



HEINRICH KIPP WERK



OPERATING PARTS | STANDARD ELEMENTS







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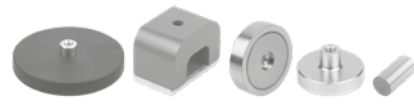
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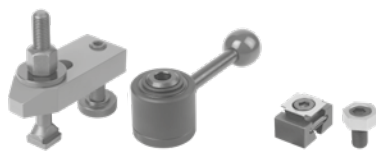
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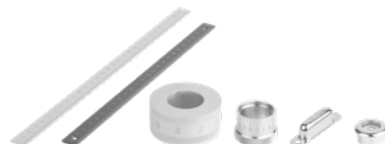
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# TRUST IN KIPP



HEINRICH KIPP WERK has been a quality partner to industry for more than 100 years.

We offer a comprehensive product spectrum with more than 65,000 elements in the sectors clamping technology, standard elements and operating parts.

We produce in our own machine shop located in Germany. This guarantees rapid response times and short logistics routes. Customers appreciate our vertical integration and many years of development experience.

Reliability. Durability. Sustainability.  
This is what our owner managed company has stood for from the very beginning.

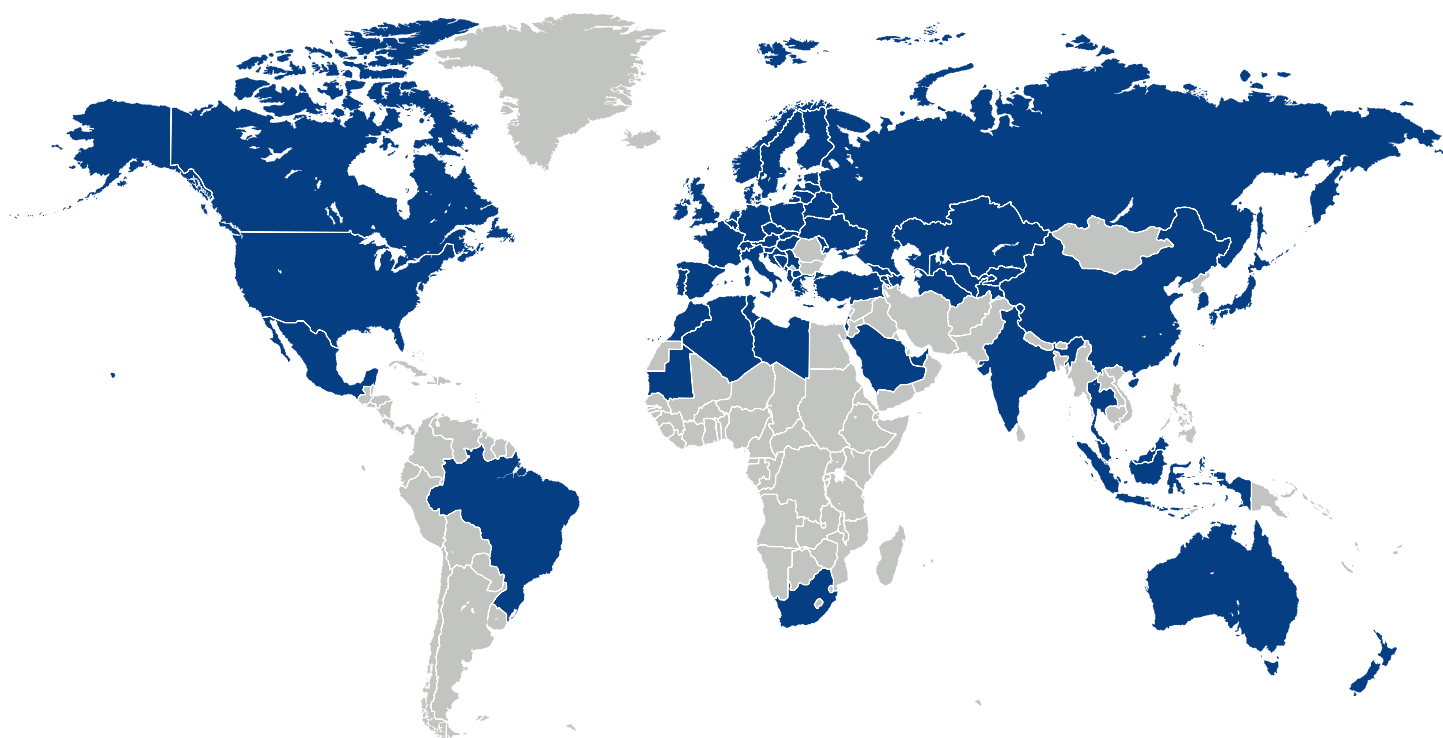


Nicolas Kipp

Heinrich Kipp

# LOCATIONS

HEINRICH KIPP WERK is present worldwide with 12 company branches and more than 50 agencies, and so guarantees a high level of delivery capability internationally. We have a well-developed service network and specialised consultants.



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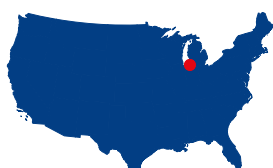
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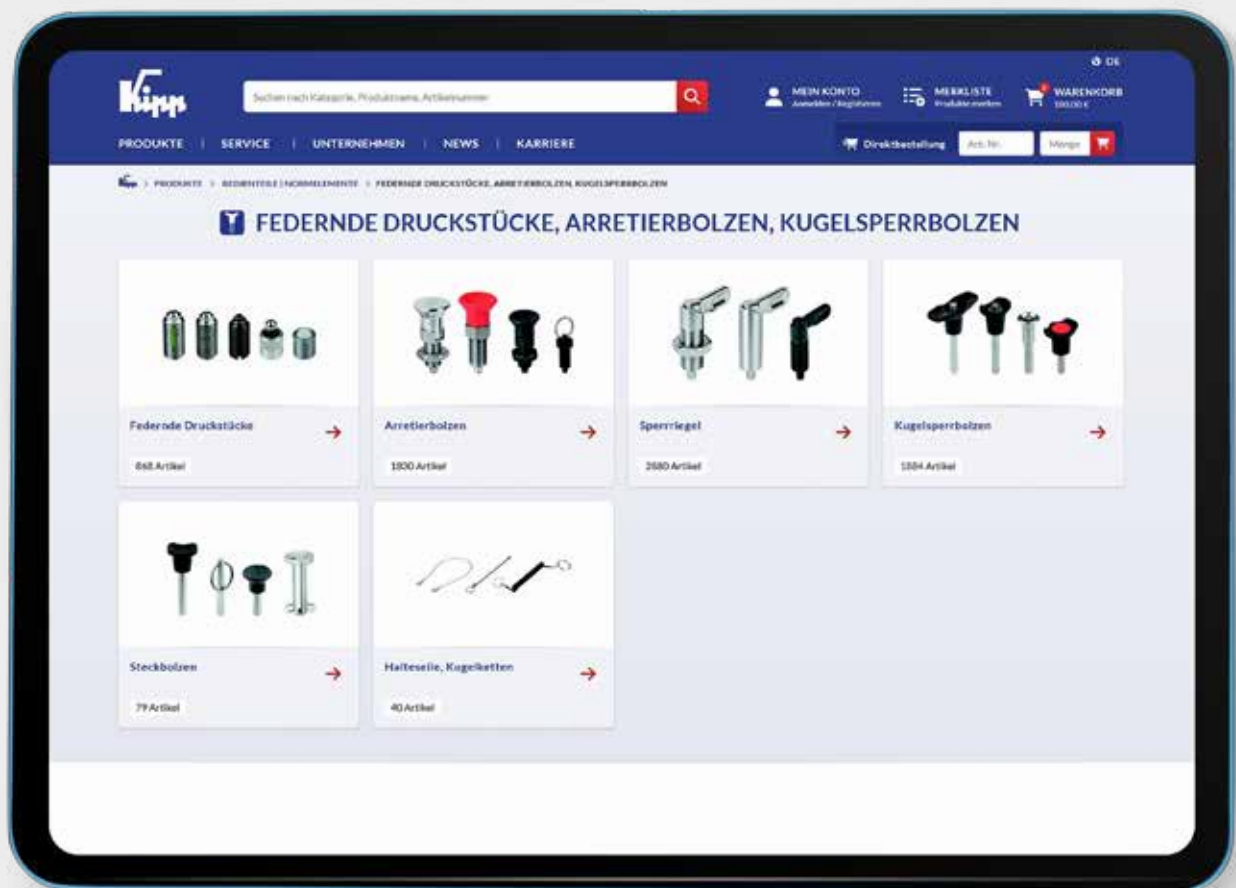
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## Find your product with just a few clicks in the KIPP webshop

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- 65,000 products in a structured overview
- All new products at a glance
- Quick and specific product search
- Live display of availability
- Order history viewable online



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## Professional advice

HEINRICH KIPP WERK has highly trained customer service staff and expert technical advisers with extensive experience.



## Delivery

The high-performance logistics system guarantees rapid response times and high supply availability. Customers can choose between standard, express or premium delivery.

# Special solutions

HEINRICH KIPP WERK produces at its site in Germany. Through our vertical range of manufacture and the extensive machine park, we can realise standard elements, assemblies and special solutions at any time.

We design a large number of near-standard and complex special elements - exactly to customer specifications. In our machine shop we have metal cutting, injection moulding and zinc die-casting machines. Our own toolmaking workshop ensures professional project implementation.

Completely assembled and with treated surface. Our quality control ensures highest quality. Sales technicians accompany every single project - from the quotation to feasibility studies and production.



Development/design



Toolmaking



Machining



Plastic injection moulding



Zinc die-casting



Grinding



Surface treatment



Assembly

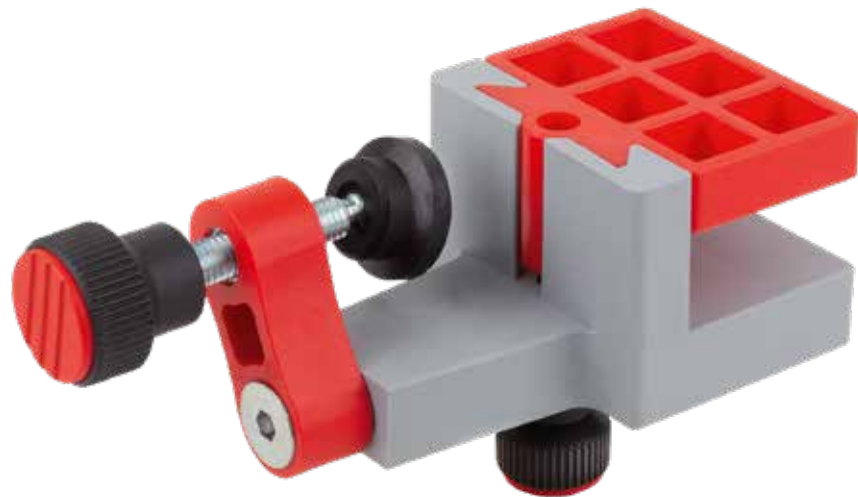


Logistics



**Cam lever  
stainless steel**

**Complex  
assemblies**



**Individualised  
operating elements**

## Product lines

### **NOVO grip**



Our NOVO grip product line is the classic in the plastic sector. Well thought out in every detail. Sophisticated design, easy-grip form and efficient price/performance.

### **SYMPA touch**



It's in the name. SYMPA touch, our product line for maximum ergonomics. The soft, anti-slip material sits perfectly in the hand.

### **NATURE grip**



Our NATURE grip product range is environmentally friendly and produced from bioplastic, which is made entirely from renewable raw materials.

### **MEDI grip**



MEDI grip is suitable for areas with high hygienic requirements. These operating parts contain micro-silver, which has an antibacterial effect on the surface.

### **FEATURE grip**



With the new FEATURE grip product range, KIPP has developed and offers smart components and solutions that deliver information and can be networked and so are suitable for Industry 4.0.

### **NOVOnox hygienic**



The stainless-steel products from the NOVOnox hygienic line target the foodstuff, pharmaceutical, chemical and packaging sectors.

## Material and surfaces

Besides the standard versions, other materials or grades can be supplied on request. At extra cost, different surface finishes such as matt or high-gloss trivalent passivated for steel parts, can be provided. In addition, for plastic coatings or injection-moulded plastic parts, other colour variants can be supplied on request.

## RoHS / REACH / POP

HEINRICH KIPP WERK supplies products that conform to the 2011/65/EU (incl. 2015/863/EU) directive. For exceptions, see the negative list. In accordance with REACH, we only use substances and compounds that are registered, not subject to authorisation under appendix XIV and not subject to any restriction under appendix XVII, and which are not part of (EU) 2019/1021 (POPs Regulation).

## 19" 19" TECHNOLOGY



Grips, rails and standard elements suitable for 19 inch systems. Compatible for applications in the IT sector, event technology, laboratories or computer centres.



## STAINLESS STEEL



Products marked with this symbol are made from stainless steel. The predominant material used here is the austenitic alloy 1.4305.



## ESD



These products are made from electrically conductive plastic. They can therefore be used in ESD secure areas where electrostatic sensitive components can often be found.



## ACCESSORIES alu profiles



The solution for connecting, clamping and holding aluminium profiles. All components perfectly match conventional profiles with 8 mm or 10 mm slot widths.



## DETECTABLE



Detectable products made from a special plastic can be quickly and reliably detected using detection systems.

### Thread versions

The threads are machined to the ISO DIN 13 tolerance class "medium" i.e. H6 for female threads and g6 for male threads. Male threads up to 60 mm long are generally supplied as a full thread. Screws from 70 mm long have 60 mm long threads.

Due to surface finish refinement, threads of aluminium grips may not be true to gauge. To toughen the material most of these threads are form pressed. The pull out resistance from aluminium with M5x10 is here 2000N.



# NOVOnox hygienic

The stainless steel products from the NOVOnox hygienic line target the foodstuff, pharmaceutical, chemical and packaging sectors.

**Hygienic DESIGN** – Operating parts and machine elements that fulfil special requirements. Radii, transitions, bevels, and surfaces are designed to impair wetting and can be easily cleaned or remain permanently unsoiled.

**Hygienic USIT®** – the perfectly coordinated sealing and fastening technology developed according to EHEDG guidelines. Polished surfaces, radii, bevels and form transitions are cavity-free.



## Stainless steel!

Material: 1.4404

Polished to  $Ra < 0.8 \mu m$



## 100 % seal!

Hygienic DESIGN  
sealing washer EU10/2011 and  
FDA conform thermoplastic (POM)

## System unit!

Hex head bolt including pre-fitted,  
replaceable sealing washer.

Material: 1.4404

Polished to  $Ra < 0.8 \mu m$

## VOLUME 1

### Clamping levers



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### Knobs



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### Grips



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### Quarter-turn locks



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### Levelling feet



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### Indexing plungers



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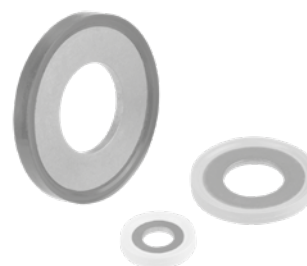
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Clamping levers steel  
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Clamping levers  
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Clamping levers, zinc  
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Clamping levers, zinc  
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Clamping levers, zinc  
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Clamping levers  
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Clamping levers  
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Clamping levers, zinc  
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Clamping levers with protective cap  
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Clamping levers with protective cap  
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Clamping levers with protective cap  
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Clamping levers with protective cap  
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Clamping levers, flat  
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Clamping levers with plastic handle  
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Clamping levers plastic  
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Clamping levers with plastic  
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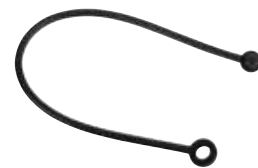
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Handwheels 2-spoke  
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Handwheels 2-spoke  
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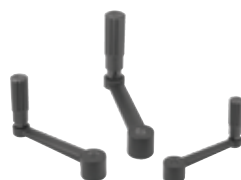
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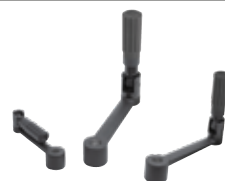
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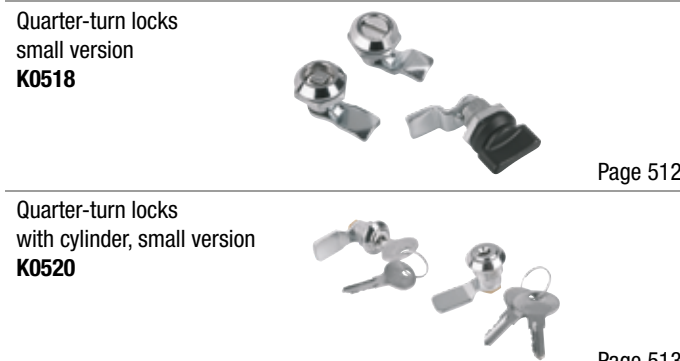


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## Hinges

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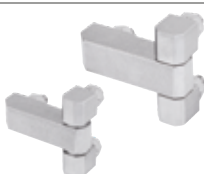
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Tube clamps T-angle  
stainless steel  
**K0475**



Page 717

Tube clamps T-angle  
plastic  
**K0476**



Page 718

Tube clamps T-angle  
aluminium  
**K0476**



Page 719

Tube clamps right-angle  
aluminium  
**K0476**



Page 720

Tube clamps base  
plastic  
**K0477**



Page 721

Tube clamps base  
aluminium  
**K0477**



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## Tube connectors, profile connectors

Tube clamps base  
stainless steel  
**K0477**



Page 723

Tube clamps base  
plastic  
**K0478**



Page 724

Tube clamps base  
aluminium  
**K0478**



Page 724

Tube clamps flange  
plastic  
**K0479**



Page 725

Tube clamps flange  
aluminium  
**K0479**



Page 726

Tube clamps flange  
aluminium  
**K0479**



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Tube clamps flange  
stainless steel  
**K0479**



Page 728

Tube clamps flange  
plastic  
**K0480**



Page 729

Tube clamps flange  
aluminium  
**K0480**



Page 729

Tube clamps straight  
plastic  
**K0481**



Page 730

Tube clamps straight  
plastic  
**K0483**



Page 730

Tube clamps swivel half  
sunken teeth, plastic  
**K0484**



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Tube clamps, swivel half  
aluminium, with sunken teeth  
**K0484**



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Tube clamps swivel half  
raised teeth, plastic  
**K0485**



Page 733

Tube clamps swivel half  
aluminium, with raised teeth  
**K0485**



Page 734

Tube clamps swivel half  
sunken teeth, plastic  
**K0486**



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Tube clamps, swivel half  
aluminium, with sunken teeth  
**K0486**



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Tube clamps swivel base  
sunken teeth, plastic  
**K0487**



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## Tube connectors, profile connectors

Tube clamps swivel base  
aluminium, with sunken teeth  
**K0487**



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Tube clamps swivel  
plastic  
**K0488**



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Tube clamps swivel  
aluminium  
**K0488**



Page 740

Tube clamps swivel  
plastic  
**K0489**



Page 741

Tube clamps swivel  
aluminium  
**K0489**



Page 742

Tube clamps swivel base  
plastic  
**K0490**



Page 743

Tube clamps swivel base  
aluminium  
**K0490**



Page 744

Reducer sleeves  
square  
**K0491**



Page 745

Reducer sleeves  
round  
**K0492**



Page 745

Round and square tubes  
**K0493**



Page 746

Tube end plugs  
**K0494**



Page 747

Monitor brackets  
**K1510**



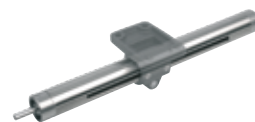
Page 748-753

Monitor brackets, aluminium,  
height adjustable  
4 or 5 axis  
**K1792**



Page 754-755

Linear actuators  
**K0495**



Page 756-757

Linear actuators, stainless steel  
**K0495**



Page 758

Linear actuator connector clamps  
cross  
**K0496**



Page 759

Linear actuator connector clamps,  
stainless steel  
cross  
**K0496**



Page 760

Linear actuator connector clamps  
cross  
**K0497**



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## Tube connectors, profile connectors

Linear actuator connector clamps  
flange  
**K0498**



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Linear actuator connector clamps,  
stainless steel  
flange  
**K0498**



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Linear actuator connector clamps  
base  
**K0499**



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Linear actuator connector clamps,  
stainless steel  
base  
**K0499**



Page 765

Square tube connectors  
straight  
**K0615**



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Square tube connectors  
two-way  
**K0616**



Page 769

Square tube connectors  
three-way, flat  
**K0617**



Page 770

Square tube connectors  
four-way, flat  
**K0618**



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Square tube connectors  
three-way  
**K0619**



Page 772

Square tube connectors  
four-way  
**K0620**



Page 773

Square tube connectors  
five-way  
**K0621**



Page 774

Square tube connectors  
six-way  
**K0622**



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Square tube connectors  
three-way with tapped hole  
**K0623**



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Square tube connectors  
four-way with tapped hole  
**K0624**



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Square tube connectors  
two-way swivel  
**K0625**



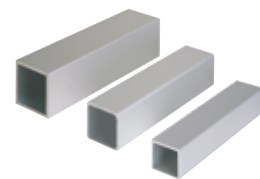
Page 778

Square tube connectors  
three-way swivel  
**K0626**



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Square tubes  
**K0627**



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Square tubes  
single-finned  
**K0628**



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## Tube connectors, profile connectors

Straps  
**K1042**



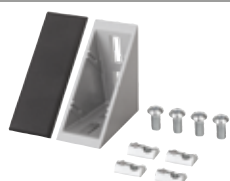
Page 781

Angles  
**K1043**



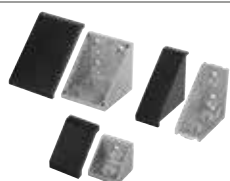
Page 781

Angle sets  
Type I  
**K1045**



Page 782

Angle sets  
Type B  
**K1046**



Page 783

Angle elements T1  
Type I  
**K1047**



Page 784

Angle elements T2  
Type I  
**K1048**



Page 785

Clamping angles  
Type I  
**K1049**



Page 786

Joint angles  
Type I  
**K1050**



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Joints  
Type B and Type I  
**K1051**



Page 788-789

End caps  
Type B and Type I  
**K1053**



Page 790

Cover and adapter profiles  
Type B and Type I  
**K1054**



Page 791

Cover profile  
Type I  
**K1055**



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Slide rail  
Type I  
**K1056**



Page 792

Profile slider  
**K1806**



Page 794-795

Profile slider  
with clamping lever  
**K1806**



Page 796-797

Foot plates  
Type B and Type I  
**K1057**



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Cable tie block  
**K1278**



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Cable clips  
**K1279**



Page 800



Tube connectors, profile connectors

|                                               |                                                                                    |                                                                                    |          |
|-----------------------------------------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|----------|
| Cable clips with T-slot key<br><b>K1280</b>   |   |   | Page 801 |
| Sensor holders<br><b>K1281</b>                |   |   | Page 802 |
| Earthing terminal<br>type I<br><b>K1282</b>   |   |   | Page 803 |
| Potential equaliser<br>type I<br><b>K1283</b> |  |  | Page 803 |





## Telescopic slides



Telescopic slides, steel  
for slot mounting, partial extension,  
load capacity up to 10 kg  
**K1566**



Page 806

Telescopic slides, steel  
for slot mounting, partial extension,  
load capacity up to 12 kg  
**K1567**



Page 807

Telescopic slides, steel  
for slot mounting, over-extension,  
load capacity up to 20 kg  
**K1568**



Page 808

Telescopic slides, steel  
for side mounting, full extension,  
load capacity up to 30 kg  
**K1569**



Page 809

Telescopic slides, steel  
for side mounting, full extension,  
load capacity up to 35 kg  
**K1571**



Page 810

Telescopic slides, steel  
for side mounting, full extension,  
load capacity up to 35 kg  
**K1572**



Page 811

Telescopic slides, steel  
for surface mounting, full extension,  
load capacity up to 35 kg  
**K1573**



Page 812

Telescopic slides, steel  
for surface mounting, full extension,  
load capacity up to 35 kg  
**K1574**



Page 813

Telescopic slides, steel  
for side mounting, full extension,  
load capacity up to 40 kg  
**K1575**



Page 814

Telescopic slides, steel  
for side mounting, full extension,  
load capacity up to 45 kg  
**K1577**



Page 815

Telescopic slides, steel  
for side mounting, partial extension,  
load capacity up to 50 kg  
**K1710**



Page 816-817

Telescopic slides, steel  
for side mounting, over-extension,  
load capacity up to 60 kg  
**K1578**



Page 818

Telescopic slides, steel  
for surface mounting, over-extension,  
load capacity up to 60 kg  
**K1579**



Page 819

Telescopic slides, steel  
for side mounting, partial extension,  
load capacity up to 65 kg  
**K1711**



Page 820-821

Telescopic slides, stainless steel  
for side mounting, partial extension,  
load capacity up to 65 kg  
**K1712**



Page 822-823

Telescopic slides, steel  
for side mounting, over-extension,  
load capacity up to 70 kg  
**K1713**



Page 824-825



## Telescopic slides

Telescopic slides, stainless steel  
for side mounting, over-extension,  
load capacity up to 70 kg  
**K1714**



Page 826-827

Telescopic slides, stainless steel  
for side mounting, full extension,  
load capacity up to 80 kg  
**K1715**



Page 828-829

Telescopic slides, steel  
for side mounting, over-extension,  
load capacity up to 90 kg  
**K1580**



Page 830

Telescopic slides, stainless steel  
for side mounting, over-extension,  
load capacity up to 90 kg  
**K1716**



Page 832-833

Telescopic slides, steel  
for side mounting, full extension,  
load capacity up to 160 kg  
**K1717**



Page 836-837

Telescopic slides, steel  
for side mounting, over-extension,  
load capacity up to 160 kg  
**K1718**



Page 838-839

Telescopic slides, steel  
for side mounting, full extension,  
load capacity up to 272 kg  
**K1719**



Page 840-842

Telescopic slides, steel  
for side mounting, full extension,  
load capacity up to 272 kg  
**K1720**



Page 844-845

Telescopic slides, aluminium  
for side mounting, full extension,  
load capacity up to 300 kg  
**K1721**



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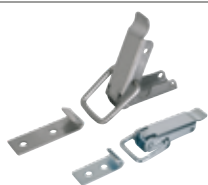
## Latches, snap locks, slam latches



Latches  
with spring clip  
**K0043**

Page 850

Latches  
with draw bail  
**K0044**



Page 851

Latch stainless steel  
DIN 3133  
**K1336**



Page 852

Latches  
with draw bail  
**K0045**



Page 853

Latches adjustable  
fastening holes accessible  
**K0046**



Page 854

Latches adjustable  
fastening holes covered  
**K0047**



Page 855

Latches adjustable  
fastening holes accessible  
**K0048**



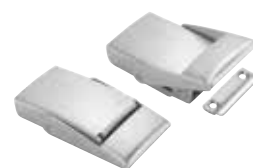
Page 856

Latches adjustable  
fastening holes covered  
**K0049**



Page 857

Latches with release  
stainless steel  
**K1357**



Page 858

Latches adjustable  
with swing bail  
**K0050**



Page 859

Latches adjustable  
**K0051**



Page 860

Latches adjustable  
heavy-duty version  
**K0052**



Page 861

Remote release, zinc  
**K1481**



Page 862-863

Bowden cables  
**K1646**



Page 864

Snap locks, plastic  
with fold-down grip  
**K1651**



Page 866-867

Snap locks, snap-in, plastic  
with grip  
**K1652**



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# Latches, snap locks, slam latches

Snap locks, plastic  
with knob  
**K1653**



Page 870-871

Snap locks, plastic  
with twist knob  
**K1654**



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Slam latches  
**K1496**



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Emergency openers  
**K1497**



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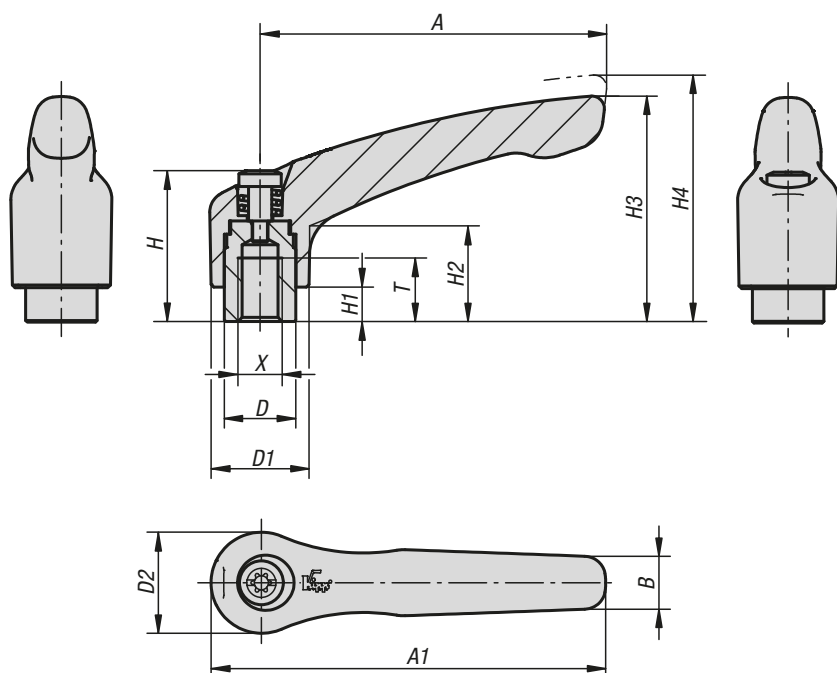
## Clamping levers, tension levers, cam levers





## Clamping levers steel

internal thread



### Material:

Handle steel 1.0401.

All other steel parts grade 5.8.

### Version:

Handle powder-coated, fine-textured structure.  
Steel parts black oxidised.

### Sample order:

K0752.1051

### Note:

Standard colours are:  
black or ruby red RAL 3003.

lift to  
disengage



### KIPP Clamping levers with internal thread

| Order No.<br>black | Order No.<br>ruby red RAL3003 | X   | A   | A1   | B  | D    | D1   | D2   | H    | H1  | H2   | H3   | H4   | T  | No. of<br>teeth |
|--------------------|-------------------------------|-----|-----|------|----|------|------|------|------|-----|------|------|------|----|-----------------|
| K0752.1041         | K0752.10427                   | M4  | 40  | 47   | 7  | 10   | 13   | 14   | 24,5 | 4   | 14,5 | 31   | 34   | 9  | 16              |
| K0752.1051         | K0752.10527                   | M5  | 40  | 47   | 7  | 10   | 13   | 14   | 24,5 | 4   | 14,5 | 31   | 34   | 9  | 16              |
| K0752.1061         | K0752.10627                   | M6  | 40  | 47   | 7  | 10   | 13   | 14   | 24,5 | 4   | 14,5 | 31   | 34   | 9  | 16              |
| K0752.2061         | K0752.20627                   | M6  | 65  | 74,5 | 10 | 13,5 | 18,5 | 19   | 28,5 | 6,5 | 17,5 | 42,5 | 45,5 | 12 | 20              |
| K0752.2081         | K0752.20827                   | M8  | 65  | 74,5 | 10 | 13,5 | 18,5 | 19   | 28,5 | 6,5 | 17,5 | 42,5 | 45,5 | 12 | 20              |
| K0752.3081         | K0752.30827                   | M8  | 80  | 91   | 11 | 16   | 21   | 22   | 37   | 10  | 24   | 54,5 | 58,5 | 14 | 22              |
| K0752.3101         | K0752.31027                   | M10 | 80  | 91   | 11 | 16   | 21   | 22   | 37   | 10  | 24   | 54,5 | 58,5 | 14 | 22              |
| K0752.4101         | K0752.41027                   | M10 | 95  | 109  | 13 | 19   | 27   | 27,5 | 43   | 10  | 27   | 63   | 67,5 | 17 | 24              |
| K0752.4121         | K0752.41227                   | M12 | 95  | 109  | 13 | 19   | 27   | 27,5 | 43   | 10  | 27   | 63   | 67,5 | 17 | 24              |
| K0752.5121         | K0752.51227                   | M12 | 110 | 126  | 15 | 23   | 31   | 32   | 49   | 12  | 31,5 | 73   | 77,5 | 23 | 26              |
| K0752.5161         | K0752.51627                   | M16 | 110 | 126  | 15 | 23   | 31   | 32   | 49   | 12  | 31,5 | 73   | 77,5 | 23 | 26              |

# Clamping levers steel

external thread



## Material:

Handle steel 1.0401.

All other steel parts grade 5.8.

## Version:

Handle powder-coated, fine-textured structure.  
Steel parts black oxidised.

## Sample order:

K0752.1051X20

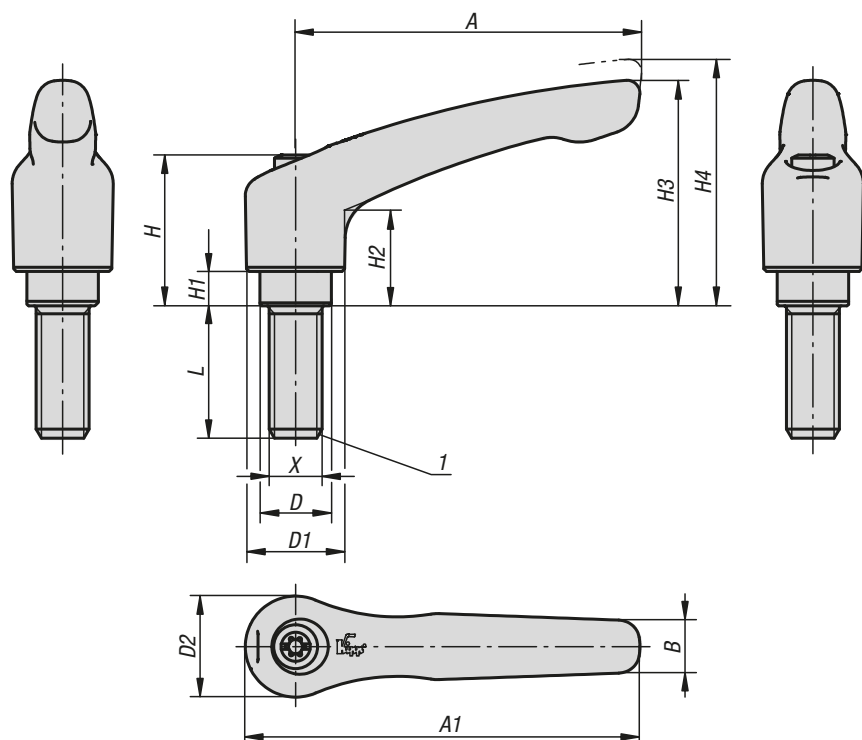
## Note:

Standard colours are:  
black or ruby red RAL 3003.

Where  $L \geq 60$  mm the thread length is always 60 mm.

## Drawing reference:

1) flat point DIN EN ISO 4753



lift to  
disengage



## KIPP Specifications

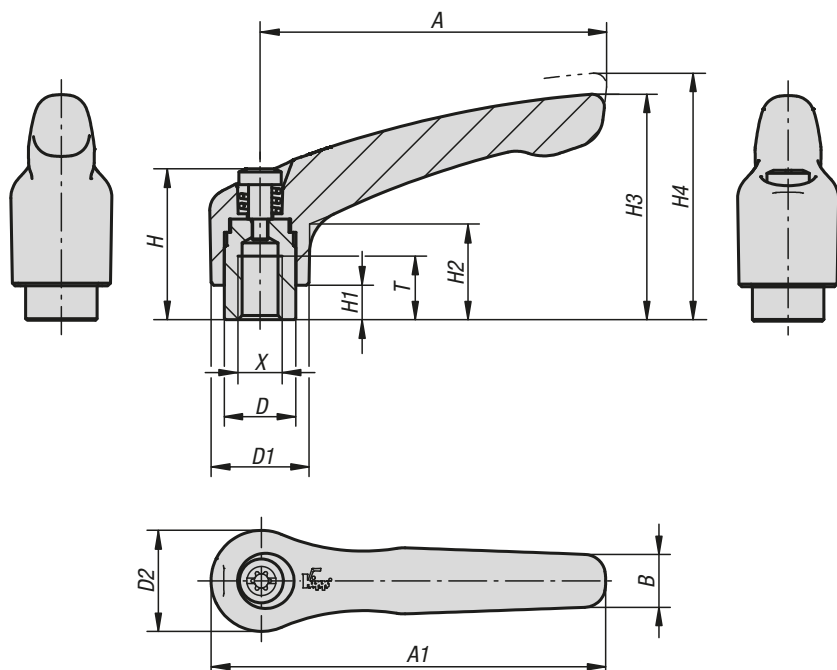
| Size | X         | A   | A1   | B  | D    | D1   | D2   | H    | H1  | H2   | H3   | H4   | No. of teeth |
|------|-----------|-----|------|----|------|------|------|------|-----|------|------|------|--------------|
| 1    | M5/M6     | 40  | 47   | 7  | 10   | 13   | 14   | 24,5 | 4   | 14,5 | 31   | 34   | 16           |
| 2    | M6/M8/M10 | 65  | 74,5 | 10 | 13,5 | 18,5 | 19   | 28,5 | 6,5 | 17,5 | 42,5 | 45,5 | 20           |
| 3    | M8/M10    | 80  | 91   | 11 | 16   | 21   | 22   | 37   | 10  | 24   | 54,5 | 58,5 | 22           |
| 4    | M10/M12   | 95  | 109  | 13 | 19   | 27   | 27,5 | 43   | 10  | 27   | 63   | 67,5 | 24           |
| 5    | M12/M16   | 110 | 126  | 15 | 23   | 31   | 32   | 49   | 12  | 31,5 | 73   | 77,5 | 26           |

## KIPP Clamping levers steel with external thread

| Order No.<br>black | Order No.<br>ruby red RAL3003 | Size | X   | L                                   |
|--------------------|-------------------------------|------|-----|-------------------------------------|
| K0752.1051X        | K0752.10527X                  | 1    | M5  | 10/15/20/25/30/35/40/45/50          |
| K0752.1061X        | K0752.10627X                  | 1    | M6  | 10/15/20/25/30/35/40/45/50          |
| K0752.2061X        | K0752.20627X                  | 2    | M6  | 15/20/25/30/35/40/45/50/55/60       |
| K0752.2081X        | K0752.20827X                  | 2    | M8  | 15/20/25/30/35/40/45/50/55/60       |
| K0752.2101X        | K0752.21027X                  | 2    | M10 | 15/20/25/30/35/40/45/50/55/60       |
| K0752.3081X        | K0752.30827X                  | 3    | M8  | 15/20/25/30/35/40/45/50/55/60       |
| K0752.3101X        | K0752.31027X                  | 3    | M10 | 15/20/25/30/35/40/45/50/55/60       |
| K0752.4101X        | K0752.41027X                  | 4    | M10 | 20/25/30/35/40/45/50/55/60/70/80/90 |
| K0752.4121X        | K0752.41227X                  | 4    | M12 | 20/25/30/35/40/45/50/55/60/70/80/90 |
| K0752.5121X        | K0752.51227X                  | 5    | M12 | 25/30/35/40/45/50/55/60/70/80/90    |
| K0752.5161X        | K0752.51627X                  | 5    | M16 | 25/30/35/40/45/50/55/60/70/80/90    |

## Clamping levers

internal thread



### Material:

Handle die-cast zinc DIN EN 12844.  
Steel parts grade 5.8.

### Version:

Handle powder-coated or high-gloss chromed.  
Steel parts black oxidised.

### Sample order:

K0122.1041

### Note:

Δ Add the desired lever colour here.

Standard colours are:

black satin finish, orange RAL 2004, ruby red RAL 3003, silver metallic, high gloss chromed.

### On request:

Other threads, colours and special versions.

Dimension "H1" available in other lengths at extra charge.

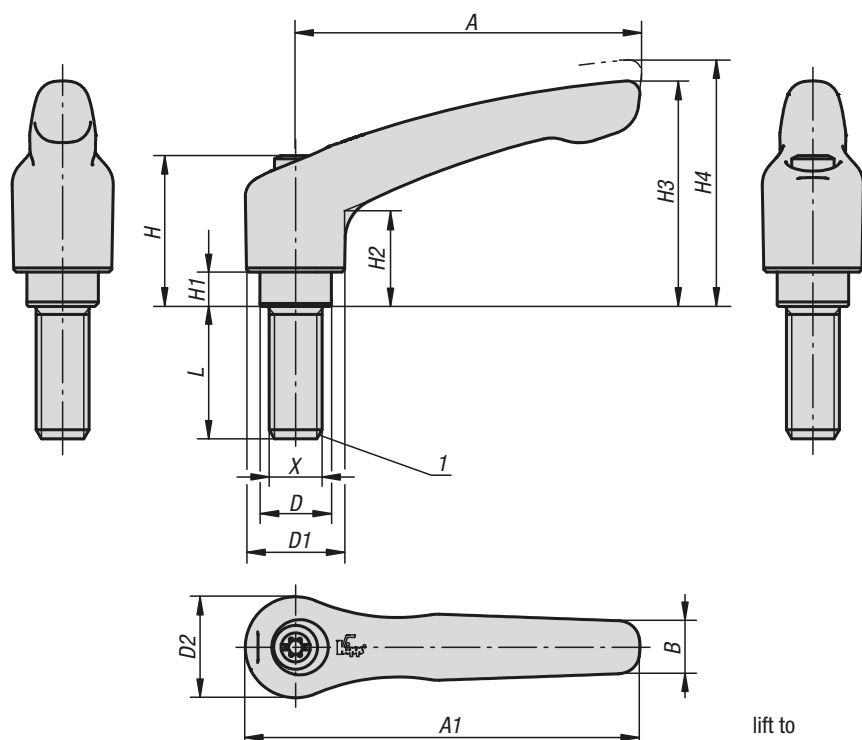
| black satin finish Δ = 1                                                            | orange Δ = 2                                                                        | ruby red Δ = 27                                                                     | silver metallic Δ = 3                                                                 | high-gloss chromed Δ = 6                                                              |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  |  |  |  |  |
|                                                                                     | RAL 2004                                                                            | RAL 3003                                                                            |                                                                                       |                                                                                       |

### KIPP Clamping levers with internal thread

| Order No.  | X   | A   | A1   | B   | D    | D1   | D2   | H    | H1  | H2   | H3   | H4   | T  | No. of teeth |
|------------|-----|-----|------|-----|------|------|------|------|-----|------|------|------|----|--------------|
| K0122.003Δ | M3  | 30  | 37   | 7   | 10   | 13   | 14   | 24,5 | 4   | 14,5 | 30   | 33   | 9  | 16           |
| K0122.004Δ | M4  | 30  | 37   | 7   | 10   | 13   | 14   | 24,5 | 4   | 14,5 | 30   | 33   | 9  | 16           |
| K0122.005Δ | M5  | 30  | 37   | 7   | 10   | 13   | 14   | 24,5 | 4   | 14,5 | 30   | 33   | 9  | 16           |
| K0122.104Δ | M4  | 40  | 47   | 7   | 10   | 13   | 14   | 24,5 | 4   | 14,5 | 31   | 34   | 9  | 16           |
| K0122.105Δ | M5  | 40  | 47   | 7   | 10   | 13   | 14   | 24,5 | 4   | 14,5 | 31   | 34   | 9  | 16           |
| K0122.106Δ | M6  | 40  | 47   | 7   | 10   | 13   | 14   | 24,5 | 4   | 14,5 | 31   | 34   | 9  | 16           |
| K0122.206Δ | M6  | 65  | 74,5 | 9,5 | 13,5 | 18,5 | 19   | 28,5 | 6,5 | 17,5 | 42,5 | 45,5 | 12 | 20           |
| K0122.208Δ | M8  | 65  | 74,5 | 9,5 | 13,5 | 18,5 | 19   | 28,5 | 6,5 | 17,5 | 42,5 | 45,5 | 12 | 20           |
| K0122.308Δ | M8  | 80  | 91   | 11  | 16   | 21   | 22   | 37   | 10  | 24   | 54,5 | 58,5 | 14 | 22           |
| K0122.310Δ | M10 | 80  | 91   | 11  | 16   | 21   | 22   | 37   | 10  | 24   | 54,5 | 58,5 | 14 | 22           |
| K0122.410Δ | M10 | 95  | 109  | 13  | 19   | 27   | 27,5 | 43   | 10  | 27   | 63   | 67,5 | 17 | 24           |
| K0122.412Δ | M12 | 95  | 109  | 13  | 19   | 27   | 27,5 | 43   | 10  | 27   | 63   | 67,5 | 17 | 24           |
| K0122.512Δ | M12 | 110 | 126  | 15  | 23   | 31   | 32   | 49   | 12  | 31,5 | 73   | 77,5 | 23 | 26           |
| K0122.516Δ | M16 | 110 | 126  | 15  | 23   | 31   | 32   | 49   | 12  | 31,5 | 73   | 77,5 | 23 | 26           |

# Clamping levers

external thread



## Material:

Handle die-cast zinc DIN EN 12844.  
Steel parts grade 5.8.

## Version:

Handle powder-coated or high-gloss chromed.  
Steel parts black oxidised.

## Sample order:

K0122.0041X10 (clamping lever, black satin finish; include length L)

## Note:

Δ Add the desired lever colour here.  
Standard colours are:  
black satin finish, orange RAL 2004, ruby red RAL 3003, silver metallic, high gloss chromed.

Where  $L \geq 60$  mm the thread length is 60 mm.

## On request:

Other threads, screw lengths, colours and special versions.  
Dimension "H1" available in other lengths at extra charge.

## Drawing reference:

1) flat point DIN EN ISO 4753

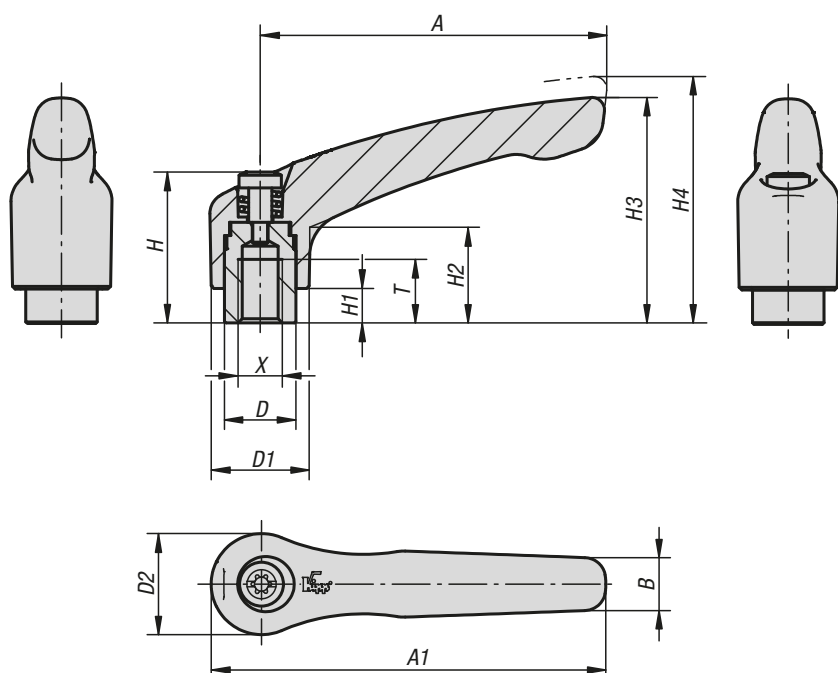


## KIPP Clamping levers with external thread

| Order No.   | X   | A   | A1   | B   | D    | D1   | D2   | H    | H1  | H2   | H3   | H4   | No. of teeth | L                                   |
|-------------|-----|-----|------|-----|------|------|------|------|-----|------|------|------|--------------|-------------------------------------|
| K0122.004ΔX | M4  | 30  | 37   | 7   | 10   | 13   | 14   | 24,5 | 4   | 14,5 | 30   | 33   | 16           | 10/15/20/25/30/35/40/45/50          |
| K0122.005ΔX | M5  | 30  | 37   | 7   | 10   | 13   | 14   | 24,5 | 4   | 14,5 | 30   | 33   | 16           | 10/15/20/25/30/35/40/45/50          |
| K0122.105ΔX | M5  | 40  | 47   | 7   | 10   | 13   | 14   | 24,5 | 4   | 14,5 | 31   | 34   | 16           | 10/15/20/25/30/35/40/45/50          |
| K0122.106ΔX | M6  | 40  | 47   | 7   | 10   | 13   | 14   | 24,5 | 4   | 14,5 | 31   | 34   | 16           | 10/15/20/25/30/35/40/45/50          |
| K0122.206ΔX | M6  | 65  | 74,5 | 9,5 | 13,5 | 18,5 | 19   | 28,5 | 6,5 | 17,5 | 42,5 | 45,5 | 20           | 15/20/25/30/35/40/45/50/55/60       |
| K0122.208ΔX | M8  | 65  | 74,5 | 9,5 | 13,5 | 18,5 | 19   | 28,5 | 6,5 | 17,5 | 42,5 | 45,5 | 20           | 15/20/25/30/35/40/45/50/55/60       |
| K0122.210ΔX | M10 | 65  | 74,5 | 9,5 | 13,5 | 18,5 | 19   | 28,5 | 6,5 | 17,5 | 42,5 | 45,5 | 20           | 15/20/25/30/35/40/45/50/55/60       |
| K0122.308ΔX | M8  | 80  | 91   | 11  | 16   | 21   | 22   | 37   | 10  | 24   | 54,5 | 58,5 | 22           | 15/20/25/30/35/40/45/50/55/60       |
| K0122.310ΔX | M10 | 80  | 91   | 11  | 16   | 21   | 22   | 37   | 10  | 24   | 54,5 | 58,5 | 22           | 15/20/25/30/35/40/45/50/55/60       |
| K0122.410ΔX | M10 | 95  | 109  | 13  | 19   | 27   | 27,5 | 43   | 10  | 27   | 63   | 67,5 | 24           | 20/25/30/35/40/45/50/55/60/70/80/90 |
| K0122.412ΔX | M12 | 95  | 109  | 13  | 19   | 27   | 27,5 | 43   | 10  | 27   | 63   | 67,5 | 24           | 20/25/30/35/40/45/50/55/60/70/80/90 |
| K0122.512ΔX | M12 | 110 | 126  | 15  | 23   | 31   | 32   | 49   | 12  | 31,5 | 73   | 77,5 | 26           | 25/30/35/40/45/50/55/60/70/80/90    |
| K0122.516ΔX | M16 | 110 | 126  | 15  | 23   | 31   | 32   | 49   | 12  | 31,5 | 73   | 77,5 | 26           | 25/30/35/40/45/50/55/60/70/80/90    |

## Clamping levers, zinc

with internal thread, steel parts trivalent blue passivated



### Material:

Handle die-cast zinc DIN EN 12844.  
Steel parts grade 5.8.

### Version:

Handle plastic-coated or high-gloss chromed.  
Steel parts trivalent blue passivated.

### Sample order:

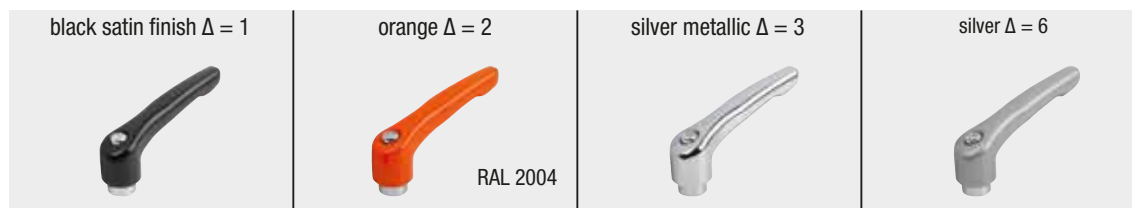
K1659.0041

### Note:

Δ Add the desired lever colour here.  
Standard colours are:  
black satin finish, orange RAL 2004, silver metallic, high gloss chromed.

### On request:

Other threads, colours and special versions.  
Dimension "H1" available in other lengths at extra charge.



lift to  
disengage

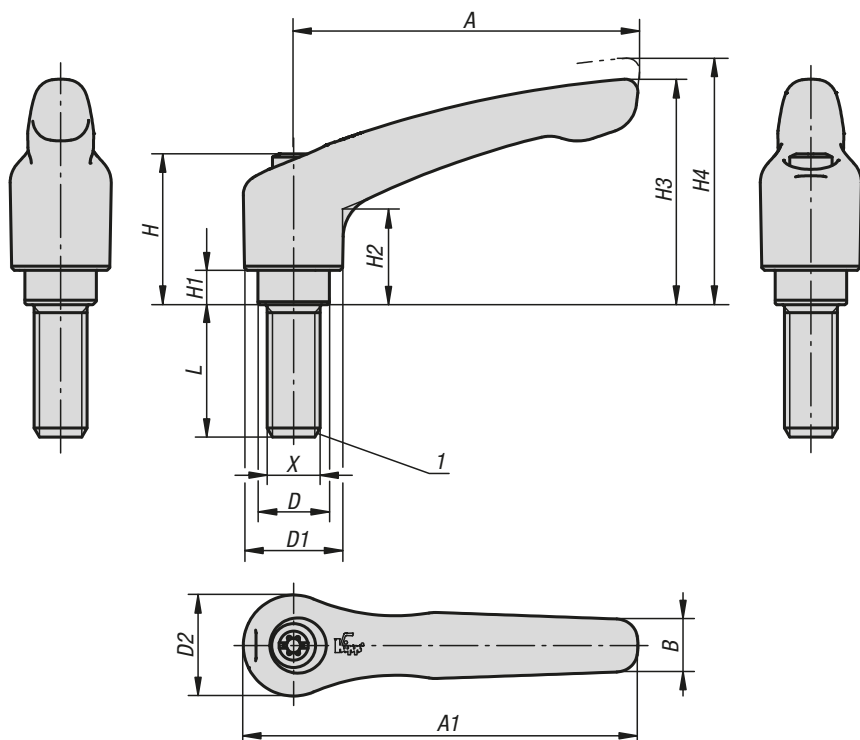


## KIPP Clamping levers with internal thread

| Order No.  | X   | A   | A1   | B   | D    | D1   | D2   | H    | H1  | H2   | H3   | H4   | T  | No. of teeth |
|------------|-----|-----|------|-----|------|------|------|------|-----|------|------|------|----|--------------|
| K1659.003Δ | M3  | 30  | 37   | 7   | 10   | 13   | 14   | 24,5 | 4   | 14,5 | 30   | 33   | 9  | 16           |
| K1659.004Δ | M4  | 30  | 37   | 7   | 10   | 13   | 14   | 24,5 | 4   | 14,5 | 30   | 33   | 9  | 16           |
| K1659.005Δ | M5  | 30  | 37   | 7   | 10   | 13   | 14   | 24,5 | 4   | 14,5 | 30   | 33   | 9  | 16           |
| K1659.104Δ | M4  | 40  | 47   | 7   | 10   | 13   | 14   | 24,5 | 4   | 14,5 | 31   | 34   | 9  | 16           |
| K1659.105Δ | M5  | 40  | 47   | 7   | 10   | 13   | 14   | 24,5 | 4   | 14,5 | 31   | 34   | 9  | 16           |
| K1659.106Δ | M6  | 40  | 47   | 7   | 10   | 13   | 14   | 24,5 | 4   | 14,5 | 31   | 34   | 9  | 16           |
| K1659.206Δ | M6  | 65  | 74,5 | 9,5 | 13,5 | 18,5 | 19   | 28,5 | 6,5 | 17,5 | 42,5 | 45,5 | 12 | 20           |
| K1659.208Δ | M8  | 65  | 74,5 | 9,5 | 13,5 | 18,5 | 19   | 28,5 | 6,5 | 17,5 | 42,5 | 45,5 | 12 | 20           |
| K1659.308Δ | M8  | 80  | 91   | 11  | 16   | 21   | 22   | 37   | 10  | 24   | 54,5 | 58,5 | 14 | 22           |
| K1659.310Δ | M10 | 80  | 91   | 11  | 16   | 21   | 22   | 37   | 10  | 24   | 54,5 | 58,5 | 14 | 22           |
| K1659.410Δ | M10 | 95  | 109  | 13  | 19   | 27   | 27,5 | 43   | 10  | 27   | 63   | 67,5 | 17 | 24           |
| K1659.412Δ | M12 | 95  | 109  | 13  | 19   | 27   | 27,5 | 43   | 10  | 27   | 63   | 67,5 | 17 | 24           |
| K1659.512Δ | M12 | 110 | 126  | 15  | 23   | 31   | 32   | 49   | 12  | 31,5 | 73   | 77,5 | 23 | 26           |
| K1659.516Δ | M16 | 110 | 126  | 15  | 23   | 31   | 32   | 49   | 12  | 31,5 | 73   | 77,5 | 23 | 26           |

## Clamping levers, zinc

with external thread, steel parts trivalent blue passivated



### Material:

Handle die-cast zinc DIN EN 12844.  
Steel parts grade 5.8.

### Version:

Handle plastic-coated or high-gloss chromed.  
Steel parts trivalent blue passivated.

### Sample order:

K1659.0041X10 (clamping lever, black satin finish;  
include length L)

### Note:

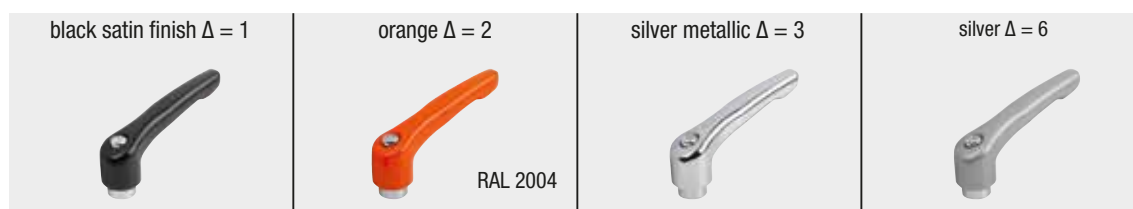
Δ Add the desired lever colour here.  
Standard colours are:  
black satin finish, orange RAL 2004, silver metallic, high  
gloss chromed.  
Where L ≥ 60 mm the thread length is 60 mm.

### On request:

Other threads, colours and special versions.  
Dimension "H1" available in other lengths at extra charge.

### Drawing reference:

1) flat point DIN EN ISO 4753

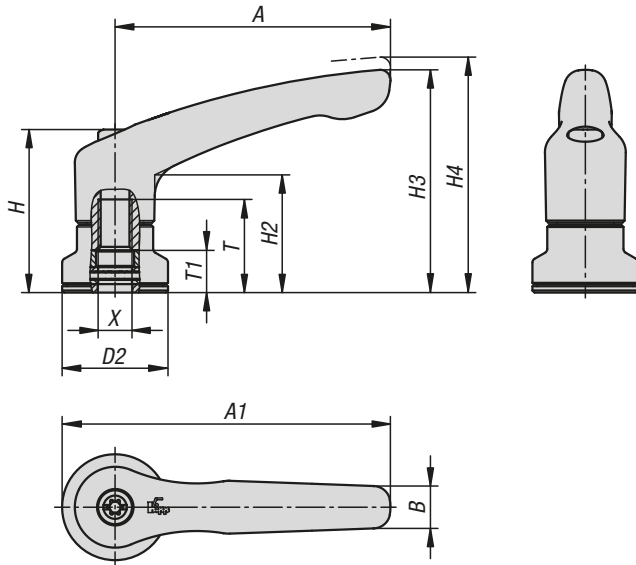


## KIPP Clamping levers with external thread

| Order No.   | X   | A   | A1   | B   | D    | D1   | D2   | H    | H1  | H2    | H3   | H4    | No. of teeth | L                                   |
|-------------|-----|-----|------|-----|------|------|------|------|-----|-------|------|-------|--------------|-------------------------------------|
| K1659.004ΔX | M4  | 30  | 37   | 7   | 10   | 13   | 14   | 24,5 | 4   | 14,5  | 30   | 33    | 16           | 10/15/20/25/30/35/40/45/50          |
| K1659.005ΔX | M5  | 30  | 37   | 7   | 10   | 13   | 14   | 24,5 | 4   | 14,5  | 30   | 33    | 16           | 10/15/20/25/30/35/40/45/50          |
| K1659.105ΔX | M5  | 40  | 47   | 7   | 10   | 13   | 14   | 24,5 | 4   | 14,5  | 31   | 34    | 16           | 10/15/20/25/30/35/40/45/50          |
| K1659.106ΔX | M6  | 40  | 47   | 7   | 10   | 13   | 14   | 24,5 | 4   | 14,5  | 31   | 34    | 16           | 10/15/20/25/30/35/40/45/50          |
| K1659.206ΔX | M6  | 65  | 74,5 | 9,5 | 13,5 | 18,5 | 19   | 28,5 | 6,5 | 17,5  | 42,5 | 45,5  | 20           | 15/20/25/30/35/40/45/50/55/60       |
| K1659.208ΔX | M8  | 65  | 74,5 | 9,5 | 13,5 | 18,5 | 19   | 28,5 | 6,5 | 17,5  | 42,5 | 45,5  | 20           | 15/20/25/30/35/40/45/50/55/60       |
| K1659.210ΔX | M10 | 65  | 74,5 | 9,5 | 13,5 | 18,5 | 19   | 28,5 | 6,5 | 17,5  | 42,5 | 45,5  | 20           | 15/20/25/30/35/40/45/50/55/60       |
| K1659.308ΔX | M8  | 80  | 91   | 11  | 16   | 21   | 22   | 37   | 10  | 24    | 54,5 | 58,5  | 22           | 15/20/25/30/35/40/45/50/55/60       |
| K1659.310ΔX | M10 | 80  | 91   | 11  | 16   | 21   | 22   | 37   | 10  | 24    | 54,5 | 58,5  | 22           | 15/20/25/30/35/40/45/50/55/60       |
| K1659.410ΔX | M10 | 95  | 109  | 13  | 19   | 27   | 27,5 | 43   | 10  | 27    | 63   | 67,5  | 24           | 20/25/30/35/40/45/50/55/60/70/80/90 |
| K1659.412ΔX | M12 | 95  | 109  | 13  | 19   | 27   | 27,5 | 43   | 10  | 27    | 63   | 67,5  | 24           | 20/25/30/35/40/45/50/55/60/70/80/90 |
| K1659.512ΔX | M12 | 110 | 126  | 15  | 23   | 31   | 32   | 49   | 12  | 31,5  | 73   | 77,5  | 26           | 25/30/35/40/45/50/55/60/70/80/90    |
| K1659.516ΔX | M16 | 110 | 126  | 15  | 23   | 31   | 32   | 49   | 12  | 31,10 | 73   | 77,10 | 26           | 25/30/35/40/45/50/55/60/70/80/90    |

## Clamping levers, zinc

with female thread and clamping force intensifier



By using clamping levers with integrated clamping force intensifier, the clamping force can be increased by up to 75% compared to standard clamping levers.

Furthermore, this product can also be used by persons with limited hand strength (e.g. in rehabilitation) to achieve comparable clamping forces with less effort. Less effort is also needed to loosen the clamping lever.

The increase in clamping force is achieved by the integral needle roller thrust bearing, which generates very low surface friction on a rigid contact surface during clamping. The hardened thrust washers are designed for high clamping forces and the bearing with its high load rating guarantees a long service life.

The clamped component is permanently protected by the large, stationary contact surface. A washer is no longer required.

### Material:

Handle die-cast zinc DIN EN 12844.  
Steel parts grade 5.8.

### Version:

Handle plastic-coated or high-gloss trivalent passivated  
Steel parts, black oxidised.  
Axial needle bearing with hardened and ground thrust washer.

### Sample order:

K1599.5121 (clamping lever, black satin finish)

### Note:

Δ Add the desired lever colour here.  
Standard colours are:  
black satin finish, orange RAL 2004, ruby red RAL 3003, silver metallic, high gloss chromed.

### Method of operation:

In the default position, the handle is engaged with the threaded insert through a toothed ring. By lifting the handle, it can be repositioned and re-engaged in the toothed ring by spring force.

### Application:

Machine, equipment and plant construction, rehabilitation sector.

### Advantages:

Significant increase of the clamping force with the same tightening torque.  
High quality axial needle bearing with high load rating and long service life.  
The component surface is protected by the stationary lower ring.

### On request:

Other colours.



## Clamping levers, zinc

with female thread and clamping force intensifier



black satin finish  $\Delta = 1$



orange  $\Delta = 2$



RAL 2004

ruby red  $\Delta = 27$



RAL 3003

silver metallic  $\Delta = 3$



high-gloss chromed  $\Delta = 6$



### KIPP Clamping levers, zinc with female thread and clamping force intensifier

| Order No.  | X   | D2 | H    | H2   | H3   | H4   | A   | A1    | B    | T  | T1 |
|------------|-----|----|------|------|------|------|-----|-------|------|----|----|
| K1599.208Δ | M8  | 25 | 38,5 | 27,7 | 52,6 | 55,6 | 65  | 77,5  | 10   | 22 | 10 |
| K1599.310Δ | M10 | 30 | 47   | 33,9 | 64,4 | 68,6 | 80  | 95    | 11,2 | 24 | 10 |
| K1599.410Δ | M10 | 30 | 53,1 | 37,2 | 72,8 | 77,3 | 95  | 110   | 13,2 | 27 | 10 |
| K1599.512Δ | M12 | 35 | 59,1 | 41,9 | 83   | 87,5 | 110 | 127,5 | 15,4 | 33 | 10 |
| K1599.310Δ | M10 | 30 | 47   | 33,9 | 4,4  | 68,6 | 80  | 95    | 11,2 | 24 | 10 |

## Clamping levers, zinc

with male thread and clamping force intensifier



By using clamping levers with integrated clamping force intensifier, the clamping force can be increased by up to 75% compared to standard clamping levers.

Furthermore, this product can also be used by persons with limited hand strength (e.g. in rehabilitation) to achieve comparable clamping forces with less effort. Less effort is also needed to loosen the clamping lever.

The increase in clamping force is achieved by the integral needle roller thrust bearing, which generates very low surface friction on a rigid contact surface during clamping. The hardened thrust washers are designed for high clamping forces and the bearing with its high load rating guarantees a long service life.

The clamped component is permanently protected by the large, stationary contact surface. A washer is no longer required.

Due to the modular construction many special designs are available.

### Material:

Handle die-cast zinc DIN EN 12844.

Steel parts grade 5.8.

### Version:

Handle plastic-coated or high-gloss trivalent passivated  
Steel parts, black oxidised.

Axial needle bearing with hardened and ground thrust washer.

### Sample order:

K1599.5121X20

(clamping lever, black satin finish; include length L)

### Note:

Δ Add the desired lever colour here.

Standard colours are:

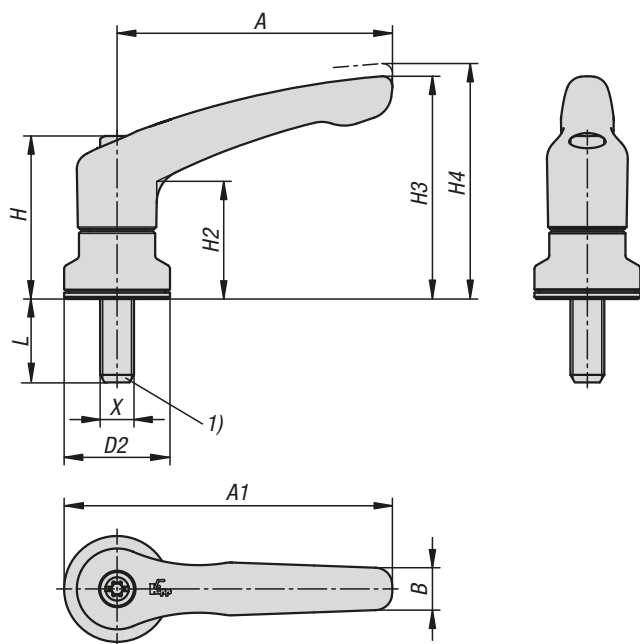
black satin finish, orange RAL 2004, ruby red RAL 3003,  
silver metallic, high gloss chromed.

### Method of operation:

In the default position, the handle is engaged with the threaded insert through a toothed ring. By lifting the handle, it can be repositioned and re-engaged in the toothed ring by spring force.

### Application:

Machine, equipment and plant construction, rehabilitation sector.



# Clamping levers, zinc

with male thread and clamping force intensifier



## Advantages:

Significant increase of the clamping force with the same tightening torque.

High quality axial needle bearing with high load rating and long service life.

The component surface is protected by the stationary lower ring.

## On request:

Other colours and thread lengths.

## Drawing reference:

1) flat point DIN EN ISO 4753



black satin finish  $\Delta = 1$



orange  $\Delta = 2$



RAL 2004

ruby red  $\Delta = 27$



RAL 3003

silver metallic  $\Delta = 3$



high-gloss chromed  $\Delta = 6$

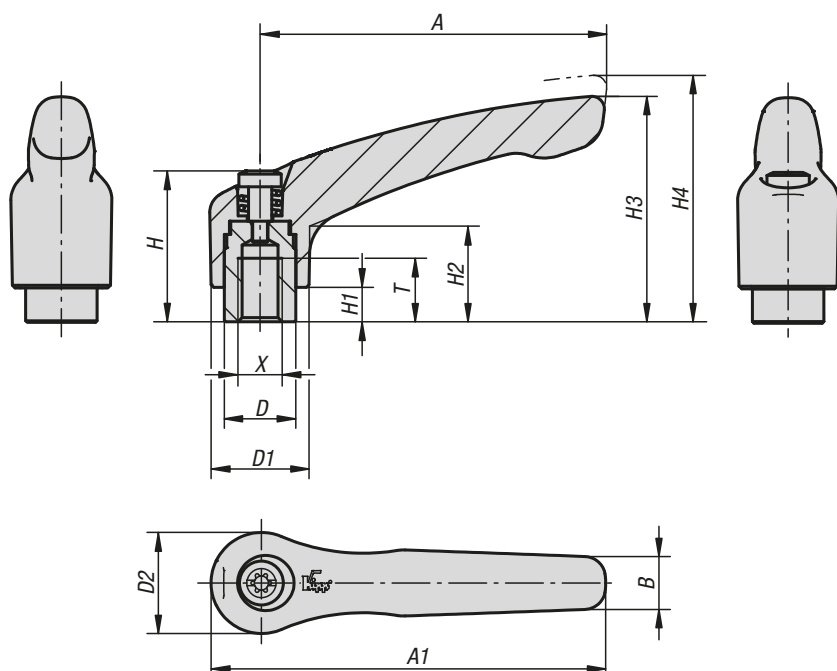


## KIPP Clamping levers, zinc with male thread and clamping force intensifier

| Order No.   | X   | D2 | H    | H2   | H3   | H4   | A   | A1    | B    | L           |
|-------------|-----|----|------|------|------|------|-----|-------|------|-------------|
| K1599.208ΔX | M8  | 25 | 38,5 | 27,7 | 52,6 | 55,6 | 65  | 77,5  | 10   | 10/20/30/40 |
| K1599.310ΔX | M10 | 30 | 47   | 33,9 | 64,4 | 68,6 | 80  | 95    | 11,2 | 15/30/40/50 |
| K1599.410ΔX | M10 | 30 | 53,1 | 37,2 | 72,8 | 77,3 | 95  | 110   | 13,2 | 20/30/40/50 |
| K1599.512ΔX | M12 | 35 | 59,1 | 41,9 | 83   | 87,5 | 110 | 127,5 | 15,4 | 20/30/40/50 |

## Clamping levers

internal thread, steel parts stainless steel



### Material:

Handle die-cast zinc DIN EN 12844.  
Steel parts stainless steel 1.4305.

### Version:

Handle powder-coated or high-gloss chromed.  
Steel parts bright.

### Sample order:

K0123.1051 (clamping lever, black satin finish)

### Note:

Δ Add the desired lever colour here.

Standard colours are:

black satin finish, orange RAL 2004, ruby red

RAL 3003, silver metallic, high gloss chromed.

### On request:

Other threads, colours and special versions.

Dimension "H1" available in other lengths at extra charge.

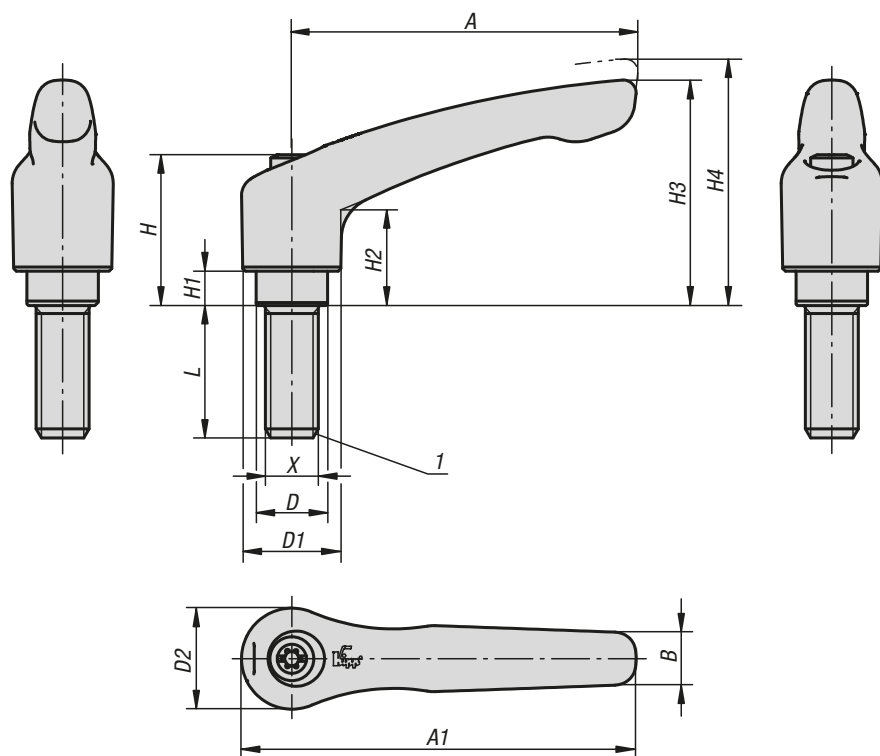


## KIPP Clamping levers with internal thread, steel parts stainless steel

| Order No.  | X   | A   | A1   | B   | D    | D1   | D2   | H    | H1  | H2   | H3   | H4   | T  | No. of teeth |
|------------|-----|-----|------|-----|------|------|------|------|-----|------|------|------|----|--------------|
| K0123.003Δ | M3  | 30  | 37   | 7   | 10   | 13   | 14   | 24,5 | 4   | 14,5 | 30   | 33   | 9  | 16           |
| K0123.004Δ | M4  | 30  | 37   | 7   | 10   | 13   | 14   | 24,5 | 4   | 14,5 | 30   | 33   | 9  | 16           |
| K0123.005Δ | M5  | 30  | 37   | 7   | 10   | 13   | 14   | 24,5 | 4   | 14,5 | 30   | 33   | 9  | 16           |
| K0123.104Δ | M4  | 40  | 47   | 7   | 10   | 13   | 14   | 24,5 | 4   | 14,5 | 31   | 34   | 9  | 16           |
| K0123.105Δ | M5  | 40  | 47   | 7   | 10   | 13   | 14   | 24,5 | 4   | 14,5 | 31   | 34   | 9  | 16           |
| K0123.106Δ | M6  | 40  | 47   | 7   | 10   | 13   | 14   | 24,5 | 4   | 14,5 | 31   | 34   | 9  | 16           |
| K0123.206Δ | M6  | 65  | 74,5 | 9,5 | 13,5 | 18,5 | 19   | 28,5 | 6,5 | 17,5 | 42,5 | 45,5 | 12 | 20           |
| K0123.208Δ | M8  | 65  | 74,5 | 9,5 | 13,5 | 18,5 | 19   | 28,5 | 6,5 | 17,5 | 42,5 | 45,5 | 12 | 20           |
| K0123.308Δ | M8  | 80  | 91   | 11  | 16   | 21   | 22   | 37   | 10  | 24   | 54,5 | 58,5 | 14 | 22           |
| K0123.310Δ | M10 | 80  | 91   | 11  | 16   | 21   | 22   | 37   | 10  | 24   | 54,5 | 58,5 | 14 | 22           |
| K0123.410Δ | M10 | 95  | 109  | 13  | 19   | 27   | 27,5 | 43   | 10  | 27   | 63   | 67,5 | 17 | 24           |
| K0123.412Δ | M12 | 95  | 109  | 13  | 19   | 27   | 27,5 | 43   | 10  | 27   | 63   | 67,5 | 17 | 24           |
| K0123.512Δ | M12 | 110 | 126  | 15  | 23   | 31   | 32   | 49   | 12  | 31,5 | 73   | 77,5 | 23 | 26           |
| K0123.516Δ | M16 | 110 | 126  | 15  | 23   | 31   | 32   | 49   | 12  | 31,5 | 73   | 77,5 | 23 | 26           |

# Clamping levers

external thread, steel parts stainless steel



## Material:

Handle die-cast zinc DIN EN 12844.  
Steel parts stainless steel 1.4305.

## Version:

Handle powder-coated or high-gloss chromed.  
Steel parts bright.

## Sample order:

K0123.1051X25 (clamping lever, black satin finish; include length L)

## Note:

Δ Add the desired lever colour here.  
Standard colours are:  
black satin finish, orange RAL 2004, ruby red RAL 3003, silver metallic, high gloss chromed.

Where  $L \geq 60$  mm the thread length is 60 mm.

## On request:

Other threads, screw lengths, colours and special versions.  
Dimension "H1" available in other lengths at extra charge.

## Drawing reference:

1) flat point DIN EN ISO 4753

lift to  
disengage



black satin finish Δ = 1



orange Δ = 2



RAL 2004

ruby red Δ = 27



RAL 3003

silver metallic Δ = 3



high-gloss chromed Δ = 6

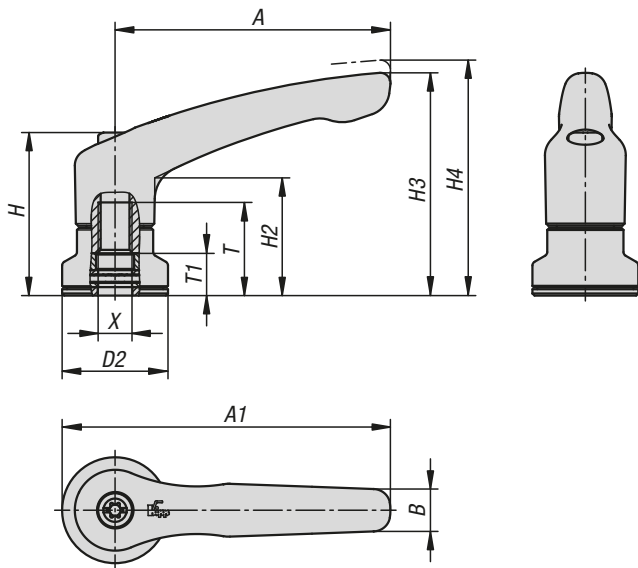


## KIPP Clamping levers with external thread, steel parts stainless steel

| Order No.   | X   | A   | A1   | B   | D    | D1   | D2   | H    | H1  | H2   | H3   | H4   | No. of teeth | L                    |
|-------------|-----|-----|------|-----|------|------|------|------|-----|------|------|------|--------------|----------------------|
| K0123.004ΔX | M4  | 30  | 37   | 7   | 10   | 13   | 14   | 24,5 | 4   | 14,5 | 30   | 33   | 16           | 10/15/20/25          |
| K0123.005ΔX | M5  | 30  | 37   | 7   | 10   | 13   | 14   | 24,5 | 4   | 14,5 | 30   | 33   | 16           | 10/15/20/25          |
| K0123.105ΔX | M5  | 40  | 47   | 7   | 10   | 13   | 14   | 24,5 | 4   | 14,5 | 31   | 34   | 16           | 10/15/20/25          |
| K0123.106ΔX | M6  | 40  | 47   | 7   | 10   | 13   | 14   | 24,5 | 4   | 14,5 | 31   | 34   | 16           | 10/15/20/25/30/40/50 |
| K0123.206ΔX | M6  | 65  | 74,5 | 9,5 | 13,5 | 18,5 | 19   | 28,5 | 6,5 | 17,5 | 42,5 | 45,5 | 20           | 15/20/25/30/40/50/60 |
| K0123.208ΔX | M8  | 65  | 74,5 | 9,5 | 13,5 | 18,5 | 19   | 28,5 | 6,5 | 17,5 | 42,5 | 45,5 | 20           | 15/20/25/30/40/50/60 |
| K0123.210ΔX | M10 | 65  | 74,5 | 9,5 | 13,5 | 18,5 | 19   | 28,5 | 6,5 | 17,5 | 42,5 | 45,5 | 20           | 20/25/30/40/50/60    |
| K0123.308ΔX | M8  | 80  | 91   | 11  | 16   | 21   | 22   | 37   | 10  | 24   | 54,5 | 58,5 | 22           | 20/25/30/40/50/60    |
| K0123.310ΔX | M10 | 80  | 91   | 11  | 16   | 21   | 22   | 37   | 10  | 24   | 54,5 | 58,5 | 22           | 20/25/30/40/50/60    |
| K0123.412ΔX | M12 | 95  | 109  | 13  | 19   | 27   | 27,5 | 43   | 10  | 27   | 63   | 67,5 | 24           | 25/30/40/50/60       |
| K0123.516ΔX | M16 | 110 | 126  | 15  | 23   | 31   | 32   | 49   | 12  | 31,5 | 73   | 77,5 | 26           | 30/40/50/60          |

## Clamping levers, zinc

with female thread and clamping force intensifier



By using clamping levers with integrated clamping force intensifier, the clamping force can be increased by up to 75% compared to standard clamping levers.

Furthermore, this product can also be used by persons with limited hand strength (e.g. in rehabilitation) to achieve comparable clamping forces with less effort. Less effort is also needed to loosen the clamping lever.

The increase in clamping force is achieved by the integral needle roller thrust bearing, which generates very low surface friction on a rigid contact surface during clamping. The hardened thrust washers are designed for high clamping forces and the bearing with its high load rating guarantees a long service life.

The clamped component is permanently protected by the large, stationary contact surface. A washer is no longer required.

### Material:

Handle die-cast zinc DIN EN 12844.

Steel parts stainless steel 1.4305.

### Version:

Handle plastic-coated or high-gloss trivalent passivated

Steel parts bright.

Axial needle bearing with hardened and ground thrust washer.

### Sample order:

K1626.5121 (clamping lever, black satin finish)

### Note:

Δ Add the desired lever colour here.

Standard colours are:

black satin finish, orange RAL 2004, ruby red RAL 3003, silver metallic, high gloss chromed.

### Method of operation:

In the default position, the handle is engaged with the threaded insert through a toothed ring. By lifting the handle, it can be repositioned and re-engaged in the toothed ring by spring force.

### Application:

Machine, equipment and plant construction, rehabilitation sector.

# Clamping levers, zinc

with female thread and clamping force intensifier



## Advantages:

Significant increase of the clamping force with the same tightening torque.  
High quality axial needle bearing with high load rating and long service life.  
The component surface is protected by the stationary lower ring.

## On request:

Other colours.



black satin finish  $\Delta = 1$



orange  $\Delta = 2$



RAL 2004

ruby red  $\Delta = 27$



RAL 3003

silver metallic  $\Delta = 3$



high-gloss chromed  $\Delta = 6$



## KIPP Clamping levers, zinc with female thread and clamping force intensifier

| Order No.  | X   | D2 | H    | H2   | H3   | H4   | A   | A1    | B    | T  | T1 |
|------------|-----|----|------|------|------|------|-----|-------|------|----|----|
| K1626.208Δ | M8  | 25 | 38,5 | 27,7 | 52,6 | 55,6 | 65  | 77,5  | 10   | 22 | 10 |
| K1626.310Δ | M10 | 30 | 47   | 33,9 | 64,4 | 68,6 | 80  | 95    | 11,2 | 24 | 10 |
| K1626.410Δ | M10 | 30 | 53,1 | 37,2 | 72,8 | 77,3 | 95  | 110   | 13,2 | 27 | 10 |
| K1626.512Δ | M12 | 35 | 59,1 | 41,9 | 83   | 87,5 | 110 | 127,5 | 15,4 | 33 | 10 |
| K1626.310Δ | M10 | 30 | 47   | 33,9 | 4,4  | 68,6 | 80  | 95    | 11,2 | 24 | 10 |



## Clamping levers, zinc

with male thread and clamping force intensifier



By using clamping levers with integrated clamping force intensifier, the clamping force can be increased by up to 75% compared to standard clamping levers.

Furthermore, this product can also be used by persons with limited hand strength (e.g. in rehabilitation) to achieve comparable clamping forces with less effort. Less effort is also needed to loosen the clamping lever.

The increase in clamping force is achieved by the integral needle roller thrust bearing, which generates very low surface friction on a rigid contact surface during clamping. The hardened thrust washers are designed for high clamping forces and the bearing with its high load rating guarantees a long service life.

The clamped component is permanently protected by the large, stationary contact surface. A washer is no longer required.

Due to the modular construction many special designs are available.

### Material:

Handle die-cast zinc DIN EN 12844.

Steel parts stainless steel 1.4305.

### Version:

Handle plastic-coated or high-gloss trivalent passivated

Steel parts bright.

Axial needle bearing with hardened and ground thrust washer.

### Sample order:

K1626.5121X20 (clamping lever, black satin finish; include length L)

### Note:

Δ Add the desired lever colour here.

Standard colours are:

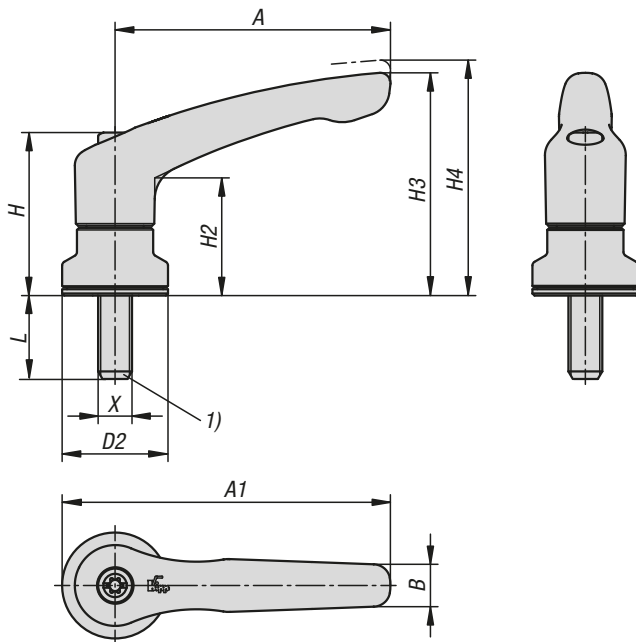
black satin finish, orange RAL 2004, ruby red RAL 3003, silver metallic, high gloss chromed.

### Method of operation:

In the default position, the handle is engaged with the threaded insert through a toothed ring. By lifting the handle, it can be repositioned and re-engaged in the toothed ring by spring force.

### Application:

Machine, equipment and plant construction, rehabilitation sector.



# Clamping levers, zinc

with male thread and clamping force intensifier



## Advantages:

Significant increase of the clamping force with the same tightening torque.  
High quality axial needle bearing with high load rating and long service life.  
The component surface is protected by the stationary lower ring.

## On request:

Other colours and thread lengths.

## Drawing reference:

1) flat point DIN EN ISO 4753



black satin finish  $\Delta = 1$



orange  $\Delta = 2$



RAL 2004

ruby red  $\Delta = 27$



RAL 3003

silver metallic  $\Delta = 3$



high-gloss chromed  $\Delta = 6$

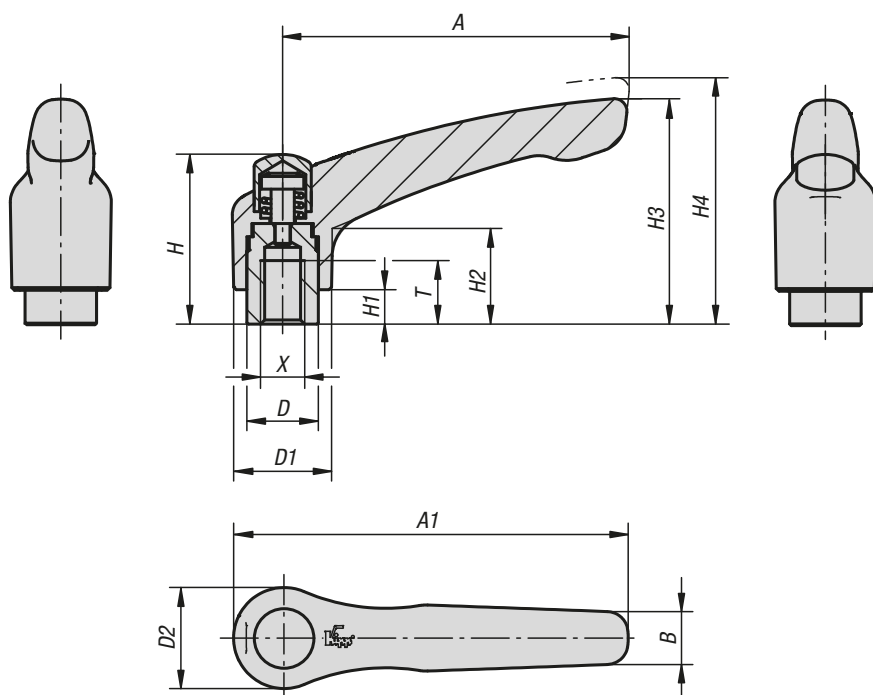


## KIPP Clamping levers, zinc with male thread and clamping force intensifier

| Order No.   | X   | D2 | H    | H2   | H3   | H4   | A   | A1    | B    | L           |
|-------------|-----|----|------|------|------|------|-----|-------|------|-------------|
| K1626.208ΔX | M8  | 25 | 38,5 | 27,7 | 52,6 | 55,6 | 65  | 77,5  | 10   | 10/20/30/40 |
| K1626.310ΔX | M10 | 30 | 47   | 33,9 | 64,4 | 68,6 | 80  | 95    | 11,2 | 15/30/40/50 |
| K1626.410ΔX | M10 | 30 | 53,1 | 37,2 | 72,8 | 77,3 | 95  | 110   | 13,2 | 20/30/40/50 |
| K1626.512ΔX | M12 | 35 | 59,1 | 41,9 | 83   | 87,5 | 110 | 127,5 | 15,4 | 20/30/40/50 |

## Clamping levers with protective cap

internal thread



### Material:

Handle die-cast zinc DIN EN 12844.  
Steel parts grade 5.8.  
Protective cap stainless steel 1.4305.

### Version:

Handle powder-coated.  
Steel parts black oxidised.  
Caps bright stainless steel.

### Sample order:

K0122.92081

### Note:

Standard colours are:  
black satin finish, orange RAL 2004.

### On request:

Other threads, colours and special versions.  
Dimension "H1" available in other lengths at  
extra charge.

lift to  
disengage

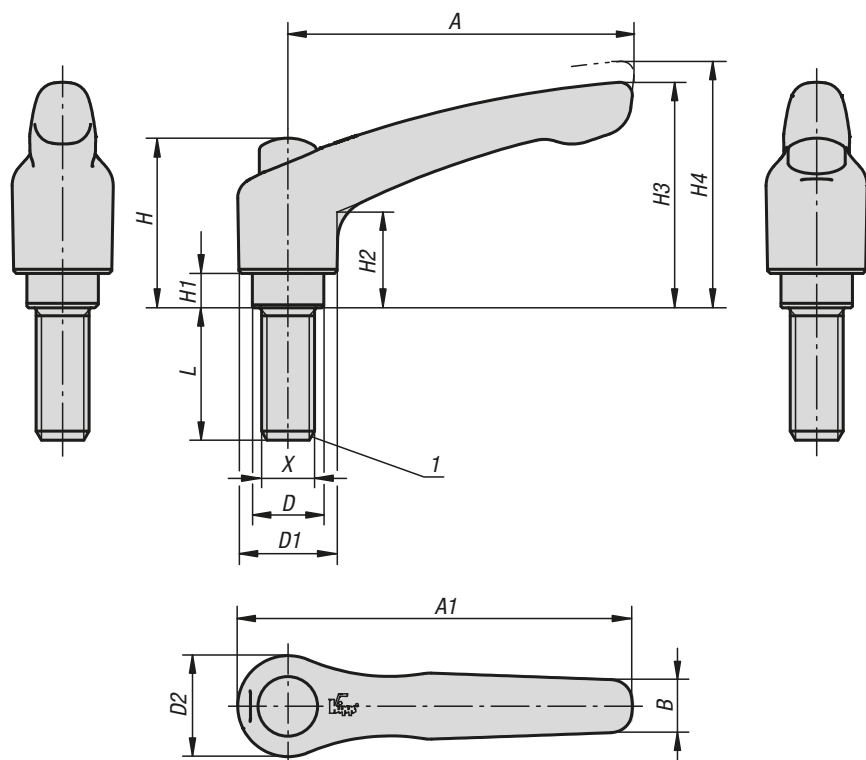


## KIPP Clamping levers with protective cap, internal thread

| Order No.<br>black | Order No.<br>orange RAL 2004 | X   | A  | A1   | B   | D    | D1   | D2 | H    | H1  | H2   | H3   | H4   | T  | No. of<br>teeth |
|--------------------|------------------------------|-----|----|------|-----|------|------|----|------|-----|------|------|------|----|-----------------|
| K0122.92061        | K0122.92062                  | M6  | 65 | 74,5 | 9,5 | 13,5 | 18,5 | 19 | 32   | 6,5 | 17,5 | 42,5 | 45,5 | 12 | 20              |
| K0122.92081        | K0122.92082                  | M8  | 65 | 74,5 | 9,5 | 13,5 | 18,5 | 19 | 32   | 6,5 | 17,5 | 42,5 | 45,5 | 12 | 20              |
| K0122.93081        | K0122.93082                  | M8  | 80 | 91   | 11  | 16   | 21   | 22 | 41,5 | 10  | 24   | 54,5 | 58,5 | 14 | 22              |
| K0122.93101        | K0122.93102                  | M10 | 80 | 91   | 11  | 16   | 21   | 22 | 41,5 | 10  | 24   | 54,5 | 58,5 | 14 | 22              |

# Clamping levers with protective cap

external thread



## Material:

Handle die-cast zinc DIN EN 12844.

Steel parts grade 5.8.

Protective cap stainless steel 1.4305.

## Version:

Handle powder-coated.

Steel parts black oxidised.

Caps bright stainless steel.

## Sample order:

K0122.92081X30 (include length L)

## Note:

Standard colours are:

black satin finish, orange RAL 2004.

Where L is  $\geq 60$  mm the thread length is 60 mm.

## On request:

Other threads, screw lengths, colours and special versions.

Dimension "H1" available in other lengths at extra charge.

## Drawing reference:

1) flat point DIN EN ISO 4753

lift to  
disengage



## KIPP Specifications

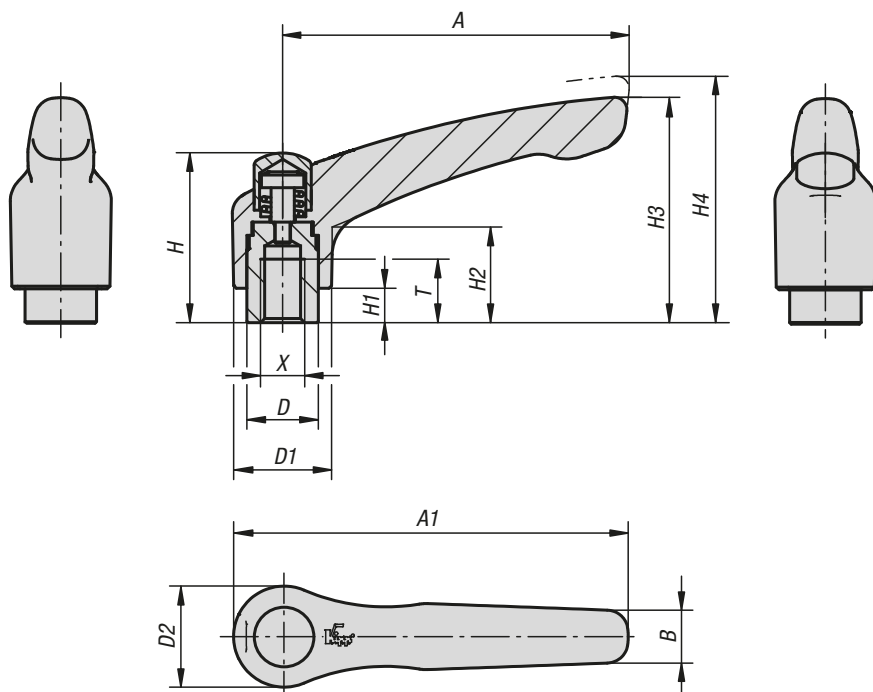
| Size | X         | A  | A1   | B   | D    | D1   | D2 | H    | H1  | H2   | H3   | H4   | No. of teeth |
|------|-----------|----|------|-----|------|------|----|------|-----|------|------|------|--------------|
| 2    | M6/M8/M10 | 65 | 74,5 | 9,5 | 13,5 | 18,5 | 19 | 32   | 6,5 | 17,5 | 42,5 | 45,5 | 20           |
| 3    | M8/M10    | 80 | 91   | 11  | 16   | 21   | 22 | 41,5 | 10  | 24   | 54,5 | 58,5 | 22           |

## KIPP Clamping levers with protective cap, external thread

| Order No.<br>black | Order No.<br>orange RAL 2004 | Size | X   | L                             |
|--------------------|------------------------------|------|-----|-------------------------------|
| K0122.92061X       | K0122.92062X                 | 2    | M6  | 15/20/25/30/35/40/45/50/55/60 |
| K0122.92081X       | K0122.92082X                 | 2    | M8  | 15/20/25/30/35/40/45/50/55/60 |
| K0122.92101X       | K0122.92102X                 | 2    | M10 | 15/20/25/30/35/40/45/50/55/60 |
| K0122.93081X       | K0122.93082X                 | 3    | M8  | 15/20/25/30/35/40/45/50/55/60 |
| K0122.93101X       | K0122.93102X                 | 3    | M10 | 15/20/25/30/35/40/45/50/55/60 |

## Clamping levers with protective cap

internal thread, steel parts stainless steel



### Material:

Handle die-cast zinc DIN EN 12844.  
Steel parts and cap 1.4305 stainless steel.

### Version:

Handle powder-coated.  
Steel parts bright.

### Sample order:

K0123.92081

### Note:

Standard colours are:  
black satin finish, orange RAL 2004.

### On request:

Other threads, colours and special versions.  
Dimension "H1" available in other lengths at extra charge.

lift to  
disengage

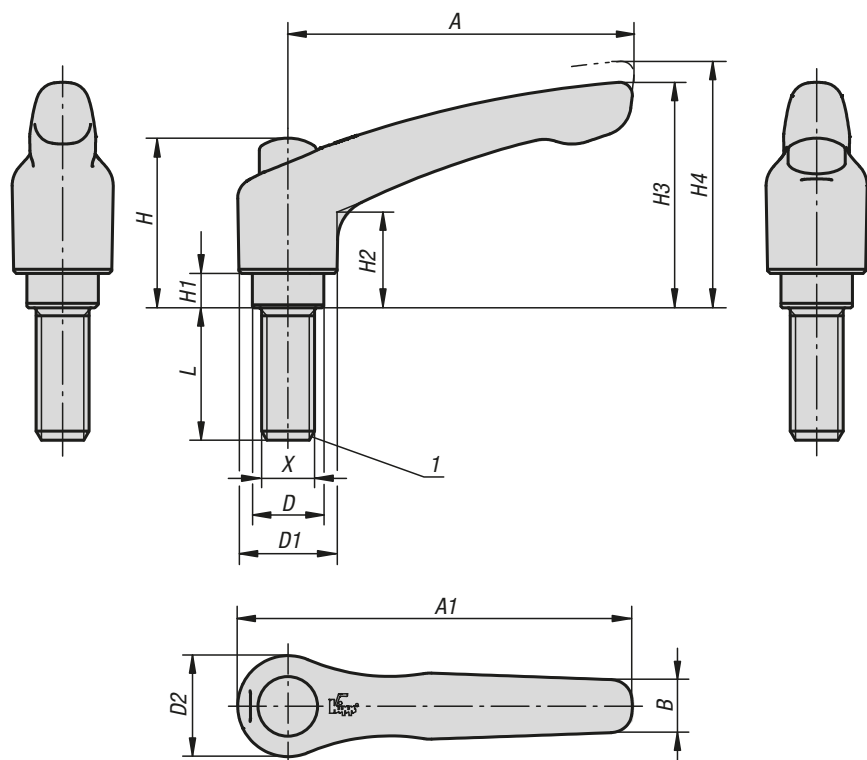


## KIPP Clamping levers with protective cap, internal thread, steel parts stainless steel

| Order No.<br>black | Order No.<br>orange RAL 2004 | X   | A  | A1   | B   | D    | D1   | D2 | H    | H1  | H2   | H3   | H4   | T  | No. of<br>teeth |
|--------------------|------------------------------|-----|----|------|-----|------|------|----|------|-----|------|------|------|----|-----------------|
| K0123.92061        | K0123.92062                  | M6  | 65 | 74,5 | 9,5 | 13,5 | 18,5 | 19 | 32   | 6,5 | 17,5 | 42,5 | 45,5 | 12 | 20              |
| K0123.92081        | K0123.92082                  | M8  | 65 | 74,5 | 9,5 | 13,5 | 18,5 | 19 | 32   | 6,5 | 17,5 | 42,5 | 45,5 | 12 | 20              |
| K0123.93081        | K0123.93082                  | M8  | 80 | 91   | 11  | 16   | 21   | 22 | 41,5 | 10  | 24   | 54,5 | 58,5 | 14 | 22              |
| K0123.93101        | K0123.93102                  | M10 | 80 | 91   | 11  | 16   | 21   | 22 | 41,5 | 10  | 24   | 54,5 | 58,5 | 14 | 22              |

# Clamping levers with protective cap

external thread, steel parts stainless steel



## Material:

Handle die-cast zinc DIN EN 12844.  
Steel parts and cap 1.4305 stainless steel.

## Version:

Handle powder-coated.  
Steel parts bright.

## Sample order:

K0123.92081X30 (include length L)

## Note:

Standard colours are:  
black satin finish, orange RAL 2004.

Where L is  $\geq 60$  mm the thread length is 60 mm.

## On request:

Other threads, screw lengths, colours and special versions.  
Dimension "H1" available in other lengths at extra charge.

## Drawing reference:

1) flat point DIN EN ISO 4753

lift to  
disengage



## KIPP Specifications

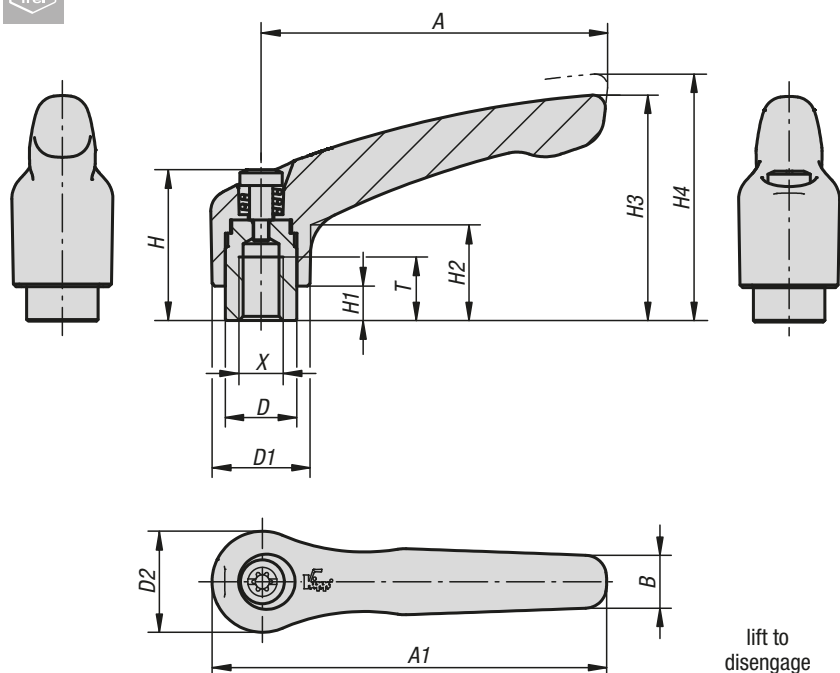
| Size | X         | A  | A1   | B   | D    | D1   | D2 | H    | H1  | H2   | H3   | H4   | No. of teeth |
|------|-----------|----|------|-----|------|------|----|------|-----|------|------|------|--------------|
| 2    | M6/M8/M10 | 65 | 74,5 | 9,5 | 13,5 | 18,5 | 19 | 32   | 6,5 | 17,5 | 42,5 | 45,5 | 20           |
| 3    | M8/M10    | 80 | 91   | 11  | 16   | 21   | 22 | 41,5 | 10  | 24   | 54,5 | 58,5 | 22           |

## KIPP Clamping levers with protective cap, external thread, steel parts stainless steel

| Order No.<br>black | Order No.<br>orange RAL 2004 | Size | X   | L                    |
|--------------------|------------------------------|------|-----|----------------------|
| K0123.92061X       | K0123.92062X                 | 2    | M6  | 15/20/25/30/40/50/60 |
| K0123.92081X       | K0123.92082X                 | 2    | M8  | 15/20/25/30/40/50/60 |
| K0123.92101X       | K0123.92102X                 | 2    | M10 | 20/25/30/40/50/60    |
| K0123.93081X       | K0123.93082X                 | 3    | M8  | 20/25/30/40/50/60    |
| K0123.93101X       | K0123.93102X                 | 3    | M10 | 20/25/30/40/50/60    |

## Clamping levers

internal thread, stainless steel



### Material:

Handle investment cast 1.4308.  
Other steel parts 1.4305.

### Version:

Handle electropolished or blasted.  
Metal parts bright.

### Sample order:

K0124.105

### On request:

Other threads and special versions.  
Dimension "H1" available in other lengths at extra charge.



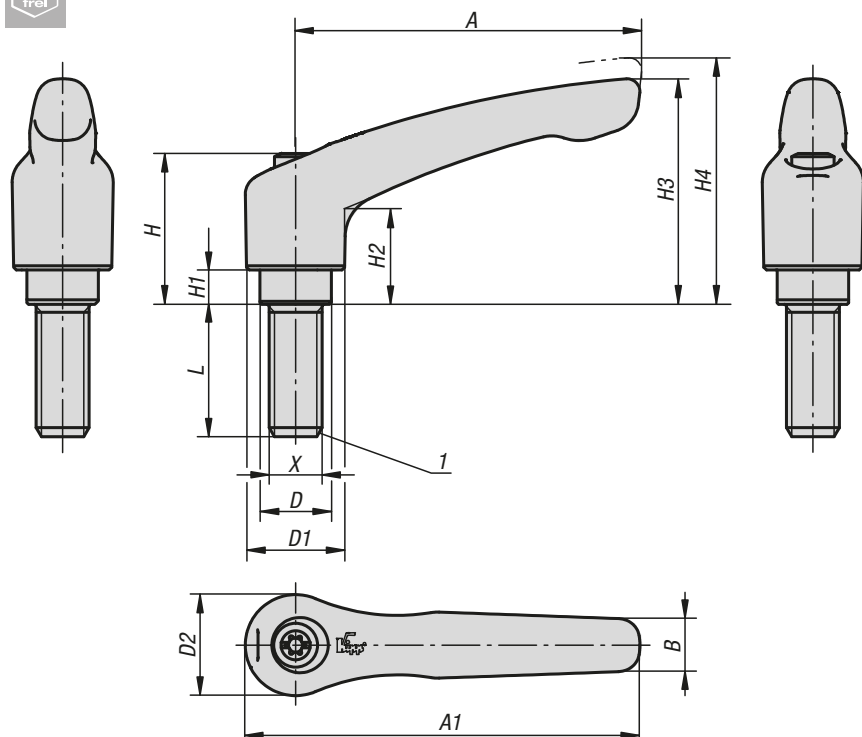
## KIPP Clamping levers with internal thread, stainless steel

| Order No.    | Main colour     | X   | A   | A1   | B  | D    | D1   | D2   | H    | H1  | H2   | H3   | H4   | T  | No. of teeth |
|--------------|-----------------|-----|-----|------|----|------|------|------|------|-----|------|------|------|----|--------------|
| K0124.104    | electropolished | M4  | 40  | 47   | 7  | 10   | 13   | 14   | 24,5 | 4   | 14,5 | 31   | 34   | 9  | 16           |
| K0124.105    | electropolished | M5  | 40  | 47   | 7  | 10   | 13   | 14   | 24,5 | 4   | 14,5 | 31   | 34   | 9  | 16           |
| K0124.106    | electropolished | M6  | 40  | 47   | 7  | 10   | 13   | 14   | 24,5 | 4   | 14,5 | 31   | 34   | 9  | 16           |
| K0124.206    | electropolished | M6  | 65  | 74,5 | 10 | 13,5 | 18,5 | 19   | 28,5 | 6,5 | 17,5 | 42,5 | 45,5 | 12 | 20           |
| K0124.208    | electropolished | M8  | 65  | 74,5 | 10 | 13,5 | 18,5 | 19   | 28,5 | 6,5 | 17,5 | 42,5 | 45,5 | 12 | 20           |
| K0124.308    | electropolished | M8  | 80  | 91   | 11 | 16   | 21   | 22   | 37   | 10  | 24   | 54,5 | 58,5 | 14 | 22           |
| K0124.310    | electropolished | M10 | 80  | 91   | 11 | 16   | 21   | 22   | 37   | 10  | 24   | 54,5 | 58,5 | 14 | 22           |
| K0124.410    | electropolished | M10 | 95  | 109  | 13 | 19   | 27   | 27,5 | 43   | 10  | 27   | 63   | 67,5 | 17 | 24           |
| K0124.412    | electropolished | M12 | 95  | 109  | 13 | 19   | 27   | 27,5 | 43   | 10  | 27   | 63   | 67,5 | 17 | 24           |
| K0124.512    | electropolished | M12 | 110 | 126  | 15 | 23   | 31   | 32   | 49   | 12  | 31,5 | 73   | 77,5 | 23 | 26           |
| K0124.516    | electropolished | M16 | 110 | 126  | 15 | 23   | 31   | 32   | 49   | 12  | 31,5 | 73   | 77,5 | 23 | 26           |
| K0124.104153 | blasted         | M4  | 40  | 47   | 7  | 10   | 13   | 14   | 24,5 | 4   | 14,5 | 31   | 34   | 9  | 16           |
| K0124.105153 | blasted         | M5  | 40  | 47   | 7  | 10   | 13   | 14   | 24,5 | 4   | 14,5 | 31   | 34   | 9  | 16           |
| K0124.106153 | blasted         | M6  | 40  | 47   | 7  | 10   | 13   | 14   | 24,5 | 4   | 14,5 | 31   | 34   | 9  | 16           |
| K0124.206153 | blasted         | M6  | 65  | 74,5 | 10 | 13,5 | 18,5 | 19   | 28,5 | 6,5 | 17,5 | 42,5 | 45,5 | 12 | 20           |
| K0124.208153 | blasted         | M8  | 65  | 74,5 | 10 | 13,5 | 18,5 | 19   | 28,5 | 6,5 | 17,5 | 42,5 | 45,5 | 12 | 20           |
| K0124.308153 | blasted         | M8  | 80  | 91   | 11 | 16   | 21   | 22   | 37   | 10  | 24   | 54,5 | 58,5 | 14 | 22           |
| K0124.310153 | blasted         | M10 | 80  | 91   | 11 | 16   | 21   | 22   | 37   | 10  | 24   | 54,5 | 58,5 | 14 | 22           |
| K0124.410153 | blasted         | M10 | 95  | 109  | 13 | 19   | 27   | 27,5 | 43   | 10  | 27   | 63   | 67,5 | 17 | 24           |
| K0124.412153 | blasted         | M12 | 95  | 109  | 13 | 19   | 27   | 27,5 | 43   | 10  | 27   | 63   | 67,5 | 17 | 24           |
| K0124.512153 | blasted         | M12 | 110 | 126  | 15 | 23   | 31   | 32   | 49   | 12  | 31,5 | 73   | 77,5 | 23 | 26           |
| K0124.516153 | blasted         | M16 | 110 | 126  | 15 | 23   | 31   | 32   | 49   | 12  | 31,5 | 73   | 77,5 | 23 | 26           |



# Clamping levers

external thread, stainless steel



## Material:

Handle investment cast 1.4308.  
Other steel parts 1.4305.

## Version:

Handle electropolished or blasted.  
Metal parts bright.

## Sample order:

K0124.105X10 (include length L)

## Note:

Where  $L \geq 60$  mm the thread length is always 60 mm.

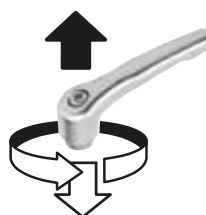
## On request:

Other threads, screw lengths and special versions.  
Dimension "H1" available in other lengths at extra charge.

## Drawing reference:

1) flat point DIN EN ISO 4753

lift to  
disengage

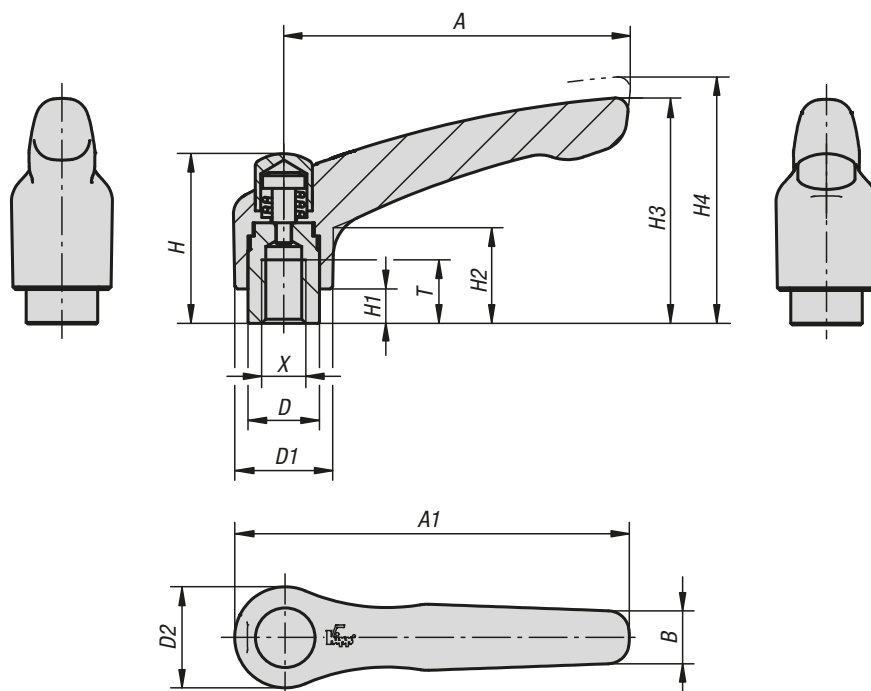


## KIPP Clamping levers with external thread, stainless steel

| Order No.     | Main colour     | X   | A   | A1   | B  | D    | D1   | D2   | H    | H1  | H2   | H3   | H4   | No. of teeth | L                    |
|---------------|-----------------|-----|-----|------|----|------|------|------|------|-----|------|------|------|--------------|----------------------|
| K0124.105X    | electropolished | M5  | 40  | 47   | 7  | 10   | 13   | 14   | 24,5 | 4   | 14,5 | 31   | 34   | 16           | 10/15/20/25          |
| K0124.106X    | electropolished | M6  | 40  | 47   | 7  | 10   | 13   | 14   | 24,5 | 4   | 14,5 | 31   | 34   | 16           | 10/15/20/25/30/40/50 |
| K0124.206X    | electropolished | M6  | 65  | 74,5 | 10 | 13,5 | 18,5 | 19   | 28,5 | 6,5 | 17,5 | 42,5 | 45,5 | 20           | 15/20/25/30/40/50/60 |
| K0124.208X    | electropolished | M8  | 65  | 74,5 | 10 | 13,5 | 18,5 | 19   | 28,5 | 6,5 | 17,5 | 42,5 | 45,5 | 20           | 15/20/25/30/40/50/60 |
| K0124.210X    | electropolished | M10 | 65  | 74,5 | 10 | 13,5 | 18,5 | 19   | 28,5 | 6,5 | 17,5 | 42,5 | 45,5 | 20           | 20/25/30/40/50/60    |
| K0124.308X    | electropolished | M8  | 80  | 91   | 11 | 16   | 21   | 22   | 37   | 10  | 24   | 54,5 | 58,5 | 22           | 20/25/30/40/50/60    |
| K0124.310X    | electropolished | M10 | 80  | 91   | 11 | 16   | 21   | 22   | 37   | 10  | 24   | 54,5 | 58,5 | 22           | 20/25/30/40/50/60    |
| K0124.412X    | electropolished | M12 | 95  | 109  | 13 | 19   | 27   | 27,5 | 43   | 10  | 27   | 63   | 67,5 | 24           | 25/30/40/50/60       |
| K0124.516X    | electropolished | M16 | 110 | 126  | 15 | 23   | 31   | 32   | 49   | 12  | 31,5 | 73   | 77,5 | 26           | 30/40/50/60          |
| K0124.105153X | blasted         | M5  | 40  | 47   | 7  | 10   | 13   | 14   | 24,5 | 4   | 14,5 | 31   | 34   | 16           | 10/15/20/25          |
| K0124.106153X | blasted         | M6  | 40  | 47   | 7  | 10   | 13   | 14   | 24,5 | 4   | 14,5 | 31   | 34   | 16           | 10/15/20/25/30/40/50 |
| K0124.206153X | blasted         | M6  | 65  | 74,5 | 10 | 13,5 | 18,5 | 19   | 28,5 | 6,5 | 17,5 | 42,5 | 45,5 | 20           | 15/20/25/30/40/50/60 |
| K0124.208153X | blasted         | M8  | 65  | 74,5 | 10 | 13,5 | 18,5 | 19   | 28,5 | 6,5 | 17,5 | 42,5 | 45,5 | 20           | 15/20/25/30/40/50/60 |
| K0124.210153X | blasted         | M10 | 65  | 74,5 | 10 | 13,5 | 18,5 | 19   | 28,5 | 6,5 | 17,5 | 42,5 | 45,5 | 20           | 20/25/30/40/50/60    |
| K0124.308153X | blasted         | M8  | 80  | 91   | 11 | 16   | 21   | 22   | 37   | 10  | 24   | 54,5 | 58,5 | 22           | 20/25/30/40/50/60    |
| K0124.310153X | blasted         | M10 | 80  | 91   | 11 | 16   | 21   | 22   | 37   | 10  | 24   | 54,5 | 58,5 | 22           | 20/25/30/40/50/60    |
| K0124.412153X | blasted         | M12 | 95  | 109  | 13 | 19   | 27   | 27,5 | 43   | 10  | 27   | 63   | 67,5 | 24           | 25/30/40/50/60       |
| K0124.516153X | blasted         | M16 | 110 | 126  | 15 | 23   | 31   | 32   | 49   | 12  | 31,5 | 73   | 77,5 | 26           | 30/40/50/60          |

## Clamping levers with protective cap

internal thread, stainless steel



### Material:

Handle investment cast 1.4308.  
Other steel parts 1.4305.

### Version:

Handle electropolished.  
Steel parts bright.

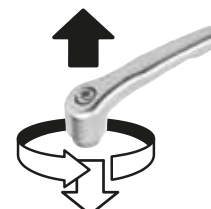
### Sample order:

K0124.9208

### On request:

Other threads and special versions.  
Dimension "H1" available in other lengths at extra charge.

lift to  
disengage

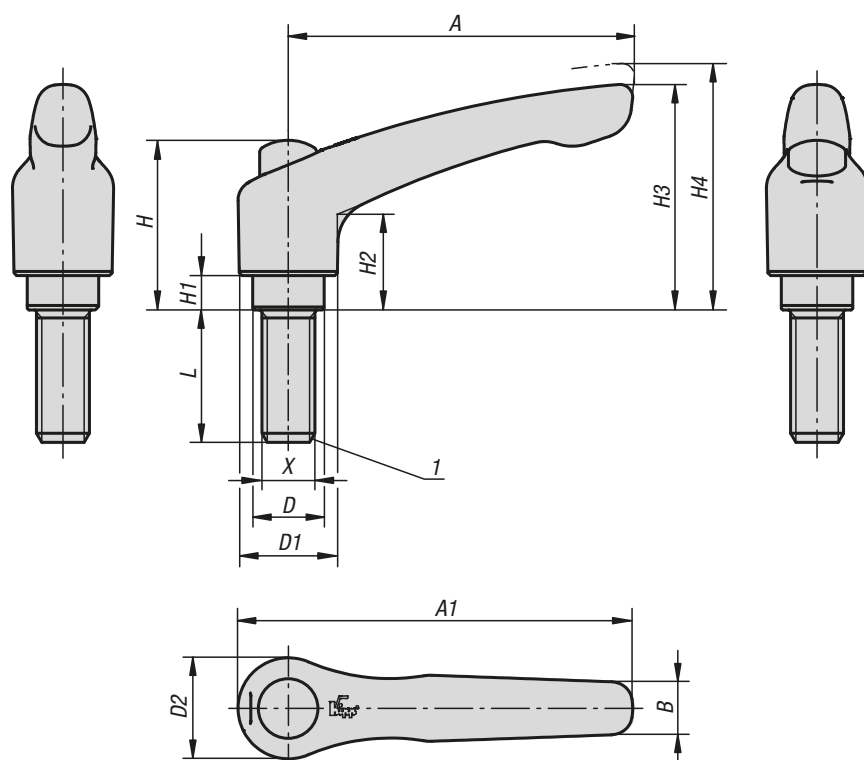


## KIPP Clamping levers with protective cap, internal thread, stainless steel

| Order No.  | X   | A  | A1   | B  | D    | D1   | D2 | H    | H1  | H2   | H3   | H4   | T  | No. of teeth |
|------------|-----|----|------|----|------|------|----|------|-----|------|------|------|----|--------------|
| K0124.9206 | M6  | 65 | 74,5 | 10 | 13,5 | 18,5 | 19 | 32   | 6,5 | 17,5 | 42,5 | 45,5 | 12 | 20           |
| K0124.9208 | M8  | 65 | 74,5 | 10 | 13,5 | 18,5 | 19 | 32   | 6,5 | 17,5 | 42,5 | 45,5 | 12 | 20           |
| K0124.9308 | M8  | 80 | 91   | 11 | 16   | 21   | 22 | 41,5 | 10  | 24   | 54,5 | 58,5 | 14 | 22           |
| K0124.9310 | M10 | 80 | 91   | 11 | 16   | 21   | 22 | 41,5 | 10  | 24   | 54,5 | 58,5 | 14 | 22           |

## Clamping levers with protective cap

external thread, stainless steel



### Material:

Handle investment cast 1.4308.

Other steel parts 1.4305.

### Version:

Handle electropolished.

Steel parts bright.

### Sample order:

K0124.9208X30 (include length L)

### On request:

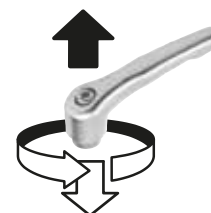
Other threads, screw lengths and special versions.

Dimension "H1" available in other lengths at extra charge.

### Drawing reference:

1) flat point DIN EN ISO 4753

lift to  
disengage

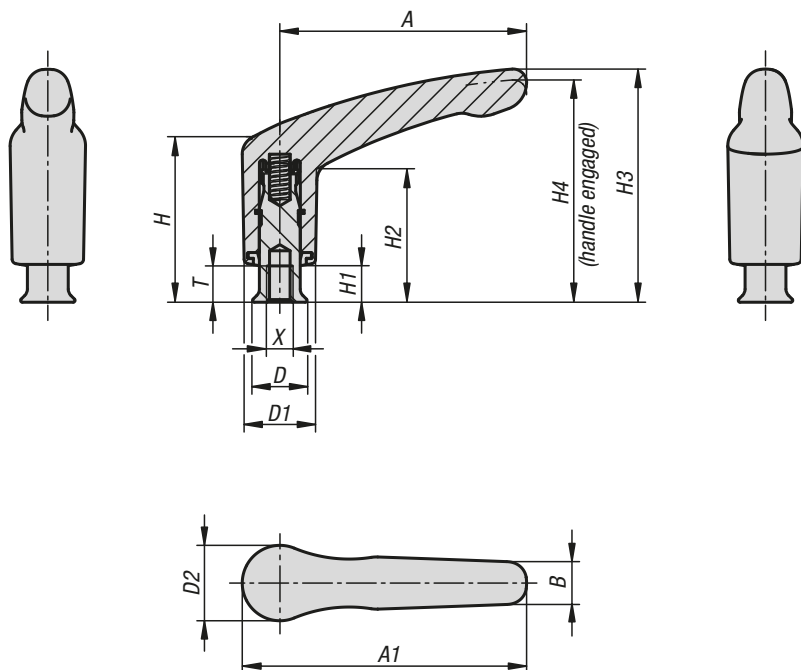


## KIPP Clamping levers with protective cap, external thread, stainless steel

| Order No.   | X   | A  | A1   | B  | D    | D1   | D2 | H    | H1  | H2   | H3   | H4   | No. of teeth | L                    |
|-------------|-----|----|------|----|------|------|----|------|-----|------|------|------|--------------|----------------------|
| K0124.9206X | M6  | 65 | 74,5 | 10 | 13,5 | 18,5 | 19 | 32   | 6,5 | 17,5 | 42,5 | 45,5 | 20           | 15/20/25/30/40/50/60 |
| K0124.9208X | M8  | 65 | 74,5 | 10 | 13,5 | 18,5 | 19 | 32   | 6,5 | 17,5 | 42,5 | 45,5 | 20           | 15/20/25/30/40/50/60 |
| K0124.9210X | M10 | 65 | 74,5 | 10 | 13,5 | 18,5 | 19 | 32   | 6,5 | 17,5 | 42,5 | 45,5 | 20           | 20/25/30/40/50/60    |
| K0124.9308X | M8  | 80 | 91   | 11 | 16   | 21   | 22 | 41,5 | 10  | 24   | 54,5 | 58,5 | 22           | 20/25/30/40/50/60    |
| K0124.9310X | M10 | 80 | 91   | 11 | 16   | 21   | 22 | 41,5 | 10  | 24   | 54,5 | 58,5 | 22           | 20/25/30/40/50/60    |

## Clamping levers with internal thread and collar

for Hygienic USIT® Freudenberg Process Seals sealing and shim washer



### Material:

Metal parts stainless steel 1.4404.  
Shaft seal 70 EPDM 291.

### Version:

High-gloss polished.

### Sample order:

K1316.308

### Note:

Clamping lever designed for the hygienic sector. The completely closed grip part and the shaft seal prevent contamination of the lever internal workings. Additionally, the screw insert has a conical collar so that the fastening point can be hygienically sealed with the Hygienic USIT® sealing and shim washer.

Due to the extremely high surface finish quality of much less than  $Ra\ 0.8\ \mu m$ , hardly any dirt particles adhere to the surface. The highly polished surfaces enable easy cleaning.

At rest, the lever is freely rotatable. Unintended opening of the lever is excluded. The toothing is protected against high wear for mounting on vibrating elements.

### On request:

Other thread depths and inch threads.

### Accessories:

Hygienic USIT® sealing and shim washer K1491.

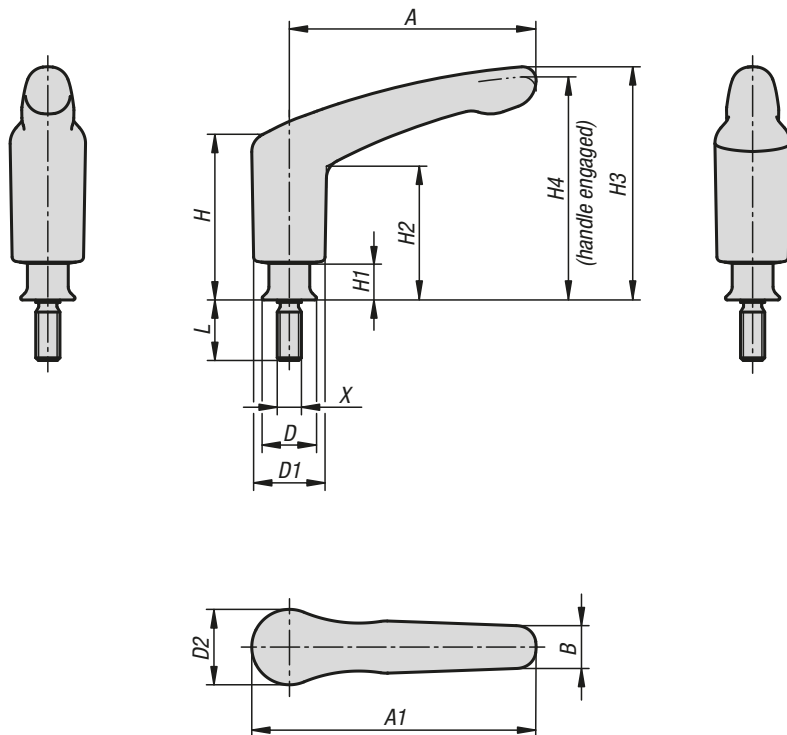


## KIPP Clamping levers with internal thread and collar for Hygienic USIT® Freudenberg Process Seals sealing and shim washer

| Order No. | X   | T  | D    | D1   | D2   | H    | H1   | H2   | H3   | H4   | A    | A1   | B    | No. of teeth |
|-----------|-----|----|------|------|------|------|------|------|------|------|------|------|------|--------------|
| K1316.106 | M6  | 10 | 14,2 | 21   | 21,7 | 36,7 | 8,8  | 27   | 50,6 | 47,6 | 47,4 | 58,2 | 11,8 | 16           |
| K1316.206 | M6  | 10 | 14,2 | 21   | 22,1 | 45,7 | 10,7 | 36,8 | 64,1 | 61,1 | 66,5 | 77,5 | 13   | 16           |
| K1316.208 | M8  | 14 | 18   | 21   | 22,1 | 45,7 | 10,7 | 36,8 | 64,1 | 61,1 | 66,5 | 77,5 | 13   | 16           |
| K1316.308 | M8  | 12 | 18   | 23,6 | 24,9 | 54,7 | 12,1 | 44   | 77   | 73,5 | 81,5 | 94   | 14,2 | 20           |
| K1316.310 | M10 | 15 | 22,3 | 23,6 | 24,9 | 54,7 | 12,1 | 44   | 77   | 73,5 | 81,5 | 94   | 14,2 | 20           |
| K1316.312 | M12 | 19 | 26,6 | 23,6 | 24,9 | 54,7 | 12,1 | 44   | 77   | 73,5 | 81,5 | 94   | 14,2 | 20           |

## Clamping levers with external thread and collar

for Hygienic USIT® Freudenberg Process Seals sealing and shim washer



### Material:

Metal parts stainless steel 1.4404.  
Shaft seal 70 EPDM 291.

### Version:

High-gloss polished.

### Sample order:

K1317.308X16

### Note:

Clamping lever designed for the hygienic sector. The completely closed grip part and the shaft seal prevent contamination of the lever internal workings. Additionally, the screw insert has a conical collar so that the fastening point can be hygienically sealed with the Hygienic USIT® sealing and shim washer.

Due to the extremely high surface finish quality of much less than Ra 0.8 µm, hardly any dirt particles adhere to the surface. The highly polished surfaces enable easy cleaning.

At rest, the lever is freely rotatable. Unintended opening of the lever is excluded. The toothing is protected against high wear for mounting on vibrating elements.

### On request:

Other screw lengths and inch threads.

### Accessories:

Hygienic USIT® sealing and shim washer K1491.

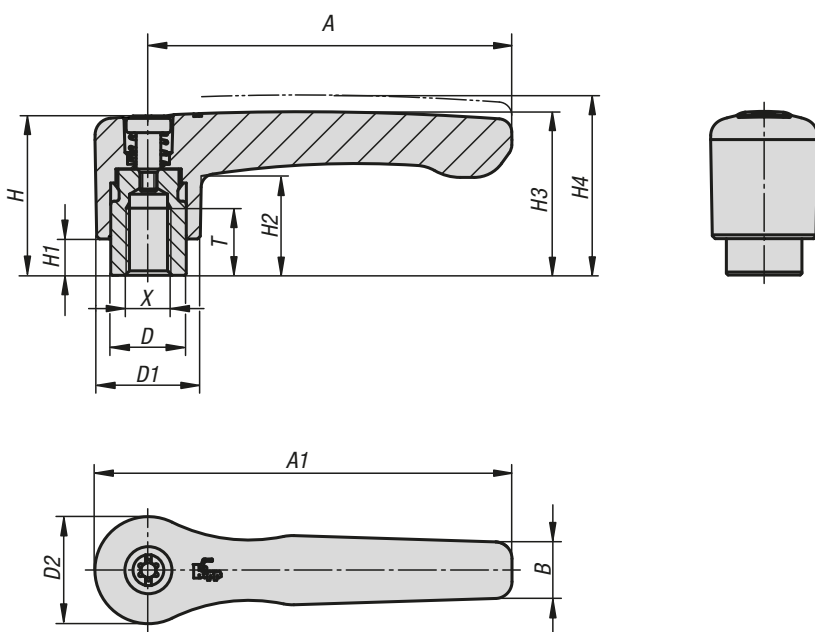


## KIPP Clamping levers with external thread and collar for Hygienic USIT® Freudenberg Process Seals sealing and shim washer

| Order No.  | X   | D    | D1   | D2   | H    | H1   | H2   | H3   | H4   | A    | A1   | B    | No. of teeth | L                       |
|------------|-----|------|------|------|------|------|------|------|------|------|------|------|--------------|-------------------------|
| K1317.106X | M6  | 14,2 | 21   | 21,7 | 36,7 | 8,8  | 27   | 50,6 | 47,6 | 47,4 | 58,2 | 11,8 | 16           | 20/30/40/50             |
| K1317.206X | M6  | 14,2 | 21   | 22,1 | 45,7 | 10,7 | 36,8 | 64,1 | 61,1 | 66,5 | 77,5 | 13   | 16           | 20/30/40/50             |
| K1317.208X | M8  | 18   | 21   | 22,1 | 45,7 | 10,7 | 36,8 | 64,1 | 61,1 | 66,5 | 77,5 | 13   | 16           | 20/30/40/50/60          |
| K1317.308X | M8  | 18   | 23,6 | 24,9 | 54,7 | 12,1 | 44   | 77   | 73,5 | 81,5 | 94   | 14,2 | 20           | 16/20/25/30/35/40/50/60 |
| K1317.310X | M10 | 22,3 | 23,6 | 24,9 | 54,7 | 12,1 | 44   | 77   | 73,5 | 81,5 | 94   | 14,2 | 20           | 20/25/30/35/40/50/60    |
| K1317.312X | M12 | 26,6 | 23,6 | 24,9 | 54,7 | 12,1 | 44   | 77   | 73,5 | 81,5 | 94   | 14,2 | 20           | 25/30/35/40/50/60       |

# Clamping levers, flat

internal thread


**Material:**

Handle die-cast zinc DIN EN 12844.  
Steel parts grade 5.8.

**Version:**

Handle powder-coated.  
Steel parts black oxidised.

**Sample order:**

K0737.2061

**Note:**

Standard colours are:  
black satin finish, orange RAL 2004.

**On request:**

Other threads, colours and special versions.  
Dimension "H1" available in other lengths at  
extra charge.

lift to  
disengage

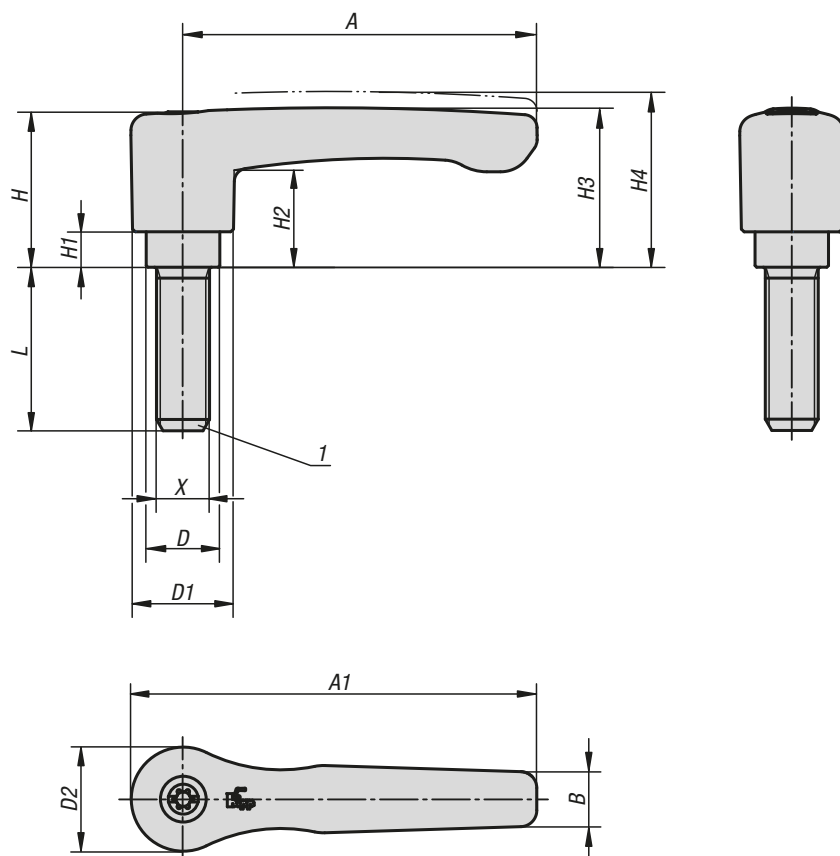


## KIPP Clamping levers, flat with internal thread

| Order No.<br>black | Order No.<br>orange RAL 2004 | X   | T  | D    | D1   | D2   | H    | H1  | H2   | H3   | H4   | A  | A1   | B    | No. of<br>teeth |
|--------------------|------------------------------|-----|----|------|------|------|------|-----|------|------|------|----|------|------|-----------------|
| K0737.2061         | K0737.2062                   | M6  | 12 | 13,5 | 18,5 | 19,1 | 28,5 | 6,5 | 17,8 | 29,2 | 32,2 | 65 | 74,5 | 10,1 | 20              |
| K0737.2081         | K0737.2082                   | M8  | 12 | 13,5 | 18,5 | 19,1 | 28,5 | 6,5 | 17,8 | 29,2 | 32,2 | 65 | 74,5 | 10,1 | 20              |
| K0737.3081         | K0737.3082                   | M8  | 14 | 16   | 21,2 | 22   | 37   | 10  | 23,8 | 38   | 42   | 80 | 91   | 11,7 | 22              |
| K0737.3101         | K0737.3102                   | M10 | 14 | 16   | 21,2 | 22   | 37   | 10  | 23,8 | 38   | 42   | 80 | 91   | 11,7 | 22              |

# Clamping levers, flat

external thread



## Material:

Handle die-cast zinc DIN EN 12844.  
Steel parts grade 5.8.

## Version:

Handle powder-coated.  
Steel parts black oxidised.

## Sample order:

K0737.2061X15 (include length L)

## Note:

Standard colours are:  
black satin finish, orange RAL 2004.

Where  $L \geq 60$  mm the thread length is 60 mm.

## On request:

Other threads, screw lengths, colours and special versions.  
Dimension "H1" available in other lengths at extra charge.

## Drawing reference:

1) flat point DIN EN ISO 4753



## KIPP Specifications

| Size | X         | A  | A1   | B    | D    | D1   | D2   | H    | H1  | H2   | H3   | H4   | No. of teeth |
|------|-----------|----|------|------|------|------|------|------|-----|------|------|------|--------------|
| 2    | M6/M8/M10 | 65 | 74,5 | 10,1 | 13,5 | 18,5 | 19,1 | 28,5 | 6,5 | 17,8 | 29,2 | 32,2 | 20           |
| 3    | M8/M10    | 80 | 91   | 11,7 | 16   | 21,2 | 22   | 37   | 10  | 23,8 | 38   | 42   | 22           |

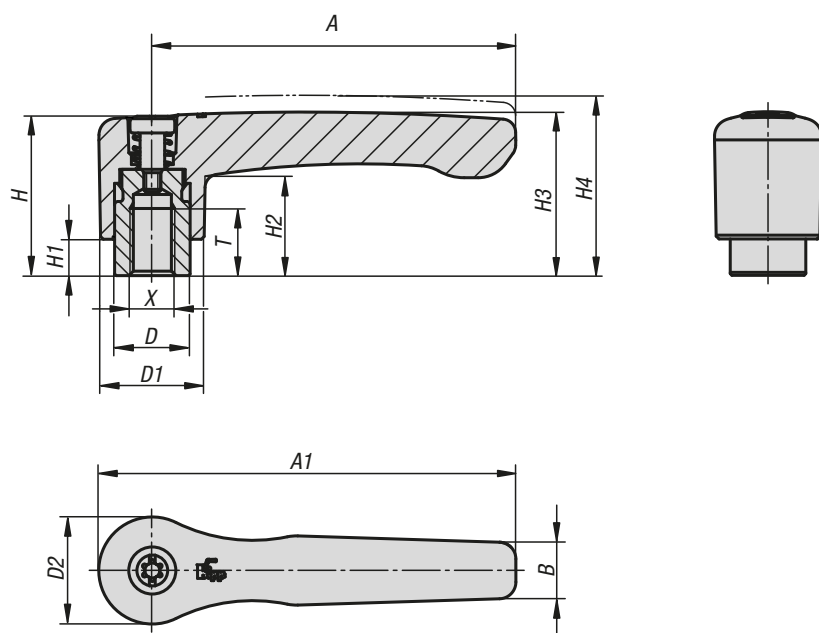
## KIPP Clamping levers, flat with external thread

| Order No.<br>black | Order No.<br>orange RAL 2004 | Size | X   | L                             |
|--------------------|------------------------------|------|-----|-------------------------------|
| K0737.2061X        | K0737.2062X                  | 2    | M6  | 15/20/25/30/35/40/45/50/55/60 |
| K0737.2081X        | K0737.2082X                  | 2    | M8  | 15/20/25/30/35/40/45/50/55/60 |
| K0737.2101X        | K0737.2102X                  | 2    | M10 | 15/20/25/30/35/40/45/50/55/60 |
| K0737.3081X        | K0737.3082X                  | 3    | M8  | 15/20/25/30/35/40/45/50/55/60 |
| K0737.3101X        | K0737.3102X                  | 3    | M10 | 15/20/25/30/35/40/45/50/55/60 |



## Clamping levers, flat

internal thread, steel parts stainless steel



### Material:

Handle die-cast zinc DIN EN 12844.  
Steel parts stainless steel 1.4305.

### Version:

Handle powder-coated.  
Stainless steel parts bright.

### Sample order:

K0738.2061

### Note:

Standard colours are:  
black satin finish, orange RAL 2004.

### On request:

Other threads, colours and special versions.  
Dimension "H1" available in other lengths at  
extra charge.

lift to  
disengage

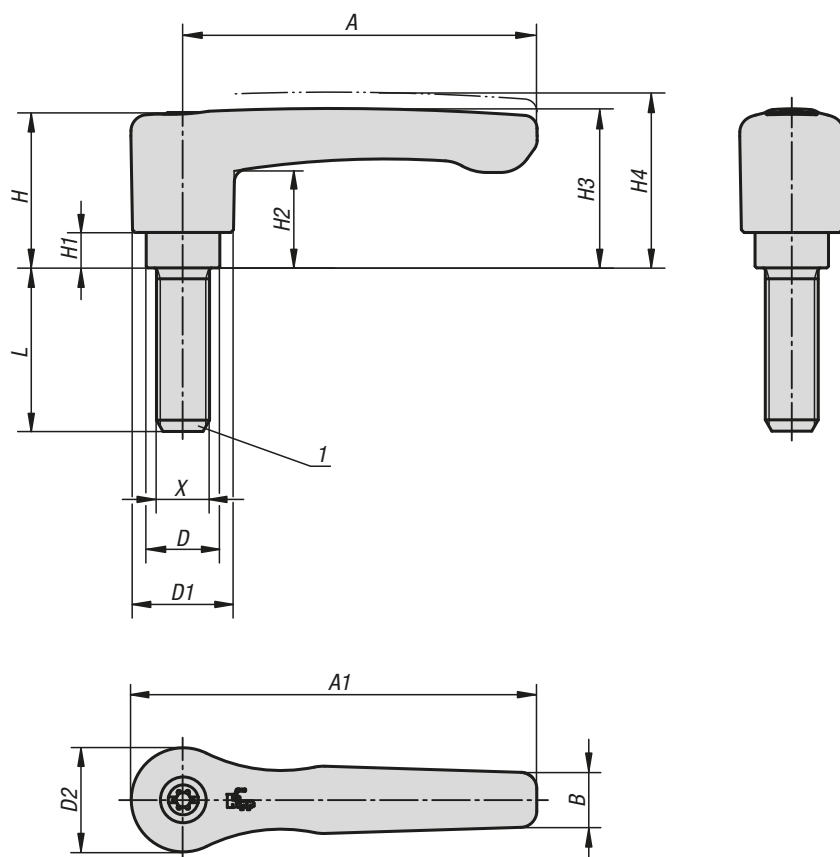


## KIPP Clamping levers, flat with internal thread, stainless steel

| Order No.<br>black | Order No.<br>orange RAL 2004 | X   | T  | D    | D1   | D2   | H    | H1  | H2   | H3   | H4   | A  | A1   | B    | No. of<br>teeth |
|--------------------|------------------------------|-----|----|------|------|------|------|-----|------|------|------|----|------|------|-----------------|
| K0738.2061         | K0738.2062                   | M6  | 12 | 13,5 | 18,5 | 19,1 | 28,5 | 6,5 | 17,8 | 29,2 | 32,2 | 65 | 74,5 | 10,1 | 20              |
| K0738.2081         | K0738.2082                   | M8  | 12 | 13,5 | 18,5 | 19,1 | 28,5 | 6,5 | 17,8 | 29,2 | 32,2 | 65 | 74,5 | 10,1 | 20              |
| K0738.3081         | K0738.3082                   | M8  | 14 | 16   | 21,2 | 22   | 37   | 10  | 23,8 | 38   | 42   | 80 | 91   | 11,7 | 22              |
| K0738.3101         | K0738.3102                   | M10 | 14 | 16   | 21,2 | 22   | 37   | 10  | 23,8 | 38   | 42   | 80 | 91   | 11,7 | 22              |

# Clamping levers, flat

external thread, steel parts stainless steel



## Material:

Handle die-cast zinc DIN EN 12844.  
Steel parts stainless steel 1.4305.

## Version:

Handle powder-coated.  
Stainless steel parts bright.

## Sample order:

K0738.2061X15 (include length L)

## Note:

Standard colours are:  
black satin finish, orange RAL 2004.

Where  $L \geq 60$  mm the thread length is 60 mm.

## On request:

Other threads, screw lengths, colours and special versions.  
Dimension "H1" available in other lengths at extra charge.

## Drawing reference:

1) flat point DIN EN ISO 4753

lift to  
disengage



## KIPP Specifications

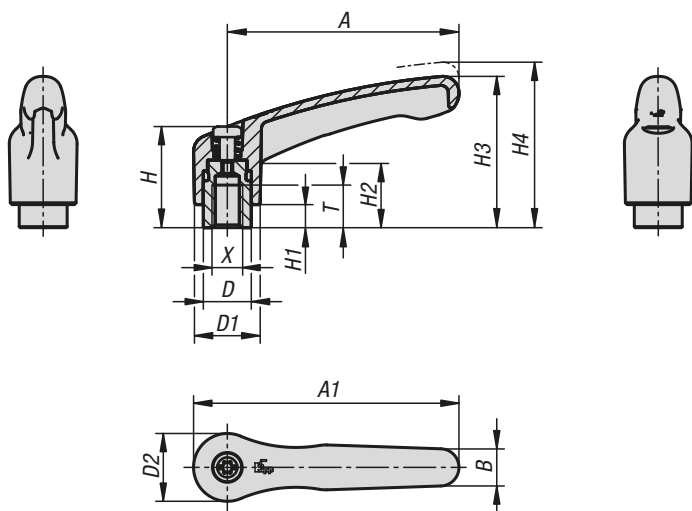
| Size | X         | A  | A1   | B    | D    | D1   | D2   | H    | H1  | H2   | H3   | H4   | No. of teeth |
|------|-----------|----|------|------|------|------|------|------|-----|------|------|------|--------------|
| 2    | M6/M8/M10 | 65 | 74,5 | 10,1 | 13,5 | 18,5 | 19,1 | 28,5 | 6,5 | 17,8 | 29,2 | 32,2 | 20           |
| 3    | M8/M10    | 80 | 91   | 11,7 | 16   | 21,2 | 22   | 37   | 10  | 23,8 | 38   | 42   | 22           |

## KIPP Clamping levers, flat with external thread, stainless steel

| Order No.<br>black | Order No.<br>orange RAL 2004 | Size | X   | L                    |
|--------------------|------------------------------|------|-----|----------------------|
| K0738.2061X        | K0738.2062X                  | 2    | M6  | 15/20/25/30/40/50/60 |
| K0738.2081X        | K0738.2082X                  | 2    | M8  | 15/20/25/30/40/50/60 |
| K0738.2101X        | K0738.2102X                  | 2    | M10 | 20/25/30/40/50/60    |
| K0738.3081X        | K0738.3082X                  | 3    | M8  | 20/25/30/40/50/60    |
| K0738.3101X        | K0738.3102X                  | 3    | M10 | 20/25/30/40/50/60    |

## Clamping levers plastic

with internal thread, steel parts black oxidised



The plastic clamping lever with ergonomic grip design offers a high-quality, modern appearance in combination with very pleasant haptics.

The clamping lever is made of a special high-performance plastic and is available in many standard colours.

The advantages of the clamping lever are high rigidity and strength. The light weight make it ideal for mobile applications.

### Material:

High performance fibreglass reinforced thermoplastic.  
Steel parts grade 5.8.

### Version:

Steel parts black oxidised.

### Sample order:

K1700.10486 (lever colour signal green)

### Note:

Δ Add the desired grip colour here.

### Method of operation:

When not actuated, the handle is engaged in the tooth insert by a gear ring, thus allowing the thread to be fastened or released. When raised, the handle can be re-positioned and then re-engaged in the gear ring by spring force.

### Application:

Machine, equipment and plant construction, rehabilitation sector.

### Temperature range:

Permanent temperature max. 100 °C.  
Brief use with temperatures up to 130 °C.

### Advantages:

Seven colour variants.

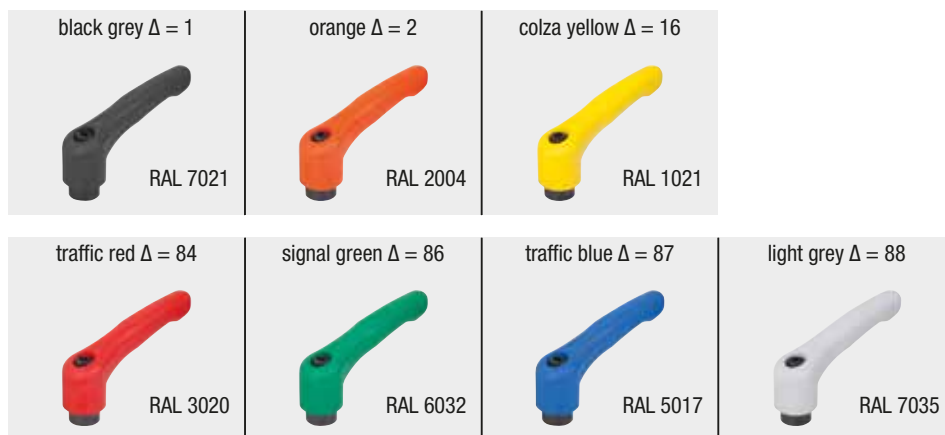
### On request:

Other female threads and special versions.  
Length "H1" optionally available in other lengths for an additional charge.

High temperature black-grey plastic.  
Permanent operating temperature  
acc. to IEC 216 150 °C - 160 °C max.  
Brief use with temperatures up to 250 °C.

## Clamping levers plastic

with internal thread, steel parts black oxidised

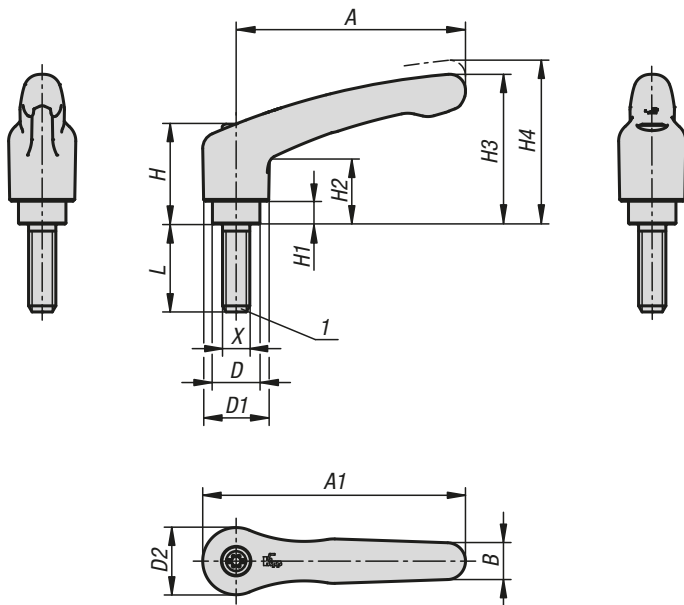


### KIPP Clamping levers plastic with internal thread, steel parts black oxidised

| Order No.  | X   | A     | A1    | B    | D    | D1   | D2   | H    | H1  | H2   | H3   | H4   | T  | No. of teeth |
|------------|-----|-------|-------|------|------|------|------|------|-----|------|------|------|----|--------------|
| K1700.104Δ | M4  | 39,9  | 46,8  | 7,9  | 10   | 13,2 | 13,8 | 24,5 | 4   | 14,2 | 30,8 | 35   | 9  | 16           |
| K1700.105Δ | M5  | 39,9  | 46,8  | 7,9  | 10   | 13,2 | 13,8 | 24,5 | 4   | 14,2 | 30,8 | 35   | 9  | 16           |
| K1700.106Δ | M6  | 39,9  | 46,8  | 7,9  | 10   | 13,2 | 13,8 | 24,5 | 4   | 14,2 | 30,8 | 35   | 9  | 16           |
| K1700.206Δ | M6  | 65,2  | 74,8  | 10,5 | 13,5 | 18,5 | 19,1 | 28,5 | 6,5 | 18,6 | 42,6 | 47,1 | 12 | 20           |
| K1700.208Δ | M8  | 65,2  | 74,8  | 10,5 | 13,5 | 18,5 | 19,1 | 28,5 | 6,5 | 18,6 | 42,6 | 47,1 | 12 | 20           |
| K1700.308Δ | M8  | 80,2  | 91,1  | 11,5 | 16   | 21,2 | 21,9 | 37   | 10  | 24   | 54   | 59,2 | 14 | 22           |
| K1700.310Δ | M10 | 80,2  | 91,1  | 11,5 | 16   | 21,2 | 21,9 | 37   | 10  | 24   | 54   | 59,2 | 14 | 22           |
| K1700.410Δ | M10 | 96,8  | 110,3 | 14,1 | 19   | 26,2 | 27,1 | 43,1 | 10  | 27,8 | 62,4 | 68,1 | 17 | 24           |
| K1700.412Δ | M12 | 96,8  | 110,3 | 14,1 | 19   | 26,2 | 27,1 | 43,1 | 10  | 27,8 | 62,4 | 68,1 | 17 | 24           |
| K1700.512Δ | M12 | 110,9 | 126,6 | 15,1 | 23   | 30,5 | 31,5 | 49,1 | 12  | 30,8 | 72,9 | 79,2 | 23 | 26           |
| K1700.516Δ | M16 | 110,9 | 126,6 | 15,1 | 23   | 30,5 | 31,5 | 49,1 | 12  | 30,8 | 72,9 | 79,2 | 23 | 26           |

## Clamping levers plastic

with external thread, steel parts black oxidised



The plastic clamping lever with ergonomic grip design offers a high-quality, modern appearance in combination with very pleasant haptics. The clamping lever is made of a special high-performance plastic and is available in many standard colours.

The advantages of the clamping lever are high rigidity and strength. The light weight make it ideal for mobile applications.

### Material:

High performance fibreglass reinforced thermoplastic. Steel parts grade 5.8.

### Version:

Steel parts black oxidised.

### Sample order:

K1700.1051X20 (lever black grey; include length L)

### Note:

Δ Add the desired grip colour here.

Where  $L \geq 60$  mm the thread length is always 60 mm.

### Method of operation:

When not actuated, the handle is engaged in the tooth insert by a gear ring, thus allowing the thread to be fastened or released. When raised, the handle can be re-positioned and then re-engaged in the gear ring by spring force.

### Application:

Machine, equipment and plant construction, rehabilitation sector.

### Temperature range:

Permanent temperature max. 100 °C.

Brief use with temperatures up to 130 °C.

### Advantages:

Seven colour variants.

### On request:

Other screw sizes, screw lengths and special versions. Length "H1" optionally available in other lengths for an additional charge.

High temperature black-grey plastic.

Permanent operating temperature

acc. to IEC 216 150 °C - 160 °C max.

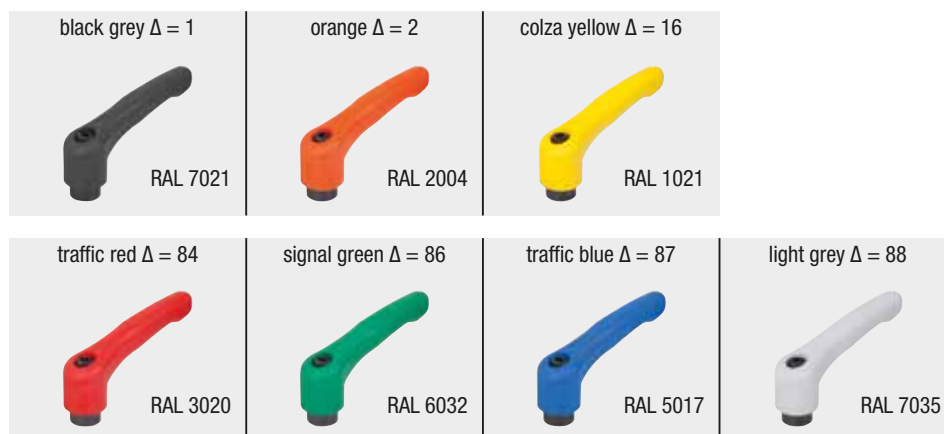
Brief use with temperatures up to 250 °C.

### Drawing reference:

1) flat point DIN EN ISO 4753

## Clamping levers plastic

with external thread, steel parts black oxidised

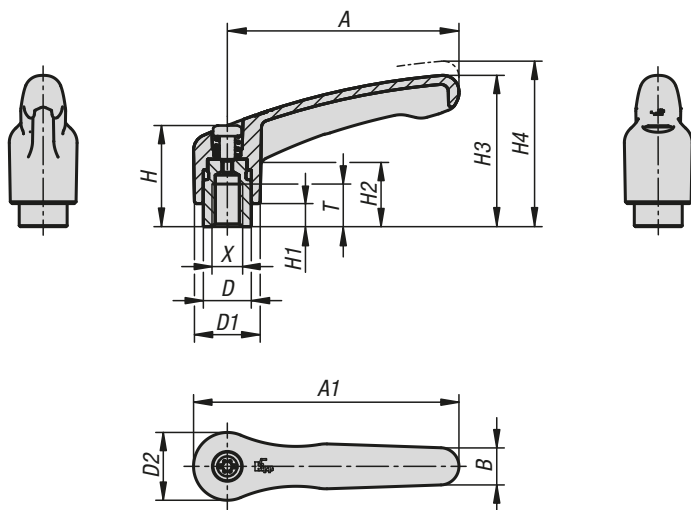


### KIPP Clamping levers plastic with external thread, steel parts black oxidised

| Order No.   | X   | A     | A1    | B    | D    | D1   | D2   | H    | H1  | H2   | H3   | H4   | No. of teeth | L                                   |
|-------------|-----|-------|-------|------|------|------|------|------|-----|------|------|------|--------------|-------------------------------------|
| K1700.105ΔX | M5  | 39,9  | 46,8  | 7,9  | 10   | 13,2 | 13,8 | 24,5 | 4   | 14,2 | 30,8 | 35   | 16           | 10/15/20/25/30/35/40/45/50          |
| K1700.106ΔX | M6  | 39,9  | 46,8  | 7,9  | 10   | 13,2 | 13,8 | 24,5 | 4   | 14,2 | 30,8 | 35   | 16           | 10/15/20/25/30/35/40/45/50          |
| K1700.206ΔX | M6  | 65,2  | 74,8  | 10,5 | 13,5 | 18,5 | 19,1 | 28,5 | 6,5 | 18,6 | 42,6 | 47,1 | 20           | 15/20/25/30/35/40/45/50/55/60       |
| K1700.208ΔX | M8  | 65,2  | 74,8  | 10,5 | 13,5 | 18,5 | 19,1 | 28,5 | 6,5 | 18,6 | 42,6 | 47,1 | 20           | 15/20/25/30/35/40/45/50/55/60       |
| K1700.210ΔX | M10 | 65,2  | 74,8  | 10,5 | 13,5 | 18,5 | 19,1 | 28,5 | 6,5 | 18,6 | 42,6 | 47,1 | 20           | 15/20/25/30/35/40/45/50/55/60       |
| K1700.308ΔX | M8  | 80,2  | 91,1  | 11,5 | 16   | 21,2 | 21,9 | 37   | 10  | 24   | 54   | 59,2 | 22           | 15/20/25/30/35/40/45/50/55/60       |
| K1700.310ΔX | M10 | 80,2  | 91,1  | 11,5 | 16   | 21,2 | 21,9 | 37   | 10  | 24   | 54   | 59,2 | 22           | 15/20/25/30/35/40/45/50/55/60       |
| K1700.410ΔX | M10 | 96,8  | 110,3 | 14,1 | 19   | 26,2 | 27,1 | 43,1 | 10  | 27,8 | 62,4 | 68,1 | 24           | 20/25/30/35/40/45/50/55/60/70/80/90 |
| K1700.412ΔX | M12 | 96,8  | 110,3 | 14,1 | 19   | 26,2 | 27,1 | 43,1 | 10  | 27,8 | 62,4 | 68,1 | 24           | 20/25/30/35/40/45/50/55/60/70/80/90 |
| K1700.512ΔX | M12 | 110,9 | 126,6 | 15,1 | 23   | 30,5 | 31,5 | 49,1 | 12  | 30,8 | 72,9 | 79,2 | 26           | 25/30/35/40/45/50/55/60/70/80/90    |
| K1700.516ΔX | M16 | 110,9 | 126,6 | 15,1 | 23   | 30,5 | 31,5 | 49,1 | 12  | 30,8 | 72,9 | 79,2 | 26           | 25/30/35/40/45/50/55/60/70/80/90    |

## Clamping levers plastic

with internal thread, steel parts blue passivated



The plastic clamping lever with ergonomic grip design offers a high-quality, modern appearance in combination with very pleasant haptics. The clamping lever is made of a special high-performance plastic and is available in many standard colours.

The advantages of the clamping lever are high rigidity and strength. The light weight make it ideal for mobile applications.

### Material:

High performance fibreglass reinforced thermoplastic.  
Steel parts grade 5.8.

### Version:

Steel parts blue-passivated.

### Sample order:

K1702.10486 (lever colour signal green)

### Note:

Δ Add the desired grip colour here.

### Method of operation:

When not actuated, the handle is engaged in the tooth insert by a gear ring, thus allowing the thread to be fastened or released. When raised, the handle can be re-positioned and then re-engaged in the gear ring by spring force.

### Application:

Machine, equipment and plant construction, rehabilitation sector.

### Temperature range:

Permanent temperature max. 100 °C.  
Brief use with temperatures up to 130 °C.

### Advantages:

Seven colour variants.

### On request:

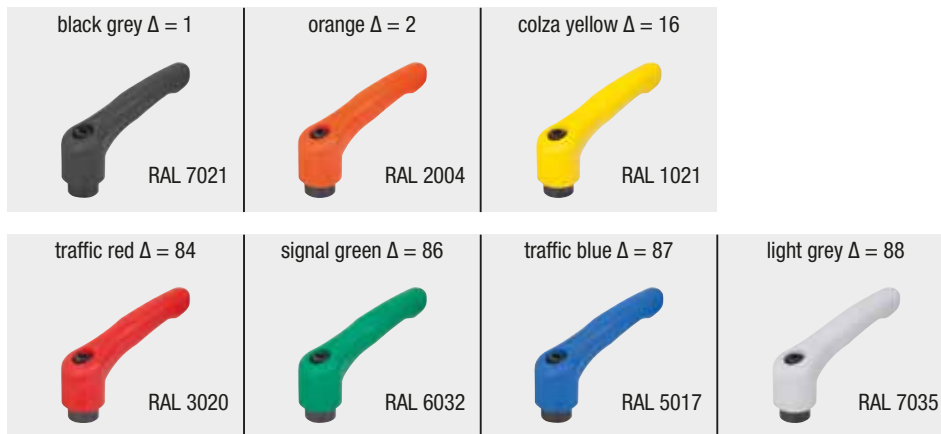
Other female threads and special versions.  
Length "H1" optionally available in other lengths for an additional charge.

High temperature black-grey plastic.  
Permanent operating temperature  
acc. to IEC 216 150 °C - 160 °C max.  
Brief use with temperatures up to 250 °C.



## Clamping levers plastic

with internal thread, steel parts blue passivated

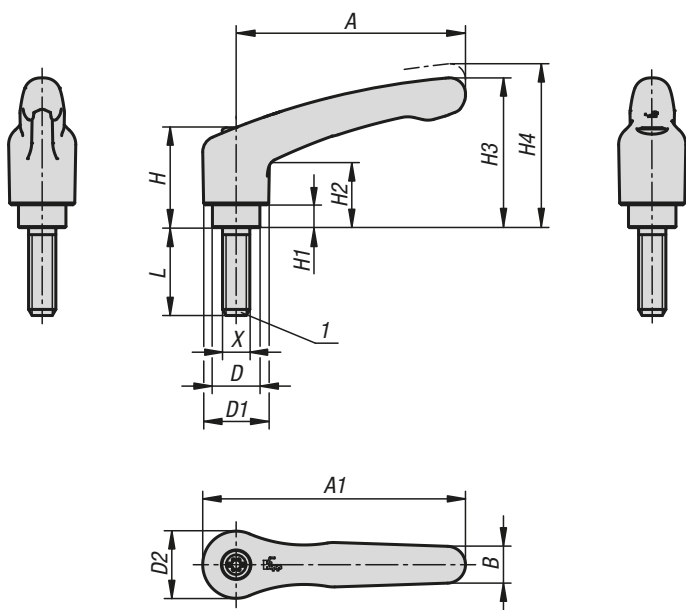


### KIPP Clamping levers plastic with internal thread, steel parts blue passivated

| Order No.  | X   | A     | A1    | B    | D    | D1   | D2   | H    | H1  | H2   | H3   | H4   | T  | No. of teeth |
|------------|-----|-------|-------|------|------|------|------|------|-----|------|------|------|----|--------------|
| K1702.104Δ | M4  | 39,9  | 46,8  | 7,9  | 10   | 13,2 | 13,8 | 24,5 | 4   | 14,2 | 30,8 | 35   | 9  | 16           |
| K1702.105Δ | M5  | 39,9  | 46,8  | 7,9  | 10   | 13,2 | 13,8 | 24,5 | 4   | 14,2 | 30,8 | 35   | 9  | 16           |
| K1702.106Δ | M6  | 39,9  | 46,8  | 7,9  | 10   | 13,2 | 13,8 | 24,5 | 4   | 14,2 | 30,8 | 35   | 9  | 16           |
| K1702.206Δ | M6  | 65,2  | 74,8  | 10,5 | 13,5 | 18,5 | 19,1 | 28,5 | 6,5 | 18,6 | 42,6 | 47,1 | 12 | 20           |
| K1702.208Δ | M8  | 65,2  | 74,8  | 10,5 | 13,5 | 18,5 | 19,1 | 28,5 | 6,5 | 18,6 | 42,6 | 47,1 | 12 | 20           |
| K1702.308Δ | M8  | 80,2  | 91,1  | 11,5 | 16   | 21,2 | 21,9 | 37   | 10  | 24   | 54   | 59,2 | 14 | 22           |
| K1702.310Δ | M10 | 80,2  | 91,1  | 11,5 | 16   | 21,2 | 21,9 | 37   | 10  | 24   | 54   | 59,2 | 14 | 22           |
| K1702.410Δ | M10 | 96,8  | 110,3 | 14,1 | 19   | 26,2 | 27,1 | 43,1 | 10  | 27,8 | 62,4 | 68,1 | 17 | 24           |
| K1702.412Δ | M12 | 96,8  | 110,3 | 14,1 | 19   | 26,2 | 27,1 | 43,1 | 10  | 27,8 | 62,4 | 68,1 | 17 | 24           |
| K1702.512Δ | M12 | 110,9 | 126,6 | 15,1 | 23   | 30,5 | 31,5 | 49,1 | 12  | 30,8 | 72,9 | 79,2 | 23 | 26           |
| K1702.516Δ | M16 | 110,9 | 126,6 | 15,1 | 23   | 30,5 | 31,5 | 49,1 | 12  | 30,8 | 72,9 | 79,2 | 23 | 26           |

## Clamping levers plastic

with external thread, steel parts blue passivated



The plastic clamping lever with ergonomic grip design offers a high-quality, modern appearance in combination with very pleasant haptics.

The clamping lever is made of a special high-performance plastic and is available in many standard colours.

The advantages of the clamping lever are high rigidity and strength. The light weight make it ideal for mobile applications.

### Material:

High performance fibreglass reinforced thermoplastic.  
Steel parts grade 5.8.

### Version:

Steel parts blue-passivated.

### Sample order:

K1702.1051X20 (lever black grey; include length L)

### Note:

Δ Add the desired grip colour here.

Where  $L \geq 60$  mm the thread length is always 60 mm.

### Method of operation:

When not actuated, the handle is engaged in the tooth insert by a gear ring, thus allowing the thread to be fastened or released. When raised, the handle can be re-positioned and then re-engaged in the gear ring by spring force.

### Application:

Machine, equipment and plant construction, rehabilitation sector.

### Temperature range:

Permanent temperature max. 100 °C.

Brief use with temperatures up to 130 °C.

### Advantages:

Seven colour variants.

### On request:

Other screw sizes, screw lengths and special versions.  
Length "H1" optionally available in other lengths for an additional charge.

High temperature black-grey plastic.

Permanent operating temperature

acc. to IEC 216 150 °C - 160 °C max.

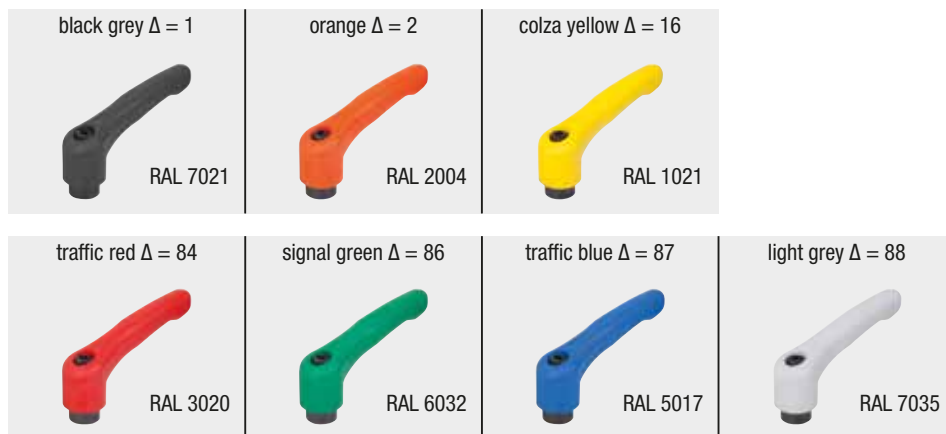
Brief use with temperatures up to 250 °C.

### Drawing reference:

1) flat point DIN EN ISO 4753

## Clamping levers plastic

with external thread, steel parts blue passivated

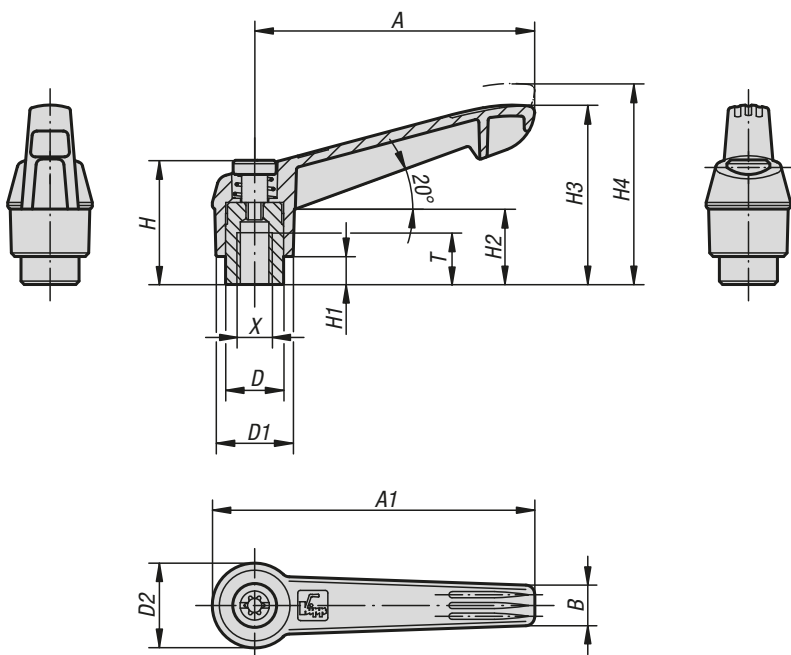


### KIPP Clamping levers plastic with external thread, steel parts blue passivated

| Order No.   | X   | A     | A1    | B    | D    | D1   | D2   | H    | H1  | H2   | H3   | H4   | No. of teeth | L                                   |
|-------------|-----|-------|-------|------|------|------|------|------|-----|------|------|------|--------------|-------------------------------------|
| K1702.105ΔX | M5  | 39,9  | 46,8  | 7,9  | 10   | 13,2 | 13,8 | 24,5 | 4   | 14,2 | 30,8 | 35   | 16           | 10/15/20/25/30/35/40/45/50          |
| K1702.106ΔX | M6  | 39,9  | 46,8  | 7,9  | 10   | 13,2 | 13,8 | 24,5 | 4   | 14,2 | 30,8 | 35   | 16           | 10/15/20/25/30/35/40/45/50          |
| K1702.206ΔX | M6  | 65,2  | 74,8  | 10,5 | 13,5 | 18,5 | 19,1 | 28,5 | 6,5 | 18,6 | 42,6 | 47,1 | 20           | 15/20/25/30/35/40/45/50/55/60       |
| K1702.208ΔX | M8  | 65,2  | 74,8  | 10,5 | 13,5 | 18,5 | 19,1 | 28,5 | 6,5 | 18,6 | 42,6 | 47,1 | 20           | 15/20/25/30/35/40/45/50/55/60       |
| K1702.210ΔX | M10 | 65,2  | 74,8  | 10,5 | 13,5 | 18,5 | 19,1 | 28,5 | 6,5 | 18,6 | 42,6 | 47,1 | 20           | 15/20/25/30/35/40/45/50/55/60       |
| K1702.308ΔX | M8  | 80,2  | 91,1  | 11,5 | 16   | 21,2 | 21,9 | 37   | 10  | 24   | 54   | 59,2 | 22           | 15/20/25/30/35/40/45/50/55/60       |
| K1702.310ΔX | M10 | 80,2  | 91,1  | 11,5 | 16   | 21,2 | 21,9 | 37   | 10  | 24   | 54   | 59,2 | 22           | 15/20/25/30/35/40/45/50/55/60       |
| K1702.410ΔX | M10 | 96,8  | 110,3 | 14,1 | 19   | 26,2 | 27,1 | 43,1 | 10  | 27,8 | 62,4 | 68,1 | 24           | 20/25/30/35/40/45/50/55/60/70/80/90 |
| K1702.412ΔX | M12 | 96,8  | 110,3 | 14,1 | 19   | 26,2 | 27,1 | 43,1 | 10  | 27,8 | 62,4 | 68,1 | 24           | 20/25/30/35/40/45/50/55/60/70/80/90 |
| K1702.512ΔX | M12 | 110,9 | 126,6 | 15,1 | 23   | 30,5 | 31,5 | 49,1 | 12  | 30,8 | 72,9 | 79,2 | 26           | 25/30/35/40/45/50/55/60/70/80/90    |
| K1702.516ΔX | M16 | 110,9 | 126,6 | 15,1 | 23   | 30,5 | 31,5 | 49,1 | 12  | 30,8 | 72,9 | 79,2 | 26           | 25/30/35/40/45/50/55/60/70/80/90    |

## Clamping levers with plastic handle

internal thread



### Material:

Handle fibreglass reinforced plastic with die-cast zinc toothed ring.  
Steel parts grade 5.8.

### Version:

Steel parts black oxidised.

### Sample order:

K0269.10486 (lever colour signal green)

### Note:

Δ Add the desired grip colour here.

### On request:

Other threads and special versions.  
Dimension "H1" available in other lengths at extra charge.

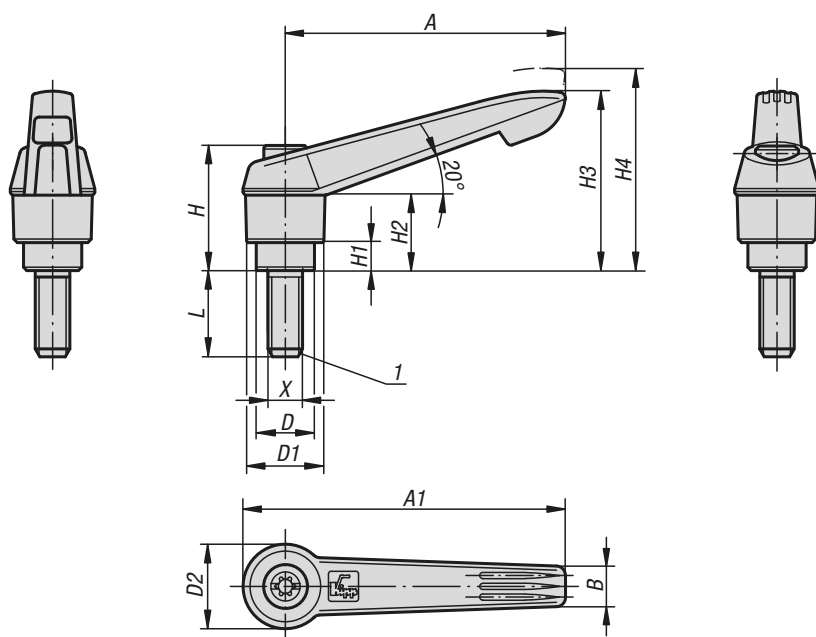


### KIPP Clamping levers with plastic handle, internal thread

| Order No.  | X   | A   | A1   | B    | D    | D1   | D2   | H    | H1  | H2   | H3   | H4   | T  | No. of teeth |
|------------|-----|-----|------|------|------|------|------|------|-----|------|------|------|----|--------------|
| K0269.104Δ | M4  | 40  | 47   | 7,5  | 10   | 13   | 14,5 | 24,5 | 4   | 15   | 30   | 33,5 | 9  | 16           |
| K0269.105Δ | M5  | 40  | 47   | 7,5  | 10   | 13   | 14,5 | 24,5 | 4   | 15   | 30   | 33,5 | 9  | 16           |
| K0269.106Δ | M6  | 40  | 47   | 7,5  | 10   | 13   | 14,5 | 24,5 | 4   | 15   | 30   | 33,5 | 9  | 16           |
| K0269.206Δ | M6  | 65  | 75   | 9,5  | 13,5 | 18   | 19,5 | 28,5 | 6,5 | 17,5 | 41,5 | 45,5 | 12 | 20           |
| K0269.208Δ | M8  | 65  | 75   | 9,5  | 13,5 | 18   | 19,5 | 28,5 | 6,5 | 17,5 | 41,5 | 45,5 | 12 | 20           |
| K0269.308Δ | M8  | 80  | 91,5 | 11   | 16   | 21,5 | 23   | 37   | 10  | 24   | 53,5 | 58   | 14 | 22           |
| K0269.310Δ | M10 | 80  | 91,5 | 11   | 16   | 21,5 | 23   | 37   | 10  | 24   | 53,5 | 58   | 14 | 22           |
| K0269.410Δ | M10 | 95  | 109  | 13   | 19   | 25,5 | 27,5 | 43   | 10  | 26   | 61   | 66   | 17 | 24           |
| K0269.412Δ | M12 | 95  | 109  | 13   | 19   | 25,5 | 27,5 | 43   | 10  | 26   | 61   | 66   | 17 | 24           |
| K0269.512Δ | M12 | 110 | 126  | 15,5 | 23   | 30   | 32,5 | 49   | 12  | 33   | 72   | 77   | 23 | 26           |
| K0269.516Δ | M16 | 110 | 126  | 15,5 | 23   | 30   | 32,5 | 49   | 12  | 33   | 72   | 77   | 23 | 26           |

## Clamping levers with plastic handle

external thread



**Material:**  
Handle fibreglass reinforced plastic with die-cast zinc toothed ring.  
Steel parts grade 5.8.

**Version:**  
Steel parts black oxidised.

**Sample order:**  
K0269.1051X40 (lever black grey; include length L)

**Note:**  
Δ Add the desired grip colour here.  
Where L ≥ 60 mm the thread length is always 60 mm.

**On request:**  
Other threads, screw lengths and special versions.  
Dimension "H1" available in other lengths at extra charge.

**Drawing reference:**  
1) flat point DIN EN ISO 4753

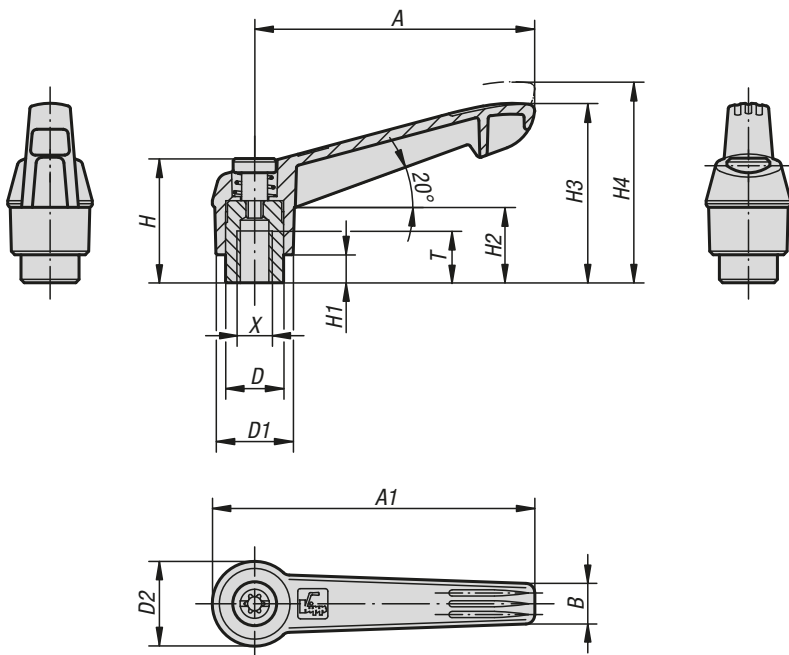


### KIPP Clamping levers with plastic handle, external thread

| Order No.   | X   | A   | A1   | B    | D    | D1   | D2   | H    | H1  | H2   | H3   | H4   | No. of teeth | L                                   |
|-------------|-----|-----|------|------|------|------|------|------|-----|------|------|------|--------------|-------------------------------------|
| K0269.105ΔX | M5  | 40  | 47   | 7,5  | 10   | 13   | 14,5 | 24,5 | 4   | 15   | 30   | 33,5 | 16           | 10/15/20/25/30/35/40/45/50          |
| K0269.106ΔX | M6  | 40  | 47   | 7,5  | 10   | 13   | 14,5 | 24,5 | 4   | 15   | 30   | 33,5 | 16           | 10/15/20/25/30/35/40/45/50          |
| K0269.206ΔX | M6  | 65  | 75   | 9,5  | 13,5 | 18   | 19,5 | 28,5 | 6,5 | 17,5 | 41,5 | 45,5 | 20           | 15/20/25/30/35/40/45/50/55/60       |
| K0269.208ΔX | M8  | 65  | 75   | 9,5  | 13,5 | 18   | 19,5 | 28,5 | 6,5 | 17,5 | 41,5 | 45,5 | 20           | 15/20/25/30/35/40/45/50/55/60       |
| K0269.210ΔX | M10 | 65  | 75   | 9,5  | 13,5 | 18   | 19,5 | 28,5 | 6,5 | 17,5 | 41,5 | 45,5 | 20           | 15/20/25/30/35/40/45/50/55/60       |
| K0269.308ΔX | M8  | 80  | 91,5 | 11   | 16   | 21,5 | 23   | 37   | 10  | 24   | 53,5 | 58   | 22           | 15/20/25/30/35/40/45/50/55/60       |
| K0269.310ΔX | M10 | 80  | 91,5 | 11   | 16   | 21,5 | 23   | 37   | 10  | 24   | 53,5 | 58   | 22           | 15/20/25/30/35/40/45/50/55/60       |
| K0269.410ΔX | M10 | 95  | 109  | 13   | 19   | 25,5 | 27,5 | 43   | 10  | 26   | 61   | 66   | 24           | 20/25/30/35/40/45/50/55/60/70/80/90 |
| K0269.412ΔX | M12 | 95  | 109  | 13   | 19   | 25,5 | 27,5 | 43   | 10  | 26   | 61   | 66   | 24           | 20/25/30/35/40/45/50/55/60/70/80/90 |
| K0269.512ΔX | M12 | 110 | 126  | 15,5 | 23   | 30   | 32,5 | 49   | 12  | 33   | 72   | 77   | 26           | 25/30/35/40/45/50/55/60/70/80/90    |
| K0269.516ΔX | M16 | 110 | 126  | 15,5 | 23   | 30   | 32,5 | 49   | 12  | 33   | 72   | 77   | 26           | 25/30/35/40/45/50/55/60/70/80/90    |

## Clamping levers plastic

with internal thread, steel parts trivalent blue passivated



### Material:

Handle fibreglass reinforced plastic with die-cast zinc toothed ring.  
Steel parts grade 5.8.

### Version:

Steel parts blue-passivated.

### Sample order:

K1660.10486 (lever colour signal green)

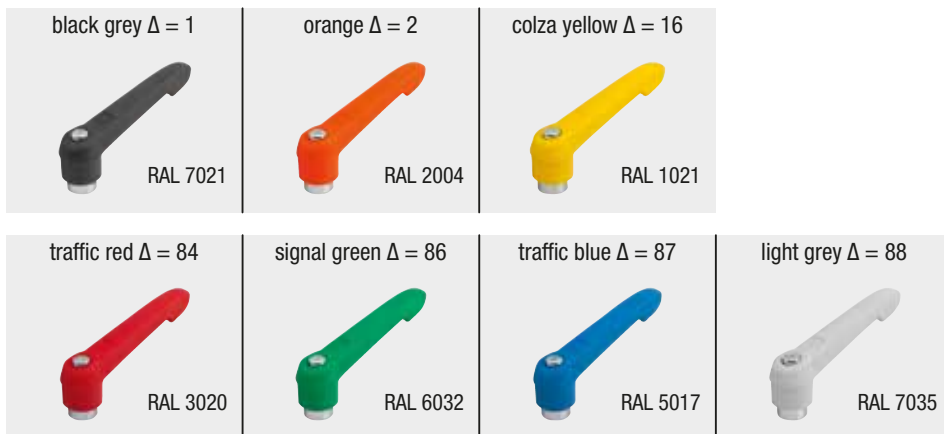
### Note:

Δ Add the desired grip colour here.

### On request:

Other threads and special versions.

Dimension "H1" available in other lengths at extra charge.

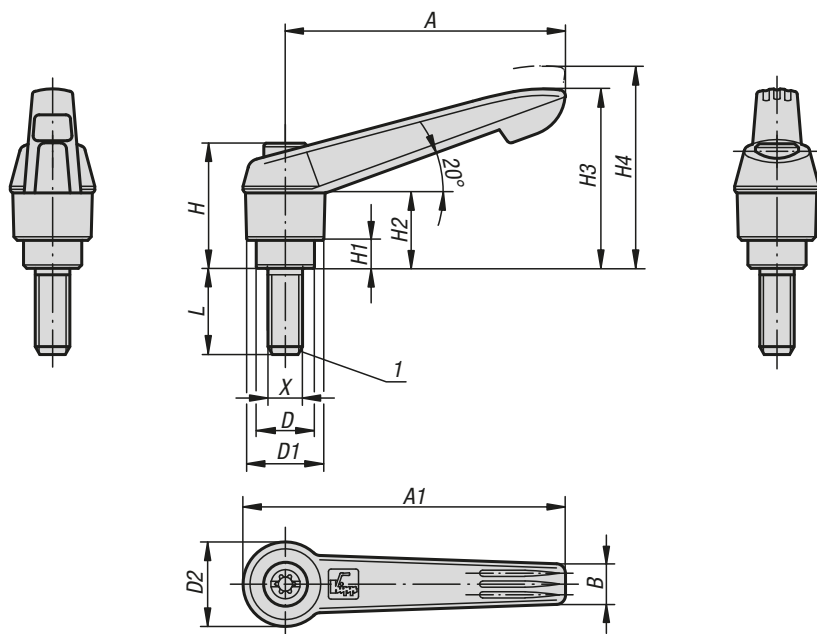


### KIPP Clamping levers with plastic handle, internal thread

| Order No.  | X   | A   | A1   | B    | D    | D1   | D2   | H    | H1  | H2   | H3   | H4   | T  | No. of teeth |
|------------|-----|-----|------|------|------|------|------|------|-----|------|------|------|----|--------------|
| K1660.104Δ | M4  | 40  | 47   | 7,5  | 10   | 13   | 14,5 | 24,5 | 4   | 15   | 30   | 33,5 | 9  | 16           |
| K1660.105Δ | M5  | 40  | 47   | 7,5  | 10   | 13   | 14,5 | 24,5 | 4   | 15   | 30   | 33,5 | 9  | 16           |
| K1660.106Δ | M6  | 40  | 47   | 7,5  | 10   | 13   | 14,5 | 24,5 | 4   | 15   | 30   | 33,5 | 9  | 16           |
| K1660.206Δ | M6  | 65  | 75   | 9,5  | 13,5 | 18   | 19,5 | 28,5 | 6,5 | 17,5 | 41,5 | 45,5 | 12 | 20           |
| K1660.208Δ | M8  | 65  | 75   | 9,5  | 13,5 | 18   | 19,5 | 28,5 | 6,5 | 17,5 | 41,5 | 45,5 | 12 | 20           |
| K1660.308Δ | M8  | 80  | 91,5 | 11   | 16   | 21,5 | 23   | 37   | 10  | 24   | 53,5 | 58   | 14 | 22           |
| K1660.310Δ | M10 | 80  | 91,5 | 11   | 16   | 21,5 | 23   | 37   | 10  | 24   | 53,5 | 58   | 14 | 22           |
| K1660.410Δ | M10 | 95  | 109  | 13   | 19   | 25,5 | 27,5 | 43   | 10  | 26   | 61   | 66   | 17 | 24           |
| K1660.412Δ | M12 | 95  | 109  | 13   | 19   | 25,5 | 27,5 | 43   | 10  | 26   | 61   | 66   | 17 | 24           |
| K1660.512Δ | M12 | 110 | 126  | 15,5 | 23   | 30   | 32,5 | 49   | 12  | 33   | 72   | 77   | 23 | 26           |
| K1660.516Δ | M16 | 110 | 126  | 15,5 | 23   | 30   | 32,5 | 49   | 12  | 33   | 72   | 77   | 23 | 26           |

## Clamping levers plastic

with external thread, steel parts trivalent blue passivated



### Material:

Handle fibreglass reinforced plastic with die-cast zinc toothed ring.  
Steel parts grade 5.8.

### Version:

Steel parts blue-passivated.

### Sample order:

K1660.1051X40 (lever black grey; include length L)

### Note:

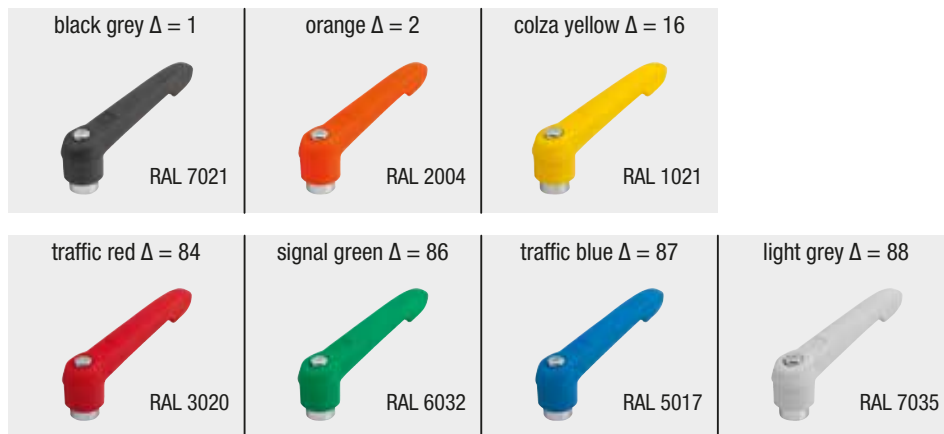
Δ Add the desired grip colour here.  
Where L ≥ 60 mm the thread length is always 60 mm.

### On request:

Other threads, screw lengths and special versions.  
Dimension "H1" available in other lengths at extra charge.

### Drawing reference:

1) flat point DIN EN ISO 4753



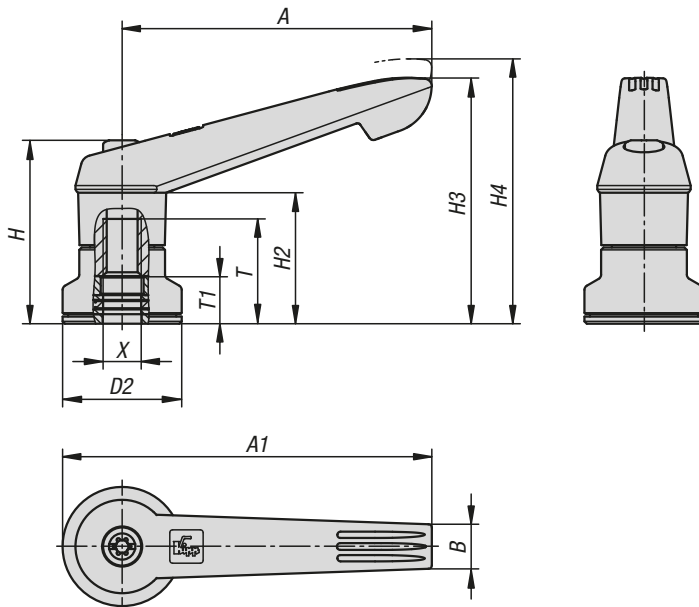
## KIPP Clamping levers with plastic handle, external thread

| Order No.   | X   | A   | A1   | B    | D    | D1   | D2   | H    | H1  | H2   | H3   | H4   | No. of teeth | L                                   |
|-------------|-----|-----|------|------|------|------|------|------|-----|------|------|------|--------------|-------------------------------------|
| K1660.105ΔX | M5  | 40  | 47   | 7,5  | 10   | 13   | 14,5 | 24,5 | 4   | 15   | 30   | 33,5 | 16           | 10/15/20/25/30/35/40/45/50          |
| K1660.106ΔX | M6  | 40  | 47   | 7,5  | 10   | 13   | 14,5 | 24,5 | 4   | 15   | 30   | 33,5 | 16           | 10/15/20/25/30/35/40/45/50          |
| K1660.206ΔX | M6  | 65  | 75   | 9,5  | 13,5 | 18   | 19,5 | 28,5 | 6,5 | 17,5 | 41,5 | 45,5 | 20           | 15/20/25/30/35/40/45/50/55/60       |
| K1660.208ΔX | M8  | 65  | 75   | 9,5  | 13,5 | 18   | 19,5 | 28,5 | 6,5 | 17,5 | 41,5 | 45,5 | 20           | 15/20/25/30/35/40/45/50/55/60       |
| K1660.210ΔX | M10 | 65  | 75   | 9,5  | 13,5 | 18   | 19,5 | 28,5 | 6,5 | 17,5 | 41,5 | 45,5 | 20           | 15/20/25/30/35/40/45/50/55/60       |
| K1660.308ΔX | M8  | 80  | 91,5 | 11   | 16   | 21,5 | 23   | 37   | 10  | 24   | 53,5 | 58   | 22           | 15/20/25/30/35/40/45/50/55/60       |
| K1660.310ΔX | M10 | 80  | 91,5 | 11   | 16   | 21,5 | 23   | 37   | 10  | 24   | 53,5 | 58   | 22           | 15/20/25/30/35/40/45/50/55/60       |
| K1660.410ΔX | M10 | 95  | 109  | 13   | 19   | 25,5 | 27,5 | 43   | 10  | 26   | 61   | 66   | 24           | 20/25/30/35/40/45/50/55/60/70/80/90 |
| K1660.412ΔX | M12 | 95  | 109  | 13   | 19   | 25,5 | 27,5 | 43   | 10  | 26   | 61   | 66   | 24           | 20/25/30/35/40/45/50/55/60/70/80/90 |
| K1660.512ΔX | M12 | 110 | 126  | 15,5 | 23   | 30   | 32,5 | 49   | 12  | 33   | 72   | 77   | 26           | 25/30/35/40/45/50/55/60/70/80/90    |
| K1660.516ΔX | M16 | 110 | 126  | 15,5 | 23   | 30   | 32,5 | 49   | 12  | 33   | 72   | 77   | 26           | 25/30/35/40/45/50/55/60/70/80/90    |



## Clamping levers plastic

with female thread and clamping force intensifier



By using clamping levers with integrated clamping force intensifier, the clamping force can be increased by up to 75% compared to standard clamping levers.

Furthermore, this product can also be used by persons with limited hand strength (e.g. in rehabilitation) to achieve comparable clamping forces with less effort. Less effort is also needed to loosen the clamping lever.

The increase in clamping force is achieved by the integral needle roller thrust bearing, which generates very low surface friction on a rigid contact surface during clamping. The hardened thrust washers are designed for high clamping forces and the bearing with its high load rating guarantees a long service life.

The clamped component is permanently protected by the large, stationary contact surface. A washer is no longer required.

### Material:

Handle fibreglass reinforced plastic with die-cast zinc toothed ring.  
Steel parts grade 5.8.

### Version:

Steel parts black oxidised.  
Axial needle bearing with hardened and ground thrust washer.

### Sample order:

K1597.20886 (lever colour signal green)

### Note:

Δ Add the desired grip colour here.

### Method of operation:

The handle lever is engaged in the toothed insert by means of a toothed ring when not actuated, enabling the thread to be tightened or loosened. By lifting the handle, it can be repositioned and re-engaged in the toothed ring by spring force.

### Application:

Machine, equipment and plant construction, rehabilitation sector.

### Advantages:

Significant increase of the clamping force with the same tightening torque.  
High quality axial needle bearing with high load rating and long service life.  
The component surface is protected by the stationary lower ring.

### On request:

Other colours.

## Clamping levers plastic

with female thread and clamping force intensifier

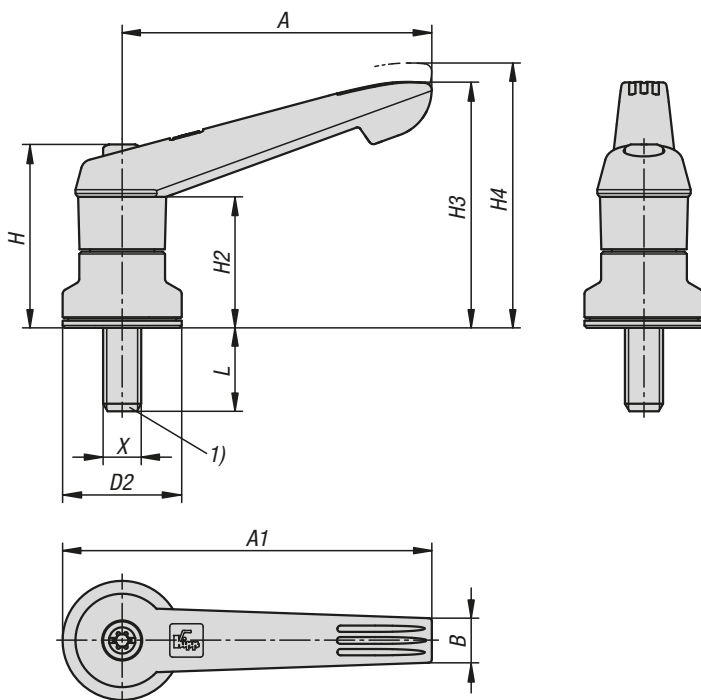


### KIPP Clamping levers, plastic with female thread and clamping force intensifier

| Order No.  | X   | D2 | H    | H2   | H3   | H4   | A     | A1    | B    | T  | T1 |
|------------|-----|----|------|------|------|------|-------|-------|------|----|----|
| K1597.208Δ | M8  | 25 | 38,5 | 27,5 | 51,6 | 55,6 | 65    | 77,5  | 9,4  | 22 | 10 |
| K1597.310Δ | M10 | 30 | 47   | 34   | 63,4 | 67,9 | 80    | 95    | 11,1 | 24 | 10 |
| K1597.410Δ | M10 | 30 | 53,1 | 36   | 71,1 | 76,1 | 95,4  | 110,4 | 13,2 | 27 | 10 |
| K1597.512Δ | M12 | 35 | 59,1 | 43   | 82,8 | 87,8 | 109,9 | 127,4 | 15,6 | 33 | 10 |

## Clamping levers plastic

with male thread and clamping force intensifier



By using clamping levers with integrated clamping force intensifier, the clamping force can be increased by up to 75% compared to standard clamping levers.

Furthermore, this product can also be used by persons with limited hand strength (e.g. in rehabilitation) to achieve comparable clamping forces with less effort. Less effort is also needed to loosen the clamping lever.

The increase in clamping force is achieved by the integral needle roller thrust bearing, which generates very low surface friction on a rigid contact surface during clamping. The hardened thrust washers are designed for high clamping forces and the bearing with its high load rating guarantees a long service life.

The clamped component is permanently protected by the large, stationary contact surface. A washer is no longer required.

Due to the modular construction many special designs are available.

### Material:

Handle fibreglass reinforced plastic with die-cast zinc toothed ring.  
Steel parts grade 5.8.

### Version:

Steel parts black oxidised.  
Axial needle bearing with hardened and ground thrust washer.

### Sample order:

K1597.2081X40 (lever black grey; include length L)

### Note:

Δ Add the desired grip colour here.

### Method of operation:

The handle lever is engaged in the toothed insert by means of a toothed ring when not actuated, enabling the thread to be tightened or loosened. By lifting the handle, it can be repositioned and re-engaged in the toothed ring by spring force.

### Application:

Machine, equipment and plant construction, rehabilitation sector.

# Clamping levers plastic

with male thread and clamping force intensifier



## Advantages:

Significant increase of the clamping force with the same tightening torque.  
High quality axial needle bearing with high load rating and long service life.  
The component surface is protected by the stationary lower ring.

## On request:

Special versions.  
Other colours and thread lengths.

## Drawing reference:

1) flat point DIN EN ISO 4753

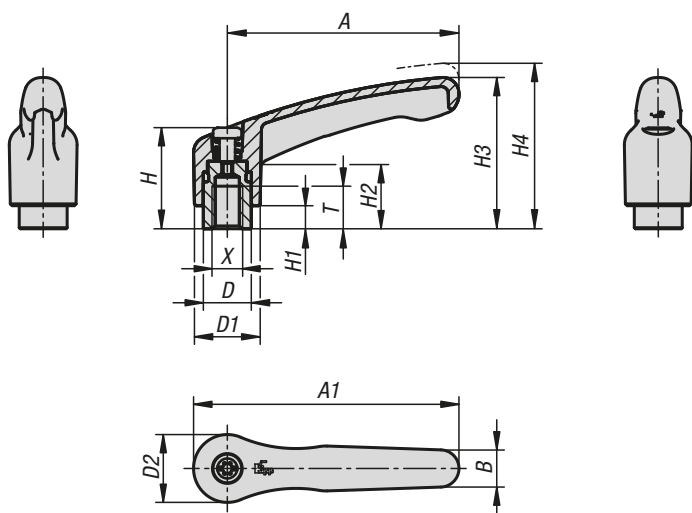


## KIPP Clamping levers plastic with male thread and clamping force intensifier

| Order No.   | X   | D2 | H    | H2   | H3   | H4   | A     | A1    | B    | L           |
|-------------|-----|----|------|------|------|------|-------|-------|------|-------------|
| K1597.208ΔX | M8  | 25 | 38,5 | 27,5 | 51,6 | 55,6 | 65    | 77,5  | 9,4  | 10/20/30/40 |
| K1597.310ΔX | M10 | 30 | 47   | 34   | 63,4 | 67,9 | 80    | 95    | 11,1 | 15/30/40/50 |
| K1597.410ΔX | M10 | 30 | 53,1 | 36   | 71,1 | 76,1 | 95,4  | 110,4 | 13,2 | 20/30/40/50 |
| K1597.512ΔX | M12 | 35 | 59,1 | 43   | 82,8 | 87,8 | 109,9 | 127,4 | 15,6 | 20/30/40/50 |

## Clamping levers plastic

with internal thread, steel parts stainless steel



The plastic clamping lever with ergonomic grip design offers a high-quality, modern appearance in combination with very pleasant haptics.

The clamping lever is made of a special high-performance plastic and is available in many standard colours.

The advantages of the clamping lever are high rigidity and strength. The light weight make it ideal for mobile applications.

It offers good chemical and corrosion resistance.

### Material:

High performance fibreglass reinforced thermoplastic.  
Steel parts stainless steel 1.4305.

### Version:

Steel parts bright.

### Sample order:

K1701.10486 (lever colour signal green)

### Note:

Δ Add the desired grip colour here.

### Method of operation:

When not actuated, the handle is engaged in the tooth insert by a gear ring, thus allowing the thread to be fastened or released. When raised, the handle can be re-positioned and then re-engaged in the gear ring by spring force.

### Application:

Machine, equipment and systems engineering, rehab applications, medical technology, food processing industry.

### Temperature range:

Permanent temperature max. 100 °C.

Brief use with temperatures up to 130 °C.

### Advantages:

Good chemical and corrosion resistance.

Seven colour variants.

### On request:

Other female threads and special versions.

Length "H1" optionally available in other lengths for an additional charge.

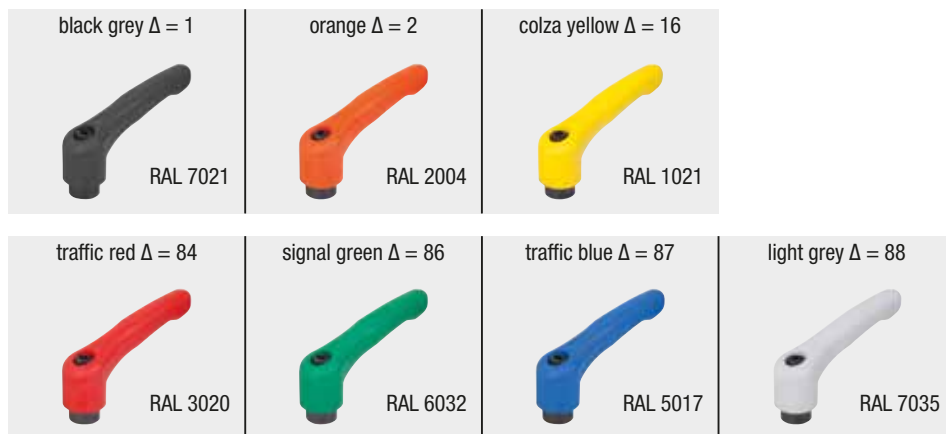
High temperature black-grey plastic.

Permanent operating temperature acc. to IEC 216 150 °C - 160 °C max.

Brief use with temperatures up to 250 °C.

## Clamping levers plastic

with internal thread, steel parts stainless steel

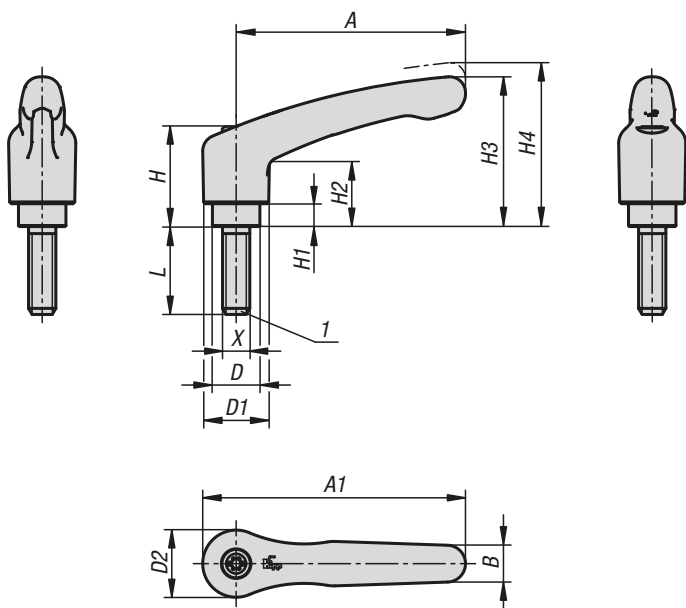


### KIPP Clamping levers plastic with internal thread, steel parts stainless steel

| Order No.  | X   | A     | A1    | B    | D    | D1   | D2   | H    | H1  | H2   | H3   | H4   | T  | No. of teeth |
|------------|-----|-------|-------|------|------|------|------|------|-----|------|------|------|----|--------------|
| K1701.104Δ | M4  | 39,9  | 46,8  | 7,9  | 10   | 13,2 | 13,8 | 24,5 | 4   | 14,2 | 30,8 | 35   | 9  | 16           |
| K1701.105Δ | M5  | 39,9  | 46,8  | 7,9  | 10   | 13,2 | 13,8 | 24,5 | 4   | 14,2 | 30,8 | 35   | 9  | 16           |
| K1701.106Δ | M6  | 39,9  | 46,8  | 7,9  | 10   | 13,2 | 13,8 | 24,5 | 4   | 14,2 | 30,8 | 35   | 9  | 16           |
| K1701.206Δ | M6  | 65,2  | 74,8  | 10,5 | 13,5 | 18,5 | 19,1 | 28,5 | 6,5 | 18,6 | 42,6 | 47,1 | 12 | 20           |
| K1701.208Δ | M8  | 65,2  | 74,8  | 10,5 | 13,5 | 18,5 | 19,1 | 28,5 | 6,5 | 18,6 | 42,6 | 47,1 | 12 | 20           |
| K1701.308Δ | M8  | 80,2  | 91,1  | 11,5 | 16   | 21,2 | 21,9 | 37   | 10  | 24   | 54   | 59,2 | 14 | 22           |
| K1701.310Δ | M10 | 80,2  | 91,1  | 11,5 | 16   | 21,2 | 21,9 | 37   | 10  | 24   | 54   | 59,2 | 14 | 22           |
| K1701.410Δ | M10 | 96,8  | 110,3 | 14,1 | 19   | 26,2 | 27,1 | 43,1 | 10  | 27,8 | 62,4 | 68,1 | 17 | 24           |
| K1701.412Δ | M12 | 96,8  | 110,3 | 14,1 | 19   | 26,2 | 27,1 | 43,1 | 10  | 27,8 | 62,4 | 68,1 | 17 | 24           |
| K1701.512Δ | M12 | 110,9 | 126,6 | 15,1 | 23   | 30,5 | 31,5 | 49,1 | 12  | 30,8 | 72,9 | 79,2 | 23 | 26           |
| K1701.516Δ | M16 | 110,9 | 126,6 | 15,1 | 23   | 30,5 | 31,5 | 49,1 | 12  | 30,8 | 72,9 | 79,2 | 23 | 26           |

## Clamping levers plastic

with external thread, steel parts stainless steel



The plastic clamping lever with ergonomic grip design offers a high-quality, modern appearance in combination with very pleasant haptics.

The clamping lever is made of a special high-performance plastic and is available in many standard colours.

The advantages of the clamping lever are high rigidity and strength. The light weight make it ideal for mobile applications. It offers good chemical and corrosion resistance.

### Material:

High performance fibreglass reinforced thermoplastic.  
Steel parts stainless steel 1.4305.

### Version:

Steel parts bright.

### Sample order:

K1701.1051X20 (lever black grey; include length L)

### Note:

Δ Add the desired grip colour here.

Where  $L \geq 60$  mm the thread length is always 60 mm.

### Method of operation:

When not actuated, the handle is engaged in the tooth insert by a gear ring, thus allowing the thread to be fastened or released. When raised, the handle can be re-positioned and then re-engaged in the gear ring by spring force.

### Application:

Machine, equipment and systems engineering, rehab applications, medical technology, food processing industry.

### Temperature range:

Permanent temperature max. 100 °C.

Brief use with temperatures up to 130 °C.

### Advantages:

Good chemical and corrosion resistance.

Seven colour variants.

### On request:

Other screw sizes, screw lengths and special versions.

Length "H1" optionally available in other lengths for an additional charge.

High temperature black-grey plastic.

Permanent operating temperature acc. to IEC 216 150 °C - 160 °C max.

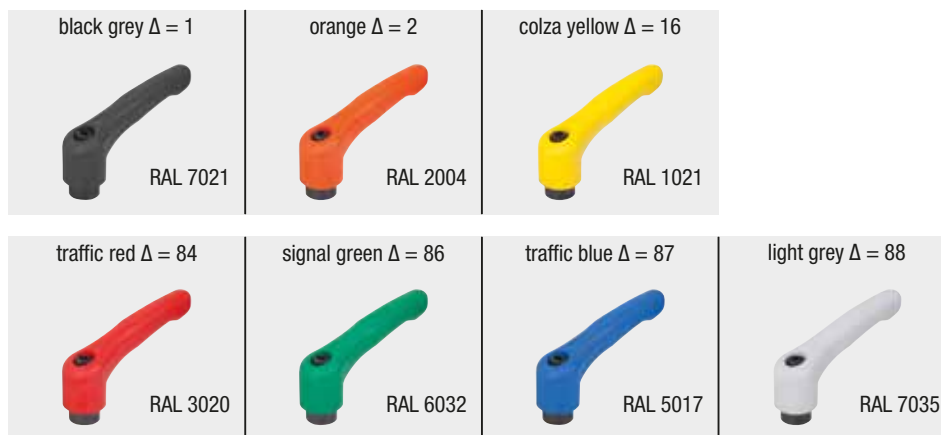
Brief use with temperatures up to 250 °C.

### Drawing reference:

1) flat point DIN EN ISO 4753

## Clamping levers plastic

with external thread, steel parts stainless steel



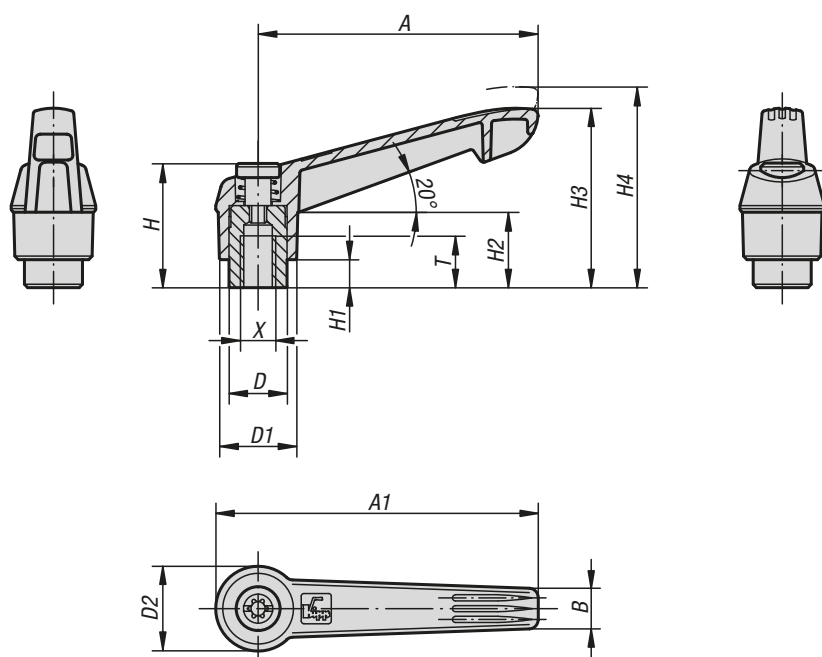
### KIPP Clamping levers plastic with external thread, steel parts stainless steel

| Order No.   | X   | A     | A1    | B    | D    | D1   | D2   | H    | H1  | H2   | H3   | H4   | No. of teeth | L                    |
|-------------|-----|-------|-------|------|------|------|------|------|-----|------|------|------|--------------|----------------------|
| K1701.105ΔX | M5  | 39,9  | 46,8  | 7,9  | 10   | 13,2 | 13,8 | 24,5 | 4   | 14,2 | 30,8 | 35   | 16           | 10/15/20/25          |
| K1701.106ΔX | M6  | 39,9  | 46,8  | 7,9  | 10   | 13,2 | 13,8 | 24,5 | 4   | 14,2 | 30,8 | 35   | 16           | 10/15/20/25/30/40/50 |
| K1701.206ΔX | M6  | 65,2  | 74,8  | 10,5 | 13,5 | 18,5 | 19,1 | 28,5 | 6,5 | 18,6 | 42,6 | 47,1 | 20           | 15/20/25/30/40/50/60 |
| K1701.208ΔX | M8  | 65,2  | 74,8  | 10,5 | 13,5 | 18,5 | 19,1 | 28,5 | 6,5 | 18,6 | 42,6 | 47,1 | 20           | 15/20/25/30/40/50/60 |
| K1701.210ΔX | M10 | 65,2  | 74,8  | 10,5 | 13,5 | 18,5 | 19,1 | 28,5 | 6,5 | 18,6 | 42,6 | 47,1 | 20           | 20/25/30/40/50/60    |
| K1701.308ΔX | M8  | 80,2  | 91,1  | 11,5 | 16   | 21,2 | 21,9 | 37   | 10  | 24   | 54   | 59,2 | 22           | 20/25/30/40/50/60    |
| K1701.310ΔX | M10 | 80,2  | 91,1  | 11,5 | 16   | 21,2 | 21,9 | 37   | 10  | 24   | 54   | 59,2 | 22           | 20/25/30/40/50/60    |
| K1701.412ΔX | M12 | 96,8  | 110,3 | 14,1 | 19   | 26,2 | 27,1 | 43,1 | 10  | 27,8 | 62,4 | 68,1 | 24           | 25/30/40/50/60       |
| K1701.516ΔX | M16 | 110,9 | 126,6 | 15,1 | 23   | 30,5 | 31,5 | 49,1 | 12  | 30,8 | 72,9 | 79,2 | 26           | 30/40/50/60          |



## Clamping levers with plastic handle

internal thread, steel parts stainless steel



**Material:**  
Handle fibreglass reinforced plastic with die-cast zinc toothed ring.  
Steel parts stainless steel 1.4305.

**Version:**  
Steel parts bright.

**Sample order:**  
K0270.10486 (lever colour signal green)

**Note:**  
Δ Add the desired grip colour here.

**On request:**  
Other threads and special versions.  
Dimension "H1" available in other lengths at extra charge.

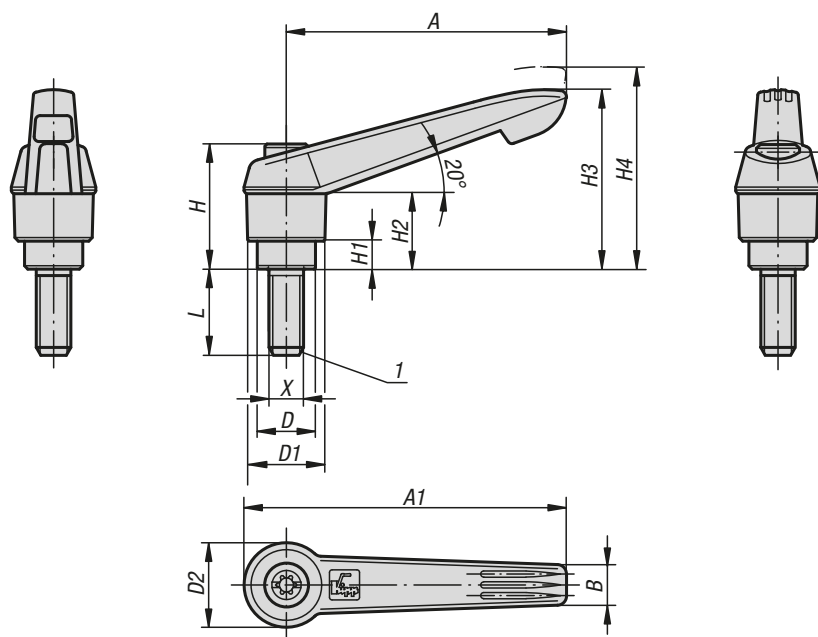


### KIPP Clamping levers with plastic handle, internal thread, metal parts stainless steel

| Order No.  | X   | A   | A1   | B    | D    | D1   | D2   | H    | H1  | H2   | H3   | H4   | T  | No. of teeth |
|------------|-----|-----|------|------|------|------|------|------|-----|------|------|------|----|--------------|
| K0270.104Δ | M4  | 40  | 47   | 7,5  | 10   | 13   | 14,5 | 24,5 | 4   | 15   | 30   | 33,5 | 9  | 16           |
| K0270.105Δ | M5  | 40  | 47   | 7,5  | 10   | 13   | 14,5 | 24,5 | 4   | 15   | 30   | 33,5 | 9  | 16           |
| K0270.106Δ | M6  | 40  | 47   | 7,5  | 10   | 13   | 14,5 | 24,5 | 4   | 15   | 30   | 33,5 | 9  | 16           |
| K0270.206Δ | M6  | 65  | 75   | 9,5  | 13,5 | 18   | 19,5 | 28,5 | 6,5 | 17,5 | 41,5 | 45,5 | 12 | 20           |
| K0270.208Δ | M8  | 65  | 75   | 9,5  | 13,5 | 18   | 19,5 | 28,5 | 6,5 | 17,5 | 41,5 | 45,5 | 12 | 20           |
| K0270.308Δ | M8  | 80  | 91,5 | 11   | 16   | 21,5 | 23   | 37   | 10  | 24   | 53,5 | 58   | 14 | 22           |
| K0270.310Δ | M10 | 80  | 91,5 | 11   | 16   | 21,5 | 23   | 37   | 10  | 24   | 53,5 | 58   | 14 | 22           |
| K0270.410Δ | M10 | 95  | 109  | 13   | 19   | 25,5 | 27,5 | 43   | 10  | 26   | 61   | 66   | 17 | 24           |
| K0270.412Δ | M12 | 95  | 109  | 13   | 19   | 25,5 | 27,5 | 43   | 10  | 26   | 61   | 66   | 17 | 24           |
| K0270.512Δ | M12 | 110 | 126  | 15,5 | 23   | 30   | 32,5 | 49   | 12  | 33   | 72   | 77   | 23 | 26           |
| K0270.516Δ | M16 | 110 | 126  | 15,5 | 23   | 30   | 32,5 | 49   | 12  | 33   | 72   | 77   | 23 | 26           |

## Clamping levers with plastic handle

external thread, steel parts stainless steel



### Material:

Handle fibreglass reinforced plastic with die-cast zinc toothed ring.

Steel parts stainless steel 1.4305.

### Version:

Steel parts bright.

### Sample order:

K0270.1051X20 (lever black grey; include length L)

### Note:

Δ Add the desired grip colour here.

Where  $L \geq 60$  mm the thread length is always 60 mm.

### On request:

Other threads, screw lengths and special versions.  
Dimension "H1" available in other lengths at extra charge.

### Drawing reference:

1) flat point DIN EN ISO 4753

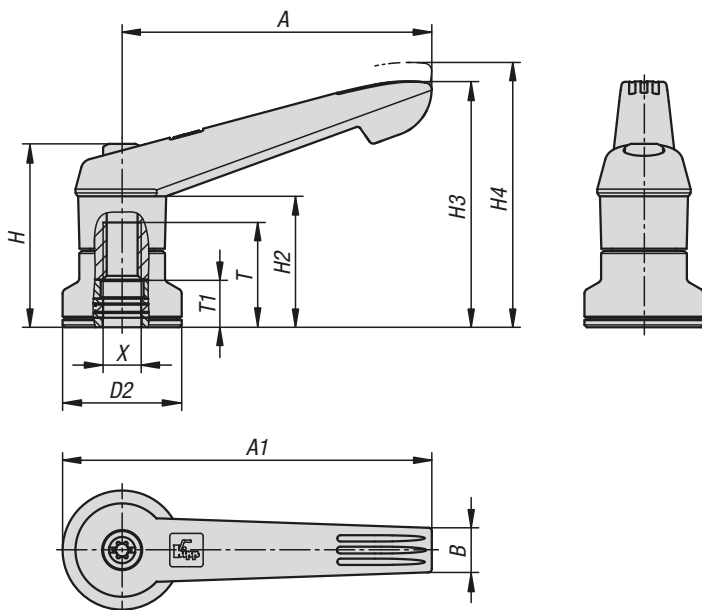


## KIPP Clamping levers with plastic handle, external thread, metal parts stainless steel

| Order No.   | X   | A   | A1   | B    | D    | D1   | D2   | H    | H1  | H2   | H3   | H4   | No. of teeth | L                    |
|-------------|-----|-----|------|------|------|------|------|------|-----|------|------|------|--------------|----------------------|
| K0270.105ΔX | M5  | 40  | 47   | 7,5  | 10   | 13   | 14,5 | 24,5 | 4   | 15   | 30   | 33,5 | 16           | 10/15/20/25          |
| K0270.106ΔX | M6  | 40  | 47   | 7,5  | 10   | 13   | 14,5 | 24,5 | 4   | 15   | 30   | 33,5 | 16           | 10/15/20/25/30/40/50 |
| K0270.206ΔX | M6  | 65  | 75   | 9,5  | 13,5 | 18   | 19,5 | 28,5 | 6,5 | 17,5 | 41,5 | 45,5 | 20           | 15/20/25/30/40/50/60 |
| K0270.208ΔX | M8  | 65  | 75   | 9,5  | 13,5 | 18   | 19,5 | 28,5 | 6,5 | 17,5 | 41,5 | 45,5 | 20           | 15/20/25/30/40/50/60 |
| K0270.210ΔX | M10 | 65  | 75   | 9,5  | 13,5 | 18   | 19,5 | 28,5 | 6,5 | 17,5 | 41,5 | 45,5 | 20           | 20/25/30/40/50/60    |
| K0270.308ΔX | M8  | 80  | 91,5 | 11   | 16   | 21,5 | 23   | 37   | 10  | 24   | 53,5 | 58   | 22           | 20/25/30/40/50/60    |
| K0270.310ΔX | M10 | 80  | 91,5 | 11   | 16   | 21,5 | 23   | 37   | 10  | 24   | 53,5 | 58   | 22           | 20/25/30/40/50/60    |
| K0270.412ΔX | M12 | 95  | 109  | 13   | 19   | 25,5 | 27,5 | 43   | 10  | 26   | 61   | 66   | 24           | 25/30/40/50/60       |
| K0270.516ΔX | M16 | 110 | 126  | 15,5 | 23   | 30   | 32,5 | 49   | 12  | 33   | 72   | 77   | 26           | 30/40/50/60          |

## Clamping levers plastic

with female thread and clamping force intensifier



By using clamping levers with integrated clamping force intensifier, the clamping force can be increased by up to 75% compared to standard clamping levers.

Furthermore, this product can also be used by persons with limited hand strength (e.g. in rehabilitation) to achieve comparable clamping forces with less effort. Less effort is also needed to loosen the clamping lever.

The increase in clamping force is achieved by the integral needle roller thrust bearing, which generates very low surface friction on a rigid contact surface during clamping. The hardened thrust washers are designed for high clamping forces and the bearing with its high load rating guarantees a long service life.

The clamped component is permanently protected by the large, stationary contact surface. A washer is no longer required.

### Material:

Handle fibreglass reinforced plastic with die-cast zinc toothed ring.  
Steel parts stainless steel 1.4305.

### Version:

Steel parts bright.  
Axial needle bearing with hardened and ground thrust washer.

### Sample order:

K1598.20886 (lever colour signal green)

### Note:

Δ Add the desired grip colour here.

### Method of operation:

The handle lever is engaged in the toothed insert by means of a toothed ring when not actuated, enabling the thread to be tightened or loosened. By lifting the handle, it can be repositioned and re-engaged in the toothed ring by spring force.

### Application:

Machine, equipment and plant construction, rehabilitation sector.

### Advantages:

Significant increase of the clamping force with the same tightening torque.  
High quality axial needle bearing with high load rating and long service life.  
The component surface is protected by the stationary lower ring.

### On request:

Other colours.

## Clamping levers plastic

with female thread and clamping force intensifier

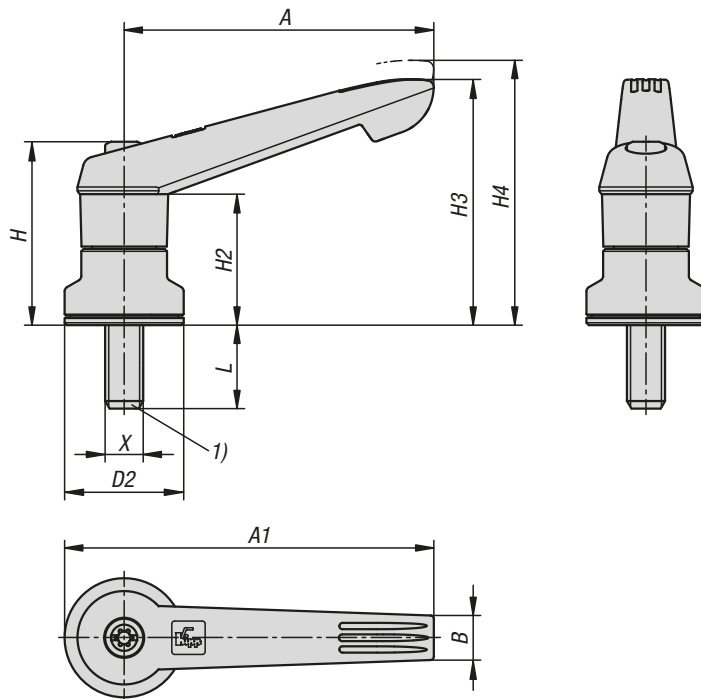


### KIPP Clamping levers, plastic with female thread and clamping force intensifier

| Order No.  | X   | D2 | H    | H2   | H3   | H4   | A     | A1    | B    | T  | T1 |
|------------|-----|----|------|------|------|------|-------|-------|------|----|----|
| K1598.208Δ | M8  | 25 | 38,5 | 27,5 | 51,6 | 55,6 | 65    | 77,5  | 9,4  | 22 | 10 |
| K1598.310Δ | M10 | 30 | 47   | 34   | 63,4 | 67,9 | 80    | 95    | 11,1 | 24 | 10 |
| K1598.410Δ | M10 | 30 | 53,1 | 36   | 71,1 | 76,1 | 95,4  | 110,4 | 13,2 | 27 | 10 |
| K1598.512Δ | M12 | 35 | 59,1 | 43   | 82,8 | 87,8 | 109,9 | 127,4 | 15,6 | 33 | 10 |

## Clamping levers plastic

with male thread and clamping force intensifier



By using clamping levers with integrated clamping force intensifier, the clamping force can be increased by up to 75% compared to standard clamping levers.

Furthermore, this product can also be used by persons with limited hand strength (e.g. in rehabilitation) to achieve comparable clamping forces with less effort. Less effort is also needed to loosen the clamping lever.

The increase in clamping force is achieved by the integral needle roller thrust bearing, which generates very low surface friction on a rigid contact surface during clamping. The hardened thrust washers are designed for high clamping forces and the bearing with its high load rating guarantees a long service life.

The clamped component is permanently protected by the large, stationary contact surface. A washer is no longer required.

Due to the modular construction many special designs are available.

### Material:

Handle fibreglass reinforced plastic with die-cast zinc toothed ring.

Steel parts stainless steel 1.4305.

### Version:

Steel parts bright.

Axial needle bearing with hardened and ground thrust washer.

### Sample order:

K1598.2081X40 (lever black grey; include length L)

### Note:

Δ Add the desired grip colour here.

### Method of operation:

The handle lever is engaged in the toothed insert by means of a toothed ring when not actuated, enabling the thread to be tightened or loosened. By lifting the handle, it can be repositioned and re-engaged in the toothed ring by spring force.

### Application:

Machine, equipment and plant construction, rehabilitation sector.

# Clamping levers plastic

with male thread and clamping force intensifier



## Advantages:

Significant increase of the clamping force with the same tightening torque.  
High quality axial needle bearing with high load rating and long service life.  
The component surface is protected by the stationary lower ring.

## On request:

Special versions.  
Other colours and thread lengths.

## Drawing reference:

1) flat point DIN EN ISO 4753

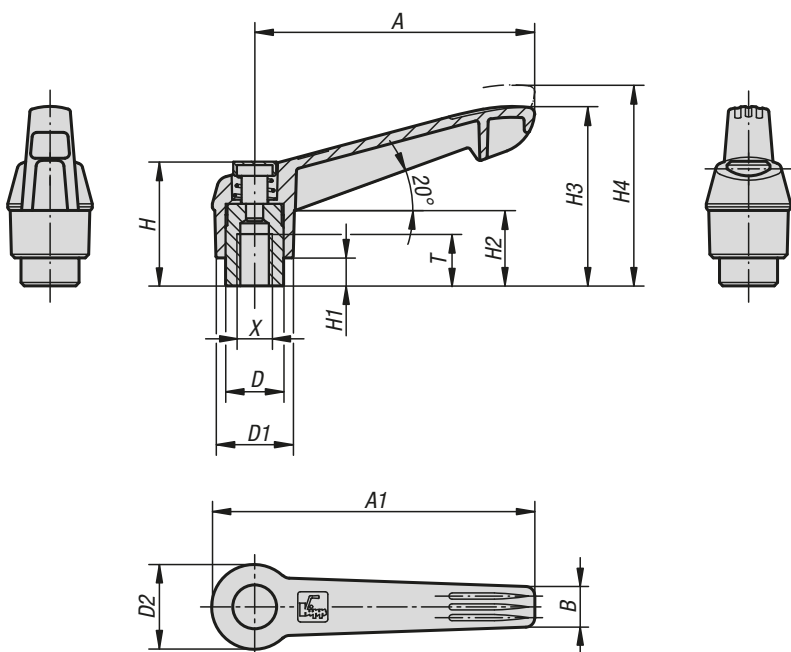


## KIPP Clamping levers, plastic with male thread and clamping force intensifier

| Order No.   | X   | D2 | H    | H2   | H3   | H4   | A     | A1    | B    | L           |
|-------------|-----|----|------|------|------|------|-------|-------|------|-------------|
| K1598.512ΔX | M12 | 35 | 59,1 | 43   | 82,8 | 87,8 | 109,9 | 127,4 | 15,6 | 20/50/40/30 |
| K1598.410ΔX | M10 | 30 | 53,1 | 36   | 71,1 | 76,1 | 95,4  | 110,4 | 13,2 | 50/20/40/30 |
| K1598.208ΔX | M8  | 25 | 38,5 | 27,5 | 51,6 | 55,6 | 65    | 77,5  | 9,4  | 10/20/30/40 |
| K1598.310ΔX | M10 | 30 | 47   | 34   | 63,4 | 67,9 | 80    | 95    | 11,1 | 15/30/40/50 |

## Clamping levers with push button

internal thread



### Material:

Handle fibreglass reinforced plastic, toothed ring die-cast zinc.  
Steel parts grade 5.8.  
Push button plastic (POM).

### Version:

Steel parts black oxidised.

### Sample order:

K0269.71104  
(clamping lever black grey, push button traffic red)

### Note:

Δ Enter the desired lever colour here.  
The standard colours are:  
Black grey clamping lever, traffic red push button.  
Orange clamping lever, black grey push button.  
Traffic red clamping lever, black grey push button.

### On request:

Other threads and special versions.  
Dimension "H1" available in other lengths at extra charge.

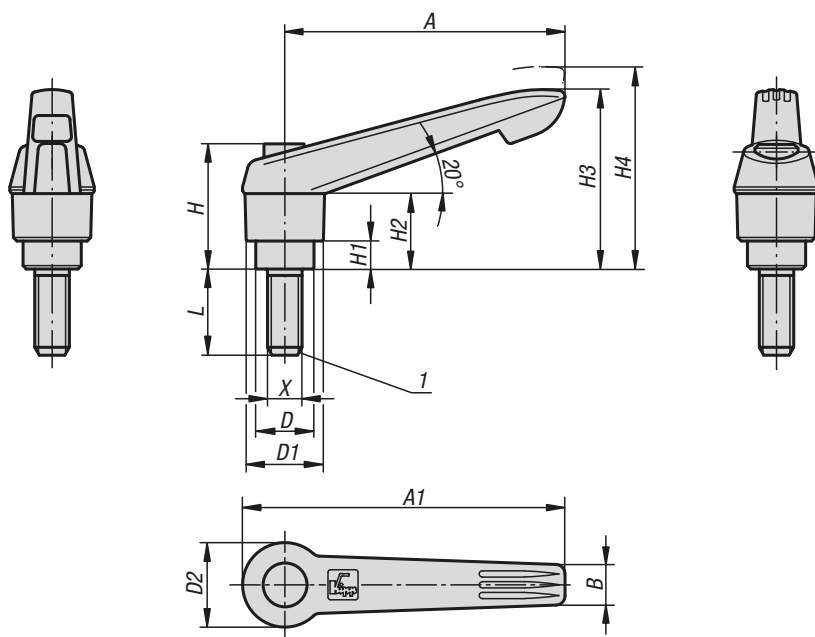


## KIPP Clamping levers with push button, internal thread

| Order No.   | X   | A   | A1   | B    | D    | D1   | D2   | H    | H1  | H2   | H3   | H4   | T  | No. of teeth |
|-------------|-----|-----|------|------|------|------|------|------|-----|------|------|------|----|--------------|
| K0269.7Δ104 | M4  | 40  | 47   | 7,5  | 10   | 13   | 14,5 | 25,5 | 4   | 15   | 30   | 33,5 | 9  | 16           |
| K0269.7Δ105 | M5  | 40  | 47   | 7,5  | 10   | 13   | 14,5 | 25,5 | 4   | 15   | 30   | 33,5 | 9  | 16           |
| K0269.7Δ106 | M6  | 40  | 47   | 7,5  | 10   | 13   | 14,5 | 25,5 | 4   | 15   | 30   | 33,5 | 9  | 16           |
| K0269.7Δ206 | M6  | 65  | 75   | 9,5  | 13,5 | 18   | 19,5 | 29,5 | 6,5 | 17,5 | 41,5 | 45,5 | 12 | 20           |
| K0269.7Δ208 | M8  | 65  | 75   | 9,5  | 13,5 | 18   | 19,5 | 29,5 | 6,5 | 17,5 | 41,5 | 45,5 | 12 | 20           |
| K0269.7Δ308 | M8  | 80  | 91,5 | 11   | 16   | 21,5 | 23   | 38,5 | 10  | 24   | 53,5 | 58   | 14 | 22           |
| K0269.7Δ310 | M10 | 80  | 91,5 | 11   | 16   | 21,5 | 23   | 38,5 | 10  | 24   | 53,5 | 58   | 14 | 22           |
| K0269.7Δ410 | M10 | 95  | 109  | 13   | 19   | 25,5 | 27,5 | 44,6 | 10  | 26   | 61   | 66   | 17 | 24           |
| K0269.7Δ412 | M12 | 95  | 109  | 13   | 19   | 25,5 | 27,5 | 44,6 | 10  | 26   | 61   | 66   | 17 | 24           |
| K0269.7Δ512 | M12 | 110 | 126  | 15,5 | 23   | 30   | 32,5 | 50,6 | 12  | 33   | 72   | 77   | 23 | 26           |
| K0269.7Δ516 | M16 | 110 | 126  | 15,5 | 23   | 30   | 32,5 | 50,6 | 12  | 33   | 72   | 77   | 23 | 26           |

## Clamping levers with push button

external thread



### Material:

Handle fibreglass reinforced plastic, toothed ring die-cast zinc.  
Steel parts grade 5.8.  
Push button plastic (POM).

### Version:

Steel parts black oxidised.

### Sample order:

K0269.71105X10  
(clamping lever black grey, push button traffic red.  
Include length L)

### Note:

Δ Enter the desired lever colour here.  
The standard colours are:  
Black grey clamping lever, traffic red push button.  
Orange clamping lever, black grey push button.  
Traffic red clamping lever, black grey push button.

Where  $L \geq 60$  mm the thread length is always 60 mm.

### On request:

Other threads, screw lengths and special versions.  
Dimension "H1" available in other lengths at extra charge.

### Drawing reference:

1) flat point DIN EN ISO 4753



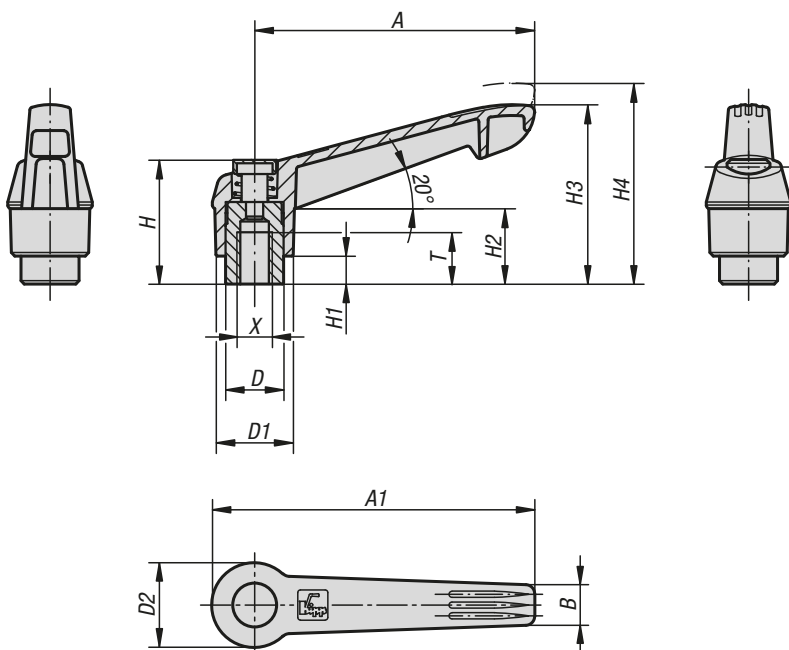
## KIPP Clamping levers with push button, external thread

| Order No.    | X   | A   | A1   | B    | D    | D1   | D2   | H    | H1  | H2   | H3   | H4   | No. of teeth | L                                   |
|--------------|-----|-----|------|------|------|------|------|------|-----|------|------|------|--------------|-------------------------------------|
| K0269.7Δ105X | M5  | 40  | 47   | 7,5  | 10   | 13   | 14,5 | 25,5 | 4   | 15   | 30   | 33,5 | 16           | 10/15/20/25/30/35/40/45/50          |
| K0269.7Δ106X | M6  | 40  | 47   | 7,5  | 10   | 13   | 14,5 | 25,5 | 4   | 15   | 30   | 33,5 | 16           | 10/15/20/25/30/35/40/45/50          |
| K0269.7Δ206X | M6  | 65  | 75   | 9,5  | 13,5 | 18   | 19,5 | 29,5 | 6,5 | 17,5 | 41,5 | 45,5 | 20           | 15/20/25/30/35/40/45/50/55/60       |
| K0269.7Δ208X | M8  | 65  | 75   | 9,5  | 13,5 | 18   | 19,5 | 29,5 | 6,5 | 17,5 | 41,5 | 45,5 | 20           | 15/20/25/30/35/40/45/50/55/60       |
| K0269.7Δ210X | M10 | 65  | 75   | 9,5  | 13,5 | 18   | 19,5 | 29,5 | 6,5 | 17,5 | 41,5 | 45,5 | 20           | 15/20/25/30/35/40/45/50/55/60       |
| K0269.7Δ308X | M8  | 80  | 91,5 | 11   | 16   | 21,5 | 23   | 38,5 | 10  | 24   | 53,5 | 58   | 22           | 15/20/25/30/35/40/45/50/55/60       |
| K0269.7Δ310X | M10 | 80  | 91,5 | 11   | 16   | 21,5 | 23   | 38,5 | 10  | 24   | 53,5 | 58   | 22           | 15/20/25/30/35/40/45/50/55/60       |
| K0269.7Δ410X | M10 | 95  | 109  | 13   | 19   | 25,5 | 27,5 | 44,6 | 10  | 26   | 61   | 66   | 24           | 20/25/30/35/40/45/50/55/60/70/80/90 |
| K0269.7Δ412X | M12 | 95  | 109  | 13   | 19   | 25,5 | 27,5 | 44,6 | 10  | 26   | 61   | 66   | 24           | 20/25/30/35/40/45/50/55/60/70/80/90 |
| K0269.7Δ512X | M12 | 110 | 126  | 15,5 | 23   | 30   | 32,5 | 50,6 | 12  | 33   | 72   | 77   | 26           | 25/30/35/40/45/50/55/60/70/80/90    |
| K0269.7Δ516X | M16 | 110 | 126  | 15,5 | 23   | 30   | 32,5 | 50,6 | 12  | 33   | 72   | 77   | 26           | 25/30/35/40/45/50/55/60/70/80/90    |



## Clamping levers with push button

internal thread, metal parts stainless-steel



### Material:

Handle fibreglass reinforced plastic, toothed ring die-cast zinc. Metal parts stainless steel 1.4305. Push button plastic (POM).

### Version:

Steel parts bright.

### Sample order:

K0270.71104  
(clamping lever black grey, push button traffic red)

### Note:

Δ Enter the desired lever colour here.

The standard colours are:

Black grey clamping lever, traffic red push button.

Orange clamping lever, black grey push button.

Traffic red clamping lever, black grey push button.

### On request:

Other threads and special versions.

Dimension "H1" available in other lengths at extra charge.

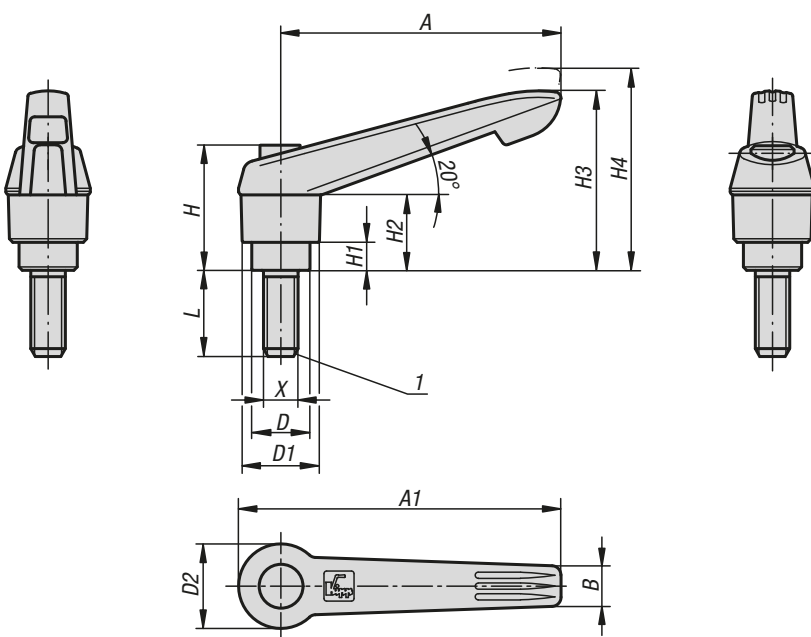


## KIPP Clamping levers with push button, internal thread, metal parts stainless steel

| Order No.   | X   | A   | A1   | B    | D    | D1   | D2   | H    | H1  | H2   | H3   | H4   | T  | No. of teeth |
|-------------|-----|-----|------|------|------|------|------|------|-----|------|------|------|----|--------------|
| K0270.7Δ104 | M4  | 40  | 47   | 7,5  | 10   | 13   | 14,5 | 25,5 | 4   | 15   | 30   | 33,5 | 9  | 16           |
| K0270.7Δ105 | M5  | 40  | 47   | 7,5  | 10   | 13   | 14,5 | 25,5 | 4   | 15   | 30   | 33,5 | 9  | 16           |
| K0270.7Δ106 | M6  | 40  | 47   | 7,5  | 10   | 13   | 14,5 | 25,5 | 4   | 15   | 30   | 33,5 | 9  | 16           |
| K0270.7Δ206 | M6  | 65  | 75   | 9,5  | 13,5 | 18   | 19,5 | 29,5 | 6,5 | 17,5 | 41,5 | 45,5 | 12 | 20           |
| K0270.7Δ208 | M8  | 65  | 75   | 9,5  | 13,5 | 18   | 19,5 | 29,5 | 6,5 | 17,5 | 41,5 | 45,5 | 12 | 20           |
| K0270.7Δ308 | M8  | 80  | 91,5 | 11   | 16   | 21,5 | 23   | 38,5 | 10  | 24   | 53,5 | 58   | 14 | 22           |
| K0270.7Δ310 | M10 | 80  | 91,5 | 11   | 16   | 21,5 | 23   | 38,5 | 10  | 24   | 53,5 | 58   | 14 | 22           |
| K0270.7Δ410 | M10 | 95  | 109  | 13   | 19   | 25,5 | 27,5 | 44,6 | 10  | 26   | 61   | 66   | 17 | 24           |
| K0270.7Δ412 | M12 | 95  | 109  | 13   | 19   | 25,5 | 27,5 | 44,6 | 10  | 26   | 61   | 66   | 17 | 24           |
| K0270.7Δ512 | M12 | 110 | 126  | 15,5 | 23   | 30   | 32,5 | 50,6 | 12  | 33   | 72   | 77   | 23 | 26           |
| K0270.7Δ516 | M16 | 110 | 126  | 15,5 | 23   | 30   | 32,5 | 50,6 | 12  | 33   | 72   | 77   | 23 | 26           |

## Clamping levers with push button

external thread, metal parts stainless-steel



### Material:

Handle fibreglass reinforced plastic, toothed ring die-cast zinc. Metal parts stainless steel 1.4305. Push button plastic (POM).

### Version:

Steel parts bright.

### Sample order:

K0270.71105X10

(Clamping lever black grey, push button traffic red. Include length L)

### Note:

Δ Enter the desired lever colour here.

The standard colours are:

Black grey clamping lever, traffic red push button.

Orange clamping lever, black grey push button.

Traffic red clamping lever, black grey push button.

Where  $L \geq 60$  mm the thread length is 60 mm.

### On request:

Other threads, screw lengths and special versions. Dimension "H1" available in other lengths at extra charge.

### Drawing reference:

1) flat point DIN EN ISO 4753

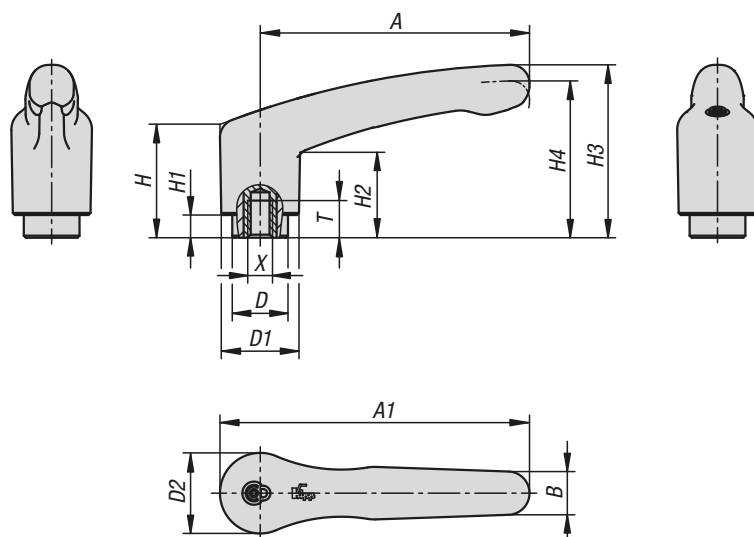


## KIPP Clamping levers with push button, external thread, metal parts stainless steel

| Order No.    | X   | A   | A1   | B    | D    | D1   | D2   | H    | H1  | H2   | H3   | H4   | No. of teeth | L                    |
|--------------|-----|-----|------|------|------|------|------|------|-----|------|------|------|--------------|----------------------|
| K0270.7Δ105X | M5  | 40  | 47   | 7,5  | 10   | 13   | 14,5 | 25,5 | 4   | 15   | 30   | 33,5 | 16           | 10/15/20/25          |
| K0270.7Δ106X | M6  | 40  | 47   | 7,5  | 10   | 13   | 14,5 | 25,5 | 4   | 15   | 30   | 33,5 | 16           | 10/15/20/25/30/40/50 |
| K0270.7Δ206X | M6  | 65  | 75   | 9,5  | 13,5 | 18   | 19,5 | 29,5 | 6,5 | 17,5 | 41,5 | 45,5 | 20           | 15/20/25/30/40/50/60 |
| K0270.7Δ208X | M8  | 65  | 75   | 9,5  | 13,5 | 18   | 19,5 | 29,5 | 6,5 | 17,5 | 41,5 | 45,5 | 20           | 15/20/25/30/40/50/60 |
| K0270.7Δ210X | M10 | 65  | 75   | 9,5  | 13,5 | 18   | 19,5 | 29,5 | 6,5 | 17,5 | 41,5 | 45,5 | 20           | 20/25/30/40/50/60    |
| K0270.7Δ308X | M8  | 80  | 91,5 | 11   | 16   | 21,5 | 23   | 38,5 | 10  | 24   | 53,5 | 58   | 22           | 20/25/30/40/50/60    |
| K0270.7Δ310X | M10 | 80  | 91,5 | 11   | 16   | 21,5 | 23   | 38,5 | 10  | 24   | 53,5 | 58   | 22           | 20/25/30/40/50/60    |
| K0270.7Δ412X | M12 | 95  | 109  | 13   | 19   | 25,5 | 27,5 | 44,6 | 10  | 26   | 61   | 66   | 24           | 25/30/40/50/60       |
| K0270.7Δ516X | M16 | 110 | 126  | 15,5 | 23   | 30   | 32,5 | 50,6 | 12  | 33   | 72   | 77   | 26           | 30/40/50/60          |

## Clamping levers, plastic with safety function

with female thread



Clamping levers with safety function prevent changes in the locking point through accidental opening or closing.

In the default position, the lever can be freely rotated and has no connection to the clamping point. The grip lever only engages when pushed down and the clamp can be loosened or tightened. A spring sets the lever automatically into the default position when released.

### Material:

Handle and insert made from reinforced plastic.  
Bush brass.

### Sample order:

K1553.2051

### Advantages:

Protection against accidental opening or closing.  
Closed grip contour without protruding edges.

### On request:

Special versions.

press to  
engage  
(safety function)

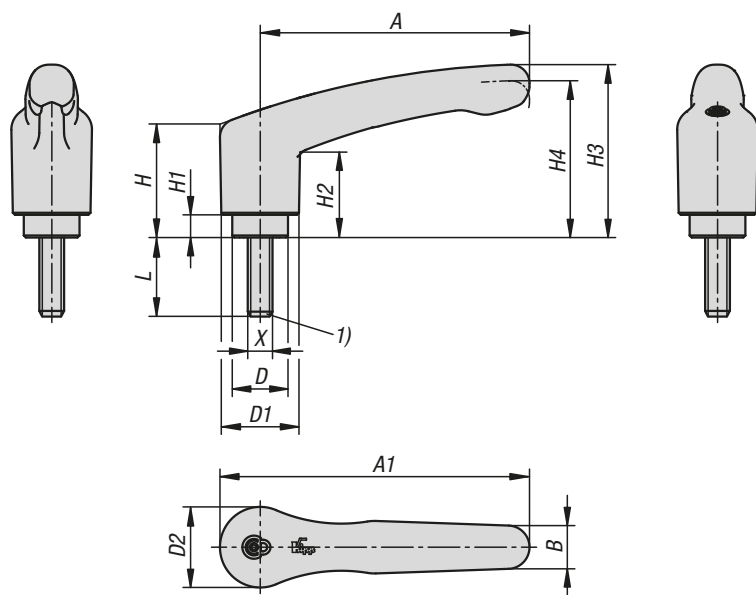


### KIPP Clamping levers, plastic with safety function with female thread

| Order No.   | Main colour          | X  | T   | D    | D1   | D2   | H    | H1  | H2   | H3   | H4 | A    | A1 | B    | No. of teeth |
|-------------|----------------------|----|-----|------|------|------|------|-----|------|------|----|------|----|------|--------------|
| K1553.2051  | black grey RAL 7021  | M5 | 7,5 | 13,5 | 18,8 | 19,5 | 27,4 | 5,5 | 20,7 | 41,9 | 38 | 65,2 | 75 | 10,5 | 12           |
| K1553.2061  | black grey RAL 7021  | M6 | 9   | 13,5 | 18,8 | 19,5 | 27,4 | 5,5 | 20,7 | 41,9 | 38 | 65,2 | 75 | 10,5 | 12           |
| K1553.2081  | black grey RAL 7021  | M8 | 9   | 13,5 | 18,8 | 19,5 | 27,4 | 5,5 | 20,7 | 41,9 | 38 | 65,2 | 75 | 10,5 | 12           |
| K1553.20584 | traffic red RAL 3020 | M5 | 7,5 | 13,5 | 18,8 | 19,5 | 27,4 | 5,5 | 20,7 | 41,9 | 38 | 65,2 | 75 | 10,5 | 12           |
| K1553.20684 | traffic red RAL 3020 | M6 | 9   | 13,5 | 18,8 | 19,5 | 27,4 | 5,5 | 20,7 | 41,9 | 38 | 65,2 | 75 | 10,5 | 12           |
| K1553.20884 | traffic red RAL 3020 | M8 | 9   | 13,5 | 18,8 | 19,5 | 27,4 | 5,5 | 20,7 | 41,9 | 38 | 65,2 | 75 | 10,5 | 12           |

## Clamping levers, plastic with safety function

with male thread



**Clamping levers with safety function prevent changes in the locking point through accidental opening or closing.**

In the default position, the lever can be freely rotated and has no connection to the clamping point. The grip lever only engages when pushed down and the clamp can be loosened or tightened. A spring sets the lever automatically into the default position when released.

**Material:**

Handle and insert reinforced plastic.  
Screw steel 5.8.

**Version:**

Steel trivalent blue passivated.

**Sample order:**

K1553.2051X20 (include length L)

**Advantages:**

Protection against accidental opening or closing.  
Closed grip contour without protruding edges.

**On request:**

Special versions.

**Drawing reference:**

1) flat point DIN EN ISO 4753

press to engage  
(safety function)

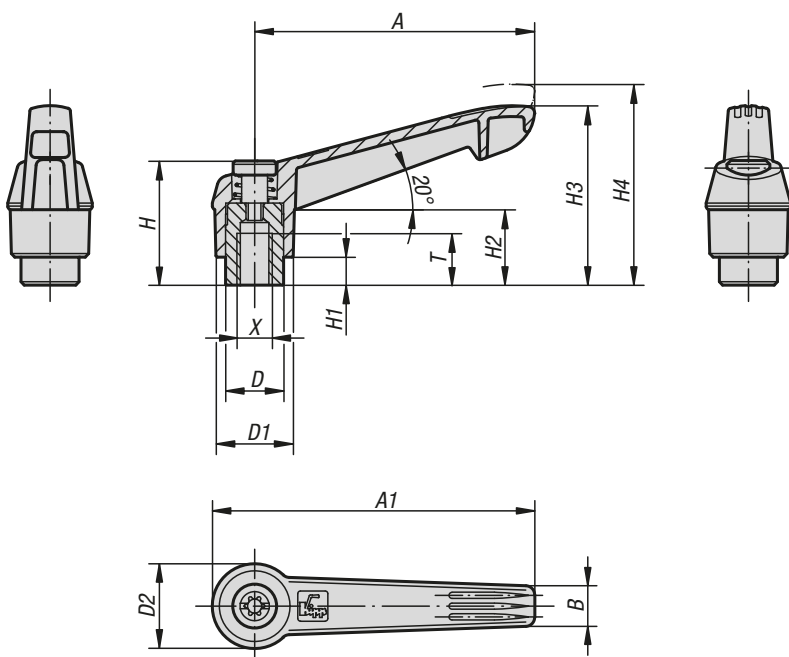


### KIPP Clamping levers, plastic with safety function with male thread

| Order No.    | Main colour          | X  | D    | D1   | D2   | H    | H1  | H2   | H3   | H4 | A    | A1 | B    | L           | No. of teeth |
|--------------|----------------------|----|------|------|------|------|-----|------|------|----|------|----|------|-------------|--------------|
| K1553.2051X  | black grey RAL 7021  | M5 | 13,5 | 18,8 | 19,5 | 27,4 | 5,5 | 20,7 | 41,9 | 38 | 65,2 | 75 | 10,5 | 10/20/30/40 | 12           |
| K1553.2061X  | black grey RAL 7021  | M6 | 13,5 | 18,8 | 19,5 | 27,4 | 5,5 | 20,7 | 41,9 | 38 | 65,2 | 75 | 10,5 | 10/20/30/40 | 12           |
| K1553.2081X  | black grey RAL 7021  | M8 | 13,5 | 18,8 | 19,5 | 27,4 | 5,5 | 20,7 | 41,9 | 38 | 65,2 | 75 | 10,5 | 10/20/30/40 | 12           |
| K1553.20584X | traffic red RAL 3020 | M5 | 13,5 | 18,8 | 19,5 | 27,4 | 5,5 | 20,7 | 41,9 | 38 | 65,2 | 75 | 10,5 | 10/20/30/40 | 12           |
| K1553.20684X | traffic red RAL 3020 | M6 | 13,5 | 18,8 | 19,5 | 27,4 | 5,5 | 20,7 | 41,9 | 38 | 65,2 | 75 | 10,5 | 10/20/30/40 | 12           |
| K1553.20884X | traffic red RAL 3020 | M8 | 13,5 | 18,8 | 19,5 | 27,4 | 5,5 | 20,7 | 41,9 | 38 | 65,2 | 75 | 10,5 | 10/20/30/40 | 12           |

# Clamping levers antistatic

internal thread, plastic grip



## Material:

Handles reinforced plastic, toothed ring die-cast zinc.  
Steel parts grade 5.8.

## Version:

Steel parts black oxidised, handles graphite black.

## Sample order:

K0269.1120624

## Application:

Sensitive electrical or electronic equipment, components and devices (ESD sensitive elements) may be damaged or destroyed by electrostatic discharges (ESD) in the immediate vicinity. Electrostatic discharges can come from people or through handling ESD sensitive components (e.g. during production, assembly, transport, storage etc). Electrically conductive products which conform to DIN EN 61340-5-1 are essential within electronic environments to prevent an electrostatic discharge. These products can be used for ESD applications or in ESD protection areas (EPA) in accordance with DIN EN 61340-5-1.

## Safety:

These ESD products can also be used for devices, components and protection systems in areas with high risk of explosion.

Use of these ESD products prevents the occurrence of electrostatic spark discharges, eliminating the potential ignition of gases and dusts which could lead to explosions in enclosed spaces.

Manufacturers and operators must use and conform to ATEX directives for the protection of persons working in areas with high risk of explosion.

These ESD products are certified by TÜV-Süd in relation to their electrical discharge capability.

## Target groups:

Device manufacturers required to conform to ATEX product directive 2014/34/EU.

Operators required to conform to ATEX worker protection directive 1999/92/EC.

lift to  
disengage

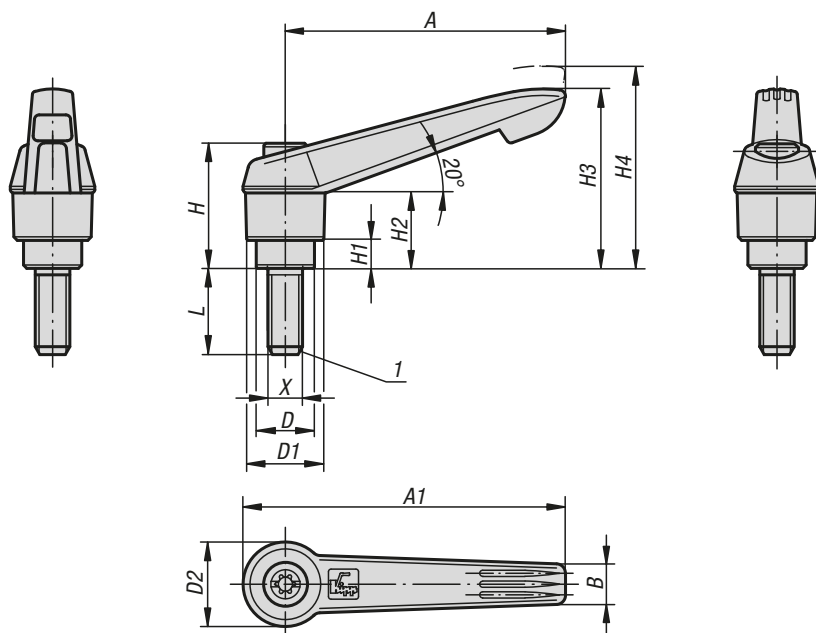


## KIPP Clamping levers antistatic, internal thread, plastic grip

| Order No.     | X  | A  | A1 | B   | D    | D1 | D2   | H    | H1  | H2   | H3   | H4   | T  | No. of teeth |
|---------------|----|----|----|-----|------|----|------|------|-----|------|------|------|----|--------------|
| K0269.1120624 | M6 | 65 | 75 | 9,5 | 13,5 | 18 | 19,5 | 28,5 | 6,5 | 17,5 | 41,5 | 45,5 | 12 | 20           |
| K0269.1120824 | M8 | 65 | 75 | 9,5 | 13,5 | 18 | 19,5 | 28,5 | 6,5 | 17,5 | 41,5 | 45,5 | 12 | 20           |

# Clamping levers antistatic

external thread, plastic grip



## Material:

Handles reinforced plastic, toothed ring die-cast zinc.  
Steel parts grade 5.8.

## Version:

Steel parts black oxidised, handles graphite black.

## Sample order:

K0269.1120624X20

## Note:

Where  $L \geq 60$  mm the thread length is always 60 mm.

## Application:

Sensitive electrical or electronic equipment, components and devices (ESD sensitive elements) may be damaged or destroyed by electrostatic discharges (ESD) in the immediate vicinity.

Electrostatic discharges can come from people or through handling ESD sensitive components (e.g. during production, assembly, transport, storage etc). Electrically conductive products which conform to DIN EN 61340-5-1 are essential within electronic environments to prevent an electrostatic discharge. These products can be used for ESD applications or in ESD protection areas (EPA) in accordance with DIN EN 61340-5-1.

## Safety:

These ESD products can also be used for devices, components and protection systems in areas with high risk of explosion.

Use of these ESD products prevents the occurrence of electrostatic spark discharges, eliminating the potential ignition of gases and dusts which could lead to explosions in enclosed spaces.

Manufacturers and operators must use and conform to ATEX directives for the protection of persons working in areas with high risk of explosion.

These ESD products are certified by TÜV-Süd in relation to their electrical discharge capability.

## Target groups:

Device manufacturers required to conform to ATEX product directive 2014/34/EU.

Operators required to conform to ATEX worker protection directive 1999/92/EC.

## Drawing reference:

1) flat point DIN EN ISO 4753

lift to  
disengage

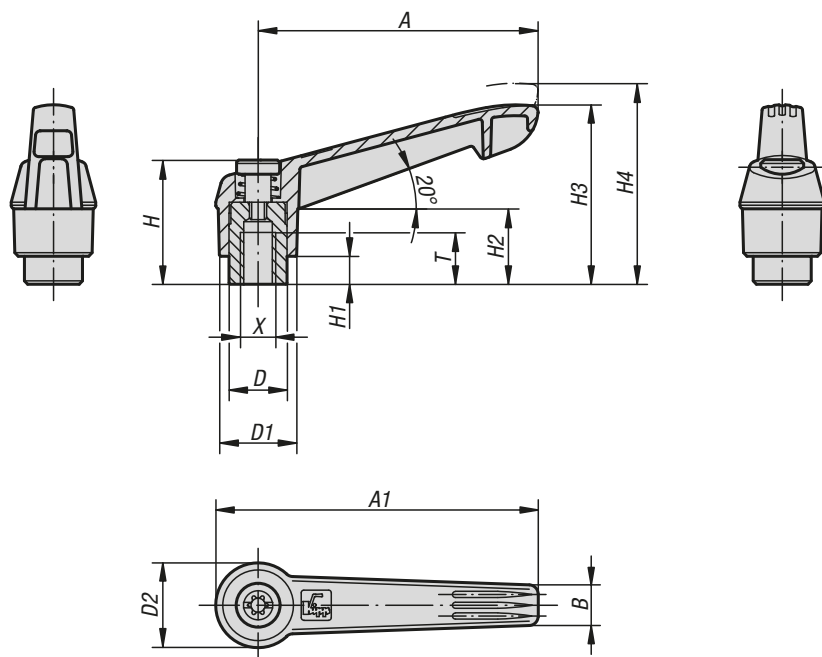


## KIPP Clamping levers antistatic, external thread, plastic grip

| Order No.        | X   | D    | D1 | D2   | H    | H1  | H2   | H3   | H4   | A  | A1 | B   | No. of teeth | L  |
|------------------|-----|------|----|------|------|-----|------|------|------|----|----|-----|--------------|----|
| K0269.1120624X20 | M6  | 13,5 | 18 | 19,5 | 28,5 | 6,5 | 17,5 | 41,5 | 45,5 | 65 | 75 | 9,5 | 20           | 20 |
| K0269.1120824X20 | M8  | 13,5 | 18 | 19,5 | 28,5 | 6,5 | 17,5 | 41,5 | 45,5 | 65 | 75 | 9,5 | 20           | 20 |
| K0269.1121024X20 | M10 | 13,5 | 18 | 19,5 | 28,5 | 6,5 | 17,5 | 41,5 | 45,5 | 65 | 75 | 9,5 | 20           | 20 |

# Clamping levers antibacterial

internal thread, plastic grip, metal parts stainless steel



## Material:

Handles slate grey reinforced plastic, toothed ring die-cast zinc.

Steel parts stainless steel 1.4305.

## Version:

Stainless steel bright.

## Sample order:

K0270.12206144

## Application:

The antibacterial KIPP MEDI grip products are highly effective against a variety of hazardous microorganisms, such as bacteria, fungi and even multi-resistant bacteria (e.g. MRSA).

The plastic used incorporates micro-silver particles with an antimicrobial effect to ensure effective results throughout the entire product life cycle.

## Function:

The growth of harmful micro-organisms on the product surface is effectively disrupted by means of silver ions, and the existing germs on MEDI grip products are consistently reduced (as tested and confirmed by an accredited testing laboratory).

During cleaning cycles the risk of infection through touching these products is significantly lower.

## Advantages:

Resistant to humidity and cleaning products (during disinfection) with no toxic side effects.

## Applications:

For installation on machines, equipment, plants and furnishings in areas with increased hygienic requirements (including hospitals, doctors' surgeries, rehabilitation centres and food production facilities), as well as for use in public areas or regularly frequented institutions (i.e. nursing homes or daycare centres).

lift to  
disengage

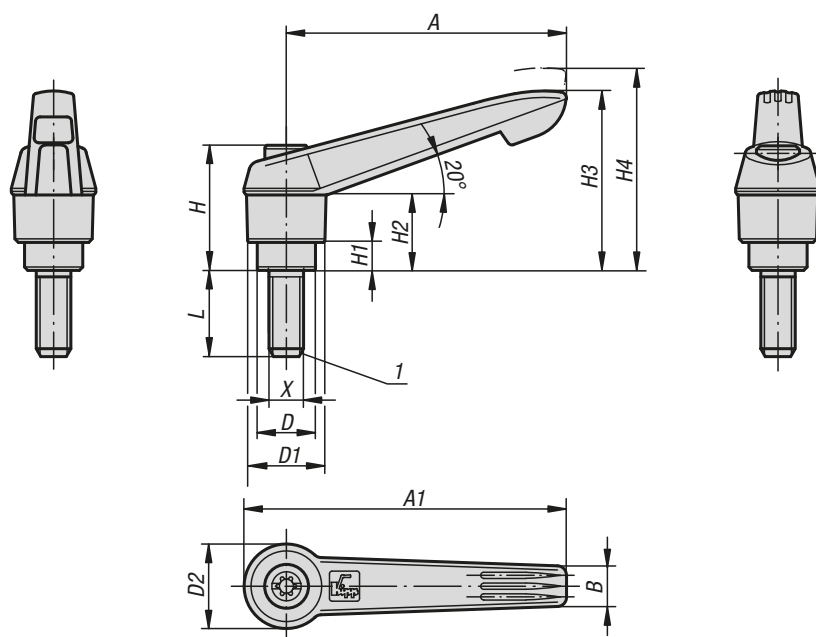


## KIPP Clamping levers antibacterial, internal thread, plastic grip, metal parts stainless steel

| Order No.      | X  | T  | D    | D1 | D2   | H    | H1  | H2   | H3   | H4   | A  | A1 | B   | No. of teeth |
|----------------|----|----|------|----|------|------|-----|------|------|------|----|----|-----|--------------|
| K0270.12206144 | M6 | 12 | 13,5 | 18 | 19,5 | 28,5 | 6,5 | 17,5 | 41,5 | 45,5 | 65 | 75 | 9,5 | 20           |
| K0270.12208144 | M8 | 12 | 13,5 | 18 | 19,5 | 28,5 | 6,5 | 17,5 | 41,5 | 45,5 | 65 | 75 | 9,5 | 20           |

## Clamping levers antibacterial

external thread, plastic grip, metal parts stainless steel



### Material:

Handles slate grey reinforced plastic, toothed ring die-cast zinc.

Steel parts stainless steel 1.4305.

### Version:

Stainless steel bright.

### Sample order:

K0270.12210144X20

### Note:

Where  $L \geq 60$  mm the thread length is always 60 mm.

### Application:

The antibacterial KIPP MEDI grip products are highly effective against a variety of hazardous microorganisms, such as bacteria, fungi and even multi-resistant bacteria (e.g. MRSA).

The plastic used incorporates micro-silver particles with an antimicrobial effect to ensure effective results throughout the entire product life cycle.

### Function:

The growth of harmful micro-organisms on the product surface is effectively disrupted by means of silver ions, and the existing germs on MEDI grip products are consistently reduced (as tested and confirmed by an accredited testing laboratory).

During cleaning cycles the risk of infection through touching these products is significantly lower.

### Advantages:

Resistant to humidity and cleaning products (during disinfection) with no toxic side effects.

### Applications:

For installation on machines, equipment, plants and furnishings in areas with increased hygienic requirements (including hospitals, doctors' surgeries, rehabilitation centres and food production facilities), as well as for use in public areas or regularly frequented institutions (i.e. nursing homes or daycare centres).

lift to  
disengage



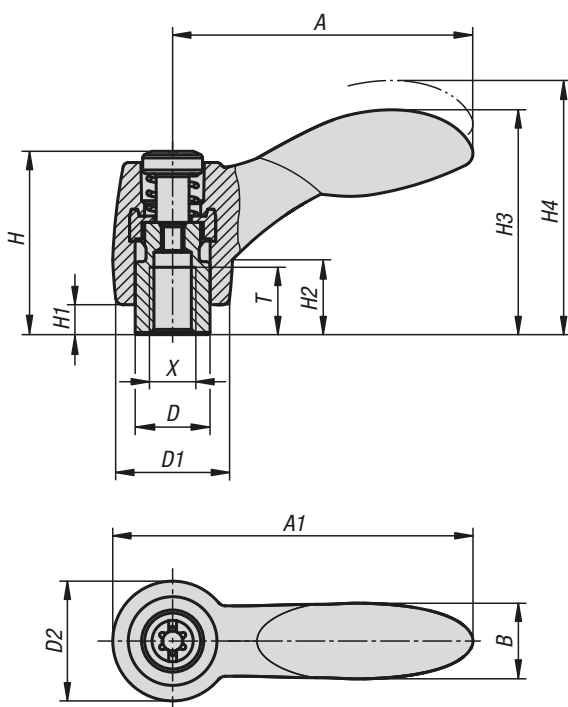
## KIPP Clamping levers antibacterial, external thread, plastic grip, metal parts stainless steel

| Order No.         | X   | D    | D1 | D2   | H    | H1  | H2   | H3   | H4   | A  | A1 | B   | No. of teeth | L  |
|-------------------|-----|------|----|------|------|-----|------|------|------|----|----|-----|--------------|----|
| K0270.12206144X20 | M6  | 13,5 | 18 | 19,5 | 28,5 | 6,5 | 17,5 | 41,5 | 45,5 | 65 | 75 | 9,5 | 20           | 20 |
| K0270.12208144X20 | M8  | 13,5 | 18 | 19,5 | 28,5 | 6,5 | 17,5 | 41,5 | 45,5 | 65 | 75 | 9,5 | 20           | 20 |
| K0270.12210144X20 | M10 | 13,5 | 18 | 19,5 | 28,5 | 6,5 | 17,5 | 41,5 | 45,5 | 65 | 75 | 9,5 | 20           | 20 |



## Clamping levers 2K

internal thread



### Material:

Handle:

Hard component fibreglass reinforced plastic with die-cast zinc toothed ring.

Soft component Thermoflex based on SEBS.

Steel parts: grade 5.8.

### Version:

Steel parts black oxidised.

### Sample order:

K0125.10401

### Note:

The hard and soft components are supplied in black grey RAL 7021 as standard.

### On request:

Other internal threads, colour combinations and special versions.

Dimension "H1" available in other lengths on request at extra charge.

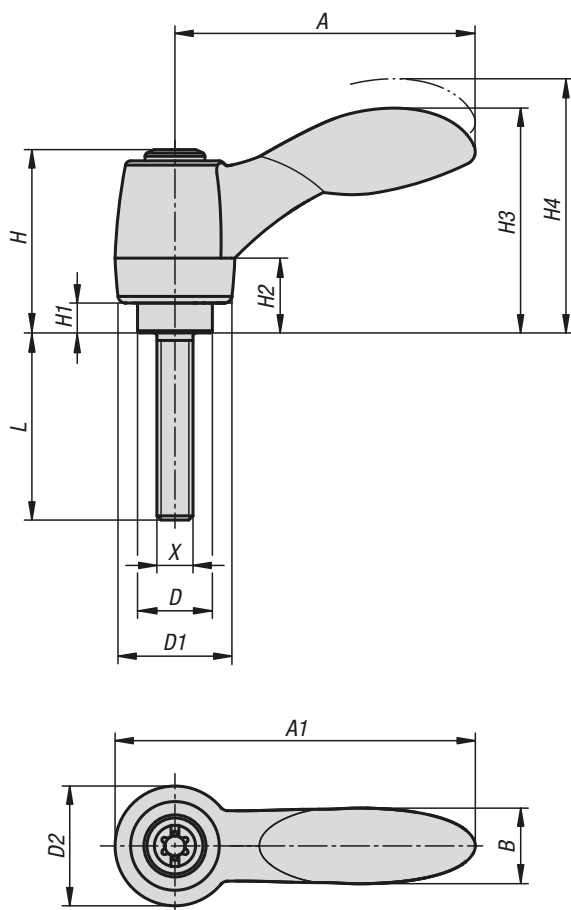


### KIPP Clamping levers 2K with internal thread

| Order No.   | Component material | X   | T  | D    | D1   | D2 | H    | H1  | H2   | H3   | H4   | A    | A1   | B    | No. of teeth |
|-------------|--------------------|-----|----|------|------|----|------|-----|------|------|------|------|------|------|--------------|
| K0125.10401 | steel              | M4  | 9  | 10   | 15   | 16 | 24,5 | 4   | 10   | 30   | 33,5 | 40,1 | 48,1 | 10,1 | 16           |
| K0125.10501 | steel              | M5  | 9  | 10   | 15   | 16 | 24,5 | 4   | 10   | 30   | 33,5 | 40,1 | 48,1 | 10,1 | 16           |
| K0125.10601 | steel              | M6  | 9  | 10   | 15   | 16 | 24,5 | 4   | 10   | 30   | 33,5 | 40,1 | 48,1 | 10,1 | 16           |
| K0125.20601 | steel              | M6  | 12 | 13,5 | 17,5 | 19 | 28,5 | 6,5 | 12,5 | 41,2 | 45,2 | 64,9 | 74,4 | 17,6 | 20           |
| K0125.20801 | steel              | M8  | 12 | 13,5 | 17,5 | 19 | 28,5 | 6,5 | 12,5 | 41,2 | 45,2 | 64,9 | 74,4 | 17,6 | 20           |
| K0125.30801 | steel              | M8  | 14 | 16   | 21   | 22 | 37   | 10  | 17   | 51,6 | 56,1 | 80,2 | 91,2 | 20,7 | 22           |
| K0125.31001 | steel              | M10 | 14 | 16   | 21   | 22 | 37   | 10  | 17   | 51,6 | 56,1 | 80,2 | 91,2 | 20,7 | 22           |

## Clamping levers 2K

external thread

**Material:****Handle:**

Hard component fibreglass reinforced plastic with die-cast zinc toothed ring.

Soft component Thermoflex based on SEBS.

**Steel parts:**

grade 5.8.

**Version:**

Steel parts black oxidised.

**Sample order:**

K0125.10501X10 (include length L)

**Note:**

The hard and soft components are supplied in black grey RAL 7021 as standard.

Where  $L \geq 60$  mm the thread length is always 60 mm.

**On request:**

Other external threads, screw lengths, colour combinations and special versions.

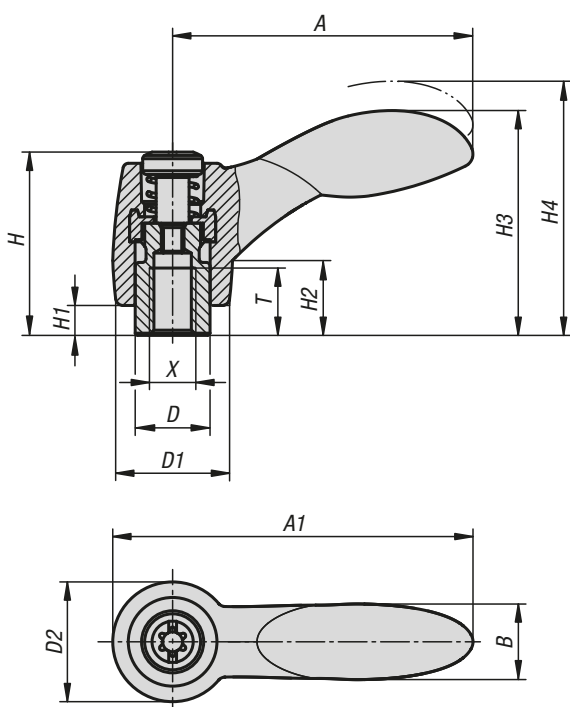
Dimension "H1" available in other lengths on request at extra charge.

**KIPP Clamping levers 2K with external thread**

| Order No.    | X   | D    | D1   | D2 | H    | H1  | H2   | H3   | H4   | A    | A1   | B    | No. of teeth | L                             |
|--------------|-----|------|------|----|------|-----|------|------|------|------|------|------|--------------|-------------------------------|
| K0125.10501X | M5  | 10   | 15   | 16 | 24,5 | 4   | 10   | 30   | 33,5 | 40,1 | 48,1 | 10,1 | 16           | 10/15/20/25/30/35/40/45/50    |
| K0125.10601X | M6  | 10   | 15   | 16 | 24,5 | 4   | 10   | 30   | 33,5 | 40,1 | 48,1 | 10,1 | 16           | 10/15/20/25/30/35/40/45/50    |
| K0125.20601X | M6  | 13,5 | 17,5 | 19 | 28,5 | 6,5 | 12,5 | 41,2 | 45,2 | 64,9 | 74,4 | 17,6 | 20           | 15/20/25/30/35/40/45/50/55/60 |
| K0125.20801X | M8  | 13,5 | 17,5 | 19 | 28,5 | 6,5 | 12,5 | 41,2 | 45,2 | 64,9 | 74,4 | 17,6 | 20           | 15/20/25/30/35/40/45/50/55/60 |
| K0125.21001X | M10 | 13,5 | 17,5 | 19 | 28,5 | 6,5 | 12,5 | 41,2 | 45,2 | 64,9 | 74,4 | 17,6 | 20           | 15/20/25/30/35/40/45/50/55/60 |
| K0125.30801X | M8  | 16   | 21   | 22 | 37   | 10  | 17   | 51,6 | 56,1 | 80,2 | 91,2 | 20,7 | 22           | 15/20/25/30/35/40/45/50/55/60 |
| K0125.31001X | M10 | 16   | 21   | 22 | 37   | 10  | 17   | 51,6 | 56,1 | 80,2 | 91,2 | 20,7 | 22           | 15/20/25/30/35/40/45/50/55/60 |

## Clamping levers 2K

internal thread, metal parts stainless steel



### Material:

#### Handle:

Hard component in glass-fibre-reinforced plastic with toothed wheel in die cast zinc.

Soft component: Thermoflex based on SEBS.

#### Steel parts:

Stainless steel, 1.4305.

### Version:

Steel parts bright.

### Sample order:

K0126.10401

### Note:

The hard and soft components are supplied in black grey RAL 7021 as standard.

### On request:

Other internal threads, colour combinations and special versions.

Dimension "H1" available in other lengths on request at extra charge.



lift to  
disengage

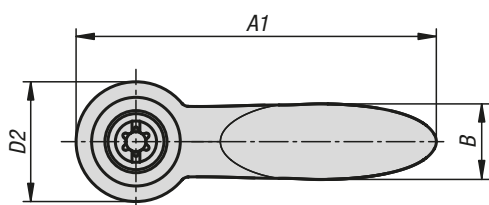
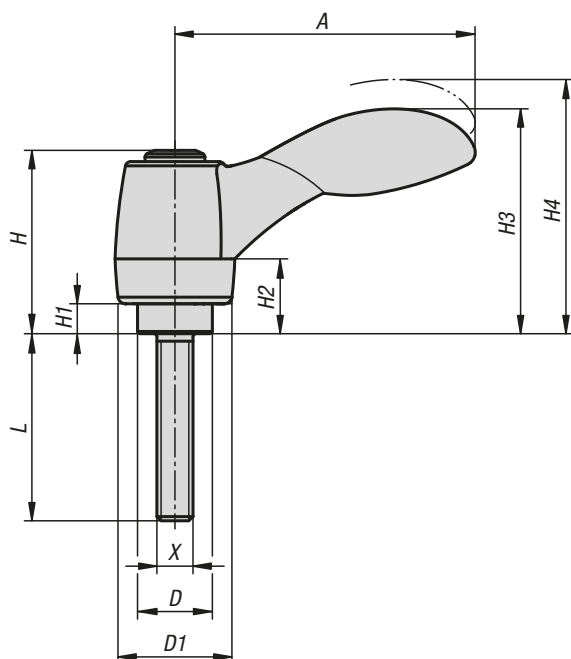


### KIPP Clamping levers 2K with internal thread, metal parts stainless steel

| Order No.   | Component material | X   | T  | D    | D1   | D2 | H    | H1  | H2   | H3   | H4   | A    | A1   | B    | No. of teeth |
|-------------|--------------------|-----|----|------|------|----|------|-----|------|------|------|------|------|------|--------------|
| K0126.10401 | stainless steel    | M4  | 9  | 10   | 15   | 16 | 24,5 | 4   | 10   | 30   | 33,5 | 40,1 | 48,1 | 10,1 | 16           |
| K0126.10501 | stainless steel    | M5  | 9  | 10   | 15   | 16 | 24,5 | 4   | 10   | 30   | 33,5 | 40,1 | 48,1 | 10,1 | 16           |
| K0126.10601 | stainless steel    | M6  | 9  | 10   | 15   | 16 | 24,5 | 4   | 10   | 30   | 33,5 | 40,1 | 48,1 | 10,1 | 16           |
| K0126.20601 | stainless steel    | M6  | 12 | 13,5 | 17,5 | 19 | 28,5 | 6,5 | 12,5 | 41,2 | 45,2 | 64,9 | 74,4 | 17,6 | 20           |
| K0126.20801 | stainless steel    | M8  | 12 | 13,5 | 17,5 | 19 | 28,5 | 6,5 | 12,5 | 41,2 | 45,2 | 64,9 | 74,4 | 17,6 | 20           |
| K0126.30801 | stainless steel    | M8  | 14 | 16   | 21   | 22 | 37   | 10  | 17   | 51,6 | 56,1 | 80,2 | 91,2 | 20,7 | 22           |
| K0126.31001 | stainless steel    | M10 | 14 | 16   | 21   | 22 | 37   | 10  | 17   | 51,6 | 56,1 | 80,2 | 91,2 | 20,7 | 22           |

## Clamping levers 2K

external thread, metal parts stainless steel



### Material:

#### Handle:

Hard component in glass-fibre-reinforced plastic with toothed wheel in die cast zinc.

Soft component: Thermoflex based on SEBS.

#### Steel parts:

Stainless steel, 1.4305.

### Version:

Steel parts bright.

### Sample order:

K0126.10501X10 (include length L)

### Note:

The hard and soft components are supplied in black grey RAL 7021 as standard.

Where  $L \geq 60$  mm the thread length is always 60 mm.

### On request:

Other external threads, screw lengths, colour combinations and special versions.

Dimension "H1" available in other lengths at extra charge.



lift to  
disengage

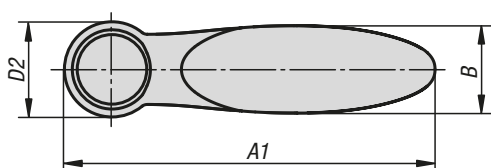
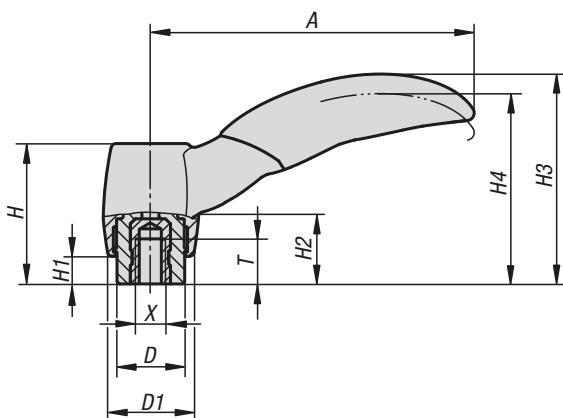


### KIPP Clamping levers 2K with external thread, metal parts stainless steel

| Order No.    | X   | D    | D1   | D2 | H    | H1  | H2   | H3   | H4   | A    | A1   | B    | No. of teeth | L                    |
|--------------|-----|------|------|----|------|-----|------|------|------|------|------|------|--------------|----------------------|
| K0126.10501X | M5  | 10   | 15   | 16 | 24,5 | 4   | 10   | 30   | 33,5 | 40,1 | 48,1 | 10,1 | 16           | 10/15/20/25          |
| K0126.10601X | M6  | 10   | 15   | 16 | 24,5 | 4   | 10   | 30   | 33,5 | 40,1 | 48,1 | 10,1 | 16           | 10/15/20/25/30/40/50 |
| K0126.20601X | M6  | 13,5 | 17,5 | 19 | 28,5 | 6,5 | 12,5 | 41,2 | 45,2 | 64,9 | 74,4 | 17,6 | 20           | 15/20/25/30/40/50/60 |
| K0126.20801X | M8  | 13,5 | 17,5 | 19 | 28,5 | 6,5 | 12,5 | 41,2 | 45,2 | 64,9 | 74,4 | 17,6 | 20           | 15/20/25/30/40/50/60 |
| K0126.21001X | M10 | 13,5 | 17,5 | 19 | 28,5 | 6,5 | 12,5 | 41,2 | 45,2 | 64,9 | 74,4 | 17,6 | 20           | 20/25/30/40/50/60    |
| K0126.30801X | M8  | 16   | 21   | 22 | 37   | 10  | 17   | 51,6 | 56,1 | 80,2 | 91,2 | 20,7 | 22           | 20/25/30/40/50/60    |
| K0126.31001X | M10 | 16   | 21   | 22 | 37   | 10  | 17   | 51,6 | 56,1 | 80,2 | 91,2 | 20,7 | 22           | 20/25/30/40/50/60    |

## Clamping levers ECO

internal thread



### Material:

Handle and insert made from reinforced plastic.  
Bush brass or steel.

### Version:

Steel trivalent blue passivated.

### Sample order:

K0252.1041

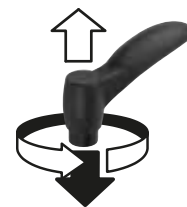
### Note:

Standard colour is black grey RAL 7021.

### On request:

Other female threads, colours and special versions.

press to  
disengage

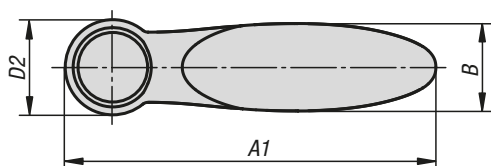
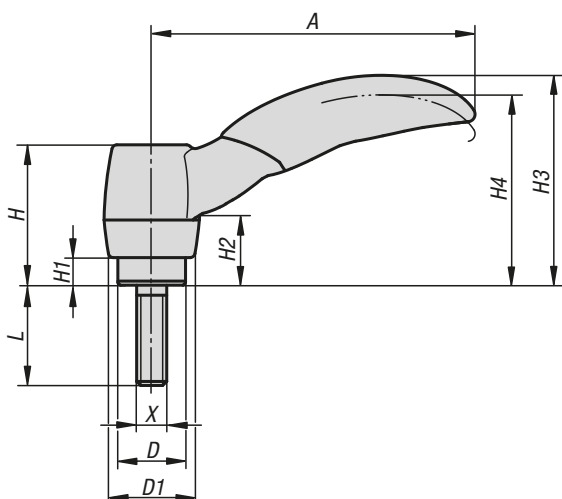


## KIPP Clamping levers ECO internal thread

| Order No.  | Component material | X   | T   | D    | D1   | D2   | H    | H1  | H2   | H3   | H4   | A    | A1 | B    | No. of teeth |
|------------|--------------------|-----|-----|------|------|------|------|-----|------|------|------|------|----|------|--------------|
| K0252.1041 | brass              | M4  | 6   | 10   | 12,6 | 14,1 | 21,7 | 5   | 11,3 | 32   | 29,1 | 47,9 | 55 | 13   | 12           |
| K0252.1051 | brass              | M5  | 6   | 10   | 12,6 | 14,1 | 21,7 | 5   | 11,3 | 32   | 29,1 | 47,9 | 55 | 13   | 12           |
| K0252.2051 | brass              | M5  | 7,5 | 13,5 | 17   | 19   | 28   | 5,5 | 14   | 41,9 | 38   | 64,5 | 74 | 17,5 | 12           |
| K0252.2061 | brass              | M6  | 9   | 13,5 | 17   | 19   | 28   | 5,5 | 14   | 41,9 | 38   | 64,5 | 74 | 17,5 | 12           |
| K0252.2081 | brass              | M8  | 9   | 13,5 | 17   | 19   | 28   | 5,5 | 14   | 41,9 | 38   | 64,5 | 74 | 17,5 | 12           |
| K0252.3081 | steel              | M8  | 12  | 17   | 20,4 | 23,9 | 40,7 | 10  | 23,1 | 58,1 | 53,3 | 81,1 | 93 | 22   | 12           |
| K0252.3101 | steel              | M10 | 12  | 17   | 20,4 | 23,9 | 40,7 | 10  | 23,1 | 58,1 | 53,3 | 81,1 | 93 | 22   | 12           |

# Clamping levers ECO

external thread



## Material:

Handle and insert reinforced plastic.  
Screw steel 5.8.

## Version:

Steel trivalent blue passivated.

## Sample order:

K0252.1041X10  
(include length L)

## Note:

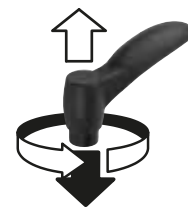
Standard colour is black grey RAL 7021.

Where  $L \geq 60$  mm the thread length is always 60 mm.

## On request:

Other external threads, colours and special versions.

press to  
disengage

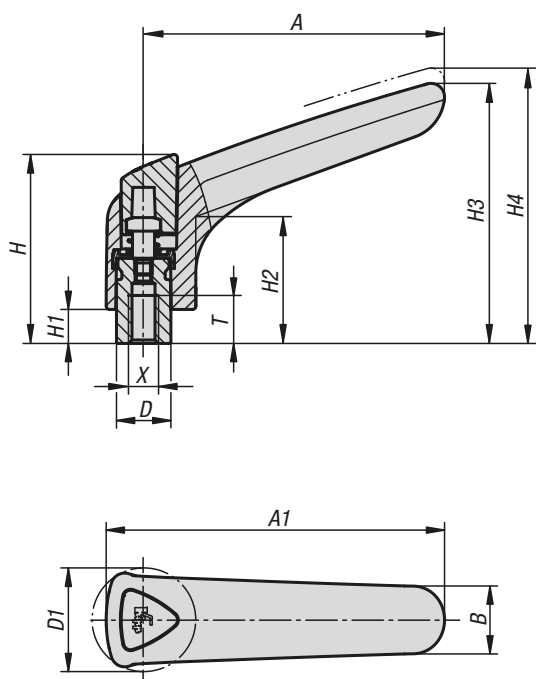


## KIPP Clamping levers ECO external thread

| Order No.   | X   | D    | D1   | D2   | H    | H1  | H2   | H3   | H4   | A    | A1 | B    | No. of teeth | L                 |
|-------------|-----|------|------|------|------|-----|------|------|------|------|----|------|--------------|-------------------|
| K0252.1041X | M4  | 10   | 12,6 | 14,1 | 21,7 | 5   | 11,3 | 32   | 29,1 | 47,9 | 55 | 13   | 12           | 10/15/20          |
| K0252.1051X | M5  | 10   | 12,6 | 14,1 | 21,7 | 5   | 11,3 | 32   | 29,1 | 47,9 | 55 | 13   | 12           | 10/15/20/25       |
| K0252.2051X | M5  | 13,5 | 17   | 19   | 28   | 5,5 | 14   | 41,9 | 38   | 64,5 | 74 | 17,5 | 12           | 10/15/20/25/30/40 |
| K0252.2061X | M6  | 13,5 | 17   | 19   | 28   | 5,5 | 14   | 41,9 | 38   | 64,5 | 74 | 17,5 | 12           | 10/15/20/25/30/40 |
| K0252.2081X | M8  | 13,5 | 17   | 19   | 28   | 5,5 | 14   | 41,9 | 38   | 64,5 | 74 | 17,5 | 12           | 10/15/20/25/30/40 |
| K0252.3081X | M8  | 17   | 20,4 | 23,9 | 40,7 | 10  | 23,1 | 58,1 | 53,3 | 81,1 | 93 | 22   | 12           | 20/25/30/40/50/60 |
| K0252.3101X | M10 | 17   | 20,4 | 23,9 | 40,7 | 10  | 23,1 | 58,1 | 53,3 | 81,1 | 93 | 22   | 12           | 20/25/30/40/50/60 |

## Clamping levers ergonomic

internal thread



### Material:

Handle: Hard components reinforced plastic, toothed ring die-cast zinc.  
Soft components thermoplastic elastomer.  
Steel parts: grade 5.8.

### Version:

Steel parts blue-passivated.

### Sample order:

K0981.3081

### Note:

The colour combinations graphite black RAL 9011 (hard components) and black grey RAL 7021 (soft components) are supplied as standard.

The soft components ensure a non-slip grip of the operating part. The closed design offers sufficient protection against dirt. The design was especially developed for ergonomic gripping requirements.

The push button improves disengagement and allows the handle to be easily used.

### On request:

Other internal threads, colours and special versions.  
Dimension "H1" available in other lengths at extra charge.

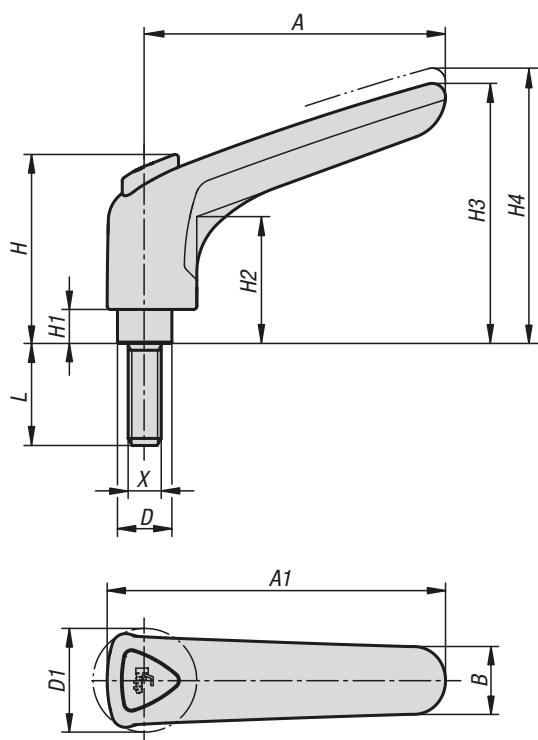


### KIPP Clamping levers, ergonomic, internal thread

| Order No.  | X   | T  | D  | D1   | H    | H1 | H2   | H3   | H4 | A    | A1   | B  | No. of teeth |
|------------|-----|----|----|------|------|----|------|------|----|------|------|----|--------------|
| K0981.3081 | M8  | 14 | 16 | 30,5 | 55,6 | 10 | 37,3 | 76,5 | 81 | 88,5 | 99,5 | 20 | 22           |
| K0981.3101 | M10 | 14 | 16 | 30,5 | 55,6 | 10 | 37,3 | 76,5 | 81 | 88,5 | 99,5 | 20 | 22           |

## Clamping levers ergonomic

external thread



### Material:

Handle: Hard components reinforced plastic, toothed ring die-cast zinc.  
Soft components thermoplastic elastomer.  
Steel parts: grade 5.8.

### Version:

Steel parts blue-passivated.

### Sample order:

K0981.3081X15 (include length L)

### Note:

The colour combinations graphite black RAL 9011 (hard components) and black grey RAL 7021 (soft components) are supplied as standard.

The soft components ensure a non-slip grip of the operating part. The closed design offers sufficient protection against dirt. The design was especially developed for ergonomic gripping requirements.

The push button improves disengagement and allows the handle to be easily used.

Where  $L \geq 60$  mm the thread length is 60 mm.

### On request:

Other external threads, screw lengths, colour combinations and special versions.  
Dimension "H1" available in other lengths on request at extra charge.



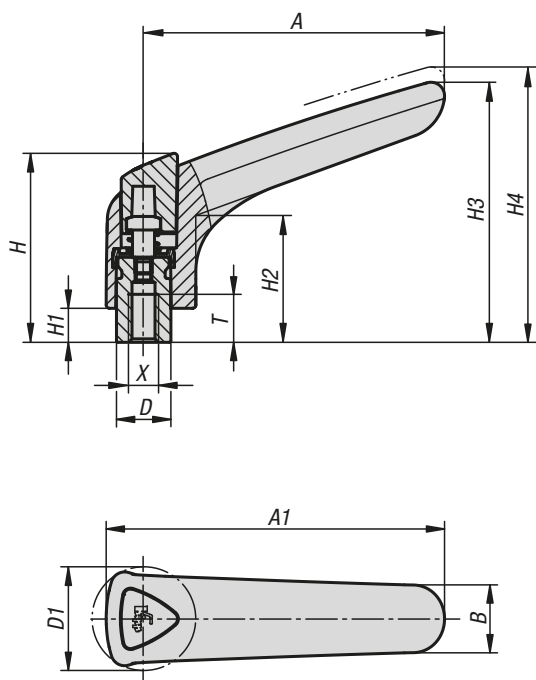
### KIPP Clamping levers, ergonomic, external thread

| Order No.   | X   | D  | D1   | H    | H1 | H2   | H3   | H4 | A    | A1   | B  | No. of teeth | L                             |
|-------------|-----|----|------|------|----|------|------|----|------|------|----|--------------|-------------------------------|
| K0981.3081X | M8  | 16 | 30,5 | 55,6 | 10 | 37,3 | 76,5 | 81 | 88,5 | 99,5 | 20 | 22           | 15/20/25/30/35/40/45/50/55/60 |
| K0981.3101X | M10 | 16 | 30,5 | 55,6 | 10 | 37,3 | 76,5 | 81 | 88,5 | 99,5 | 20 | 22           | 15/20/25/30/35/40/45/50/55/60 |



## Clamping levers ergonomic

internal thread, steel parts stainless steel



### Material:

Handle: Hard components reinforced plastic, toothed ring die-cast zinc.

Soft components thermoplastic elastomer.

Steel parts:

Stainless steel, 1.4305.

### Version:

Steel parts bright.

### Sample order:

K0982.3081

### Note:

The colour combinations graphite black RAL 9011 (hard components) and black grey RAL 7021 (soft components) are supplied as standard.

The soft components ensure a non-slip grip of the operating part. The closed design offers sufficient protection against dirt. The design was especially developed for ergonomic gripping requirements.

The push button improves disengagement and allows the handle to be easily used.

### On request:

Other internal threads, colours and special versions. Dimension "H1" available in other lengths at extra charge.

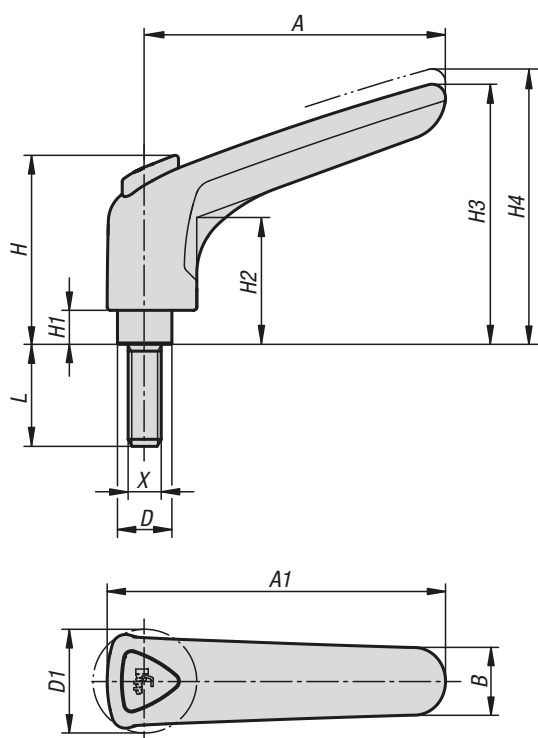


## KIPP Clamping levers, ergonomic, internal thread, metal parts stainless steel

| Order No.  | X   | T  | D  | D1   | H    | H1 | H2   | H3   | H4 | A    | A1   | B  | No. of teeth |
|------------|-----|----|----|------|------|----|------|------|----|------|------|----|--------------|
| K0982.3081 | M8  | 14 | 16 | 30,5 | 55,6 | 10 | 37,3 | 76,5 | 81 | 88,5 | 99,5 | 20 | 22           |
| K0982.3101 | M10 | 14 | 16 | 30,5 | 55,6 | 10 | 37,3 | 76,5 | 81 | 88,5 | 99,5 | 20 | 22           |

# Clamping levers ergonomic

external thread, steel parts stainless steel



lift to  
disengage



## Material:

Handle: Hard components reinforced plastic, toothed ring die-cast zinc.

Soft components thermoplastic elastomer.

Steel parts:

Stainless steel, 1.4305.

## Version:

Steel parts bright.

## Sample order:

K0982.3081X20

## Note:

The colour combinations graphite black RAL 9011 (hard components) and black grey RAL 7021 (soft components) are supplied as standard.

The soft components ensure a non-slip grip of the operating part. The closed design offers sufficient protection against dirt. The design was especially developed for ergonomic gripping requirements.

The push button improves disengagement and allows the handle to be easily used.

Where  $L \geq 60$  mm the thread length is 60 mm.

## On request:

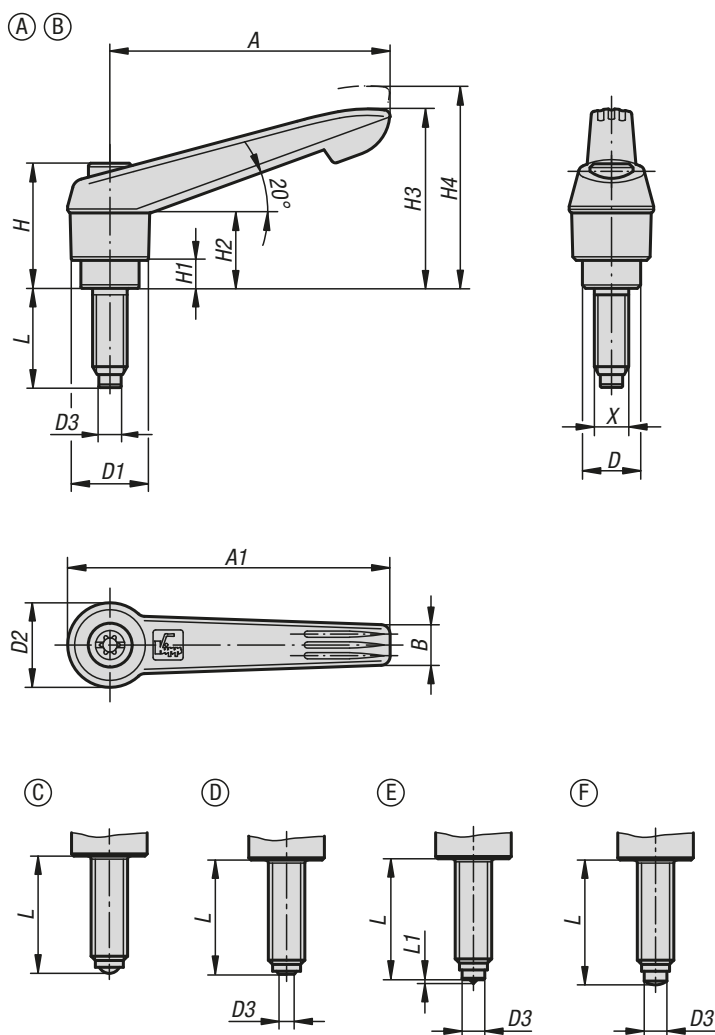
Other external threads, screw lengths, colour combinations and special versions.

Dimension "H1" available in other lengths on request at extra charge.

## KIPP Clamping levers, ergonomic, external thread, metal parts stainless steel

| Order No.     | X   | D  | D1   | H    | H1 | H2   | H3   | H4 | A    | A1   | B  | No. of teeth | L  |
|---------------|-----|----|------|------|----|------|------|----|------|------|----|--------------|----|
| K0982.3081X20 | M8  | 16 | 30,5 | 55,6 | 10 | 37,3 | 76,5 | 81 | 88,5 | 99,5 | 20 | 22           | 20 |
| K0982.3081X25 | M8  | 16 | 30,5 | 55,6 | 10 | 37,3 | 76,5 | 81 | 88,5 | 99,5 | 20 | 22           | 25 |
| K0982.3081X30 | M8  | 16 | 30,5 | 55,6 | 10 | 37,3 | 76,5 | 81 | 88,5 | 99,5 | 20 | 22           | 30 |
| K0982.3081X40 | M8  | 16 | 30,5 | 55,6 | 10 | 37,3 | 76,5 | 81 | 88,5 | 99,5 | 20 | 22           | 40 |
| K0982.3081X50 | M8  | 16 | 30,5 | 55,6 | 10 | 37,3 | 76,5 | 81 | 88,5 | 99,5 | 20 | 22           | 50 |
| K0982.3081X60 | M8  | 16 | 30,5 | 55,6 | 10 | 37,3 | 76,5 | 81 | 88,5 | 99,5 | 20 | 22           | 60 |
| K0982.3101X20 | M10 | 16 | 30,5 | 55,6 | 10 | 37,3 | 76,5 | 81 | 88,5 | 99,5 | 20 | 22           | 20 |
| K0982.3101X25 | M10 | 16 | 30,5 | 55,6 | 10 | 37,3 | 76,5 | 81 | 88,5 | 99,5 | 20 | 22           | 25 |
| K0982.3101X30 | M10 | 16 | 30,5 | 55,6 | 10 | 37,3 | 76,5 | 81 | 88,5 | 99,5 | 20 | 22           | 30 |
| K0982.3101X40 | M10 | 16 | 30,5 | 55,6 | 10 | 37,3 | 76,5 | 81 | 88,5 | 99,5 | 20 | 22           | 40 |
| K0982.3101X50 | M10 | 16 | 30,5 | 55,6 | 10 | 37,3 | 76,5 | 81 | 88,5 | 99,5 | 20 | 22           | 50 |
| K0982.3101X60 | M10 | 16 | 30,5 | 55,6 | 10 | 37,3 | 76,5 | 81 | 88,5 | 99,5 | 20 | 22           | 60 |

## Clamping levers with thrust pad



### Material:

Handles fibreglass reinforced plastic with die-cast zinc toothed rings.

Steel parts grade 5.8.

Thrust pin, brass, steel or POM.

Ball in steel.

### Version:

Steel parts black oxidised.

### Sample order:

K0780.12061X20 (include length L)

### Note:

The various different thrust pins are used to avoid pressure marks, compensate for unevenness or increase the grip on the workpiece.

Where  $L \geq 60$  mm the thread length is always 60 mm.

### On request:

Other threads, screw lengths, clamp lever colours and thrust pin types as well as special versions.

Dimension "H1" available in other lengths at extra cost.

### Drawing reference:

Form A: brass thrust pin

Form B: POM thrust pin

Form C: with ball

Form D: with flattened ball

Form E: with point

Form F: with half-dog point

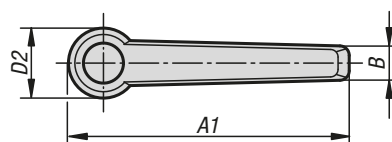
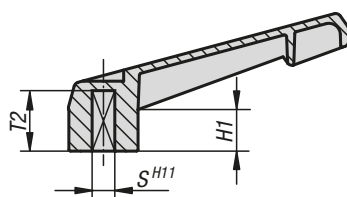
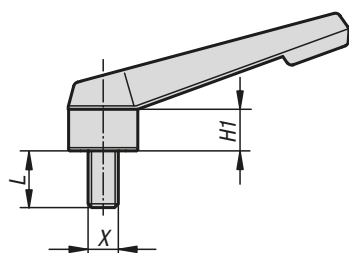
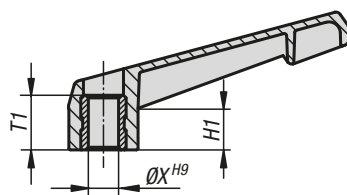
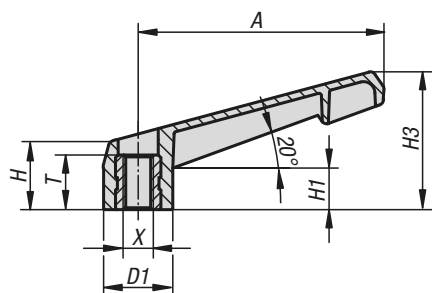
## Clamping levers with thrust pad



## KIPP Clamping levers with thrust pad

| Order No.    | Form | Component material   | X   | A  | A1 | B   | D    | D1 | D2   | D3  | Ball Ø | H    | H1  | H2   | H3   | H4   | L                        | L1  | No. of teeth |
|--------------|------|----------------------|-----|----|----|-----|------|----|------|-----|--------|------|-----|------|------|------|--------------------------|-----|--------------|
| K0780.11051X | A    | pin brass            | M5  | 40 | 47 | 7,5 | 10   | 13 | 14,5 | 3   | -      | 24,5 | 4   | 15   | 30   | 33,5 | 20/30/40/50              | -   | 16           |
| K0780.11061X | A    | pin brass            | M6  | 40 | 47 | 7,5 | 10   | 13 | 14,5 | 4   | -      | 24,5 | 4   | 15   | 30   | 33,5 | 20/30/40/50              | -   | 16           |
| K0780.12061X | A    | pin brass            | M6  | 65 | 75 | 9,5 | 13,5 | 18 | 19,5 | 4   | -      | 28,5 | 6,5 | 17,5 | 41,5 | 45,5 | 20/30/40/50/60           | -   | 20           |
| K0780.12081X | A    | pin brass            | M8  | 65 | 75 | 9,5 | 13,5 | 18 | 19,5 | 5,5 | -      | 28,5 | 6,5 | 17,5 | 41,5 | 45,5 | 20/30/40/50/60           | -   | 20           |
| K0780.12101X | A    | pin brass            | M10 | 65 | 75 | 9,5 | 13,5 | 18 | 19,5 | 7   | -      | 28,5 | 6,5 | 17,5 | 41,5 | 45,5 | 20/30/40/50/60           | -   | 20           |
| K0780.21051X | B    | pin POM              | M5  | 40 | 47 | 7,5 | 10   | 13 | 14,5 | 3   | -      | 24,5 | 4   | 15   | 30   | 33,5 | 20,5/30,5/40,5/50,5      | -   | 16           |
| K0780.21061X | B    | pin POM              | M6  | 40 | 47 | 7,5 | 10   | 13 | 14,5 | 3,5 | -      | 24,5 | 4   | 15   | 30   | 33,5 | 19,8/29,8/39,8/49,8      | -   | 16           |
| K0780.22061X | B    | pin POM              | M6  | 65 | 75 | 9,5 | 13,5 | 18 | 19,5 | 3,5 | -      | 28,5 | 6,5 | 17,5 | 41,5 | 45,5 | 19,8/29,8/39,8/49,8/59,8 | -   | 20           |
| K0780.22081X | B    | pin POM              | M8  | 65 | 75 | 9,5 | 13,5 | 18 | 19,5 | 5   | -      | 28,5 | 6,5 | 17,5 | 41,5 | 45,5 | 19,6/29,6/39,6/49,6/59,6 | -   | 20           |
| K0780.22101X | B    | pin POM              | M10 | 65 | 75 | 9,5 | 13,5 | 18 | 19,5 | 6,5 | -      | 28,5 | 6,5 | 17,5 | 41,5 | 45,5 | 19,9/29,9/39,9/49,9/59,9 | -   | 20           |
| K0780.31051X | C    | ball steel           | M5  | 40 | 47 | 7,5 | 10   | 13 | 14,5 | -   | 3      | 24,5 | 4   | 15   | 30   | 33,5 | 19,5/29,5/39,5/49,5      | -   | 16           |
| K0780.31061X | C    | ball steel           | M6  | 40 | 47 | 7,5 | 10   | 13 | 14,5 | -   | 4      | 24,5 | 4   | 15   | 30   | 33,5 | 19,3/29,3/39,3/49,3      | -   | 16           |
| K0780.32061X | C    | ball steel           | M6  | 65 | 75 | 9,5 | 13,5 | 18 | 19,5 | -   | 4      | 28,5 | 6,5 | 17,5 | 41,5 | 45,5 | 19,3/29,3/39,3/49,3/59,3 | -   | 20           |
| K0780.32081X | C    | ball steel           | M8  | 65 | 75 | 9,5 | 13,5 | 18 | 19,5 | -   | 5,5    | 28,5 | 6,5 | 17,5 | 41,5 | 45,5 | 19,2/29,2/39,2/49,2/59,2 | -   | 20           |
| K0780.32101X | C    | ball steel           | M10 | 65 | 75 | 9,5 | 13,5 | 18 | 19,5 | -   | 7      | 28,5 | 6,5 | 17,5 | 41,5 | 45,5 | 19,7/29,7/39,7/49,7/59,7 | -   | 20           |
| K0780.41051X | D    | ball steel           | M5  | 40 | 47 | 7,5 | 10   | 13 | 14,5 | 2   | 3      | 24,5 | 4   | 15   | 30   | 33,5 | 19,1/29,1/39,1/49,1      | -   | 16           |
| K0780.41061X | D    | ball steel           | M6  | 40 | 47 | 7,5 | 10   | 13 | 14,5 | 3   | 4      | 24,5 | 4   | 15   | 30   | 33,5 | 18,6/28,6/38,6/48,6      | -   | 16           |
| K0780.42061X | D    | ball steel           | M6  | 65 | 75 | 9,5 | 13,5 | 18 | 19,5 | 3   | 4      | 28,5 | 6,5 | 17,5 | 41,5 | 45,5 | 18,6/28,6/38,6/48,6/58,6 | -   | 20           |
| K0780.42081X | D    | ball steel           | M8  | 65 | 75 | 9,5 | 13,5 | 18 | 19,5 | 4,1 | 5,5    | 28,5 | 6,5 | 17,5 | 41,5 | 45,5 | 18,3/28,3/38,3/48,3/58,3 | -   | 20           |
| K0780.42101X | D    | ball steel           | M10 | 65 | 75 | 9,5 | 13,5 | 18 | 19,5 | 5,6 | 7      | 28,5 | 6,5 | 17,5 | 41,5 | 45,5 | 18,3/28,3/38,3/48,3/58,3 | -   | 20           |
| K0780.51051X | E    | steel point          | M5  | 40 | 47 | 7,5 | 10   | 13 | 14,5 | 3   | -      | 24,5 | 4   | 15   | 30   | 33,5 | 20/30/40/50              | 0,5 | 16           |
| K0780.51061X | E    | steel point          | M6  | 40 | 47 | 7,5 | 10   | 13 | 14,5 | 4   | -      | 24,5 | 4   | 15   | 30   | 33,5 | 20/30/40/50              | 0,8 | 16           |
| K0780.52061X | E    | steel point          | M6  | 65 | 75 | 9,5 | 13,5 | 18 | 19,5 | 4   | -      | 28,5 | 6,5 | 17,5 | 41,5 | 45,5 | 20/30/40/50/60           | 0,8 | 20           |
| K0780.52081X | E    | steel point          | M8  | 65 | 75 | 9,5 | 13,5 | 18 | 19,5 | 5,5 | -      | 28,5 | 6,5 | 17,5 | 41,5 | 45,5 | 20/30/40/50/60           | 1   | 20           |
| K0780.52101X | E    | steel point          | M10 | 65 | 75 | 9,5 | 13,5 | 18 | 19,5 | 7   | -      | 28,5 | 6,5 | 17,5 | 41,5 | 45,5 | 20/30/40/50/60           | 1,5 | 20           |
| K0780.61051X | F    | half-dog point steel | M5  | 40 | 47 | 7,5 | 10   | 13 | 14,5 | 3   | -      | 24,5 | 4   | 15   | 30   | 33,5 | 20,5/30,5/40,5/50,5      | -   | 16           |
| K0780.61061X | F    | half-dog point steel | M6  | 40 | 47 | 7,5 | 10   | 13 | 14,5 | 4   | -      | 24,5 | 4   | 15   | 30   | 33,5 | 20,8/30,8/40,8/50,8      | -   | 16           |
| K0780.62061X | F    | half-dog point steel | M6  | 65 | 75 | 9,5 | 13,5 | 18 | 19,5 | 4   | -      | 28,5 | 6,5 | 17,5 | 41,5 | 45,5 | 20,8/30,8/40,8/50,8/60,8 | -   | 20           |
| K0780.62081X | F    | half-dog point steel | M8  | 65 | 75 | 9,5 | 13,5 | 18 | 19,5 | 5,5 | -      | 28,5 | 6,5 | 17,5 | 41,5 | 45,5 | 20,8/30,8/40,8/50,8/60,8 | -   | 20           |
| K0780.62101X | F    | half-dog point steel | M10 | 65 | 75 | 9,5 | 13,5 | 18 | 19,5 | 7   | -      | 28,5 | 6,5 | 17,5 | 41,5 | 45,5 | 20,9/30,9/40,9/50,9/60,9 | -   | 20           |

## Clamping levers non-adjustable



### Material:

Handle fibreglass reinforced plastic.  
Steel parts grade 5.8.

### Version:

Handle black grey, steel parts blue passivated.

### Sample order:

K0175.105X20 (include length L)

### Note:

Non-adjustable clamping levers can be used for simple applications. Generally, there must be enough space so that the lever can be rotated through 360°.

### On request:

Special versions.

## Clamping levers non-adjustable



## KIPP Non-adjustable clamping levers with internal thread

| Order No.    | Thread type     | Size | X   | T  | D1   | D2   | H  | H1 | H3   | A   | A1  | B  |
|--------------|-----------------|------|-----|----|------|------|----|----|------|-----|-----|----|
| K0175.104000 | internal thread | 1    | M4  | 10 | 13,8 | 14   | 17 | 11 | 27   | 40  | 47  | 8  |
| K0175.105000 | internal thread | 1    | M5  | 10 | 13,8 | 14   | 17 | 11 | 27   | 40  | 47  | 8  |
| K0175.106000 | internal thread | 1    | M6  | 10 | 13,8 | 14   | 17 | 11 | 27   | 40  | 47  | 8  |
| K0175.208000 | internal thread | 2    | M8  | 14 | 18,3 | 18,5 | 18 | 11 | 36,5 | 65  | 75  | 9  |
| K0175.310000 | internal thread | 3    | M10 | 14 | 21,8 | 22   | 22 | 14 | 45   | 80  | 91  | 11 |
| K0175.412000 | internal thread | 4    | M12 | 18 | 25,8 | 26   | 26 | 17 | 54   | 95  | 108 | 13 |
| K0175.516000 | internal thread | 5    | M16 | 18 | 30,8 | 31   | 31 | 21 | 63   | 110 | 126 | 16 |

## KIPP Non-adjustable clamping levers with external thread

| Order No.  | Thread type     | Size | X   | D1   | D2   | H  | H1 | H3   | A   | A1  | B  | L        |
|------------|-----------------|------|-----|------|------|----|----|------|-----|-----|----|----------|
| K0175.105X | external thread | 1    | M5  | 13,8 | 14   | 17 | 11 | 27   | 40  | 47  | 8  | 20       |
| K0175.106X | external thread | 1    | M6  | 13,8 | 14   | 17 | 11 | 27   | 40  | 47  | 8  | 20       |
| K0175.208X | external thread | 2    | M8  | 18,3 | 18,5 | 18 | 11 | 36,5 | 65  | 75  | 9  | 15/20/30 |
| K0175.310X | external thread | 3    | M10 | 21,8 | 22   | 22 | 14 | 45   | 80  | 91  | 11 | 30       |
| K0175.412X | external thread | 4    | M12 | 25,8 | 26   | 26 | 17 | 54   | 95  | 108 | 13 | 30       |
| K0175.516X | external thread | 5    | M16 | 30,8 | 31   | 31 | 21 | 63   | 110 | 126 | 16 | 40       |

## KIPP Non-adjustable clamping levers with reamed hole

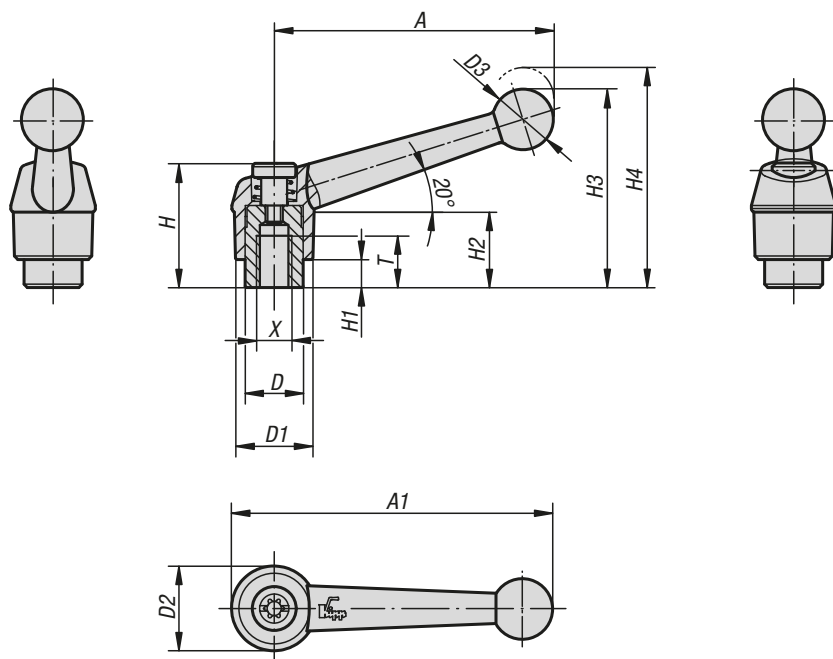
| Order No.    | Thread type | Size | X  | T1 | D1   | D2   | H  | H1 | H3   | A   | A1  | B  |
|--------------|-------------|------|----|----|------|------|----|----|------|-----|-----|----|
| K0175.106001 | reamed hole | 1    | 6  | 10 | 13,8 | 14   | 17 | 11 | 27   | 40  | 47  | 8  |
| K0175.208001 | reamed hole | 2    | 8  | 14 | 18,3 | 18,5 | 18 | 11 | 36,5 | 65  | 75  | 9  |
| K0175.310001 | reamed hole | 3    | 10 | 14 | 21,8 | 22   | 22 | 14 | 45   | 80  | 91  | 11 |
| K0175.412001 | reamed hole | 4    | 12 | 18 | 25,8 | 26   | 26 | 17 | 54   | 95  | 108 | 13 |
| K0175.516001 | reamed hole | 5    | 16 | 18 | 30,8 | 31   | 31 | 21 | 63   | 110 | 126 | 16 |

## KIPP Non-adjustable clamping levers with square socket

| Order No.    | Thread type   | Size | S  | T2 | D1   | D2   | H  | H1 | H3   | A   | A1  | B  |
|--------------|---------------|------|----|----|------|------|----|----|------|-----|-----|----|
| K0175.105002 | square socket | 1    | 5  | 13 | 13,8 | 14   | 17 | 11 | 27   | 40  | 47  | 8  |
| K0175.206002 | square socket | 2    | 6  | 16 | 18,3 | 18,5 | 18 | 11 | 36,5 | 65  | 75  | 9  |
| K0175.308002 | square socket | 3    | 8  | 18 | 21,8 | 22   | 22 | 14 | 45   | 80  | 91  | 11 |
| K0175.410002 | square socket | 4    | 10 | 20 | 25,8 | 26   | 26 | 17 | 54   | 95  | 108 | 13 |
| K0175.512002 | square socket | 5    | 12 | 26 | 30,8 | 31   | 31 | 21 | 63   | 110 | 126 | 16 |

## Clamping levers

internal thread



### Material:

Handle die-cast zinc DIN EN 12844.  
Steel parts grade 5.8.

### Version:

Handle powder-coated.  
Steel parts black oxidised.

### Sample order:

K0116.4103

### Note:

Standard colours are:  
black satin finish, silver metallic.

### On request:

Other threads, colours and special versions.  
Dimension "H1" available in other lengths at  
extra charge.

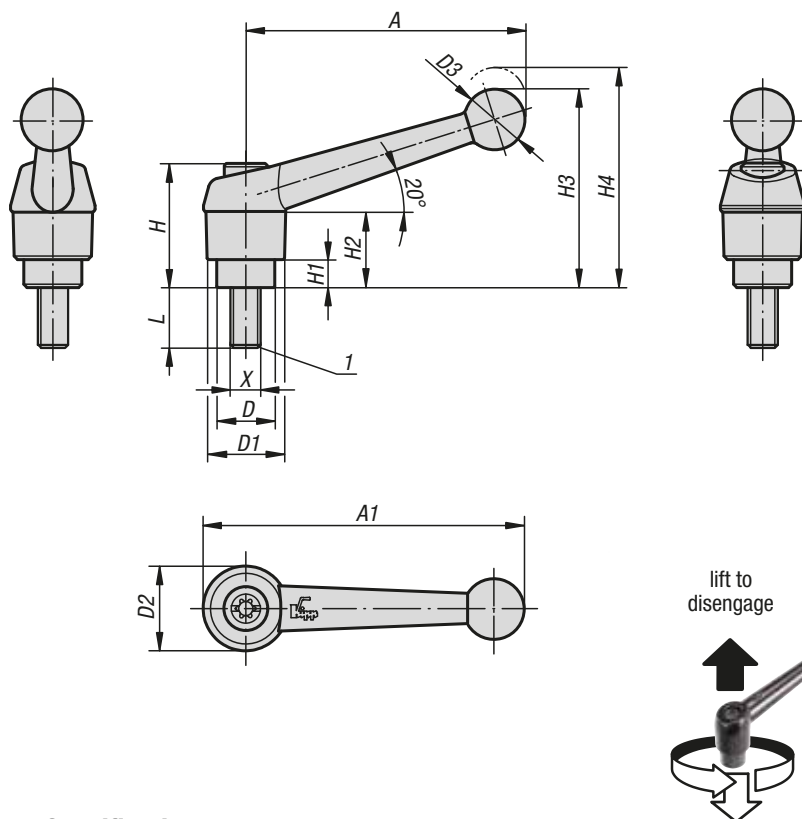


## KIPP Clamping levers with internal thread

| Order No.<br>black | Order No.<br>silver metallic | X   | A   | A1  | T  | D    | D1 | D2   | D3   | H    | H1  | H2   | H3   | H4   | No. of<br>teeth |
|--------------------|------------------------------|-----|-----|-----|----|------|----|------|------|------|-----|------|------|------|-----------------|
| K0116.1041         | K0116.1043                   | M4  | 39  | 46  | 9  | 10   | 13 | 14   | 10,5 | 24,5 | 4   | 15   | 32,5 | 35,5 | 16              |
| K0116.1051         | K0116.1053                   | M5  | 39  | 46  | 9  | 10   | 13 | 14   | 10,5 | 24,5 | 4   | 15   | 32,5 | 35,5 | 16              |
| K0116.1061         | K0116.1063                   | M6  | 39  | 46  | 9  | 10   | 13 | 14   | 10,5 | 24,5 | 4   | 15   | 32,5 | 35,5 | 16              |
| K0116.2061         | K0116.2063                   | M6  | 64  | 73  | 12 | 13,5 | 18 | 18,5 | 15,5 | 28,5 | 6,5 | 16,5 | 45,5 | 49,5 | 20              |
| K0116.2081         | K0116.2083                   | M8  | 64  | 73  | 12 | 13,5 | 18 | 18,5 | 15,5 | 28,5 | 6,5 | 16,5 | 45,5 | 49,5 | 20              |
| K0116.3081         | K0116.3083                   | M8  | 79  | 90  | 14 | 16   | 21 | 22   | 17   | 37   | 10  | 23   | 57,5 | 61,5 | 22              |
| K0116.3101         | K0116.3103                   | M10 | 79  | 90  | 14 | 16   | 21 | 22   | 17   | 37   | 10  | 23   | 57,5 | 61,5 | 22              |
| K0116.4101         | K0116.4103                   | M10 | 95  | 108 | 17 | 19   | 25 | 26   | 19   | 42,5 | 10  | 26   | 67   | 72   | 24              |
| K0116.4121         | K0116.4123                   | M12 | 95  | 108 | 17 | 19   | 25 | 26   | 19   | 42,5 | 10  | 26   | 67   | 72   | 24              |
| K0116.5121         | K0116.5123                   | M12 | 110 | 126 | 23 | 23   | 30 | 31   | 22   | 49   | 12  | 32   | 79   | 84   | 26              |
| K0116.5161         | K0116.5163                   | M16 | 110 | 126 | 23 | 23   | 30 | 31   | 22   | 49   | 12  | 32   | 79   | 84   | 26              |

# Clamping levers

external thread

**Material:**

Handle die-cast zinc DIN EN 12844.

Steel parts grade 5.8.

**Version:**

Handle powder-coated.

Steel black oxidised.

**Sample order:**

K0116.1051X20 (include length L)

**Note:**

Standard colours are:

black satin finish, silver metallic.

Where  $L \geq 60$  mm the thread length is always 60 mm.**On request:**

Other threads, screw lengths, colours and special versions.

Dimension "H1" available in other lengths at extra charge.

**Drawing reference:**

1) flat point DIN EN ISO 4753

## KIPP Specifications

| Size | X         | A   | A1  | D    | D1 | D2   | D3   | H    | H1  | H2   | H3   | H4   | No. of teeth |
|------|-----------|-----|-----|------|----|------|------|------|-----|------|------|------|--------------|
| 1    | M5/M6     | 39  | 46  | 10   | 13 | 14   | 10,5 | 24,5 | 4   | 15   | 32,5 | 35,5 | 16           |
| 2    | M6/M8/M10 | 64  | 73  | 13,5 | 18 | 18,5 | 15,5 | 28,5 | 6,5 | 16,5 | 45,5 | 49,5 | 20           |
| 3    | M8/M10    | 79  | 90  | 16   | 21 | 22   | 17   | 37   | 10  | 23   | 57,5 | 61,5 | 22           |
| 4    | M10/M12   | 95  | 108 | 19   | 25 | 26   | 19   | 42,5 | 10  | 26   | 67   | 72   | 24           |
| 5    | M12/M16   | 110 | 126 | 23   | 30 | 31   | 22   | 49   | 12  | 32   | 79   | 84   | 26           |

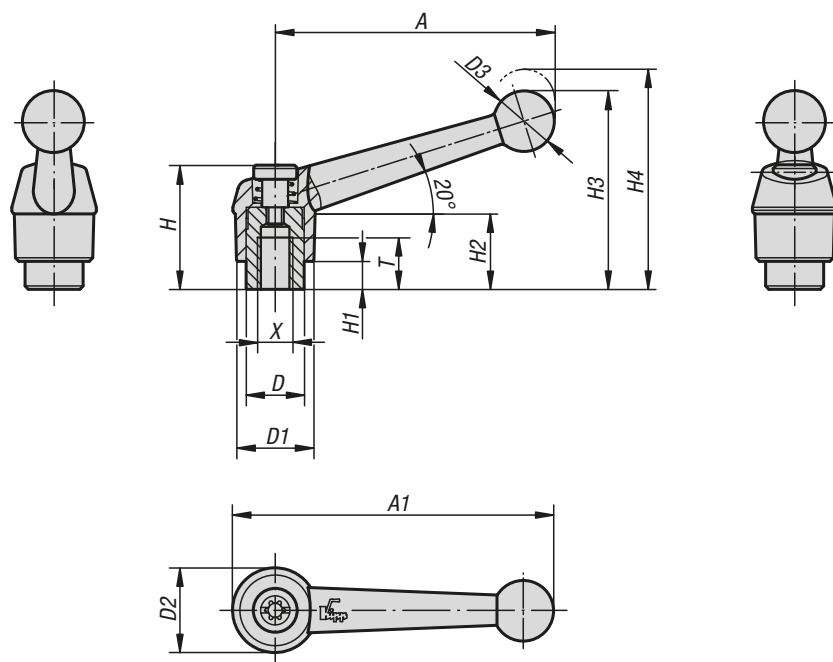
## KIPP Clamping levers with external thread

| Order No. black | Order No. silver metallic | Size | X   | L                                   |
|-----------------|---------------------------|------|-----|-------------------------------------|
| K0116.1051X     | K0116.1053X               | 1    | M5  | 10/15/20/25/30/35/40/45/50          |
| K0116.1061X     | K0116.1063X               | 1    | M6  | 10/15/20/25/30/35/40/45/50          |
| K0116.2061X     | K0116.2063X               | 2    | M6  | 15/20/25/30/35/40/45/50/55/60       |
| K0116.2081X     | K0116.2083X               | 2    | M8  | 15/20/25/30/35/40/45/50/55/60       |
| K0116.2101X     | K0116.2103X               | 2    | M10 | 15/20/25/30/35/40/45/50/55/60       |
| K0116.3081X     | K0116.3083X               | 3    | M8  | 15/20/25/30/35/40/45/50/55/60       |
| K0116.3101X     | K0116.3103X               | 3    | M10 | 15/20/25/30/35/40/45/50/55/60       |
| K0116.4101X     | K0116.4103X               | 4    | M10 | 20/25/30/35/40/45/50/55/60/70/80/90 |
| K0116.4121X     | K0116.4123X               | 4    | M12 | 20/25/30/35/40/45/50/55/60/70/80/90 |
| K0116.5121X     | K0116.5123X               | 5    | M12 | 25/30/35/40/45/50/55/60/70/80/90    |
| K0116.5161X     | K0116.5163X               | 5    | M16 | 25/30/35/40/45/50/55/60/70/80/90    |



## Clamping levers

internal thread, steel parts stainless steel



### Material:

Handle die-cast zinc DIN EN 12844.  
Steel parts stainless steel 1.4305.

### Version:

Handle powder-coated.  
Stainless steel parts bright.

### Sample order:

K0117.2061

### Note:

Standard colours are:  
black satin finish, silver metallic.

### On request:

Other threads, colours and special versions.  
Dimension "H1" available in other lengths at  
extra charge.

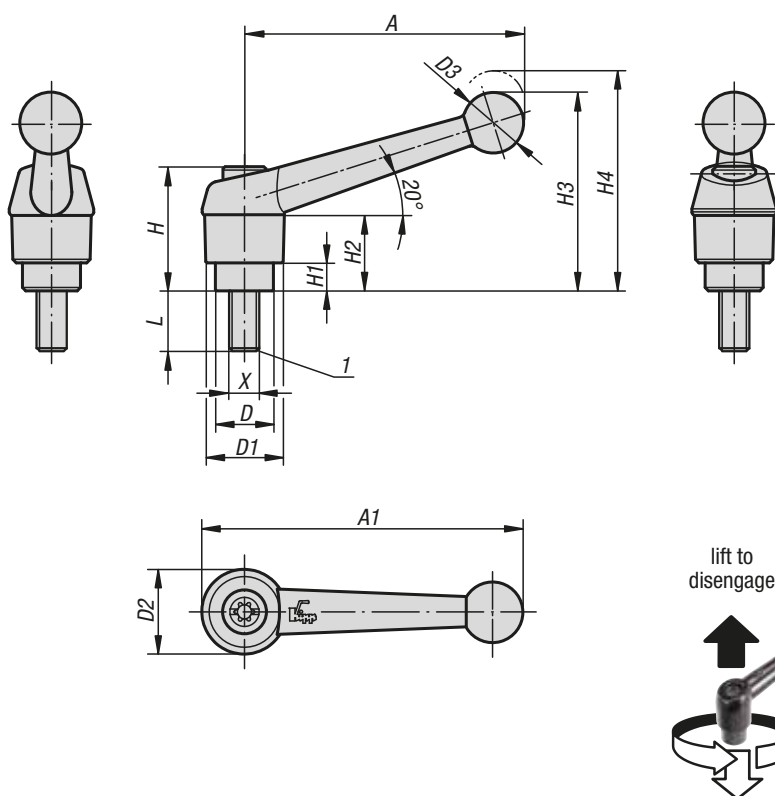


### KIPP Clamping levers with internal thread, steel parts stainless steel

| Order No.<br>black | Order No.<br>silver metallic | X   | A   | A1  | T  | D    | D1 | D2   | D3   | H    | H1  | H2   | H3   | H4   | No. of<br>teeth |
|--------------------|------------------------------|-----|-----|-----|----|------|----|------|------|------|-----|------|------|------|-----------------|
| K0117.1041         | K0117.1043                   | M4  | 39  | 46  | 9  | 10   | 13 | 14   | 10,5 | 24,5 | 4   | 15   | 32,5 | 35,5 | 16              |
| K0117.1051         | K0117.1053                   | M5  | 39  | 46  | 9  | 10   | 13 | 14   | 10,5 | 24,5 | 4   | 15   | 32,5 | 35,5 | 16              |
| K0117.1061         | K0117.1063                   | M6  | 39  | 46  | 9  | 10   | 13 | 14   | 10,5 | 24,5 | 4   | 15   | 32,5 | 35,5 | 16              |
| K0117.2061         | K0117.2063                   | M6  | 64  | 73  | 12 | 13,5 | 18 | 18,5 | 15,5 | 28,5 | 6,5 | 16,5 | 45,5 | 49,5 | 20              |
| K0117.2081         | K0117.2083                   | M8  | 64  | 73  | 12 | 13,5 | 18 | 18,5 | 15,5 | 28,5 | 6,5 | 16,5 | 45,5 | 49,5 | 20              |
| K0117.3081         | K0117.3083                   | M8  | 79  | 90  | 14 | 16   | 21 | 22   | 17   | 37   | 10  | 23   | 57,5 | 61,5 | 22              |
| K0117.3101         | K0117.3103                   | M10 | 79  | 90  | 14 | 16   | 21 | 22   | 17   | 37   | 10  | 23   | 57,5 | 61,5 | 22              |
| K0117.4101         | K0117.4103                   | M10 | 95  | 108 | 17 | 19   | 25 | 26   | 19   | 42,5 | 10  | 26   | 67   | 72   | 24              |
| K0117.4121         | K0117.4123                   | M12 | 95  | 108 | 17 | 19   | 25 | 26   | 19   | 42,5 | 10  | 26   | 67   | 72   | 24              |
| K0117.5121         | K0117.5123                   | M12 | 110 | 126 | 23 | 23   | 30 | 31   | 22   | 49   | 12  | 32   | 79   | 84   | 26              |
| K0117.5161         | K0117.5163                   | M16 | 110 | 126 | 23 | 23   | 30 | 31   | 22   | 49   | 12  | 32   | 79   | 84   | 26              |

# Clamping levers

external thread, steel parts stainless steel



## Material:

Handle die-cast zinc DIN EN 12844.  
Steel parts stainless steel 1.4305.

## Version:

Handle powder-coated.  
Stainless steel bright.

## Sample order:

K0117.1051X20 (include length L)

## Note:

Standard colours are:  
black satin finish, silver metallic.

Where  $L \geq 60$  mm the thread length is always 60 mm.

## On request:

Other external threads, screw lengths, colours and special versions.  
Dimension "H1" available in other lengths at extra charge.

## Drawing reference:

1) flat point DIN EN ISO 4753

## KIPP Specifications

| Size | X         | A   | A1  | D    | D1 | D2   | D3   | H    | H1  | H2   | H3   | H4   | No. of teeth |
|------|-----------|-----|-----|------|----|------|------|------|-----|------|------|------|--------------|
| 1    | M5/M6     | 39  | 46  | 10   | 13 | 14   | 10,5 | 24,5 | 4   | 15   | 32,5 | 35,5 | 16           |
| 2    | M6/M8/M10 | 64  | 73  | 13,5 | 18 | 18,5 | 15,5 | 28,5 | 6,5 | 16,5 | 45,5 | 49,5 | 20           |
| 3    | M8/M10    | 79  | 90  | 16   | 21 | 22   | 17   | 37   | 10  | 23   | 57,5 | 61,5 | 22           |
| 4    | M12       | 95  | 108 | 19   | 25 | 26   | 19   | 42,5 | 10  | 26   | 67   | 72   | 24           |
| 5    | M16       | 110 | 126 | 23   | 30 | 31   | 22   | 49   | 12  | 32   | 79   | 84   | 26           |

## KIPP Clamping levers with external thread, steel parts stainless steel

| Order No.<br>black | Order No.<br>silver metallic | Size | X   | L                    |
|--------------------|------------------------------|------|-----|----------------------|
| K0117.1051X        | K0117.1053X                  | 1    | M5  | 10/15/20/25          |
| K0117.1061X        | K0117.1063X                  | 1    | M6  | 10/15/20/25/30/40/50 |
| K0117.2061X        | K0117.2063X                  | 2    | M6  | 15/20/25/30/40/50/60 |
| K0117.2081X        | K0117.2083X                  | 2    | M8  | 15/20/25/30/40/50/60 |
| K0117.2101X        | K0117.2103X                  | 2    | M10 | 20/25/30/40/50/60    |
| K0117.3081X        | K0117.3083X                  | 3    | M8  | 20/25/30/40/50/60    |
| K0117.3101X        | K0117.3103X                  | 3    | M10 | 20/25/30/40/50/60    |
| K0117.4121X        | K0117.4123X                  | 4    | M12 | 25/30/40/50/60       |
| K0117.5161X        | K0117.5163X                  | 5    | M16 | 30/40/50/60          |

## Clamping levers steel

internal thread



### Material:

Handle steel 1.0401.

All other steel parts grade 5.8.

### Version:

Handle painted silver-grey hammer-tone.

Steel parts black oxidised.

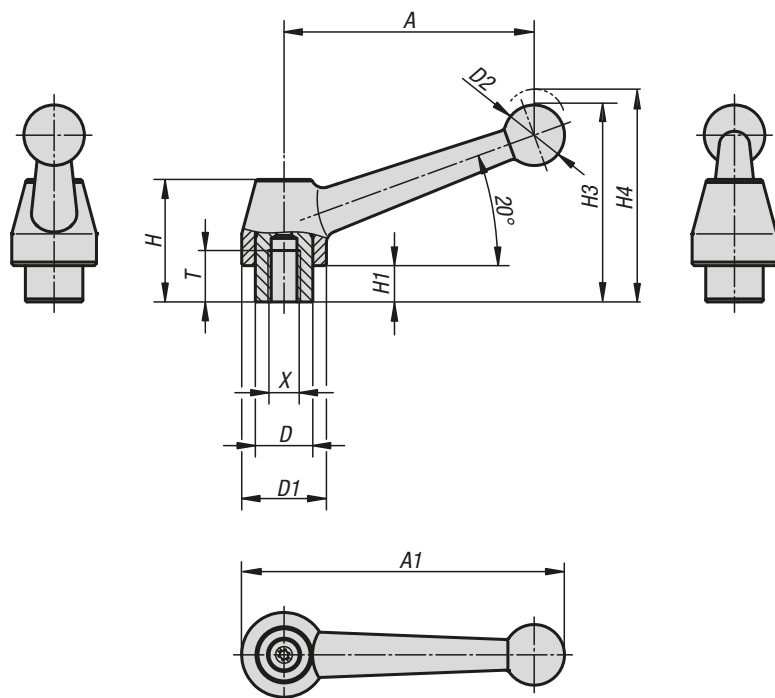
### Sample order:

K0120.108

### On request:

Other threads and special versions.

Dimension "H1" available in other lengths at extra charge.

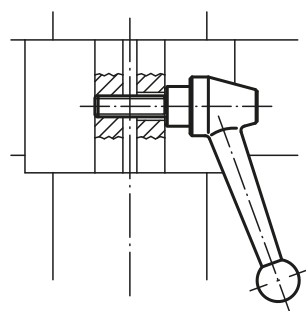
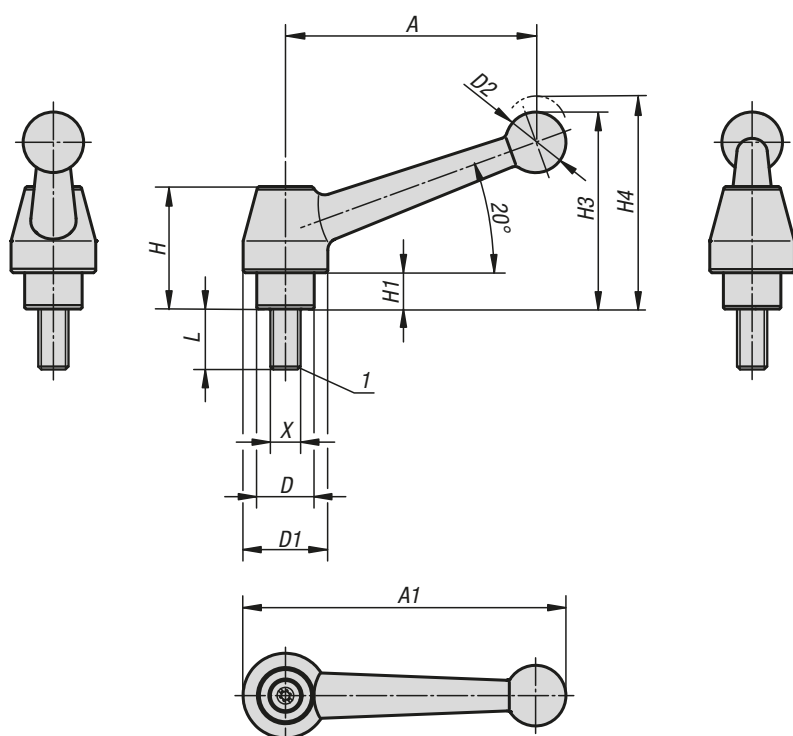


### KIPP Clamping levers with internal thread

| Order No. | Main material | X   | A   | A1  | T  | D  | D1 | D2 | H    | H1 | H3   | H4   | No. of teeth |
|-----------|---------------|-----|-----|-----|----|----|----|----|------|----|------|------|--------------|
| K0120.108 | steel         | M8  | 83  | 107 | 17 | 19 | 28 | 20 | 40,5 | 12 | 65   | 68,5 | 24           |
| K0120.110 | steel         | M10 | 83  | 107 | 17 | 19 | 28 | 20 | 40,5 | 12 | 65   | 68,5 | 24           |
| K0120.112 | steel         | M12 | 83  | 107 | 17 | 19 | 28 | 20 | 40,5 | 12 | 65   | 68,5 | 24           |
| K0120.212 | steel         | M12 | 108 | 138 | 23 | 23 | 35 | 25 | 51,5 | 12 | 79,5 | 84   | 26           |
| K0120.216 | steel         | M16 | 108 | 138 | 23 | 23 | 35 | 25 | 51,5 | 12 | 79,5 | 84   | 26           |
| K0120.316 | steel         | M16 | 132 | 168 | 27 | 30 | 43 | 30 | 60   | 12 | 93   | 97,5 | 36           |
| K0120.320 | steel         | M20 | 132 | 168 | 27 | 30 | 43 | 30 | 60   | 12 | 93   | 97,5 | 36           |

## Clamping levers steel

external thread



### Material:

Handle steel 1.0401.

All other steel parts grade 5.8.

### Version:

Handle painted silver-grey hammer-tone.

Steel parts black oxidised.

### Sample order:

K0120.110X30 (include length L)

### Note:

Where  $L \geq 60$  mm the thread length is always 60 mm.

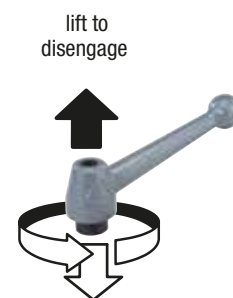
### On request:

Other threads, screw lengths and special versions.

Dimension "H1" available in other lengths at extra charge.

### Drawing reference:

1) flat point DIN EN ISO 4753



## KIPP Clamping levers steel with external thread

| Order No.  | Main material | X   | A   | A1  | D  | D1 | D2 | H    | H1 | H3   | H4   | No. of teeth | L                                   |
|------------|---------------|-----|-----|-----|----|----|----|------|----|------|------|--------------|-------------------------------------|
| K0120.110X | steel         | M10 | 83  | 107 | 19 | 28 | 20 | 40,5 | 12 | 65   | 68,5 | 24           | 20/25/30/35/40/45/50/55/60/70/80/90 |
| K0120.112X | steel         | M12 | 83  | 107 | 19 | 28 | 20 | 40,5 | 12 | 65   | 68,5 | 24           | 20/25/30/35/40/45/50/55/60/70/80/90 |
| K0120.212X | steel         | M12 | 108 | 138 | 23 | 35 | 25 | 51,5 | 12 | 79,5 | 84   | 26           | 25/30/35/40/45/50/55/60/70/80/90    |
| K0120.216X | steel         | M16 | 108 | 138 | 23 | 35 | 25 | 51,5 | 12 | 79,5 | 84   | 26           | 25/30/35/40/45/50/55/60/70/80/90    |
| K0120.316X | steel         | M16 | 132 | 168 | 30 | 43 | 30 | 60   | 12 | 93   | 97,5 | 36           | 30/40/50/60/70/80/90                |
| K0120.320X | steel         | M20 | 132 | 168 | 30 | 43 | 30 | 60   | 12 | 93   | 97,5 | 36           | 30/40/50/60/70/80/90                |

## Clamping levers stainless steel

internal thread



### Material:

Handle stainless steel 1.4308.

All other metal parts stainless steel 1.4305.

### Version:

Stainless steel grip electropolished.

Steel parts bright.

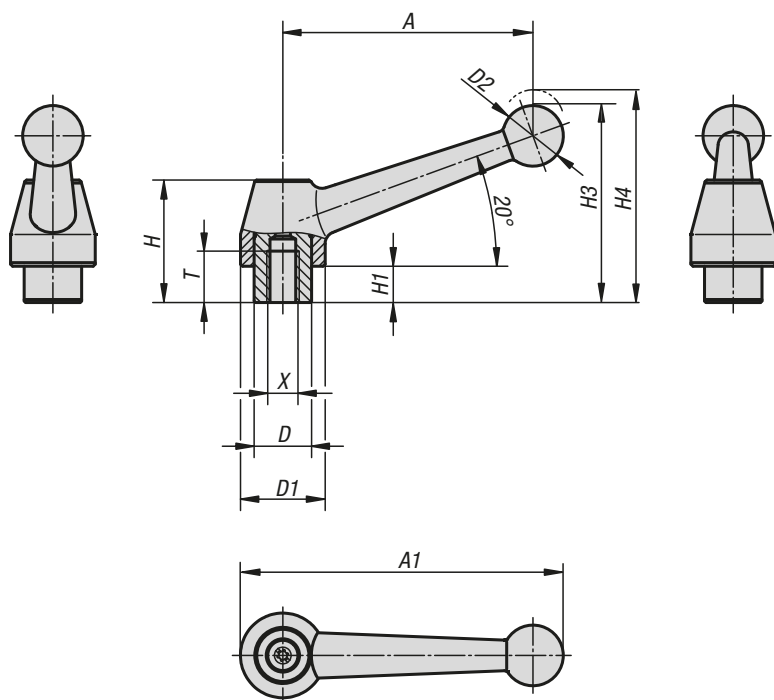
### Sample order:

K0121.1108

### On request:

Other threads and special versions.

Dimension "H1" available in other lengths at extra charge.

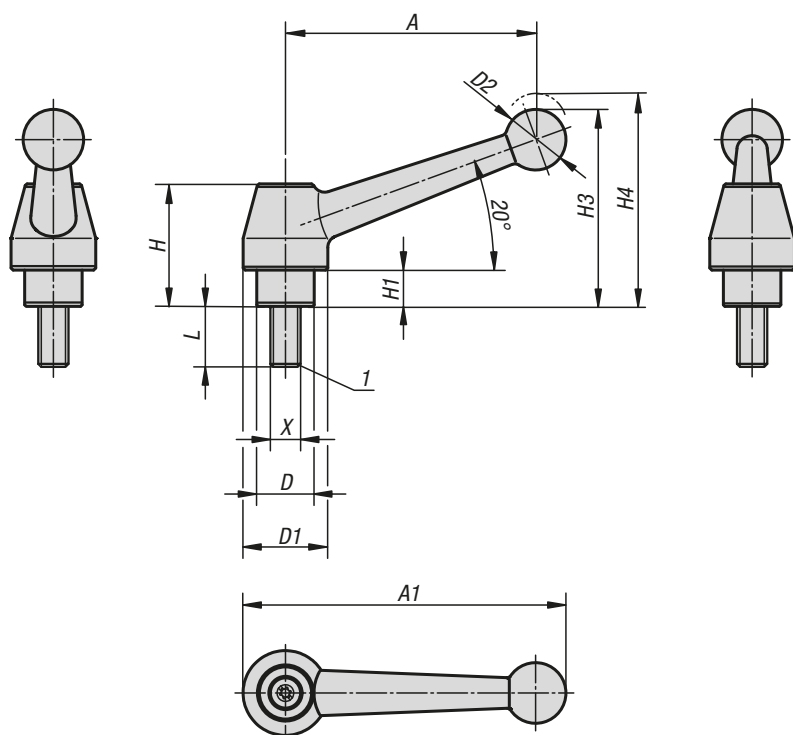


### KIPP Clamping levers with internal thread, stainless steel

| Order No.  | Main material   | X   | A  | A1  | T  | D  | D1 | D2 | H    | H1 | H3 | H4   | No. of teeth |
|------------|-----------------|-----|----|-----|----|----|----|----|------|----|----|------|--------------|
| K0121.1108 | stainless steel | M8  | 83 | 107 | 17 | 19 | 28 | 20 | 40,5 | 12 | 65 | 68,5 | 24           |
| K0121.1110 | stainless steel | M10 | 83 | 107 | 17 | 19 | 28 | 20 | 40,5 | 12 | 65 | 68,5 | 24           |
| K0121.1112 | stainless steel | M12 | 83 | 107 | 17 | 19 | 28 | 20 | 40,5 | 12 | 65 | 68,5 | 24           |

## Clamping levers stainless steel

external thread

**Material:**

Handle stainless steel 1.4308.

All other metal parts stainless steel 1.4305.

**Version:**

Stainless steel grip electropolished.

Steel parts bright.

**Sample order:**

K0121.1110X30 (include length L)

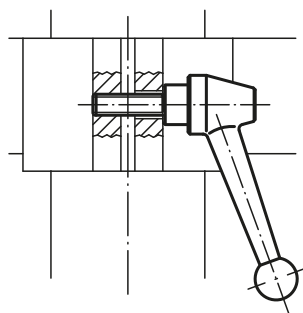
**Note:**Where  $L \geq 60$  mm the thread length is always 60 mm.**On request:**

Other threads, screw lengths and special versions.

Dimension "H1" available in other lengths at extra charge.

**Drawing reference:**

1) flat point DIN EN ISO 4753

**KIPP Clamping levers with external thread, stainless steel**

| Order No.   | Main material   | X   | A  | A1  | D  | D1 | D2 | H    | H1 | H3 | H4   | No. of teeth | L              |
|-------------|-----------------|-----|----|-----|----|----|----|------|----|----|------|--------------|----------------|
| K0121.1110X | stainless steel | M10 | 83 | 107 | 19 | 28 | 20 | 40,5 | 12 | 65 | 68,5 | 24           | 25/30/40/50/60 |
| K0121.1112X | stainless steel | M12 | 83 | 107 | 19 | 28 | 20 | 40,5 | 12 | 65 | 68,5 | 24           | 25/30/40/50/60 |

## Tension levers

internal thread



### Material:

Steel parts grade 5.8.  
Ball knob black plastic.

### Version:

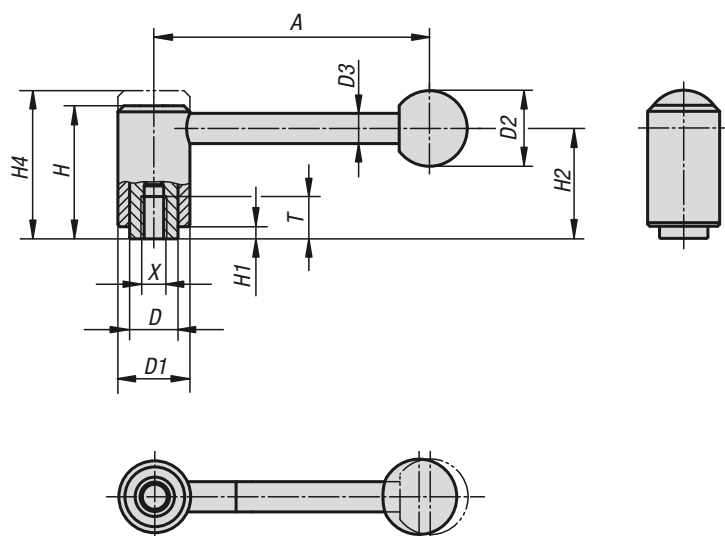
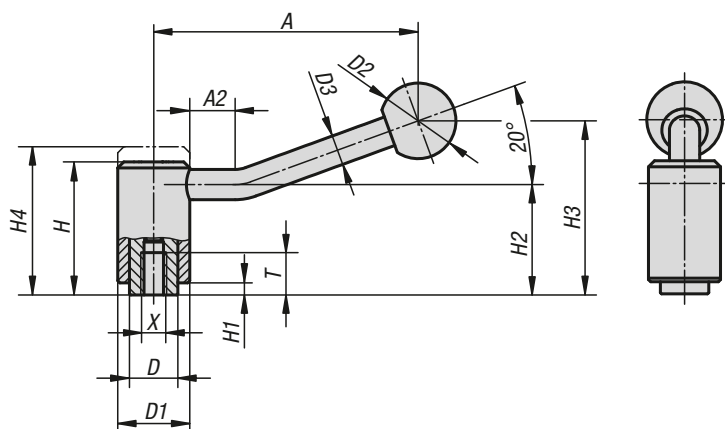
Powder-coated with fine texture, black.

### Sample order:

K0108.1082

### On request:

Other threads and special versions.  
Dimensions "H1" and "A" available in other lengths  
at extra charge.

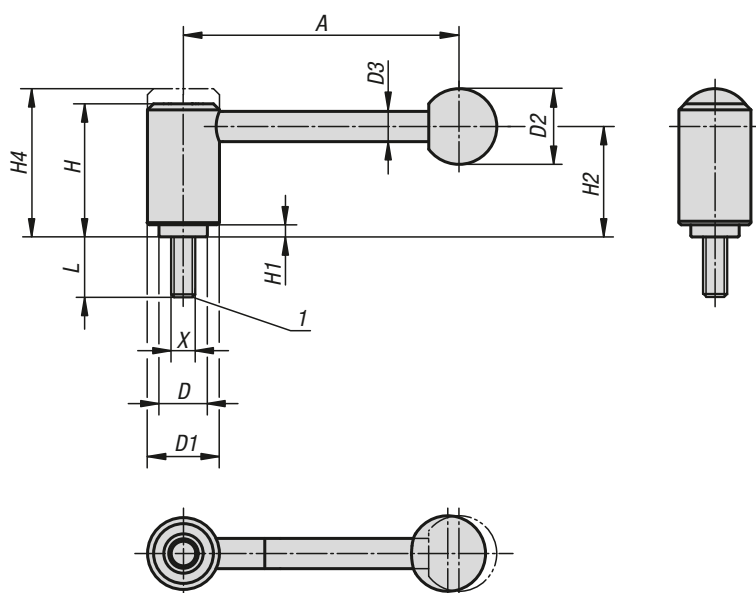
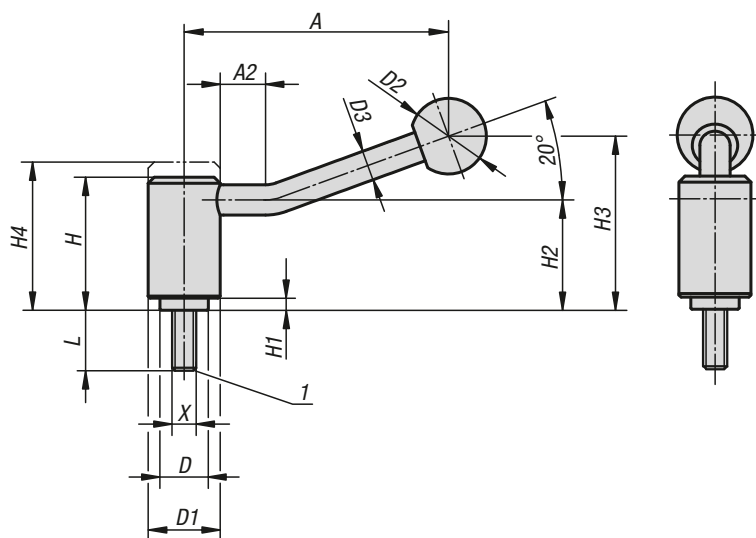


## KIPP Tension levers with internal thread

| Order No.<br>0° | Order No.<br>20° | X   | T  | A=Handle length | A2   | D  | D1 | D2 | D3 | H    | H1  | H2   | H3     | H4   | No. of<br>teeth |
|-----------------|------------------|-----|----|-----------------|------|----|----|----|----|------|-----|------|--------|------|-----------------|
| K0108.1082      | K0108.1081       | M8  | 14 | 92/88           | -/15 | 16 | 24 | 25 | 10 | 44,5 | 4,5 | 37   | -/58,5 | 49,5 | 22              |
| K0108.1102      | K0108.1101       | M10 | 14 | 92/88           | -/15 | 16 | 24 | 25 | 10 | 44,5 | 4,5 | 37   | -/58,5 | 49,5 | 22              |
| K0108.2102      | K0108.2101       | M10 | 17 | 111/106         | -/15 | 19 | 28 | 32 | 12 | 51,5 | 5,5 | 42   | -/68,5 | 57,5 | 24              |
| K0108.2122      | K0108.2121       | M12 | 17 | 111/106         | -/15 | 19 | 28 | 32 | 12 | 51,5 | 5,5 | 42   | -/68,5 | 57,5 | 24              |
| K0108.3122      | K0108.3121       | M12 | 23 | 134,5/128,5     | -/15 | 23 | 33 | 32 | 13 | 58   | 6   | 47   | -/81   | 65   | 26              |
| K0108.3162      | K0108.3161       | M16 | 23 | 134,5/128,5     | -/15 | 23 | 33 | 32 | 13 | 58   | 6   | 47   | -/81   | 65   | 26              |
| K0108.4162      | K0108.4161       | M16 | 27 | 134/128,5       | -/15 | 30 | 41 | 32 | 13 | 68,5 | 7,5 | 56,5 | -/89,5 | 76,5 | 36              |
| K0108.4202      | K0108.4201       | M20 | 27 | 134/128,5       | -/15 | 30 | 41 | 32 | 13 | 68,5 | 7,5 | 56,5 | -/89,5 | 76,5 | 36              |
| K0108.4242      | K0108.4241       | M24 | 27 | 134/128,5       | -/15 | 30 | 41 | 32 | 13 | 68,5 | 7,5 | 56,5 | -/89,5 | 76,5 | 36              |

## Tension levers

external thread



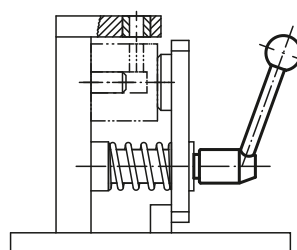
**Material:**  
Steel parts grade 5.8.  
Ball knob black plastic.

**Version:**  
Powder-coated with fine texture, black.

**Sample order:**  
K0108.1082X30 (include length L)

**On request:**  
Other threads, screw lengths and special versions.  
Dimensions "H1" and "A" available in other lengths  
at extra charge.

**Drawing reference:**  
1) flat point DIN EN ISO 4753



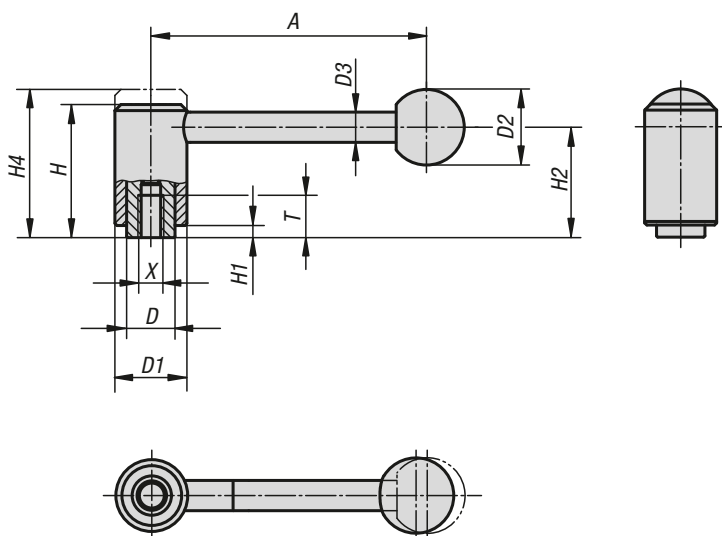
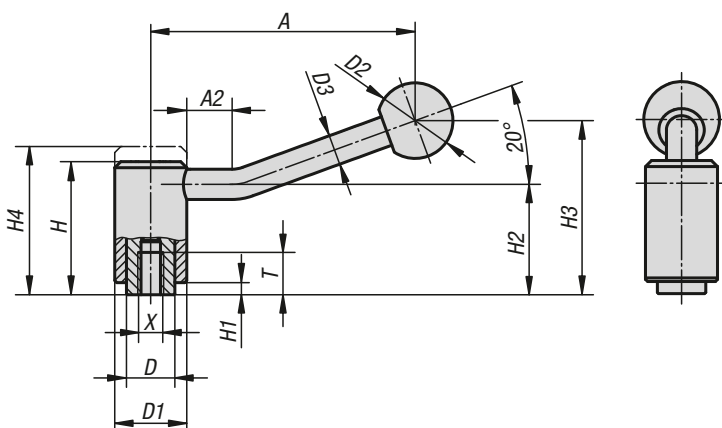
### KIPP Tension levers with external thread

| Order No.<br>0° | Order No.<br>20° | X   | A=Handle length | A2   | D  | D1 | D2 | D3 | H    | H1  | H2   | H3     | H4   | L                          | No. of<br>teeth |
|-----------------|------------------|-----|-----------------|------|----|----|----|----|------|-----|------|--------|------|----------------------------|-----------------|
| K0108.1082X     | K0108.1081X      | M8  | 92/88           | -/15 | 16 | 24 | 25 | 10 | 44,5 | 4,5 | 37   | -/58,5 | 49,5 | 15/20/25/30/40/50/60       | 22              |
| K0108.1102X     | K0108.1101X      | M10 | 92/88           | -/15 | 16 | 24 | 25 | 10 | 44,5 | 4,5 | 37   | -/58,5 | 49,5 | 15/20/25/30/40/50/60       | 22              |
| K0108.1122X     | K0108.1121X      | M12 | 92/88           | -/15 | 16 | 24 | 25 | 10 | 44,5 | 4,5 | 37   | -/58,5 | 49,5 | 15/20/25/30/40/50/60       | 22              |
| K0108.2122X     | K0108.2121X      | M12 | 111/106         | -/15 | 19 | 28 | 32 | 12 | 51,5 | 5,5 | 42   | -/68,5 | 57,5 | 20/25/30/40/50/60          | 24              |
| K0108.3122X     | K0108.3121X      | M12 | 134,5/128,5     | -/15 | 23 | 33 | 32 | 13 | 58   | 6   | 47   | -/81   | 65   | 20/25/30/40/50/60/70/80/90 | 26              |
| K0108.3162X     | K0108.3161X      | M16 | 134,5/128,5     | -/15 | 23 | 33 | 32 | 13 | 58   | 6   | 47   | -/81   | 65   | 20/25/30/40/50/60/70/80/90 | 26              |
| K0108.4162X     | K0108.4161X      | M16 | 134/128,5       | -/15 | 30 | 41 | 32 | 13 | 68,5 | 7,5 | 56,5 | -/89,5 | 76,5 | 30/40/50/60/70/80/90       | 36              |
| K0108.4202X     | K0108.4201X      | M20 | 134/128,5       | -/15 | 30 | 41 | 32 | 13 | 68,5 | 7,5 | 56,5 | -/89,5 | 76,5 | 30/40/50/60/70/80/90       | 36              |
| K0108.4242X     | K0108.4241X      | M24 | 134/128,5       | -/15 | 30 | 41 | 32 | 13 | 68,5 | 7,5 | 56,5 | -/89,5 | 76,5 | 30/40/50/60/70/80/90       | 36              |



## Tension levers

internal thread, stainless steel



### Material:

Steel parts stainless steel 1.4305.  
Ball knob black plastic.

### Version:

Stainless steel parts bright.  
Ball knob polished.

### Sample order:

K0109.1082

### On request:

Other threads and special versions.  
Dimensions "H1" and "A" available in other lengths at extra charge.

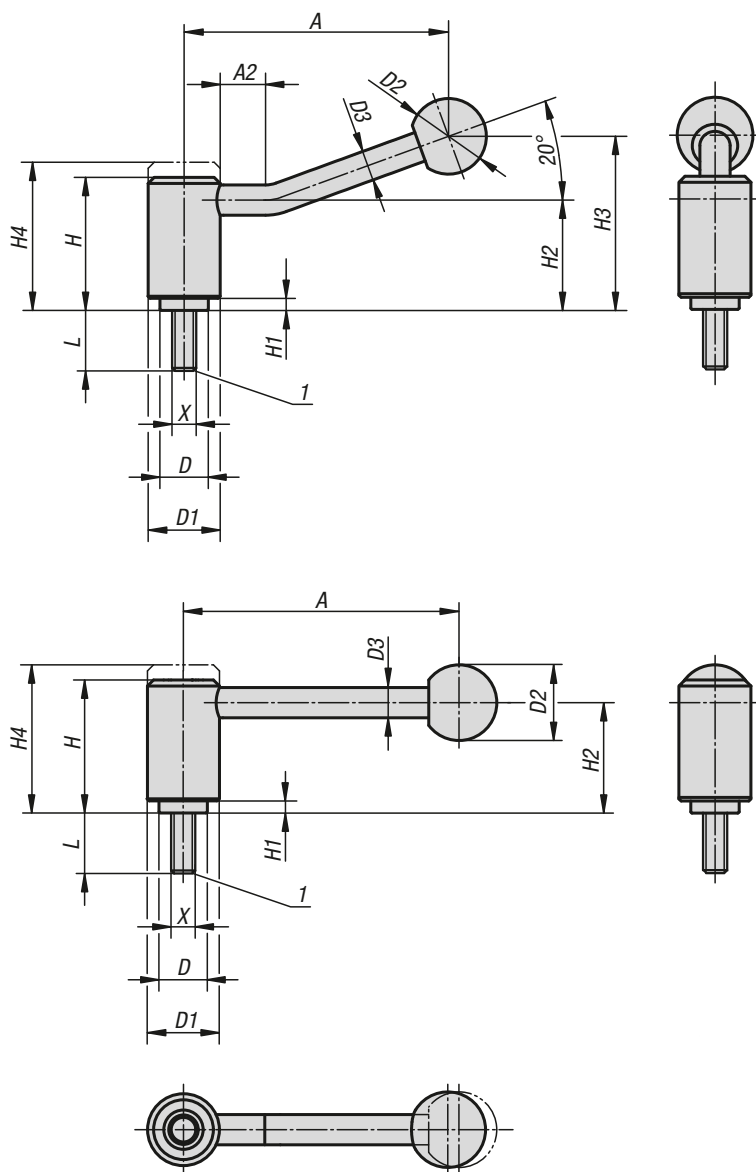


### KIPP Tension levers, internal thread, stainless steel

| Order No.<br>0° | Order No.<br>20° | X   | T  | A=Handle length | A2   | D  | D1 | D2 | D3 | H    | H1  | H2   | H3     | H4   | No. of<br>teeth |
|-----------------|------------------|-----|----|-----------------|------|----|----|----|----|------|-----|------|--------|------|-----------------|
| K0109.1082      | K0109.1081       | M8  | 14 | 92/88           | -/15 | 16 | 24 | 25 | 10 | 44,5 | 4,5 | 37   | -/58,5 | 49,5 | 22              |
| K0109.1102      | K0109.1101       | M10 | 14 | 92/88           | -/15 | 16 | 24 | 25 | 10 | 44,5 | 4,5 | 37   | -/58,5 | 49,5 | 22              |
| K0109.2102      | K0109.2101       | M10 | 17 | 111/106         | -/15 | 19 | 28 | 32 | 12 | 51,5 | 5,5 | 42   | -/68,5 | 57,5 | 24              |
| K0109.2122      | K0109.2121       | M12 | 17 | 111/106         | -/15 | 19 | 28 | 32 | 12 | 51,5 | 5,5 | 42   | -/68,5 | 57,5 | 24              |
| K0109.3122      | K0109.3121       | M12 | 23 | 134,5/128,5     | -/15 | 23 | 33 | 32 | 13 | 58   | 6   | 47   | -/81   | 65   | 26              |
| K0109.3162      | K0109.3161       | M16 | 23 | 134,5/128,5     | -/15 | 23 | 33 | 32 | 13 | 58   | 6   | 47   | -/81   | 65   | 26              |
| K0109.4162      | K0109.4161       | M16 | 27 | 134/128,5       | -/15 | 30 | 41 | 32 | 13 | 68,5 | 7,5 | 56,5 | -/89,5 | 76,5 | 36              |
| K0109.4202      | K0109.4201       | M20 | 27 | 134/128,5       | -/15 | 30 | 41 | 32 | 13 | 68,5 | 7,5 | 56,5 | -/89,5 | 76,5 | 36              |

## Tension levers

external thread, stainless steel



### Material:

Steel parts stainless steel 1.4305.  
Ball knob black plastic.

### Version:

Stainless steel parts bright.  
Ball knob polished.

### Sample order:

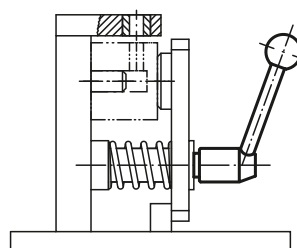
K0109.1082X30 (include length L)

### On request:

Other threads, screw lengths and special versions.  
Dimensions "H1" and "A" available in other  
lengths at extra charge.

### Drawing reference:

1) flat point DIN EN ISO 4753

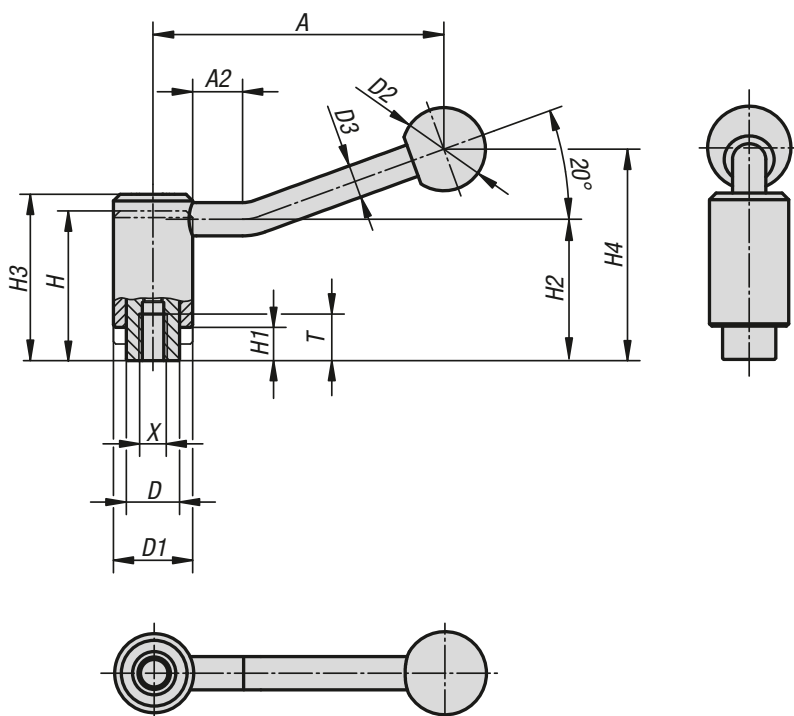


## KIPP Tension levers, external thread, stainless steel

| Order No.<br>0° | Order No.<br>20° | X   | A=Handle length | A2   | D  | D1 | D2 | D3 | H    | H1  | H2   | H3     | H4   | L                          | No. of<br>teeth |
|-----------------|------------------|-----|-----------------|------|----|----|----|----|------|-----|------|--------|------|----------------------------|-----------------|
| K0109.1082X     | K0109.1081X      | M8  | 92/88           | -/15 | 16 | 24 | 25 | 10 | 44,5 | 4,5 | 37   | -/58,5 | 49,5 | 15/20/25/30/40/50/60       | 22              |
| K0109.1102X     | K0109.1101X      | M10 | 92/88           | -/15 | 16 | 24 | 25 | 10 | 44,5 | 4,5 | 37   | -/58,5 | 49,5 | 15/20/25/30/40/50/60       | 22              |
| K0109.1122X     | K0109.1121X      | M12 | 92/88           | -/15 | 16 | 24 | 25 | 10 | 44,5 | 4,5 | 37   | -/58,5 | 49,5 | 15/20/25/30/40/50/60       | 22              |
| K0109.2122X     | K0109.2121X      | M12 | 111/106         | -/15 | 19 | 28 | 32 | 12 | 51,5 | 5,5 | 42   | -/68,5 | 57,5 | 20/25/30/40/50/60          | 24              |
| K0109.3122X     | K0109.3121X      | M12 | 134,5/128,5     | -/15 | 23 | 33 | 32 | 13 | 58   | 6   | 47   | -/81   | 65   | 20/25/30/40/50/60/70/80/90 | 26              |
| K0109.3162X     | K0109.3161X      | M16 | 134,5/128,5     | -/15 | 23 | 33 | 32 | 13 | 58   | 6   | 47   | -/81   | 65   | 20/25/30/40/50/60/70/80/90 | 26              |
| K0109.4162X     | K0109.4161X      | M16 | 134/128,5       | -/15 | 30 | 41 | 32 | 13 | 68,5 | 7,5 | 56,5 | -/89,5 | 76,5 | 30/40/50/60/70/80/90       | 36              |
| K0109.4202X     | K0109.4201X      | M20 | 134/128,5       | -/15 | 30 | 41 | 32 | 13 | 68,5 | 7,5 | 56,5 | -/89,5 | 76,5 | 30/40/50/60/70/80/90       | 36              |

## Tension levers safety

internal thread



### Material:

Steel parts grade 5.8.  
Ball knob black plastic.

### Version:

Powder-coated with fine texture, black.

### Sample order:

K0112.1108

### Method of operation:

Press the handle down until the teeth are fully engaged. The object can now be clamped or released. Spring pressure pushes the handle up disengaging the teeth and thereby restoring the safety function (handle can be rotated without engaging).

### On request:

Special versions.  
Dimensions "H1" and "A" available in other lengths at extra charge.

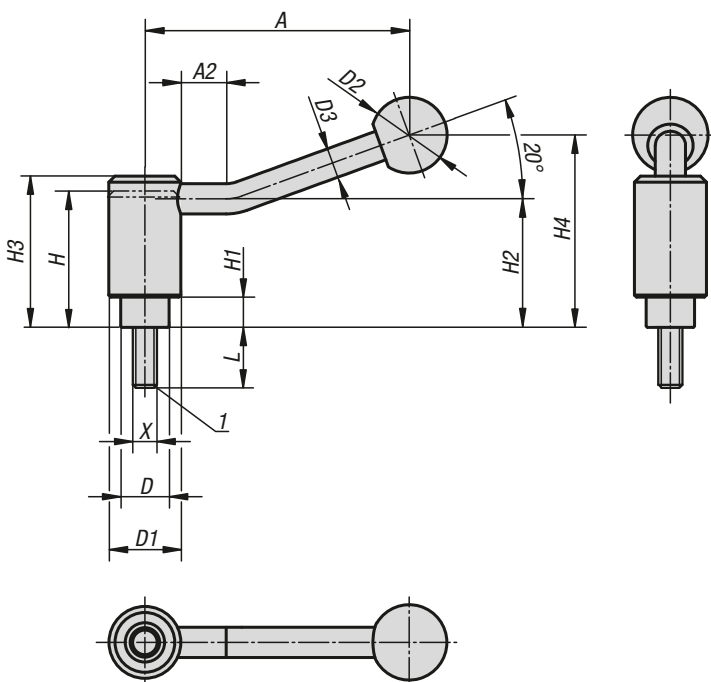


## KIPP Tension levers, safety, with internal thread

| Order No.  | X   | T  | A=Handle length | A2 | D  | D1 | D2 | D3 | H    | H1   | H2   | H3   | H4   | No. of teeth |
|------------|-----|----|-----------------|----|----|----|----|----|------|------|------|------|------|--------------|
| K0112.1108 | M8  | 14 | 88              | 15 | 16 | 24 | 25 | 10 | 44,5 | 9,5  | 49,3 | 49,5 | 63,5 | 22           |
| K0112.1110 | M10 | 14 | 88              | 15 | 16 | 24 | 25 | 10 | 44,5 | 9,5  | 49,3 | 49,5 | 63,5 | 22           |
| K0112.1210 | M10 | 17 | 106             | 15 | 19 | 28 | 32 | 12 | 51   | 10,5 | 56,3 | 56,5 | 74   | 24           |
| K0112.1212 | M12 | 17 | 106             | 15 | 19 | 28 | 32 | 12 | 51   | 10,5 | 56,3 | 56,5 | 74   | 24           |
| K0112.1312 | M12 | 23 | 128,5           | 15 | 23 | 33 | 32 | 13 | 57,5 | 12,5 | 64,5 | 64,5 | 87,5 | 26           |
| K0112.1316 | M16 | 23 | 128,5           | 15 | 23 | 33 | 32 | 13 | 57,5 | 12,5 | 64,5 | 64,5 | 87,5 | 26           |

## Tension levers safety

external thread



### Material:

Steel parts grade 5.8.  
Ball knob black plastic.

### Version:

Powder-coated with fine texture, black.

### Sample order:

K0112.1108X30 (include length L)

### Method of operation:

Press the handle down until the teeth are fully engaged. The object can now be clamped or released. Spring pressure pushes the handle up disengaging the teeth and thereby restoring the safety function (handle can be rotated without engaging).

### On request:

Other threads, screw lengths and special versions.  
Dimensions "H1" and "A" available in other lengths at extra charge.

### Drawing reference:

1) flat point DIN EN ISO 4753

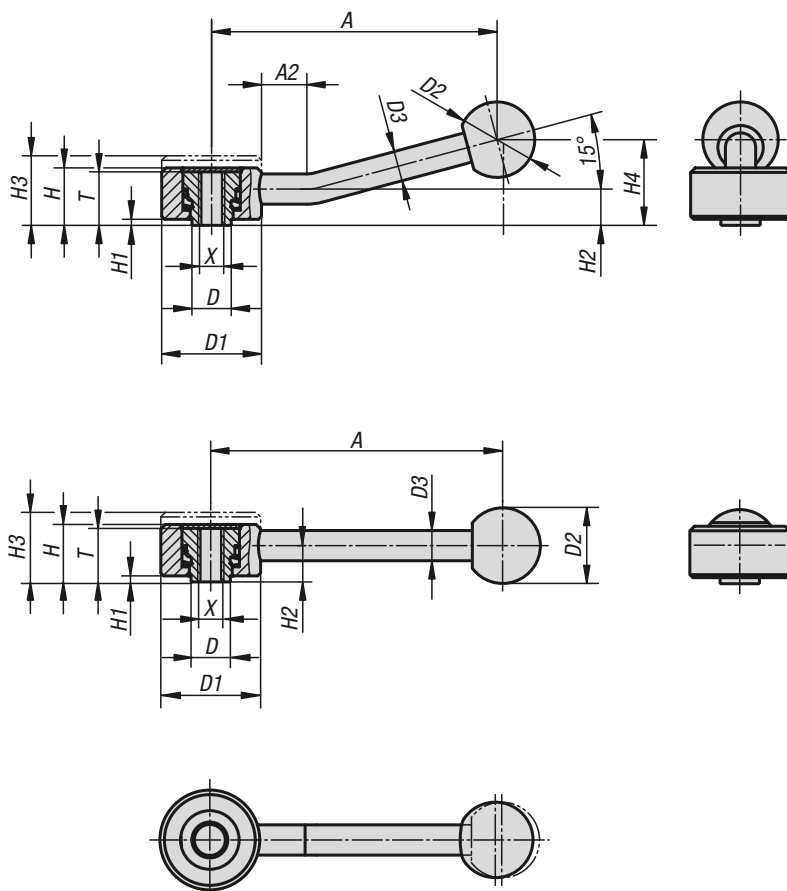


## KIPP Tension levers, safety, with external thread

| Order No.   | X   | A=Handle length | A2 | D  | D1 | D2 | D3 | H    | H1   | H2   | H3   | H4   | No. of teeth | L                 |
|-------------|-----|-----------------|----|----|----|----|----|------|------|------|------|------|--------------|-------------------|
| K0112.1108X | M8  | 88              | 15 | 16 | 24 | 25 | 10 | 44,5 | 9,5  | 49,3 | 49,5 | 63,5 | 22           | 20/25/30/40/50/60 |
| K0112.1110X | M10 | 88              | 15 | 16 | 24 | 25 | 10 | 44,5 | 9,5  | 49,3 | 49,5 | 63,5 | 22           | 20/25/30/40/50/60 |
| K0112.1112X | M12 | 88              | 15 | 16 | 24 | 25 | 10 | 44,5 | 9,5  | 49,3 | 49,5 | 63,5 | 22           | 20/25/30/40/50/60 |
| K0112.1212X | M12 | 106             | 15 | 19 | 28 | 32 | 12 | 51   | 10,5 | 56,3 | 56,5 | 74   | 24           | 20/25/30/40/50/60 |
| K0112.1312X | M12 | 128,5           | 15 | 23 | 33 | 32 | 13 | 57,5 | 12,5 | 64,5 | 64,5 | 87,5 | 26           | 25/30/40/50/60    |
| K0112.1316X | M16 | 128,5           | 15 | 23 | 33 | 32 | 13 | 57,5 | 12,5 | 64,5 | 64,5 | 87,5 | 26           | 25/30/40/50/60    |

## Tension levers flat

internal thread



### Material:

Steel parts grade 5.8.  
Ball knob black plastic.

### Version:

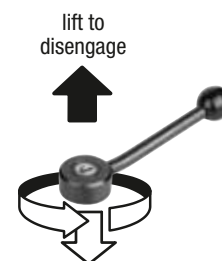
Black oxidised.

### Sample order:

K0114.1061

### On request:

Other threads and special versions.  
Dimensions "H1" and "A" available in other lengths  
at extra charge.

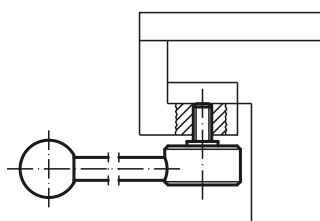
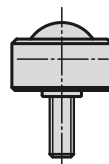
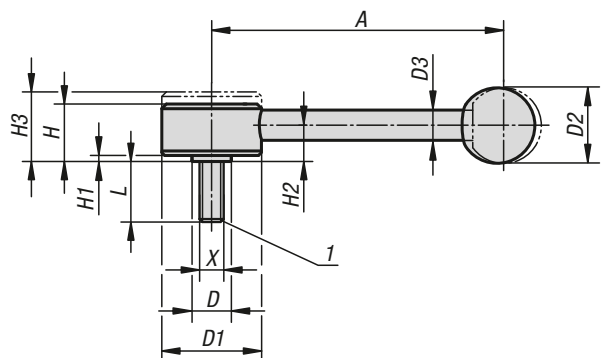
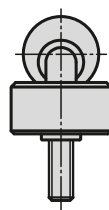
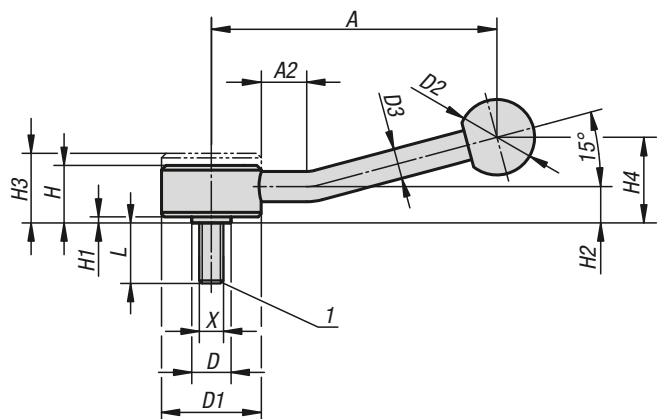


### KIPP Tension levers, flat, with internal thread

| Order No.<br>0° | Order No.<br>15° | X   | T  | A=Handle length | A2   | D    | D1 | D2 | D3 | H  | H1 | H2   | H3 | H4   | No. of<br>teeth |
|-----------------|------------------|-----|----|-----------------|------|------|----|----|----|----|----|------|----|------|-----------------|
| K0114.1061      | K0114.1062       | M6  | 18 | 102/100         | -/15 | 13,5 | 33 | 25 | 10 | 19 | 2  | 12   | 23 | -/29 | 26              |
| K0114.1081      | K0114.1082       | M8  | 18 | 102/100         | -/15 | 13,5 | 33 | 25 | 10 | 19 | 2  | 12   | 23 | -/29 | 26              |
| K0114.2101      | K0114.2102       | M10 | 21 | 131/127         | -/15 | 19   | 41 | 30 | 12 | 22 | 2  | 13,5 | 26 | -/38 | 30              |
| K0114.2121      | K0114.2122       | M12 | 21 | 131/127         | -/15 | 19   | 41 | 30 | 12 | 22 | 2  | 13,5 | 26 | -/38 | 30              |
| K0114.3121      | K0114.3122       | M12 | 27 | 148/145         | -/15 | 23   | 45 | 37 | 14 | 28 | 2  | 17   | 33 | -/48 | 36              |
| K0114.3161      | K0114.3162       | M16 | 27 | 148/145         | -/15 | 23   | 45 | 37 | 14 | 28 | 2  | 17   | 33 | -/48 | 36              |

## Tension levers flat

external thread



### Material:

Steel parts grade 5.8.  
Ball knob black plastic.

### Version:

Black oxidised.

### Sample order:

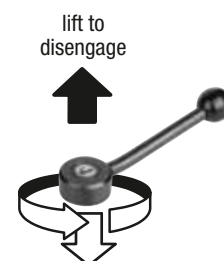
K0114.1081X30 (include length L)

### On request:

Other threads, screw lengths and special versions.  
Dimensions "H1" and "A" available in other lengths  
at extra charge.

### Drawing reference:

1) flat point DIN EN ISO 4753



## KIPP Tension levers, flat, external thread

| Order No.<br>0° | Order No.<br>15° | X   | A=Handle length | A2   | D    | D1 | D2 | D3 | H  | H1 | H2   | H3 | H4   | L                    | No. of<br>teeth |
|-----------------|------------------|-----|-----------------|------|------|----|----|----|----|----|------|----|------|----------------------|-----------------|
| K0114.1081X     | K0114.1082X      | M8  | 102/100         | -/15 | 13,5 | 33 | 25 | 10 | 19 | 2  | 12   | 23 | -/29 | 15/20/25/30/40/50/60 | 20              |
| K0114.1101X     | K0114.1102X      | M10 | 102/100         | -/15 | 13,5 | 33 | 25 | 10 | 19 | 2  | 12   | 23 | -/29 | 15/20/25/30/40/50/60 | 20              |
| K0114.2101X     | K0114.2102X      | M10 | 131/127         | -/15 | 19   | 41 | 30 | 12 | 22 | 2  | 13,5 | 26 | -/38 | 20/25/30/40/50/60    | 24              |
| K0114.2121X     | K0114.2122X      | M12 | 131/127         | -/15 | 19   | 41 | 30 | 12 | 22 | 2  | 13,5 | 26 | -/38 | 20/25/30/40/50/60    | 24              |
| K0114.3121X     | K0114.3122X      | M12 | 148/145         | -/15 | 23   | 45 | 37 | 14 | 28 | 2  | 17   | 33 | -/48 | 20/25/30/40/50/60    | 26              |
| K0114.3161X     | K0114.3162X      | M16 | 148/145         | -/15 | 23   | 45 | 37 | 14 | 28 | 2  | 17   | 33 | -/48 | 20/25/30/40/50/60    | 26              |

## Tension levers flat

internal thread, stainless steel



### Material:

Steel parts stainless steel 1.4305.  
Ball knob black plastic.

### Version:

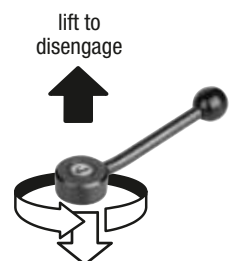
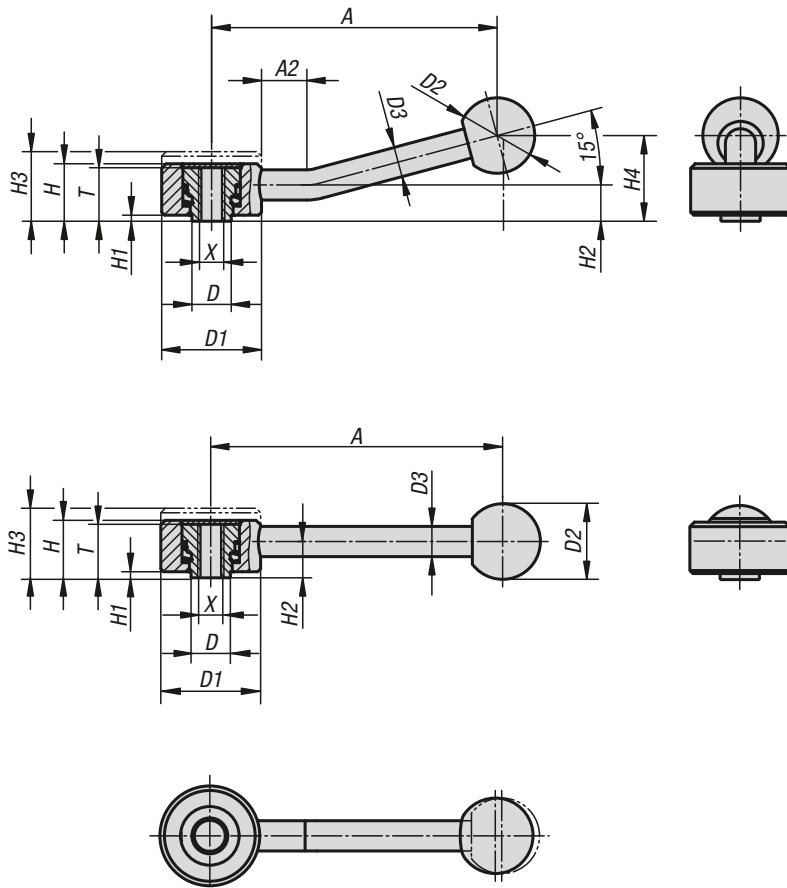
Steel parts bright.

### Sample order:

K0129.1081

### On request:

Other threads and special versions.  
Dimensions "H1" and "A" available in other lengths  
at extra charge.

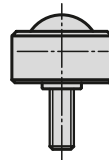
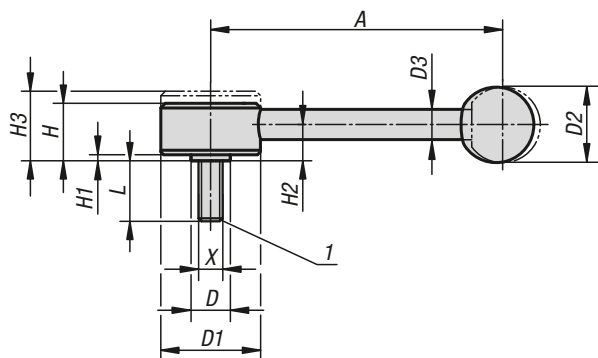
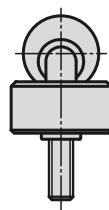
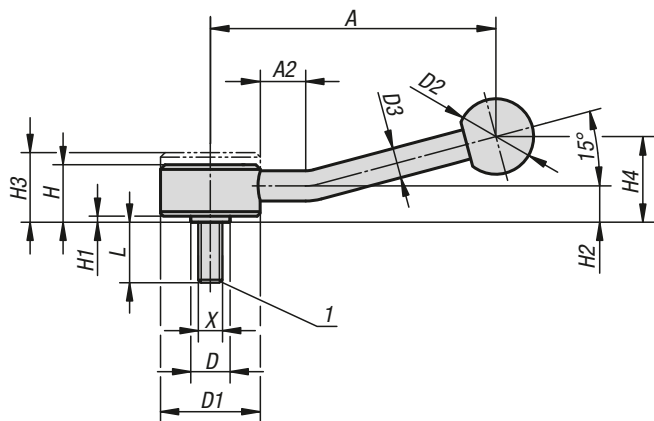


### KIPP Tension levers, flat, internal thread, stainless steel

| Order No.<br>0° | Order No.<br>15° | X   | A=Handle length | A2   | D    | D1 | D2 | D3 | H  | H1 | H2   | H3 | H4   | No. of<br>teeth | T  |
|-----------------|------------------|-----|-----------------|------|------|----|----|----|----|----|------|----|------|-----------------|----|
| K0129.1081      | K0129.1082       | M8  | 102/100         | -/15 | 13,5 | 33 | 25 | 10 | 19 | 2  | 12   | 23 | -/29 | 26              | 18 |
| K0129.2101      | K0129.2102       | M10 | 131/127         | -/15 | 19   | 41 | 30 | 12 | 22 | 2  | 13,5 | 26 | -/38 | 30              | 21 |
| K0129.2121      | K0129.2122       | M12 | 131/127         | -/15 | 19   | 41 | 30 | 12 | 22 | 2  | 13,5 | 26 | -/38 | 30              | 21 |
| K0129.3161      | K0129.3162       | M16 | 148/145         | -/15 | 23   | 45 | 37 | 14 | 28 | 2  | 17   | 33 | -/48 | 36              | 27 |

## Tension levers flat

external thread, stainless steel



### Material:

Steel parts stainless steel 1.4305.  
Ball knob black plastic.

### Version:

Steel parts bright.

### Sample order:

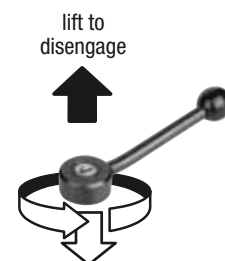
K0129.1081X40 (include length L)

### On request:

Other threads, screw lengths and special versions.  
Dimensions "H1" and "A" available in other lengths at extra charge.

### Drawing reference:

1) flat point DIN EN ISO 4753



## KIPP Tension levers flat, external thread, stainless steel

| Order No.<br>0° | Order No.<br>15° | X   | A=Handle length | A2   | D    | D1 | D2 | D3 | H  | H1 | H2   | H3 | H4   | L           | No. of<br>teeth |
|-----------------|------------------|-----|-----------------|------|------|----|----|----|----|----|------|----|------|-------------|-----------------|
| K0129.1081X     | K0129.1082X      | M8  | 102/100         | -/15 | 13,5 | 33 | 25 | 10 | 19 | 2  | 12   | 23 | -/29 | 30/40/50    | 26              |
| K0129.2101X     | K0129.2102X      | M10 | 131/127         | -/15 | 19   | 41 | 30 | 12 | 22 | 2  | 13,5 | 26 | -/38 | 30/40/50/60 | 30              |
| K0129.2121X     | K0129.2122X      | M12 | 131/127         | -/15 | 19   | 41 | 30 | 12 | 22 | 2  | 13,5 | 26 | -/38 | 30/40/50/60 | 30              |
| K0129.3161X     | K0129.3162X      | M16 | 148/145         | -/15 | 23   | 45 | 37 | 14 | 28 | 2  | 17   | 33 | -/48 | 40/50/60    | 36              |



## Levers

DIN 99



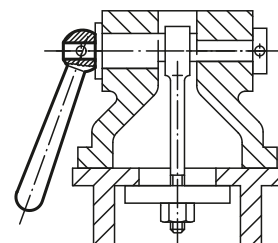
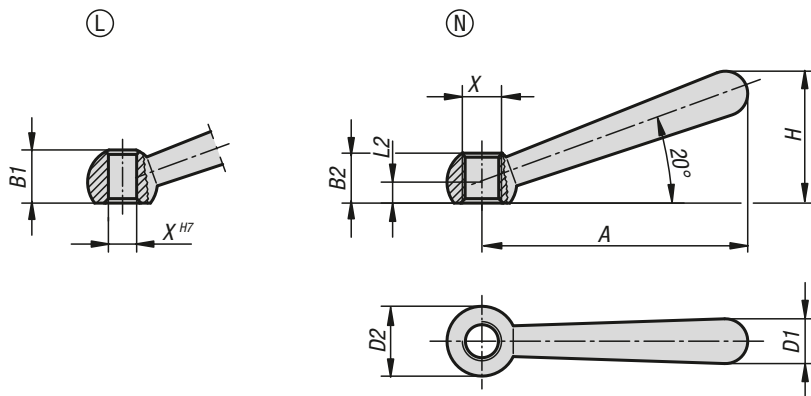
**Material:**  
Steel.

**Version:**  
Polished.

**Sample order:**  
K0174.212

**Note:**  
To fix the lever to another element, gluing is often more cost-effective than pinning.

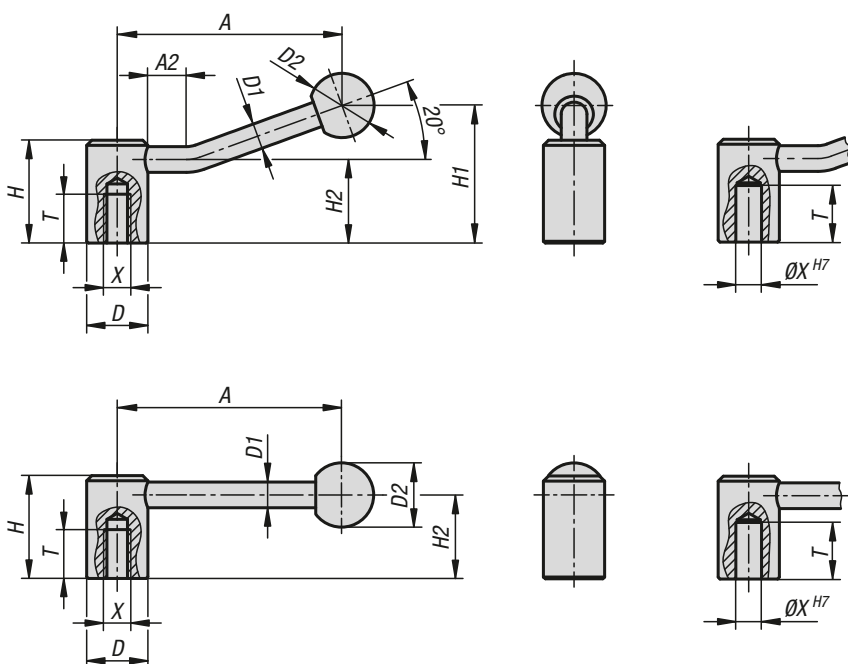
**Drawing reference:**  
Form L: with hole  
Form N: with internal thread



### KIPP Levers DIN 99

| Order No.<br>Form L | Order No.<br>Form N | X      | A=Handle length | B1     | B2     | D1 | D2<br>ball | H    | L2   |
|---------------------|---------------------|--------|-----------------|--------|--------|----|------------|------|------|
| K0174.106           | K0174.206           | 6/M6   | 48              | 9,5/-  | -/9,5  | 8  | 12         | 24   | 4    |
| K0174.108           | K0174.208           | 8/M8   | 60              | 12/-   | -/12   | 10 | 16         | 30,5 | 5    |
| K0174.110           | K0174.210           | 10/M10 | 76              | 14,5/- | -/14,5 | 13 | 20         | 38   | 6    |
| K0174.112           | K0174.212           | 12/M12 | 95              | 18,5/- | -/18,5 | 16 | 25         | 47   | 7,5  |
| K0174.116           | K0174.216           | 16/M16 | 119             | 24/-   | -/24   | 20 | 32         | 59,5 | 10   |
| K0174.120           | K0174.220           | 20/M20 | 152             | 30/-   | -/30   | 25 | 40         | 75,5 | 12,5 |

## Tension levers



### Material:

Steel parts grade 5.8.  
Ball knob black plastic.

### Version:

Black oxidised.

### Sample order:

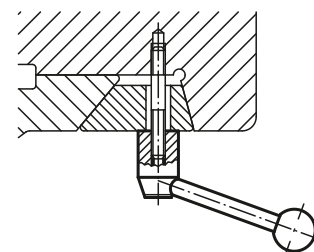
K0176.208

### Note:

Tension levers can be used for simple clamping or control operations.  
Where applicable, there must be enough space available so that the grip can be rotated 360°.

### On request:

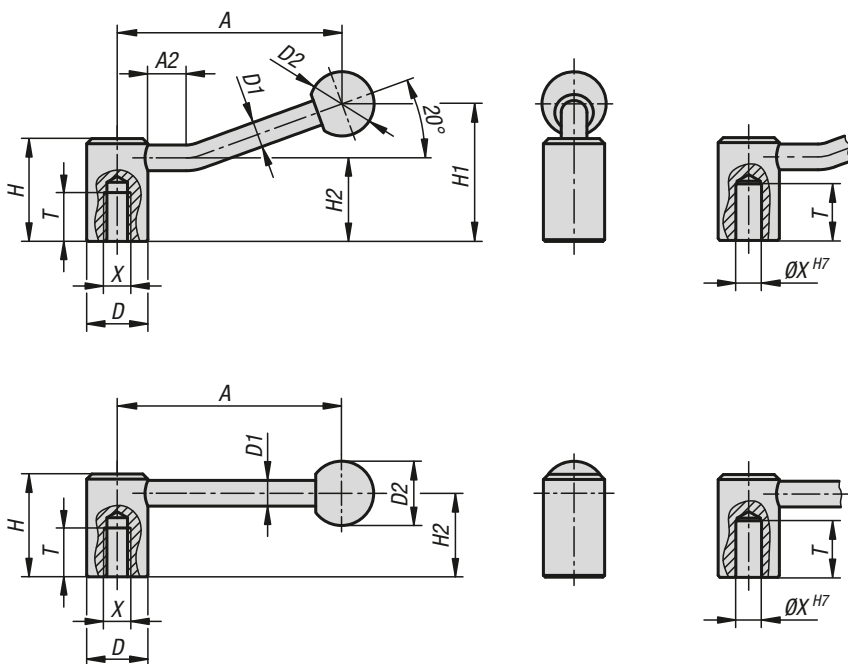
Other internal threads, reamed holes and special versions.  
Dimension "A" available in other lengths at extra charge.



### KIPP Tension levers

| Order No.<br>0° | Order No.<br>20° | Kind of fastening | X   | T  | A=Handle length | A2   | D  | D1 | D2 | H  | H1     | H2   |
|-----------------|------------------|-------------------|-----|----|-----------------|------|----|----|----|----|--------|------|
| K0176.2082      | K0176.208        | internal thread   | M8  | 18 | 88,1/84,5       | -/15 | 24 | 10 | 25 | 40 | -/52,5 | 32,5 |
| K0176.2102      | K0176.210        | internal thread   | M10 | 18 | 88,1/84,5       | -/15 | 24 | 10 | 25 | 40 | -/52,5 | 32,5 |
| K0176.21012     | K0176.2101       | internal thread   | M10 | 20 | 104/100         | -/15 | 28 | 12 | 32 | 46 | -/61   | 36,5 |
| K0176.2122      | K0176.212        | internal thread   | M12 | 20 | 104/100         | -/15 | 28 | 12 | 32 | 46 | -/61   | 36,5 |
| K0176.2162      | K0176.216        | internal thread   | M16 | 23 | 126,5/121       | -/15 | 33 | 13 | 32 | 52 | -/72   | 41   |
| K0176.2202      | K0176.220        | internal thread   | M20 | 26 | 128,5/123       | -/15 | 41 | 13 | 32 | 61 | -/80   | 49   |
| K0176.1102      | K0176.110        | reamed hole       | 10  | 22 | 88,1/84,5       | -/15 | 24 | 10 | 25 | 40 | -/52,5 | 32,5 |
| K0176.1122      | K0176.112        | reamed hole       | 12  | 25 | 104/100         | -/15 | 28 | 12 | 32 | 46 | -/61   | 36,5 |
| K0176.1142      | K0176.114        | reamed hole       | 14  | 25 | 104/100         | -/15 | 28 | 12 | 32 | 46 | -/61   | 36,5 |
| K0176.1162      | K0176.116        | reamed hole       | 16  | 28 | 126,5/121       | -/15 | 33 | 13 | 32 | 52 | -/72   | 41   |
| K0176.1202      | K0176.120        | reamed hole       | 20  | 32 | 128,5/123       | -/15 | 41 | 13 | 32 | 61 | -/80   | 49   |

## Tension levers stainless steel



### Material:

Steel parts stainless steel 1.4305.  
Ball knob black plastic.

### Version:

Stainless steel parts bright.  
Ball knob polished.

### Sample order:

K1444.2082

### Note:

Tension levers can be used for simple clamping or control operations.

Where applicable, there must be enough space available so that the grip can be rotated 360°.

### On request:

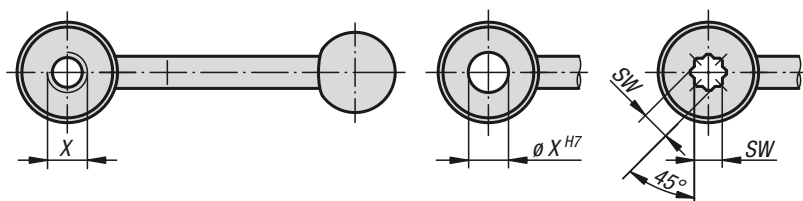
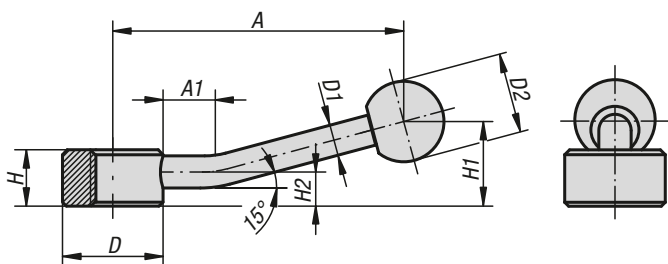
Other internal threads, reamed holes and special versions.

Dimension "A" available in other lengths at extra charge.

## KIPP Tension levers stainless steel

| Order No.<br>0° | Order No.<br>20° | Thread type     | X   | A         | A2   | D  | D1 | D2 | H  | H1     | H2   | T  |
|-----------------|------------------|-----------------|-----|-----------|------|----|----|----|----|--------|------|----|
| K1444.2082      | K1444.208        | internal thread | M8  | 88,1/84,5 | -/15 | 24 | 10 | 25 | 40 | -/52,5 | 32,5 | 18 |
| K1444.2102      | K1444.210        | internal thread | M10 | 88,1/84,5 | -/15 | 24 | 10 | 25 | 40 | -/52,5 | 32,5 | 18 |
| K1444.21012     | K1444.2101       | internal thread | M10 | 104/100   | -/15 | 28 | 12 | 32 | 46 | -/61   | 36,5 | 20 |
| K1444.2122      | K1444.212        | internal thread | M12 | 104/100   | -/15 | 28 | 12 | 32 | 46 | -/61   | 36,5 | 20 |
| K1444.2162      | K1444.216        | internal thread | M16 | 126,5/121 | -/15 | 33 | 13 | 32 | 52 | -/72   | 41   | 23 |
| K1444.2202      | K1444.220        | internal thread | M20 | 128,5/123 | -/15 | 41 | 13 | 32 | 61 | -/80   | 49   | 26 |
| K1444.1102      | K1444.110        | reamed hole     | 10  | 88,1/84,5 | -/15 | 24 | 10 | 25 | 40 | -/52,5 | 32,5 | 22 |
| K1444.1122      | K1444.112        | reamed hole     | 12  | 104/100   | -/15 | 28 | 12 | 32 | 46 | -/61   | 36,5 | 25 |
| K1444.1142      | K1444.114        | reamed hole     | 14  | 104/100   | -/15 | 28 | 12 | 32 | 46 | -/61   | 36,5 | 25 |
| K1444.1162      | K1444.116        | reamed hole     | 16  | 126,5/121 | -/15 | 33 | 13 | 32 | 52 | -/72   | 41   | 28 |
| K1444.1202      | K1444.120        | reamed hole     | 20  | 128,5/123 | -/15 | 41 | 13 | 32 | 61 | -/80   | 49   | 32 |

# Tension levers flat


**Material:**

Steel parts grade 5.8.

Ball knob black thermoset PF 31

**Version:**

Black oxidised.

**Sample order:**

K0177.206

**Note:**

Flat tension levers can be used for simple clamping or control operations. Where applicable, there must be enough space available so that the grip can be rotated 360°.

The version with star socket is designed to allow a 45° change of position.

**On request:**

Other internal threads, reamed holes and star sockets.

Dimension "A" available in other lengths at extra charge.

## KIPP Tension levers flat with internal thread

| Order No. | Kind of fastening | X   | A=Handle length | A1 | D  | D1 | D2 | H  | H1 | H2   |
|-----------|-------------------|-----|-----------------|----|----|----|----|----|----|------|
| K0177.206 | internal thread   | M6  | 75              | 15 | 25 | 8  | 20 | 14 | 22 | 8,5  |
| K0177.208 | internal thread   | M8  | 75              | 15 | 25 | 8  | 20 | 14 | 22 | 8,5  |
| K0177.210 | internal thread   | M10 | 75              | 15 | 25 | 8  | 20 | 14 | 22 | 8,5  |
| K0177.212 | internal thread   | M12 | 100             | 15 | 33 | 10 | 25 | 17 | 27 | 10   |
| K0177.216 | internal thread   | M16 | 100             | 15 | 33 | 10 | 25 | 17 | 27 | 10   |
| K0177.220 | internal thread   | M20 | 128             | 15 | 41 | 12 | 30 | 20 | 36 | 11,5 |
| K0177.224 | internal thread   | M24 | 128             | 15 | 41 | 12 | 30 | 20 | 36 | 11,5 |

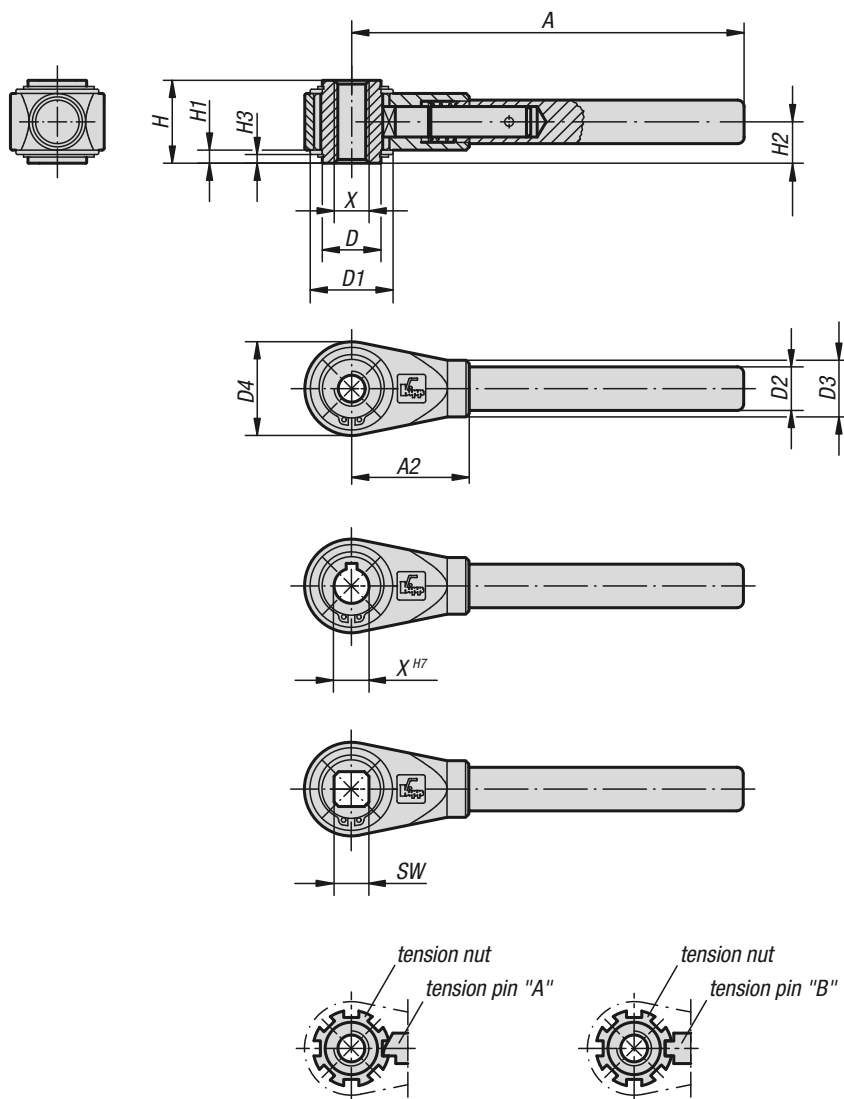
## KIPP Tension levers flat with reamed hole

| Order No. | Kind of fastening | X  | A=Handle length | A1 | D  | D1 | D2 | H  | H1 | H2   |
|-----------|-------------------|----|-----------------|----|----|----|----|----|----|------|
| K0177.106 | reamed hole       | 6  | 75              | 15 | 25 | 8  | 20 | 14 | 22 | 8,5  |
| K0177.108 | reamed hole       | 8  | 75              | 15 | 25 | 8  | 20 | 14 | 22 | 8,5  |
| K0177.110 | reamed hole       | 10 | 75              | 15 | 25 | 8  | 20 | 14 | 22 | 8,5  |
| K0177.112 | reamed hole       | 12 | 100             | 15 | 33 | 10 | 25 | 17 | 27 | 10   |
| K0177.116 | reamed hole       | 16 | 100             | 15 | 33 | 10 | 25 | 17 | 27 | 10   |
| K0177.120 | reamed hole       | 20 | 128             | 15 | 41 | 12 | 30 | 20 | 36 | 11,5 |
| K0177.124 | reamed hole       | 24 | 128             | 15 | 41 | 12 | 30 | 20 | 36 | 11,5 |

## KIPP Tension levers flat with star socket

| Order No. | Kind of fastening | SW  | A=Handle length | A1 | D  | D1 | D2 | H  | H1 | H2   |
|-----------|-------------------|-----|-----------------|----|----|----|----|----|----|------|
| K0177.305 | star socket       | 5,5 | 75              | 15 | 25 | 8  | 20 | 14 | 22 | 8,5  |
| K0177.307 | star socket       | 7   | 75              | 15 | 25 | 8  | 20 | 14 | 22 | 8,5  |
| K0177.309 | star socket       | 9   | 100             | 15 | 33 | 10 | 25 | 17 | 27 | 10   |
| K0177.311 | star socket       | 11  | 100             | 15 | 33 | 10 | 25 | 17 | 27 | 10   |
| K0177.314 | star socket       | 14  | 128             | 15 | 41 | 12 | 30 | 20 | 36 | 11,5 |
| K0177.319 | star socket       | 19  | 128             | 15 | 41 | 12 | 30 | 20 | 36 | 11,5 |

## Ratchet levers

**Material:**

Housing carbon steel, tension nut and tension pin case-hardened steel.

**Version:**

Black oxidised.

Matt-finished or high-polish chrome-plated versions available at extra charge.

**Sample order:**

K0128.316

**Note:**

Tension Pin A standard version (for ratchet action): Use for clamping and releasing in limited space and when considerable travel is involved. In order to change the tightening direction, the handle must be reversed by 180°.

Tension Pin B special version:

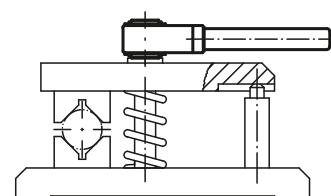
Use for clamping and releasing in limited space and when short travel is involved. The handle is not reversed in order to change the tightening direction. It must be pulled out before it can be engaged in the next slot.

Clamp with H7 reamed hole and DIN 6885/1 keyway.

**On request:**

Other thread, reamed hole and square socket sizes. Dimension "E" available in other lengths at extra charge.

Special version: Tension pin B.



## Ratchet levers



## KIPP Ratchet levers with internal thread

| Order No. | Kind of fastening | X   | A=Handle length | A2  | D  | D1 | D2 | D3 | D4 | H  | H1  | H2   | H3 | No. of index slots |
|-----------|-------------------|-----|-----------------|-----|----|----|----|----|----|----|-----|------|----|--------------------|
| K0128.310 | internal thread   | M10 | 150             | 48  | 22 | 33 | 17 | 22 | 36 | 31 | 4,5 | 15,5 | 3  | 7                  |
| K0128.312 | internal thread   | M12 | 150             | 48  | 22 | 33 | 17 | 22 | 36 | 31 | 4,5 | 15,5 | 3  | 7                  |
| K0128.314 | internal thread   | M14 | 180             | 54  | 27 | 38 | 20 | 26 | 43 | 38 | 6   | 19   | 4  | 8                  |
| K0128.316 | internal thread   | M16 | 180             | 54  | 27 | 38 | 20 | 26 | 43 | 38 | 6   | 19   | 4  | 8                  |
| K0128.318 | internal thread   | M18 | 230             | 70  | 35 | 45 | 24 | 30 | 51 | 42 | 6   | 21   | 4  | 8                  |
| K0128.320 | internal thread   | M20 | 230             | 70  | 35 | 45 | 24 | 30 | 51 | 42 | 6   | 21   | 4  | 8                  |
| K0128.322 | internal thread   | M22 | 300             | 80  | 42 | 56 | 28 | 35 | 61 | 47 | 6   | 23,5 | 4  | 9                  |
| K0128.324 | internal thread   | M24 | 300             | 80  | 42 | 56 | 28 | 35 | 61 | 47 | 6   | 23,5 | 4  | 9                  |
| K0128.327 | internal thread   | M27 | 300             | 80  | 42 | 56 | 28 | 35 | 61 | 47 | 6   | 23,5 | 4  | 9                  |
| K0128.330 | internal thread   | M30 | 400             | 110 | 60 | 75 | 32 | 38 | 82 | 53 | 7,5 | 26,5 | 5  | 11                 |
| K0128.336 | internal thread   | M36 | 400             | 110 | 60 | 75 | 32 | 38 | 82 | 53 | 7,5 | 26,5 | 5  | 11                 |
| K0128.342 | internal thread   | M42 | 400             | 110 | 60 | 75 | 32 | 38 | 82 | 53 | 7,5 | 26,5 | 5  | 11                 |

## KIPP Ratchet levers with reamed hole

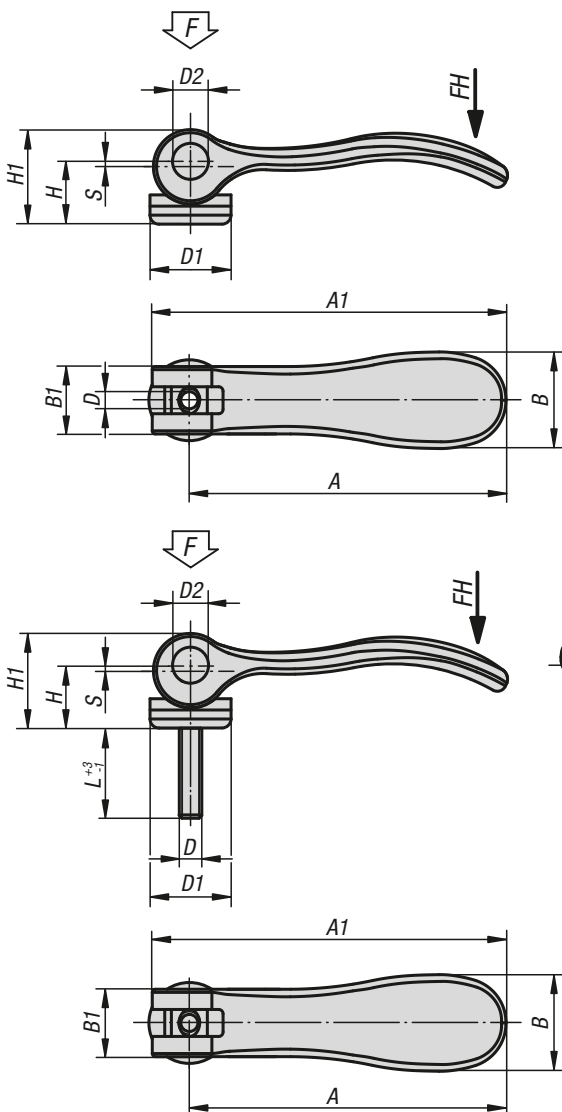
| Order No. | Kind of fastening     | X  | A=Handle length | A2  | D  | D1 | D2 | D3 | D4 | H  | H1  | H2   | H3 | No. of index slots |
|-----------|-----------------------|----|-----------------|-----|----|----|----|----|----|----|-----|------|----|--------------------|
| K0128.412 | reamed hole with slot | 12 | 150             | 48  | 22 | 33 | 17 | 22 | 36 | 31 | 4,5 | 15,5 | 3  | 7                  |
| K0128.414 | reamed hole with slot | 14 | 180             | 54  | 27 | 38 | 20 | 26 | 43 | 38 | 6   | 19   | 4  | 8                  |
| K0128.415 | reamed hole with slot | 15 | 180             | 54  | 27 | 38 | 20 | 26 | 43 | 38 | 6   | 19   | 4  | 8                  |
| K0128.416 | reamed hole with slot | 16 | 180             | 54  | 27 | 38 | 20 | 26 | 43 | 38 | 6   | 19   | 4  | 8                  |
| K0128.418 | reamed hole with slot | 18 | 230             | 70  | 35 | 45 | 24 | 30 | 51 | 42 | 6   | 21   | 4  | 8                  |
| K0128.420 | reamed hole with slot | 20 | 230             | 70  | 35 | 45 | 24 | 30 | 51 | 42 | 6   | 21   | 4  | 8                  |
| K0128.422 | reamed hole with slot | 22 | 300             | 80  | 42 | 56 | 28 | 35 | 61 | 47 | 6   | 23,5 | 4  | 9                  |
| K0128.425 | reamed hole with slot | 25 | 300             | 80  | 42 | 56 | 28 | 35 | 61 | 47 | 6   | 23,5 | 4  | 9                  |
| K0128.427 | reamed hole with slot | 27 | 300             | 80  | 42 | 56 | 28 | 35 | 61 | 47 | 6   | 23,5 | 4  | 9                  |
| K0128.430 | reamed hole with slot | 30 | 400             | 110 | 60 | 75 | 32 | 38 | 82 | 53 | 7,5 | 26,5 | 5  | 11                 |
| K0128.436 | reamed hole with slot | 36 | 400             | 110 | 60 | 75 | 32 | 38 | 82 | 53 | 7,5 | 26,5 | 5  | 11                 |

## KIPP Ratchet levers with square socket

| Order No. | Kind of fastening | SW | A=Handle length | A2  | D  | D1 | D2 | D3 | D4 | H  | H1  | H2   | H3 | No. of index slots |
|-----------|-------------------|----|-----------------|-----|----|----|----|----|----|----|-----|------|----|--------------------|
| K0128.510 | square socket     | 10 | 150             | 48  | 22 | 33 | 17 | 22 | 36 | 31 | 4,5 | 15,5 | 3  | 7                  |
| K0128.512 | square socket     | 12 | 150             | 48  | 22 | 33 | 17 | 22 | 36 | 31 | 4,5 | 15,5 | 3  | 7                  |
| K0128.513 | square socket     | 13 | 180             | 54  | 27 | 38 | 20 | 26 | 43 | 38 | 6   | 19   | 4  | 8                  |
| K0128.514 | square socket     | 14 | 180             | 54  | 27 | 38 | 20 | 26 | 43 | 38 | 6   | 19   | 4  | 8                  |
| K0128.517 | square socket     | 17 | 230             | 70  | 35 | 45 | 24 | 30 | 51 | 42 | 6   | 21   | 4  | 8                  |
| K0128.519 | square socket     | 19 | 300             | 80  | 42 | 56 | 28 | 35 | 61 | 47 | 6   | 23,5 | 4  | 9                  |
| K0128.520 | square socket     | 20 | 300             | 80  | 42 | 56 | 28 | 35 | 61 | 47 | 6   | 23,5 | 4  | 9                  |
| K0128.522 | square socket     | 22 | 300             | 80  | 42 | 56 | 28 | 35 | 61 | 47 | 6   | 23,5 | 4  | 9                  |
| K0128.524 | square socket     | 24 | 300             | 80  | 42 | 56 | 28 | 35 | 61 | 47 | 6   | 23,5 | 4  | 9                  |
| K0128.530 | square socket     | 30 | 400             | 110 | 60 | 75 | 32 | 38 | 82 | 53 | 7,5 | 26,5 | 5  | 11                 |
| K0128.532 | square socket     | 32 | 400             | 110 | 60 | 75 | 32 | 38 | 82 | 53 | 7,5 | 26,5 | 5  | 11                 |

# Cam levers

internal and external thread, steel or stainless steel



## Material:

Handles cast aluminum EN AC-46200.

Thrust washer plastic PA 66 GF 35-X fiberglass reinforced.

Hinge pin stainless steel 1.4305.

Studs and washer steel grade 5.8 or stainless steel 1.4305.

## Version:

Handles fine structured powder-coated, black or red RAL 3003.

Thrust washer black.

Hinge pin bright.

Studs and washer blue passivated steel or bright stainless steel.

## Sample order:

K0005.101105X20 (include length L)

## Note:

Plastics are subject to creeping under load (retardation).

# Cam levers

internal and external thread, steel or stainless steel



## KIPP Cam levers with internal thread, grip black

| Order No.<br>steel | Order No.<br>stainless steel | D  | D1   | D2 | B    | B1   | H    | H1   | A    | A1   | Travel<br>S | Clamping<br>force<br>F (kN) | Hand<br>force<br>FH N |
|--------------------|------------------------------|----|------|----|------|------|------|------|------|------|-------------|-----------------------------|-----------------------|
| K0005.9501103      | K0005.9511103                | M3 | 12   | 6  | 14,4 | 11,5 | 9    | 13   | 36,2 | 41,7 | 1           | 1,5                         | 90                    |
| K0005.9501104      | K0005.9511104                | M4 | 12   | 6  | 14,4 | 11,5 | 9    | 13   | 36,2 | 41,7 | 1           | 1,5                         | 90                    |
| K0005.0501104      | K0005.0511104                | M4 | 15,4 | 8  | 18   | 13   | 11,2 | 17   | 52,3 | 59,1 | 1           | 2,5                         | 100                   |
| K0005.0501105      | K0005.0511105                | M5 | 15,4 | 8  | 18   | 13   | 11,2 | 17   | 52,3 | 59,1 | 1           | 2,5                         | 100                   |
| K0005.1501105      | K0005.1511105                | M5 | 18,1 | 9  | 21,5 | 15   | 14,5 | 22   | 70,4 | 79,2 | 1,2         | 4                           | 120                   |
| K0005.1501106      | K0005.1511106                | M6 | 18,1 | 9  | 21,5 | 15   | 14,5 | 22   | 70,4 | 79,2 | 1,2         | 4                           | 120                   |
| K0005.2501108      | K0005.2511108                | M8 | 27,1 | 11 | 33,3 | 24   | 18   | 28,5 | 96   | 108  | 1,5         | 8                           | 350                   |

## KIPP Cam levers with internal thread, grip red

| Order No.<br>steel | Order No.<br>stainless steel | D  | D1   | D2 | B    | B1   | H    | H1   | A    | A1   | Travel<br>S | Clamping<br>force<br>F (kN) | Hand<br>force<br>FH N |
|--------------------|------------------------------|----|------|----|------|------|------|------|------|------|-------------|-----------------------------|-----------------------|
| K0005.9501403      | K0005.9511403                | M3 | 12   | 6  | 14,4 | 11,5 | 9    | 13   | 36,2 | 41,7 | 1           | 1,5                         | 90                    |
| K0005.9501404      | K0005.9511404                | M4 | 12   | 6  | 14,4 | 11,5 | 9    | 13   | 36,2 | 41,7 | 1           | 1,5                         | 90                    |
| K0005.0501404      | K0005.0511404                | M4 | 15,4 | 8  | 18   | 13   | 11,2 | 17   | 52,3 | 59,1 | 1           | 2,5                         | 100                   |
| K0005.0501405      | K0005.0511405                | M5 | 15,4 | 8  | 18   | 13   | 11,2 | 17   | 52,3 | 59,1 | 1           | 2,5                         | 100                   |
| K0005.1501405      | K0005.1511405                | M5 | 18,1 | 9  | 21,5 | 15   | 14,5 | 22   | 70,4 | 79,2 | 1,2         | 4                           | 120                   |
| K0005.1501406      | K0005.1511406                | M6 | 18,1 | 9  | 21,5 | 15   | 14,5 | 22   | 70,4 | 79,2 | 1,2         | 4                           | 120                   |
| K0005.2501408      | K0005.2511408                | M8 | 27,1 | 11 | 33,3 | 24   | 18   | 28,5 | 96   | 108  | 1,5         | 8                           | 350                   |

## KIPP Cam levers with external thread, grip black

| Order No.<br>steel | Order No.<br>stainless steel | D   | D1   | D2 | B    | B1   | H    | H1   | A    | A1   | L           | Travel<br>S | Clamping<br>force<br>F (kN) | Hand<br>force<br>FH N |
|--------------------|------------------------------|-----|------|----|------|------|------|------|------|------|-------------|-------------|-----------------------------|-----------------------|
| K0005.9501103X     | K0005.9511103X               | M3  | 12   | 6  | 14,4 | 11,5 | 9    | 13   | 36,2 | 41,7 | 10/15/30    | 1           | 1,5                         | 90                    |
| K0005.9501104X     | K0005.9511104X               | M4  | 12   | 6  | 14,4 | 11,5 | 9    | 13   | 36,2 | 41,7 | 10/15/30    | 1           | 1,5                         | 90                    |
| K0005.0501104X     | K0005.0511104X               | M4  | 15,4 | 8  | 18   | 13   | 11,2 | 17   | 52,3 | 59,1 | 15/20/30    | 1           | 2,5                         | 100                   |
| K0005.0501105X     | K0005.0511105X               | M5  | 15,4 | 8  | 18   | 13   | 11,2 | 17   | 52,3 | 59,1 | 20/30/40/50 | 1           | 2,5                         | 100                   |
| K0005.1501105X     | K0005.1511105X               | M5  | 18,1 | 9  | 21,5 | 15   | 14,5 | 22   | 70,4 | 79,2 | 20/30/40/50 | 1,2         | 4                           | 120                   |
| K0005.1501106X     | K0005.1511106X               | M6  | 18,1 | 9  | 21,5 | 15   | 14,5 | 22   | 70,4 | 79,2 | 20/30/40/50 | 1,2         | 4                           | 120                   |
| K0005.2501108X     | K0005.2511108X               | M8  | 27,1 | 11 | 33,3 | 24   | 18   | 28,5 | 96   | 108  | 25/30/40/50 | 1,5         | 8                           | 350                   |
| K0005.2501110X     | K0005.2511110X               | M10 | 27,1 | 11 | 33,3 | 24   | 18   | 28,5 | 96   | 108  | 25/30/40/50 | 1,5         | 8                           | 350                   |

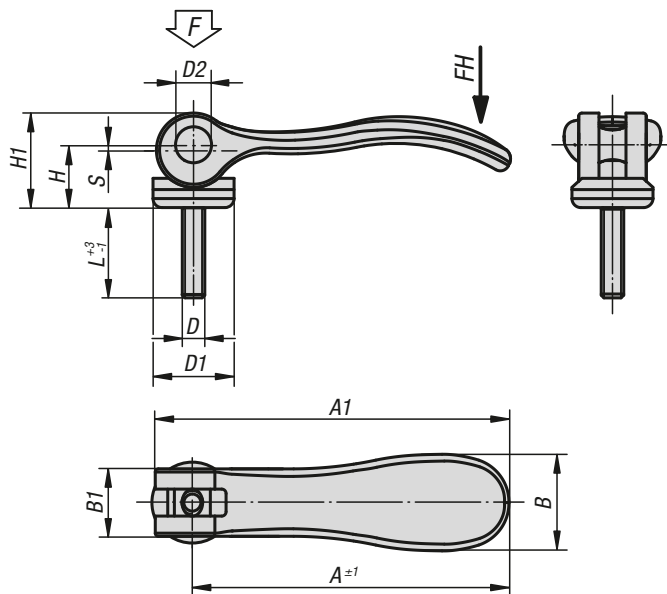
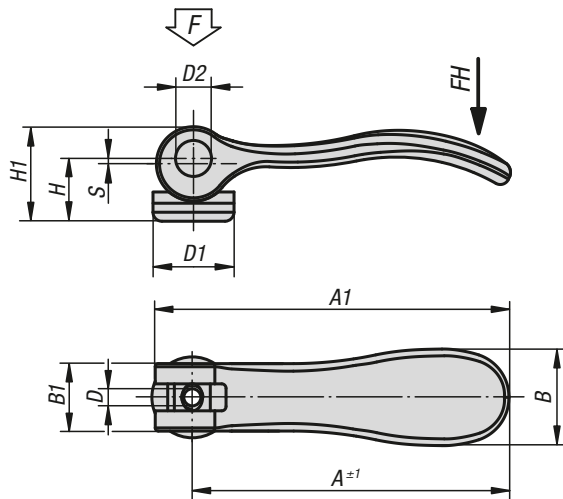
## KIPP Cam levers with external thread, grip red

| Order No.<br>steel | Order No.<br>stainless steel | D   | D1   | D2 | B    | B1   | H    | H1   | A    | A1   | L           | Travel<br>S | Clamping<br>force<br>F (kN) | Hand<br>force<br>FH N |
|--------------------|------------------------------|-----|------|----|------|------|------|------|------|------|-------------|-------------|-----------------------------|-----------------------|
| K0005.9501403X     | K0005.9511403X               | M3  | 12   | 6  | 14,4 | 11,5 | 9    | 13   | 36,2 | 41,7 | 10/15/30    | 1           | 1,5                         | 90                    |
| K0005.9501404X     | K0005.9511404X               | M4  | 12   | 6  | 14,4 | 11,5 | 9    | 13   | 36,2 | 41,7 | 10/15/30    | 1           | 1,5                         | 90                    |
| K0005.0501404X     | K0005.0511404X               | M4  | 15,4 | 8  | 18   | 13   | 11,2 | 17   | 52,3 | 59,1 | 15/20/30    | 1           | 2,5                         | 100                   |
| K0005.0501405X     | K0005.0511405X               | M5  | 15,4 | 8  | 18   | 13   | 11,2 | 17   | 52,3 | 59,1 | 20/30/40/50 | 1           | 2,5                         | 100                   |
| K0005.1501405X     | K0005.1511405X               | M5  | 18,1 | 9  | 21,5 | 15   | 14,5 | 22   | 70,4 | 79,2 | 20/30/40/50 | 1,2         | 4                           | 120                   |
| K0005.1501406X     | K0005.1511406X               | M6  | 18,1 | 9  | 21,5 | 15   | 14,5 | 22   | 70,4 | 79,2 | 20/30/40/50 | 1,2         | 4                           | 120                   |
| K0005.2501408X     | K0005.2511408X               | M8  | 27,1 | 11 | 33,3 | 24   | 18   | 28,5 | 96   | 108  | 25/30/40/50 | 1,5         | 8                           | 350                   |
| K0005.2501410X     | K0005.2511410X               | M10 | 27,1 | 11 | 33,3 | 24   | 18   | 28,5 | 96   | 108  | 25/30/40/50 | 1,5         | 8                           | 350                   |



# Cam levers

internal and external thread, steel



## Material:

Handle steel 1.0401.

Thrust washer plastic PA 66 GF 35-X fibreglass reinforced.

Hinge pin stainless steel 1.4305.

Stud and washer steel, grade 5.8.

## Version:

Handle, stud and washer trivalent blue passivated.

Thrust washer black.

Hinge pin bright.

## Sample order:

K0788.1502205

## Note:

Plastics are subject to creeping under load (retardation).

# Cam levers

internal and external thread, steel



## KIPP Cam levers with internal thread, steel

| Order No.     | D  | D1   | D2 | B    | B1 | H    | H1   | A    | A1   | Travel<br>S | Clamping<br>force<br>F (kN) | Hand<br>force<br>FH N |
|---------------|----|------|----|------|----|------|------|------|------|-------------|-----------------------------|-----------------------|
| K0788.1502205 | M5 | 18,1 | 9  | 21,5 | 15 | 14,5 | 22   | 70,4 | 79,2 | 1,2         | 4                           | 120                   |
| K0788.1502206 | M6 | 18,1 | 9  | 21,5 | 15 | 14,5 | 22   | 70,4 | 79,2 | 1,2         | 4                           | 120                   |
| K0788.2502208 | M8 | 27,1 | 11 | 33,2 | 24 | 18   | 28,5 | 96   | 108  | 1,5         | 8                           | 350                   |

## KIPP Cam levers with external thread, steel

| Order No.      | D   | D1   | D2 | B    | B1 | H    | H1   | A    | A1   | L           | Travel<br>S | Clamping<br>force<br>F (kN) | Hand<br>force<br>FH N |
|----------------|-----|------|----|------|----|------|------|------|------|-------------|-------------|-----------------------------|-----------------------|
| K0788.1502205X | M5  | 18,1 | 9  | 21,5 | 15 | 14,5 | 22   | 70,4 | 79,2 | 20/30/40/50 | 1,2         | 4                           | 120                   |
| K0788.1502206X | M6  | 18,1 | 9  | 21,5 | 15 | 14,5 | 22   | 70,4 | 79,2 | 20/30/40/50 | 1,2         | 4                           | 120                   |
| K0788.2502208X | M8  | 27,1 | 11 | 33,2 | 24 | 18   | 28,5 | 96   | 108  | 25/30/40/50 | 1,5         | 8                           | 350                   |
| K0788.2502210X | M10 | 27,1 | 11 | 33,2 | 24 | 18   | 28,5 | 96   | 108  | 25/30/40/50 | 1,5         | 8                           | 350                   |

## Cam levers

internal and external thread, stainless steel



### Material:

Handles 1.4308 stainless steel.

Thrust washer plastic PA 66 GF 35-X, fibreglass reinforced.

Hinge pin, washer and screw 1.4305 stainless steel.

### Version:

Handle electropolished or blasted.

Thrust washer black.

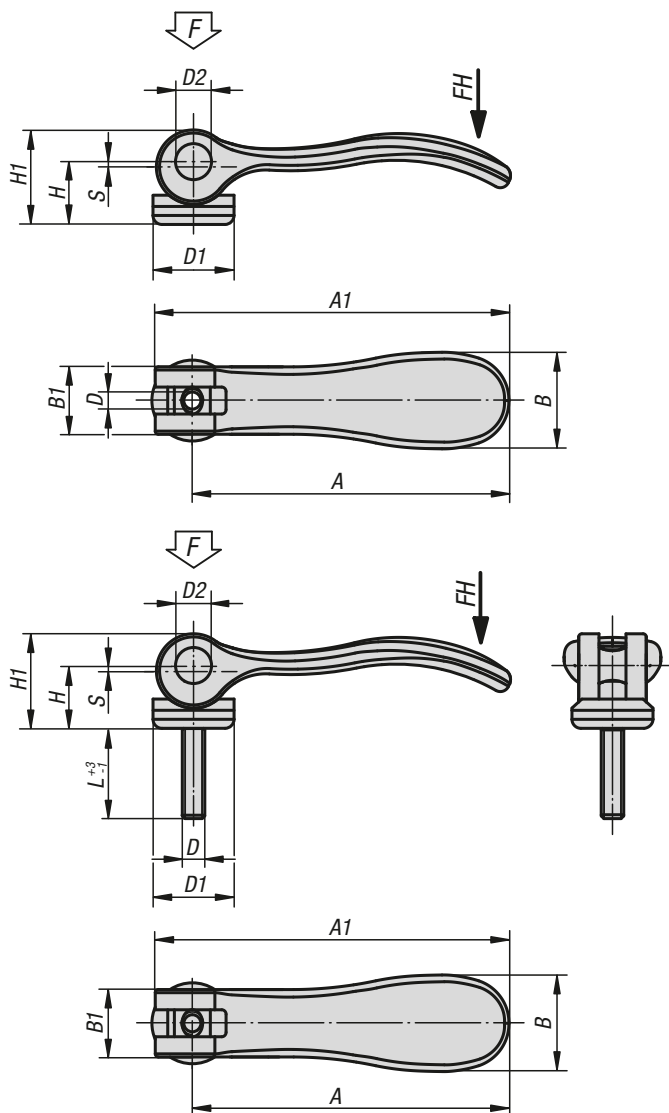
Hinge pin, washer and screw bright.

### Sample order:

K0645.1512005X20 (include length L)

### Note:

Plastics are subject to creeping under load (retardation).



# Cam levers

internal and external thread, stainless steel



## KIPP Cam levers with internal thread, stainless steel

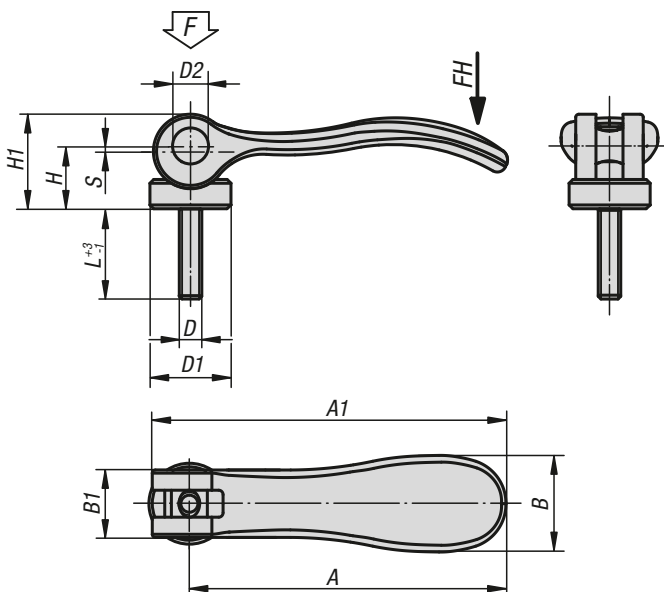
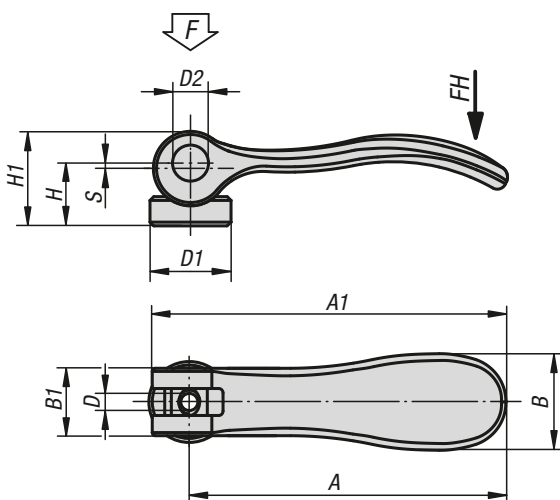
| Order No.     | Surface finish body | D  | D1   | D2 | B    | B1   | H    | H1   | A    | A1   | Travel S | Clamping force F (kN) | Hand force FH N |
|---------------|---------------------|----|------|----|------|------|------|------|------|------|----------|-----------------------|-----------------|
| K0645.9512003 | electropolished     | M3 | 12   | 6  | 14,4 | 11,5 | 9    | 13   | 36,2 | 41,7 | 1        | 1,5                   | 90              |
| K0645.9512004 | electropolished     | M4 | 12   | 6  | 14,4 | 11,5 | 9    | 13   | 36,2 | 41,7 | 1        | 1,5                   | 90              |
| K0645.0512004 | electropolished     | M4 | 15,4 | 8  | 18   | 13   | 11,2 | 17   | 52,3 | 59,1 | 1        | 2,5                   | 100             |
| K0645.0512005 | electropolished     | M5 | 15,4 | 8  | 18   | 13   | 11,2 | 17   | 52,3 | 59,1 | 1        | 2,5                   | 100             |
| K0645.1512005 | electropolished     | M5 | 18,1 | 9  | 21,5 | 15   | 14,5 | 22   | 70,4 | 79,2 | 1,2      | 4                     | 120             |
| K0645.1512006 | electropolished     | M6 | 18,1 | 9  | 21,5 | 15   | 14,5 | 22   | 70,4 | 79,2 | 1,2      | 4                     | 120             |
| K0645.2512008 | electropolished     | M8 | 27,1 | 11 | 33,3 | 24   | 18   | 28,5 | 96   | 108  | 1,5      | 8                     | 350             |
| K0645.9512303 | blasted             | M3 | 12   | 6  | 14,4 | 11,5 | 9    | 13   | 36,2 | 41,7 | 1        | 1,5                   | 90              |
| K0645.9512304 | blasted             | M4 | 12   | 6  | 14,4 | 11,5 | 9    | 13   | 36,2 | 41,7 | 1        | 1,5                   | 90              |
| K0645.0512304 | blasted             | M4 | 15,4 | 8  | 18   | 13   | 11,2 | 17   | 52,3 | 59,1 | 1        | 2,5                   | 100             |
| K0645.0512305 | blasted             | M5 | 15,4 | 8  | 18   | 13   | 11,2 | 17   | 52,3 | 59,1 | 1        | 2,5                   | 100             |
| K0645.1512305 | blasted             | M5 | 18,1 | 9  | 21,5 | 15   | 14,5 | 22   | 70,4 | 79,2 | 1,2      | 4                     | 120             |
| K0645.1512306 | blasted             | M6 | 18,1 | 9  | 21,5 | 15   | 14,5 | 22   | 70,4 | 79,2 | 1,2      | 4                     | 120             |
| K0645.2512308 | blasted             | M8 | 27,1 | 11 | 33,3 | 24   | 18   | 28,5 | 96   | 108  | 1,5      | 8                     | 350             |

## KIPP Cam levers with external thread, stainless steel

| Order No.      | Surface finish body | D   | D1   | D2 | B    | B1   | H    | H1   | A    | A1   | L           | Travel S | Clamping force F (kN) | Hand force FH N |
|----------------|---------------------|-----|------|----|------|------|------|------|------|------|-------------|----------|-----------------------|-----------------|
| K0645.9512003X | electropolished     | M3  | 12   | 6  | 14,4 | 11,5 | 9    | 13   | 36,2 | 41,7 | 10/15/30    | 1        | 1,5                   | 90              |
| K0645.9512004X | electropolished     | M4  | 12   | 6  | 14,4 | 11,5 | 9    | 13   | 36,2 | 41,7 | 10/15/30    | 1        | 1,5                   | 90              |
| K0645.0512004X | electropolished     | M4  | 15,4 | 8  | 18   | 13   | 11,2 | 17   | 52,3 | 59,1 | 15/20/30    | 1        | 2,5                   | 100             |
| K0645.0512005X | electropolished     | M5  | 15,4 | 8  | 18   | 13   | 11,2 | 17   | 52,3 | 59,1 | 20/30/40/50 | 1        | 2,5                   | 100             |
| K0645.1512005X | electropolished     | M5  | 18,1 | 9  | 21,5 | 15   | 14,5 | 22   | 70,4 | 79,2 | 20/30/40/50 | 1,2      | 4                     | 120             |
| K0645.1512006X | electropolished     | M6  | 18,1 | 9  | 21,5 | 15   | 14,5 | 22   | 70,4 | 79,2 | 20/30/40/50 | 1,2      | 4                     | 120             |
| K0645.2512008X | electropolished     | M8  | 27,1 | 11 | 33,3 | 24   | 18   | 28,5 | 96   | 108  | 25/30/40/50 | 1,5      | 8                     | 350             |
| K0645.2512010X | electropolished     | M10 | 27,1 | 11 | 33,3 | 24   | 18   | 28,5 | 96   | 108  | 25/30/40/50 | 1,5      | 8                     | 350             |
| K0645.9512303X | blasted             | M3  | 12   | 6  | 14,4 | 11,5 | 9    | 13   | 36,2 | 41,7 | 10/15/30    | 1        | 1,5                   | 90              |
| K0645.9512304X | blasted             | M4  | 12   | 6  | 14,4 | 11,5 | 9    | 13   | 36,2 | 41,7 | 10/15/30    | 1        | 1,5                   | 90              |
| K0645.0512304X | blasted             | M4  | 15,4 | 8  | 18   | 13   | 11,2 | 17   | 52,3 | 59,1 | 15/20/30    | 1        | 2,5                   | 100             |
| K0645.0512305X | blasted             | M5  | 15,4 | 8  | 18   | 13   | 11,2 | 17   | 52,3 | 59,1 | 20/30/40/50 | 1        | 2,5                   | 100             |
| K0645.1512305X | blasted             | M5  | 18,1 | 9  | 21,5 | 15   | 14,5 | 22   | 70,4 | 79,2 | 20/30/40/50 | 1,2      | 4                     | 120             |
| K0645.1512306X | blasted             | M6  | 18,1 | 9  | 21,5 | 15   | 14,5 | 22   | 70,4 | 79,2 | 20/30/40/50 | 1,2      | 4                     | 120             |
| K0645.2512308X | blasted             | M8  | 27,1 | 11 | 33,3 | 24   | 18   | 28,5 | 96   | 108  | 25/30/40/50 | 1,5      | 8                     | 350             |
| K0645.2512310X | blasted             | M10 | 27,1 | 11 | 33,3 | 24   | 18   | 28,5 | 96   | 108  | 25/30/40/50 | 1,5      | 8                     | 350             |

## Cam levers

internal or external thread, stainless steel, thrust washer stainless steel



### Material:

Handle 1.4308 stainless steel.

Thrust washer 1.4034 stainless steel, hardened.

Hinge pin and stud 1.4305 stainless steel.

### Version:

Handle electropolished or blasted.

Thrust washer, hinge pin and screw bright.

### Sample order:

K0645.0541005X20 (include length L)

### Note:

The thrust washer face is lightly greased before delivery.

The grease is FDA conform and is suitable for use in the foodstuff and pharmaceutical industries.

# Cam levers

internal or external thread, stainless steel, thrust washer stainless steel



## KIPP Cam levers, stainless steel, with internal thread, thrust washer stainless steel

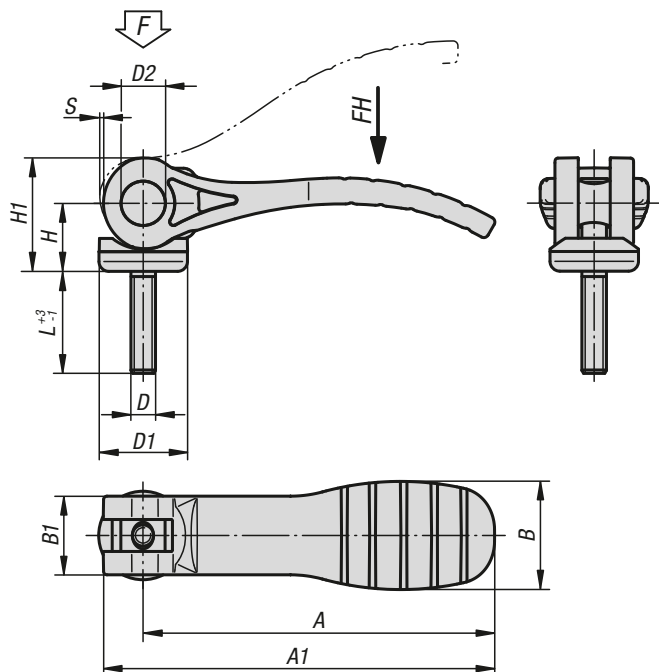
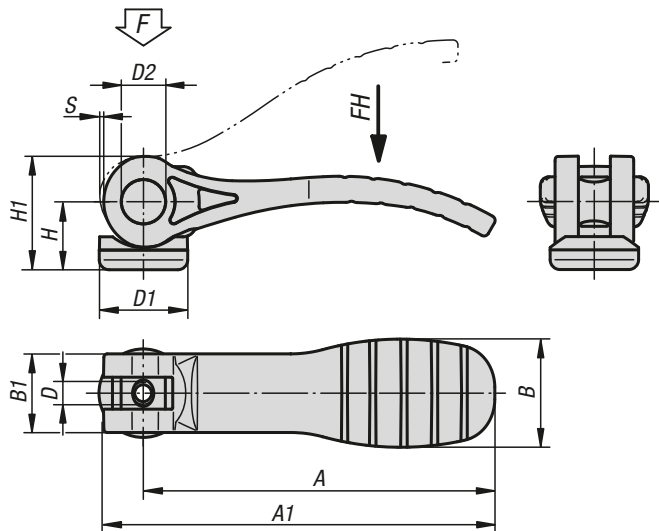
| Order No.<br>electropolished | Order No.<br>blasted | D  | D1   | D2 | B    | B1   | H    | H1   | A    | A1   | Travel<br>S | Clamping<br>force<br>F (kN) | Hand<br>force<br>FH N |
|------------------------------|----------------------|----|------|----|------|------|------|------|------|------|-------------|-----------------------------|-----------------------|
| K0645.9541003                | K0645.9541303        | M3 | 12   | 6  | 14,4 | 11,5 | 9    | 13,5 | 36,2 | 41,7 | 1           | 1,5                         | 90                    |
| K0645.9541004                | K0645.9541304        | M4 | 12   | 6  | 14,4 | 11,5 | 9    | 13,5 | 36,2 | 41,7 | 1           | 1,5                         | 90                    |
| K0645.0541004                | K0645.0541304        | M4 | 15,4 | 8  | 18   | 13   | 11,4 | 17,2 | 52,3 | 59,1 | 1           | 2,5                         | 100                   |
| K0645.0541005                | K0645.0541305        | M5 | 15,4 | 8  | 18   | 13   | 11,4 | 17,2 | 52,3 | 59,1 | 1           | 2,5                         | 100                   |
| K0645.1541005                | K0645.1541305        | M5 | 18   | 9  | 21,5 | 15   | 14,7 | 22   | 70,4 | 79,2 | 1,2         | 4                           | 120                   |
| K0645.1541006                | K0645.1541306        | M6 | 18   | 9  | 21,5 | 15   | 14,7 | 22   | 70,4 | 79,2 | 1,2         | 4                           | 120                   |
| K0645.2541008                | K0645.2541308        | M8 | 27   | 11 | 33,3 | 24   | 18,3 | 28,8 | 96   | 108  | 1,5         | 8                           | 350                   |

## KIPP Cam levers, stainless steel, with external thread, thrust washer stainless steel

| Order No.<br>electropolished | Order No.<br>blasted | D   | D1   | D2 | B    | B1   | H    | H1   | A    | A1   | L           | Travel<br>S | Clamping<br>force<br>F (kN) | Hand<br>force<br>FH N |
|------------------------------|----------------------|-----|------|----|------|------|------|------|------|------|-------------|-------------|-----------------------------|-----------------------|
| K0645.9541003X               | K0645.9541303X       | M3  | 12   | 6  | 14,4 | 11,5 | 9    | 13,5 | 36,2 | 41,7 | 10/15/30    | 1           | 1,5                         | 90                    |
| K0645.9541004X               | K0645.9541304X       | M4  | 12   | 6  | 14,4 | 11,5 | 9    | 13,5 | 36,2 | 41,7 | 10/15/30    | 1           | 1,5                         | 90                    |
| K0645.0541004X               | K0645.0541304X       | M4  | 15,4 | 8  | 18   | 13   | 11,4 | 17,2 | 52,3 | 59,1 | 15/20/30    | 1           | 2,5                         | 100                   |
| K0645.0541005X               | K0645.0541305X       | M5  | 15,4 | 8  | 18   | 13   | 11,4 | 17,2 | 52,3 | 59,1 | 20/30/40/50 | 1           | 2,5                         | 100                   |
| K0645.1541005X               | K0645.1541305X       | M5  | 18   | 9  | 21,5 | 15   | 14,7 | 22   | 70,4 | 79,2 | 20/30/40/50 | 1,2         | 4                           | 120                   |
| K0645.1541006X               | K0645.1541306X       | M6  | 18   | 9  | 21,5 | 15   | 14,7 | 22   | 70,4 | 79,2 | 20/30/40/50 | 1,2         | 4                           | 120                   |
| K0645.2541008X               | K0645.2541308X       | M8  | 27   | 11 | 33,3 | 24   | 18,3 | 28,8 | 96   | 108  | 25/30/40/50 | 1,5         | 8                           | 350                   |
| K0645.2541010X               | K0645.2541310X       | M10 | 27   | 11 | 33,3 | 24   | 18,3 | 28,8 | 96   | 108  | 25/30/40/50 | 1,5         | 8                           | 350                   |

# Cam levers with plastic handle

internal and external thread, steel or stainless steel



## Material:

Grip and thrust washer plastic PA 66 fibreglass reinforced.  
Hinge pins stainless steel 1.4305.  
Studs and washer steel grade 5.8 or stainless steel 1.4305.

## Version:

Grip black or traffic red RAL3020.  
Thrust washer black.  
Hinge pin bright.  
Stud and washer trivalent blue passivated or bright stainless steel.

## Sample order:

K0646.1521105X20 (include length L)

## Note:

Plastics are subject to creeping under load (retardation), this can cause reduced clamping force.

# Cam levers with plastic handle

internal and external thread, steel or stainless steel



## KIPP Cam levers with black plastic grip and internal thread

| Order No.<br>steel | Order No.<br>stainless steel | D  | D1   | D2 | B  | B1   | H    | H1   | A    | A1   | Travel<br>S | Clamping<br>force<br>F (kN) | Hand<br>force<br>FH N |
|--------------------|------------------------------|----|------|----|----|------|------|------|------|------|-------------|-----------------------------|-----------------------|
| K0646.1521105      | K0646.1531105                | M5 | 18,1 | 9  | 22 | 16   | 14   | 23,4 | 71,5 | 79,6 | 1,15        | 2,5                         | 125                   |
| K0646.1521106      | K0646.1531106                | M6 | 18,1 | 9  | 22 | 16   | 14   | 23,4 | 71,5 | 79,6 | 1,15        | 2,5                         | 125                   |
| K0646.2521108      | K0646.2531108                | M8 | 27,1 | 11 | 33 | 24,2 | 16,2 | 27,7 | 100  | 110  | 1,5         | 5                           | 170                   |

## KIPP Cam levers with red plastic grip and internal thread

| Order No.<br>steel | Order No.<br>stainless steel | D  | D1   | D2 | B  | B1   | H    | H1   | A    | A1   | Travel<br>S | Clamping<br>force<br>F (kN) | Hand<br>force<br>FH N |
|--------------------|------------------------------|----|------|----|----|------|------|------|------|------|-------------|-----------------------------|-----------------------|
| K0646.15218405     | K0646.15318405               | M5 | 18,1 | 9  | 22 | 16   | 14   | 23,4 | 71,5 | 79,6 | 1,15        | 2,5                         | 125                   |
| K0646.15218406     | K0646.15318406               | M6 | 18,1 | 9  | 22 | 16   | 14   | 23,4 | 71,5 | 79,6 | 1,15        | 2,5                         | 125                   |
| K0646.25218408     | K0646.25318408               | M8 | 27,1 | 11 | 33 | 24,2 | 16,2 | 27,7 | 100  | 110  | 1,5         | 5                           | 170                   |

## KIPP Cam levers with black plastic grip and external thread

| Order No.<br>steel | Order No.<br>stainless steel | D   | D1   | D2 | B  | B1   | H    | H1   | A    | A1   | L           | Travel<br>S | Clamping<br>force<br>F (kN) | Hand<br>force<br>FH N |
|--------------------|------------------------------|-----|------|----|----|------|------|------|------|------|-------------|-------------|-----------------------------|-----------------------|
| K0646.1521105X     | K0646.1531105X               | M5  | 18,1 | 9  | 22 | 16   | 14   | 23,4 | 71,5 | 79,6 | 20/30/40/50 | 1,15        | 2,5                         | 125                   |
| K0646.1521106X     | K0646.1531106X               | M6  | 18,1 | 9  | 22 | 16   | 14   | 23,4 | 71,5 | 79,6 | 20/30/40/50 | 1,15        | 2,5                         | 125                   |
| K0646.2521108X     | K0646.2531108X               | M8  | 27,1 | 11 | 33 | 24,2 | 16,2 | 27,7 | 100  | 110  | 25/30/40/50 | 1,5         | 5                           | 170                   |
| K0646.2521110X     | K0646.2531110X               | M10 | 27,1 | 11 | 33 | 24,2 | 16,2 | 27,7 | 100  | 110  | 25/30/40/50 | 1,5         | 5                           | 170                   |

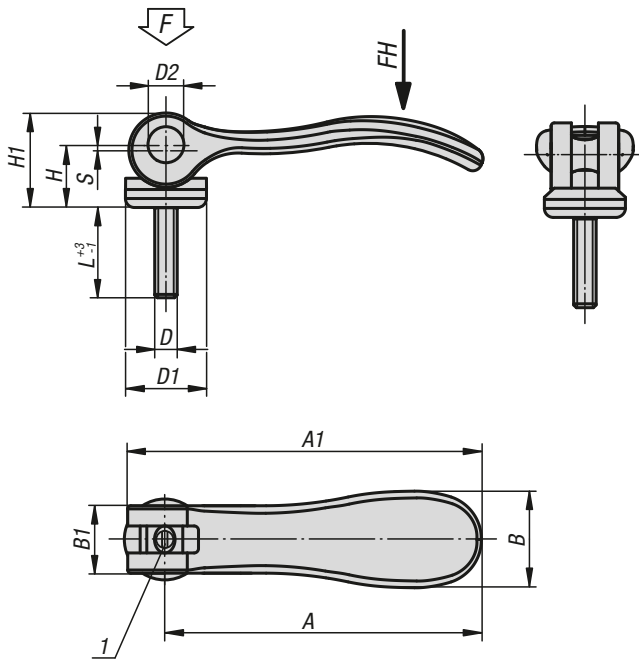
## KIPP Cam levers with red plastic grip and external thread

| Order No.<br>steel | Order No.<br>stainless steel | D   | D1   | D2 | B  | B1   | H    | H1   | A    | A1   | L           | Travel<br>S | Clamping<br>force<br>F (kN) | Hand<br>force<br>FH N |
|--------------------|------------------------------|-----|------|----|----|------|------|------|------|------|-------------|-------------|-----------------------------|-----------------------|
| K0646.15218405X    | K0646.15318405X              | M5  | 18,1 | 9  | 22 | 16   | 14   | 23,4 | 71,5 | 79,6 | 20/30/40/50 | 1,15        | 2,5                         | 125                   |
| K0646.15218406X    | K0646.15318406X              | M6  | 18,1 | 9  | 22 | 16   | 14   | 23,4 | 71,5 | 79,6 | 20/30/40/50 | 1,15        | 2,5                         | 125                   |
| K0646.25218408X    | K0646.25318408X              | M8  | 27,1 | 11 | 33 | 24,2 | 16,2 | 27,7 | 100  | 110  | 25/30/40/50 | 1,5         | 5                           | 170                   |
| K0646.25218410X    | K0646.25318410X              | M10 | 27,1 | 11 | 33 | 24,2 | 16,2 | 27,7 | 100  | 110  | 25/30/40/50 | 1,5         | 5                           | 170                   |



# Cam levers adjustable

external thread, steel or stainless steel



## Material:

Handles cast aluminium EN AC-46200.  
Thrust washer fibreglass reinforced plastic PA 66 GF 35-X.  
Hinge pins 1.4305 stainless steel.  
Screw and washer steel grade 5.8 or 1.4305 stainless steel.

## Version:

Handles fine structured powder-coated, black or red RAL 3003.  
Thrust washer black.  
Hinge pin bright.  
Studs and washer blue passivated steel or bright stainless steel.

## Sample order:

K0006.9501103X10 (include length L)

## Note:

Adjustable cam levers are used if the position of the lever relative to the axis of tension only permits one specific position (interference circle). The exact position of the lever is adjusted using a screwdriver on the fine thread setscrew.  
Plastics are subject to creeping under load (retardation).

## Drawing reference:

1) setscrew for fine adjustment of lever

# Cam levers adjustable

external thread, steel or stainless steel



## KIPP Adjustable cam levers with external thread, grip black

| Order No.<br>steel | Order No.<br>stainless steel | D   | D1   | D2 | B    | B1   | H    | H1   | A    | A1   | L           | Travel<br>S | Clamping<br>force<br>F (kN) | Hand<br>force<br>FH N |
|--------------------|------------------------------|-----|------|----|------|------|------|------|------|------|-------------|-------------|-----------------------------|-----------------------|
| K0006.9501103X     | K0006.9511103X               | M3  | 12   | 6  | 14,4 | 11,5 | 9    | 13   | 36,2 | 41,7 | 10/15/30    | 1           | 1,5                         | 90                    |
| K0006.9501104X     | K0006.9511104X               | M4  | 12   | 6  | 14,4 | 11,5 | 9    | 13   | 36,2 | 41,7 | 10/15/30    | 1           | 1,5                         | 90                    |
| K0006.0501104X     | K0006.0511104X               | M4  | 15,4 | 8  | 18   | 13   | 11,2 | 17   | 52,3 | 59,1 | 15/20/30    | 1           | 2,5                         | 100                   |
| K0006.0501105X     | K0006.0511105X               | M5  | 15,4 | 8  | 18   | 13   | 11,2 | 17   | 52,3 | 59,1 | 20/30/40/50 | 1           | 2,5                         | 100                   |
| K0006.1501105X     | K0006.1511105X               | M5  | 18,1 | 9  | 21,5 | 15   | 14,5 | 22   | 70,4 | 79,2 | 20/30/40/50 | 1,2         | 4                           | 120                   |
| K0006.1501106X     | K0006.1511106X               | M6  | 18,1 | 9  | 21,5 | 15   | 14,5 | 22   | 70,4 | 79,2 | 20/30/40/50 | 1,2         | 4                           | 120                   |
| K0006.2501108X     | K0006.2511108X               | M8  | 27,1 | 11 | 33,3 | 24   | 18   | 28,5 | 96   | 108  | 25/30/40/50 | 1,5         | 8                           | 350                   |
| K0006.2501110X     | K0006.2511110X               | M10 | 27,1 | 11 | 33,3 | 24   | 18   | 28,5 | 96   | 108  | 25/30/40/50 | 1,5         | 8                           | 350                   |

## KIPP Adjustable cam levers with external thread, grip red

| Order No.<br>steel | Order No.<br>stainless steel | D   | D1   | D2 | B    | B1   | H    | H1   | A    | A1   | L           | Travel<br>S | Clamping<br>force<br>F (kN) | Hand<br>force<br>FH N |
|--------------------|------------------------------|-----|------|----|------|------|------|------|------|------|-------------|-------------|-----------------------------|-----------------------|
| K0006.9501403X     | K0006.9511403X               | M3  | 12   | 6  | 14,4 | 11,5 | 9    | 13   | 36,2 | 41,7 | 10/15/30    | 1           | 1,5                         | 90                    |
| K0006.9501404X     | K0006.9511404X               | M4  | 12   | 6  | 14,4 | 11,5 | 9    | 13   | 36,2 | 41,7 | 10/15/30    | 1           | 1,5                         | 90                    |
| K0006.0501404X     | K0006.0511404X               | M4  | 15,4 | 8  | 18   | 13   | 11,2 | 17   | 52,3 | 59,1 | 15/20/30    | 1           | 2,5                         | 100                   |
| K0006.0501405X     | K0006.0511405X               | M5  | 15,4 | 8  | 18   | 13   | 11,2 | 17   | 52,3 | 59,1 | 20/30/40/50 | 1           | 2,5                         | 100                   |
| K0006.1501405X     | K0006.1511405X               | M5  | 18,1 | 9  | 21,5 | 15   | 14,5 | 22   | 70,4 | 79,2 | 20/30/40/50 | 1,2         | 4                           | 120                   |
| K0006.1501406X     | K0006.1511406X               | M6  | 18,1 | 9  | 21,5 | 15   | 14,5 | 22   | 70,4 | 79,2 | 20/30/40/50 | 1,2         | 4                           | 120                   |
| K0006.2501408X     | K0006.2511408X               | M8  | 27,1 | 11 | 33,3 | 24   | 18   | 28,5 | 96   | 108  | 25/30/40/50 | 1,5         | 8                           | 350                   |
| K0006.2501410X     | K0006.2511410X               | M10 | 27,1 | 11 | 33,3 | 24   | 18   | 28,5 | 96   | 108  | 25/30/40/50 | 1,5         | 8                           | 350                   |

# Cam levers adjustable

external thread, steel



## Material:

Handle steel 1.0401.

Thrust washer plastic PA 66 GF 35-X fibreglass reinforced.

Hinge pin stainless steel 1.4305.

Stud and washer steel, grade 5.8.

## Version:

Handle, stud and washer trivalent blue passivated.

Thrust washer black.

Hinge pin bright.

## Sample order:

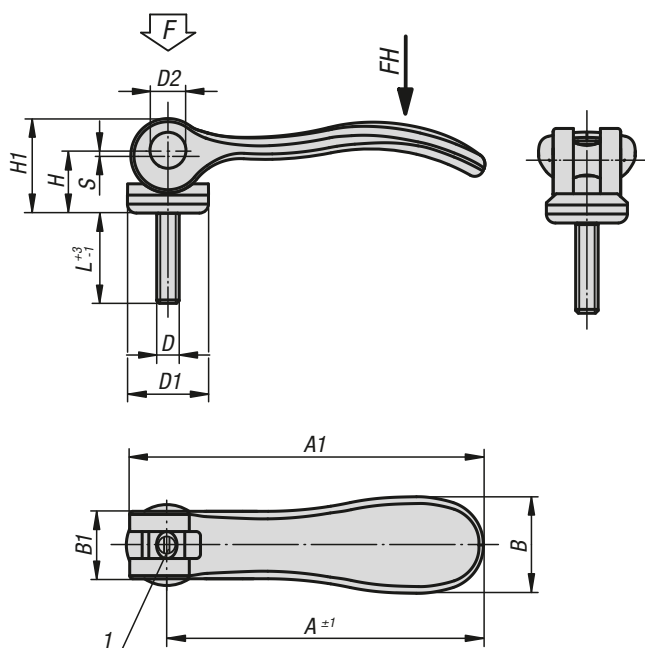
K0789.1502205X20

## Note:

Adjustable cam levers are used if the position of the lever relative to the axis of tension only permits one specific position (interference circle). The exact position of the lever is adjusted using a screwdriver on the fine thread setscrew. Plastics are subject to creeping under load (retardation).

## Drawing reference:

1) setscrew for fine adjustment of lever

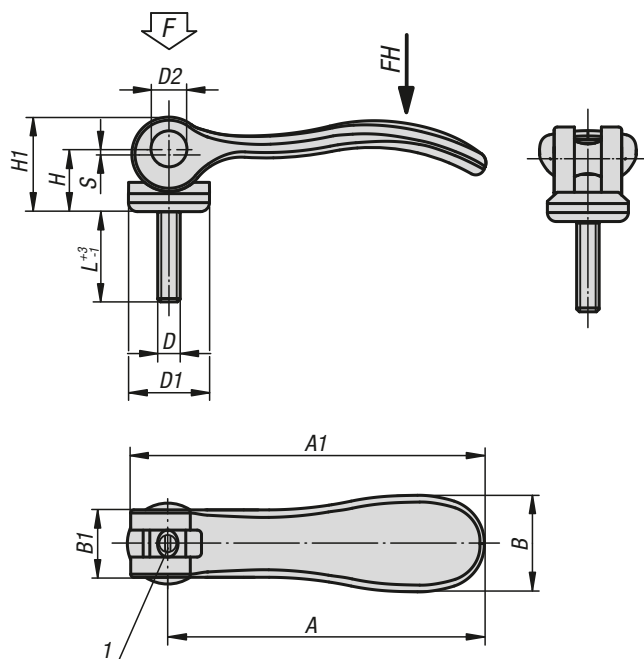


## KIPP Cam levers, adjustable, external thread, steel

| Order No.      | D   | D1   | D2 | B    | B1 | H    | H1   | A    | A1   | L           | Travel<br>S | Clamping<br>force<br>F (kN) | Hand<br>force<br>FH N |
|----------------|-----|------|----|------|----|------|------|------|------|-------------|-------------|-----------------------------|-----------------------|
| K0789.1502205X | M5  | 18,1 | 9  | 21,5 | 15 | 14,5 | 22   | 70,4 | 79,2 | 20/30/40/50 | 1,2         | 4                           | 120                   |
| K0789.1502206X | M6  | 18,1 | 9  | 21,5 | 15 | 14,5 | 22   | 70,4 | 79,2 | 20/30/40/50 | 1,2         | 4                           | 120                   |
| K0789.2502208X | M8  | 27,1 | 11 | 33,2 | 24 | 18   | 28,5 | 96   | 108  | 25/30/40/50 | 1,5         | 8                           | 350                   |
| K0789.2502210X | M10 | 27,1 | 11 | 33,2 | 24 | 18   | 28,5 | 96   | 108  | 25/30/40/50 | 1,5         | 8                           | 350                   |

# Cam levers adjustable

external thread, stainless steel



## Material:

Handles 1.4308 stainless steel.

Thrust washer plastic PA 66 GF 35-X, fibreglass reinforced.

Hinge pin, washer and screw 1.4305 stainless steel.

## Version:

Handle electropolished or blasted.

Thrust washer black.

Hinge pin, washer and screw bright.

## Sample order:

K0647.1512005X20 (include length L)

## Note:

Adjustable cam levers are used if the position of the lever relative to the axis of tension only permits one specific position (interference circle). The exact position of the lever is adjusted using a screwdriver on the fine thread setscrew. Plastics are subject to creeping under load (retardation).

## Drawing reference:

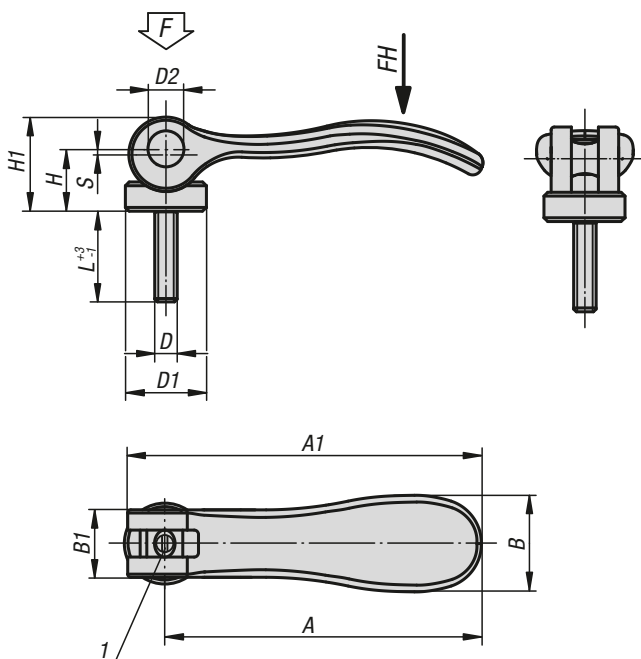
1) setscrew for fine adjustment of lever

## KIPP Cam levers, adjustable, external thread, stainless steel

| Order No.      | Surface finish body | D   | D1   | D2 | B    | B1   | H    | H1   | A    | A1   | L           | Travel S | Clamping force F (kN) | Hand force FH N |
|----------------|---------------------|-----|------|----|------|------|------|------|------|------|-------------|----------|-----------------------|-----------------|
| K0647.9512003X | electropolished     | M3  | 12   | 6  | 14,4 | 11,5 | 9    | 13   | 36,2 | 41,7 | 10/15/30    | 1        | 1,5                   | 90              |
| K0647.9512004X | electropolished     | M4  | 12   | 6  | 14,4 | 11,5 | 9    | 13   | 36,2 | 41,7 | 10/15/30    | 1        | 1,5                   | 90              |
| K0647.0512004X | electropolished     | M4  | 15,4 | 8  | 18   | 13   | 11,2 | 17   | 52,3 | 59,1 | 15/20/30    | 1        | 2,5                   | 100             |
| K0647.0512005X | electropolished     | M5  | 15,4 | 8  | 18   | 13   | 11,2 | 17   | 52,3 | 59,1 | 20/30/40/50 | 1        | 2,5                   | 100             |
| K0647.1512005X | electropolished     | M5  | 18,1 | 9  | 21,5 | 15   | 14,5 | 22   | 70,4 | 79,2 | 20/30/40/50 | 1,2      | 4                     | 120             |
| K0647.1512006X | electropolished     | M6  | 18,1 | 9  | 21,5 | 15   | 14,5 | 22   | 70,4 | 79,2 | 20/30/40/50 | 1,2      | 4                     | 120             |
| K0647.2512008X | electropolished     | M8  | 27,1 | 11 | 33,3 | 24   | 18   | 28,5 | 96   | 108  | 25/30/40/50 | 1,5      | 8                     | 350             |
| K0647.2512010X | electropolished     | M10 | 27,1 | 11 | 33,3 | 24   | 18   | 28,5 | 96   | 108  | 25/30/40/50 | 1,5      | 8                     | 350             |
| K0647.9512303X | blasted             | M3  | 12   | 6  | 14,4 | 11,5 | 9    | 13   | 36,2 | 41,7 | 10/15/30    | 1        | 1,5                   | 90              |
| K0647.9512304X | blasted             | M4  | 12   | 6  | 14,4 | 11,5 | 9    | 13   | 36,2 | 41,7 | 10/15/30    | 1        | 1,5                   | 90              |
| K0647.0512304X | blasted             | M4  | 15,4 | 8  | 18   | 13   | 11,2 | 17   | 52,3 | 59,1 | 15/20/30    | 1        | 2,5                   | 100             |
| K0647.0512305X | blasted             | M5  | 15,4 | 8  | 18   | 13   | 11,2 | 17   | 52,3 | 59,1 | 20/30/40/50 | 1        | 2,5                   | 100             |
| K0647.1512305X | blasted             | M5  | 18,1 | 9  | 21,5 | 15   | 14,5 | 22   | 70,4 | 79,2 | 20/30/40/50 | 1,2      | 4                     | 120             |
| K0647.1512306X | blasted             | M6  | 18,1 | 9  | 21,5 | 15   | 14,5 | 22   | 70,4 | 79,2 | 20/30/40/50 | 1,2      | 4                     | 120             |
| K0647.2512308X | blasted             | M8  | 27,1 | 11 | 33,3 | 24   | 18   | 28,5 | 96   | 108  | 25/30/40/50 | 1,5      | 8                     | 350             |
| K0647.2512310X | blasted             | M10 | 27,1 | 11 | 33,3 | 24   | 18   | 28,5 | 96   | 108  | 25/30/40/50 | 1,5      | 8                     | 350             |

# Cam levers adjustable

external thread, stainless steel, thrust washer stainless steel



## Material:

Handle 1.4308 stainless steel.

Thrust washer 1.4034 stainless steel, hardened.

Hinge pin and stud 1.4305 stainless steel.

## Version:

Handle electropolished or blasted.

Thrust washer, hinge pin and screw bright.

## Sample order:

K0647.0541305X20 (include length L)

## Note:

Adjustable cam levers are used when the position of the clamping lever relative to the clamping axis permits only one specific position (swing circle interference). The exact position of the clamping lever is adjusted with a screwdriver via the fine thread on the stud.

The thrust washer face is lightly greased before delivery. The grease is FDA conform and is suitable for use in the foodstuff and pharmaceutical industries.

## Drawing reference:

1) setscrew for fine adjustment of lever

## KIPP Cam levers adjustable, stainless steel, with external thread, thrust washer stainless steel

| Order No.      | D   | D1   | D2 | B    | B1   | H    | H1   | A    | A1   | L           | Travel<br>S | Clamping<br>force<br>F (kN) | Hand<br>force<br>FH N |
|----------------|-----|------|----|------|------|------|------|------|------|-------------|-------------|-----------------------------|-----------------------|
| K0647.9541003X | M3  | 12   | 6  | 14,4 | 11,5 | 9    | 13,5 | 36,2 | 41,7 | 10/15/30    | 1           | 1,5                         | 90                    |
| K0647.9541004X | M4  | 12   | 6  | 14,4 | 11,5 | 9    | 13,5 | 36,2 | 41,7 | 10/15/30    | 1           | 1,5                         | 90                    |
| K0647.0541004X | M4  | 15,4 | 8  | 18   | 13   | 11,4 | 17,2 | 52,3 | 59,1 | 15/20/30    | 1           | 2,5                         | 100                   |
| K0647.0541005X | M5  | 15,4 | 8  | 18   | 13   | 11,4 | 17,2 | 52,3 | 59,1 | 20/30/40/50 | 1           | 2,5                         | 100                   |
| K0647.1541005X | M5  | 18   | 9  | 21,5 | 15   | 14,7 | 22   | 70,4 | 79,2 | 20/30/40/50 | 1,2         | 4                           | 120                   |
| K0647.1541006X | M6  | 18   | 9  | 21,5 | 15   | 14,7 | 22   | 70,4 | 79,2 | 20/30/40/50 | 1,2         | 4                           | 120                   |
| K0647.2541008X | M8  | 27   | 11 | 33,3 | 24   | 18,3 | 28,8 | 96   | 108  | 25/30/40/50 | 1,5         | 8                           | 350                   |
| K0647.2541010X | M10 | 27   | 11 | 33,3 | 24   | 18,3 | 28,8 | 96   | 108  | 25/30/40/50 | 1,5         | 8                           | 350                   |

# Cam levers adjustable with plastic handle

external thread, steel or stainless steel



## Material:

Handles and thrust washer fiberglass reinforced plastic PA 66.  
Hinge pins 1.4305 stainless steel.  
Screw and washer steel quality class 5.8 or 1.4305 stainless steel.

## Version:

Grip black or traffic red RAL3020.  
Thrust washer black.  
Hinge pin bright.  
Stud and washer trivalent blue passivated or bright stainless steel.

## Sample order:

K0648.1521105X20 (include length L)

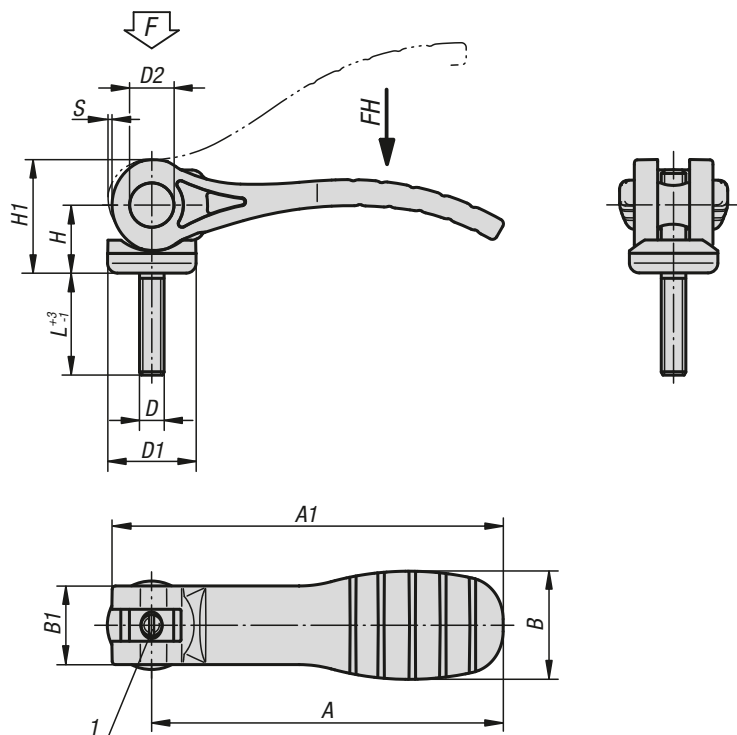
## Note:

Adjustable cam levers are used if the position of the lever relative to the axis of tension only permits one specific position (interference circle). The exact position of the lever is adjusted using a screwdriver on the fine thread setscrew.

Plastics are subject to creeping under load (retardation), this can cause reduced clamping force.

## Drawing reference:

1) setscrew for fine adjustment of lever



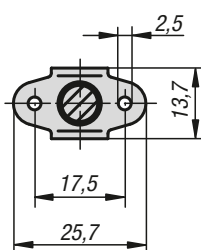
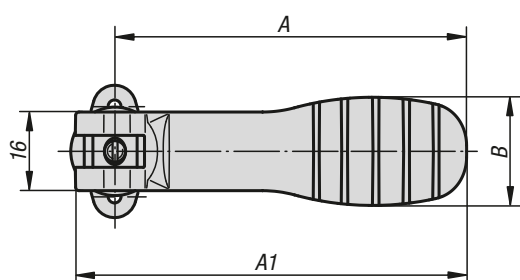
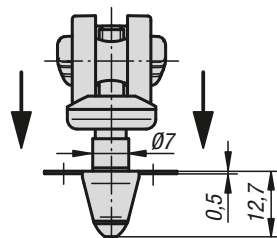
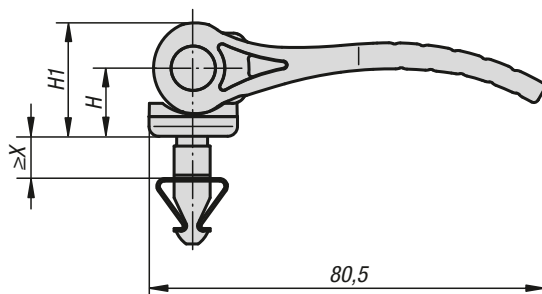
## KIPP Cam levers, adjustable with black plastic grip and external thread

| Order No.<br>steel | Order No.<br>stainless steel | D   | D1   | D2 | B  | B1 | H    | H1   | A    | A1   | L           | Travel<br>S | Clamping<br>force<br>F (kN) | Hand<br>force<br>FH N |
|--------------------|------------------------------|-----|------|----|----|----|------|------|------|------|-------------|-------------|-----------------------------|-----------------------|
| K0648.1521105X     | K0648.1531105X               | M5  | 18,1 | 9  | 22 | 16 | 14   | 23,4 | 71,5 | 79,6 | 20/30/40/50 | 1,15        | 2,5                         | 125                   |
| K0648.1521106X     | K0648.1531106X               | M6  | 18,1 | 9  | 22 | 16 | 14   | 23,4 | 71,5 | 79,6 | 20/30/40/50 | 1,15        | 2,5                         | 125                   |
| K0648.2521108X     | K0648.2531108X               | M8  | 27,1 | 11 | 33 | 24 | 16,2 | 27,7 | 100  | 110  | 25/30/40/50 | 1,5         | 5                           | 170                   |
| K0648.2521110X     | K0648.2531110X               | M10 | 27,1 | 11 | 33 | 24 | 16,2 | 27,7 | 100  | 110  | 25/30/40/50 | 1,5         | 5                           | 170                   |

## KIPP Cam levers, adjustable with red plastic grip and external thread

| Order No.<br>steel | Order No.<br>stainless steel | D   | D1   | D2 | B  | B1 | H    | H1   | A    | A1   | L           | Travel<br>S | Clamping<br>force<br>F (kN) | Hand<br>force<br>FH N |
|--------------------|------------------------------|-----|------|----|----|----|------|------|------|------|-------------|-------------|-----------------------------|-----------------------|
| K0648.15218405X    | K0648.15318405X              | M5  | 18,1 | 9  | 22 | 16 | 14   | 23,4 | 71,5 | 79,6 | 20/30/40/50 | 1,15        | 2,5                         | 125                   |
| K0648.15218406X    | K0648.15318406X              | M6  | 18,1 | 9  | 22 | 16 | 14   | 23,4 | 71,5 | 79,6 | 20/30/40/50 | 1,15        | 2,5                         | 125                   |
| K0648.25218408X    | K0648.25318408X              | M8  | 27,1 | 11 | 33 | 24 | 16,2 | 27,7 | 100  | 110  | 25/30/40/50 | 1,5         | 5                           | 170                   |
| K0648.25218410X    | K0648.25318410X              | M10 | 27,1 | 11 | 33 | 24 | 16,2 | 27,7 | 100  | 110  | 25/30/40/50 | 1,5         | 5                           | 170                   |

## Cam levers with quick lock



### Material, version:

Handle and thrust washer fibreglass reinforced PA66 plastic, black.  
Hinge pins bright 1.4305 stainless steel.  
Locking pin trivalent blue passivated 1.0718 steel.  
Spring clip trivalent passivated 1.4310 stainless steel.

### Sample order:

K0751.121107X2

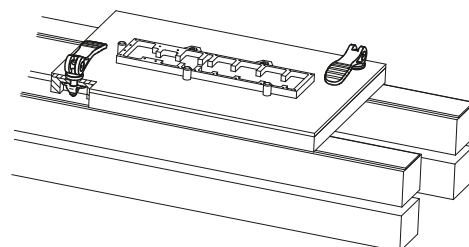
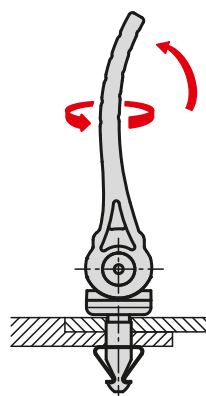
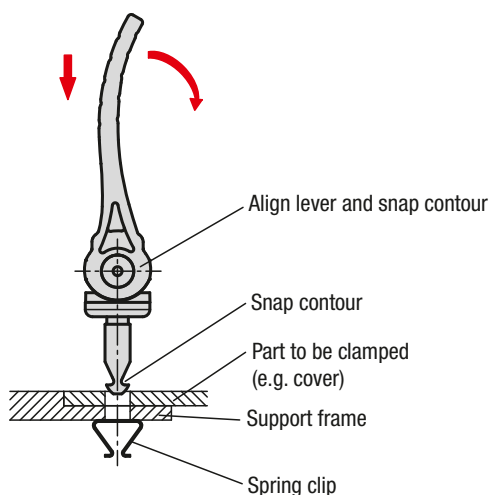
### Note:

A sheet metal element can be positioned by engaging the spring clip. The sheet metal element is then clamped using the handle.  
Plastics are subject to creeping under load (retardation), this can cause reduced clamping force.

## Installation instructions for cam levers with quick lock

Push in to install  
Swivel grip down to clamp

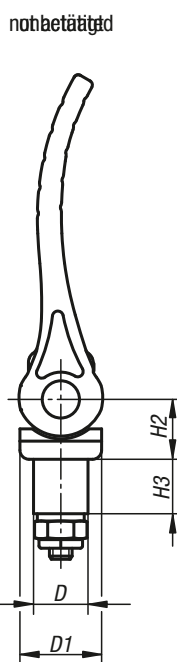
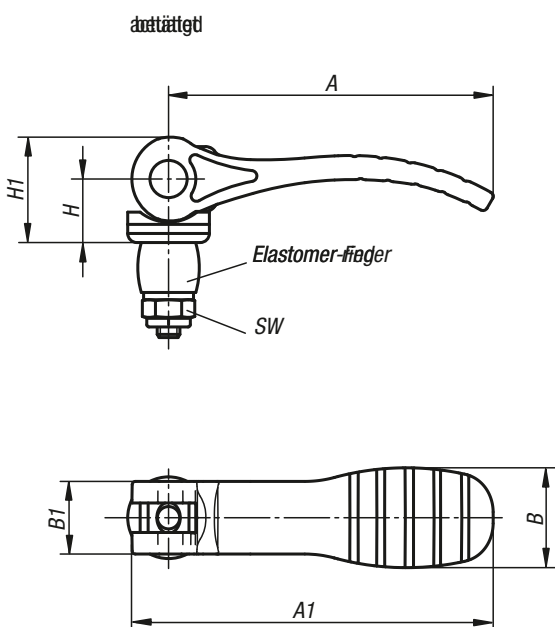
Swivel grip up and twist to loosen



## KIPP Cam levers with quick lock

| Order No.      | A    | A1   | B  | H  | H1   | X<br>Material thickness | Clamping<br>force<br>ca. N |
|----------------|------|------|----|----|------|-------------------------|----------------------------|
| K0751.121107X2 | 71,5 | 79,6 | 22 | 14 | 23,4 | 1,9 - 2,3               | 500                        |
| K0751.121107X4 | 71,5 | 79,6 | 22 | 14 | 23,4 | 3,9 - 4,3               | 500                        |
| K0751.121107X6 | 71,5 | 79,6 | 22 | 14 | 23,4 | 5,9 - 6,3               | 500                        |
| K0751.121107X8 | 71,5 | 79,6 | 22 | 14 | 23,4 | 7,9 - 8,3               | 500                        |

# Cam levers with elastomer lock



## Material:

Handle and thrust washer fibreglass reinforced plastic PA 66.  
Hinge pin 1.4305 stainless steel.  
Stud and washer steel grade 5.8.  
Expanding bush PUR elastomer.

## Version:

Handles and thrust washer black.  
Hinge pins bright.  
Screw, washer, locknut and thrust washer trivalent blue passivated.

## Sample order:

K0118.121112X12

## Note:

Actuating the handle causes the elastomer bush to expand and form to the surrounding surface.  
The amount of expansion of the elastomer bush and hence the clamping force can be adjusted by tightening or loosening the locknut.  
The thread lock in the nut also ensures that the preset clamping force remains unchanged when the clamp is released.

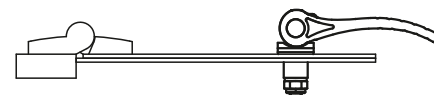
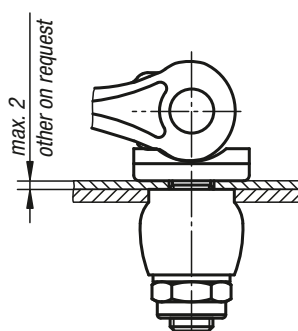
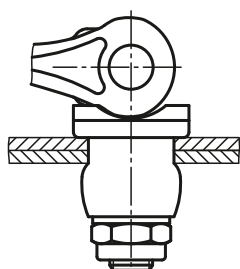
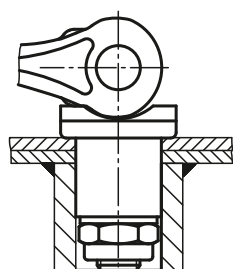
## Application:

The specified holding forces are not suitable for constant loads.  
We would be happy to supply samples to test on your application.

Full bore clamping

Sheet metal clamping 1

Sheet metal clamping 2



## KIPP Cam levers with elastomer lock

| Order No.       | D  | D1   | B  | B1 | H    | H1   | H2    | H3 | A    | A1   | SW | Clamping force ca. N<br>clamp bore<br>(no permanent load) | Clamping force ca. N<br>plate clamping<br>(no permanent load) |
|-----------------|----|------|----|----|------|------|-------|----|------|------|----|-----------------------------------------------------------|---------------------------------------------------------------|
| K0118.121112X12 | 12 | 18,1 | 22 | 16 | 14   | 23,2 | 12,85 | 12 | 71,5 | 79,6 | 10 | 100                                                       | 50                                                            |
| K0118.121114X12 | 14 | 18,1 | 22 | 16 | 14   | 23,2 | 12,85 | 12 | 71,5 | 79,6 | 10 | 150                                                       | 60                                                            |
| K0118.221116X20 | 16 | 27,1 | 33 | 24 | 16,2 | 27,8 | 14,7  | 20 | 99,9 | 110  | 13 | 350                                                       | 60                                                            |
| K0118.221118X20 | 18 | 27,1 | 33 | 24 | 16,2 | 27,8 | 14,7  | 20 | 99,9 | 110  | 13 | 350                                                       | 100                                                           |
| K0118.221120X20 | 20 | 27,1 | 33 | 24 | 16,2 | 27,8 | 14,7  | 20 | 99,9 | 110  | 16 | 350                                                       | 100                                                           |



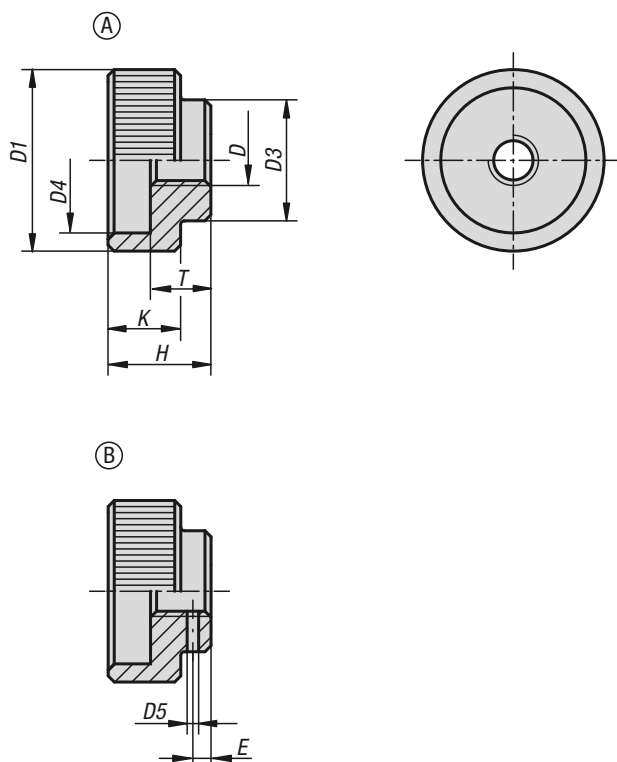


## Grips, knobs



## Knurled nuts

steel and stainless steel, DIN 6303



### Material:

Steel 1.0718.

Stainless steel 1.4305.

### Version:

Steel, black oxidised.

Stainless steel, bright.

### Sample order:

K0137.108

### Note:

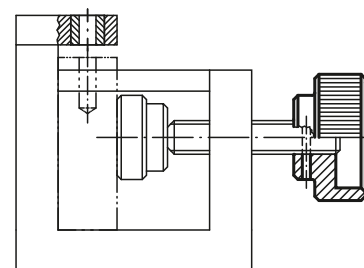
Due to the better haptics, a larger pitch was chosen contrary to DIN.

### Drawing reference:

Form A: without pin hole

Form B: with pin hole

- Drill through and ream pin hole during assembly.



## KIPP Knurled nuts, steel and stainless steel, DIN 6303

| Order No.  | Form | Main material   | D   | D1 | D3 | D4 | D5<br>predrilled | E   | H  | K  | T  | suitable<br>dowel pin<br>ISO 2338 |
|------------|------|-----------------|-----|----|----|----|------------------|-----|----|----|----|-----------------------------------|
| K0137.105  | A    | steel           | M5  | 20 | 14 | 15 | -                | -   | 12 | 8  | 7  | -                                 |
| K0137.106  | A    | steel           | M6  | 24 | 16 | 18 | -                | -   | 14 | 10 | 8  | -                                 |
| K0137.108  | A    | steel           | M8  | 30 | 20 | 24 | -                | -   | 17 | 12 | 10 | -                                 |
| K0137.110  | A    | steel           | M10 | 36 | 28 | 30 | -                | -   | 20 | 14 | 12 | -                                 |
| K0137.112  | A    | steel           | M12 | 40 | 32 | 34 | -                | -   | 24 | 16 | 14 | -                                 |
| K0137.1052 | A    | stainless steel | M5  | 20 | 14 | 15 | -                | -   | 12 | 8  | 7  | -                                 |
| K0137.1062 | A    | stainless steel | M6  | 24 | 16 | 18 | -                | -   | 14 | 10 | 8  | -                                 |
| K0137.1082 | A    | stainless steel | M8  | 30 | 20 | 24 | -                | -   | 17 | 12 | 10 | -                                 |
| K0137.1102 | A    | stainless steel | M10 | 36 | 28 | 30 | -                | -   | 20 | 14 | 12 | -                                 |
| K0137.1122 | A    | stainless steel | M12 | 40 | 32 | 34 | -                | -   | 24 | 16 | 14 | -                                 |
| K0137.205  | B    | steel           | M5  | 20 | 14 | 15 | 1,4              | 2,5 | 12 | 8  | 7  | 1,5                               |
| K0137.206  | B    | steel           | M6  | 24 | 16 | 18 | 1,4              | 2,5 | 14 | 10 | 8  | 1,5                               |
| K0137.208  | B    | steel           | M8  | 30 | 20 | 24 | 1,9              | 3   | 17 | 12 | 10 | 2                                 |
| K0137.210  | B    | steel           | M10 | 36 | 28 | 30 | 2,9              | 4   | 20 | 14 | 12 | 3                                 |
| K0137.212  | B    | steel           | M12 | 40 | 32 | 34 | 3,9              | 4   | 24 | 16 | 14 | 4                                 |

## Knurled nuts

plastic



### Material:

Black thermoset PF 31.  
Tapped bush brass.

### Version:

Tapped bush nickel-plated.

### Sample order:

K0138.08

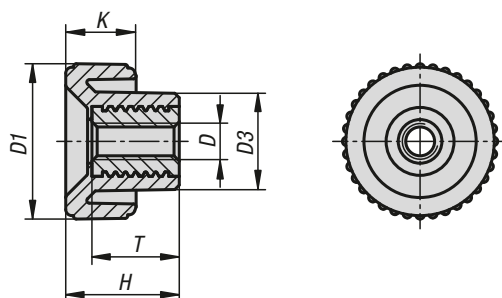
### KIPP Knurled nuts plastic

| Order No. | D   | D1 | D3 | D4 | H  | K  | T  |
|-----------|-----|----|----|----|----|----|----|
| K0138.04  | M4  | 18 | 10 | 7  | 13 | 8  | 9  |
| K0138.05  | M5  | 20 | 12 | 8  | 14 | 8  | 10 |
| K0138.06  | M6  | 24 | 13 | 9  | 16 | 9  | 10 |
| K0138.08  | M8  | 30 | 15 | 11 | 18 | 11 | 11 |
| K0138.10  | M10 | 35 | 18 | 14 | 19 | 12 | 11 |

# K1472

## Knurled nuts

plastic



### Material:

Body reinforced polyamide thermoplastic, black grey.  
Tapped bush 5.8 steel or stainless steel 1.4305.

### Version:

Tapped bush blue passivated steel or bright stainless steel.

### Sample order:

K1472.1804

### KIPP Knurled nuts plastic

| Order No.<br>steel | Order No.<br>stainless steel | D   | D1 | D3   | H  | K  | T  |
|--------------------|------------------------------|-----|----|------|----|----|----|
| K1472.1804         | K1472.18042                  | M4  | 18 | 11   | 13 | 8  | 10 |
| K1472.2005         | K1472.20052                  | M5  | 20 | 13,6 | 15 | 9  | 10 |
| K1472.2006         | K1472.20062                  | M6  | 20 | 13,6 | 15 | 9  | 10 |
| K1472.2505         | K1472.25052                  | M5  | 25 | 14   | 17 | 10 | 10 |
| K1472.2506         | K1472.25062                  | M6  | 25 | 14   | 17 | 10 | 10 |
| K1472.3208         | K1472.32082                  | M8  | 32 | 18   | 22 | 13 | 14 |
| K1472.3210         | K1472.32102                  | M10 | 32 | 18   | 22 | 13 | 14 |
| K1472.4008         | K1472.40082                  | M8  | 40 | 19   | 25 | 14 | 14 |
| K1472.4010         | K1472.40102                  | M10 | 40 | 19   | 25 | 14 | 14 |

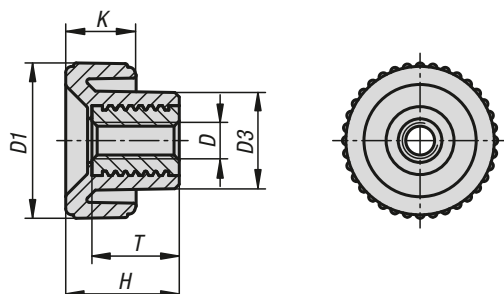
### Advantages:

The knurled nuts can be tightened or loosened without tools.

Suitable for manual fixating and clamping.

Various thread sizes.

# Knurled nuts plastic, antistatic


**Material:**

Reinforced polyamide thermoplastic, graphite grey.  
Screw steel 5.8.

**Version:**

Tapped bush trivalent blue passivated.

**Sample order:**

K1472.11180424

**Application:**

Sensitive electrical or electronic equipment, components and devices (ESD sensitive elements) may be damaged or destroyed by electrostatic discharges (ESD) in the immediate vicinity. Electrostatic discharges can come from people or through handling ESD sensitive components (e.g. during production, assembly, transport, storage etc).

Electrically conductive products which conform to DIN EN 61340-5-1 are essential within electronic environments to prevent an electrostatic discharge.

These products can be used for ESD applications or in ESD protection areas (EPA) in accordance with DIN EN 61340-5-1.

**Advantages:**

To protect sensitive electrical or electronic parts, components and devices.

Areas of application: electrical assembly, equipment construction according to ATEX directives.

Made from a special electrically conductive plastic.

ESD operating parts have been specially designed for use in ESD protected areas.

The knurled nuts can be tightened or loosened without tools.

**Safety:**

These ESD products can also be used for devices, components and protection systems in areas with high risk of explosion.

Use of these ESD products prevents the occurrence of electrostatic spark discharges, eliminating the potential ignition of gases and dusts which could lead to explosions in enclosed spaces.

Manufacturers and operators must use and conform to ATEX directives for the protection of persons working in areas with high risk of explosion.

These ESD products are certified by TÜV-Süd in relation to their electrical discharge capability.

**Target groups:**

Device manufacturers required to conform to ATEX product directive 2014/34/EU.

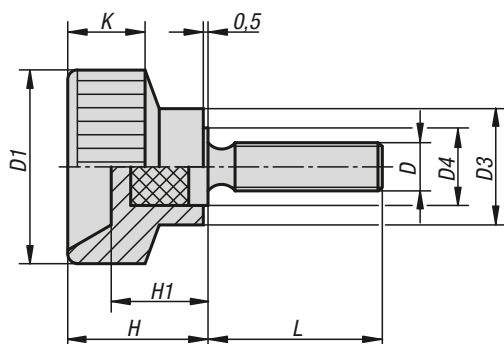
Operators required to conform to ATEX worker protection directive 1999/92/EC.

**KIPP Knurled nuts plastic, antistatic**

| Order No.      | D   | D1 | D3   | H  | K  | T  |
|----------------|-----|----|------|----|----|----|
| K1472.11180424 | M4  | 18 | 11   | 13 | 8  | 10 |
| K1472.11200524 | M5  | 20 | 13,6 | 15 | 9  | 10 |
| K1472.11250624 | M6  | 25 | 14   | 17 | 10 | 10 |
| K1472.11320824 | M8  | 32 | 18   | 22 | 13 | 14 |
| K1472.11401024 | M10 | 40 | 19   | 25 | 14 | 14 |

## Knurled screws

plastic



**Material:**  
Black thermoset PF 31.  
Screw steel.

**Version:**  
Screw electro zinc-plated.

**Sample order:**  
K0141.05X25 (include length L)

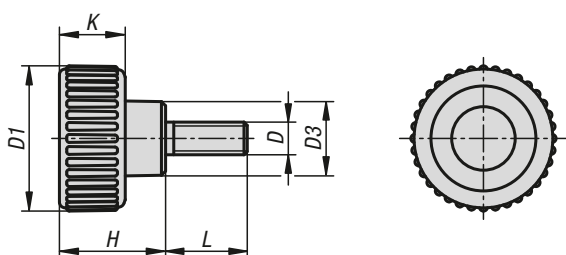
### KIPP Knurled screws, plastic

| Order No. | D   | D1 | D3 | D4 | H    | H1  | K  | L        |
|-----------|-----|----|----|----|------|-----|----|----------|
| K0141.04X | M4  | 18 | 10 | 7  | 13,5 | 9   | 8  | 15/20    |
| K0141.05X | M5  | 20 | 12 | 8  | 14,5 | 10  | 8  | 10/18/25 |
| K0141.06X | M6  | 24 | 13 | 10 | 15   | 9,5 | 9  | 20/28    |
| K0141.08X | M8  | 30 | 15 | 12 | 18   | 11  | 11 | 25/32    |
| K0141.10X | M10 | 35 | 18 | 14 | 18,5 | 11  | 12 | 30       |

## K1473

## Knurled screws

plastic



**Material:**  
Reinforced polyamide thermoplastic, black grey.  
Threaded pin 5.8 steel or stainless steel 1.4305.

**Version:**  
Threaded pin trivalent blue passivated steel, bright stainless steel.

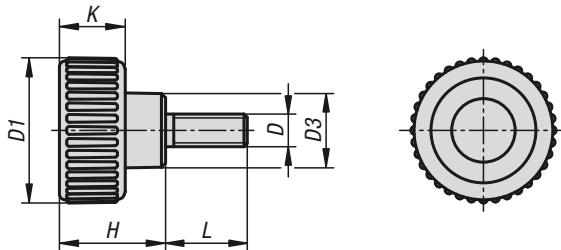
**Sample order:**  
K1473.2005X20 (include length L)

### KIPP Knurled screws plastic

| Order No.<br>steel | Order No.<br>stainless steel | D   | D1 | D3   | H  | K  | L              |
|--------------------|------------------------------|-----|----|------|----|----|----------------|
| K1473.1804X        | K1473.18042X                 | M4  | 18 | 9    | 13 | 8  | 10/15          |
| K1473.2005X        | K1473.20052X                 | M5  | 20 | 10,6 | 15 | 9  | 10/15/20       |
| K1473.2506X        | K1473.25062X                 | M6  | 25 | 12   | 17 | 10 | 10/15/20/30/40 |
| K1473.3208X        | K1473.32082X                 | M8  | 32 | 14   | 22 | 13 | 15/20/30/40    |
| K1473.4010X        | K1473.40102X                 | M10 | 40 | 18   | 25 | 14 | 20/30/40       |

**Advantages:**  
The knurled screws can be tightened or loosened without tools.  
Suitable for manual fixing and clamping.  
Various thread sizes and lengths.

# Knurled screws plastic, antistatic


**Material:**

Reinforced polyamide thermoplastic, graphite grey.  
Screw steel 5.8.

**Version:**

Screw blue passivated.

**Sample order:**

K1473.11200524X20 (include length L)

**Application:**

Sensitive electrical or electronic equipment, components and devices (ESD sensitive elements) may be damaged or destroyed by electrostatic discharges (ESD) in the immediate vicinity. Electrostatic discharges can come from people or through handling ESD sensitive components (e.g. during production, assembly, transport, storage etc).

Electrically conductive products which conform to DIN EN 61340-5-1 are essential within electronic environments to prevent an electrostatic discharge.

These products can be used for ESD applications or in ESD protection areas (EPA) in accordance with DIN EN 61340-5-1.

**Advantages:**

To protect sensitive electrical or electronic parts, components and devices.

Areas of application: electrical assembly, equipment construction according to ATEX directives.

Made from a special electrically conductive plastic.

ESD operating parts have been specially designed for use in ESD protected areas.

The knurled screws can be tightened or loosened without tools.

**Safety:**

These ESD products can also be used for devices, components and protection systems in areas with high risk of explosion.

Use of these ESD products prevents the occurrence of electrostatic spark discharges, eliminating the potential ignition of gases and dusts which could lead to explosions in enclosed spaces.

Manufacturers and operators must use and conform to ATEX directives for the protection of persons working in areas with high risk of explosion.

These ESD products are certified by TÜV-Süd in relation to their electrical discharge capability.

**Target groups:**

Device manufacturers required to conform to ATEX product directive 2014/34/EU.

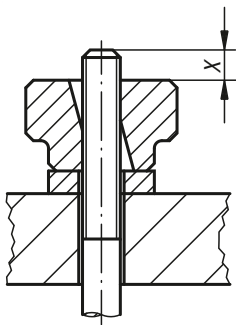
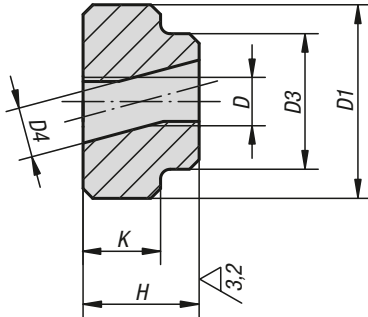
Operators required to conform to ATEX worker protection directive 1999/92/EC.

**KIPP Knurled screws plastic, antistatic**

| Order No.       | D   | D1 | D3   | H  | K  | L        |
|-----------------|-----|----|------|----|----|----------|
| K1473.11180424X | M4  | 18 | 9    | 13 | 8  | 10/15    |
| K1473.11200524X | M5  | 20 | 10,6 | 15 | 9  | 10/15/20 |
| K1473.11250624X | M6  | 25 | 12   | 17 | 10 | 10/15/20 |
| K1473.11320824X | M8  | 32 | 14   | 22 | 13 | 15/20/30 |
| K1473.11401024X | M10 | 40 | 18   | 25 | 14 | 20/30    |

## Knurled nuts quick-acting

steel or stainless steel



Quick-acting knurled nuts are mainly used in applications where no high clamping pressures are required.

Tilt the nut to slide on, then straighten it to engage the threads.

### Material:

High carbon steel or stainless steel 1.4404.

### Version:

Steel tempered and black oxidised.

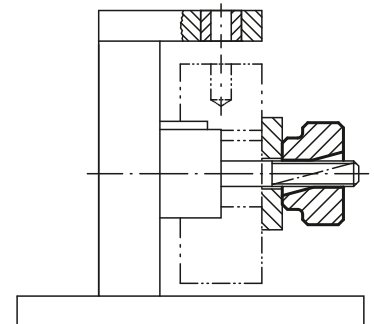
Stainless steel bright.

### Sample order:

K0139.08

### Drawing reference:

X: The stud should be several mm longer than height "H"



## KIPP Knurled nuts quick-acting steel or stainless steel

| Order No.<br>high carbon steel | Order No.<br>stainless steel | D   | D1 | D3 | D4   | H  | K  |
|--------------------------------|------------------------------|-----|----|----|------|----|----|
| K0139.04                       | K0139.104                    | M4  | 16 | 14 | 4,2  | 12 | 8  |
| K0139.05                       | K0139.105                    | M5  | 20 | 14 | 5,2  | 12 | 8  |
| K0139.06                       | K0139.106                    | M6  | 24 | 16 | 6,2  | 14 | 10 |
| K0139.08                       | K0139.108                    | M8  | 30 | 20 | 8,2  | 17 | 12 |
| K0139.10                       | K0139.110                    | M10 | 36 | 28 | 10,3 | 20 | 14 |
| K0139.12                       | K0139.112                    | M12 | 40 | 32 | 12,3 | 24 | 16 |



## Knurled nuts flat

steel and stainless steel, DIN 467

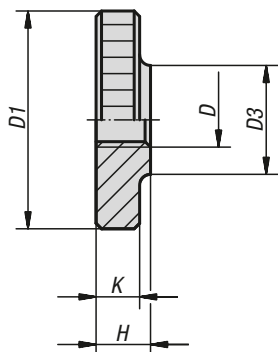


**Material:**  
Steel.  
Stainless steel 1.4305.

**Version:**  
Steel black oxidised.  
Stainless steel bright.

**Sample order:**  
K0144.042

**Note:**  
M12 flat knurled nuts are not included in the official standards sheet.



### KIPP Knurled nuts flat, steel and stainless steel, DIN 467

| Order No.<br>stainless steel | Order No.<br>steel | D   | D1 | D3 | H  | K   |
|------------------------------|--------------------|-----|----|----|----|-----|
| K0144.042                    | K0144.04           | M4  | 16 | 8  | 4  | 3,5 |
| K0144.052                    | K0144.05           | M5  | 20 | 10 | 5  | 4   |
| K0144.062                    | K0144.06           | M6  | 24 | 12 | 6  | 5   |
| K0144.082                    | K0144.08           | M8  | 30 | 16 | 8  | 6   |
| K0144.122                    | K0144.12           | M12 | 36 | 20 | 10 | 8   |
| K0144.102                    | K0144.10           | M10 | 36 | 20 | 10 | 8   |

# K0143

## Knurled nuts high form

steel and stainless steel, DIN 466

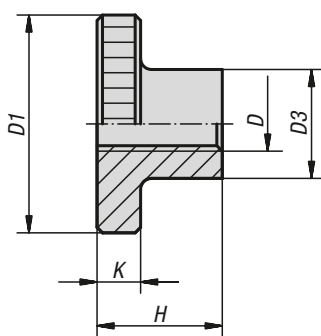


**Material:**  
Steel.  
Stainless steel 1.4305.

**Version:**  
Steel black oxidised.  
Stainless steel bright.

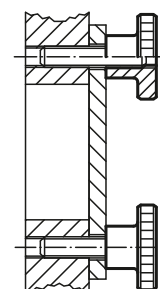
**Sample order:**  
K0143.04

**Note:**  
M12 high knurled nuts are not included in the official standards sheet.



### KIPP Knurled nuts high form steel and stainless steel, DIN 466

| Order No.<br>stainless steel | Order No.<br>steel | D   | D1 | D3 | H    | K   |
|------------------------------|--------------------|-----|----|----|------|-----|
| K0143.042                    | K0143.04           | M4  | 16 | 8  | 9,5  | 3,5 |
| K0143.052                    | K0143.05           | M5  | 20 | 10 | 11,5 | 4   |
| K0143.062                    | K0143.06           | M6  | 24 | 12 | 15   | 5   |
| K0143.082                    | K0143.08           | M8  | 30 | 16 | 18   | 6   |
| K0143.122                    | K0143.12           | M12 | 36 | 20 | 23   | 8   |
| K0143.102                    | K0143.10           | M10 | 36 | 20 | 23   | 8   |



# Knurled screws high form

steel and stainless steel, DIN 464



## Material:

Steel.  
Stainless steel 1.4305.

## Version:

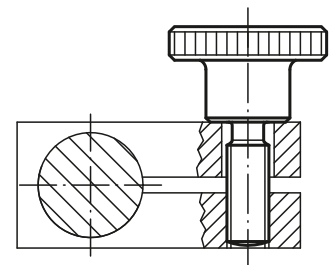
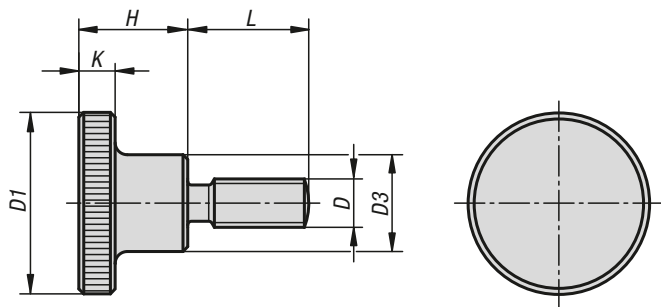
Steel, black oxidised.  
Stainless steel, bright.

## Sample order:

K0140.06X20 (include length L)

## Note:

\* Threads with these lengths have no undercut at the shoulder.

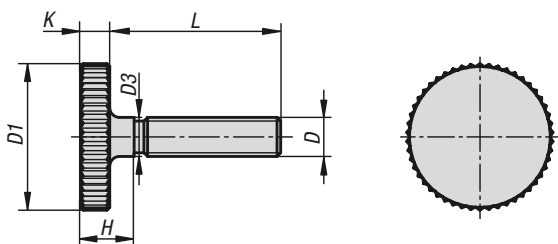


## KIPP Knurled screws high, steel and stainless steel, DIN 464

| Order No.<br>stainless steel | Order No.<br>steel | D   | D1 | D3 | H    | K   | L            |
|------------------------------|--------------------|-----|----|----|------|-----|--------------|
| K0140.042X                   | K0140.04X          | M4  | 16 | 8  | 9,5  | 3,5 | 10/16/20*    |
| K0140.052X                   | K0140.05X          | M5  | 20 | 10 | 11,5 | 4   | 10/16/20*    |
| K0140.062X                   | K0140.06X          | M6  | 24 | 12 | 15   | 5   | 10/16/20/25* |
| K0140.082X                   | K0140.08X          | M8  | 30 | 16 | 18   | 6   | 16/20/25/30* |
| K0140.102X                   | K0140.10X          | M10 | 36 | 20 | 23   | 8   | 20/25/30/40* |

## Knurled screws low head

steel and stainless steel, DIN 653



### KIPP Knurled screws low head, steel and stainless steel, DIN 653

| Order No.  | Main material   | D   | D1 | D3 | H   | K   | L                    |
|------------|-----------------|-----|----|----|-----|-----|----------------------|
| K1163.03X  | steel           | M3  | 12 | 3  | 4,5 | 2,5 | 10/12/16             |
| K1163.04X  | steel           | M4  | 16 | 4  | 6,5 | 3,5 | 8/10/12/16/20        |
| K1163.05X  | steel           | M5  | 20 | 5  | 7   | 4   | 10/12/16/20/25/30    |
| K1163.06X  | steel           | M6  | 24 | 6  | 9   | 5   | 12/16/20/25/30/35/40 |
| K1163.08X  | steel           | M8  | 30 | 8  | 11  | 6   | 16/20/25/30/35/40    |
| K1163.10X  | steel           | M10 | 36 | 10 | 14  | 8   | 20/25/30/35/40       |
| K1163.032X | stainless steel | M3  | 12 | 3  | 4,5 | 2,5 | 10/12/16             |
| K1163.042X | stainless steel | M4  | 16 | 4  | 6,5 | 3,5 | 8/10/12/16/20        |
| K1163.052X | stainless steel | M5  | 20 | 5  | 7   | 4   | 10/12/16/20/25/30    |
| K1163.062X | stainless steel | M6  | 24 | 6  | 9   | 5   | 12/16/20/25/30/35/40 |
| K1163.082X | stainless steel | M8  | 30 | 8  | 11  | 6   | 16/20/25/30          |
| K1163.102X | stainless steel | M10 | 36 | 10 | 14  | 8   | 20/25/30/40          |

#### Material:

Steel or stainless steel (A 1).

#### Version:

Steel grade 5.8, bright;  
Stainless steel, bright.

#### Sample order:

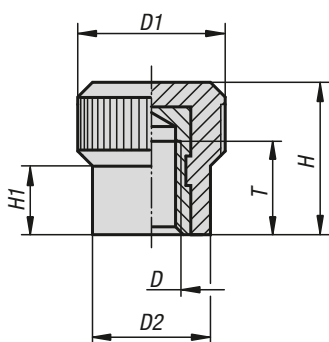
K1163.062X20 (include length L)

#### Note:

Delivery is according to DIN 653 or DIN 653-A.

# K0142

## Knurled knobs



#### Material:

Thermoset PF 31, black.  
Bush brass.

#### Version:

Tapped bush, bright

#### Sample order:

K0142.11203

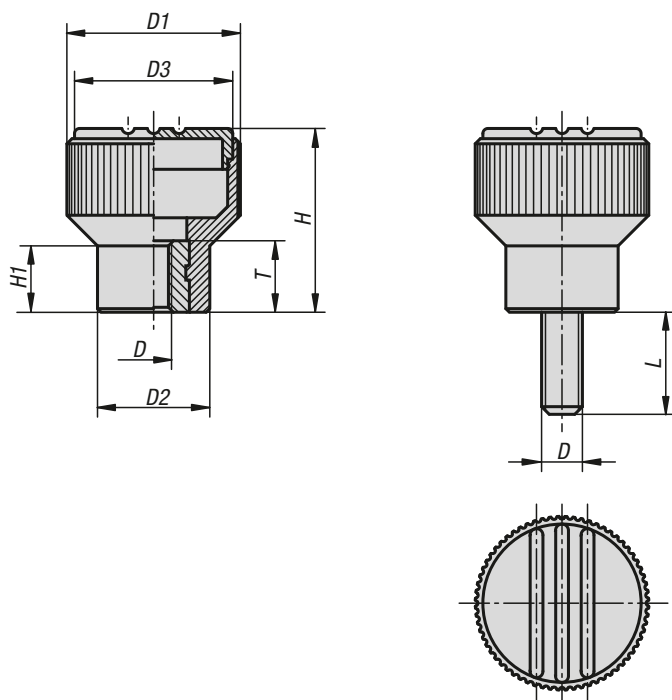
#### On request:

Other colours.

### KIPP Knurled knobs

| Order No.   | D  | D1 | D2 | H    | H1 | T   |
|-------------|----|----|----|------|----|-----|
| K0142.11203 | M3 | 13 | 10 | 13,5 | 6  | 6,5 |
| K0142.11204 | M4 | 13 | 10 | 13,5 | 6  | 10  |
| K0142.11504 | M4 | 15 | 12 | 15,5 | 7  | 10  |
| K0142.11505 | M5 | 15 | 12 | 15,5 | 7  | 10  |
| K0142.11506 | M6 | 15 | 12 | 15,5 | 7  | 9   |

## Knurled knobs

**Material:**

Black thermoplastic.

Bush and screw 5.8 steel or 1.4305 stainless steel.

**Version:**

Steel trivalent blue passivated, stainless steel bright.

**Sample order:**

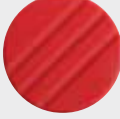
K0247.01056X20

(Cap colour traffic red. Include length L)

**Note:**

Δ Add the desired cap colour here.

No colour code is required for black grey caps.

|                                                                                                                    |                                                                                                                      |                                                                                                                       |                                                                                                                       |
|--------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| black grey<br><br>RAL 7021       | pure orange Δ = 1<br><br>RAL 2004 | signal green Δ = 2<br><br>RAL 6032 | traffic blue Δ = 3<br><br>RAL 5017 |
| light grey Δ = 5<br><br>RAL 7035 | traffic red Δ = 6<br><br>RAL 3020 | colza yellow Δ = 7<br><br>RAL 1021 |                                                                                                                       |

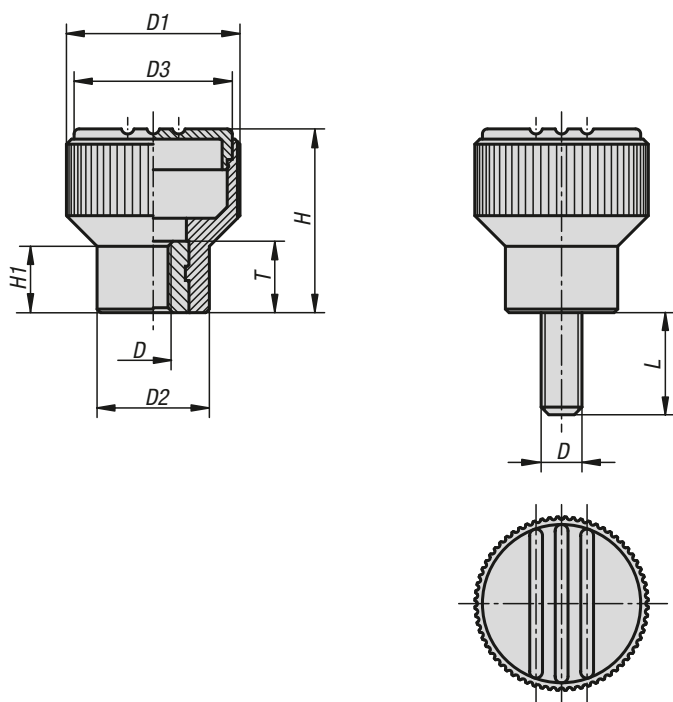
**KIPP Knurled knobs with internal thread**

| Order No.<br>stainless steel | Order No.<br>steel | D   | D1 | D2 | D3 | H  | H1  | T  |
|------------------------------|--------------------|-----|----|----|----|----|-----|----|
| K0247.0104Δ                  | K0247.104Δ         | M4  | 21 | 14 | 19 | 22 | 8   | 10 |
| K0247.0105Δ                  | K0247.105Δ         | M5  | 21 | 14 | 19 | 22 | 8   | 10 |
| K0247.0106Δ                  | K0247.106Δ         | M6  | 21 | 14 | 19 | 22 | 8   | 10 |
| K0247.0208Δ                  | K0247.208Δ         | M8  | 26 | 18 | 23 | 26 | 9,5 | 14 |
| K0247.0308Δ                  | K0247.308Δ         | M8  | 34 | 22 | 31 | 36 | 13  | 14 |
| K0247.0310Δ                  | K0247.310Δ         | M10 | 34 | 22 | 31 | 36 | 13  | 14 |

**KIPP Knurled knobs with external thread**

| Order No.<br>steel | Order No.<br>stainless steel | D   | D1 | D2 | D3 | H  | H1  | L              |
|--------------------|------------------------------|-----|----|----|----|----|-----|----------------|
| K0247.105ΔX        | K0247.0105ΔX                 | M5  | 21 | 14 | 19 | 22 | 8   | 10/12/15/20/25 |
| K0247.106ΔX        | K0247.0106ΔX                 | M6  | 21 | 14 | 19 | 22 | 8   | 15/20/25/30    |
| K0247.208ΔX        | K0247.0208ΔX                 | M8  | 26 | 18 | 23 | 26 | 9,5 | 20/25/30/40    |
| K0247.310ΔX        | K0247.0310ΔX                 | M10 | 34 | 22 | 31 | 36 | 13  | 20/30/40       |

## Knurled knobs biopolymer

**Material:**

Biopolymer, beech.  
Bush or threaded pin steel 5.8

**Version:**

Steel blue passivated.  
Natural beech with beech fibres or coloured black grey.

**Sample order:**

K0247.1010490

**Advantages:**

This biopolymer is manufactured entirely from renewable raw materials (oil free).  
Conservation of finite fossil resources.  
The wood fibres originate 100% from local, sustainably managed forests in Germany.

**Features:**

Excellent mechanical stability (certified with a minimum of 2x safety factor).  
Biopolymer is suitable for recycling (comparable to thermoplastics).  
Suitable for outdoor use (not biodegradable).  
Excellent resistance to strong acids and lyes.  
Short-term resistance to alcohol, fuel, mineral oil and grease.

**KIPP Knurled knobs biopolymer internal thread**

| Order No.      | Main colour         | D  | D1 | D2 | D3 | H  | H1 | T  |
|----------------|---------------------|----|----|----|----|----|----|----|
| K0247.10104143 | natural beech       | M4 | 21 | 14 | 19 | 22 | 8  | 10 |
| K0247.10105143 | natural beech       | M5 | 21 | 14 | 19 | 22 | 8  | 10 |
| K0247.10106143 | natural beech       | M6 | 21 | 14 | 19 | 22 | 8  | 10 |
| K0247.1010490  | black grey RAL 7021 | M4 | 21 | 14 | 19 | 22 | 8  | 10 |
| K0247.1010590  | black grey RAL 7021 | M5 | 21 | 14 | 19 | 22 | 8  | 10 |
| K0247.1010690  | black grey RAL 7021 | M6 | 21 | 14 | 19 | 22 | 8  | 10 |

**KIPP Knurled knobs biopolymer external thread**

| Order No.         | Main colour         | D  | D1 | D2 | D3 | H  | H1 | L  |
|-------------------|---------------------|----|----|----|----|----|----|----|
| K0247.10105143X10 | natural beech       | M5 | 21 | 14 | 19 | 22 | 8  | 10 |
| K0247.10106143X15 | natural beech       | M6 | 21 | 14 | 19 | 22 | 8  | 15 |
| K0247.1010590X10  | black grey RAL 7021 | M5 | 21 | 14 | 19 | 22 | 8  | 10 |
| K0247.1010690X15  | black grey RAL 7021 | M6 | 21 | 14 | 19 | 22 | 8  | 15 |

## Knurled knobs antistatic

**Material:**

Thermoplastic, graphite black.  
Bush or screw steel 5.8.

**Version:**

Screw blue passivated.

**Sample order:**

K0247.1110624

**Application:**

Sensitive electrical or electronic equipment, components and devices (ESD sensitive elements) may be damaged or destroyed by electrostatic discharges (ESD) in the immediate vicinity. Electrostatic discharges can come from people or through handling ESD sensitive components (e.g. during production, assembly, transport, storage etc).

Electrically conductive products which conform to DIN EN 61340-5-1 are essential within electronic environments to prevent an electrostatic discharge.

These products can be used for ESD applications or in ESD protection areas (EPA) in accordance with DIN EN 61340-5-1.

**Safety:**

These ESD products can also be used for devices, components and protection systems in areas with high risk of explosion.

Use of these ESD products prevents the occurrence of electrostatic spark discharges, eliminating the potential ignition of gases and dusts which could lead to explosions in enclosed spaces.

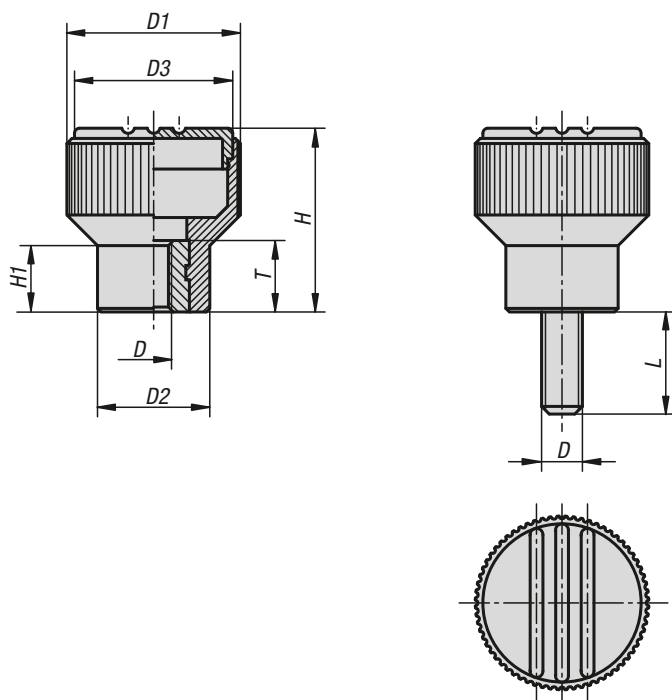
Manufacturers and operators must use and conform to ATEX directives for the protection of persons working in areas with high risk of explosion.

These ESD products are certified by TÜV-Süd in relation to their electrical discharge capability.

**Target groups:**

Device manufacturers required to conform to ATEX product directive 2014/34/EU.

Operators required to conform to ATEX worker protection directive 1999/92/EC.

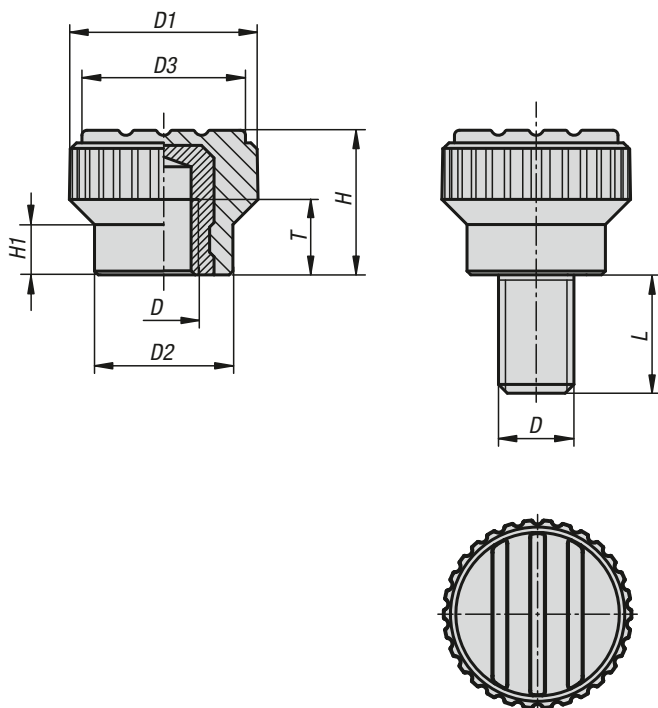
**KIPP Knurled knobs antistatic with internal thread**

| Order No.     | D  | D1 | D2 | D3 | H  | H1 | T  |
|---------------|----|----|----|----|----|----|----|
| K0247.1110624 | M6 | 21 | 14 | 19 | 22 | 8  | 10 |

**KIPP Knurled knobs antistatic with external thread**

| Order No.        | D  | D1 | D2 | D3 | H  | H1 | L  |
|------------------|----|----|----|----|----|----|----|
| K0247.1110624X15 | M6 | 21 | 14 | 19 | 22 | 8  | 15 |

## Knurled knobs

**Material:**

Grip black grey thermoplastic.

Bush brass or stainless steel 1.4305.

Screw steel 5.8 or stainless steel 1.4305.

**Version:**

Steel trivalent blue passivated.

Stainless steel, bright.

**Sample order:**

K0110.005X12 (include length L)

**On request:**

Other colours.

**KIPP Knurled knobs with internal thread**

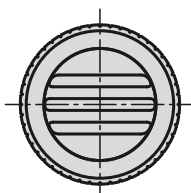
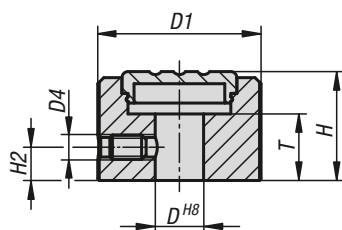
| Order No.  | Component material | D  | D1 | D2 | D3 | H    | H1  | T   |
|------------|--------------------|----|----|----|----|------|-----|-----|
| K0110.003  | brass              | M3 | 15 | 11 | 13 | 11,5 | 4,3 | 4,5 |
| K0110.004  | brass              | M4 | 15 | 11 | 13 | 11,5 | 4,3 | 6   |
| K0110.005  | brass              | M5 | 15 | 11 | 13 | 11,5 | 4,3 | 6   |
| K0110.0003 | stainless steel    | M3 | 15 | 11 | 13 | 11,5 | 4,3 | 4,5 |
| K0110.0004 | stainless steel    | M4 | 15 | 11 | 13 | 11,5 | 4,3 | 6   |
| K0110.0005 | stainless steel    | M5 | 15 | 11 | 13 | 11,5 | 4,3 | 6   |

**KIPP Knurled knobs with external thread**

| Order No.   | Component material | D  | D1 | D2 | D3 | H    | H1  | L           |
|-------------|--------------------|----|----|----|----|------|-----|-------------|
| K0110.003X  | steel              | M3 | 15 | 11 | 13 | 11,5 | 4,3 | 8/10/12/15  |
| K0110.004X  | steel              | M4 | 15 | 11 | 13 | 11,5 | 4,3 | 8/10/12/15  |
| K0110.005X  | steel              | M5 | 15 | 11 | 13 | 11,5 | 4,3 | 10/12/15/20 |
| K0110.006X  | steel              | M6 | 15 | 11 | 13 | 11,5 | 4,3 | 10/15/20/25 |
| K0110.0003X | stainless steel    | M3 | 15 | 11 | 13 | 11,5 | 4,3 | 8/10/12/15  |
| K0110.0004X | stainless steel    | M4 | 15 | 11 | 13 | 11,5 | 4,3 | 8/10/12/15  |
| K0110.0005X | stainless steel    | M5 | 15 | 11 | 13 | 11,5 | 4,3 | 10/12/15/20 |
| K0110.0006X | stainless steel    | M6 | 15 | 11 | 13 | 11,5 | 4,3 | 10/15/20/25 |

## Knurled knobs

aluminium



### Material:

Body aluminium.  
Cap thermoplastic PA6.  
Grub screw stainless steel.

### Version:

Body black anodised.  
Cap light grey RAL 7035.  
Grub screw bright.

### Sample order:

K1099.27085

### On request:

Other female threads, colours and special versions.

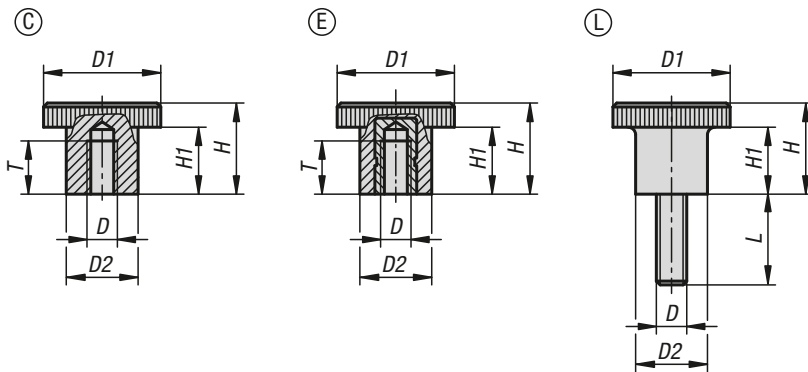


## KIPP Knurled knobs aluminium

| Order No.   | D  | D1 | D4 | H    | H2  | T  |
|-------------|----|----|----|------|-----|----|
| K1099.27085 | 8  | 27 | M4 | 18   | 5,5 | 11 |
| K1099.27105 | 10 | 27 | M4 | 18   | 5,5 | 11 |
| K1099.34105 | 10 | 34 | M5 | 21   | 7   | 14 |
| K1099.34125 | 12 | 34 | M5 | 21   | 7   | 14 |
| K1099.42125 | 12 | 42 | M5 | 24,5 | 8,5 | 15 |
| K1099.42145 | 14 | 42 | M5 | 24,5 | 8,5 | 15 |



## Knurled knobs



### Material:

Thermoset PF 31, black.

Screw, steel.

Tapped bush, steel or brass.

### Version:

Screw, electro zinc-plated.

Tapped bush, electro zinc-plated or bright brass.

### Sample order:

K1223.302205X10

### Drawing reference:

Form C: tapped blind hole

Form E: tapped bush

Form L: external thread

### KIPP Knurled knobs with internal thread

| Order No.    | Form | Component material | D  | D1 | D2 | H  | H1 | T   |
|--------------|------|--------------------|----|----|----|----|----|-----|
| K1223.102206 | C    | plastic            | M6 | 22 | 12 | 13 | 6  | 7,5 |
| K1223.102606 | C    | plastic            | M6 | 26 | 17 | 20 | 14 | 9   |
| K1223.212205 | E    | brass              | M5 | 22 | 12 | 13 | 6  | 6   |
| K1223.202606 | E    | steel              | M6 | 26 | 17 | 20 | 14 | 10  |
| K1223.202608 | E    | steel              | M8 | 26 | 17 | 20 | 14 | 12  |

### KIPP Knurled knobs with external thread

| Order No.     | Form | Component material | D  | D1 | D2 | H  | H1 | L           |
|---------------|------|--------------------|----|----|----|----|----|-------------|
| K1223.302205X | L    | steel              | M5 | 22 | 12 | 13 | 6  | 10/15/20    |
| K1223.302206X | L    | steel              | M6 | 22 | 12 | 13 | 6  | 10/15/20/30 |
| K1223.302606X | L    | steel              | M6 | 26 | 15 | 13 | 6  | 10/15/20/30 |
| K1223.302608X | L    | steel              | M8 | 26 | 15 | 13 | 6  | 15/20/30    |

## Knurled knobs

for hex head screws



### Material:

Thermoplastic.

### Version:

Black or orange.

### Sample order:

K1138.00040 (knurled knob colour black)

Colour code:

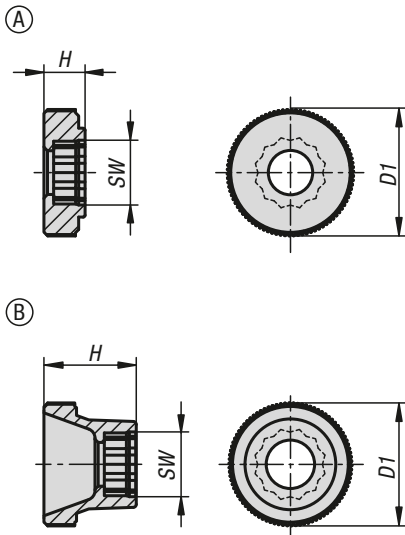
0=black

1=orange

### Note:

Suitable screws ISO 4014.

Δ add the desired colour code here



## KIPP Knurled knobs for screws with external hex

| Order No.   | Form | for screws | D1 | H    | SW |
|-------------|------|------------|----|------|----|
| K1138.0Δ040 | A    | M4         | 17 | 5,5  | 7  |
| K1138.0Δ050 | A    | M5         | 20 | 6,5  | 8  |
| K1138.0Δ060 | A    | M6         | 25 | 8    | 10 |
| K1138.0Δ080 | A    | M8         | 36 | 10   | 13 |
| K1138.0Δ100 | A    | M10        | 36 | 10   | 17 |
| K1138.1Δ040 | B    | M4         | 17 | 11,5 | 7  |
| K1138.1Δ050 | B    | M5         | 20 | 15   | 8  |
| K1138.1Δ060 | B    | M6         | 25 | 18   | 10 |
| K1138.1Δ080 | B    | M8         | 36 | 23   | 13 |
| K1138.1Δ100 | B    | M10        | 36 | 23   | 17 |

## Knurled heads

for hexagon socket screws



**Material:**

Thermoplastic.

**Version:**

Black, grey or red.

**Sample order:**

K0680.0506 (knurled head colour red)

Colour code:

5 = grey

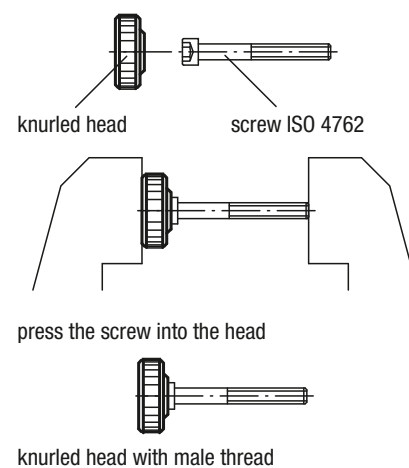
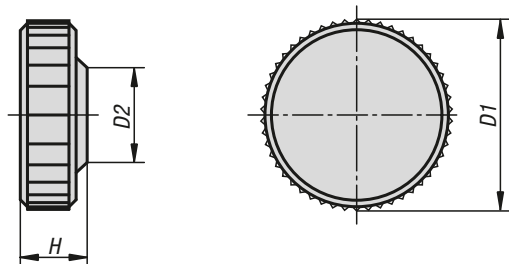
6 = red

**Note:**

Suitable screws ISO 4762.

Δ Add the desired colour code here.

No colour code is required for black.



### KIPP Knurled heads for hexagon socket screws

| Order No.  | D1  | D2   | H   | for cap screws |
|------------|-----|------|-----|----------------|
| K0680.030Δ | 9,5 | 8,3  | 4,5 | M3             |
| K0680.040Δ | 13  | 9,6  | 5   | M4             |
| K0680.050Δ | 16  | 11,5 | 6,5 | M5             |
| K0680.060Δ | 19  | 14   | 7,5 | M6             |
| K0680.061Δ | 26  | 13   | 8   | M6             |
| K0680.080Δ | 26  | 16   | 10  | M8             |

# Wing grips

for hexagon socket screws


**Material:**

Thermoplastic.

**Version:**

Black, grey or red.

**Sample order:**

K0681.0506 (wing grip colour red)

Colour code:

5 = grey

6 = red

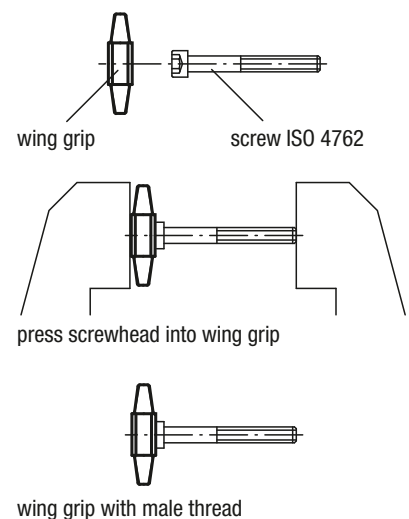
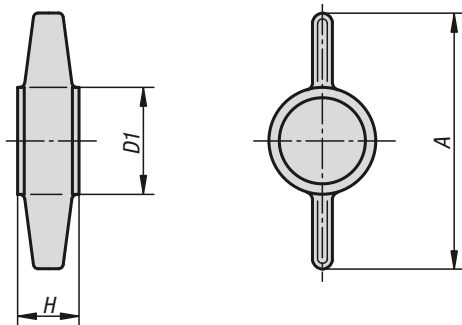
Δ Add the desired colour code here.

No colour code is required for black grips.

**Note:**

Suitable screws ISO 4762.

Δ Add the desired grip colour here. No colour code is required for black grips.



## KIPP Wing grips for hexagon socket screws

| Order No.  | A  | D1   | H    | for<br>cap<br>screws |
|------------|----|------|------|----------------------|
| K0681.050Δ | 26 | 12   | 7    | M5                   |
| K0681.060Δ | 30 | 13,5 | 8    | M6                   |
| K0681.080Δ | 38 | 17   | 10   | M8                   |
| K0681.100Δ | 45 | 20   | 12,5 | M10                  |

## Palm grips

aluminium, similar to DIN 6335



### Material:

Aluminium.  
Grub screw stainless steel 1.4305.  
Pin stainless steel 1.4310.

### Version:

Vibratory ground or ground and polished.  
Grub screw and pin bright.

### Sample order:

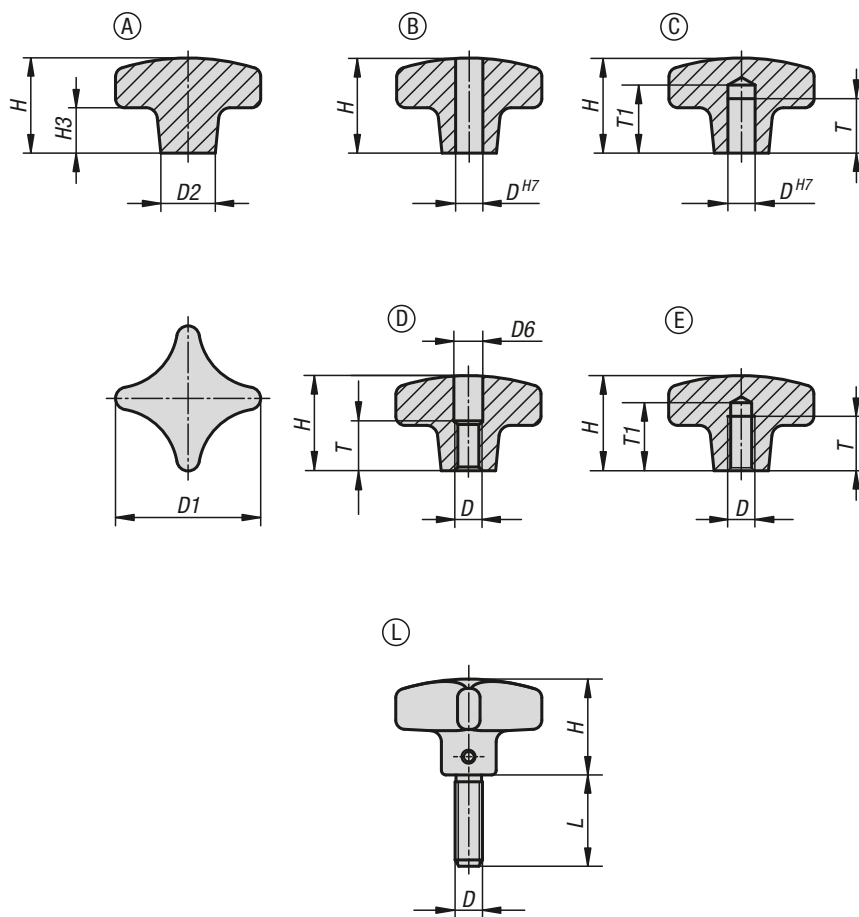
K0145.604008X20 (include length L.)

### On request:

Blank palm grips (not tumbled).

### Drawing reference:

Form A: blank  
Form B: drilled through  
Form C: blind hole  
Form D: tapped and counterbored  
Form E: tapped blind hole  
Form L: external thread



## KIPP Palm grips aluminium, similar to DIN 6335

| Order No.    | Form | Surface finish body | D1 | D2 | H  | H3 |
|--------------|------|---------------------|----|----|----|----|
| K0145.104008 | A    | tumbled             | 40 | 14 | 26 | 14 |
| K0145.105010 | A    | tumbled             | 50 | 18 | 34 | 20 |
| K0145.106312 | A    | tumbled             | 63 | 25 | 42 | 25 |
| K0145.108016 | A    | tumbled             | 80 | 25 | 52 | 30 |

# Palm grips

aluminium, similar to DIN 6335



## KIPP Palm grips similar to DIN 6335, aluminium

| Order No.<br>tumbled | Order No.<br>polished | Form | D  | D1 | D2 | H  |
|----------------------|-----------------------|------|----|----|----|----|
| K0145.204008         | K0145.2040082         | B    | 8  | 40 | 14 | 25 |
| K0145.205010         | K0145.2050102         | B    | 10 | 50 | 18 | 32 |
| K0145.206312         | K0145.2063122         | B    | 12 | 63 | 25 | 40 |
| K0145.208016         | K0145.2080162         | B    | 16 | 80 | 25 | 50 |

| Order No.<br>tumbled | Order No.<br>polished | Form | D  | D1 | D2 | H  | T  | T1 |
|----------------------|-----------------------|------|----|----|----|----|----|----|
| K0145.304008         | K0145.3040082         | C    | 8  | 40 | 14 | 25 | 15 | 18 |
| K0145.305010         | K0145.3050102         | C    | 10 | 50 | 18 | 32 | 18 | 21 |
| K0145.306312         | K0145.3063122         | C    | 12 | 63 | 25 | 40 | 22 | 25 |
| K0145.308016         | K0145.3080162         | C    | 16 | 80 | 25 | 50 | 28 | 32 |

| Order No.<br>tumbled | Order No.<br>polished | Form | D   | D1 | D2 | D6   | H  | T  |
|----------------------|-----------------------|------|-----|----|----|------|----|----|
| K0145.404008         | K0145.4040082         | D    | M8  | 40 | 14 | 8,4  | 25 | 15 |
| K0145.405010         | K0145.4050102         | D    | M10 | 50 | 18 | 10,5 | 32 | 18 |
| K0145.406312         | K0145.4063122         | D    | M12 | 63 | 25 | 13   | 40 | 22 |
| K0145.408016         | K0145.4080162         | D    | M16 | 80 | 25 | 17   | 50 | 28 |

| Order No.<br>tumbled | Order No.<br>polished | Form | D   | D1 | D2 | H  | T  | T1 |
|----------------------|-----------------------|------|-----|----|----|----|----|----|
| K0145.504008         | K0145.5040082         | E    | M8  | 40 | 14 | 25 | 15 | 18 |
| K0145.505010         | K0145.5050102         | E    | M10 | 50 | 18 | 32 | 18 | 21 |
| K0145.506312         | K0145.5063122         | E    | M12 | 63 | 25 | 40 | 22 | 25 |
| K0145.508016         | K0145.5080162         | E    | M16 | 80 | 25 | 50 | 28 | 32 |

| Order No.     | Form | Surface finish<br>body | D   | D1 | D2 | H  | L              |
|---------------|------|------------------------|-----|----|----|----|----------------|
| K0145.604008X | L    | tumbled                | M8  | 40 | 14 | 25 | 20/25/30/40/50 |
| K0145.605010X | L    | tumbled                | M10 | 50 | 18 | 32 | 20/25/30/40/50 |
| K0145.606312X | L    | tumbled                | M12 | 63 | 25 | 40 | 20/30/40/50    |

## Palm grips

stainless steel, similar to DIN 6335



### Material:

Stainless steel 1.4308.  
Grub screw stainless steel 1.4305.  
Pin stainless steel 1.4310.

### Version:

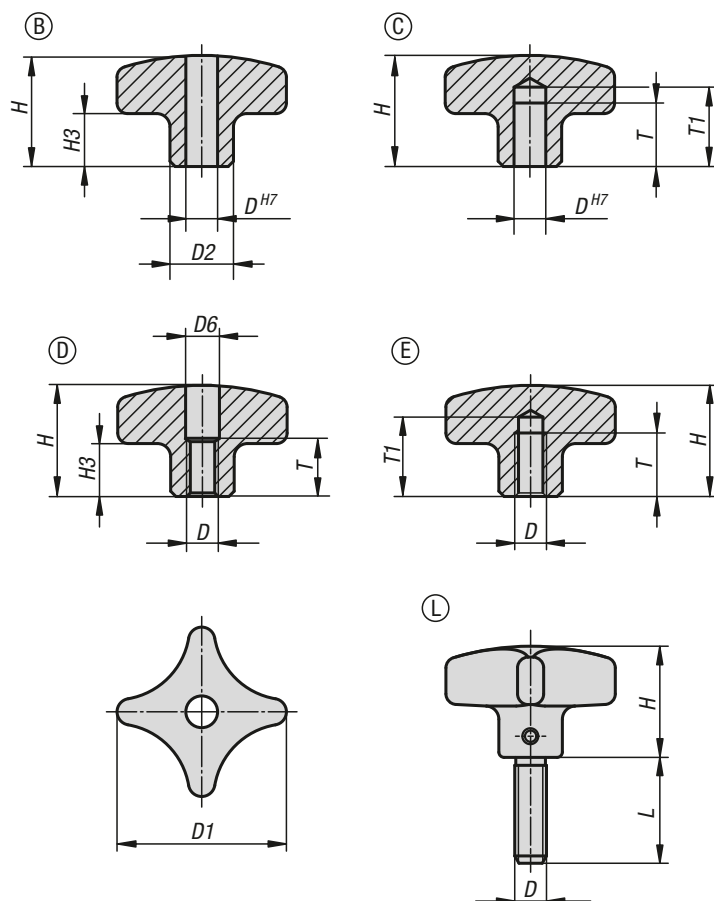
Ground and polished or blasted.  
Grub screw and pin bright.

### Sample order:

K0146.6032063X20 (include length L.)

### Drawing reference:

Form B: drilled through  
Form C: blind hole  
Form D: tapped and counterbored  
Form E: tapped blind hole  
Form L: external thread



# Palm grips

stainless steel, similar to DIN 6335



## KIPP Palm grips stainless steel, similar to DIN 6335

| Order No.<br>Form B | Order No.<br>Form C | Surface finish<br>body | D  | D1 | D2 | H  | H3 | T    | T1   |
|---------------------|---------------------|------------------------|----|----|----|----|----|------|------|
| K0146.2032062       | K0146.3032062       | polished               | 6  | 32 | 12 | 21 | 10 | -/12 | -/15 |
| K0146.2040082       | K0146.3040082       | polished               | 8  | 40 | 14 | 26 | 14 | -/15 | -/18 |
| K0146.2050102       | K0146.3050102       | polished               | 10 | 50 | 18 | 34 | 20 | -/18 | -/21 |
| K0146.2063122       | K0146.3063122       | polished               | 12 | 63 | 20 | 42 | 25 | -/22 | -/25 |
| K0146.2032063       | K0146.3032063       | blasted                | 6  | 32 | 12 | 21 | 10 | -/12 | -/15 |
| K0146.2040083       | K0146.3040083       | blasted                | 8  | 40 | 14 | 26 | 14 | -/15 | -/18 |
| K0146.2050103       | K0146.3050103       | blasted                | 10 | 50 | 18 | 34 | 20 | -/18 | -/21 |
| K0146.2063123       | K0146.3063123       | blasted                | 12 | 63 | 20 | 42 | 25 | -/22 | -/25 |



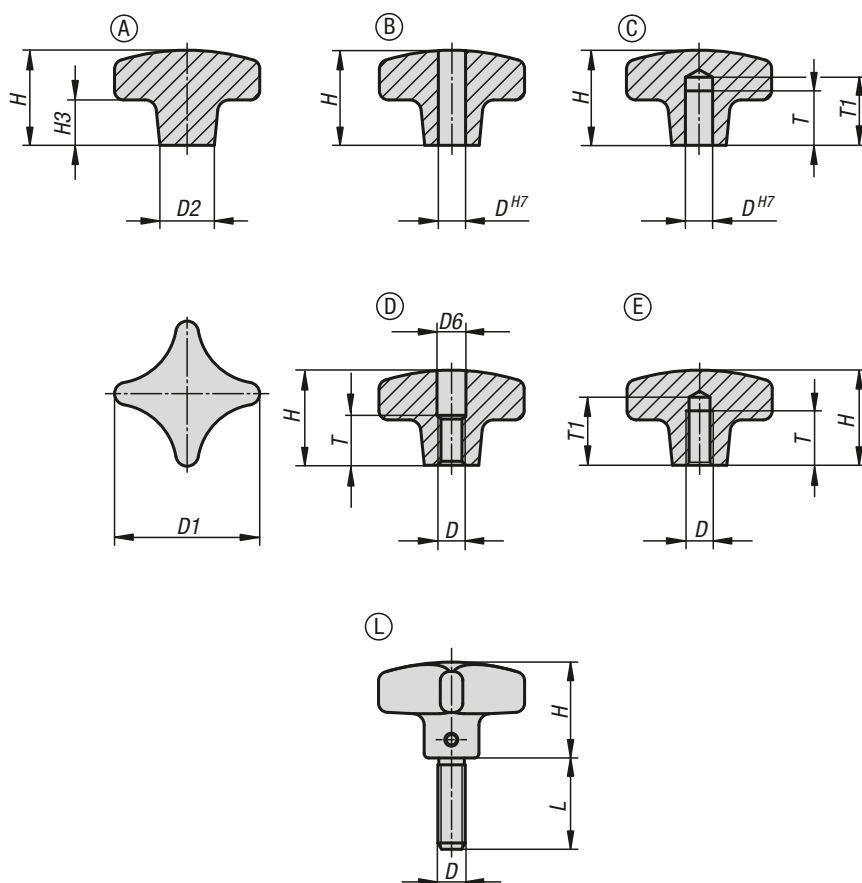
| Order No.<br>Form D | Order No.<br>Form E | Surface finish<br>body | D   | D1 | D2 | D6     | H  | H3 | T     | T1   |
|---------------------|---------------------|------------------------|-----|----|----|--------|----|----|-------|------|
| K0146.4032062       | K0146.5032062       | polished               | M6  | 32 | 12 | 6,4/-  | 21 | 10 | 11/12 | -/15 |
| K0146.4040082       | K0146.5040082       | polished               | M8  | 40 | 14 | 8,4/-  | 26 | 14 | 14/15 | -/18 |
| K0146.4050102       | K0146.5050102       | polished               | M10 | 50 | 18 | 10,5/- | 34 | 20 | 18    | -/21 |
| K0146.4063122       | K0146.5063122       | polished               | M12 | 63 | 20 | 13/-   | 42 | 25 | 22    | -/25 |
| K0146.4032063       | K0146.5032063       | blasted                | M6  | 32 | 12 | 6,4/-  | 21 | 10 | 11/12 | -/15 |
| K0146.4040083       | K0146.5040083       | blasted                | M8  | 40 | 14 | 8,4/-  | 26 | 14 | 14/15 | -/18 |
| K0146.4050103       | K0146.5050103       | blasted                | M10 | 50 | 18 | 10,5/- | 34 | 20 | 18    | -/21 |
| K0146.4063123       | K0146.5063123       | blasted                | M12 | 63 | 20 | 13/-   | 42 | 25 | 22    | -/25 |

| Order No.      | Form | Surface finish<br>body | D   | D1 | D2 | H  | H3 | L  |
|----------------|------|------------------------|-----|----|----|----|----|----|
| K0146.6032063X | L    | blasted                | M6  | 32 | 12 | 21 | 10 | 15 |
| K0146.6032063X | L    | blasted                | M6  | 32 | 12 | 21 | 10 | 20 |
| K0146.6032063X | L    | blasted                | M6  | 32 | 12 | 21 | 10 | 25 |
| K0146.6032063X | L    | blasted                | M6  | 32 | 12 | 21 | 10 | 30 |
| K0146.6032063X | L    | blasted                | M6  | 32 | 12 | 21 | 10 | 40 |
| K0146.6032063X | L    | blasted                | M6  | 32 | 12 | 21 | 10 | 50 |
| K0146.6040083X | L    | blasted                | M8  | 40 | 14 | 26 | 14 | 20 |
| K0146.6040083X | L    | blasted                | M8  | 40 | 14 | 26 | 14 | 25 |
| K0146.6040083X | L    | blasted                | M8  | 40 | 14 | 26 | 14 | 30 |
| K0146.6040083X | L    | blasted                | M8  | 40 | 14 | 26 | 14 | 40 |
| K0146.6040083X | L    | blasted                | M8  | 40 | 14 | 26 | 14 | 50 |
| K0146.6050103X | L    | blasted                | M10 | 50 | 18 | 34 | 20 | 20 |
| K0146.6050103X | L    | blasted                | M10 | 50 | 18 | 34 | 20 | 25 |
| K0146.6050103X | L    | blasted                | M10 | 50 | 18 | 34 | 20 | 30 |
| K0146.6050103X | L    | blasted                | M10 | 50 | 18 | 34 | 20 | 40 |
| K0146.6050103X | L    | blasted                | M10 | 50 | 18 | 34 | 20 | 50 |
| K0146.6063123X | L    | blasted                | M12 | 63 | 20 | 42 | 25 | 20 |
| K0146.6063123X | L    | blasted                | M12 | 63 | 20 | 42 | 25 | 30 |
| K0146.6063123X | L    | blasted                | M12 | 63 | 20 | 42 | 25 | 40 |
| K0146.6063123X | L    | blasted                | M12 | 63 | 20 | 42 | 25 | 50 |



## Palm grips

grey cast iron, DIN 6335



### Material:

Grey cast iron GJL 200.  
Grub screw stainless steel 1.4305.  
Pin stainless steel 1.4310.

### Version:

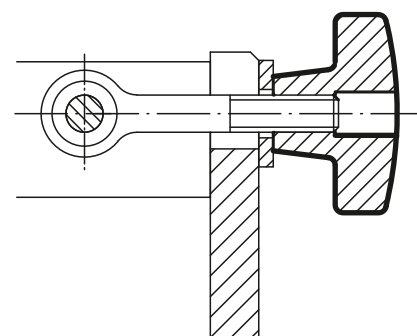
Vibratory ground, bright.  
Grub screw and pin bright.

### Sample order:

K0147.606X20 (include length L.)

### Drawing reference:

Form A: blank  
Form B: drilled through  
Form C: blind hole  
Form D: tapped and counterbored  
Form E: tapped blind hole  
Form L: external thread



# Palm grips

grey cast iron, DIN 6335



## KIPP Palm grips grey cast iron DIN 6335

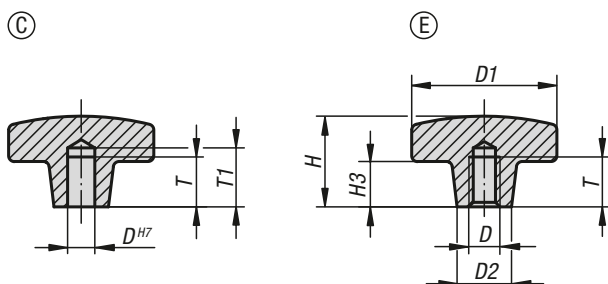
| Order No.<br>Form A | Order No.<br>Form B | Surface finish<br>body | D    | D1  | D2 | H     | H3 |
|---------------------|---------------------|------------------------|------|-----|----|-------|----|
| K0147.106           | K0147.206           | tumbled                | -/6  | 32  | 12 | 21/20 | 10 |
| K0147.108           | K0147.208           | tumbled                | -/8  | 40  | 14 | 26/25 | 14 |
| K0147.110           | K0147.210           | tumbled                | -/10 | 50  | 18 | 34/32 | 20 |
| K0147.112           | K0147.212           | tumbled                | -/12 | 63  | 20 | 42/40 | 25 |
| K0147.116           | K0147.216           | tumbled                | -/16 | 80  | 25 | 52/50 | 30 |
| K0147.120           | K0147.220           | tumbled                | -/20 | 100 | 32 | 65/63 | 38 |

| Order No.<br>Form C | Order No.<br>Form D | Order No.<br>Form E | Surface finish<br>body | D              | D1  | D2 | H  | H3 | T        | T1      |
|---------------------|---------------------|---------------------|------------------------|----------------|-----|----|----|----|----------|---------|
| K0147.306           | K0147.406           | K0147.506           | tumbled                | 6 / M6 / M6    | 32  | 12 | 20 | 10 | 12/10/12 | 15/-/15 |
| K0147.308           | K0147.408           | K0147.508           | tumbled                | 8 / M8 / M8    | 40  | 14 | 25 | 14 | 15/13/15 | 18/-/18 |
| K0147.310           | K0147.410           | K0147.510           | tumbled                | 10 / M10 / M10 | 50  | 18 | 32 | 20 | 18/16/18 | 21/-/21 |
| K0147.312           | K0147.412           | K0147.512           | tumbled                | 12 / M12 / M12 | 63  | 20 | 40 | 25 | 22/20/22 | 25/-/25 |
| K0147.316           | K0147.416           | K0147.516           | tumbled                | 16 / M16 / M16 | 80  | 25 | 50 | 30 | 28/20/28 | 32/-/32 |
| K0147.320           | K0147.420           | K0147.520           | tumbled                | 20 / M20 / M20 | 100 | 32 | 63 | 38 | 36/25/36 | 40/-/40 |

| Order No.  | Form | Surface finish<br>body | D   | D1 | H  | L                 |
|------------|------|------------------------|-----|----|----|-------------------|
| K0147.606X | L    | tumbled                | M6  | 32 | 20 | 15/20/25/30/40/50 |
| K0147.608X | L    | tumbled                | M8  | 40 | 25 | 20/25/30/40/50    |
| K0147.610X | L    | tumbled                | M10 | 50 | 32 | 20/25/30/40/50    |
| K0147.612X | L    | tumbled                | M12 | 63 | 40 | 20/30/40/50       |

## Palm grips

plastic coated grey cast iron, DIN 6335



### Material:

Grey cast iron GJL 200.

### Version:

Plastic coated.

### Sample order:

K0682.212

### Note:

Available colours:

Pure orange RAL 2004.

Jet black RAL 9005.

### Drawing reference:

Form C: blind hole

Form E: tapped blind hole

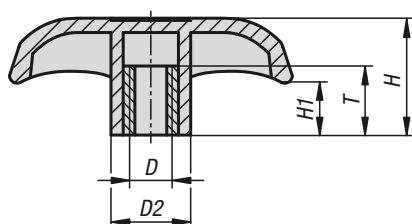
## KIPP Palm grips, plastic coated grey cast iron, DIN 6335

| Order No.<br>orange | Order No.<br>black | Form | D   | D1 | D2 | H  | H3 | T  | T1 |
|---------------------|--------------------|------|-----|----|----|----|----|----|----|
| K0682.108           | K0682.208          | C    | 8   | 40 | 14 | 26 | 14 | 15 | 18 |
| K0682.110           | K0682.210          | C    | 10  | 50 | 18 | 34 | 20 | 18 | 21 |
| K0682.112           | K0682.212          | C    | 12  | 63 | 20 | 42 | 25 | 22 | 25 |
| K0682.116           | K0682.216          | C    | 16  | 80 | 25 | 52 | 30 | 28 | 32 |
| K0682.308           | K0682.408          | E    | M8  | 40 | 14 | 26 | 14 | 15 | -  |
| K0682.310           | K0682.410          | E    | M10 | 50 | 18 | 34 | 20 | 18 | -  |
| K0682.312           | K0682.412          | E    | M12 | 63 | 20 | 42 | 25 | 22 | -  |
| K0682.316           | K0682.416          | E    | M16 | 80 | 25 | 52 | 30 | 28 | -  |

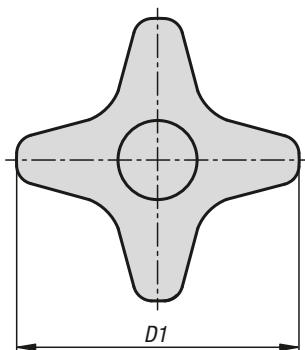
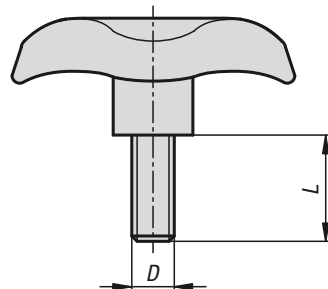
## Palm grips soft



(K)



(L)



### Material:

Body hard thermoplastic.  
Coating soft thermoplastic.  
Bush or screw steel 5.8.

### Version:

Body and coating black.  
Bush and screw electro zinc-plated.

### Sample order:

K0613.5108X20 (include length L)

### Note:

Palm grips with a soft gripping surface combine the stability of standard thermoplastic grips with the pleasant feel of the soft surface.  
The soft coating creates a sympathetic, non-slip surface allowing higher clamping forces while protecting the hand.

## KIPP Palm grips soft with internal thread

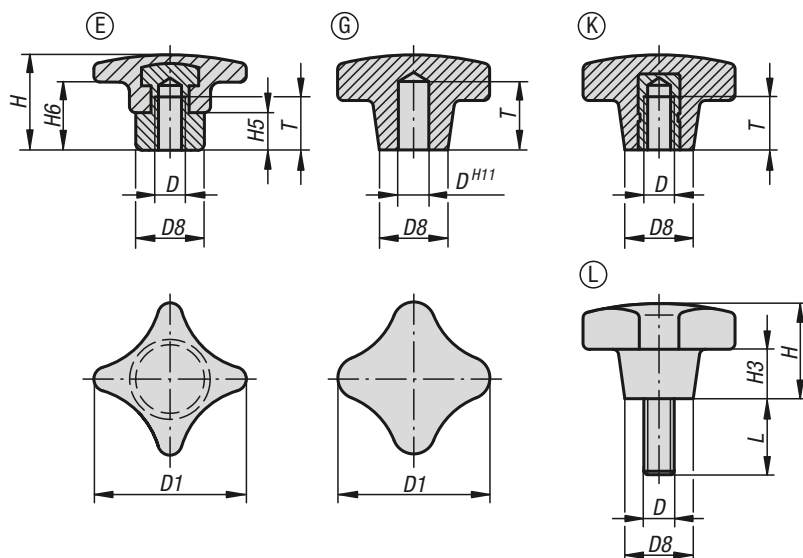
| Order No.  | Form | D   | D1 | D2   | H  | H1   | T  |
|------------|------|-----|----|------|----|------|----|
| K0613.5108 | K    | M8  | 51 | 15   | 22 | 10   | 13 |
| K0613.5110 | K    | M10 | 51 | 15   | 22 | 10   | 13 |
| K0613.7608 | K    | M8  | 76 | 19,5 | 28 | 13,5 | 20 |
| K0613.7610 | K    | M10 | 76 | 19,5 | 28 | 13,5 | 20 |
| K0613.7612 | K    | M12 | 76 | 19,5 | 28 | 13,5 | 20 |

## KIPP Palm grips soft with external thread

| Order No.   | Form | D   | D1 | D2   | H  | H1   | L        |
|-------------|------|-----|----|------|----|------|----------|
| K0613.5108X | L    | M8  | 51 | 15   | 23 | 10   | 20/40    |
| K0613.5110X | L    | M10 | 51 | 15   | 23 | 10   | 20/40    |
| K0613.7608X | L    | M8  | 76 | 19,5 | 30 | 13,5 | 20/40    |
| K0613.7610X | L    | M10 | 76 | 19,5 | 30 | 13,5 | 20/40    |
| K0613.7612X | L    | M12 | 76 | 19,5 | 30 | 13,5 | 20/30/40 |

## Palm grips

similar to DIN 6335



### Material:

Black thermoset PF 31.

Bush and screw electro zinc-plated steel.

### Version:

High-gloss polished.

### Sample order:

K0148.505X30 (include length L)

### Drawing reference:

Form E: projecting steel bush

Form G: blind hole

Form K: tapped bush

Form L: external thread

# Palm grips

similar to DIN 6335



## KIPP Palm grips similar to DIN 6335, Form E

| Order No. | Form | D   | D1 | D8 | H  | H5 | H6 | T  |
|-----------|------|-----|----|----|----|----|----|----|
| K0148.306 | E    | M6  | 32 | 12 | 23 | 9  | 12 | 12 |
| K0148.308 | E    | M8  | 40 | 14 | 26 | 10 | 13 | 15 |
| K0148.310 | E    | M10 | 50 | 18 | 32 | 12 | 18 | 18 |
| K0148.312 | E    | M12 | 63 | 20 | 40 | 14 | 23 | 22 |
| K0148.316 | E    | M16 | 80 | 25 | 50 | 17 | 28 | 28 |

## KIPP Palm grips similar to DIN 6335, Form G

| Order No. | Form | D  | D1 | D8 | H  | H3 | T  |
|-----------|------|----|----|----|----|----|----|
| K0148.405 | G    | 5  | 25 | 12 | 16 | 8  | 12 |
| K0148.406 | G    | 6  | 32 | 14 | 20 | 10 | 15 |
| K0148.408 | G    | 8  | 40 | 18 | 25 | 13 | 18 |
| K0148.410 | G    | 10 | 50 | 22 | 32 | 20 | 21 |
| K0148.412 | G    | 12 | 63 | 26 | 40 | 25 | 25 |

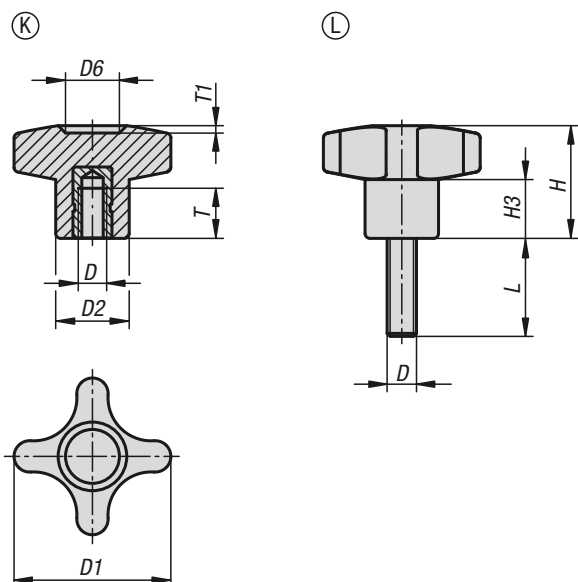
## KIPP Palm grips similar to DIN 6335, Form K

| Order No. | Form | D   | D1 | D8 | H  | H3 | T   |
|-----------|------|-----|----|----|----|----|-----|
| K0148.205 | K    | M5  | 25 | 12 | 16 | 8  | 9,5 |
| K0148.206 | K    | M6  | 32 | 14 | 20 | 10 | 12  |
| K0148.208 | K    | M8  | 40 | 18 | 25 | 13 | 14  |
| K0148.210 | K    | M10 | 50 | 22 | 32 | 20 | 18  |
| K0148.212 | K    | M12 | 63 | 26 | 40 | 25 | 22  |
| K0148.216 | K    | M16 | 80 | 35 | 50 | 30 | 30  |

## KIPP Palm grips similar to DIN 6335, Form L

| Order No.  | Form | D   | D1 | D8 | H  | H3 | L                    |
|------------|------|-----|----|----|----|----|----------------------|
| K0148.505X | L    | M5  | 25 | 12 | 16 | 8  | 15/20/25/30/40/50    |
| K0148.506X | L    | M6  | 32 | 14 | 20 | 10 | 15/20/25/30/40/50    |
| K0148.508X | L    | M8  | 40 | 18 | 25 | 13 | 20/25/30/35/40/45/50 |
| K0148.510X | L    | M10 | 50 | 22 | 32 | 20 | 20/25/30/35/40/45/50 |
| K0148.512X | L    | M12 | 63 | 26 | 40 | 25 | 20/30/40/50/60       |

## Palm grips



### Material:

Fibreglass reinforced thermoplastic.  
Tapped bush brass.  
Screw steel.

### Version:

Grip, black.  
Screw electro zinc-plated.

### Sample order:

K1089.43205X30 (include length L)

### KIPP Palm grips with internal thread

| Order No.   | Form | D   | D1 | D2 | D6 | H    | H3   | T  | T1  |
|-------------|------|-----|----|----|----|------|------|----|-----|
| K1089.23205 | K    | M5  | 32 | 15 | 11 | 23   | 12   | 14 | 1,5 |
| K1089.23206 | K    | M6  | 32 | 15 | 11 | 23   | 12   | 14 | 1,5 |
| K1089.24008 | K    | M8  | 40 | 16 | 13 | 24,5 | 12,5 | 14 | 1,5 |
| K1089.25010 | K    | M10 | 50 | 20 | 14 | 29   | 15   | 14 | 2   |
| K1089.26012 | K    | M12 | 60 | 24 | 18 | 34   | 18,5 | 18 | 2   |

### KIPP Palm grips with external thread

| Order No.    | Form | D   | D1 | D2   | D6   | H    | H3   | T1  | L           |
|--------------|------|-----|----|------|------|------|------|-----|-------------|
| K1089.43205X | L    | M5  | 32 | 15   | 11   | 23   | 11   | 1,5 | 16/20       |
| K1089.43206X | L    | M6  | 32 | 15   | 11   | 23   | 11   | 1,5 | 16/20/30    |
| K1089.43208X | L    | M8  | 32 | 15   | 11   | 23   | 11   | 1,5 | 16/20/30/40 |
| K1089.44006X | L    | M6  | 40 | 15,7 | 12   | 24,5 | 12,5 | 1   | 20/30       |
| K1089.44008X | L    | M8  | 40 | 15,7 | 12   | 24,5 | 12,5 | 1   | 20/30/40/50 |
| K1089.45008X | L    | M8  | 50 | 20   | 14,5 | 29   | 15   | 1,5 | 20/30/40    |
| K1089.45010X | L    | M10 | 50 | 20   | 14,5 | 29   | 15   | 1,5 | 20/30/40/50 |
| K1089.46010X | L    | M10 | 60 | 24   | 18   | 34   | 18,5 | 1,5 | 20/30/40/50 |
| K1089.46012X | L    | M12 | 60 | 24   | 18   | 34   | 18,5 | 1,5 | 20/30/40/50 |

## Palm grips

similar to DIN 6335, metal parts stainless steel



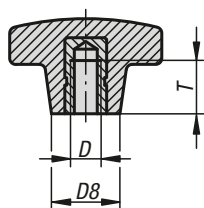
**Material:**  
Thermoset PF 31, black.  
Metal parts stainless steel 1.4301.

**Version:**  
High-gloss polished, black.

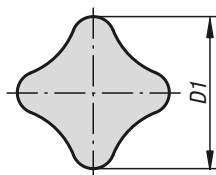
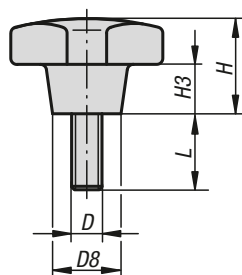
**Sample order:**  
K1017.22505 (Form K)  
K1017.52505X15 (Form L)

**Drawing reference:**  
Form K: tapped bush  
Form L: external thread

(K)



(L)



### KIPP Palm grips metal parts stainless steel Form K

| Order No.   | Form | Component material | D   | D1 | D8 | H  | H3 | T   |
|-------------|------|--------------------|-----|----|----|----|----|-----|
| K1017.22505 | K    | stainless steel    | M5  | 25 | 12 | 16 | 8  | 9,5 |
| K1017.23206 | K    | stainless steel    | M6  | 32 | 14 | 20 | 10 | 12  |
| K1017.24008 | K    | stainless steel    | M8  | 40 | 18 | 25 | 13 | 14  |
| K1017.25010 | K    | stainless steel    | M10 | 50 | 22 | 32 | 20 | 18  |
| K1017.26312 | K    | stainless steel    | M12 | 63 | 26 | 40 | 25 | 22  |

### KIPP Palm grips metal parts stainless steel Form L

| Order No.      | Form | Component material | D  | D1 | D8 | H  | H3 | L  |
|----------------|------|--------------------|----|----|----|----|----|----|
| K1017.52505X15 | L    | stainless steel    | M5 | 25 | 12 | 16 | 8  | 15 |
| K1017.52505X20 | L    | stainless steel    | M5 | 25 | 12 | 16 | 8  | 20 |
| K1017.53206X15 | L    | stainless steel    | M6 | 32 | 14 | 20 | 10 | 15 |
| K1017.53206X20 | L    | stainless steel    | M6 | 32 | 14 | 20 | 10 | 20 |
| K1017.53206X25 | L    | stainless steel    | M6 | 32 | 14 | 20 | 10 | 25 |
| K1017.53206X30 | L    | stainless steel    | M6 | 32 | 14 | 20 | 10 | 30 |
| K1017.53206X40 | L    | stainless steel    | M6 | 32 | 14 | 20 | 10 | 40 |
| K1017.53206X50 | L    | stainless steel    | M6 | 32 | 14 | 20 | 10 | 50 |
| K1017.54008X20 | L    | stainless steel    | M8 | 40 | 18 | 25 | 13 | 20 |
| K1017.54008X25 | L    | stainless steel    | M8 | 40 | 18 | 25 | 13 | 25 |
| K1017.54008X30 | L    | stainless steel    | M8 | 40 | 18 | 25 | 13 | 30 |
| K1017.54008X40 | L    | stainless steel    | M8 | 40 | 18 | 25 | 13 | 40 |
| K1017.54008X50 | L    | stainless steel    | M8 | 40 | 18 | 25 | 13 | 50 |



# Palm grips quick-acting

grey cast iron


**Material:**

Grey cast iron GJL 300

**Version:**

Vibratory ground.

**Sample order:**

K0683.08

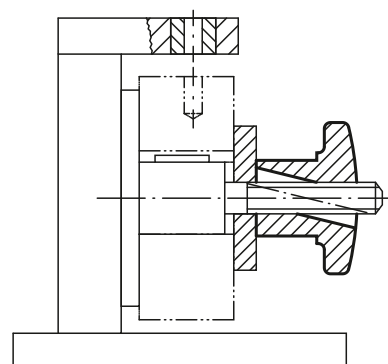
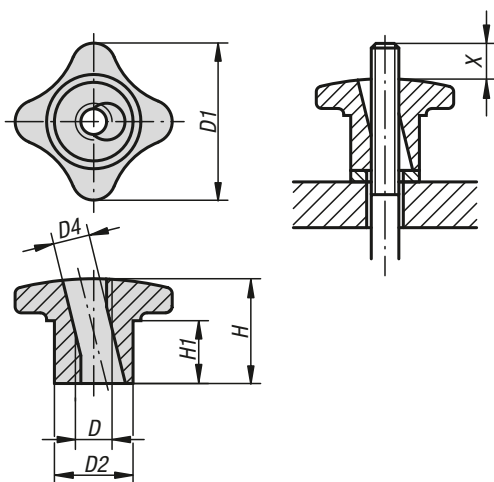
**Note:**

Quick-acting palm grips can be used on all fixtures that do not require a high clamping force.

Tilt the grip to slide on, then straighten it to engage the threads.

**Drawing reference:**

X: The stud should be several mm longer than height "H"



## KIPP Palm grips quick-acting, grey cast iron

| Order No. | D   | D1 | D2 | D4   | H  | H1 |
|-----------|-----|----|----|------|----|----|
| K0683.06  | M6  | 30 | 15 | 7    | 20 | 10 |
| K0683.08  | M8  | 40 | 18 | 9,4  | 25 | 14 |
| K0683.10  | M10 | 50 | 21 | 11,3 | 30 | 16 |
| K0683.12  | M12 | 60 | 26 | 13,1 | 35 | 19 |
| K0683.14  | M14 | 70 | 30 | 15,6 | 40 | 22 |
| K0683.16  | M16 | 80 | 34 | 17,6 | 45 | 25 |



A large rectangular area filled with a light gray grid pattern, intended for handwritten notes.



## Star grips

aluminium, similar to DIN 6336



### Material:

Aluminium.

Grub screw stainless steel 1.4305.

Pin stainless steel 1.4310.

### Version:

Vibratory ground or ground and polished.

Grub screw and pin bright.

### Sample order:

K0149.64008X20 (include length L.)

### On request:

Blank star grips (not tumbled).

### Drawing reference:

Form A: blank

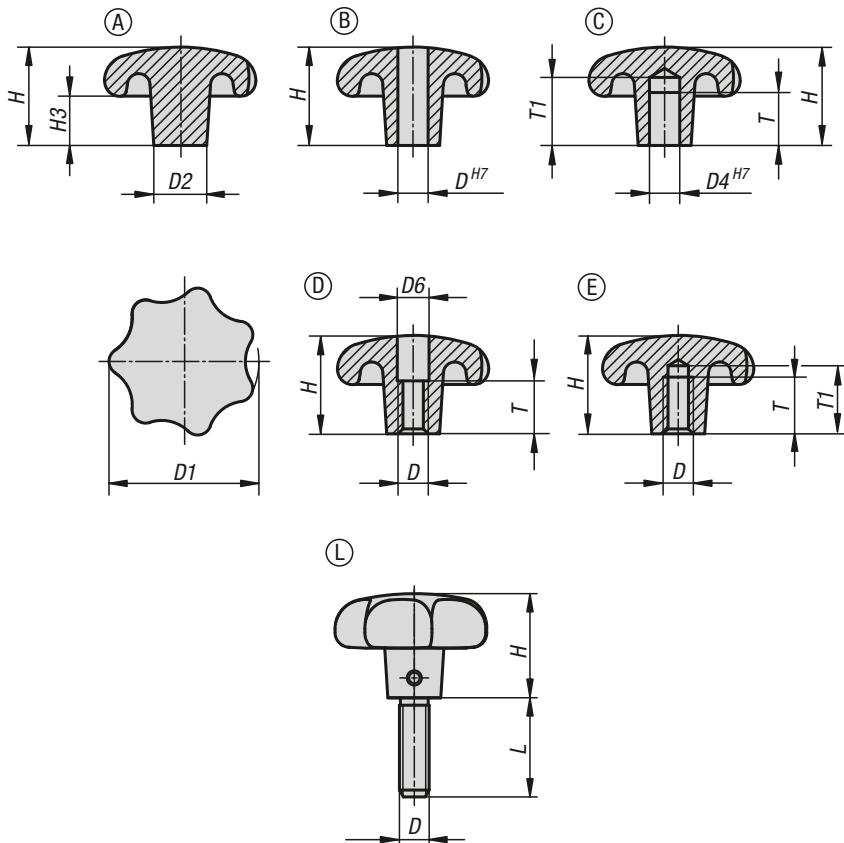
Form B: drilled through

Form C: blind hole

Form D: tapped and counterbored

Form E: tapped blind hole

Form L: external thread



## KIPP Star grips, aluminium, similar to DIN 6336

| Order No.   | Form | Surface finish<br>body | D1 | D2 | H  | H3 |
|-------------|------|------------------------|----|----|----|----|
| K0149.14008 | A    | tumbled                | 40 | 14 | 26 | 13 |
| K0149.15010 | A    | tumbled                | 50 | 18 | 34 | 17 |
| K0149.16312 | A    | tumbled                | 63 | 20 | 42 | 21 |
| K0149.18016 | A    | tumbled                | 80 | 25 | 52 | 25 |

| Order No.<br>tumbled | Order No.<br>polished | Form | D  | D1 | D2 | H  |
|----------------------|-----------------------|------|----|----|----|----|
| K0149.24008          | K0149.240082          | B    | 8  | 40 | 14 | 25 |
| K0149.25010          | K0149.250102          | B    | 10 | 50 | 18 | 32 |
| K0149.26312          | K0149.263122          | B    | 12 | 63 | 20 | 40 |
| K0149.28016          | K0149.280162          | B    | 16 | 80 | 25 | 50 |

## Star grips

aluminium, similar to DIN 6336



| Order No.<br>tumbled | Order No.<br>polished | Form | D  | D1 | D2 | H  | T  | T1 |
|----------------------|-----------------------|------|----|----|----|----|----|----|
| K0149.34008          | K0149.340082          | C    | 8  | 40 | 14 | 25 | 15 | 18 |
| K0149.35010          | K0149.350102          | C    | 10 | 50 | 18 | 32 | 18 | 21 |
| K0149.36312          | K0149.363122          | C    | 12 | 63 | 20 | 40 | 22 | 25 |
| K0149.38016          | K0149.380162          | C    | 16 | 80 | 25 | 50 | 28 | 32 |

| Order No.<br>tumbled | Order No.<br>polished | Form | D   | D1 | D2 | D6   | H  | T  |
|----------------------|-----------------------|------|-----|----|----|------|----|----|
| K0149.44008          | K0149.440082          | D    | M8  | 40 | 14 | 8,4  | 25 | 12 |
| K0149.45010          | K0149.450102          | D    | M10 | 50 | 18 | 10,5 | 32 | 16 |
| K0149.46312          | K0149.463122          | D    | M12 | 63 | 20 | 13   | 40 | 20 |
| K0149.48016          | K0149.480162          | D    | M16 | 80 | 25 | 17   | 50 | 30 |

| Order No.<br>tumbled | Order No.<br>polished | Form | D   | D1 | D2 | H  | T  | T1 |
|----------------------|-----------------------|------|-----|----|----|----|----|----|
| K0149.54008          | K0149.540082          | E    | M8  | 40 | 14 | 25 | 15 | 18 |
| K0149.55010          | K0149.550102          | E    | M10 | 50 | 18 | 32 | 18 | 21 |
| K0149.56312          | K0149.563122          | E    | M12 | 63 | 20 | 40 | 22 | 25 |
| K0149.58016          | K0149.580162          | E    | M16 | 80 | 25 | 50 | 28 | 32 |

| Order No.    | Form | Surface finish<br>body | D   | D1 | D2 | H  | L           |
|--------------|------|------------------------|-----|----|----|----|-------------|
| K0149.64008X | L    | tumbled                | M8  | 40 | 14 | 25 | 20/25/30/40 |
| K0149.65010X | L    | tumbled                | M10 | 50 | 18 | 32 | 25/30/40/50 |
| K0149.66312X | L    | tumbled                | M12 | 63 | 20 | 40 | 30/40/50/60 |

## Star grips

stainless steel, similar to DIN 6336



### Material:

Stainless steel 1.4308.

Grub screw stainless steel 1.4305.

Pin stainless steel 1.4310.

### Version:

Ground and polished or blasted.

Grub screw and pin bright.

### Sample order:

K0150.632063X20 (include length L.)

### Drawing reference:

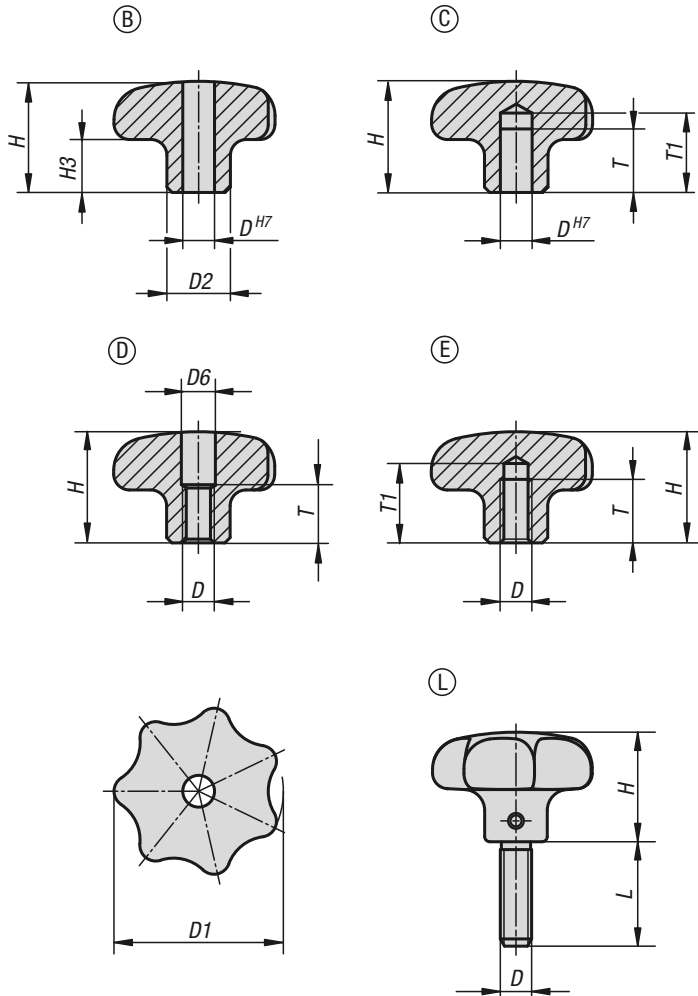
Form B: drilled through

Form C: blind hole

Form D: tapped and counterbored

Form E: tapped blind hole

Form L: external thread



## Star grips

stainless steel, similar to DIN 6336



## KIPP Star grips in stainless steel, similar to DIN 6336



| Order No.<br>Form B | Order No.<br>Form C | Surface finish<br>body | D  | D1 | D2 | H  | H3 | T    | T1   |
|---------------------|---------------------|------------------------|----|----|----|----|----|------|------|
| K0150.232062        | K0150.332062        | polished               | 6  | 32 | 12 | 21 | 10 | -/12 | -/15 |
| K0150.240082        | K0150.340082        | polished               | 8  | 40 | 14 | 26 | 13 | -/15 | -/18 |
| K0150.250102        | K0150.350102        | polished               | 10 | 50 | 18 | 34 | 17 | -/18 | -/21 |
| K0150.263122        | K0150.363122        | polished               | 12 | 63 | 20 | 42 | 21 | -/22 | -/25 |
| K0150.232063        | K0150.332063        | blasted                | 6  | 32 | 12 | 21 | 10 | -/12 | -/15 |
| K0150.240083        | K0150.340083        | blasted                | 8  | 40 | 14 | 26 | 13 | -/15 | -/18 |
| K0150.250103        | K0150.350103        | blasted                | 10 | 50 | 18 | 34 | 17 | -/18 | -/21 |
| K0150.263123        | K0150.363123        | blasted                | 12 | 63 | 20 | 42 | 21 | -/22 | -/25 |

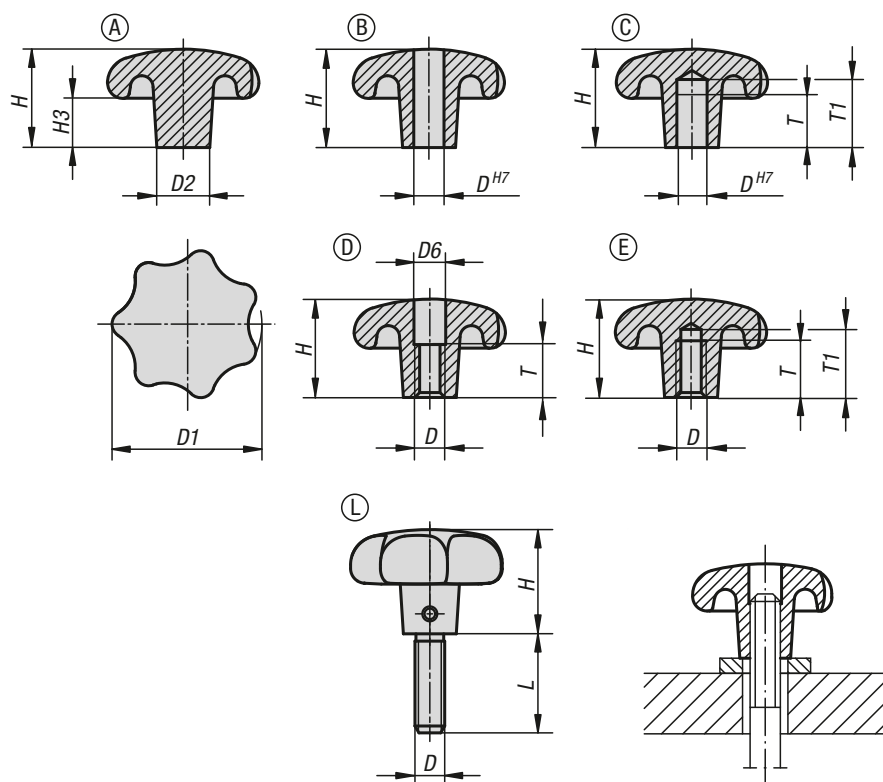
| Order No.    | Form | Surface finish<br>body | D   | D1 | D2 | D6   | H  | H3 | T  |
|--------------|------|------------------------|-----|----|----|------|----|----|----|
| K0150.432062 | D    | polished               | M6  | 32 | 12 | 6,4  | 21 | 10 | 11 |
| K0150.440082 | D    | polished               | M8  | 40 | 14 | 8,4  | 26 | 13 | 14 |
| K0150.450102 | D    | polished               | M10 | 50 | 18 | 10,5 | 34 | 17 | 18 |
| K0150.463122 | D    | polished               | M12 | 63 | 20 | 13   | 42 | 21 | 22 |
| K0150.432063 | D    | blasted                | M6  | 32 | 12 | 6,4  | 21 | 10 | 11 |
| K0150.440083 | D    | blasted                | M8  | 40 | 14 | 8,4  | 26 | 13 | 14 |
| K0150.450103 | D    | blasted                | M10 | 50 | 18 | 10,5 | 34 | 17 | 18 |
| K0150.463123 | D    | blasted                | M12 | 63 | 20 | 13   | 42 | 21 | 22 |

| Order No.    | Form | Surface finish<br>body | D   | D1 | D2 | H  | H3 | T  | T1 |
|--------------|------|------------------------|-----|----|----|----|----|----|----|
| K0150.532062 | E    | polished               | M6  | 32 | 12 | 21 | 10 | 12 | 15 |
| K0150.540082 | E    | polished               | M8  | 40 | 14 | 26 | 13 | 15 | 18 |
| K0150.550102 | E    | polished               | M10 | 50 | 18 | 34 | 17 | 18 | 21 |
| K0150.563122 | E    | polished               | M12 | 63 | 20 | 42 | 21 | 22 | 25 |
| K0150.532063 | E    | blasted                | M6  | 32 | 12 | 21 | 10 | 12 | 15 |
| K0150.540083 | E    | blasted                | M8  | 40 | 14 | 26 | 13 | 15 | 18 |
| K0150.550103 | E    | blasted                | M10 | 50 | 18 | 34 | 17 | 18 | 21 |
| K0150.563123 | E    | blasted                | M12 | 63 | 20 | 42 | 21 | 22 | 25 |

| Order No.     | Form | Surface finish<br>body | D   | D1 | D2 | H  | H3 | L           |
|---------------|------|------------------------|-----|----|----|----|----|-------------|
| K0150.632063X | L    | blasted                | M6  | 32 | 12 | 21 | 10 | 15/20/25/30 |
| K0150.640083X | L    | blasted                | M8  | 40 | 14 | 26 | 13 | 20/25/30/40 |
| K0150.650103X | L    | blasted                | M10 | 50 | 18 | 34 | 17 | 25/30/40/50 |
| K0150.663123X | L    | blasted                | M12 | 63 | 20 | 42 | 21 | 30/40/50/60 |

## Star grips

grey cast iron, DIN 6336



### Material:

Grey cast iron GJL 200.  
Grub screw stainless steel 1.4305.  
Pin stainless steel 1.4310.

### Version:

Vibratory ground, bright.  
Grub screw and pin bright.

### Sample order:

K0151.606X20 (include length L.)

### On request:

Grips with a plastic coating.

### Drawing reference:

Form A: blank  
Form B: drilled through  
Form C: blind hole  
Form D: tapped and counterbored  
Form E: tapped blind hole  
Form L: external thread

## KIPP Star grips, grey cast iron, DIN 6336

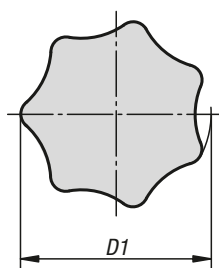
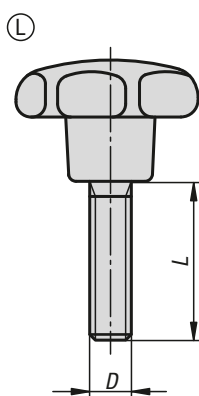
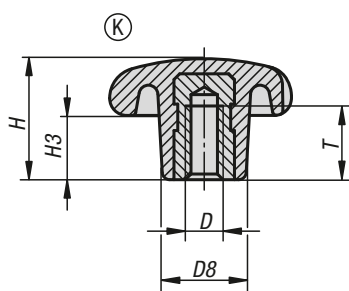
| Order No. | Form   | Surface finish body | D    | D1 | D2 | H     | H3 |
|-----------|--------|---------------------|------|----|----|-------|----|
| K0151.106 | Form A | tumbled             | -/6  | 32 | 12 | 21/20 | 10 |
| K0151.108 | Form A | tumbled             | -/8  | 40 | 14 | 26/25 | 13 |
| K0151.110 | Form A | tumbled             | -/10 | 50 | 18 | 34/32 | 17 |
| K0151.112 | Form A | tumbled             | -/12 | 63 | 20 | 42/40 | 21 |
| K0151.116 | Form A | tumbled             | -/16 | 80 | 25 | 52/50 | 25 |
| K0151.206 | Form B | tumbled             | -/6  | 32 | 12 | 21/20 | 10 |
| K0151.216 | Form B | tumbled             | -/16 | 80 | 25 | 52/50 | 25 |
| K0151.208 | Form B | tumbled             | -/8  | 40 | 14 | 26/25 | 13 |
| K0151.210 | Form B | tumbled             | -/10 | 50 | 18 | 34/32 | 17 |
| K0151.212 | Form B | tumbled             | -/12 | 63 | 20 | 42/40 | 21 |

| Order No.<br>Form C | Order No.<br>Form D | Order No.<br>Form E | Surface finish body | D              | D1 | D2 | H  | H3 | T        | T1      |
|---------------------|---------------------|---------------------|---------------------|----------------|----|----|----|----|----------|---------|
| K0151.306           | K0151.406           | K0151.506           | tumbled             | 6 / M6 / M6    | 32 | 12 | 20 | 10 | 12/10/12 | 15/-/15 |
| K0151.308           | K0151.408           | K0151.508           | tumbled             | 8 / M8 / M8    | 40 | 14 | 25 | 13 | 15/13/15 | 18/-/18 |
| K0151.310           | K0151.410           | K0151.510           | tumbled             | 10 / M10 / M10 | 50 | 18 | 32 | 17 | 18/16/18 | 21/-/21 |
| K0151.312           | K0151.412           | K0151.512           | tumbled             | 12 / M12 / M12 | 63 | 20 | 40 | 21 | 22/20/22 | 25/-/25 |
| K0151.316           | K0151.416           | K0151.516           | tumbled             | 16 / M16 / M16 | 80 | 25 | 50 | 25 | 28/20/28 | 32/-/32 |

| Order No.  | Form | Surface finish body | D   | D1 | D2 | H  | L           |
|------------|------|---------------------|-----|----|----|----|-------------|
| K0151.606X | L    | tumbled             | M6  | 32 | 12 | 20 | 15/20/25/30 |
| K0151.608X | L    | tumbled             | M8  | 40 | 14 | 25 | 20/25/30/40 |
| K0151.610X | L    | tumbled             | M10 | 50 | 18 | 32 | 25/30/40/50 |
| K0151.612X | L    | tumbled             | M12 | 63 | 20 | 40 | 30/40/50/60 |

# Star grips

similar to DIN 6336



## Material:

Thermoset PF 31, black.

Bush and screw steel, trivalent blue passivated.

## Version:

High-gloss polished.

## Sample order:

K0152.42505X15 (include length L.)

## Note:

The version K0152.22004 has a brass bush.

## On request:

Other colours.

## Drawing reference:

Form K: tapped bush

Form L: external thread

## KIPP Star grips similar to DIN 6336 with internal thread, Form K

| Order No.   | Form | D   | D1 | D8 | H  | H3 | T   |
|-------------|------|-----|----|----|----|----|-----|
| K0152.22004 | K    | M4  | 20 | 10 | 13 | 7  | 6,5 |
| K0152.22505 | K    | M5  | 25 | 12 | 16 | 8  | 9,5 |
| K0152.23206 | K    | M6  | 32 | 14 | 20 | 10 | 12  |
| K0152.24008 | K    | M8  | 40 | 18 | 25 | 13 | 14  |
| K0152.25010 | K    | M10 | 50 | 22 | 32 | 17 | 18  |
| K0152.26312 | K    | M12 | 63 | 26 | 40 | 21 | 22  |
| K0152.28016 | K    | M16 | 80 | 35 | 50 | 25 | 30  |

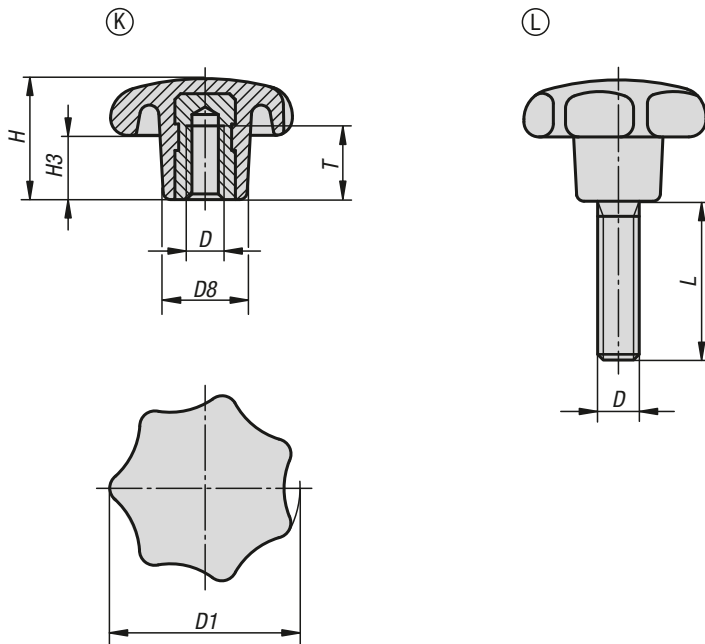
## KIPP Star grips similar to DIN 6336 with external thread, Form L

| Order No.    | Form | D   | D1 | D8 | H  | H3 | L              |
|--------------|------|-----|----|----|----|----|----------------|
| K0152.42505X | L    | M5  | 25 | 12 | 16 | 8  | 15/20/25       |
| K0152.43206X | L    | M6  | 32 | 14 | 20 | 10 | 15/20/25/30    |
| K0152.44008X | L    | M8  | 40 | 18 | 25 | 13 | 20/25/30/35/40 |
| K0152.45010X | L    | M10 | 50 | 22 | 32 | 17 | 25/30/35/40/50 |
| K0152.46312X | L    | M12 | 63 | 26 | 40 | 21 | 30/35/40/50/60 |
| K0152.48016X | L    | M16 | 80 | 35 | 50 | 25 | 30/40/50/60    |



## Star grips

similar to DIN 6336 metal parts stainless steel



### Material:

Thermoset PF 31, black.

Bushing or threaded pin stainless steel 1.4301.

### Version:

High-gloss polished.

### Sample order:

K1016.43206X20 (include length L)

### On request:

Other colours.

### Drawing reference:

Form K: tapped bush

Form L: external thread

### KIPP Star grips similar to DIN 6336, metal parts stainless steel, internal thread, with cap, Form K

| Order No.   | Form | D   | D1 | D8 | H  | H3 | T   |
|-------------|------|-----|----|----|----|----|-----|
| K1016.22505 | K    | M5  | 25 | 12 | 16 | 8  | 7,5 |
| K1016.23206 | K    | M6  | 32 | 14 | 20 | 10 | 12  |
| K1016.24008 | K    | M8  | 40 | 18 | 25 | 13 | 14  |
| K1016.25010 | K    | M10 | 50 | 22 | 32 | 17 | 18  |
| K1016.26312 | K    | M12 | 63 | 26 | 40 | 21 | 22  |
| K1016.28016 | K    | M16 | 80 | 35 | 50 | 25 | 24  |

### KIPP Star grips similar to DIN 6336 metal parts stainless steel, with external thread, Form L

| Order No.    | Form | D   | D1 | D8 | H  | H3 | L              |
|--------------|------|-----|----|----|----|----|----------------|
| K1016.42505X | L    | M5  | 25 | 12 | 16 | 8  | 15/20/25       |
| K1016.43206X | L    | M6  | 32 | 14 | 20 | 10 | 15/20/25/30/40 |
| K1016.44008X | L    | M8  | 40 | 18 | 25 | 13 | 20/25/30/40/50 |
| K1016.45010X | L    | M10 | 50 | 22 | 32 | 17 | 25/30/40/50    |
| K1016.46312X | L    | M12 | 63 | 26 | 40 | 21 | 30/40/50/60    |
| K1016.48016X | L    | M16 | 80 | 35 | 50 | 25 | 30/40/50/60    |

## Star grips, plastic

with protruding steel bush



The thermoset star grip is distinguished by its closed grip contour. The contact surface of the protruding steel bush is vertical to the thread axis and ensures a firm screw connection.

### Material:

Thermoset PF 31.

Steel grade 5.8 or stainless steel 1.4305.

### Version:

Thermoset black, high-gloss polished.

Metal parts trivalent blue passivated steel or bright stainless steel.

### Sample order:

K1514.43206X10 (include length L)

### Advantages:

Wear resistant contact surface

Closed grip contour

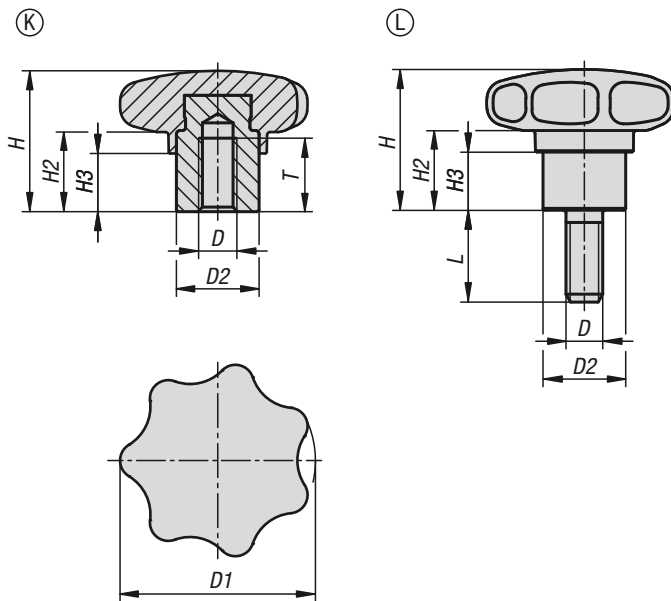
### On request:

Form H: bush with blind hole

### Drawing reference:

Form K: tapped bush

Form L: external thread



### KIPP Star grips plastic with protruding steel bush, internal thread, Form K

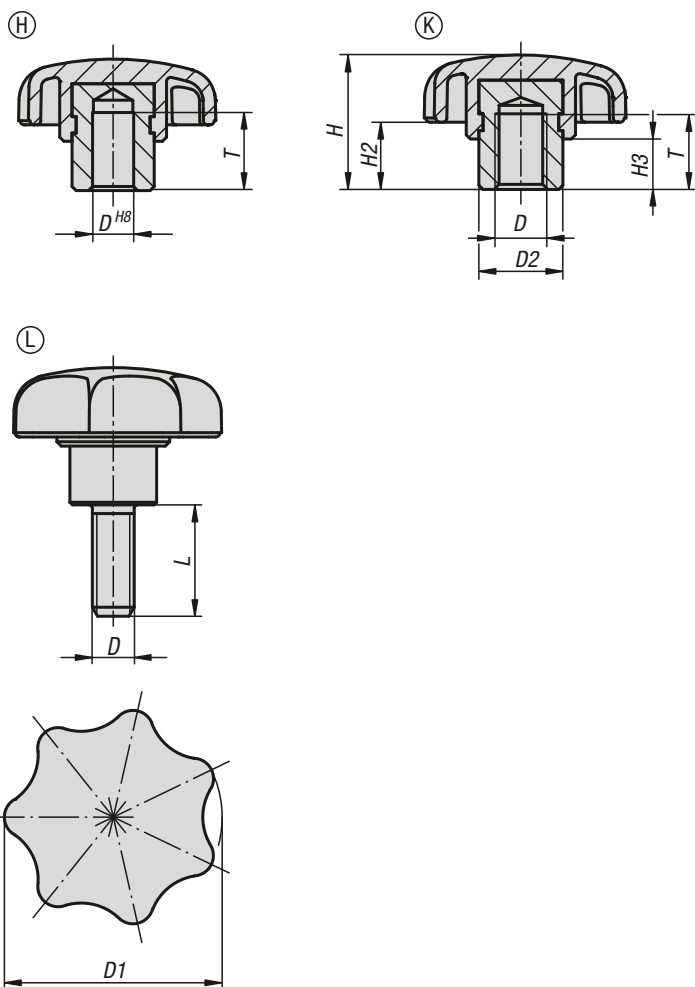
| Order No.<br>steel | Order No.<br>stainless steel | Form | D   | D1 | D2   | H  | H2 | H3  | T  |
|--------------------|------------------------------|------|-----|----|------|----|----|-----|----|
| K1514.23206        | K1514.33206                  | K    | M6  | 32 | 13,5 | 23 | 13 | 9,5 | 12 |
| K1514.24006        | K1514.34006                  | K    | M6  | 40 | 13,5 | 25 | 13 | 10  | 12 |
| K1514.24008        | K1514.34008                  | K    | M8  | 40 | 13,5 | 25 | 13 | 10  | 12 |
| K1514.25008        | K1514.35008                  | K    | M8  | 50 | 19   | 32 | 17 | 12  | 17 |
| K1514.25010        | K1514.35010                  | K    | M10 | 50 | 19   | 32 | 17 | 12  | 17 |
| K1514.26310        | K1514.36310                  | K    | M10 | 63 | 19   | 40 | 20 | 15  | 17 |
| K1514.26312        | K1514.36312                  | K    | M12 | 63 | 19   | 40 | 20 | 15  | 17 |

### KIPP Star grips plastic with protruding steel bush, external thread, Form L

| Order No.<br>steel | Order No.<br>stainless steel | Form | D   | D1 | D2   | H  | H2 | H3  | L                 |
|--------------------|------------------------------|------|-----|----|------|----|----|-----|-------------------|
| K1514.43206X       | K1514.53206X                 | L    | M6  | 32 | 13,5 | 23 | 13 | 9,5 | 10/15/20/25/30    |
| K1514.44008X       | K1514.54008X                 | L    | M8  | 40 | 13,5 | 25 | 13 | 10  | 15/20/25/30/40/50 |
| K1514.45010X       | K1514.55010X                 | L    | M10 | 50 | 19   | 32 | 17 | 12  | 20/25/30/40/50/60 |
| K1514.46312X       | K1514.56312X                 | L    | M12 | 63 | 19   | 40 | 20 | 15  | 20/25/30/40/50/60 |

## Star grips

with projecting steel bush



### Material:

Black thermoplastic.

Steel grade 5.8 or stainless steel 1.4305.

### Version:

Metal parts trivalent blue passivated steel or bright stainless steel.

### Sample order:

K0153.405X20 (include length L.)

### Note:

Star grips with projecting steel bush and blind hole or female thread are especially suited for cross pinning.

### Drawing reference:

Form H: bush with blind hole

Form K: tapped bush

Form L: external thread

### KIPP Star grips with projecting steel bush, Form H

| Order No.  | Form | Component material | D  | D1 | D2   | H  | H2 | H3  | T    |
|------------|------|--------------------|----|----|------|----|----|-----|------|
| K0153.105  | H    | steel              | 5  | 25 | 10   | 17 | 9  | 7   | 9,5  |
| K0153.106  | H    | steel              | 6  | 32 | 13,5 | 21 | 11 | 9,5 | 12,5 |
| K0153.1061 | H    | steel              | 6  | 40 | 13,5 | 25 | 13 | 10  | 12,5 |
| K0153.108  | H    | steel              | 8  | 40 | 13,5 | 25 | 13 | 10  | 12,5 |
| K0153.1081 | H    | steel              | 8  | 50 | 19   | 32 | 17 | 12  | 19,5 |
| K0153.110  | H    | steel              | 10 | 50 | 19   | 32 | 17 | 12  | 19,5 |
| K0153.1101 | H    | steel              | 10 | 63 | 19   | 37 | 18 | 12  | 19,5 |
| K0153.112  | H    | steel              | 12 | 63 | 19   | 37 | 18 | 12  | 19,5 |
| K0153.116  | H    | steel              | 16 | 63 | 23   | 40 | 21 | 15  | 24,5 |

# Star grips

with projecting steel bush



## KIPP Star grips with projecting steel bush, Form K

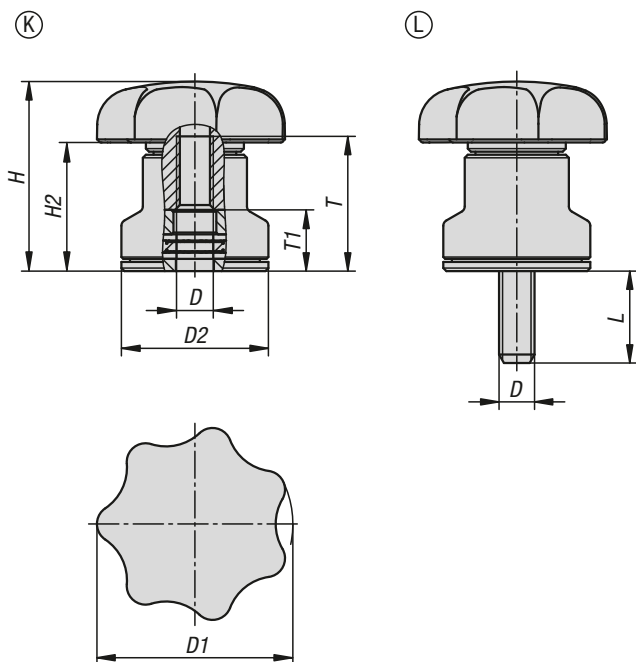
| Order No.<br>steel | Order No.<br>stainless steel | Form | D   | D1 | D2   | H  | H2 | H3  | T  |
|--------------------|------------------------------|------|-----|----|------|----|----|-----|----|
| K0153.205          | K0153.305                    | K    | M5  | 25 | 10   | 17 | 9  | 7   | 9  |
| K0153.206          | K0153.306                    | K    | M6  | 32 | 13,5 | 21 | 11 | 9,5 | 12 |
| K0153.2061         | K0153.3061                   | K    | M6  | 40 | 13,5 | 25 | 13 | 10  | 12 |
| K0153.208          | K0153.308                    | K    | M8  | 40 | 13,5 | 25 | 13 | 10  | 12 |
| K0153.2081         | K0153.3081                   | K    | M8  | 50 | 19   | 32 | 17 | 12  | 17 |
| K0153.210          | K0153.310                    | K    | M10 | 50 | 19   | 32 | 17 | 12  | 17 |
| K0153.2101         | K0153.3101                   | K    | M10 | 63 | 19   | 37 | 18 | 12  | 17 |
| K0153.212          | K0153.312                    | K    | M12 | 63 | 19   | 37 | 18 | 12  | 17 |
| K0153.216          | K0153.316                    | K    | M16 | 63 | 23   | 40 | 21 | 15  | 23 |

## KIPP Star grips with external thread, Form L

| Order No.<br>steel | Order No.<br>stainless steel | Form | D   | D1 | D2   | H  | H2 | H3  | L                 |
|--------------------|------------------------------|------|-----|----|------|----|----|-----|-------------------|
| K0153.405X         | K0153.505X                   | L    | M5  | 25 | 10   | 17 | 9  | 7   | 10/15/20          |
| K0153.406X         | K0153.506X                   | L    | M6  | 32 | 13,5 | 21 | 11 | 9,5 | 10/15/20/25/30    |
| K0153.408X         | K0153.508X                   | L    | M8  | 40 | 13,5 | 25 | 13 | 10  | 15/20/25/30/40/50 |
| K0153.410X         | K0153.510X                   | L    | M10 | 50 | 19   | 32 | 17 | 12  | 20/25/30/40/50/60 |
| K0153.412X         | K0153.512X                   | L    | M12 | 63 | 19   | 37 | 18 | 12  | 20/25/30/40/50/60 |

## Star grips, plastic

with clamping force intensifier



Star grips with integrated clamping force intensifier can achieve double the clamping force compared to standard star grips.

Furthermore, this product can also be used by persons with limited hand strength (e.g. in rehabilitation) to achieve comparable clamping forces with less effort. Less effort is also needed to loosen the star grip.

The increase in clamping force is achieved by the integral needle roller thrust bearing, which generates very low surface friction on a rigid contact surface during clamping. The hardened thrust washers are designed for high clamping forces and the bearing with its high load rating guarantees a long service life.

The clamped component is permanently protected by the large, stationary contact surface. A washer is no longer required.

Due to the modular construction many special designs are available.

### Material:

Star grip polyamide thermoplastic, black.  
Steel parts 5.8 steel or stainless steel 1.4305.

### Version:

Metal parts trivalent blue passivated steel or bright stainless steel.  
Axial needle bearing with hardened and ground thrust washer.

### Sample order:

K1596.406X20 (include length L.)

### Application:

Machine, equipment and plant construction, rehabilitation sector.

### Advantages:

Significant increase of the clamping force with the same tightening torque.

High quality axial needle bearing with high load rating and long service life.

The component surface is protected by the stationary lower ring.

**On request:**  
Other thread lengths.

**Drawing reference:**  
Form K: tapped bush  
Form L: external thread

## KIPP Star grips, plastic with clamping force intensifier, Form K

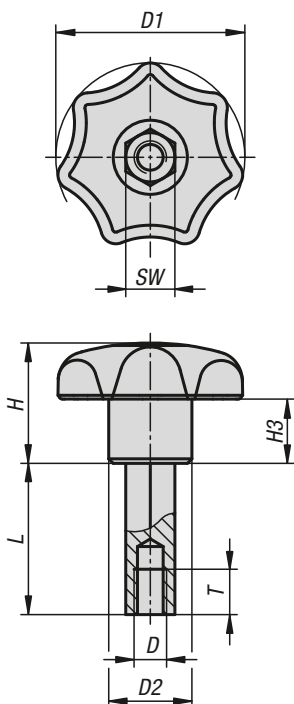
| Order No.<br>steel | Order No.<br>stainless steel | Form | D   | D1 | D2 | H  | H2 | T  | T1 |
|--------------------|------------------------------|------|-----|----|----|----|----|----|----|
| K1596.206          | K1596.306                    | K    | M6  | 32 | 24 | 31 | 21 | 22 | 10 |
| K1596.208          | K1596.308                    | K    | M8  | 40 | 25 | 35 | 23 | 22 | 10 |
| K1596.210          | K1596.310                    | K    | M10 | 50 | 30 | 42 | 27 | 27 | 10 |
| K1596.212          | K1596.312                    | K    | M12 | 63 | 35 | 47 | 28 | 27 | 10 |

## KIPP Star grips, plastic with clamping force intensifier, Form L

| Order No.<br>steel | Order No.<br>stainless steel | Form | D   | D1 | D2 | H  | H2 | L     |
|--------------------|------------------------------|------|-----|----|----|----|----|-------|
| K1596.406X         | K1596.506X                   | L    | M6  | 32 | 24 | 31 | 21 | 10/20 |
| K1596.408X         | K1596.508X                   | L    | M8  | 40 | 25 | 35 | 23 | 15/30 |
| K1596.410X         | K1596.510X                   | L    | M10 | 50 | 30 | 42 | 27 | 20/30 |
| K1596.412X         | K1596.512X                   | L    | M12 | 63 | 35 | 47 | 28 | 20/30 |

## Star grips

with extended collar



### Material:

Thermoplastic, black.

Extension piece, free-cutting steel .

### Version:

Extension piece, trivalent blue passivated.

### Sample order:

K1291.320508020

(include length L e.g. 020 for L = 20 mm.)

## KIPP Star grips with extended collar

| Order No.       | D   | D1 | D2 | H  | H3 | L                  | SW | T  |
|-----------------|-----|----|----|----|----|--------------------|----|----|
| K1291.320508*** | M5  | 32 | 14 | 20 | 10 | 20/25/30           | 8  | 8  |
| K1291.400610*** | M6  | 40 | 18 | 25 | 13 | 20/25/30/40/50     | 10 | 9  |
| K1291.500813*** | M8  | 50 | 22 | 32 | 17 | 20/25/30/40/50/80  | 13 | 12 |
| K1291.631016*** | M10 | 63 | 26 | 40 | 21 | 25/30/40/50/80/100 | 16 | 15 |

## Star grips

similar to DIN 6336



### Material:

Black thermoplastic.  
Bush and screw steel.

### Version:

Bush and screw trivalent blue passivated.

### Sample order:

K0155.4127X30  
(Cap colour colza yellow; include length L)

### Note:

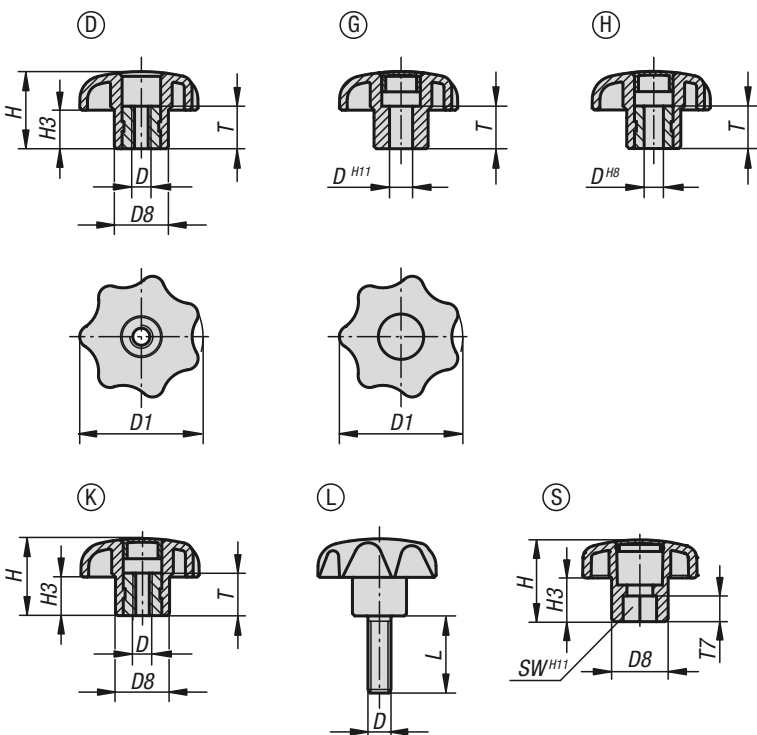
Δ Add the desired cap colour code here. No colour code is required for black caps.

### On request:

Other colours or designs, such as company logo.

### Drawing reference:

Form D: tapped bush without cap  
Form G: without bush  
Form H: with reamed bush  
Form K: tapped bush with cap  
Form L: external thread  
Form S: hexagon



examples of grip cap designs



## KIPP Star grips similar to DIN 6336

| Order No.  | Form | D   | D1 | D8 | H  | H3 | T  |
|------------|------|-----|----|----|----|----|----|
| K0155.504  | D    | M4  | 25 | 12 | 16 | 8  | 10 |
| K0155.505  | D    | M5  | 25 | 12 | 16 | 8  | 10 |
| K0155.5061 | D    | M6  | 25 | 12 | 16 | 8  | 10 |
| K0155.5051 | D    | M5  | 32 | 14 | 20 | 10 | 10 |
| K0155.506  | D    | M6  | 32 | 14 | 20 | 10 | 10 |
| K0155.508  | D    | M8  | 40 | 18 | 25 | 13 | 14 |
| K0155.5101 | D    | M10 | 40 | 18 | 25 | 13 | 14 |
| K0155.5081 | D    | M8  | 50 | 22 | 32 | 17 | 14 |
| K0155.510  | D    | M10 | 50 | 22 | 32 | 17 | 14 |
| K0155.5121 | D    | M12 | 50 | 22 | 32 | 17 | 18 |
| K0155.5102 | D    | M10 | 63 | 26 | 40 | 21 | 14 |
| K0155.512  | D    | M12 | 63 | 26 | 40 | 21 | 18 |
| K0155.516  | D    | M16 | 63 | 26 | 40 | 21 | 18 |

## Star grips

similar to DIN 6336



| Order No.<br>Form G | Order No.<br>Form H | D  | D1 | D8 | H  | H3 | T  |
|---------------------|---------------------|----|----|----|----|----|----|
| K0155.305Δ          | K0155.105Δ          | 5  | 25 | 12 | 16 | 8  | 10 |
| K0155.306Δ          | K0155.106Δ          | 6  | 32 | 14 | 20 | 10 | 10 |
| K0155.308Δ          | K0155.108Δ          | 8  | 40 | 18 | 25 | 13 | 14 |
| K0155.310Δ          | K0155.110Δ          | 10 | 50 | 22 | 32 | 17 | 14 |
| -                   | K0155.1101Δ         | 10 | 63 | 26 | 40 | 21 | 14 |
| K0155.312Δ          | K0155.112Δ          | 12 | 63 | 26 | 40 | 21 | 18 |

| Order No.   | Form | D   | D1 | D8 | H  | H3 | T  |
|-------------|------|-----|----|----|----|----|----|
| K0155.204Δ  | K    | M4  | 25 | 12 | 16 | 8  | 10 |
| K0155.205Δ  | K    | M5  | 25 | 12 | 16 | 8  | 10 |
| K0155.2061Δ | K    | M6  | 25 | 12 | 16 | 8  | 10 |
| K0155.2051Δ | K    | M5  | 32 | 14 | 20 | 10 | 10 |
| K0155.206Δ  | K    | M6  | 32 | 14 | 20 | 10 | 10 |
| K0155.208Δ  | K    | M8  | 40 | 18 | 25 | 13 | 14 |
| K0155.2101Δ | K    | M10 | 40 | 18 | 25 | 13 | 14 |
| K0155.2081Δ | K    | M8  | 50 | 22 | 32 | 17 | 14 |
| K0155.210Δ  | K    | M10 | 50 | 22 | 32 | 17 | 14 |
| K0155.2121Δ | K    | M12 | 50 | 22 | 32 | 17 | 18 |
| K0155.2102Δ | K    | M10 | 63 | 26 | 40 | 21 | 14 |
| K0155.212Δ  | K    | M12 | 63 | 26 | 40 | 21 | 18 |
| K0155.216Δ  | K    | M16 | 63 | 26 | 40 | 21 | 18 |

| Order No.    | Form | D   | D1 | D8 | H  | H3 | L                             |
|--------------|------|-----|----|----|----|----|-------------------------------|
| K0155.405ΔX  | L    | M5  | 25 | 12 | 16 | 8  | 10/15/20/25/30/35/40/45/50/60 |
| K0155.406ΔX  | L    | M6  | 25 | 12 | 16 | 8  | 10/15/20/25/30/35/40/45/50/60 |
| K0155.4061ΔX | L    | M6  | 32 | 14 | 20 | 10 | 10/15/20/25/30/35/40/45/50/60 |
| K0155.408ΔX  | L    | M8  | 32 | 14 | 20 | 10 | 15/20/25/30/35/40/45/50/60    |
| K0155.4081ΔX | L    | M8  | 40 | 18 | 25 | 13 | 15/20/25/30/35/40/45/50/60    |
| K0155.410ΔX  | L    | M10 | 40 | 18 | 25 | 13 | 15/20/25/30/35/40/45/50/60    |
| K0155.4101ΔX | L    | M10 | 50 | 22 | 32 | 17 | 15/20/25/30/35/40/45/50/60    |
| K0155.412ΔX  | L    | M12 | 50 | 22 | 32 | 17 | 15/20/25/30/35/40/45/50/60    |
| K0155.4102ΔX | L    | M10 | 63 | 26 | 40 | 21 | 20/25/30/35/40/45/50/60       |
| K0155.4121ΔX | L    | M12 | 63 | 26 | 40 | 21 | 20/25/30/35/40/45/50/60       |
| K0155.416ΔX  | L    | M16 | 63 | 26 | 40 | 21 | 30/35/40/45/50/60             |

| Order No. | Form | D1 | D8 | H  | H3 | SW | T7 |
|-----------|------|----|----|----|----|----|----|
| K0155.808 | S    | 32 | 14 | 20 | 10 | 8  | 5  |
| K0155.810 | S    | 40 | 18 | 25 | 13 | 10 | 10 |
| K0155.813 | S    | 50 | 22 | 32 | 17 | 13 | 10 |
| K0155.816 | S    | 63 | 26 | 40 | 21 | 16 | 15 |



## Star grips biopolymer

similar to DIN 6336



### Material:

Grip biopolymer.  
Bush and screw steel.

### Version:

Bush and screw trivalent blue passivated.  
Natural beech with beech fibres or coloured black grey.

### Sample order:

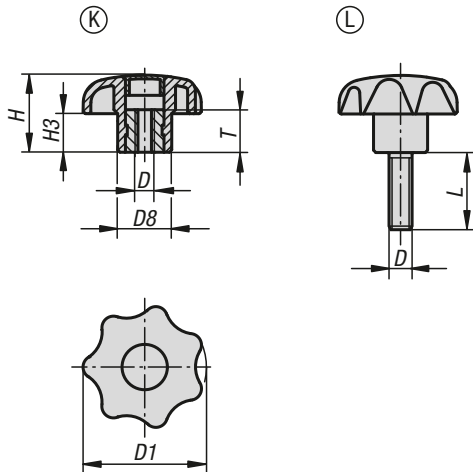
K0155.10406190X15

### Advantages:

This biopolymer is manufactured entirely from renewable raw materials (oil free).  
Conservation of finite fossil resources.  
The wood fibres originate 100% from local, sustainably managed forests in Germany.

### Features:

Excellent mechanical stability (certified with a minimum of 2x safety factor).  
Biopolymer is suitable for recycling (comparable to thermoplastics).  
Suitable for outdoor use (not biodegradable).  
Excellent resistance to strong acids and lyes.  
Short-term resistance to alcohol, fuel, mineral oil and grease.



# Star grips biopolymer

similar to DIN 6336



## KIPP Star grips biopolymer similar to DIN 6336, internal thread

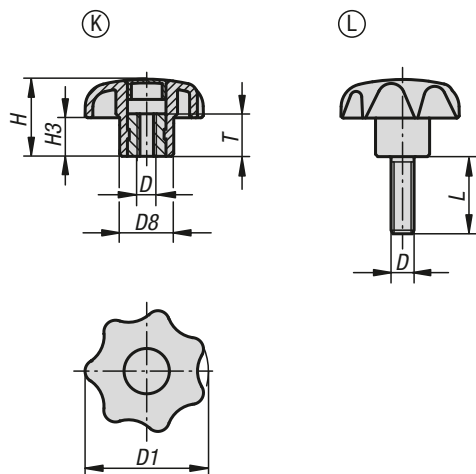
| Order No.       | Form | Main colour         | D   | D1 | D8 | H  | H3 | T  |
|-----------------|------|---------------------|-----|----|----|----|----|----|
| K0155.102051143 | K    | natural beech       | M5  | 32 | 14 | 20 | 10 | 10 |
| K0155.10206143  | K    | natural beech       | M6  | 32 | 14 | 20 | 10 | 10 |
| K0155.10208143  | K    | natural beech       | M8  | 40 | 18 | 25 | 13 | 14 |
| K0155.102081143 | K    | natural beech       | M8  | 50 | 22 | 32 | 17 | 14 |
| K0155.102101143 | K    | natural beech       | M10 | 40 | 18 | 25 | 13 | 14 |
| K0155.10210143  | K    | natural beech       | M10 | 50 | 22 | 32 | 17 | 14 |
| K0155.102121143 | K    | natural beech       | M12 | 50 | 22 | 32 | 17 | 18 |
| K0155.10205190  | K    | black grey RAL 7021 | M5  | 32 | 14 | 20 | 10 | 10 |
| K0155.1020690   | K    | black grey RAL 7021 | M6  | 32 | 14 | 20 | 10 | 10 |
| K0155.1020890   | K    | black grey RAL 7021 | M8  | 40 | 18 | 25 | 13 | 14 |
| K0155.10208190  | K    | black grey RAL 7021 | M8  | 50 | 22 | 32 | 17 | 14 |
| K0155.10210190  | K    | black grey RAL 7021 | M10 | 40 | 18 | 25 | 13 | 14 |
| K0155.1021090   | K    | black grey RAL 7021 | M10 | 50 | 22 | 32 | 17 | 14 |
| K0155.10212190  | K    | black grey RAL 7021 | M12 | 50 | 22 | 32 | 17 | 18 |

## KIPP Star grips biopolymer similar to DIN 6336, external thread

| Order No.          | Form | Main colour         | D   | D1 | D8 | H  | H3 | L  |
|--------------------|------|---------------------|-----|----|----|----|----|----|
| K0155.104061143X15 | L    | natural beech       | M6  | 32 | 14 | 20 | 10 | 15 |
| K0155.10408143X20  | L    | natural beech       | M8  | 32 | 14 | 20 | 10 | 20 |
| K0155.104081143X25 | L    | natural beech       | M8  | 40 | 18 | 25 | 13 | 25 |
| K0155.10410143X25  | L    | natural beech       | M10 | 40 | 18 | 25 | 13 | 25 |
| K0155.104101143X25 | L    | natural beech       | M10 | 50 | 22 | 32 | 17 | 25 |
| K0155.10412143X25  | L    | natural beech       | M12 | 50 | 22 | 32 | 17 | 25 |
| K0155.10406190X15  | L    | black grey RAL 7021 | M6  | 32 | 14 | 20 | 10 | 15 |
| K0155.1040890X20   | L    | black grey RAL 7021 | M8  | 32 | 14 | 20 | 10 | 20 |
| K0155.10408190X25  | L    | black grey RAL 7021 | M8  | 40 | 18 | 25 | 13 | 25 |
| K0155.1041090X25   | L    | black grey RAL 7021 | M10 | 40 | 18 | 25 | 13 | 25 |
| K0155.10410190X25  | L    | black grey RAL 7021 | M10 | 50 | 22 | 32 | 17 | 25 |
| K0155.1041290X25   | L    | black grey RAL 7021 | M12 | 50 | 22 | 32 | 17 | 25 |

# Star grips antibacterial

similar to DIN 6336, metal parts stainless steel



## Material:

Thermoplastic, slate grey.  
Bush and screw stainless steel 1.4305.

## Version:

Bush and screw bright.

## Sample order:

K0154.12408144X25

## Application:

The antibacterial KIPP MEDI grip products are highly effective against a variety of hazardous microorganisms, such as bacteria, fungi and even multi-resistant bacteria (e.g. MRSA).

The plastic used incorporates micro-silver particles with an antimicrobial effect to ensure effective results throughout the entire product life cycle.

## Function:

The growth of harmful micro-organisms on the product surface is effectively disrupted by means of silver ions, and the existing germs on MEDI grip products are consistently reduced (as tested and confirmed by an accredited testing laboratory).

During cleaning cycles the risk of infection through touching these products is significantly lower.

## Advantages:

Resistant to humidity and cleaning products (during disinfection) with no toxic side effects.

## Applications:

For installation on machines, equipment, plants and furnishings in areas with increased hygienic requirements (including hospitals, doctors' surgeries, rehabilitation centres and food production facilities), as well as for use in public areas or regularly frequented institutions (i.e. nursing homes or daycare centres).

## KIPP Star grips antibacterial, similar to DIN 6336, metal parts stainless steel, internal thread, Form K

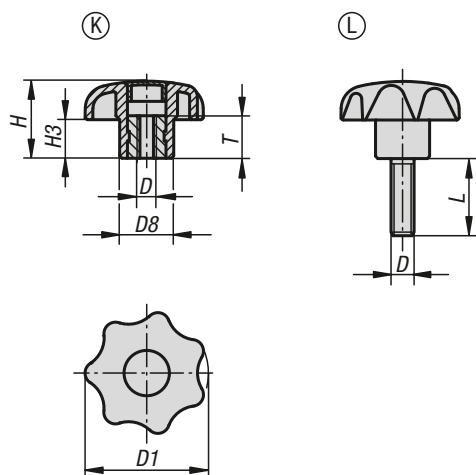
| Order No.      | Form | D  | D1 | D8 | H  | H3 | T  |
|----------------|------|----|----|----|----|----|----|
| K0154.12208144 | K    | M8 | 40 | 18 | 25 | 13 | 14 |

## KIPP Star grips antibacterial, similar to DIN 6336, metal parts stainless steel, external thread, Form L

| Order No.         | Form | D  | D1 | D8 | H  | H3 | L  |
|-------------------|------|----|----|----|----|----|----|
| K0154.12408144X25 | L    | M8 | 40 | 18 | 25 | 13 | 25 |

# Star grips antistatic

similar to DIN 6336



## Material:

Thermoplastic, graphite black.  
Bush or screw steel 5.8.

## Version:

Screw blue passivated.

## Sample order:

K0155.1120824

## Application:

Sensitive electrical or electronic equipment, components and devices (ESD sensitive elements) may be damaged or destroyed by electrostatic discharges (ESD) in the immediate vicinity. Electrostatic discharges can come from people or through handling ESD sensitive components (e.g. during production, assembly, transport, storage etc). Electrically conductive products which conform to DIN EN 61340-5-1 are essential within electronic environments to prevent an electrostatic discharge. These products can be used for ESD applications or in ESD protection areas (EPA) in accordance with DIN EN 61340-5-1.

## Safety:

These ESD products can also be used for devices, components and protection systems in areas with high risk of explosion. Use of these ESD products prevents the occurrence of electrostatic spark discharges, eliminating the potential ignition of gases and dusts which could lead to explosions in enclosed spaces.

Manufacturers and operators must use and conform to ATEX directives for the protection of persons working in areas with high risk of explosion.

These ESD products are certified by TÜV-Süd in relation to their electrical discharge capability.

## Target groups:

Device manufacturers required to conform to ATEX product directive 2014/34/EU.

Operators required to conform to ATEX worker protection directive 1999/92/EC.

## Drawing reference:

Form K: tapped bush, with cap  
Form L: external thread

## KIPP Star grips antistatic similar to DIN 6336, internal thread, Form K

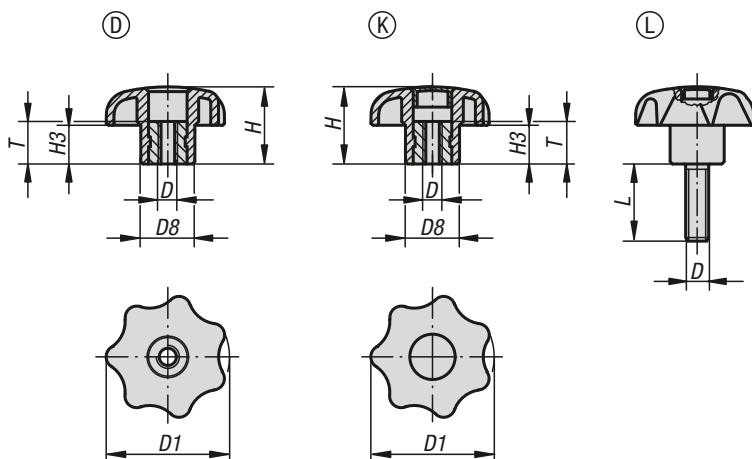
| Order No.     | Form | D  | D1 | D8 | H  | H3 | T  |
|---------------|------|----|----|----|----|----|----|
| K0155.1120824 | K    | M8 | 40 | 18 | 25 | 13 | 14 |

## KIPP Star grips antistatic similar to DIN 6336, external thread, Form L

| Order No.         | Form | D  | D1 | D8 | H  | H3 | L  |
|-------------------|------|----|----|----|----|----|----|
| K0155.11408124X25 | L    | M8 | 40 | 18 | 25 | 13 | 25 |

# Star grips

similar to DIN 6336, metal parts stainless steel


**Material:**

Black thermoplastic.  
Bush and screw stainless steel 1.4305.

**Version:**

Bush and screw bright.

**Sample order:**

K0154.4067X30  
(cap colour colza yellow; include length L)

**Note:**

Δ Add the desired cap colour code here. No colour code is required for black caps.

**On request:**

Other colours or designs, such as company logo.

**Drawing reference:**

Form D: tapped bush without cap  
Form K: tapped bush with cap  
Form L: external thread



## KIPP Star grips similar to DIN 6336, metal parts stainless steel, internal thread, without cap, Form D

| Order No. | Form | D   | D1 | D8 | H  | H3 | T  |
|-----------|------|-----|----|----|----|----|----|
| K0154.505 | D    | M5  | 25 | 12 | 16 | 8  | 10 |
| K0154.506 | D    | M6  | 32 | 14 | 20 | 10 | 10 |
| K0154.508 | D    | M8  | 40 | 18 | 25 | 13 | 14 |
| K0154.510 | D    | M10 | 50 | 22 | 32 | 17 | 14 |
| K0154.512 | D    | M12 | 63 | 26 | 40 | 21 | 18 |

## KIPP Star grips similar to DIN 6336, metal parts stainless steel, internal thread, with cap, Form K

| Order No.  | Form | D   | D1 | D8 | H  | H3 | T  |
|------------|------|-----|----|----|----|----|----|
| K0154.205Δ | K    | M5  | 25 | 12 | 16 | 8  | 10 |
| K0154.206Δ | K    | M6  | 32 | 14 | 20 | 10 | 10 |
| K0154.208Δ | K    | M8  | 40 | 18 | 25 | 13 | 14 |
| K0154.210Δ | K    | M10 | 50 | 22 | 32 | 17 | 14 |
| K0154.212Δ | K    | M12 | 63 | 26 | 40 | 21 | 18 |

## KIPP Star grips similar to DIN 6336 metal parts stainless steel, with external thread, Form L

| Order No.   | Form | D   | D1 | D8 | H  | H3 | L                 |
|-------------|------|-----|----|----|----|----|-------------------|
| K0154.405ΔX | L    | M5  | 25 | 12 | 16 | 8  | 15/20             |
| K0154.406ΔX | L    | M6  | 32 | 14 | 20 | 10 | 20/30             |
| K0154.408ΔX | L    | M8  | 40 | 18 | 25 | 13 | 15/20/25/30/40/60 |
| K0154.410ΔX | L    | M10 | 50 | 22 | 32 | 17 | 25/30/40/50/60    |



A large grid of graph paper for taking notes.



## Star grips



### Material:

Fibreglass reinforced thermoplastic.  
Tapped bush brass.  
Screw steel.

### Version:

Grip, black.  
Screw electro zinc-plated.

### Sample order:

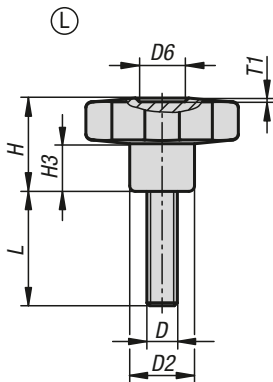
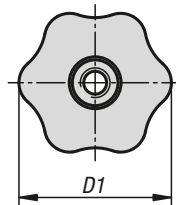
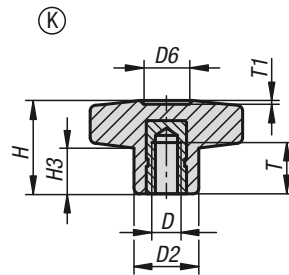
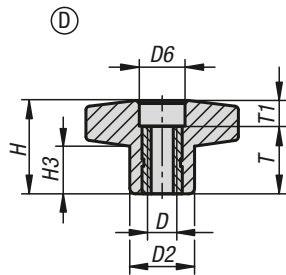
K1090.43006X16 (include length L)

### Drawing reference:

Form D: tapped bush, without cap

Form K: tapped bush

Form L: external thread





## KIPP Form D, tapped bush, without cap

| Order No.   | Form | D   | D1 | D2 | D6   | H    | H3   | T  | T1 |
|-------------|------|-----|----|----|------|------|------|----|----|
| K1090.53005 | D    | M5  | 30 | 15 | 11   | 22   | 11   | 18 | 4  |
| K1090.53006 | D    | M6  | 30 | 15 | 11   | 22   | 11   | 18 | 4  |
| K1090.53008 | D    | M8  | 30 | 15 | 11   | 22   | 11   | 18 | 4  |
| K1090.54006 | D    | M6  | 40 | 17 | 12,5 | 24,5 | 12,5 | 18 | 6  |
| K1090.54008 | D    | M8  | 40 | 17 | 12,5 | 24,5 | 12,5 | 18 | 6  |
| K1090.54010 | D    | M10 | 40 | 17 | 12,5 | 24,5 | 12,5 | 18 | 6  |
| K1090.55008 | D    | M8  | 50 | 20 | 14   | 29   | 15,5 | 18 | 11 |
| K1090.55010 | D    | M10 | 50 | 20 | 14   | 29   | 15,5 | 18 | 11 |
| K1090.55012 | D    | M12 | 50 | 20 | 14   | 29   | 14   | 18 | 11 |
| K1090.56010 | D    | M10 | 60 | 24 | 16,5 | 34   | 18   | 18 | 16 |
| K1090.56012 | D    | M12 | 60 | 24 | 16,5 | 34   | 18   | 18 | 16 |

## KIPP Form K, tapped bush

| Order No.   | Form | D   | D1 | D2 | D6   | H    | H3   | T  | T1  |
|-------------|------|-----|----|----|------|------|------|----|-----|
| K1090.23005 | K    | M5  | 30 | 15 | 9    | 22   | 11   | 14 | 1,5 |
| K1090.23006 | K    | M6  | 30 | 15 | 9    | 22   | 11   | 10 | 1,5 |
| K1090.24006 | K    | M6  | 40 | 17 | 12   | 24,5 | 12   | 16 | 1   |
| K1090.24008 | K    | M8  | 40 | 17 | 12   | 24,5 | 12   | 14 | 1   |
| K1090.24010 | K    | M10 | 40 | 17 | 12   | 24,5 | 12   | 14 | 1   |
| K1090.25008 | K    | M8  | 50 | 20 | 14,5 | 29   | 15,5 | 14 | 1,5 |
| K1090.25010 | K    | M10 | 50 | 20 | 14,5 | 29   | 15,5 | 14 | 1,5 |
| K1090.25012 | K    | M12 | 50 | 20 | 14,5 | 29   | 15,5 | 18 | 1,5 |
| K1090.26010 | K    | M10 | 60 | 24 | 18   | 34   | 18   | 21 | 1,5 |
| K1090.26012 | K    | M12 | 60 | 24 | 18   | 34   | 18   | 18 | 1,5 |

## KIPP Form L, external thread

| Order No.    | Form | D   | D1 | D2 | D6   | H    | H3   | T1  | L           |
|--------------|------|-----|----|----|------|------|------|-----|-------------|
| K1090.43006X | L    | M6  | 30 | 15 | 9    | 22   | 11   | 1,5 | 16/20/30    |
| K1090.43008X | L    | M8  | 30 | 15 | 9    | 22   | 11   | 1,5 | 16/20/30/40 |
| K1090.44006X | L    | M6  | 40 | 17 | 12   | 24,5 | 12,5 | 1   | 16/20/30/40 |
| K1090.44008X | L    | M8  | 40 | 17 | 12   | 24,5 | 12,5 | 1   | 20/30/40/50 |
| K1090.45008X | L    | M8  | 50 | 20 | 14,5 | 29   | 15   | 1,5 | 20/30/40    |
| K1090.45010X | L    | M10 | 50 | 20 | 14,5 | 29   | 15   | 1,5 | 20/30/40/50 |
| K1090.46010X | L    | M10 | 60 | 24 | 18   | 34   | 18   | 1,5 | 20/30/40/50 |
| K1090.46012X | L    | M12 | 60 | 24 | 18   | 34   | 18   | 1,5 | 20/30/40/50 |



## Star grips with safety cable

similar to DIN 6336



**Material:**

Grip thermoplastic.  
Bush and screw steel.  
Safety cable elastic TPU.

**Version:**

Bush and screw trivalent blue passivated.

**Sample order:**

K0155.7056X15  
(cap colour traffic red; include length L)

**Note:**

Δ Add the desired cap colour code here. No colour code is required for black caps.

Attach the safety cable to a base to make the star grip unlosable. The star grip cannot be moved far from the object to which it belongs, simplifying screwing and unscrewing of the grip and ensuring against loss.

**Assembly:**

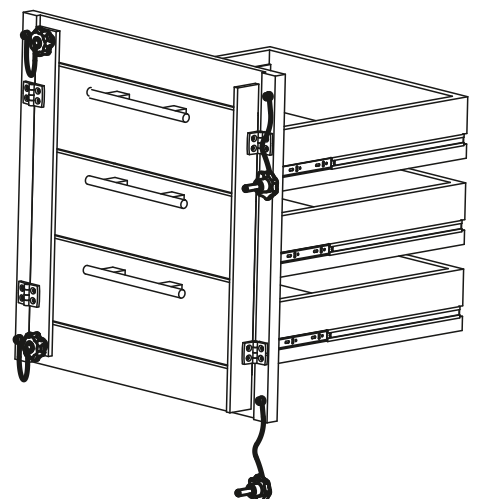
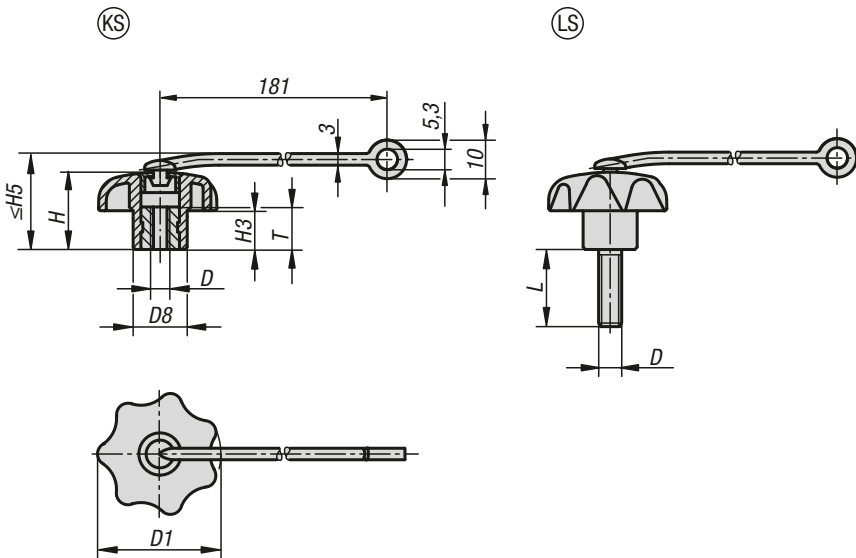
Do not stretch the band during assembly.  
Make sure that the anchor is not too far from where the star grip is to be used.

### Accessories:

The safety cable is also available as an accessory, see K0743.04190.

**Drawing reference:**

Form KS: tapped bush, with cap  
Form LS: male thread



# Star grips with safety cable

similar to DIN 6336



## KIPP Star grips with safety cable, female thread, Form KS

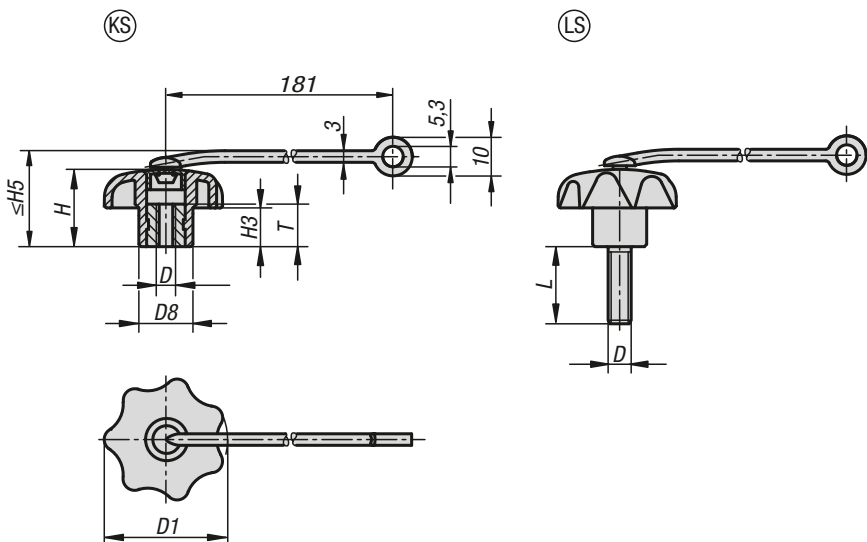
| Order No.   | Form | D   | D1 | D8 | H  | H3 | H5<br>max. | T  |
|-------------|------|-----|----|----|----|----|------------|----|
| K0155.604Δ  | KS   | M4  | 25 | 12 | 16 | 8  | 22         | 10 |
| K0155.605Δ  | KS   | M5  | 25 | 12 | 16 | 8  | 22         | 10 |
| K0155.6061Δ | KS   | M6  | 25 | 12 | 16 | 8  | 22         | 10 |
| K0155.6051Δ | KS   | M5  | 32 | 14 | 20 | 10 | 26         | 10 |
| K0155.606Δ  | KS   | M6  | 32 | 14 | 20 | 10 | 26         | 10 |
| K0155.608Δ  | KS   | M8  | 40 | 18 | 25 | 13 | 31         | 14 |
| K0155.6101Δ | KS   | M10 | 40 | 18 | 25 | 13 | 31         | 14 |
| K0155.6081Δ | KS   | M8  | 50 | 22 | 32 | 17 | 38         | 14 |
| K0155.610Δ  | KS   | M10 | 50 | 22 | 32 | 17 | 38         | 14 |
| K0155.6121Δ | KS   | M12 | 50 | 22 | 32 | 17 | 38         | 14 |
| K0155.6102Δ | KS   | M10 | 63 | 26 | 40 | 21 | 46         | 14 |
| K0155.612Δ  | KS   | M12 | 63 | 26 | 40 | 21 | 46         | 14 |
| K0155.616Δ  | KS   | M16 | 63 | 26 | 40 | 21 | 46         | 14 |

## KIPP Star grips with safety cable, male thread, Form LS

| Order No.    | Form | D   | D1 | D8 | H  | H3 | H5<br>max. | L                             |
|--------------|------|-----|----|----|----|----|------------|-------------------------------|
| K0155.705ΔX  | LS   | M5  | 25 | 12 | 16 | 8  | 22         | 10/15/20/25/30/35/40/45/50/60 |
| K0155.706ΔX  | LS   | M6  | 25 | 12 | 16 | 8  | 22         | 10/15/20/25/30/35/40/45/50/60 |
| K0155.7061ΔX | LS   | M6  | 32 | 14 | 20 | 10 | 26         | 10/15/20/25/30/35/40/45/50/60 |
| K0155.708ΔX  | LS   | M8  | 32 | 14 | 20 | 10 | 26         | 15/20/25/30/35/40/45/50/60    |
| K0155.7081ΔX | LS   | M8  | 40 | 18 | 25 | 13 | 31         | 15/20/25/30/35/40/45/50/60    |
| K0155.710ΔX  | LS   | M10 | 40 | 18 | 25 | 13 | 31         | 15/20/25/30/35/40/45/50/60    |
| K0155.7101ΔX | LS   | M10 | 50 | 22 | 32 | 17 | 38         | 15/20/25/30/35/40/45/50/60    |
| K0155.712ΔX  | LS   | M12 | 50 | 22 | 32 | 17 | 38         | 15/20/25/30/35/40/45/50/60    |
| K0155.7102ΔX | LS   | M10 | 63 | 26 | 40 | 21 | 46         | 20/25/30/35/40/45/50/60       |
| K0155.7121ΔX | LS   | M12 | 63 | 26 | 40 | 21 | 46         | 20/25/30/35/40/45/50/60       |
| K0155.716ΔX  | LS   | M16 | 63 | 26 | 40 | 21 | 46         | 30/35/40/45/50/60             |

# Star grips with safety cable

similar to DIN 6336, metal parts stainless steel



## Material:

Grip thermoplastic.  
Bush and screw stainless steel 1.4305.  
Safety cable elastic TPU.

## Version:

Bush and screw bright.

## Sample order:

K0154.7056X15  
(cap colour traffic red; include length L)

## Note:

Δ Add the desired cap colour code here. No colour code is required for black caps.

Attach the safety cable to a base to make the star grip unlosable.

The star grip cannot be moved far from the object to which it belongs, simplifying screwing and unscrewing of the grip and ensuring against loss.

## Assembly:

Do not stretch the band during assembly.  
Make sure that the anchor is not too far from where the star grip is to be used.

## Accessories:

The safety cable is also available as an accessory, see K0743.04190.

## Drawing reference:

Form KS: tapped bush, with cap  
Form LS: male thread



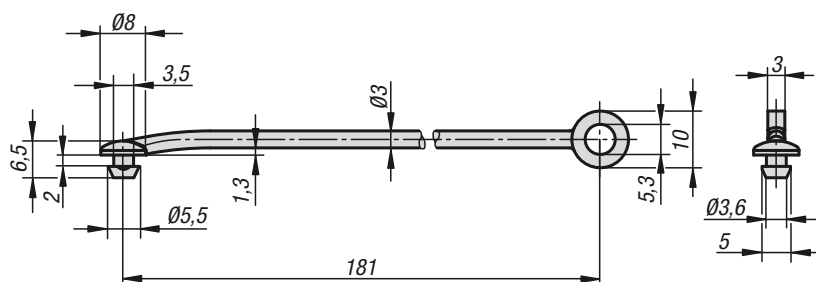
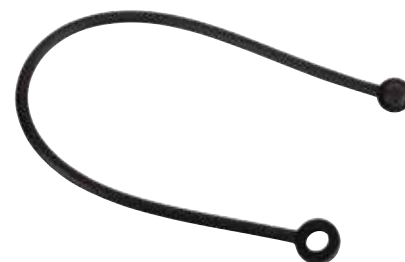
## KIPP Star grips with safety cable, metal parts stainless steel, internal thread, Form KS

| Order No.  | Form | D   | D1 | D8 | H  | H3 | H5 max. | T  |
|------------|------|-----|----|----|----|----|---------|----|
| K0154.605Δ | KS   | M5  | 25 | 12 | 16 | 8  | 22      | 10 |
| K0154.606Δ | KS   | M6  | 32 | 14 | 20 | 10 | 26      | 10 |
| K0154.608Δ | KS   | M8  | 40 | 18 | 25 | 13 | 31      | 14 |
| K0154.610Δ | KS   | M10 | 50 | 22 | 32 | 17 | 38      | 14 |
| K0154.612Δ | KS   | M12 | 63 | 26 | 40 | 21 | 46      | 18 |

## KIPP Star grips with safety cable, metal parts stainless steel, external thread, Form LS

| Order No.   | Form | D   | D1 | D8 | H  | H3 | H5 max. | L                 |
|-------------|------|-----|----|----|----|----|---------|-------------------|
| K0154.705ΔX | LS   | M5  | 25 | 12 | 16 | 8  | 22      | 15/20             |
| K0154.706ΔX | LS   | M6  | 32 | 14 | 20 | 10 | 26      | 20/30             |
| K0154.708ΔX | LS   | M8  | 40 | 18 | 25 | 13 | 31      | 15/20/25/30/40/60 |
| K0154.710ΔX | LS   | M10 | 50 | 22 | 32 | 17 | 38      | 25/30/40/50/60    |

# Safety cable


**Material:**

Thermoplastic urethane TPU.

**Sample order:**

K0743.04190

**Note:**

This safety cable has a high breaking strain and good elasticity.

It was especially conceived for the star grips K0154, K0155 to make them unlosable operating parts.

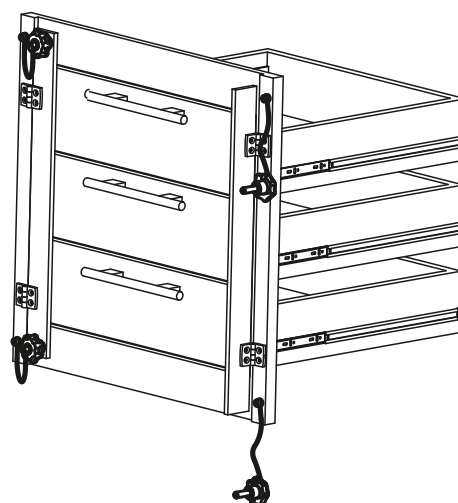
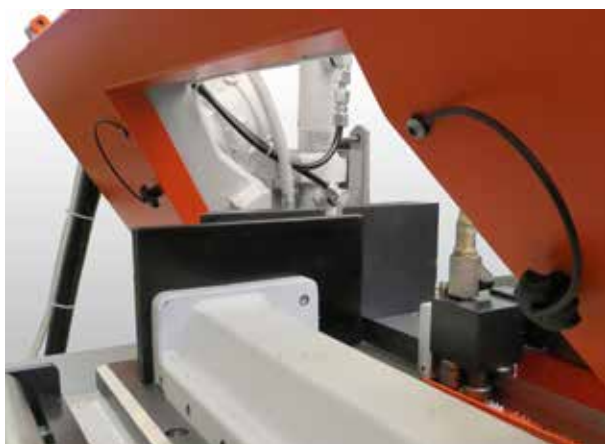
Star grips K0154, K0155 and the knurled knobs K0260/K0261 and K0247 from our range can be retrofitted with this lanyard.

**Assembly:**

Recommended hole  $\varnothing 3.8_{-0.1}$ . The hole edge should be deburred. A Teflon based lubrication is recommended to aid assembly.

**On request:**

Can be combined with other products.


**KIPP Safety cable**

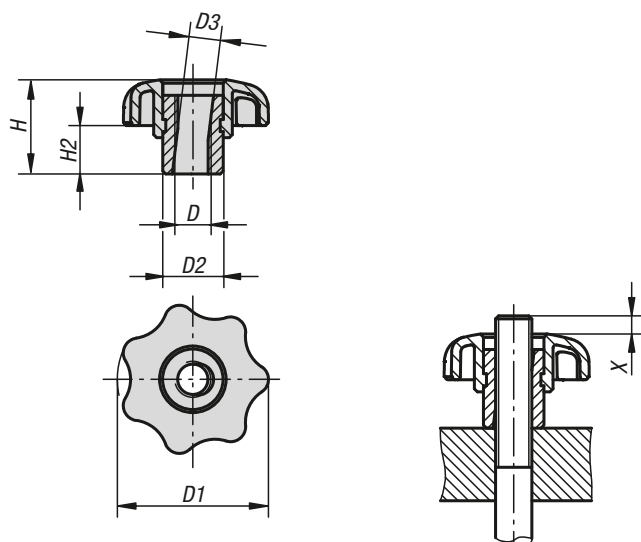
Order No.

Dimensions

K0743.04190

see drawing

## Star grips quick-acting



### Material:

Black thermoplastic.  
Bush steel.

### Version:

Bush trivalent blue passivated

### Sample order:

K0156.06

### Note:

Quick-acting star grips can be used on all fixtures that do not require a high clamping force.  
Tilt the grip to slide on, then straighten it to engage the threads.

### Drawing reference:

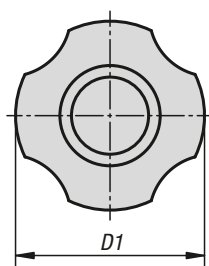
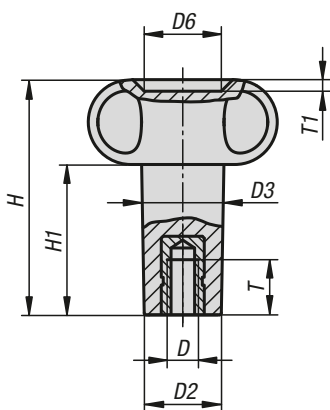
X: The stud should be several mm longer than height "H"

## KIPP Star grips quick-acting

| Order No. | D   | D1 | D2   | D3   | H    | H2 |
|-----------|-----|----|------|------|------|----|
| K0156.05  | M5  | 25 | 10   | 5,2  | 16,6 | 9  |
| K0156.06  | M6  | 32 | 13,5 | 6,2  | 20,6 | 11 |
| K0156.08  | M8  | 40 | 13,5 | 8,3  | 24,5 | 13 |
| K0156.10  | M10 | 50 | 19   | 10,3 | 31,2 | 17 |
| K0156.12  | M12 | 63 | 19   | 12,7 | 39,3 | 21 |

## Star grips

with extended hub



### Material:

Fibreglass reinforced thermoplastic.  
Tapped bush brass.

### Version:

black.

### Sample order:

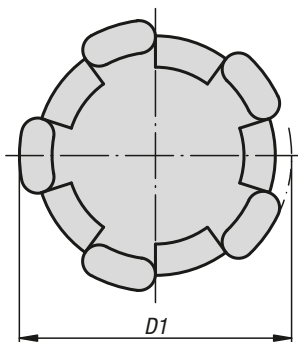
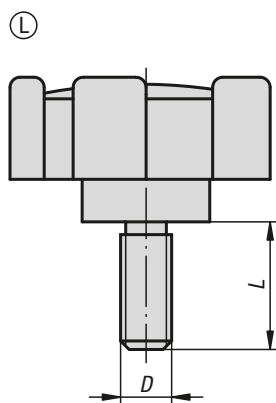
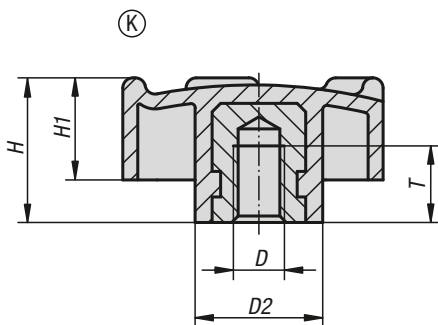
K1088.2410685



### KIPP Star grips with extended hub

| Order No.     | D   | D1 | D2   | D3   | D6 | H  | H1 | T  | T1  |
|---------------|-----|----|------|------|----|----|----|----|-----|
| K1088.2410685 | M6  | 41 | 14,8 | 15,5 | 12 | 85 | 66 | 18 | 3   |
| K1088.2520861 | M8  | 52 | 17,5 | 19   | 14 | 61 | 39 | 15 | 2,5 |
| K1088.2521071 | M10 | 52 | 18   | 20,5 | 14 | 71 | 49 | 15 | 2,5 |

## Five lobe grips



### Material:

Grip black grey thermoplastic.  
Bush steel or brass.  
Screw 5.8 steel.

### Version:

Steel bush electro zinc-plated.  
Screw trivalent blue passivated.

### Sample order:

K0276.3206

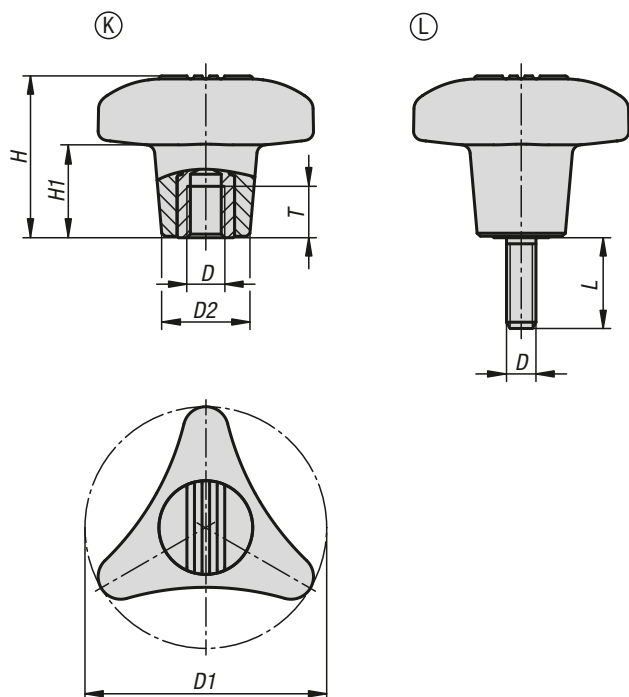
### KIPP Five lobe grips with internal thread

| Order No.  | Form | D   | D1 | D2 | H    | H1   | T  |
|------------|------|-----|----|----|------|------|----|
| K0276.3206 | K    | M6  | 32 | 15 | 17   | 12   | 9  |
| K0276.4008 | K    | M8  | 40 | 18 | 20,5 | 14,5 | 11 |
| K0276.5010 | K    | M10 | 50 | 20 | 25   | 18   | 14 |

### KIPP Five lobe grips with external thread

| Order No.    | Form | D   | D1 | D2 | H    | H1   | L  |
|--------------|------|-----|----|----|------|------|----|
| K0276.320615 | L    | M6  | 32 | 15 | 17   | 12   | 15 |
| K0276.400816 | L    | M8  | 40 | 18 | 20,5 | 14,5 | 16 |
| K0276.501020 | L    | M10 | 50 | 20 | 25   | 18   | 20 |

## Triangular grips



### Material:

Grip glass-bead reinforced thermoplastic.  
Cap thermoplastic.  
Steel parts grade 5.8.

### Version:

Grip and cap black grey (RAL 7021).  
Steel parts blue-passivated.

### Sample order:

K1020.18010X15 (include length L)

### On request:

Other screw lengths and colours.  
Metal parts stainless steel.

## KIPP Triangular grips, internal thread

| Order No.   | Form | D   | D1 | D2   | H    | H1 | T  |
|-------------|------|-----|----|------|------|----|----|
| K1020.18008 | K    | M8  | 80 | 29,2 | 53,5 | 31 | 17 |
| K1020.18010 | K    | M10 | 80 | 29,2 | 53,5 | 31 | 17 |
| K1020.18012 | K    | M12 | 80 | 29,2 | 53,5 | 31 | 17 |

## KIPP Triangular grips, external thread

| Order No.    | Form | D   | D1 | D2   | H    | H1 | L              |
|--------------|------|-----|----|------|------|----|----------------|
| K1020.18008X | L    | M8  | 80 | 29,2 | 53,5 | 31 | 15/20/30/40/50 |
| K1020.18010X | L    | M10 | 80 | 29,2 | 53,5 | 31 | 15/20/30/40/50 |
| K1020.18012X | L    | M12 | 80 | 29,2 | 53,5 | 31 | 15/20/30/40/50 |



# Triangular grips

with high collar


**Material:**

Black thermoset PF 31.

Bush and screw electro zinc-plated steel or bright stainless steel.

**Version:**

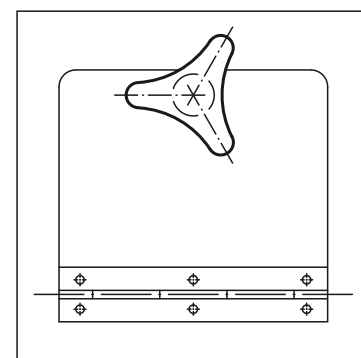
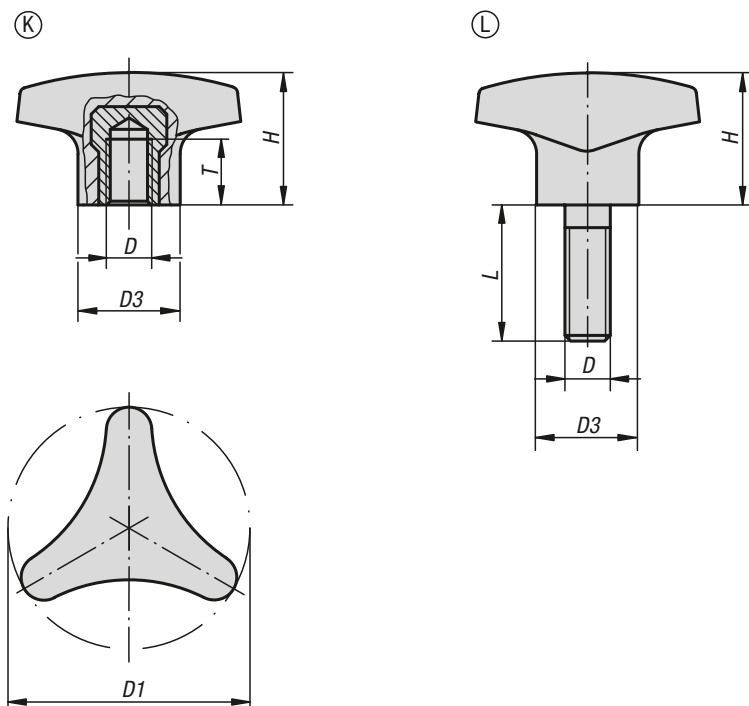
High-gloss polished.

**Sample order:**

K0183.14008X20

**On request:**

Other screw sizes, screw lengths and colours.



## KIPP Triangular grips with high collar, internal thread

| Order No.   | Form | Component material | D   | D1 | D3 | H  | T  |
|-------------|------|--------------------|-----|----|----|----|----|
| K0183.14006 | K    | steel              | M6  | 40 | 14 | 22 | 12 |
| K0183.15008 | K    | steel              | M8  | 50 | 18 | 28 | 14 |
| K0183.16210 | K    | steel              | M10 | 62 | 22 | 35 | 14 |
| K0183.24006 | K    | stainless steel    | M6  | 40 | 12 | 22 | 9  |
| K0183.25008 | K    | stainless steel    | M8  | 50 | 15 | 28 | 13 |
| K0183.26210 | K    | stainless steel    | M10 | 62 | 18 | 35 | 13 |

## KIPP Triangular grips with high collar, external thread

| Order No.      | Form | Component material | D   | D1 | D3 | H  | L  |
|----------------|------|--------------------|-----|----|----|----|----|
| K0183.14006X15 | L    | steel              | M6  | 40 | 14 | 22 | 15 |
| K0183.14008X20 | L    | steel              | M8  | 40 | 14 | 22 | 20 |
| K0183.15008X20 | L    | steel              | M8  | 50 | 18 | 28 | 20 |
| K0183.15010X25 | L    | steel              | M10 | 50 | 22 | 28 | 25 |
| K0183.16210X25 | L    | steel              | M10 | 62 | 22 | 35 | 25 |
| K0183.24006X20 | L    | stainless steel    | M6  | 40 | 12 | 22 | 20 |
| K0183.24008X20 | L    | stainless steel    | M8  | 40 | 12 | 22 | 20 |
| K0183.25008X20 | L    | stainless steel    | M8  | 50 | 15 | 28 | 20 |
| K0183.25010X30 | L    | stainless steel    | M10 | 50 | 15 | 28 | 30 |
| K0183.26210X30 | L    | stainless steel    | M10 | 62 | 18 | 35 | 30 |

## Triangular grips



### Material:

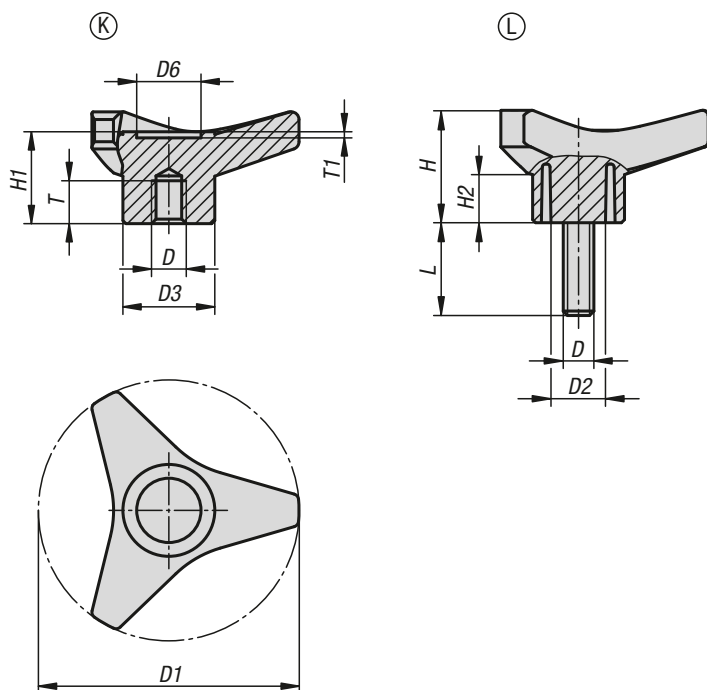
Fibreglass reinforced thermoplastic.  
Tapped bush brass.  
Screw steel.

### Version:

Grip, black.  
Screw electro zinc-plated.

### Sample order:

K1083.48510X20



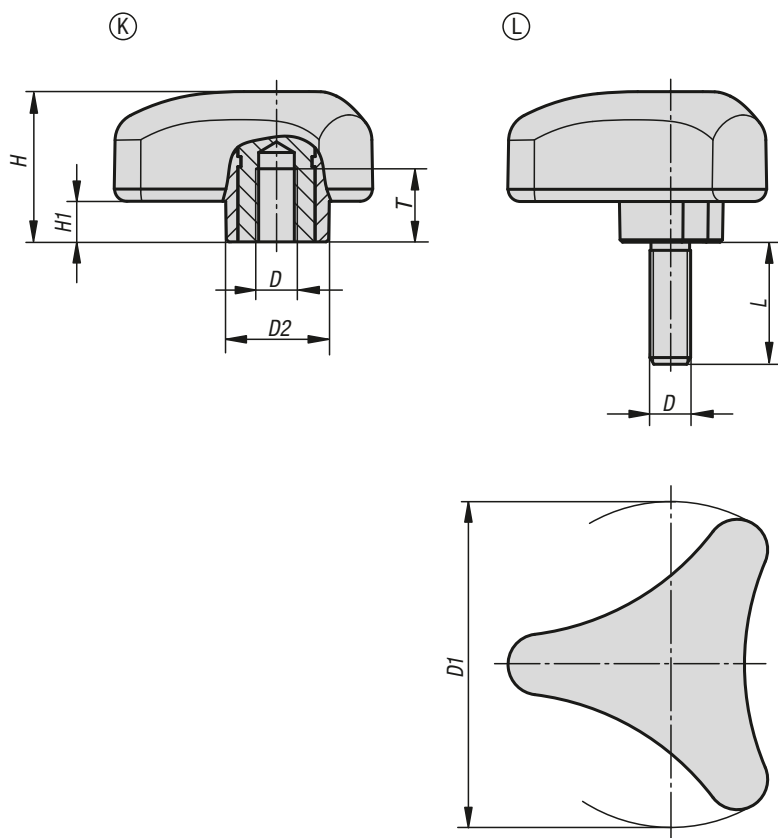
### KIPP Triangular grips with internal thread

| Order No.    | Form | D   | D1  | D3 | D6   | H  | H1   | H2   | T  | T1  |
|--------------|------|-----|-----|----|------|----|------|------|----|-----|
| K1083.24506  | K    | M6  | 45  | 16 | 11   | 21 | 18   | 10   | 9  | 1   |
| K1083.26508  | K    | M8  | 65  | 22 | 15,5 | 28 | 23,5 | 11,5 | 11 | 1,5 |
| K1083.26510  | K    | M10 | 65  | 22 | 15,5 | 28 | 23,5 | 11,5 | 11 | 1,5 |
| K1083.28510  | K    | M10 | 85  | 30 | 21   | 37 | 30,5 | 16   | 14 | 2   |
| K1083.28512  | K    | M12 | 85  | 30 | 21   | 37 | 30,5 | 16   | 19 | 2   |
| K1083.210512 | K    | M12 | 105 | 35 | 25   | 46 | 37,5 | 19   | 17 | 2   |
| K1083.210514 | K    | M14 | 105 | 35 | 25   | 46 | 37,5 | 19   | 19 | 2   |

### KIPP Triangular grips with external thread

| Order No.       | Form | D   | D1  | D2 | D3 | D6 | H  | H1   | H2 | L  | T1 |
|-----------------|------|-----|-----|----|----|----|----|------|----|----|----|
| K1083.48508X20  | L    | M8  | 85  | 18 | 30 | 21 | 37 | 30,5 | 16 | 20 | 2  |
| K1083.48508X30  | L    | M8  | 85  | 18 | 30 | 21 | 37 | 30,5 | 16 | 30 | 2  |
| K1083.48510X20  | L    | M10 | 85  | 18 | 30 | 21 | 37 | 30,5 | 16 | 20 | 2  |
| K1083.48510X30  | L    | M10 | 85  | 18 | 30 | 21 | 37 | 30,5 | 16 | 30 | 2  |
| K1083.48512X20  | L    | M12 | 85  | 18 | 30 | 21 | 37 | 30,5 | 16 | 20 | 2  |
| K1083.48512X40  | L    | M12 | 85  | 18 | 30 | 21 | 37 | 30,5 | 16 | 40 | 2  |
| K1083.410512X30 | L    | M12 | 105 | 20 | 35 | 25 | 46 | 37,5 | 19 | 30 | 2  |
| K1083.410512X50 | L    | M12 | 105 | 20 | 35 | 25 | 46 | 37,5 | 19 | 50 | 2  |

# Triangular grips ergonomic

**Material:**

Hard components fibreglass reinforced plastic.  
Soft components thermoplastic elastomer.  
Bush or screw, steel grade 5.8 or stainless steel 1.4305.

**Version:**

Steel trivalent blue passivated.  
Stainless steel, bright.

**Sample order:**

K0785.8008X20

**Note:**

The colour combination  
black grey RAL 7021 (hard components) and  
black grey RAL 7021 (soft components)  
are supplied as standard.

**On request:**

Other versions.

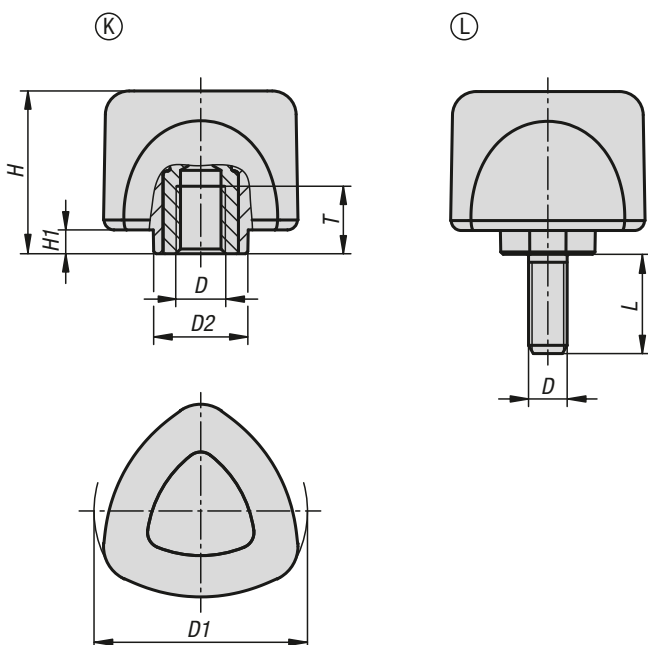
## KIPP Triangular grips ergonomic with internal thread

| Order No.   | Form | Component material | D   | D1 | D2 | H  | H1 | T  |
|-------------|------|--------------------|-----|----|----|----|----|----|
| K0785.8008  | K    | steel              | M8  | 80 | 26 | 37 | 10 | 17 |
| K0785.8010  | K    | steel              | M10 | 80 | 26 | 37 | 10 | 17 |
| K0785.8012  | K    | steel              | M12 | 80 | 26 | 37 | 10 | 17 |
| K0785.08008 | K    | stainless steel    | M8  | 80 | 26 | 37 | 10 | 17 |
| K0785.08010 | K    | stainless steel    | M10 | 80 | 26 | 37 | 10 | 17 |
| K0785.08012 | K    | stainless steel    | M12 | 80 | 26 | 37 | 10 | 17 |

## KIPP Triangular grips ergonomic with external thread

| Order No.    | Form | Component material | D   | D1 | D2 | H  | H1 | L           |
|--------------|------|--------------------|-----|----|----|----|----|-------------|
| K0785.8008X  | L    | steel              | M8  | 80 | 26 | 37 | 10 | 20/25/30/40 |
| K0785.8010X  | L    | steel              | M10 | 80 | 26 | 37 | 10 | 30/40/50    |
| K0785.8012X  | L    | steel              | M12 | 80 | 26 | 37 | 10 | 30/40/50/60 |
| K0785.08008X | L    | stainless steel    | M8  | 80 | 26 | 37 | 10 | 20/25/30/40 |
| K0785.08010X | L    | stainless steel    | M10 | 80 | 26 | 37 | 10 | 30/40/50    |
| K0785.08012X | L    | stainless steel    | M12 | 80 | 26 | 37 | 10 | 30/40/50/60 |

## Triangular grips 2K ergonomic



### Material:

Hard components fibreglass reinforced plastic.  
Soft components thermoplastic elastomer.  
Bush or screw, steel grade 5.8 or stainless steel 1.4305.

### Version:

Steel trivalent blue passivated.  
Stainless steel, bright.

### Sample order:

K0980.5008X20

### Note:

The colour combinations  
graphite black RAL 9011 (hard components) and  
black grey RAL 7021 (soft components)  
are supplied as standard.

The soft components ensure a non-slip grip of the  
operating part. The closed design offers sufficient  
protection against dirt.

### On request:

Further colour combinations.

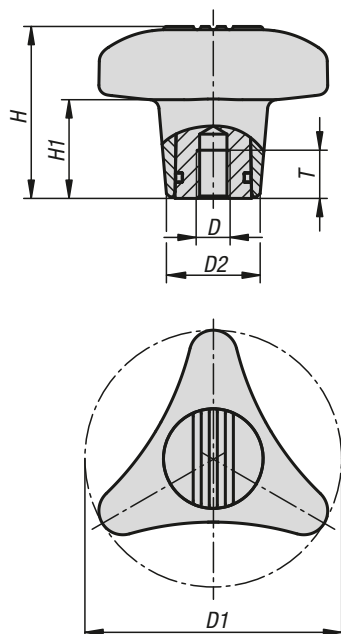
## KIPP Internal thread

| Order No.   | Form | Component material | D   | D1   | D2   | H  | H1 | T  |
|-------------|------|--------------------|-----|------|------|----|----|----|
| K0980.5008  | K    | steel              | M8  | 53,8 | 23,9 | 41 | 6  | 17 |
| K0980.5010  | K    | steel              | M10 | 53,8 | 23,9 | 41 | 6  | 17 |
| K0980.6308  | K    | steel              | M8  | 67,7 | 23,9 | 36 | 6  | 17 |
| K0980.6310  | K    | steel              | M10 | 67,7 | 23,9 | 36 | 6  | 17 |
| K0980.05008 | K    | stainless steel    | M8  | 53,8 | 23,9 | 41 | 6  | 17 |
| K0980.05010 | K    | stainless steel    | M10 | 53,8 | 23,9 | 41 | 6  | 17 |
| K0980.06308 | K    | stainless steel    | M8  | 67,7 | 23,9 | 36 | 6  | 17 |
| K0980.06310 | K    | stainless steel    | M10 | 67,7 | 23,9 | 36 | 6  | 17 |

## KIPP External thread

| Order No.    | Form | Component material | D   | D1   | D2   | H  | H1 | L           |
|--------------|------|--------------------|-----|------|------|----|----|-------------|
| K0980.5008X  | L    | steel              | M8  | 53,8 | 23,9 | 41 | 6  | 20/25/30/40 |
| K0980.5010X  | L    | steel              | M10 | 53,8 | 23,9 | 41 | 6  | 20/25/30/40 |
| K0980.6308X  | L    | steel              | M8  | 67,7 | 23,9 | 36 | 6  | 20/25/30/40 |
| K0980.6310X  | L    | steel              | M10 | 67,7 | 23,9 | 36 | 6  | 20/25/30/40 |
| K0980.05008X | L    | stainless steel    | M8  | 53,8 | 23,9 | 41 | 6  | 20/25/30/40 |
| K0980.05010X | L    | stainless steel    | M10 | 53,8 | 23,9 | 41 | 6  | 20/25/30/40 |
| K0980.06308X | L    | stainless steel    | M8  | 67,7 | 23,9 | 36 | 6  | 20/25/30/40 |
| K0980.06310X | L    | stainless steel    | M10 | 67,7 | 23,9 | 36 | 6  | 20/25/30/40 |

# Triangular torque grips


**Material:**

Grip glass-bead reinforced thermoplastic.

Cap thermoplastic.

Metal parts hardened stainless steel.

**Version:**

Grip and cap, black grey (RAL 7021).

Stainless steel parts, electropolished.

**Sample order:**

K1019.180105

**Note:**

An audible click signals when the maximum torque has been reached. The grip can only be tightened with the maximum torque specified in the table.

**On request:**

Other internal threads, maximum torques and colours.

**KIPP Triangular torque grips**

| Order No.    | D   | D1 | D2   | H    | H1 | T  | Torque Nm |
|--------------|-----|----|------|------|----|----|-----------|
| K1019.180085 | M8  | 80 | 29,2 | 53,5 | 31 | 13 | 5         |
| K1019.180105 | M10 | 80 | 29,2 | 53,5 | 31 | 13 | 5         |
| K1019.180125 | M12 | 80 | 29,2 | 53,5 | 31 | 13 | 5         |



A large rectangular area filled with a light gray grid pattern, intended for taking notes.



## Four lobe grips flat



Extraordinary gripping safety combined with attractive design are key elements to outstanding functionality. The flat construction make these four lobe grips suitable for low working spaces.

### Material, version:

Grip hard black thermoplastic.  
Coating, soft thermoplastic, black.  
Female thread electro zinc-plated brass.  
Screw grade 5.8 electro zinc-plated steel

### Sample order:

K0278.3506X20 (include length L)

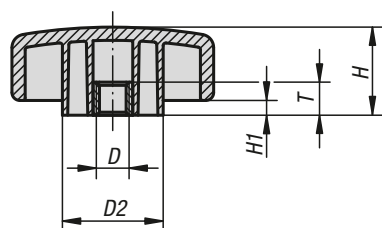
### Note:

SYMPA TOUCH flat four lobe grips are available in 5 sizes of internal and external threads.

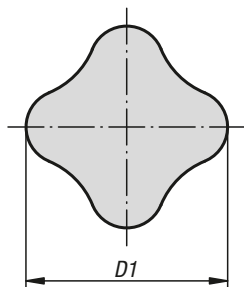
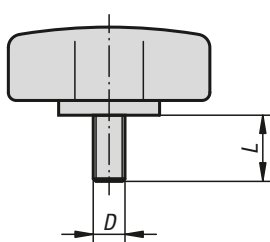
### On request:

Other screw sizes, screw lengths, versions and colours.

(K)



(L)



## Four lobe grips flat



## KIPP Four lobe grips, flat, with internal thread

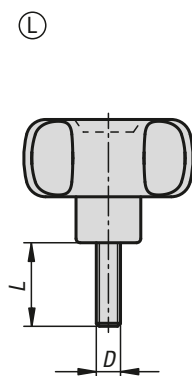
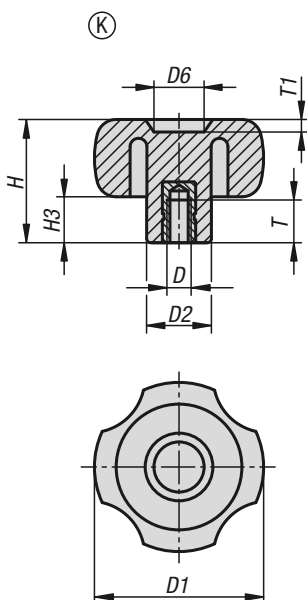
| Order No.  | Form | D   | D1   | D2   | H    | H1  | T    |
|------------|------|-----|------|------|------|-----|------|
| K0278.3505 | K    | M5  | 35,5 | 14,2 | 15,5 | 2,8 | 12,5 |
| K0278.3506 | K    | M6  | 35,5 | 14,2 | 15,5 | 2,8 | 12,5 |
| K0278.4405 | K    | M5  | 44,5 | 17,5 | 19,3 | 3,3 | 12,5 |
| K0278.4406 | K    | M6  | 44,5 | 17,5 | 19,3 | 3,3 | 12,5 |
| K0278.4408 | K    | M8  | 44,5 | 17,5 | 19,3 | 3,3 | 12,5 |
| K0278.4410 | K    | M10 | 44,5 | 17,5 | 19,3 | 3,3 | 12,5 |
| K0278.5005 | K    | M5  | 50,8 | 23,6 | 22,1 | 3,8 | 12,5 |
| K0278.5006 | K    | M6  | 50,8 | 23,6 | 22,1 | 3,8 | 12,5 |
| K0278.5008 | K    | M8  | 50,8 | 23,6 | 22,1 | 3,8 | 12,5 |
| K0278.5010 | K    | M10 | 50,8 | 23,6 | 22,1 | 3,8 | 12,5 |
| K0278.6306 | K    | M6  | 63,5 | 31,7 | 27,7 | 4,6 | 12,5 |
| K0278.6308 | K    | M8  | 63,5 | 31,7 | 27,7 | 4,6 | 12,5 |
| K0278.6310 | K    | M10 | 63,5 | 31,7 | 27,7 | 4,6 | 12,5 |
| K0278.6312 | K    | M12 | 63,5 | 31,7 | 27,7 | 4,6 | 12,5 |
| K0278.7608 | K    | M8  | 76,2 | 38,1 | 33,3 | 5,6 | 12,5 |
| K0278.7610 | K    | M10 | 76,2 | 38,1 | 33,3 | 5,6 | 12,5 |
| K0278.7612 | K    | M12 | 76,2 | 38,1 | 33,3 | 5,6 | 12,5 |

## KIPP Flat four lobe grips, flat, with external thread

| Order No.   | Form | D   | D1   | D2   | H    | H1  | L           |
|-------------|------|-----|------|------|------|-----|-------------|
| K0278.3506X | L    | M6  | 35,5 | 14,2 | 15,5 | 2,8 | 15/20/25/35 |
| K0278.4406X | L    | M6  | 44,5 | 17,5 | 19,3 | 3,3 | 15/20/25/35 |
| K0278.4408X | L    | M8  | 44,5 | 17,5 | 19,3 | 3,3 | 16/25/35    |
| K0278.4410X | L    | M10 | 44,5 | 17,5 | 19,3 | 3,3 | 20/30/40/50 |
| K0278.5006X | L    | M6  | 50,8 | 23,6 | 22,1 | 3,8 | 15/20/25/35 |
| K0278.5008X | L    | M8  | 50,8 | 23,6 | 22,1 | 3,8 | 16/25/35    |
| K0278.5010X | L    | M10 | 50,8 | 23,6 | 22,1 | 3,8 | 30/40/50    |
| K0278.6306X | L    | M6  | 63,5 | 31,7 | 27,7 | 4,6 | 15/20/25/35 |
| K0278.6308X | L    | M8  | 63,5 | 31,7 | 27,7 | 4,6 | 16/25/35    |
| K0278.6310X | L    | M10 | 63,5 | 31,7 | 27,7 | 4,6 | 30/40/50    |
| K0278.7608X | L    | M8  | 76,2 | 38,1 | 33,3 | 5,6 | 16/25/35    |
| K0278.7610X | L    | M10 | 76,2 | 38,1 | 33,3 | 5,6 | 30/40/50    |



## Four lobe grips



### Material:

Fibreglass reinforced thermoplastic.

Tapped bush brass.

Screw steel.

### Version:

Grip, black.

Screw electro zinc-plated.

### Sample order:

K1093.43006X20 (include length L)

### KIPP Four lobe grips with internal thread

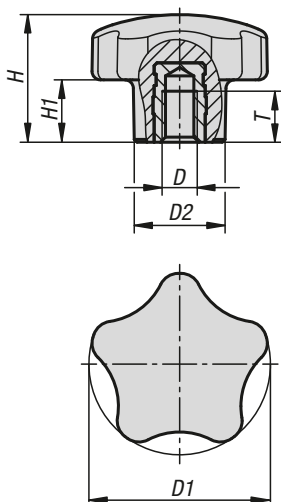
| Order No.   | Form | D   | D1   | D2   | D6   | H    | H3  | T  | T1  |
|-------------|------|-----|------|------|------|------|-----|----|-----|
| K1093.23006 | K    | M6  | 30   | 15   | 12   | 23   | 9,5 | 10 | 2   |
| K1093.24006 | K    | M6  | 40,5 | 15,5 | 12   | 29,5 | 11  | 10 | 3   |
| K1093.24008 | K    | M8  | 40,5 | 15   | 12   | 27,5 | 11  | 14 | 3   |
| K1093.25208 | K    | M8  | 50   | 20,5 | 14,5 | 32,5 | 11  | 14 | 2,5 |
| K1093.25210 | K    | M10 | 50   | 20,5 | 14,5 | 32,5 | 11  | 13 | 2,5 |
| K1093.26010 | K    | M10 | 59   | 23   | 24   | 40   | 15  | 14 | 4   |
| K1093.26012 | K    | M12 | 59   | 23   | 24   | 40   | 15  | 18 | 4   |

### KIPP Four lobe grips with external thread

| Order No.    | Form | D   | D1   | D2   | D6   | H    | H3  | T1  | L              |
|--------------|------|-----|------|------|------|------|-----|-----|----------------|
| K1093.43006X | L    | M6  | 30   | 15   | 12   | 23   | 9,5 | 2   | 16/20/30/40/50 |
| K1093.44006X | L    | M6  | 40,5 | 15,5 | 12   | 29,5 | 11  | 3   | 16/20          |
| K1093.44008X | L    | M8  | 40,5 | 15   | 12   | 29,5 | 11  | 3   | 20/30/40       |
| K1093.45208X | L    | M8  | 50   | 20,5 | 14,5 | 32,5 | 11  | 2,5 | 16/20/30/40/50 |
| K1093.46010X | L    | M10 | 59   | 23   | 24   | 40   | 15  | 4   | 20/30/40/50    |
| K1093.46012X | L    | M12 | 59   | 23   | 24   | 40   | 15  | 4   | 50             |
| K1093.48010X | L    | M10 | 79   | 30   | 21   | 41   | 17  | 3   | 30/50          |
| K1093.48012X | L    | M12 | 79   | 30   | 21   | 41   | 17  | 3   | 50             |

## Five lobe grips

with internal thread



### Material:

Thermoset PF 31.  
Steel or stainless steel.

### Version:

Thermoset black, high-gloss polished.  
Trivalent blue passivated steel or bright stainless steel.

### Sample order:

K1297.3205

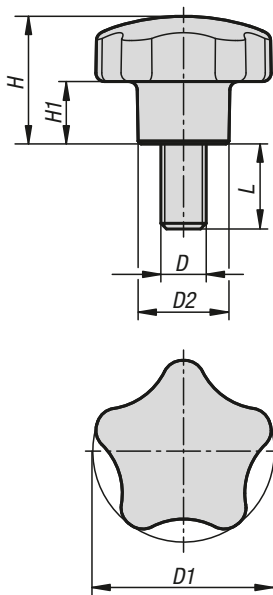


## KIPP Five lobe grips with internal thread

| Order No.<br>steel | Order No.<br>stainless steel | D   | D1 | D2 | H    | H1   | T   |
|--------------------|------------------------------|-----|----|----|------|------|-----|
| K1297.3205         | K1297.13205                  | M5  | 32 | 16 | 22,5 | 11   | 7,5 |
| K1297.3206         | K1297.13206                  | M6  | 32 | 16 | 22,5 | 11   | 9   |
| K1297.4006         | K1297.14006                  | M6  | 40 | 20 | 28   | 14   | 9   |
| K1297.4008         | K1297.14008                  | M8  | 40 | 20 | 28   | 14   | 12  |
| K1297.4010         | K1297.14010                  | M10 | 40 | 20 | 28   | 14   | 15  |
| K1297.5008         | K1297.15008                  | M8  | 50 | 25 | 35   | 17,5 | 12  |
| K1297.5010         | K1297.15010                  | M10 | 50 | 25 | 35   | 17,5 | 15  |
| K1297.6012         | K1297.16012                  | M12 | 60 | 30 | 37   | 18,5 | 18  |

## Five lobe grips

with external thread



### Material:

Thermoset PF 31.  
Steel or stainless steel.

### Version:

Thermoset black, high-gloss polished.  
Trivalent blue passivated steel or bright stainless steel.

### Sample order:

K1298.3206X10 (include length L)

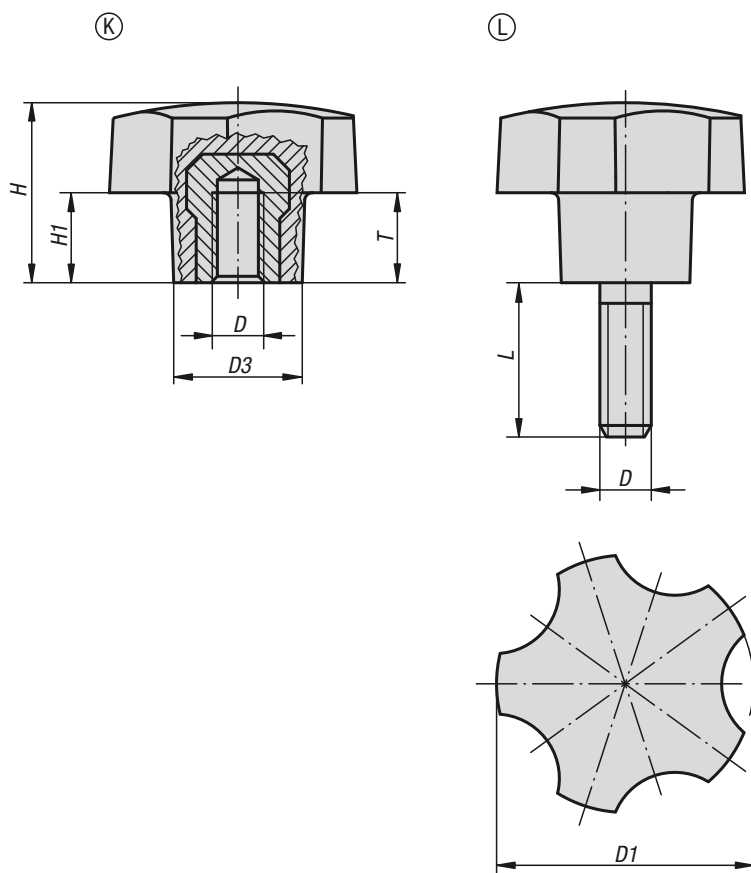
### On request:

Other screw lengths.

## KIPP Five lobe grips with external thread

| Order No.<br>steel | Order No.<br>stainless steel | D   | D1 | D2 | H    | H1   | L                 |
|--------------------|------------------------------|-----|----|----|------|------|-------------------|
| K1298.3206X        | K1298.13206X                 | M6  | 32 | 16 | 22,5 | 11   | 10/15/20/35       |
| K1298.3208X        | K1298.13208X                 | M8  | 32 | 16 | 22,5 | 11   | 15/25             |
| K1298.4006X        | K1298.14006X                 | M6  | 40 | 20 | 28   | 14   | 15                |
| K1298.4008X        | K1298.14008X                 | M8  | 40 | 20 | 28   | 14   | 15/20/25/30/35/45 |
| K1298.4010X        | K1298.14010X                 | M10 | 40 | 20 | 28   | 14   | 30                |
| K1298.5008X        | K1298.15008X                 | M8  | 50 | 25 | 35   | 17,5 | 15/25             |
| K1298.5010X        | K1298.15010X                 | M10 | 50 | 25 | 35   | 17,5 | 20/30/40/50       |
| K1298.6012X        | K1298.16012X                 | M12 | 60 | 30 | 37   | 18,5 | 30/40/50          |

## Five lobe grips

**Material:**

Thermoset PF 31, black.  
Steel bush and stud, electro zinc-plated.

**Version:**

High-gloss polished.

**Sample order:**

K0185.3206X12 (include length L)

**Note:**

The versions K0185.3205 and K0185.3206 have a brass bush.

**On request:**

Other screw sizes, screw lengths and colours.

**KIPP Five lobe grips with internal thread**

| Order No.  | Form | D   | D1 | D3 | H    | H1   | T  |
|------------|------|-----|----|----|------|------|----|
| K0185.3205 | K    | M5  | 32 | 16 | 22,4 | 11,2 | 10 |
| K0185.3206 | K    | M6  | 32 | 16 | 22,4 | 11,2 | 9  |
| K0185.4006 | K    | M6  | 40 | 20 | 28   | 14   | 12 |
| K0185.4008 | K    | M8  | 40 | 20 | 28   | 14   | 14 |
| K0185.4010 | K    | M10 | 40 | 20 | 28   | 14   | 14 |
| K0185.5008 | K    | M8  | 50 | 25 | 35   | 17,5 | 14 |
| K0185.5010 | K    | M10 | 50 | 25 | 35   | 17,5 | 14 |

**KIPP Five lobe grips with external thread**

| Order No.   | Form | D   | D1 | D3 | H    | H1   | L        |
|-------------|------|-----|----|----|------|------|----------|
| K0185.3206X | L    | M6  | 32 | 16 | 22,4 | 11,2 | 12/18    |
| K0185.3208X | L    | M8  | 32 | 16 | 22,4 | 11,2 | 16/24    |
| K0185.4006X | L    | M6  | 40 | 20 | 28   | 14   | 18       |
| K0185.4008X | L    | M8  | 40 | 20 | 28   | 14   | 16/20/24 |
| K0185.4010X | L    | M10 | 40 | 20 | 28   | 14   | 30       |
| K0185.5008X | L    | M8  | 50 | 25 | 35   | 17,5 | 16/24    |
| K0185.5010X | L    | M10 | 50 | 25 | 35   | 17,5 | 20/30    |

## Five lobe grips



The material and form lend this grip a natural and secure gripping effect.

### Material, version:

Grip black hard thermoplastic.  
Coating black soft thermoplastic.  
Tapped bush brass.  
Screw electro zinc-plated steel grade 5.8.

### Sample order:

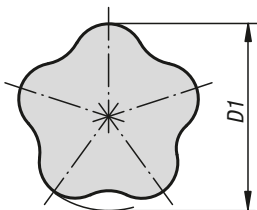
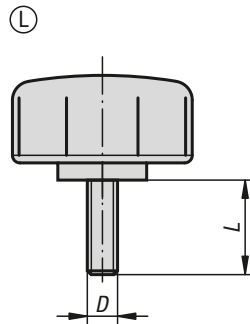
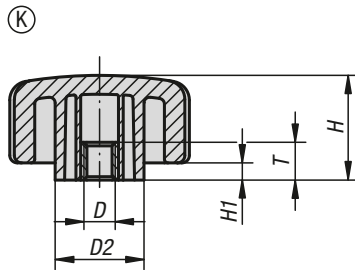
K0279.4006X20 (include length L)

### Note:

SYMPA TOUCH five lobe grips are available in 3 sizes with internal and external threads.

### On request:

Other screw sizes, screw lengths, versions and colours.



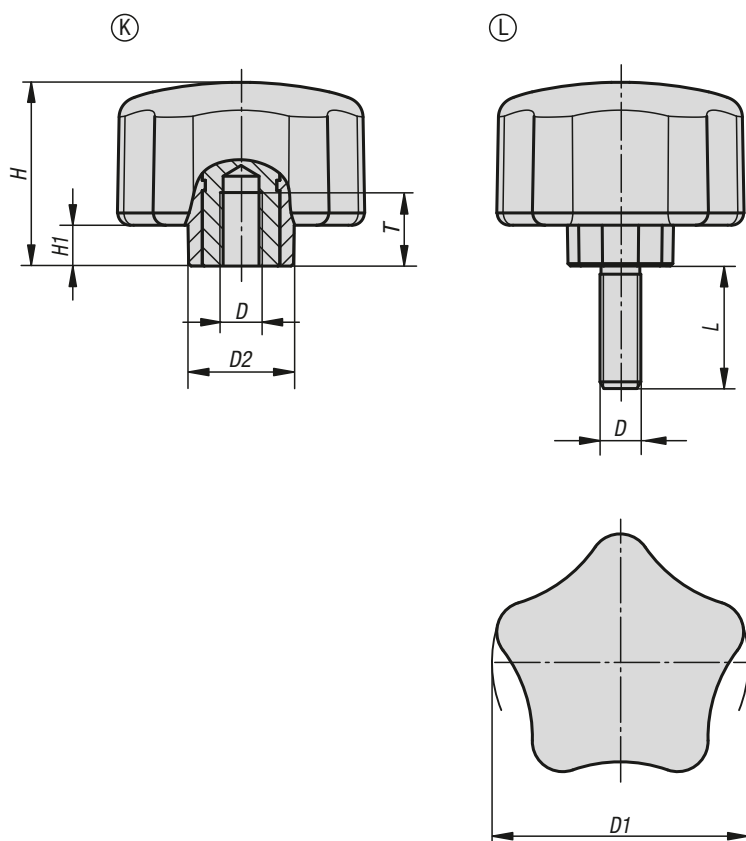
### KIPP Five lobe grips with internal thread

| Order No.  | Form | D   | D1 | D2   | H    | H1  | T    |
|------------|------|-----|----|------|------|-----|------|
| K0279.4005 | K    | M5  | 40 | 19   | 27,7 | 4,6 | 12,5 |
| K0279.4006 | K    | M6  | 40 | 19   | 27,7 | 4,6 | 12,5 |
| K0279.4008 | K    | M8  | 40 | 19   | 27,7 | 4,6 | 12,5 |
| K0279.4010 | K    | M10 | 40 | 19   | 27,7 | 4,6 | 12,5 |
| K0279.5006 | K    | M6  | 50 | 23,5 | 27,7 | 4,6 | 12,5 |
| K0279.5008 | K    | M8  | 50 | 23,5 | 27,7 | 4,6 | 12,5 |
| K0279.5010 | K    | M10 | 50 | 23,5 | 27,7 | 4,6 | 12,5 |
| K0279.6006 | K    | M6  | 60 | 31,8 | 27,7 | 4,6 | 12,5 |
| K0279.6008 | K    | M8  | 60 | 31,8 | 27,7 | 4,6 | 12,5 |
| K0279.6010 | K    | M10 | 60 | 31,8 | 27,7 | 4,6 | 12,5 |

### KIPP Five lobe grips with external thread

| Order No.   | Form | D   | D1 | D2   | H    | H1  | L           |
|-------------|------|-----|----|------|------|-----|-------------|
| K0279.4006X | L    | M6  | 40 | 19   | 27,7 | 4,6 | 15/20/25/35 |
| K0279.4008X | L    | M8  | 40 | 19   | 27,7 | 4,6 | 16/25/35    |
| K0279.4010X | L    | M10 | 40 | 19   | 27,7 | 4,6 | 20/30/40/50 |
| K0279.5006X | L    | M6  | 50 | 23,5 | 27,7 | 4,6 | 15/20/25/35 |
| K0279.5008X | L    | M8  | 50 | 23,5 | 27,7 | 4,6 | 16/25/35    |
| K0279.5010X | L    | M10 | 50 | 23,5 | 27,7 | 4,6 | 30/40/50    |
| K0279.6006X | L    | M6  | 60 | 31,8 | 27,7 | 4,6 | 15/20/25/35 |
| K0279.6008X | L    | M8  | 60 | 31,8 | 27,7 | 4,6 | 16/25/35    |
| K0279.6010X | L    | M10 | 60 | 31,8 | 27,7 | 4,6 | 20/30/40/50 |

## Five lobe grips ergonomic

**Material:**

Hard components fibreglass reinforced plastic.  
Soft components thermoplastic elastomer.  
Bush or screw, steel grade 5.8 or stainless steel 1.4305.

**Version:**

Steel trivalent blue passivated.  
Stainless steel, bright.

**Sample order:**

K0786.6308X20

**Note:**

The colour combination  
black grey RAL 7021 (hard components) and  
black grey RAL 7021 (soft components)  
are supplied as standard.

**On request:**

Other versions.

**KIPP Five lobe grips ergonomic with internal thread**

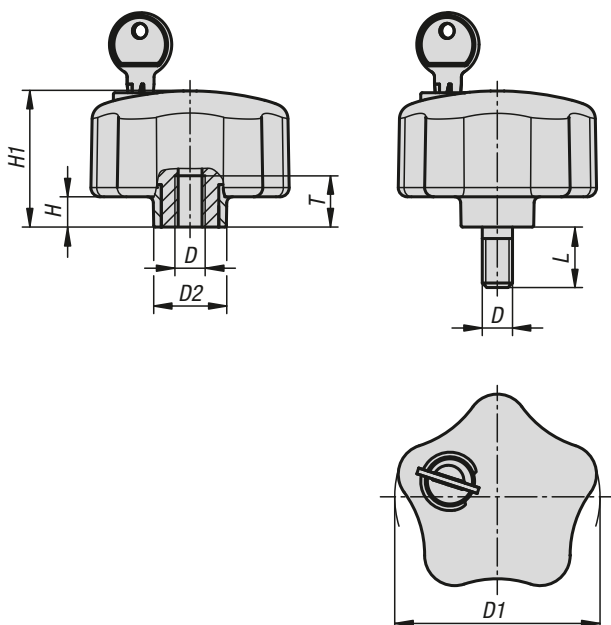
| Order No.   | Form | Component material | D   | D1 | D2 | H  | H1 | T  |
|-------------|------|--------------------|-----|----|----|----|----|----|
| K0786.6308  | K    | steel              | M8  | 63 | 26 | 45 | 10 | 17 |
| K0786.6310  | K    | steel              | M10 | 63 | 26 | 45 | 10 | 17 |
| K0786.06308 | K    | stainless steel    | M8  | 63 | 26 | 45 | 10 | 17 |
| K0786.06310 | K    | stainless steel    | M10 | 63 | 26 | 45 | 10 | 17 |

**KIPP Five lobe grips ergonomic with external thread**

| Order No.    | Form | Component material | D   | D1 | D2 | H  | H1 | L           |
|--------------|------|--------------------|-----|----|----|----|----|-------------|
| K0786.6308X  | L    | steel              | M8  | 63 | 26 | 45 | 10 | 20/25/30/40 |
| K0786.6310X  | L    | steel              | M10 | 63 | 26 | 45 | 10 | 30/40/50    |
| K0786.06308X | L    | stainless steel    | M8  | 63 | 26 | 45 | 10 | 20/25/30/40 |
| K0786.06310X | L    | stainless steel    | M10 | 63 | 26 | 45 | 10 | 30/40/50    |

## Five lobe grips

plastic, lockable



### Material:

Grip thermoplastic.  
Bush and threaded pin steel grade 5.8 or stainless steel 1.4305.

### Version:

Grip black grey RAL 7021 or red similar to RAL 3020.  
Steel parts trivalent blue passivated.  
Stainless steel bright.

### Sample order:

K1378.6810X20

### Note:

Lockable five lobe grips prevent unauthorised loosening of the screw connection.  
The cylinder lock forms a positive lock between grip and screw.  
When unlocked the grip rotates freely without driving the screw, preventing unauthorised opening of the screw connection.

The lockable five lobe grips are supplied with 2 keys each.

The key can be removed in the open and closed position.

The locks are a single-key system, i.e. the same key works in all locks.

### On request:

Other versions.

### KIPP Five lobe grips, plastic, lockable, with female thread

| Order No.<br>steel | Order No.<br>stainless steel | Main<br>colour | D   | D1 | D2 | H  | H1   | T  |
|--------------------|------------------------------|----------------|-----|----|----|----|------|----|
| K1378.6806         | K1378.06806                  | black grey     | M6  | 68 | 24 | 10 | 45,5 | 17 |
| K1378.6808         | K1378.06808                  | black grey     | M8  | 68 | 24 | 10 | 45,5 | 17 |
| K1378.6810         | K1378.06810                  | black grey     | M10 | 68 | 24 | 10 | 45,5 | 17 |
| K1378.846806       | K1378.0846806                | red            | M6  | 68 | 24 | 10 | 45,5 | 17 |
| K1378.846808       | K1378.0846808                | red            | M8  | 68 | 24 | 10 | 45,5 | 17 |
| K1378.846810       | K1378.0846810                | red            | M10 | 68 | 24 | 10 | 45,5 | 17 |

### KIPP Five lobe grips, plastic, lockable, with male thread

| Order No.<br>steel | Order No.<br>stainless steel | Main<br>colour | D   | D1 | D2 | H  | H1   | L  |
|--------------------|------------------------------|----------------|-----|----|----|----|------|----|
| K1378.6808X20      | K1378.06808X20               | black grey     | M8  | 68 | 24 | 10 | 45,5 | 20 |
| K1378.6810X20      | K1378.06810X20               | black grey     | M10 | 68 | 24 | 10 | 45,5 | 20 |
| K1378.846808X20    | K1378.0846808X20             | red            | M8  | 68 | 24 | 10 | 45,5 | 20 |
| K1378.846810X20    | K1378.0846810X20             | red            | M10 | 68 | 24 | 10 | 45,5 | 20 |

## Clamping grips high form



These grips are distinguished by their unusual design. The high form permits high clamping forces while being gentle to the hand.

**Material, version:**

Grip black hard thermoplastic.

Coating black soft thermoplastic.

Tapped bush brass.

Screw electro zinc-plated steel grade 5.8.

**Sample order:**

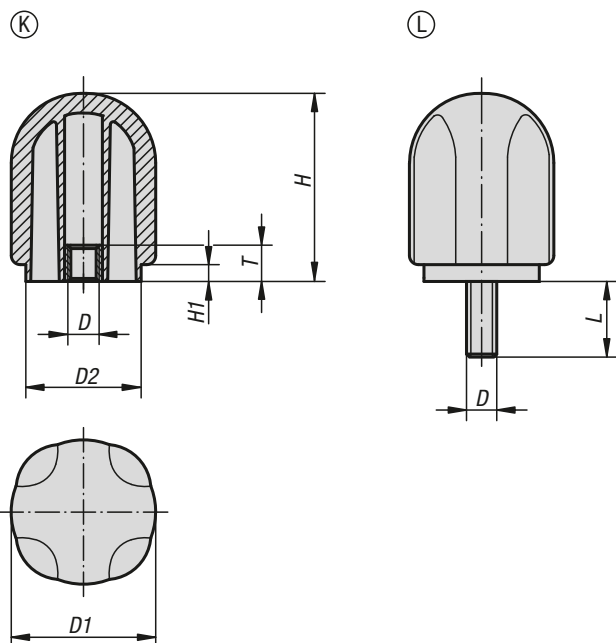
K0280.4206X20 (include length L)

**Note:**

SYMPA TOUCH high form clamping grips are available in 2 grip sizes with internal and external threads.

**On request:**

Other screw sizes, screw lengths, versions and colours.

**KIPP Clamping grips high form with internal thread**

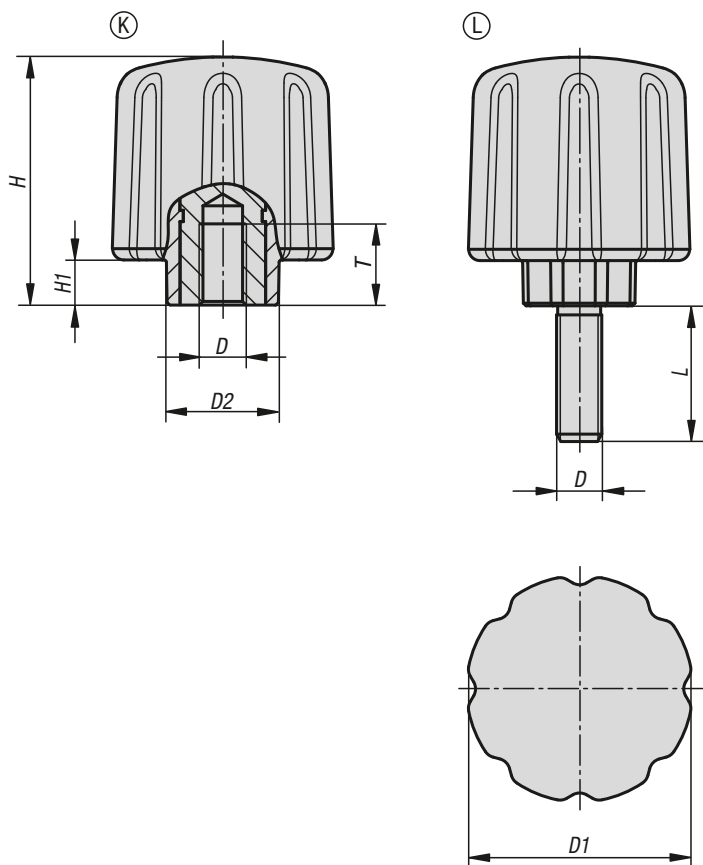
| Order No.  | Form | D   | D1   | D2   | H    | H1  | T    |
|------------|------|-----|------|------|------|-----|------|
| K0280.4206 | K    | M6  | 42,7 | 34   | 55,6 | 4,8 | 12,5 |
| K0280.4208 | K    | M8  | 42,7 | 34   | 55,6 | 4,8 | 12,5 |
| K0280.4210 | K    | M10 | 42,7 | 34   | 55,6 | 4,8 | 12,5 |
| K0280.4212 | K    | M12 | 42,7 | 34   | 55,6 | 4,8 | 12,5 |
| K0280.4706 | K    | M6  | 47,8 | 38,1 | 62,2 | 5,6 | 12,5 |
| K0280.4708 | K    | M8  | 47,8 | 38,1 | 62,2 | 5,6 | 12,5 |
| K0280.4710 | K    | M10 | 47,8 | 38,1 | 62,2 | 5,6 | 12,5 |
| K0280.4712 | K    | M12 | 47,8 | 38,1 | 62,2 | 5,6 | 12,5 |

**KIPP Clamping grips high form with external thread**

| Order No.   | Form | D   | D1   | D2   | H    | H1  | L           |
|-------------|------|-----|------|------|------|-----|-------------|
| K0280.4206X | L    | M6  | 42,7 | 34   | 55,6 | 4,8 | 15/20/25/35 |
| K0280.4208X | L    | M8  | 42,7 | 34   | 55,6 | 4,8 | 16/25/35    |
| K0280.4210X | L    | M10 | 42,7 | 34   | 55,6 | 4,8 | 20/30/40/50 |
| K0280.4706X | L    | M6  | 47,8 | 38,1 | 62,2 | 5,6 | 20/35       |
| K0280.4708X | L    | M8  | 47,8 | 38,1 | 62,2 | 5,6 | 35          |
| K0280.4710X | L    | M10 | 47,8 | 38,1 | 62,2 | 5,6 | 40/50       |



# Clamping grips ergonomic


**Material:**

Hard components fibreglass reinforced plastic.  
Soft components thermoplastic elastomer.  
Bush or screw, steel grade 5.8 or stainless steel 1.4305.

**Version:**

Steel trivalent blue passivated.  
Stainless steel, bright.

**Sample order:**

K0779.5006X20

**Note:**

The colour combination  
black grey RAL 7021 (hard components) and  
black grey RAL 7021 (soft components)  
are supplied as standard.

**On request:**

Other versions.

## KIPP Clamping grips ergonomic with internal thread

| Order No.   | Form | Component material | D   | D1 | D2 | H  | H1 | T  |
|-------------|------|--------------------|-----|----|----|----|----|----|
| K0779.5006  | K    | steel              | M6  | 50 | 26 | 55 | 10 | 17 |
| K0779.5008  | K    | steel              | M8  | 50 | 26 | 55 | 10 | 17 |
| K0779.5010  | K    | steel              | M10 | 50 | 26 | 55 | 10 | 17 |
| K0779.05006 | K    | stainless steel    | M6  | 50 | 26 | 55 | 10 | 17 |
| K0779.05008 | K    | stainless steel    | M8  | 50 | 26 | 55 | 10 | 17 |
| K0779.05010 | K    | stainless steel    | M10 | 50 | 26 | 55 | 10 | 17 |

## KIPP Clamping grips ergonomic with external thread

| Order No.    | Form | Component material | D   | D1 | D2 | H  | H1 | L           |
|--------------|------|--------------------|-----|----|----|----|----|-------------|
| K0779.5006X  | L    | steel              | M6  | 50 | 26 | 55 | 10 | 15/20/25/30 |
| K0779.5008X  | L    | steel              | M8  | 50 | 26 | 55 | 10 | 20/25/30/40 |
| K0779.5010X  | L    | steel              | M10 | 50 | 26 | 55 | 10 | 30/40/50    |
| K0779.05006X | L    | stainless steel    | M6  | 50 | 26 | 55 | 10 | 15/20/25/30 |
| K0779.05008X | L    | stainless steel    | M8  | 50 | 26 | 55 | 10 | 20/25/30/40 |
| K0779.05010X | L    | stainless steel    | M10 | 50 | 26 | 55 | 10 | 30/40/50    |

## Knurled screws



Due to their extremely flat design, these grips can be used in very cramped spaces. The fluting around the edge improves gripping.

**Material, version:**

Grip black hard thermoplastic.  
Coating black soft thermoplastic.  
Tapped bush brass.  
Screw electro zinc-plated steel grade 5.8.

**Sample order:**

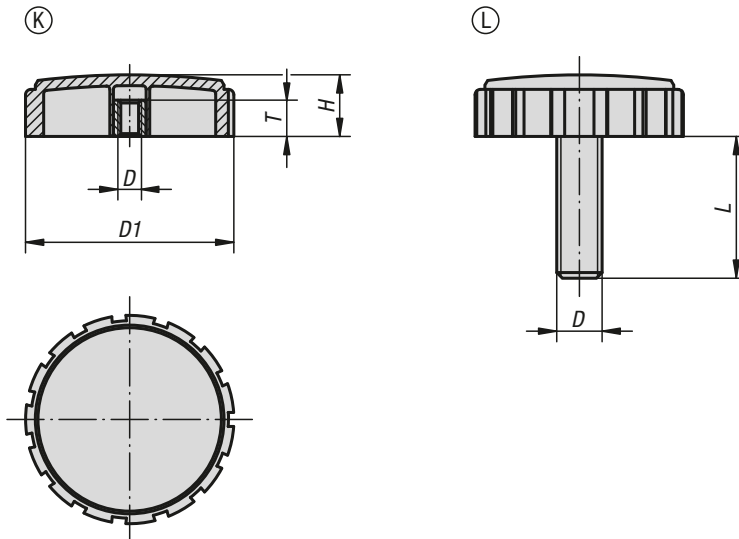
K0281.5706X20 (include length L)

**Note:**

SYMPA TOUCH Knurled screws are available in one grip size with internal and external threads.

**On request:**

Other screw sizes, screw lengths, versions and colours.

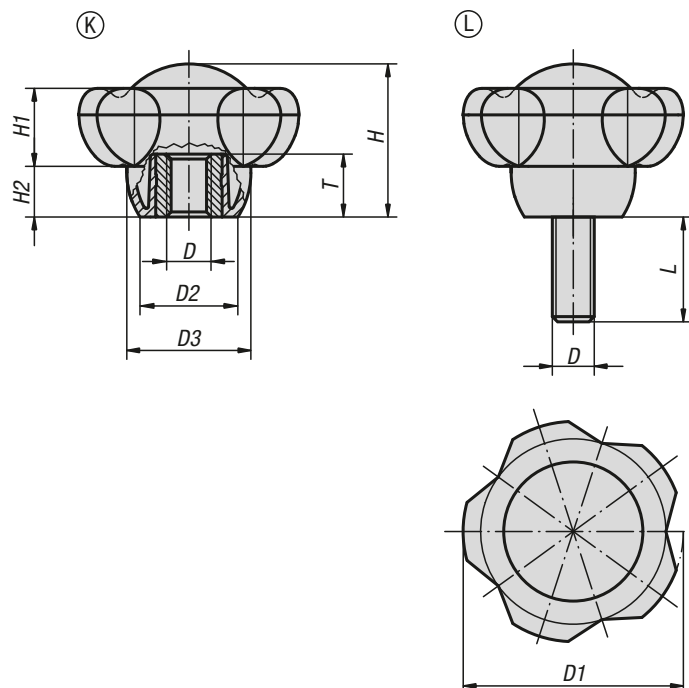
**KIPP Knurled screw with internal thread**

| Order No.  | Form | D   | D1   | H  | T    |
|------------|------|-----|------|----|------|
| K0281.5705 | K    | M5  | 57,4 | 17 | 12,5 |
| K0281.5706 | K    | M6  | 57,4 | 17 | 12,5 |
| K0281.5708 | K    | M8  | 57,4 | 17 | 12,5 |
| K0281.5710 | K    | M10 | 57,4 | 17 | 12,5 |

**KIPP Knurled screw with external thread**

| Order No.   | Form | D   | D1   | H  | L           |
|-------------|------|-----|------|----|-------------|
| K0281.5706X | L    | M6  | 57,4 | 17 | 15/20/25/35 |
| K0281.5708X | L    | M8  | 57,4 | 17 | 16/25/30/35 |
| K0281.5710X | L    | M10 | 57,4 | 17 | 30/40/50    |

## Five lobe grips



### Material:

Black thermoplastic.

Bush and screw 5.8 steel or 1.4305 stainless steel.

### Version:

Steel trivalent blue passivated, stainless steel bright.

### Sample order:

K0255.50106X30

(cap colour traffic red; include length L)

### Note:

The screw lengths 15, 35 and 45 are not available in stainless steel.

Δ Add the desired cap colour here. No colour code is required for black grey caps.



### KIPP Five lobe grips with internal thread

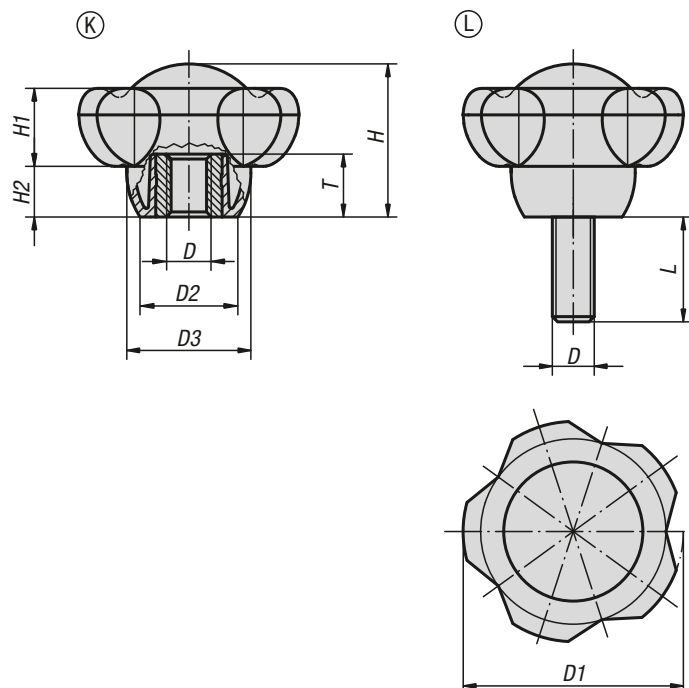
| Order No.<br>steel | Order No.<br>stainless steel | Form | D   | D1 | D2   | D3   | H    | H1   | H2   | T  |
|--------------------|------------------------------|------|-----|----|------|------|------|------|------|----|
| K0255.5008Δ        | K0255.50081Δ                 | K    | M8  | 50 | 22,2 | 28,2 | 34,8 | 17,8 | 11,5 | 14 |
| K0255.5010Δ        | K0255.50101Δ                 | K    | M10 | 50 | 22,2 | 28,2 | 34,8 | 17,8 | 11,5 | 14 |
| K0255.5012Δ        | K0255.50121Δ                 | K    | M12 | 50 | 22,2 | 28,2 | 34,8 | 17,8 | 11,5 | 18 |
| K0255.6310Δ        | K0255.63101Δ                 | K    | M10 | 63 | 28   | 35,5 | 44   | 22,5 | 14,5 | 14 |
| K0255.6312Δ        | K0255.63121Δ                 | K    | M12 | 63 | 28   | 35,5 | 44   | 22,5 | 14,5 | 18 |
| K0255.6316Δ        | -                            | K    | M16 | 63 | 28   | 35,5 | 44   | 22,5 | 14,5 | 18 |

### KIPP Five lobe grips with external thread

| Order No.<br>steel | Order No.<br>stainless steel | Form | D   | D1 | D2   | D3   | H    | H1   | H2   | L                          |
|--------------------|------------------------------|------|-----|----|------|------|------|------|------|----------------------------|
| K0255.5010ΔX       | K0255.50101ΔX                | L    | M10 | 50 | 22,2 | 28,2 | 34,8 | 17,8 | 11,5 | 15/20/25/30/35/40/45/50/60 |
| K0255.5012ΔX       | -                            | L    | M12 | 50 | 22,2 | 28,2 | 34,8 | 17,8 | 11,5 | 15/20/25/30/35/40/45/50/60 |
| K0255.6310ΔX       | K0255.63101ΔX                | L    | M10 | 63 | 28   | 35,5 | 44   | 22,5 | 14,5 | 20/25/30/35/40/45/50/60    |
| K0255.6312ΔX       | -                            | L    | M12 | 63 | 28   | 35,5 | 44   | 22,5 | 14,5 | 20/25/30/35/40/45/50/60    |

# Five lobe grips antibacterial

metal parts stainless steel



## Material:

Thermoplastic, slate grey.  
Bush and screw stainless steel 1.4305.

## Version:

Stainless steel bright.

## Sample order:

K0255.1263101144X20

## Application:

The antibacterial KIPP MEDI grip products are highly effective against a variety of hazardous microorganisms, such as bacteria, fungi and even multi-resistant bacteria (e.g. MRSA).

The plastic used incorporates micro-silver particles with an antimicrobial effect to ensure effective results throughout the entire product life cycle.

## Function:

The growth of harmful micro-organisms on the product surface is effectively disrupted by means of silver ions, and the existing germs on MEDI grip products are consistently reduced (as tested and confirmed by an accredited testing laboratory).

During cleaning cycles the risk of infection through touching these products is significantly lower.

## Advantages:

Resistant to humidity and cleaning products (during disinfection) with no toxic side effects.

## Applications:

For installation on machines, equipment, plants and furnishings in areas with increased hygienic requirements (including hospitals, doctors' surgeries, rehabilitation centres and food production facilities), as well as for use in public areas or regularly frequented institutions (i.e. nursing homes or daycare centres).

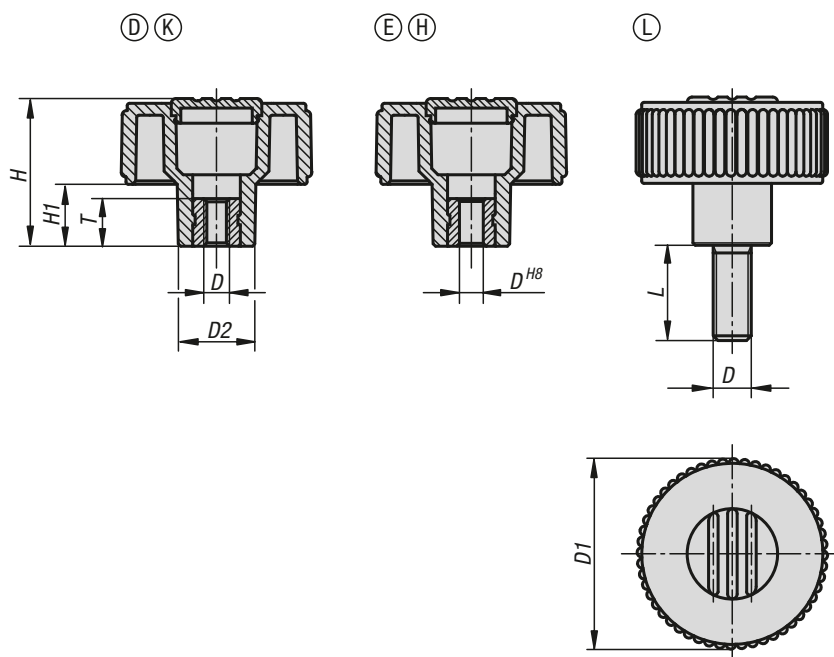
## KIPP Five lobe grips antibacterial, metal parts stainless steel, internal thread

| Order No.        | Form | D   | D1 | D2 | D3   | H  | H1   | H2   | T  |
|------------------|------|-----|----|----|------|----|------|------|----|
| K0255.1263101144 | K    | M10 | 63 | 28 | 35,5 | 44 | 22,5 | 14,5 | 14 |

## KIPP Five lobe grips antibacterial, metal parts stainless steel, external thread

| Order No.           | Form | D   | D1 | D2 | D3   | H  | H1   | H2   | L  |
|---------------------|------|-----|----|----|------|----|------|------|----|
| K0255.1263101144X20 | L    | M10 | 63 | 28 | 35,5 | 44 | 22,5 | 14,5 | 20 |

## Knurled knobs



### Material:

Black thermoplastic.  
Bush and screw grade 5.8 steel.

### Version:

Steel trivalent blue passivated.

### Sample order:

K0260.41067  
(cap colour colza yellow.)

### Note for ordering:

Δ Add the desired cap colour here.

No colour code is required for black grey caps.

### Drawing reference:

Form D: tapped bush without cap

Form K: tapped bush with cap

Form E: reamed bush without cap

Form H: reamed bush with cap

Form L: external thread

|                                                                                                                    |                                                                                                                      |                                                                                                                       |                                                                                                                       |
|--------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| black grey<br><br>RAL 7021       | pure orange Δ = 1<br><br>RAL 2004 | signal green Δ = 2<br><br>RAL 6032 | traffic blue Δ = 3<br><br>RAL 5017 |
| light grey Δ = 5<br><br>RAL 7035 | traffic red Δ = 6<br><br>RAL 3020 | colza yellow Δ = 7<br><br>RAL 1021 |                                                                                                                       |

### KIPP Knurled knobs Form D, with tapped bush, without cap

| Order No.  | Form | D   | D1 | D2   | H  | H1 | T  |
|------------|------|-----|----|------|----|----|----|
| K0260.1105 | D    | M5  | 40 | 16,5 | 30 | 13 | 10 |
| K0260.1106 | D    | M6  | 40 | 16,5 | 30 | 13 | 10 |
| K0260.1108 | D    | M8  | 40 | 16,5 | 30 | 13 | 14 |
| K0260.1208 | D    | M8  | 50 | 18   | 35 | 15 | 14 |
| K0260.1210 | D    | M10 | 50 | 18   | 35 | 15 | 14 |
| K0260.1310 | D    | M10 | 63 | 22   | 40 | 17 | 14 |
| K0260.1312 | D    | M12 | 63 | 22   | 40 | 17 | 18 |



## KIPP Knurled knobs Form K, with tapped bush, with cap

| Order No.   | Form | D   | D1 | D2   | H  | H1 | T  |
|-------------|------|-----|----|------|----|----|----|
| K0260.2105Δ | K    | M5  | 40 | 16,5 | 31 | 13 | 10 |
| K0260.2106Δ | K    | M6  | 40 | 16,5 | 31 | 13 | 10 |
| K0260.2108Δ | K    | M8  | 40 | 16,5 | 31 | 13 | 14 |
| K0260.2208Δ | K    | M8  | 50 | 18   | 36 | 15 | 14 |
| K0260.2210Δ | K    | M10 | 50 | 18   | 36 | 15 | 14 |
| K0260.2310Δ | K    | M10 | 63 | 22   | 41 | 17 | 14 |
| K0260.2312Δ | K    | M12 | 63 | 22   | 41 | 17 | 18 |

## KIPP Knurled knobs Form E, with reamed bush, without cap

| Order No.  | Form | D  | D1 | D2   | H  | H1 | T  |
|------------|------|----|----|------|----|----|----|
| K0260.3106 | E    | 6  | 40 | 16,5 | 30 | 13 | 10 |
| K0260.3208 | E    | 8  | 50 | 18   | 35 | 15 | 14 |
| K0260.3310 | E    | 10 | 63 | 22   | 40 | 17 | 14 |

## KIPP Knurled knobs Form H, with reamed bush, with cap

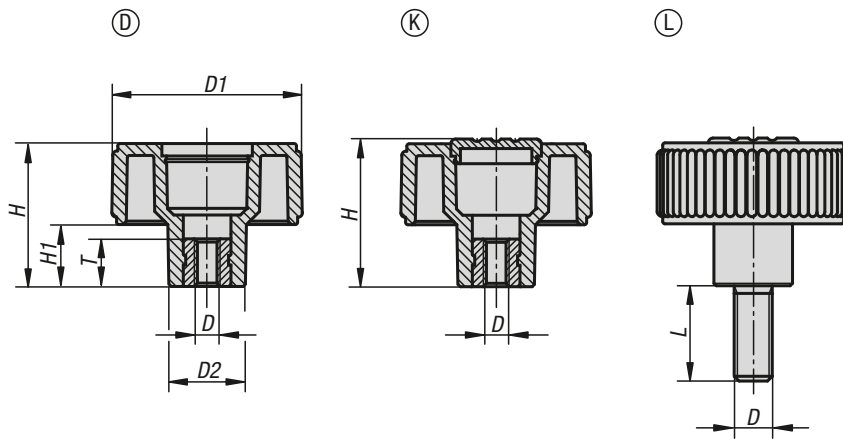
| Order No.   | Form | D  | D1 | D2   | H  | H1 | T  |
|-------------|------|----|----|------|----|----|----|
| K0260.4106Δ | H    | 6  | 40 | 16,5 | 31 | 13 | 10 |
| K0260.4208Δ | H    | 8  | 50 | 18   | 36 | 15 | 14 |
| K0260.4310Δ | H    | 10 | 63 | 22   | 41 | 17 | 14 |

## KIPP Knurled knobs Form L, with external thread

| Order No.    | Form | D   | D1 | D2   | H  | H1 | L        |
|--------------|------|-----|----|------|----|----|----------|
| K0260.5105ΔX | L    | M5  | 40 | 16,5 | 31 | 13 | 10/20/40 |
| K0260.5106ΔX | L    | M6  | 40 | 16,5 | 31 | 13 | 10/20/40 |
| K0260.5108ΔX | L    | M8  | 40 | 16,5 | 31 | 13 | 15/30/60 |
| K0260.5208ΔX | L    | M8  | 50 | 18   | 36 | 15 | 15/30/60 |
| K0260.5210ΔX | L    | M10 | 50 | 18   | 36 | 15 | 20/30/60 |
| K0260.5310ΔX | L    | M10 | 63 | 22   | 41 | 17 | 20/30/60 |
| K0260.5312ΔX | L    | M12 | 63 | 22   | 41 | 17 | 30/60    |

# Knurled knobs

metal parts stainless steel



## Material:

Thermoplastic, black grey.

Bush and screw stainless steel 1.4305.

## Version:

Stainless steel bright.

## Sample order:

K0261.51056X10

(cap colour traffic red; include length L.)

## Note:

Δ Add the desired cap colour here.

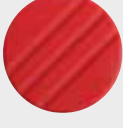
No colour code is required for black grey caps.

## Drawing reference:

Form D: tapped bush without cap

Form K: tapped bush with cap

Form L: external thread

|                                                                                                                    |                                                                                                                      |                                                                                                                       |                                                                                                                       |
|--------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| black grey<br><br>RAL 7021       | pure orange Δ = 1<br><br>RAL 2004 | signal green Δ = 2<br><br>RAL 6032 | traffic blue Δ = 3<br><br>RAL 5017 |
| light grey Δ = 5<br><br>RAL 7035 | traffic red Δ = 6<br><br>RAL 3020 | colza yellow Δ = 7<br><br>RAL 1021 |                                                                                                                       |

## KIPP Knurled knobs, metal parts stainless steel, Form D, with tapped bush, without cap

| Order No.  | Form | D   | D1 | D2   | H  | H1 | T  |
|------------|------|-----|----|------|----|----|----|
| K0261.1105 | D    | M5  | 40 | 16,5 | 30 | 13 | 10 |
| K0261.1106 | D    | M6  | 40 | 16,5 | 30 | 13 | 10 |
| K0261.1108 | D    | M8  | 40 | 16,5 | 30 | 13 | 14 |
| K0261.1208 | D    | M8  | 50 | 18   | 35 | 15 | 14 |
| K0261.1210 | D    | M10 | 50 | 18   | 35 | 15 | 14 |
| K0261.1310 | D    | M10 | 63 | 22   | 40 | 17 | 14 |
| K0261.1312 | D    | M12 | 63 | 22   | 40 | 17 | 18 |

# Knurled knobs

metal parts stainless steel



## KIPP Knurled knobs, metal parts stainless steel, Form K, with tapped bush, with cap

| Order No.   | Form | D   | D1 | D2   | H  | H1 | T  |
|-------------|------|-----|----|------|----|----|----|
| K0261.2105Δ | K    | M5  | 40 | 16,5 | 31 | 13 | 10 |
| K0261.2106Δ | K    | M6  | 40 | 16,5 | 31 | 13 | 10 |
| K0261.2108Δ | K    | M8  | 40 | 16,5 | 31 | 13 | 14 |
| K0261.2108Δ | K    | M8  | 40 | 16,5 | 31 | 13 | 10 |
| K0261.2208Δ | K    | M8  | 50 | 18   | 36 | 15 | 14 |
| K0261.2210Δ | K    | M10 | 50 | 18   | 36 | 15 | 14 |
| K0261.2310Δ | K    | M10 | 63 | 22   | 41 | 17 | 14 |
| K0261.2312Δ | K    | M12 | 63 | 22   | 41 | 17 | 18 |

## KIPP Knurled knobs, metal parts stainless steel, Form L, with external thread

| Order No.    | Form | D   | D1 | D2   | H  | H1 | L        |
|--------------|------|-----|----|------|----|----|----------|
| K0261.5105ΔX | L    | M5  | 40 | 16,5 | 31 | 13 | 10/20    |
| K0261.5106ΔX | L    | M6  | 40 | 16,5 | 31 | 13 | 10/20/40 |
| K0261.5108ΔX | L    | M8  | 40 | 16,5 | 31 | 13 | 15/30/60 |
| K0261.5208ΔX | L    | M8  | 50 | 18   | 36 | 15 | 15/30/60 |
| K0261.5210ΔX | L    | M10 | 50 | 18   | 36 | 15 | 20/30/60 |
| K0261.5310ΔX | L    | M10 | 63 | 22   | 41 | 17 | 20/30/60 |



# Mushroom knobs

internal thread

**Material:**

Steel, 1.4305 stainless steel, 1.4404 stainless steel or aluminium.

**Version:**

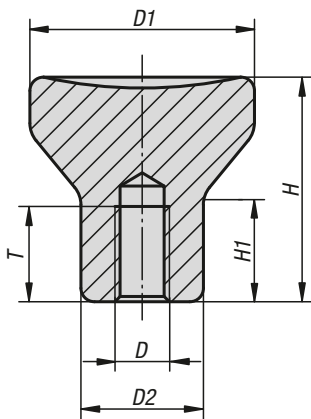
Steel electro zinc-plated and trivalent blue passivated.  
Stainless steel, fine turned or abrasive blasted.  
Aluminium natural tone anodised.

**Sample order:**

K0250.104

**On request:**

With external threads.



# Mushroom knobs

internal thread

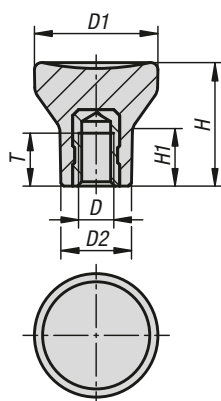


## KIPP Mushroom knobs with internal thread

| Order No.  | Main material   | Steel code | Surface finish body | D   | D1 | D2 | H  | H1   | T    |
|------------|-----------------|------------|---------------------|-----|----|----|----|------|------|
| K0250.0902 | steel           | -          | blue-passivated     | M2  | 14 | 8  | 14 | 6,7  | 4    |
| K0250.0003 | steel           | -          | blue-passivated     | M3  | 18 | 10 | 18 | 8,6  | 7,5  |
| K0250.0104 | steel           | -          | blue-passivated     | M4  | 21 | 12 | 21 | 10   | 10   |
| K0250.0105 | steel           | -          | blue-passivated     | M5  | 21 | 12 | 21 | 10   | 12,5 |
| K0250.0206 | steel           | -          | blue-passivated     | M6  | 25 | 14 | 25 | 12   | 12   |
| K0250.0308 | steel           | -          | blue-passivated     | M8  | 33 | 18 | 33 | 16   | 16   |
| K0250.0410 | steel           | -          | blue-passivated     | M10 | 40 | 24 | 40 | 18,7 | 20   |
| K0250.902  | stainless steel | 1.4305     | fine turned         | M2  | 14 | 8  | 14 | 6,7  | 4    |
| K0250.003  | stainless steel | 1.4305     | fine turned         | M3  | 18 | 10 | 18 | 8,6  | 7,5  |
| K0250.104  | stainless steel | 1.4305     | fine turned         | M4  | 21 | 12 | 21 | 10   | 10   |
| K0250.105  | stainless steel | 1.4305     | fine turned         | M5  | 21 | 12 | 21 | 10   | 12,5 |
| K0250.206  | stainless steel | 1.4305     | fine turned         | M6  | 25 | 14 | 25 | 12   | 12   |
| K0250.308  | stainless steel | 1.4305     | fine turned         | M8  | 33 | 18 | 33 | 16   | 16   |
| K0250.410  | stainless steel | 1.4305     | fine turned         | M10 | 40 | 24 | 40 | 18,7 | 20   |
| K0250.2902 | stainless steel | 1.4305     | blasted             | M2  | 14 | 8  | 14 | 6,7  | 4    |
| K0250.2003 | stainless steel | 1.4305     | blasted             | M3  | 18 | 10 | 18 | 8,6  | 7,5  |
| K0250.2104 | stainless steel | 1.4305     | blasted             | M4  | 21 | 12 | 21 | 10   | 10   |
| K0250.2105 | stainless steel | 1.4305     | blasted             | M5  | 21 | 12 | 21 | 10   | 12,5 |
| K0250.2206 | stainless steel | 1.4305     | blasted             | M6  | 25 | 14 | 25 | 12   | 12   |
| K0250.2308 | stainless steel | 1.4305     | blasted             | M8  | 33 | 18 | 33 | 16   | 16   |
| K0250.2410 | stainless steel | 1.4305     | blasted             | M10 | 40 | 24 | 40 | 18,7 | 20   |
| K0250.3902 | stainless steel | 1.4404     | bright              | M2  | 14 | 8  | 14 | 6,7  | 4    |
| K0250.3003 | stainless steel | 1.4404     | bright              | M3  | 18 | 10 | 18 | 8,6  | 7,5  |
| K0250.3104 | stainless steel | 1.4404     | bright              | M4  | 21 | 12 | 21 | 10   | 10   |
| K0250.3105 | stainless steel | 1.4404     | bright              | M5  | 21 | 12 | 21 | 10   | 12,5 |
| K0250.3206 | stainless steel | 1.4404     | bright              | M6  | 25 | 14 | 25 | 12   | 12   |
| K0250.3308 | stainless steel | 1.4404     | bright              | M8  | 33 | 18 | 33 | 16   | 16   |
| K0250.3410 | stainless steel | 1.4404     | bright              | M10 | 40 | 24 | 40 | 18,7 | 20   |
| K0250.4902 | stainless steel | 1.4404     | blasted             | M2  | 14 | 8  | 14 | 6,7  | 4    |
| K0250.4003 | stainless steel | 1.4404     | blasted             | M3  | 18 | 10 | 18 | 8,6  | 7,5  |
| K0250.4104 | stainless steel | 1.4404     | blasted             | M4  | 21 | 12 | 21 | 10   | 10   |
| K0250.4105 | stainless steel | 1.4404     | blasted             | M5  | 21 | 12 | 21 | 10   | 12,5 |
| K0250.4206 | stainless steel | 1.4404     | blasted             | M6  | 25 | 14 | 25 | 12   | 12   |
| K0250.4308 | stainless steel | 1.4404     | blasted             | M8  | 33 | 18 | 33 | 16   | 16   |
| K0250.4410 | stainless steel | 1.4404     | blasted             | M10 | 40 | 24 | 40 | 18,7 | 20   |
| K0250.1902 | aluminium       | -          | anodised            | M2  | 14 | 8  | 14 | 6,7  | 4    |
| K0250.1003 | aluminium       | -          | anodised            | M3  | 18 | 10 | 18 | 8,6  | 7,5  |
| K0250.1104 | aluminium       | -          | anodised            | M4  | 21 | 12 | 21 | 10   | 10   |
| K0250.1105 | aluminium       | -          | anodised            | M5  | 21 | 12 | 21 | 10   | 12,5 |
| K0250.1206 | aluminium       | -          | anodised            | M6  | 25 | 14 | 25 | 12   | 12   |
| K0250.1308 | aluminium       | -          | anodised            | M8  | 33 | 18 | 33 | 16   | 16   |
| K0250.1410 | aluminium       | -          | anodised            | M10 | 40 | 24 | 40 | 18,7 | 20   |

## Mushroom knobs

internal thread



### Material:

Thermoset PF 31.

Steel or stainless steel.

### Version:

Thermoset black, high-gloss polished.

Trivalent blue passivated steel or bright stainless steel.

### Sample order:

K1286.104

### Note:

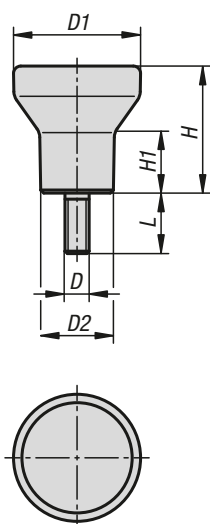
K1286.104 has a brass bush.

### KIPP Mushroom knobs with internal thread

| Order No.  | Component material | D  | D1 | D2 | H  | H1 | T   |
|------------|--------------------|----|----|----|----|----|-----|
| K1286.104  | brass              | M4 | 21 | 12 | 21 | 10 | 6   |
| K1286.105  | steel              | M5 | 21 | 12 | 21 | 10 | 7,5 |
| K1286.206  | steel              | M6 | 25 | 14 | 25 | 12 | 9   |
| K1286.308  | steel              | M8 | 33 | 18 | 33 | 16 | 12  |
| K1286.1104 | stainless steel    | M4 | 21 | 12 | 21 | 10 | 6   |
| K1286.1105 | stainless steel    | M5 | 21 | 12 | 21 | 10 | 7,5 |
| K1286.1206 | stainless steel    | M6 | 25 | 14 | 25 | 12 | 9   |
| K1286.1308 | stainless steel    | M8 | 33 | 18 | 33 | 16 | 12  |

# Mushroom knobs

external thread



## Material:

Thermoset PF 31.

Steel or stainless steel.

## Version:

Thermoset black, high-gloss polished.

Trivalent blue passivated steel or bright stainless steel.

## Sample order:

K1287.104X10

## On request:

Other screw lengths.

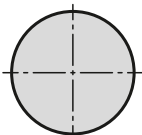
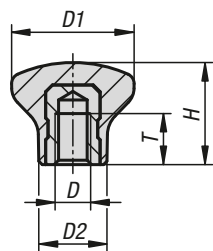


## KIPP Mushroom knobs with external thread

| Order No.<br>steel | Order No.<br>stainless steel | D  | D1 | D2 | H  | H1 | L  |
|--------------------|------------------------------|----|----|----|----|----|----|
| K1287.104X10       | K1287.1104X10                | M4 | 21 | 12 | 21 | 10 | 10 |
| K1287.105X10       | K1287.1105X10                | M5 | 21 | 12 | 21 | 10 | 10 |
| K1287.206X10       | K1287.1206X10                | M6 | 25 | 14 | 25 | 12 | 10 |
| K1287.308X15       | K1287.1308X15                | M8 | 33 | 18 | 33 | 16 | 15 |

## Mushroom knobs

internal thread



**Material:**

Thermoset PF 31.  
Steel or stainless steel.

**Version:**

Thermoset black, high-gloss polished.  
Trivalent blue passivated steel or bright stainless steel.

**Sample order:**

K1288.1805

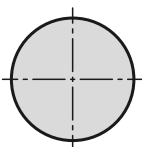
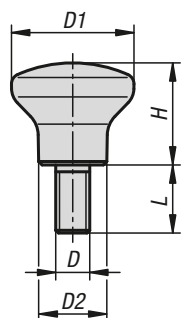
### KIPP Mushroom knobs with internal thread

| Order No.<br>steel | Order No.<br>stainless steel | D  | D1 | D2 | H  | T   |
|--------------------|------------------------------|----|----|----|----|-----|
| K1288.1805         | K1288.11805                  | M5 | 18 | 10 | 15 | 7,5 |
| K1288.2106         | K1288.12106                  | M6 | 21 | 12 | 17 | 9   |
| K1288.2506         | K1288.12506                  | M6 | 25 | 14 | 21 | 9   |
| K1288.3308         | K1288.13308                  | M8 | 33 | 18 | 29 | 12  |

# K1289

## Mushroom knobs

external thread



**Material:**

Thermoset PF 31.  
Steel or stainless steel.

**Version:**

Thermoset black, high-gloss polished.  
Trivalent blue passivated steel or bright stainless steel.

**Sample order:**

K1289.1805X10

**On request:**

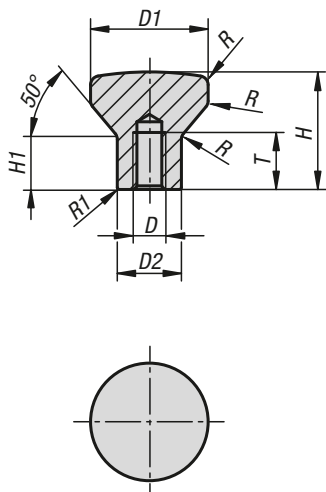
Other screw lengths.

### KIPP Mushroom knobs with external thread

| Order No.<br>steel | Order No.<br>stainless steel | D  | D1 | D2 | H  | L  |
|--------------------|------------------------------|----|----|----|----|----|
| K1289.1805X10      | K1289.11805X10               | M5 | 18 | 10 | 15 | 10 |
| K1289.2106X10      | K1289.12106X10               | M6 | 21 | 12 | 17 | 10 |
| K1289.2506X10      | K1289.12506X10               | M6 | 25 | 14 | 21 | 10 |
| K1289.3308X15      | K1289.13308X15               | M8 | 33 | 18 | 29 | 15 |

## Mushroom knobs female thread with high head

for Hygienic USIT® Freudenberg Process Seals sealing and shim washer



### Material:

Steel parts stainless steel 1.4404.

### Version:

High-gloss polished.

### Sample order:

K1308.2004

### Note:

The high head makes the mushroom knob ideal for manual pull and push movements.

The complete surface is polished to a high gloss with a surface finish of much less than Ra 0.8 µm. The contour is produced with generous radii and transitions. It doesn't matter in which position the mushroom knob is mounted, dirt and residue from products or cleaners seldom adheres. Easy cleaning is ensured.

The Hygienic USIT® sealing and shim washers from Freudenberg Process are used to seal the screw-on point. The shaft of the mushroom knob is specially designed to suit this seal. An almost cavity-free seal of the screw-on point is created which satisfies hygienic regulations.

### On request:

Inch threads, thread depths, form variations.

### Accessories:

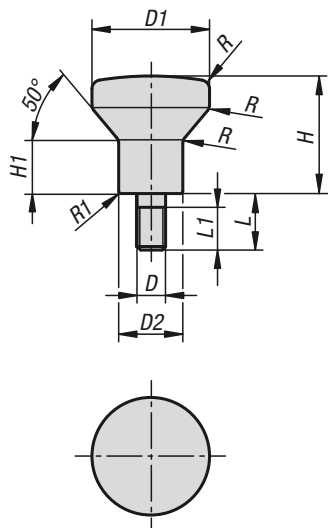
Hygienic USIT® sealing and shim washer K1491 for the screw-on surface.

## KIPP Mushroom knobs, female thread with high head, for Hygienic USIT® sealing and shim washer

| Order No.  | D   | D1 | D2   | H  | H1 | T  | R | R1   |
|------------|-----|----|------|----|----|----|---|------|
| K1308.2004 | M4  | 20 | 10,8 | 19 | 8  | 10 | 3 | 0,45 |
| K1308.2105 | M5  | 21 | 11,8 | 21 | 10 | 12 | 3 | 0,5  |
| K1308.2506 | M6  | 25 | 14,2 | 25 | 12 | 12 | 3 | 0,55 |
| K1308.3308 | M8  | 33 | 18   | 33 | 15 | 16 | 4 | 0,7  |
| K1308.4010 | M10 | 40 | 22,3 | 40 | 19 | 20 | 4 | 0,8  |

## Mushroom knobs male thread with high head

for Hygienic USIT® sealing and shim washer Freudenberg Process Seals



### Material:

Steel parts stainless steel 1.4404.

### Version:

High-gloss polished.

### Sample order:

K1309.2004X8

### Note:

The high head makes the mushroom knob ideal for manual pull and push movements. The complete surface is polished to a high gloss with a surface finish of much less than Ra 0.8 µm. The contour is produced with generous radii and transitions. It doesn't matter in which position the mushroom knob is mounted, dirt and residue from products or cleaners seldom adheres. Easy cleaning is ensured. The Hygienic USIT® sealing and shim washers from Freudenberg Process are used to seal the screw-on point. The shaft of the mushroom knob is specially designed to suit this seal. An almost cavity-free seal of the screw-on point is created which satisfies hygienic regulations.

### On request:

Inch threads, thread lengths, form variations.

### Accessories:

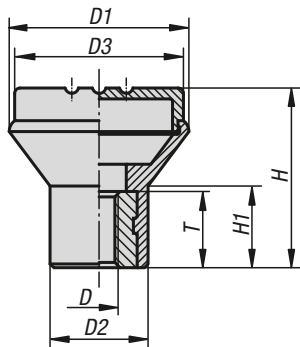
Hygienic USIT® sealing and shim washer K1491 for the screw-on surface.

### KIPP Mushroom knobs male thread, with high head, for Hygienic USIT® sealing and shim washer

| Order No.     | D   | D1 | D2   | H  | H1 | L  | L1 | R | R1   |
|---------------|-----|----|------|----|----|----|----|---|------|
| K1309.2004X8  | M4  | 20 | 10,8 | 19 | 8  | 8  | 7  | 3 | 0,45 |
| K1309.2105X10 | M5  | 21 | 11,8 | 21 | 10 | 10 | 9  | 3 | 0,5  |
| K1309.2506X12 | M6  | 25 | 14,2 | 25 | 12 | 12 | 11 | 3 | 0,55 |
| K1309.3308X16 | M8  | 33 | 18   | 33 | 15 | 16 | 15 | 4 | 0,7  |
| K1309.4010X20 | M10 | 40 | 22,3 | 40 | 19 | 20 | 19 | 4 | 0,8  |

# Mushroom knobs

internal thread



## Material:

Black thermoplastic.

Bush grade 5.8 steel or 1.4305 stainless steel.

## Version:

Steel trivalent blue passivated, stainless steel bright.

## Sample order:

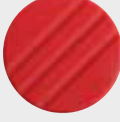
K0251.046 (cap colour traffic red.)

## Note:

Δ Add the desired cap colour here.

No colour code is required for black grey caps.



|                                                                                                                    |                                                                                                                      |                                                                                                                       |                                                                                                                       |
|--------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| black grey<br><br>RAL 7021       | pure orange Δ = 1<br><br>RAL 2004 | signal green Δ = 2<br><br>RAL 6032 | traffic blue Δ = 3<br><br>RAL 5017 |
| light grey Δ = 5<br><br>RAL 7035 | traffic red Δ = 6<br><br>RAL 3020 | colza yellow Δ = 7<br><br>RAL 1021 |                                                                                                                       |

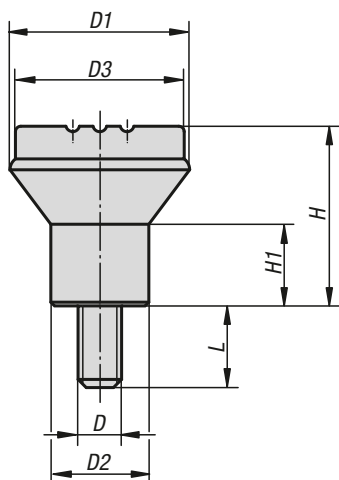
## KIPP Mushroom knobs with internal thread

| Order No.<br>steel | Order No.<br>stainless steel | D  | D1 | D2 | D3 | H  | H1 | T  |
|--------------------|------------------------------|----|----|----|----|----|----|----|
| K0251.04Δ          | K0251.004Δ                   | M4 | 21 | 12 | 19 | 21 | 10 | 10 |
| K0251.05Δ          | K0251.005Δ                   | M5 | 21 | 12 | 19 | 21 | 10 | 10 |
| K0251.06Δ          | K0251.006Δ                   | M6 | 25 | 14 | 23 | 25 | 12 | 10 |
| K0251.08Δ          | K0251.008Δ                   | M8 | 33 | 19 | 31 | 33 | 15 | 14 |



# Mushroom knobs

external thread



## Material:

Black thermoplastic.

Screw grade 5.8 steel or 1.4305 stainless steel.

## Version:

Steel trivalent blue passivated, stainless steel bright.

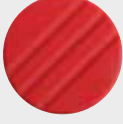
## Sample order:

K0251.046X10 (cap colour traffic red; include length L)

## Note:

Δ Add the desired cap colour here.

No colour code is required for black grey caps.

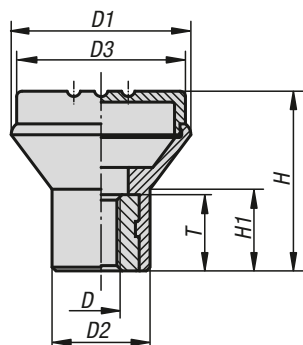
|                                                                                                                    |                                                                                                                      |                                                                                                                       |                                                                                                                       |
|--------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| black grey<br><br>RAL 7021       | pure orange Δ = 1<br><br>RAL 2004 | signal green Δ = 2<br><br>RAL 6032 | traffic blue Δ = 3<br><br>RAL 5017 |
| light grey Δ = 5<br><br>RAL 7035 | traffic red Δ = 6<br><br>RAL 3020 | colza yellow Δ = 7<br><br>RAL 1021 |                                                                                                                       |

## KIPP Mushroom knobs with external thread

| Order No.<br>steel | Order No.<br>stainless steel | D  | D1 | D2 | D3 | H  | H1 | L  |
|--------------------|------------------------------|----|----|----|----|----|----|----|
| K0251.04ΔX         | K0251.004ΔX                  | M4 | 21 | 12 | 19 | 21 | 10 | 10 |
| K0251.05ΔX         | K0251.005ΔX                  | M5 | 21 | 12 | 19 | 21 | 10 | 10 |
| K0251.06ΔX         | K0251.006ΔX                  | M6 | 25 | 14 | 23 | 25 | 12 | 15 |
| K0251.08ΔX         | K0251.008ΔX                  | M8 | 33 | 19 | 31 | 33 | 15 | 15 |

# Mushroom knobs biopolymer

internal thread



## Material:

Biopolymer, beech.  
Bush steel 5.8

## Version:

Bush trivalent blue passivated.  
Natural beech with beech fibres or coloured black grey.

## Sample order:

K0251.1005143

## Advantages:

This biopolymer is manufactured entirely from renewable raw materials (oil free).  
Conservation of finite fossil resources.  
The wood fibres originate 100% from local, sustainably managed forests in Germany.

## Features:

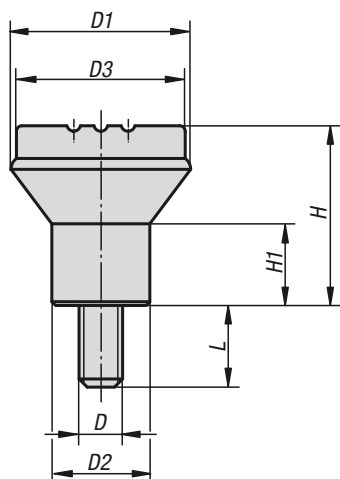
Excellent mechanical stability (certified with a minimum of 2x safety factor).  
Biopolymer is suitable for recycling (comparable to thermoplastics).  
Suitable for outdoor use (not biodegradable).  
Excellent resistance to strong acids and lyes.  
Short-term resistance to alcohol, fuel, mineral oil and grease.

## KIPP Mushroom knobs biopolymer with internal thread

| Order No.     | Main colour         | Thread type     | D  | D1 | D2 | D3 | H  | H1 | T  |
|---------------|---------------------|-----------------|----|----|----|----|----|----|----|
| K0251.1005143 | natural beech       | internal thread | M5 | 21 | 12 | 19 | 21 | 10 | 10 |
| K0251.1006143 | natural beech       | internal thread | M6 | 25 | 14 | 23 | 25 | 12 | 10 |
| K0251.1008143 | natural beech       | internal thread | M8 | 33 | 19 | 33 | 33 | 15 | 14 |
| K0251.100590  | black grey RAL 7021 | internal thread | M5 | 21 | 12 | 19 | 21 | 10 | 10 |
| K0251.100690  | black grey RAL 7021 | internal thread | M6 | 25 | 14 | 23 | 25 | 12 | 10 |
| K0251.100890  | black grey RAL 7021 | internal thread | M8 | 33 | 19 | 33 | 33 | 15 | 14 |

# Mushroom knobs biopolymer

external thread



## Material:

Biopolymer, beech.  
Threaded pin steel 5.8.

## Version:

Screw trivalent blue passivated.  
Natural beech with beech fibres or coloured black grey.

## Sample order:

K0251.100590X10

## Advantages:

This biopolymer is manufactured entirely from renewable raw materials (oil free).  
Conservation of finite fossil resources.  
The wood fibres originate 100% from local, sustainably managed forests in Germany.

## Features:

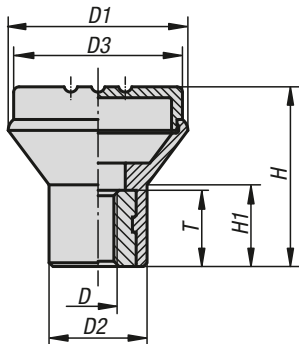
Excellent mechanical stability (certified with a minimum of 2x safety factor).  
Biopolymer is suitable for recycling (comparable to thermoplastics).  
Suitable for outdoor use (not biodegradable).  
Excellent resistance to strong acids and lyes.  
Short-term resistance to alcohol, fuel, mineral oil and grease.

## KIPP Mushroom knobs biopolymer with external thread

| Order No.        | Main colour         | D  | D1 | D2 | D3 | H  | H1 | L  |
|------------------|---------------------|----|----|----|----|----|----|----|
| K0251.1005143X10 | natural beech       | M5 | 21 | 12 | 19 | 21 | 10 | 10 |
| K0251.1006143X15 | natural beech       | M6 | 25 | 14 | 23 | 25 | 12 | 15 |
| K0251.1008143X15 | natural beech       | M8 | 33 | 19 | 33 | 33 | 15 | 15 |
| K0251.100590X10  | black grey RAL 7021 | M5 | 21 | 12 | 19 | 21 | 10 | 10 |
| K0251.100690X15  | black grey RAL 7021 | M6 | 25 | 14 | 23 | 25 | 12 | 15 |
| K0251.100890X15  | black grey RAL 7021 | M8 | 33 | 19 | 33 | 33 | 15 | 15 |

# Mushroom knobs antibacterial

internal thread, metal parts stainless steel



## Material:

Thermoplastic, slate grey.  
Bush stainless steel 1.4305.

## Version:

Stainless steel bright.

## Sample order:

K0251.12005144

## Application:

The antibacterial KIPP MEDI grip products are highly effective against a variety of hazardous microorganisms, such as bacteria, fungi and even multi-resistant bacteria (e.g. MRSA). The plastic used incorporates micro-silver particles with an antimicrobial effect to ensure effective results throughout the entire product life cycle.

## Function:

The growth of harmful micro-organisms on the product surface is effectively disrupted by means of silver ions, and the existing germs on MEDI grip products are consistently reduced (as tested and confirmed by an accredited testing laboratory). During cleaning cycles the risk of infection through touching these products is significantly lower.

## Advantages:

Resistant to humidity and cleaning products (during disinfection) with no toxic side effects.

## Applications:

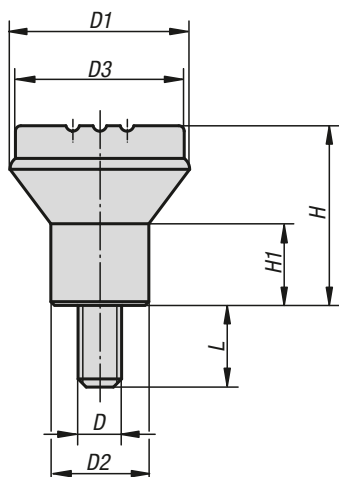
For installation on machines, equipment, plants and furnishings in areas with increased hygienic requirements (including hospitals, doctors' surgeries, rehabilitation centres and food production facilities), as well as for use in public areas or regularly frequented institutions (i.e. nursing homes or daycare centres).

## KIPP Mushroom knobs antibacterial internal thread, metal parts stainless steel

| Order No.      | Component material | D  | D1 | D2 | D3 | H  | H1 | T  |
|----------------|--------------------|----|----|----|----|----|----|----|
| K0251.12005144 | stainless steel    | M5 | 21 | 12 | 19 | 21 | 10 | 10 |

# Mushroom knobs antibacterial

external thread, metal parts stainless steel



## Material:

Thermoplastic, slate grey.

Threaded pin stainless steel 1.4305.

## Version:

Stainless steel bright.

## Sample order:

K0251.12005144X10

## Application:

The antibacterial KIPP MEDI grip products are highly effective against a variety of hazardous microorganisms, such as bacteria, fungi and even multi-resistant bacteria (e.g. MRSA).

The plastic used incorporates micro-silver particles with an antimicrobial effect to ensure effective results throughout the entire product life cycle.

## Function:

The growth of harmful micro-organisms on the product surface is effectively disrupted by means of silver ions, and the existing germs on MEDI grip products are consistently reduced (as tested and confirmed by an accredited testing laboratory).

During cleaning cycles the risk of infection through touching these products is significantly lower.

## Advantages:

Resistant to humidity and cleaning products (during disinfection) with no toxic side effects.

## Applications:

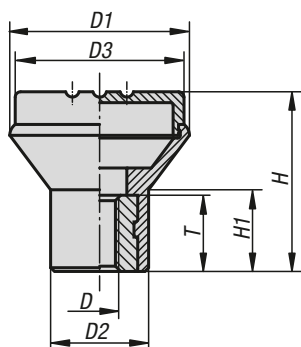
For installation on machines, equipment, plants and furnishings in areas with increased hygienic requirements (including hospitals, doctors' surgeries, rehabilitation centres and food production facilities), as well as for use in public areas or regularly frequented institutions (i.e. nursing homes or daycare centres).

## KIPP Mushroom knobs antibacterial, external thread, metal parts stainless steel

| Order No.         | Component material | D  | D1 | D2 | D3 | H  | H1 | L  |
|-------------------|--------------------|----|----|----|----|----|----|----|
| K0251.12005144X10 | stainless steel    | M5 | 21 | 12 | 19 | 21 | 10 | 10 |

# Mushroom knobs antistatic

internal thread



## Material:

Thermoplastic, graphite black.  
Bush steel 5.8.

## Version:

Bush blue passivated

## Sample order:

K0251.110524

## Application:

Sensitive electrical or electronic equipment, components and devices (ESD sensitive elements) may be damaged or destroyed by electrostatic discharges (ESD) in the immediate vicinity.

Electrostatic discharges can come from people or through handling ESD sensitive components (e.g. during production, assembly, transport, storage etc).

Electrically conductive products which conform to DIN EN 61340-5-1 are essential within electronic environments to prevent an electrostatic discharge.

These products can be used for ESD applications or in ESD protection areas (EPA) in accordance with DIN EN 61340-5-1.

## Safety:

These ESD products can also be used for devices, components and protection systems in areas with high risk of explosion.

Use of these ESD products prevents the occurrence of electrostatic spark discharges, eliminating the potential ignition of gases and dusts which could lead to explosions in enclosed spaces.

Manufacturers and operators must use and conform to ATEX directives for the protection of persons working in areas with high risk of explosion.

These ESD products are certified by TÜV-Süd in relation to their electrical discharge capability.

## Target groups:

Device manufacturers required to conform to ATEX product directive 2014/34/EU.

Operators required to conform to ATEX worker protection directive 1999/92/EC.

## KIPP Mushroom knobs antistatic internal thread

| Order No.    | Main colour             | D  | D1 | D2 | D3 | H  | H1 | T  |
|--------------|-------------------------|----|----|----|----|----|----|----|
| K0251.110524 | graphite black RAL 9011 | M5 | 21 | 12 | 19 | 21 | 10 | 10 |

# Mushroom knobs antistatic

external thread



## Material:

Thermoplastic, graphite black.  
Threaded pin steel 5.8.

## Version:

Screw blue passivated.

## Sample order:

K0251.110524X10

## Application:

Sensitive electrical or electronic equipment, components and devices (ESD sensitive elements) may be damaged or destroyed by electrostatic discharges (ESD) in the immediate vicinity.

Electrostatic discharges can come from people or through handling ESD sensitive components (e.g. during production, assembly, transport, storage etc).

Electrically conductive products which conform to DIN EN 61340-5-1 are essential within electronic environments to prevent an electrostatic discharge.

These products can be used for ESD applications or in ESD protection areas (EPA) in accordance with DIN EN 61340-5-1.

## Safety:

These ESD products can also be used for devices, components and protection systems in areas with high risk of explosion.

Use of these ESD products prevents the occurrence of electrostatic spark discharges, eliminating the potential ignition of gases and dusts which could lead to explosions in enclosed spaces.

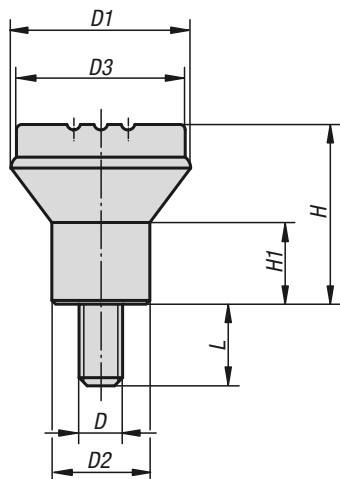
Manufacturers and operators must use and conform to ATEX directives for the protection of persons working in areas with high risk of explosion.

These ESD products are certified by TÜV-Süd in relation to their electrical discharge capability.

## Target groups:

Device manufacturers required to conform to ATEX product directive 2014/34/EU.

Operators required to conform to ATEX worker protection directive 1999/92/EC.



## KIPP Mushroom knobs antistatic external thread

| Order No.       | Main colour             | D  | D1 | D2 | D3 | H  | H1 | L  |
|-----------------|-------------------------|----|----|----|----|----|----|----|
| K0251.110524X10 | graphite black RAL 9011 | M5 | 21 | 12 | 19 | 21 | 10 | 10 |



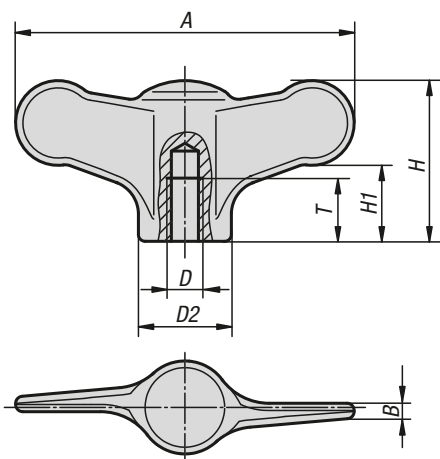
A large rectangular area filled with a light gray grid pattern, intended for taking notes.





# Wing grips

internal thread, stainless steel


**Material:**

Stainless steel 1.4308.

**Version:**

Polished or blasted.

**Sample order:**

K0273.105

**On request:**

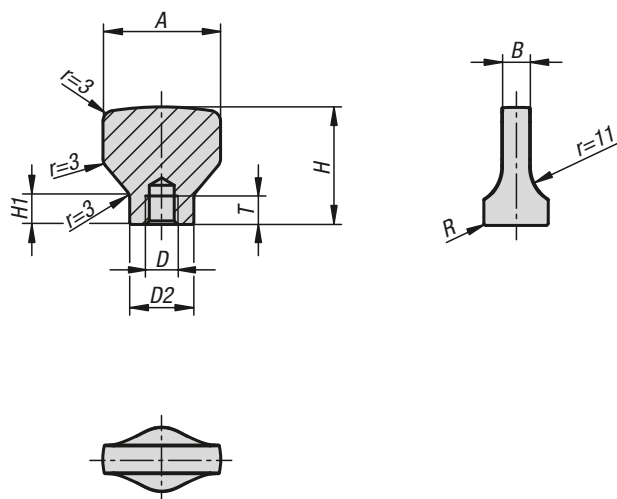
With external threads.

## KIPP Wing grips with internal thread, stainless steel

| Order No.  | Main colour | A  | B   | D   | D2   | H  | H1   | T  |
|------------|-------------|----|-----|-----|------|----|------|----|
| K0273.904  | polished    | 38 | 1,7 | M4  | 10,5 | 18 | 8,5  | 9  |
| K0273.905  | polished    | 38 | 1,7 | M5  | 10,5 | 18 | 8,5  | 9  |
| K0273.906  | polished    | 38 | 1,7 | M6  | 10,5 | 18 | 8,5  | 9  |
| K0273.105  | polished    | 50 | 2,3 | M5  | 14   | 24 | 11,5 | 12 |
| K0273.106  | polished    | 50 | 2,3 | M6  | 14   | 24 | 11,5 | 12 |
| K0273.208  | polished    | 75 | 3,4 | M8  | 21   | 35 | 16,5 | 15 |
| K0273.210  | polished    | 75 | 3,4 | M10 | 21   | 35 | 16,5 | 15 |
| K0273.9041 | blasted     | 38 | 1,7 | M4  | 10,5 | 18 | 8,5  | 9  |
| K0273.9051 | blasted     | 38 | 1,7 | M5  | 10,5 | 18 | 8,5  | 9  |
| K0273.9061 | blasted     | 38 | 1,7 | M6  | 10,5 | 18 | 8,5  | 9  |
| K0273.1051 | blasted     | 50 | 2,3 | M5  | 14   | 24 | 11,5 | 12 |
| K0273.1061 | blasted     | 50 | 2,3 | M6  | 14   | 24 | 11,5 | 12 |
| K0273.2081 | blasted     | 75 | 3,4 | M8  | 21   | 35 | 16,5 | 15 |
| K0273.2101 | blasted     | 75 | 3,4 | M10 | 21   | 35 | 16,5 | 15 |

# Wing nuts

for Hygienic USIT® sealing and shim washer Freudenberg Process Seals



## Material:

Steel parts stainless steel 1.4404.

## Version:

High-gloss polished.

## Sample order:

K1312.2004

## Note:

The wing nut makes simple screw connections superbly feasible. They can be easily opened or re-tightened without tools.

The complete surface is polished to a high gloss with a surface finish of much less than Ra 0.8 µm. The contour is produced with generous radii and transitions. It doesn't matter in which position the wing grip is mounted, dirt and residue from products or cleaners seldom adheres. Easy cleaning is ensured. The Hygienic USIT® sealing and shim washers from Freudenberg Process are used to seal the screw-on point. The shaft of the wing nut is specially designed to suit this seal. An almost cavity-free seal of the screw-on point is created which satisfies hygienic regulations.

## On request:

Other thread depths and inch threads.

## Accessories:

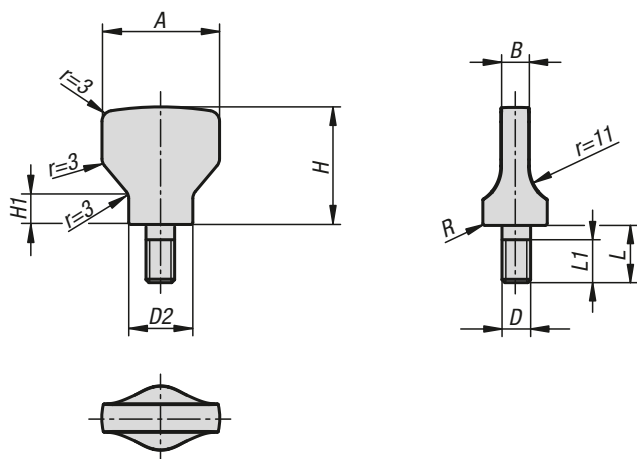
Hygienic USIT® sealing and shim washer K1491 for the screw-on surface.

## KIPP Wing nuts for Hygienic USIT® sealing and shim washer Freudenberg Process Seals

| Order No.  | A  | B  | D   | D2   | H  | H1  | R    | T  |
|------------|----|----|-----|------|----|-----|------|----|
| K1312.2004 | 20 | 4  | M4  | 10,8 | 19 | 5,3 | 0,45 | 6  |
| K1312.2105 | 21 | 5  | M5  | 11,8 | 21 | 6   | 0,5  | 6  |
| K1312.2506 | 25 | 6  | M6  | 14,2 | 25 | 7   | 0,55 | 7  |
| K1312.3308 | 33 | 8  | M8  | 18   | 33 | 8,4 | 0,7  | 9  |
| K1312.4010 | 40 | 10 | M10 | 22,3 | 40 | 10  | 0,8  | 11 |

## Wing screws

for Hygienic USIT® sealing and shim washer Freudenberg Process Seals



### Material:

Steel parts stainless steel 1.4404.

### Version:

High-gloss polished.

### Sample order:

K1313.2004X8

### Note:

The wing screw makes simple screw connections superbly feasible. They can be easily opened or re-tightened without tools.

The complete surface is polished to a high gloss with a surface finish of much less than Ra 0.8 µm. The contour is produced with generous radii and transitions. It doesn't matter in which position the wing grip is mounted, dirt and residue from products or cleaners seldom adheres. Easy cleaning is ensured. The Hygienic USIT® sealing and shim washers from Freudenberg Process are used to seal the screw-on point. The shaft of the wing screw is specially designed to suit this seal. An almost cavity-free seal of the screw-on point is created which satisfies hygienic regulations.

### On request:

Other screw lengths and inch threads.

### Accessories:

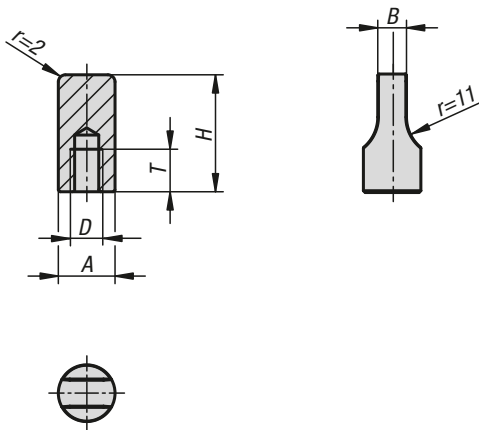
Hygienic USIT® sealing and shim washer K1491 for the screw-on surface.

## KIPP Wing screws for Hygienic USIT® sealing and shim washer Freudenberg Process Seals

| Order No.     | A  | B  | D   | D2   | H  | H1  | L  | L1 | R    |
|---------------|----|----|-----|------|----|-----|----|----|------|
| K1313.2004X8  | 20 | 4  | M4  | 10,8 | 19 | 5,3 | 8  | 7  | 0,45 |
| K1313.2105X10 | 21 | 5  | M5  | 11,8 | 21 | 6   | 10 | 9  | 0,5  |
| K1313.2506X12 | 25 | 6  | M6  | 14,2 | 25 | 7   | 12 | 11 | 0,55 |
| K1313.3308X16 | 33 | 8  | M8  | 18   | 33 | 8,4 | 16 | 15 | 0,7  |
| K1313.4010X20 | 40 | 10 | M10 | 22,3 | 40 | 10  | 20 | 19 | 0,8  |

# Wing nuts narrow

in Hygienic DESIGN


**Material:**

Stainless steel 1.4404.

**Version:**

Polished.

**Sample order:**

K1314.04

**Note:**

The wing nut makes simple screw connections feasible. They can be easily opened or re-tightened without tools.

The complete surface is polished with a surface finish of less than  $Ra\ 0.8\ \mu m$ . The contour is rounded with smooth transitions. Due to the polished surface dirt and residue from products or cleaners seldom adheres. Easy cleaning is ensured.

**On request:**

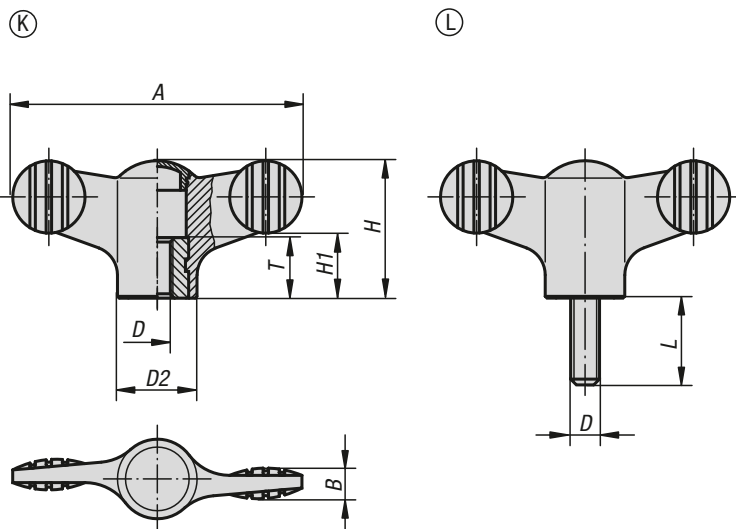
Inch threads, external threads.



## KIPP Wing nuts narrow in Hygienic DESIGN

| Order No. | A  | B   | D   | H  | T  |
|-----------|----|-----|-----|----|----|
| K1314.04  | 9  | 4,5 | M4  | 20 | 6  |
| K1314.05  | 10 | 4,5 | M5  | 22 | 6  |
| K1314.06  | 12 | 5,5 | M6  | 22 | 7  |
| K1314.08  | 16 | 8   | M8  | 25 | 9  |
| K1314.10  | 20 | 10  | M10 | 30 | 11 |

## Wing grips

**Material:**

Grip black thermoplastic.

Bush and screw steel 5.8 or stainless steel 1.4305.

**Version:**

Bush or screw trivalent blue passivated steel or bright stainless steel.

**Sample order:**

K0274.1057X20 (cap colour colza yellow; include length L)

**Note:**

Δ Add the desired cap colour here.

No colour code is required for black grey caps.



## KIPP Wing grips with internal thread

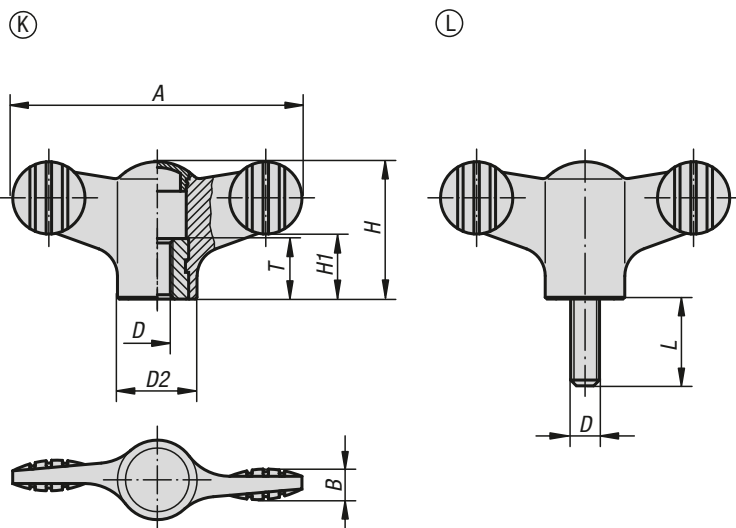
| Order No.<br>steel | Order No.<br>stainless steel | A  | B   | D   | D2 | H    | H1   | T  |
|--------------------|------------------------------|----|-----|-----|----|------|------|----|
| K0274.904Δ         | K0274.0904Δ                  | 38 | 4,5 | M4  | 12 | 18   | 8,5  | 10 |
| K0274.905Δ         | K0274.0905Δ                  | 38 | 4,5 | M5  | 12 | 18   | 8,5  | 10 |
| K0274.906Δ         | K0274.0906Δ                  | 38 | 4,5 | M6  | 12 | 18   | 8,5  | 10 |
| K0274.105Δ         | K0274.0105Δ                  | 50 | 5   | M5  | 14 | 24   | 11,5 | 10 |
| K0274.106Δ         | K0274.0106Δ                  | 50 | 5   | M6  | 14 | 24   | 11,5 | 10 |
| K0274.208Δ         | K0274.0208Δ                  | 75 | 7   | M8  | 21 | 35,6 | 16,5 | 14 |
| K0274.210Δ         | K0274.0210Δ                  | 75 | 7   | M10 | 21 | 35,6 | 16,5 | 14 |

## KIPP Wing grips with external thread

| Order No.<br>steel | Order No.<br>stainless steel | A  | B   | D   | D2 | H    | H1   | L           |
|--------------------|------------------------------|----|-----|-----|----|------|------|-------------|
| K0274.904ΔX        | K0274.0904ΔX                 | 38 | 4,5 | M4  | 12 | 18   | 8,5  | 10/15       |
| K0274.905ΔX        | K0274.0905ΔX                 | 38 | 4,5 | M5  | 12 | 18   | 8,5  | 15/20/30    |
| K0274.906ΔX        | K0274.0906ΔX                 | 38 | 4,5 | M6  | 12 | 18   | 8,5  | 20/30/40    |
| K0274.105ΔX        | K0274.0105ΔX                 | 50 | 5   | M5  | 14 | 24   | 11,5 | 15/20       |
| K0274.106ΔX        | K0274.0106ΔX                 | 50 | 5   | M6  | 14 | 24   | 11,5 | 20/30/40    |
| K0274.108ΔX        | K0274.0108ΔX                 | 50 | 5   | M8  | 14 | 24   | 11,5 | 20/30/40    |
| K0274.208ΔX        | K0274.0208ΔX                 | 75 | 7   | M8  | 21 | 35,6 | 16,5 | 20/30/40    |
| K0274.210ΔX        | K0274.0210ΔX                 | 75 | 7   | M10 | 21 | 35,6 | 16,5 | 20/30/40/50 |

# Wing grips antibacterial

metal parts stainless steel



## Material:

Thermoplastic, slate grey.  
Bush and screw stainless steel 1.4305.

## Version:

Bush and screw bright.

## Sample order:

K0274.120106144X20

## Application:

The antibacterial KIPP MEDI grip products are highly effective against a variety of hazardous microorganisms, such as bacteria, fungi and even multi-resistant bacteria (e.g. MRSA). The plastic used incorporates micro-silver particles with an antimicrobial effect to ensure effective results throughout the entire product life cycle.

## Function:

The growth of harmful micro-organisms on the product surface is effectively disrupted by means of silver ions, and the existing germs on MEDI grip products are consistently reduced (as tested and confirmed by an accredited testing laboratory). During cleaning cycles the risk of infection through touching these products is significantly lower.

## Advantages:

Resistant to humidity and cleaning products (during disinfection) with no toxic side effects.

## Applications:

For installation on machines, equipment, plants and furnishings in areas with increased hygienic requirements (including hospitals, doctors' surgeries, rehabilitation centres and food production facilities), as well as for use in public areas or regularly frequented institutions (i.e. nursing homes or daycare centres).

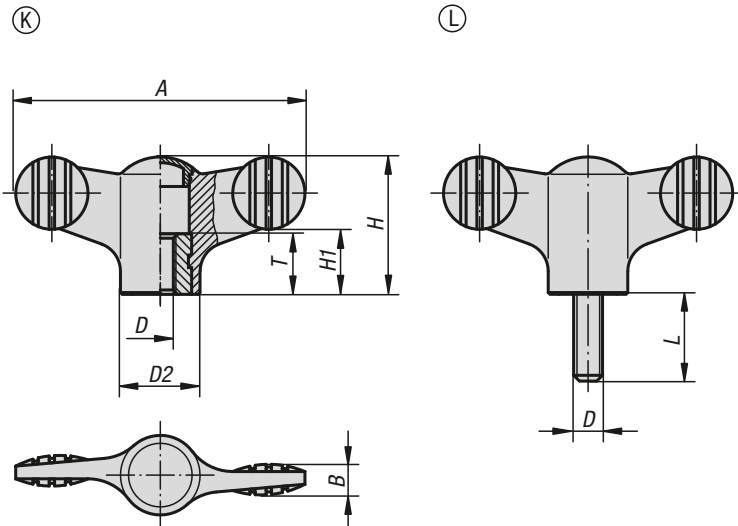
## KIPP Wing grips antibacterial internal thread, metal parts stainless steel

| Order No.       | Form | D  | A  | B | D2 | H  | H1   | T  |
|-----------------|------|----|----|---|----|----|------|----|
| K0274.120106144 | K    | M6 | 50 | 5 | 14 | 24 | 11,5 | 10 |

## KIPP Wing grips antibacterial external thread, metal parts stainless steel

| Order No.          | Form | D  | A  | B | D2 | H  | H1   | L  |
|--------------------|------|----|----|---|----|----|------|----|
| K0274.120106144X20 | L    | M6 | 50 | 5 | 14 | 24 | 11,5 | 20 |

## Wing grips antistatic

**Material:**

Thermoplastic, graphite black.  
Bush or screw steel 5.8.

**Version:**

Screw blue passivated.

**Sample order:**

K0274.1110624X20

**Application:**

Sensitive electrical or electronic equipment, components and devices (ESD sensitive elements) may be damaged or destroyed by electrostatic discharges (ESD) in the immediate vicinity.

Electrostatic discharges can come from people or through handling ESD sensitive components (e.g. during production, assembly, transport, storage etc).

Electrically conductive products which conform to DIN EN 61340-5-1 are essential within electronic environments to prevent an electrostatic discharge.

These products can be used for ESD applications or in ESD protection areas (EPA) in accordance with DIN EN 61340-5-1.

**Safety:**

These ESD products can also be used for devices, components and protection systems in areas with high risk of explosion.

Use of these ESD products prevents the occurrence of electrostatic spark discharges, eliminating the potential ignition of gases and dusts which could lead to explosions in enclosed spaces.

Manufacturers and operators must use and conform to ATEX directives for the protection of persons working in areas with high risk of explosion.

These ESD products are certified by TÜV-Süd in relation to their electrical discharge capability.

**Target groups:**

Device manufacturers required to conform to ATEX product directive 2014/34/EU.

Operators required to conform to ATEX worker protection directive 1999/92/EC.

**KIPP Wing grips antistatic with internal thread**

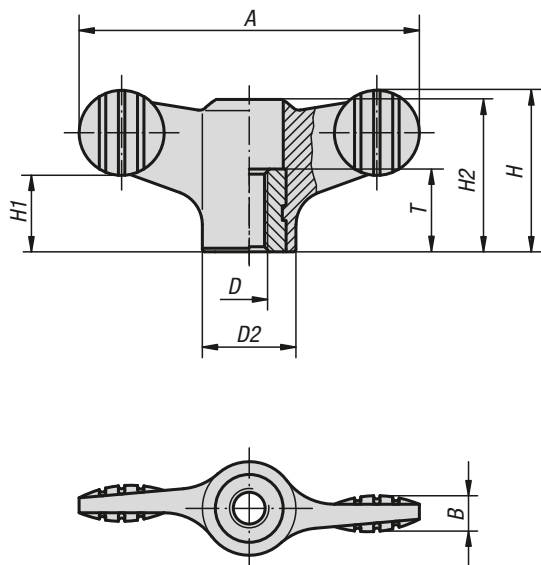
| Order No.     | Form | A  | B | D  | D2 | H  | H1   | T  |
|---------------|------|----|---|----|----|----|------|----|
| K0274.1110624 | K    | 50 | 5 | M6 | 14 | 24 | 11,5 | 10 |

**KIPP Wing grips antistatic with external thread**

| Order No.        | Form | A  | B | D  | D2 | H  | H1   | L  |
|------------------|------|----|---|----|----|----|------|----|
| K0274.1110624X20 | L    | 50 | 5 | M6 | 14 | 24 | 11,5 | 20 |

# Wing grips

tapped through



## Material:

Grip thermoplastic.

Bush steel 5.8 or stainless steel 1.4305.

## Version:

Grip black grey.

Bush trivalent blue passivated steel or bright stainless steel.

## Sample order:

K0274.1904

## KIPP Wing grips with tapped through bush

| Order No.   | Component material | A  | B   | D   | D2 | H    | H1   | H2   | T  |
|-------------|--------------------|----|-----|-----|----|------|------|------|----|
| K0274.1904  | steel              | 38 | 4,5 | M4  | 12 | 18   | 8,5  | 16,1 | 10 |
| K0274.1905  | steel              | 38 | 4,5 | M5  | 12 | 18   | 8,5  | 16,1 | 10 |
| K0274.1906  | steel              | 38 | 4,5 | M6  | 12 | 18   | 8,5  | 16,1 | 10 |
| K0274.1105  | steel              | 50 | 5   | M5  | 14 | 24   | 11,5 | 22   | 10 |
| K0274.1106  | steel              | 50 | 5   | M6  | 14 | 24   | 11,5 | 22   | 10 |
| K0274.1208  | steel              | 75 | 7   | M8  | 21 | 35,6 | 17   | 33,3 | 14 |
| K0274.1210  | steel              | 75 | 7   | M10 | 21 | 35,6 | 17   | 33,3 | 14 |
| K0274.10904 | stainless steel    | 38 | 4,5 | M4  | 12 | 18   | 8,5  | 16,1 | 10 |
| K0274.10905 | stainless steel    | 38 | 4,5 | M5  | 12 | 18   | 8,5  | 16,1 | 10 |
| K0274.10906 | stainless steel    | 38 | 4,5 | M6  | 12 | 18   | 8,5  | 16,1 | 10 |
| K0274.10105 | stainless steel    | 50 | 5   | M5  | 14 | 24   | 11,5 | 22   | 10 |
| K0274.10106 | stainless steel    | 50 | 5   | M6  | 14 | 24   | 11,5 | 22   | 10 |
| K0274.10208 | stainless steel    | 75 | 7   | M8  | 21 | 35,6 | 17   | 33,3 | 14 |
| K0274.10210 | stainless steel    | 75 | 7   | M10 | 21 | 35,6 | 17   | 33,3 | 14 |



## Wing grips



### Material:

Grip polyamide, glass bead reinforced.

Bush brass or steel.

Screw steel.

### Version:

Steel electro zinc-plated.

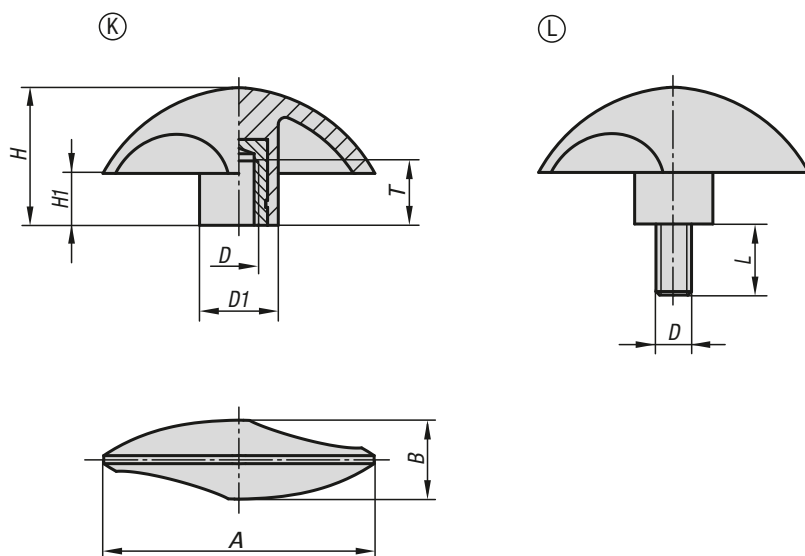
### Sample order:

K0783.15006

### Note:

Temperature resistance from -50 °C to 130 °C.

Resistant to common chemicals and oils.



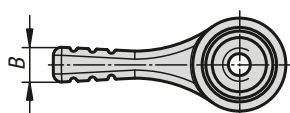
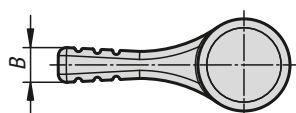
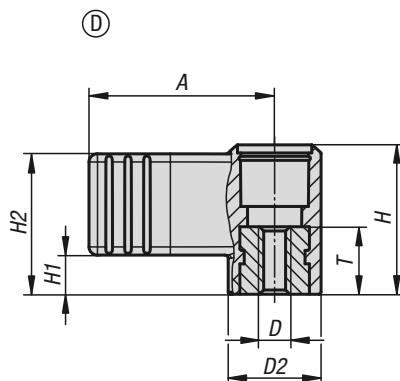
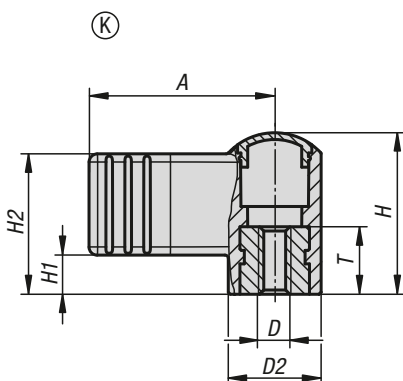
### KIPP Wing grips with internal thread

| Order No.   | Form | A    | B  | D   | D1 | H    | H1   | T  |
|-------------|------|------|----|-----|----|------|------|----|
| K0783.15006 | K    | 51   | 15 | M6  | 15 | 25,5 | 9,5  | 14 |
| K0783.16008 | K    | 61,5 | 18 | M8  | 18 | 31   | 11,5 | 14 |
| K0783.17510 | K    | 76   | 22 | M10 | 22 | 38,5 | 14,5 | 14 |

### KIPP Wing grips with external thread

| Order No.      | Form | A    | B  | D   | D1 | H    | H1   | L  |
|----------------|------|------|----|-----|----|------|------|----|
| K0783.25006X15 | L    | 51   | 15 | M6  | 15 | 25,5 | 9,5  | 15 |
| K0783.26008X20 | L    | 61,5 | 18 | M8  | 18 | 31   | 11,5 | 20 |
| K0783.27510X20 | L    | 76   | 22 | M10 | 22 | 38,5 | 14,5 | 20 |

## Wing grips one-sided



**Material:**  
Thermoplastic.  
Bush steel 5.8 or stainless steel 1.4305.

**Version:**  
Grip black grey.  
Bush trivalent blue passivated steel or bright stainless steel.

**Sample order:**  
K0608.09046 (Bush M4 stainless steel, cap traffic red.)

**Note:**  
Δ Add the desired cap colour here.  
No colour code is required for black grey caps.

**Drawing reference:**  
Form K with cap.  
Form D without cap.



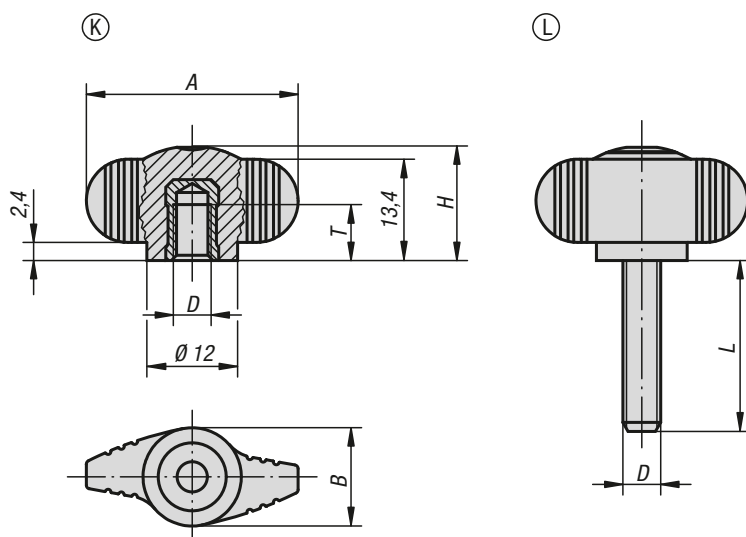
### KIPP Wing grips, one-sided without cap

| Order No.<br>steel | Order No.<br>stainless steel | Form | A    | B   | D   | D2 | H    | H1  | H2   | T  |
|--------------------|------------------------------|------|------|-----|-----|----|------|-----|------|----|
| K0608.1904         | K0608.10904                  | D    | 22   | 4,4 | M4  | 12 | 16,1 | 4,5 | 15,5 | 10 |
| K0608.1905         | K0608.10905                  | D    | 22   | 4,4 | M5  | 12 | 16,1 | 4,5 | 15,5 | 10 |
| K0608.1906         | K0608.10906                  | D    | 22   | 4,4 | M6  | 12 | 16,1 | 4,5 | 15,5 | 10 |
| K0608.1105         | K0608.10105                  | D    | 27,5 | 5,1 | M5  | 14 | 22,1 | 5,8 | 20,8 | 10 |
| K0608.1106         | K0608.10106                  | D    | 27,5 | 5,1 | M6  | 14 | 22,1 | 5,8 | 20,8 | 10 |
| K0608.1208         | K0608.10208                  | D    | 37,5 | 6,3 | M8  | 21 | 33,3 | 8,5 | 30,5 | 14 |
| K0608.1210         | K0608.10210                  | D    | 37,5 | 6,3 | M10 | 21 | 33,3 | 8,5 | 30,5 | 14 |

### KIPP Wing grips, one-sided with cap

| Order No.<br>steel | Order No.<br>stainless steel | Form | D   | D2 | A    | B   | H  | H1  | H2   | T  |
|--------------------|------------------------------|------|-----|----|------|-----|----|-----|------|----|
| K0608.904Δ         | K0608.0904Δ                  | K    | M4  | 12 | 22   | 4,4 | 18 | 4,5 | 15,5 | 10 |
| K0608.905Δ         | K0608.0905Δ                  | K    | M5  | 12 | 22   | 4,4 | 18 | 4,5 | 15,5 | 10 |
| K0608.906Δ         | K0608.0906Δ                  | K    | M6  | 12 | 22   | 4,4 | 18 | 4,5 | 15,5 | 10 |
| K0608.105Δ         | K0608.0105Δ                  | K    | M5  | 14 | 27,5 | 5,1 | 24 | 5,8 | 20,8 | 10 |
| K0608.106Δ         | K0608.0106Δ                  | K    | M6  | 14 | 27,5 | 5,1 | 24 | 5,8 | 20,8 | 10 |
| K0608.208Δ         | K0608.0208Δ                  | K    | M8  | 21 | 37,5 | 6,3 | 36 | 8,5 | 30,5 | 14 |
| K0608.210Δ         | K0608.0210Δ                  | K    | M10 | 21 | 37,5 | 6,3 | 36 | 8,5 | 30,5 | 14 |

## Wing grips "Miniwing"

**Material:**

Grip black grey thermoplastic.  
 Bush brass or stainless steel 1.4305.  
 Screw steel 5.8 or stainless steel 1.4305.

**Version:**

Steel trivalent blue passivated.  
 Stainless steel, bright.

**Sample order:**

K0274.005X10 (include length L)

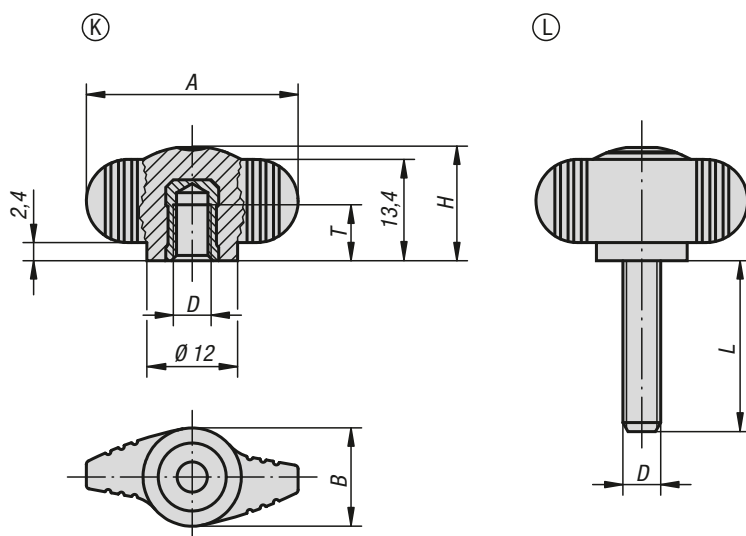
## KIPP Wing grips "Miniwing" with internal thread

| Order No.  | Form | Component material | A  | B  | D  | H  | T   |
|------------|------|--------------------|----|----|----|----|-----|
| K0274.004  | K    | brass              | 28 | 13 | M4 | 15 | 6   |
| K0274.005  | K    | brass              | 28 | 13 | M5 | 15 | 7,5 |
| K0274.006  | K    | brass              | 28 | 13 | M6 | 15 | 9   |
| K0274.0004 | K    | stainless steel    | 28 | 13 | M4 | 15 | 6   |
| K0274.0005 | K    | stainless steel    | 28 | 13 | M5 | 15 | 7,5 |
| K0274.0006 | K    | stainless steel    | 28 | 13 | M6 | 15 | 9   |

## KIPP Wing grips "Miniwing" with external thread

| Order No. steel | Order No. stainless steel | Form | A  | B  | D  | H  | L              |
|-----------------|---------------------------|------|----|----|----|----|----------------|
| K0274.004X      | K0274.0004X               | L    | 28 | 13 | M4 | 15 | 8              |
| K0274.005X      | K0274.0005X               | L    | 28 | 13 | M5 | 15 | 10/15/20       |
| K0274.006X      | K0274.0006X               | L    | 28 | 13 | M6 | 15 | 10/15/20/25/30 |
| K0274.008X      | K0274.0008X               | L    | 28 | 13 | M8 | 15 | 20/25/30/40    |

## Wing grips "Miniwing" biopolymer

**Material:**

Biopolymer, bush.  
Bush brass. Screw 5.8 steel.

**Version:**

Screw trivalent blue passivated.  
Natural beech with beech fibres or coloured black grey.

**Sample order:**

K0274.1000690

**Advantages:**

This biopolymer is manufactured entirely from renewable raw materials (oil free).  
Conservation of finite fossil resources.  
The wood fibres originate 100% from local, sustainably managed forests in Germany.

**Features:**

Excellent mechanical stability (certified with a minimum of 2x safety factor).  
Biopolymer is suitable for recycling (comparable to thermoplastics).  
Suitable for outdoor use (not biodegradable).  
Excellent resistance to strong acids and lyes.  
Short-term resistance to alcohol, fuel, mineral oil and grease.

## KIPP Wing grips "Miniwing" with internal thread

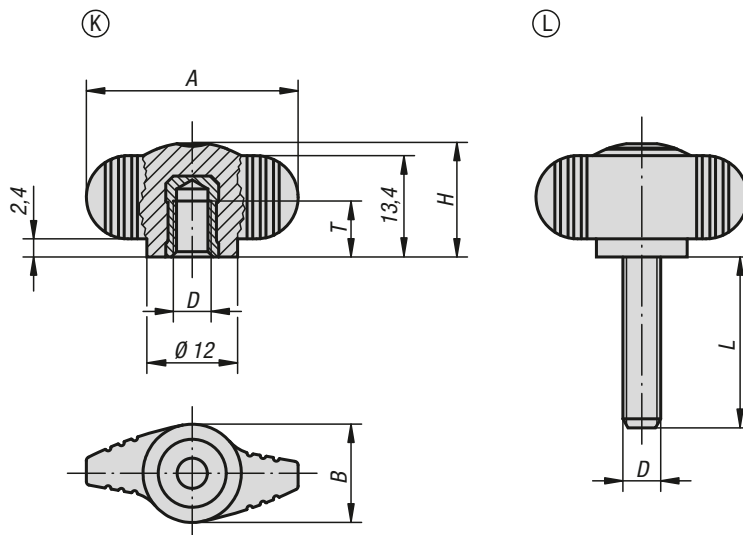
| Order No.      | Form | Main colour         | D  | A  | B  | H  | T   |
|----------------|------|---------------------|----|----|----|----|-----|
| K0274.1000490  | K    | black grey RAL 7021 | M4 | 28 | 13 | 15 | 6   |
| K0274.10004143 | K    | natural beech       | M4 | 28 | 13 | 15 | 6   |
| K0274.1000590  | K    | black grey RAL 7021 | M5 | 28 | 13 | 15 | 7,5 |
| K0274.10005143 | K    | natural beech       | M5 | 28 | 13 | 15 | 7,5 |
| K0274.1000690  | K    | black grey RAL 7021 | M6 | 28 | 13 | 15 | 9   |
| K0274.10006143 | K    | natural beech       | M6 | 28 | 13 | 15 | 9   |

## KIPP Wing grips "Miniwing" external thread

| Order No.         | Form | Main colour         | A  | B  | D  | H  | L  |
|-------------------|------|---------------------|----|----|----|----|----|
| K0274.1000490X8   | L    | black grey RAL 7021 | 28 | 13 | M4 | 15 | 8  |
| K0274.10004143X8  | L    | natural beech       | 28 | 13 | M4 | 15 | 8  |
| K0274.1000590X15  | L    | black grey RAL 7021 | 28 | 13 | M5 | 15 | 15 |
| K0274.10005143X15 | L    | natural beech       | 28 | 13 | M5 | 15 | 15 |
| K0274.1000690X15  | L    | black grey RAL 7021 | 28 | 13 | M6 | 15 | 15 |
| K0274.10006143X15 | L    | natural beech       | 28 | 13 | M6 | 15 | 15 |
| K0274.1000890X20  | L    | black grey RAL 7021 | 28 | 13 | M8 | 15 | 20 |
| K0274.10008143X20 | L    | natural beech       | 28 | 13 | M8 | 15 | 20 |

# Wing grips "Miniwing" antibacterial

metal parts stainless steel



## Material:

Thermoplastic, slate grey.  
Bush and screw stainless steel 1.4305.

## Version:

Bush and screw bright.

## Sample order:

K0274.120006144

## Application:

The antibacterial KIPP MEDI grip products are highly effective against a variety of hazardous microorganisms, such as bacteria, fungi and even multi-resistant bacteria (e.g. MRSA). The plastic used incorporates micro-silver particles with an antimicrobial effect to ensure effective results throughout the entire product life cycle.

## Function:

The growth of harmful micro-organisms on the product surface is effectively disrupted by means of silver ions, and the existing germs on MEDI grip products are consistently reduced (as tested and confirmed by an accredited testing laboratory). During cleaning cycles the risk of infection through touching these products is significantly lower.

## Advantages:

Resistant to humidity and cleaning products (during disinfection) with no toxic side effects.

## Applications:

For installation on machines, equipment, plants and furnishings in areas with increased hygienic requirements (including hospitals, doctors' surgeries, rehabilitation centres and food production facilities), as well as for use in public areas or regularly frequented institutions (i.e. nursing homes or daycare centres).

## KIPP Wing grips "Miniwing" antibacterial internal thread, metal parts stainless steel

| Order No.       | Form | A  | B  | D  | H  | T |
|-----------------|------|----|----|----|----|---|
| K0274.120006144 | K    | 28 | 13 | M6 | 15 | 9 |

## KIPP Wing grips "Miniwing" antibacterial external thread, metal parts stainless steel

| Order No.          | Form | A  | B  | D  | H  | L  |
|--------------------|------|----|----|----|----|----|
| K0274.120006144X15 | L    | 28 | 13 | M6 | 15 | 15 |

## Wing grips "Miniwing" antistatic

**Material:**

Thermoplastic, graphite black.  
Bush brass or threaded pins steel 5.8.

**Version:**

Screw blue passivated.

**Sample order:**

K0274.1100624X15

**Application:**

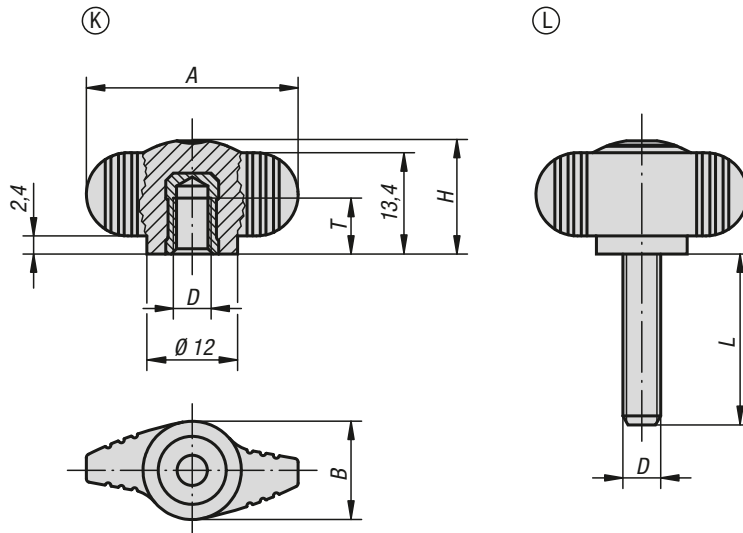
Sensitive electrical or electronic equipment, components and devices (ESD sensitive elements) may be damaged or destroyed by electrostatic discharges (ESD) in the immediate vicinity. Electrostatic discharges can come from people or through handling ESD sensitive components (e.g. during production, assembly, transport, storage etc). Electrically conductive products which conform to DIN EN 61340-5-1 are essential within electronic environments to prevent an electrostatic discharge. These products can be used for ESD applications or in ESD protection areas (EPA) in accordance with DIN EN 61340-5-1.

**Safety:**

These ESD products can also be used for devices, components and protection systems in areas with high risk of explosion. Use of these ESD products prevents the occurrence of electrostatic spark discharges, eliminating the potential ignition of gases and dusts which could lead to explosions in enclosed spaces. Manufacturers and operators must use and conform to ATEX directives for the protection of persons working in areas with high risk of explosion. These ESD products are certified by TÜV-Süd in relation to their electrical discharge capability.

**Target groups:**

Device manufacturers required to conform to ATEX product directive 2014/34/EU.  
Operators required to conform to ATEX worker protection directive 1999/92/EC.



## KIPP Wing grips "Miniwing" antistatic with internal thread

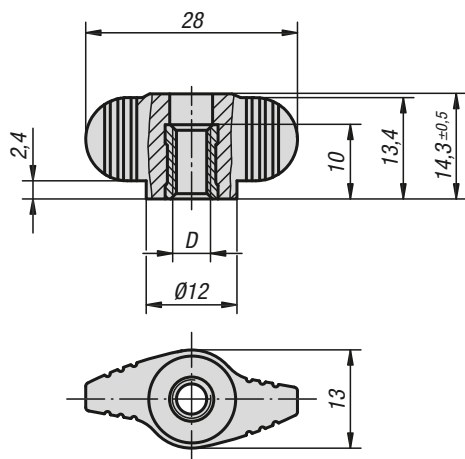
| Order No.     | A  | B  | D  | H  | T |
|---------------|----|----|----|----|---|
| K0274.1100624 | 28 | 13 | M6 | 15 | 9 |

## KIPP Wing grips "Miniwing" antistatic with external thread

| Order No.        | A  | B  | D  | H  | L  |
|------------------|----|----|----|----|----|
| K0274.1100624X15 | 28 | 13 | M6 | 15 | 15 |

# Wing grips "Miniwing"

tapped through



## Material:

Grip thermoplastic.

Bush steel 5.8 or stainless steel 1.4305.

## Version:

Grip black grey.

Steel trivalent blue passivated.

Stainless steel bright.

## Sample order:

K0658.1004

## KIPP Wing grips "Miniwing" with tapped through bush

| Order No.   | Component material | D  |
|-------------|--------------------|----|
| K0658.1004  | steel              | M4 |
| K0658.1005  | steel              | M5 |
| K0658.1006  | steel              | M6 |
| K0658.10004 | stainless steel    | M4 |
| K0658.10005 | stainless steel    | M5 |
| K0658.10006 | stainless steel    | M6 |

## Grip nuts

**Material:**

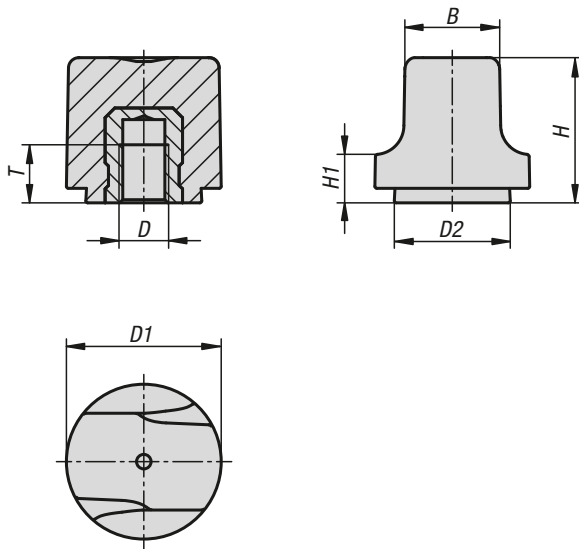
Thermoplastic black.  
Bush steel, stainless steel or brass.

**Version:**

Bush blue passivated steel, stainless steel and brass bright.

**Sample order:**

K1126.103

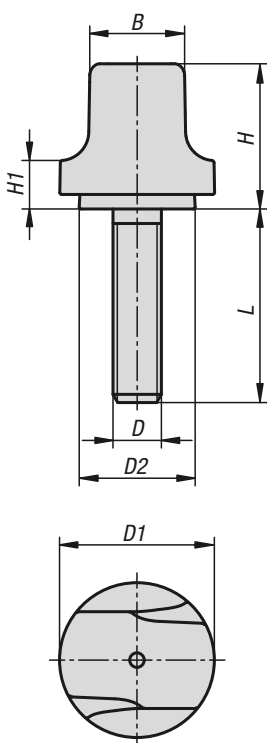


## KIPP Grip nuts

| Order No.  | Component material | B    | D  | D1 | D2   | H    | H1  | T   |
|------------|--------------------|------|----|----|------|------|-----|-----|
| K1126.103  | brass              | 10   | M3 | 16 | 12   | 15   | 5   | 4,5 |
| K1126.104  | brass              | 10   | M4 | 16 | 12   | 15   | 5   | 6   |
| K1126.204  | brass              | 12,3 | M4 | 20 | 15   | 18,5 | 6   | 6   |
| K1126.205  | brass              | 12,3 | M5 | 20 | 15   | 18,5 | 6   | 6   |
| K1126.305  | steel              | 15,3 | M5 | 25 | 18,7 | 22,9 | 7,3 | 8,5 |
| K1126.306  | steel              | 15,3 | M6 | 25 | 18,7 | 22,9 | 7,3 | 9   |
| K1126.1003 | stainless steel    | 10   | M3 | 16 | 12   | 15   | 5   | 4,5 |
| K1126.1004 | stainless steel    | 10   | M4 | 16 | 12   | 15   | 5   | 6   |
| K1126.2004 | stainless steel    | 12,3 | M4 | 20 | 15   | 18,5 | 6   | 6   |
| K1126.2005 | stainless steel    | 12,3 | M5 | 20 | 15   | 18,5 | 6   | 6   |
| K1126.3005 | stainless steel    | 15,3 | M5 | 25 | 18,7 | 22,9 | 7,3 | 8,5 |
| K1126.3006 | stainless steel    | 15,3 | M6 | 25 | 18,7 | 22,9 | 7,3 | 9   |



## Grip screws



### Material:

Thermoplastic black. Screw steel or stainless steel.

### Version:

Screw blue passivated steel or bright stainless steel.

### Sample order:

K1126.103X8 (include length L.)

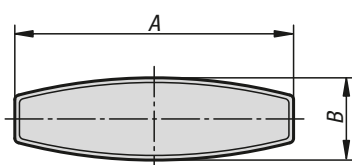
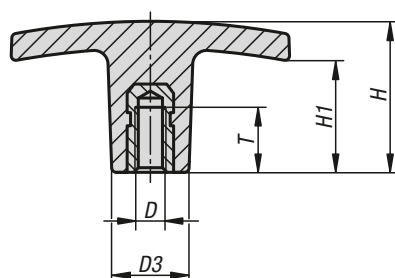
## KIPP Grip screws

| Order No.<br>steel | Order No.<br>stainless steel | B    | D  | D1 | D2   | H    | H1  | L           |
|--------------------|------------------------------|------|----|----|------|------|-----|-------------|
| K1126.103X         | K1126.1003X                  | 10   | M3 | 16 | 12   | 15   | 5   | 8/10/12/15  |
| K1126.104X         | K1126.1004X                  | 10   | M4 | 16 | 12   | 15   | 5   | 10/15/20    |
| K1126.105X         | K1126.1005X                  | 10   | M5 | 16 | 12   | 15   | 5   | 10/15/20    |
| K1126.204X         | K1126.2004X                  | 12,3 | M4 | 20 | 15   | 18,5 | 6   | 10/15/20    |
| K1126.205X         | K1126.2005X                  | 12,3 | M5 | 20 | 15   | 18,5 | 6   | 10/15/20/25 |
| K1126.206X         | K1126.2006X                  | 12,3 | M6 | 20 | 15   | 18,5 | 6   | 10/15/20/25 |
| K1126.305X         | K1126.3005X                  | 15,3 | M5 | 25 | 18,7 | 22,9 | 7,3 | 10/15/20/25 |
| K1126.306X         | K1126.3006X                  | 15,3 | M6 | 25 | 18,7 | 22,9 | 7,3 | 10/15/20/25 |
| K1126.308X         | K1126.3008X                  | 15,3 | M8 | 25 | 18,7 | 22,9 | 7,3 | 15/20/25/30 |

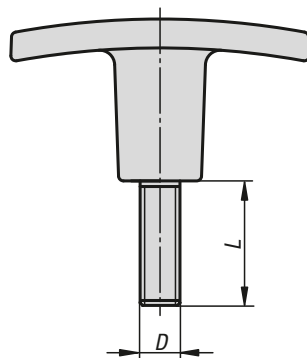
## T-grips



(K)



(L)

**Material:**

Fibreglass reinforced thermoplastic.

Tapped bush brass.

Screw steel.

**Version:**

Grip, black.

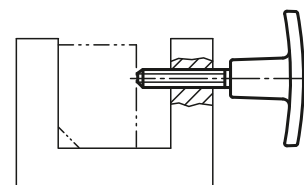
Screw electro zinc-plated.

**Sample order:**

K0180.25005X15 (include length L)

**On request:**

Grip colour red, yellow, green, blue, white or grey (min. quantity 1000).

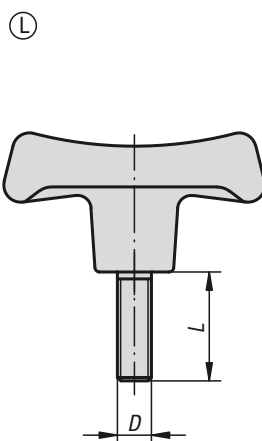
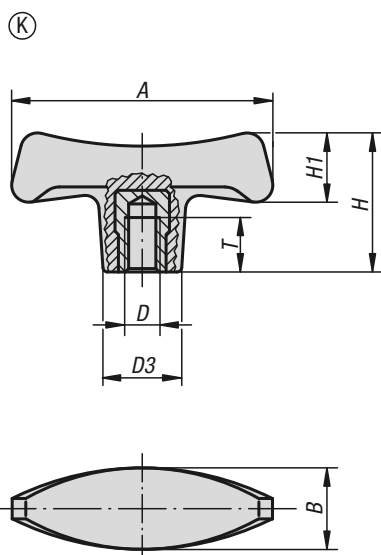
**KIPP T-grips, with internal thread**

| Order No.   | Form | A  | B    | D   | D3 | H    | H1 | T  |
|-------------|------|----|------|-----|----|------|----|----|
| K0180.14005 | K    | 40 | 13   | M5  | 13 | 30,5 | 20 | 10 |
| K0180.15005 | K    | 50 | 15   | M5  | 14 | 24   | 16 | 10 |
| K0180.16006 | K    | 60 | 17   | M6  | 16 | 31,5 | 23 | 12 |
| K0180.17108 | K    | 71 | 19,5 | M8  | 20 | 36   | 19 | 20 |
| K0180.17110 | K    | 71 | 19,5 | M10 | 20 | 36   | 19 | 20 |
| K0180.18010 | K    | 80 | 26   | M10 | 26 | 39,5 | 26 | 25 |
| K0180.18012 | K    | 80 | 26   | M12 | 26 | 39,5 | 26 | 25 |

**KIPP T-grips, with external thread**

| Order No.    | Form | A  | B    | D   | D3 | H    | H1 | L     |
|--------------|------|----|------|-----|----|------|----|-------|
| K0180.24005X | L    | 40 | 13   | M5  | 13 | 30,5 | 20 | 15    |
| K0180.25005X | L    | 50 | 15   | M5  | 14 | 24   | 16 | 15/20 |
| K0180.26006X | L    | 60 | 17   | M6  | 16 | 31,5 | 23 | 20/25 |
| K0180.27108X | L    | 71 | 19,5 | M8  | 20 | 36   | 19 | 20/30 |
| K0180.27110X | L    | 71 | 19,5 | M10 | 20 | 36   | 19 | 20/30 |
| K0180.28010X | L    | 80 | 26   | M10 | 26 | 39,5 | 26 | 30    |
| K0180.28012X | L    | 80 | 26   | M12 | 26 | 39,5 | 26 | 40    |

## T-grips



### Material:

Thermoset PF 31, black.

Steel bush and stud, electro zinc-plated.

### Version:

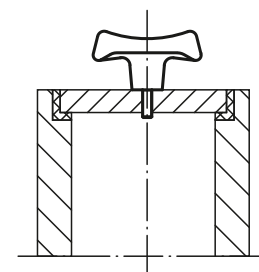
High-gloss polished.

### Sample order:

K0181.27006X18 (include length L)

### On request:

Other screw sizes, screw lengths and colours.



### KIPP T-grips, with internal thread

| Order No.   | Form | A  | B  | D   | D3   | H    | H1   | T  |
|-------------|------|----|----|-----|------|------|------|----|
| K0181.17006 | K    | 70 | 22 | M6  | 19,6 | 38,8 | 20,2 | 12 |
| K0181.17008 | K    | 70 | 22 | M8  | 19,6 | 38,8 | 20,2 | 14 |
| K0181.17010 | K    | 70 | 22 | M10 | 19,6 | 38,8 | 20,2 | 14 |
| K0181.18008 | K    | 80 | 25 | M8  | 22,3 | 44   | 23   | 14 |
| K0181.18010 | K    | 80 | 25 | M10 | 22,3 | 44   | 23   | 22 |
| K0181.19010 | K    | 90 | 28 | M10 | 25   | 49,6 | 26   | 22 |
| K0181.19012 | K    | 90 | 28 | M12 | 25   | 49,6 | 26   | 21 |

### KIPP T-grips, with external thread

| Order No.    | Form | A  | B  | D   | D3   | H    | H1   | L     |
|--------------|------|----|----|-----|------|------|------|-------|
| K0181.27006X | L    | 70 | 22 | M6  | 19,6 | 38,8 | 20,2 | 18    |
| K0181.27008X | L    | 70 | 22 | M8  | 19,6 | 38,8 | 20,2 | 24    |
| K0181.28010X | L    | 80 | 25 | M10 | 22,3 | 44   | 23   | 20/30 |
| K0181.29010X | L    | 90 | 28 | M10 | 25   | 49,6 | 26   | 30    |
| K0181.29012X | L    | 90 | 28 | M12 | 25   | 49,6 | 26   | 24    |

## T-grips stainless steel



### Material:

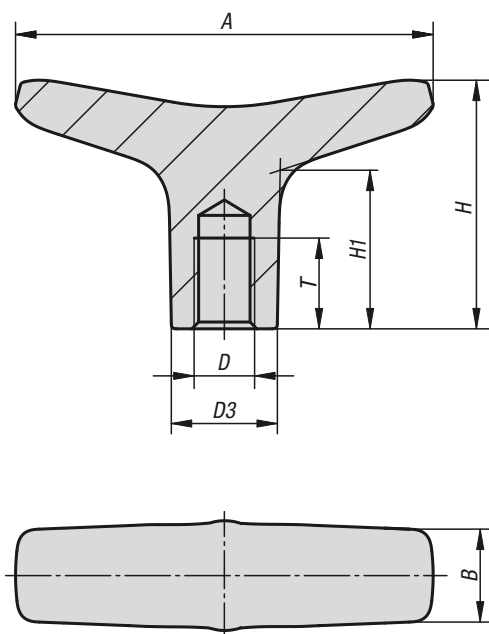
Stainless steel 1.4308.

### Version:

Electropolished or blasted.

### Sample order:

K1203.55061

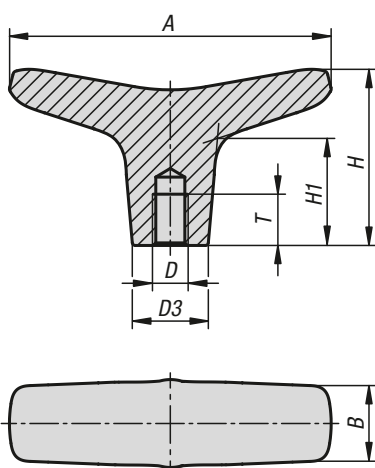


## KIPP T-grips, stainless steel

| Order No.   | Surface finish body | A    | B    | D   | D3 | H    | H1   | T  |
|-------------|---------------------|------|------|-----|----|------|------|----|
| K1203.55061 | blasted             | 55,2 | 12,3 | M6  | 14 | 32,9 | 21   | 12 |
| K1203.55081 | blasted             | 55,2 | 12,3 | M8  | 14 | 32,9 | 21   | 12 |
| K1203.65061 | blasted             | 65,3 | 14   | M6  | 16 | 37   | 22,7 | 16 |
| K1203.65081 | blasted             | 65,3 | 14   | M8  | 16 | 37   | 22,7 | 16 |
| K1203.65101 | blasted             | 65,3 | 14   | M10 | 16 | 37   | 22,7 | 16 |
| K1203.75101 | blasted             | 75,3 | 17,8 | M10 | 20 | 41,2 | 24,9 | 16 |
| K1203.75121 | blasted             | 75,3 | 17,8 | M12 | 20 | 41,2 | 24,9 | 16 |
| K1203.55062 | electropolished     | 55,2 | 12,3 | M6  | 14 | 32,9 | 21   | 12 |
| K1203.55082 | electropolished     | 55,2 | 12,3 | M8  | 14 | 32,9 | 21   | 12 |
| K1203.65062 | electropolished     | 65,3 | 14   | M6  | 16 | 37   | 22,7 | 16 |
| K1203.65082 | electropolished     | 65,3 | 14   | M8  | 16 | 37   | 22,7 | 16 |
| K1203.65102 | electropolished     | 65,3 | 14   | M10 | 16 | 37   | 22,7 | 16 |
| K1203.75102 | electropolished     | 75,3 | 17,8 | M10 | 20 | 41,2 | 24,9 | 16 |
| K1203.75122 | electropolished     | 75,3 | 17,8 | M12 | 20 | 41,2 | 24,9 | 16 |

# T-grips with female thread in stainless steel

for Hygienic USIT® sealing and shim washer Freudenberg Process Seals


**Material:**

Stainless steel 1.4404.

**Version:**

High-gloss polished.

**Sample order:**

K1515.5505

**Note:**

The complete surface is polished to a high gloss with a surface finish of Ra 0.8 µm. This means that dirt and impurities can hardly adhere. Easy cleaning is ensured. The Hygienic USIT® sealing and shim washers from Freudenberg Process are used to seal the fastening point. The shaft of the T-grip is specially designed to suit this seal. A cavity-free seal of the fastening point is created, which satisfies hygienic regulations.

**On request:**

Other thread depths, inch threads, male threads.

**Accessories:**

Hygienic USIT® sealing and shim washer K1491 for the screw-on surface.

## KIPP T-grips with female thread in stainless steel for Hygienic USIT® sealing and shim washer Freudenberg Process Seals

| Order No.  | A    | B    | D  | D3    | H    | H1   | T   |
|------------|------|------|----|-------|------|------|-----|
| K1515.5505 | 55,2 | 12,3 | M5 | 11,65 | 32,9 | 21   | 7,5 |
| K1515.6506 | 65,3 | 14   | M6 | 14    | 37   | 22,7 | 9   |
| K1515.7508 | 75,3 | 17,7 | M8 | 17,8  | 41,2 | 24,9 | 12  |

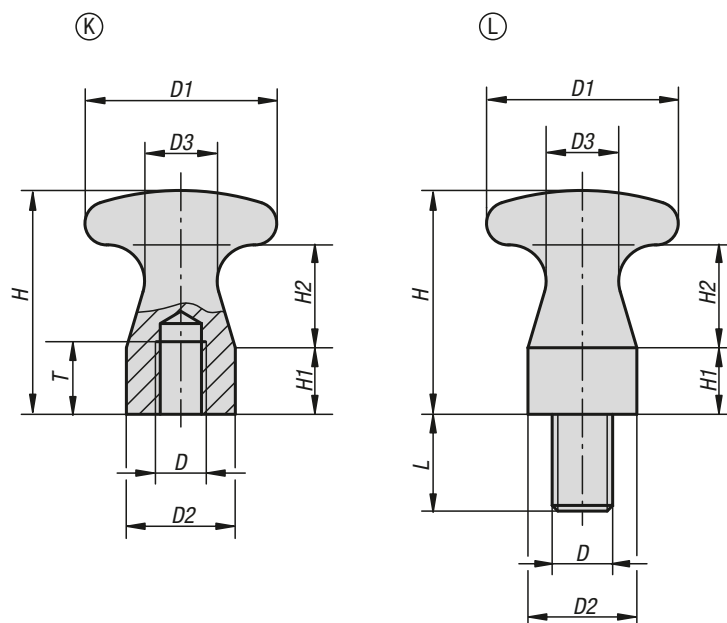
## Knobs flat



**Material:**  
Steel.

**Version:**  
Black oxidised.

**Sample order:**  
K0157.08



## KIPP Knobs flat, internal thread

| Order No. | Form | D   | D1 | D2 | D3 | H  | H1 | H2 | T  |
|-----------|------|-----|----|----|----|----|----|----|----|
| K0157.05  | K    | M5  | 16 | 10 | 6  | 18 | 5  | 9  | 7  |
| K0157.06  | K    | M6  | 25 | 14 | 10 | 29 | 9  | 13 | 9  |
| K0157.08  | K    | M8  | 32 | 18 | 12 | 37 | 11 | 17 | 12 |
| K0157.10  | K    | M10 | 36 | 20 | 13 | 42 | 12 | 20 | 15 |

## KIPP Knobs flat, external thread

| Order No.   | Form | D   | D1 | D2 | D3 | H  | H1 | H2 | L  |
|-------------|------|-----|----|----|----|----|----|----|----|
| K0157.06010 | L    | M6  | 16 | 10 | 6  | 18 | 5  | 9  | 10 |
| K0157.08014 | L    | M8  | 25 | 14 | 10 | 29 | 9  | 13 | 14 |
| K0157.10016 | L    | M10 | 32 | 18 | 12 | 37 | 11 | 17 | 16 |
| K0157.12018 | L    | M12 | 36 | 20 | 13 | 42 | 12 | 20 | 18 |

# Ball knobs

stainless steel or aluminium, DIN 319


**Material:**

Stainless steel 1.4301, 1.4305 or aluminium.

**Version:**

Polished.

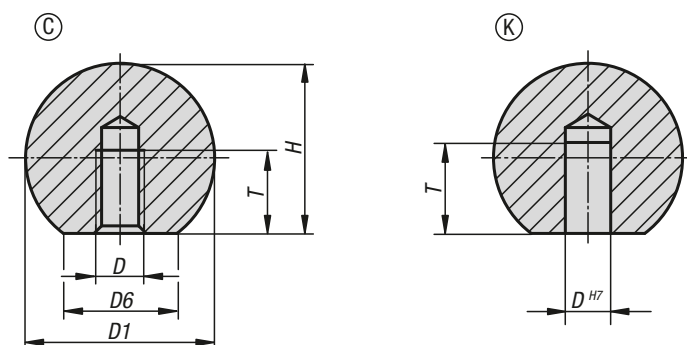
**Sample order:**

K0650.116043

**Drawing reference:**

Form C: tapped hole

Form K: reamed hole



## KIPP Ball Knobs, stainless steel or aluminium to DIN 319

| Order No.    | Form | Form-Type            | Main material   | Steel code | D   | D1 | D6 | H    | T    |
|--------------|------|----------------------|-----------------|------------|-----|----|----|------|------|
| K0650.116044 | C    | with internal thread | stainless steel | 1.4301     | M4  | 16 | 8  | 15   | 7,2  |
| K0650.120054 | C    | with internal thread | stainless steel | 1.4301     | M5  | 20 | 12 | 18   | 9,1  |
| K0650.125064 | C    | with internal thread | stainless steel | 1.4301     | M6  | 25 | 15 | 22,5 | 11   |
| K0650.132084 | C    | with internal thread | stainless steel | 1.4301     | M8  | 32 | 18 | 29   | 14,5 |
| K0650.140104 | C    | with internal thread | stainless steel | 1.4301     | M10 | 40 | 22 | 37   | 18   |
| K0650.150124 | C    | with internal thread | stainless steel | 1.4301     | M12 | 50 | 28 | 46   | 21   |
| K0650.116042 | C    | with internal thread | aluminium       | -          | M4  | 16 | 8  | 15   | 7,2  |
| K0650.120052 | C    | with internal thread | aluminium       | -          | M5  | 20 | 12 | 18   | 9,1  |
| K0650.125062 | C    | with internal thread | aluminium       | -          | M6  | 25 | 15 | 22,5 | 11   |
| K0650.132082 | C    | with internal thread | aluminium       | -          | M8  | 32 | 18 | 29   | 14,5 |
| K0650.140102 | C    | with internal thread | aluminium       | -          | M10 | 40 | 22 | 37   | 18   |
| K0650.150122 | C    | with internal thread | aluminium       | -          | M12 | 50 | 28 | 46   | 21   |

| Order No.    | Form | Form-Type        | Main material   | Steel code | D  | D1 | D6 | H    | T  |
|--------------|------|------------------|-----------------|------------|----|----|----|------|----|
| K0650.316043 | K    | with reamed hole | stainless steel | 1.4305     | 6  | 16 | 8  | 15   | 10 |
| K0650.320053 | K    | with reamed hole | stainless steel | 1.4305     | 8  | 20 | 12 | 18   | 12 |
| K0650.325063 | K    | with reamed hole | stainless steel | 1.4305     | 10 | 25 | 15 | 22,5 | 16 |
| K0650.332083 | K    | with reamed hole | stainless steel | 1.4305     | 12 | 32 | 18 | 29   | 20 |
| K0650.340103 | K    | with reamed hole | stainless steel | 1.4305     | 16 | 40 | 22 | 37   | 25 |
| K0650.350123 | K    | with reamed hole | stainless steel | 1.4305     | 20 | 50 | 28 | 46   | 32 |
| K0650.316042 | K    | with reamed hole | aluminium       | -          | 6  | 16 | 8  | 15   | 10 |
| K0650.320052 | K    | with reamed hole | aluminium       | -          | 8  | 20 | 12 | 18   | 12 |
| K0650.325062 | K    | with reamed hole | aluminium       | -          | 10 | 25 | 15 | 22,5 | 16 |
| K0650.332082 | K    | with reamed hole | aluminium       | -          | 12 | 32 | 18 | 29   | 20 |
| K0650.340102 | K    | with reamed hole | aluminium       | -          | 16 | 40 | 22 | 37   | 25 |
| K0650.350122 | K    | with reamed hole | aluminium       | -          | 20 | 50 | 28 | 46   | 32 |

## Ball knobs

thermoplastic, DIN 319 enhanced



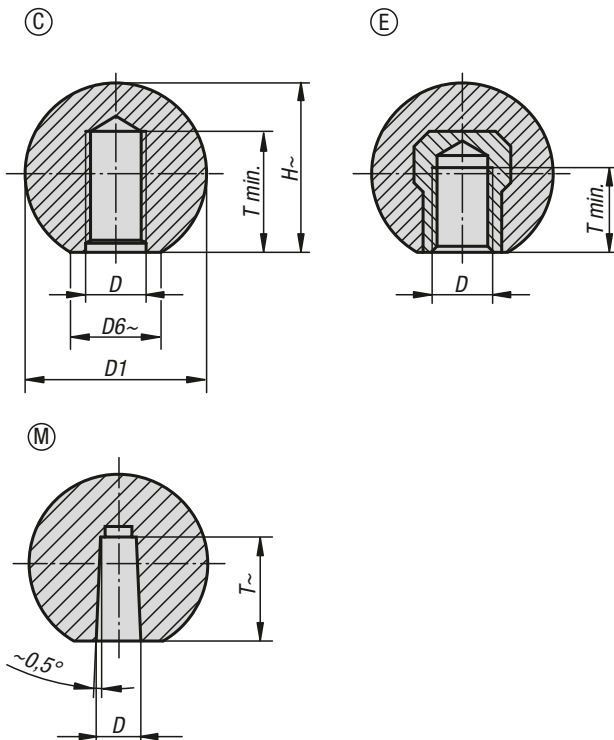
**Material:**  
Black thermoplastic.  
Bush steel.

**Version:**  
Steel electro zinc-plated.

**Sample order:**  
K0158.11604

**On request:**  
Other colours.

**Drawing reference:**  
Form C: plastic thread  
Form E: tapped bush  
Form M: tapered hole



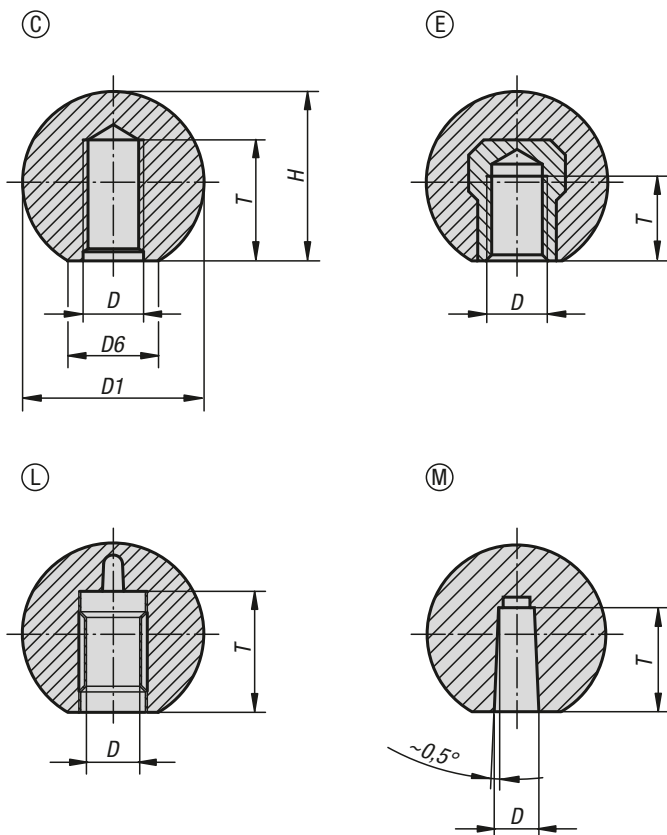
### KIPP Ball knobs thermoplastic DIN 319 enhanced

| Order No.   | Form | D   | D1 | D6 | H    | T   |
|-------------|------|-----|----|----|------|-----|
| K0158.11604 | C    | M4  | 16 | 8  | 15   | 6   |
| K0158.11605 | C    | M5  | 16 | 8  | 15   | 7,5 |
| K0158.12005 | C    | M5  | 20 | 12 | 18   | 7,5 |
| K0158.12006 | C    | M6  | 20 | 12 | 18   | 9   |
| K0158.12506 | C    | M6  | 25 | 15 | 22,5 | 9   |
| K0158.12508 | C    | M8  | 25 | 15 | 22,5 | 12  |
| K0158.13208 | C    | M8  | 32 | 18 | 29   | 12  |
| K0158.13210 | C    | M10 | 32 | 18 | 29   | 15  |
| K0158.14010 | C    | M10 | 40 | 22 | 37   | 15  |
| K0158.14012 | C    | M12 | 40 | 22 | 37   | 15  |
| K0158.22005 | E    | M5  | 20 | 12 | 18   | 7,5 |
| K0158.22006 | E    | M6  | 20 | 12 | 18   | 7,5 |
| K0158.22506 | E    | M6  | 25 | 15 | 22,5 | 9   |
| K0158.22508 | E    | M8  | 25 | 15 | 22,5 | 9   |
| K0158.23208 | E    | M8  | 32 | 18 | 29   | 12  |
| K0158.23210 | E    | M10 | 32 | 18 | 29   | 12  |
| K0158.32005 | M    | 5   | 20 | 12 | 18   | 12  |
| K0158.32506 | M    | 6   | 25 | 15 | 22,5 | 15  |
| K0158.32508 | M    | 8   | 25 | 15 | 22,5 | 15  |
| K0158.33208 | M    | 8   | 32 | 18 | 29   | 15  |
| K0158.33210 | M    | 10  | 32 | 18 | 29   | 15  |
| K0158.34010 | M    | 10  | 40 | 22 | 37   | 20  |
| K0158.34012 | M    | 12  | 40 | 22 | 37   | 20  |



## Ball knobs smooth

DIN 319 enhanced



### Material:

Thermoset PF 31, black or red.  
Bush electro zinc-plated steel.

### Version:

High-gloss polished.

### Sample order:

K0159.11604

### Assembly:

Assembly, Form L: The ball knobs are installed by tapping lightly with a hammer. Please only use a rubber or plastic hammer with a weight up to 200 g!

The version B0307.21604 has a brass bush.

The versions B0307.23008, B0307.230081, B0307.23508 and B0307.24008 have copper plated steel bushes.

### Shank tolerance:

Ball knobs with press-fit sleeve can be mounted on standard shafts with tolerance h9. The supplied press-fit sleeve assures a firm and reliable fit.

### Drawing reference:

Form C: moulded thread

Form E: tapped bush

Form L: press-fit sleeve

Form M: tapered hole

## KIPP Ball knobs smooth DIN 319 enhanced, Form C, with molded thread

| Order No.<br>black | Order No.<br>red | Form | D   | D1 | D6 | H    | T   |
|--------------------|------------------|------|-----|----|----|------|-----|
| K0159.11604        | K0159.116041     | C    | M4  | 16 | 8  | 15   | 6   |
| K0159.11605        | K0159.116051     | C    | M5  | 16 | 8  | 15   | 7,5 |
| K0159.12005        | K0159.120051     | C    | M5  | 20 | 12 | 18   | 7,5 |
| K0159.11606        | -                | C    | M6  | 16 | 8  | 15   | 9   |
| K0159.12006        | K0159.120061     | C    | M6  | 20 | 12 | 18   | 9   |
| K0159.12506        | K0159.125061     | C    | M6  | 25 | 15 | 23   | 9   |
| K0159.12508        | K0159.125081     | C    | M8  | 25 | 15 | 23   | 12  |
| K0159.13008        | K0159.130081     | C    | M8  | 30 | 16 | 28   | 12  |
| K0159.13208        | K0159.132081     | C    | M8  | 32 | 18 | 29   | 12  |
| K0159.13508        | -                | C    | M8  | 36 | 17 | 33   | 18  |
| K0159.14008        | K0159.140081     | C    | M8  | 40 | 20 | 37,5 | 12  |
| K0159.13210        | -                | C    | M10 | 32 | 18 | 29   | 15  |
| K0159.13510        | K0159.135101     | C    | M10 | 36 | 17 | 33   | 15  |
| K0159.14010        | K0159.140101     | C    | M10 | 40 | 20 | 37,5 | 15  |
| K0159.14510        | -                | C    | M10 | 45 | 20 | 43   | 15  |
| K0159.15010        | K0159.150101     | C    | M10 | 50 | 22 | 48   | 15  |
| K0159.14012        | -                | C    | M12 | 40 | 20 | 37,5 | 18  |
| K0159.14512        | -                | C    | M12 | 45 | 20 | 43   | 18  |
| K0159.15012        | K0159.150121     | C    | M12 | 50 | 28 | 48   | 18  |

# Ball knobs smooth

DIN 319 enhanced

## KIPP Ball knobs smooth DIN 319 enhanced, Form E, with tapped bush

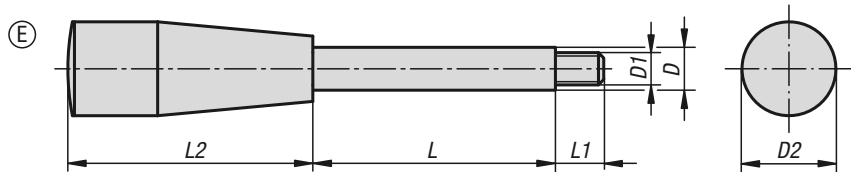
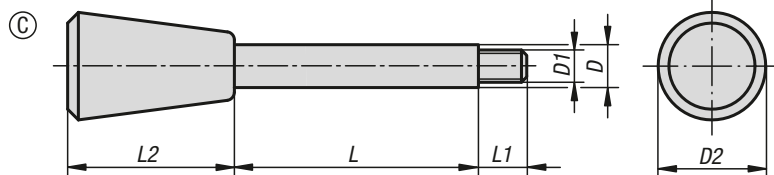
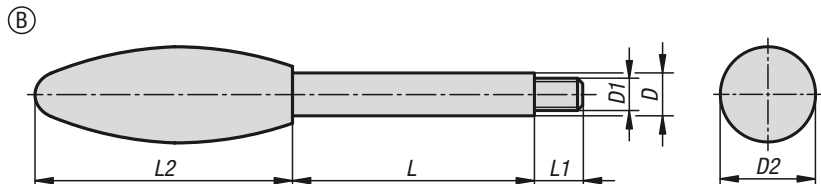
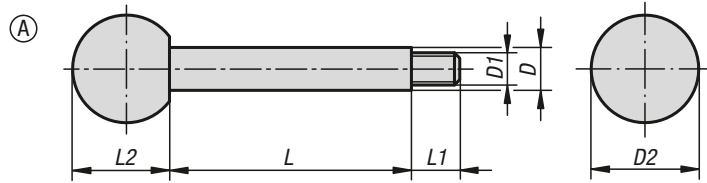
| Order No.<br>black | Order No.<br>red | Form | D   | D1 | D6 | H    | T   |
|--------------------|------------------|------|-----|----|----|------|-----|
| K0159.21604        | -                | E    | M4  | 16 | 8  | 15   | 6   |
| K0159.22005        | K0159.220051     | E    | M5  | 20 | 12 | 18   | 7,5 |
| K0159.22006        | -                | E    | M6  | 20 | 12 | 18   | 9   |
| K0159.22506        | K0159.225061     | E    | M6  | 25 | 15 | 23   | 9   |
| K0159.22508        | -                | E    | M8  | 25 | 15 | 23   | 12  |
| K0159.23008        | K0159.230081     | E    | M8  | 30 | 16 | 28   | 12  |
| K0159.23208        | -                | E    | M8  | 32 | 18 | 29   | 12  |
| K0159.23508        | -                | E    | M8  | 36 | 17 | 33   | 14  |
| K0159.24008        | -                | E    | M8  | 40 | 20 | 37,5 | 14  |
| K0159.23210        | -                | E    | M10 | 32 | 18 | 29   | 15  |
| K0159.23510        | K0159.235101     | E    | M10 | 36 | 17 | 33   | 14  |
| K0159.24010        | K0159.240101     | E    | M10 | 40 | 20 | 37,5 | 15  |
| K0159.24510        | -                | E    | M10 | 45 | 20 | 43   | 22  |
| K0159.25010        | -                | E    | M10 | 50 | 22 | 48   | 15  |
| K0159.24012        | K0159.240121     | E    | M12 | 40 | 20 | 37,5 | 18  |
| K0159.24512        | -                | E    | M12 | 45 | 20 | 43   | 21  |
| K0159.25012        | K0159.250121     | E    | M12 | 50 | 28 | 48   | 18  |

## KIPP Ball knobs smooth DIN 319 enhanced, Form L, with clamping sleeve

| Order No.   | Form | Main colour | D  | D1 | D6 | H    | T  |
|-------------|------|-------------|----|----|----|------|----|
| K0159.42005 | L    | black       | 5  | 20 | 12 | 18   | 13 |
| K0159.42506 | L    | black       | 6  | 25 | 15 | 23   | 16 |
| K0159.42508 | L    | black       | 8  | 25 | 15 | 23   | 15 |
| K0159.43208 | L    | black       | 8  | 32 | 18 | 29   | 15 |
| K0159.43210 | L    | black       | 10 | 32 | 18 | 29   | 20 |
| K0159.44010 | L    | black       | 10 | 40 | 20 | 37,5 | 20 |
| K0159.44012 | L    | black       | 12 | 40 | 20 | 37,5 | 23 |
| K0159.45012 | L    | black       | 12 | 50 | 28 | 48   | 20 |

## KIPP Ball knobs smooth DIN 319 enhanced, Form M, with tapered bore

| Order No.   | Form | Main colour | D  | D1 | D6 | H    | T  |
|-------------|------|-------------|----|----|----|------|----|
| K0159.31604 | M    | black       | 4  | 16 | 8  | 15   | 9  |
| K0159.32005 | M    | black       | 5  | 20 | 12 | 18   | 12 |
| K0159.32506 | M    | black       | 6  | 25 | 15 | 23   | 15 |
| K0159.32508 | M    | black       | 8  | 25 | 15 | 23   | 15 |
| K0159.33208 | M    | black       | 8  | 32 | 18 | 29   | 15 |
| K0159.33210 | M    | black       | 10 | 32 | 18 | 29   | 15 |
| K0159.34010 | M    | black       | 10 | 40 | 20 | 37,5 | 20 |
| K0159.34012 | M    | black       | 12 | 40 | 20 | 37,5 | 20 |
| K0159.35012 | M    | black       | 12 | 50 | 28 | 48   | 22 |

**Material:**

Knobs thermoset PF 31.

Rod steel 1.0718 or stainless steel 1.4305.

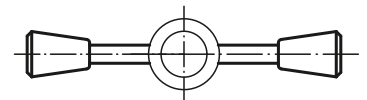
**Version:**

Thermoset black, high-gloss polished.

Steel black oxidised or bright stainless steel.

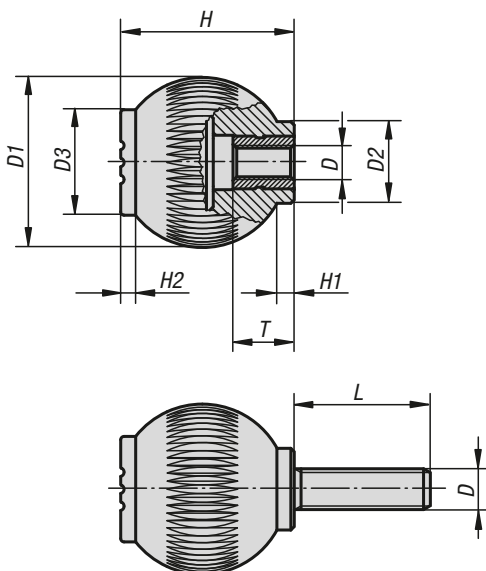
**Sample order:**

K0179.208X35 (include length L)

**KIPP Handles**

| Order No.<br>steel | Order No.<br>stainless steel | Form | D  | D1  | D2 | L              | L1 | L2 |
|--------------------|------------------------------|------|----|-----|----|----------------|----|----|
| K0179.208X         | K0179.1208X                  | A    | 8  | M6  | 20 | 35/50/65       | 9  | 18 |
| K0179.210X         | K0179.1210X                  | A    | 10 | M8  | 25 | 50/65/80/100   | 13 | 23 |
| K0179.212X         | K0179.1212X                  | A    | 12 | M10 | 32 | 65/80/100/125  | 15 | 29 |
| K0179.214X         | K0179.1214X                  | A    | 14 | M12 | 36 | 80/100/125/160 | 16 | 33 |
| K0179.708X         | K0179.1708X                  | B    | 8  | M6  | 23 | 35/50/65       | 9  | 60 |
| K0179.710X         | K0179.1710X                  | B    | 10 | M8  | 26 | 50/65/80/100   | 13 | 70 |
| K0179.712X         | K0179.1712X                  | B    | 12 | M10 | 35 | 65/80/100/125  | 15 | 85 |
| K0179.714X         | K0179.1714X                  | B    | 14 | M12 | 35 | 80/100/125/160 | 16 | 85 |
| K0179.408X         | K0179.1408X                  | C    | 8  | M6  | 20 | 35/50/65       | 9  | 31 |
| K0179.410X         | K0179.1410X                  | C    | 10 | M8  | 25 | 50/65/80/100   | 13 | 38 |
| K0179.412X         | K0179.1412X                  | C    | 12 | M10 | 30 | 65/80/100/125  | 15 | 46 |
| K0179.414X         | K0179.1414X                  | C    | 14 | M12 | 35 | 80/100/125/160 | 16 | 53 |
| K0179.608X         | K0179.1608X                  | E    | 8  | M6  | 17 | 35/50/65       | 9  | 45 |
| K0179.610X         | K0179.1610X                  | E    | 10 | M8  | 23 | 50/65/80/100   | 13 | 61 |
| K0179.612X         | K0179.1612X                  | E    | 12 | M10 | 29 | 65/80/100/125  | 15 | 71 |
| K0179.614X         | K0179.1614X                  | E    | 14 | M12 | 29 | 80/100/125/160 | 16 | 71 |

## Spherical knobs

**Material:**

Black thermoplastic.

Bush and screw 5.8 steel or 1.4305 stainless steel.

**Version:**

Steel trivalent blue passivated, stainless steel bright.

**Sample order:**

K0253.1066X15 (cap colour traffic red; include length L.)

**Note:**

Δ Add the desired cap colour here.

No colour code is required for black grey caps.

|                                                                                                                    |                                                                                                                      |                                                                                                                       |                                                                                                                       |
|--------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| black grey<br><br>RAL 7021       | pure orange Δ = 1<br><br>RAL 2004 | signal green Δ = 2<br><br>RAL 6032 | traffic blue Δ = 3<br><br>RAL 5017 |
| light grey Δ = 5<br><br>RAL 7035 | traffic red Δ = 6<br><br>RAL 3020 | colza yellow Δ = 7<br><br>RAL 1021 |                                                                                                                       |

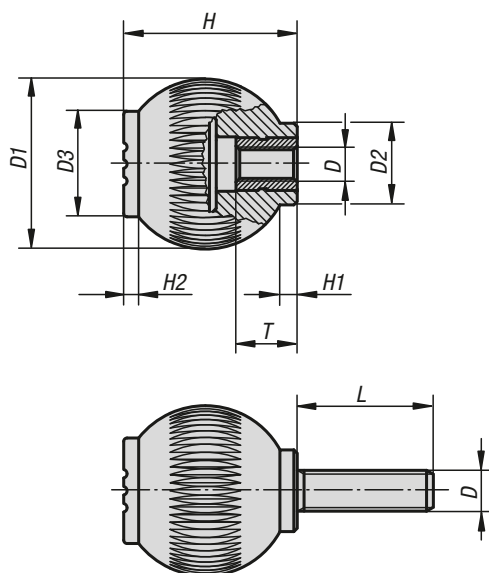
**KIPP Spherical knobs with internal thread**

| Order No.<br>steel | Order No.<br>stainless steel | D   | D1 | D2   | D3 | H  | H1  | H2  | T  |
|--------------------|------------------------------|-----|----|------|----|----|-----|-----|----|
| K0253.106Δ         | K0253.0106Δ                  | M6  | 25 | 12   | 17 | 25 | 3   | 2   | 10 |
| K0253.208Δ         | K0253.0208Δ                  | M8  | 32 | 15,5 | 19 | 33 | 3,5 | 2,6 | 14 |
| K0253.310Δ         | K0253.0310Δ                  | M10 | 40 | 19   | 23 | 41 | 4   | 3   | 14 |
| K0253.410Δ         | K0253.0410Δ                  | M10 | 50 | 24   | 31 | 51 | 5,5 | 4,5 | 14 |
| K0253.412Δ         | K0253.0412Δ                  | M12 | 50 | 24   | 31 | 51 | 5,5 | 4,5 | 18 |

**KIPP Spherical knobs with external thread**

| Order No.<br>steel | Order No.<br>stainless steel | D   | D1 | D2   | D3 | H  | H1  | H2  | L           |
|--------------------|------------------------------|-----|----|------|----|----|-----|-----|-------------|
| K0253.106ΔX        | K0253.0106ΔX                 | M6  | 25 | 12   | 17 | 25 | 3   | 2   | 15/20/25/30 |
| K0253.208ΔX        | K0253.0208ΔX                 | M8  | 32 | 15,5 | 19 | 33 | 3,5 | 2,6 | 20/25/30/40 |
| K0253.310ΔX        | K0253.0310ΔX                 | M10 | 40 | 19   | 23 | 41 | 4   | 3   | 20/30/40    |
| K0253.410ΔX        | K0253.0410ΔX                 | M10 | 50 | 24   | 31 | 51 | 5,5 | 4,5 | 20/30/40    |
| K0253.412ΔX        | K0253.0412ΔX                 | M12 | 50 | 24   | 31 | 51 | 5,5 | 4,5 | 20/30/40    |

## Spherical knobs biopolymer

**Material:**

Biopolymer, beech.

Bush or threaded pin steel 5.8

**Version:**

Bush and screw trivalent blue passivated.

Natural beech with beech fibres or coloured black grey.

**Sample order:**

K0253.10106143X15

**Advantages:**

This biopolymer is manufactured entirely from renewable raw materials (oil free).

Conservation of finite fossil resources.

The wood fibres originate 100% from local, sustainably managed forests in Germany.

**Features:**

Excellent mechanical stability (certified with a minimum of 2x safety factor).

Biopolymer is suitable for recycling (comparable to thermoplastics).

Suitable for outdoor use (not biodegradable).

Excellent resistance to strong acids and lyes.

Short-term resistance to alcohol, fuel, mineral oil and grease.

**KIPP Spherical knobs biopolymer with internal thread**

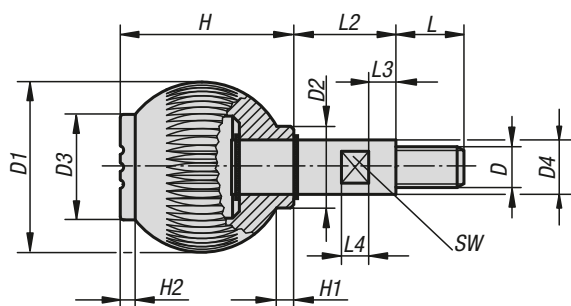
| Order No.      | Main colour         | D  | D1 | D2   | D3 | H  | H1  | H2  | T  |
|----------------|---------------------|----|----|------|----|----|-----|-----|----|
| K0253.10106143 | natural beech       | M6 | 25 | 12   | 17 | 25 | 3   | 2   | 10 |
| K0253.10208143 | natural beech       | M8 | 32 | 15,5 | 19 | 33 | 3,5 | 2,6 | 14 |
| K0253.1010690  | black grey RAL 7021 | M6 | 25 | 12   | 17 | 25 | 3   | 2   | 10 |
| K0253.1020890  | black grey RAL 7021 | M8 | 32 | 15,5 | 19 | 33 | 3,5 | 2,6 | 14 |

**KIPP Spherical knobs biopolymer with external thread**

| Order No.         | Main colour         | D  | D1 | D2   | D3 | H  | H1  | H2  | L  |
|-------------------|---------------------|----|----|------|----|----|-----|-----|----|
| K0253.10106143X15 | natural beech       | M6 | 25 | 12   | 17 | 25 | 3   | 2   | 15 |
| K0253.10208143X20 | natural beech       | M8 | 32 | 15,5 | 19 | 33 | 3,5 | 2,6 | 20 |
| K0253.1010690X15  | black grey RAL 7021 | M6 | 25 | 12   | 17 | 25 | 3   | 2   | 15 |
| K0253.1020890X20  | black grey RAL 7021 | M8 | 32 | 15,5 | 19 | 33 | 3,5 | 2,6 | 20 |

## Spherical knobs

revolving



### Material:

Thermoplastic, black grey.  
Axis steel 5.8 or stainless steel 1.4305.

### Version:

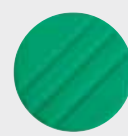
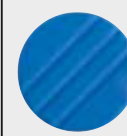
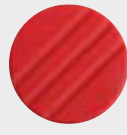
Trivalent blue passivated steel or bright stainless steel.  
Circlips electro zinc-plated, including stainless steel version.

### Sample order:

K0254.1066 (cap colour traffic red.)

### Note:

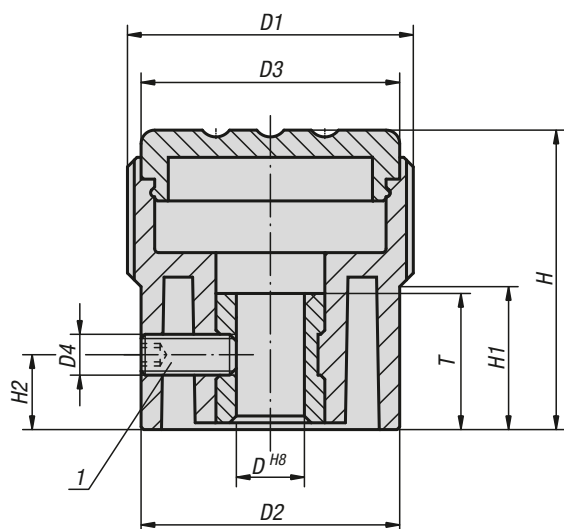
Δ Add the desired cap colour here.  
No colour code is required for black grey caps.

|                                                                                                                    |                                                                                                                      |                                                                                                                       |                                                                                                                       |
|--------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| black grey<br><br>RAL 7021       | pure orange Δ = 1<br><br>RAL 2004 | signal green Δ = 2<br><br>RAL 6032 | traffic blue Δ = 3<br><br>RAL 5017 |
| light grey Δ = 5<br><br>RAL 7035 | traffic red Δ = 6<br><br>RAL 3020 | colza yellow Δ = 7<br><br>RAL 1021 |                                                                                                                       |

### KIPP Spherical knobs revolving

| Order No.<br>steel | Order No.<br>stainless steel | D   | D1 | D2   | D3 | D4 | H  | H1  | H2  | L  | L2 | L3 | L4 | SW |
|--------------------|------------------------------|-----|----|------|----|----|----|-----|-----|----|----|----|----|----|
| K0254.106Δ         | K0254.0106Δ                  | M6  | 25 | 12   | 17 | 8  | 25 | 3   | 2   | 10 | 15 | 5  | 5  | 7  |
| K0254.208Δ         | K0254.0208Δ                  | M8  | 32 | 15,5 | 19 | 10 | 33 | 3,5 | 2,6 | 12 | 20 | 6  | 6  | 8  |
| K0254.310Δ         | K0254.0310Δ                  | M10 | 40 | 19   | 23 | 13 | 41 | 4   | 3   | 15 | 25 | 7  | 10 | 10 |
| K0254.412Δ         | K0254.0412Δ                  | M12 | 50 | 24   | 31 | 16 | 51 | 5,5 | 4,5 | 20 | 30 | 8  | 8  | 13 |

## Knurled knobs

**Material:**

Thermoplastic, black grey.  
Bush steel.

**Version:**

Bush blue passivated

**Sample order:**

K0248.11055 (cap colour light grey)

**Note:**

Available without graduations, with one scale line or with 20 graduations and 10 digits.

Δ Add the desired cap colour here. No colour code is required for black grey caps.

**On request:**

Special graduations.

**Drawing reference:**

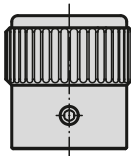
Form A: without graduations

Form B: with one scale line

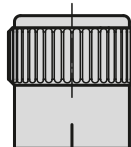
Form C: with standard graduations

1) Set screw for locking (by Form C between numbers 5 and 6)

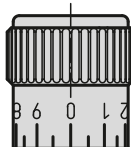
A



B



C



black grey



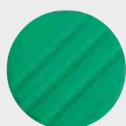
RAL 7021

pure orange Δ = 1



RAL 2004

signal green Δ = 2



RAL 6032

traffic blue Δ = 3



RAL 5017

light grey Δ = 5



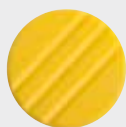
RAL 7035

traffic red Δ = 6



RAL 3020

colza yellow Δ = 7



RAL 1021

## KIPP Knurled knobs

| Order No.   | Form | D | D1 | D2 | D3 | D4 | H  | H1   | H2 | T  |
|-------------|------|---|----|----|----|----|----|------|----|----|
| K0248.1105Δ | A    | 5 | 21 | 19 | 19 | M3 | 22 | 10,5 | 5  | 10 |
| K0248.1206Δ | A    | 6 | 26 | 23 | 23 | M3 | 26 | 12   | 6  | 10 |
| K0248.1308Δ | A    | 8 | 34 | 31 | 31 | M4 | 36 | 17,5 | 7  | 14 |
| K0248.2105Δ | B    | 5 | 21 | 19 | 19 | M3 | 22 | 10,5 | 5  | 10 |
| K0248.2206Δ | B    | 6 | 26 | 23 | 23 | M3 | 26 | 12   | 6  | 10 |
| K0248.2308Δ | B    | 8 | 34 | 31 | 31 | M4 | 36 | 17,5 | 7  | 14 |
| K0248.3105Δ | C    | 5 | 21 | 19 | 19 | M3 | 22 | 10,5 | 5  | 10 |
| K0248.3206Δ | C    | 6 | 26 | 23 | 23 | M3 | 26 | 12   | 6  | 10 |
| K0248.3308Δ | C    | 8 | 34 | 31 | 31 | M4 | 36 | 17,5 | 7  | 14 |

# Knurled knobs

with arrow



## Material:

Knurled knob thermoplastic.  
Washer aluminium.

## Version:

Knurled knob black grey.  
Washer, black anodised.

## Sample order:

K0249.1055 (cap colour light grey)

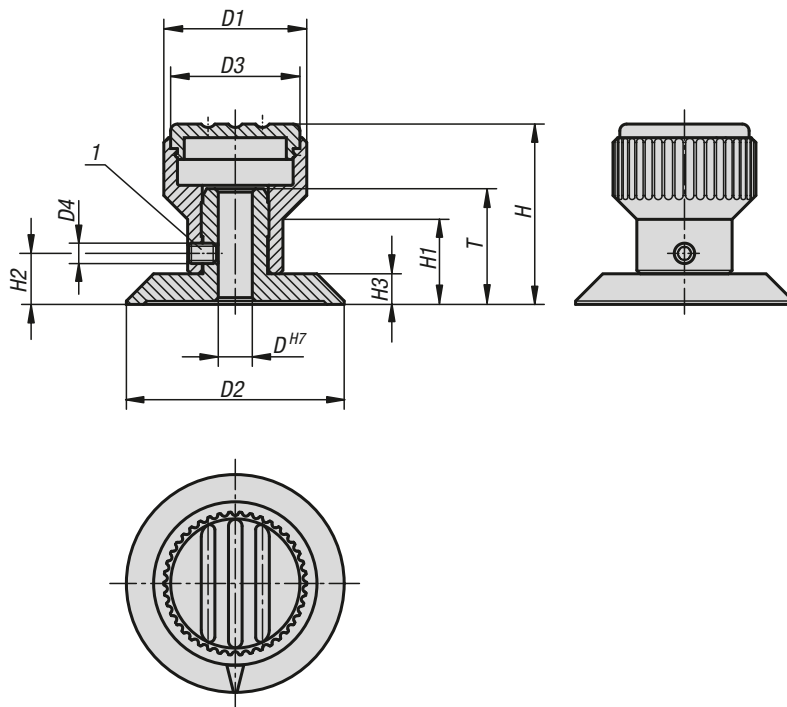
## Note:

The arrow is engraved after anodizing. The set screw secures both the hub and the pressed-in washer. The H7 hole in the hub ensures a good tight fit on the shaft.

Δ Add the desired cap colour here. No colour code is required for black grey caps.

## Drawing reference:

1) set screw



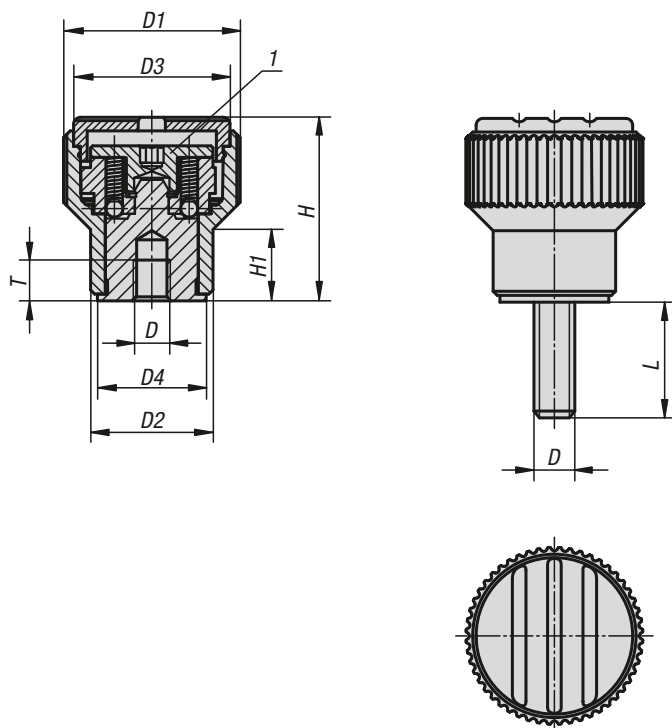
|                                                                                                                    |                                                                                                                      |                                                                                                                       |                                                                                                                       |
|--------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| black grey<br><br>RAL 7021       | pure orange Δ = 1<br><br>RAL 2004 | signal green Δ = 2<br><br>RAL 6032 | traffic blue Δ = 3<br><br>RAL 5017 |
| light grey Δ = 5<br><br>RAL 7035 | traffic red Δ = 6<br><br>RAL 3020 | colza yellow Δ = 7<br><br>RAL 1021 |                                                                                                                       |

## KIPP Knurled knobs with arrow

| Order No.  | D | D1 | D2 | D3 | D4 | H    | H1   | H2  | H3  | T    |
|------------|---|----|----|----|----|------|------|-----|-----|------|
| K0249.105Δ | 5 | 21 | 32 | 19 | M3 | 26,5 | 12,5 | 7,5 | 4,5 | 17   |
| K0249.206Δ | 6 | 26 | 40 | 23 | M4 | 31,5 | 15   | 9,5 | 5,5 | 20,5 |
| K0249.308Δ | 8 | 34 | 52 | 31 | M4 | 43   | 20   | 12  | 7   | 22   |



# Knurled torque knobs


**Material:**

Thermoplastic, black grey.  
Bush and screw steel 5.8.

**Version:**

Bush black oxidised.  
Screw trivalent blue passivated.

**Sample order:**

K0277.2056X30  
(cap colour traffic red; include length L)

**Note:**

The set screw sets the required torque. The knob de-clutches and turns freely when the desired torque is reached.

Δ Add the desired cap colour here. No colour code is required for black grey caps.

**Drawing reference:**

1) adjusting screw for setting the torque

|                              |                               |                                |                                |
|------------------------------|-------------------------------|--------------------------------|--------------------------------|
| black grey<br>RAL 7021       | pure orange Δ = 1<br>RAL 2004 | signal green Δ = 2<br>RAL 6032 | traffic blue Δ = 3<br>RAL 5017 |
| light grey Δ = 5<br>RAL 7035 | traffic red Δ = 6<br>RAL 3020 | colza yellow Δ = 7<br>RAL 1021 |                                |

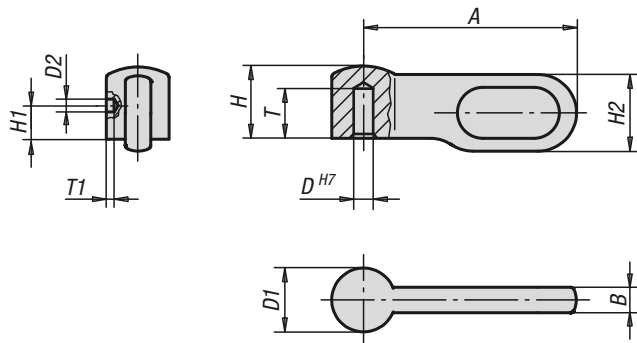
## KIPP Knurled torque knobs with internal thread

| Order No.  | Component material | D  | D1 | D2 | D3 | D4 | H    | H1   | T  | Torque Nm |
|------------|--------------------|----|----|----|----|----|------|------|----|-----------|
| K0277.205Δ | steel              | M5 | 26 | 18 | 23 | 16 | 27   | 10,5 | 5  | 0,1 - 0,3 |
| K0277.206Δ | steel              | M6 | 26 | 18 | 23 | 16 | 27   | 10,5 | 6  | 0,1 - 0,3 |
| K0277.306Δ | steel              | M6 | 34 | 22 | 31 | 20 | 37,5 | 14,5 | 10 | 0,1 - 0,3 |
| K0277.308Δ | steel              | M8 | 34 | 22 | 31 | 20 | 37,5 | 14,5 | 14 | 0,1 - 0,3 |

## KIPP Knurled torque knobs with external thread

| Order No.   | Component material | D  | D1 | D2 | D3 | D4 | H    | H1   | L     | Torque Nm |
|-------------|--------------------|----|----|----|----|----|------|------|-------|-----------|
| K0277.205ΔX | steel              | M5 | 26 | 18 | 23 | 16 | 27   | 10,5 | 30/50 | 0,1 - 0,3 |
| K0277.206ΔX | steel              | M6 | 26 | 18 | 23 | 16 | 27   | 10,5 | 30/50 | 0,1 - 0,3 |
| K0277.306ΔX | steel              | M6 | 34 | 22 | 31 | 20 | 37,5 | 14,5 | 40/60 | 0,1 - 0,3 |
| K0277.308ΔX | steel              | M8 | 34 | 22 | 31 | 20 | 37,5 | 14,5 | 40/60 | 0,1 - 0,3 |

## Lock grips

**Material:**

Stainless steel 1.4308 or steel.

**Version:**Stainless steel bright.  
Steel black oxidised.**Sample order:**

K0178.1040

**Note:**

Lock grips can be used as required. The styled design with recessed grip gives fingers a good purchase and is well suited to modern requirements. High clamping forces can be easily attained. Use the pilot hole in the side to secure the grip by pinning or screw.

## KIPP Lock grip

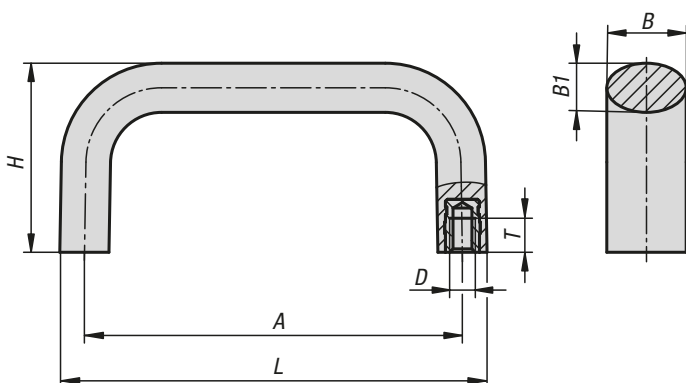
| Order No.  | Main material   | Size | A  | B   | D | D1  | D2  | H    | H1 | H2   | T    | T1  |
|------------|-----------------|------|----|-----|---|-----|-----|------|----|------|------|-----|
| K0178.1040 | stainless steel | 1    | 25 | 3   | 4 | 7,5 | 1,5 | 8,5  | 3  | 9    | 5,5  | 0,5 |
| K0178.2050 | stainless steel | 2    | 30 | 3,6 | 5 | 9   | 2   | 10,2 | 4  | 10,8 | 6,5  | 1   |
| K0178.3060 | stainless steel | 3    | 40 | 4,8 | 6 | 12  | 2   | 13,6 | 5  | 14,4 | 8,7  | 1   |
| K0178.4080 | stainless steel | 4    | 50 | 6   | 8 | 15  | 3   | 17   | 6  | 18   | 10,2 | 1   |
| K0178.1041 | steel           | 1    | 25 | 3   | 4 | 7,5 | 1,5 | 8,5  | 3  | 9    | 5,5  | 0,5 |
| K0178.2051 | steel           | 2    | 30 | 3,6 | 5 | 9   | 2   | 10,2 | 4  | 10,8 | 6,5  | 1   |
| K0178.3061 | steel           | 3    | 40 | 4,8 | 6 | 12  | 2   | 13,6 | 5  | 14,4 | 8,7  | 1   |
| K0178.4081 | steel           | 4    | 50 | 6   | 8 | 15  | 3   | 17   | 6  | 18   | 10,2 | 1   |



## Pull handles, tubular handles, recessed handles



## Plastic pull handles, oval



### Material:

Thermoset PF 31.

Tapped bush, steel or stainless steel.

### Version:

Thermoset black, high-gloss polished.

Trivalent blue passivated steel or bright stainless steel.

### Sample order:

K1458.21280621

### Temperature range:

Permanent application temperature 140 °C.

Temporary operating temperature max. 160 °C.

### Assembly:

From the rear.

## KIPP Plastic pull handles, oval

| Order No.      | Component material | A   | B  | B1 | D  | H  | L   | T  | Load capacity N |
|----------------|--------------------|-----|----|----|----|----|-----|----|-----------------|
| K1458.21000621 | steel              | 100 | 21 | 13 | M6 | 50 | 113 | 9  | 500             |
| K1458.21200621 | steel              | 120 | 21 | 13 | M6 | 50 | 133 | 9  | 500             |
| K1458.21280621 | steel              | 128 | 21 | 13 | M6 | 50 | 141 | 9  | 500             |
| K1458.21600825 | steel              | 160 | 25 | 17 | M8 | 55 | 177 | 12 | 500             |
| K1458.31000621 | stainless steel    | 100 | 21 | 13 | M6 | 50 | 113 | 9  | 500             |
| K1458.31200621 | stainless steel    | 120 | 21 | 13 | M6 | 50 | 133 | 9  | 500             |
| K1458.31280621 | stainless steel    | 128 | 21 | 13 | M6 | 50 | 141 | 9  | 500             |
| K1458.31600825 | stainless steel    | 160 | 25 | 17 | M8 | 55 | 177 | 12 | 500             |

## Pull handles

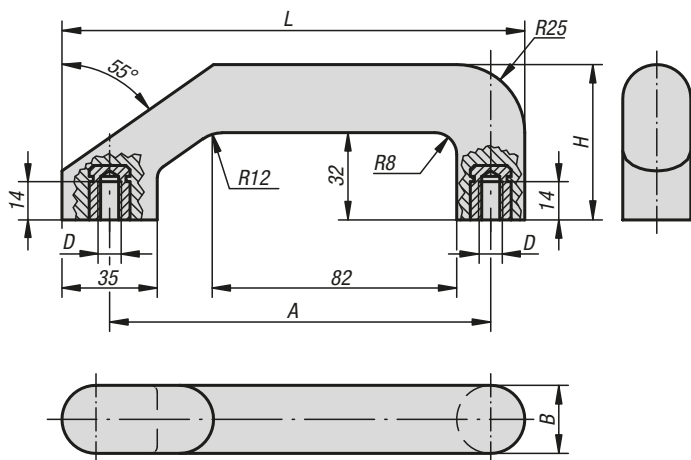


**Material:**  
Thermoset PF 31, black.  
Bushes brass or electro zinc-plated steel.

**Version:**  
High-gloss polished.

**Sample order:**  
K0187.101

**Assembly:**  
From the rear.



### KIPP Pull handles

| Order No. | Component material | A   | B  | D  | H  | L   | Load capacity N |
|-----------|--------------------|-----|----|----|----|-----|-----------------|
| K0187.101 | brass              | 140 | 25 | M8 | 57 | 170 | 300             |
| K0187.201 | steel              | 140 | 25 | M8 | 57 | 170 | 300             |

# K0188

## Pull handles

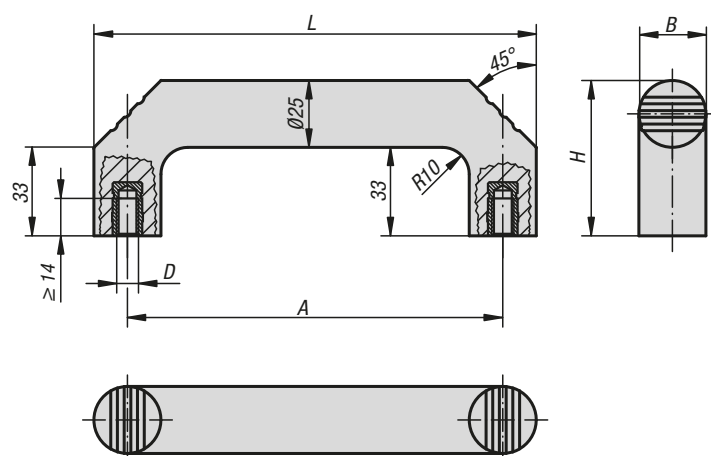


**Material:**  
Thermoset PF 31, black.  
Bushes brass or electro zinc-plated steel.

**Version:**  
High-gloss polished.

**Sample order:**  
K0188.114008

**Assembly:**  
From the rear.

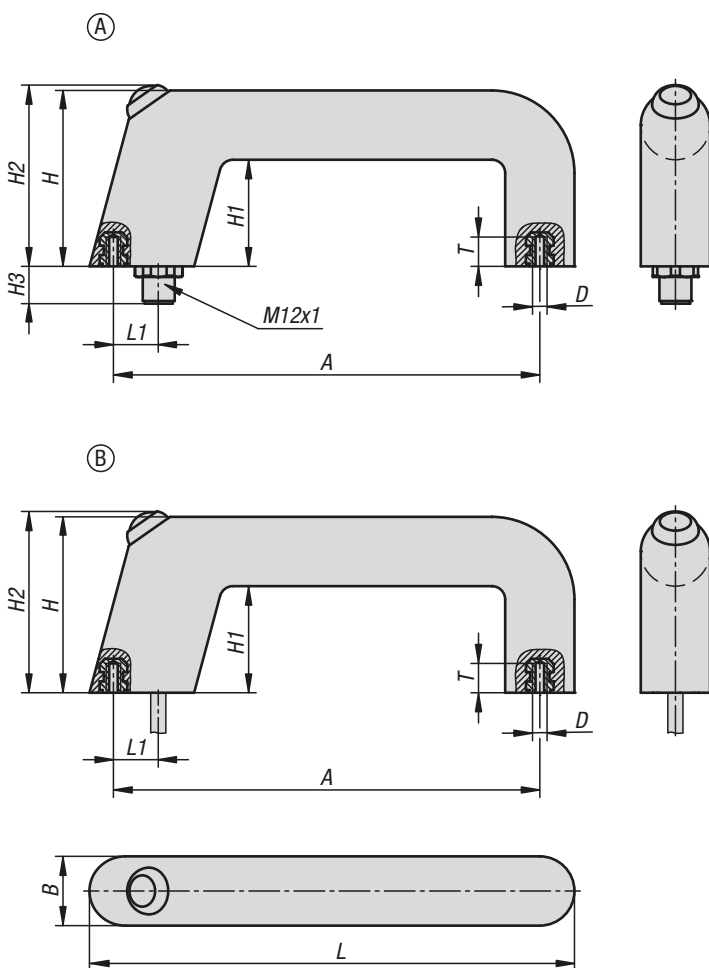


### KIPP Pull handles

| Order No.    | Component material | A   | B  | D  | H  | L   | Load capacity N |
|--------------|--------------------|-----|----|----|----|-----|-----------------|
| K0188.114008 | brass              | 140 | 25 | M8 | 58 | 165 | 500             |
| K0188.214008 | steel              | 140 | 25 | M8 | 58 | 165 | 500             |

## Pull handles, plastic

with electronic switch function



### Material:

Plastic PA6.

### Version:

Fine texture, black.

### Sample order:

K1527.11601

### Note:

Push button with red or green LED.

### Form A:

Connector with 8 pin plug in the screw face of the grip leg. (Connector (K1498) with 10 m cable available as accessory. Please order separately.)

### Form B:

Connection cable, 5 m long, attached to the screw face of the grip leg.

Rating: IP65 for Form A (when connector is screwed on).

### Assembly:

From the rear.

### Drawing reference:

Form A: with plug

Form B: with cable

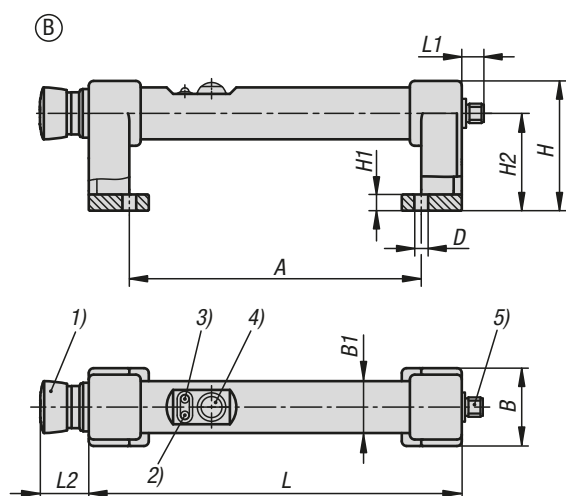
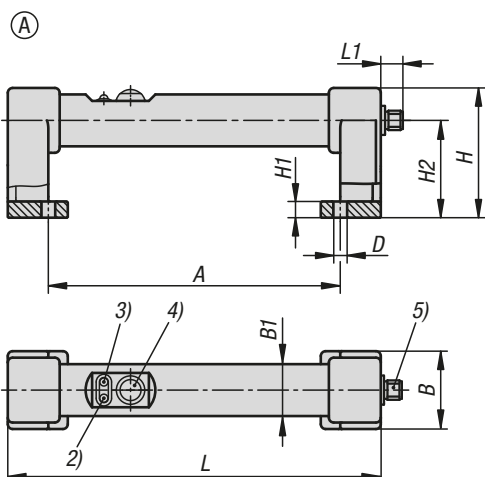


## KIPP Pull handles, plastic with electronic switch function

| Order No.   | Form | Component colour | A   | B  | D  | H  | H1 | H2 max. | H3 | L   | L1 | T  | Load capacity N |
|-------------|------|------------------|-----|----|----|----|----|---------|----|-----|----|----|-----------------|
| K1527.11601 | A    | green            | 160 | 26 | M6 | 66 | 40 | 70      | 10 | 182 | 17 | 10 | 1000            |
| K1527.11602 | A    | red              | 160 | 26 | M6 | 66 | 40 | 70      | 10 | 182 | 17 | 10 | 1000            |
| K1527.21601 | B    | green            | 160 | 26 | M6 | 66 | 40 | 70      | -  | 182 | 17 | 10 | 1000            |
| K1527.21602 | B    | red              | 160 | 26 | M6 | 66 | 40 | 70      | -  | 182 | 17 | 10 | 1000            |

## Tubular handles, plastic

with electronic switch function



### Material:

Grip legs PA6 plastic.  
Grip tube PVC plastic.

### Version:

Grip legs fine textured, black.  
Grip tube turned, black.

### Sample order:

K1529.180

### Note:

Form A:  
Push button (changer)  
2 LED'S  
Plug 8 pin

Form B:  
Emergency stop (2 opener)  
Push button (changer)  
2 LED'S  
Plug 12 pin

Plug mounted in the grip leg from the lower tube axis.  
Connector (K1498) with 10 m cable available as accessory. Please order separately.

Rating: IP65 when connector is screwed on.

Optically matching tubular handle without electronic switch function (K1528) available.

### Assembly:

From the front.

### Drawing reference:

- 1) Emergency stop
- 2) Red LED
- 3) Green LED
- 4) Push button
- 5) Connector, M12x1



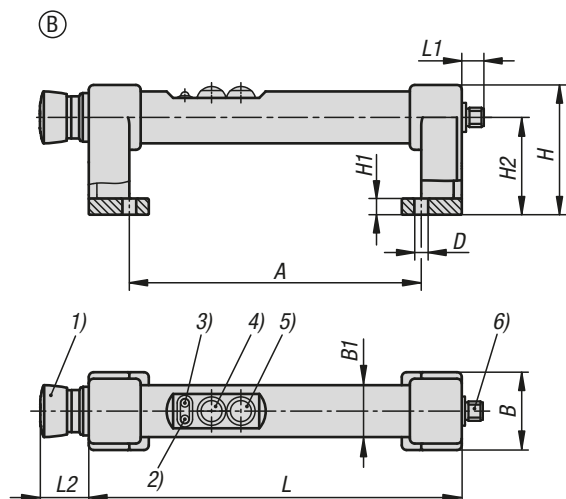
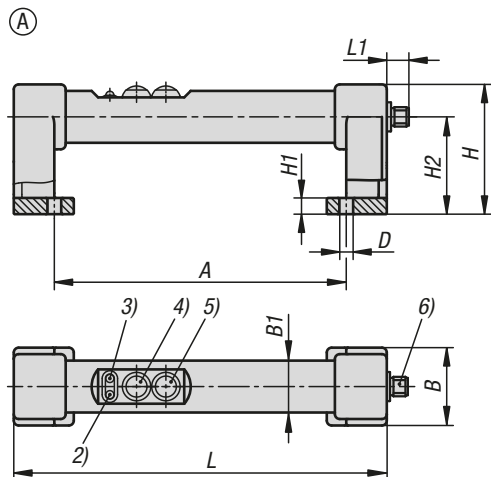
## KIPP Tubular handles, plastic with electronic switch function

| Order No.  | Form | A   | B  | B1 | D   | H  | H1 | H2 | L   | L1 | L2 | Load capacity N |
|------------|------|-----|----|----|-----|----|----|----|-----|----|----|-----------------|
| K1529.180  | A    | 180 | 48 | 32 | 8,5 | 80 | 10 | 60 | 230 | 13 | -  | 1000            |
| K1529.1180 | B    | 180 | 48 | 32 | 8,5 | 80 | 10 | 60 | 230 | 13 | 30 | 1000            |



## Tubular handles, plastic

with electronic switch function



### Drawing reference:

- 1) Emergency stop
- 2) Red LED
- 3) Green LED
- 4) Push button 1
- 5) Push button 2
- 6) Connector, M12x1

### Material:

Grip legs PA6 plastic.  
Grip tube PVC plastic.

### Version:

Grip legs fine textured, black.  
Grip tube turned, black.

### Sample order:

K1530.180

### Note:

Form A:  
Push button 1 (changer)  
Push button 2 (closer)  
2 LED'S  
Plug 8 pin

Form B:  
Emergency stop (2 opener)  
Push button 1 (changer)  
Push button 2 (closer)  
2 LED'S  
Plug 12 pin

Plug mounted in the grip leg from the lower tube axis.  
Connector (K1498) with 10 m cable available as accessory. Please order separately.

Rating: IP65 when connector is screwed on.

Optically matching tubular handle without electronic switch function (K1528) available.

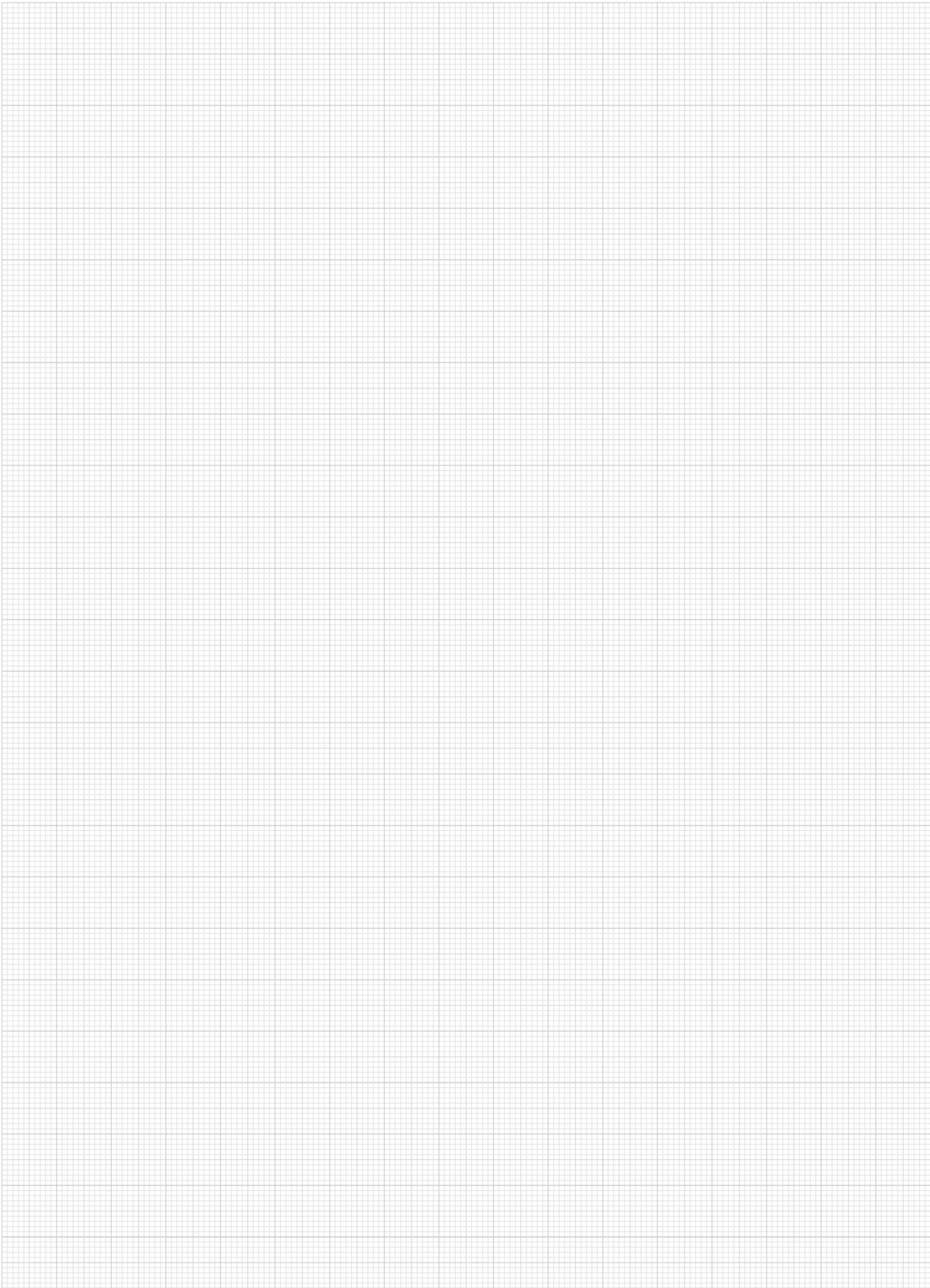
### Assembly:

From the front.

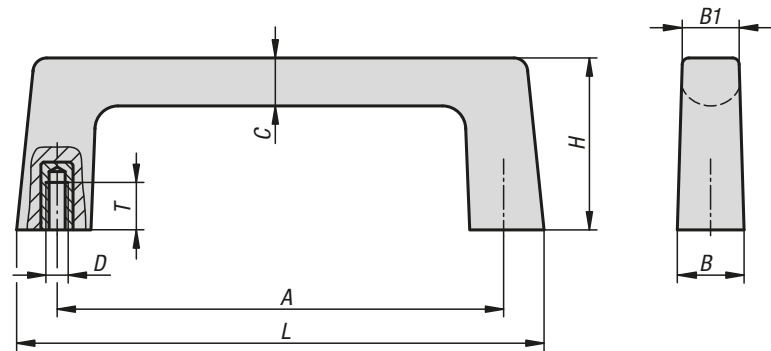


### KIPP Tubular handles, plastic with electronic switch function

| Order No.  | Form | A   | B  | B1 | D   | H  | H1 | H2 | L   | L1 | L2 | Load capacity<br>N |
|------------|------|-----|----|----|-----|----|----|----|-----|----|----|--------------------|
| K1530.180  | A    | 180 | 48 | 32 | 8,5 | 80 | 10 | 60 | 230 | 13 | -  | 1000               |
| K1530.1180 | B    | 180 | 48 | 32 | 8,5 | 80 | 10 | 60 | 230 | 13 | 30 | 1000               |



Pull handles



**Material:**  
Thermoset FS 31.  
Threaded insert steel.

**Version:**  
black.

**Sample order:**  
K1074.11005

**Note for ordering:**  
Fastening screws included.

**Note:**  
Load rating max. 500 N.

**Assembly:**  
From the rear.

KIPP Pull handles

| Order No.   | Main material | A   | B  | B1 | C  | D  | H  | L   | T  | Load capacity N |
|-------------|---------------|-----|----|----|----|----|----|-----|----|-----------------|
| K1074.11005 | duroplast     | 110 | 16 | 14 | 12 | M5 | 42 | 130 | 10 | 500             |

## Pull handles



### Material:

Thermoplastic.  
Bushing brass.

### Version:

Handle and cap black.

### Sample order:

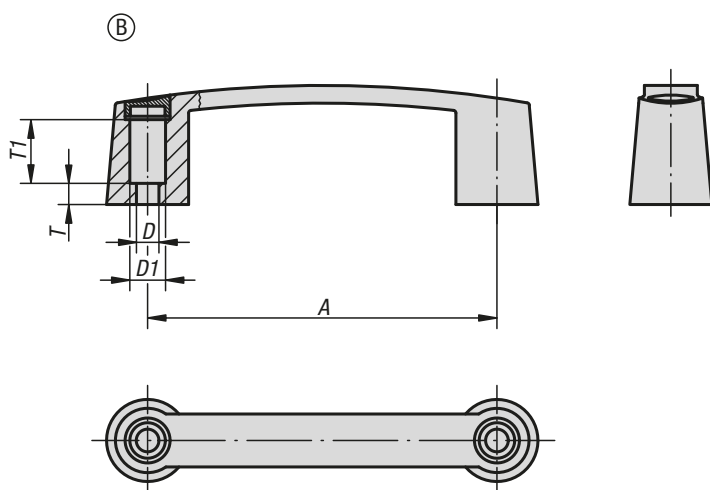
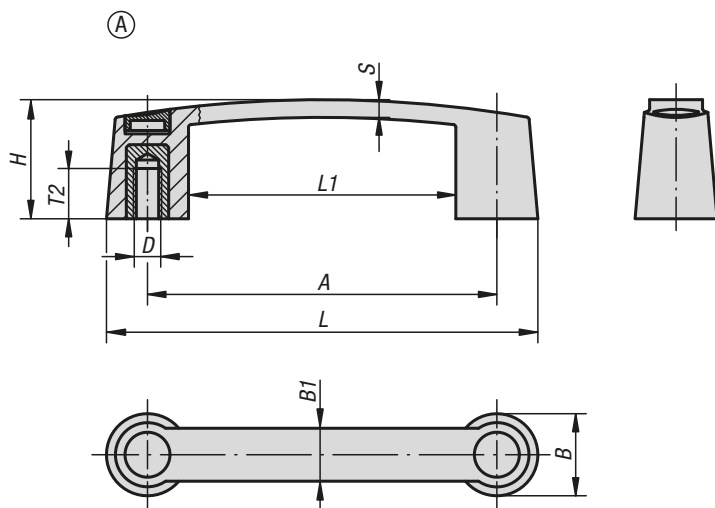
K0189.109406

### Assembly:

Form A from the rear.  
Form B from the front.

### On request:

Other handle or cap colours.



## KIPP Pull handles

| Order No.    | Form | A    | B  | B1 | D   | D1   | H  | L     | L1   | S   | T   | T1 | T2   | Load capacity N |
|--------------|------|------|----|----|-----|------|----|-------|------|-----|-----|----|------|-----------------|
| K0189.109406 | A    | 93,5 | 26 | 17 | M6  | -    | 35 | 119,5 | 67,5 | 5,8 | -   | -  | 15,5 | 320             |
| K0189.111706 | A    | 117  | 29 | 19 | M6  | -    | 40 | 145   | 89   | 6,4 | -   | -  | 15,5 | 320             |
| K0189.111708 | A    | 117  | 29 | 19 | M8  | -    | 40 | 145   | 89   | 6,4 | -   | -  | 16   | 870             |
| K0189.113206 | A    | 132  | 31 | 20 | M6  | -    | 45 | 163   | 101  | 6,7 | -   | -  | 15,5 | 320             |
| K0189.113208 | A    | 132  | 31 | 20 | M8  | -    | 45 | 163   | 101  | 6,7 | -   | -  | 16   | 870             |
| K0189.117910 | A    | 179  | 35 | 22 | M10 | -    | 50 | 213   | 145  | 7,1 | -   | -  | 22   | 1200            |
| K0189.209406 | B    | 93,5 | 26 | 17 | 6,8 | 12   | 35 | 119,5 | 67,5 | 5,8 | 4,5 | 19 | -    | 500             |
| K0189.211708 | B    | 117  | 29 | 19 | 8,5 | 13,5 | 40 | 145   | 89   | 6,4 | 8   | 23 | -    | 950             |
| K0189.213208 | B    | 132  | 31 | 20 | 8,5 | 13,5 | 45 | 163   | 101  | 6,7 | 8   | 22 | -    | 950             |
| K0189.217908 | B    | 179  | 35 | 22 | 8,5 | 13,5 | 50 | 213   | 145  | 7,1 | 12  | 22 | -    | 950             |

## Pull handles



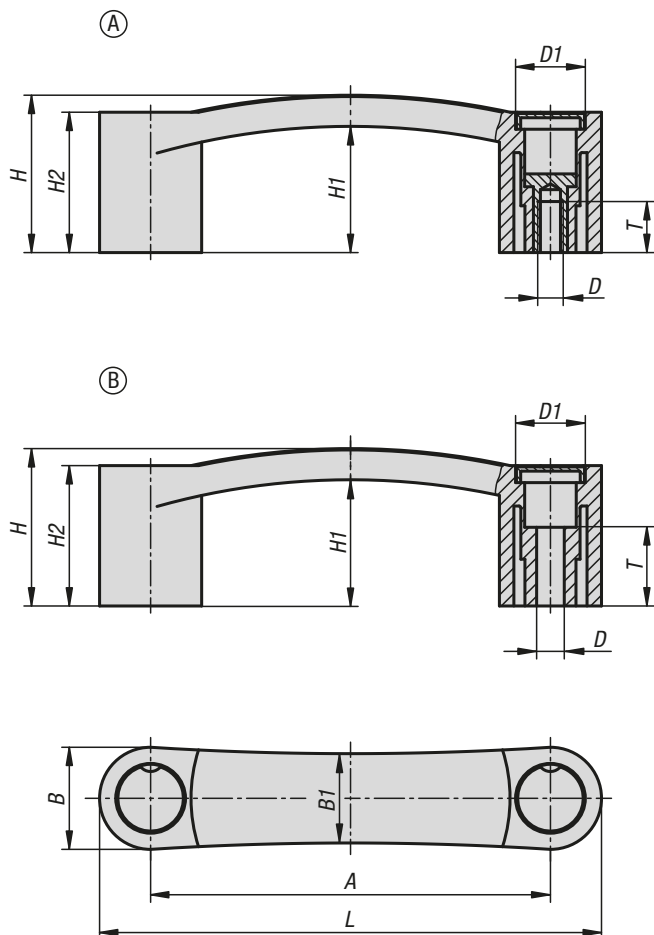
**Material:**  
Fibreglass reinforced thermoplastic.  
Tapped bush brass.

**Version:**  
Black.  
Cap grey.

**Sample order:**  
K1092.109406

**Assembly:**  
Form A from the rear.  
Form B from the front.

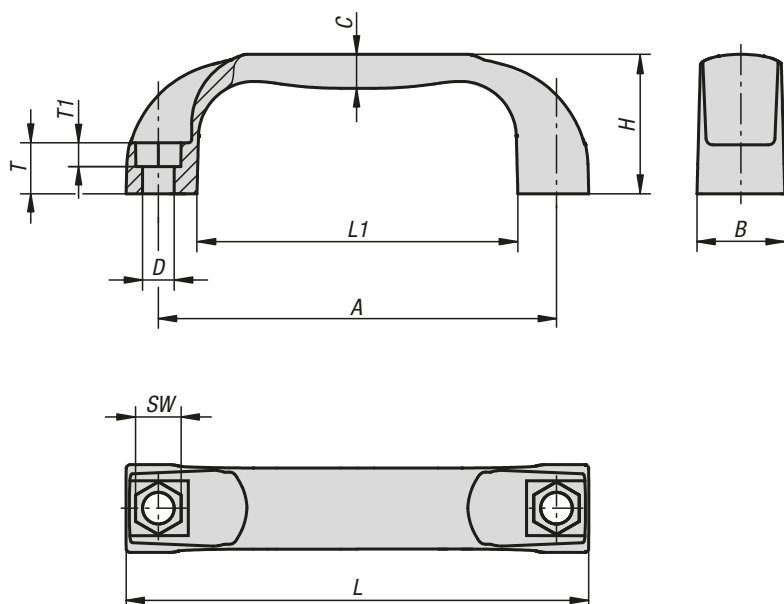
**On request:**  
Other handle or cap colours.



### KIPP Pull handles

| Order No.    | Version 1         | Form | A   | B  | B1 | D   | D1 | H    | H1   | H2   | L   | T  | Load capacity N |
|--------------|-------------------|------|-----|----|----|-----|----|------|------|------|-----|----|-----------------|
| K1092.109406 | internal thread   | A    | 94  | 24 | 21 | M6  | 16 | 37   | 30   | 33   | 118 | 12 | 2000            |
| K1092.111706 | internal thread   | A    | 117 | 28 | 24 | M6  | 18 | 40,5 | 31,5 | 34   | 145 | 12 | 3400            |
| K1092.111708 | internal thread   | A    | 117 | 28 | 24 | M8  | 18 | 40,5 | 31,5 | 34   | 145 | 12 | 3400            |
| K1092.112006 | internal thread   | A    | 120 | 28 | 24 | M6  | 18 | 40,5 | 31,5 | 34   | 148 | 12 | 3500            |
| K1092.112008 | internal thread   | A    | 120 | 28 | 24 | M8  | 18 | 40,5 | 31,5 | 34   | 148 | 12 | 3500            |
| K1092.113208 | internal thread   | A    | 132 | 28 | 24 | M8  | 18 | 43   | 34   | 36,5 | 160 | 12 | 3500            |
| K1092.209406 | with through hole | B    | 94  | 24 | 21 | 6,5 | 16 | 37   | 30   | 33   | 118 | 14 | 2500            |
| K1092.211706 | with through hole | B    | 117 | 28 | 24 | 6,5 | 18 | 40,5 | 31,5 | 34   | 145 | 15 | 3700            |
| K1092.211708 | with through hole | B    | 117 | 28 | 24 | 8,5 | 18 | 40,5 | 31,5 | 34   | 145 | 15 | 3700            |
| K1092.212006 | with through hole | B    | 120 | 28 | 24 | 6,5 | 18 | 40,5 | 31,5 | 34   | 148 | 15 | 2900            |
| K1092.212008 | with through hole | B    | 120 | 28 | 24 | 8,5 | 18 | 40,5 | 31,5 | 34   | 148 | 15 | 2900            |
| K1092.213208 | with through hole | B    | 132 | 28 | 24 | 8,5 | 18 | 43   | 34   | 36,5 | 160 | 15 | 3200            |

## Pull handles



### Material:

Glass-bead reinforced thermoplastic PA (polyamide) or fiberglass reinforced PP (polypropylene).

### Version:

Polypropylene black-grey.  
Polyamide black-grey RAL 7021, pure orange RAL 2004, colza yellow RAL 1021, signal green RAL 6032, traffic blue RAL 5017, traffic red RAL 3020 and light-grey RAL 7035.

### Sample order:

K0190.10940684 (pull handle traffic red)

### Note for ordering:

Δ Add the desired colour here. No colour code is required for black grey.

### Note:

The fastening hole is designed to accept the head of a cap or hexagon head screw or a hexagon nut.

### Assembly:

From the front or rear.



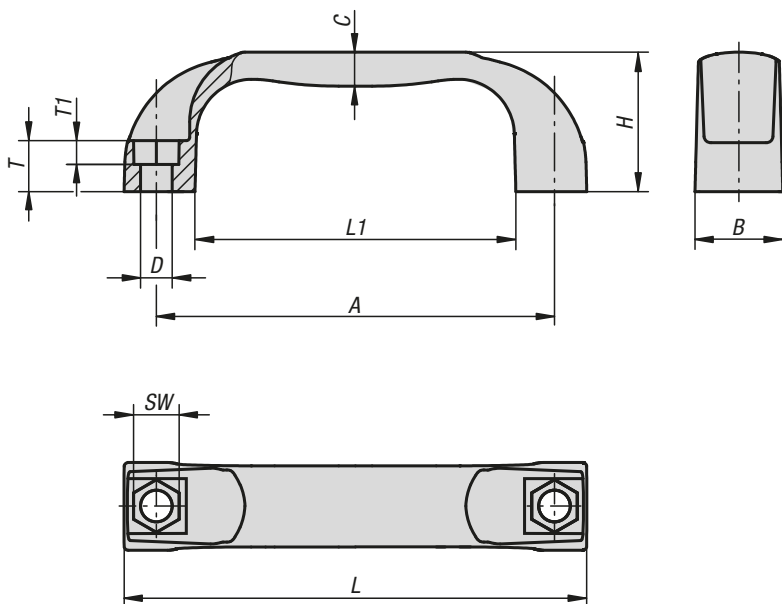
## KIPP Pull handles

| Order No.    | Main material | A   | B  | C  | D   | H  | L   | L1  | SW | T  | T1 | Load capacity N |
|--------------|---------------|-----|----|----|-----|----|-----|-----|----|----|----|-----------------|
| K0190.209406 | polypropylene | 94  | 21 | 8  | 6,6 | 36 | 109 | 76  | 10 | 13 | 6  | 500             |
| K0190.211708 | polypropylene | 117 | 26 | 10 | 9   | 41 | 136 | 94  | 13 | 15 | 8  | 800             |
| K0190.213208 | polypropylene | 132 | 27 | 11 | 9   | 44 | 154 | 112 | 13 | 16 | 8  | 800             |
| K0190.215008 | polypropylene | 150 | 27 | 11 | 9   | 44 | 172 | 132 | 13 | 16 | 8  | 800             |
| K0190.217908 | polypropylene | 179 | 28 | 11 | 9   | 50 | 197 | 156 | 13 | 17 | 8  | 800             |

| Order No.     | Main material | A   | B  | C  | D   | H  | L   | L1  | SW | T  | T1 | Load capacity N |
|---------------|---------------|-----|----|----|-----|----|-----|-----|----|----|----|-----------------|
| K0190.109406Δ | polyamide     | 94  | 21 | 8  | 6,6 | 36 | 109 | 76  | 10 | 13 | 6  | 1000            |
| K0190.111708Δ | polyamide     | 117 | 26 | 10 | 9   | 41 | 136 | 94  | 13 | 15 | 8  | 1500            |
| K0190.113208Δ | polyamide     | 132 | 27 | 11 | 9   | 44 | 154 | 112 | 13 | 16 | 8  | 1500            |
| K0190.115008Δ | polyamide     | 150 | 27 | 11 | 9   | 44 | 172 | 132 | 13 | 16 | 8  | 1500            |
| K0190.117908Δ | polyamide     | 179 | 28 | 11 | 9   | 50 | 197 | 156 | 13 | 17 | 8  | 1500            |

## Pull handles

high temperature resistant



### Material:

Thermoplastic PPA (resistant to high temperatures), fibreglass reinforced.

### Version:

black.

### Sample order:

K0190.311708

### Note:

The fastening hole is designed to accept the head of a cap or hexagon head screw or a hexagon nut.

### Temperature range:

Continuous operating temperature acc. to IEC 216 max. 150°C - 160°C.

Temporary operating temperature max. 250°C.

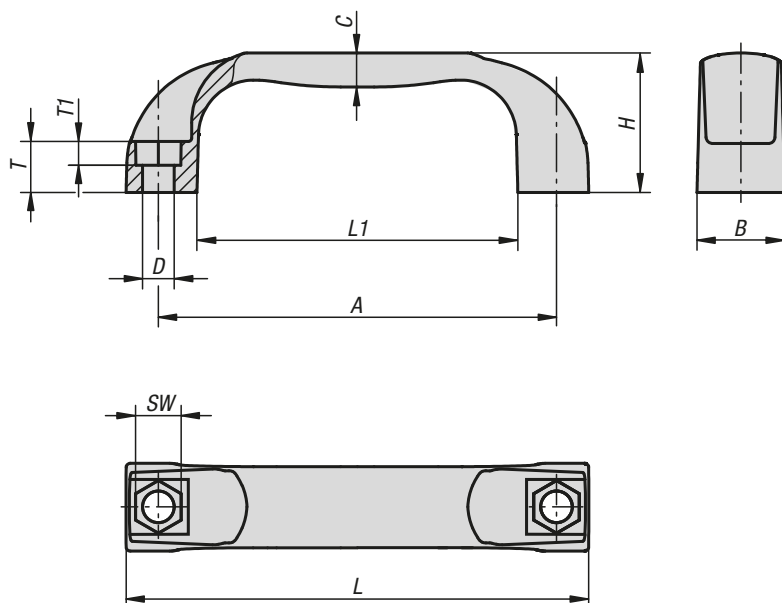
### Assembly:

From the front or rear.

## KIPP Pull handles, high temperature resistant

| Order No.    | A   | B  | C  | D | H  | L   | L1  | SW | T  | T1 | Load capacity<br>N |
|--------------|-----|----|----|---|----|-----|-----|----|----|----|--------------------|
| K0190.311708 | 117 | 26 | 10 | 9 | 41 | 136 | 94  | 13 | 15 | 8  | 1500               |
| K0190.313208 | 132 | 27 | 11 | 9 | 44 | 154 | 112 | 13 | 16 | 8  | 1500               |
| K0190.315008 | 150 | 27 | 11 | 9 | 44 | 172 | 132 | 13 | 16 | 8  | 1500               |

# Pull handles antibacterial


**Material:**

Thermoplastic PA (polyamide) reinforced.

**Version:**

slate grey.

**Sample order:**

K0190.1211708144

**Note:**

The fastening hole is designed to accept the head of a cap or hexagon head screw or a hexagon nut.

**Application:**

The antibacterial KIPP MEDI grip products are highly effective against a variety of hazardous microorganisms, such as bacteria, fungi and even multi-resistant bacteria (e.g. MRSA).

The plastic used incorporates micro-silver particles with an antimicrobial effect to ensure effective results throughout the entire product life cycle.

**Function:**

The growth of harmful micro-organisms on the product surface is effectively disrupted by means of silver ions, and the existing germs on MEDI grip products are consistently reduced (as tested and confirmed by an accredited testing laboratory).

During cleaning cycles the risk of infection through touching these products is significantly lower.

**Assembly:**

From the front or rear.

**Advantages:**

Resistant to humidity and cleaning products (during disinfection) with no toxic side effects.

**Applications:**

For installation on machines, equipment, plants and furnishings in areas with increased hygienic requirements (including hospitals, doctors' surgeries, rehabilitation centres and food production facilities), as well as for use in public areas or regularly frequented institutions (i.e. nursing homes or daycare centres).

**KIPP Pull handles antibacterial**

| Order No.        | A   | B  | C  | D | H  | L   | L1  | SW | T  | T1 | Load capacity N |
|------------------|-----|----|----|---|----|-----|-----|----|----|----|-----------------|
| K0190.1211708144 | 117 | 26 | 10 | 9 | 41 | 136 | 94  | 13 | 15 | 8  | 1500            |
| K0190.1215008144 | 150 | 27 | 11 | 9 | 44 | 172 | 132 | 13 | 16 | 8  | 1500            |



## Pull handles antistatic



### Material:

Thermoplastic PA (polyamide) reinforced.

### Version:

graphite black.

### Sample order:

K0190.111170824

### Note:

The fastening hole is designed to accept the head of a cap or hexagon head screw or a hexagon nut.

### Application:

Sensitive electrical or electronic equipment, components and devices (ESD sensitive elements) may be damaged or destroyed by electrostatic discharges (ESD) in the immediate vicinity. Electrostatic discharges can come from people or through handling ESD sensitive components (e.g. during production, assembly, transport, storage etc). Electrically conductive products which conform to DIN EN 61340-5-1 are essential within electronic environments to prevent an electrostatic discharge. These products can be used for ESD applications or in ESD protection areas (EPA) in accordance with DIN EN 61340-5-1.

### Assembly:

From the front or rear.

### Safety:

These ESD products can also be used for devices, components and protection systems in areas with high risk of explosion.

Use of these ESD products prevents the occurrence of electrostatic spark discharges, eliminating the potential ignition of gases and dusts which could lead to explosions in enclosed spaces.

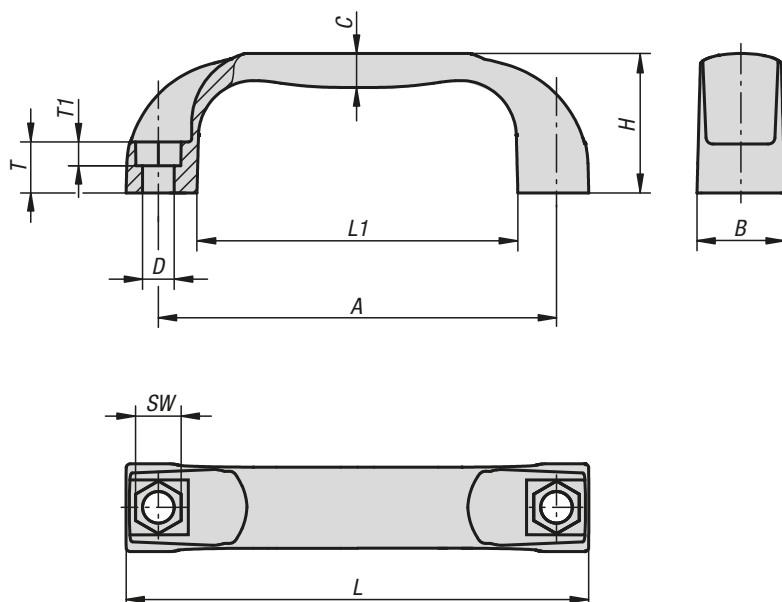
Manufacturers and operators must use and conform to ATEX directives for the protection of persons working in areas with high risk of explosion.

These ESD products are certified by TÜV-Süd in relation to their electrical discharge capability.

### Target groups:

Device manufacturers required to conform to ATEX product directive 2014/34/EU.

Operators required to conform to ATEX worker protection directive 1999/92/EC.



## KIPP Pull handles antistatic

| Order No.       | Main colour             | A   | B  | C  | D | H  | L   | L1  | SW | T  | T1 | Load capacity N |
|-----------------|-------------------------|-----|----|----|---|----|-----|-----|----|----|----|-----------------|
| K0190.111170824 | graphite black RAL 9011 | 117 | 26 | 10 | 9 | 41 | 136 | 94  | 13 | 15 | 8  | 1500            |
| K0190.111500824 | graphite black RAL 9011 | 150 | 27 | 11 | 9 | 44 | 172 | 132 | 13 | 16 | 8  | 1500            |

## Pull handles



### Material:

Thermoplastic PA (polyamide), glass-bead reinforced.  
Bush, screw, washer and nut steel or stainless steel.

### Version:

Black grey

### Sample order:

K1060.1100051

### Note:

This pull handle is characterised by its large size and pleasant haptics.

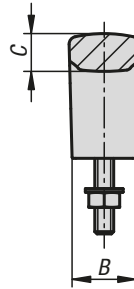
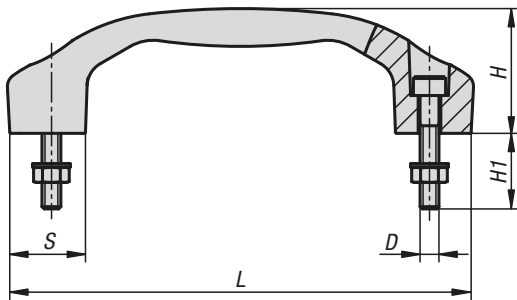
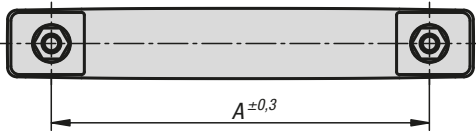
Form A is supplied with fastening screws, washers and nuts.

### Assembly:

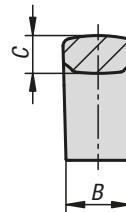
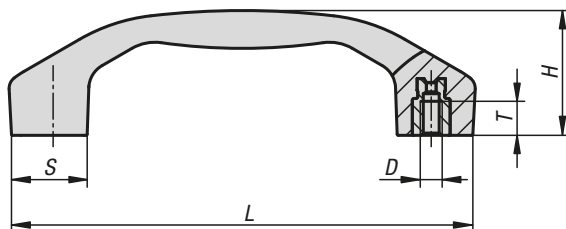
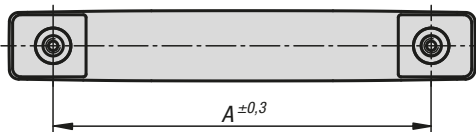
Form A from the front.

Form B from the rear.

(A)



(B)

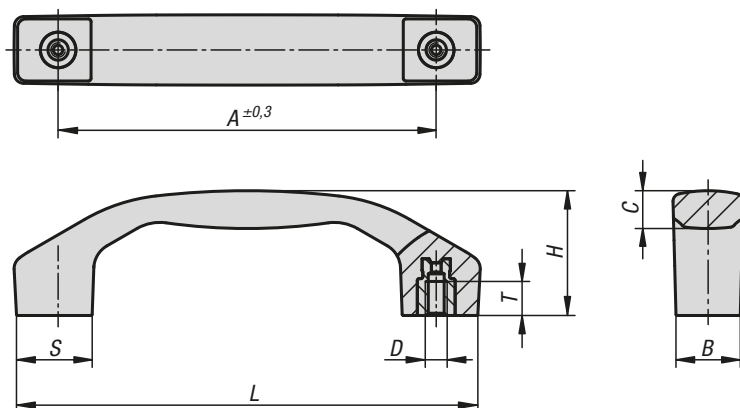


## KIPP Pull handles

| Order No.     | Form | Component material | A   | B  | C    | D  | H  | H1 | L   | S  | T  | Load capacity N |
|---------------|------|--------------------|-----|----|------|----|----|----|-----|----|----|-----------------|
| K1060.1100051 | A    | steel              | 100 | 17 | 9,5  | M5 | 33 | 20 | 122 | 20 | -  | 1000            |
| K1060.1120061 | A    | steel              | 120 | 21 | 11,4 | M6 | 39 | 25 | 146 | 24 | -  | 1000            |
| K1060.1140081 | A    | steel              | 140 | 24 | 14,2 | M8 | 45 | 30 | 170 | 28 | -  | 1000            |
| K1060.1100052 | A    | stainless steel    | 100 | 17 | 9,5  | M5 | 33 | 20 | 122 | 20 | -  | 1000            |
| K1060.1120062 | A    | stainless steel    | 120 | 21 | 11,4 | M6 | 39 | 25 | 146 | 24 | -  | 1000            |
| K1060.1140082 | A    | stainless steel    | 140 | 24 | 14,2 | M8 | 45 | 30 | 170 | 28 | -  | 1000            |
| K1060.2100051 | B    | steel              | 100 | 17 | 9,5  | M5 | 33 | -  | 122 | 20 | 9  | 1000            |
| K1060.2120061 | B    | steel              | 120 | 21 | 11,4 | M6 | 39 | -  | 146 | 24 | 12 | 1000            |
| K1060.2140081 | B    | steel              | 140 | 24 | 14,2 | M8 | 45 | -  | 170 | 28 | 12 | 1000            |
| K1060.2100052 | B    | stainless steel    | 100 | 17 | 9,5  | M5 | 33 | -  | 122 | 20 | 9  | 1000            |
| K1060.2120062 | B    | stainless steel    | 120 | 21 | 11,4 | M6 | 39 | -  | 146 | 24 | 12 | 1000            |
| K1060.2140082 | B    | stainless steel    | 140 | 24 | 14,2 | M8 | 45 | -  | 170 | 28 | 12 | 1000            |

## Pull handles

high temperature resistant



### Material:

Thermoplastic PPA (resistant to high temperatures),  
fibreglass reinforced.  
Bush, stainless steel.

### Version:

black.

### Sample order:

K1060.2100054

### Note:

This pull handle is characterised by its large size and pleasant haptics.  
Easy to clean due to its closed, smooth design (suitable for e.g. foodstuff production and medical technology).

### Temperature range:

Continuous operating temperature acc. to IEC 216 max.  
160 °C.

Short-term operating temperature: max. 250 °C.

Suitable for steam sterilisation (medical technology).

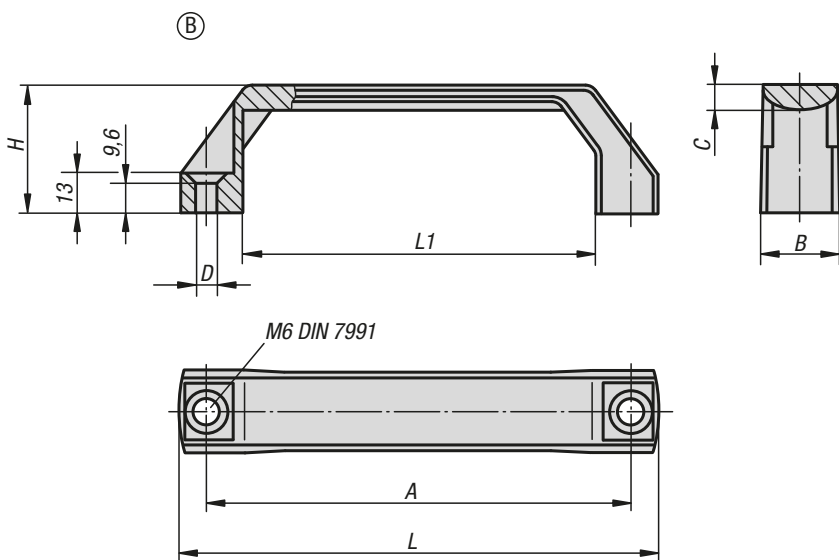
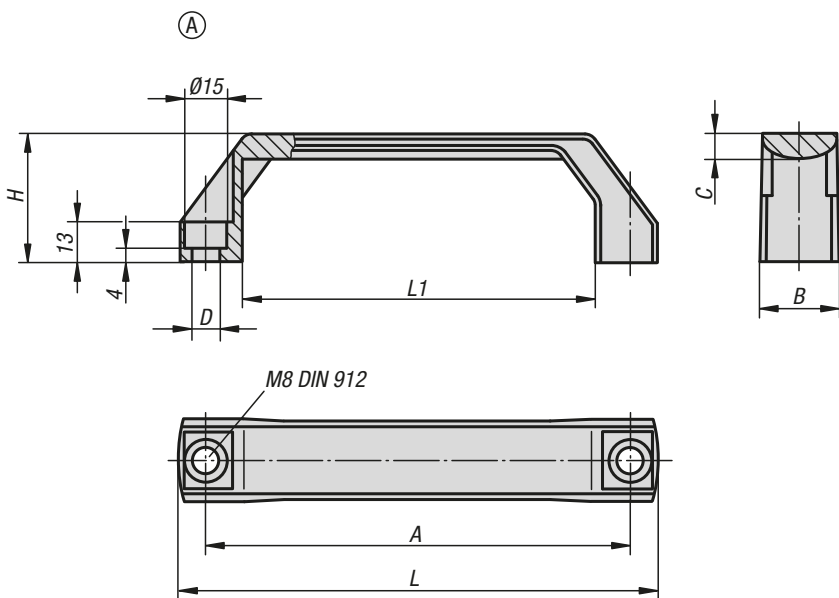
### Assembly:

From the rear.

## KIPP Pull handles, high temperature resistant

| Order No.     | Form | A   | B  | C    | D  | H    | L     | S  | T  | Load capacity<br>N |
|---------------|------|-----|----|------|----|------|-------|----|----|--------------------|
| K1060.2100054 | B    | 100 | 17 | 10,3 | M5 | 34   | 122,5 | 20 | 9  | 1000               |
| K1060.2120064 | B    | 120 | 21 | 12,4 | M6 | 41   | 146   | 24 | 12 | 1000               |
| K1060.2140084 | B    | 140 | 24 | 15,4 | M8 | 46,5 | 170   | 28 | 12 | 1000               |

## Pull handles



### Material:

Glass bead reinforced thermoplastic.

### Version:

Black RAL 7021 or orange.

### Sample order:

K0191.1120081

### Note:

Dimension "A" applies after mounting. Before mounting it can be up to 2 mm smaller due to the release of the bending stress.

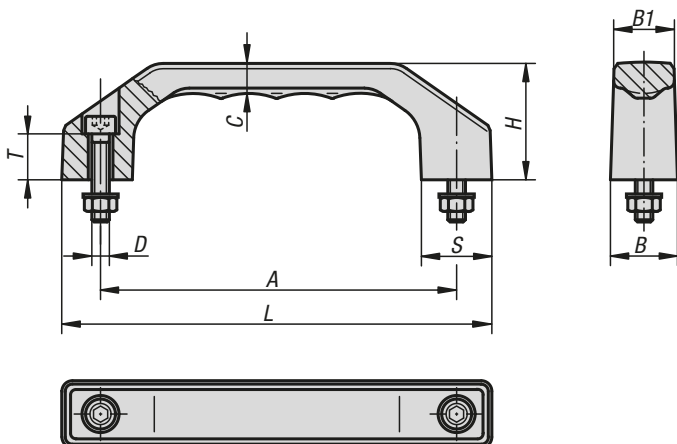
### Assembly:

From the front.

## KIPP Pull handles

| Order No.<br>black grey RAL 7021 | Order No.<br>orange | Form | A   | B  | C | D   | H  | L   | L1  | Load<br>capacity<br>N |
|----------------------------------|---------------------|------|-----|----|---|-----|----|-----|-----|-----------------------|
| K0191.1120081                    | K0191.1120082       | A    | 120 | 26 | 8 | 9   | 42 | 138 | 96  | 1000                  |
| K0191.1140081                    | K0191.1140082       | A    | 140 | 26 | 8 | 9   | 42 | 158 | 116 | 1000                  |
| K0191.1160081                    | K0191.1160082       | A    | 160 | 28 | 9 | 9   | 45 | 178 | 136 | 1000                  |
| K0191.2120061                    | K0191.2120062       | B    | 120 | 26 | 8 | 6,6 | 42 | 138 | 96  | 1000                  |
| K0191.2140061                    | K0191.2140062       | B    | 140 | 26 | 8 | 6,6 | 42 | 158 | 116 | 1000                  |
| K0191.2160061                    | K0191.2160062       | B    | 160 | 28 | 9 | 6,6 | 45 | 178 | 136 | 1000                  |

## Pull handles



### Material:

Glass bead reinforced thermoplastic.

### Version:

Matt black with fine texture.

### Sample order:

K0200.140082

### Note:

These handles are extremely flex-resistant and very user friendly. Fastening screws, nuts and washers are supplied. Stainless steel fasteners are supplied for wet areas.

### Assembly:

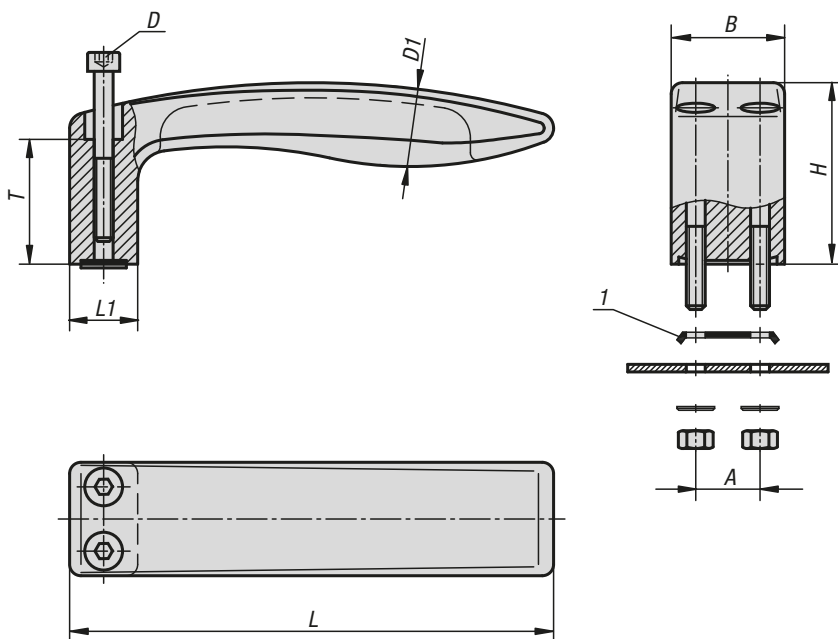
From the front.

## KIPP Pull handles

| Order No.<br>- | Order No.<br>wet area | A   | B  | B1   | C    | D      | H  | L   | S  | T  | Load<br>capacity<br>N |
|----------------|-----------------------|-----|----|------|------|--------|----|-----|----|----|-----------------------|
| K0200.100051   | K0200.100052          | 100 | 19 | 17   | 8,5  | M5X22  | 35 | 122 | 20 | 13 | 1000                  |
| K0200.120061   | K0200.120062          | 120 | 23 | 20,5 | 10,5 | M6X25  | 39 | 146 | 24 | 15 | 1000                  |
| K0200.140081   | K0200.140082          | 140 | 27 | 24   | 12   | M8X30  | 45 | 170 | 28 | 16 | 1000                  |
| K0200.160081   | K0200.160082          | 160 | 31 | 27,5 | 13,5 | M8X35  | 52 | 194 | 32 | 20 | 1000                  |
| K0200.180081   | K0200.180082          | 180 | 35 | 31   | 15,5 | M10X40 | 58 | 218 | 36 | 20 | 1000                  |

# Pull handles

open-ended screw on



## Material:

Glass-bead reinforced thermoplastic.  
Fastening material 1.4301.

## Version:

Matt black with fine texture.

## Sample order:

K0237.12805

## Note:

These open-ended handles can be mounted right or left. They are form stable and have a high load rating. Fastening bolts, nuts and washers are supplied as is a locking plate to prevent twisting.

## Assembly:

From the front.

## Drawing reference:

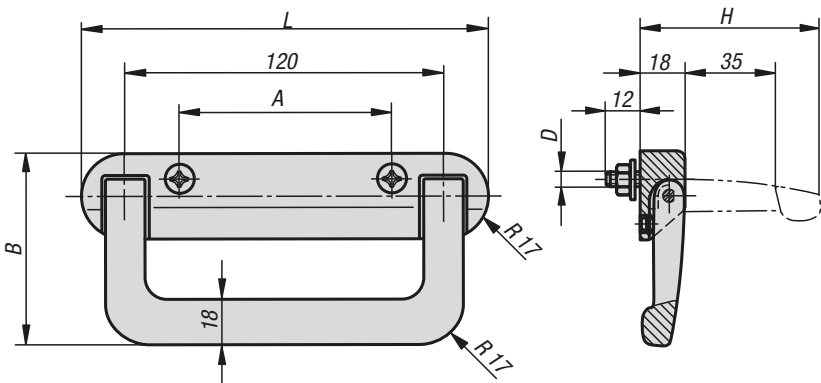
1) locking plate

## KIPP Pull handles open-ended screw on

| Order No.   | A  | B  | D     | D1 | H  | L   | L1 | T  | Load capacity<br>N |
|-------------|----|----|-------|----|----|-----|----|----|--------------------|
| K0237.12805 | 17 | 30 | M5x45 | 20 | 48 | 128 | 18 | 33 | 800                |
| K0237.15606 | 20 | 36 | M6x55 | 24 | 58 | 156 | 22 | 40 | 1000               |

Pull handles

fold-down



**Material:**  
Frame and grip glass-bead reinforced thermoplastic.  
Linkpins and return springs stainless steel.

**Version:**  
matt black.

**Sample order:**  
K0241.080181

**Note:**  
The fold-down handle automatically returns to rest.  
Can be screwed onto a housing panel.  
Black electro zinc-plated DIN 965 countersunk M6x30 screws with cross slit, washers and nuts are supplied.

KIPP Pull handles fold-down

| Order No.    | A  | B  | D  | H  | L   | Load capacity N |
|--------------|----|----|----|----|-----|-----------------|
| K0241.080181 | 80 | 77 | M6 | 71 | 154 | 300             |

## Pull handles

angled



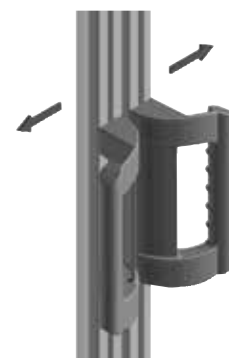
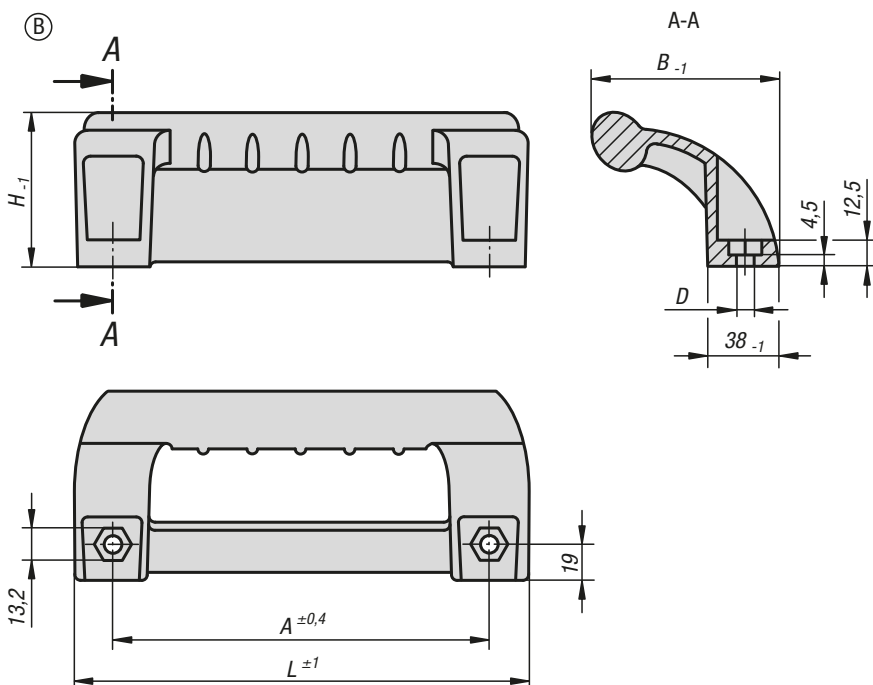
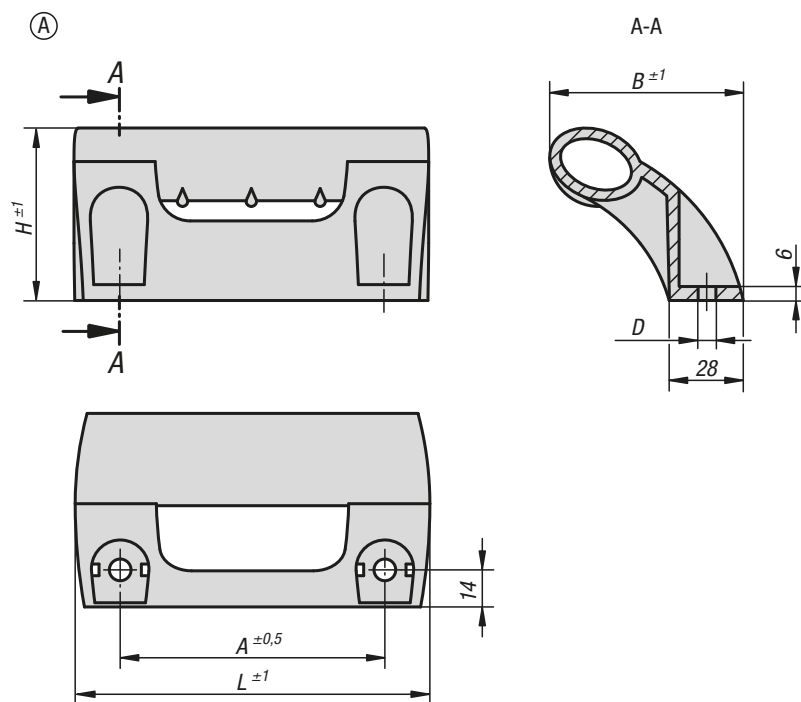
**Material:**  
Glass-bead reinforced thermoplastic PA

**Version:**  
black.

**Sample order:**  
K0244.100081  
K0244.1 (2 per pack)

**Note:**  
Ergonomic design pull handles with finger shield. For mounting on doors, hatches and aluminium profiles. Ideal for double-leaf doors. Fastening with hexagon or socket head M8 bolts.

Cover caps are not supplied with the handle, please order separately.

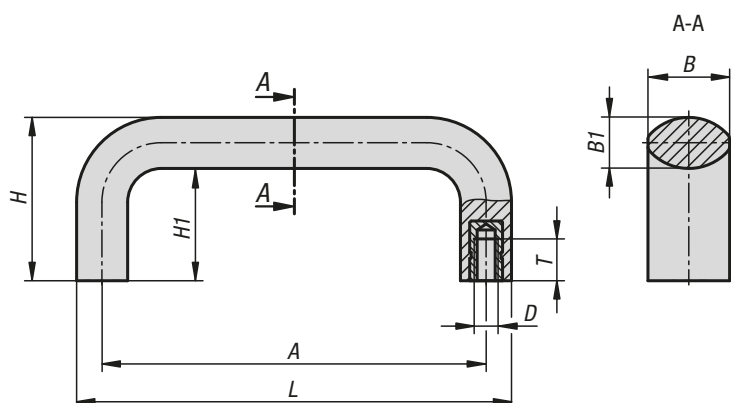


### KIPP Pull handles angled

| Order No.    | Form | A   | B   | D   | H  | L   | Load capacity N | Order No. cover caps |
|--------------|------|-----|-----|-----|----|-----|-----------------|----------------------|
| K0244.100081 | A    | 100 | 73  | 8,5 | 65 | 134 | 1000            | K0244.1              |
| K0244.198081 | B    | 198 | 100 | 8,8 | 80 | 236 | 1000            | K0244.3              |



## Pull handles



### Material:

Fibreglass reinforced thermoplastic.  
Tapped bush brass.

### Version:

black.

### Sample order:

K1087.08605

### Assembly:

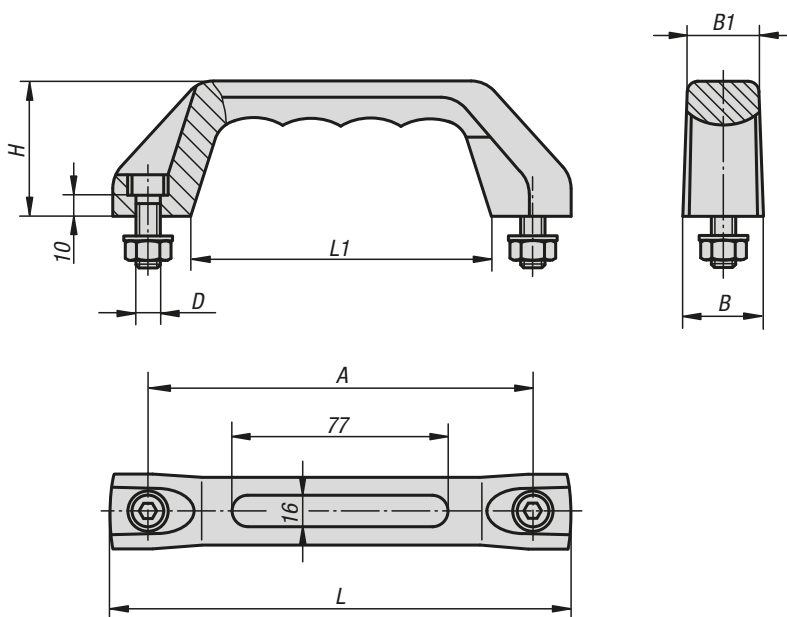
From the rear.

## KIPP Pull handles

| Order No.   | A   | B  | B1 | D   | H  | H1 | L     | T  | Load capacity N |
|-------------|-----|----|----|-----|----|----|-------|----|-----------------|
| K1087.08605 | 86  | 20 | 12 | M5  | 40 | 28 | 98,5  | 10 | 1000            |
| K1087.08606 | 86  | 20 | 12 | M6  | 40 | 28 | 98,5  | 9  | 1000            |
| K1087.09405 | 94  | 20 | 12 | M5  | 40 | 28 | 106,5 | 10 | 1000            |
| K1087.09406 | 94  | 20 | 12 | M6  | 40 | 28 | 106,5 | 9  | 1000            |
| K1087.11705 | 117 | 25 | 16 | M5  | 50 | 34 | 134   | 10 | 1000            |
| K1087.11706 | 117 | 25 | 16 | M6  | 50 | 34 | 134   | 9  | 1000            |
| K1087.11708 | 117 | 25 | 16 | M8  | 50 | 34 | 134   | 14 | 1000            |
| K1087.12005 | 120 | 25 | 16 | M5  | 50 | 34 | 134   | 10 | 1000            |
| K1087.12006 | 120 | 25 | 16 | M6  | 50 | 34 | 134   | 9  | 1000            |
| K1087.12008 | 120 | 25 | 16 | M8  | 50 | 34 | 134   | 14 | 1000            |
| K1087.13205 | 132 | 25 | 16 | M5  | 50 | 34 | 148   | 10 | 1000            |
| K1087.13206 | 132 | 25 | 16 | M6  | 50 | 34 | 148   | 9  | 1000            |
| K1087.13208 | 132 | 25 | 16 | M8  | 50 | 34 | 148   | 14 | 1000            |
| K1087.15006 | 150 | 29 | 18 | M6  | 58 | 40 | 168   | 15 | 1000            |
| K1087.15008 | 150 | 29 | 18 | M8  | 58 | 40 | 168   | 14 | 1000            |
| K1087.15010 | 150 | 29 | 18 | M10 | 58 | 40 | 168   | 14 | 1000            |
| K1087.17908 | 179 | 29 | 18 | M8  | 58 | 40 | 197   | 14 | 1000            |
| K1087.17910 | 179 | 29 | 18 | M10 | 58 | 40 | 197   | 14 | 1000            |

## Pull handles

with soft inner face



### Material:

Hard components glass-bead reinforced thermoplastic.  
Soft components SEBS

### Version:

Hard component matt black, soft component basalt grey.

### Sample order:

K0171.515008

### Note:

Heavy-duty polyamide handle. Excellent carrying and gripping comfort thanks to its soft inner surface. Black electro zinc-plated cap screws, nuts and washers are supplied.

For wet areas, the fastening material is supplied in stainless steel (1.4301).

### Assembly:

From the front.

### On request:

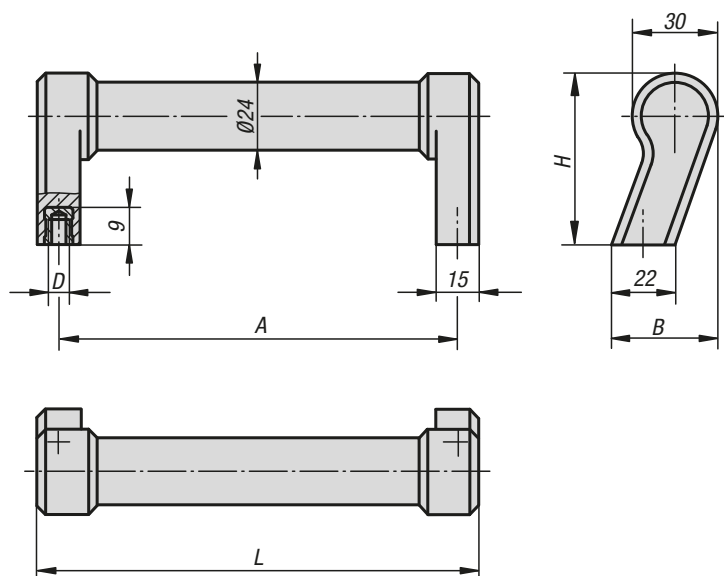
With individual caption, embossed or raised on the soft material. Hard and soft components are available in all RAL colours.

### KIPP Pull handles with soft inner face

| Order No.    | Version 2 | A   | B  | B1   | D     | L   | L1  | H  | Load capacity N |
|--------------|-----------|-----|----|------|-------|-----|-----|----|-----------------|
| K0171.515008 | standard  | 150 | 29 | 25,5 | M8x25 | 178 | 118 | 53 | 500             |
| K0171.615008 | wet area  | 150 | 29 | 25,5 | M8x25 | 178 | 118 | 53 | 500             |

# Pull handles

oblique


**Material:**

Grip glass-bead reinforced thermoplastic.  
Bushing brass.

**Version:**

Matt black or light grey

**Sample order:**

K0197.140061

**Note:**

Oblique, robust polyamide handle. Tube and legs form one unit. The oblique contact faces allow mounting under cramped conditions e.g. in corners.

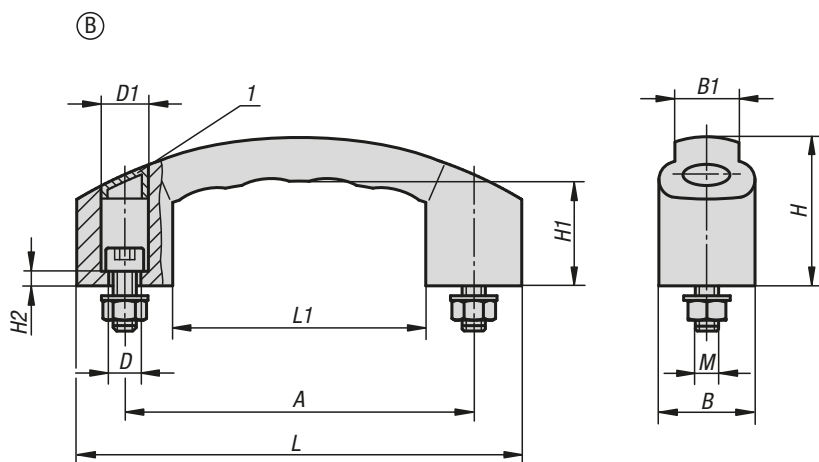
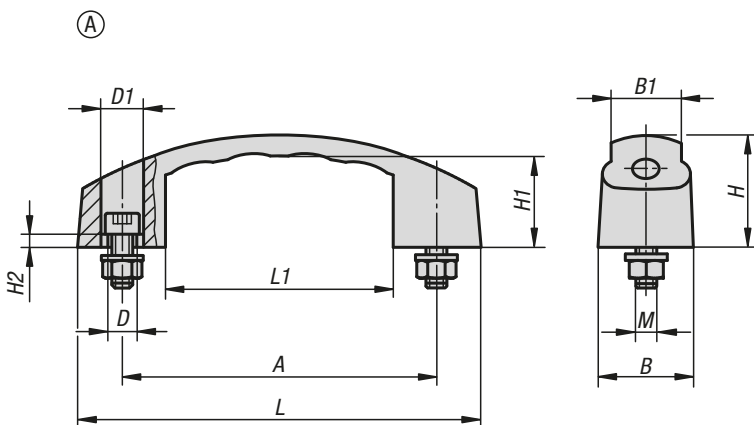
**Assembly:**

From the rear.

## KIPP Pull handles, oblique

| Order No.    | Main colour         | A   | B  | D  | H  | L   | Load capacity N |
|--------------|---------------------|-----|----|----|----|-----|-----------------|
| K0197.140061 | black grey RAL 7021 | 140 | 37 | M6 | 60 | 155 | 1000            |
| K0197.140062 | light grey RAL 7035 | 140 | 37 | M6 | 60 | 155 | 1000            |

## Pull handles



**Material:**  
Glass-bead reinforced thermoplastic.

**Version:**  
matt black.

**Sample order:**  
K0192.110006

**Note:**  
Ergonomic and functional pull handles with temperature resistance of -50 °C to +130 °C.

Supplied with DIN 912 socket head screws, DIN 934 nuts and DIN 125 electro zinc-plated washers as well as caps for Form B.  
Form A are supplied without caps.

**Assembly:**  
From the front.

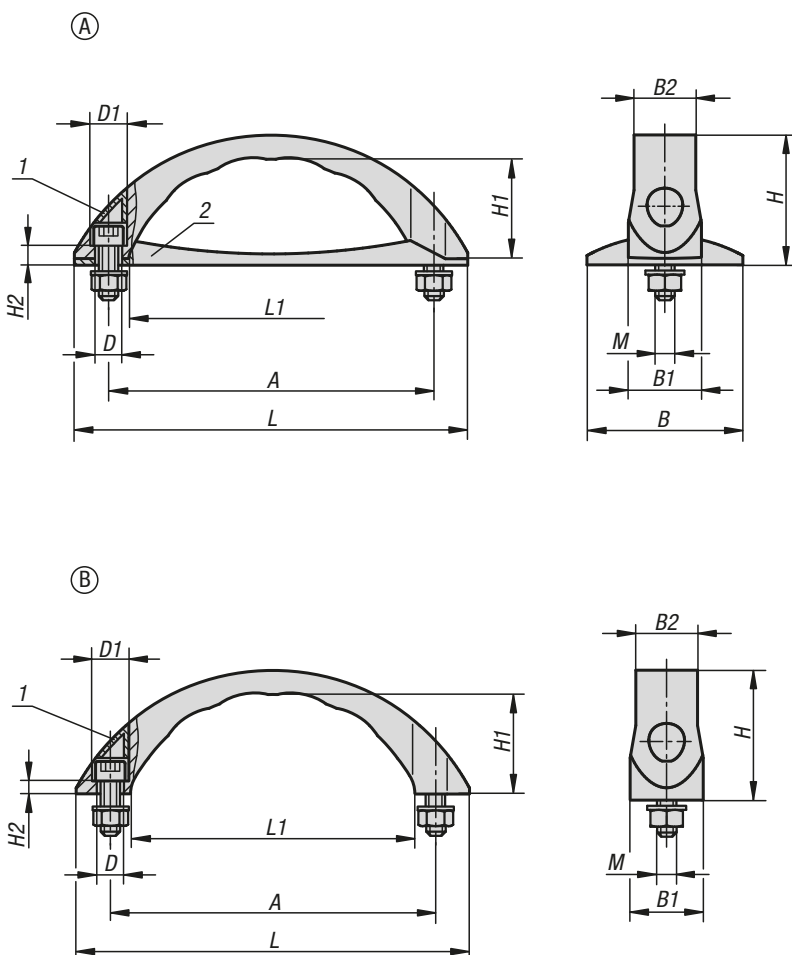
**Drawing reference:**  
Form A: without cover cap  
Form B: with cover cap

1) cover cap

### KIPP Pull handles

| Order No.    | Form | Version           | A   | B  | B1 | D   | D1 | H  | H1 | H2 | L   | L1  | M     | Load capacity N |
|--------------|------|-------------------|-----|----|----|-----|----|----|----|----|-----|-----|-------|-----------------|
| K0192.110006 | A    | without cover cap | 100 | 27 | 22 | 7   | 11 | 38 | 29 | 5  | 130 | 79  | M6x25 | 600             |
| K0192.112006 | A    | without cover cap | 120 | 29 | 23 | 7   | 11 | 38 | 29 | 8  | 150 | 91  | M6x25 | 600             |
| K0192.212008 | B    | with cover cap    | 120 | 33 | 22 | 9   | 14 | 51 | 36 | 5  | 153 | 87  | M8x30 | 1000            |
| K0192.214008 | B    | with cover cap    | 140 | 38 | 26 | 9,5 | 15 | 59 | 42 | 6  | 178 | 101 | M8x30 | 1000            |

## Pull handles arch



### Material:

Glass-bead reinforced thermoplastic.

### Version:

matt black.

### Sample order:

K0193.110006

### Note:

Ergonomic and functional pull handles with temperature resistance of -50 °C to +130 °C.

Supplied with DIN 912 electro zinc-plated socket head screws, DIN 934 nuts, DIN 125 electro zinc-plated washers and caps.

The versions K0193.110006 and K0193.210006 are supplied without caps.

### Assembly:

From the front.

### Drawing reference:

Form A: with base plate

Form B: without base plate

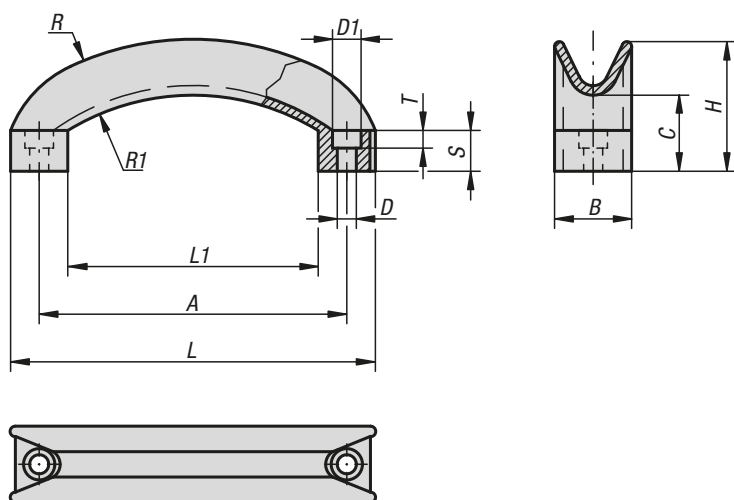
1) cover cap

2) base plate

## KIPP Pull handles, arch

| Order No.    | Form | Type               | Version 1         | A   | B  | B1 | B2 | D   | D1 | H  | H1 | H2  | L   | L1  | M     | Load capacity N |
|--------------|------|--------------------|-------------------|-----|----|----|----|-----|----|----|----|-----|-----|-----|-------|-----------------|
| K0193.110006 | A    | with base plate    | without cover cap | 100 | 48 | 23 | 19 | 7   | 11 | 40 | 29 | 6   | 121 | 84  | M6x25 | 600             |
| K0193.112006 | A    | with base plate    | with cover cap    | 120 | 57 | 28 | 23 | 7   | 12 | 52 | 36 | 7   | 152 | 104 | M6x25 | 600             |
| K0193.114008 | A    | with base plate    | with cover cap    | 140 | 62 | 31 | 25 | 9,5 | 16 | 56 | 37 | 7,5 | 177 | 122 | M8x30 | 600             |
| K0193.210006 | B    | without base plate | without cover cap | 100 | -  | 23 | 19 | 7   | 11 | 38 | 31 | 4   | 121 | 84  | M6x25 | 600             |
| K0193.212006 | B    | without base plate | with cover cap    | 120 | -  | 28 | 23 | 7   | 12 | 50 | 38 | 5   | 152 | 104 | M6x25 | 600             |
| K0193.214008 | B    | without base plate | with cover cap    | 140 | -  | 31 | 25 | 9,5 | 16 | 54 | 39 | 5,5 | 177 | 122 | M8x30 | 600             |

## Pull handles arch



**Material:**  
Black grey thermoplastic.

**Sample order:**  
K0194.11406

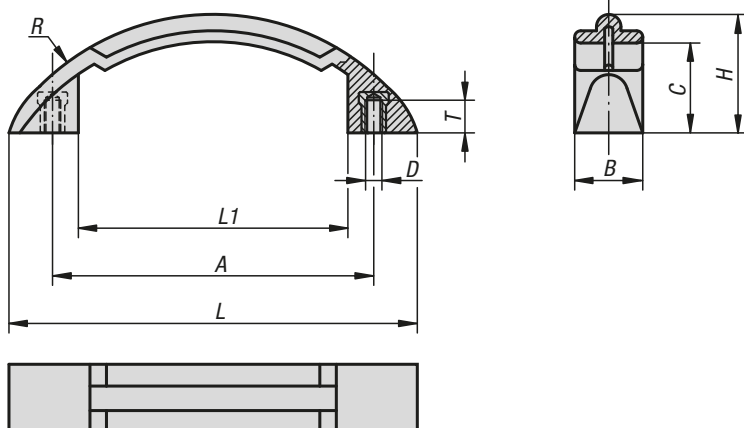
**Assembly:**  
From the front.

### KIPP Pull handles arch

| Order No.   | A   | B  | C  | D   | D1   | H  | L   | L1 | R   | R1 | S  | T   | Load capacity N |
|-------------|-----|----|----|-----|------|----|-----|----|-----|----|----|-----|-----------------|
| K0194.11406 | 114 | 28 | 29 | 6,5 | 10,5 | 48 | 134 | 92 | 117 | 79 | 15 | 6,5 | 1000            |

# K0196

## Pull handles arch



**Material, version:**  
Thermoplastic, black grey.  
Bushes electro zinc-plated steel.

**Sample order:**  
K0196.11906

**Assembly:**  
From the rear.

### KIPP Pull handles arch

| Order No.   | A   | B  | C  | D  | H    | L   | L1 | R  | T  | Load capacity N |
|-------------|-----|----|----|----|------|-----|----|----|----|-----------------|
| K0196.11906 | 119 | 25 | 33 | M6 | 43,5 | 150 | 98 | 94 | 10 | 1000            |

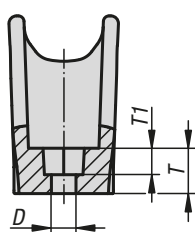
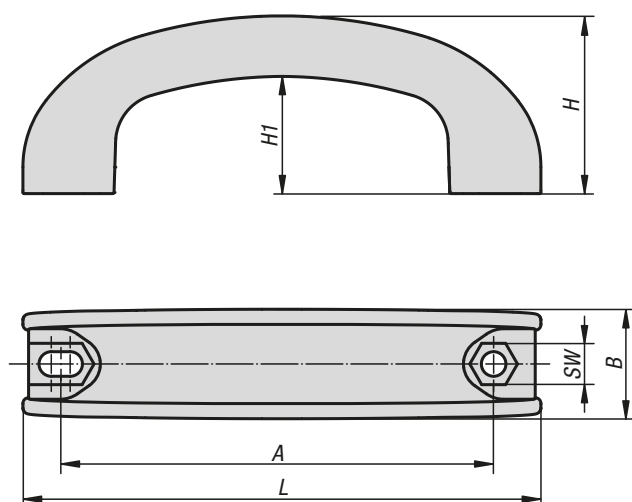
## Pull handles arch



**Material:**  
Black thermoplastic.

**Sample order:**  
K1217.09006

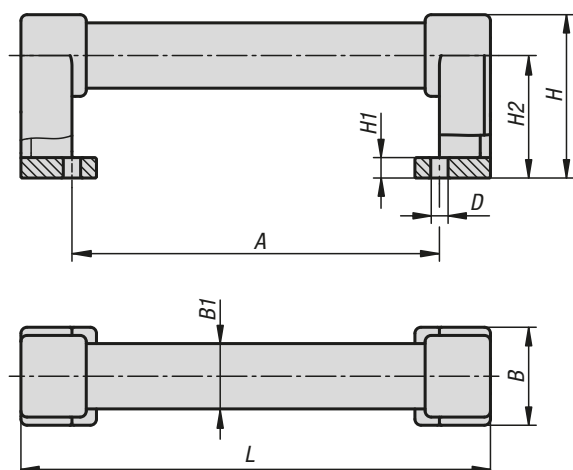
**Assembly:**  
From the front.



### KIPP Pull handles arch

| Order No.   | A       | B    | D   | H    | H1 | L   | T  | T1  | SW   | Load capacity<br>N |
|-------------|---------|------|-----|------|----|-----|----|-----|------|--------------------|
| K1217.09006 | 90-95   | 26,6 | 6,5 | 42   | 29 | 115 | 10 | 6,4 | 10,2 | 1000               |
| K1217.11206 | 112-117 | 29   | 6,5 | 47   | 31 | 137 | 12 | 7   | 10,2 | 1000               |
| K1217.17708 | 177-182 | 30   | 8,5 | 48,1 | 31 | 208 | 14 | 9   | 13,2 | 1000               |

## Tubular handles, plastic



### Material:

Grip legs PA6 plastic.  
Grip tube PVC plastic.

### Version:

Grip legs fine textured, black.  
Grip tube turned, black.

### Sample order:

K1528.180

### Note:

Optically matching K1529 and K1530.

### Assembly:

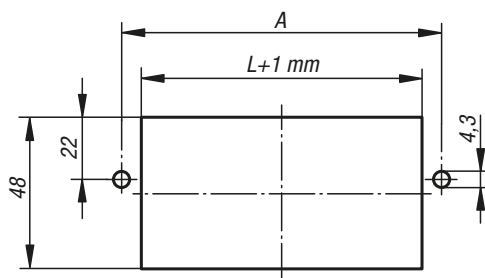
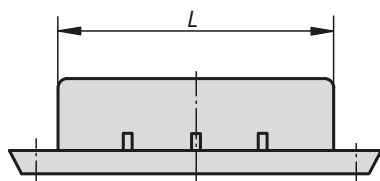
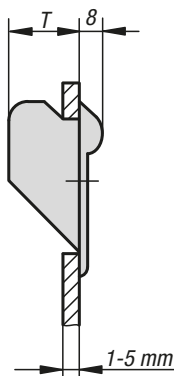
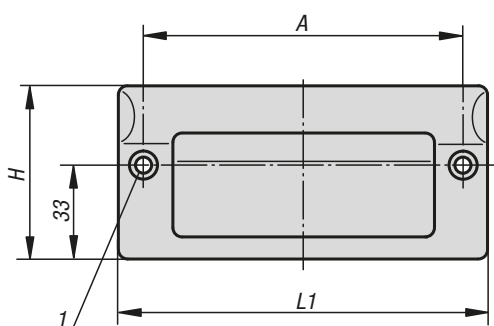
From the front.

## KIPP Tubular handles, plastic

| Order No. | A   | B  | B1 | D   | H  | H1 | H2 | L   | Load capacity<br>N |
|-----------|-----|----|----|-----|----|----|----|-----|--------------------|
| K1528.180 | 180 | 48 | 32 | 8,5 | 80 | 10 | 60 | 230 | 1000               |



# Recessed handles

**Material:**

Glass bead reinforced thermoplastic.

**Version:**

Semi-matt, black or light grey.

**Sample order:**

K0242.1082041

**Note:**

These ergonomically shaped handles are ideally suited for wall thicknesses of 1-5 mm.

**Assembly:**

The handle is inserted in the cutout of the housing panel and then fixed from the front with 2 countersunk screws (not supplied).

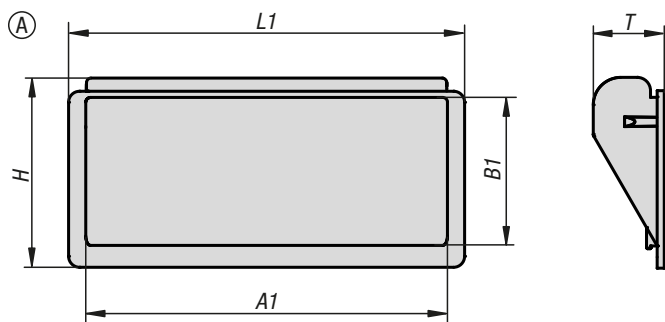
**Drawing reference:**

1) for countersunk screws M4

## KIPP Recessed handles

| Order No.     | Main colour         | A   | H  | L  | L1  | T  | Load capacity N |
|---------------|---------------------|-----|----|----|-----|----|-----------------|
| K0242.1082041 | black               | 82  | 61 | 67 | 100 | 25 | 1000            |
| K0242.1112041 | black               | 112 | 61 | 97 | 130 | 25 | 1000            |
| K0242.1082042 | light grey RAL 7035 | 82  | 61 | 67 | 100 | 25 | 1000            |
| K0242.1112042 | light grey RAL 7035 | 112 | 61 | 97 | 130 | 25 | 1000            |

## Recessed handles



The ergonomic form of the recessed handle is ideally suited for appliances and housings. It is installed by pressing in and clipping into the mounting opening.

**Material:**  
Thermoplastic (ABS).

**Version:**  
black.

**Sample order:**  
K1077.1101

**Note:**  
This handle can be used with a wall thickness of 0.75 to 1.5 mm.  
The retaining force is 750 N per pair for steel and sheet steel housings.

K1077.1101 is supplied with spring clips for mounting on the inside wall of the housing.

### KIPP Recessed handles

| Order No.  | Version 2 | A1 | B1   | H    | L1  | T  | Mounting cutout | Load capacity N |
|------------|-----------|----|------|------|-----|----|-----------------|-----------------|
| K1077.0901 | plug-in   | 79 | 30   | 40   | 90  | 16 | 83 x 34         | 375             |
| K1077.1101 | plug-in   | 95 | 33,8 | 56,3 | 110 | 18 | 103 x 49        | 375             |

Recessed handles

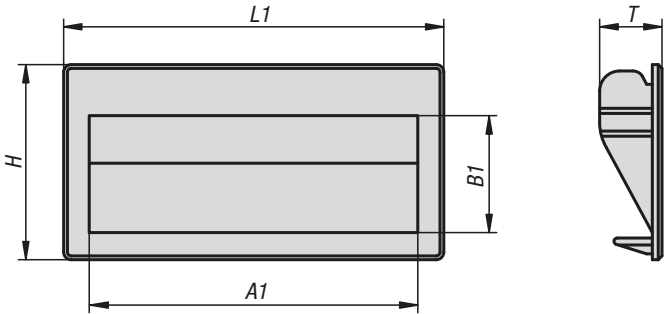


**Material:**  
Thermoplastic (ABS).

**Version:**  
black.

**Sample order:**  
K1078.1871

**Note:**  
This handle can be used with a wall thickness of 1.5 to 2 mm.  
The retaining force is 750 N per pair in steel and plate housings.

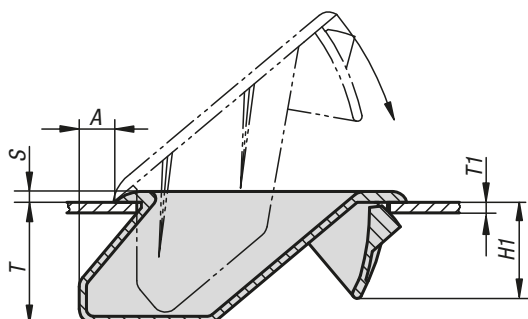


KIPP Recessed handles

| Order No.  | Version 2 | A1  | B1 | H  | L1  | T  | Mounting cutout | Load capacity N |
|------------|-----------|-----|----|----|-----|----|-----------------|-----------------|
| K1078.1871 | plug-in   | 164 | 54 | 79 | 187 | 22 | 171 x 73        | 375             |

## Recessed grips

clip-in



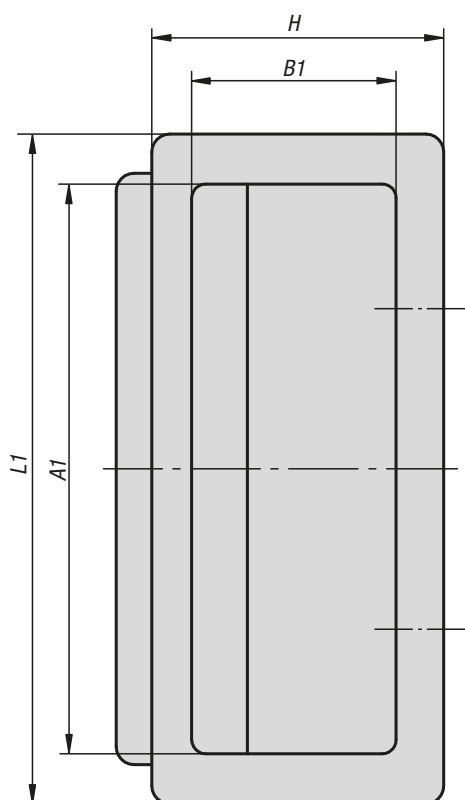
**Material:**  
Polyamide.

**Version:**  
black.

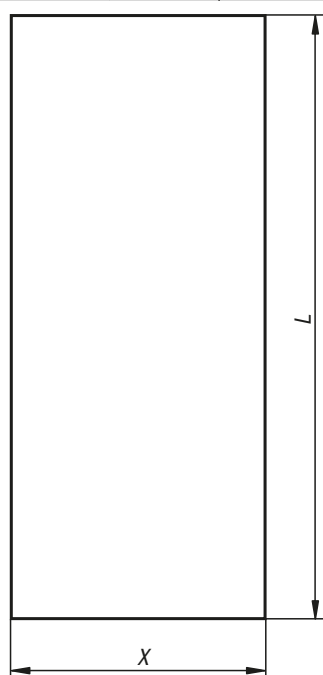
**Sample order:**  
K1306.09441

**Note:**  
Recessed grips for clipping into material with a thickness 0.75 to 3.5 mm.

See drawing for installation cut-out dimensions for the various material thicknesses.



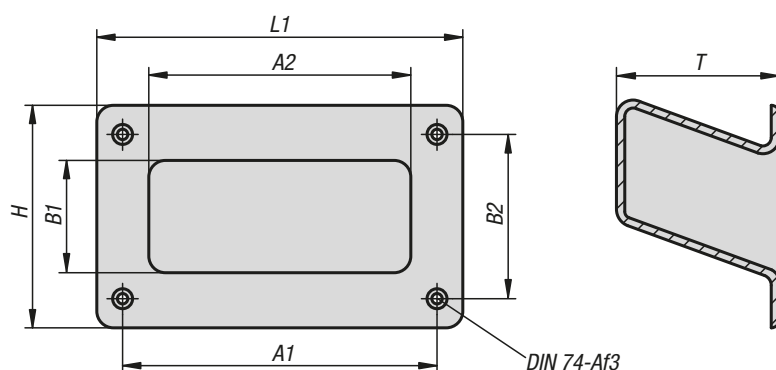
|                    | T1          | X         | L         |
|--------------------|-------------|-----------|-----------|
| T1 =<br>0,75 - 2,2 | 0,75 - 0,79 | 34,8 +0,2 | 85,0 +0,2 |
|                    | 0,8 - 1,4   | 35,0 +0,2 | 85,0 +0,2 |
|                    | 1,5 - 2,2   | 36,0 +0,2 | 85,0 +0,2 |
| T1 =<br>1,5 - 3,5  | 1,5 - 2,0   | 49,6 +0,2 | 100 -0,5  |
|                    | 2,0 - 3,2   | 50,3 +0,3 | 100 -0,5  |
|                    | 3,2 - 3,5   | 51,0 +0,3 | 100 -0,5  |



### KIPP Recessed grip, clip-in

| Order No.   | A  | A1 | B1   | H  | H1    | L1  | S   | T  |
|-------------|----|----|------|----|-------|-----|-----|----|
| K1306.09441 | 5  | 80 | 28,7 | 41 | 13,5  | 94  | 1,5 | 17 |
| K1306.11057 | 10 | 94 | 40,3 | 57 | 18,65 | 110 | 2   | 26 |

## Recessed handles

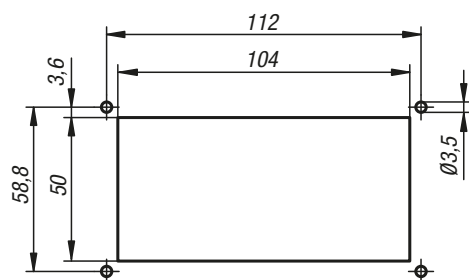


**Material:**  
Thermoplastic (ABS).

**Version:**  
black.

**Sample order:**  
K1079.1121

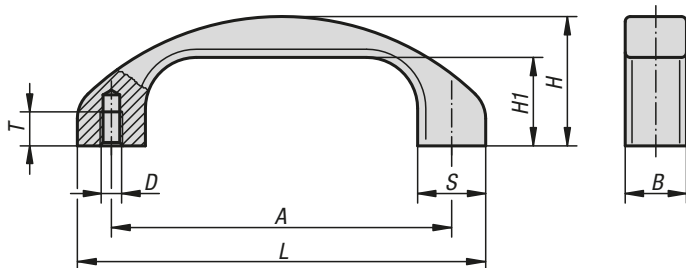
**Note:**  
Max. load 500 N/pair.



### KIPP Recessed handles

| Order No.  | Version 2 | A1  | A2 | B1 | B2   | H  | L1  | T  | Load capacity N |
|------------|-----------|-----|----|----|------|----|-----|----|-----------------|
| K1079.1121 | screw on  | 112 | 94 | 40 | 58,8 | 79 | 131 | 58 | 250             |

## Pull handles



**Material:**  
Profile aluminium EN AW-6060

**Version:**  
High quality anodised version, glass-bead blasted, semi-gloss finish.

**Sample order:**  
K0195.120061

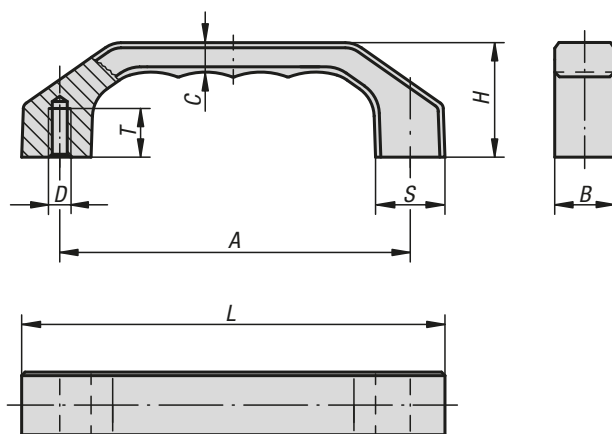
**Assembly:**  
From the rear.

### KIPP Pull handles

| Order No.    | Main colour      | A   | B  | D  | H  | H1 | L   | S  | T  | Load capacity N |
|--------------|------------------|-----|----|----|----|----|-----|----|----|-----------------|
| K0195.120061 | black anodised   | 120 | 22 | M6 | 46 | 31 | 144 | 24 | 12 | 1000            |
| K0195.140081 | black anodised   | 140 | 25 | M8 | 53 | 36 | 168 | 28 | 15 | 1000            |
| K0195.120063 | natural anodised | 120 | 22 | M6 | 46 | 31 | 144 | 24 | 12 | 1000            |
| K0195.140083 | natural anodised | 140 | 25 | M8 | 53 | 36 | 168 | 28 | 15 | 1000            |

# K0199

## Pull handles



**Material:**  
EN AW-6060

**Version:**  
Matt-finished and anodised or powder-coated

**Sample order:**  
K0199.140082

**Assembly:**  
From the rear.

### KIPP Pull handles

| Order No. natural | Order No. black | Order No. titanium | A   | B  | C    | D  | H  | L   | S  | T  | Load capacity N |
|-------------------|-----------------|--------------------|-----|----|------|----|----|-----|----|----|-----------------|
| K0199.120061      | K0199.120062    | K0199.120063       | 120 | 22 | 10,5 | M6 | 39 | 146 | 24 | 15 | 1000            |
| K0199.140081      | K0199.140082    | K0199.140083       | 140 | 25 | 12   | M8 | 45 | 170 | 28 | 16 | 1000            |
| K0199.160081      | K0199.160082    | K0199.160083       | 160 | 28 | 13,5 | M8 | 52 | 194 | 32 | 16 | 1000            |

## Pull handles, aluminium

round

19"

**Material:**

Aluminium.

**Version:**

Natural or black anodised.

**Sample order:**

K0201.064043

**Note for ordering:**

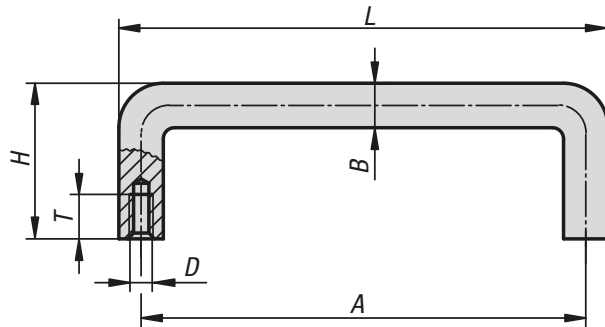
Order the fastening material and end washers separately.

**Assembly:**

From the rear.

**Accessories:**

End washers K0201.



## KIPP Pull handles, aluminium, round

| Order No.<br>black | Order No.<br>natural | A   | B | D  | H  | L   | T  | Load<br>capacity<br>N | Order No.<br>end washer |
|--------------------|----------------------|-----|---|----|----|-----|----|-----------------------|-------------------------|
| K0201.032041       | K0201.032043         | 32  | 8 | M4 | 32 | 40  | 10 | 500                   | K0201.4/K0201.5         |
| K0201.055041       | K0201.055043         | 55  | 8 | M4 | 32 | 63  | 10 | 500                   | K0201.4/K0201.5         |
| K0201.064041       | K0201.064043         | 64  | 8 | M4 | 32 | 72  | 10 | 500                   | K0201.4/K0201.5         |
| K0201.076041       | K0201.076043         | 76  | 8 | M4 | 32 | 84  | 10 | 500                   | K0201.4/K0201.5         |
| K0201.088041       | K0201.088043         | 88  | 8 | M4 | 32 | 96  | 10 | 500                   | K0201.4/K0201.5         |
| K0201.096041       | K0201.096043         | 96  | 8 | M4 | 32 | 104 | 10 | 500                   | K0201.4/K0201.5         |
| K0201.098041       | K0201.098043         | 98  | 8 | M4 | 32 | 106 | 10 | 500                   | K0201.4/K0201.5         |
| K0201.100041       | K0201.100043         | 100 | 8 | M4 | 32 | 108 | 10 | 500                   | K0201.4/K0201.5         |
| K0201.102041       | K0201.102043         | 102 | 8 | M4 | 32 | 110 | 10 | 500                   | K0201.4/K0201.5         |
| K0201.120041       | K0201.120043         | 120 | 8 | M4 | 32 | 128 | 10 | 500                   | K0201.4/K0201.5         |
| K0201.136041       | K0201.136043         | 136 | 8 | M4 | 32 | 144 | 10 | 500                   | K0201.4/K0201.5         |

## Pull handles, aluminium

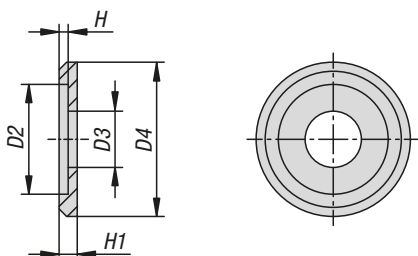
round



| Order No.<br>black | Order No.<br>natural | A   | B  | D   | H  | L   | T  | Load<br>capacity<br>N | Order No.<br>end washer |
|--------------------|----------------------|-----|----|-----|----|-----|----|-----------------------|-------------------------|
| K0201.055051       | K0201.055053         | 55  | 10 | M5  | 40 | 65  | 10 | 500                   | K0201.1/K0201.3         |
| K0201.064051       | K0201.064053         | 64  | 10 | M5  | 40 | 74  | 10 | 500                   | K0201.1/K0201.3         |
| K0201.076051       | K0201.076053         | 76  | 10 | M5  | 40 | 86  | 10 | 500                   | K0201.1/K0201.3         |
| K0201.088051       | K0201.088053         | 88  | 10 | M5  | 40 | 98  | 10 | 500                   | K0201.1/K0201.3         |
| K0201.096051       | K0201.096053         | 96  | 10 | M5  | 40 | 106 | 10 | 500                   | K0201.1/K0201.3         |
| K0201.098051       | K0201.098053         | 98  | 10 | M5  | 40 | 108 | 10 | 500                   | K0201.1/K0201.3         |
| K0201.100051       | K0201.100053         | 100 | 10 | M5  | 40 | 110 | 10 | 500                   | K0201.1/K0201.3         |
| K0201.102051       | K0201.102053         | 102 | 10 | M5  | 40 | 112 | 10 | 500                   | K0201.1/K0201.3         |
| K0201.120051       | K0201.120053         | 120 | 10 | M5  | 40 | 130 | 10 | 500                   | K0201.1/K0201.3         |
| K0201.136051       | K0201.136053         | 136 | 10 | M5  | 40 | 146 | 10 | 500                   | K0201.1/K0201.3         |
| K0201.140051       | K0201.140053         | 140 | 10 | M5  | 40 | 150 | 10 | 500                   | K0201.1/K0201.3         |
| K0201.160051       | K0201.160053         | 160 | 10 | M5  | 40 | 170 | 10 | 500                   | K0201.1/K0201.3         |
| K0201.180051       | K0201.180053         | 180 | 10 | M5  | 40 | 190 | 10 | 500                   | K0201.1/K0201.3         |
| K0201.200051       | K0201.200053         | 200 | 10 | M5  | 40 | 210 | 10 | 500                   | K0201.1/K0201.3         |
| K0201.235051       | K0201.235053         | 235 | 10 | M5  | 40 | 245 | 10 | 500                   | K0201.1/K0201.3         |
| K0201.250051       | K0201.250053         | 250 | 10 | M5  | 40 | 260 | 10 | 500                   | K0201.1/K0201.3         |
| K0201.300051       | K0201.300053         | 300 | 10 | M5  | 40 | 310 | 10 | 500                   | K0201.1/K0201.3         |
| K0201.350051       | K0201.350053         | 350 | 10 | M5  | 40 | 360 | 10 | 500                   | K0201.1/K0201.3         |
| K0201.120061       | K0201.120063         | 120 | 12 | M6  | 42 | 132 | 12 | 500                   | K0201.6/K0201.7         |
| K0201.136061       | K0201.136063         | 136 | 12 | M6  | 42 | 148 | 12 | 500                   | K0201.6/K0201.7         |
| K0201.140061       | K0201.140063         | 140 | 12 | M6  | 42 | 152 | 12 | 500                   | K0201.6/K0201.7         |
| K0201.160061       | K0201.160063         | 160 | 12 | M6  | 42 | 172 | 12 | 500                   | K0201.6/K0201.7         |
| K0201.180061       | K0201.180063         | 180 | 12 | M6  | 42 | 192 | 12 | 500                   | K0201.6/K0201.7         |
| K0201.200061       | K0201.200063         | 200 | 12 | M6  | 42 | 212 | 12 | 500                   | K0201.6/K0201.7         |
| K0201.235061       | K0201.235063         | 235 | 12 | M6  | 42 | 247 | 12 | 500                   | K0201.6/K0201.7         |
| K0201.250061       | K0201.250063         | 250 | 12 | M6  | 42 | 262 | 12 | 500                   | K0201.6/K0201.7         |
| K0201.300061       | K0201.300063         | 300 | 12 | M6  | 42 | 312 | 12 | 500                   | K0201.6/K0201.7         |
| K0201.350061       | K0201.350063         | 350 | 12 | M6  | 42 | 362 | 12 | 500                   | K0201.6/K0201.7         |
| K0201.140081       | K0201.140083         | 140 | 16 | M8  | 58 | 156 | 12 | 500                   | -                       |
| K0201.160081       | K0201.160083         | 160 | 16 | M8  | 58 | 176 | 12 | 500                   | -                       |
| K0201.180081       | K0201.180083         | 180 | 16 | M8  | 58 | 196 | 12 | 500                   | -                       |
| K0201.200081       | K0201.200083         | 200 | 16 | M8  | 58 | 216 | 12 | 500                   | -                       |
| K0201.235081       | K0201.235083         | 235 | 16 | M8  | 58 | 251 | 12 | 500                   | -                       |
| K0201.250081       | K0201.250083         | 250 | 16 | M8  | 58 | 266 | 12 | 500                   | -                       |
| K0201.300081       | K0201.300083         | 300 | 16 | M8  | 58 | 316 | 12 | 500                   | -                       |
| K0201.350081       | K0201.350083         | 350 | 16 | M8  | 58 | 366 | 12 | 500                   | -                       |
| K0201.200101       | K0201.200103         | 200 | 20 | M10 | 70 | 220 | 19 | 500                   | -                       |
| K0201.235101       | K0201.235103         | 235 | 20 | M10 | 70 | 255 | 19 | 500                   | -                       |
| K0201.250101       | K0201.250103         | 250 | 20 | M10 | 70 | 270 | 19 | 500                   | -                       |
| K0201.300101       | K0201.300103         | 300 | 20 | M10 | 70 | 320 | 19 | 500                   | -                       |
| K0201.350101       | K0201.350103         | 350 | 20 | M10 | 70 | 370 | 19 | 500                   | -                       |



## End washers, aluminium



The end washers are designed for round pull handles. The washer enlarges the screw-on surface, thus minimising the risk of breaking through with thin-walled sheets.

**Material:**  
Aluminium.

**Version:**  
Natural or black anodised.

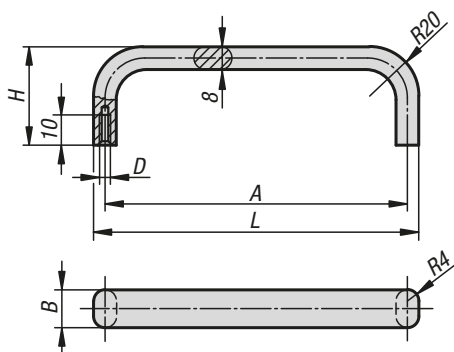
**Sample order:**  
K0201.3

## KIPP End washers, aluminium

| Order No. | Main colour | D2   | D3  | D4   | H | H1 | for screws |
|-----------|-------------|------|-----|------|---|----|------------|
| K0201.5   | natural     | 8,1  | 4,2 | 12,5 | 1 | 2  | M4         |
| K0201.3   | natural     | 10,1 | 5,2 | 15   | 1 | 2  | M5         |
| K0201.7   | natural     | 12,1 | 6,2 | 17   | 1 | 2  | M6         |
| K0201.4   | black       | 8,1  | 4,2 | 12,5 | 1 | 2  | M4         |
| K0201.1   | black       | 10,1 | 5,2 | 15   | 1 | 2  | M5         |
| K0201.6   | black       | 12,1 | 6,2 | 17   | 1 | 2  | M6         |

## Pull handles oval

19"



### KIPP Pull handles oval

| Order No.<br>black | Order No.<br>natural | A   | B  | D  | H  | L   | Load<br>capacity<br>N |
|--------------------|----------------------|-----|----|----|----|-----|-----------------------|
| K0202.055051       | K0202.055053         | 55  | 12 | M5 | 40 | 63  | 500                   |
| K0202.088051       | K0202.088053         | 88  | 12 | M5 | 40 | 96  | 500                   |
| K0202.100051       | K0202.100053         | 100 | 12 | M5 | 40 | 108 | 500                   |
| K0202.120051       | K0202.120053         | 120 | 12 | M5 | 40 | 128 | 500                   |
| K0202.180051       | K0202.180053         | 180 | 12 | M5 | 40 | 188 | 500                   |
| K0202.200051       | K0202.200053         | 200 | 12 | M5 | 40 | 208 | 500                   |
| K0202.235051       | K0202.235053         | 235 | 12 | M5 | 40 | 243 | 500                   |
| K0202.250051       | K0202.250053         | 250 | 12 | M5 | 40 | 258 | 500                   |



**Material:**  
Oval aluminium.

**Version:**  
Surface matt-finished and natural colour or black anodised.

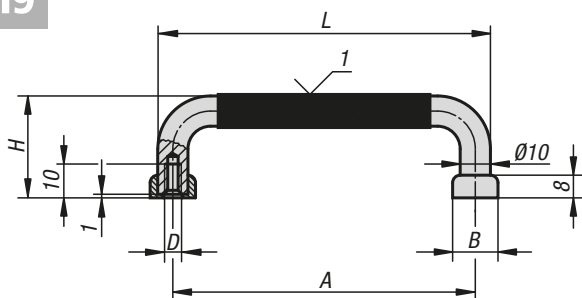
**Sample order:**  
K0202.055051

**Assembly:**  
From the rear.

# K0203

## Pull handles round

19"



### KIPP Pull handles round

| Order No.   | A   | B  | D  | H  | L   | Load<br>capacity<br>N |
|-------------|-----|----|----|----|-----|-----------------------|
| K0203.05505 | 55  | 14 | M5 | 41 | 65  | 1000                  |
| K0203.08805 | 88  | 14 | M5 | 41 | 98  | 1000                  |
| K0203.10005 | 100 | 14 | M5 | 41 | 110 | 1000                  |
| K0203.10205 | 102 | 14 | M5 | 41 | 112 | 1000                  |
| K0203.11505 | 115 | 14 | M5 | 41 | 125 | 1000                  |
| K0203.12005 | 120 | 14 | M5 | 41 | 130 | 1000                  |
| K0203.13605 | 136 | 14 | M5 | 41 | 146 | 1000                  |
| K0203.18005 | 180 | 14 | M5 | 41 | 190 | 1000                  |
| K0203.20005 | 200 | 14 | M5 | 41 | 210 | 1000                  |
| K0203.23505 | 235 | 14 | M5 | 41 | 245 | 1000                  |
| K0203.25005 | 250 | 14 | M5 | 41 | 260 | 1000                  |



**Material:**  
Round steel

**Version:**  
Surface very finely ground and matt-polish chrome-plated.  
Grip plastic coated.

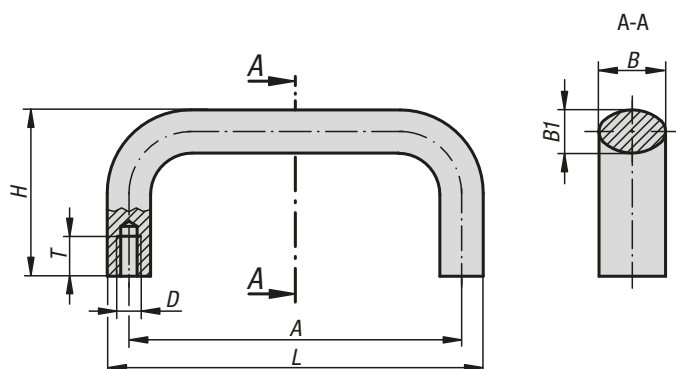
**Sample order:**  
K0203.05505

**Note:**  
High quality handles for front panels and similar applications.

**Assembly:**  
From the rear.

**Drawing reference:**  
1) plastic coating

## Pull handles oval



### Material:

Oval aluminium EN AW-6060

### Version:

Black or ruby red RAL 3003 powder-coated, natural tone anodised or bright vibratory ground.

### Sample order:

K0204.10001

### Note:

These pull handles are extremely robust and can also be used where rough usage is expected. The bright vibratory-ground version can be painted or coated after assembly.

### Assembly:

From the rear.

## KIPP Pull handles, oval

| Order No.<br>black<br>powder-coated | Order No.<br>natural<br>anodised | Order No.<br>ruby red<br>powder-coated | Order No.<br>-<br>bright and tumbled | A   | B  | B1 | D  | H  | T  | L   | Load<br>capacity<br>N |
|-------------------------------------|----------------------------------|----------------------------------------|--------------------------------------|-----|----|----|----|----|----|-----|-----------------------|
| K0204.10001                         | K0204.110003                     | K0204.10027                            | K0204.100                            | 100 | 21 | 13 | M6 | 50 | 12 | 113 | 1000                  |
| K0204.11201                         | K0204.111203                     | K0204.11227                            | K0204.112                            | 112 | 21 | 13 | M6 | 50 | 12 | 125 | 1000                  |
| K0204.1120108                       | K0204.11120308                   | K0204.1122708                          | K0204.11208                          | 112 | 25 | 17 | M8 | 55 | 14 | 129 | 1000                  |
| K0204.12001                         | K0204.112003                     | K0204.12027                            | K0204.120                            | 120 | 21 | 13 | M6 | 50 | 12 | 133 | 1000                  |
| K0204.1200108                       | K0204.11200308                   | K0204.1202708                          | K0204.12008                          | 120 | 25 | 17 | M8 | 55 | 14 | 137 | 1000                  |
| K0204.12801                         | K0204.112803                     | K0204.12827                            | K0204.128                            | 128 | 21 | 13 | M6 | 50 | 12 | 141 | 1000                  |
| K0204.1280108                       | K0204.11280308                   | K0204.1282708                          | K0204.12808                          | 128 | 25 | 17 | M8 | 55 | 14 | 145 | 1000                  |
| K0204.1600106                       | K0204.11600306                   | K0204.1602706                          | K0204.16006                          | 160 | 21 | 13 | M6 | 50 | 12 | 173 | 1000                  |
| K0204.16001                         | K0204.116003                     | K0204.16027                            | K0204.160                            | 160 | 25 | 17 | M8 | 55 | 14 | 177 | 1000                  |
| K0204.18001                         | K0204.118003                     | K0204.18027                            | K0204.180                            | 180 | 25 | 17 | M8 | 55 | 14 | 197 | 1000                  |
| K0204.19201                         | K0204.119203                     | K0204.19227                            | K0204.192                            | 192 | 25 | 17 | M8 | 55 | 14 | 209 | 1000                  |
| K0204.35001                         | K0204.135003                     | K0204.35027                            | K0204.350                            | 350 | 25 | 17 | M8 | 55 | 14 | 367 | 1000                  |

# Pull handles oval

with thru hole


**Material:**

Oval aluminium EN AW-6060

**Version:**

Black or ruby red RAL 3003, powder-coated.

**Sample order:**

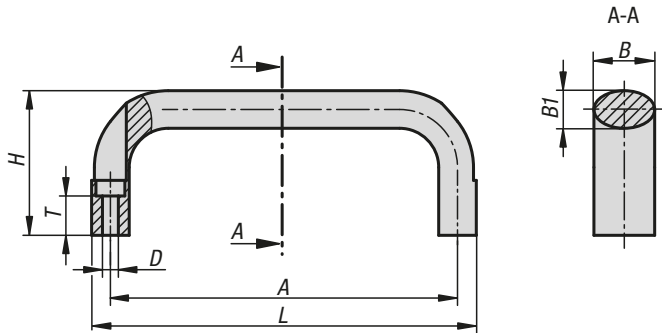
K0204.11120105

**Assembly:**

From the front.

**Accessories:**

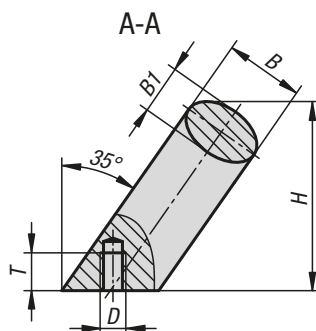
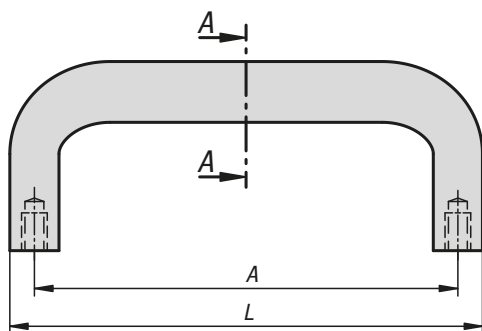
Use ISO 4762-M5/M6 cap screws for mounting the handles.



## KIPP Pull handles, oval with thru hole

| Order No.<br>black | Order No.<br>ruby red | A   | B  | B1 | D   | H  | L   | T    | Load<br>capacity<br>N |
|--------------------|-----------------------|-----|----|----|-----|----|-----|------|-----------------------|
| K0204.11000105     | K0204.11002705        | 100 | 21 | 13 | 5,5 | 50 | 113 | 13,6 | 1000                  |
| K0204.11120105     | K0204.11122705        | 112 | 21 | 13 | 5,5 | 50 | 125 | 13,6 | 1000                  |
| K0204.11120106     | K0204.11122706        | 112 | 25 | 17 | 6,6 | 55 | 129 | 11   | 1000                  |
| K0204.11200105     | K0204.11202705        | 120 | 21 | 13 | 5,5 | 50 | 133 | 13,6 | 1000                  |
| K0204.11200106     | K0204.11202706        | 120 | 25 | 17 | 6,6 | 55 | 137 | 11   | 1000                  |
| K0204.11280105     | K0204.11282705        | 128 | 21 | 13 | 5,5 | 50 | 141 | 13,6 | 1000                  |
| K0204.11280106     | K0204.11282706        | 128 | 25 | 17 | 6,6 | 55 | 145 | 11   | 1000                  |
| K0204.11600105     | K0204.11602705        | 160 | 21 | 13 | 5,5 | 50 | 173 | 13,6 | 1000                  |
| K0204.11600106     | K0204.11602706        | 160 | 25 | 17 | 6,6 | 55 | 177 | 11   | 1000                  |
| K0204.11800106     | K0204.11802706        | 180 | 25 | 17 | 6,6 | 55 | 197 | 11   | 1000                  |

## Pull handles aluminium, oval, slanted



These slanted pull handles are particularly suitable for mounting in places where space is limited. These handles are very strong and robust and can also be used where robust handling is required.

**Material:**  
Aluminium EN AW-6063

**Version:**  
Black or traffic red RAL 3020 powder-coated, natural colour anodized or bright.

**Sample order:**  
K1634.1000106

**Note:**  
The bright version can be painted or coated after assembly.

**Application:**  
Where space is limited in machine and plant construction, toolmaking, furniture industry, rehabilitation and medical technology

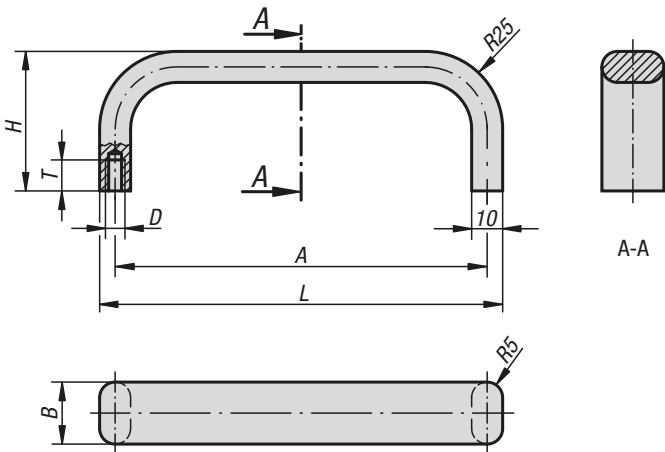
**Assembly:**  
From the rear.

**Advantages:**  
Good access where space is limited.  
Very stable and robust.  
Retaining element for opening and closing covers, panels and hoods.

### KIPP Pull handles aluminium, oval, slanted

| Order No.<br>black<br>powder-coated | Order No.<br>natural<br>anodised | Order No.<br>traffic red RAL 3020<br>powder-coated | Order No.<br>-<br>bright | A   | B  | B1 | D  | H  | L   | T  | Load<br>capacity<br>N |
|-------------------------------------|----------------------------------|----------------------------------------------------|--------------------------|-----|----|----|----|----|-----|----|-----------------------|
| K1634.1000106                       | K1634.1000306                    | K1634.1002706                                      | K1634.10006              | 100 | 21 | 13 | M6 | 50 | 113 | 10 | 1000                  |
| K1634.1120106                       | K1634.1120306                    | K1634.1122706                                      | K1634.11206              | 112 | 21 | 13 | M6 | 50 | 125 | 10 | 1000                  |
| K1634.1200106                       | K1634.1200306                    | K1634.1202706                                      | K1634.12006              | 120 | 21 | 13 | M6 | 50 | 133 | 10 | 1000                  |
| K1634.1280106                       | K1634.1280306                    | K1634.1282706                                      | K1634.12806              | 128 | 21 | 13 | M6 | 50 | 141 | 10 | 1000                  |
| K1634.1600106                       | K1634.1600306                    | K1634.1602706                                      | K1634.16006              | 160 | 21 | 13 | M6 | 50 | 173 | 10 | 1000                  |
| K1634.1120108                       | K1634.1120308                    | K1634.1122708                                      | K1634.11208              | 112 | 25 | 17 | M8 | 55 | 129 | 12 | 1000                  |
| K1634.1200108                       | K1634.1200308                    | K1634.1202708                                      | K1634.12008              | 120 | 25 | 17 | M8 | 55 | 137 | 12 | 1000                  |
| K1634.1280108                       | K1634.1280308                    | K1634.1282708                                      | K1634.12808              | 128 | 25 | 17 | M8 | 55 | 145 | 12 | 1000                  |
| K1634.1600108                       | K1634.1600308                    | K1634.1602708                                      | K1634.16008              | 160 | 25 | 17 | M8 | 55 | 177 | 12 | 1000                  |
| K1634.1800108                       | K1634.1800308                    | K1634.1802708                                      | K1634.18008              | 180 | 25 | 17 | M8 | 55 | 197 | 12 | 1000                  |

Pull handles



**Material:**  
Profile aluminium EN AW-6060

**Version:**  
Matt-finished, black or natural colour anodised

**Sample order:**  
K0205.18001

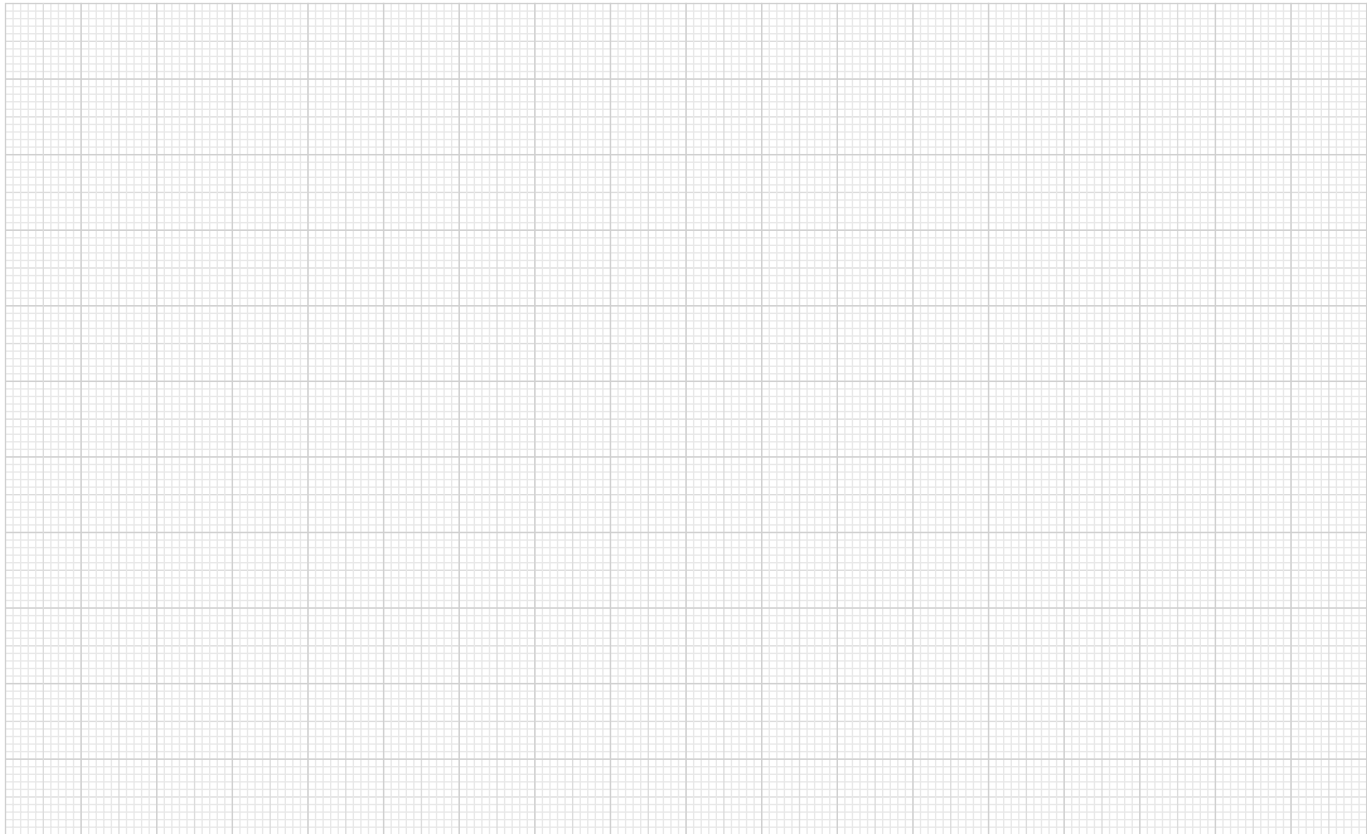
**Note:**  
These elegant flat profile aluminium handles are especially suitable for machines, fixtures, equipment etc.

**Assembly:**  
From the rear.

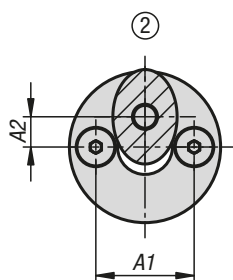
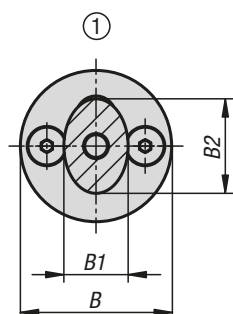
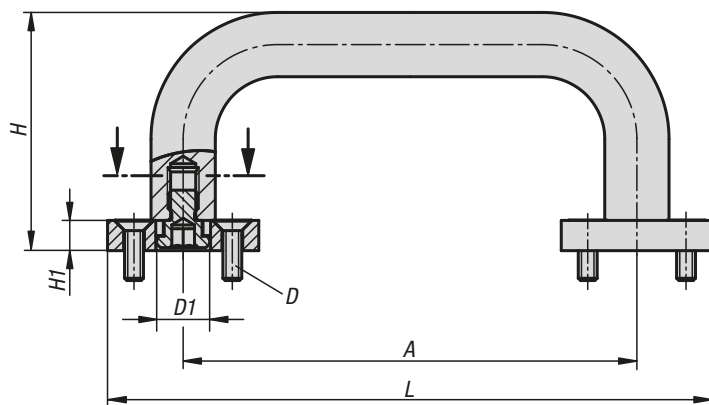
KIPP Pull handles

| Order No.<br>black | Order No.<br>natural | A   | B  | D  | H  | L   | T  | Load<br>capacity<br>N |
|--------------------|----------------------|-----|----|----|----|-----|----|-----------------------|
| K0205.12001        | K0205.12003          | 120 | 20 | M5 | 45 | 130 | 10 | 500                   |
| K0205.18001        | K0205.18003          | 180 | 20 | M5 | 45 | 190 | 10 | 500                   |
| K0205.20001        | K0205.20003          | 200 | 20 | M5 | 45 | 210 | 10 | 500                   |
| K0205.35001        | K0205.35003          | 350 | 20 | M6 | 45 | 360 | 12 | 500                   |

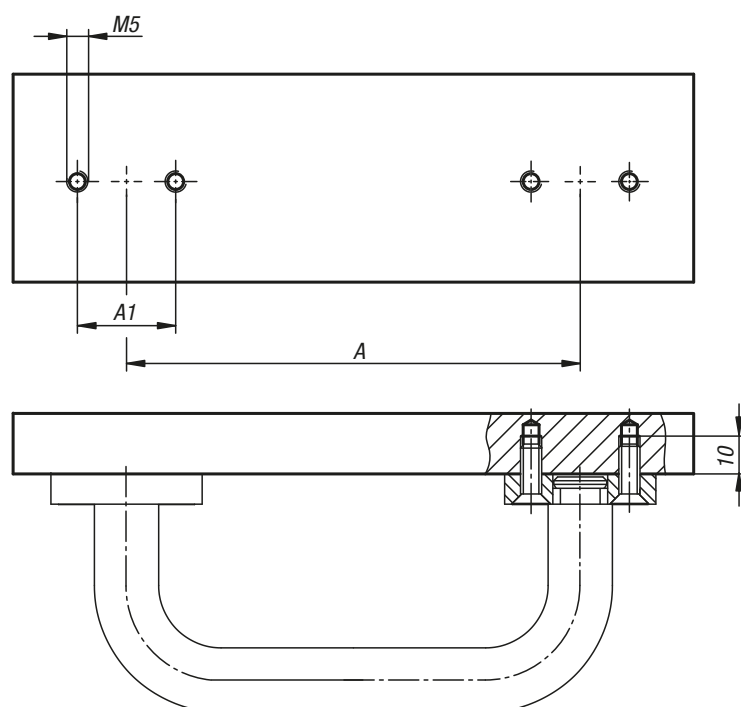
Notes



## Pull handles oval detachable



mounting instructions:



### Material:

Pull handle, oval aluminium EN AW-6060.

Locating pin steel.

Blanking disc steel.

### Version:

Pull handle black powder-coated.

Locating pin and blanking disc black oxidised.

### Sample order:

K0204.10012001

### Note:

The pull handles are mounted on an object by a push-fit system.

Dismantling is carried out when no load is applied.

### Application:

Insert the pull handle into the opening until the grip makes contact with the blanking disc.

Lock by holding the handle parallel and pulling up.

The grip can only be subject to vertical loads.

To release, follow the previous instructions in reverse.

### Assembly:

An object must be prepared before the blanking disc can be mounted.

See mounting instructions drawing.

### Drawing reference:

1) Position disengaged

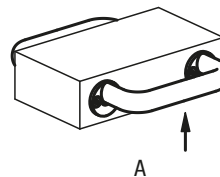
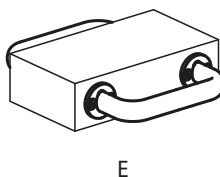
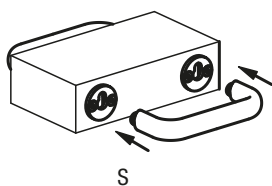
2) Position engaged

S = insert

E = engage

A = lift

# Pull handles oval detachable



## KIPP Pull handles oval detachable

| Order No.      | A   | A1 | A2 | B  | B1 | B2 | D     | D1 | H  | H1 | L   | Load capacity<br>N |
|----------------|-----|----|----|----|----|----|-------|----|----|----|-----|--------------------|
| K0204.10012001 | 100 | 24 | 7  | 35 | 13 | 21 | M5x16 | 12 | 58 | 8  | 135 | 1000               |
| K0204.11212001 | 112 | 24 | 7  | 35 | 13 | 21 | M5x16 | 12 | 58 | 8  | 147 | 1000               |
| K0204.11214001 | 112 | 26 | 8  | 40 | 15 | 25 | M5x16 | 14 | 63 | 8  | 152 | 1000               |
| K0204.12012001 | 120 | 24 | 7  | 35 | 13 | 21 | M5x16 | 12 | 58 | 8  | 155 | 1000               |
| K0204.12014001 | 120 | 26 | 8  | 40 | 17 | 25 | M5x16 | 14 | 63 | 8  | 160 | 1000               |
| K0204.12812001 | 128 | 24 | 7  | 35 | 13 | 21 | M5x16 | 12 | 58 | 8  | 163 | 1000               |
| K0204.12814001 | 128 | 26 | 8  | 40 | 17 | 25 | M5x16 | 14 | 63 | 8  | 168 | 1000               |
| K0204.16012001 | 160 | 24 | 7  | 35 | 13 | 21 | M5x16 | 12 | 58 | 8  | 195 | 1000               |
| K0204.16014001 | 160 | 26 | 8  | 40 | 17 | 25 | M5x16 | 14 | 63 | 8  | 200 | 1000               |
| K0204.18014001 | 180 | 26 | 8  | 40 | 17 | 25 | M5x16 | 14 | 63 | 8  | 220 | 1000               |
| K0204.19214001 | 192 | 26 | 8  | 40 | 17 | 25 | M5x16 | 14 | 63 | 8  | 232 | 1000               |
| K0204.35014001 | 350 | 26 | 8  | 40 | 17 | 25 | M5x16 | 14 | 63 | 8  | 390 | 1000               |



## Pull handles



### Material:

Profile aluminium EN AW-6060

### Version:

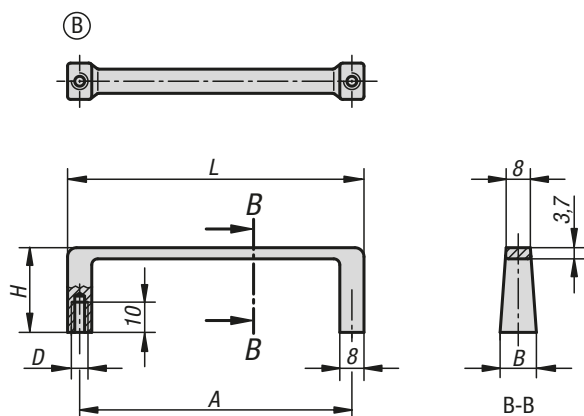
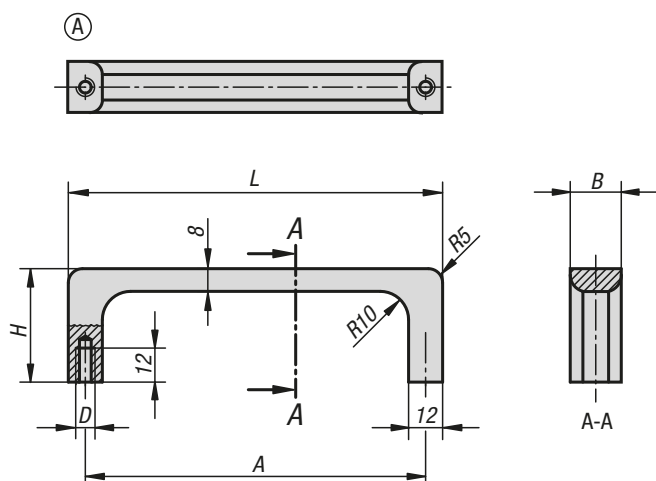
Matt-finished, anodised black or natural tone.

### Sample order:

K0213.12001

### Assembly:

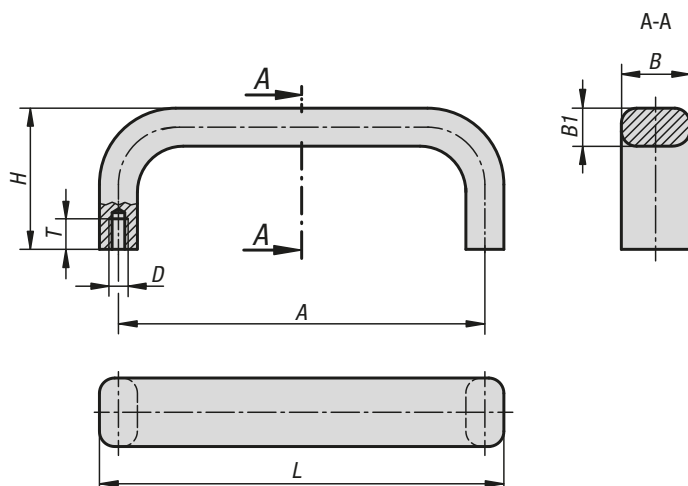
From the rear.



## KIPP Pull handles

| Order No.   | Form | Main colour | A   | B  | D  | H  | L   | Load capacity N |
|-------------|------|-------------|-----|----|----|----|-----|-----------------|
| K0213.12001 | A    | black       | 120 | 18 | M6 | 40 | 132 | 500             |
| K0213.09001 | B    | black       | 90  | 12 | M5 | 28 | 98  | 300             |
| K0213.12003 | A    | natural     | 120 | 18 | M6 | 40 | 132 | 500             |
| K0213.09003 | B    | natural     | 90  | 12 | M5 | 28 | 98  | 300             |

## Pull handles



### Material:

Aluminium.

### Version:

Matt-finished, anodised black or natural tone.

### Sample order:

K1091.088053

### Note for ordering:

Fastening screws included.

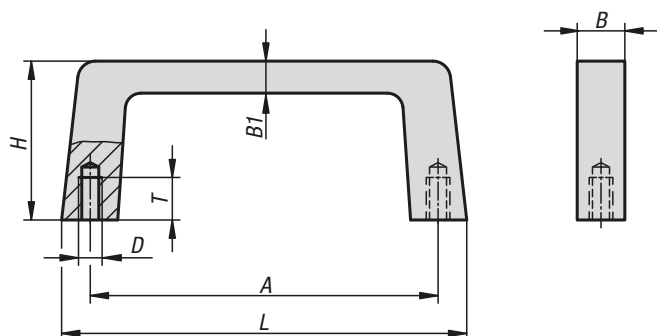
### Assembly:

From the rear.

## KIPP Pull handles

| Order No.<br>natural anodized | Order No.<br>black anodised | A   | B  | B1 | D  | H  | L   | T  | Load<br>capacity<br>N |
|-------------------------------|-----------------------------|-----|----|----|----|----|-----|----|-----------------------|
| K1091.055053                  | K1091.055051                | 55  | 12 | 8  | M5 | 29 | 63  | 10 | 750                   |
| K1091.088053                  | K1091.088051                | 88  | 12 | 8  | M5 | 29 | 96  | 10 | 750                   |
| K1091.100053                  | K1091.100051                | 100 | 12 | 8  | M5 | 39 | 108 | 10 | 750                   |
| K1091.120053                  | K1091.120051                | 120 | 15 | 10 | M5 | 39 | 130 | 10 | 750                   |
| K1091.180053                  | K1091.180051                | 180 | 15 | 10 | M5 | 39 | 190 | 10 | 750                   |
| K1091.235053                  | K1091.235051                | 235 | 15 | 10 | M5 | 39 | 245 | 10 | 750                   |

## Pull handles



### Material:

Aluminium.

### Version:

Matt-finished, anodised black or natural tone.

### Sample order:

K1075.088053

### Note for ordering:

Fastening screws included.

### Assembly:

From the rear.

## KIPP Pull handles

| Order No.<br>natural | Order No.<br>black | A   | B    | B1 | D  | H  | T  | Load<br>capacity<br>N |
|----------------------|--------------------|-----|------|----|----|----|----|-----------------------|
| K1075.055053         | K1075.055051       | 55  | 12,2 | 8  | M5 | 40 | 10 | 750                   |
| K1075.088053         | K1075.088051       | 88  | 12,2 | 8  | M5 | 40 | 10 | 750                   |
| K1075.120053         | K1075.120051       | 120 | 12,2 | 8  | M5 | 40 | 10 | 750                   |
| K1075.180053         | K1075.180051       | 180 | 12,2 | 8  | M5 | 40 | 10 | 750                   |
| K1075.235053         | -                  | 235 | 12,2 | 8  | M5 | 40 | 10 | 750                   |

## Pull handles angled

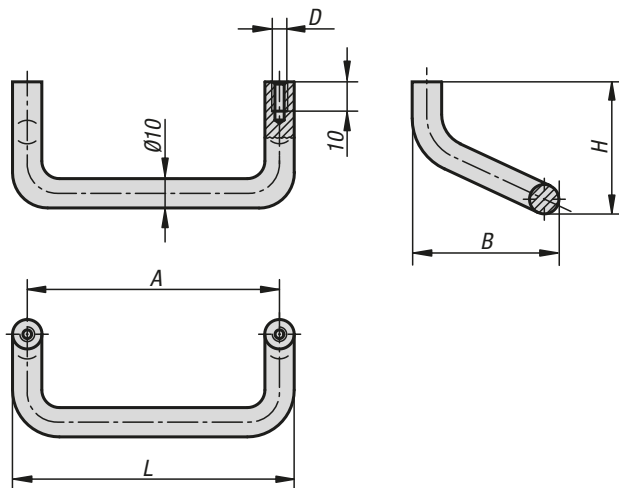


**Material:**  
Aluminium.

**Version:**  
Matt-finished, anodised black or natural tone.

**Sample order:**  
K0219.12001

**Assembly:**  
From the rear.



### KIPP Pull handles angled

| Order No.<br>black | Order No.<br>natural | A   | B  | D  | H  | L   | Load<br>capacity<br>N |
|--------------------|----------------------|-----|----|----|----|-----|-----------------------|
| K0219.08601        | K0219.08603          | 86  | 40 | M5 | 45 | 96  | 500                   |
| K0219.12001        | K0219.12003          | 120 | 40 | M5 | 45 | 130 | 500                   |
| K0219.18001        | K0219.18003          | 180 | 40 | M5 | 45 | 190 | 500                   |

# K0229

## Pull handles angled



**Material:**  
Round aluminium EN AW-6060

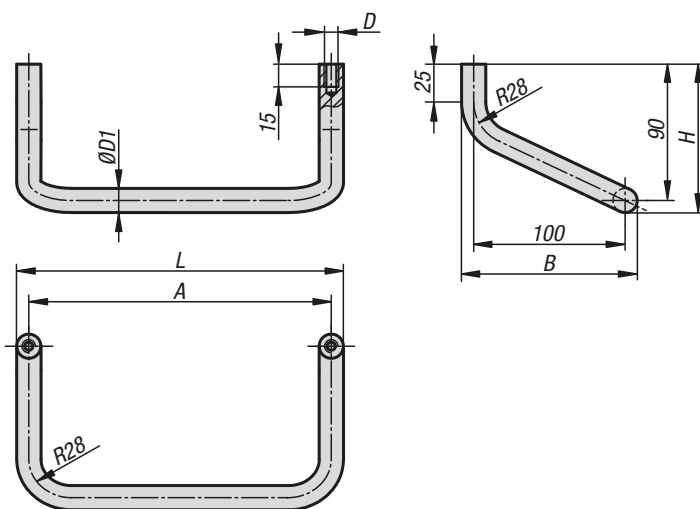
**Version:**  
Ground, glass blasted and matt-gloss black anodised.

**Sample order:**  
K0229.20016

**Note:**  
End washers not included.

**Assembly:**  
From the rear.

**On request:**  
Any handle length.

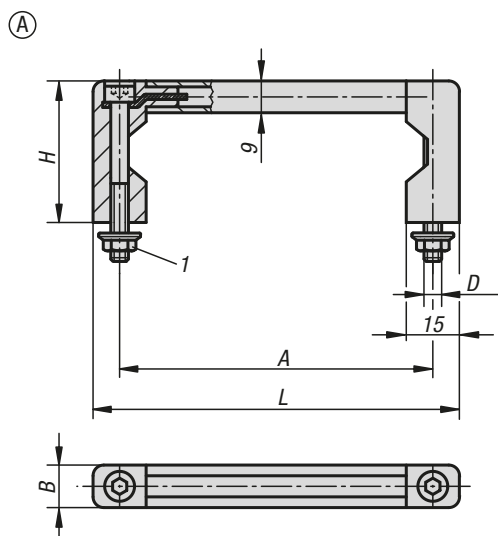


### KIPP Pull handles angled

| Order No.   | A   | B   | D  | D1 | H  | L   | Load<br>capacity<br>N | Order No.<br>end washer |
|-------------|-----|-----|----|----|----|-----|-----------------------|-------------------------|
| K0229.20016 | 200 | 116 | M8 | 16 | 98 | 216 | 1000                  | K0229.16                |
| K0229.25016 | 250 | 116 | M8 | 16 | 98 | 266 | 1000                  | K0229.16                |
| K0229.30016 | 300 | 116 | M8 | 16 | 98 | 316 | 1000                  | K0229.16                |
| K0229.40016 | 400 | 116 | M8 | 16 | 98 | 416 | 1000                  | K0229.16                |
| K0229.50018 | 500 | 118 | M8 | 18 | 99 | 518 | 1000                  | K0229.18                |

## Pull handles

19"



### Material:

Grip aluminium.  
Legs glass-bead reinforced polyamide.

### Version:

Grip matt-finished and natural tone or black anodised.  
Legs fine structure semi-matt, black.

### Sample order:

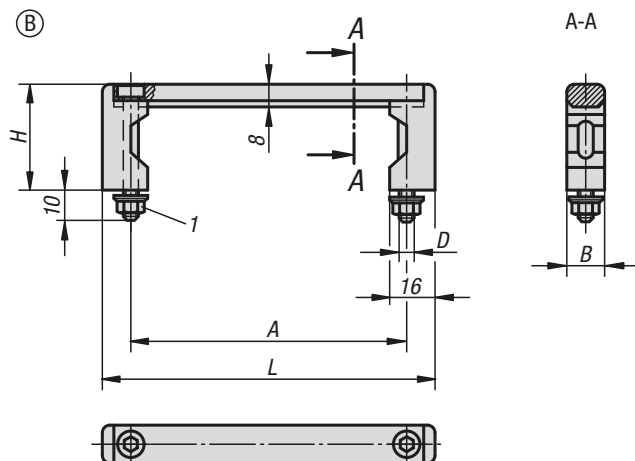
K0216.10001

### Assembly:

From the front.

### Drawing reference:

1) Toothed locknut

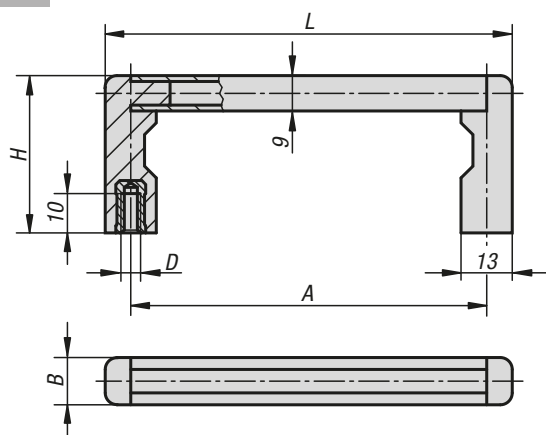


## KIPP Pull handles

| Order No.<br>black | Order No.<br>natural | Form | A   | B  | D  | H  | L   | Load<br>capacity<br>N |
|--------------------|----------------------|------|-----|----|----|----|-----|-----------------------|
| K0216.05501        | K0216.05503          | A    | 55  | 12 | M5 | 40 | 70  | 1000                  |
| K0216.08801        | K0216.08803          | A    | 88  | 12 | M5 | 40 | 103 | 1000                  |
| K0216.10001        | K0216.10003          | A    | 100 | 12 | M5 | 40 | 115 | 1000                  |
| K0216.12001        | K0216.12003          | A    | 120 | 12 | M5 | 40 | 135 | 1000                  |
| K0216.18001        | K0216.18003          | A    | 180 | 12 | M5 | 40 | 195 | 1000                  |
| K0216.23501        | K0216.23503          | A    | 235 | 12 | M5 | 40 | 250 | 1000                  |
| K0216.055101       | K0216.055103         | B    | 55  | 12 | M5 | 40 | 75  | 1000                  |
| K0216.088101       | K0216.088103         | B    | 88  | 12 | M5 | 40 | 108 | 1000                  |
| K0216.100101       | K0216.100103         | B    | 100 | 12 | M5 | 40 | 120 | 1000                  |
| K0216.120101       | K0216.120103         | B    | 120 | 12 | M5 | 40 | 140 | 1000                  |
| K0216.180101       | K0216.180103         | B    | 180 | 12 | M5 | 40 | 200 | 1000                  |
| K0216.235101       | K0216.235103         | B    | 235 | 12 | M5 | 40 | 255 | 1000                  |

## Pull handles

19"



### KIPP Pull handles

| Order No.<br>black | Order No.<br>natural | A   | B  | D  | H  | L   | Load<br>capacity<br>N |
|--------------------|----------------------|-----|----|----|----|-----|-----------------------|
| K0217.05501        | K0217.05503          | 55  | 12 | M5 | 40 | 69  | 1000                  |
| K0217.08801        | K0217.08803          | 88  | 12 | M5 | 40 | 102 | 1000                  |
| K0217.10001        | K0217.10003          | 100 | 12 | M5 | 40 | 114 | 1000                  |
| K0217.12001        | K0217.12003          | 120 | 12 | M5 | 40 | 134 | 1000                  |
| K0217.18001        | K0217.18003          | 180 | 12 | M5 | 40 | 194 | 1000                  |
| K0217.23501        | K0217.23503          | 235 | 12 | M5 | 40 | 249 | 1000                  |



**Material:**  
Grip aluminium.  
Legs high-strength plastic

**Version:**  
Grip natural tone or black anodised.

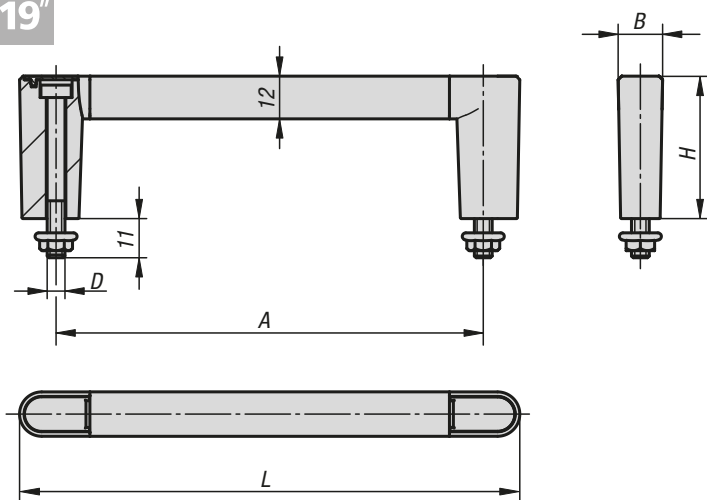
**Sample order:**  
K0217.05501

**Assembly:**  
From the rear.

# K1127

## Pull handles

19"



### KIPP Pull handles

| Order No.<br>black | Order No.<br>natural | A   | B    | D  | H  | L     | Load<br>capacity<br>N |
|--------------------|----------------------|-----|------|----|----|-------|-----------------------|
| K1127.055201       | K1127.055203         | 55  | 12,5 | M5 | 40 | 75,5  | 1000                  |
| K1127.088201       | K1127.088203         | 88  | 12,5 | M5 | 40 | 108,5 | 1000                  |
| K1127.100201       | K1127.100203         | 100 | 12,5 | M5 | 40 | 120,5 | 1000                  |
| K1127.120201       | K1127.120203         | 120 | 12,5 | M5 | 40 | 140,5 | 1000                  |
| K1127.180201       | K1127.180203         | 180 | 12,5 | M5 | 40 | 200,5 | 1000                  |
| K1127.235201       | K1127.235203         | 235 | 12,5 | M5 | 40 | 255,5 | 1000                  |



**Material:**  
Grip aluminium.  
Legs and cap PA 6.  
Screw and flange nut steel.

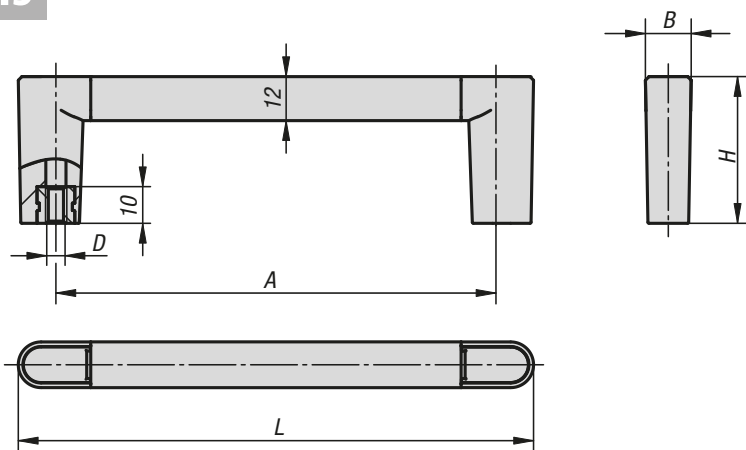
**Version:**  
Grip natural colour or black anodised.  
Screw and flange nut electro zinc-plated.

**Sample order:**  
K1127.120203

**Note:**  
- 19"  
- Closed design  
- Simple assembly  
- The cap is tapped on using a plastic hammer

## Pull handles

19"



**Material:**  
Grip aluminium.  
Legs and cap PA 6.  
Tapped bush steel.

**Version:**  
Grip natural colour or black anodised.  
Tapped bush electro zinc-plated.

**Sample order:**  
K1128.120101

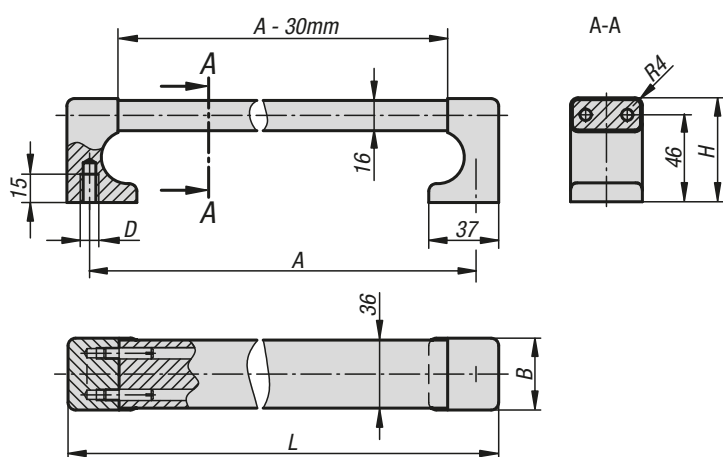
**Note:**  
- 19"  
- Closed design  
- Simple assembly  
- The cap is tapped on using a plastic hammer

### KIPP Pull handles

| Order No.<br>black | Order No.<br>natural | A   | B    | D  | H  | L     | Load<br>capacity<br>N |
|--------------------|----------------------|-----|------|----|----|-------|-----------------------|
| K1128.055101       | K1128.055103         | 55  | 12,5 | M5 | 40 | 75,5  | 1000                  |
| K1128.088101       | K1128.088103         | 88  | 12,5 | M5 | 40 | 108,5 | 1000                  |
| K1128.100101       | K1128.100103         | 100 | 12,5 | M5 | 40 | 120,5 | 1000                  |
| K1128.120101       | K1128.120103         | 120 | 12,5 | M5 | 40 | 140,5 | 1000                  |
| K1128.180101       | K1128.180103         | 180 | 12,5 | M5 | 40 | 200,5 | 1000                  |
| K1128.235101       | K1128.235103         | 235 | 12,5 | M5 | 40 | 255,5 | 1000                  |

# K0228

## Pull handles



**Material:**  
Legs and grip aluminium EN AW-6060.  
Connecting pins stainless steel.

**Version:**  
Legs and grip finely ground, anodised black or natural tone.

**Sample order:**  
K0228.250081

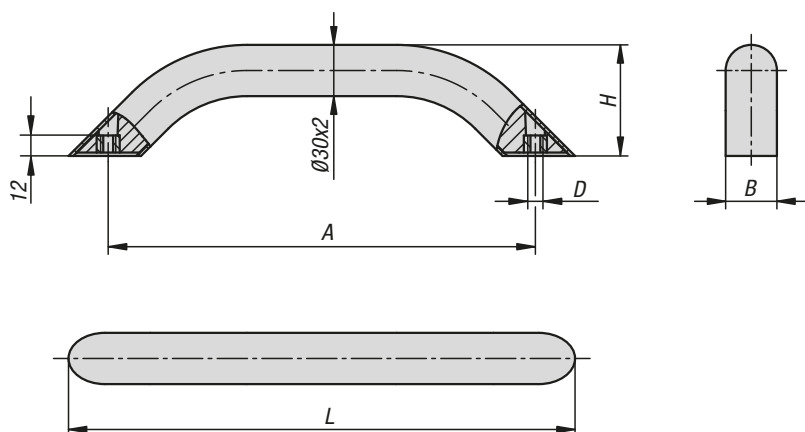
**Note:**  
The solid construction permits this handle series to also be used as edge protectors.

**Assembly:**  
From the rear.

### KIPP Pull handles

| Order No.<br>black anodised | Order No.<br>natural anodised | A   | B  | D  | H  | L   | Load<br>capacity<br>N |
|-----------------------------|-------------------------------|-----|----|----|----|-----|-----------------------|
| K0228.250081                | K0228.250083                  | 250 | 38 | M8 | 55 | 274 | 1000                  |
| K0228.300081                | K0228.300083                  | 300 | 38 | M8 | 55 | 324 | 1000                  |
| K0228.400081                | K0228.400083                  | 400 | 38 | M8 | 55 | 424 | 1000                  |
| K0228.500081                | K0228.500083                  | 500 | 38 | M8 | 55 | 524 | 1000                  |
| K0228.600081                | K0228.600083                  | 600 | 38 | M8 | 55 | 624 | 1000                  |

# Tubular handles round, aluminium



These tubular handles impresses with a combination of solid appearance, high stability and extreme lightness. The patented fastening system enables the handles to be installed from the rear with no screws visible from the front. With its easy-to-clean and abrasion-resistant surface, the handle also blends in perfectly with its surroundings.

## Material:

Round tube aluminium EN AW-6060.  
steel tapped bush.

## Version:

Anodised natural tone or powder-coated black, ruby red RAL 3003 or traffic red RAL 3020.

## Sample order:

K0795.300083

## Note:

Mounting fasteners are not supplied. Cap screws with LONG-LOK thread lock are recommended for secure and long-term stability.

## Assembly:

The tubular handle can be mounted from the rear. DIN socket head screws or hexagon head bolts with thread size M8 are provided for this purpose.

## Advantages:

Solid appearance combined with low weight

Timeless elegant design.

Ergonomic handle shape.

Patented fastening system for rear mounting.

## Accessories:

K0869 socket head screws, DIN 912 / DIN EN ISO 4762  
LONG-LOK thread lock

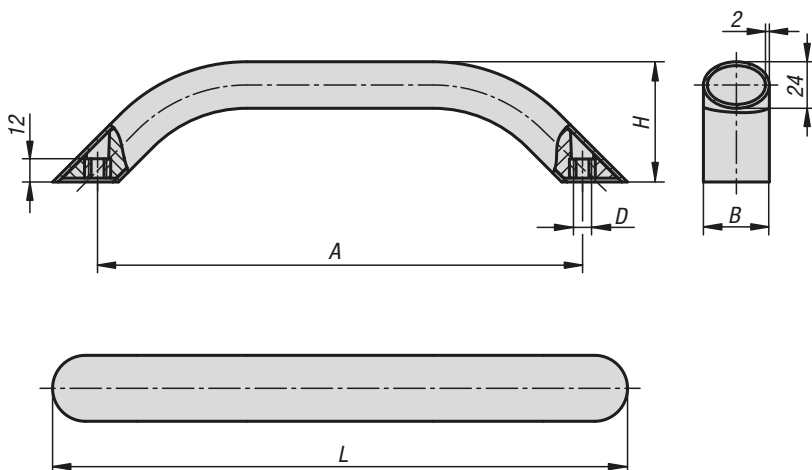
K0869 socket head screws, DIN 912 / DIN EN ISO 4762  
K0871 hexagon head bolts DIN 933 / DIN EN ISO 4017

## KIPP Tubular handles round, aluminium

| Order No.<br>natural<br>anodised | Order No.<br>black<br>powder-coated | Order No.<br>ruby red RAL3003<br>powder-coated | Order No.<br>traffic red RAL 3020<br>powder-coated | A   | B  | D  | H  | L     | Load<br>capacity<br>N |
|----------------------------------|-------------------------------------|------------------------------------------------|----------------------------------------------------|-----|----|----|----|-------|-----------------------|
| K0795.250083                     | K0795.250081                        | K0795.2500827                                  | K0795.2500884                                      | 250 | 30 | M8 | 65 | 296,4 | 1000                  |
| K0795.300083                     | K0795.300081                        | K0795.3000827                                  | K0795.3000884                                      | 300 | 30 | M8 | 65 | 346,4 | 1000                  |
| K0795.400083                     | K0795.400081                        | K0795.4000827                                  | K0795.4000884                                      | 400 | 30 | M8 | 65 | 446,4 | 1000                  |
| K0795.500083                     | K0795.500081                        | K0795.5000827                                  | K0795.5000884                                      | 500 | 30 | M8 | 65 | 546,4 | 1000                  |



# Tubular handles oval, aluminium



These tubular handles impresses with a combination of solid appearance, high stability and extreme lightness. The patented fastening system enables the handles to be installed from the rear with no screws visible from the front. With its easy-to-clean and abrasion-resistant surface, the handle also blends in perfectly with its surroundings.

## Material:

Tube oval aluminium EN AW-6060.  
Tapped bush steel.

## Version:

Anodised natural tone or powder-coated black, ruby red RAL 3003 or traffic red RAL 3020.

## Sample order:

K0796.400083

## Note:

Mounting fasteners are not supplied. Cap screws with LONG-LOK thread lock are recommended for secure and long-term stability.

## Assembly:

The tubular handle can be mounted from the rear. DIN socket head screws or hexagon head bolts with thread size M8 are provided for this purpose.

## Advantages:

Solid appearance combined with low weight

Timeless elegant design.

Ergonomic handle shape.

Patented fastening system for rear mounting.

## Accessories:

K0869 socket head screws, DIN 912 / DIN EN ISO 4762  
LONG-LOK thread lock

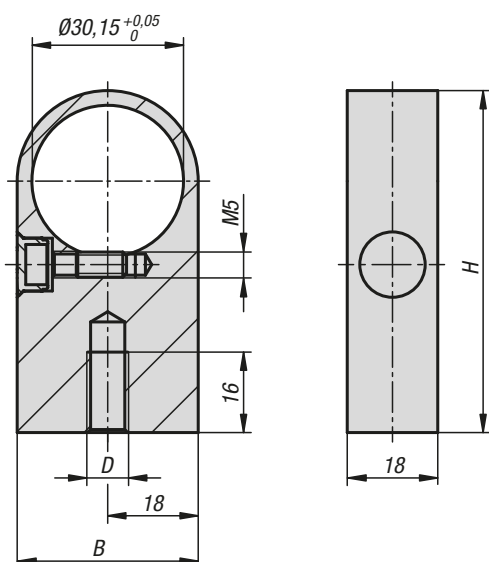
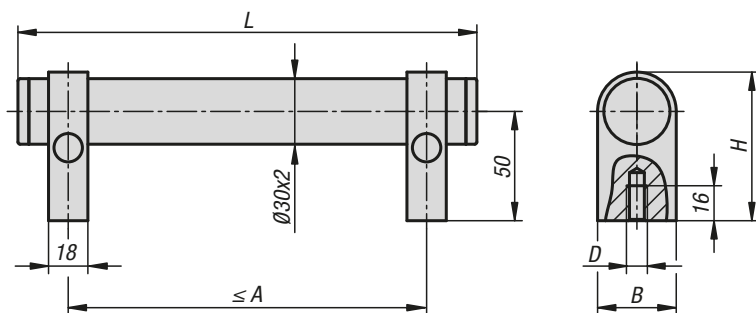
K0869 socket head screws, DIN 912 / DIN EN ISO 4762  
K0871 hexagon head bolts DIN 933 / DIN EN ISO 4017

## KIPP Tubular handles oval, aluminium

| Order No.<br>natural<br>anodised | Order No.<br>black<br>powder-coated | Order No.<br>ruby red RAL3003<br>powder-coated | Order No.<br>traffic red RAL 3020<br>powder-coated | A   | B  | D  | H  | L     | Load<br>capacity<br>N |
|----------------------------------|-------------------------------------|------------------------------------------------|----------------------------------------------------|-----|----|----|----|-------|-----------------------|
| K0796.250083                     | K0796.250081                        | K0796.2500827                                  | K0796.2500884                                      | 250 | 34 | M8 | 62 | 296,4 | 1000                  |
| K0796.300083                     | K0796.300081                        | K0796.3000827                                  | K0796.3000884                                      | 300 | 34 | M8 | 62 | 346,4 | 1000                  |
| K0796.400083                     | K0796.400081                        | K0796.4000827                                  | K0796.4000884                                      | 400 | 34 | M8 | 62 | 446,4 | 1000                  |
| K0796.500083                     | K0796.500081                        | K0796.5000827                                  | K0796.5000884                                      | 500 | 34 | M8 | 62 | 546,4 | 1000                  |

## Tubular handles

adjustable



### Material:

Grip tube EN AW-6060.  
Mounting bracket EN AW-6063.  
End caps thermoplastic.  
Grub screw ISO 4766-14H.

### Version:

Grip tube anodised natural tone.  
Mounting brackets anodised natural tone or black.  
Grip end piece, black.  
Bracket end cap light grey or black.

### Sample order:

K1018.2503011

### Note:

The adjustable tubular handles are supplied unassembled.  
The centre distance for the tubular handles can be freely determined.  
The recommended maximum centre distance can be found in the table under A max.  
Additional mounting brackets can be included for long handle lengths or high loads.  
The mounting brackets are supplied unassembled.

### KIPP Tubular handles adjustable

| Order No.     | Main colour      | Component colour | A max. | B  | D  | H  | L   | Load capacity N |
|---------------|------------------|------------------|--------|----|----|----|-----|-----------------|
| K1018.2503011 | natural anodised | natural anodised | 220    | 36 | M8 | 68 | 250 | 1000            |
| K1018.3003011 | natural anodised | natural anodised | 270    | 36 | M8 | 68 | 300 | 1000            |
| K1018.4003011 | natural anodised | natural anodised | 370    | 36 | M8 | 68 | 400 | 1000            |
| K1018.5003011 | natural anodised | natural anodised | 470    | 36 | M8 | 68 | 500 | 1000            |
| K1018.6003011 | natural anodised | natural anodised | 570    | 36 | M8 | 68 | 600 | 1000            |
| K1018.2503012 | natural anodised | black anodised   | 220    | 36 | M8 | 68 | 250 | 1000            |
| K1018.3003012 | natural anodised | black anodised   | 270    | 36 | M8 | 68 | 300 | 1000            |
| K1018.4003012 | natural anodised | black anodised   | 370    | 36 | M8 | 68 | 400 | 1000            |
| K1018.5003012 | natural anodised | black anodised   | 470    | 36 | M8 | 68 | 500 | 1000            |
| K1018.6003012 | natural anodised | black anodised   | 570    | 36 | M8 | 68 | 600 | 1000            |

### KIPP Mounting brackets

| Order No.   | Main colour      | B  | D  | H  |
|-------------|------------------|----|----|----|
| K1018.08301 | natural anodised | 36 | M8 | 68 |
| K1018.08302 | black anodised   | 36 | M8 | 68 |

## Tubular handles



### Material:

Legs black glass-bead reinforced thermoplastic.  
Grip tube aluminium.

### Version:

Grip, ground and natural colour anodised  
Grip with serrated plastic sheath, black

### Sample order:

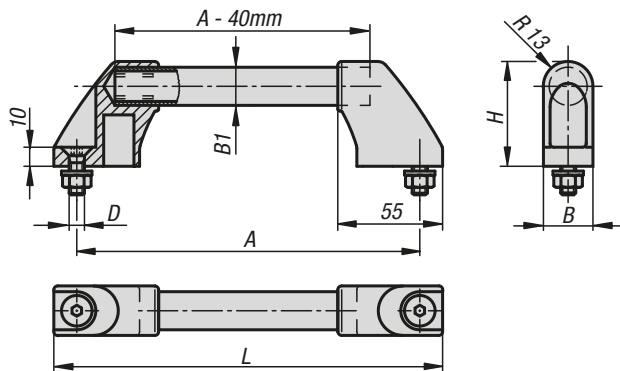
K0210.200

### Note:

The legs have 4 webs in the hole for the grip tube.  
When pushing the tube in, these are trimmed off and produce a precise seating.  
Black electro zinc-plated fastening screws, suitable washers and nuts are supplied.

### Assembly:

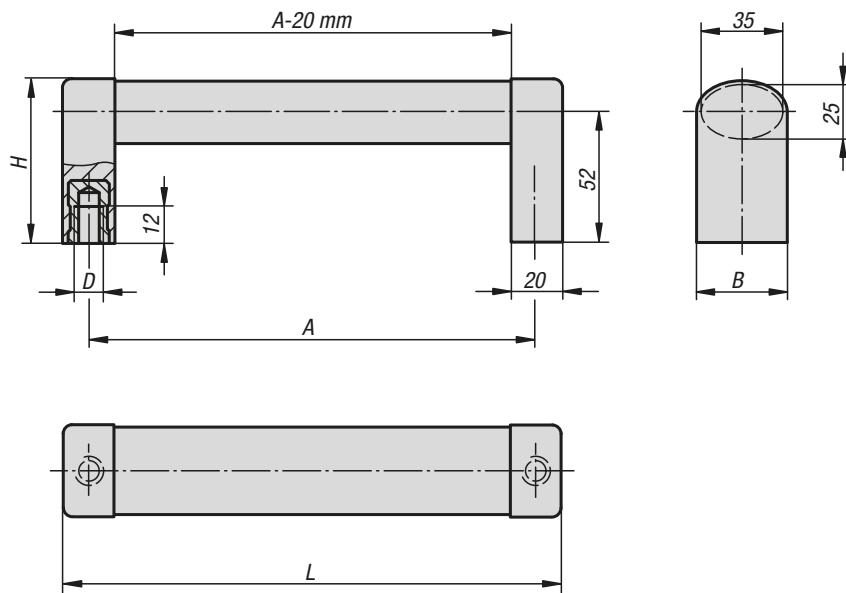
From the front.



## KIPP Pull handles tubular

| Order No.<br>ground and anodised | Order No.<br>serrated plastic sleeve | A   | B  | B1   | D     | H  | L   | Load<br>capacity<br>N |
|----------------------------------|--------------------------------------|-----|----|------|-------|----|-----|-----------------------|
| K0210.180                        | K0210.1803                           | 180 | 26 | 20X2 | M8x20 | 55 | 204 | 500                   |
| K0210.200                        | K0210.2003                           | 200 | 26 | 20X2 | M8x20 | 55 | 224 | 500                   |
| K0210.250                        | K0210.2503                           | 250 | 26 | 20X2 | M8x20 | 55 | 274 | 500                   |
| K0210.300                        | K0210.3003                           | 300 | 26 | 20X2 | M8x20 | 55 | 324 | 500                   |
| K0210.350                        | K0210.3503                           | 350 | 26 | 20X2 | M8x20 | 55 | 374 | 500                   |
| K0210.400                        | K0210.4003                           | 400 | 26 | 20X2 | M8x20 | 55 | 424 | 500                   |
| K0210.500                        | K0210.5003                           | 500 | 26 | 20X2 | M8x20 | 55 | 524 | 500                   |
| K0210.600                        | K0210.6003                           | 600 | 26 | 20X2 | M8x20 | 55 | 624 | 500                   |

## Tubular handles



### Material:

Grip aluminium EN AW-6060.  
Legs polyamide glass-bead reinforced.  
Bushing brass.  
Clamping sleeves stainless steel.

### Version:

Grip natural colour or black anodised.  
Legs aluminium colour or black.

### Sample order:

K0211.1200081

### Note:

Oval-profile handles for joining together. Version with plastic legs and aluminium oval grip.

### Assembly:

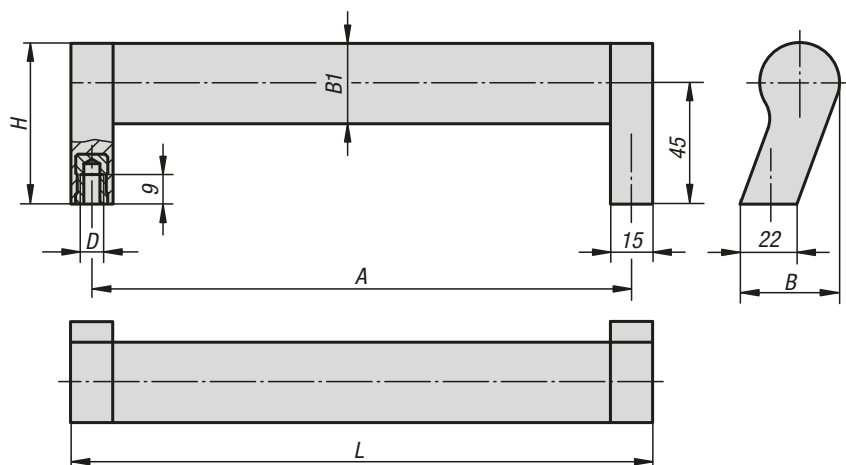
From the rear.

## KIPP Tubular handles

| Order No.     | Main colour | Component colour | A   | B  | D  | H  | L   | Load capacity N |
|---------------|-------------|------------------|-----|----|----|----|-----|-----------------|
| K0211.1200081 | natural     | aluminium tone   | 200 | 36 | M8 | 65 | 220 | 1000            |
| K0211.1250081 | natural     | aluminium tone   | 250 | 36 | M8 | 65 | 270 | 1000            |
| K0211.1300081 | natural     | aluminium tone   | 300 | 36 | M8 | 65 | 320 | 1000            |
| K0211.1400081 | natural     | aluminium tone   | 400 | 36 | M8 | 65 | 420 | 1000            |
| K0211.1500081 | natural     | aluminium tone   | 500 | 36 | M8 | 65 | 520 | 1000            |
| K0211.1200082 | natural     | black            | 200 | 36 | M8 | 65 | 220 | 1000            |
| K0211.1250082 | natural     | black            | 250 | 36 | M8 | 65 | 270 | 1000            |
| K0211.1300082 | natural     | black            | 300 | 36 | M8 | 65 | 320 | 1000            |
| K0211.1400082 | natural     | black            | 400 | 36 | M8 | 65 | 420 | 1000            |
| K0211.1500082 | natural     | black            | 500 | 36 | M8 | 65 | 520 | 1000            |
| K0211.1200083 | black       | black            | 200 | 36 | M8 | 65 | 220 | 1000            |
| K0211.1250083 | black       | black            | 250 | 36 | M8 | 65 | 270 | 1000            |
| K0211.1300083 | black       | black            | 300 | 36 | M8 | 65 | 320 | 1000            |
| K0211.1400083 | black       | black            | 400 | 36 | M8 | 65 | 420 | 1000            |
| K0211.1500083 | black       | black            | 500 | 36 | M8 | 65 | 520 | 1000            |

## Tubular handles

oblique



### Material:

Grip tube aluminium EN AW-6060;  
Legs polyamide, glass-bead reinforced;  
Bushing brass

### Version:

Tube matt-polished anodised.  
Legs black

### Sample order:

K0212.2150061

### Note:

Oblique tubular pull handles in modern industrial design. Webs on the leg spigot provide a precision fit for the tube.

### Assembly:

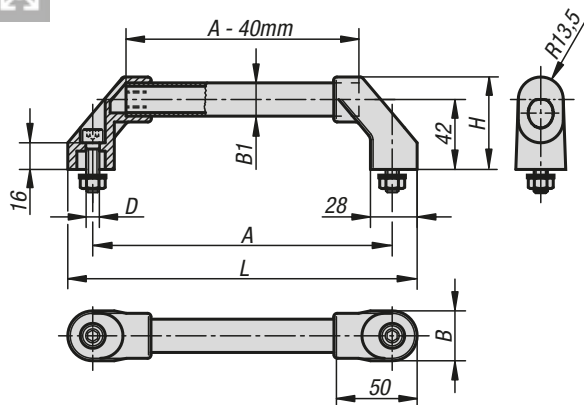
From the rear.

### KIPP Tubular handles, oblique

| Order No.     | A   | B  | B1     | D  | H  | L   | Load capacity N |
|---------------|-----|----|--------|----|----|-----|-----------------|
| K0212.2150061 | 150 | 37 | 30X1,5 | M6 | 60 | 165 | 800             |
| K0212.2200061 | 200 | 37 | 30X1,5 | M6 | 60 | 215 | 800             |
| K0212.2250061 | 250 | 37 | 30X1,5 | M6 | 60 | 265 | 800             |
| K0212.2300061 | 300 | 37 | 30X1,5 | M6 | 60 | 315 | 800             |
| K0212.2350061 | 350 | 37 | 30X1,5 | M6 | 60 | 365 | 800             |
| K0212.2400061 | 400 | 37 | 30X1,5 | M6 | 60 | 415 | 800             |

# K0221

## Tubular handles



### Material:

Legs black glass-bead reinforced thermoplastic.  
Grip aluminium EN AW-6060.

### Version:

Grip, ground and natural colour anodised  
Grip with serrated plastic sheath, black

### Sample order:

K0221.3001

### Note:

The legs have 4 webs in the hole for the grip tube. When pushing the tube in these are trimmed off and produce a precise seating. Black electro zinc-plated fastening screws, suitable washers and nuts are supplied.

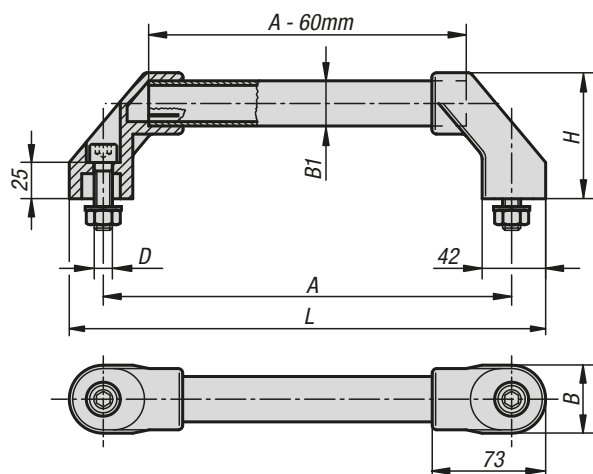
### Assembly:

From the front.

### KIPP Tubular handles

| Order No.<br>ground and anodised | Order No.<br>serrated plastic sleeve | A   | B  | B1   | D     | H    | L   | Load capacity N |
|----------------------------------|--------------------------------------|-----|----|------|-------|------|-----|-----------------|
| K0221.1801                       | K0221.1802                           | 180 | 30 | 20X2 | M8X30 | 55,5 | 210 | 1000            |
| K0221.2001                       | K0221.2002                           | 200 | 30 | 20X2 | M8X30 | 55,5 | 230 | 1000            |
| K0221.2501                       | K0221.2502                           | 250 | 30 | 20X2 | M8X30 | 55,5 | 280 | 1000            |
| K0221.3001                       | K0221.3002                           | 300 | 30 | 20X2 | M8X30 | 55,5 | 330 | 1000            |
| K0221.3501                       | K0221.3502                           | 350 | 30 | 20X2 | M8X30 | 55,5 | 380 | 1000            |
| K0221.4001                       | K0221.4002                           | 400 | 30 | 20X2 | M8X30 | 55,5 | 430 | 1000            |
| K0221.5001                       | K0221.5002                           | 500 | 30 | 20X2 | M8X30 | 55,5 | 530 | 1000            |
| K0221.6001                       | K0221.6002                           | 600 | 30 | 20X2 | M8X30 | 55,5 | 630 | 1000            |

# Tubular handles



## Material:

Legs black glass-bead reinforced thermoplastic.  
Grip aluminium EN AW-6060 or stainless steel 1.4301.

## Version:

Connecting tube aluminium, ground and natural tone anodised or with serrated plastic cover.  
Connecting tube stainless steel, fine ground.

## Sample order:

K0222.3501

## Note:

The legs have 4 webs in the hole for the grip tube. When pushing the tube in these are trimmed off and produce a precise seating.  
Black electro zinc-plated fastening screws together with washers and nuts are supplied.

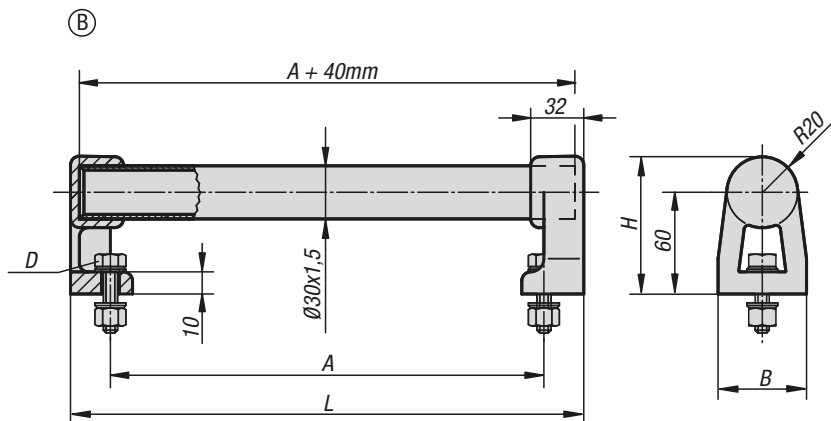
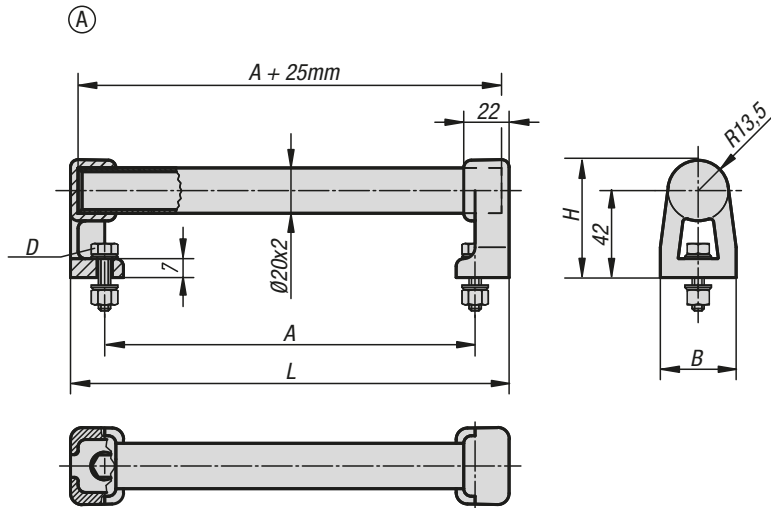
## Assembly:

From the front.

## KIPP Tubular handles

| Order No.<br>aluminium<br>ground and anodised | Order No.<br>aluminium<br>serrated plastic sleeve | Order No.<br>stainless steel | A   | B  | B1     | D      | H  | L   | Load<br>capacity<br>N |
|-----------------------------------------------|---------------------------------------------------|------------------------------|-----|----|--------|--------|----|-----|-----------------------|
| K0222.2501                                    | K0222.2502                                        | K0222.2503                   | 250 | 44 | 30X1,5 | M10x45 | 80 | 294 | 1000                  |
| K0222.3001                                    | K0222.3002                                        | K0222.3003                   | 300 | 44 | 30X1,5 | M10x45 | 80 | 344 | 1000                  |
| K0222.3501                                    | K0222.3502                                        | K0222.3503                   | 350 | 44 | 30X1,5 | M10x45 | 80 | 394 | 1000                  |
| K0222.4001                                    | K0222.4002                                        | K0222.4003                   | 400 | 44 | 30X1,5 | M10x45 | 80 | 444 | 1000                  |
| K0222.5001                                    | K0222.5002                                        | K0222.5003                   | 500 | 44 | 30X1,5 | M10x45 | 80 | 544 | 1000                  |
| K0222.6001                                    | K0222.6002                                        | K0222.6003                   | 600 | 44 | 30X1,5 | M10x45 | 80 | 644 | 1000                  |

## Tubular handles



### Material:

Grip aluminium EN AW-6060.  
Legs glass-bead reinforced polyamide.

### Version:

Grip natural colour anodised or with black serrated plastic cover.

### Sample order:

K0223.150203

### Note:

The legs have 2 or 4 PVC profile pins in the hole for the grip tube. When pushing the tube in these are trimmed off and produce a precise seating.  
Black electro zinc-plated fastening screws, suitable washers and nuts are supplied.

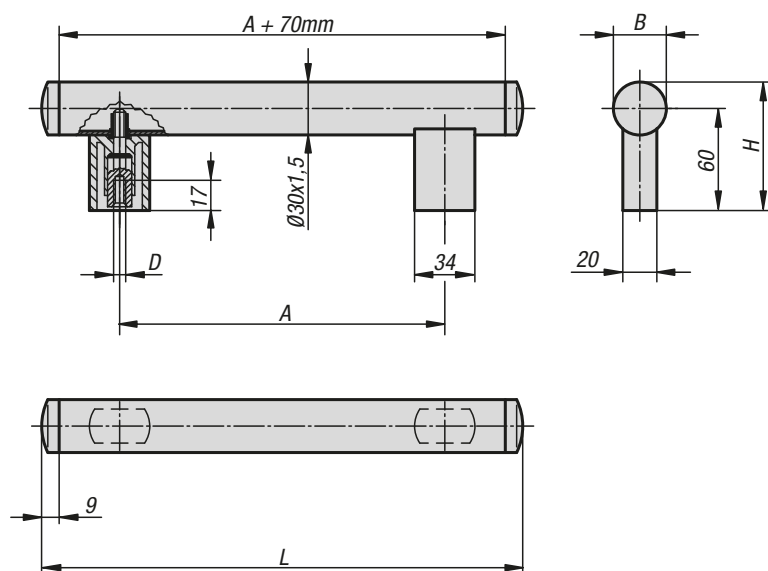
### Assembly:

From the front.

## KIPP Tubular handles

| Order No.<br>natural | Order No.<br>black | Form | A   | B  | D     | H    | L   | Load<br>capacity<br>N |
|----------------------|--------------------|------|-----|----|-------|------|-----|-----------------------|
| K0223.150203         | K0223.150202       | A    | 150 | 32 | M5x20 | 55,5 | 184 | 1000                  |
| K0223.200203         | K0223.200202       | A    | 200 | 32 | M5x20 | 55,5 | 234 | 1000                  |
| K0223.300203         | K0223.300202       | A    | 300 | 32 | M5x20 | 55,5 | 334 | 1000                  |
| K0223.400203         | K0223.400202       | A    | 400 | 32 | M5x20 | 55,5 | 434 | 1000                  |
| K0223.500203         | K0223.500202       | A    | 500 | 32 | M5x20 | 55,5 | 534 | 1000                  |
| K0223.150303         | K0223.150302       | B    | 150 | 48 | M8x25 | 80   | 200 | 1000                  |
| K0223.200303         | K0223.200302       | B    | 200 | 48 | M8x25 | 80   | 250 | 1000                  |
| K0223.300303         | K0223.300302       | B    | 300 | 48 | M8x25 | 80   | 350 | 1000                  |
| K0223.400303         | K0223.400302       | B    | 400 | 48 | M8x25 | 80   | 450 | 1000                  |
| K0223.500303         | K0223.500302       | B    | 500 | 48 | M8x25 | 80   | 550 | 1000                  |

## Tubular handles

**Material:**

Legs and tube cap glass-bead reinforced polyamide.  
Grip aluminium EN AW-6060.

**Version:**

Grip finely ground and anodised black or natural tone.  
Legs and tube cap semi-matt with fine texture, black.

**Sample order:**

K0224.200061

**Note:**

The legs and tube are fastened together with pull-out resistant rivet nuts.

**Assembly:**

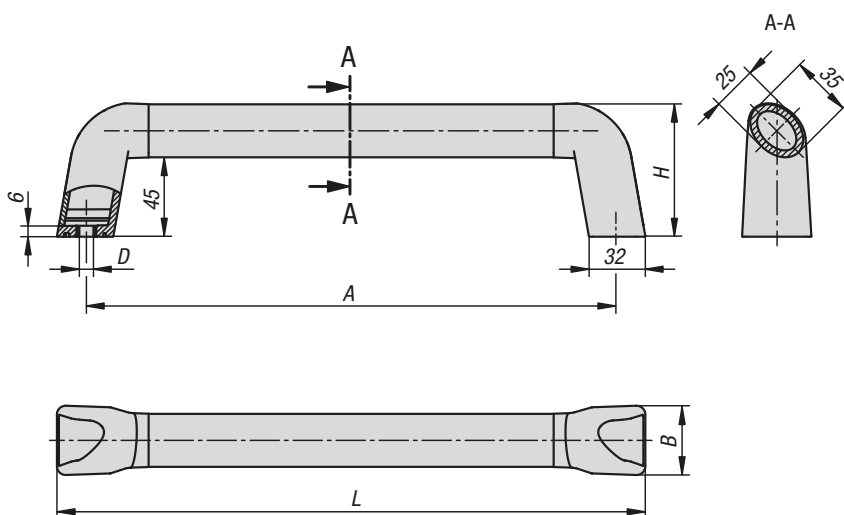
From the rear.

## KIPP Tubular handles

| Order No.    | Main colour      | A   | B  | D  | H  | L   | Load capacity N |
|--------------|------------------|-----|----|----|----|-----|-----------------|
| K0224.200061 | black anodised   | 200 | 30 | M6 | 75 | 288 | 800             |
| K0224.250061 | black anodised   | 250 | 30 | M6 | 75 | 338 | 800             |
| K0224.300061 | black anodised   | 300 | 30 | M6 | 75 | 388 | 800             |
| K0224.400061 | black anodised   | 400 | 30 | M6 | 75 | 488 | 800             |
| K0224.500061 | black anodised   | 500 | 30 | M6 | 75 | 588 | 800             |
| K0224.200063 | natural anodised | 200 | 30 | M6 | 75 | 288 | 800             |
| K0224.250063 | natural anodised | 250 | 30 | M6 | 75 | 338 | 800             |
| K0224.300063 | natural anodised | 300 | 30 | M6 | 75 | 388 | 800             |
| K0224.400063 | natural anodised | 400 | 30 | M6 | 75 | 488 | 800             |
| K0224.500063 | natural anodised | 500 | 30 | M6 | 75 | 588 | 800             |



# Tubular handles "Bighand"



The newly designed Bighand tubular handle with its ergonomic oval shape and selected tube size provides a secure and comfortable grip. Its timeless elegant design makes it attractive and the variable colour scheme means it can be optimally adapted to its surroundings.

## Material:

Oval tube aluminium.  
End piece thermoplastic polyamide.  
End cap thermoplastic polyamide.  
Adapter bush stainless steel.

## Version:

Oval tube black grey powder-coated (glossy), black anodised (matt) or natural tone anodised (matt).  
End piece black grey RAL 7021.  
End cap black grey RAL 7021, pure orange RAL 2004, rape yellow RAL 1021, traffic red RAL 3020, signal green RAL 6032 or traffic blue RAL 5017.

## Sample order:

K1445.18084 (cap colour traffic red.)

## Note for ordering:

Δ Enter the required colour code here.

## Note:

Fastening materials are not supplied.  
Cap screws with thread lock are recommended for a secure and permanent hold.

## Temperature range:

Permanent temperature max. 100 °C.  
Short time use up to 180 °C.

## Assembly:

The end pieces are designed so that the tubular handle can be fastened either from the front or rear. DIN M8 cap screws or hex head screws are provided for this purpose. After mounting, the end caps can be pressed in by hand. Slots are provided on both sides of the end caps so that they can be removed with a screwdriver without damaging them.

## On request:

Special lengths "A".

## Tubular handles “Bighand”



### Accessories:

K0869 Socket head screws DIN 912 / DIN EN ISO 4762  
with thread lock

K0869 Socket head screw DIN 912 / DIN EN ISO 4762

K0871 Hex head screws DIN 933 / DIN EN ISO 4017

K1145 Hex nuts 934 / DIN EN ISO 4032 / DIN EN 24032

K0868 Washers DIN 125 / DIN EN ISO 7089 Form A

colour codes:



black Grey  
 $\Delta = 1$   
RAL 7021



Pure orange  
 $\Delta = 2$   
RAL 2004



colza yellow  
 $\Delta = 16$   
RAL 1021



traffic red  
 $\Delta = 84$   
RAL 3020



signal green  
 $\Delta = 86$   
RAL 6032



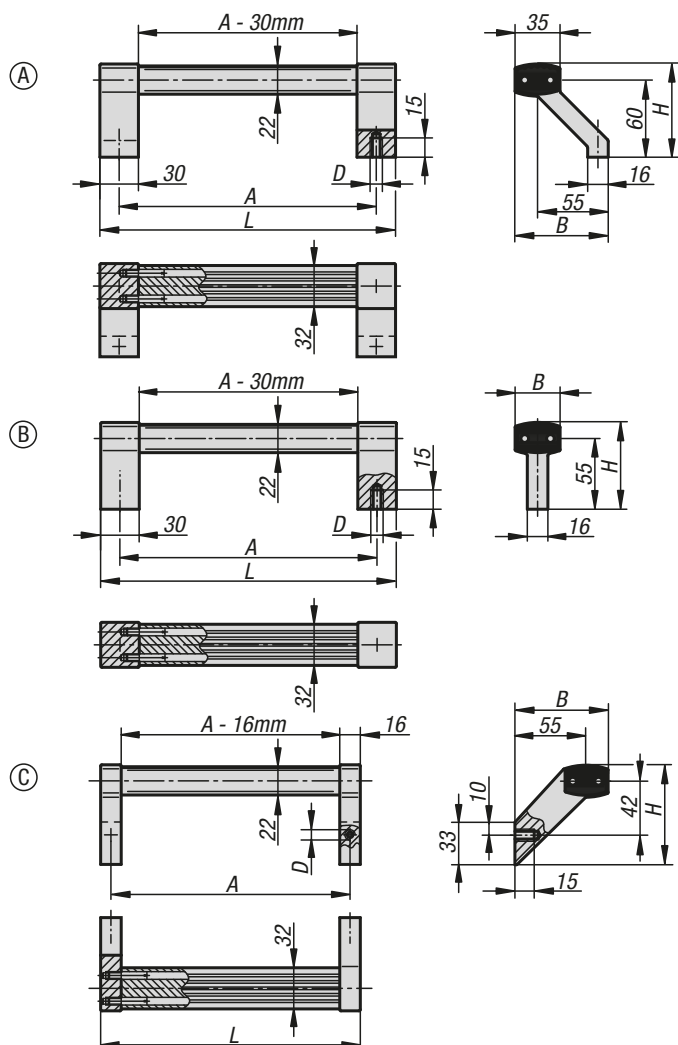
traffic blue  
 $\Delta = 87$   
RAL 5017



### KIPP Tubular handles “Bighand”

| Order No.<br>black grey | Order No.<br>black | Order No.<br>natural | A   | B    | D | H    | L     | Load<br>capacity<br>N |
|-------------------------|--------------------|----------------------|-----|------|---|------|-------|-----------------------|
| K1445.180Δ              | K1445.18001Δ       | K1445.18003Δ         | 180 | 39,2 | 8 | 75,5 | 213,4 | 1000                  |
| K1445.200Δ              | K1445.20001Δ       | K1445.20003Δ         | 200 | 39,2 | 8 | 75,5 | 233,4 | 1000                  |
| K1445.250Δ              | K1445.25001Δ       | K1445.25003Δ         | 250 | 39,2 | 8 | 75,5 | 283,4 | 1000                  |
| K1445.300Δ              | K1445.30001Δ       | K1445.30003Δ         | 300 | 39,2 | 8 | 75,5 | 333,4 | 1000                  |
| K1445.350Δ              | K1445.35001Δ       | K1445.35003Δ         | 350 | 39,2 | 8 | 75,5 | 383,4 | 1000                  |
| K1445.400Δ              | K1445.40001Δ       | K1445.40003Δ         | 400 | 39,2 | 8 | 75,5 | 433,4 | 1000                  |
| K1445.500Δ              | K1445.50001Δ       | K1445.50003Δ         | 500 | 39,2 | 8 | 75,5 | 533,4 | 1000                  |
| K1445.600Δ              | K1445.60001Δ       | K1445.60003Δ         | 600 | 39,2 | 8 | 75,5 | 633,4 | 1000                  |

# Tubular handles



## Material:

Legs and grip aluminium profile EN AW-6060.  
Connecting pins stainless steel.

## Version:

Legs glass-bead blasted and semi-matt black anodised.

Grip brushed and natural colour anodised, black anodised or titanium colour powder-coated.

## Sample order:

K0131.2000811

## Note:

These tubular handles are characterised by robust construction and high load rating.

M8x16 hexagon head DIN 933 electro zinc-plated screws and DIN EN ISO 7089 electro zinc-plated washers are included.

## Assembly:

From the rear.

## KIPP Tubular handles, Form A

| Order No.<br>grip black anodized | Order No.<br>grip titanium coloured powder-coated | Order No.<br>grip natural colour anodized | A   | B    | D  | H    | L   | Load<br>capacity<br>N |
|----------------------------------|---------------------------------------------------|-------------------------------------------|-----|------|----|------|-----|-----------------------|
| K0131.2000811                    | K0131.2000812                                     | K0131.2000813                             | 200 | 72,5 | M8 | 72,5 | 230 | 1000                  |
| K0131.3000811                    | K0131.3000812                                     | K0131.3000813                             | 300 | 72,5 | M8 | 72,5 | 330 | 1000                  |
| K0131.4000811                    | K0131.4000812                                     | K0131.4000813                             | 400 | 72,5 | M8 | 72,5 | 430 | 1000                  |
| K0131.5000811                    | K0131.5000812                                     | K0131.5000813                             | 500 | 72,5 | M8 | 72,5 | 530 | 1000                  |

## KIPP Tubular handles, Form B

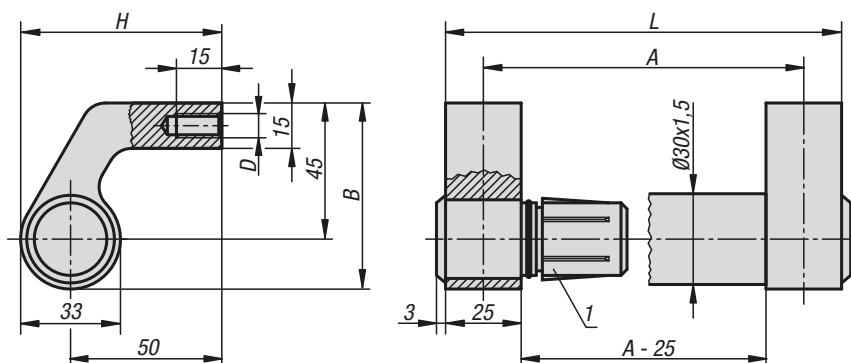
| Order No.<br>grip black anodized | Order No.<br>grip titanium coloured powder-coated | Order No.<br>grip natural colour anodized | A   | B  | D  | H    | L   | Load<br>capacity<br>N |
|----------------------------------|---------------------------------------------------|-------------------------------------------|-----|----|----|------|-----|-----------------------|
| K0131.2000821                    | K0131.2000822                                     | K0131.2000823                             | 200 | 35 | M8 | 67,5 | 230 | 1000                  |
| K0131.3000821                    | K0131.3000822                                     | K0131.3000823                             | 300 | 35 | M8 | 67,5 | 330 | 1000                  |
| K0131.4000821                    | K0131.4000822                                     | K0131.4000823                             | 400 | 35 | M8 | 67,5 | 430 | 1000                  |
| K0131.5000821                    | K0131.5000822                                     | K0131.5000823                             | 500 | 35 | M8 | 67,5 | 530 | 1000                  |

## KIPP Tubular handles, Form C

| Order No.<br>grip black anodized | Order No.<br>grip titanium coloured powder-coated | Order No.<br>grip natural colour anodized | A   | B    | D  | H    | L   | Load<br>capacity<br>N |
|----------------------------------|---------------------------------------------------|-------------------------------------------|-----|------|----|------|-----|-----------------------|
| K0131.2000831                    | K0131.2000832                                     | K0131.2000833                             | 200 | 72,5 | M8 | 77,5 | 216 | 1000                  |
| K0131.3000831                    | K0131.3000832                                     | K0131.3000833                             | 300 | 72,5 | M8 | 77,5 | 316 | 1000                  |
| K0131.4000831                    | K0131.4000832                                     | K0131.4000833                             | 400 | 72,5 | M8 | 77,5 | 416 | 1000                  |
| K0131.5000831                    | K0131.5000832                                     | K0131.5000833                             | 500 | 72,5 | M8 | 77,5 | 516 | 1000                  |

## Tubular handles

angled



### Material:

Legs EN AW-6060 extruded.  
Grip inserts glass-bead reinforced thermoplastic.  
Grip EN AW-6060.

### Version:

Legs matt-gloss black anodised.  
Grip insert black.  
Grip fine ground and anodised, powder-coated or with serrated black plastic sleeve.

### Sample order:

K0132.3001

### Note:

The push-fit handle system shown here can be supplied as complete handles or as pre-assembled legs and grip inserts for mounting custom length grip tubes. The connection between leg and grip tube is splash-proof and absolutely tight.

### Assembly:

From the rear.

### On request:

Supports for larger tube lengths.

### Drawing reference:

1) grip insert

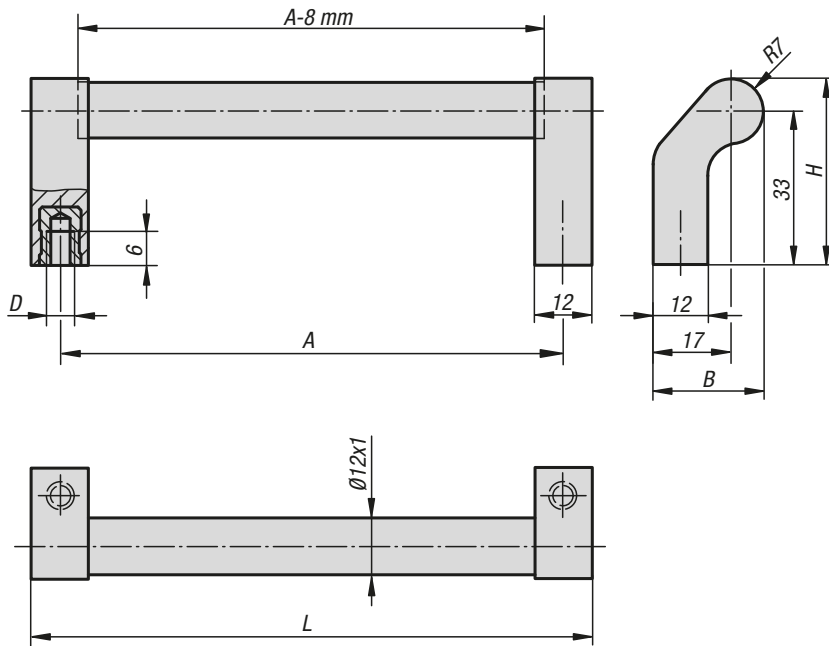
## KIPP Tubular handles angled

| Order No.<br>natural anodized | Order No.<br>black anodised | Order No.<br>black powder-coated | Order No.<br>black plastic ribbed | A   | B    | D  | H    | L   | Load<br>capacity<br>N |
|-------------------------------|-----------------------------|----------------------------------|-----------------------------------|-----|------|----|------|-----|-----------------------|
| K0132.2001                    | K0132.2002                  | K0132.2003                       | K0132.2004                        | 200 | 61,5 | M8 | 66,5 | 225 | 1000                  |
| K0132.2501                    | K0132.2502                  | K0132.2503                       | K0132.2504                        | 250 | 61,5 | M8 | 66,5 | 275 | 1000                  |
| K0132.3001                    | K0132.3002                  | K0132.3003                       | K0132.3004                        | 300 | 61,5 | M8 | 66,5 | 325 | 1000                  |
| K0132.3501                    | K0132.3502                  | K0132.3503                       | K0132.3504                        | 350 | 61,5 | M8 | 66,5 | 375 | 1000                  |
| K0132.4001                    | K0132.4002                  | K0132.4003                       | K0132.4004                        | 400 | 61,5 | M8 | 66,5 | 425 | 1000                  |
| K0132.5001                    | K0132.5002                  | K0132.5003                       | K0132.5004                        | 500 | 61,5 | M8 | 66,5 | 525 | 1000                  |
| K0132.6001                    | K0132.6002                  | K0132.6003                       | K0132.6004                        | 600 | 61,5 | M8 | 66,5 | 625 | 1000                  |

# Tubular handles

angled

19"



## Material:

Grip aluminium EN AW-6060 or stainless steel 1.4301.  
Legs polyamide glass-bead reinforced.  
Bushing brass.

## Version:

Grip natural colour, black anodised or finely ground  
stainless steel.  
Legs matt black.

## Sample order:

K0235.088041

## Note:

Clamping webs give a precision fit of tube to legs.

## Assembly:

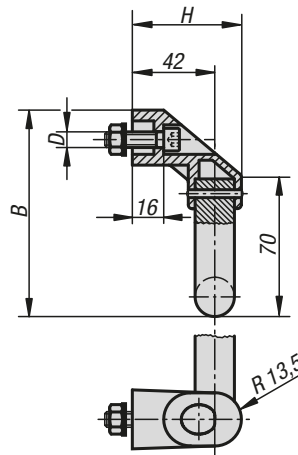
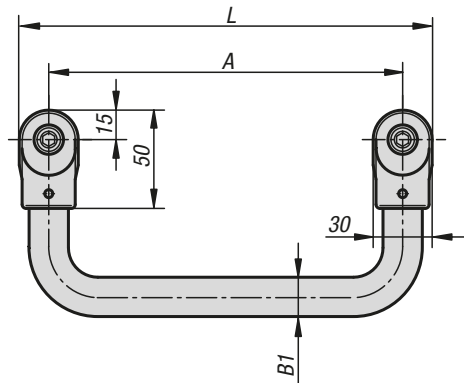
From the rear.

## KIPP Tubular handles angled

| Order No.    | Main material   | Main colour      | A   | B  | D  | H  | L   | Load capacity N |
|--------------|-----------------|------------------|-----|----|----|----|-----|-----------------|
| K0235.088041 | aluminium       | natural anodised | 88  | 24 | M4 | 40 | 100 | 200             |
| K0235.096041 | aluminium       | natural anodised | 96  | 24 | M4 | 40 | 108 | 200             |
| K0235.120041 | aluminium       | natural anodised | 120 | 24 | M4 | 40 | 132 | 200             |
| K0235.128041 | aluminium       | natural anodised | 128 | 24 | M4 | 40 | 140 | 200             |
| K0235.160041 | aluminium       | natural anodised | 160 | 24 | M4 | 40 | 172 | 200             |
| K0235.180041 | aluminium       | natural anodised | 180 | 24 | M4 | 40 | 192 | 200             |
| K0235.088042 | aluminium       | black anodised   | 88  | 24 | M4 | 40 | 100 | 200             |
| K0235.096042 | aluminium       | black anodised   | 96  | 24 | M4 | 40 | 108 | 200             |
| K0235.120042 | aluminium       | black anodised   | 120 | 24 | M4 | 40 | 132 | 200             |
| K0235.128042 | aluminium       | black anodised   | 128 | 24 | M4 | 40 | 140 | 200             |
| K0235.160042 | aluminium       | black anodised   | 160 | 24 | M4 | 40 | 172 | 200             |
| K0235.180042 | aluminium       | black anodised   | 180 | 24 | M4 | 40 | 192 | 200             |
| K0235.088043 | stainless steel | ground           | 88  | 24 | M4 | 40 | 100 | 200             |
| K0235.096043 | stainless steel | ground           | 96  | 24 | M4 | 40 | 108 | 200             |
| K0235.120043 | stainless steel | ground           | 120 | 24 | M4 | 40 | 132 | 200             |
| K0235.128043 | stainless steel | ground           | 128 | 24 | M4 | 40 | 140 | 200             |
| K0235.160043 | stainless steel | ground           | 160 | 24 | M4 | 40 | 172 | 200             |
| K0235.180043 | stainless steel | ground           | 180 | 24 | M4 | 40 | 192 | 200             |

## Tubular handles

angled



### Material:

Leg glass-bead reinforced thermoplastic.  
Grip aluminium tube.

### Version:

Black thermoplastic.  
Anodised aluminium.

### Sample order:

K0220.3002

### Note:

The legs are pinned to the aluminium tube. Black electro zinc-plated cap screws, nuts and washers are supplied.

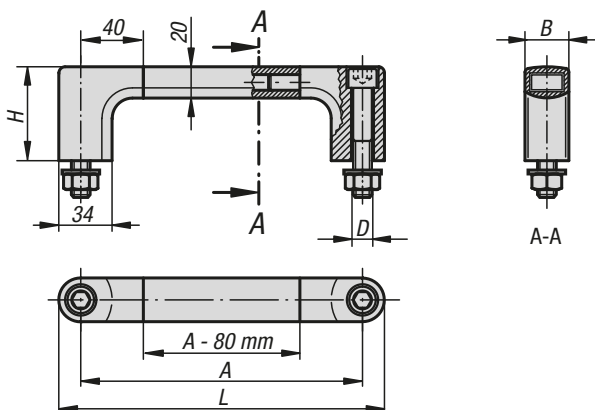
### Assembly:

From the front.

## KIPP Tubular handles angled

| Order No.<br>natural | Order No.<br>black | A   | B   | B1 | D     | H    | L   | Load<br>capacity<br>N |
|----------------------|--------------------|-----|-----|----|-------|------|-----|-----------------------|
| K0220.2001           | K0220.2002         | 200 | 115 | 20 | M8x30 | 55,5 | 230 | 800                   |
| K0220.2501           | K0220.2502         | 250 | 115 | 20 | M8x30 | 55,5 | 280 | 800                   |
| K0220.3001           | K0220.3002         | 300 | 115 | 20 | M8x30 | 55,5 | 330 | 800                   |
| K0220.3501           | K0220.3502         | 350 | 115 | 20 | M8x30 | 55,5 | 380 | 800                   |
| K0220.4001           | K0220.4002         | 400 | 115 | 20 | M8x30 | 55,5 | 430 | 800                   |

## Tubular handles



### Material:

Aluminium.

### Version:

Leg black powder-coated.

Grip natural colour anodised.

### Sample order:

K0209.300

### Note:

Black electro zinc-plated M12x70 cap screws, suitable washers and nuts for fastening are supplied.

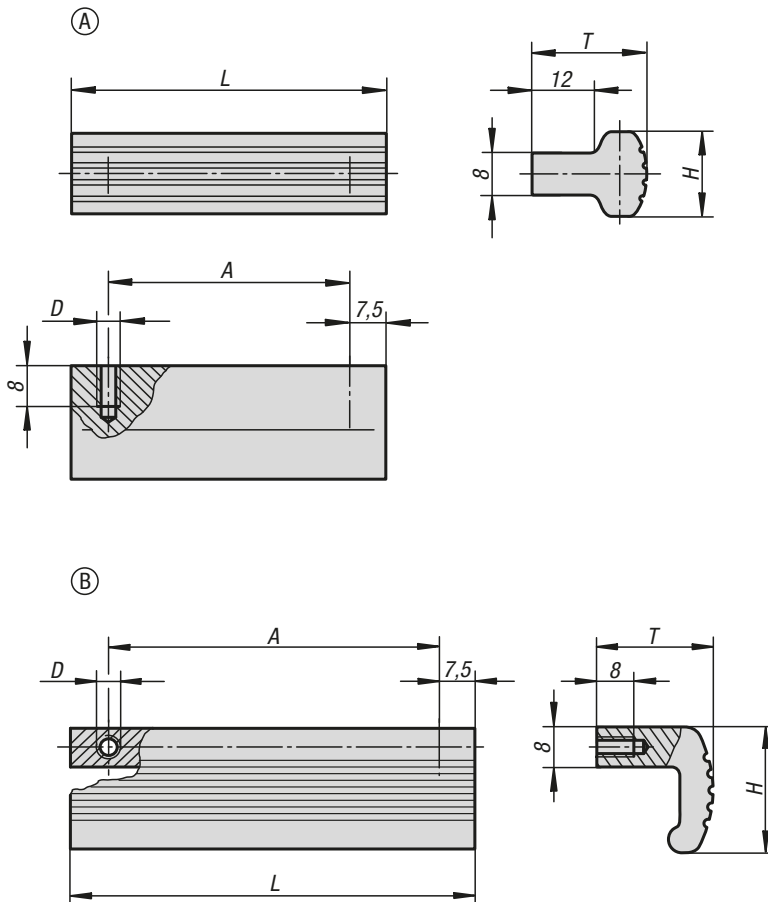
### Assembly:

From the front.

## KIPP Tubular handles

| Order No. | A   | B  | D   | H  | L   | Load capacity<br>N |
|-----------|-----|----|-----|----|-----|--------------------|
| K0209.180 | 180 | 28 | M12 | 60 | 208 | 1000               |
| K0209.200 | 200 | 28 | M12 | 60 | 228 | 1000               |
| K0209.250 | 250 | 28 | M12 | 60 | 278 | 1000               |
| K0209.300 | 300 | 28 | M12 | 60 | 328 | 1000               |
| K0209.350 | 350 | 28 | M12 | 60 | 378 | 1000               |
| K0209.400 | 400 | 28 | M12 | 60 | 428 | 1000               |
| K0209.500 | 500 | 28 | M12 | 60 | 528 | 1000               |
| K0209.600 | 600 | 28 | M12 | 60 | 628 | 1000               |

## Ledge handles



### Material:

Profile aluminium EN AW-6060

### Version:

Profile aluminium vibration ground, matt-finished and natural colour or black anodised.

### Sample order:

K0232.10301

### Assembly:

From the rear.

### On request:

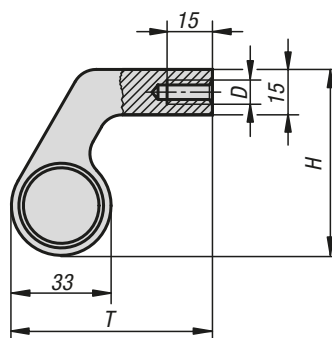
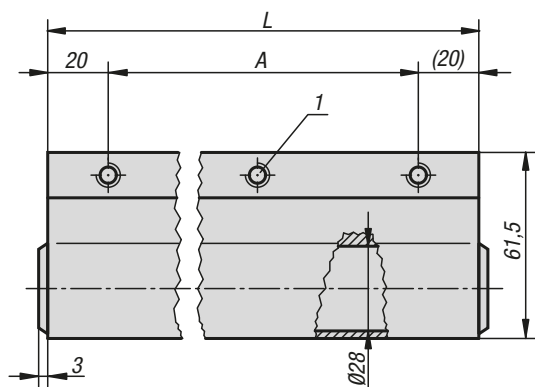
Any other lengths.

## KIPP Ledge handles

| Order No.<br>natural anodized | Order No.<br>black anodised | Form | A   | D  | H  | L   | T  | Load<br>capacity<br>N |
|-------------------------------|-----------------------------|------|-----|----|----|-----|----|-----------------------|
| K0232.10301                   | K0232.10302                 | A    | 30  | M4 | 16 | 45  | 22 | 200                   |
| K0232.10451                   | K0232.10452                 | A    | 45  | M4 | 16 | 60  | 22 | 200                   |
| K0232.10701                   | K0232.10702                 | A    | 70  | M4 | 16 | 85  | 22 | 200                   |
| K0232.10901                   | K0232.10902                 | A    | 90  | M4 | 16 | 105 | 22 | 200                   |
| K0232.11051                   | K0232.11052                 | A    | 105 | M4 | 16 | 120 | 22 | 200                   |
| K0232.11201                   | K0232.11202                 | A    | 120 | M4 | 16 | 135 | 22 | 200                   |
| K0232.20301                   | K0232.20302                 | B    | 30  | M4 | 26 | 45  | 25 | 200                   |
| K0232.20451                   | K0232.20452                 | B    | 45  | M4 | 26 | 60  | 25 | 200                   |
| K0232.20701                   | K0232.20702                 | B    | 70  | M4 | 26 | 85  | 25 | 200                   |
| K0232.20901                   | K0232.20902                 | B    | 90  | M4 | 26 | 105 | 25 | 200                   |
| K0232.21051                   | K0232.21052                 | B    | 105 | M4 | 26 | 120 | 25 | 200                   |
| K0232.21201                   | K0232.21202                 | B    | 120 | M4 | 26 | 135 | 25 | 200                   |



## Ledge handles



### Material:

Profile aluminium EN AW-6060.  
End caps black thermoplastic.

### Version:

Matt-gloss anodised.

### Sample order:

K0130.3001

### Note:

Ledge handles have many uses including sliding doors and technical installations. This ledge handle is also suitable as edge protection.

### Assembly:

From the rear.

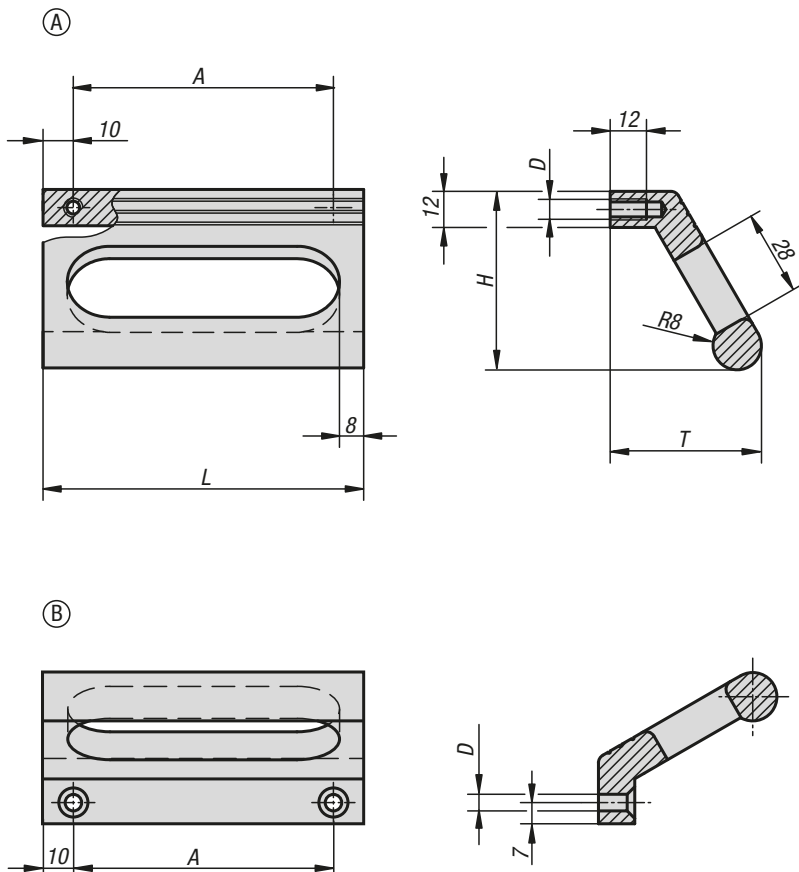
### Drawing reference:

1) middle tapped hole only  $L \geq 400$  mm

## KIPP Ledge handles

| Order No.  | Main colour      | A   | D  | H    | L   | T    | Load capacity N |
|------------|------------------|-----|----|------|-----|------|-----------------|
| K0130.1501 | natural anodized | 110 | M8 | 61,5 | 150 | 66,5 | 1000            |
| K0130.2001 | natural anodized | 160 | M8 | 61,5 | 200 | 66,5 | 1000            |
| K0130.2501 | natural anodized | 210 | M8 | 61,5 | 250 | 66,5 | 1000            |
| K0130.3001 | natural anodized | 260 | M8 | 61,5 | 300 | 66,5 | 1000            |
| K0130.3501 | natural anodized | 310 | M8 | 61,5 | 350 | 66,5 | 1000            |
| K0130.4001 | natural anodized | 360 | M8 | 61,5 | 400 | 66,5 | 1000            |
| K0130.1502 | black anodised   | 110 | M8 | 61,5 | 150 | 66,5 | 1000            |
| K0130.2002 | black anodised   | 160 | M8 | 61,5 | 200 | 66,5 | 1000            |
| K0130.2502 | black anodised   | 210 | M8 | 61,5 | 250 | 66,5 | 1000            |
| K0130.3002 | black anodised   | 260 | M8 | 61,5 | 300 | 66,5 | 1000            |
| K0130.3502 | black anodised   | 310 | M8 | 61,5 | 350 | 66,5 | 1000            |
| K0130.4002 | black anodised   | 360 | M8 | 61,5 | 400 | 66,5 | 1000            |
| K0130.5002 | black anodised   | 460 | M8 | 61,5 | 500 | 66,5 | 1000            |
| K0130.6002 | black anodised   | 560 | M8 | 61,5 | 600 | 66,5 | 1000            |

## Ledge handles



### Material:

Profile aluminium EN AW-6060

### Version:

Matt-gloss anodised.

### Sample order:

K0234.086061

### Note:

These ledge handles are available with M6 internal thread or with through hole for M5 countersunk screws for front mounting.

### Assembly:

Form A from the rear.

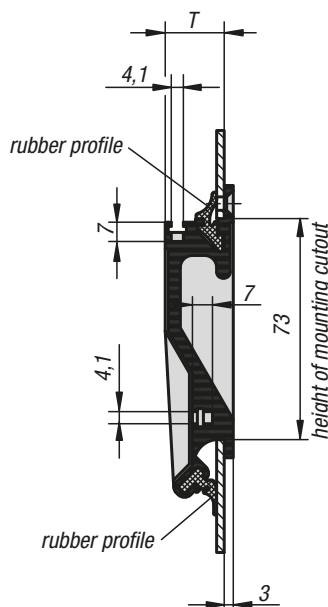
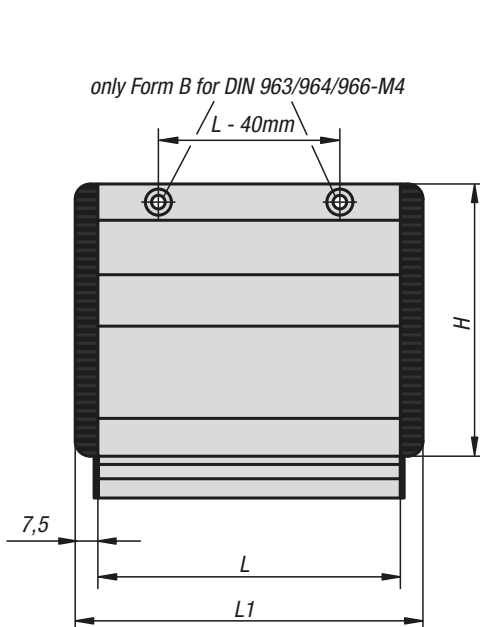
Form B from the front.

## KIPP Ledge handles

| Order No.    | Form | Main colour      | A   | D   | H  | L   | T  | Load capacity N |
|--------------|------|------------------|-----|-----|----|-----|----|-----------------|
| K0234.086061 | A    | black anodised   | 86  | M6  | 59 | 106 | 50 | 500             |
| K0234.100061 | A    | black anodised   | 100 | M6  | 59 | 120 | 50 | 500             |
| K0234.120061 | A    | black anodised   | 120 | M6  | 59 | 140 | 50 | 500             |
| K0234.086063 | A    | natural anodised | 86  | M6  | 59 | 106 | 50 | 500             |
| K0234.100063 | A    | natural anodised | 100 | M6  | 59 | 120 | 50 | 500             |
| K0234.120063 | A    | natural anodised | 120 | M6  | 59 | 140 | 50 | 500             |
| K0234.086051 | B    | black anodised   | 86  | 5,5 | 59 | 106 | 50 | 500             |
| K0234.100051 | B    | black anodised   | 100 | 5,5 | 59 | 120 | 50 | 500             |
| K0234.120051 | B    | black anodised   | 120 | 5,5 | 59 | 140 | 50 | 500             |
| K0234.086053 | B    | natural anodised | 86  | 5,5 | 59 | 106 | 50 | 500             |
| K0234.100053 | B    | natural anodised | 100 | 5,5 | 59 | 120 | 50 | 500             |
| K0234.120053 | B    | natural anodised | 120 | 5,5 | 59 | 140 | 50 | 500             |

## Recessed handles

19"



### Material:

Grip aluminium profile.

End caps polyamide.

Form A: rubber profile for mounting.

Form B: 2 steel countersunk screws for mounting.

### Version:

Handle glass-bead blasted, satin finish and anodised black or natural colour.

Rubber profile black.

Fastening screws electro zinc-plated.

### Sample order:

K0238.10011

### Note:

The Form A handles can be mounted without screws by material thicknesses of 1 - 2.5 mm. Two rubber profiles ensure an absolutely firm hold.

The Form B handles can be mounted from the front with 2 countersunk screws.

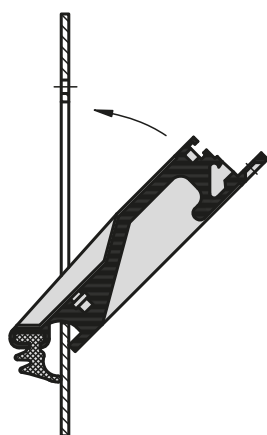
Two cross-slots offset by 90° for M4 screws allow an earthing cable to be connected and can serve as mounting aids for additional parts.

### Assembly:

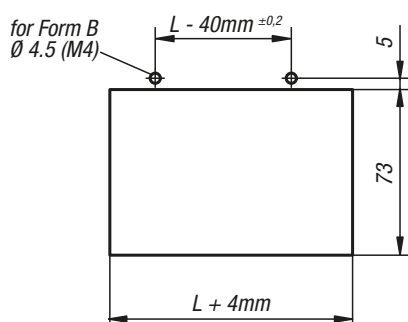
After fitting the lower rubber profile, press the two side caps onto the handle. Next press the handle over the lower edge of the mounting cutout at a 45° angle and then push it up against the housing panel.

Now, depending on which type is being used, push the 2nd rubber profile into the upper groove or fix in place with 2 countersunk screws.

installation



mounting cutout



## KIPP Recessed handles

| Order No.<br>black | Order No.<br>natural | Form | Version 2 | H  | L   | L1  | T    | Mounting<br>cutout | Load<br>capacity<br>N |
|--------------------|----------------------|------|-----------|----|-----|-----|------|--------------------|-----------------------|
| K0238.10011        | K0238.10013          | A    | plug-in   | 90 | 100 | 115 | 19,5 | 104 x 73           | 500                   |
| K0238.11811        | K0238.11813          | A    | plug-in   | 90 | 118 | 133 | 19,5 | 122 x 73           | 500                   |
| K0238.16711        | K0238.16713          | A    | plug-in   | 90 | 167 | 182 | 19,5 | 171 x 73           | 500                   |
| K0238.10021        | K0238.10023          | B    | screw on  | 90 | 100 | 115 | 19,5 | 104 x 73           | 500                   |
| K0238.11821        | K0238.11823          | B    | screw on  | 90 | 118 | 133 | 19,5 | 122 x 73           | 500                   |
| K0238.16721        | K0238.16723          | B    | screw on  | 90 | 167 | 182 | 19,5 | 171 x 73           | 500                   |

## Recessed handles

fold-down

19"



### Material:

Tray and grip aluminium profile.  
End caps polyamide.  
Form A: Rubber profile for mounting.  
Form B: 2 steel countersunk screws for mounting.

### Version:

Tray and grip glass-bead blasted, satin finish and anodised black or natural colour.  
Rubber profile black.  
Fastening screws electro zinc-plated.

### Sample order:

K0239.10011

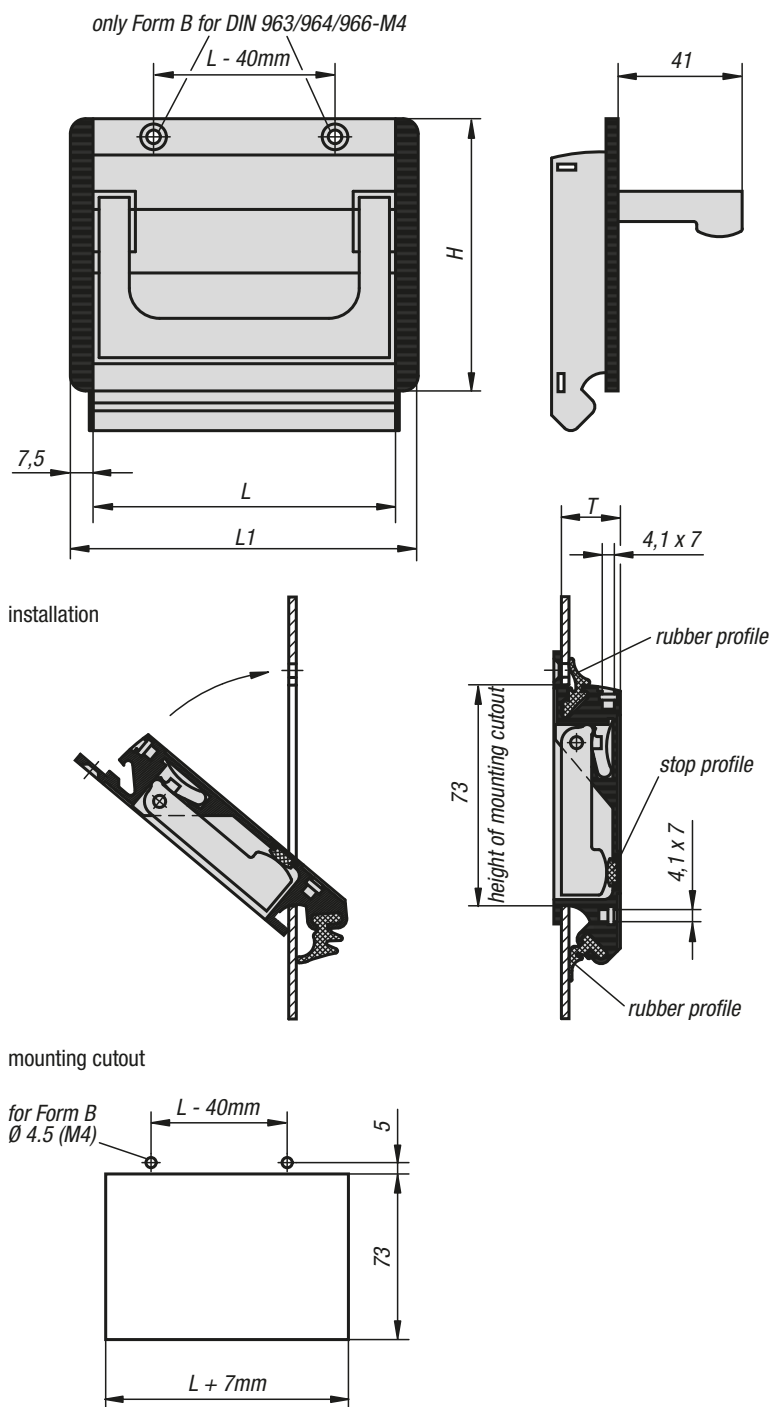
### Note:

Form A handles can be mounted without screws for material thicknesses of 1 - 2.5 mm using 2 rubber profiles.  
Form B handles can be mounted from the front with 2 countersunk screws.

Two cross-slots for M4 screws allow earthing connection and can serve as a mounting aid for additional parts.

### Assembly:

After fitting the lower rubber profile, press the two side caps onto the handle. Next press the handle over the lower edge of the mounting cutout at a 45° angle and then push it up against the housing panel. Now push the 2nd rubber profile into the upper groove or fix in place with 2 countersunk screws.



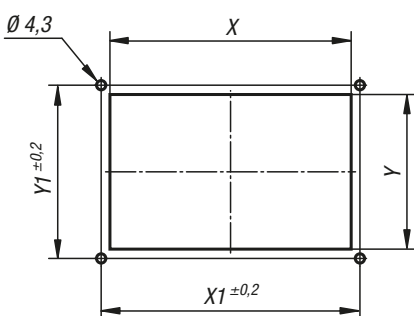
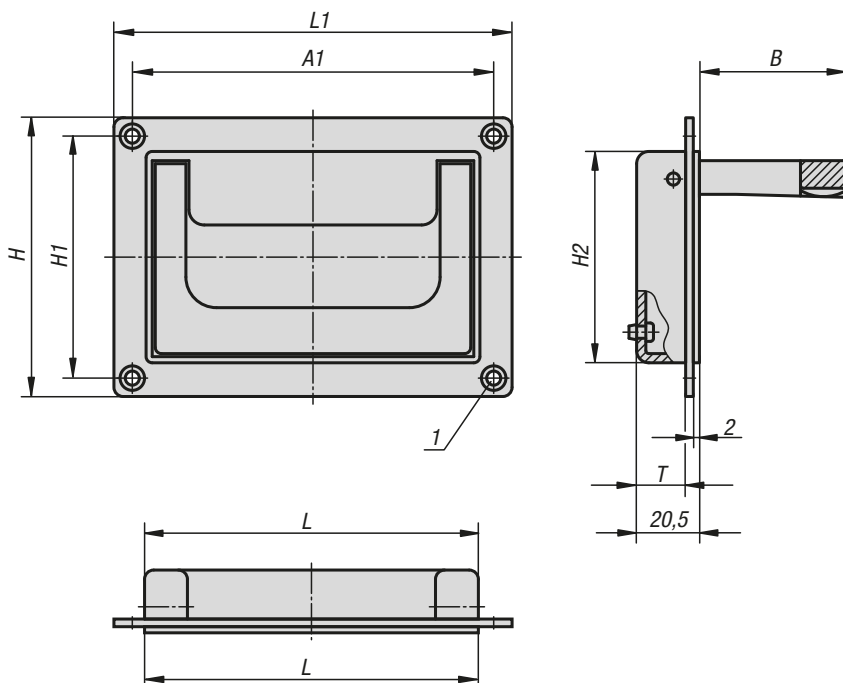
## KIPP Recessed handles fold-down

| Order No.<br>black | Order No.<br>natural | Form | Version 2 | H  | L   | L1  | T    | Mounting<br>cutout | Load<br>capacity<br>N |
|--------------------|----------------------|------|-----------|----|-----|-----|------|--------------------|-----------------------|
| K0239.10011        | K0239.10013          | A    | plug-in   | 90 | 100 | 115 | 19,5 | 107 x 73           | 500                   |
| K0239.11811        | K0239.11813          | A    | plug-in   | 90 | 118 | 133 | 19,5 | 125 x 73           | 500                   |
| K0239.16711        | K0239.16713          | A    | plug-in   | 90 | 167 | 182 | 19,5 | 174 x 73           | 500                   |
| K0239.10021        | K0239.10023          | B    | screw on  | 90 | 100 | 115 | 19,5 | 107 x 73           | 500                   |
| K0239.11821        | K0239.11823          | B    | screw on  | 90 | 118 | 133 | 19,5 | 125 x 73           | 500                   |
| K0239.16721        | K0239.16723          | B    | screw on  | 90 | 167 | 182 | 19,5 | 174 x 73           | 500                   |

## Recessed handles

fold-down

19"



**Material:**  
Die-cast aluminium.

**Version:**  
Tray and handle black or light grey powder-coated, semi-matt.

**Sample order:**  
K0240.05018411

**Note:**  
With their modern design recessed fold-down handles can be used wherever solid and attractive handles are required.  
Handles Form A snap into both resting and working positions.  
Handles Form B swivel back into the resting position automatically after use.

**Assembly:**  
The fold-down recessed handles can be installed from the front or rear of the housing panel with the same housing cutout.

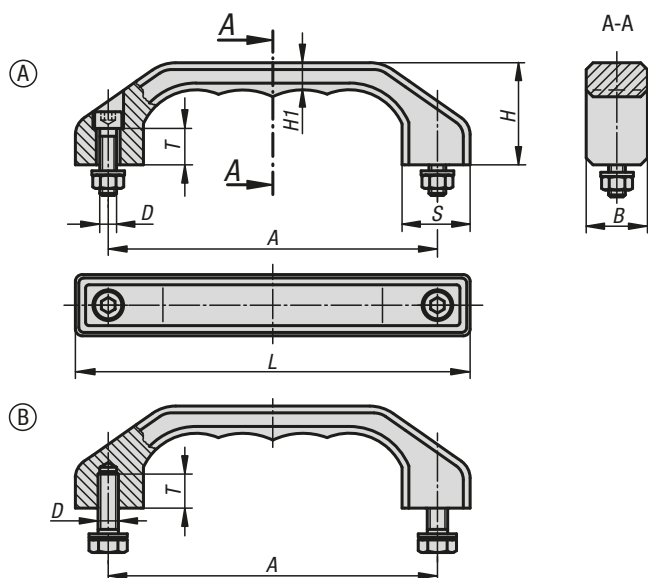
**Drawing reference:**  
1) for countersunk screws M4

### KIPP Recessed handles fold-down

| Order No.      | Form | Main colour         | A1  | B  | H  | H1 | H2 | L   | L1  | T  | X   | X1  | Y    | Y1 | Load capacity N |
|----------------|------|---------------------|-----|----|----|----|----|-----|-----|----|-----|-----|------|----|-----------------|
| K0240.07911811 | A    | black               | 118 | 48 | 91 | 79 | 69 | 109 | 130 | 16 | 110 | 118 | 70,5 | 79 | 500             |
| K0240.05018411 | A    | black               | 184 | 51 | 80 | 50 | 72 | 170 | 200 | 16 | 171 | 184 | 73   | 50 | 500             |
| K0240.07911812 | A    | light grey RAL 7035 | 118 | 48 | 91 | 79 | 69 | 109 | 130 | 16 | 110 | 118 | 70,5 | 79 | 500             |
| K0240.05018412 | A    | light grey RAL 7035 | 184 | 51 | 80 | 50 | 72 | 170 | 200 | 16 | 171 | 184 | 73   | 50 | 500             |
| K0240.07911821 | B    | black               | 118 | 48 | 91 | 79 | 69 | 109 | 130 | 16 | 110 | 118 | 70,5 | 79 | 500             |
| K0240.05018421 | B    | black               | 184 | 51 | 80 | 50 | 72 | 170 | 200 | 16 | 171 | 184 | 73   | 50 | 500             |
| K0240.07911822 | B    | light grey RAL 7035 | 118 | 48 | 91 | 79 | 69 | 109 | 130 | 16 | 110 | 118 | 70,5 | 79 | 500             |
| K0240.05018422 | B    | light grey RAL 7035 | 184 | 51 | 80 | 50 | 72 | 170 | 200 | 16 | 171 | 184 | 73   | 50 | 500             |

## Pull handles

stainless steel



### Material:

Investment cast 1.4308 stainless steel.  
Fasteners 1.4301 stainless steel.

### Version:

Abrasive cleaned and matt gloss electropolished.

### Sample order:

K0198.140081

### Assembly:

Form A from the front.  
Form B from the rear.

### KIPP Pull handles stainless steel

| Order No.    | Form | A   | B  | D      | H  | H1 | L   | S  | T  | Load capacity N |
|--------------|------|-----|----|--------|----|----|-----|----|----|-----------------|
| K0198.140081 | A    | 140 | 25 | M8x30  | 45 | 12 | 170 | 28 | 15 | 1000            |
| K0198.180101 | A    | 180 | 32 | M10x40 | 58 | 15 | 218 | 36 | 18 | 1000            |
| K0198.140082 | B    | 140 | 25 | M8x18  | 45 | 12 | 170 | 28 | 15 | 1000            |
| K0198.180102 | B    | 180 | 32 | M10x20 | 58 | 15 | 218 | 36 | 18 | 1000            |

Pull handles

stainless steel



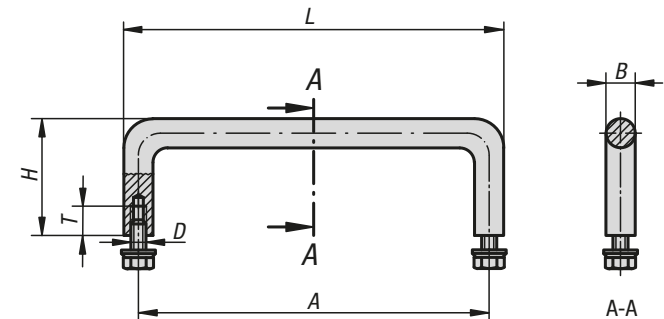
**Material:**  
Pull handle 1.4404 stainless steel.  
Fastening material grade A4.

**Version:**  
Semi-gloss vibratory ground.

**Sample order:**  
K0206.120

**Note:**  
Stainless steel pull handles are used mainly on equipment in the medical and food industry as well as in laboratories and nuclear technology.

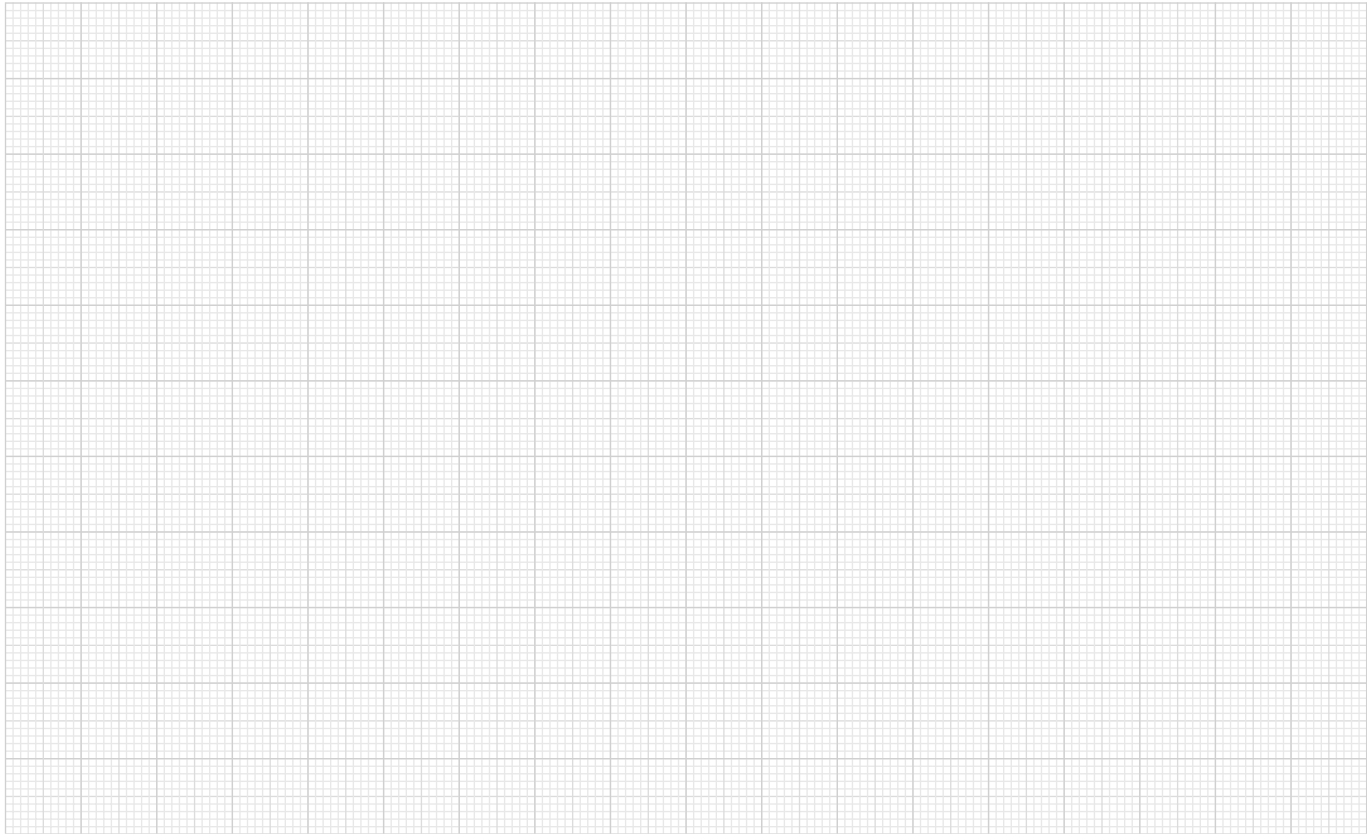
**Assembly:**  
From the rear.



KIPP Pull handles stainless steel

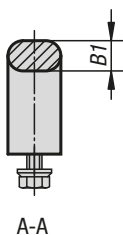
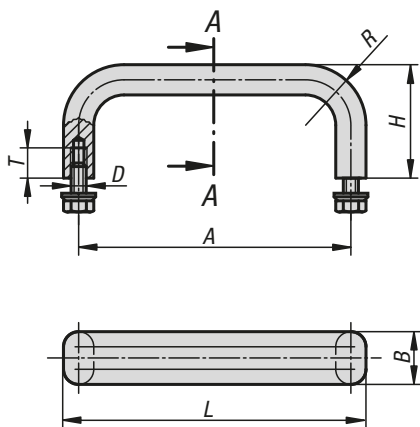
| Order No. | A   | B  | D     | H  | L   | T  | Load capacity N |
|-----------|-----|----|-------|----|-----|----|-----------------|
| K0206.100 | 100 | 8  | M5x10 | 35 | 108 | 10 | 1000            |
| K0206.120 | 120 | 10 | M5x10 | 40 | 130 | 10 | 1000            |
| K0206.250 | 250 | 10 | M5x10 | 40 | 260 | 10 | 1000            |
| K0206.350 | 350 | 10 | M5x10 | 40 | 360 | 10 | 1000            |

Notes



## Pull handles

stainless steel



### Material:

Handle stainless steel 1.4404.  
Fastening material 1.4301.

### Version:

Vibratory ground semi-gloss finish.

### Sample order:

K0208.10005

### Assembly:

From the rear.

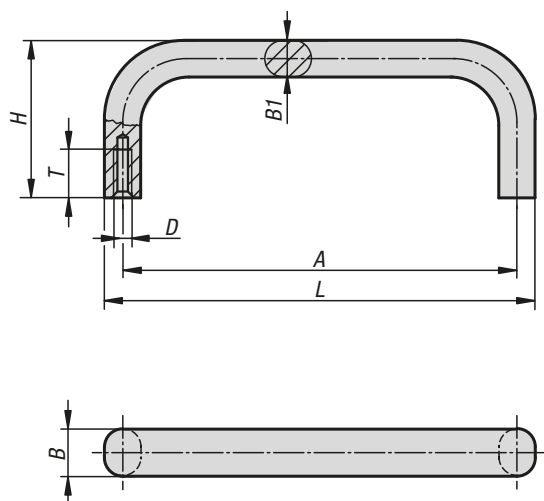
## KIPP Pull handles stainless steel

| Order No.   | A   | B    | B1 | D     | H  | L   | R  | T  | Load capacity N |
|-------------|-----|------|----|-------|----|-----|----|----|-----------------|
| K0208.10005 | 100 | 12   | 8  | M5x10 | 40 | 108 | 22 | 10 | 1000            |
| K0208.12005 | 120 | 12   | 8  | M5x10 | 40 | 128 | 22 | 10 | 1000            |
| K0208.15005 | 150 | 12   | 8  | M5x10 | 40 | 158 | 22 | 10 | 1000            |
| K0208.18005 | 180 | 12   | 8  | M5x10 | 40 | 188 | 22 | 10 | 1000            |
| K0208.25005 | 250 | 12   | 8  | M5x10 | 40 | 258 | 22 | 10 | 1000            |
| K0208.10006 | 100 | 19,5 | 10 | M6x12 | 45 | 110 | 24 | 12 | 1000            |
| K0208.12006 | 120 | 19,5 | 10 | M6x12 | 45 | 130 | 24 | 12 | 1000            |
| K0208.15006 | 150 | 19,5 | 10 | M6x12 | 45 | 160 | 24 | 12 | 1000            |
| K0208.18006 | 180 | 19,5 | 10 | M6x12 | 45 | 190 | 24 | 12 | 1000            |
| K0208.25006 | 250 | 19,5 | 10 | M6x12 | 45 | 260 | 24 | 12 | 1000            |



# Pull handles

stainless steel


**Material:**

Stainless steel 1.4301.

**Version:**

Vibratory ground semi-gloss finish.

**Sample order:**

K1086.1001005

**Assembly:**

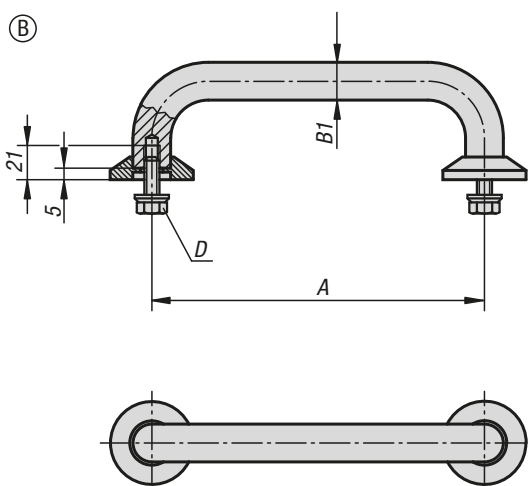
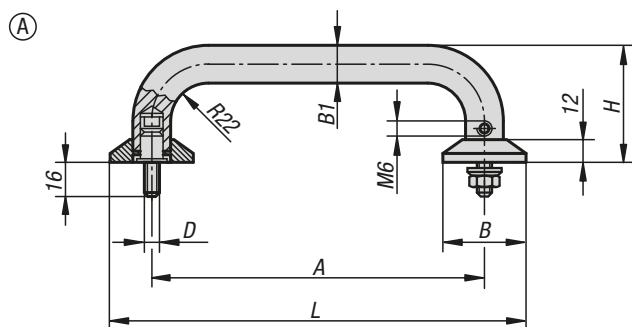
From the rear.

## KIPP Pull handles stainless steel

| Order No.     | A   | B  | B1 | D  | H  | L   | T  | Load capacity<br>N |
|---------------|-----|----|----|----|----|-----|----|--------------------|
| K1086.1000805 | 100 | 12 | 8  | M5 | 39 | 108 | 10 | 1000               |
| K1086.1200805 | 120 | 12 | 8  | M5 | 39 | 128 | 10 | 1000               |
| K1086.1001005 | 100 | 15 | 10 | M5 | 39 | 110 | 10 | 1000               |
| K1086.1501005 | 150 | 15 | 10 | M5 | 39 | 160 | 10 | 1000               |
| K1086.1801005 | 180 | 15 | 10 | M5 | 39 | 190 | 10 | 1000               |

# Pull handles

stainless steel



## Material:

Pull Handle and fasteners 1.4404 stainless steel.

## Version:

Ground and satin brushed finish.

## Sample order:

K0215.2001

## Note:

These stainless steel pull handles are ideal for all technical applications where highest load and high chemical or corrosive resistance is required.

## Drawing reference:

Form A

fastening from the front.

Form B

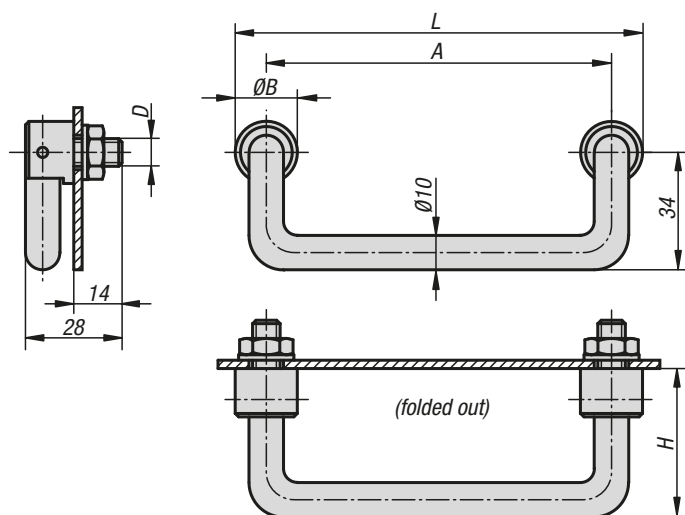
fastening from the rear.

## KIPP Pull handles stainless steel

| Order No.  | Form | A   | B  | B1 | D  | H  | L   | Load capacity N |
|------------|------|-----|----|----|----|----|-----|-----------------|
| K0215.2001 | A    | 200 | 50 | 20 | M8 | 75 | 250 | 1000            |
| K0215.2501 | A    | 250 | 50 | 20 | M8 | 75 | 300 | 1000            |
| K0215.2002 | B    | 200 | 50 | 20 | M8 | 75 | 250 | 1000            |
| K0215.2502 | B    | 250 | 50 | 20 | M8 | 75 | 300 | 1000            |

## Pull handles

fold-down



### Material:

Steel or 1.4305 stainless steel

### Version:

Steel version:

Surface finely ground and high-gloss chromed or with a smooth plastic cover on the grip.

Stainless steel version:

Surface semi-gloss score-free vibratory ground.

### Sample order:

K0218.1201

### Note:

Steel or stainless steel fastening material is provided.  
Spring lock in both end positions.

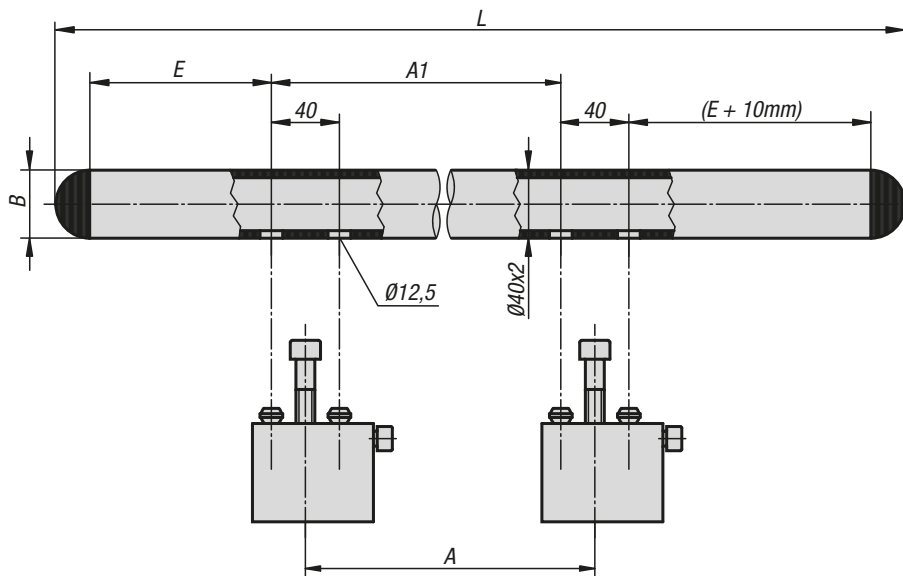
### Assembly:

From the rear.

## KIPP Pull handles fold-down

| Order No.<br>steel | Order No.<br>steel<br>with plastic cover | Order No.<br>stainless steel | A   | B  | D     | H  | L   | Load<br>capacity<br>N |
|--------------------|------------------------------------------|------------------------------|-----|----|-------|----|-----|-----------------------|
| K0218.1001         | K0218.1002                               | K0218.1003                   | 100 | 18 | M10x1 | 48 | 118 | 500                   |
| K0218.1201         | K0218.1202                               | K0218.1203                   | 120 | 18 | M10x1 | 48 | 138 | 500                   |
| K0218.1801         | K0218.1802                               | K0218.1803                   | 180 | 18 | M10x1 | 48 | 198 | 500                   |

## Tubular handles



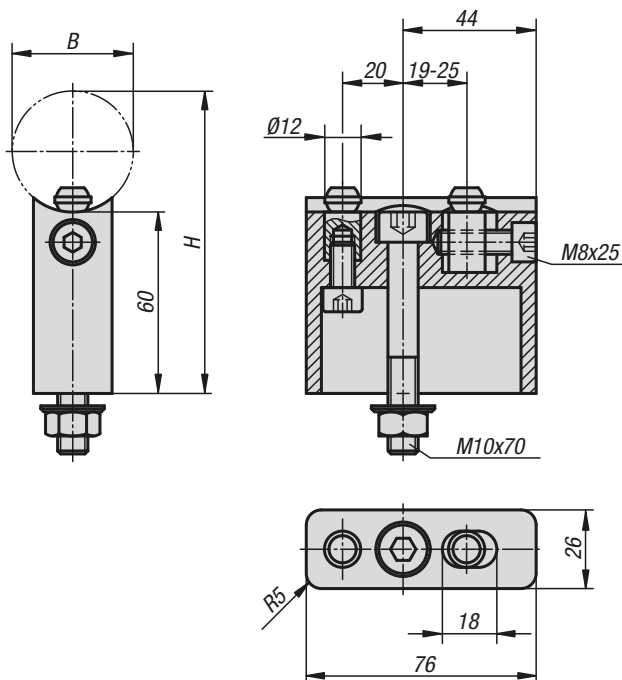
**Material:**  
 Grip stainless steel 1.4301.  
 Legs die-cast aluminium.  
 End caps glass-bead reinforced plastic.  
 Screws and locking pins steel.

**Version:**  
 Grip finely ground.  
 Legs black powder-coated.  
 End cap black.  
 Screws and pins trivalent passivated.

**Sample order:**  
 K0225.0600101

**Note:**  
 Heavy duty tubular pull handles for machine and plant construction. Easy mounting from the front.  
 Adjustable leg spacing by the same grip length.

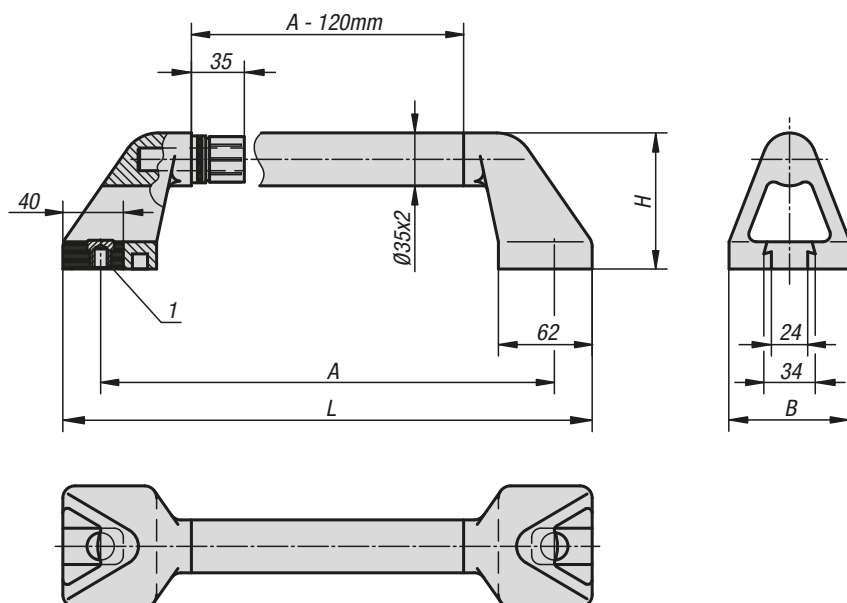
Leg locking diagram:



### KIPP Tubular handles

| Order No.     | A   | A1  | B  | E   | H   | L    | Load capacity N |
|---------------|-----|-----|----|-----|-----|------|-----------------|
| K0225.0600101 | 380 | 380 | 40 | 85  | 100 | 640  | 1000            |
| K0225.0700101 | 480 | 480 | 40 | 85  | 100 | 740  | 1000            |
| K0225.0800101 | 500 | 500 | 40 | 125 | 100 | 840  | 1000            |
| K0225.0900101 | 600 | 600 | 40 | 125 | 100 | 940  | 1000            |
| K0225.1000101 | 700 | 700 | 40 | 125 | 100 | 1040 | 1000            |

## Tubular handles



### Material:

Legs glass-bead reinforced thermoplastic.  
Grip stainless steel 1.4301.  
Inserts stainless steel 1.4305.

### Version:

Legs fine structured, black.  
Grip fine ground.  
Inserts fine turned.

### Sample order:

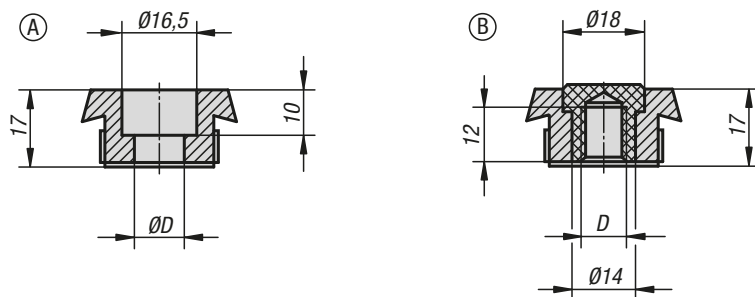
K0226.300101

### Note:

Locking webs allow a precision fit of the tube on the plastic leg boss.  
Splash-proof with O-ring seals.  
Different fastening inserts allow mounting from the front, rear or with each other.  
Handles with through hole inserts (Form A) are supplied with stainless steel fasteners.  
Handles with tapped inserts (Form B) are supplied without fasteners.

### Drawing reference:

Form A: screw head insert  
Form B: threaded insert

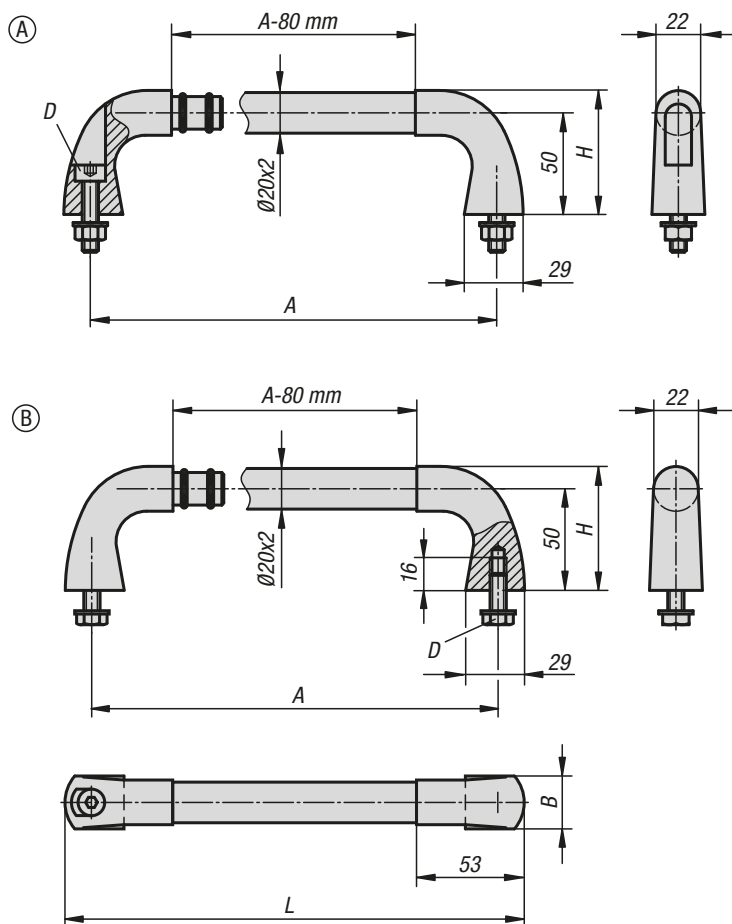


1) Screw head insert (A) or threaded insert (B).

## KIPP Tubular handles

| Order No.    | Form | A   | B  | D   | H  | L   | Load capacity N |
|--------------|------|-----|----|-----|----|-----|-----------------|
| K0226.300101 | A    | 300 | 80 | 11  | 90 | 350 | 1000            |
| K0226.350101 | A    | 350 | 80 | 11  | 90 | 400 | 1000            |
| K0226.400101 | A    | 400 | 80 | 11  | 90 | 450 | 1000            |
| K0226.500101 | A    | 500 | 80 | 11  | 90 | 550 | 1000            |
| K0226.600101 | A    | 600 | 80 | 11  | 90 | 650 | 1000            |
| K0226.300102 | B    | 300 | 80 | M10 | 90 | 350 | 1000            |
| K0226.350102 | B    | 350 | 80 | M10 | 90 | 400 | 1000            |
| K0226.400102 | B    | 400 | 80 | M10 | 90 | 450 | 1000            |
| K0226.500102 | B    | 500 | 80 | M10 | 90 | 550 | 1000            |
| K0226.600102 | B    | 600 | 80 | M10 | 90 | 650 | 1000            |

## Tubular handles stainless steel

**Material:**

Grip and fasteners 1.4301 stainless steel.

Legs investment cast 1.4581 stainless steel.

**Version:**

Grip finely ground or with ribbed black plastic sleeve.

Legs abrasive cleaned and matt-gloss electropolished.

**Sample order:**

K0227.200081

**Note:**

Cap screws with nuts and washers are supplied for Form A handles.

Hexagon head screws and washers are supplied for Form B handles.

**Assembly:**

Form A from the front.

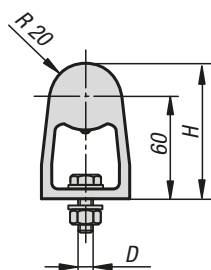
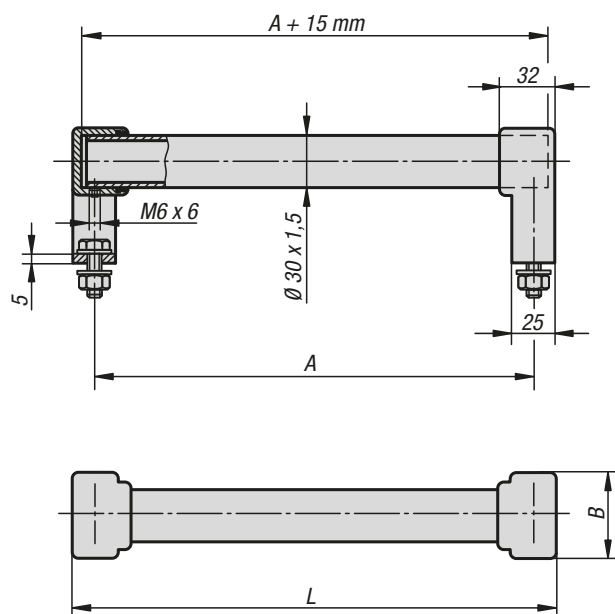
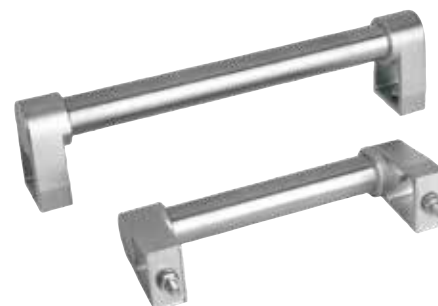
Form B from the rear.

## KIPP Tubular handles stainless steel

| Order No.    | Form | Main colour          | A   | B  | D     | H  | L   | Load capacity N |
|--------------|------|----------------------|-----|----|-------|----|-----|-----------------|
| K0227.200081 | A    | ground               | 200 | 26 | M8x35 | 60 | 226 | 1000            |
| K0227.300081 | A    | ground               | 300 | 26 | M8x35 | 60 | 326 | 1000            |
| K0227.400081 | A    | ground               | 400 | 26 | M8x35 | 60 | 426 | 1000            |
| K0227.200082 | A    | black plastic ribbed | 200 | 26 | M8x35 | 60 | 226 | 1000            |
| K0227.300082 | A    | black plastic ribbed | 300 | 26 | M8x35 | 60 | 326 | 1000            |
| K0227.400082 | A    | black plastic ribbed | 400 | 26 | M8x35 | 60 | 426 | 1000            |
| K0227.200083 | B    | ground               | 200 | 26 | M8x20 | 60 | 226 | 1000            |
| K0227.300083 | B    | ground               | 300 | 26 | M8x20 | 60 | 326 | 1000            |
| K0227.400083 | B    | ground               | 400 | 26 | M8x20 | 60 | 426 | 1000            |
| K0227.200084 | B    | black plastic ribbed | 200 | 26 | M8x20 | 60 | 226 | 1000            |
| K0227.300084 | B    | black plastic ribbed | 300 | 26 | M8x20 | 60 | 326 | 1000            |
| K0227.400084 | B    | black plastic ribbed | 400 | 26 | M8x20 | 60 | 426 | 1000            |

# Tubular handles

stainless steel



## Material:

Grip and fastening material stainless steel 1.4301.  
 Legs investment cast G 4581.  
 Clamping and sealing rings food-grade silicone rubber,  
 long term temperature resistance  $-60^\circ\text{C}$  to  $+200^\circ\text{C}$ .

## Version:

Grip finely ground.  
 Legs blasted and semi-gloss electropolished.

## Sample order:

K0652.200301

## Note:

General purpose self-assembly stainless steel tubular handles. Splashproof tube/leg connection. Additional tube clamping with socket head grub screws. For mounting from the front or rear. Easy to clean, especially suitable for the foodstuff industry.

## Assembly:

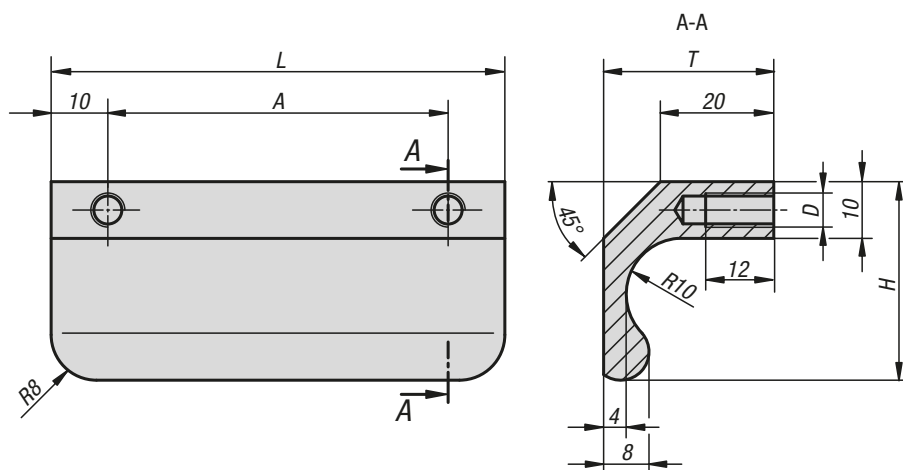
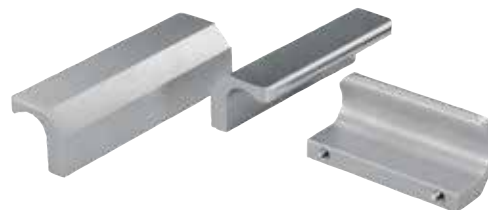
From the front.

## KIPP Tubular handles stainless steel

| Order No.    | A   | B  | D     | H  | L   | Load capacity N |
|--------------|-----|----|-------|----|-----|-----------------|
| K0652.200301 | 200 | 48 | M8x25 | 80 | 225 | 1000            |
| K0652.250301 | 250 | 48 | M8x25 | 80 | 275 | 1000            |
| K0652.300301 | 300 | 48 | M8x25 | 80 | 325 | 1000            |
| K0652.350301 | 350 | 48 | M8x25 | 80 | 375 | 1000            |
| K0652.400301 | 400 | 48 | M8x25 | 80 | 425 | 1000            |
| K0652.500301 | 500 | 48 | M8x25 | 80 | 525 | 1000            |

# Ledge handles

stainless steel


**Material:**

Profile stainless steel 1.4404.

**Version:**

Abrasive cleaned and matt-gloss electropolished.

**Sample order:**

K0233.06006

**Assembly:**

From the rear.

**On request:**

Any other lengths.

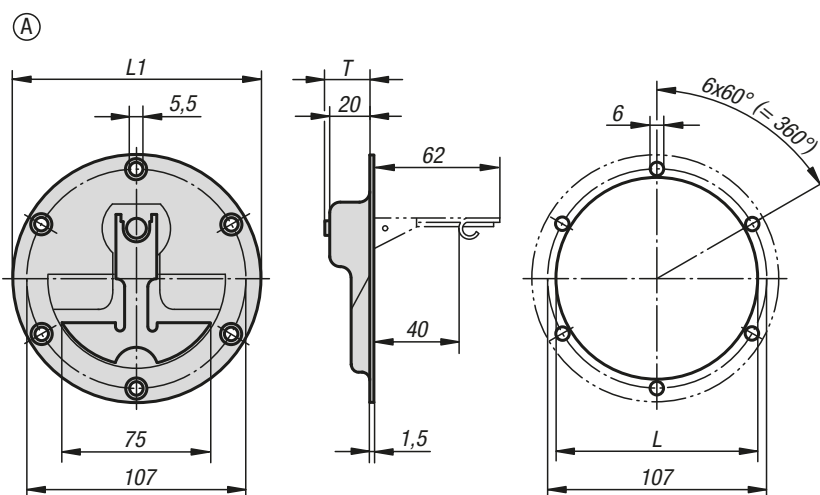
## KIPP Ledge handles stainless steel

| Order No.   | A   | D  | H  | L   | T  | Load capacity N |
|-------------|-----|----|----|-----|----|-----------------|
| K0233.06006 | 60  | M6 | 35 | 80  | 30 | 1000            |
| K0233.08006 | 80  | M6 | 35 | 100 | 30 | 1000            |
| K0233.10006 | 100 | M6 | 35 | 120 | 30 | 1000            |
| K0233.13006 | 130 | M6 | 35 | 150 | 30 | 1000            |



# Recessed handles

fold-down stainless steel



## Material:

Stainless steel 1.4301.

## Version:

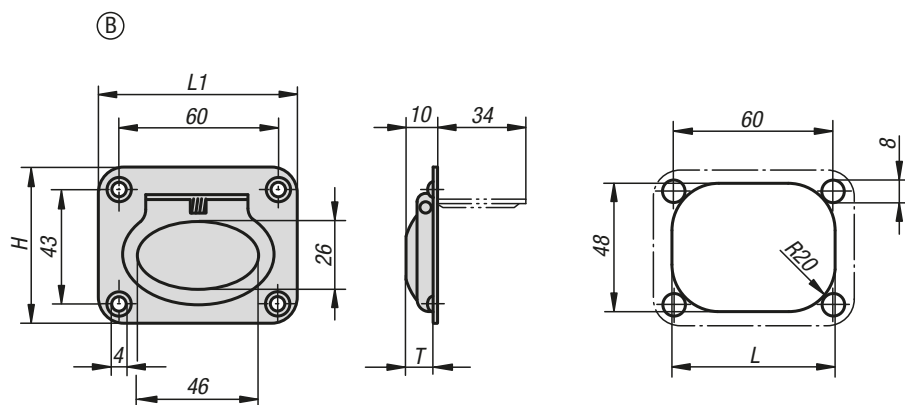
High-gloss electropolished.

## Sample order:

K0243.1120000

## Note:

Stainless steel retractable grips with marginal installation depth. For base and mounting plates or drawers. With return spring. The grip automatically swivels back into its resting position after use.

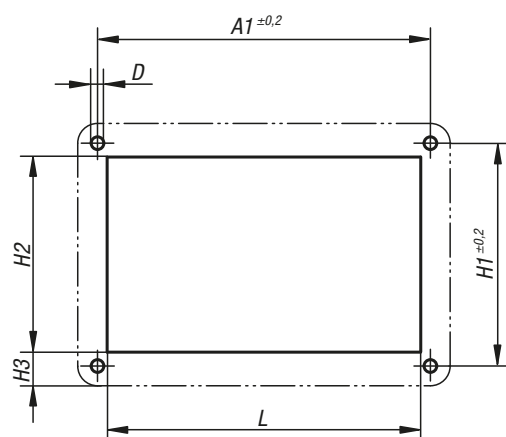
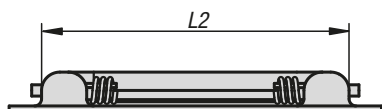
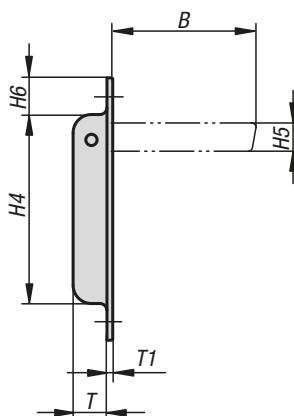
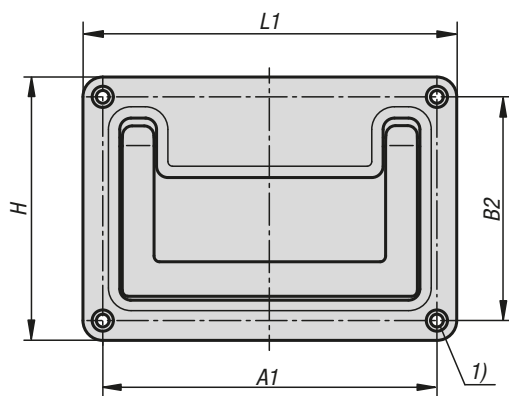


## KIPP Recessed handles fold-down stainless steel

| Order No.     | Form | Version 2 | H   | L  | L1  | T  | Load capacity N |
|---------------|------|-----------|-----|----|-----|----|-----------------|
| K0243.1120000 | A    | screw on  | 120 | 98 | 120 | 22 | 200             |
| K0243.2075058 | B    | screw on  | 58  | 63 | 75  | 9  | 200             |

## Recessed handles

fold-down stainless steel



### Material:

Stainless steel 1.4301.

### Version:

High-gloss electropolished.

### Sample order:

K1305.132

### Note:

Stainless steel retractable grips with marginal installation depth. For base and mounting plates or drawers. With return spring. The grip automatically swivels back into its resting position after use.

### Drawing reference:

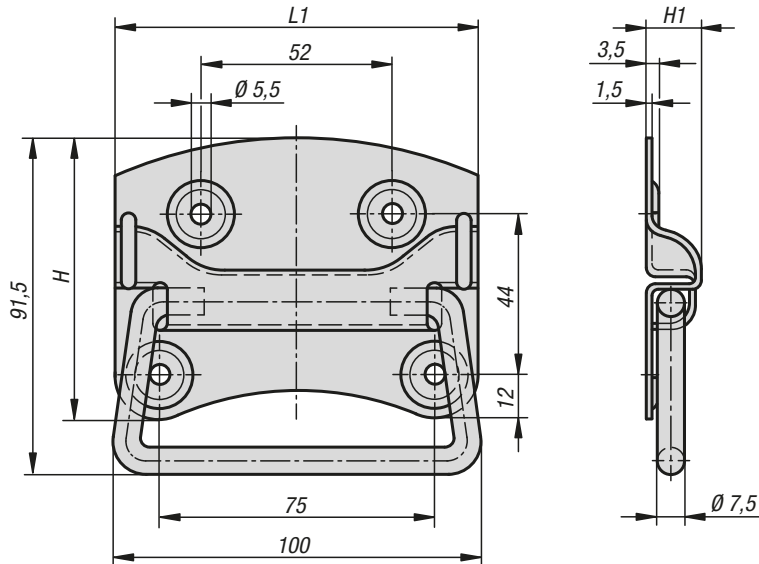
1) for countersunk screws M4

## KIPP Recessed handles fold-down stainless steel

| Order No. | A1      | B  | B2 | D   | H  | H1     | H2 | H3   | H4 | H5 | H6 | L   | L1  | L2  | T  | T1  |
|-----------|---------|----|----|-----|----|--------|----|------|----|----|----|-----|-----|-----|----|-----|
| K1305.132 | 118±0,2 | 51 | 79 | 4,5 | 93 | 79±0,2 | 72 | 10,5 | 67 | 10 | 13 | 115 | 132 | 109 | 12 | 1,5 |

## Recessed handles, fold down

DIN 3136



**Material:**  
Stainless steel 1.4301.

**Version:**  
Bright.

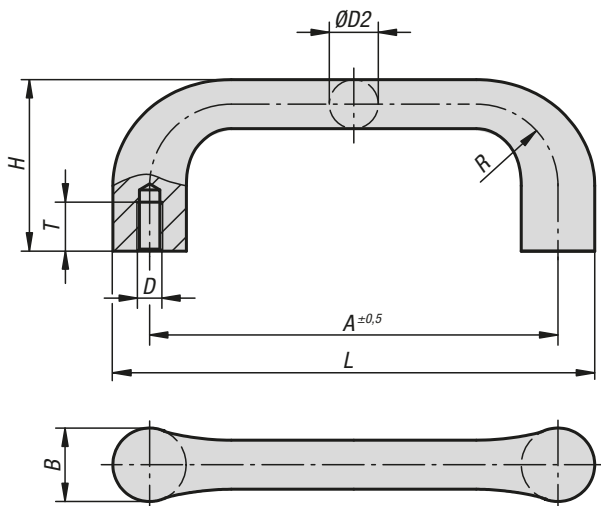
**Sample order:**  
K1369.100

**Applications:**  
Crates, chests, lids.

### KIPP Recessed handles, fold down DIN 3136

| Order No. | H  | H1 | L1  | Load capacity<br>N |
|-----------|----|----|-----|--------------------|
| K1369.100 | 77 | 14 | 100 | 500                |

## Pull handles



**Material:**  
GJS 400

**Version:**  
Vibratory ground or black powder-coated.  
End faces machined.

**Sample order:**  
K0186.12510

**Assembly:**  
From the rear.

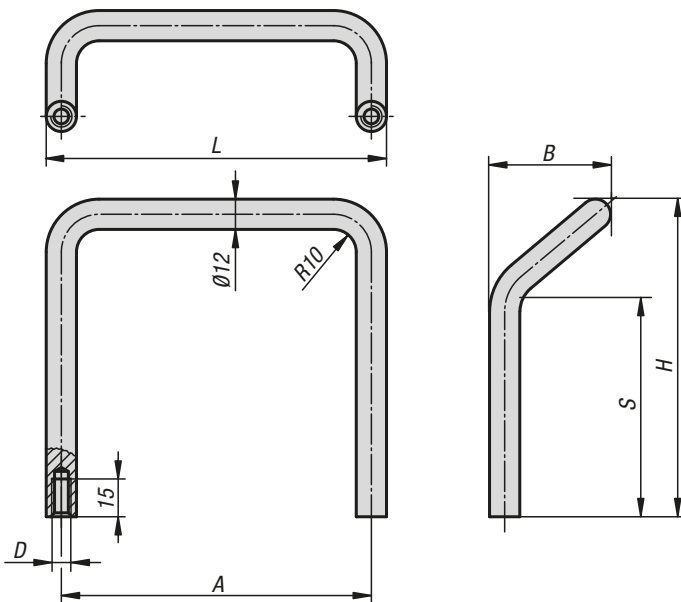
### KIPP Pull handles

| Order No.<br>bright | Order No.<br>black | A   | B  | D   | D2 | H  | L   | R  | T  | Load<br>capacity<br>N |
|---------------------|--------------------|-----|----|-----|----|----|-----|----|----|-----------------------|
| K0186.10006         | K0186.100061       | 100 | 18 | M6  | 12 | 42 | 118 | 20 | 12 | 1000                  |
| K0186.11208         | K0186.112081       | 112 | 20 | M8  | 14 | 47 | 132 | 22 | 15 | 1000                  |
| K0186.12510         | K0186.125101       | 125 | 22 | M10 | 16 | 53 | 147 | 24 | 18 | 1000                  |
| K0186.14012         | K0186.140121       | 140 | 25 | M12 | 18 | 59 | 165 | 26 | 20 | 1000                  |

# K0207

## Pull handles

angled



**Material:**  
Round steel

**Version:**  
Finely ground and high-gloss chrome-plated.

**Sample order:**  
K0207.06008

**Assembly:**  
From the rear.

### KIPP Pull handles angled

| Order No.   | A   | B  | D  | H   | L   | S  | Load<br>capacity<br>N |
|-------------|-----|----|----|-----|-----|----|-----------------------|
| K0207.06008 | 120 | 47 | M8 | 66  | 132 | 27 | 1000                  |
| K0207.12008 | 120 | 47 | M8 | 126 | 132 | 87 | 1000                  |

## Pull handles

high-gloss chromed

19"



**Material:**  
Steel.

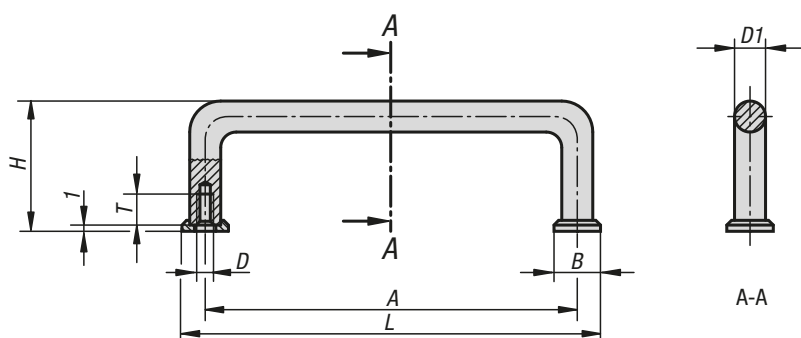
**Version:**  
Disc very finely ground.  
Pull handle high-gloss chromed.

**Sample order:**  
K0214.10204

**Note:**  
These pull handles are used primarily on optical devices, laboratory installations, audio, video and hi-fi equipment, etc. The end washers are supplied loose.

**Assembly:**  
From the rear.

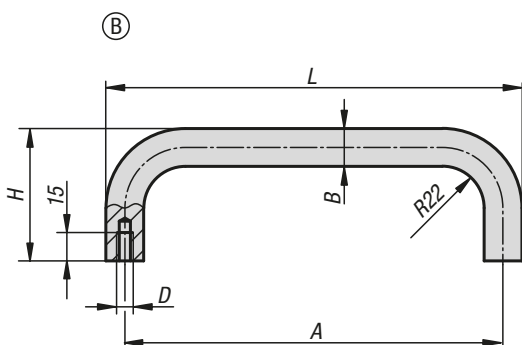
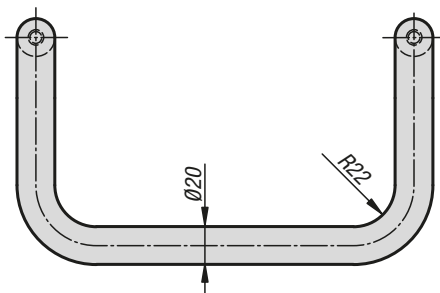
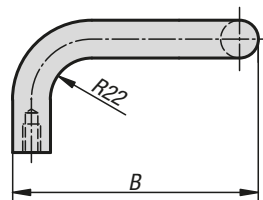
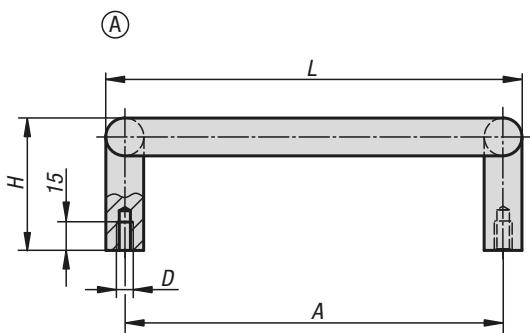
**On request:**  
Other surface finishes.



### KIPP Pull handles high-gloss chromed

| Order No.   | A   | B    | D  | D1 | H  | L     | T  | Load capacity N |
|-------------|-----|------|----|----|----|-------|----|-----------------|
| K0214.03203 | 32  | 8    | M3 | 5  | 21 | 40    | 6  | 1000            |
| K0214.04203 | 42  | 8    | M3 | 5  | 25 | 50    | 6  | 1000            |
| K0214.05503 | 55  | 8    | M3 | 5  | 25 | 63    | 6  | 1000            |
| K0214.07603 | 76  | 8    | M3 | 5  | 25 | 84    | 6  | 1000            |
| K0214.08803 | 88  | 8    | M3 | 5  | 25 | 96    | 6  | 1000            |
| K0214.03204 | 32  | 12,5 | M4 | 8  | 33 | 44,5  | 8  | 1000            |
| K0214.05504 | 55  | 12,5 | M4 | 8  | 33 | 67,5  | 8  | 1000            |
| K0214.06404 | 64  | 12,5 | M4 | 8  | 33 | 76,5  | 8  | 1000            |
| K0214.08804 | 88  | 12,5 | M4 | 8  | 33 | 100,5 | 8  | 1000            |
| K0214.09604 | 96  | 12,5 | M4 | 8  | 33 | 108,5 | 8  | 1000            |
| K0214.09804 | 98  | 12,5 | M4 | 8  | 33 | 110,5 | 8  | 1000            |
| K0214.10204 | 102 | 12,5 | M4 | 8  | 33 | 114,5 | 8  | 1000            |
| K0214.12004 | 120 | 12,5 | M4 | 8  | 33 | 132,5 | 8  | 1000            |
| K0214.12804 | 128 | 12,5 | M4 | 8  | 33 | 140,5 | 8  | 1000            |
| K0214.13604 | 136 | 12,5 | M4 | 8  | 33 | 148,5 | 8  | 1000            |
| K0214.05505 | 55  | 15   | M5 | 10 | 41 | 70    | 10 | 1000            |
| K0214.08805 | 88  | 15   | M5 | 10 | 41 | 103   | 10 | 1000            |
| K0214.10005 | 100 | 15   | M5 | 10 | 41 | 115   | 10 | 1000            |
| K0214.10205 | 102 | 15   | M5 | 10 | 41 | 117   | 10 | 1000            |
| K0214.11505 | 115 | 15   | M5 | 10 | 41 | 130   | 10 | 1000            |
| K0214.12005 | 120 | 15   | M5 | 10 | 41 | 135   | 10 | 1000            |
| K0214.13605 | 136 | 15   | M5 | 10 | 41 | 151   | 10 | 1000            |
| K0214.18005 | 180 | 15   | M5 | 10 | 41 | 195   | 10 | 1000            |
| K0214.20005 | 200 | 15   | M5 | 10 | 41 | 215   | 10 | 1000            |
| K0214.23505 | 235 | 15   | M5 | 10 | 41 | 250   | 10 | 1000            |
| K0214.25005 | 250 | 15   | M5 | 10 | 41 | 265   | 10 | 1000            |

## Pull handles



**Material:**  
Round steel

**Version:**  
Ground, brushed and matt-chromed or black powder-coated with fine texture

**Sample order:**  
K0230.20081

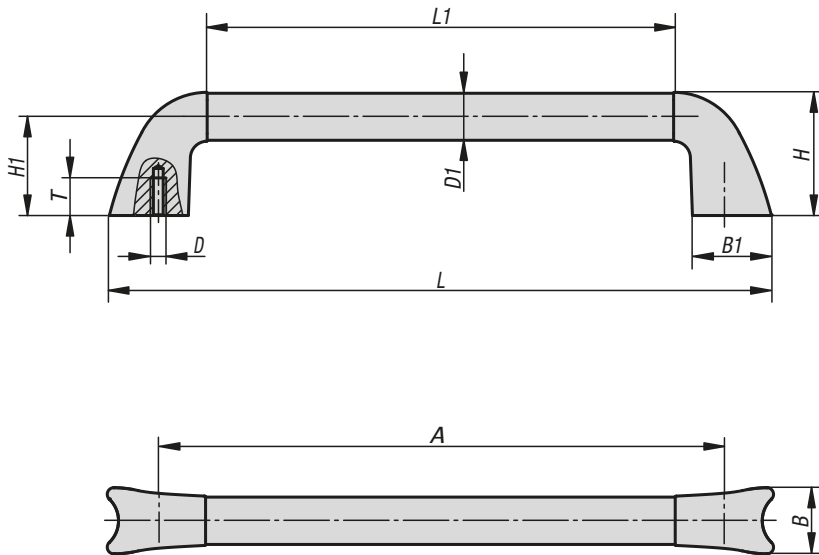
**Note:**  
Available as straight or right-angled handle.

**Assembly:**  
From the rear.

### KIPP Pull handles

| Order No.    | Form | Main colour         | A   | B   | D  | H  | L   | Load capacity N |
|--------------|------|---------------------|-----|-----|----|----|-----|-----------------|
| K0230.200081 | A    | matt chromed        | 200 | 130 | M8 | 70 | 220 | 1000            |
| K0230.350081 | A    | matt chromed        | 350 | 130 | M8 | 70 | 370 | 1000            |
| K0230.200082 | A    | black powder-coated | 200 | 130 | M8 | 70 | 220 | 1000            |
| K0230.350082 | A    | black powder-coated | 350 | 130 | M8 | 70 | 370 | 1000            |
| K0230.200083 | B    | matt chromed        | 200 | 20  | M8 | 70 | 220 | 1000            |
| K0230.250083 | B    | matt chromed        | 250 | 20  | M8 | 70 | 270 | 1000            |
| K0230.300083 | B    | matt chromed        | 300 | 20  | M8 | 70 | 320 | 1000            |
| K0230.350083 | B    | matt chromed        | 350 | 20  | M8 | 70 | 370 | 1000            |
| K0230.200084 | B    | black powder-coated | 200 | 20  | M8 | 70 | 220 | 1000            |
| K0230.250084 | B    | black powder-coated | 250 | 20  | M8 | 70 | 270 | 1000            |
| K0230.300084 | B    | black powder-coated | 300 | 20  | M8 | 70 | 320 | 1000            |
| K0230.350084 | B    | black powder-coated | 350 | 20  | M8 | 70 | 370 | 1000            |

## Tubular handles carbon

**Material:**

Grip legs stainless steel 1.4308.

Tubular grip carbon fibre reinforced plastic (CFP).

**Version:**

Grip legs polished.

Tubular grip CFP composition, clear varnished.

**Sample order:**

K0781.250251

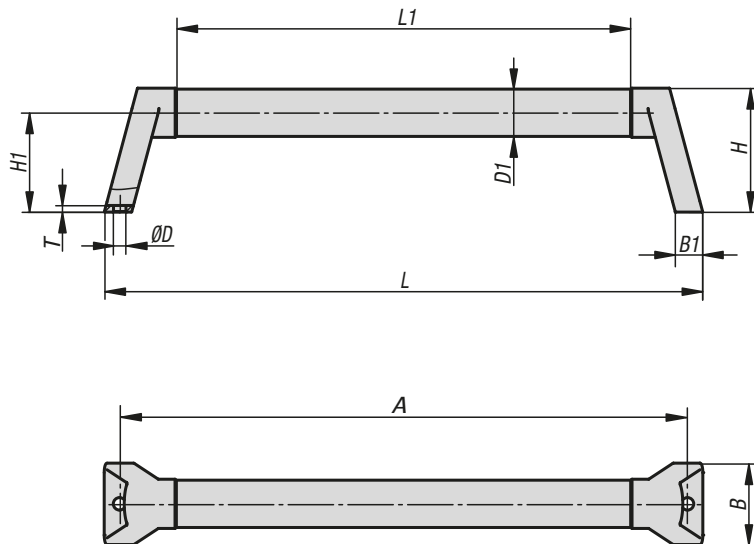
**Note:**

The grip is fastened using stainless steel DIN EN ISO 4762 socket head screws.

## KIPP Tubular handles carbon

| Order No.    | A   | B    | B1   | D  | D1 | H  | H1 | L   | L1  | T  | Load capacity<br>N |
|--------------|-----|------|------|----|----|----|----|-----|-----|----|--------------------|
| K0781.250251 | 250 | 34,8 | 41,6 | M6 | 25 | 64 | 51 | 301 | 198 | 20 | 1000               |
| K0781.300251 | 300 | 34,8 | 41,6 | M6 | 25 | 64 | 51 | 351 | 248 | 20 | 1000               |
| K0781.350251 | 350 | 34,8 | 41,6 | M6 | 25 | 64 | 51 | 401 | 298 | 20 | 1000               |
| K0781.350351 | 350 | 47,7 | 55   | M6 | 35 | 84 | 66 | 424 | 286 | 20 | 1000               |
| K0781.400351 | 400 | 47,7 | 55   | M6 | 35 | 84 | 66 | 474 | 336 | 20 | 1000               |
| K0781.450351 | 450 | 47,7 | 55   | M6 | 35 | 84 | 66 | 524 | 386 | 20 | 1000               |

## Tubular handles carbon

**Material:**

Grip legs stainless steel 1.4308.

Tubular grip carbon fibre reinforced plastic (CFP).

**Version:**

Grip legs polished.

Tubular grip CFP composition, clear varnished.

**Sample order:**

K0782.250251

**Note:**

The grip is fastened using stainless steel DIN EN ISO 4017 hexagon head screws.

## KIPP Tubular handles carbon

| Order No.    | A   | B    | B1   | D   | D1 | H    | H1   | L   | L1  | T   | Load capacity<br>N |
|--------------|-----|------|------|-----|----|------|------|-----|-----|-----|--------------------|
| K0782.250251 | 250 | 43   | 14,5 | 6,6 | 25 | 65,5 | 52,5 | 266 | 190 | 3,5 | 1000               |
| K0782.300251 | 300 | 43   | 14,5 | 6,6 | 25 | 65,5 | 52,5 | 316 | 240 | 3,5 | 1000               |
| K0782.350251 | 350 | 43   | 14,5 | 6,6 | 25 | 65,5 | 52,5 | 366 | 290 | 3,5 | 1000               |
| K0782.350351 | 350 | 57,7 | 18,6 | 6,6 | 35 | 85,5 | 67,5 | 371 | 270 | 4,5 | 1000               |
| K0782.400351 | 400 | 57,7 | 18,6 | 6,6 | 35 | 85,5 | 67,5 | 421 | 320 | 4,5 | 1000               |
| K0782.450351 | 450 | 57,7 | 18,6 | 6,6 | 35 | 85,5 | 67,5 | 471 | 370 | 4,5 | 1000               |



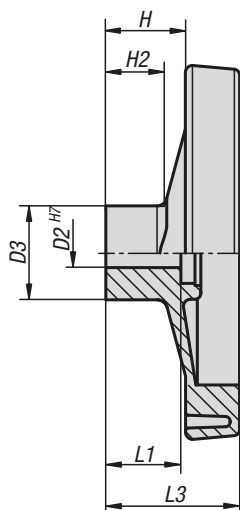
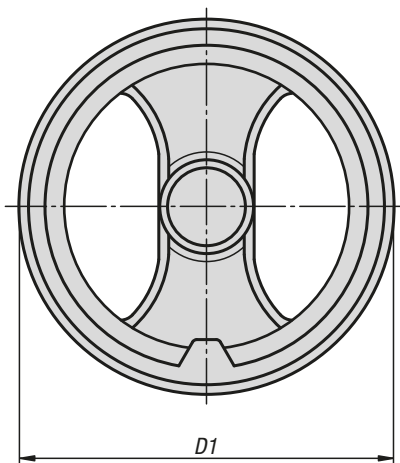


## Handwheels, crank handles, position indicators



# Handwheels 2-spoke

plastic



## Material:

Handwheel, reinforced and stabilised polyamide.  
Centre caps, polyamide.  
Centre bushes, steel.

## Version:

Handwheel, oil and grease resistant, black (RAL 9011), satin finish.  
Centre caps, grey (RAL 7035).  
Centre bushes, black oxidised.

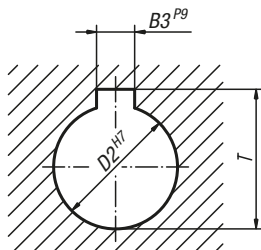
## Sample order:

K0725.0080X08

## On request:

Other cap colours.  
Special versions.

DIN 6885-1

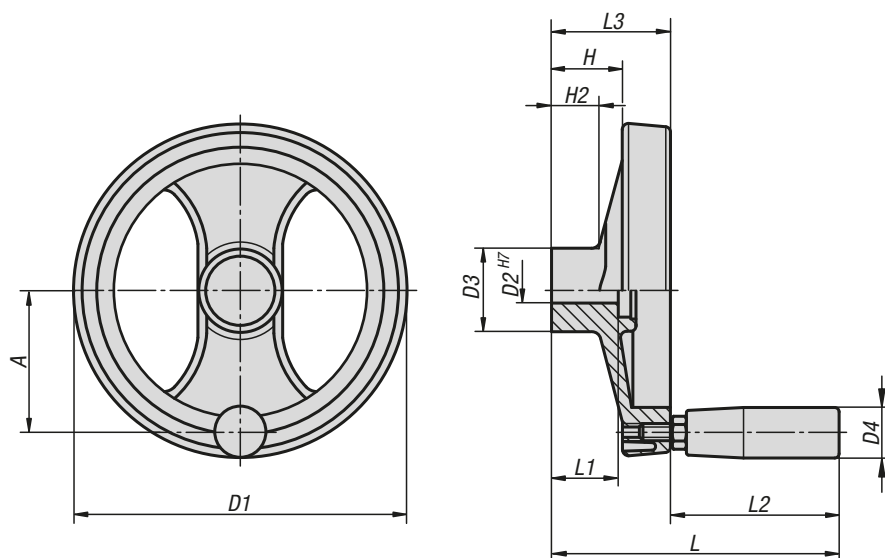


## KIPP Handwheels 2-spoke, plastic

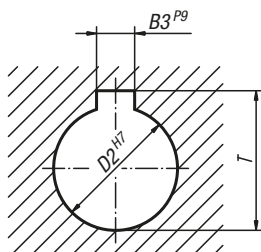
| Order No.<br>reamed hole | Order No.<br>reamed hole with slot | D1  | D2   | D3   | H    | H2   | L1 | L3 | B3  | T      |
|--------------------------|------------------------------------|-----|------|------|------|------|----|----|-----|--------|
| K0725.0080X08            | K0725.1080X08                      | 80  | 8H7  | 24,5 | 20   | 16   | 20 | 34 | -/2 | -/9    |
| K0725.0080X10            | K0725.1080X10                      | 80  | 10H7 | 24,5 | 20   | 16   | 20 | 34 | -/3 | -/11,4 |
| K0725.0100X10            | K0725.1100X10                      | 99  | 10H7 | 28   | 25,5 | 20   | 24 | 42 | -/3 | -/11,4 |
| K0725.0100X12            | K0725.1100X12                      | 99  | 12H7 | 28   | 25,5 | 20   | 24 | 42 | -/4 | -/13,8 |
| K0725.0130X12            | K0725.1130X12                      | 129 | 12H7 | 32   | 30   | 21   | 24 | 50 | -/4 | -/13,8 |
| K0725.0130X14            | K0725.1130X14                      | 129 | 14H7 | 32   | 30   | 21   | 24 | 50 | -/5 | -/16,3 |
| K0725.0160X14            | K0725.1160X14                      | 159 | 14H7 | 40   | 33   | 22   | 32 | 57 | -/5 | -/16,3 |
| K0725.0160X16            | K0725.1160X16                      | 159 | 16H7 | 40   | 33   | 22   | 32 | 57 | -/5 | -/18,3 |
| K0725.0200X16            | K0725.1200X16                      | 198 | 16H7 | 51   | 31   | 17,5 | 32 | 60 | -/5 | -/18,3 |
| K0725.0200X20            | K0725.1200X20                      | 198 | 20H7 | 51   | 31   | 17,5 | 32 | 60 | -/6 | -/22,8 |
| K0725.0250X20            | K0725.1250X20                      | 252 | 20H7 | 55,5 | 39,5 | 24   | 36 | 71 | -/6 | -/22,8 |
| K0725.0250X24            | K0725.1250X24                      | 252 | 24H7 | 55,5 | 39,5 | 24   | 36 | 71 | -/8 | -/27,3 |
| K0725.0345X20            | K0725.1345X20                      | 346 | 20H7 | 67,5 | 42   | 24   | 32 | 79 | -/6 | -/22,8 |

# Handwheels 2-spoke

plastic, with revolving grip



DIN 6885-1



## Material:

Handwheel, reinforced and stabilised polyamide.  
Centre caps, polyamide.  
Centre bushes, steel.  
Tapped insert for cylinder grip, brass.

## Version:

Handwheel, oil and grease resistant, black (RAL 9011), satin finish.  
Centre caps, grey (RAL 7035).  
Centre bushes, black oxidised.

## Sample order:

K0725.4080X08

## On request:

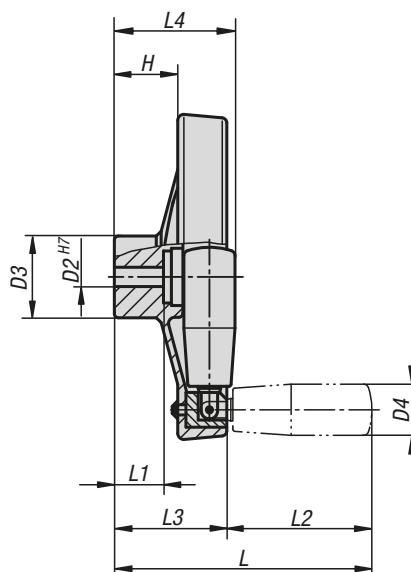
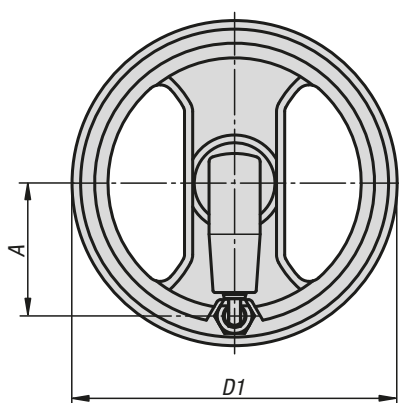
Other cap colours.  
Special versions.

## KIPP Handwheels 2-spoke, plastic, with revolving grip

| Order No.<br>reamed hole | Order No.<br>reamed hole with slot | D1  | D2   | D3   | D4 | H    | H2   | A   | L   | L1 | L2 | L3 | B3  | T      |
|--------------------------|------------------------------------|-----|------|------|----|------|------|-----|-----|----|----|----|-----|--------|
| K0725.4080X08            | K0725.5080X08                      | 80  | 8H7  | 24,5 | 20 | 20   | 16   | 30  | 85  | 20 | 51 | 34 | -/2 | -/9    |
| K0725.4080X10            | K0725.5080X10                      | 80  | 10H7 | 24,5 | 20 | 20   | 16   | 30  | 85  | 20 | 51 | 34 | -/3 | -/11,4 |
| K0725.4100X10            | K0725.5100X10                      | 99  | 10H7 | 28   | 20 | 25,5 | 20   | 38  | 93  | 24 | 51 | 43 | -/3 | -/11,4 |
| K0725.4100X12            | K0725.5100X12                      | 99  | 12H7 | 28   | 20 | 25,5 | 20   | 38  | 93  | 24 | 51 | 43 | -/4 | -/13,8 |
| K0725.4130X12            | K0725.5130X12                      | 129 | 12H7 | 32   | 23 | 30   | 21   | 55  | 112 | 24 | 62 | 50 | -/4 | -/13,8 |
| K0725.4130X14            | K0725.5130X14                      | 129 | 14H7 | 32   | 23 | 30   | 21   | 55  | 112 | 24 | 62 | 50 | -/5 | -/16,3 |
| K0725.4160X14            | K0725.5160X14                      | 159 | 14H7 | 40   | 23 | 33   | 22   | 66  | 119 | 32 | 62 | 57 | -/5 | -/16,3 |
| K0725.4160X16            | K0725.5160X16                      | 159 | 16H7 | 40   | 23 | 33   | 22   | 66  | 119 | 32 | 62 | 57 | -/5 | -/18,3 |
| K0725.4200X16            | K0725.5200X16                      | 198 | 16H7 | 51   | 26 | 31   | 17,5 | 82  | 141 | 32 | 81 | 60 | -/5 | -/18,3 |
| K0725.4200X20            | K0725.5200X20                      | 198 | 20H7 | 51   | 26 | 31   | 17,5 | 82  | 141 | 32 | 81 | 60 | -/6 | -/22,8 |
| K0725.4250X20            | K0725.5250X20                      | 252 | 20H7 | 55,5 | 27 | 39,5 | 24   | 113 | 163 | 36 | 92 | 71 | -/6 | -/22,8 |
| K0725.4250X24            | K0725.5250X24                      | 252 | 24H7 | 55,5 | 27 | 39,5 | 24   | 113 | 163 | 36 | 92 | 71 | -/8 | -/27,3 |
| K0725.4345X20            | K0725.5345X20                      | 346 | 20H7 | 67,5 | 27 | 42   | 24   | 146 | 171 | 32 | 92 | 79 | -/6 | -/22,8 |

# Handwheels 2-spoke

plastic, with folding grip



## Material:

Handwheel, reinforced and stabilised polyamide.

Centre caps, polyamide.

Centre bush and tapped insert for cylinder grip, steel.

## Version:

Handwheel, oil and grease resistant, black (RAL 9011), satin finish.

Centre caps, grey (RAL 7035).

Centre bush and taped insert for folding grip, black oxidised.

## Sample order:

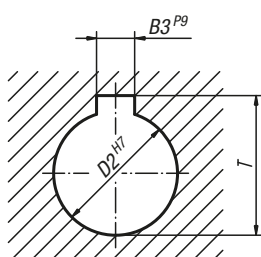
K0725.6130X12

## On request:

Other cap colours.

Special versions.

DIN 6885-1



## KIPP Handwheels 2-spoke, plastic, with folding grip

| Order No.<br>reamed hole | Order No.<br>reamed hole with slot | D1  | D2   | D3   | D4 | A   | H    | L   | L1 | L2 | L3 | L4 | B3  | T      |
|--------------------------|------------------------------------|-----|------|------|----|-----|------|-----|----|----|----|----|-----|--------|
| K0725.6130X12            | K0725.7130X12                      | 129 | 12H7 | 32   | 20 | 51  | 29   | 111 | 20 | 59 | 52 | 53 | -/4 | -/13,8 |
| K0725.6130X14            | K0725.7130X14                      | 129 | 14H7 | 32   | 20 | 51  | 29   | 111 | 20 | 59 | 52 | 53 | -/5 | -/16,3 |
| K0725.6160X14            | K0725.7160X14                      | 159 | 14H7 | 40   | 25 | 65  | 31   | 126 | 24 | 71 | 55 | 59 | -/5 | -/16,3 |
| K0725.6160X16            | K0725.7160X16                      | 159 | 16H7 | 40   | 25 | 65  | 31   | 126 | 24 | 71 | 55 | 59 | -/5 | -/18,3 |
| K0725.6200X16            | K0725.7200X16                      | 200 | 16H7 | 54,5 | 27 | 80  | 33   | 160 | 28 | 91 | 69 | 69 | -/5 | -/18,3 |
| K0725.6200X20            | K0725.7200X20                      | 200 | 20H7 | 54,5 | 27 | 80  | 33   | 160 | 28 | 91 | 69 | 69 | -/6 | -/22,8 |
| K0725.6345X20            | K0725.7345X20                      | 346 | 20H7 | 67,5 | 27 | 148 | 43,5 | 144 | 32 | 91 | 80 | 80 | -/6 | -/22,8 |

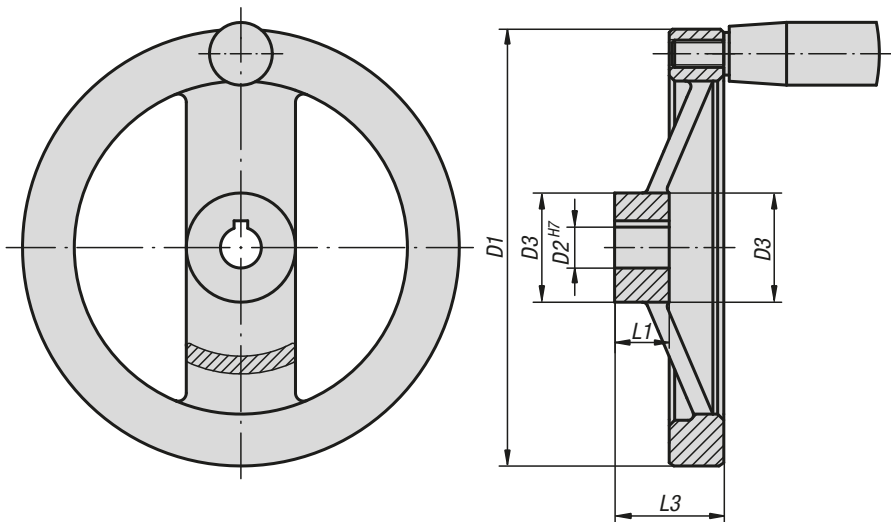


A large rectangular area filled with a fine grid of light gray lines, intended for handwritten notes.



# Handwheels 2-spoke

flat rim, aluminium



## Material:

Handwheels aluminium.

Cylinder grip black thermoset PF 31-DIN 7708, centre pin electro zinc-plated steel.

## Version:

Wheel rim turned and polished.

Radial and axial run-out of rim < IT 12.

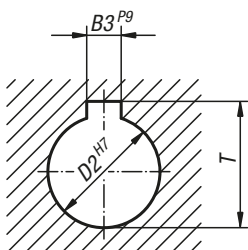
## Sample order:

K0162.4080X10

## On request:

Hubs with square socket or powder-coated handwheels.

DIN 6885-1



## KIPP Handwheels 2-spoke, aluminium, flat wheel rim, without grip

| Order No.<br>reamed hole | Order No.<br>reamed hole with slot | D1  | D2   | D3 | L1 | L3   | B3  | T      |
|--------------------------|------------------------------------|-----|------|----|----|------|-----|--------|
| K0162.0080X10            | K0162.1080X10                      | 80  | 10H7 | 24 | 16 | 28   | -/3 | -/11,4 |
| K0162.0080X12            | K0162.1080X12                      | 80  | 12H7 | 24 | 16 | 28   | -/4 | -/13,8 |
| K0162.0100X10            | K0162.1100X10                      | 100 | 10H7 | 26 | 17 | 33   | -/3 | -/11,4 |
| K0162.0100X12            | K0162.1100X12                      | 100 | 12H7 | 26 | 17 | 33   | -/4 | -/13,8 |
| K0162.0125X12            | K0162.1125X12                      | 125 | 12H7 | 31 | 18 | 33,5 | -/4 | -/13,8 |
| K0162.0125X14            | K0162.1125X14                      | 125 | 14H7 | 31 | 18 | 33,5 | -/5 | -/16,3 |
| K0162.0160X14            | K0162.1160X14                      | 160 | 14H7 | 40 | 20 | 39   | -/5 | -/16,3 |
| K0162.0160X16            | K0162.1160X16                      | 160 | 16H7 | 40 | 20 | 39   | -/5 | -/18,3 |
| K0162.0200X18            | K0162.1200X18                      | 200 | 18H7 | 42 | 24 | 45   | -/6 | -/20,8 |
| K0162.0200X20            | K0162.1200X20                      | 200 | 20H7 | 42 | 24 | 45   | -/6 | -/22,8 |
| K0162.0250X22            | K0162.1250X22                      | 250 | 22H7 | 48 | 28 | 51   | -/6 | -/24,8 |
| K0162.0250X26            | K0162.1250X26                      | 250 | 26H7 | 48 | 28 | 51   | -/8 | -/29,3 |

## Handwheels 2-spoke

flat rim, aluminium



## KIPP Handwheels 2-spoke, aluminium, flat wheel rim, with fixed cylinder grip

| Order No.<br>reamed hole | Order No.<br>reamed hole with slot | D1  | D2   | D3 | L1 | L3   | B3  | T      | Fixed<br>cylinder<br>grip |
|--------------------------|------------------------------------|-----|------|----|----|------|-----|--------|---------------------------|
| K0162.2080X10            | K0162.3080X10                      | 80  | 10H7 | 24 | 16 | 28   | -/3 | -/11,4 | ø18 x M6 x 40             |
| K0162.2080X12            | K0162.3080X12                      | 80  | 12H7 | 24 | 16 | 28   | -/4 | -/13,8 | ø18 x M6 x 40             |
| K0162.2100X10            | K0162.3100X10                      | 100 | 10H7 | 26 | 17 | 33   | -/3 | -/11,4 | ø18 x M6 x 40             |
| K0162.2100X12            | K0162.3100X12                      | 100 | 12H7 | 26 | 17 | 33   | -/4 | -/13,8 | ø18 x M6 x 40             |
| K0162.2125X12            | K0162.3125X12                      | 125 | 12H7 | 31 | 18 | 33,5 | -/4 | -/13,8 | ø21 x M8 x 50             |
| K0162.2125X14            | K0162.3125X14                      | 125 | 14H7 | 31 | 18 | 33,5 | -/5 | -/16,3 | ø21 x M8 x 50             |
| K0162.2160X14            | K0162.3160X14                      | 160 | 14H7 | 40 | 20 | 39   | -/5 | -/16,3 | ø26 x M10 x 80            |
| K0162.2160X16            | K0162.3160X16                      | 160 | 16H7 | 40 | 20 | 39   | -/5 | -/18,3 | ø26 x M10 x 80            |
| K0162.2200X18            | K0162.3200X18                      | 200 | 18H7 | 42 | 24 | 45   | -/6 | -/20,8 | ø26 x M10 x 80            |
| K0162.2200X20            | K0162.3200X20                      | 200 | 20H7 | 42 | 24 | 45   | -/6 | -/22,8 | ø26 x M10 x 80            |
| K0162.2250X22            | K0162.3250X22                      | 250 | 22H7 | 48 | 28 | 51   | -/6 | -/24,8 | ø28 x M12 x 90            |
| K0162.2250X26            | K0162.3250X26                      | 250 | 26H7 | 48 | 28 | 51   | -/8 | -/29,3 | ø28 x M12 x 90            |

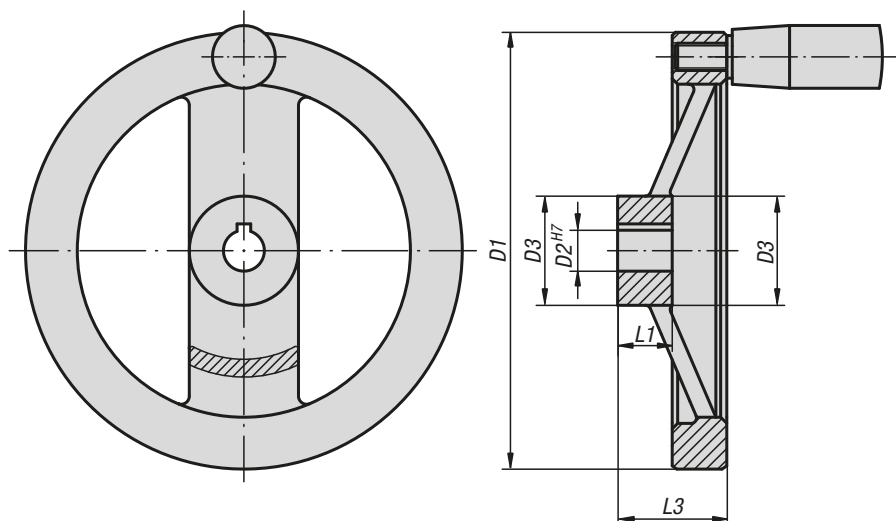
## KIPP Handwheels 2-spoke, aluminium, flat wheel rim, with revolving cylinder grip

| Order No.<br>reamed hole | Order No.<br>reamed hole with slot | D1  | D2   | D3 | L1 | L3   | B3  | T      | Revolving<br>cylinder<br>grip |
|--------------------------|------------------------------------|-----|------|----|----|------|-----|--------|-------------------------------|
| K0162.4080X10            | K0162.5080X10                      | 80  | 10H7 | 24 | 16 | 28   | -/3 | -/11,4 | ø18 x M6 x 40                 |
| K0162.4080X12            | K0162.5080X12                      | 80  | 12H7 | 24 | 16 | 28   | -/4 | -/13,8 | ø18 x M6 x 40                 |
| K0162.4100X10            | K0162.5100X10                      | 100 | 10H7 | 26 | 17 | 33   | -/3 | -/11,4 | ø18 x M6 x 40                 |
| K0162.4100X12            | K0162.5100X12                      | 100 | 12H7 | 26 | 17 | 33   | -/4 | -/13,8 | ø18 x M6 x 40                 |
| K0162.4125X12            | K0162.5125X12                      | 125 | 12H7 | 31 | 18 | 33,5 | -/4 | -/13,8 | ø22 x M8 x 56                 |
| K0162.4125X14            | K0162.5125X14                      | 125 | 14H7 | 31 | 18 | 33,5 | -/5 | -/16,3 | ø22 x M8 x 56                 |
| K0162.4160X14            | K0162.5160X14                      | 160 | 14H7 | 40 | 20 | 39   | -/5 | -/16,3 | ø26 x M10 x 80                |
| K0162.4160X16            | K0162.5160X16                      | 160 | 16H7 | 40 | 20 | 39   | -/5 | -/18,3 | ø26 x M10 x 80                |
| K0162.4200X18            | K0162.5200X18                      | 200 | 18H7 | 42 | 24 | 45   | -/6 | -/20,8 | ø26 x M10 x 80                |
| K0162.4200X20            | K0162.5200X20                      | 200 | 20H7 | 42 | 24 | 45   | -/6 | -/22,8 | ø26 x M10 x 80                |
| K0162.4250X22            | K0162.5250X22                      | 250 | 22H7 | 48 | 28 | 51   | -/6 | -/24,8 | ø31 x M12 x 102               |
| K0162.4250X26            | K0162.5250X26                      | 250 | 26H7 | 48 | 28 | 51   | -/8 | -/29,3 | ø31 x M12 x 102               |



# Handwheels 2-spoke

flat rim, aluminium



## Material:

Handwheels aluminium.  
Cylinder grip black thermoset PF 31-DIN 7708,  
centre pin electro zinc-plated steel.

## Version:

Black, powder-coated.  
Wheel rim turned.  
Radial and axial run-out of rim < IT 12.

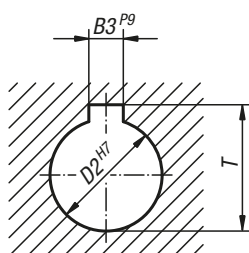
## Sample order:

K0162.01080X10

## On request:

Hubs with square socket.

DIN 6885-1



## KIPP Handwheels 2-spoke, aluminium, flat wheel rim, without grip

| Order No.<br>reamed hole | Order No.<br>reamed hole with slot | D1  | D2   | D3 | L1 | L3   | B3  | T      |
|--------------------------|------------------------------------|-----|------|----|----|------|-----|--------|
| K0162.01080X10           | K0162.11080X10                     | 80  | 10H7 | 24 | 16 | 28   | -/3 | -/11,4 |
| K0162.01080X12           | K0162.11080X12                     | 80  | 12H7 | 24 | 16 | 28   | -/4 | -/13,8 |
| K0162.01100X10           | K0162.11100X10                     | 100 | 10H7 | 26 | 17 | 33   | -/3 | -/11,4 |
| K0162.01100X12           | K0162.11100X12                     | 100 | 12H7 | 26 | 17 | 33   | -/4 | -/13,8 |
| K0162.01125X12           | K0162.11125X12                     | 125 | 12H7 | 31 | 18 | 33,5 | -/4 | -/13,8 |
| K0162.01125X14           | K0162.11125X14                     | 125 | 14H7 | 31 | 18 | 33,5 | -/5 | -/16,3 |
| K0162.01160X14           | K0162.11160X14                     | 160 | 14H7 | 40 | 20 | 39   | -/5 | -/16,3 |
| K0162.01160X16           | K0162.11160X16                     | 160 | 16H7 | 40 | 20 | 39   | -/5 | -/18,3 |
| K0162.01200X18           | K0162.11200X18                     | 200 | 18H7 | 42 | 24 | 45   | -/6 | -/20,8 |
| K0162.01200X20           | K0162.11200X20                     | 200 | 20H7 | 42 | 24 | 45   | -/6 | -/22,8 |
| K0162.01250X22           | K0162.11250X22                     | 250 | 22H7 | 48 | 28 | 51   | -/6 | -/24,8 |
| K0162.01250X26           | K0162.11250X26                     | 250 | 26H7 | 48 | 28 | 51   | -/8 | -/29,3 |

## Handwheels 2-spoke

flat rim, aluminium



## KIPP Handwheels 2-spoke, aluminium, flat wheel rim, with fixed cylinder grip

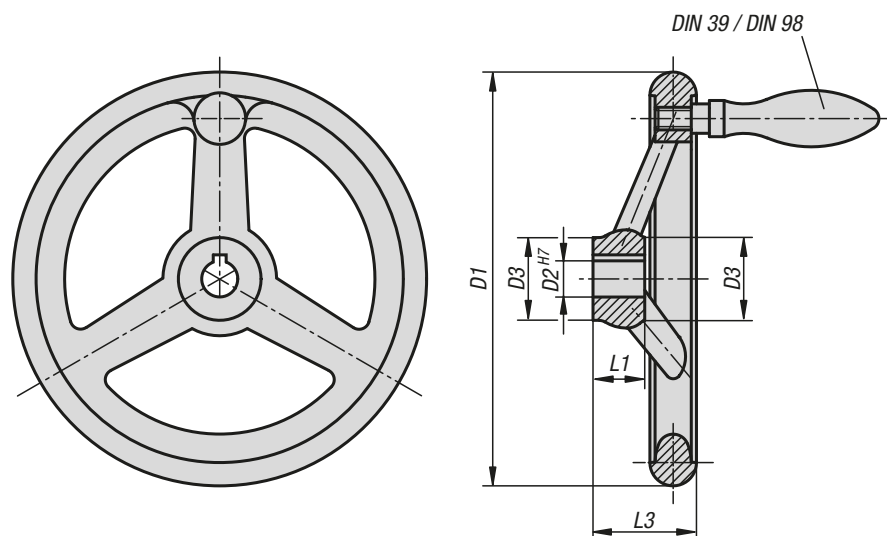
| Order No.<br>reamed hole | Order No.<br>reamed hole with slot | D1  | D2   | D3 | L1 | L3   | B3  | T      | Fixed<br>cylinder<br>grip |
|--------------------------|------------------------------------|-----|------|----|----|------|-----|--------|---------------------------|
| K0162.21080X10           | K0162.31080X10                     | 80  | 10H7 | 24 | 16 | 28   | -/3 | -/11,4 | ø18 x M6 x 40             |
| K0162.21080X12           | K0162.31080X12                     | 80  | 12H7 | 24 | 16 | 28   | -/4 | -/13,8 | ø18 x M6 x 40             |
| K0162.21100X10           | K0162.31100X10                     | 100 | 10H7 | 26 | 17 | 33   | -/3 | -/11,4 | ø18 x M6 x 40             |
| K0162.21100X12           | K0162.31100X12                     | 100 | 12H7 | 26 | 17 | 33   | -/4 | -/13,8 | ø18 x M6 x 40             |
| K0162.21125X12           | K0162.31125X12                     | 125 | 12H7 | 31 | 18 | 33,5 | -/4 | -/13,8 | ø21 x M8 x 50             |
| K0162.21125X14           | K0162.31125X14                     | 125 | 14H7 | 31 | 18 | 33,5 | -/5 | -/16,3 | ø21 x M8 x 50             |
| K0162.21160X14           | K0162.31160X14                     | 160 | 14H7 | 40 | 20 | 39   | -/5 | -/16,3 | ø26 x M10 x 80            |
| K0162.21160X16           | K0162.31160X16                     | 160 | 16H7 | 40 | 20 | 39   | -/5 | -/18,3 | ø26 x M10 x 80            |
| K0162.21200X18           | K0162.31200X18                     | 200 | 18H7 | 42 | 24 | 45   | -/6 | -/20,8 | ø26 x M10 x 80            |
| K0162.21200X20           | K0162.31200X20                     | 200 | 20H7 | 42 | 24 | 45   | -/6 | -/22,8 | ø26 x M10 x 80            |
| K0162.21250X22           | K0162.31250X22                     | 250 | 22H7 | 48 | 28 | 51   | -/6 | -/24,8 | ø28 x M12 x 90            |
| K0162.21250X26           | K0162.31250X26                     | 250 | 26H7 | 48 | 28 | 51   | -/8 | -/29,3 | ø28 x M12 x 90            |

## KIPP Handwheels 2-spoke, aluminium, flat wheel rim, with revolving cylinder grip

| Order No.<br>reamed hole | Order No.<br>reamed hole with slot | D1  | D2   | D3 | L1 | L3   | B3  | T      | Revolving<br>cylinder<br>grip |
|--------------------------|------------------------------------|-----|------|----|----|------|-----|--------|-------------------------------|
| K0162.41080X10           | K0162.51080X10                     | 80  | 10H7 | 24 | 16 | 28   | -/3 | -/11,4 | ø18 x M6 x 40                 |
| K0162.41080X12           | K0162.51080X12                     | 80  | 12H7 | 24 | 16 | 28   | -/4 | -/13,8 | ø18 x M6 x 40                 |
| K0162.41100X10           | K0162.51100X10                     | 100 | 10H7 | 26 | 17 | 33   | -/3 | -/11,4 | ø18 x M6 x 40                 |
| K0162.41100X12           | K0162.51100X12                     | 100 | 12H7 | 26 | 17 | 33   | -/4 | -/13,8 | ø18 x M6 x 40                 |
| K0162.41125X12           | K0162.51125X12                     | 125 | 12H7 | 31 | 18 | 33,5 | -/4 | -/13,8 | ø22 x M8 x 56                 |
| K0162.41125X14           | K0162.51125X14                     | 125 | 14H7 | 31 | 18 | 33,5 | -/5 | -/16,3 | ø22 x M8 x 56                 |
| K0162.41160X14           | K0162.51160X14                     | 160 | 14H7 | 40 | 20 | 39   | -/5 | -/16,3 | ø26 x M10 x 80                |
| K0162.41160X16           | K0162.51160X16                     | 160 | 16H7 | 40 | 20 | 39   | -/5 | -/18,3 | ø26 x M10 x 80                |
| K0162.41200X18           | K0162.51200X18                     | 200 | 18H7 | 42 | 24 | 45   | -/6 | -/20,8 | ø26 x M10 x 80                |
| K0162.41200X20           | K0162.51200X20                     | 200 | 20H7 | 42 | 24 | 45   | -/6 | -/22,8 | ø26 x M10 x 80                |
| K0162.41250X22           | K0162.51250X22                     | 250 | 22H7 | 48 | 28 | 51   | -/6 | -/24,8 | ø31 x M12 x 102               |
| K0162.41250X26           | K0162.51250X26                     | 250 | 26H7 | 48 | 28 | 51   | -/8 | -/29,3 | ø31 x M12 x 102               |

# Handwheels

DIN 950 grey cast iron



## Material:

Handwheel, grey cast iron.  
Grip steel.

## Version:

Wheel rim turned and polished.  
Radial and axial run-out of rim < IT 12.

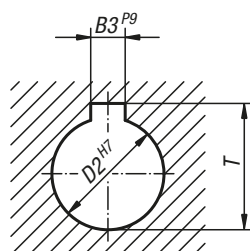
## Sample order:

K0671.4080X10

## On request:

Hubs with square socket or powder-coated handwheels.

DIN 6885-1



## KIPP Handwheels DIN 950 grey cast iron, without grip

| Order No.<br>reamed hole | Order No.<br>reamed hole with slot | D1  | D2   | D3 | L1 | L3 | B3   | T      | No. of<br>spokes |
|--------------------------|------------------------------------|-----|------|----|----|----|------|--------|------------------|
| K0671.0080X10            | K0671.1080X10                      | 80  | 10H7 | 25 | 16 | 29 | -/3  | -/11,4 | 3                |
| K0671.0080X12            | K0671.1080X12                      | 80  | 12H7 | 25 | 16 | 29 | -/4  | -/13,8 | 3                |
| K0671.0100X10            | K0671.1100X10                      | 100 | 10H7 | 26 | 17 | 33 | -/3  | -/11,4 | 3                |
| K0671.0100X12            | K0671.1100X12                      | 100 | 12H7 | 26 | 17 | 33 | -/4  | -/13,8 | 3                |
| K0671.0125X12            | K0671.1125X12                      | 125 | 12H7 | 33 | 18 | 36 | -/4  | -/13,8 | 3                |
| K0671.0125X14            | K0671.1125X14                      | 125 | 14H7 | 33 | 18 | 36 | -/5  | -/16,3 | 3                |
| K0671.0140X14            | K0671.1140X14                      | 140 | 14H7 | 33 | 19 | 39 | -/5  | -/16,3 | 3                |
| K0671.0140X16            | K0671.1140X16                      | 140 | 16H7 | 33 | 19 | 39 | -/5  | -/18,3 | 3                |
| K0671.0160X14            | K0671.1160X14                      | 160 | 14H7 | 37 | 20 | 40 | -/5  | -/16,3 | 3                |
| K0671.0160X16            | K0671.1160X16                      | 160 | 16H7 | 37 | 20 | 40 | -/5  | -/18,3 | 3                |
| K0671.0180X16            | K0671.1180X16                      | 180 | 16H7 | 36 | 22 | 43 | -/5  | -/18,3 | 3                |
| K0671.0180X18            | K0671.1180X18                      | 180 | 18H7 | 36 | 22 | 43 | -/6  | -/20,8 | 3                |
| K0671.0200X18            | K0671.1200X18                      | 200 | 18H7 | 38 | 24 | 45 | -/6  | -/20,8 | 3                |
| K0671.0200X22            | K0671.1200X22                      | 200 | 22H7 | 38 | 24 | 45 | -/6  | -/24,8 | 3                |
| K0671.0250X22            | K0671.1250X22                      | 250 | 22H7 | 46 | 28 | 50 | -/6  | -/24,8 | 5                |
| K0671.0250X26            | K0671.1250X26                      | 250 | 26H7 | 46 | 28 | 50 | -/8  | -/29,3 | 5                |
| K0671.0315X26            | K0671.1315X26                      | 315 | 26H7 | 54 | 33 | 56 | -/8  | -/29,3 | 5                |
| K0671.0315X30            | K0671.1315X30                      | 315 | 30H7 | 54 | 33 | 56 | -/8  | -/33,3 | 5                |
| K0671.0400X30            | K0671.1400X30                      | 400 | 30H7 | 68 | 38 | 63 | -/8  | -/33,3 | 5                |
| K0671.0400X34            | K0671.1400X34                      | 400 | 34H7 | 68 | 38 | 63 | -/10 | -/37,3 | 5                |
| K0671.0500X34            | K0671.1500X34                      | 500 | 34H7 | 79 | 45 | 72 | -/10 | -/37,3 | 5                |
| K0671.0500X40            | K0671.1500X40                      | 500 | 40H7 | 79 | 45 | 72 | -/12 | -/43,3 | 5                |

# Handwheels

DIN 950 grey cast iron

## KIPP Handwheels DIN 950 grey cast iron, with fixed grip

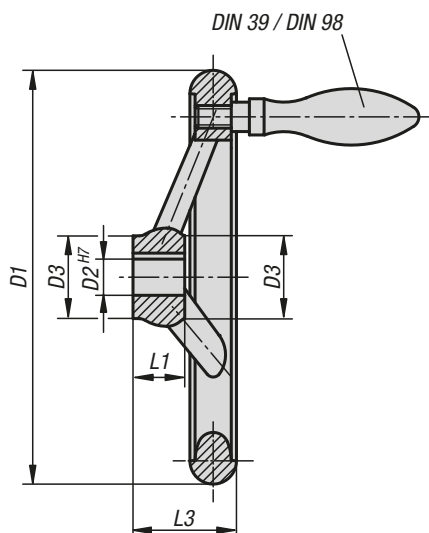
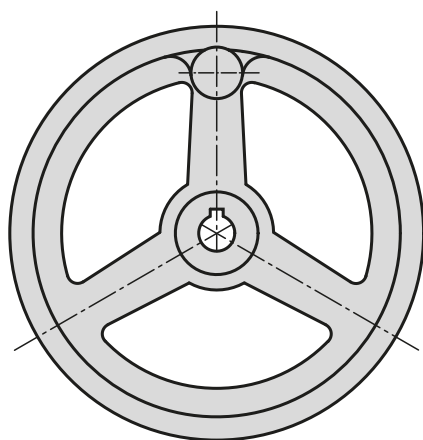
| Order No.<br>reamed hole | Order No.<br>reamed hole with slot | D1  | D2   | D3 | L1 | L3 | B3   | T      | No.of<br>spokes | fixed grip<br>DIN 39<br>Form E |
|--------------------------|------------------------------------|-----|------|----|----|----|------|--------|-----------------|--------------------------------|
| K0671.2080X10            | K0671.3080X10                      | 80  | 10H7 | 25 | 16 | 29 | -/3  | -/11,4 | 3               | ø16 x M6 x 50                  |
| K0671.2080X12            | K0671.3080X12                      | 80  | 12H7 | 25 | 16 | 29 | -/4  | -/13,8 | 3               | ø16 x M6 x 50                  |
| K0671.2100X10            | K0671.3100X10                      | 100 | 10H7 | 26 | 17 | 33 | -/3  | -/11,4 | 3               | ø16 x M6 x 50                  |
| K0671.2100X12            | K0671.3100X12                      | 100 | 12H7 | 26 | 17 | 33 | -/4  | -/13,8 | 3               | ø16 x M6 x 50                  |
| K0671.2125X12            | K0671.3125X12                      | 125 | 12H7 | 33 | 18 | 36 | -/4  | -/13,8 | 3               | ø20 x M8 x 64                  |
| K0671.2125X14            | K0671.3125X14                      | 125 | 14H7 | 33 | 18 | 36 | -/5  | -/16,3 | 3               | ø20 x M8 x 64                  |
| K0671.2140X14            | K0671.3140X14                      | 140 | 14H7 | 33 | 19 | 39 | -/5  | -/16,3 | 3               | ø20 x M8 x 64                  |
| K0671.2140X16            | K0671.3140X16                      | 140 | 16H7 | 33 | 19 | 39 | -/5  | -/18,3 | 3               | ø20 x M8 x 64                  |
| K0671.2160X14            | K0671.3160X14                      | 160 | 14H7 | 37 | 20 | 40 | -/5  | -/16,3 | 3               | ø25 x M10 x 80                 |
| K0671.2160X16            | K0671.3160X16                      | 160 | 16H7 | 37 | 20 | 40 | -/5  | -/18,3 | 3               | ø25 x M10 x 80                 |
| K0671.2180X16            | K0671.3180X16                      | 180 | 16H7 | 36 | 22 | 43 | -/5  | -/18,3 | 3               | ø25 x M10 x 80                 |
| K0671.2180X18            | K0671.3180X18                      | 180 | 18H7 | 36 | 22 | 43 | -/6  | -/20,8 | 3               | ø25 x M10 x 80                 |
| K0671.2200X18            | K0671.3200X18                      | 200 | 18H7 | 38 | 24 | 45 | -/6  | -/20,8 | 3               | ø25 x M10 x 80                 |
| K0671.2200X22            | K0671.3200X22                      | 200 | 22H7 | 38 | 24 | 45 | -/6  | -/24,8 | 3               | ø25 x M10 x 80                 |
| K0671.2250X22            | K0671.3250X22                      | 250 | 22H7 | 46 | 28 | 50 | -/6  | -/24,8 | 5               | ø32 x M12 x 100                |
| K0671.2250X26            | K0671.3250X26                      | 250 | 26H7 | 46 | 28 | 50 | -/8  | -/29,3 | 5               | ø32 x M12 x 100                |
| K0671.2315X26            | K0671.3315X26                      | 315 | 26H7 | 54 | 33 | 56 | -/8  | -/29,3 | 5               | ø32 x M12 x 100                |
| K0671.2315X30            | K0671.3315X30                      | 315 | 30H7 | 54 | 33 | 56 | -/8  | -/33,3 | 5               | ø32 x M12 x 100                |
| K0671.2400X30            | K0671.3400X30                      | 400 | 30H7 | 68 | 38 | 63 | -/8  | -/33,3 | 5               | ø36 x M16 x 112                |
| K0671.2400X34            | K0671.3400X34                      | 400 | 34H7 | 68 | 38 | 63 | -/10 | -/37,3 | 5               | ø36 x M16 x 112                |
| K0671.2500X34            | K0671.3500X34                      | 500 | 34H7 | 79 | 45 | 72 | -/10 | -/37,3 | 5               | ø36 x M16 x 112                |
| K0671.2500X40            | K0671.3500X40                      | 500 | 40H7 | 79 | 45 | 72 | -/12 | -/43,3 | 5               | ø36 x M16 x 112                |

## KIPP Handwheels DIN 950 grey cast iron, with revolving grip

| Order No.<br>reamed hole | Order No.<br>reamed hole with slot | D1  | D2   | D3 | L1 | L3 | B3   | T      | No.of<br>spokes | revolving<br>grip DIN 98<br>Form E |
|--------------------------|------------------------------------|-----|------|----|----|----|------|--------|-----------------|------------------------------------|
| K0671.4080X10            | K0671.5080X10                      | 80  | 10H7 | 25 | 16 | 29 | -/3  | -/11,4 | 3               | ø16 x M6 x 54,5                    |
| K0671.4080X12            | K0671.5080X12                      | 80  | 12H7 | 25 | 16 | 29 | -/4  | -/13,8 | 3               | ø16 x M6 x 54,5                    |
| K0671.4100X10            | K0671.5100X10                      | 100 | 10H7 | 26 | 17 | 33 | -/3  | -/11,4 | 3               | ø16 x M6 x 54,5                    |
| K0671.4100X12            | K0671.5100X12                      | 100 | 12H7 | 26 | 17 | 33 | -/4  | -/13,8 | 3               | ø16 x M6 x 54,5                    |
| K0671.4125X12            | K0671.5125X12                      | 125 | 12H7 | 33 | 18 | 36 | -/4  | -/13,8 | 3               | ø20 x M8 x 67                      |
| K0671.4125X14            | K0671.5125X14                      | 125 | 14H7 | 33 | 18 | 36 | -/5  | -/16,3 | 3               | ø20 x M8 x 67                      |
| K0671.4140X14            | K0671.5140X14                      | 140 | 14H7 | 33 | 19 | 39 | -/5  | -/16,3 | 3               | ø20 x M8 x 67                      |
| K0671.4140X16            | K0671.5140X16                      | 140 | 16H7 | 33 | 19 | 39 | -/5  | -/18,3 | 3               | ø20 x M8 x 67                      |
| K0671.4160X14            | K0671.5160X14                      | 160 | 14H7 | 37 | 20 | 40 | -/5  | -/16,3 | 3               | ø25 x M10 x 83                     |
| K0671.4160X16            | K0671.5160X16                      | 160 | 16H7 | 37 | 20 | 40 | -/5  | -/18,3 | 3               | ø25 x M10 x 83                     |
| K0671.4180X16            | K0671.5180X16                      | 180 | 16H7 | 36 | 22 | 43 | -/5  | -/18,3 | 3               | ø25 x M10 x 83                     |
| K0671.4180X18            | K0671.5180X18                      | 180 | 18H7 | 36 | 22 | 43 | -/6  | -/20,8 | 3               | ø25 x M10 x 83                     |
| K0671.4200X18            | K0671.5200X18                      | 200 | 18H7 | 38 | 24 | 45 | -/6  | -/20,8 | 3               | ø25 x M10 x 83                     |
| K0671.4200X22            | K0671.5200X22                      | 200 | 22H7 | 38 | 24 | 45 | -/6  | -/24,8 | 3               | ø25 x M10 x 83                     |
| K0671.4250X22            | K0671.5250X22                      | 250 | 22H7 | 46 | 28 | 50 | -/6  | -/24,8 | 5               | ø32 x M12 x 105,5                  |
| K0671.4250X26            | K0671.5250X26                      | 250 | 26H7 | 46 | 28 | 50 | -/8  | -/29,3 | 5               | ø32 x M12 x 105,5                  |
| K0671.4315X26            | K0671.5315X26                      | 315 | 26H7 | 54 | 33 | 56 | -/8  | -/29,3 | 5               | ø32 x M12 x 105,5                  |
| K0671.4315X30            | K0671.5315X30                      | 315 | 30H7 | 54 | 33 | 56 | -/8  | -/33,3 | 5               | ø32 x M12 x 105,5                  |
| K0671.4400X30            | K0671.5400X30                      | 400 | 30H7 | 68 | 38 | 63 | -/8  | -/33,3 | 5               | ø36 x M16 x 117                    |
| K0671.4400X34            | K0671.5400X34                      | 400 | 34H7 | 68 | 38 | 63 | -/10 | -/37,3 | 5               | ø36 x M16 x 117                    |
| K0671.4500X34            | K0671.5500X34                      | 500 | 34H7 | 79 | 45 | 72 | -/10 | -/37,3 | 5               | ø36 x M16 x 117                    |
| K0671.4500X40            | K0671.5500X40                      | 500 | 40H7 | 79 | 45 | 72 | -/12 | -/43,3 | 5               | ø36 x M16 x 117                    |

## Handwheels

DIN 950, aluminium

**Material:**

Handwheel aluminium.

Fixed grip aluminium, centre pin black oxidised steel.

Revolving grip aluminium, centre pin trivalent blue passivated steel.

**Version:**

Wheel rim turned and polished.

Radial and axial run-out of rim &lt; IT 12.

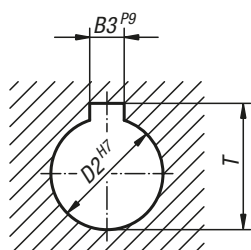
**Sample order:**

K0160.4080X10

**On request:**

Hubs with square socket or powder-coated handwheels.

DIN 6885-1



## KIPP Handwheels DIN 950 aluminium, without grip

| Order No.<br>reamed hole | Order No.<br>reamed hole with slot | D1  | D2   | D3 | L1 | L3 | B3   | T      | No. of<br>spokes |
|--------------------------|------------------------------------|-----|------|----|----|----|------|--------|------------------|
| K0160.0080X10            | K0160.1080X10                      | 80  | 10H7 | 25 | 16 | 29 | -/3  | -/11,4 | 3                |
| K0160.0080X12            | K0160.1080X12                      | 80  | 12H7 | 25 | 16 | 29 | -/4  | -/13,8 | 3                |
| K0160.0100X10            | K0160.1100X10                      | 100 | 10H7 | 29 | 17 | 33 | -/3  | -/11,4 | 3                |
| K0160.0100X12            | K0160.1100X12                      | 100 | 12H7 | 29 | 17 | 33 | -/4  | -/13,8 | 3                |
| K0160.0125X12            | K0160.1125X12                      | 125 | 12H7 | 31 | 18 | 36 | -/4  | -/13,8 | 3                |
| K0160.0125X14            | K0160.1125X14                      | 125 | 14H7 | 31 | 18 | 36 | -/5  | -/16,3 | 3                |
| K0160.0140X14            | K0160.1140X14                      | 140 | 14H7 | 36 | 19 | 39 | -/5  | -/16,3 | 3                |
| K0160.0140X16            | K0160.1140X16                      | 140 | 16H7 | 36 | 19 | 39 | -/5  | -/18,3 | 3                |
| K0160.0160X14            | K0160.1160X14                      | 160 | 14H7 | 36 | 20 | 40 | -/5  | -/16,3 | 3                |
| K0160.0160X16            | K0160.1160X16                      | 160 | 16H7 | 36 | 20 | 40 | -/5  | -/18,3 | 3                |
| K0160.0180X16            | K0160.1180X16                      | 180 | 16H7 | 37 | 22 | 43 | -/5  | -/18,3 | 3                |
| K0160.0180X18            | K0160.1180X18                      | 180 | 18H7 | 37 | 22 | 43 | -/6  | -/20,8 | 3                |
| K0160.0200X18            | K0160.1200X18                      | 200 | 18H7 | 43 | 24 | 45 | -/6  | -/20,8 | 3                |
| K0160.0200X22            | K0160.1200X22                      | 200 | 22H7 | 43 | 24 | 45 | -/6  | -/24,8 | 3                |
| K0160.0250X22            | K0160.1250X22                      | 250 | 22H7 | 49 | 28 | 50 | -/6  | -/24,8 | 5                |
| K0160.0250X26            | K0160.1250X26                      | 250 | 26H7 | 49 | 28 | 50 | -/8  | -/29,3 | 5                |
| K0160.0315X26            | K0160.1315X26                      | 315 | 26H7 | 54 | 33 | 56 | -/8  | -/29,3 | 5                |
| K0160.0315X30            | K0160.1315X30                      | 315 | 30H7 | 54 | 33 | 56 | -/8  | -/33,3 | 5                |
| K0160.0400X30            | K0160.1400X30                      | 400 | 30H7 | 65 | 38 | 63 | -/8  | -/33,3 | 5                |
| K0160.0400X34            | K0160.1400X34                      | 400 | 34H7 | 65 | 38 | 63 | -/10 | -/37,3 | 5                |
| K0160.0500X34            | K0160.1500X34                      | 500 | 34H7 | 79 | 45 | 72 | -/10 | -/37,3 | 5                |
| K0160.0500X40            | K0160.1500X40                      | 500 | 40H7 | 79 | 45 | 72 | -/12 | -/43,3 | 5                |

# Handwheels

DIN 950, aluminium

## KIPP Handwheels DIN 950 aluminium, with fixed grip

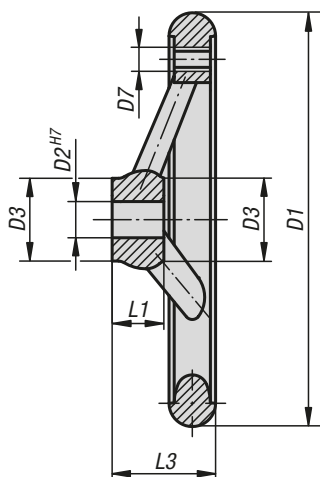
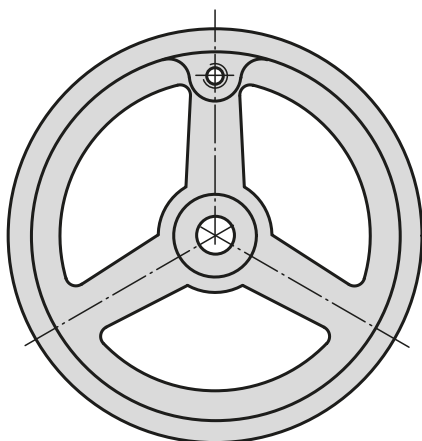
| Order No.<br>reamed hole | Order No.<br>reamed hole with slot | D1  | D2   | D3 | L1 | L3 | B3   | T      | No.of<br>spokes | fixed grip<br>DIN 39<br>Form E |
|--------------------------|------------------------------------|-----|------|----|----|----|------|--------|-----------------|--------------------------------|
| K0160.2080X10            | K0160.3080X10                      | 80  | 10H7 | 25 | 16 | 29 | -/3  | -/11,4 | 3               | ø16 x M6 x 50                  |
| K0160.2080X12            | K0160.3080X12                      | 80  | 12H7 | 25 | 16 | 29 | -/4  | -/13,8 | 3               | ø16 x M6 x 50                  |
| K0160.2100X10            | K0160.3100X10                      | 100 | 10H7 | 29 | 17 | 33 | -/3  | -/11,4 | 3               | ø16 x M6 x 50                  |
| K0160.2100X12            | K0160.3100X12                      | 100 | 12H7 | 29 | 17 | 33 | -/4  | -/13,8 | 3               | ø16 x M6 x 50                  |
| K0160.2125X12            | K0160.3125X12                      | 125 | 12H7 | 31 | 18 | 36 | -/4  | -/13,8 | 3               | ø20 x M8 x 64                  |
| K0160.2125X14            | K0160.3125X14                      | 125 | 14H7 | 31 | 18 | 36 | -/5  | -/16,3 | 3               | ø20 x M8 x 64                  |
| K0160.2140X14            | K0160.3140X14                      | 140 | 14H7 | 36 | 19 | 39 | -/5  | -/16,3 | 3               | ø20 x M8 x 64                  |
| K0160.2140X16            | K0160.3140X16                      | 140 | 16H7 | 36 | 19 | 39 | -/5  | -/18,3 | 3               | ø20 x M8 x 64                  |
| K0160.2160X14            | K0160.3160X14                      | 160 | 14H7 | 36 | 20 | 40 | -/5  | -/16,3 | 3               | ø25 x M10 x 80                 |
| K0160.2160X16            | K0160.3160X16                      | 160 | 16H7 | 36 | 20 | 40 | -/5  | -/18,3 | 3               | ø25 x M10 x 80                 |
| K0160.2180X16            | K0160.3180X16                      | 180 | 16H7 | 37 | 22 | 43 | -/5  | -/18,3 | 3               | ø25 x M10 x 80                 |
| K0160.2180X18            | K0160.3180X18                      | 180 | 18H7 | 37 | 22 | 43 | -/6  | -/20,8 | 3               | ø25 x M10 x 80                 |
| K0160.2200X18            | K0160.3200X18                      | 200 | 18H7 | 43 | 24 | 45 | -/6  | -/20,8 | 3               | ø25 x M10 x 80                 |
| K0160.2200X22            | K0160.3200X22                      | 200 | 22H7 | 43 | 24 | 45 | -/6  | -/24,8 | 3               | ø25 x M10 x 80                 |
| K0160.2250X22            | K0160.3250X22                      | 250 | 22H7 | 49 | 28 | 50 | -/6  | -/24,8 | 5               | ø32 x M12 x 100                |
| K0160.2250X26            | K0160.3250X26                      | 250 | 26H7 | 49 | 28 | 50 | -/8  | -/29,3 | 5               | ø32 x M12 x 100                |
| K0160.2315X26            | K0160.3315X26                      | 315 | 26H7 | 54 | 33 | 56 | -/8  | -/29,3 | 5               | ø32 x M12 x 100                |
| K0160.2315X30            | K0160.3315X30                      | 315 | 30H7 | 54 | 33 | 56 | -/8  | -/33,3 | 5               | ø32 x M12 x 100                |
| K0160.2400X30            | K0160.3400X30                      | 400 | 30H7 | 65 | 38 | 63 | -/8  | -/33,3 | 5               | ø36 x M16 x 112                |
| K0160.2400X34            | K0160.3400X34                      | 400 | 34H7 | 65 | 38 | 63 | -/10 | -/37,3 | 5               | ø36 x M16 x 112                |
| K0160.2500X34            | K0160.3500X34                      | 500 | 34H7 | 79 | 45 | 72 | -/10 | -/37,3 | 5               | ø36 x M16 x 112                |
| K0160.2500X40            | K0160.3500X40                      | 500 | 40H7 | 79 | 45 | 72 | -/12 | -/43,3 | 5               | ø36 x M16 x 112                |

## KIPP Handwheels DIN 950 aluminium, with revolving grip

| Order No.<br>reamed hole | Order No.<br>reamed hole with slot | D1  | D2   | D3 | L1 | L3 | B3   | T      | No.of<br>spokes | revolving<br>grip DIN 98<br>Form E |
|--------------------------|------------------------------------|-----|------|----|----|----|------|--------|-----------------|------------------------------------|
| K0160.4080X10            | K0160.5080X10                      | 80  | 10H7 | 25 | 16 | 29 | -/3  | -/11,4 | 3               | ø16 x M6 x 54,5                    |
| K0160.4080X12            | K0160.5080X12                      | 80  | 12H7 | 25 | 16 | 29 | -/4  | -/13,8 | 3               | ø16 x M6 x 54,5                    |
| K0160.4100X10            | K0160.5100X10                      | 100 | 10H7 | 29 | 17 | 33 | -/3  | -/11,4 | 3               | ø16 x M6 x 54,5                    |
| K0160.4100X12            | K0160.5100X12                      | 100 | 12H7 | 29 | 17 | 33 | -/4  | -/13,8 | 3               | ø16 x M6 x 54,5                    |
| K0160.4125X12            | K0160.5125X12                      | 125 | 12H7 | 31 | 18 | 36 | -/4  | -/13,8 | 3               | ø20 x M8 x 67                      |
| K0160.4125X14            | K0160.5125X14                      | 125 | 14H7 | 31 | 18 | 36 | -/5  | -/16,3 | 3               | ø20 x M8 x 67                      |
| K0160.4140X14            | K0160.5140X14                      | 140 | 14H7 | 36 | 19 | 39 | -/5  | -/16,3 | 3               | ø20 x M8 x 67                      |
| K0160.4140X16            | K0160.5140X16                      | 140 | 16H7 | 36 | 19 | 39 | -/5  | -/18,3 | 3               | ø20 x M8 x 67                      |
| K0160.4160X14            | K0160.5160X14                      | 160 | 14H7 | 36 | 20 | 40 | -/5  | -/16,3 | 3               | ø25 x M10 x 83                     |
| K0160.4160X16            | K0160.5160X16                      | 160 | 16H7 | 36 | 20 | 40 | -/5  | -/18,3 | 3               | ø25 x M10 x 83                     |
| K0160.4180X16            | K0160.5180X16                      | 180 | 16H7 | 37 | 22 | 43 | -/5  | -/18,3 | 3               | ø25 x M10 x 83                     |
| K0160.4180X18            | K0160.5180X18                      | 180 | 18H7 | 37 | 22 | 43 | -/6  | -/20,8 | 3               | ø25 x M10 x 83                     |
| K0160.4200X18            | K0160.5200X18                      | 200 | 18H7 | 43 | 24 | 45 | -/6  | -/20,8 | 3               | ø25 x M10 x 83                     |
| K0160.4200X22            | K0160.5200X22                      | 200 | 22H7 | 43 | 24 | 45 | -/6  | -/24,8 | 3               | ø25 x M10 x 83                     |
| K0160.4250X22            | K0160.5250X22                      | 250 | 22H7 | 49 | 28 | 50 | -/6  | -/24,8 | 5               | ø32 x M12 x 105,5                  |
| K0160.4250X26            | K0160.5250X26                      | 250 | 26H7 | 49 | 28 | 50 | -/8  | -/29,3 | 5               | ø32 x M12 x 105,5                  |
| K0160.4315X26            | K0160.5315X26                      | 315 | 26H7 | 54 | 33 | 56 | -/8  | -/29,3 | 5               | ø32 x M12 x 105,5                  |
| K0160.4315X30            | K0160.5315X30                      | 315 | 30H7 | 54 | 33 | 56 | -/8  | -/33,3 | 5               | ø32 x M12 x 105,5                  |
| K0160.4400X30            | K0160.5400X30                      | 400 | 30H7 | 65 | 38 | 63 | -/8  | -/33,3 | 5               | ø36 x M16 x 117                    |
| K0160.4400X34            | K0160.5400X34                      | 400 | 34H7 | 65 | 38 | 63 | -/10 | -/37,3 | 5               | ø36 x M16 x 117                    |
| K0160.4500X34            | K0160.5500X34                      | 500 | 34H7 | 79 | 45 | 72 | -/10 | -/37,3 | 5               | ø36 x M16 x 117                    |
| K0160.4500X40            | K0160.5500X40                      | 500 | 40H7 | 79 | 45 | 72 | -/12 | -/43,3 | 5               | ø36 x M16 x 117                    |

## Handwheels

DIN 950, stainless steel

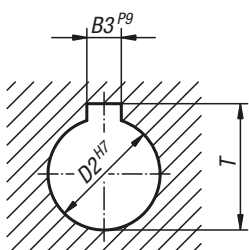


**Material:**  
Stainless steel 1.4401.

**Version:**  
Wheel rim turned  
and polished

**Sample order:**  
K1208.0100X10

DIN 6885-1



### KIPP Handwheels DIN 950, stainless steel

| Order No.     | Version 1             | D1  | D2   | D3 | D7  | L1 | L3 | B3 | T    | No. of spokes |
|---------------|-----------------------|-----|------|----|-----|----|----|----|------|---------------|
| K1208.0100X10 | reamed hole           | 100 | 10H7 | 26 | M6  | 17 | 33 | -  | -    | 3             |
| K1208.0125X12 | reamed hole           | 125 | 12H7 | 28 | M8  | 18 | 36 | -  | -    | 3             |
| K1208.0160X16 | reamed hole           | 160 | 16H7 | 32 | M10 | 20 | 40 | -  | -    | 3             |
| K1208.0200X18 | reamed hole           | 200 | 18H7 | 38 | M10 | 24 | 45 | -  | -    | 3             |
| K1208.1100X10 | reamed hole with slot | 100 | 10H7 | 26 | M6  | 17 | 33 | 3  | 11,4 | 3             |
| K1208.1125X12 | reamed hole with slot | 125 | 12H7 | 28 | M8  | 18 | 36 | 4  | 13,8 | 3             |
| K1208.1160X16 | reamed hole with slot | 160 | 16H7 | 32 | M10 | 20 | 40 | 5  | 18,3 | 3             |
| K1208.1200X18 | reamed hole with slot | 200 | 18H7 | 38 | M10 | 24 | 45 | 6  | 20,8 | 3             |



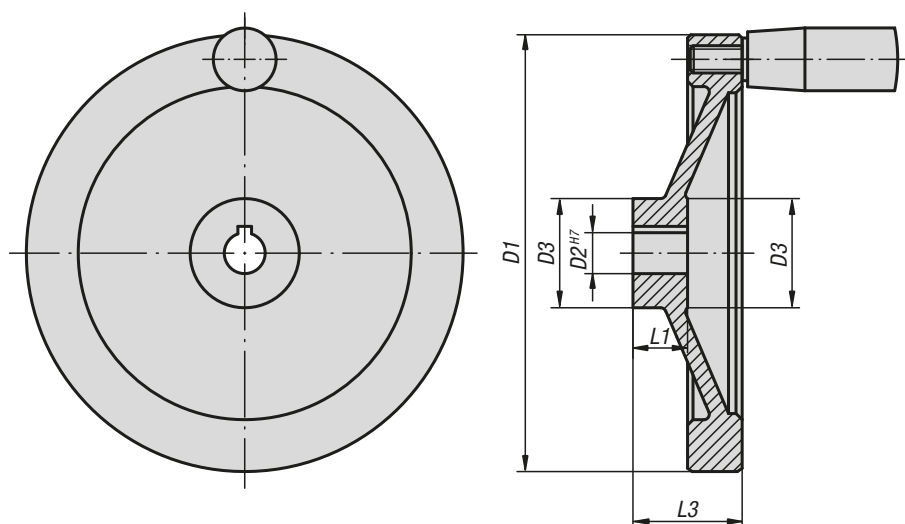
A large rectangular area filled with a light gray grid pattern, intended for handwritten notes.





## Handwheels disc

aluminium

**Material:**

Disc handwheel aluminium.  
Cylinder grip black thermoset PF 31-DIN 7708.  
Hub electro zinc-plated steel.

**Version:**

Wheel rim turned and polished.  
Radial and axial run-out of rim < IT 12.

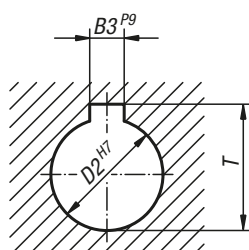
**Sample order:**

K0161.4080X10

**On request:**

Hubs with square socket or powder-coated handwheels.

DIN 6885-1

**KIPP Handwheels disc, aluminium, without grip**

| Order No.<br>reamed hole | Order No.<br>reamed hole with slot | D1  | D2   | D3 | L1 | L3 | B3  | T      |
|--------------------------|------------------------------------|-----|------|----|----|----|-----|--------|
| K0161.0080X10            | K0161.1080X10                      | 80  | 10H7 | 26 | 16 | 31 | -/3 | -/11,4 |
| K0161.0080X12            | K0161.1080X12                      | 80  | 12H7 | 26 | 16 | 31 | -/4 | -/13,8 |
| K0161.0100X10            | K0161.1100X10                      | 100 | 10H7 | 31 | 17 | 34 | -/3 | -/11,4 |
| K0161.0100X12            | K0161.1100X12                      | 100 | 12H7 | 31 | 17 | 34 | -/4 | -/13,8 |
| K0161.0125X12            | K0161.1125X12                      | 125 | 12H7 | 30 | 18 | 37 | -/4 | -/13,8 |
| K0161.0125X14            | K0161.1125X14                      | 125 | 14H7 | 30 | 18 | 37 | -/5 | -/16,3 |
| K0161.0140X14            | K0161.1140X14                      | 140 | 14H7 | 34 | 19 | 34 | -/5 | -/16,3 |
| K0161.0140X15            | K0161.1140X15                      | 140 | 15H7 | 34 | 19 | 34 | -/5 | -/17,3 |
| K0161.0160X15            | K0161.1160X15                      | 160 | 15H7 | 40 | 20 | 40 | -/5 | -/17,3 |
| K0161.0160X16            | K0161.1160X16                      | 160 | 16H7 | 40 | 20 | 40 | -/5 | -/18,3 |
| K0161.0200X18            | K0161.1200X18                      | 200 | 18H7 | 50 | 24 | 46 | -/6 | -/20,8 |
| K0161.0200X20            | K0161.1200X20                      | 200 | 20H7 | 50 | 24 | 46 | -/6 | -/22,8 |
| K0161.0250X22            | K0161.1250X22                      | 250 | 22H7 | 50 | 28 | 49 | -/6 | -/24,8 |
| K0161.0250X24            | K0161.1250X24                      | 250 | 24H7 | 50 | 28 | 49 | -/8 | -/27,3 |

## Handwheels disc

aluminium



## KIPP Handwheels disc, aluminium, with fixed cylinder grip

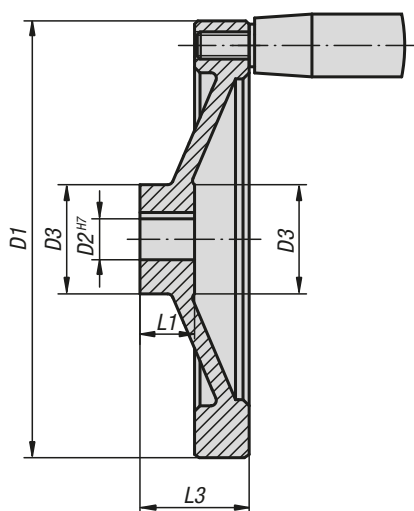
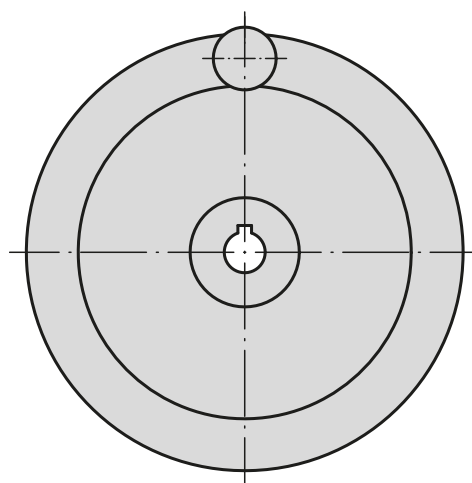
| Order No.<br>reamed hole | Order No.<br>reamed hole with slot | D1  | D2   | D3 | L1 | L3 | B3  | T      | Fixed<br>cylinder<br>grip |
|--------------------------|------------------------------------|-----|------|----|----|----|-----|--------|---------------------------|
| K0161.2080X10            | K0161.3080X10                      | 80  | 10H7 | 26 | 16 | 31 | -/3 | -/11,4 | ø18 x M6 x 40             |
| K0161.2080X12            | K0161.3080X12                      | 80  | 12H7 | 26 | 16 | 31 | -/4 | -/13,8 | ø18 x M6 x 40             |
| K0161.2100X10            | K0161.3100X10                      | 100 | 10H7 | 31 | 17 | 34 | -/3 | -/11,4 | ø18 x M6 x 40             |
| K0161.2100X12            | K0161.3100X12                      | 100 | 12H7 | 31 | 17 | 34 | -/4 | -/13,8 | ø18 x M6 x 40             |
| K0161.2125X12            | K0161.3125X12                      | 125 | 12H7 | 30 | 18 | 37 | -/4 | -/13,8 | ø21 x M8 x 50             |
| K0161.2125X14            | K0161.3125X14                      | 125 | 14H7 | 30 | 18 | 37 | -/5 | -/16,3 | ø21 x M8 x 50             |
| K0161.2140X14            | K0161.3140X14                      | 140 | 14H7 | 34 | 19 | 34 | -/5 | -/16,3 | ø21 x M8 x 50             |
| K0161.2140X15            | K0161.3140X15                      | 140 | 15H7 | 34 | 19 | 34 | -/5 | -/17,3 | ø21 x M8 x 50             |
| K0161.2160X15            | K0161.3160X15                      | 160 | 15H7 | 40 | 20 | 40 | -/5 | -/17,3 | ø26 x M10 x 80            |
| K0161.2160X16            | K0161.3160X16                      | 160 | 16H7 | 40 | 20 | 40 | -/5 | -/18,3 | ø26 x M10 x 80            |
| K0161.2200X18            | K0161.3200X18                      | 200 | 18H7 | 50 | 24 | 46 | -/6 | -/20,8 | ø26 x M10 x 80            |
| K0161.2200X20            | K0161.3200X20                      | 200 | 20H7 | 50 | 24 | 46 | -/6 | -/22,8 | ø26 x M10 x 80            |
| K0161.2250X22            | K0161.3250X22                      | 250 | 22H7 | 50 | 28 | 49 | -/6 | -/24,8 | ø28 x M12 x 90            |
| K0161.2250X24            | K0161.3250X24                      | 250 | 24H7 | 50 | 28 | 49 | -/8 | -/27,3 | ø28 x M12 x 90            |

## KIPP Handwheels disc, aluminium, with revolving cylinder grip

| Order No.<br>reamed hole | Order No.<br>reamed hole with slot | D1  | D2   | D3 | L1 | L3 | B3  | T      | Revolving<br>cylinder<br>grip |
|--------------------------|------------------------------------|-----|------|----|----|----|-----|--------|-------------------------------|
| K0161.4080X10            | K0161.5080X10                      | 80  | 10H7 | 26 | 16 | 31 | -/3 | -/11,4 | ø18 x M6 x 40                 |
| K0161.4080X12            | K0161.5080X12                      | 80  | 12H7 | 26 | 16 | 31 | -/4 | -/13,8 | ø18 x M6 x 40                 |
| K0161.4100X10            | K0161.5100X10                      | 100 | 10H7 | 31 | 17 | 34 | -/3 | -/11,4 | ø18 x M6 x 40                 |
| K0161.4100X12            | K0161.5100X12                      | 100 | 12H7 | 31 | 17 | 34 | -/4 | -/13,8 | ø18 x M6 x 40                 |
| K0161.4125X12            | K0161.5125X12                      | 125 | 12H7 | 30 | 18 | 37 | -/4 | -/13,8 | ø22 x M8 x 56                 |
| K0161.4125X14            | K0161.5125X14                      | 125 | 14H7 | 30 | 18 | 37 | -/5 | -/16,3 | ø22 x M8 x 56                 |
| K0161.4140X14            | K0161.5140X14                      | 140 | 14H7 | 34 | 19 | 34 | -/5 | -/16,3 | ø22 x M8 x 56                 |
| K0161.4140X15            | K0161.5140X15                      | 140 | 15H7 | 34 | 19 | 34 | -/5 | -/17,3 | ø22 x M8 x 56                 |
| K0161.4160X15            | K0161.5160X15                      | 160 | 15H7 | 40 | 20 | 40 | -/5 | -/17,3 | ø26 x M10 x 80                |
| K0161.4160X16            | K0161.5160X16                      | 160 | 16H7 | 40 | 20 | 40 | -/5 | -/18,3 | ø26 x M10 x 80                |
| K0161.4200X18            | K0161.5200X18                      | 200 | 18H7 | 50 | 24 | 46 | -/6 | -/20,8 | ø26 x M10 x 80                |
| K0161.4200X20            | K0161.5200X20                      | 200 | 20H7 | 50 | 24 | 46 | -/6 | -/22,8 | ø26 x M10 x 80                |
| K0161.4250X22            | K0161.5250X22                      | 250 | 22H7 | 50 | 28 | 49 | -/6 | -/24,8 | ø31 x M12 x 102               |
| K0161.4250X24            | K0161.5250X24                      | 250 | 24H7 | 50 | 28 | 49 | -/8 | -/27,3 | ø31 x M12 x 102               |

## Handwheels disc

aluminium



### Material:

Disc handwheel aluminium.  
Cylinder grip black thermoset PF 31-DIN 7708.  
Hub electro zinc-plated steel.

### Version:

Black, powder-coated.  
Wheel rim turned.  
Radial and axial run-out of rim < IT 12.

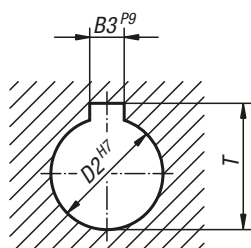
### Sample order:

K0161.01080X10

### On request:

Hubs with square socket.

DIN 6885-1



## KIPP Handwheels disc, aluminium, without grip

| Order No.<br>reamed hole | Order No.<br>reamed hole with slot | D1  | D2   | D3 | L1 | L3 | B3  | T      |
|--------------------------|------------------------------------|-----|------|----|----|----|-----|--------|
| K0161.01080X10           | K0161.11080X10                     | 80  | 10H7 | 26 | 16 | 31 | -/3 | -/11,4 |
| K0161.01080X12           | K0161.11080X12                     | 80  | 12H7 | 26 | 16 | 31 | -/4 | -/13,8 |
| K0161.01100X10           | K0161.11100X10                     | 100 | 10H7 | 31 | 17 | 34 | -/3 | -/11,4 |
| K0161.01100X12           | K0161.11100X12                     | 100 | 12H7 | 31 | 17 | 34 | -/4 | -/13,8 |
| K0161.01125X12           | K0161.11125X12                     | 125 | 12H7 | 30 | 18 | 37 | -/4 | -/13,8 |
| K0161.01125X14           | K0161.11125X14                     | 125 | 14H7 | 30 | 18 | 37 | -/5 | -/16,3 |
| K0161.01140X14           | K0161.11140X14                     | 140 | 14H7 | 34 | 19 | 34 | -/5 | -/16,3 |
| K0161.01140X15           | K0161.11140X15                     | 140 | 15H7 | 34 | 19 | 34 | -/5 | -/17,3 |
| K0161.01160X15           | K0161.11160X15                     | 160 | 15H7 | 40 | 20 | 40 | -/5 | -/17,3 |
| K0161.01160X16           | K0161.11160X16                     | 160 | 16H7 | 40 | 20 | 40 | -/5 | -/18,3 |
| K0161.01200X18           | K0161.11200X18                     | 200 | 18H7 | 50 | 24 | 46 | -/6 | -/20,8 |
| K0161.01200X20           | K0161.11200X20                     | 200 | 20H7 | 50 | 24 | 46 | -/6 | -/22,8 |
| K0161.01250X22           | K0161.11250X22                     | 250 | 22H7 | 50 | 28 | 49 | -/6 | -/24,8 |
| K0161.01250X24           | K0161.11250X24                     | 250 | 24H7 | 50 | 28 | 49 | -/8 | -/27,3 |

## Handwheels disc

aluminium



## KIPP Handwheels disc, aluminium, with fixed cylinder grip

| Order No.<br>reamed hole | Order No.<br>reamed hole with slot | D1  | D2   | D3 | L1 | L3 | B3  | T      | Fixed<br>cylinder<br>grip |
|--------------------------|------------------------------------|-----|------|----|----|----|-----|--------|---------------------------|
| K0161.21080X10           | K0161.31080X10                     | 80  | 10H7 | 26 | 16 | 31 | -/3 | -/11,4 | ø18 x M6 x 40             |
| K0161.21080X12           | K0161.31080X12                     | 80  | 12H7 | 26 | 16 | 31 | -/4 | -/13,8 | ø18 x M6 x 40             |
| K0161.21100X10           | K0161.31100X10                     | 100 | 10H7 | 31 | 17 | 34 | -/3 | -/11,4 | ø18 x M6 x 40             |
| K0161.21100X12           | K0161.31100X12                     | 100 | 12H7 | 31 | 17 | 34 | -/4 | -/13,8 | ø18 x M6 x 40             |
| K0161.21125X12           | K0161.31125X12                     | 125 | 12H7 | 30 | 18 | 37 | -/4 | -/13,8 | ø21 x M8 x 50             |
| K0161.21125X14           | K0161.31125X14                     | 125 | 14H7 | 30 | 18 | 37 | -/5 | -/16,3 | ø21 x M8 x 50             |
| K0161.21140X14           | K0161.31140X14                     | 140 | 14H7 | 34 | 19 | 34 | -/5 | -/16,3 | ø21 x M8 x 50             |
| K0161.21140X15           | K0161.31140X15                     | 140 | 15H7 | 34 | 19 | 34 | -/5 | -/17,3 | ø21 x M8 x 50             |
| K0161.21160X15           | K0161.31160X15                     | 160 | 15H7 | 40 | 20 | 40 | -/5 | -/17,3 | ø26 x M10 x 80            |
| K0161.21160X16           | K0161.31160X16                     | 160 | 16H7 | 40 | 20 | 40 | -/5 | -/18,3 | ø26 x M10 x 80            |
| K0161.21200X18           | K0161.31200X18                     | 200 | 18H7 | 50 | 24 | 46 | -/6 | -/20,8 | ø26 x M10 x 80            |
| K0161.21200X20           | K0161.31200X20                     | 200 | 20H7 | 50 | 24 | 46 | -/6 | -/22,8 | ø26 x M10 x 80            |
| K0161.21250X22           | K0161.31250X22                     | 250 | 22H7 | 50 | 28 | 49 | -/6 | -/24,8 | ø28 x M12 x 90            |
| K0161.21250X24           | K0161.31250X24                     | 250 | 24H7 | 50 | 28 | 49 | -/8 | -/27,3 | ø28 x M12 x 90            |

## KIPP Handwheels disc, aluminium, with revolving cylinder grip

| Order No.<br>reamed hole | Order No.<br>reamed hole with slot | D1  | D2   | D3 | L1 | L3 | B3  | T      | Revolving<br>cylinder<br>grip |
|--------------------------|------------------------------------|-----|------|----|----|----|-----|--------|-------------------------------|
| K0161.41080X10           | K0161.51080X10                     | 80  | 10H7 | 26 | 16 | 31 | -/3 | -/11,4 | ø18 x M6 x 40                 |
| K0161.41080X12           | K0161.51080X12                     | 80  | 12H7 | 26 | 16 | 31 | -/4 | -/13,8 | ø18 x M6 x 40                 |
| K0161.41100X10           | K0161.51100X10                     | 100 | 10H7 | 31 | 17 | 34 | -/3 | -/11,4 | ø18 x M6 x 40                 |
| K0161.41100X12           | K0161.51100X12                     | 100 | 12H7 | 31 | 17 | 34 | -/4 | -/13,8 | ø18 x M6 x 40                 |
| K0161.41125X12           | K0161.51125X12                     | 125 | 12H7 | 30 | 18 | 37 | -/4 | -/13,8 | ø22 x M8 x 56                 |
| K0161.41125X14           | K0161.51125X14                     | 125 | 14H7 | 30 | 18 | 37 | -/5 | -/16,3 | ø22 x M8 x 56                 |
| K0161.41140X14           | K0161.51140X14                     | 140 | 14H7 | 34 | 19 | 34 | -/5 | -/16,3 | ø22 x M8 x 56                 |
| K0161.41140X15           | K0161.51140X15                     | 140 | 15H7 | 34 | 19 | 34 | -/5 | -/17,3 | ø22 x M8 x 56                 |
| K0161.41160X15           | K0161.51160X15                     | 160 | 15H7 | 40 | 20 | 40 | -/5 | -/17,3 | ø26 x M10 x 80                |
| K0161.41160X16           | K0161.51160X16                     | 160 | 16H7 | 40 | 20 | 40 | -/5 | -/18,3 | ø26 x M10 x 80                |
| K0161.41200X18           | K0161.51200X18                     | 200 | 18H7 | 50 | 24 | 46 | -/6 | -/20,8 | ø26 x M10 x 80                |
| K0161.41200X20           | K0161.51200X20                     | 200 | 20H7 | 50 | 24 | 46 | -/6 | -/22,8 | ø26 x M10 x 80                |
| K0161.41250X22           | K0161.51250X22                     | 250 | 22H7 | 50 | 28 | 49 | -/6 | -/24,8 | ø31 x M12 x 102               |
| K0161.41250X24           | K0161.51250X24                     | 250 | 24H7 | 50 | 28 | 49 | -/8 | -/27,3 | ø31 x M12 x 102               |

## Handwheels disc

similar to DIN 950, aluminium



### Material:

Handwheel aluminium.

### Version:

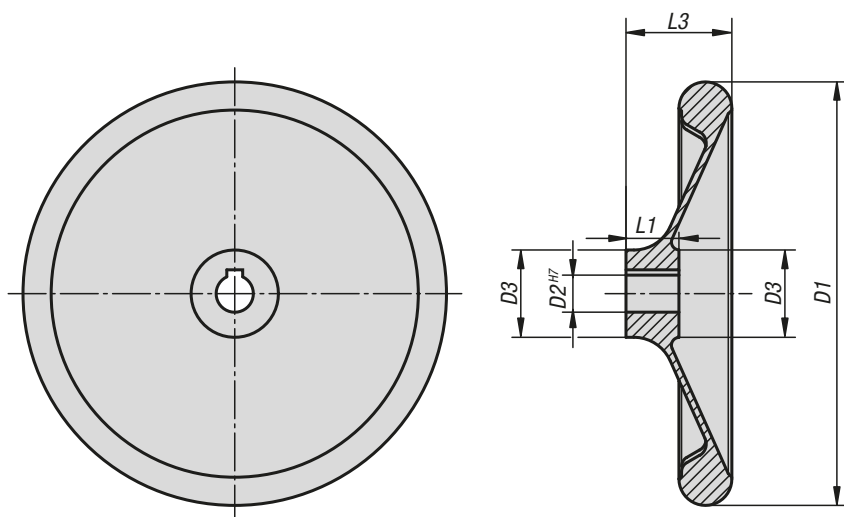
Wheel rim turned and polished.  
Radial and axial run-out of rim < IT 12.

### Sample order:

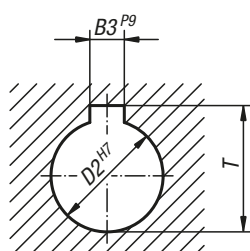
K0163.0080X10

### On request:

Hubs with square socket or powder-coated handwheels.



DIN 6885-1

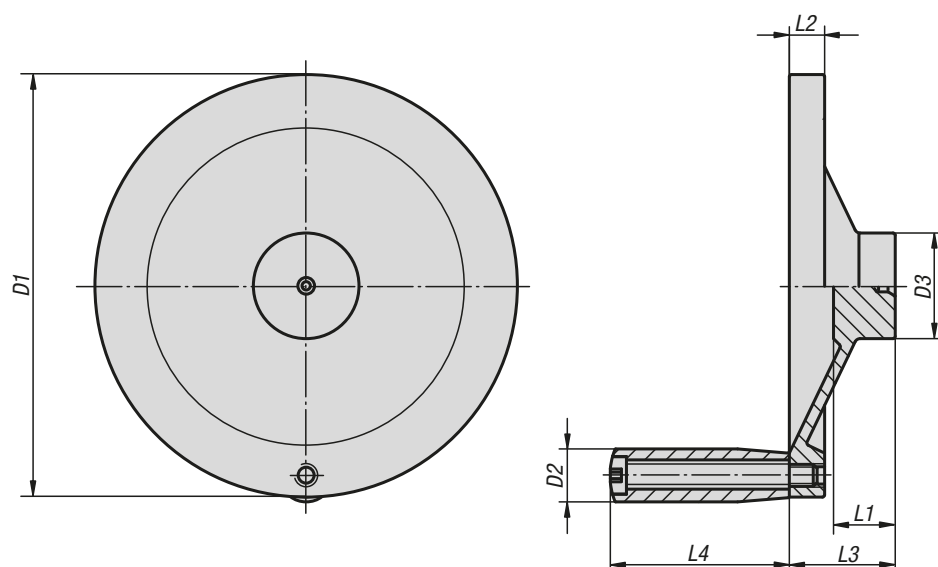


## KIPP Handwheels disc, similar to DIN 950, aluminium

| Order No.<br>reamed hole | Order No.<br>reamed hole with slot | D1  | D2   | D3 | L1 | L3 | B3   | T      |
|--------------------------|------------------------------------|-----|------|----|----|----|------|--------|
| K0163.0080X10            | K0163.1080X10                      | 80  | 10H7 | 25 | 16 | 30 | -/3  | -/11,4 |
| K0163.0080X12            | K0163.1080X12                      | 80  | 12H7 | 25 | 16 | 30 | -/4  | -/13,8 |
| K0163.0100X10            | K0163.1100X10                      | 100 | 10H7 | 28 | 17 | 31 | -/3  | -/11,4 |
| K0163.0100X12            | K0163.1100X12                      | 100 | 12H7 | 28 | 17 | 31 | -/4  | -/13,8 |
| K0163.0120X12            | K0163.1120X12                      | 120 | 12H7 | 27 | 18 | 30 | -/4  | -/13,8 |
| K0163.0120X14            | K0163.1120X14                      | 120 | 14H7 | 27 | 18 | 30 | -/5  | -/16,3 |
| K0163.0160X14            | K0163.1160X14                      | 160 | 14H7 | 34 | 20 | 40 | -/5  | -/16,3 |
| K0163.0160X16            | K0163.1160X16                      | 160 | 16H7 | 34 | 20 | 40 | -/5  | -/18,3 |
| K0163.0200X18            | K0163.1200X18                      | 200 | 18H7 | 40 | 24 | 44 | -/6  | -/20,8 |
| K0163.0200X22            | K0163.1200X22                      | 200 | 22H7 | 40 | 24 | 44 | -/6  | -/24,8 |
| K0163.0250X22            | K0163.1250X22                      | 250 | 22H7 | 49 | 28 | 61 | -/6  | -/24,8 |
| K0163.0250X26            | K0163.1250X26                      | 250 | 26H7 | 49 | 28 | 61 | -/8  | -/29,3 |
| K0163.0280X24            | K0163.1280X24                      | 280 | 24H7 | 51 | 30 | 38 | -/8  | -/27,3 |
| K0163.0280X28            | K0163.1280X28                      | 280 | 28H7 | 51 | 30 | 38 | -/8  | -/31,3 |
| K0163.0360X28            | K0163.1360X28                      | 360 | 28H7 | 63 | 35 | 73 | -/8  | -/31,3 |
| K0163.0360X32            | K0163.1360X32                      | 360 | 32H7 | 63 | 35 | 73 | -/10 | -/35,3 |

## Handwheels disc stainless steel

with revolving grip



### Material:

Stainless steel 1.4301.

### Version:

Turned, bright.

Hub is centre bored.

### Sample order:

K1307.4076X00

### On request:

Stainless steel 1.4401.

Stainless steel 1.4404.

Stainless steel 1.4571.

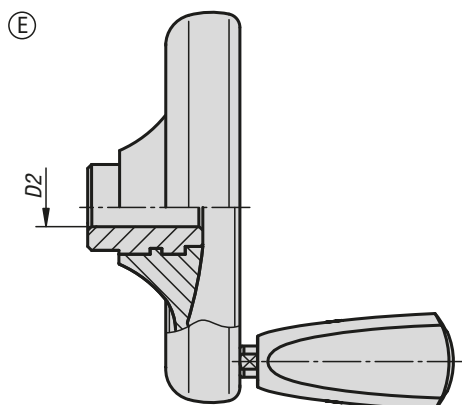
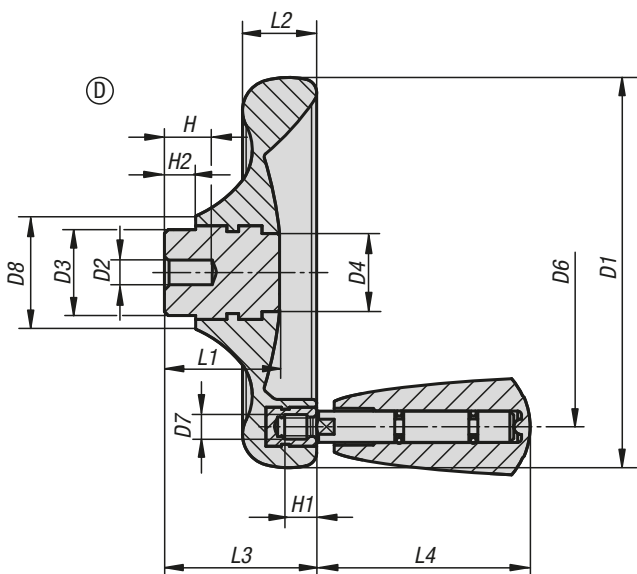


### KIPP Handwheels disc stainless steel, with revolving grip

| Order No.     | D1    | D2    | D3   | L1    | L2    | L3   | L4    |
|---------------|-------|-------|------|-------|-------|------|-------|
| K1307.4076X00 | 76,2  | 9,91  | 22,1 | 17,02 | 6,1   | 27,9 | 37,9  |
| K1307.4101X00 | 101,6 | 11,94 | 25,9 | 18,03 | 7,87  | 31,7 | 39,88 |
| K1307.4152X00 | 152,4 | 19,05 | 38,1 | 22,1  | 12,7  | 38,1 | 63,5  |
| K1307.4203X00 | 203,2 | 22,1  | 45,7 | 24,13 | 14,22 | 45,7 | 76,2  |
| K1307.4254X00 | 254   | 22,1  | 50,8 | 26,67 | 15,75 | 50,8 | 76,2  |

## Handwheels disc

with revolving grip



### Material:

Thermoset PF 31, black.

Hubs and steel parts of grip nickel-plated steel or bright 1.4305 stainless steel.

### Version:

High-gloss polished.

### Sample order:

K0164.0125X08

### Note:

The handwheel is supplied with the grip loose.

### On request:

Other reamed hole sizes.

### Drawing reference:

Form D: pilot hole

Form E: reamed hole

## KIPP Handwheels disc, with revolving grip

| Order No.<br>Form D | Order No.<br>Form E | D1  | D2      | D3 | D4 | D6  | D7 | D8 | H    | H1 | H2 | L1   | L2   | L3 | L4   |
|---------------------|---------------------|-----|---------|----|----|-----|----|----|------|----|----|------|------|----|------|
| K0164.0100X06       | K0164.1100X10       | 100 | 6/10H8  | 22 | 20 | 79  | M6 | 29 | 12/- | 9  | 8  | 29,5 | 19   | 39 | 54,7 |
| K0164.0125X08       | K0164.1125X12       | 125 | 8/12H8  | 26 | 21 | 101 | M6 | 34 | 15/- | 9  | 8  | 34   | 24   | 46 | 54,7 |
| K0164.0140X08       | K0164.1140X14       | 140 | 8/14H8  | 30 | 25 | 110 | M8 | 39 | 16/- | 12 | 8  | 38,5 | 27   | 52 | 82,2 |
| K0164.0160X10       | K0164.1160X16       | 160 | 10/16H8 | 33 | 30 | 128 | M8 | 43 | 20/- | 12 | 8  | 41,3 | 30,1 | 57 | 82,2 |
| -                   | K0164.1160X18       | 160 | 18H8    | 33 | 30 | 128 | M8 | 43 | -    | 12 | 8  | 41,3 | 30,1 | 57 | 82,2 |

## KIPP Handwheels disc, with revolving grip, metal parts stainless steel

| Order No.<br>Form D | Order No.<br>Form E | D1  | D2      | D3 | D4 | D6  | D7 | D8 | H    | H1 | H2 | L1   | L2   | L3 | L4   |
|---------------------|---------------------|-----|---------|----|----|-----|----|----|------|----|----|------|------|----|------|
| K0164.2100X06       | K0164.3100X10       | 100 | 6/10H7  | 22 | 20 | 79  | M6 | 29 | 12/- | 9  | 8  | 29,5 | 19   | 39 | 54,7 |
| K0164.2125X08       | K0164.3125X12       | 125 | 8/12H7  | 26 | 21 | 101 | M6 | 34 | 15/- | 9  | 8  | 34   | 24   | 46 | 54,7 |
| K0164.2140X08       | K0164.3140X14       | 140 | 8/14H7  | 30 | 25 | 110 | M8 | 39 | 16/- | 12 | 8  | 38,5 | 27   | 52 | 82,2 |
| K0164.2160X10       | K0164.3160X16       | 160 | 10/16H7 | 33 | 30 | 128 | M8 | 43 | 20/- | 12 | 8  | 41,3 | 30,1 | 57 | 82,2 |
| -                   | K0164.3160X18       | 160 | 18H7    | 33 | 30 | 128 | M8 | 43 | -    | 12 | 8  | 41,3 | 30,1 | 57 | 82,2 |

## Handwheels disc

without grip

**Material:**

Black thermoset PF 31.

Hub nickel-plated steel or bright 1.4305 stainless steel.

**Version:**

High-gloss polished.

**Sample order:**

K0165.0100X06

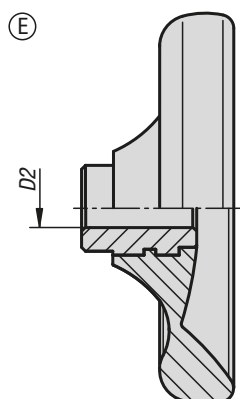
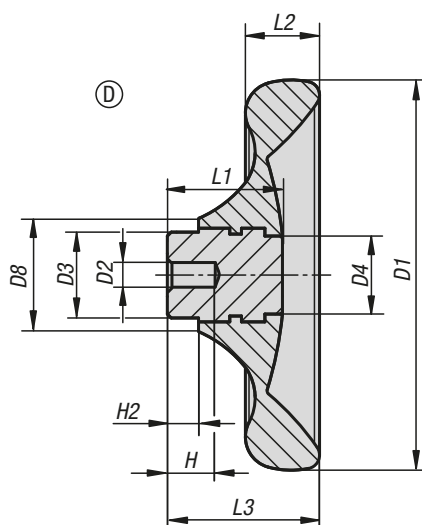
**On request:**

Other reamed hole sizes.

**Drawing reference:**

Form D: pilot hole

Form E: reamed hole

**KIPP Handwheels disc, without grip, bush steel**

| Order No.<br>Form D | Order No.<br>Form E | D1  | D2      | D3 | D4 | D8 | H    | H2 | L1   | L2   | L3 |
|---------------------|---------------------|-----|---------|----|----|----|------|----|------|------|----|
| K0165.0100X06       | K0165.1100X10       | 100 | 6/10H8  | 22 | 20 | 29 | 12/- | 8  | 29,5 | 19   | 39 |
| K0165.0125X08       | K0165.1125X12       | 125 | 8/12H8  | 26 | 21 | 34 | 15/- | 8  | 34   | 24   | 46 |
| K0165.0140X08       | K0165.1140X14       | 140 | 8/14H8  | 30 | 25 | 39 | 16/- | 8  | 38,5 | 27   | 52 |
| K0165.0160X10       | K0165.1160X16       | 160 | 10/16H8 | 33 | 30 | 43 | 20/- | 8  | 41,3 | 30,1 | 57 |
| -                   | K0165.1160X18       | 160 | 18H8    | 33 | 30 | 43 | -    | 8  | 41,3 | 30,1 | 57 |

**KIPP Handwheels disc, without grip, bush stainless steel**

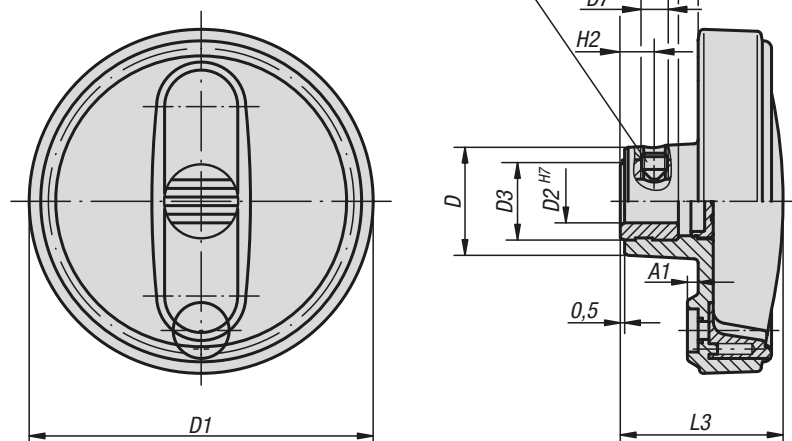
| Order No.<br>Form D | Order No.<br>Form E | D1  | D2      | D3 | D4 | D8 | H    | H2 | L1   | L2   | L3 |
|---------------------|---------------------|-----|---------|----|----|----|------|----|------|------|----|
| K0165.2100X06       | K0165.3100X10       | 100 | 6/10H7  | 22 | 20 | 29 | 12/- | 8  | 29,5 | 19   | 39 |
| K0165.2125X08       | K0165.3125X12       | 125 | 8/12H7  | 26 | 21 | 34 | 15/- | 8  | 34   | 24   | 46 |
| K0165.2140X08       | K0165.3140X14       | 140 | 8/14H7  | 30 | 25 | 39 | 16/- | 8  | 38,5 | 27   | 52 |
| K0165.2160X10       | K0165.3160X16       | 160 | 10/16H7 | 33 | 30 | 43 | 20/- | 8  | 41,3 | 30,1 | 57 |
| -                   | K0165.3160X18       | 160 | 18H7    | 33 | 30 | 43 | -    | 8  | 41,3 | 30,1 | 57 |



## Handwheels



The transverse hole is positioned  
at 90° to the keyway

**Material:**

Black grey thermoplastic.

**Version:**

Steel parts black oxidised.

**Sample order:**

K0256.108008

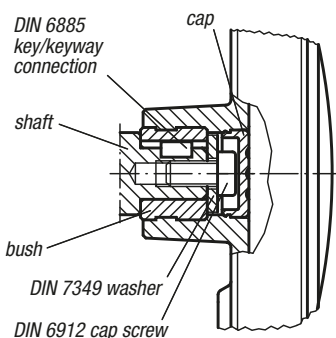
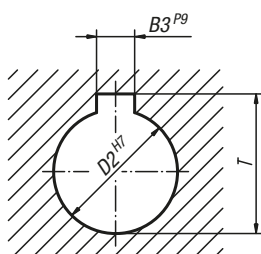
**Note:**

The hub cap is supplied loose.

The handwheels can be secured using a transverse pin or by parallel key connection together with a DIN 6912 socket head screw and a DIN 7349 washer.

Versions with transverse bore are fastened using the ISO 4027 (DIN 914) grub screws.

DIN 6885-1



## KIPP Handwheels

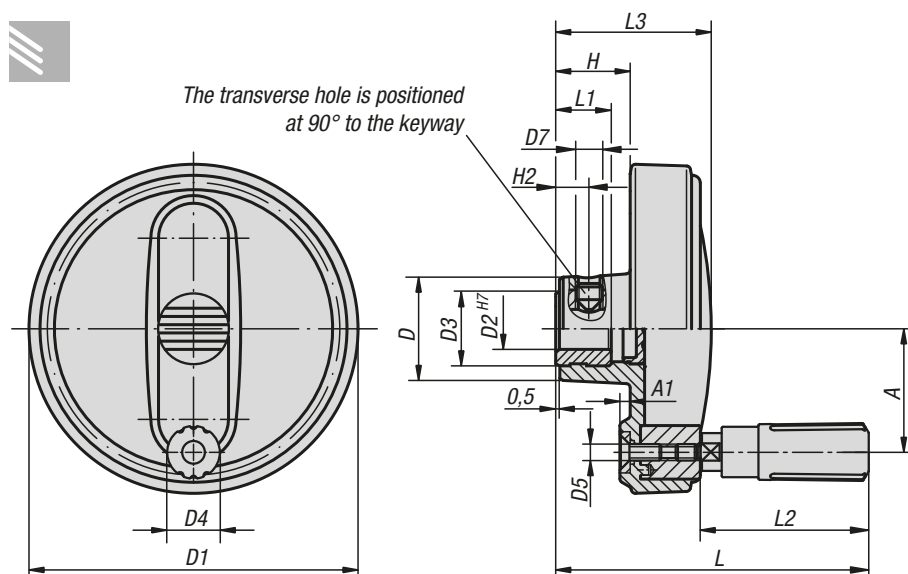
| Order No.<br>reamed hole | Order No.<br>reamed hole with slot | D  | D1  | D2   | D3 | A1  | H    | L1   | L3   | B3  | T      |
|--------------------------|------------------------------------|----|-----|------|----|-----|------|------|------|-----|--------|
| K0256.108008             | K0256.10800802                     | 25 | 80  | 8H7  | 19 | 2,5 | 17,5 | 13   | 37,5 | -/2 | -/9    |
| K0256.108010             | K0256.10801003                     | 25 | 80  | 10H7 | 19 | 2,5 | 17,5 | 13   | 37,5 | -/3 | -/11,4 |
| K0256.108012             | K0256.10801204                     | 25 | 80  | 12H7 | 19 | 2,5 | 17,5 | 13   | 37,5 | -/4 | -/13,8 |
| K0256.210010             | K0256.21001003                     | 28 | 100 | 10H7 | 19 | 3   | 20   | 13   | 44   | -/3 | -/11,4 |
| K0256.210012             | K0256.21001204                     | 28 | 100 | 12H7 | 19 | 3   | 20   | 13   | 44   | -/4 | -/13,8 |
| K0256.312512             | K0256.31251204                     | 35 | 125 | 12H7 | 25 | 4   | 23,5 | 18,5 | 53   | -/4 | -/13,8 |
| K0256.312514             | K0256.31251405                     | 35 | 125 | 14H7 | 25 | 4   | 23,5 | 18,5 | 53   | -/5 | -/16,3 |
| K0256.312516             | K0256.31251605                     | 35 | 125 | 16H7 | 25 | 4   | 23,5 | 18,5 | 53   | -/5 | -/18,3 |
| K0256.416014             | K0256.41601405                     | 45 | 160 | 14H7 | 25 | 5,6 | 28   | 18,5 | 64,5 | -/5 | -/16,3 |
| K0256.416016             | K0256.41601605                     | 45 | 160 | 16H7 | 25 | 5,6 | 28   | 18,5 | 64,5 | -/5 | -/18,3 |

## KIPP Handwheels with transverse bore

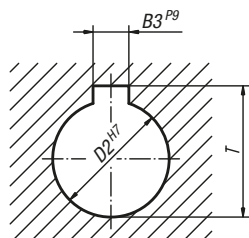
| Order No.<br>reamed hole | Order No.<br>reamed hole with slot | D  | D1  | D2   | D3 | D7 | A1  | H    | H2  | L1   | L3   | B3  | T      |
|--------------------------|------------------------------------|----|-----|------|----|----|-----|------|-----|------|------|-----|--------|
| K0256.1080086            | K0256.108008026                    | 25 | 80  | 8H7  | 19 | M6 | 2,5 | 17,5 | 7,5 | 13   | 37,5 | -/2 | -/9    |
| K0256.1080106            | K0256.108010036                    | 25 | 80  | 10H7 | 19 | M6 | 2,5 | 17,5 | 7,5 | 13   | 37,5 | -/3 | -/11,4 |
| K0256.1080126            | K0256.108012046                    | 25 | 80  | 12H7 | 19 | M6 | 2,5 | 17,5 | 7,5 | 13   | 37,5 | -/4 | -/13,8 |
| K0256.2100106            | K0256.210010036                    | 28 | 100 | 10H7 | 19 | M6 | 3   | 20   | 7,5 | 13   | 44   | -/3 | -/11,4 |
| K0256.2100126            | K0256.210012046                    | 28 | 100 | 12H7 | 19 | M6 | 3   | 20   | 7,5 | 13   | 44   | -/4 | -/13,8 |
| K0256.3125126            | K0256.312512046                    | 35 | 125 | 12H7 | 25 | M6 | 4   | 23,5 | 7,5 | 18,5 | 53   | -/4 | -/13,8 |
| K0256.3125146            | K0256.312514056                    | 35 | 125 | 14H7 | 25 | M6 | 4   | 23,5 | 7,5 | 18,5 | 53   | -/5 | -/16,3 |
| K0256.3125166            | K0256.312516056                    | 35 | 125 | 16H7 | 25 | M6 | 4   | 23,5 | 7,5 | 18,5 | 53   | -/5 | -/18,3 |
| K0256.4160146            | K0256.416014056                    | 45 | 160 | 14H7 | 25 | M6 | 5,6 | 28   | 7,5 | 18,5 | 64,5 | -/5 | -/16,3 |
| K0256.4160166            | K0256.416016056                    | 45 | 160 | 16H7 | 25 | M6 | 5,6 | 28   | 7,5 | 18,5 | 64,5 | -/5 | -/18,3 |

# Handwheels

with revolving grip



DIN 6885-1



**Material:**  
Black grey thermoplastic.

**Version:**  
Steel parts black oxidised.

**Sample order:**  
K0257.108008

**Note:**  
The hub cover and the revolving cylinder grip are supplied unassembled. To assemble, screw the grip into the tapped hole.  
The handwheels can be secured using a transverse pin or by parallel key connection together with a DIN 6912 socket head screw and a DIN 7349 washer. Versions with transverse bore are secured using the ISO 4027 (DIN 914) grub screw.

## KIPP Handwheels with revolving cylinder grip

| Order No.<br>reamed hole | Order No.<br>reamed hole with slot | D  | D1  | D2   | D3 | D4 | D5 | A    | A1  | H    | L     | L1   | L2   | L3   | B3  | T      |
|--------------------------|------------------------------------|----|-----|------|----|----|----|------|-----|------|-------|------|------|------|-----|--------|
| K0257.108008             | K0257.10800802                     | 25 | 80  | 8H7  | 19 | 14 | M4 | 30   | 2,5 | 17,6 | 74,6  | 13   | 40   | 36,7 | -/2 | -/9    |
| K0257.108010             | K0257.10801003                     | 25 | 80  | 10H7 | 19 | 14 | M4 | 30   | 2,5 | 17,6 | 74,6  | 13   | 40   | 36,7 | -/3 | -/11,4 |
| K0257.108012             | K0257.10801204                     | 25 | 80  | 12H7 | 19 | 14 | M4 | 30   | 2,5 | 17,6 | 74,6  | 13   | 40   | 36,7 | -/4 | -/13,8 |
| K0257.210010             | K0257.21001003                     | 28 | 100 | 10H7 | 19 | 16 | M5 | 38   | 3   | 20,1 | 90,2  | 13   | 49,1 | 43,5 | -/3 | -/11,4 |
| K0257.210012             | K0257.21001204                     | 28 | 100 | 12H7 | 19 | 16 | M5 | 38   | 3   | 20,1 | 90,2  | 13   | 49,1 | 43,5 | -/4 | -/13,8 |
| K0257.312512             | K0257.31251204                     | 35 | 125 | 12H7 | 25 | 20 | M6 | 47,5 | 4   | 23,3 | 110,7 | 18,5 | 61,4 | 52,1 | -/4 | -/13,8 |
| K0257.312514             | K0257.31251405                     | 35 | 125 | 14H7 | 25 | 20 | M6 | 47,5 | 4   | 23,3 | 110,7 | 18,5 | 61,4 | 52,1 | -/5 | -/16,3 |
| K0257.312516             | K0257.31251605                     | 35 | 125 | 16H7 | 25 | 20 | M6 | 47,5 | 4   | 23,3 | 110,7 | 18,5 | 61,4 | 52,1 | -/5 | -/18,3 |
| K0257.416014             | K0257.41601405                     | 45 | 160 | 14H7 | 25 | 25 | M8 | 62   | 5,6 | 28   | 143   | 18,5 | 82,5 | 63,8 | -/5 | -/16,3 |
| K0257.416016             | K0257.41601605                     | 45 | 160 | 16H7 | 25 | 25 | M8 | 62   | 5,6 | 28   | 143   | 18,5 | 82,5 | 63,8 | -/5 | -/18,3 |

## KIPP Handwheels with revolving cylinder grip with transverse bore

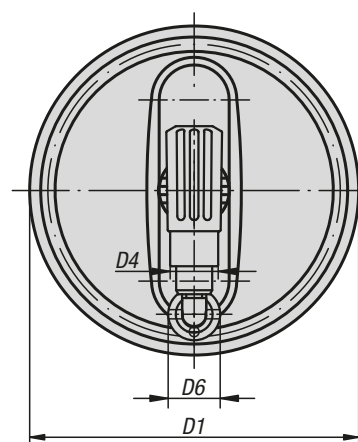
| Order No.<br>reamed hole | Order No.<br>reamed hole with slot | D  | D1  | D2   | D3 | D4 | D5 | D7 | A    | A1  | H    | H2  | L     | L1   | L2   | L3   | B3  | T      |
|--------------------------|------------------------------------|----|-----|------|----|----|----|----|------|-----|------|-----|-------|------|------|------|-----|--------|
| K0257.1080086            | K0257.108008026                    | 25 | 80  | 8H7  | 19 | 14 | M4 | M6 | 30   | 2,5 | 17,6 | 7,5 | 74,6  | 13   | 40   | 36,7 | -/2 | -/9    |
| K0257.1080106            | K0257.108010036                    | 25 | 80  | 10H7 | 19 | 14 | M4 | M6 | 30   | 2,5 | 17,6 | 7,5 | 74,6  | 13   | 40   | 36,7 | -/3 | -/11,4 |
| K0257.1080126            | K0257.108012046                    | 25 | 80  | 12H7 | 19 | 14 | M4 | M6 | 30   | 2,5 | 17,6 | 7,5 | 74,6  | 13   | 40   | 36,7 | -/4 | -/13,8 |
| K0257.2100106            | K0257.210010036                    | 28 | 100 | 10H7 | 19 | 16 | M5 | M6 | 38   | 3   | 20,1 | 7,5 | 90,2  | 13   | 49,1 | 43,5 | -/3 | -/11,4 |
| K0257.2100126            | K0257.210012046                    | 28 | 100 | 12H7 | 19 | 16 | M5 | M6 | 38   | 3   | 20,1 | 7,5 | 90,2  | 13   | 49,1 | 43,5 | -/4 | -/13,8 |
| K0257.3125126            | K0257.312512046                    | 35 | 125 | 12H7 | 25 | 20 | M6 | M6 | 47,5 | 4   | 23,3 | 7,5 | 110,7 | 18,5 | 61,4 | 52,1 | -/4 | -/13,8 |
| K0257.3125146            | K0257.312514056                    | 35 | 125 | 14H7 | 25 | 20 | M6 | M6 | 47,5 | 4   | 23,3 | 7,5 | 110,7 | 18,5 | 61,4 | 52,1 | -/5 | -/16,3 |
| K0257.3125166            | K0257.312516056                    | 35 | 125 | 16H7 | 25 | 20 | M6 | M6 | 47,5 | 4   | 23,3 | 7,5 | 110,7 | 18,5 | 61,4 | 52,1 | -/5 | -/18,3 |
| K0257.4160146            | K0257.416014056                    | 45 | 160 | 14H7 | 25 | 25 | M8 | M6 | 62   | 5,6 | 28   | 7,5 | 143   | 18,5 | 82,5 | 63,8 | -/5 | -/16,3 |
| K0257.4160166            | K0257.416016056                    | 45 | 160 | 16H7 | 25 | 25 | M8 | M6 | 62   | 5,6 | 28   | 7,5 | 143   | 18,5 | 82,5 | 63,8 | -/5 | -/18,3 |

# Handwheels

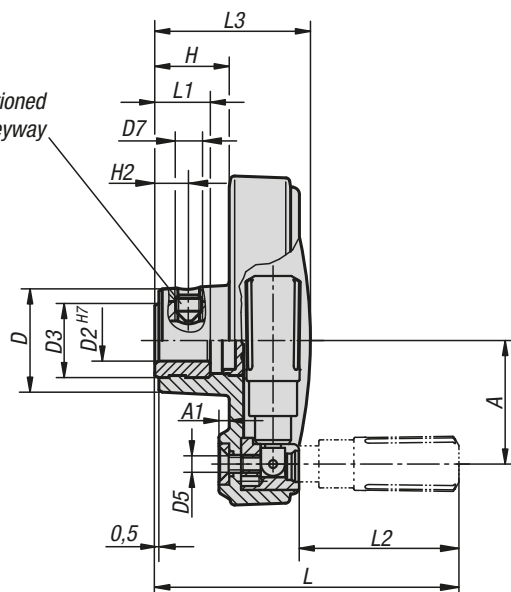
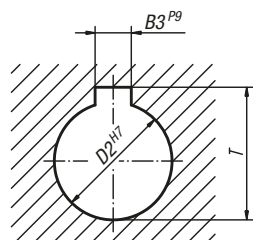
with fold-down grip



The transverse hole is positioned at 90° to the keyway



DIN 6885-1



## Material:

Black grey thermoplastic.

## Version:

Steel parts black oxidised.

## Sample order:

K0258.108008

## Note:

The hub cover is supplied loose.

The handwheels can be secured using a transverse pin or by parallel key connection together with a DIN 6912 socket head screw and a DIN 7349 washer.

Versions with transverse bore are secured using the ISO 4027 (DIN 914) grub screw.

For assembly example, see K0256.

## KIPP Handwheels with fold-down cylinder grip

| Order No.<br>reamed hole | Order No.<br>reamed hole with slot | D  | D1  | D2   | D3 | D4 | D5 | D6 | A    | A1  | H    | L     | L1   | L2   | L3   | B3  | T      |
|--------------------------|------------------------------------|----|-----|------|----|----|----|----|------|-----|------|-------|------|------|------|-----|--------|
| K0258.108008             | K0258.10800802                     | 25 | 80  | 8H7  | 19 | 14 | M4 | 13 | 30   | 2,5 | 17,6 | 74,6  | 13   | 40   | 36,7 | -/2 | -/9    |
| K0258.108010             | K0258.10801003                     | 25 | 80  | 10H7 | 19 | 14 | M4 | 13 | 30   | 2,5 | 17,6 | 74,6  | 13   | 40   | 36,7 | -/3 | -/11,4 |
| K0258.108012             | K0258.10801204                     | 25 | 80  | 12H7 | 19 | 14 | M4 | 13 | 30   | 2,5 | 17,6 | 74,6  | 13   | 40   | 36,7 | -/4 | -/13,8 |
| K0258.210010             | K0258.21001003                     | 28 | 100 | 10H7 | 19 | 16 | M5 | 16 | 38   | 3   | 20,1 | 90,1  | 13   | 49   | 43,5 | -/3 | -/11,4 |
| K0258.210012             | K0258.21001204                     | 28 | 100 | 12H7 | 19 | 16 | M5 | 16 | 38   | 3   | 20,1 | 90,1  | 13   | 49   | 43,5 | -/4 | -/13,8 |
| K0258.312512             | K0258.31251204                     | 35 | 125 | 12H7 | 25 | 20 | M6 | 20 | 47,5 | 4   | 23,3 | 108,8 | 18,5 | 59,5 | 52,1 | -/4 | -/13,8 |
| K0258.312514             | K0258.31251405                     | 35 | 125 | 14H7 | 25 | 20 | M6 | 20 | 47,5 | 4   | 23,3 | 108,8 | 18,5 | 59,5 | 52,1 | -/5 | -/16,3 |
| K0258.312516             | K0258.31251605                     | 35 | 125 | 16H7 | 25 | 20 | M6 | 20 | 47,5 | 4   | 23,3 | 108,8 | 18,5 | 59,5 | 52,1 | -/5 | -/18,3 |
| K0258.416014             | K0258.41601405                     | 45 | 160 | 14H7 | 25 | 25 | M8 | 26 | 62   | 5,6 | 28   | 143,5 | 18,5 | 83   | 63,8 | -/5 | -/16,3 |
| K0258.416016             | K0258.41601605                     | 45 | 160 | 16H7 | 25 | 25 | M8 | 26 | 62   | 5,6 | 28   | 143,5 | 18,5 | 83   | 63,8 | -/5 | -/18,3 |

## KIPP Handwheels with fold-down grip, with transverse bore

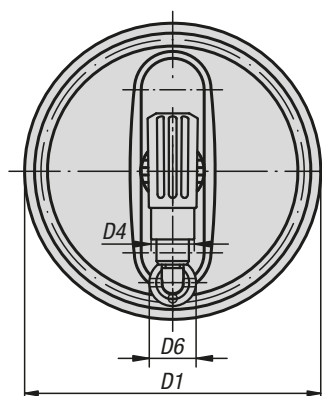
| Order No.<br>reamed hole | Order No.<br>reamed hole with slot | D  | D1  | D2   | D3 | D4 | D5 | D6 | D7 | A    | A1  | H    | H2  | L     | L1   | L2   | L3   | B3  | T      |
|--------------------------|------------------------------------|----|-----|------|----|----|----|----|----|------|-----|------|-----|-------|------|------|------|-----|--------|
| K0258.1080086            | K0258.108008026                    | 25 | 80  | 8H7  | 19 | 14 | M4 | 13 | M6 | 30   | 2,5 | 17,6 | 7,5 | 74,6  | 13   | 40   | 36,7 | -/2 | -/9    |
| K0258.1080106            | K0258.108010036                    | 25 | 80  | 10H7 | 19 | 14 | M4 | 13 | M6 | 30   | 2,5 | 17,6 | 7,5 | 74,6  | 13   | 40   | 36,7 | -/3 | -/11,4 |
| K0258.1080126            | K0258.108012046                    | 25 | 80  | 12H7 | 19 | 14 | M4 | 13 | M6 | 30   | 2,5 | 17,6 | 7,5 | 74,6  | 13   | 40   | 36,7 | -/4 | -/13,8 |
| K0258.2100106            | K0258.210010036                    | 28 | 100 | 10H7 | 19 | 16 | M5 | 16 | M6 | 38   | 3   | 20,1 | 7,5 | 90,1  | 13   | 49   | 43,5 | -/3 | -/11,4 |
| K0258.2100126            | K0258.210012046                    | 28 | 100 | 12H7 | 19 | 16 | M5 | 16 | M6 | 38   | 3   | 20,1 | 7,5 | 90,1  | 13   | 49   | 43,5 | -/4 | -/13,8 |
| K0258.3125126            | K0258.312512046                    | 35 | 125 | 12H7 | 25 | 20 | M6 | 20 | M6 | 47,5 | 4   | 23,3 | 7,5 | 108,8 | 18,5 | 59,5 | 52,1 | -/4 | -/13,8 |
| K0258.3125146            | K0258.312514056                    | 35 | 125 | 14H7 | 25 | 20 | M6 | 20 | M6 | 47,5 | 4   | 23,3 | 7,5 | 108,8 | 18,5 | 59,5 | 52,1 | -/5 | -/16,3 |
| K0258.3125166            | K0258.312516056                    | 35 | 125 | 16H7 | 25 | 20 | M6 | 20 | M6 | 47,5 | 4   | 23,3 | 7,5 | 108,8 | 18,5 | 59,5 | 52,1 | -/5 | -/18,3 |
| K0258.4160146            | K0258.416014056                    | 45 | 160 | 14H7 | 25 | 25 | M8 | 26 | M6 | 62   | 5,6 | 28   | 7,5 | 143,5 | 18,5 | 83   | 63,8 | -/5 | -/16,3 |
| K0258.4160166            | K0258.416016056                    | 45 | 160 | 16H7 | 25 | 25 | M8 | 26 | M6 | 62   | 5,6 | 28   | 7,5 | 143,5 | 18,5 | 83   | 63,8 | -/5 | -/18,3 |

# Handwheels

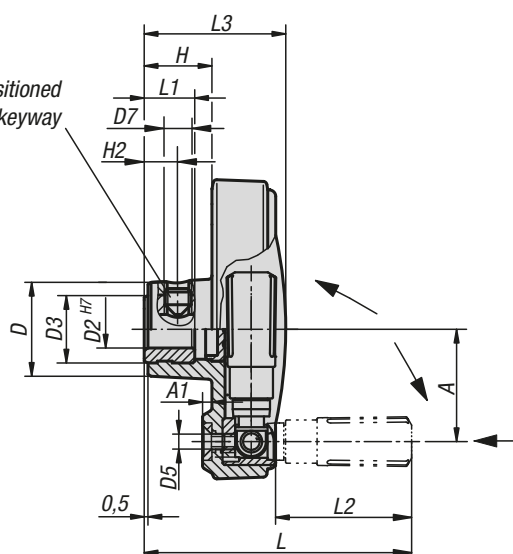
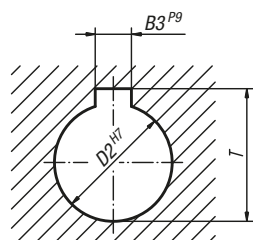
with safety grip



The transverse hole is positioned at 90° to the keyway



DIN 6885-1



## Material:

Black grey thermoplastic.

## Version:

Steel parts black oxidised.

## Sample order:

K0259.108008

## Note:

The hub cover is supplied loose. The handwheels can be secured using a transverse pin or by parallel key connection together with a DIN 6912 socket head screw and a DIN 7349 washer.

Two steps have to be carried out to bring the cylindrical safety grip into operating position:

- Swivel the grip around the axis of rotation until it stops (90°).
- Push grip in axial position into locking position.

The pressed-in position is the most comfortable position to crank. When released, the grip automatically returns to original position.

Versions with transverse bore are secured using the ISO 4027 (DIN 914) grub screw.

For assembly examples, see K0256.

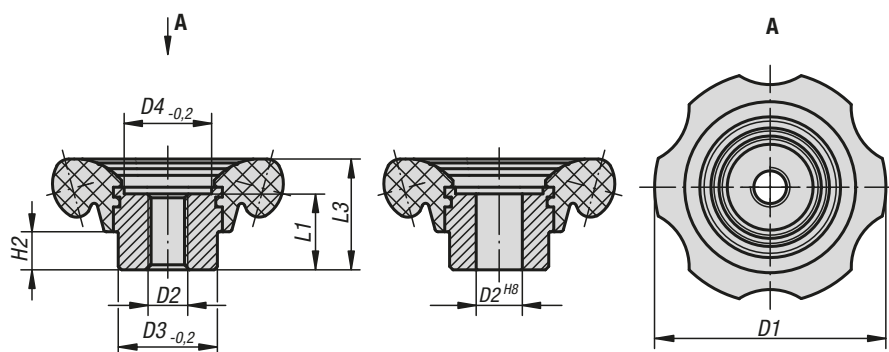
## KIPP Handwheels with safety cylinder grip

| Order No.<br>reamed hole | Order No.<br>reamed hole with slot | D  | D1  | D2   | D3 | D4 | D5 | D6 | A    | A1  | H    | L     | L1   | L2   | L3   | B3  | T      |
|--------------------------|------------------------------------|----|-----|------|----|----|----|----|------|-----|------|-------|------|------|------|-----|--------|
| K0259.108008             | K0259.10800802                     | 25 | 80  | 8H7  | 19 | 14 | M4 | 13 | 30   | 2,5 | 17,6 | 72,6  | 13   | 38   | 36,7 | -/2 | -/9    |
| K0259.108010             | K0259.10801003                     | 25 | 80  | 10H7 | 19 | 14 | M4 | 13 | 30   | 2,5 | 17,6 | 72,6  | 13   | 38   | 36,7 | -/3 | -/11,4 |
| K0259.108012             | K0259.10801204                     | 25 | 80  | 12H7 | 19 | 14 | M4 | 13 | 30   | 2,5 | 17,6 | 72,6  | 13   | 38   | 36,7 | -/4 | -/13,8 |
| K0259.210010             | K0259.21001003                     | 28 | 100 | 10H7 | 19 | 16 | M5 | 16 | 38   | 3   | 20,1 | 88,6  | 13   | 47,5 | 43,5 | -/3 | -/11,4 |
| K0259.210012             | K0259.21001204                     | 28 | 100 | 12H7 | 19 | 16 | M5 | 16 | 38   | 3   | 20,1 | 88,6  | 13   | 47,5 | 43,5 | -/4 | -/13,8 |
| K0259.312512             | K0259.31251204                     | 35 | 125 | 12H7 | 25 | 20 | M6 | 20 | 47,5 | 4   | 23,3 | 107,7 | 18,5 | 58,4 | 52,1 | -/4 | -/13,8 |
| K0259.312514             | K0259.31251405                     | 35 | 125 | 14H7 | 25 | 20 | M6 | 20 | 47,5 | 4   | 23,3 | 107,7 | 18,5 | 58,4 | 52,1 | -/5 | -/16,3 |
| K0259.312516             | K0259.31251605                     | 35 | 125 | 16H7 | 25 | 20 | M6 | 20 | 47,5 | 4   | 23,3 | 107,7 | 18,5 | 58,4 | 52,1 | -/5 | -/18,3 |
| K0259.416014             | K0259.41601405                     | 45 | 160 | 14H7 | 25 | 25 | M8 | 26 | 62   | 5,6 | 28   | 142   | 18,5 | 81,6 | 63,8 | -/5 | -/16,3 |
| K0259.416016             | K0259.41601605                     | 45 | 160 | 16H7 | 25 | 25 | M8 | 26 | 62   | 5,6 | 28   | 142   | 18,5 | 81,6 | 63,8 | -/5 | -/18,3 |

## KIPP Handwheels with safety cylinder grip with transverse bore

| Order No.<br>reamed hole | Order No.<br>reamed hole with slot | D  | D1  | D2   | D3 | D4 | D5 | D6 | D7 | A    | A1  | H    | H2  | L     | L1   | L2   | L3   | B3  | T      |
|--------------------------|------------------------------------|----|-----|------|----|----|----|----|----|------|-----|------|-----|-------|------|------|------|-----|--------|
| K0259.1080086            | K0259.108008026                    | 25 | 80  | 8H7  | 19 | 14 | M4 | 13 | M6 | 30   | 2,5 | 17,6 | 7,5 | 72,6  | 13   | 38   | 36,7 | -/2 | -/9    |
| K0259.1080106            | K0259.108010036                    | 25 | 80  | 10H7 | 19 | 14 | M4 | 13 | M6 | 30   | 2,5 | 17,6 | 7,5 | 72,6  | 13   | 38   | 36,7 | -/3 | -/11,4 |
| K0259.1080126            | K0259.108012046                    | 25 | 80  | 12H7 | 19 | 14 | M4 | 13 | M6 | 30   | 2,5 | 17,6 | 7,5 | 72,6  | 13   | 38   | 36,7 | -/4 | -/13,8 |
| K0259.2100106            | K0259.210010036                    | 28 | 100 | 10H7 | 19 | 16 | M5 | 16 | M6 | 38   | 3   | 20,1 | 7,5 | 88,6  | 13   | 47,5 | 43,5 | -/3 | -/11,4 |
| K0259.2100126            | K0259.210012046                    | 28 | 100 | 12H7 | 19 | 16 | M5 | 16 | M6 | 38   | 3   | 20,1 | 7,5 | 88,6  | 13   | 47,5 | 43,5 | -/4 | -/13,8 |
| K0259.3125126            | K0259.312512046                    | 35 | 125 | 12H7 | 25 | 20 | M6 | 20 | M6 | 47,5 | 4   | 23,3 | 7,5 | 107,7 | 18,5 | 58,4 | 52,1 | -/4 | -/13,8 |
| K0259.3125146            | K0259.312514056                    | 35 | 125 | 14H7 | 25 | 20 | M6 | 20 | M6 | 47,5 | 4   | 23,3 | 7,5 | 107,7 | 18,5 | 58,4 | 52,1 | -/5 | -/16,3 |
| K0259.3125166            | K0259.312516056                    | 35 | 125 | 16H7 | 25 | 20 | M6 | 20 | M6 | 47,5 | 4   | 23,3 | 7,5 | 107,7 | 18,5 | 58,4 | 52,1 | -/5 | -/18,3 |
| K0259.4160146            | K0259.416014056                    | 45 | 160 | 14H7 | 25 | 25 | M8 | 26 | M6 | 62   | 5,6 | 28   | 7,5 | 142   | 18,5 | 81,6 | 63,8 | -/5 | -/16,3 |
| K0259.4160166            | K0259.416016056                    | 45 | 160 | 16H7 | 25 | 25 | M8 | 26 | M6 | 62   | 5,6 | 28   | 7,5 | 142   | 18,5 | 81,6 | 63,8 | -/5 | -/18,3 |

## Handwheels



**Material:**  
Handwheel thermoset PF 31.  
Bush steel, black oxidised.

**Version:**  
High-gloss polished, black.

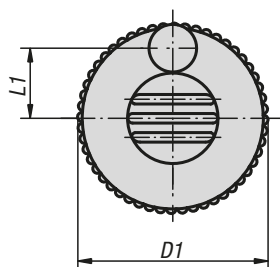
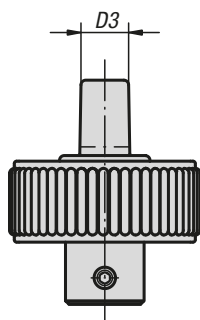
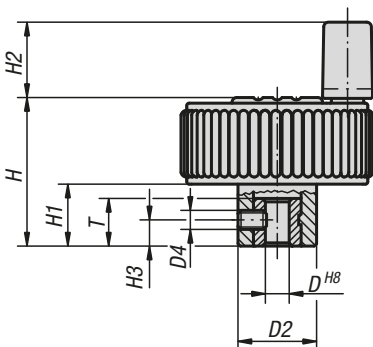
**Sample order:**  
K0184.70112

### KIPP Handwheels

| Order No.   | Version 1       | D1 | D2   | D3 | D4   | H2   | L1 | L3   |
|-------------|-----------------|----|------|----|------|------|----|------|
| K0184.70110 | internal thread | 70 | M10  | 30 | 26,5 | 11,5 | 23 | 33,5 |
| K0184.70112 | internal thread | 70 | M12  | 30 | 26,5 | 11,5 | 23 | 33,5 |
| K0184.83112 | internal thread | 83 | M12  | 35 | 31,5 | 14   | 28 | 40   |
| K0184.83116 | internal thread | 83 | M16  | 35 | 31,5 | 14   | 28 | 40   |
| K0184.70212 | reamed hole     | 70 | 12H8 | 30 | 26,5 | 11,5 | 23 | 33,5 |
| K0184.70214 | reamed hole     | 70 | 14H8 | 30 | 26,5 | 11,5 | 23 | 33,5 |
| K0184.83214 | reamed hole     | 83 | 14H8 | 35 | 31,5 | 14   | 28 | 40   |
| K0184.83216 | reamed hole     | 83 | 16H8 | 35 | 31,5 | 14   | 28 | 40   |

## Knurled knobs

with grip



### Material:

Black thermoplastic.  
Bush grade 5.8 steel.

### Version:

Steel trivalent blue passivated.

### Sample order:

K0262.21066 (cap colour traffic red)

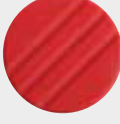
### Note:

Δ Add the desired cap colour here.  
No colour code is required for black grey caps.

### Drawing reference:

Form H: without locking grub screw  
Form M: with locking grub screw



|                                                                                                                    |                                                                                                                      |                                                                                                                       |                                                                                                                       |
|--------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| black grey<br><br>RAL 7021       | pure orange Δ = 1<br><br>RAL 2004 | signal green Δ = 2<br><br>RAL 6032 | traffic blue Δ = 3<br><br>RAL 5017 |
| light grey Δ = 5<br><br>RAL 7035 | traffic red Δ = 6<br><br>RAL 3020 | colza yellow Δ = 7<br><br>RAL 1021 |                                                                                                                       |

### KIPP Knurled knobs with grip

| Order No.   | Form | D   | D1 | D2   | D3 | D4 | H  | H1 | H2 | H3  | L1   | T  |
|-------------|------|-----|----|------|----|----|----|----|----|-----|------|----|
| K0262.2106Δ | H    | 6H8 | 40 | 16,5 | 10 | -  | 31 | 13 | 16 | -   | 15   | 10 |
| K0262.2206Δ | H    | 6H8 | 50 | 18   | 10 | -  | 36 | 15 | 16 | -   | 18,5 | 10 |
| K0262.2308Δ | H    | 8H8 | 63 | 22   | 10 | -  | 41 | 17 | 16 | -   | 25   | 14 |
| K0262.1106Δ | M    | 6H8 | 40 | 16,5 | 10 | M4 | 31 | 13 | 16 | 5,5 | 15   | 10 |
| K0262.1206Δ | M    | 6H8 | 50 | 18   | 10 | M4 | 36 | 15 | 16 | 5,5 | 18,5 | 10 |
| K0262.1308Δ | M    | 8H8 | 63 | 22   | 10 | M4 | 41 | 17 | 16 | 8   | 25   | 14 |

## Deltawheels

**Material:**

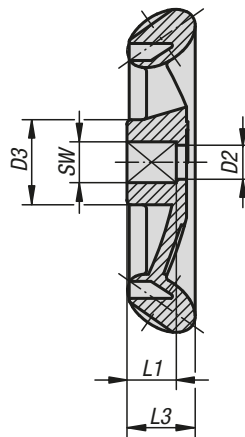
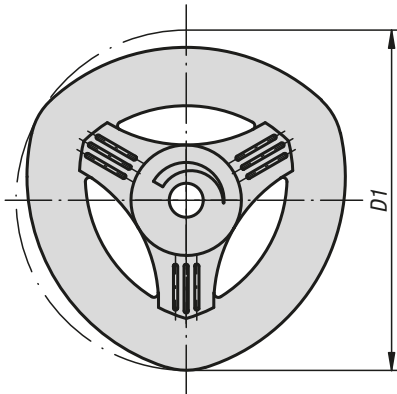
Fibreglass reinforced thermoplastic.

**Sample order:**

K0275.050051 (colour signal green)

**Note:**

Δ Add the desired colour here. No colour code is required for black grey.



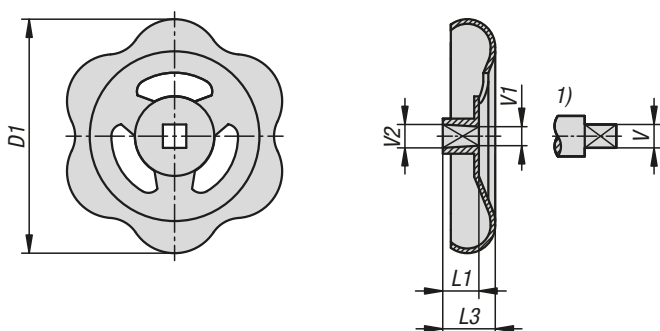
| black grey                                                                         | signal green Δ = 1                                                                  | traffic red Δ = 2                                                                   | colza yellow Δ = 3                                                                  | traffic blue Δ = 4                                                                    |
|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  |  |  |  |  |
| RAL 7021                                                                           | RAL 6032                                                                            | RAL 3020                                                                            | RAL 1021                                                                            | RAL 5017                                                                              |

## KIPP Deltawheels

| Order No.    | D1 | D2 | D3   | L1  | L3   | SW |
|--------------|----|----|------|-----|------|----|
| K0275.05005Δ | 50 | 5  | 12,5 | 7,3 | 10   | 5  |
| K0275.05006Δ | 50 | 5  | 12,5 | 7,3 | 10   | 6  |
| K0275.06306Δ | 63 | 5  | 15,8 | 9   | 12,6 | 6  |
| K0275.06307Δ | 63 | 5  | 15,8 | 9   | 12,6 | 7  |
| K0275.08008Δ | 80 | 5  | 20   | 12  | 16   | 8  |
| K0275.08009Δ | 80 | 5  | 20   | 12  | 16   | 9  |



## Hand wheels, steel, stamped



### Material:

Steel.

### Version:

Powder-coated black RAL 9005, red RAL 3000 or trivalent blue passivated.

### Sample order:

K1661.050060

### Note:

Especially suitable for stop valves. The handwheels are made from a single piece. The handwheel is strengthened in the hub area using a special forming process. The tapered hub allows easy mounting and ensures secure seating on the square bar.

### Drawing reference:

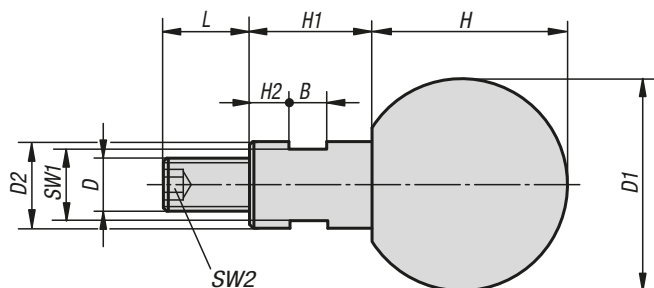
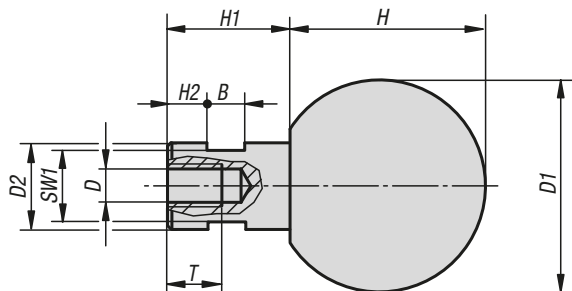
1) Square on shaft

## KIPP Hand wheels, steel, stamped

| Order No.<br>passivated | Order No.<br>jet black RAL 9005 | Order No.<br>red RAL 3000 | D1  | L1  | L3 | V  | V1   | V2    | Number of<br>spokes |
|-------------------------|---------------------------------|---------------------------|-----|-----|----|----|------|-------|---------------------|
| K1661.130122            | K1661.130120                    | K1661.130121              | 130 | 15  | 23 | 12 | 11,9 | 12,15 | 3                   |
| K1661.050062            | K1661.050060                    | K1661.050061              | 50  | 8,5 | 12 | 6  | 5,9  | 6,15  | 3                   |
| K1661.050072            | K1661.050070                    | K1661.050071              | 50  | 8,5 | 12 | 7  | 6,9  | 7,15  | 3                   |
| K1661.060062            | K1661.060060                    | K1661.060061              | 60  | 8,5 | 12 | 6  | 5,9  | 6,15  | 3                   |
| K1661.060072            | K1661.060070                    | K1661.060071              | 60  | 8,5 | 12 | 7  | 6,9  | 7,15  | 3                   |
| K1661.110102            | K1661.110100                    | K1661.110101              | 108 | 15  | 23 | 10 | 9,9  | 10,15 | 3                   |
| K1661.070072            | K1661.070070                    | K1661.070071              | 69  | 10  | 15 | 7  | 6,9  | 7,15  | 3                   |
| K1661.100102            | K1661.100100                    | K1661.100101              | 98  | 13  | 20 | 10 | 9,9  | 10,15 | 3                   |
| K1661.070082            | K1661.070080                    | K1661.070081              | 69  | 10  | 15 | 8  | 7,9  | 8,15  | 3                   |
| K1661.080082            | K1661.080080                    | K1661.080081              | 78  | 11  | 16 | 8  | 7,9  | 8,15  | 3                   |
| K1661.080092            | K1661.080090                    | K1661.080091              | 78  | 11  | 16 | 9  | 8,9  | 9,15  | 3                   |
| K1661.090092            | K1661.090090                    | K1661.090091              | 89  | 11  | 16 | 9  | 8,9  | 9,15  | 3                   |
| K1661.100092            | K1661.100090                    | K1661.100091              | 98  | 13  | 20 | 9  | 8,9  | 9,15  | 3                   |



## Ball grips revolving



### Material:

Ball thermoset PF 31.

Bush and screw steel or stainless steel 1.4305.

### Version:

Ball black glossy.

Steel trivalent blue passivated.

Stainless steel bright.

### Sample order:

K0726.061

### KIPP Ball grips revolving with female thread

| Order No.<br>steel | Order No.<br>stainless steel | B  | D   | D1 | D2 | H    | H1 | H2 | SW1 | T    |
|--------------------|------------------------------|----|-----|----|----|------|----|----|-----|------|
| K0726.060          | K0726.1060                   | 5  | M6  | 25 | 10 | 22,5 | 15 | 5  | 8   | 12,5 |
| K0726.080          | K0726.1080                   | 6  | M8  | 32 | 13 | 29,5 | 19 | 6  | 10  | 15   |
| K0726.100          | K0726.1100                   | 8  | M10 | 40 | 16 | 37   | 24 | 8  | 13  | 19   |
| K0726.120          | K0726.1120                   | 10 | M12 | 50 | 20 | 47   | 31 | 12 | 17  | 21,5 |

### KIPP Ball grips revolving with male thread

| Order No.<br>steel | Order No.<br>stainless steel | B  | D   | D1 | D2 | H    | H1 | H2 | L  | SW1 | SW2 |
|--------------------|------------------------------|----|-----|----|----|------|----|----|----|-----|-----|
| K0726.061          | K0726.1061                   | 5  | M6  | 25 | 10 | 22,5 | 15 | 5  | 11 | 8   | 3   |
| K0726.081          | K0726.1081                   | 6  | M8  | 32 | 13 | 29,5 | 19 | 6  | 13 | 10  | 4   |
| K0726.101          | K0726.1101                   | 8  | M10 | 40 | 16 | 37   | 24 | 8  | 14 | 13  | 5   |
| K0726.121          | K0726.1121                   | 10 | M12 | 50 | 20 | 47   | 31 | 12 | 21 | 17  | 6   |

# Crank handles offset

similar to DIN 468



## Material:

Crank arm malleable or ductile iron.

## Version:

Blasted.

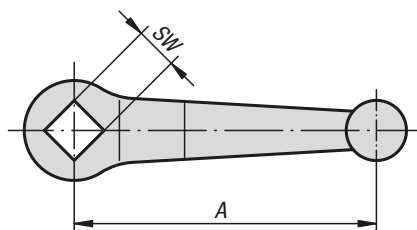
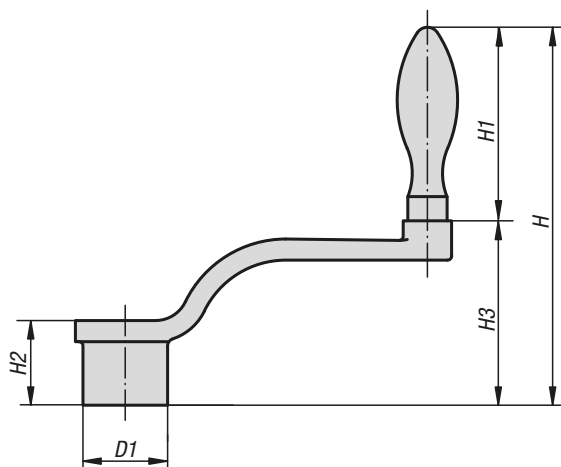
## Sample order:

K0684.212X14

## Drawing reference:

Form D: with revolving handle

Form F: with fixed handle

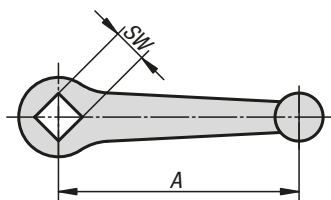
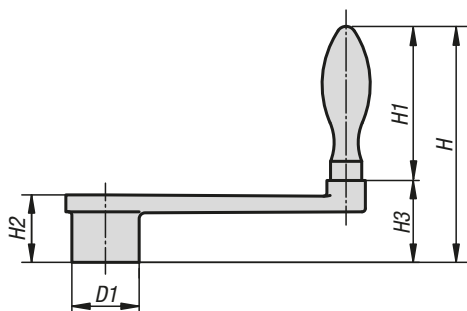


## KIPP Crank handles offset similar DIN 468

| Order No.    | Form | A   | D1 | H   | H1  | H2 | H3 | SW     | Grip<br>Ø |
|--------------|------|-----|----|-----|-----|----|----|--------|-----------|
| K0684.206X10 | D    | 63  | 20 | 92  | 52  | 20 | 40 | 10+0,2 | 16        |
| K0684.208X10 | D    | 80  | 24 | 109 | 65  | 24 | 44 | 10+0,2 | 20        |
| K0684.208X12 | D    | 80  | 24 | 109 | 65  | 24 | 44 | 12+0,2 | 20        |
| K0684.210X12 | D    | 100 | 28 | 120 | 65  | 28 | 55 | 12+0,2 | 20        |
| K0684.210X14 | D    | 100 | 28 | 120 | 65  | 28 | 55 | 14+0,3 | 20        |
| K0684.212X14 | D    | 125 | 34 | 141 | 83  | 34 | 58 | 14+0,3 | 25        |
| K0684.212X17 | D    | 125 | 34 | 141 | 83  | 34 | 58 | 17+0,3 | 25        |
| K0684.216X17 | D    | 160 | 37 | 153 | 83  | 38 | 70 | 17+0,3 | 25        |
| K0684.216X19 | D    | 160 | 37 | 153 | 83  | 38 | 70 | 19+0,3 | 25        |
| K0684.220X19 | D    | 200 | 40 | 189 | 105 | 44 | 84 | 19+0,3 | 32        |
| K0684.220X22 | D    | 200 | 40 | 189 | 105 | 44 | 84 | 22+0,3 | 32        |
| K0684.106X10 | F    | 63  | 20 | 92  | 52  | 20 | 40 | 10+0,2 | 16        |
| K0684.108X10 | F    | 80  | 24 | 109 | 65  | 24 | 44 | 10+0,2 | 20        |
| K0684.108X12 | F    | 80  | 24 | 109 | 65  | 24 | 44 | 12+0,2 | 20        |
| K0684.110X12 | F    | 100 | 28 | 120 | 65  | 28 | 55 | 12+0,2 | 20        |
| K0684.110X14 | F    | 100 | 28 | 120 | 65  | 28 | 55 | 14+0,3 | 20        |
| K0684.112X14 | F    | 125 | 34 | 141 | 83  | 34 | 58 | 14+0,3 | 25        |
| K0684.112X17 | F    | 125 | 34 | 141 | 83  | 34 | 58 | 17+0,3 | 25        |
| K0684.116X17 | F    | 160 | 37 | 153 | 83  | 38 | 70 | 17+0,3 | 25        |
| K0684.116X19 | F    | 160 | 37 | 153 | 83  | 38 | 70 | 19+0,3 | 25        |
| K0684.120X19 | F    | 200 | 40 | 189 | 105 | 44 | 84 | 19+0,3 | 32        |
| K0684.120X22 | F    | 200 | 40 | 189 | 105 | 44 | 84 | 22+0,3 | 32        |

## Crank handles straight

similar to DIN 469



### Material:

Crank arm malleable or ductile iron.

### Version:

Blasted.

### Sample order:

K0685.120X22

### Drawing reference:

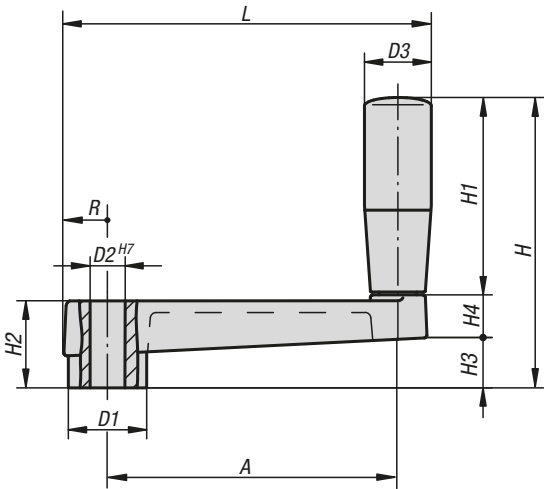
Form D: with revolving handle

Form F: with fixed handle

## KIPP Crank handles straight similar DIN 469

| Order No.    | Form | A   | D1 | H   | H1  | H2 | H3 | SW     | Grip Ø |
|--------------|------|-----|----|-----|-----|----|----|--------|--------|
| K0685.206X10 | D    | 63  | 20 | 80  | 52  | 20 | 28 | 10+0,2 | 16     |
| K0685.208X10 | D    | 80  | 24 | 98  | 65  | 24 | 33 | 10+0,2 | 20     |
| K0685.208X12 | D    | 80  | 24 | 98  | 65  | 24 | 33 | 12+0,2 | 20     |
| K0685.210X12 | D    | 100 | 28 | 102 | 65  | 28 | 37 | 12+0,2 | 20     |
| K0685.210X14 | D    | 100 | 28 | 102 | 65  | 28 | 37 | 14+0,3 | 20     |
| K0685.212X14 | D    | 125 | 34 | 120 | 80  | 34 | 40 | 14+0,3 | 25     |
| K0685.212X17 | D    | 125 | 34 | 120 | 80  | 34 | 40 | 17+0,3 | 25     |
| K0685.216X17 | D    | 160 | 37 | 131 | 83  | 38 | 48 | 17+0,3 | 25     |
| K0685.216X19 | D    | 160 | 37 | 131 | 83  | 38 | 48 | 19+0,3 | 25     |
| K0685.220X19 | D    | 200 | 40 | 158 | 105 | 44 | 53 | 19+0,3 | 32     |
| K0685.220X22 | D    | 200 | 40 | 158 | 105 | 44 | 53 | 22+0,3 | 32     |
| K0685.106X10 | F    | 63  | 20 | 80  | 52  | 20 | 28 | 10+0,2 | 16     |
| K0685.108X10 | F    | 80  | 24 | 98  | 65  | 24 | 33 | 10+0,2 | 20     |
| K0685.108X12 | F    | 80  | 24 | 98  | 65  | 24 | 33 | 12+0,2 | 20     |
| K0685.110X12 | F    | 100 | 28 | 102 | 65  | 28 | 37 | 12+0,2 | 20     |
| K0685.110X14 | F    | 100 | 28 | 102 | 65  | 28 | 37 | 14+0,3 | 20     |
| K0685.112X14 | F    | 125 | 34 | 120 | 80  | 34 | 40 | 14+0,3 | 25     |
| K0685.112X17 | F    | 125 | 34 | 120 | 80  | 34 | 40 | 17+0,3 | 25     |
| K0685.116X17 | F    | 160 | 37 | 131 | 83  | 38 | 48 | 17+0,3 | 25     |
| K0685.116X19 | F    | 160 | 37 | 131 | 83  | 38 | 48 | 19+0,3 | 25     |
| K0685.120X19 | F    | 200 | 40 | 158 | 105 | 44 | 53 | 19+0,3 | 32     |
| K0685.120X22 | F    | 200 | 40 | 158 | 105 | 44 | 53 | 22+0,3 | 32     |

Crank handles aluminium



**Material:**  
Aluminium.  
Grip thermoplastic.

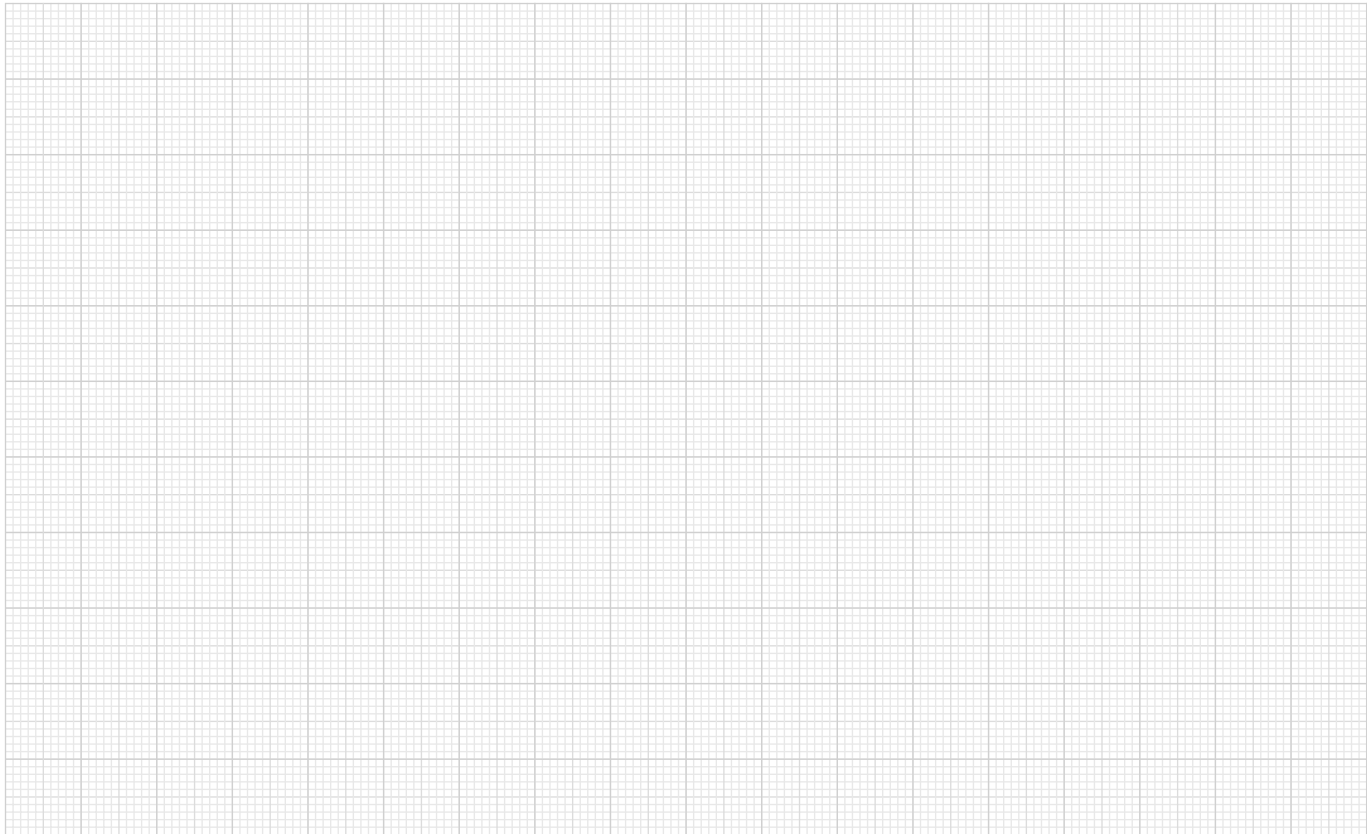
**Version:**  
Arm powder-coated, black.  
Grip black.

**Sample order:**  
K0727.100

KIPP Crank handles aluminium

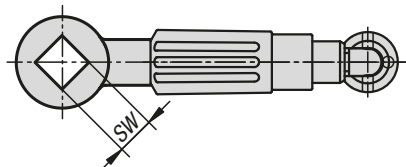
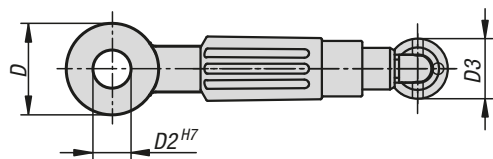
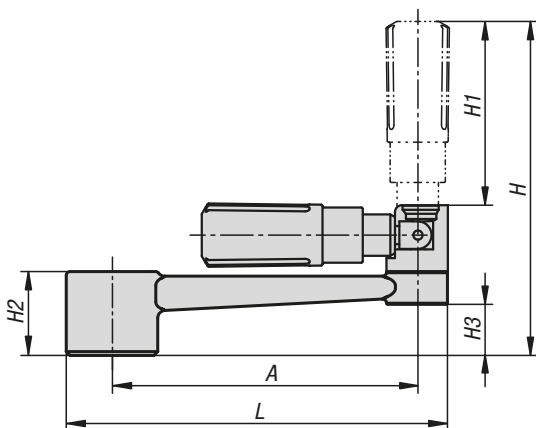
| Order No. | A   | D1 | D2 | D3 | H   | H1 | H2 | H3 | H4 | L     | R    |
|-----------|-----|----|----|----|-----|----|----|----|----|-------|------|
| K0727.100 | 80  | 23 | 10 | 21 | 81  | 53 | 24 | 14 | 14 | 103,5 | 13   |
| K0727.120 | 100 | 27 | 12 | 23 | 100 | 68 | 28 | 17 | 15 | 126,5 | 15   |
| K0727.140 | 125 | 32 | 14 | 26 | 123 | 83 | 34 | 22 | 18 | 155,5 | 17,5 |

Notes



# Crank handles aluminium

with fold-away grip



## Material:

Crank AISi9Cu3 3.2163.

Cylinder grip thermoplastic PA6 and steel.

## Version:

Crank black powder coated.

Thermoplastic black.

Steel parts black oxidised.

## Sample order:

K0997.1110

## Note:

Similar to DIN 469.

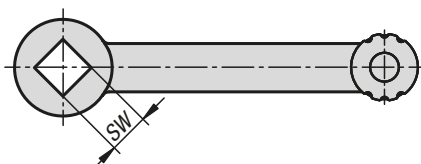
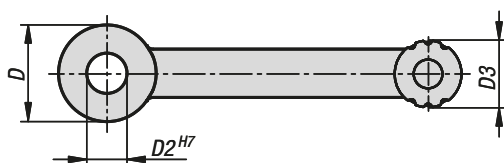
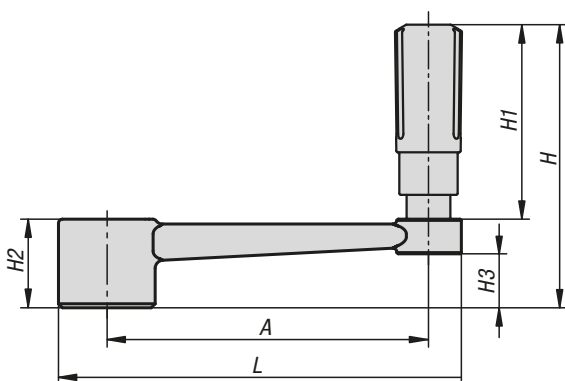
## KIPP Crank handles aluminium with fold-away cylinder grip

| Order No.  | Version 1   | Version 2               | A   | D  | D2 | D3 | H   | H1   | H2 | H3   | L   |
|------------|-------------|-------------------------|-----|----|----|----|-----|------|----|------|-----|
| K0997.1110 | reamed hole | without transverse hole | 80  | 24 | 10 | 16 | 89  | 49   | 22 | 13,4 | 100 |
| K0997.1212 | reamed hole | without transverse hole | 100 | 28 | 12 | 20 | 108 | 59,5 | 26 | 16   | 124 |
| K0997.1314 | reamed hole | without transverse hole | 125 | 30 | 14 | 25 | 140 | 83   | 28 | 15,8 | 153 |
| K0997.1417 | reamed hole | without transverse hole | 160 | 34 | 17 | 25 | 144 | 83   | 32 | 19,6 | 190 |

| Order No.  | Version 1     | Version 2               | A   | D  | D3 | H   | H1   | H2 | H3   | L   | SW |
|------------|---------------|-------------------------|-----|----|----|-----|------|----|------|-----|----|
| K0997.2110 | square socket | without transverse hole | 80  | 24 | 16 | 89  | 49   | 22 | 13,4 | 100 | 10 |
| K0997.2212 | square socket | without transverse hole | 100 | 28 | 20 | 108 | 59,5 | 26 | 16   | 124 | 12 |
| K0997.2314 | square socket | without transverse hole | 125 | 30 | 25 | 140 | 83   | 28 | 15,8 | 153 | 14 |
| K0997.2417 | square socket | without transverse hole | 160 | 34 | 25 | 144 | 83   | 32 | 19,6 | 190 | 17 |

# Crank handles aluminium

with revolving grip



## Material:

Crank AISi9Cu3 3.2163.

Revolving grip thermoplastic PA6 and steel.

## Version:

Crank black powder coated.

Thermoplastic black.

Steel parts black oxidised.

## Sample order:

K0996.3110

## Note:

Similar to DIN 469.

## KIPP Crank handles aluminium with cylindrical revolving grip

| Order No.  | Version 1   | Version 2               | A   | D  | D2 | D3 | H     | H1   | H2 | H3   | L   |
|------------|-------------|-------------------------|-----|----|----|----|-------|------|----|------|-----|
| K0996.3110 | reamed hole | without transverse hole | 80  | 24 | 10 | 16 | 71,1  | 49,1 | 22 | 13,4 | 100 |
| K0996.3212 | reamed hole | without transverse hole | 100 | 28 | 12 | 20 | 87,4  | 61,4 | 26 | 16   | 124 |
| K0996.3314 | reamed hole | without transverse hole | 125 | 30 | 14 | 25 | 110,5 | 82,5 | 28 | 15,8 | 153 |
| K0996.3417 | reamed hole | without transverse hole | 160 | 34 | 17 | 25 | 114,5 | 82,5 | 32 | 19,6 | 190 |

| Order No.  | Version 1     | Version 2               | A   | D  | D3 | H     | H1   | H2 | H3   | L   | SW |
|------------|---------------|-------------------------|-----|----|----|-------|------|----|------|-----|----|
| K0996.4110 | square socket | without transverse hole | 80  | 24 | 16 | 71,1  | 49,1 | 22 | 13,4 | 100 | 10 |
| K0996.4212 | square socket | without transverse hole | 100 | 28 | 20 | 87,4  | 61,4 | 26 | 16   | 124 | 12 |
| K0996.4314 | square socket | without transverse hole | 125 | 30 | 25 | 110,5 | 82,5 | 28 | 15,8 | 153 | 14 |
| K0996.4417 | square socket | without transverse hole | 160 | 34 | 25 | 114,5 | 82,5 | 32 | 19,6 | 190 | 17 |

## Crank handles aluminium

with safety grip



### Material:

Crank AISi9Cu3 3.2163.

Safety cylinder grip thermoplastic PA6 and steel.

### Version:

Crank black powder coated.

Thermoplastic black.

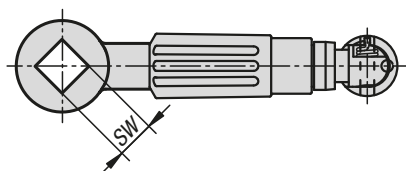
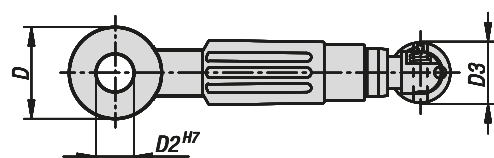
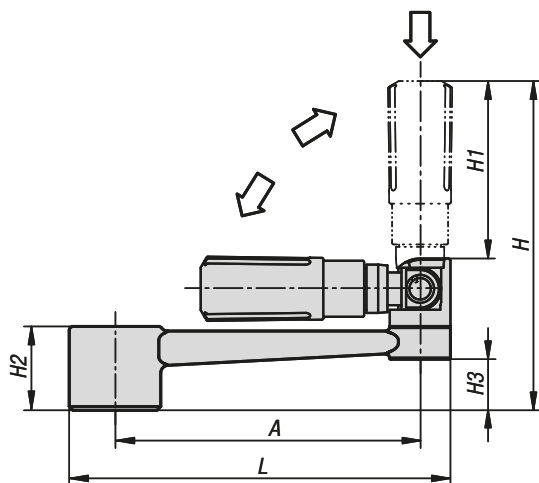
Steel parts black oxidised.

### Sample order:

K0998.1110

### Note:

Similar to DIN 469.



## KIPP Crank handle aluminium with safety cylinder grip

| Order No.  | Version 1   | Version 2               | A   | D  | D2 | D3 | H    | H1   | H2 | H3   | L   |
|------------|-------------|-------------------------|-----|----|----|----|------|------|----|------|-----|
| K0998.1110 | reamed hole | without transverse hole | 80  | 24 | 10 | 16 | 87,5 | 47,5 | 22 | 13,6 | 100 |
| K0998.1212 | reamed hole | without transverse hole | 100 | 28 | 12 | 20 | 107  | 58,5 | 25 | 16   | 124 |
| K0998.1314 | reamed hole | without transverse hole | 125 | 30 | 14 | 25 | 139  | 82   | 28 | 15,8 | 153 |
| K0998.1417 | reamed hole | without transverse hole | 160 | 34 | 17 | 25 | 143  | 82   | 32 | 19,6 | 190 |

| Order No.  | Version 1     | Version 2               | A   | D  | D3 | H    | H1   | H2 | H3   | L   | SW |
|------------|---------------|-------------------------|-----|----|----|------|------|----|------|-----|----|
| K0998.2110 | square socket | without transverse hole | 80  | 24 | 16 | 87,5 | 47,5 | 22 | 13,6 | 100 | 10 |
| K0998.2212 | square socket | without transverse hole | 100 | 28 | 20 | 107  | 58,5 | 25 | 16   | 124 | 12 |
| K0998.2314 | square socket | without transverse hole | 125 | 30 | 25 | 139  | 82   | 28 | 15,8 | 153 | 14 |
| K0998.2417 | square socket | without transverse hole | 160 | 34 | 25 | 143  | 82   | 32 | 19,6 | 190 | 17 |

# Crank handles stainless steel

with revolving grip



## Material:

Crank stainless steel 1.4308.

Axle pin and revolving grip stainless steel 1.4305.

Retaining ring stainless steel 1.4310.

## Version:

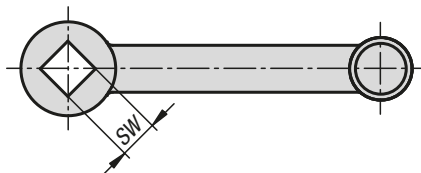
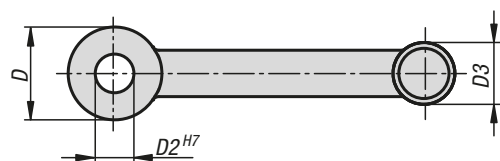
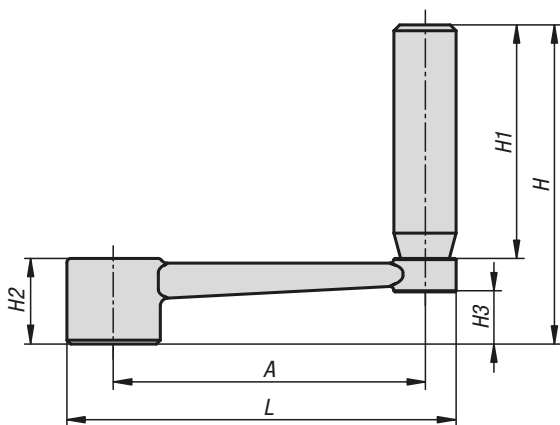
Bright.

## Sample order:

K0999.3110

## Note:

Similar to DIN 469.



## KIPP Crank handles stainless steel with cylindrical revolving grip

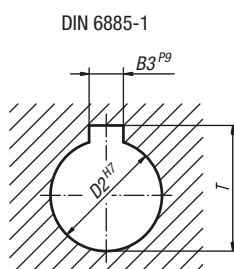
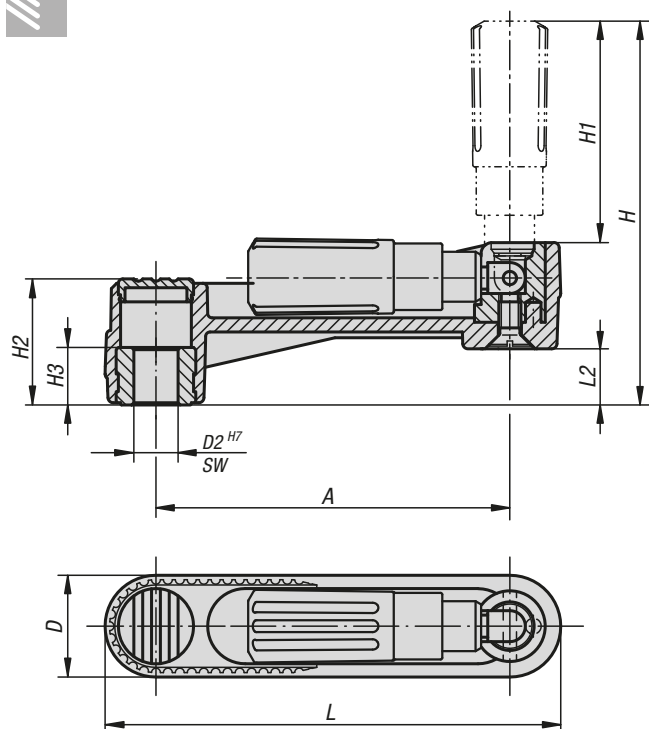
| Order No.  | Version 1   | Version 2 | A   | D  | D2 | D3 | H   | H1 | H2 | H3   | L   |
|------------|-------------|-----------|-----|----|----|----|-----|----|----|------|-----|
| K0999.3110 | reamed hole | revolving | 80  | 24 | 10 | 16 | 82  | 60 | 22 | 13,4 | 100 |
| K0999.3212 | reamed hole | revolving | 100 | 28 | 12 | 20 | 98  | 72 | 26 | 16   | 124 |
| K0999.3314 | reamed hole | revolving | 125 | 30 | 14 | 26 | 118 | 90 | 28 | 15,8 | 153 |
| K0999.3417 | reamed hole | revolving | 160 | 34 | 17 | 26 | 122 | 90 | 32 | 19,6 | 190 |

| Order No.  | Version 1     | Version 2 | A   | D  | D3 | H   | H1 | H2 | H3   | L   | SW |
|------------|---------------|-----------|-----|----|----|-----|----|----|------|-----|----|
| K0999.4110 | square socket | revolving | 80  | 24 | 16 | 82  | 60 | 22 | 13,4 | 100 | 10 |
| K0999.4212 | square socket | revolving | 100 | 28 | 20 | 98  | 72 | 26 | 16   | 124 | 12 |
| K0999.4314 | square socket | revolving | 125 | 30 | 26 | 118 | 90 | 28 | 15,8 | 153 | 14 |
| K0999.4417 | square socket | revolving | 160 | 34 | 26 | 122 | 90 | 32 | 19,6 | 190 | 17 |



# Crank handles

with fold-down grip



## Material:

Black grey thermoplastic.

## Version:

Steel parts black oxidised.

## Sample order:

K0266.1108

## Note:

The hub cap is supplied loose.

The crank handle can be secured to a shaft using a transverse pin or by parallel key connection together with a DIN 6912 socket head screw and a DIN 7349 washer.

## KIPP Crank handles with fold-down grip

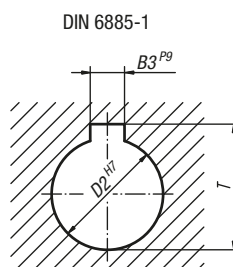
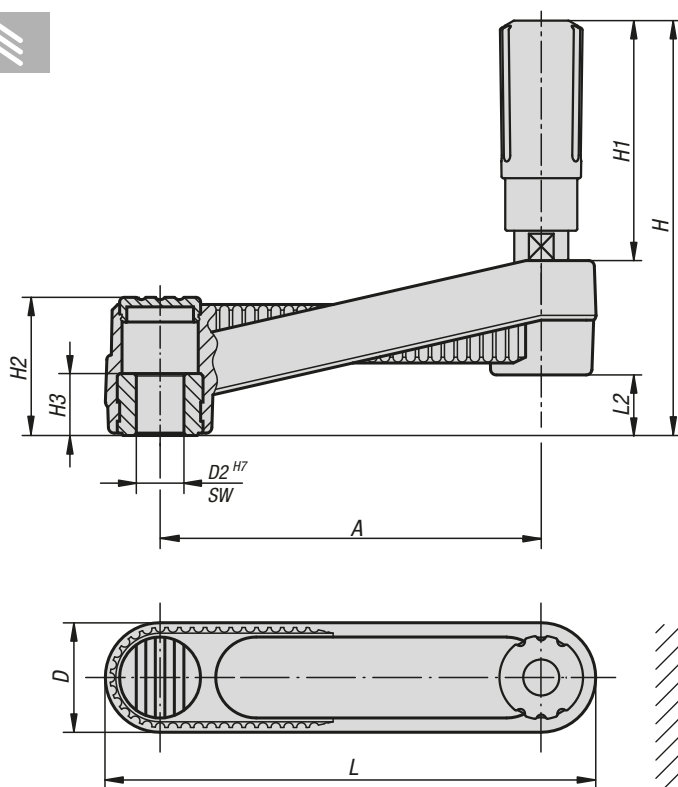
| Order No.  | Version 1   | Version 2               | A   | D  | D2 | H     | H1   | H2   | H3   | L   | L2   |
|------------|-------------|-------------------------|-----|----|----|-------|------|------|------|-----|------|
| K0266.1108 | reamed hole | without transverse hole | 80  | 24 | 8  | 85,7  | 49   | 28,5 | 13   | 104 | 12,7 |
| K0266.1110 | reamed hole | without transverse hole | 80  | 24 | 10 | 85,7  | 49   | 28,5 | 13   | 104 | 12,7 |
| K0266.1210 | reamed hole | without transverse hole | 100 | 29 | 10 | 105,2 | 49   | 35,5 | 13   | 129 | 15,7 |
| K0266.1212 | reamed hole | without transverse hole | 100 | 29 | 12 | 105,2 | 59,5 | 35,5 | 13   | 129 | 15,7 |
| K0266.1312 | reamed hole | without transverse hole | 125 | 36 | 12 | 140   | 83   | 44   | 18,5 | 161 | 19,5 |
| K0266.1314 | reamed hole | without transverse hole | 125 | 36 | 14 | 140   | 83   | 44   | 18,5 | 161 | 19,5 |

| Order No.    | Version 1             | Version 2               | A   | B3 | D  | D2 | H     | H1   | H2   | H3   | L   | L2   | T    |
|--------------|-----------------------|-------------------------|-----|----|----|----|-------|------|------|------|-----|------|------|
| K0266.110802 | reamed hole with slot | without transverse hole | 80  | 2  | 24 | 8  | 85,7  | 49   | 28,5 | 13   | 104 | 12,7 | 9    |
| K0266.111003 | reamed hole with slot | without transverse hole | 80  | 3  | 24 | 10 | 85,7  | 49   | 28,5 | 13   | 104 | 12,7 | 11,4 |
| K0266.121003 | reamed hole with slot | without transverse hole | 100 | 3  | 29 | 10 | 105,2 | 59,5 | 35,5 | 13   | 129 | 15,7 | 11,4 |
| K0266.121204 | reamed hole with slot | without transverse hole | 100 | 4  | 29 | 12 | 105,2 | 59,5 | 35,5 | 13   | 129 | 15,7 | 13,8 |
| K0266.131204 | reamed hole with slot | without transverse hole | 125 | 4  | 36 | 12 | 140   | 83   | 44   | 18,5 | 161 | 19,5 | 13,8 |
| K0266.131405 | reamed hole with slot | without transverse hole | 125 | 5  | 36 | 14 | 140   | 83   | 44   | 18,5 | 161 | 19,5 | 16,3 |

| Order No.  | Version 1     | Version 2               | A   | D  | H     | H1   | H2   | H3   | L   | L2   | SW |
|------------|---------------|-------------------------|-----|----|-------|------|------|------|-----|------|----|
| K0266.2108 | square socket | without transverse hole | 80  | 24 | 85,7  | 49   | 28,5 | 13   | 104 | 12,7 | 8  |
| K0266.2110 | square socket | without transverse hole | 80  | 24 | 85,7  | 49   | 28,5 | 13   | 104 | 12,7 | 10 |
| K0266.2210 | square socket | without transverse hole | 100 | 29 | 105,2 | 59,5 | 35,5 | 13   | 129 | 15,7 | 10 |
| K0266.2212 | square socket | without transverse hole | 100 | 29 | 105,2 | 59,5 | 35,5 | 13   | 129 | 15,7 | 12 |
| K0266.2312 | square socket | without transverse hole | 125 | 36 | 140   | 83   | 44   | 18,5 | 161 | 19,5 | 12 |
| K0266.2314 | square socket | without transverse hole | 125 | 36 | 140   | 83   | 44   | 18,5 | 161 | 19,5 | 14 |

# Crank handles

with revolving grip



## Material:

Black grey thermoplastic.

## Version:

Steel parts black oxidised.

## Sample order:

K0659.3108

## Note:

The hub cap and the revolving grip are supplied loose. To assemble the handle simply screw the grip into the existing hole.

The crank handles can be secured to a shaft by using a transverse pin or by parallel key connection together with a DIN 6912 cap screw and a DIN 7349 washer.



## KIPP Crank handles with revolving grip

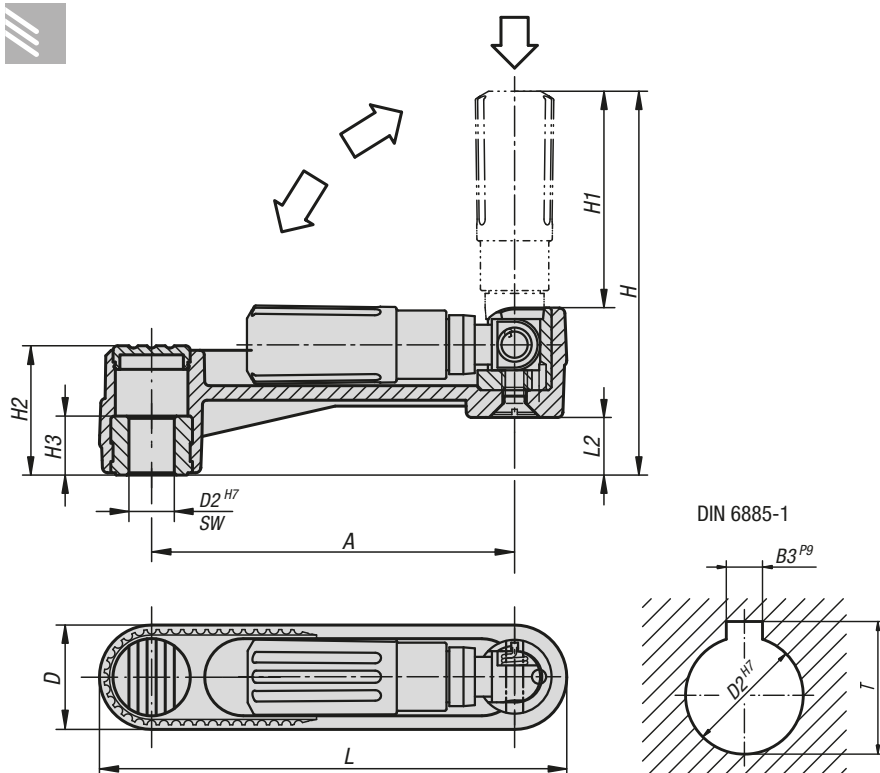
| Order No.  | Version 1   | Version 2               | A   | D  | D2 | H     | H1   | H2   | H3   | L   | L2   |
|------------|-------------|-------------------------|-----|----|----|-------|------|------|------|-----|------|
| K0659.3108 | reamed hole | without transverse hole | 80  | 24 | 8  | 85,8  | 49,1 | 28,5 | 13   | 104 | 12,7 |
| K0659.3110 | reamed hole | without transverse hole | 80  | 24 | 10 | 85,8  | 49,1 | 28,5 | 13   | 104 | 12,7 |
| K0659.3210 | reamed hole | without transverse hole | 100 | 29 | 10 | 107,1 | 61,4 | 35,5 | 13   | 129 | 15,7 |
| K0659.3212 | reamed hole | without transverse hole | 100 | 29 | 12 | 107,1 | 61,4 | 35,5 | 13   | 129 | 15,7 |
| K0659.3312 | reamed hole | without transverse hole | 125 | 36 | 12 | 139,5 | 82,5 | 44   | 18,5 | 161 | 19,5 |
| K0659.3314 | reamed hole | without transverse hole | 125 | 36 | 14 | 139,5 | 82,5 | 44   | 18,5 | 161 | 19,5 |

| Order No.    | Version 1             | Version 2               | A   | B3 | D  | D2 | H     | H1   | H2   | H3   | L   | L2   | T    |
|--------------|-----------------------|-------------------------|-----|----|----|----|-------|------|------|------|-----|------|------|
| K0659.310802 | reamed hole with slot | without transverse hole | 80  | 2  | 24 | 8  | 85,8  | 49,1 | 28,5 | 13   | 104 | 12,7 | 9    |
| K0659.311003 | reamed hole with slot | without transverse hole | 80  | 3  | 24 | 10 | 85,8  | 49,1 | 28,5 | 13   | 104 | 12,7 | 11,4 |
| K0659.321003 | reamed hole with slot | without transverse hole | 100 | 3  | 29 | 10 | 107,1 | 61,4 | 35,5 | 13   | 129 | 15,7 | 11,4 |
| K0659.321204 | reamed hole with slot | without transverse hole | 100 | 4  | 29 | 12 | 107,1 | 61,4 | 35,5 | 13   | 129 | 15,7 | 13,8 |
| K0659.331204 | reamed hole with slot | without transverse hole | 125 | 4  | 36 | 12 | 139,5 | 82,5 | 44   | 18,5 | 161 | 19,5 | 13,8 |
| K0659.331405 | reamed hole with slot | without transverse hole | 125 | 5  | 36 | 14 | 139,5 | 82,5 | 44   | 18,5 | 161 | 19,5 | 16,3 |

| Order No.  | Version 1     | Version 2               | A   | D  | H     | H1   | H2   | H3   | L   | L2   | SW |
|------------|---------------|-------------------------|-----|----|-------|------|------|------|-----|------|----|
| K0659.4108 | square socket | without transverse hole | 80  | 24 | 85,8  | 49,1 | 28,5 | 13   | 104 | 12,7 | 8  |
| K0659.4110 | square socket | without transverse hole | 80  | 24 | 85,8  | 49,1 | 28,5 | 13   | 104 | 12,7 | 10 |
| K0659.4210 | square socket | without transverse hole | 100 | 29 | 107,1 | 61,4 | 35,5 | 13   | 129 | 15,7 | 10 |
| K0659.4212 | square socket | without transverse hole | 100 | 29 | 107,1 | 61,4 | 35,5 | 13   | 129 | 15,7 | 12 |
| K0659.4312 | square socket | without transverse hole | 125 | 36 | 139,5 | 82,5 | 44   | 18,5 | 161 | 19,5 | 12 |
| K0659.4314 | square socket | without transverse hole | 125 | 36 | 139,5 | 82,5 | 44   | 18,5 | 161 | 19,5 | 14 |

# Crank handles

with safety grip



## Material:

Arm and grip black grey thermoplastic.

## Version:

Steel parts black oxidised.

## Sample order:

K0268.1108

## Note:

The hub cover is supplied loose.

The crank handles can be secured to the shaft by cross-pinning or by parallel key together with a DIN 6912 socket head screw and DIN 7349 washer.

Two actions must be made to bring the safety grip into an operating position:

- Swing the grip out until it stops (90°).
- Push the grip in until it locks.

The pushed-in position is the most comfortable for cranking. The grip swings back automatically after releasing.

## KIPP Crank handles with safety grip

| Order No.  | Version 1   | Version 2               | A   | D  | D2 | H     | H1   | H2   | H3   | L   | L2   |
|------------|-------------|-------------------------|-----|----|----|-------|------|------|------|-----|------|
| K0268.1108 | reamed hole | without transverse hole | 80  | 24 | 8  | 84,2  | 47,5 | 28,5 | 13   | 104 | 12,7 |
| K0268.1110 | reamed hole | without transverse hole | 80  | 24 | 10 | 84,2  | 47,5 | 28,5 | 13   | 104 | 12,7 |
| K0268.1210 | reamed hole | without transverse hole | 100 | 29 | 10 | 104,2 | 58,5 | 35,5 | 13   | 129 | 15,7 |
| K0268.1212 | reamed hole | without transverse hole | 100 | 29 | 12 | 104,2 | 58,5 | 35,5 | 13   | 129 | 15,7 |
| K0268.1312 | reamed hole | without transverse hole | 125 | 36 | 12 | 139   | 82   | 44   | 18,5 | 161 | 19,5 |
| K0268.1314 | reamed hole | without transverse hole | 125 | 36 | 14 | 139   | 82   | 44   | 18,5 | 161 | 19,5 |

| Order No.    | Version 1             | Version 2               | A   | B3 | D  | D2 | H     | H1   | H2   | H3   | L   | L2   | T    |
|--------------|-----------------------|-------------------------|-----|----|----|----|-------|------|------|------|-----|------|------|
| K0268.110802 | reamed hole with slot | without transverse hole | 80  | 2  | 24 | 8  | 84,2  | 47,5 | 28,5 | 13   | 104 | 12,7 | 9    |
| K0268.111003 | reamed hole with slot | without transverse hole | 80  | 3  | 24 | 10 | 84,2  | 47,5 | 28,5 | 13   | 104 | 12,7 | 11,4 |
| K0268.121003 | reamed hole with slot | without transverse hole | 100 | 3  | 29 | 10 | 104,2 | 58,5 | 35,5 | 13   | 129 | 15,7 | 11,4 |
| K0268.121204 | reamed hole with slot | without transverse hole | 100 | 4  | 29 | 12 | 104,2 | 58,5 | 35,5 | 13   | 129 | 15,7 | 13,8 |
| K0268.131204 | reamed hole with slot | without transverse hole | 125 | 4  | 36 | 12 | 139   | 82   | 44   | 18,5 | 161 | 19,5 | 13,8 |
| K0268.131405 | reamed hole with slot | without transverse hole | 125 | 5  | 36 | 14 | 139   | 82   | 44   | 18,5 | 161 | 19,5 | 16,3 |

| Order No.  | Version 1     | Version 2               | A   | D  | H     | H1   | H2   | H3   | L   | L2   | SW |
|------------|---------------|-------------------------|-----|----|-------|------|------|------|-----|------|----|
| K0268.2108 | square socket | without transverse hole | 80  | 24 | 84,2  | 47,5 | 28,5 | 13   | 104 | 12,7 | 8  |
| K0268.2110 | square socket | without transverse hole | 80  | 24 | 84,2  | 47,5 | 28,5 | 13   | 104 | 12,7 | 10 |
| K0268.2210 | square socket | without transverse hole | 100 | 29 | 104,2 | 58,5 | 35,5 | 13   | 129 | 15,7 | 10 |
| K0268.2212 | square socket | without transverse hole | 100 | 29 | 104,2 | 58,5 | 35,5 | 13   | 129 | 15,7 | 12 |
| K0268.2312 | square socket | without transverse hole | 125 | 36 | 139   | 82   | 44   | 18,5 | 161 | 19,5 | 12 |
| K0268.2314 | square socket | without transverse hole | 125 | 36 | 139   | 82   | 44   | 18,5 | 161 | 19,5 | 14 |

Crank handles balanced

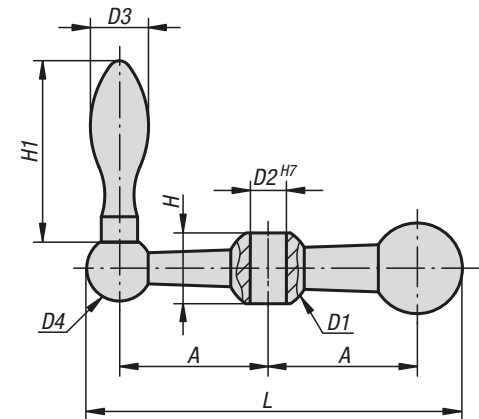


**Material:**  
Steel.

**Version:**  
Electro zinc-plated.

**Sample order:**  
K0728.108

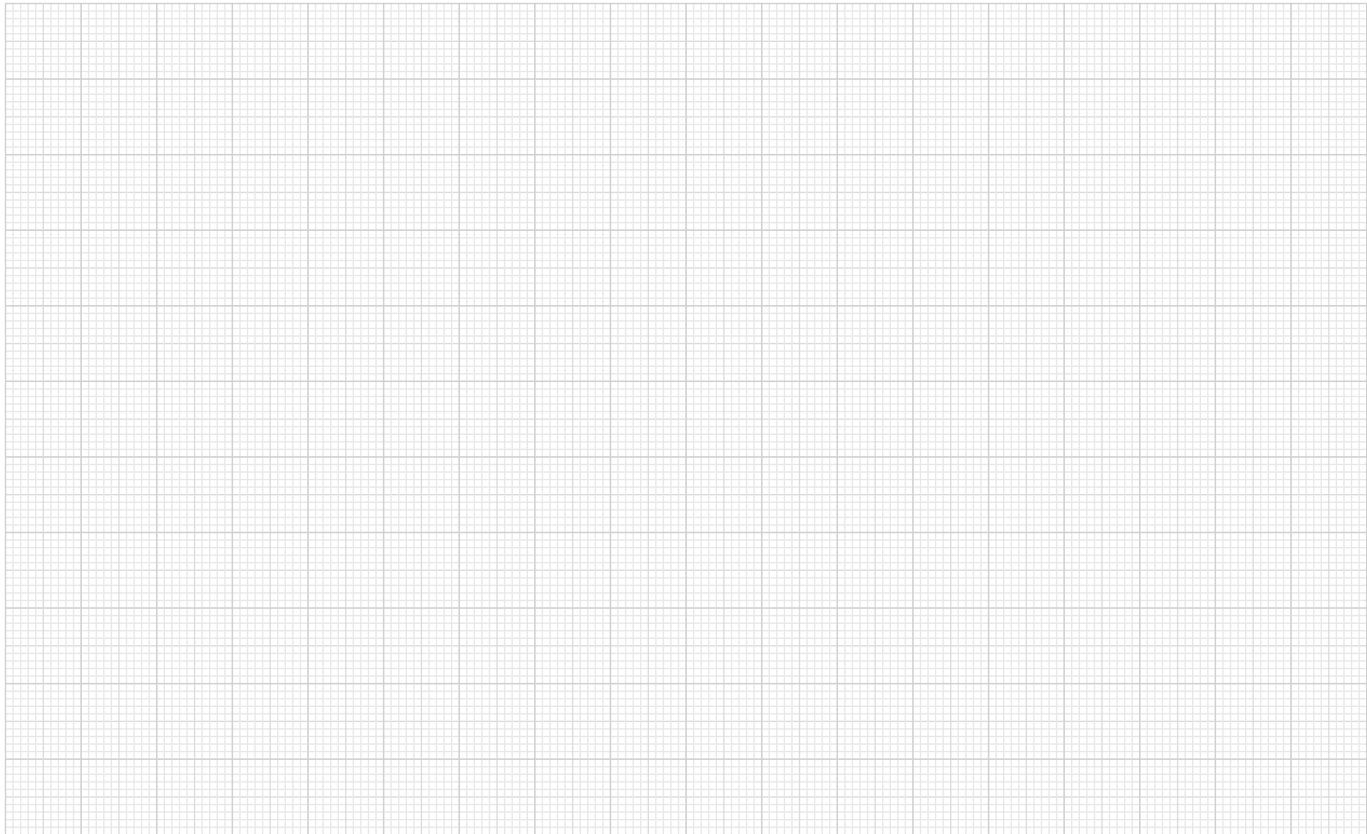
**Note:**  
Fixed handle DIN 39.



KIPP Balanced handles

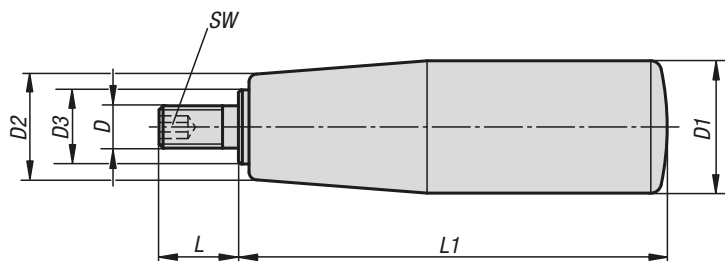
| Order No. | A  | D1 | D2 | D3 | D4 | H    | H1 | L     |
|-----------|----|----|----|----|----|------|----|-------|
| K0728.107 | 25 | 16 | 7  | 10 | 13 | 13   | 32 | 65,5  |
| K0728.108 | 34 | 20 | 8  | 14 | 16 | 17   | 46 | 87    |
| K0728.110 | 41 | 23 | 10 | 16 | 18 | 19,5 | 50 | 103,5 |
| K0728.112 | 50 | 26 | 12 | 18 | 20 | 21,5 | 56 | 124   |

Notes



## Cylindrical grips revolving

with hexagon socket



### Material:

Grip thermoplastic.  
Steel parts electro zinc-plated.

### Version:

Black satin finished.

### Sample order:

K0740.08230620

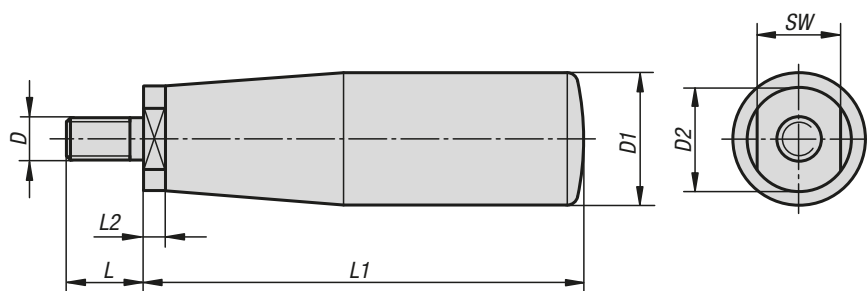
### Note:

Cylindrical grips can be screwed onto our handwheels, crank handles etc.

## KIPP Cylinder grips revolving with hexagon socket

| Order No.      | D   | D1 | D2 | D3 | L  | L1 | SW |
|----------------|-----|----|----|----|----|----|----|
| K0740.06200520 | M6  | 20 | 15 | 10 | 12 | 51 | 3  |
| K0740.06230620 | M6  | 23 | 18 | 10 | 12 | 62 | 3  |
| K0740.08230620 | M8  | 23 | 18 | 10 | 15 | 62 | 4  |
| K0740.08250720 | M8  | 25 | 19 | 10 | 15 | 71 | 4  |
| K0740.10250720 | M10 | 25 | 19 | 10 | 15 | 71 | 4  |
| K0740.08250810 | M8  | 26 | 22 | 14 | 15 | 81 | 4  |
| K0740.10250810 | M10 | 26 | 22 | 14 | 15 | 81 | 5  |
| K0740.12260820 | M12 | 26 | 22 | 14 | 15 | 81 | 5  |
| K0740.10270930 | M10 | 27 | 22 | 14 | 15 | 92 | 5  |
| K0740.12270930 | M12 | 27 | 22 | 14 | 15 | 92 | 5  |

## Cylindrical grips revolving

**Material:**

Grip thermoplastic.  
Steel parts electro zinc-plated.

**Version:**

Black satin finished.

**Sample order:**

K0774.08230600

**Note:**

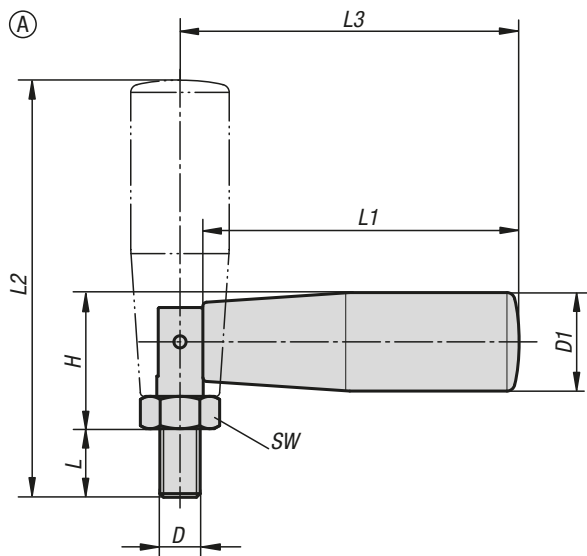
Cylindrical grips can be screwed onto our handwheels, crank handles etc.



## KIPP Cylindrical revolving grips

| Order No.      | D   | D1 | D2 | L  | L1 | L2 | SW |
|----------------|-----|----|----|----|----|----|----|
| K0774.06200500 | M6  | 20 | 12 | 12 | 55 | 5  | 10 |
| K0774.08230600 | M8  | 23 | 14 | 15 | 67 | 7  | 13 |
| K0774.08250690 | M8  | 25 | 14 | 15 | 77 | 7  | 13 |
| K0774.10250690 | M10 | 25 | 14 | 15 | 77 | 7  | 13 |
| K0774.10250800 | M10 | 26 | 18 | 15 | 86 | 7  | 16 |
| K0774.12250800 | M12 | 26 | 18 | 15 | 86 | 7  | 16 |
| K0774.10270890 | M10 | 27 | 18 | 15 | 97 | 7  | 16 |
| K0774.12270890 | M12 | 27 | 18 | 15 | 97 | 7  | 16 |

# Cylindrical grips fold-down

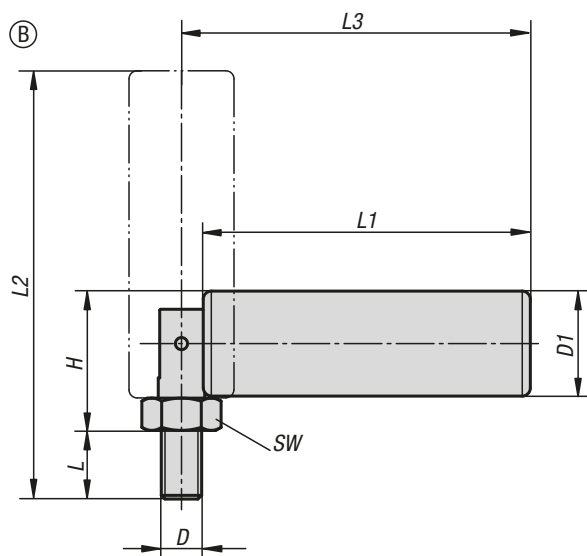


**Material:**  
Grip thermoplastic.  
Steel parts black oxidised.

**Version:**  
Black satin finished.

**Sample order:**  
K0775.10260890

**Note:**  
Cylindrical grips can be screwed onto our handwheels, crank handles etc.

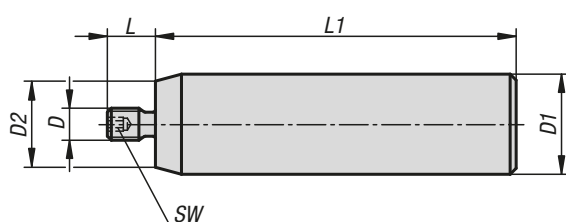


## KIPP Cylindrical grips fold-down

| Order No.      | Form | D   | D1 | SW | L  | L1 | L2   | L3 | H    |
|----------------|------|-----|----|----|----|----|------|----|------|
| K0775.06200490 | A    | M6  | 20 | 10 | 9  | 49 | 63   | 53 | 24,5 |
| K0775.08250690 | A    | M8  | 25 | 13 | 11 | 70 | 87,5 | 74 | 28   |
| K0775.10260890 | B    | M10 | 26 | 17 | 16 | 90 | 114  | 96 | 34   |

## Cylindrical grips revolving

stainless steel



### Material:

Axis and revolving grip stainless steel 1.4305.  
Snap ring stainless steel 1.4310.

### Version:

Bright.

### Sample order:

K1000.105

### Assembly:

Screw in using hexagon socket in axis.



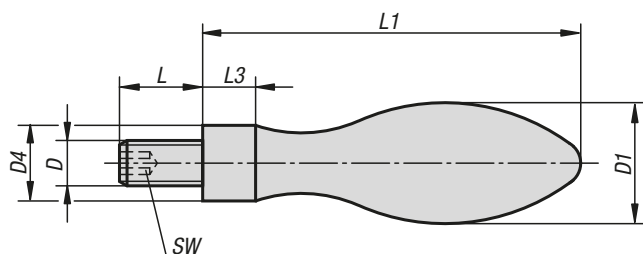
### KIPP Cylindrical grips, revolving, stainless steel

| Order No. | D  | D1 | D2   | L  | L1 | SW |
|-----------|----|----|------|----|----|----|
| K1000.105 | M5 | 16 | 12,5 | 8  | 60 | 3  |
| K1000.206 | M6 | 20 | 16,5 | 9  | 72 | 3  |
| K1000.308 | M8 | 25 | 21,5 | 12 | 90 | 3  |



## Machine handles fixed

steel, DIN 39 Form E



**Material:**  
Steel

**Version:**  
Trivalent blue passivated.

**Sample order:**  
K0166.0616050

**Note:**  
Machine handle suitable for DIN 950 handwheels.

### KIPP Machine handles fixed, steel, DIN 39 Form E

| Order No.     | D   | D1 | D4 | L  | L1  | L3 | SW |
|---------------|-----|----|----|----|-----|----|----|
| K0166.0616050 | M6  | 16 | 10 | 11 | 50  | 7  | 3  |
| K0166.0820064 | M8  | 20 | 13 | 13 | 64  | 8  | 4  |
| K0166.1025080 | M10 | 25 | 16 | 14 | 80  | 10 | 5  |
| K0166.1232100 | M12 | 32 | 20 | 21 | 100 | 13 | 6  |
| K0166.1636112 | M16 | 36 | 22 | 26 | 112 | 14 | 8  |

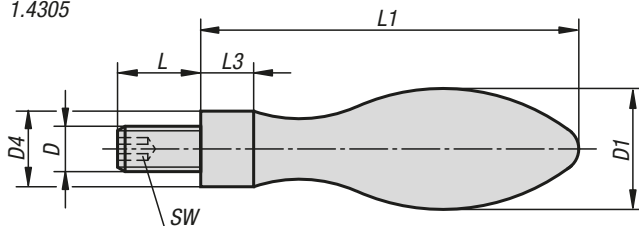
## K1199

## Machine handles fixed

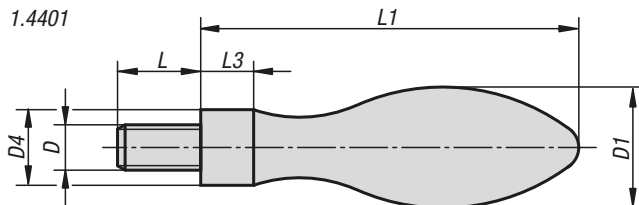
DIN 39 Form E, stainless steel



1.4305



1.4401



**Material:**  
1.4305 or 1.4401 stainless steel.

**Version:**  
Electropolished.

**Sample order:**  
K1199.0616050

**Note:**  
1.4401 stainless steel, similar to DIN 39.  
Grip suitable for DIN 950 handwheels.

### KIPP Machine handles, fixed, DIN 39 Form E, stainless steel

| Order No.      | Steel code | Version 2              | D   | D1 | D4 | L  | L1 | L3   | SW |
|----------------|------------|------------------------|-----|----|----|----|----|------|----|
| K1199.0616050  | 1.4305     | with hexagon socket    | M6  | 16 | 10 | 11 | 50 | 7    | 3  |
| K1199.0820064  | 1.4305     | with hexagon socket    | M8  | 20 | 13 | 13 | 64 | 8    | 4  |
| K1199.1025080  | 1.4305     | with hexagon socket    | M10 | 25 | 16 | 14 | 80 | 10   | 5  |
| K1199.10616050 | 1.4401     | without hexagon socket | M6  | 16 | 11 | 13 | 51 | 5,1  | -  |
| K1199.10820064 | 1.4401     | without hexagon socket | M8  | 21 | 14 | 14 | 67 | 8,75 | -  |
| K1199.11025080 | 1.4401     | without hexagon socket | M10 | 25 | 16 | 18 | 81 | 9,75 | -  |

## Machine handles fixed

aluminium, DIN 39 Form E



**Material:**  
Grip aluminium.  
Screw steel.

**Version:**  
Grip polished.  
Screw black.

**Sample order:**  
K0167.0616050

**Note:**  
Machine handle suitable for DIN 950 handwheels.



### KIPP Machine handles fixed, aluminium, DIN 39 Form E

| Order No.     | D   | D1 | D4 | L  | L1  | L3 | SW |
|---------------|-----|----|----|----|-----|----|----|
| K0167.0616050 | M6  | 16 | 10 | 11 | 50  | 7  | 3  |
| K0167.0820064 | M8  | 20 | 13 | 13 | 64  | 8  | 4  |
| K0167.1025080 | M10 | 25 | 16 | 14 | 80  | 10 | 5  |
| K0167.1232100 | M12 | 32 | 20 | 21 | 100 | 13 | 6  |
| K0167.1636112 | M16 | 36 | 22 | 26 | 112 | 14 | 8  |

# K0168

## Machine handles revolving

similar to DIN 98 Form E, steel



**Material:**  
Grip and screw steel.

**Version:**  
Grip and axle part trivalent blue passivated.

**Sample order:**  
K0168.0616055

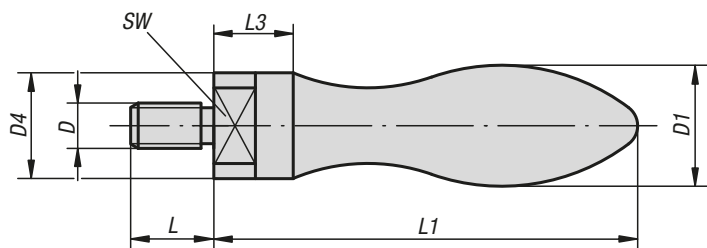
**Note:**  
The handles with D1=25 mm and 32 mm have a thread length L2 that is shorter than the length specified in DIN 98. These machine handles are suitable for DIN 950 handwheels.

### KIPP Machine handles revolving, similar to DIN 98 Form E, steel

| Order No.     | D   | D1 | D4 | D6 | L  | L1    | L3   | L4  | SW |
|---------------|-----|----|----|----|----|-------|------|-----|----|
| K0168.0616055 | M6  | 16 | 10 | 14 | 11 | 54,5  | 5,5  | 5   | 3  |
| K0168.0820067 | M8  | 20 | 13 | 18 | 13 | 67    | 6    | 6   | 4  |
| K0168.1025083 | M10 | 25 | 16 | 21 | 13 | 83    | 8    | 6,5 | 5  |
| K0168.1232105 | M12 | 32 | 20 | 26 | 16 | 105,5 | 10,5 | 8   | 6  |
| K0168.1636117 | M16 | 36 | 22 | 29 | 26 | 117   | 11   | 9   | 8  |

## Machine handles revolving

similar to DIN 98 Form E, stainless steel



**Material:**  
Stainless steel 1.4404.

**Version:**  
Polished

**Sample order:**  
K1209.10616050

**Note:**  
Machine handle suitable for DIN 950 handwheels.

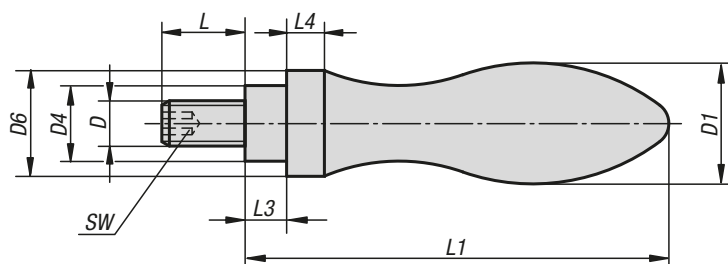
### KIPP Machine handles revolving, similar to DIN 98 Form E, stainless steel

| Order No.      | D   | D1 | D4   | L  | L1 | L3 | SW |
|----------------|-----|----|------|----|----|----|----|
| K1209.10616050 | M6  | 16 | 11   | 13 | 56 | 11 | 8  |
| K1209.10820064 | M8  | 20 | 13,5 | 14 | 72 | 13 | 10 |
| K1209.11025080 | M10 | 24 | 16   | 16 | 86 | 15 | 11 |

# K0169

## Machine handles revolving

aluminium, similar to DIN 98 Form E



**Material:**  
Grip aluminium.  
Screw steel.

**Version:**  
Grip polished.  
Axle trivalent blue passivated.

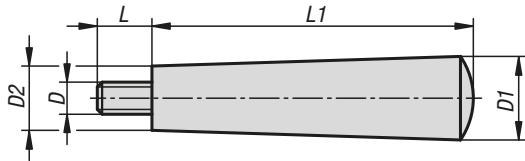
**Sample order:**  
K0169.0616055

**Note:**  
Machine handle suitable for DIN 950 handwheels.

### KIPP Machine handles revolving, aluminium, similar to DIN 98 Form E

| Order No.     | D   | D1 | D4 | D6 | L  | L1    | L3   | L4  | SW |
|---------------|-----|----|----|----|----|-------|------|-----|----|
| K0169.0616055 | M6  | 16 | 10 | 14 | 11 | 54,5  | 5,5  | 5   | 3  |
| K0169.0820067 | M8  | 20 | 13 | 18 | 13 | 67    | 6    | 6   | 4  |
| K0169.1025083 | M10 | 25 | 16 | 21 | 13 | 83    | 8    | 6,5 | 5  |
| K0169.1232105 | M12 | 32 | 20 | 26 | 16 | 105,5 | 10,5 | 8   | 6  |
| K0169.1636117 | M16 | 36 | 22 | 29 | 26 | 117   | 11   | 9   | 8  |

## Taper grips fixed



**Material:**  
Black thermoset PF 31.  
Screw electro zinc-plated steel.

**Version:**  
High-gloss polished.

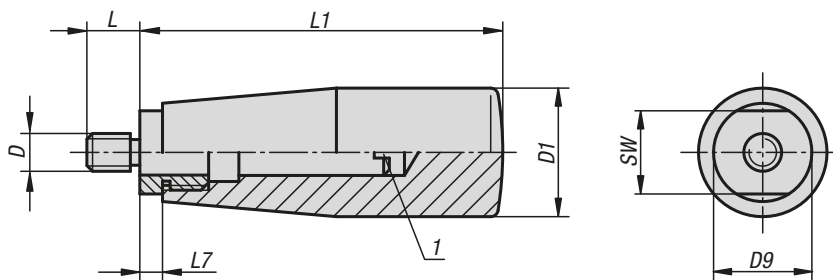
**Sample order:**  
K1221.120408

### KIPP Taper grips, fixed

| Order No.    | D   | D1 | D2 | L  | L1  |
|--------------|-----|----|----|----|-----|
| K1221.120408 | M4  | 12 | 9  | 8  | 40  |
| K1221.150507 | M5  | 15 | 11 | 7  | 50  |
| K1221.180608 | M6  | 18 | 13 | 8  | 64  |
| K1221.210610 | M6  | 21 | 15 | 10 | 72  |
| K1221.210810 | M8  | 21 | 15 | 10 | 72  |
| K1221.250810 | M8  | 25 | 17 | 10 | 90  |
| K1221.261012 | M10 | 26 | 20 | 12 | 100 |

# K0170

## Taper grips revolving



**Material:**  
Black thermoset PF 31.  
Centre pin and tapped bush electro zinc-plated steel or bright stainless steel.

**Version:**  
High-gloss polished.

**Sample order:**  
K0170.105007

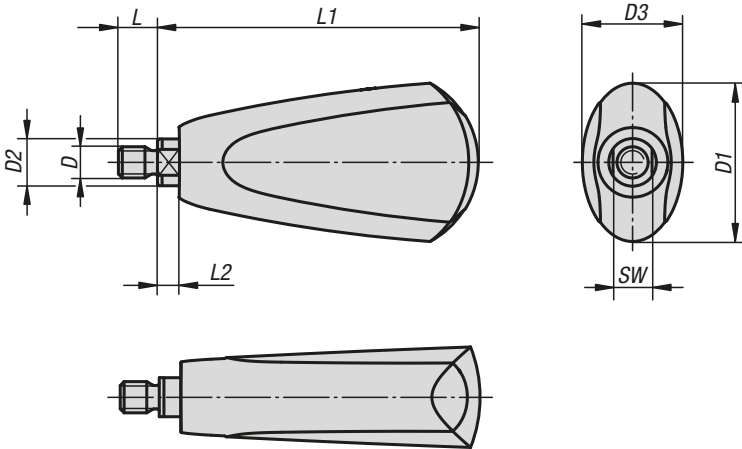
**Note:**  
To mount unscrew the axle.

**Drawing reference:**  
1) mounting aid

### KIPP Taper grips revolving

| Order No.<br>steel | Order No.<br>stainless steel | D   | D1 | D9 | L  | L1 | L7 | SW |
|--------------------|------------------------------|-----|----|----|----|----|----|----|
| K0170.105007       | K0170.1105007                | M5  | 17 | 15 | 7  | 51 | 5  | 13 |
| K0170.206008       | K0170.1206008                | M6  | 23 | 18 | 8  | 68 | 6  | 16 |
| K0170.208009       | K0170.1208009                | M8  | 23 | 18 | 9  | 68 | 6  | 16 |
| K0170.310011       | K0170.1310011                | M10 | 28 | 21 | 11 | 77 | 7  | 19 |

Taper grips revolving  
oval



**Material:**  
Thermoset PF 31, black.  
Centre pin nickel-plated steel or bright 1.4305 stainless steel.  
Snap ring 1.4310 stainless steel.

**Version:**  
High-gloss polished.

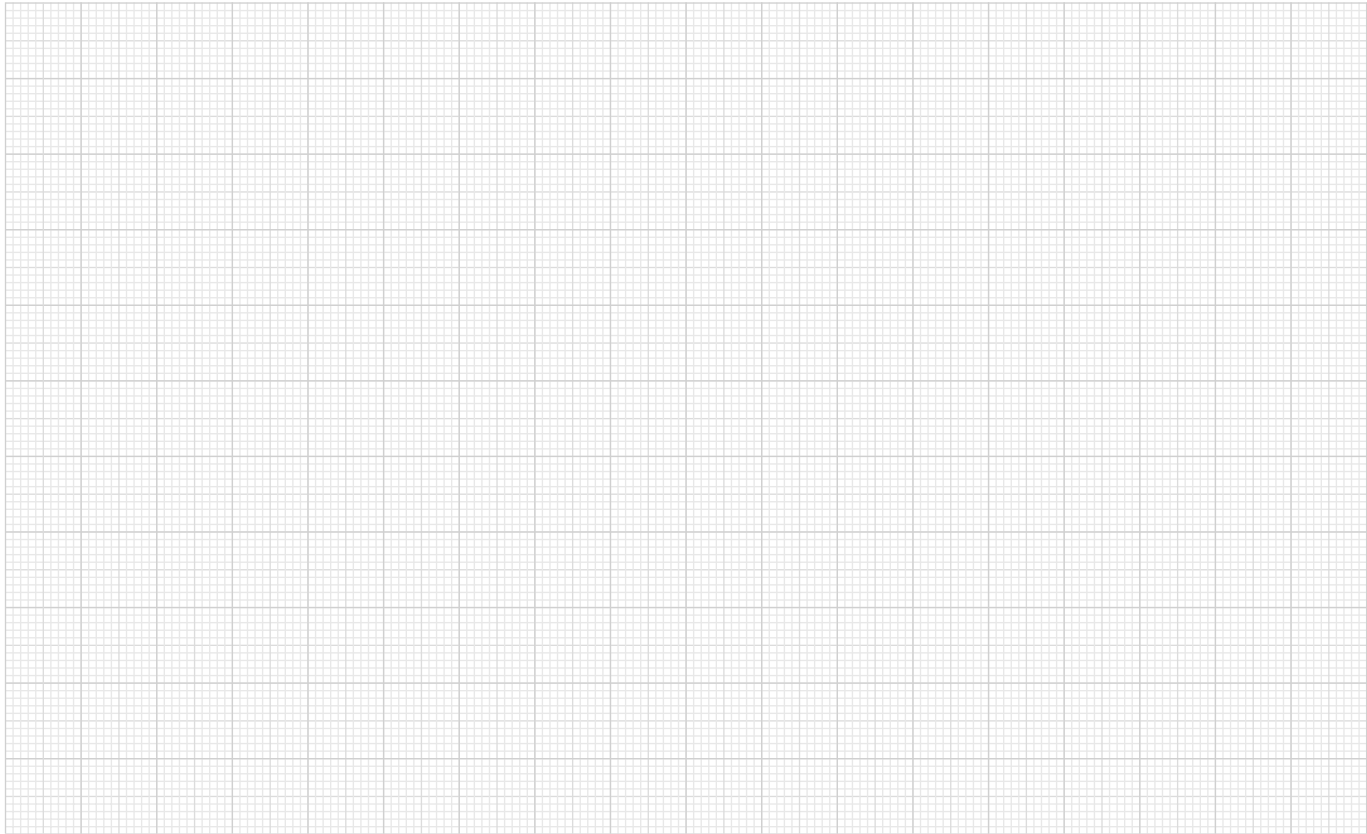
**Sample order:**  
K0651.106009

**Note:**  
These grips are suitable as replacement handles for disc handwheels K0164.

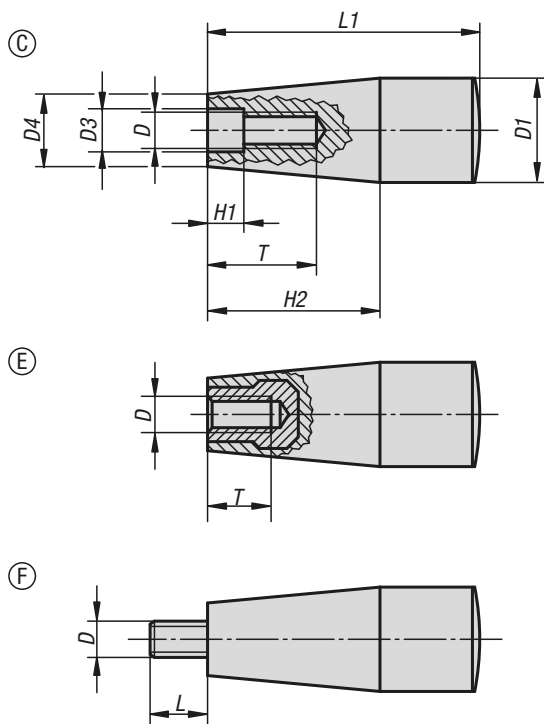
KIPP Taper grips revolving, oval

| Order No.<br>steel | Order No.<br>stainless steel | D  | D1 | D2 | D3 | L  | L1   | L2  | SW |
|--------------------|------------------------------|----|----|----|----|----|------|-----|----|
| K0651.106009       | K0651.1106009                | M6 | 25 | 8  | 18 | 9  | 54,7 | 4,5 | 7  |
| K0651.208010       | K0651.1208010                | M8 | 41 | 12 | 26 | 10 | 82,2 | 5,5 | 10 |

Notes



## Taper grips

**Material:**

Thermoset PF 31, black.

Steel bush and stud, electro zinc-plated.

**Version:**

High-gloss polished.

**Sample order:**

K0172.106

**Note:**

The versions K0172.205 and K0172.206 have a brass bush.

The versions K0172.208 and K0172.2081 have a copper-plated steel bush.

**On request:**

Other colours.

**Drawing reference:**

Form C: moulded female thread

Form E: tapped bush

Form F: male thread

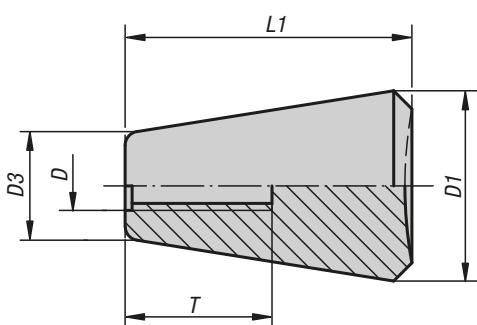
## KIPP Taper grips with internal thread

| Order No.  | Form | D   | D1 | D3   | D4 | H1  | H2 | L1 | T  |
|------------|------|-----|----|------|----|-----|----|----|----|
| K0172.106  | C    | M6  | 17 | 6,2  | 15 | 2   | 26 | 45 | 14 |
| K0172.108  | C    | M8  | 17 | 8,2  | 13 | 2   | 26 | 45 | 16 |
| K0172.1081 | C    | M8  | 23 | 8,5  | 18 | 2   | 38 | 61 | 24 |
| K0172.110  | C    | M10 | 29 | 10,5 | 21 | 3,5 | 42 | 71 | 28 |
| K0172.205  | E    | M5  | 17 | -    | 15 | -   | 26 | 45 | 10 |
| K0172.206  | E    | M6  | 17 | -    | 15 | -   | 26 | 45 | 9  |
| K0172.208  | E    | M8  | 23 | -    | 18 | -   | 38 | 61 | 14 |
| K0172.2081 | E    | M8  | 28 | -    | 21 | -   | 42 | 71 | 14 |

## KIPP Taper grips with external thread

| Order No. | Form | D   | D1 | D4 | H2 | L  | L1 |
|-----------|------|-----|----|----|----|----|----|
| K0172.306 | F    | M6  | 17 | 15 | 26 | 18 | 45 |
| K0172.308 | F    | M8  | 23 | 18 | 38 | 12 | 61 |
| K0172.310 | F    | M10 | 29 | 21 | 42 | 20 | 71 |

## Tapered knobs

**Material:**

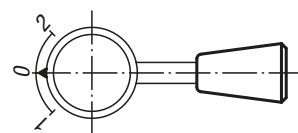
Black thermoset PF 31

**Version:**

Moulded thread.

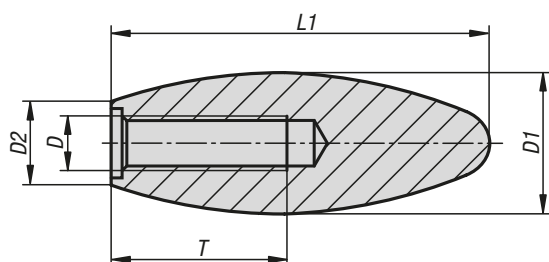
**Sample order:**

K1207.06

**KIPP Tapered knobs**

| Order No. | D   | D1 | D3 | L1 | T  |
|-----------|-----|----|----|----|----|
| K1207.05  | M5  | 20 | 12 | 30 | 15 |
| K1207.061 | M6  | 20 | 12 | 30 | 18 |
| K1207.06  | M6  | 25 | 15 | 38 | 19 |
| K1207.081 | M8  | 25 | 15 | 38 | 18 |
| K1207.08  | M8  | 30 | 18 | 46 | 16 |
| K1207.101 | M10 | 30 | 18 | 46 | 18 |
| K1207.10  | M10 | 35 | 21 | 53 | 19 |
| K1207.12  | M12 | 35 | 21 | 53 | 21 |

## Conical knobs

**Material:**

Black thermoset PF 31

**Version:**

High-gloss polished.

**Sample order:**

K1222.120



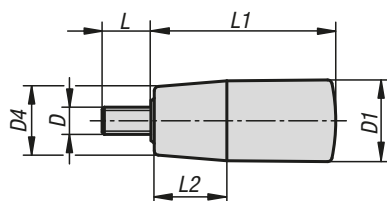
## KIPP Conical knobs

| Order No. | D   | D1 | D2   | L1 | T  |
|-----------|-----|----|------|----|----|
| K1222.050 | M5  | 14 | 7    | 34 | 25 |
| K1222.060 | M6  | 23 | 14   | 60 | 17 |
| K1222.080 | M8  | 22 | 14   | 60 | 25 |
| K1222.081 | M8  | 26 | 16   | 70 | 19 |
| K1222.100 | M10 | 27 | 15,5 | 70 | 25 |
| K1222.101 | M10 | 35 | 22   | 85 | 25 |
| K1222.120 | M12 | 27 | 15,5 | 70 | 25 |
| K1222.121 | M12 | 35 | 22   | 85 | 25 |
| K1222.160 | M16 | 35 | 22   | 85 | 30 |



## Conical grips

revolving



### Material:

Thermoset PF 31, black.

Centre pin electro zinc-plated steel or bright stainless steel.

### Version:

High-gloss polished.

### Sample order:

K1201.10618

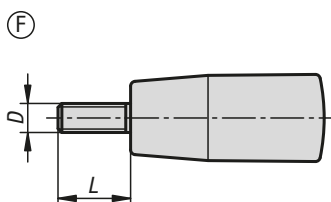
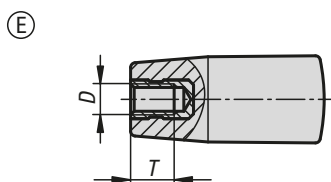
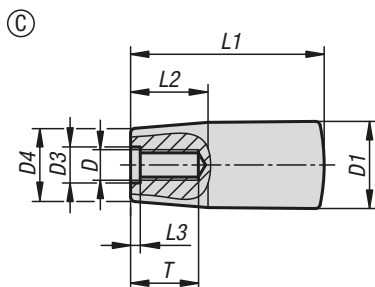
### Note:

Cylindrical grips can be screwed onto our handwheels, crank handles etc.

### KIPP Conical grip revolving

| Order No.<br>steel | Order No.<br>stainless steel | D   | D1 | D4 | L  | L1   | L2 |
|--------------------|------------------------------|-----|----|----|----|------|----|
| K1201.0618         | K1201.10618                  | M6  | 18 | 15 | 11 | 40,5 | 16 |
| K1201.0823         | K1201.10823                  | M8  | 23 | 19 | 13 | 65,5 | 24 |
| K1201.1028         | K1201.11028                  | M10 | 28 | 22 | 14 | 90,5 | 32 |

## Taper grips

**Material:**

Thermoset PF 31, black.

Steel bush and stud, electro zinc-plated.

**Version:**

High-gloss polished.

**Sample order:**

K1202.10818

**On request:**

Other colours.

**Drawing reference:**

Form C: moulded female thread

Form E: tapped bush

Form F: male thread

## KIPP Taper grips with female thread

| Order No.   | Form | D   | D1 | D3   | D4 | L1 | L2 | L3  | T   |
|-------------|------|-----|----|------|----|----|----|-----|-----|
| K1202.10618 | C    | M6  | 18 | 6,2  | 15 | 40 | 16 | 2   | 14  |
| K1202.10818 | C    | M8  | 18 | 8,5  | 15 | 40 | 16 | 2   | 18  |
| K1202.10823 | C    | M8  | 23 | 8,5  | 19 | 65 | 24 | 2   | 18  |
| K1202.11028 | C    | M10 | 28 | 10,5 | 22 | 90 | 32 | 3,5 | 22  |
| K1202.20518 | E    | M5  | 18 | -    | 15 | 40 | 16 | -   | 7,5 |
| K1202.20618 | E    | M6  | 18 | -    | 15 | 40 | 16 | -   | 9   |
| K1202.20823 | E    | M8  | 23 | -    | 19 | 65 | 24 | -   | 12  |
| K1202.20828 | E    | M8  | 28 | -    | 22 | 90 | 32 | -   | 12  |
| K1202.21028 | E    | M10 | 28 | -    | 22 | 90 | 32 | -   | 15  |

## KIPP Taper grips with male thread

| Order No.   | Form | D   | D1 | D4 | L  | L1 | L2 |
|-------------|------|-----|----|----|----|----|----|
| K1202.30618 | F    | M6  | 18 | 15 | 15 | 40 | 16 |
| K1202.30823 | F    | M8  | 23 | 19 | 15 | 65 | 24 |
| K1202.31028 | F    | M10 | 28 | 22 | 15 | 90 | 32 |

# Handwheel washers


**Material:**

Steel.

Stainless steel 1.4305.

**Version:**

Steel black oxidised.

Stainless steel bright.

**Sample order:**

K0173.00416

**Note:**

These washers are used together with DIN EN ISO 2009 or DIN EN ISO 10642 countersunk screws on the end of shafts with keyways to secure handwheels and crank handles.

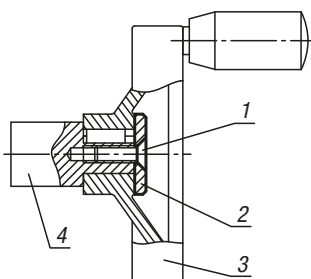
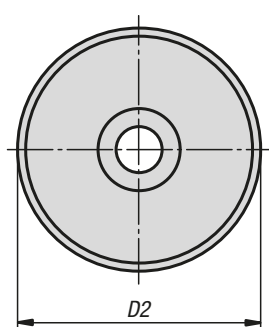
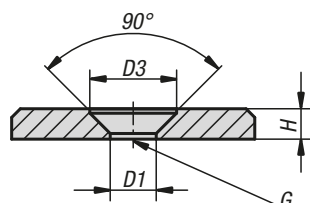
The washers can be used with the handwheels K0671, K0160, K0161, K0162, K0163, K0164, K0165.

The steel washers are often used as caps for magnets.

**Drawing reference:**

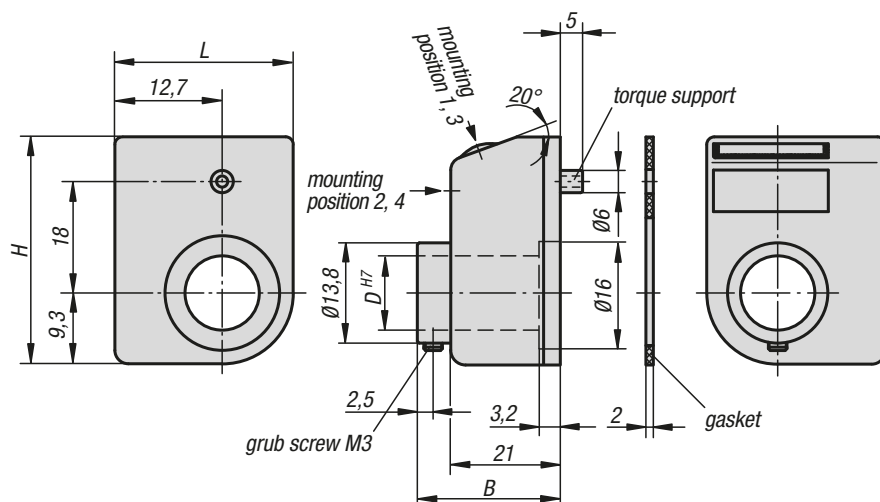
D3 = for countersunk screw ISO 2009 and ISO 10642

- 1) countersunk screw ISO 2009 and ISO 10642
- 2) washer
- 3) handwheel
- 4) shaft


**KIPP Handwheel washers**

| Order No.<br>steel | Order No.<br>stainless steel | D1  | D2 | D3  | H   | G  |
|--------------------|------------------------------|-----|----|-----|-----|----|
| K0173.00310        | K0173.10310                  | 3,2 | 10 | 6   | 2   | M3 |
| K0173.00313        | K0173.10313                  | 3,2 | 13 | 6   | 2   | M3 |
| K0173.00416        | K0173.10416                  | 4,3 | 16 | 8,4 | 3   | M4 |
| K0173.00420        | K0173.10420                  | 4,3 | 20 | 8,4 | 3   | M4 |
| K0173.00520        | K0173.10520                  | 5,3 | 20 | 10  | 3,5 | M5 |
| K0173.00522        | K0173.10522                  | 5,3 | 22 | 10  | 3,5 | M5 |
| K0173.00525        | K0173.10525                  | 5,3 | 25 | 10  | 3,5 | M5 |
| K0173.00528        | K0173.10528                  | 5,3 | 28 | 10  | 3,5 | M5 |
| K0173.00630        | K0173.10630                  | 6,4 | 30 | 12  | 4   | M6 |
| K0173.00632        | K0173.10632                  | 6,4 | 32 | 12  | 4   | M6 |
| K0173.00636        | K0173.10636                  | 6,4 | 36 | 12  | 4   | M6 |
| K0173.00640        | K0173.10640                  | 6,4 | 40 | 12  | 5   | M6 |
| K0173.00645        | K0173.10645                  | 6,4 | 45 | 12  | 6   | M6 |
| K0173.00652        | K0173.10652                  | 6,4 | 52 | 12  | 6   | M6 |

## Position indicators



### Material:

Housing polyamide 6.  
Hollow shaft steel.  
Screen plastic.  
Grub screw steel.

### Version:

Impact-resistant housing.  
Hollow shaft black oxidised.  
Grub screw black.  
Dial black, digits white.

### Sample order:

K0408.01001111  
(Position indicator with 1 mm pitch, decimal point in first position from the right, assembly position 1, direction of count ascending clockwise, colour orange)

### Note:

Position indicators allow direct reading of input measurement values at a glance.  
In addition, the value indicated per spindle rotation (corresponding spindle pitch) can be selected and the various indicator values are realised by a transmission gear. The position indicators are distinguished by their small construction with very clear display.  
They are especially suitable for small spindle distances and small shaft diameters and have a torque support that is positioned in a hole on the side.

\*\* At the 1st asterisk give assembly position and at the 2nd asterisk give the count direction (see sample order "assembly position, count direction").

### On request:

- Stainless steel driveshaft
- Indicator for inch

### Accessories:

- Reducing bushes K0412

### Technical data:

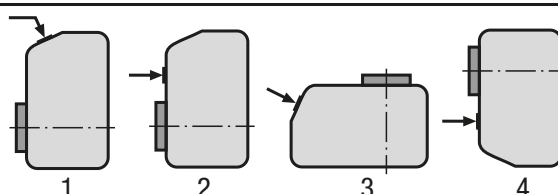
- Counter consisting of 3 10-position dials
- Height of figures about 4 mm
- Hollow shaft Ø 10 H7 mm
- Temperature resistant to 80 °C
- Oil and solvent resistant

### Display after one rotation, with decimal point:



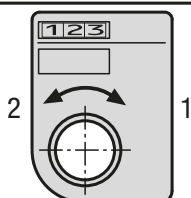
e. g. K0408.01001111  
0100 = 1mm increments  
1 = decimal places

### Mounting position (1 - 4):



e. g. K0408.01001111  
= mounting position 1

### Count direction (1 - 2):



e. g. K0408.01001111  
1 = clockwise (ascending values)  
2 = anticlockwise (ascending values)

### Colour (1 - 2):

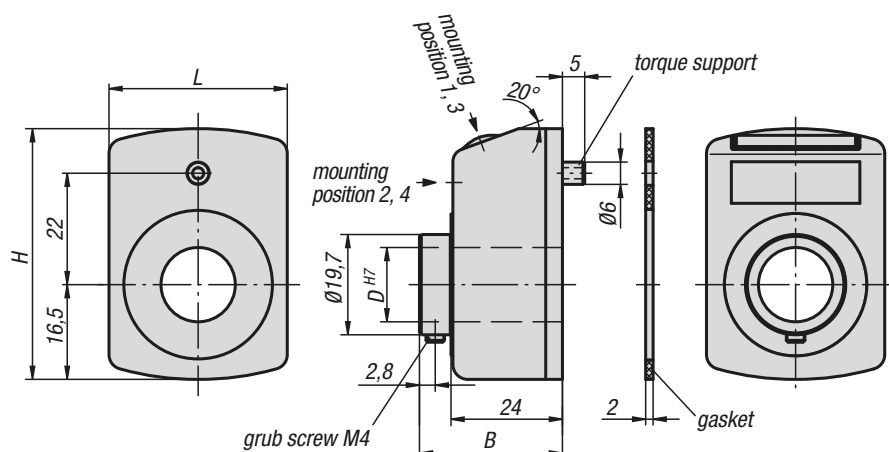


e. g. K0408.01001111  
1 = orange  
2 = black

## KIPP Position indicators

| Order No.<br>orange RAL 2004 | Order No.<br>black | B  | D  | H  | L  | Pitch | Indicator<br>after one<br>rotation | Decimal<br>point in<br>position | Max.<br>rpm |
|------------------------------|--------------------|----|----|----|----|-------|------------------------------------|---------------------------------|-------------|
| K0408.01001**1               | K0408.01001**2     | 26 | 10 | 33 | 22 | 1     | 01,0                               | 1                               | 500         |
| K0408.02001**1               | K0408.02001**2     | 26 | 10 | 33 | 22 | 2     | 02,0                               | 1                               | 500         |
| K0408.02501**1               | K0408.02501**2     | 26 | 10 | 33 | 22 | 2,5   | 02,5                               | 1                               | 500         |
| K0408.03001**1               | K0408.03001**2     | 26 | 10 | 33 | 22 | 3     | 03,0                               | 1                               | 500         |
| K0408.04001**1               | K0408.04001**2     | 26 | 10 | 33 | 22 | 4     | 04,0                               | 1                               | 375         |
| K0408.05001**1               | K0408.05001**2     | 26 | 10 | 33 | 22 | 5     | 05,0                               | 1                               | 300         |
| K0408.06001**1               | K0408.06001**2     | 26 | 10 | 33 | 22 | 6     | 06,0                               | 1                               | 250         |
| K0408.08001**1               | K0408.08001**2     | 26 | 10 | 33 | 22 | 8     | 08,0                               | 1                               | 180         |
| K0408.10001**1               | K0408.10001**2     | 26 | 10 | 33 | 22 | 10    | 10,0                               | 1                               | 150         |

## Position indicators



### Material:

Housing polyamide 6.  
Hollow shaft steel.  
Screen plastic.  
Grub screw steel.

### Version:

Impact-resistant housing.  
Hollow shaft black oxidised.  
Grub screw black.  
Dial black, digits white.

### Sample order:

K0409.01002111  
(Position indicator with 1 mm pitch, decimal point in second position from the right, assembly position 1, direction of count ascending clockwise, colour orange)

### Note:

Position indicators allow direct reading of input measurement values at a glance.  
In addition, the value indicated per spindle rotation (corresponding spindle pitch) can be selected and the various indicator values are realised by a transmission gear. The position indicators are distinguished by their small construction with very clear display and fine scale.  
They are especially suitable for small spindle distances and small shaft diameters and have a torque support that is positioned in a hole on the side.

\*\* At the 1st asterisk give assembly position and at the 2nd asterisk give the count direction (see sample order "assembly position, count direction").

| Display after one rotation, with decimal point:                      | Mounting position (1 - 4):                    |
|----------------------------------------------------------------------|-----------------------------------------------|
|                                                                      |                                               |
| e. g. K0409.01002111<br>0100 = 1 mm increments<br>2 = decimal places | e. g. K0409.01002111<br>= mounting position 1 |

| Count direction (1 - 2):                                                                             | Colour (1 - 2):                                     |
|------------------------------------------------------------------------------------------------------|-----------------------------------------------------|
| <br>e. g. K0409.01002111<br>1 = clockwise (ascending values)<br>2 = anticlockwise (ascending values) | <br>e. g. K0409.01002111<br>1 = orange<br>2 = black |

## KIPP Position indicators

| Order No.<br>orange RAL 2004 | Order No.<br>black | B  | D  | H  | L  | Pitch | Indicator<br>after one<br>rotation | Decimal<br>point in<br>position | max.<br>rpm |
|------------------------------|--------------------|----|----|----|----|-------|------------------------------------|---------------------------------|-------------|
| K0409.01002**1               | K0409.01002**2     | 31 | 14 | 47 | 33 | 1     | 00,10                              | 2                               | 500         |
| K0409.01001**1               | K0409.01001**2     | 31 | 14 | 47 | 33 | 1     | 001,0                              | 1                               | 500         |
| K0409.01251**1               | K0409.01251**2     | 31 | 14 | 47 | 33 | 1,25  | 001,2/5                            | 1                               | 500         |
| K0409.01501**1               | K0409.01501**2     | 31 | 14 | 47 | 33 | 1,5   | 001,5                              | 1                               | 500         |
| K0409.02001**1               | K0409.02001**2     | 31 | 14 | 47 | 33 | 2     | 002,0                              | 1                               | 500         |
| K0409.02501**1               | K0409.02501**2     | 31 | 14 | 47 | 33 | 2,5   | 002,5                              | 1                               | 500         |
| K0409.03001**1               | K0409.03001**2     | 31 | 14 | 47 | 33 | 3     | 003,0                              | 1                               | 500         |
| K0409.04001**1               | K0409.04001**2     | 31 | 14 | 47 | 33 | 4     | 004,0                              | 1                               | 375         |
| K0409.05001**1               | K0409.05001**2     | 31 | 14 | 47 | 33 | 5     | 005,0                              | 1                               | 300         |
| K0409.06001**1               | K0409.06001**2     | 31 | 14 | 47 | 33 | 6     | 006,0                              | 1                               | 250         |
| K0409.08001**1               | K0409.08001**2     | 31 | 14 | 47 | 33 | 8     | 008,0                              | 1                               | 180         |
| K0409.10001**1               | K0409.10001**2     | 31 | 14 | 47 | 33 | 10    | 010,0                              | 1                               | 150         |

### On request:

- Counter cover made of mineral glass
- Stainless steel driveshaft
- Axial sealing (dust-proof)
- Vibration protection

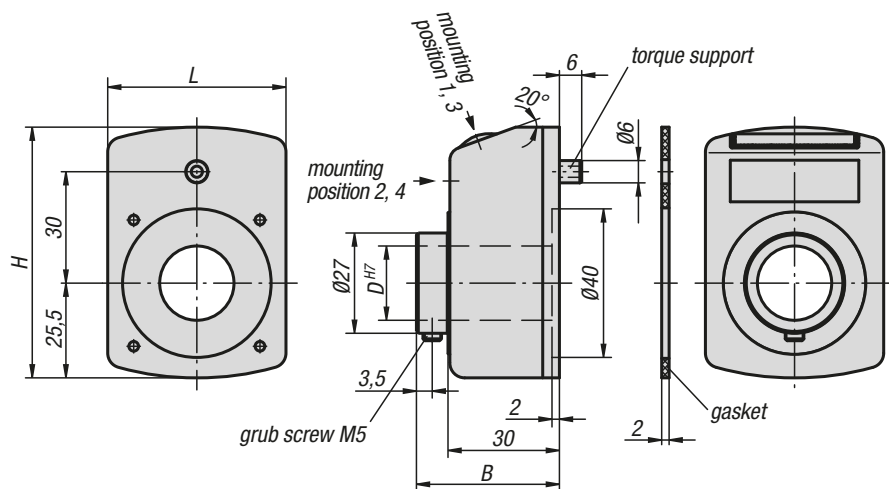
### Accessories:

- Reducing bushes K0412
- Insert plate K0413
- Mounting plates K0414

### Technical data:

- Counter consisting of 4 10-position dials + fine scale
- Height of figures about 6 mm
- Hollow shaft Ø 14 H7 mm
- Temperature resistant to 80 °C
- Oil and solvent resistant

## Position indicators



### Material:

Housing polyamide 6.  
Hollow shaft steel.  
Screen plastic.  
Grub screw steel.

### Version:

Impact-resistant housing.  
Hollow shaft black oxidised.  
Grub screw black.  
Dial black, digits white.

### Sample order:

K0410.01002111  
(Position indicator with 1 mm pitch, decimal point in second position from the right, assembly position 1, direction of count ascending clockwise, colour orange)

### Note:

Position indicators allow direct reading of input measurement values at a glance. In addition the value indicated per spindle rotation (corresponding spindle pitch) can be selected and the various indicator values are realised by a transmission gear. The position indicators are distinguished by their very clear display and fine scale. They have a torque support that is positioned in a hole on the side.

\*\* At the 1st asterisk give assembly position and at the 2nd asterisk give the count direction (see sample order "assembly position, count direction").

### On request:

- Counter cover made of mineral glass
- Stainless steel driveshaft
- Axial sealing (dust-proof)
- Waterproof
- Vibration protection

### Accessories:

- Reducing bushes K0412
- Insert plate K0413
- Mounting plates K0414

### Technical data:

- Counter consisting of 5 10-position dials + fine scale
- Height of figures about 7 mm
- Hollow shaft Ø 20 H7 mm
- Temperature resistant to 80 °C
- Oil and solvent resistant
- Dust-proof

| Display after one rotation, with decimal point:                      | Mounting position (1 - 4):                    |
|----------------------------------------------------------------------|-----------------------------------------------|
|                                                                      |                                               |
| e. g. K0410.01002111<br>0100 = 1 mm increments<br>2 = decimal places | e. g. K0410.01002111<br>= mounting position 1 |

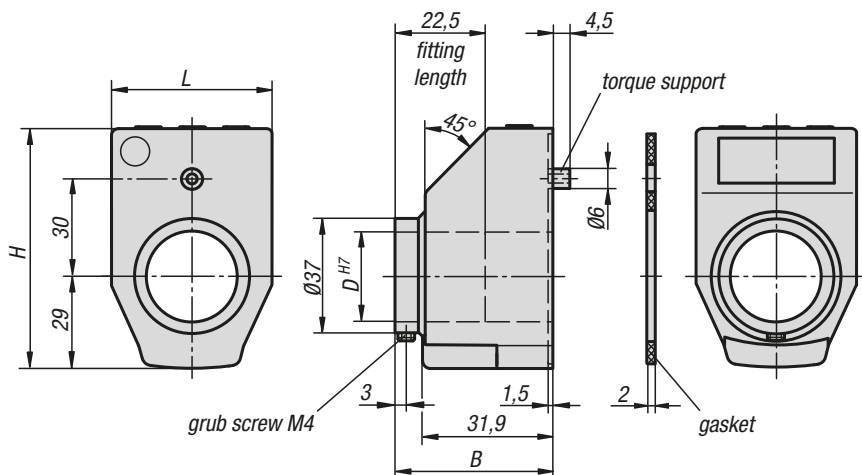
| Count direction (1 - 2):                                                                             | Colour (1 - 2):                                     |
|------------------------------------------------------------------------------------------------------|-----------------------------------------------------|
| <br>e. g. K0410.01002111<br>1 = clockwise (ascending values)<br>2 = anticlockwise (ascending values) | <br>e. g. K0410.01002111<br>1 = orange<br>2 = black |

## KIPP Position indicators

| Order No.<br>orange RAL 2004 | Order No.<br>black | B    | D  | H    | L  | Pitch | Indicator<br>after one<br>rotation | Decimal<br>point in<br>position | max.<br>rpm |
|------------------------------|--------------------|------|----|------|----|-------|------------------------------------|---------------------------------|-------------|
| K0410.01002**1               | K0410.01002**2     | 38,5 | 20 | 67,5 | 48 | 1     | 000,10                             | 2                               | 500         |
| K0410.01001**1               | K0410.01001**2     | 38,5 | 20 | 67,5 | 48 | 1     | 0001,0                             | 1                               | 500         |
| K0410.01501**1               | K0410.01501**2     | 38,5 | 20 | 67,5 | 48 | 1,5   | 0001,5                             | 1                               | 500         |
| K0410.02001**1               | K0410.02001**2     | 38,5 | 20 | 67,5 | 48 | 2     | 0002,0                             | 1                               | 500         |
| K0410.02501**1               | K0410.02501**2     | 38,5 | 20 | 67,5 | 48 | 2,5   | 0002,5                             | 1                               | 500         |
| K0410.03001**1               | K0410.03001**2     | 38,5 | 20 | 67,5 | 48 | 3     | 0003,0                             | 1                               | 500         |
| K0410.04001**1               | K0410.04001**2     | 38,5 | 20 | 67,5 | 48 | 4     | 0004,0                             | 1                               | 450         |
| K0410.05001**1               | K0410.05001**2     | 38,5 | 20 | 67,5 | 48 | 5     | 0005,0                             | 1                               | 300         |
| K0410.06001**1               | K0410.06001**2     | 38,5 | 20 | 67,5 | 48 | 6     | 0006,0                             | 1                               | 250         |
| K0410.10001**1               | K0410.10001**2     | 38,5 | 20 | 67,5 | 48 | 10    | 0010,0                             | 1                               | 150         |

# Position indicators

freely programmable



## Technical data:

- LCD Display with 5 digits
- Digit size approx. 11.5 mm
- Display range from -19999 ... 99999
- Tunular shaft Ø 30 H7 mm
- Operating temperature -10 °C to +60 °C
- Storage temperature -30 °C to +80 °C
- Revolution max. 600 rpm
- Lithium battery Button cell 3V, type CR 2032, service life approx. 2 years
- Vibration-resistance according to DIN IEC 68-2-6 10 g / (5 ... 150 Hz), 20 g / (100 ... 2000 Hz)
- Shock-resistance according to DIN IEC 68-2-27 30 g / 15 ms
- EMC DIN EN 61000-4-2; DIN EN 61000-4-4
- Type of protection IP 51

## Material:

Housing plastic.  
Hollow shaft steel.  
Screen LCD display.  
Grub screw steel.

## Version:

Hollow shaft black oxidised.  
Grub screw black.

## Sample order not programmed:

K0411.12  
(Position indicator with assembly position 1, colour black)

## Sample order programmed:

K0411.0200021120  
(See ordering example on the next page)

## Note:

The electronic position indicators offer diverse opportunities compared to mechanical position indicators because they display angles as well as uncommon spindle pitches and record each fraction of spindle movement.

\* Freely programmable parameters using the programming software K0411.09.

## Features:

- indicated value and decimal point freely programmable
- linear or angle mode
- function key for zero-point position
- function key for switching between the absolute dimension and chain dimension
- programming of an offset value directly at the device
- easy battery change

## Accessories:

- reducing bushes K0412
- programming software K0411.09

## KIPP Position indicators programmed

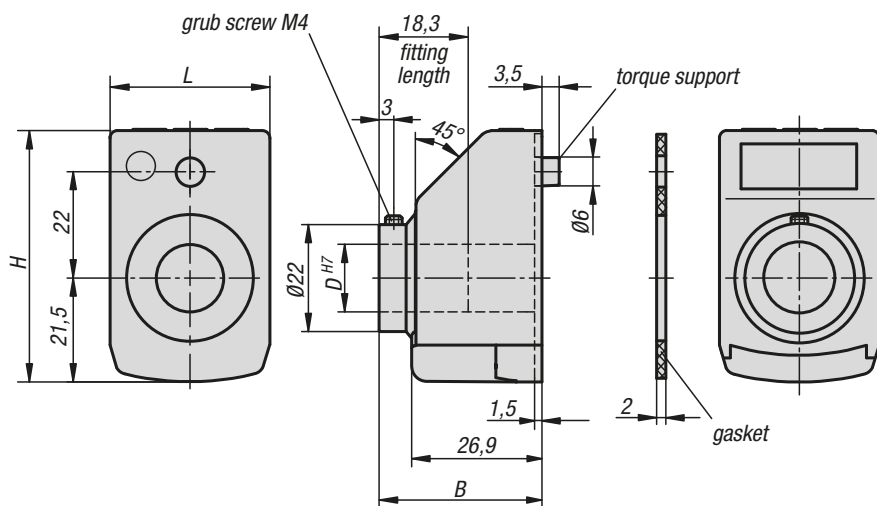
| Order No. | Version 1                                           | Version 2           | B    | D  | H  | L  |
|-----------|-----------------------------------------------------|---------------------|------|----|----|----|
| K0411.    | See sample order for position Indicators programmed | freely programmable | 38,8 | 30 | 71 | 48 |

## KIPP Position indicators not programmed\*

| Order No. | Assembly position | Main colour | Version 2           | Order No. software |
|-----------|-------------------|-------------|---------------------|--------------------|
| K0411.11  | 1                 | orange      | freely programmable | K0411.09           |
| K0411.12  | 1                 | black       | freely programmable | K0411.09           |
| K0411.31  | 3                 | orange      | freely programmable | K0411.09           |
| K0411.32  | 3                 | black       | freely programmable | K0411.09           |

# Position indicators

freely programmable



## Technical data:

- LCD Display with 5 digits
- Digit size approx. 8 mm
- Display range from -19999 ... 99999
- Hollow shaft Ø 14 H7 mm
- Operating temperature -10 °C to +60 °C
- Storage temperature -30 °C to +80 °C
- Revolution max. 600 rpm
- Lithium battery button cell 3V, type CR 2032, service life ca. 2 years
- Vibration-resistance acc. to DIN IEC 68-2-6 10 g / (5 ... 150 Hz), 20 g / (100 ... 2000 Hz)
- Shock-resistance acc. to DIN IEC 68-2-27 30 g / 15 ms
- EMC DIN EN 61000-4-2; DIN EN 61000-4-4
- Protection IP 51

## Material:

Housing plastic.  
Hollow shaft steel.  
Screen LCD display.  
Grub screw steel.

## Version:

Hollow shaft black oxidised.  
Grub screw black.

## Sample order not programmed:

K0771-12  
(position indicator with assembly position 1, colour black)

## Sample order programmed:

K0771.0200021120  
(see sample order on following page)

## Note:

The electronic position indicators offer diverse opportunities compared to mechanical position indicators because they display angles as well as uncommon spindle pitches and record each fraction of spindle movement.

\* Freely programmable parameters using the programming software K0411.09.

## Features:

- indicated value and decimal point freely programmable
- linear or angle mode
- function key for zero-point position
- function key for switching between the absolute dimension and chain dimension
- programming of an offset value directly at the device
- easy battery change

## Accessories:

- reducing bushes K0412
- programming software K0411.09

## KIPP Position indicators programmed

| Order No. | Version 1                                           | Version 2           | B    | D  | H  | L  |
|-----------|-----------------------------------------------------|---------------------|------|----|----|----|
| K0771.    | See sample order for position Indicators programmed | freely programmable | 33,6 | 14 | 52 | 33 |

## KIPP Position indicators not programmed\*

| Order No. | Assembly position | Main colour | Version 2           | Order No. software |
|-----------|-------------------|-------------|---------------------|--------------------|
| K0771.11  | 1                 | orange      | freely programmable | K0411.09           |
| K0771.12  | 1                 | black       | freely programmable | K0411.09           |
| K0771.31  | 3                 | orange      | freely programmable | K0411.09           |
| K0771.32  | 3                 | black       | freely programmable | K0411.09           |



# Sample order for programmed position indicators K0411 and K0771



Order code:

K0411.

**Indicator after  
one rotation:**

e.g.  
K0411.0200021120  
Please indicate here which  
value is to be displayed  
after one rotation (this is  
usually the spindle pitch).

## Important:

Please note the decimal  
point position!

02000

## Angle mode:

(resolution 0.1°)

If you want the display to  
be in angle mode, enter  
03600.

The display in angle mode  
is 03600 after one rotation  
and returns to 00000 for  
the next rotation.

**Decimal point position:**

e.g.  
K0411.0200021120  
Please indicate here how  
many decimal places you  
require.

0 = 00000  
1 = 0000.0  
2 = 000.00  
3 = 00.000

020.00

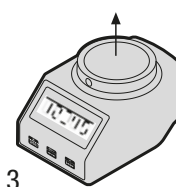
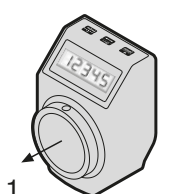
## Angle mode:

If you want the display to  
be in angle mode, the  
decimal point is best put in  
position 1.

This means the display  
shows the value 0360.0  
after one rotation.

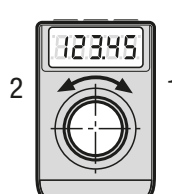
**Assembly position:**

e.g.  
K0411.0200021120  
1 = Mounting position for  
horizontal spindle  
3 = Mounting position for  
vertical spindle



**Count direction:**

e.g.  
K0411.0200021120  
1 = clockwise  
(ascending values)  
2 = anticlockwise  
(ascending values)



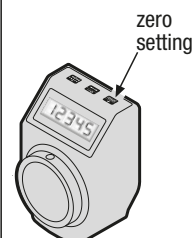
**Colour:**

e.g.  
K0411.0200021120  
1 = orange  
2 = black



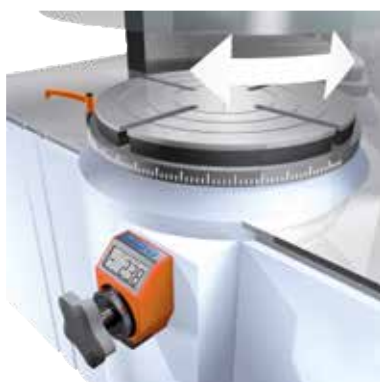
**Zero-point position:**

e.g.  
K0411.0200021120  
0 = directly  
5 = delayed by 5 sec.



The Zero-point position  
can be delayed by 5 sec.  
by means of a parameter,  
in order to avoid accidental  
zero setting.

## Application using position indicators





A large rectangular area filled with a fine grid of light gray lines, intended for handwritten notes.





# Position indicator, plastic, electronic

IO link interface



## Technical data:

Position indicators K1657.1530 and K1657.1650:

Rotation speed:  $\leq 500$  rpm

Operating voltage: 24 V DC  $\pm 20$  %

Current consumption:  $\sim 30$  mA

Battery life:  $\sim 5$  years

Resolution: 880 increments/rotation

Measurement range:  $\leq 11914$  rotations

Ambient temperature: 0 °C to +60 °C

Storage temperature: -20 °C to +80 °C

Position indicators K1657.1531 and K1657.1651:

Operating voltage: 24 V DC  $\pm 20$  %

Current consumption:  $\sim 30$  mA

Battery life:  $\sim 5$  years

Resolution: 0.01 mm (with magnetic sensor K1658)

System accuracy:  $\pm 35$   $\mu$ m (with magnetic sensor K1658)

Measurement range:  $\pm 655$  m (with magnetic sensor K1658)

Ambient temperature: 0 °C to +60 °C

Storage temperature: -20 °C to +80 °C

## Drawing reference:

- 1) Torque support
- 2) Grub screw M3 (2x 120°)
- 3) Min. space required to change battery without disassembling.
- 4) 2x M5/7 deep
- 5) Contact area
- 6) Earthing terminal for flat connector 6.3 or cable lug
- 7) IO link M8 connector (pin contact) metal connection thread
- 8) Sensor



## KIPP Position indicator, plastic, electronic IO link interface

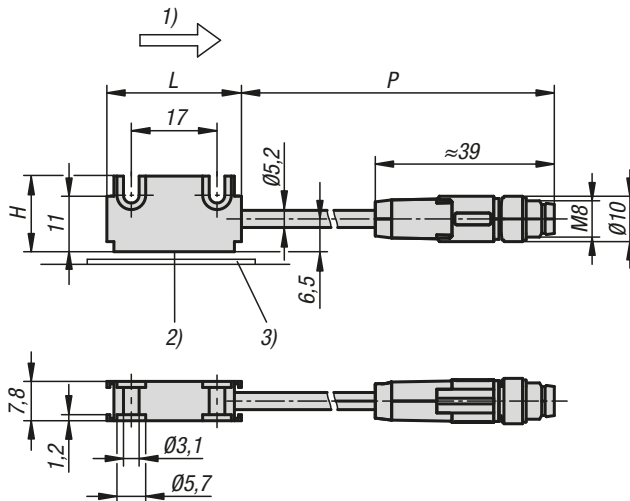
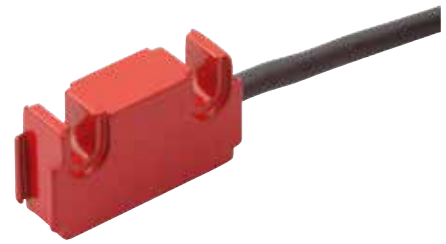
| Order No.  | Form | Component material | B    | D  | H    | L  | Safety rating |
|------------|------|--------------------|------|----|------|----|---------------|
| K1657.1530 | A    | stainless steel    | 50,3 | 20 | 68,4 | 48 | IP53          |
| K1657.1650 | A    | stainless steel    | 50,3 | 20 | 68,4 | 48 | IP65          |

| Order No.  | Form | B    | H    | L  | Safety rating |
|------------|------|------|------|----|---------------|
| K1657.1531 | B    | 50,3 | 68,4 | 48 | IP53          |
| K1657.1651 | B    | 50,3 | 68,4 | 48 | IP65          |

## Magnetic sensors, passive sensors, miniature design

IO link interface



### Material:

Housing aluminium.  
Cable sheath PUR.

### Version:

Compact sensor and connector design.  
M8 connector, 6-pole, 1x pin (E15).  
Connection cable, mm 6-wire  $\varnothing$  5.2 mm.  
Bend radius  $\geq$  52 mm (dynamic).

### Sample order:

K1658.010001

### Note:

Works with magnetic tapes K1663.  
The reading distance between the sensor and tape must be 0.1 to 2 mm.  
The operating voltage and current for the sensor are supplied from the downstream electronics.  
System accuracy, repeat accuracy, and travel speed depend on the downstream electronics.  
Plug-in connection at position indicators K1657.

### Temperature range:

- Ambient temperature 0...60°C  
- Storage temperature -10...70°C

### Assembly:

Installation must be carried out using the enclosed user information.

A, reading distance sensor/tape  $\leq$  2 mm  
B, lateral offset  $\pm$  2 mm  
C, misalignment  $\pm$  3°  
D, pitch gradient  $\pm$  1°  
E, lateral gradient  $\pm$  3°

### Accessories:

Position indicators K1657.  
Magnetic tapes K1663.

### Attention:

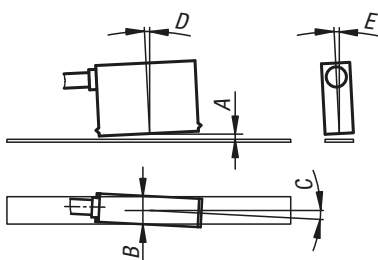
Relative humidity 100%. Dewing is permissible (sensor head).

### Technical data:

- Rating IP 67; EN 60529 (sensor head)  
- Shock resistance 2000 m/s<sup>2</sup>, 11 ms; EN 60068-2-27  
- Vibration resistance 200 m/s<sup>2</sup>, 50 Hz–2 kHz; EN 60068-2-6

### Drawing reference:

1) Sine before cosine  
2) Active measuring surface  
3) Magnetic tape



Magnetic sensors, passive sensors, miniature design  
IO link interface

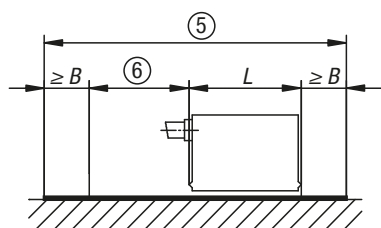
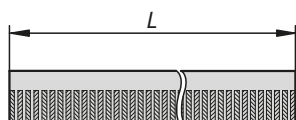
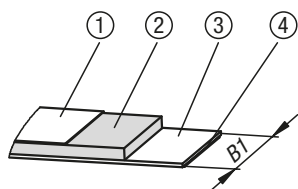


KIPP Magnetic sensors, passive sensors, miniature design IO link interface

| Order No.    | H  | L    | P    | for Art. No.            |
|--------------|----|------|------|-------------------------|
| K1658.010001 | 15 | 26,7 | 1000 | K1657.1531 / K1657.1651 |
| K1658.020001 | 15 | 26,7 | 2000 | K1657.1531 / K1657.1651 |

## Magnetic tape

scale with incremental coding, 5 mm pole length



### Material:

Magnetic tape, magnetised plastic sheet.  
Carrier band steel.  
Cover band stainless steel.

### Version:

Scale with incremental coding.  
Pole length 5 mm.

### Sample order:

K1663.010X1000

### Note:

Simple adhesive mounting; self-assembly possible.  
Required tape length calculated from:  
measuring path + sensor length „L“ + (2 x run or return „B“).  
L = see drawing of sensor used.  
B = 10 mm (run and return).

### Temperature range:

- Ambient temperature -20–70°C  
- Storage temperature -40–70°C

### Assembly:

Installation using the pre-affixed double-sided adhesive tape must be carried out according to the enclosed user information.

### On request:

Other lengths from 0.1–100 m, in increments of 0.1 m.

### Attention:

Relative humidity 100%. Dewing is permissible.

### Technical data:

- Coefficient of expansion  $(11 \pm 1) \times 10^{-6}/K$  (spring steel)

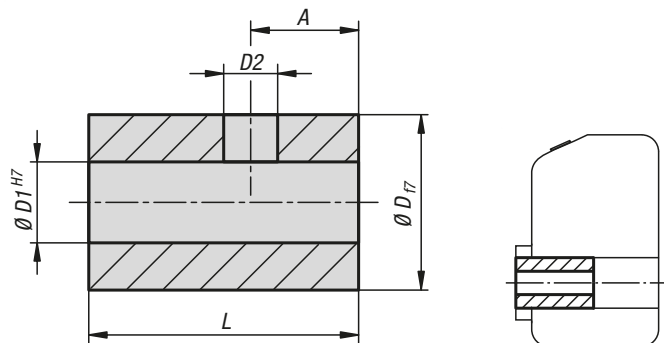
### Drawing reference:

- 1) Cover band A = 0.176 mm
- 2) Magnetic tape M = 1.0 mm
- 3) Carrier band T = 0.3 mm
- 4) Adhesive tape K = 0.1 mm
- 5) Required tape length = measuring path + L + 2 x B
- 6) Measuring path

## KIPP Magnetic tape, scale with incremental coding, 5 mm pole length

| Order No.       | B1 | L     | Precision mm |
|-----------------|----|-------|--------------|
| K1663.010X1000  | 10 | 1000  | 0,1          |
| K1663.010X2000  | 10 | 2000  | 0,1          |
| K1663.010X3000  | 10 | 3000  | 0,1          |
| K1663.010X4000  | 10 | 4000  | 0,1          |
| K1663.010X5000  | 10 | 5000  | 0,1          |
| K1663.010X6000  | 10 | 6000  | 0,1          |
| K1663.010X7000  | 10 | 7000  | 0,1          |
| K1663.010X8000  | 10 | 8000  | 0,1          |
| K1663.010X9000  | 10 | 9000  | 0,1          |
| K1663.010X10000 | 10 | 10000 | 0,1          |

## Reducing bushings



**Material:**  
Steel.

**Version:**  
Black oxidised.

**Sample order:**  
K0412.1408 (diameter D1=8)

**Note:**  
Reducing bushes are used for adapting the diameter between position indicator and positioning spindle.



### KIPP Reducing bushings

| Order No.  | A   | D  | D1                | D2  | L  | Suitable for position indicator |
|------------|-----|----|-------------------|-----|----|---------------------------------|
| K0412.10** | 2,5 | 10 | 6/8               | 3,2 | 14 | K0408                           |
| K0412.14** | 3,5 | 14 | 6/8/10/12         | 4,2 | 17 | K0409                           |
| K0412.20** | 4,5 | 20 | 12/14/16/18       | 5,5 | 20 | K0410                           |
| K0412.30** | 4   | 30 | 12/14/16/18/20/25 | 5,5 | 30 | K0411                           |

# K0413

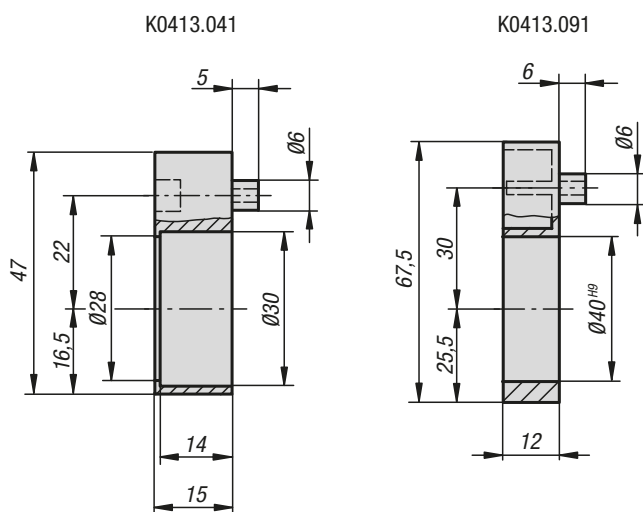
## Intermediate plates



**Material:**  
Plastic

**Sample order:**  
K0413.041

**Note:**  
Intermediate plates are used for mounting shaft collars and radial shaft seals.

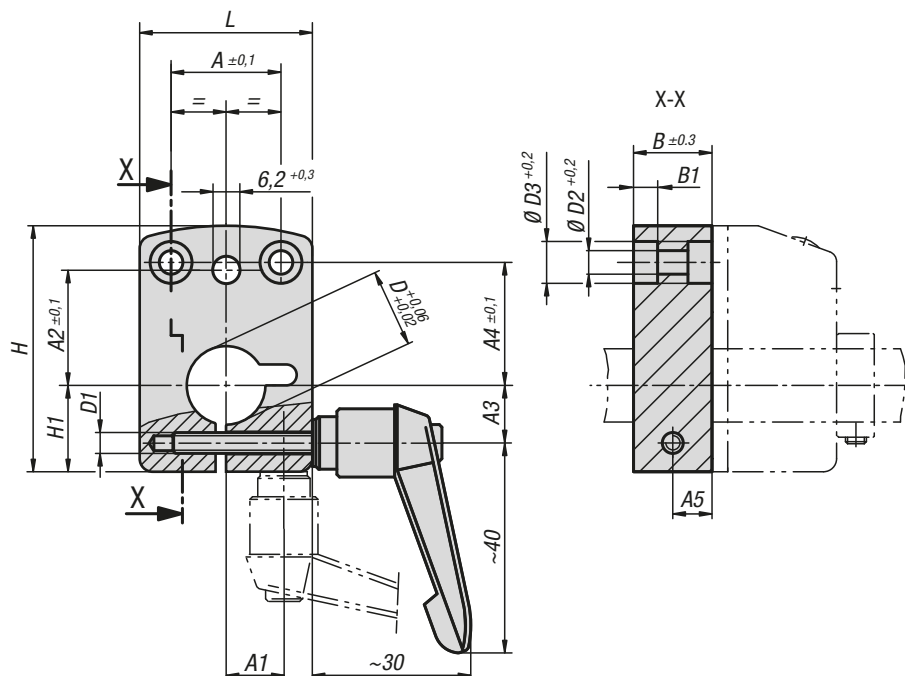


### KIPP Intermediate plates

| Order No. | Suitable for position indicator |
|-----------|---------------------------------|
| K0413.041 | K0409, K0771                    |
| K0413.091 | K0410, K0411                    |



## Mounting brackets



**Mounting brackets form a compact unit with position indicators. They guarantee reliable spindle clamping without additional construction work.**

**Material:**

Mounting position 1, housing die-cast zinc  
Mounting position 3, housing aluminium.  
Clamping lever plastic.

**Version:**

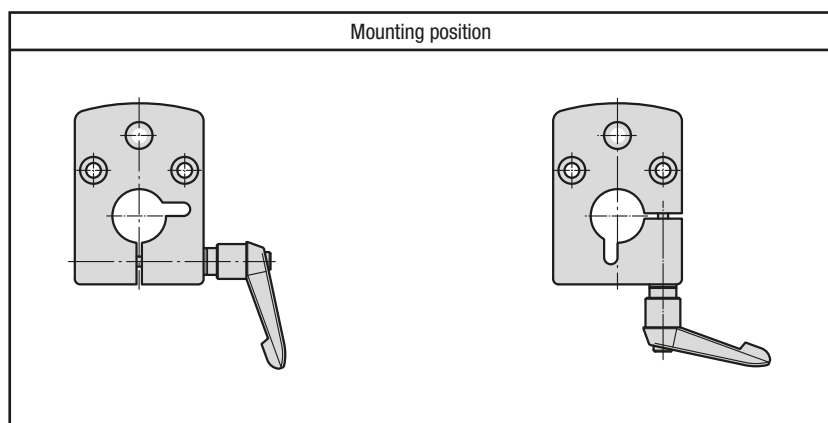
Installed position 1, housing, painted.  
Installed position 3, housing anodised.  
Clamping lever dark grey.

**Sample order:**

K0414.09121

**Note:**

Due to the simple assembly, the mounting bracket is also suitable for retrofitting to existing systems.



K0414. ....1

K0414. ....3



### KIPP Mounting brackets

| Order No.<br>Assembly position 1 | Order No.<br>Assembly position 3 | A  | A1   | A2 | A3   | A4   | A5  | B  | B1  | D  | D1 | D2  | D3 | H    | H1   | L  | Suitable<br>for position<br>indicator |
|----------------------------------|----------------------------------|----|------|----|------|------|-----|----|-----|----|----|-----|----|------|------|----|---------------------------------------|
| K0414.04081                      | K0414.04083                      | 21 | -/11 | 22 | 11/- | 23,5 | 7,5 | 15 | 4,6 | 8  | M4 | 4,5 | 8  | 47   | 16,5 | 33 | K0409                                 |
| K0414.04101                      | K0414.04103                      | 21 | -/11 | 22 | 11/- | 23,5 | 7,5 | 15 | 4,6 | 10 | M4 | 4,5 | 8  | 47   | 16,5 | 33 | K0409                                 |
| K0414.04121                      | K0414.04123                      | 21 | -/11 | 22 | 11/- | 23,5 | 7,5 | 15 | 4,6 | 12 | M4 | 4,5 | 8  | 47   | 16,5 | 33 | K0409                                 |
| K0414.04141                      | K0414.04143                      | 21 | -/11 | 22 | 11/- | 23,5 | 7,5 | 15 | 4,6 | 14 | M4 | 4,5 | 8  | 47   | 16,5 | 33 | K0409                                 |
| K0414.09121                      | K0414.09123                      | 34 | -/17 | 30 | 17/- | 17   | 10  | 20 | 5,5 | 12 | M5 | 5,5 | 10 | 67,5 | 25,5 | 48 | K0410                                 |
| K0414.09141                      | K0414.09143                      | 34 | -/17 | 30 | 17/- | 17   | 10  | 20 | 5,5 | 14 | M5 | 5,5 | 10 | 67,5 | 25,5 | 48 | K0410                                 |
| K0414.09161                      | K0414.09163                      | 34 | -/17 | 30 | 17/- | 17   | 10  | 20 | 5,5 | 16 | M5 | 5,5 | 10 | 67,5 | 25,5 | 48 | K0410                                 |
| K0414.09201                      | K0414.09203                      | 34 | -/17 | 30 | 17/- | 17   | 10  | 20 | 5,5 | 20 | M5 | 5,5 | 10 | 67,5 | 25,5 | 48 | K0410                                 |



A large rectangular area filled with a fine grid of light gray lines, intended for taking notes or drawing.





## Quarter-turn locks, edge protection profiles



## Quarter-turn locks

small version



### Material:

Housing and actuator die-cast zinc.  
Tongue steel.

### Version:

Housing and actuator trivalent passivated.  
Wing-handle version powder-coated.  
Tongue electro zinc-plated.

### Sample order:

Quarter turn lock K0518.16131  
Tongue K0519.125X075

### Note:

Small quarter turn lock with spring-loaded tongue.  
Right or left deployment. The lock can be installed pre-assembled. The fastening nut is an earthing nut with teeth one side.

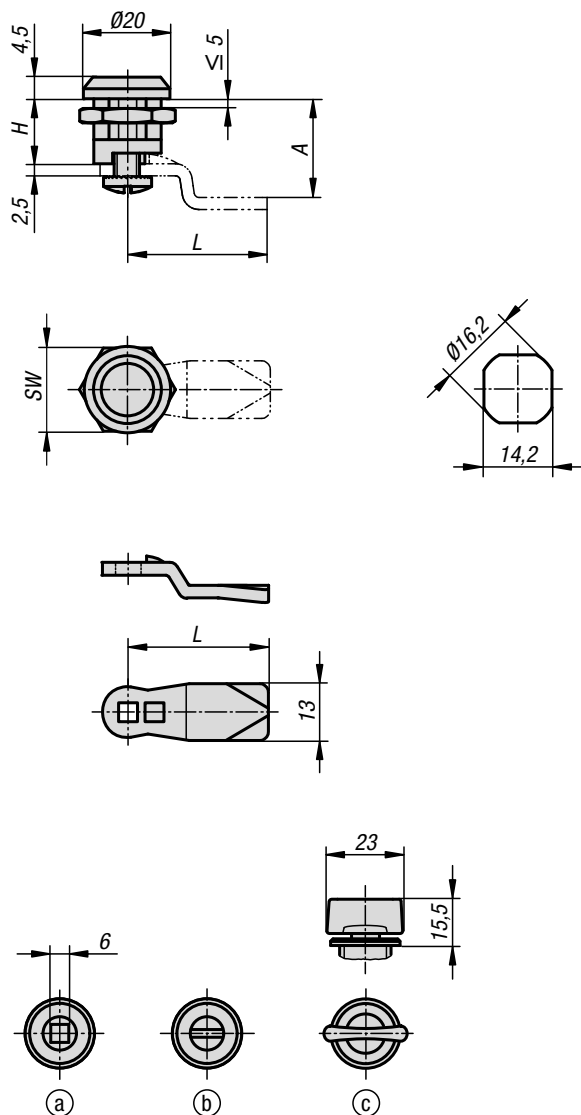
Please order the desired tongue type separately.  
Every tongue can be combined with every housing.

### Accessories:

Key K0535

### Drawing reference:

Actuation:  
a) square 6 mm  
b) slot  
c) wing grip



### KIPP Quarter-turn locks small version

| Order No.   | Actuation   | H    | SW |
|-------------|-------------|------|----|
| K0518.16131 | square 6 mm | 13,5 | 20 |
| K0518.20131 | slot        | 13,5 | 20 |
| K0518.30132 | grip        | 13,5 | 20 |

### KIPP Tongue for quarter-turn locks

| Order No.     | A    | L  |
|---------------|------|----|
| K0519.125X075 | 7,5  | 25 |
| K0519.125X135 | 13,5 | 25 |
| K0519.125X195 | 19,5 | 25 |

# Quarter-turn locks

with cylinder, small version



## Material:

Housing and actuator die-cast zinc.

Tongue steel.

Key nickel silver.

## Version:

Housing and actuator trivalent passivated.

Tongue electro zinc-plated.

## Sample order:

Quarter turn lock with cylinder K0520.131

Tongue K0521.128X105

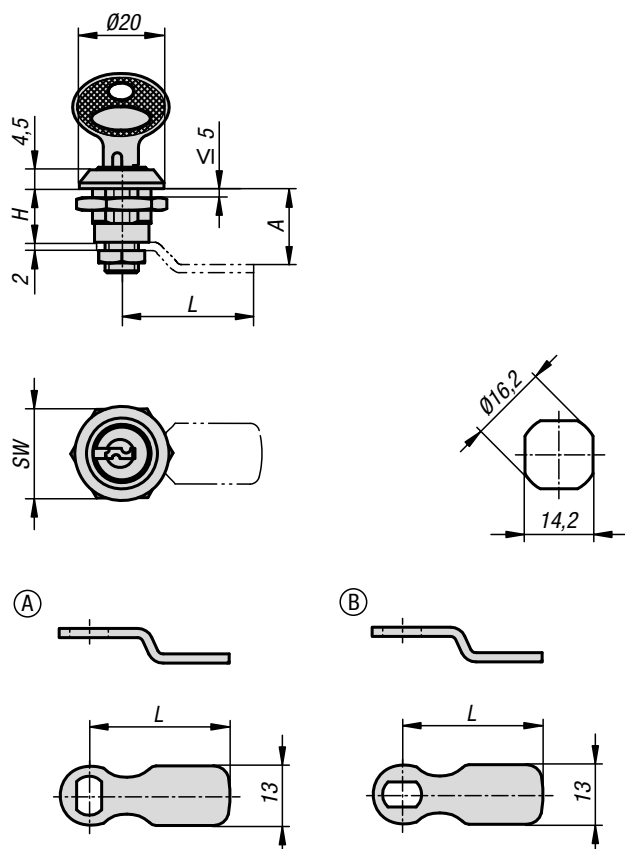
## Note:

Small quarter turn with cylinder, deployable right or left. The lock can be installed pre-assembled. The fastening nut is an earthing nut with teeth one side. These quarter turns with cylinder are supplied with 2 keys. The key can be removed in both positions (open and closed). All cylinders are identical i.e. all locks can be opened with the same key.

Please order the desired tongue type separately.

## On request:

Non-identical cylinders.



## KIPP Quarter-turn locks with cylinder, small version

| Order No. | Actuation             | H  | SW |
|-----------|-----------------------|----|----|
| K0520.131 | Key single-key system | 13 | 20 |

## KIPP Tongue for quarter-turn locks

| Order No.     | Form | A  | L  |
|---------------|------|----|----|
| K0521.128X105 | A    | 10 | 28 |
| K0521.124X135 | B    | 13 | 24 |
| K0521.131X135 | B    | 13 | 31 |
| K0521.136X135 | B    | 13 | 36 |
| K0521.130X165 | B    | 16 | 30 |
| K0521.126X205 | B    | 20 | 26 |

## Quarter-turn locks



### Material:

Housing, actuator and nut, die-cast zinc or PA6 GFR 30 plastic.  
Flat seal rubber.  
Tongue steel.

### Version:

Housing, actuator and nut trivalent passivated or black.  
Tongue electro zinc-plated.

### Sample order:

Quarter-turn lock K0522.17181  
Tongue K0523.145X045  
(include tongue gap "A")

### Note:

Quarter-turn lock with spring-loaded tongue. Right or left deployment. The lock can be installed pre-assembled. The fastening nut is an earthing nut with teeth one side.

Vibration-proof (except plastic version), a catch prevents independent opening. Water and dust tight according to IP65.

Please order the desired tongue type separately. Every tongue can be combined with every housing.

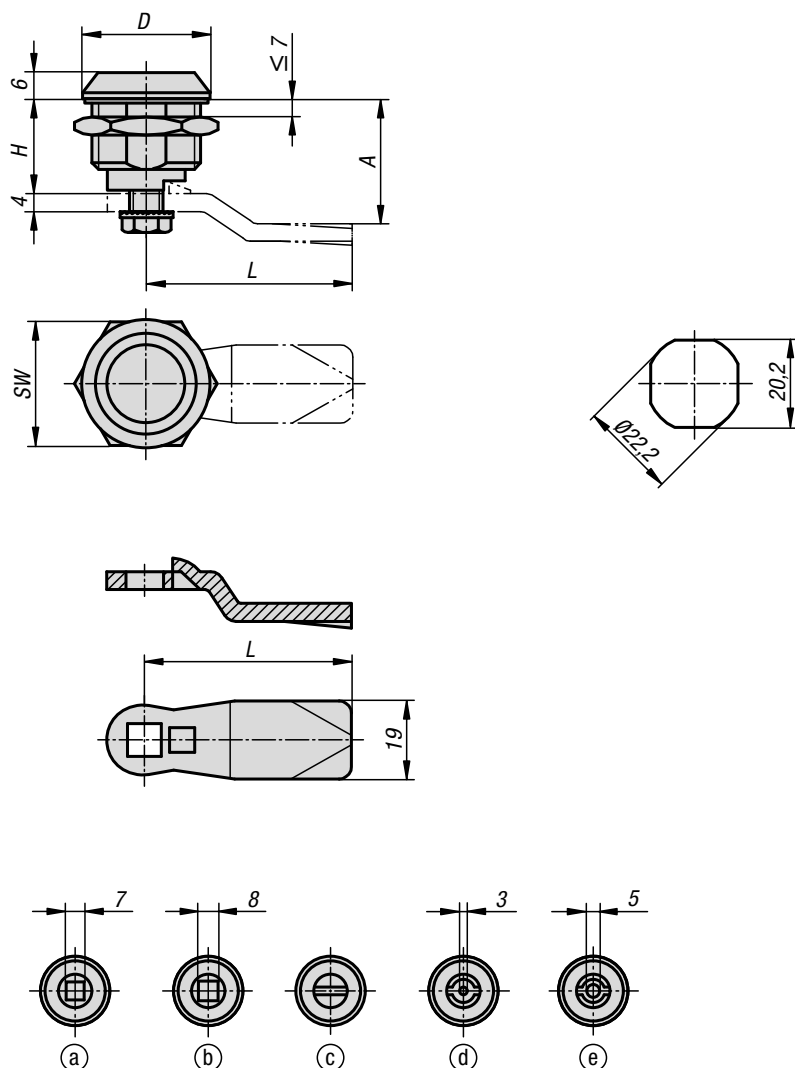
### Accessories:

Key K0535

### Drawing reference:

Actuation:

- a) square 7 mm
- b) square 8 mm
- c) slot
- d) double lug 3 mm
- e) double lug 5 mm



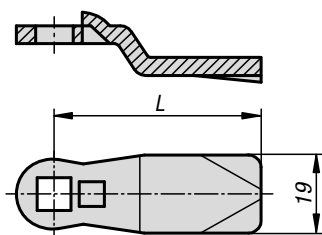
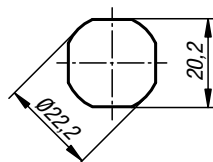
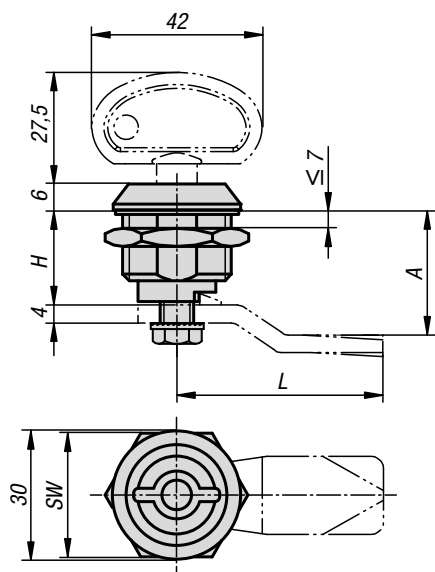
### KIPP Quarter-turn lock

| Order No.<br>zinc | Order No.<br>plastic | D     | Actuation       | SW | H    |
|-------------------|----------------------|-------|-----------------|----|------|
| K0522.17181       | -                    | 30    | square 7 mm     | 27 | 18,5 |
| K0522.18181       | -                    | 30    | square 8 mm     | 27 | 18,5 |
| K0522.20181       | K0522.20185          | 30/28 | slot            | 27 | 18,5 |
| K0522.43181       | K0522.43185          | 30/28 | double lug 3 mm | 27 | 18,5 |
| K0522.45181       | K0522.45185          | 30/28 | double lug 5 mm | 27 | 18,5 |

### KIPP Tongue for quarter-turn lock

| Order No.  | A                                                                                                     | L  |
|------------|-------------------------------------------------------------------------------------------------------|----|
| K0523.135X | 16,5/18,5/20,5/22,5/24,5                                                                              | 35 |
| K0523.145X | 4,5/6,5/8,5/10,5/12,5/14,5/16,5/18,5/20,5/21,5/22,5/24,5/26,5/28,5/30,5/32,5/34,5/36,5/38,5/40,5/42,5 | 45 |

# Quarter-turn security locks



## Material:

Housing, actuator, nut and key die-cast zinc.  
Flat seal rubber.  
Tongue steel.

## Version:

Housing and actuator trivalent passivated or black powder-coated.  
Tongue electro zinc-plated.  
Key trivalent passivated.

## Sample order:

Security quarter turn lock K0524.181  
Tongue K0523.145X045  
(include tongue gap "A")  
Key K0524.9

## Note:

Security quarter turn lock with spring-loaded tongue.  
Right or left deployment. The lock can be installed pre-assembled. The fastening nut is an earthing nut with teeth one side.

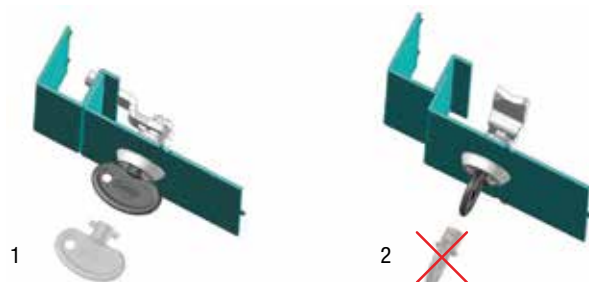
Water and dust tight according to IP65.

Please order key separately. Lock can only be opened and closed with a specific key. The key can only be removed in the closed position. With an open lock the key acts as a grip.

Please order the desired tongue type separately.  
Every tongue can be combined with every housing.

## Drawing reference:

- 1) Key can be pulled out when locked
- 2) Key cannot be pulled out when open



## KIPP Quarter-turn lock security

| Bestellnummer<br>verchromt | Bestellnummer<br>pulverbeschichtet | Betätigung | H    | SW | Bestellnummer<br>Schlüssel |
|----------------------------|------------------------------------|------------|------|----|----------------------------|
| K0524.181                  | K0524.182                          | Schlüssel  | 18,5 | 27 | K0524.9                    |

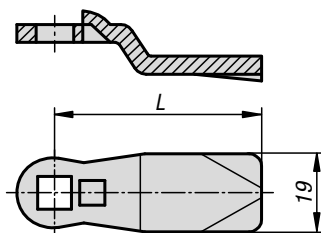
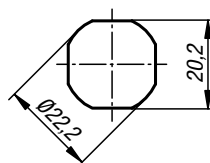
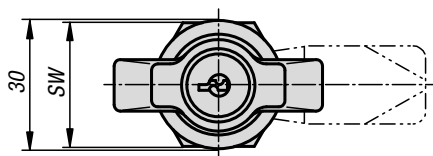
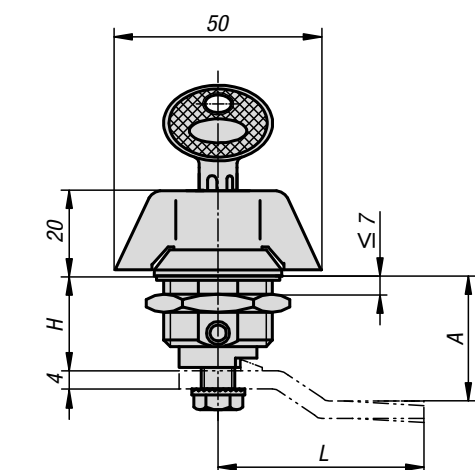
## KIPP Tongue for quarter-turn lock

| Order No.  | A                                                                                                     | L  |
|------------|-------------------------------------------------------------------------------------------------------|----|
| K0523.135X | 16,5/18,5/20,5/22,5/24,5                                                                              | 35 |
| K0523.145X | 4,5/6,5/8,5/10,5/12,5/14,5/16,5/18,5/20,5/21,5/22,5/24,5/26,5/28,5/30,5/32,5/34,5/36,5/38,5/40,5/42,5 | 45 |



## Quarter-turn locks

with wing grip



### Material:

Housing and nut die-cast zinc.  
Grip plastic PA6 GF 30.  
Flat seal rubber.  
Tongue steel.

### Version:

Housing and nut trivalent passivated.  
Grip black.  
Tongue electro zinc-plated.

### Sample order:

Quarter-turn lock K0525.1183  
Tongue K0523.145X045 (include tongue gap "A")

### Note:

Quarter-turn lock with wing grip. Right or left deployment. The lock can be installed pre-assembled. The fastening nut is an earthing nut with teeth one side.

Water and dust tight according to IP65.

The cylinder locks are supplied with 2 keys. The key can be removed in both positions (open and closed). All cylinders are identical i.e. all locks can be opened with the same key (Euro key 5333).

Please order the desired tongue type separately. Every tongue can be combined with every housing.

### KIPP Quarter-turn lock with wing grip

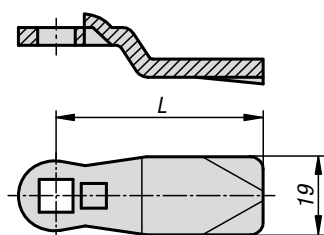
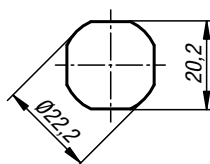
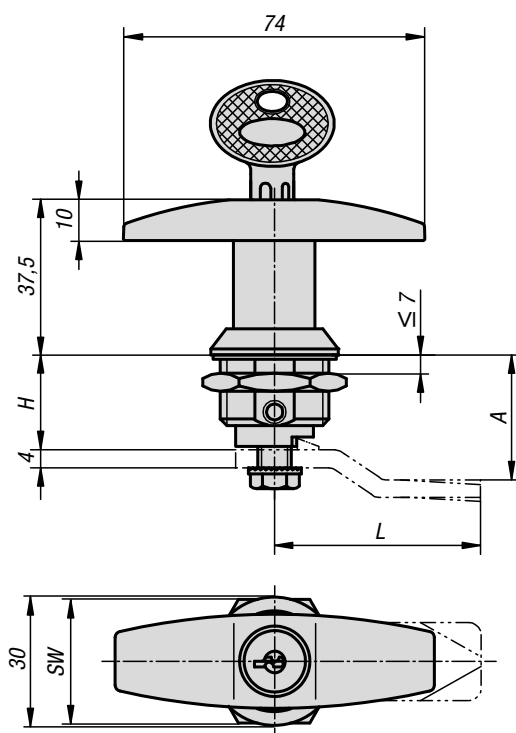
| Order No.  | Actuation     | H    | SW |
|------------|---------------|------|----|
| K0525.1183 | grip          | 18,5 | 27 |
| K0525.2183 | lockable grip | 18,5 | 27 |

### KIPP Tongue for quarter-turn locks

| Order No.  | A                                                                                                     | L  |
|------------|-------------------------------------------------------------------------------------------------------|----|
| K0523.135X | 16,5/18,5/20,5/22,5/24,5                                                                              | 35 |
| K0523.145X | 4,5/6,5/8,5/10,5/12,5/14,5/16,5/18,5/20,5/21,5/22,5/24,5/26,5/28,5/30,5/32,5/34,5/36,5/38,5/40,5/42,5 | 45 |

# Quarter-turn locks

with T-grip



## Material:

Housing and nut die-cast zinc.  
T-grip plastic PA6 GF 30.  
Flat seal rubber.  
Tongue steel.

## Version:

Housing and nut trivalent passivated.  
T-grip black.  
Tongue electro zinc-plated.

## Sample order:

Quarter-turn lock K0526.1183  
Tongue K0523.145X045  
(include tongue gap "A")

## Note:

Quarter-turn lock with T-grip. Right or left deployment.  
The lock can be installed pre-assembled. The fastening nut is an earthing nut with teeth one side.

Water and dust tight according to IP65.

The cylinder locks are supplied with 2 keys. The key can be removed in both positions (open and closed). All cylinders are identical i.e. all locks can be opened with the same key (Euro key 5333).

Please order the desired tongue type separately. Every tongue can be combined with every housing.

## KIPP Quarter-turn lock with T-grip

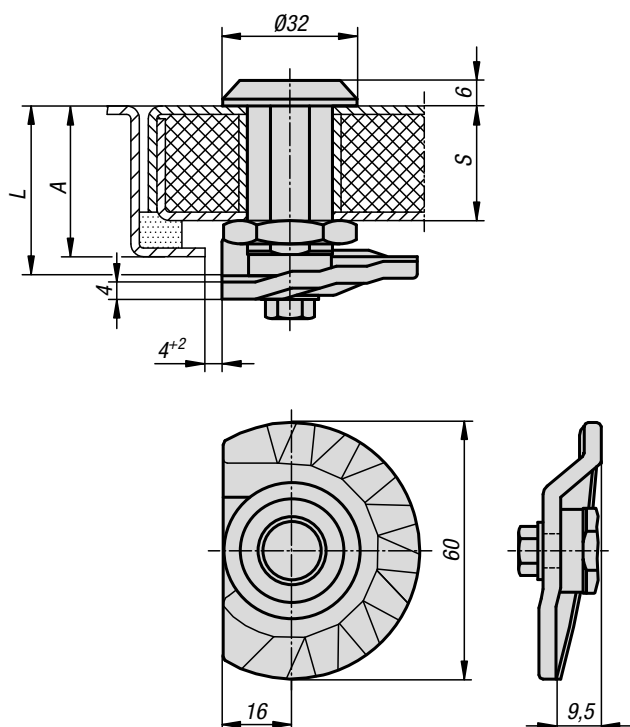
| Order No.  | Actuation       | H    | SW |
|------------|-----------------|------|----|
| K0526.1183 | T-Grip          | 18,5 | 27 |
| K0526.2183 | lockable T-grip | 18,5 | 27 |

## KIPP Tongue for quarter-turn locks

| Order No.  | A                                                                                                     | L  |
|------------|-------------------------------------------------------------------------------------------------------|----|
| K0523.135X | 16,5/18,5/20,5/22,5/24,5                                                                              | 35 |
| K0523.145X | 4,5/6,5/8,5/10,5/12,5/14,5/16,5/18,5/20,5/21,5/22,5/24,5/26,5/28,5/30,5/32,5/34,5/36,5/38,5/40,5/42,5 | 45 |

## Compression latches

with stepped cam



### Material:

Housing, actuator, nut and cam die-cast zinc.  
Flat seal rubber.

### Version:

Housing, actuator, nut and cam, chrome-plated.

### Sample order:

Compression latch K0527.17301

### Note:

Compression latches with stepped cam are primarily used for doors and housings that require a high pressure on the seal. Right or left deployment. The locking direction is always clockwise. By turning the actuator to the right the door can be pulled incrementally into the frame by up to 9.5 mm at a maximum rotation of 270°.

The fastening nut is an earthing nut with teeth one side.

Water and dust tight according to IP65.

### Accessories:

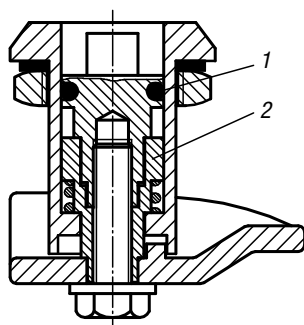
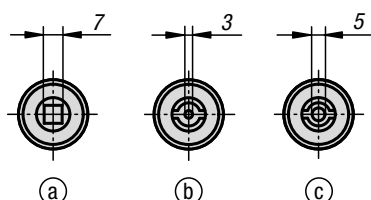
Key K0535

### Drawing reference:

Actuation:

- a) square 7 mm
- b) double lug 3 mm
- c) double lug 5 mm

- 1) O-ring
- 2) Adapter



## KIPP Compression latches with stepped cam

| Order No.<br>square 7 mm | Order No.<br>double lug 3 mm | Order No.<br>double lug 5 mm | A       | L  | S<br>max. |
|--------------------------|------------------------------|------------------------------|---------|----|-----------|
| K0527.17301              | K0527.43301                  | K0527.45301                  | 30 -9,5 | 30 | 20        |
| K0527.17401              | K0527.43401                  | K0527.45401                  | 40 -9,5 | 40 | 30        |
| K0527.17501              | K0527.43501                  | K0527.45501                  | 50 -9,5 | 50 | 40        |
| K0527.17601              | K0527.43601                  | K0527.45601                  | 60 -9,5 | 60 | 50        |

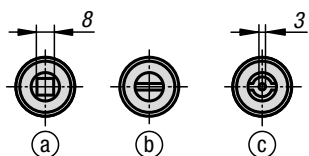
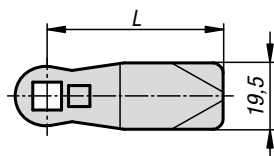
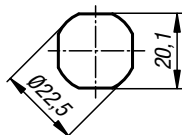
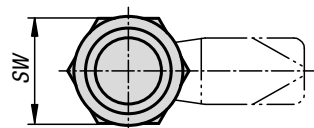
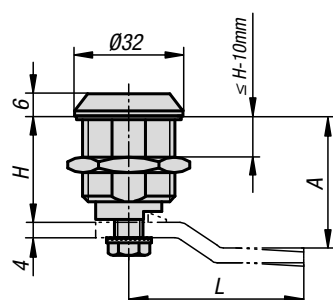


A large rectangular area filled with a light gray grid pattern, intended for taking notes.



## Quarter-turn locks

long version



### Material:

Housing and actuator die-cast zinc.  
Tongue steel.

### Version:

Housing and actuator trivalent passivated.  
Tongue electro zinc-plated.

### Sample order:

Quarter turn lock K1113.18301  
Tongue K1114.145X040

### Note:

Rating IP65. This is achieved using an additional O-ring underneath the actuator and a flat seal attached to the housing. The quarter-turn lock can be installed pre-assembled. Please order the required tongue separately. Every tongue can be combined with this housing.

### Accessories:

Key K0535

### Drawing reference:

Actuation:

- a) square 8 mm
- b) slot
- c) double lug 3 mm

# Quarter-turn locks

long version



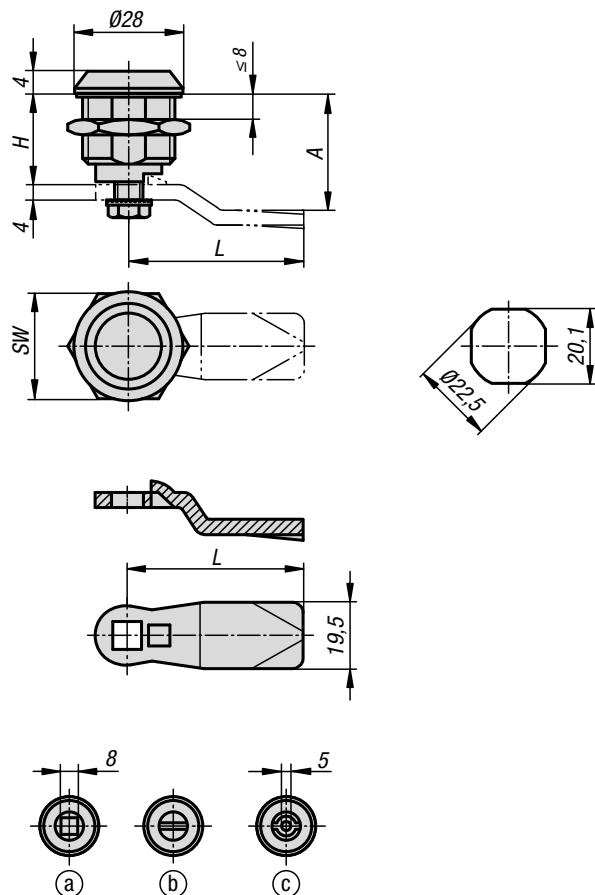
## KIPP Quarter-turn locks long version

| Order No.   | H  | Actuation       | SW |
|-------------|----|-----------------|----|
| K1113.18301 | 30 | square 8 mm     | 27 |
| K1113.40301 | 30 | double lug 3 mm | 27 |
| K1113.20301 | 30 | slot            | 27 |
| K1113.18401 | 40 | square 8 mm     | 27 |
| K1113.40401 | 40 | double lug 3 mm | 27 |
| K1113.20401 | 40 | slot            | 27 |
| K1113.18501 | 50 | square 8 mm     | 27 |
| K1113.40501 | 50 | double lug 3 mm | 27 |
| K1113.20501 | 50 | slot            | 27 |

## KIPP Tongue for quarter-turn locks

| Order No.     | A<br>for housing length<br>H=30 | A<br>for housing length<br>H=40 | A<br>for housing length<br>H=50 | L  |
|---------------|---------------------------------|---------------------------------|---------------------------------|----|
| K1114.145X040 | 16                              | 26                              | 36                              | 45 |
| K1114.145X060 | 18                              | 28                              | 38                              | 45 |
| K1114.145X080 | 20                              | 30                              | 40                              | 45 |
| K1114.145X100 | 22                              | 32                              | 42                              | 45 |
| K1114.145X120 | 24                              | 34                              | 44                              | 45 |
| K1114.145X140 | 26                              | 36                              | 46                              | 45 |
| K1114.145X160 | 28                              | 38                              | 48                              | 45 |
| K1114.145X180 | 30                              | 40                              | 50                              | 45 |
| K1114.145X200 | 32                              | 42                              | 52                              | 45 |
| K1114.145X220 | 34                              | 44                              | 54                              | 45 |
| K1114.145X240 | 36                              | 46                              | 56                              | 45 |
| K1114.145X260 | 38                              | 48                              | 58                              | 45 |
| K1114.145X280 | 40                              | 50                              | 60                              | 45 |
| K1114.145X300 | 42                              | 52                              | 62                              | 45 |
| K1114.145X320 | 44                              | 54                              | 64                              | 45 |
| K1114.145X340 | 46                              | 56                              | 66                              | 45 |
| K1114.145X360 | 48                              | 58                              | 68                              | 45 |
| K1114.145X380 | 50                              | 60                              | 70                              | 45 |
| K1114.145X400 | 52                              | 62                              | 72                              | 45 |
| K1114.145X420 | 54                              | 64                              | 74                              | 45 |

## Quarter-turn locks, stainless steel



### Material:

Quarter-turn lock 1.4305 stainless steel.  
Tongue 1.4301 stainless steel.

### Version:

Bright.

### Sample order:

Quarter turn lock K1106.40186  
Tongue K1114.245X180

### Note:

Rating IP65. This is achieved using an additional O-ring underneath the actuator and a PUR seal foamed onto the housing. The quarter-turn lock can be installed pre-assembled. Please order the required tongue separately. Every tongue can be combined with this housing.

### Drawing reference:

Actuation:

- a) square 8 mm
- b) slot
- c) double lug 5 mm

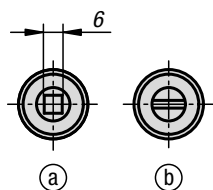
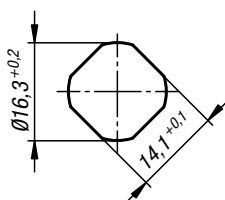
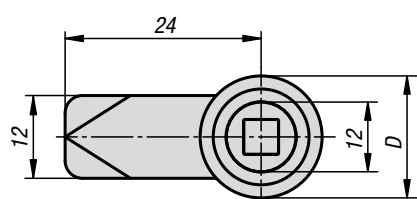
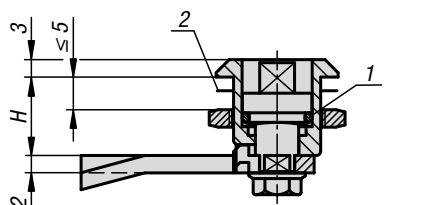
## KIPP Quarter-turn locks, stainless steel

| Order No.   | Actuation       | H  | SW |
|-------------|-----------------|----|----|
| K1106.40186 | double lug 5 mm | 18 | 27 |
| K1106.20186 | slot            | 18 | 27 |
| K1106.18186 | square 8 mm     | 18 | 27 |

## KIPP Tongue for quarter-turn locks

| Order No.     | A<br>for housing length<br>H=18 | L  |
|---------------|---------------------------------|----|
| K1114.245X180 | 18                              | 45 |
| K1114.245X200 | 20                              | 45 |
| K1114.245X240 | 24                              | 45 |
| K1114.245X280 | 28                              | 45 |
| K1114.245X320 | 32                              | 45 |
| K1114.245X340 | 34                              | 45 |
| K1114.245X360 | 36                              | 45 |
| K1114.245X380 | 38                              | 45 |
| K1114.245X400 | 40                              | 45 |
| K1114.245X420 | 42                              | 45 |

## Quarter-turn locks, stainless steel



### Material:

Quarter-turn lock 1.4401 stainless steel.  
Tongue 1.4301 stainless steel.

### Version:

Bright.

### Sample order:

K1360.1613

### Note:

The lock can be installed pre-assembled and has a 90° closing angle.  
It is protected against water and dust according to IP65 of EN 60529.

### Accessories:

Key K0535

### Drawing reference:

Actuation:

- a) square 6 mm
- b) slot

1) O-ring

2) flat seal

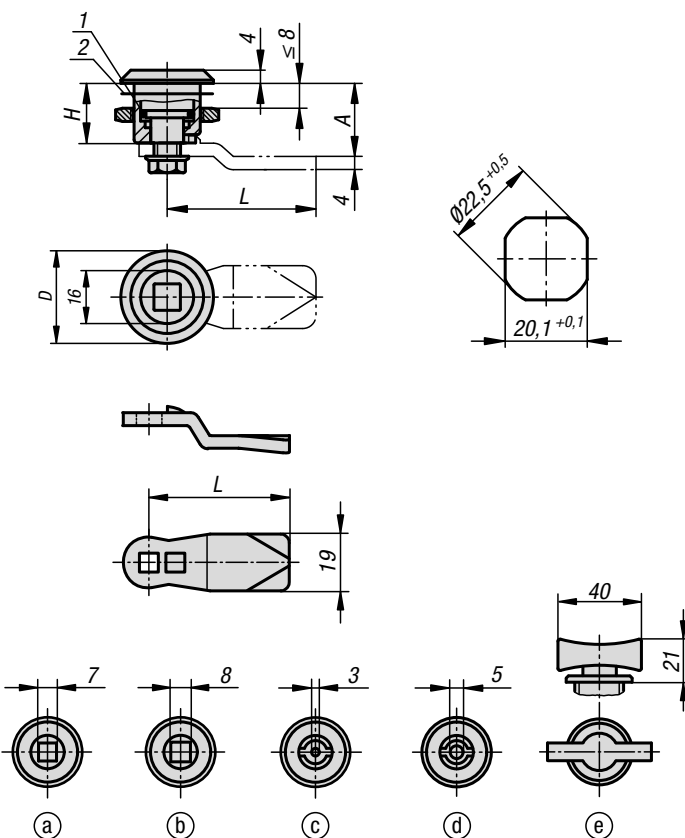
## KIPP Quarter-turn locks, stainless steel

| Order No.  | Actuation   | D  | H    |
|------------|-------------|----|------|
| K1360.1613 | square 6 mm | 20 | 13,5 |
| K1360.2013 | slot        | 20 | 13,5 |



## Quarter-turn locks, stainless steel

small version



### Material:

Housing 1.4404 stainless steel.

Actuation and fastening nut 1.4404 stainless steel.

Tongue 1.4301 stainless steel.

### Version:

Bright.

### Sample order:

Quarter turn lock K1351.1718

Tongue K1340.45060

### Note:

The quarter turn lock can be installed pre-assembled.

For right or left use. Water and dust protected acc. to IP65 from DIN EN 60529.

Please order required tongue version separately. Every tongue can be combined with every housing.

### Accessories:

Key K0535

### Drawing reference:

Actuation:

- a) square 7 mm
- b) square 8 mm
- c) double lug 3 mm
- d) double lug 5 mm
- e) wing grip

1) O-ring

2) flat seal

# Quarter-turn locks, stainless steel

small version



## KIPP Quarter-turn locks, stainless steel, small version

| Order No.  | Actuation       | D  | H  |
|------------|-----------------|----|----|
| K1351.1718 | square 7 mm     | 28 | 18 |
| K1351.1818 | square 8 mm     | 28 | 18 |
| K1351.4318 | double lug 3 mm | 28 | 18 |
| K1351.4518 | double lug 5 mm | 28 | 18 |
| K1351.0018 | grip            | 28 | 18 |

## KIPP Tongue for quarter-turn locks

| Order No.   | A  | L  |
|-------------|----|----|
| K1340.45060 | 6  | 45 |
| K1340.45080 | 8  | 45 |
| K1340.45100 | 10 | 45 |
| K1340.45140 | 14 | 45 |
| K1340.45160 | 16 | 45 |
| K1340.45180 | 18 | 45 |
| K1340.45200 | 20 | 45 |
| K1340.45220 | 22 | 45 |
| K1340.45240 | 24 | 45 |
| K1340.45260 | 26 | 45 |
| K1340.45280 | 28 | 45 |
| K1340.45320 | 32 | 45 |
| K1340.45500 | 50 | 45 |

## Quarter-turn locks, stainless steel

long version



### Material:

Housing 1.4305 stainless steel.

Actuation and fastening nut 1.4404 stainless steel.

Tongue 1.4301 stainless steel.

### Version:

Bright.

### Sample order:

Quarter turn lock K1352.1730

Tongue K1340.45060

### Note:

The quarter turn lock can be installed pre-assembled.  
For right or left use. Water and dust protected acc. to IP65 from DIN EN 60529.

Please order required tongue version separately. Every tongue can be combined with every housing.

### Accessories:

Key K0535

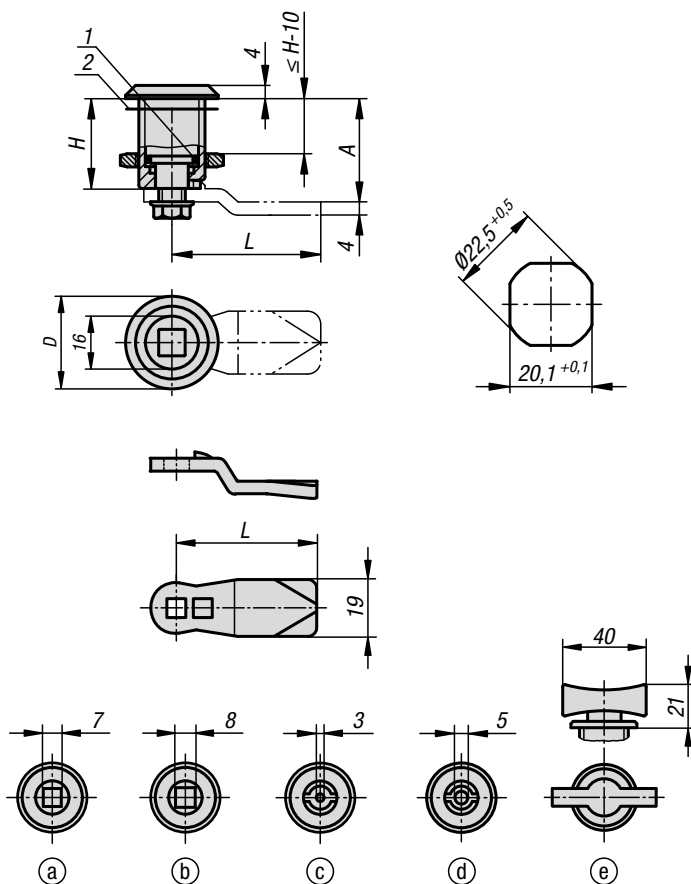
### Drawing reference:

Actuation:

- a) square 7 mm
- b) square 8 mm
- c) double lug 3 mm
- d) double lug 5 mm
- e) wing grip

1) O-ring

2) flat seal



# Quarter-turn locks, stainless steel

long version



## KIPP Quarter-turn locks, stainless steel, long version

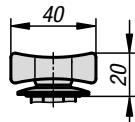
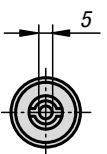
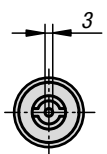
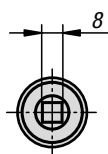
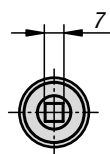
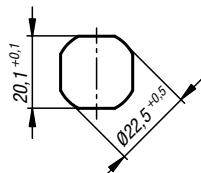
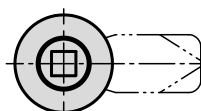
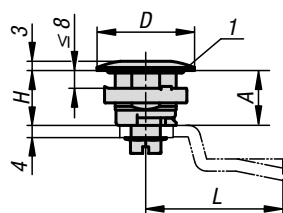
| Order No.  | Actuation       | D  | H  |
|------------|-----------------|----|----|
| K1352.1730 | square 7 mm     | 28 | 30 |
| K1352.1736 | square 7 mm     | 28 | 36 |
| K1352.1740 | square 7 mm     | 28 | 40 |
| K1352.1750 | square 7 mm     | 28 | 50 |
| K1352.1760 | square 7 mm     | 28 | 60 |
| K1352.1830 | square 8 mm     | 28 | 30 |
| K1352.1836 | square 8 mm     | 28 | 36 |
| K1352.1840 | square 8 mm     | 28 | 40 |
| K1352.1850 | square 8 mm     | 28 | 50 |
| K1352.1860 | square 8 mm     | 28 | 60 |
| K1352.4330 | double lug 3 mm | 28 | 30 |
| K1352.4336 | double lug 3 mm | 28 | 36 |
| K1352.4340 | double lug 3 mm | 28 | 40 |
| K1352.4350 | double lug 3 mm | 28 | 50 |
| K1352.4360 | double lug 3 mm | 28 | 60 |
| K1352.4530 | double lug 5 mm | 28 | 30 |
| K1352.4536 | double lug 5 mm | 28 | 36 |
| K1352.4540 | double lug 5 mm | 28 | 40 |
| K1352.4550 | double lug 5 mm | 28 | 50 |
| K1352.4560 | double lug 5 mm | 28 | 60 |
| K1352.0030 | grip            | 28 | 30 |
| K1352.0036 | grip            | 28 | 36 |
| K1352.0040 | grip            | 28 | 40 |
| K1352.0050 | grip            | 28 | 50 |
| K1352.0060 | grip            | 28 | 60 |

## KIPP Tongue for quarter-turn locks

| Order No.   | A<br>for housing length<br>H=30 | A<br>for housing length<br>H=36 | A<br>for housing length<br>H=40 | A<br>for housing length<br>H=50 | A<br>for housing length<br>H=60 | L  |
|-------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|----|
| K1340.45060 | 18                              | 24                              | 28                              | 38                              | 48                              | 45 |
| K1340.45080 | 20                              | 26                              | 30                              | 40                              | 50                              | 45 |
| K1340.45100 | 22                              | 28                              | 32                              | 42                              | 52                              | 45 |
| K1340.45140 | 26                              | 32                              | 36                              | 46                              | 56                              | 45 |
| K1340.45160 | 28                              | 34                              | 38                              | 48                              | 58                              | 45 |
| K1340.45180 | 30                              | 36                              | 40                              | 50                              | 60                              | 45 |
| K1340.45200 | 32                              | 38                              | 42                              | 52                              | 62                              | 45 |
| K1340.45220 | 34                              | 40                              | 44                              | 54                              | 64                              | 45 |
| K1340.45240 | 36                              | 42                              | 46                              | 56                              | 66                              | 45 |
| K1340.45260 | 38                              | 44                              | 48                              | 58                              | 68                              | 45 |
| K1340.45280 | 40                              | 46                              | 50                              | 60                              | 70                              | 45 |
| K1340.45320 | 44                              | 50                              | 54                              | 64                              | 74                              | 45 |
| K1340.45500 | 62                              | 68                              | 72                              | 82                              | 92                              | 45 |

## Quarter-turn locks, stainless steel

small version



(a)

(b)

(c)

(d)

(e)



### Material:

Housing and fastening nut 1.4404 stainless steel.

Actuator 1.4401.

O-ring NBR.

Tongue 1.4301 stainless steel.

### Version:

Bright.

### Sample order:

Quarter turn lock K1339.1718

Tongue K1340.45060

### Note:

The quarter turn lock can be installed pre-assembled.

For right or left use.

Water and dust protected acc. to IP65 to DIN EN 60529.

Please order required tongue version separately. Every tongue can be combined with every housing.

### Accessories:

Key K0535

### Drawing reference:

Actuation:

a) square 7 mm

b) square 8 mm

c) double lug 3 mm

d) double lug 5 mm

e) wing grip

1) O-ring

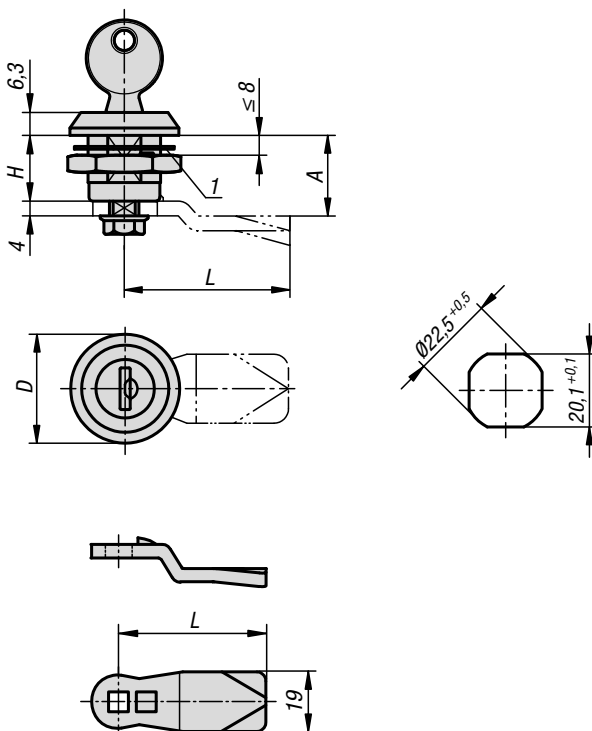
### KIPP Quarter-turn locks, stainless steel, small version

| Order No.  | Actuation       | D  | H  |
|------------|-----------------|----|----|
| K1339.1718 | square 7 mm     | 32 | 18 |
| K1339.1818 | square 8 mm     | 32 | 18 |
| K1339.4318 | double lug 3 mm | 32 | 18 |
| K1339.4518 | double lug 5 mm | 32 | 18 |
| K1339.0018 | grip            | 32 | 18 |

### KIPP Tongue for quarter-turn locks

| Order No.   | A  | L  |
|-------------|----|----|
| K1340.45060 | 6  | 45 |
| K1340.45080 | 8  | 45 |
| K1340.45100 | 10 | 45 |
| K1340.45140 | 14 | 45 |
| K1340.45160 | 16 | 45 |
| K1340.45180 | 18 | 45 |
| K1340.45200 | 20 | 45 |
| K1340.45220 | 22 | 45 |
| K1340.45240 | 24 | 45 |
| K1340.45260 | 26 | 45 |
| K1340.45280 | 28 | 45 |
| K1340.45320 | 32 | 45 |
| K1340.45500 | 50 | 45 |

## Quarter-turn locks lockable, stainless steel

**Material:**

Quarter-turn lock 1.4401 stainless steel.  
Tongue 1.4301 stainless steel.

**Version:**

Bright.

**Sample order:**

Quarter turn lock K1355.18  
Tongue K1340.45060

**Note:**

The quarter turn lock can be installed pre-assembled.  
Housing with fastening nut and plate cylinder, same  
key locking, incl. 2 keys (lock type 1333).

Please order required tongue version separately. Every  
tongue can be combined with every housing.

**Drawing reference:**

1) flat seal

**KIPP Quarter-turn lock, lockable, stainless steel**

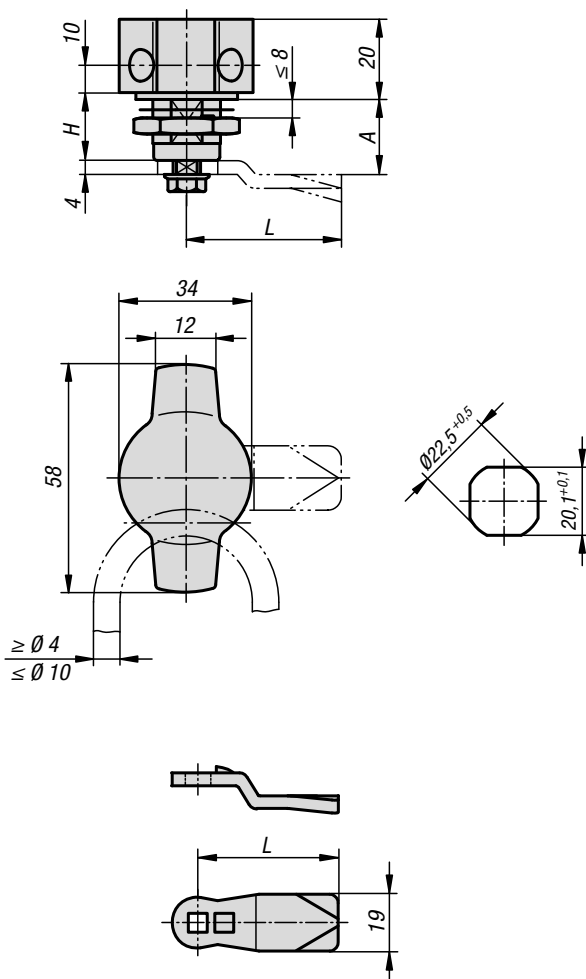
| Order No. | Actuation             | D  | H  |
|-----------|-----------------------|----|----|
| K1355.18  | key single-key system | 30 | 18 |

**KIPP Tongue for quarter-turn lock**

| Order No.   | A  | L  |
|-------------|----|----|
| K1340.45060 | 6  | 45 |
| K1340.45080 | 8  | 45 |
| K1340.45100 | 10 | 45 |
| K1340.45140 | 14 | 45 |
| K1340.45160 | 16 | 45 |
| K1340.45180 | 18 | 45 |
| K1340.45200 | 20 | 45 |
| K1340.45220 | 22 | 45 |
| K1340.45240 | 24 | 45 |
| K1340.45260 | 26 | 45 |
| K1340.45280 | 28 | 45 |
| K1340.45320 | 32 | 45 |
| K1340.45500 | 50 | 45 |

## Quarter-turn lock, stainless steel

with wing grip



### Material:

Quarter-turn lock 1.4401 stainless steel.  
Tongue 1.4301 stainless steel.

### Version:

Bright.  
Grip polished.

### Sample order:

Quarter turn lock K1358.18  
Tongue K1340.45060

### Note:

Quarter-turn lock with wing grip. Right or left deployment. The lock can be installed pre-assembled.

Water and dust tight according to IP65.

Please order the desired tongue type separately. Every tongue can be combined with every housing.

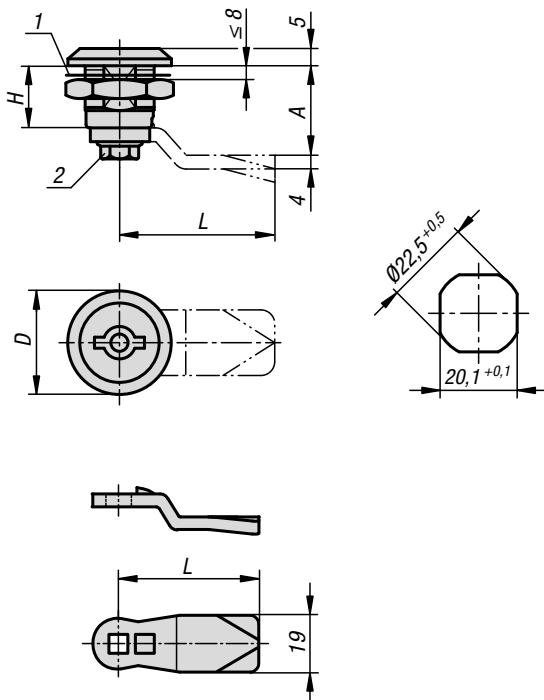
### KIPP Quarter-turn lock, stainless steel with wing grip

| Order No. | Actuation     | H  |
|-----------|---------------|----|
| K1358.18  | lockable grip | 18 |

### KIPP Tongue for quarter-turn lock

| Order No.   | A  | L  |
|-------------|----|----|
| K1340.45060 | 6  | 45 |
| K1340.45080 | 8  | 45 |
| K1340.45100 | 10 | 45 |
| K1340.45140 | 14 | 45 |
| K1340.45160 | 16 | 45 |
| K1340.45180 | 18 | 45 |
| K1340.45200 | 20 | 45 |
| K1340.45220 | 22 | 45 |
| K1340.45240 | 24 | 45 |
| K1340.45260 | 26 | 45 |
| K1340.45280 | 28 | 45 |
| K1340.45320 | 32 | 45 |
| K1340.45500 | 50 | 45 |

## Quarter-turn security locks, stainless steel



### Material:

Quarter-turn lock 1.4401 stainless steel.  
Tongue 1.4301 stainless steel.

### Version:

Bright.

### Sample order:

Quarter turn lock K1350.14518  
Tongue K1340.45060

### Note:

The secure quarter turn lock is shock and vibration-resistant acc. to DIN 43668 even under high pressing force due to a built-in restrictor element. Actuation without a suitable key is not possible. The key can be removed only in the locked position. quarter turn lock, pre-assembled. Right version = closes anti-clockwise. Left version = closes clockwise. Water and dust protected acc. to IP65 from DIN EN 60529.

Please order required tongue version separately. Every tongue can be combined with every housing.

### Accessories:

Key K0535

### Drawing reference:

- 1) flat seal
- 2) self-locking screw

### KIPP Quarter-turn security locks, stainless steel

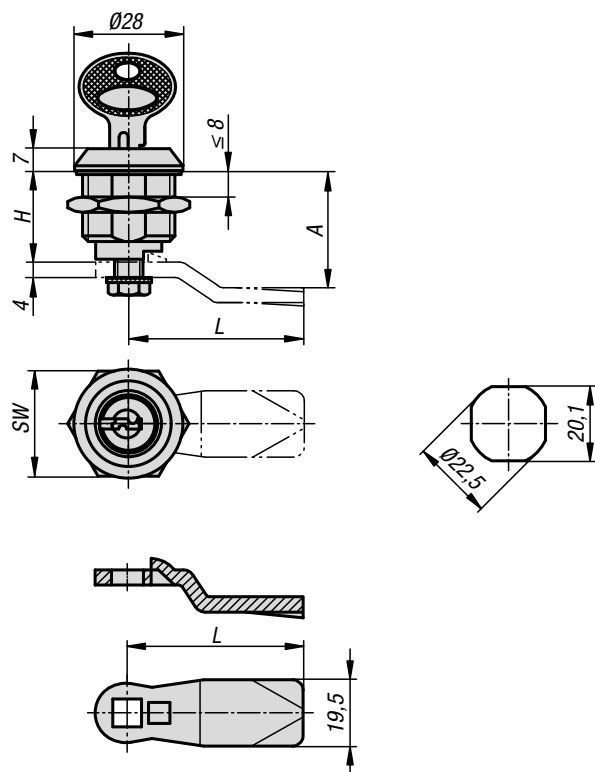
| Order No.   | Version 1 | Actuation       | D  | H  |
|-------------|-----------|-----------------|----|----|
| K1350.14518 | right     | double lug 5 mm | 30 | 18 |
| K1350.24518 | left      | double lug 5 mm | 30 | 18 |

### KIPP Tongue for quarter-turn locks

| Order No.   | A  | L  |
|-------------|----|----|
| K1340.45060 | 6  | 45 |
| K1340.45080 | 8  | 45 |
| K1340.45100 | 10 | 45 |
| K1340.45140 | 14 | 45 |
| K1340.45160 | 16 | 45 |
| K1340.45180 | 18 | 45 |
| K1340.45200 | 20 | 45 |
| K1340.45220 | 22 | 45 |
| K1340.45240 | 24 | 45 |
| K1340.45260 | 26 | 45 |
| K1340.45280 | 28 | 45 |
| K1340.45320 | 32 | 45 |
| K1340.45500 | 50 | 45 |



## Quarter-turn locks, stainless steel, lockable



### Material:

Quarter-turn lock 1.4401 stainless steel.  
Tongue 1.4301 stainless steel.

### Version:

Bright.

### Sample order:

Quarter turn lock K1107.186  
Tongue K1114.245X180

### Note:

Lockable quarter-turn lock for right or left mounting with 90° closing. The quarter-turn lock can be installed pre-assembled. This lockable quarter-turn lock is supplied with 2 keys. The key can be removed in both the closed and open position. The cylinder locks have a single-key system i.e. the same key works in all locks (lock type 1333).

Please order required tongue separately. Every tongue can be combined with this housing.

## KIPP Quarter-turn lock, stainless steel, lockable

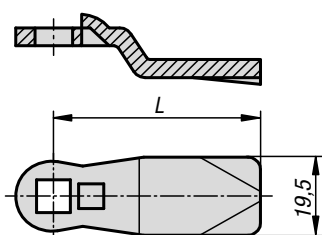
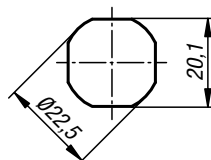
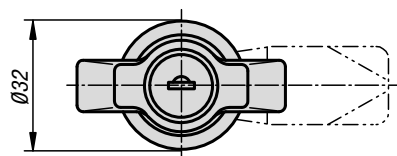
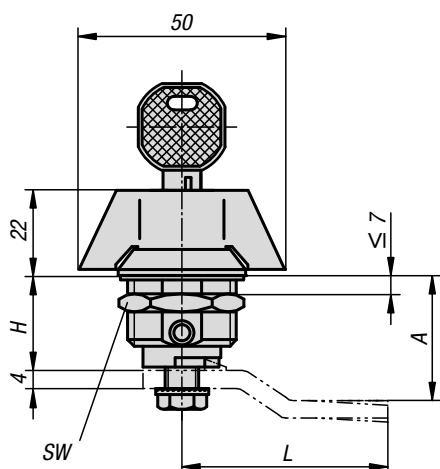
| Order No. | Actuation             | H  | SW |
|-----------|-----------------------|----|----|
| K1107.186 | key single-key system | 18 | 27 |

## KIPP Tongue for quarter-turn lock

| Order No.     | A<br>for housing length<br>H=18 | L  |
|---------------|---------------------------------|----|
| K1114.245X180 | 18                              | 45 |
| K1114.245X200 | 20                              | 45 |
| K1114.245X240 | 24                              | 45 |
| K1114.245X280 | 28                              | 45 |
| K1114.245X320 | 32                              | 45 |
| K1114.245X340 | 34                              | 45 |
| K1114.245X360 | 36                              | 45 |
| K1114.245X380 | 38                              | 45 |
| K1114.245X400 | 40                              | 45 |
| K1114.245X420 | 42                              | 45 |

## Quarter-turn locks, stainless steel

with wing grip



### Material:

Quarter-turn lock 1.4401 stainless steel.  
Tongue 1.4301 stainless steel.

### Version:

Bright.

### Sample order:

Quarter turn lock K1108.1186  
Tongue K1114.245X180

### Note:

Quarter-turn lock with wing grip. For right or left mounting with 90° closing. The quarter-turn lock can be installed pre-assembled. Supplied with standard stainless-steel nut. The lockable quarter-turn lock is supplied with 2 keys. The key can be removed in both the closed and open position. The cylinder locks have a single-key system i.e. the same key works in all locks (lock type 1333).

Order the desired tongue separately. Every tongue can be combined with this housing.

## KIPP Quarter-turn locks, stainless steel with wing grip

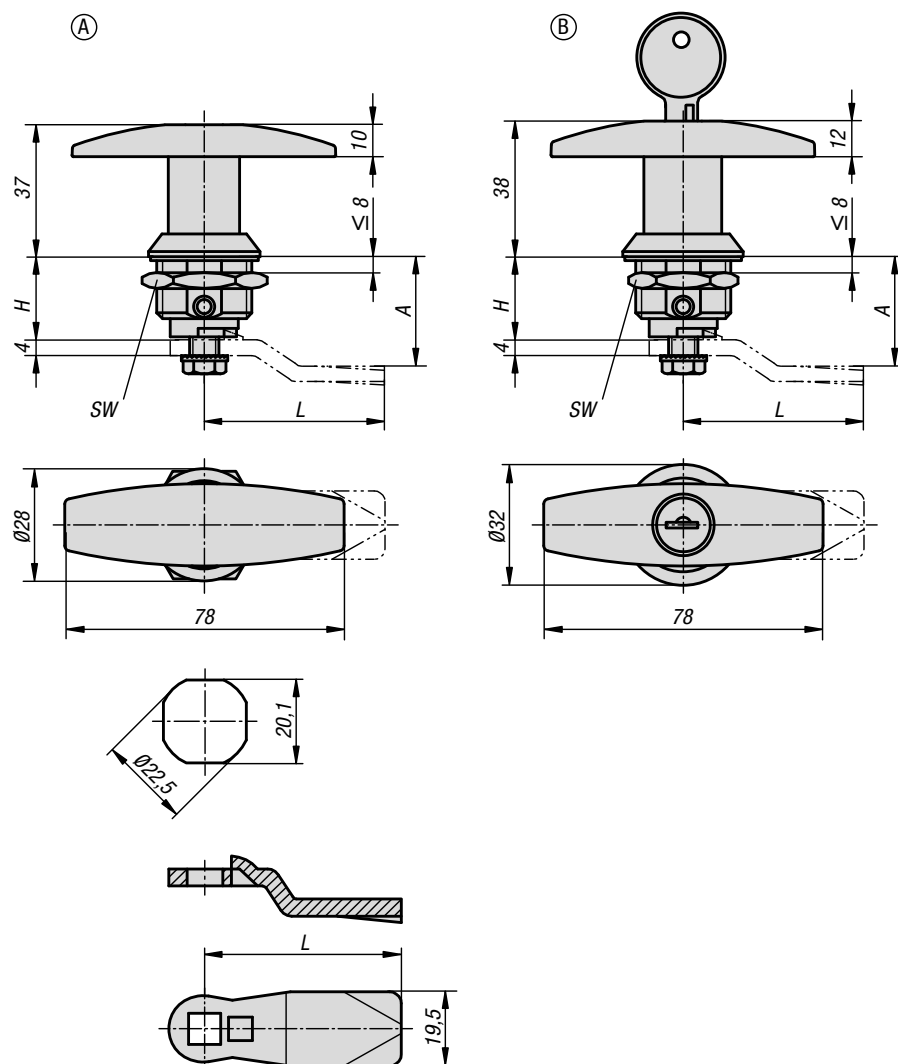
| Order No.  | Actuation     | H  | SW |
|------------|---------------|----|----|
| K1108.1186 | grip          | 18 | 27 |
| K1108.2186 | lockable grip | 18 | 27 |

## KIPP Tongue for quarter-turn locks

| Order No.     | A<br>for housing length<br>H=18 | L  |
|---------------|---------------------------------|----|
| K1114.245X180 | 18                              | 45 |
| K1114.245X200 | 20                              | 45 |
| K1114.245X240 | 24                              | 45 |
| K1114.245X280 | 28                              | 45 |
| K1114.245X320 | 32                              | 45 |
| K1114.245X340 | 34                              | 45 |
| K1114.245X360 | 36                              | 45 |
| K1114.245X380 | 38                              | 45 |
| K1114.245X400 | 40                              | 45 |
| K1114.245X420 | 42                              | 45 |

## Quarter-turn locks, stainless steel

with T-grip



### Material:

Grip and tongue 1.4301 stainless steel.  
Housing and nut 1.4305 stainless steel.

### Version:

Bright.

### Sample order:

Quarter turn lock K1109.1186  
Tongue K1114.245X180

### Note:

Quarter-turn lock with T-grip. For right or left mounting with 90° closing. The quarter-turn lock can be installed pre-assembled. Supplied with standard stainless-steel nut. The lockable quarter-turn lock is supplied with 2 keys. The key can be removed in both the closed and open position. The cylinder locks have a single-key system i.e. the same key works in all locks (lock type 1333).

Rating IP65.

Order the desired tongue separately. Every tongue can be combined with this housing.

### KIPP Quarter-turn locks, stainless steel with T-grip

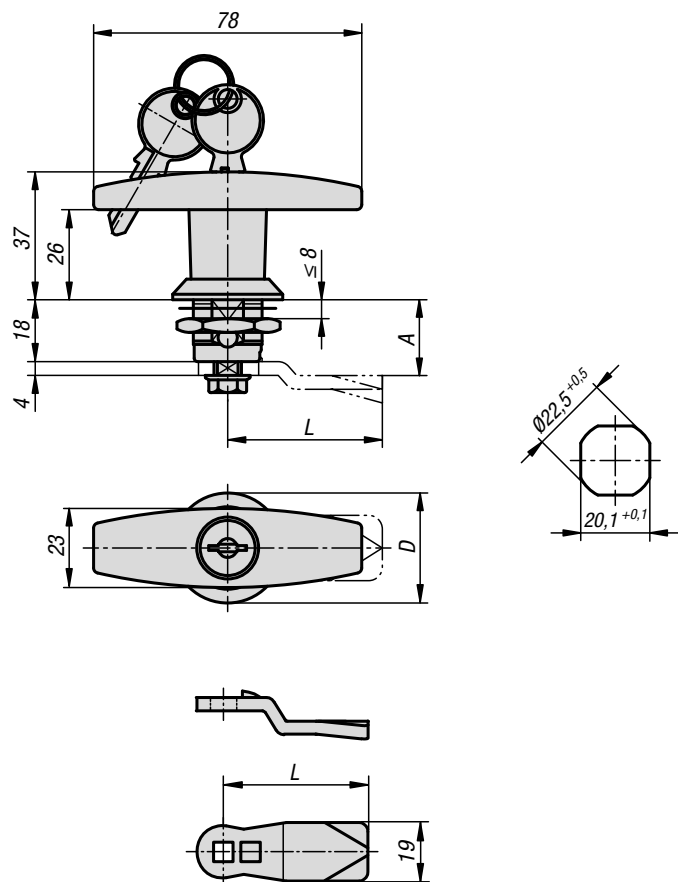
| Order No.  | Form | Actuation       | H  | SW |
|------------|------|-----------------|----|----|
| K1109.1186 | A    | T-Grip          | 18 | 27 |
| K1109.2186 | B    | lockable T-grip | 18 | 27 |

### KIPP Tongue for quarter-turn lock

| Order No.     | A<br>for housing length<br>H=18 | L  |
|---------------|---------------------------------|----|
| K1114.245X180 | 18                              | 45 |
| K1114.245X200 | 20                              | 45 |
| K1114.245X240 | 24                              | 45 |
| K1114.245X280 | 28                              | 45 |
| K1114.245X320 | 32                              | 45 |
| K1114.245X340 | 34                              | 45 |
| K1114.245X360 | 36                              | 45 |
| K1114.245X380 | 38                              | 45 |
| K1114.245X400 | 40                              | 45 |
| K1114.245X420 | 42                              | 45 |

# Quarter-turn locks, stainless steel

with T-grip



## Material:

Quarter-turn lock 1.4401 stainless steel.  
Tongue 1.4301 stainless steel.

## Version:

Bright.  
Grip polished.

## Sample order:

Quarter turn lock K1356.1186  
Tongue K1340.45060

## Note:

Quarter-turn lock with T-grip. For right or left mounting with 90° closing. The quarter-turn lock can be installed pre-assembled. Supplied with standard stainless-steel nut. The lockable quarter-turn locks are each supplied with 2 keys. Rating IP65. Please order required tongue version separately. Every tongue can be combined with this housing.

The cylinder locks have a single-key system i.e. the same key works in all locks.

## On request:

Available for door thickness 20 and 40 mm.

## KIPP Quarter-turn locks, stainless steel with T-grip

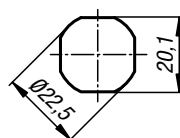
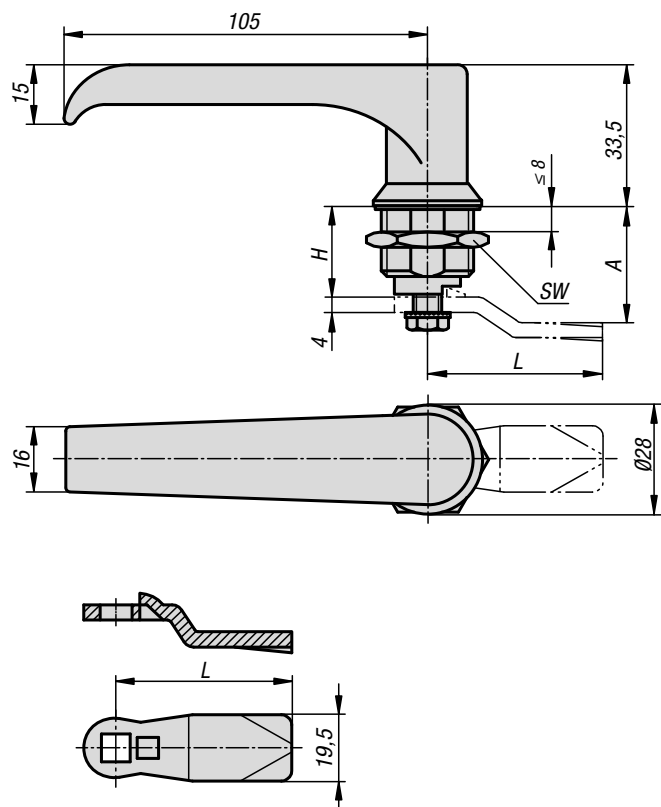
| Order No.  | Actuation       | D  |
|------------|-----------------|----|
| K1356.1186 | T-Grip          | 32 |
| K1356.2186 | lockable T-grip | 32 |

## KIPP Tongue for quarter-turn locks

| Order No.   | A  | L  |
|-------------|----|----|
| K1340.45060 | 6  | 45 |
| K1340.45080 | 8  | 45 |
| K1340.45100 | 10 | 45 |
| K1340.45140 | 14 | 45 |
| K1340.45160 | 16 | 45 |
| K1340.45180 | 18 | 45 |
| K1340.45200 | 20 | 45 |
| K1340.45220 | 22 | 45 |
| K1340.45240 | 24 | 45 |
| K1340.45260 | 26 | 45 |
| K1340.45280 | 28 | 45 |
| K1340.45320 | 32 | 45 |
| K1340.45500 | 50 | 45 |

# Quarter-turn lock, stainless steel

with L-grip


**Material:**

Grip and tongue 1.4301 stainless steel.  
Housing and nut 1.4305 stainless steel.

**Version:**

Bright.

**Sample order:**

Quarter turn lock K1110.1186  
Tongue K1114.245X180

**Note:**

Quarter-turn lock with L-grip. For right or left mounting with 90° closing. The quarter-turn lock can be installed pre-assembled. Supplied with standard stainless-steel nut. Rating IP65. Please order required tongue version separately. Every tongue can be combined with this housing.

## KIPP Quarter-turn lock, stainless steel with L-grip

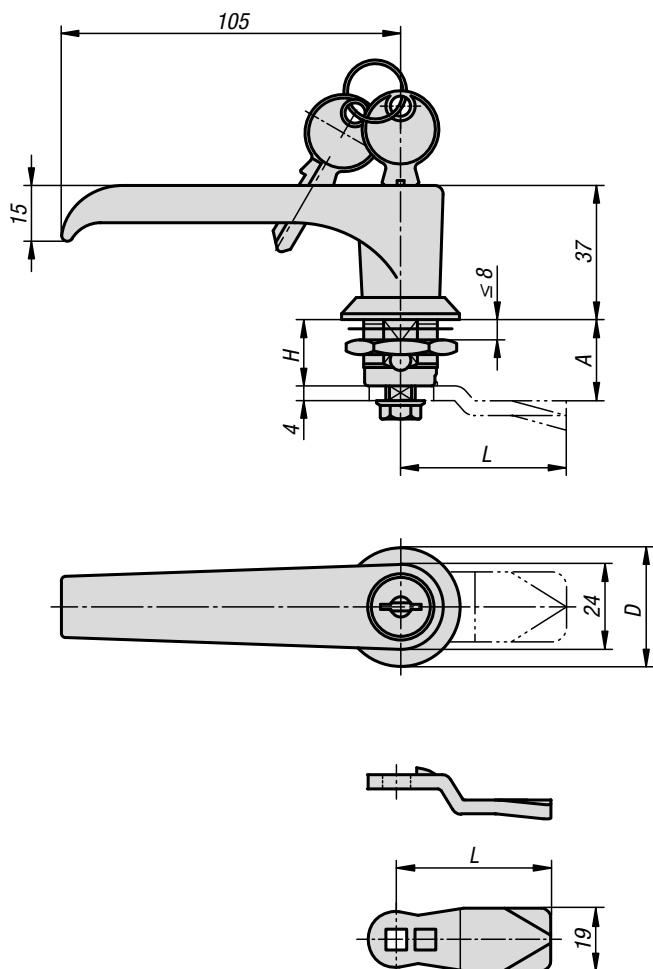
| Order No.  | Actuation | H  | SW |
|------------|-----------|----|----|
| K1110.1186 | L-grip    | 18 | 27 |

## KIPP Tongue for quarter-turn lock

| Order No.     | A<br>for housing length<br>H=18 | L  |
|---------------|---------------------------------|----|
| K1114.245X180 | 18                              | 45 |
| K1114.245X200 | 20                              | 45 |
| K1114.245X240 | 24                              | 45 |
| K1114.245X280 | 28                              | 45 |
| K1114.245X320 | 32                              | 45 |
| K1114.245X340 | 34                              | 45 |
| K1114.245X360 | 36                              | 45 |
| K1114.245X380 | 38                              | 45 |
| K1114.245X400 | 40                              | 45 |
| K1114.245X420 | 42                              | 45 |

## Quarter-turn locks, stainless steel

with L-grip



### Material:

Quarter-turn lock 1.4401 stainless steel.  
Tongue 1.4301 stainless steel.

### Version:

Bright.  
Grip polished.

### Sample order:

Quarter turn lock K1359.118  
Tongue K1340.45060

### Note:

Quarter-turn lock with L-grip. For right or left mounting with 90° closing. The quarter-turn lock can be installed pre-assembled. Rating IP65. Please order required tongue version separately. Every tongue can be combined with this housing.

The lockable quarter-turn locks are each supplied with 2 keys. The cylinder locks have a single-key system i.e. the same key works in all locks.

### On request:

Available for door thickness 20 and 40 mm.

### KIPP Quarter-turn locks, stainless steel with L-grip

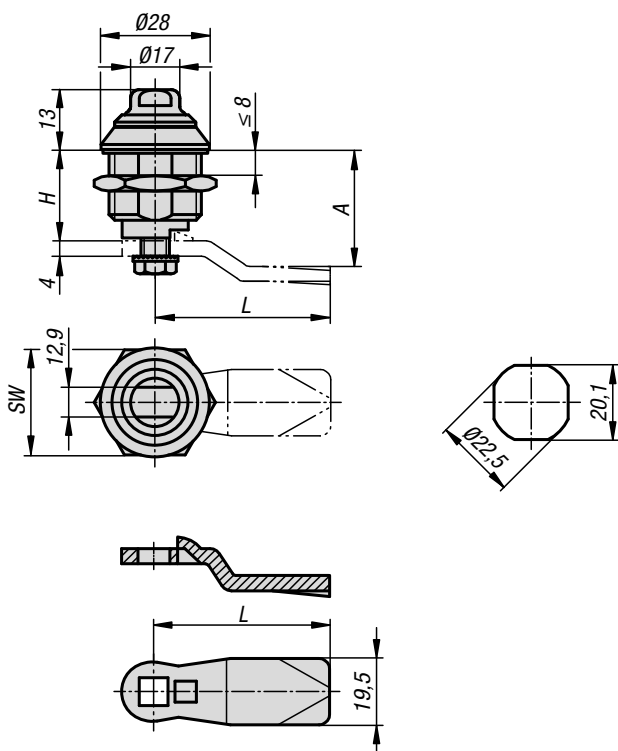
| Order No. | Actuation       | D  | H  |
|-----------|-----------------|----|----|
| K1359.118 | L-grip          | 32 | 18 |
| K1359.218 | lockable L-grip | 32 | 18 |

### KIPP Tongue for quarter-turn locks

| Order No.   | A  | L  |
|-------------|----|----|
| K1340.45060 | 6  | 45 |
| K1340.45080 | 8  | 45 |
| K1340.45100 | 10 | 45 |
| K1340.45140 | 14 | 45 |
| K1340.45160 | 16 | 45 |
| K1340.45180 | 18 | 45 |
| K1340.45200 | 20 | 45 |
| K1340.45220 | 22 | 45 |
| K1340.45240 | 24 | 45 |
| K1340.45260 | 26 | 45 |
| K1340.45280 | 28 | 45 |
| K1340.45320 | 32 | 45 |
| K1340.45500 | 50 | 45 |

# Quarter-turn lock

for sterile areas



## Material:

Quarter-turn lock 1.4305 stainless steel.

Tongue 1.4301 stainless steel.

## Version:

Bright.

## Sample order:

Quarter turn lock K1111.60186

Tongue K1114.245X180

## Note:

Stainless steel quarter-turn lock with 13 mm AF actuator for applications with hygienic requirements as per EN ISO 14159, EN 1672-2:2009\*. Dust and waterproof as per IP69K. The rounded form and polished surfaces together with the material used make these locks insensitive to cleaning materials and resistant to dirt. The seal between the quarter-turn lock and the door is made using the captive PUR foam seal on the underside of the quarter-turn lock housing.

## Accessories:

Key K1335.113

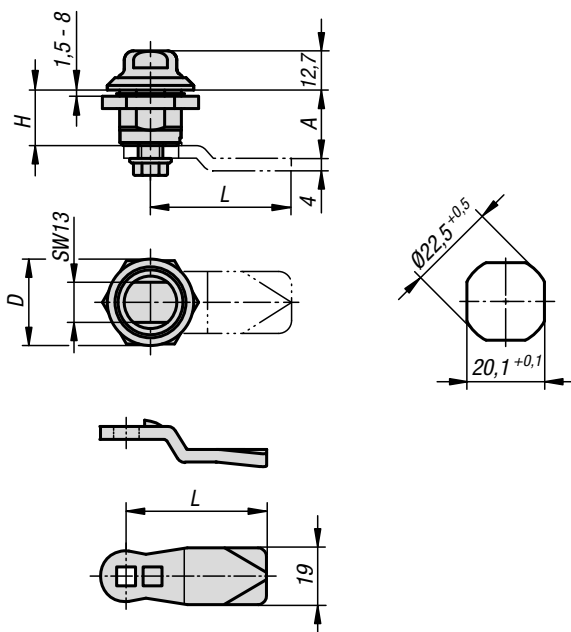
## KIPP Quarter-turn lock for sterile areas

| Order No.   | Actuation   | H  | SW |
|-------------|-------------|----|----|
| K1111.60186 | double flat | 18 | 27 |

## KIPP Tongue for quarter-turn lock

| Order No.     | A<br>for housing length<br>H=18 | L  |
|---------------|---------------------------------|----|
| K1114.245X180 | 18                              | 45 |
| K1114.245X200 | 20                              | 45 |
| K1114.245X240 | 24                              | 45 |
| K1114.245X280 | 28                              | 45 |
| K1114.245X320 | 32                              | 45 |
| K1114.245X340 | 34                              | 45 |
| K1114.245X360 | 36                              | 45 |
| K1114.245X380 | 38                              | 45 |
| K1114.245X400 | 40                              | 45 |
| K1114.245X420 | 42                              | 45 |

## Quarter-turn lock in Hygienic DESIGN



### Material:

Housing, actuation and fastening nut 1.4404 stainless steel.  
O-rings red silicone, conforming to FDA.  
Tongue 1.4301 stainless steel.

### Version:

Bright.

### Sample order:

Quarter turn lock K1353.18  
Tongue K1340.45060

### Note:

The quarter turn lock fulfills the hygienic requirements acc. to DIN EN 1672-2 and DIN EN 14159. Especially suitable for the food and beverage industry.

Please order required tongue version separately. Every tongue can be combined with every housing.

### Accessories:

Lock key K1335.113  
Ring spanner K1362.16  
Protective insert K1362.1613

## KIPP Quarter-turn locks in Hygienic DESIGN

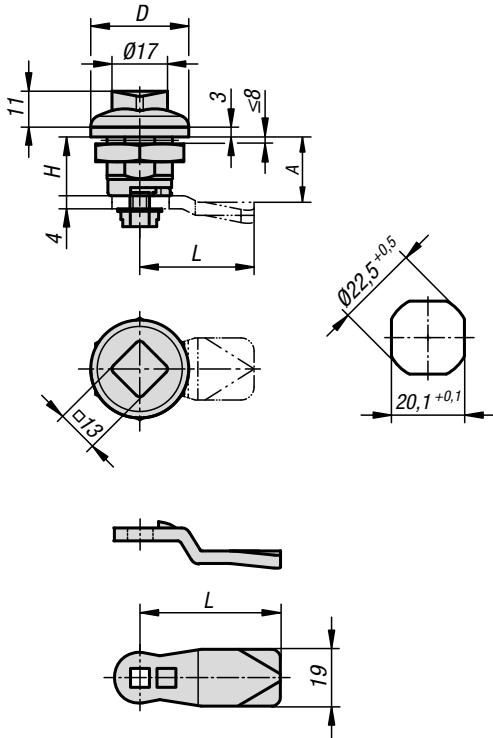
| Order No. | Actuation   | D  | H  |
|-----------|-------------|----|----|
| K1353.18  | double flat | 28 | 18 |

## KIPP Tongue for quarter-turn lock

| Order No.   | A  | L  |
|-------------|----|----|
| K1340.45060 | 6  | 45 |
| K1340.45080 | 8  | 45 |
| K1340.45100 | 10 | 45 |
| K1340.45140 | 14 | 45 |
| K1340.45160 | 16 | 45 |
| K1340.45180 | 18 | 45 |
| K1340.45200 | 20 | 45 |
| K1340.45220 | 22 | 45 |
| K1340.45240 | 24 | 45 |
| K1340.45260 | 26 | 45 |
| K1340.45280 | 28 | 45 |
| K1340.45320 | 32 | 45 |
| K1340.45500 | 50 | 45 |



# Quarter-turn lock in Hygienic DESIGN


**Material:**

Housing and actuation: 1.4404.  
Earthing nut and ratchet screw: 1.4301.  
Seal: blue silicon, FDA conform.  
Tongue 1.4301.

**Version:**

Bright.

**Sample order:**

Quarter turn lock K1354.18  
Tongue K1340.45060

**Note:**

The hygienic stainless steel quarter turn lock prevents bacterial attack and fulfils the strict regulations of testing principles for foodstuff machinery and hygien. The well conceived geometric form, the mirror polished stainless steel surface and the central circumferential seal reliably prevent dirt accumulation. Water, cleaning agents etc. can drain off fully and so prevent contamination.

Especially in processes where the resistance of the seal to cleaning and disinfection agents is very important, optimised control cabinets, terminal boxes and command panels are a must. Specifically designed after the principles of Hygienic DESIGN, the hygienic quarter turn lock HD fulfils the strict regulations of the foodstuff processing industry and passes therefore optimally in their professional hygienic applications. The special seal is suitable for high pressure washing up to max. 100 bar and fulfils IP65/67. Furthermore, the seal is temperature stable up to 80°C and the blue colour satisfies FDA regulations (reliably prevents a confusion with foodstuffs).

## KIPP Quarter-turn locks in Hygienic DESIGN

| Order No. | Actuation | D  | H  |
|-----------|-----------|----|----|
| K1354.18  | square    | 30 | 18 |

## KIPP Tongue for quarter-turn lock

| Order No.   | A  | L  |
|-------------|----|----|
| K1340.45060 | 6  | 45 |
| K1340.45080 | 8  | 45 |
| K1340.45100 | 10 | 45 |
| K1340.45140 | 14 | 45 |
| K1340.45160 | 16 | 45 |
| K1340.45180 | 18 | 45 |
| K1340.45200 | 20 | 45 |
| K1340.45220 | 22 | 45 |
| K1340.45240 | 24 | 45 |
| K1340.45260 | 26 | 45 |
| K1340.45280 | 28 | 45 |
| K1340.45320 | 32 | 45 |
| K1340.45500 | 50 | 45 |

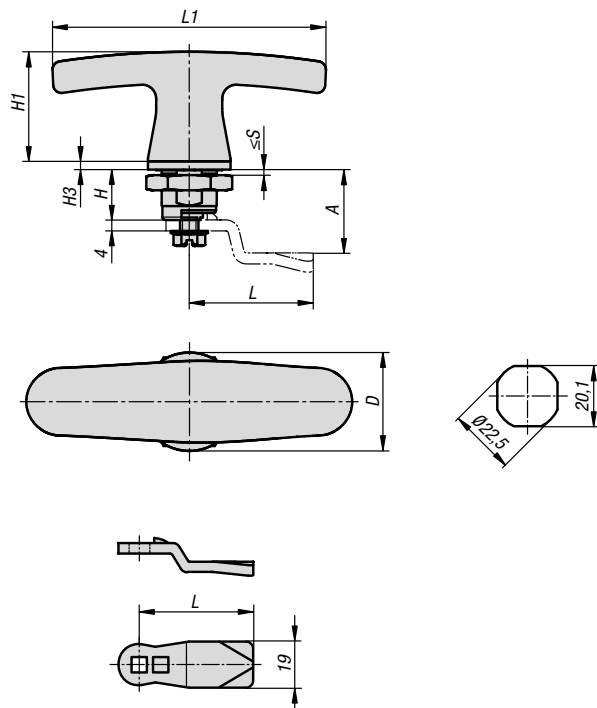
Please order required tongue version separately. Every tongue can be combined with every housing.

**Accessories:**

Lock key K1335.113  
Ring spanner K1362.16  
Protective insert K1362.1613

# Quarter-turn lock in Hygienic DESIGN

with T-grip



## Material:

Housing and actuation: 1.4404.

Earthing nut and ratchet screw: 1.4301.

Seal: blue silicon, FDA conform.

## Version:

Bright.

Grip polished.

## Sample order:

K1452.1188

## Note:

The hygienic stainless steel quarter turn lock prevents bacterial attack and fulfils the strict regulations of testing principles for foodstuff machinery and hygien. The well conceived geometric form, the mirror polished stainless steel surface and the central circumferential seal reliably prevent dirt accumulation. Water, cleaning agents etc. can drain off fully and so prevent contamination.

Especially in processes where the resistance of the seal to cleaning and disinfection agents is very important, optimised control cabinets, terminal boxes and command panels are a must. Specifically designed after the principles of Hygienic DESIGN, the hygienic quarter turn lock HD fulfils the strict regulations of the foodstuff processing industry and passes therefore optimally in their professional hygienic applications. The special seal is suitable for high pressure washing up to max. 100 bar and fulfils IP65/67. Furthermore, the seal is temperature stable up to 80°C and the blue colour satisfies FDA regulations (reliably prevents a confusion with foodstuffs).

## KIPP Quarter-turn locks in Hygienic DESIGN with T-grip

| Order No.  | D  | H  | H1 | H3 | L1  | S<br>max. |
|------------|----|----|----|----|-----|-----------|
| K1452.1188 | 30 | 18 | 40 | 3  | 100 | 8         |

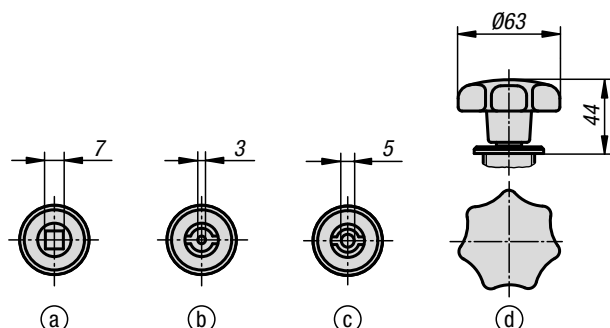
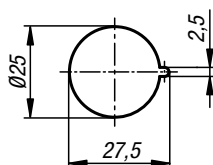
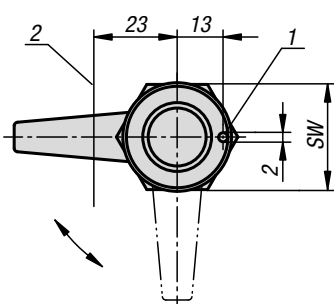
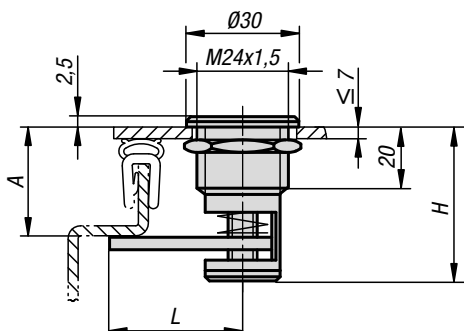
## KIPP Tongue for quarter-turn locks

| Order No.   | A  | L  |
|-------------|----|----|
| K1340.45060 | 6  | 45 |
| K1340.45080 | 8  | 45 |
| K1340.45100 | 10 | 45 |
| K1340.45140 | 14 | 45 |
| K1340.45160 | 16 | 45 |
| K1340.45180 | 18 | 45 |
| K1340.45200 | 20 | 45 |
| K1340.45220 | 22 | 45 |
| K1340.45240 | 24 | 45 |
| K1340.45260 | 26 | 45 |
| K1340.45280 | 28 | 45 |
| K1340.45320 | 32 | 45 |
| K1340.45500 | 50 | 45 |

Please order required tongue version separately. Every tongue can be combined with every housing.

## Compression latches

with variable compression



### Material:

Compression latch steel.  
DIN 6336 star grip thermoset.

### Version:

Compression latch trivalent blue passivated.  
Star grip black.

### Sample order:

Compression latch K0528.1709161

### Note:

Compression latches are primarily used for doors and housings that require a high pressure on the seal. Right or left deployment. The locking direction is always clockwise.

### Assembly:

Cut a notch in a Ø25 mm hole for the locking pin. Pass the latch through the hole. The tongue must be in the end position and in the centre of the opening before the nut can be slipped on and tightened.

### On request:

Water tight A2 stainless steel version rated IP65.

### Function:

Turning the actuator 90° brings the tongue into the closed position. Turning the actuator further winds the tongue up the thread and increases the pressure on the frame. To unlock the latch turn the actuator to the left. The tongue moves to the open position and, even doors with sticky seals can be easily opened. The variable compression gap is 7 mm. The frame width range of 9-44 mm is covered by 7 offset tongues (dimension A).

Supplied completely assembled.

### Accessories:

Key K0535

### Drawing reference:

- 1) locating pin
- 2) frame

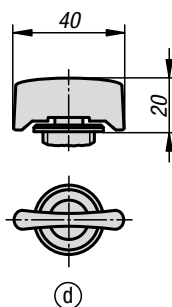
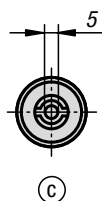
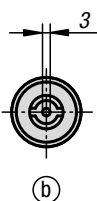
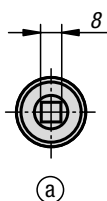
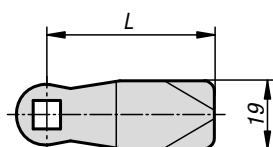
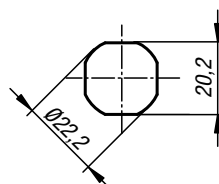
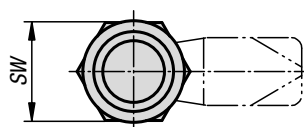
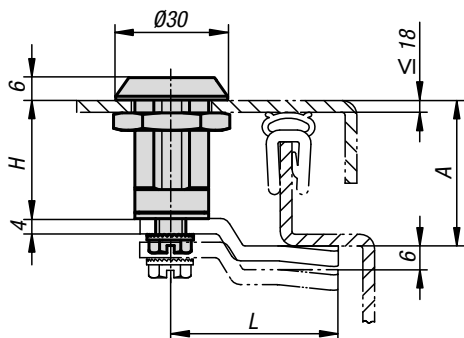
### Actuation

- a) square 7 mm
- b) double lug 3 mm
- c) double lug 5 mm
- d) star grip

## KIPP Compression latches with variable compression

| Order No.<br>square 7 mm | Order No.<br>double lug 3 mm | Order No.<br>double lug 5 mm | Order No.<br>star grip | A       | L    | H  | SW |
|--------------------------|------------------------------|------------------------------|------------------------|---------|------|----|----|
| K0528.1709161            | K0528.4309161                | K0528.4509161                | K0528.5009161          | 9-16    | 40,5 | 40 | 27 |
| K0528.1713201            | K0528.4313201                | K0528.4513201                | K0528.5013201          | 13 - 20 | 42,5 | 40 | 27 |
| K0528.1717241            | K0528.4317241                | K0528.4517241                | K0528.5017241          | 17 - 24 | 44   | 40 | 27 |
| K0528.1723301            | K0528.4323301                | K0528.4523301                | K0528.5023301          | 23 - 30 | 45   | 40 | 27 |
| K0528.1729361            | K0528.4329361                | K0528.4529361                | K0528.5029361          | 29 - 36 | 43   | 40 | 27 |
| K0528.1733401            | K0528.4333401                | K0528.4533401                | K0528.5033401          | 33 - 40 | 40,5 | 40 | 27 |
| K0528.1737441            | K0528.4337441                | K0528.4537441                | K0528.5037441          | 37 - 44 | 37   | 40 | 27 |

## Compression latches



### Material:

Housing and actuator die-cast zinc.  
Flat seal rubber.  
Tongue steel.

### Version:

Housing and actuator trivalent passivated.  
Tongue electro zinc-plated.

### Sample order:

Compression latch K0529.18321  
Tongue K0530.145X320  
(include tongue gap "A")

### Note:

Compression latches are primarily used for doors and housings that require a high pressure on the seal. Right or left deployment. The locking direction is always clockwise.

Vibration-proof, water and dust tight according to IP65.  
Please order the desired tongue type separately. Every tongue can be combined with every housing.

### Function:

Turning the actuator 90° brings the tongue into the closed position. Turning the actuator another 90° draws the tongue into the frame increasing the pressure. The compression gap is 6 mm. The fastening nut is an earthing nut with teeth one side.

### Accessories:

Key K0535

### Drawing reference:

Actuation:

- a) square 8 mm
- b) double lug 3 mm
- c) double lug 5 mm
- d) toggle

### KIPP Compression latches

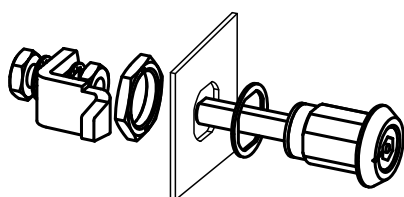
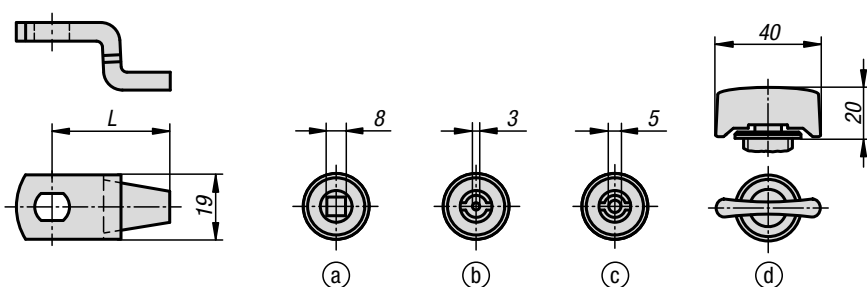
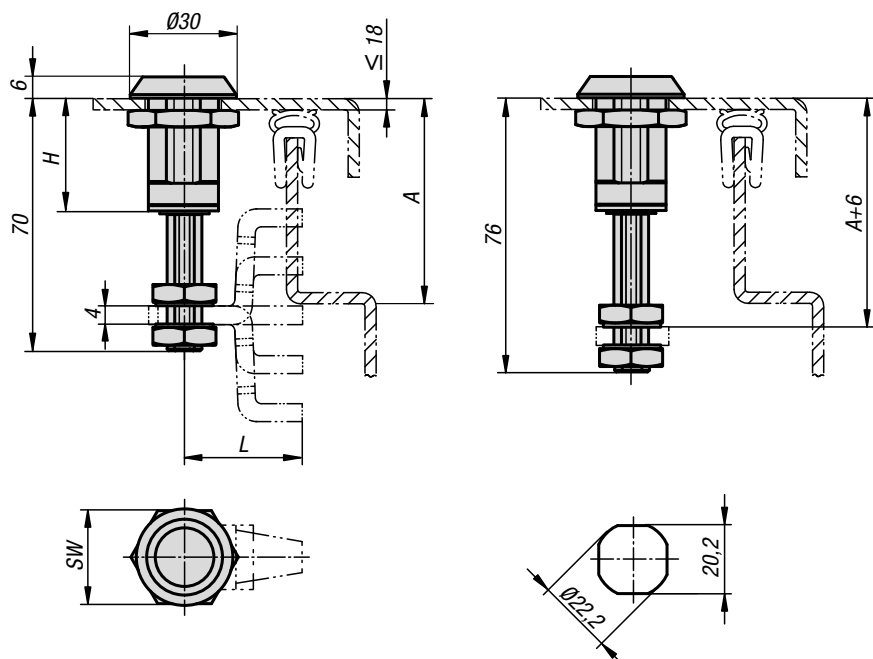
| Order No.   | Actuation       | H  | SW |
|-------------|-----------------|----|----|
| K0529.18321 | square 8 mm     | 32 | 27 |
| K0529.30321 | grip            | 32 | 27 |
| K0529.43321 | double lug 3 mm | 32 | 27 |
| K0529.45321 | double lug 5 mm | 32 | 27 |

### KIPP Tongue for compression latches

| Order No.  | A           | L  |
|------------|-------------|----|
| K0530.145X | 32/35/38/44 | 45 |
| K0530.151X | 32          | 51 |

## Compression latches

with adjustable tongue gap



### Material:

Housing and actuator die-cast zinc.  
Flat seal rubber.  
Tongue steel.

### Version:

Housing and actuator trivalent passivated.  
Wing-handle version powder-coated.  
Tongue electro zinc-plated.

### Sample order:

Compression latch K0531.18321  
Tongue K0532.1000X590

### Note:

Compression latches are primarily used for doors and housings that require a high pressure on the seal. Right or left deployment. The locking direction is always clockwise.

Vibration-proof, water and dust tight according to IP65. Please order the desired tongue type separately. Every tongue can be combined with every housing.

### Function:

Turning the actuator 90° brings the tongue into the closed position. Turning the actuator another 90° draws the tongue into the frame increasing the pressure. The compression gap is 6 mm. The fastening nut is an earthing nut with teeth one side. The offset tongue can be installed positive or negative.

### Accessories:

Key K0535

### Drawing reference:

Actuation:  
a) square 8 mm  
b) double lug 3 mm  
c) double lug 5 mm  
d) toggle

### KIPP Compression latches with adjustable tongue gap

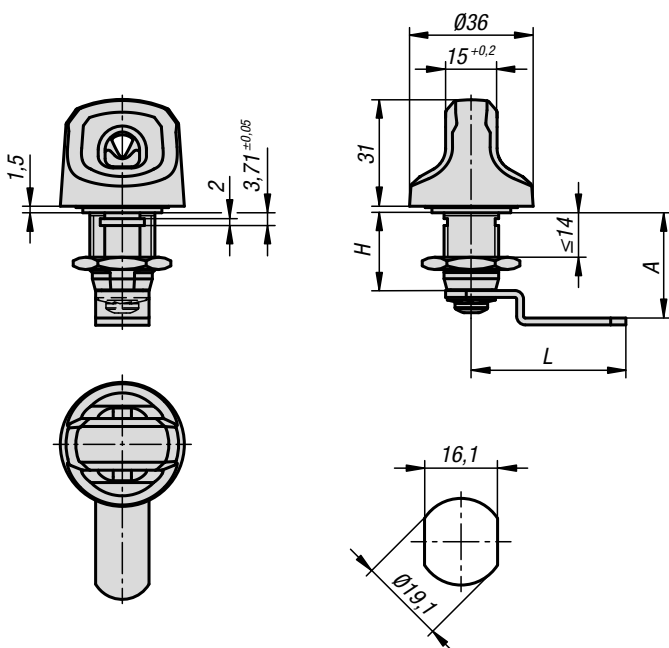
| Order No.   | Actuation       | SW | H  |
|-------------|-----------------|----|----|
| K0531.18321 | square 8 mm     | 27 | 32 |
| K0531.43321 | double lug 3 mm | 27 | 32 |
| K0531.45321 | double lug 5 mm | 27 | 32 |
| K0531.30322 | grip            | 27 | 32 |

### KIPP Tongues for compression latches with adjustable tongue gap

| Order No.      | A             | L  |
|----------------|---------------|----|
| K0532.1000X590 | 40-59         | 33 |
| K0532.1140X730 | 26-45 / 52-73 | 33 |
| K0532.1275X860 | 12-32 / 68-86 | 33 |

## Quarter-turn locks

free-turning



### Material:

Housing and actuator die-cast zinc.  
Nut brass.  
Tongue steel.

### Version:

Housing trivalent blue passivated.  
Lever black KTL coated.  
Tongue electro zinc-plated.

### Sample order:

K1275.22224

### Note:

Particularly suitable for steel cabinets, lockers in changing rooms, schools, leisure facilities and industrial companies.

### Method of operation:

The integrated free-turning function provides higher security against violent actuation compared to conventional locks.

### Assembly:

The quarter-turn lock can be installed pre-assembled.

### Attention:

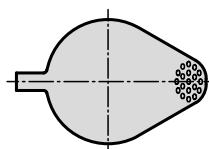
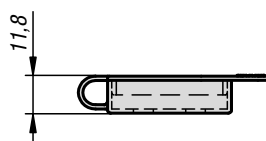
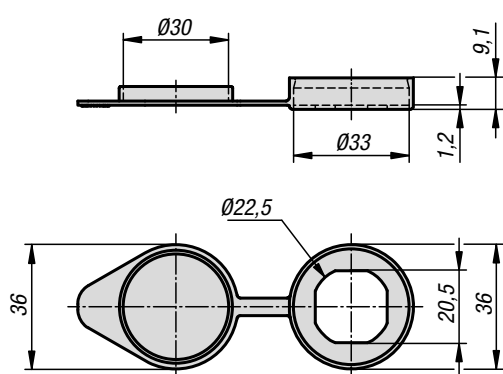
Optimum functionality is guaranteed with padlocks with a shackle diameter of Ø6 – Ø8 mm.



### KIPP Quarter-turn lock, free-turning

| Order No.   | A    | L  | H    |
|-------------|------|----|------|
| K1275.22224 | 22,4 | 44 | 22,4 |
| K1275.22248 | 24,8 | 42 | 22,4 |
| K1275.22304 | 30,4 | 45 | 22,4 |
| K1275.22359 | 35,9 | 49 | 22,4 |
| K1275.22424 | 42,4 | 45 | 22,4 |

## Dust caps



**Material:**  
Thermoplastic plastic (PU).

**Version:**  
Black.

**Sample order:**  
K0533.202230

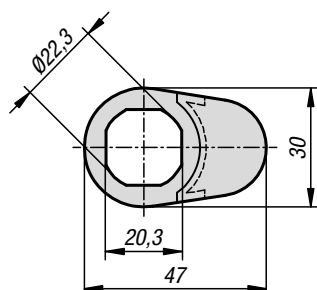
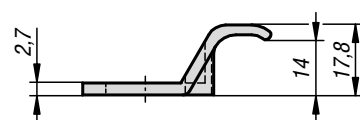
**Note:**  
Dust caps for compression latches with a head diameter up to max. 32 mm. It offers increased protection from dust and moisture. If the dust cap is used, dimension "A" of the compression latch is reduced by 1 mm.

### KIPP Dust caps

Order No.

K0533.202230

## Opening grips



**Material:**  
Thermoplastic plastic (PA).

**Version:**  
Black.

**Sample order:**  
K0534.202230

**Note:**  
Practical opening grip for compression latches with a head diameter up to max. 30 mm. If the opening grip is used, dimension "A" of the compression latch is reduced by 2.5 mm.

### KIPP Opening grips

Order No.

K0534.202230



Keys

for latches and locks

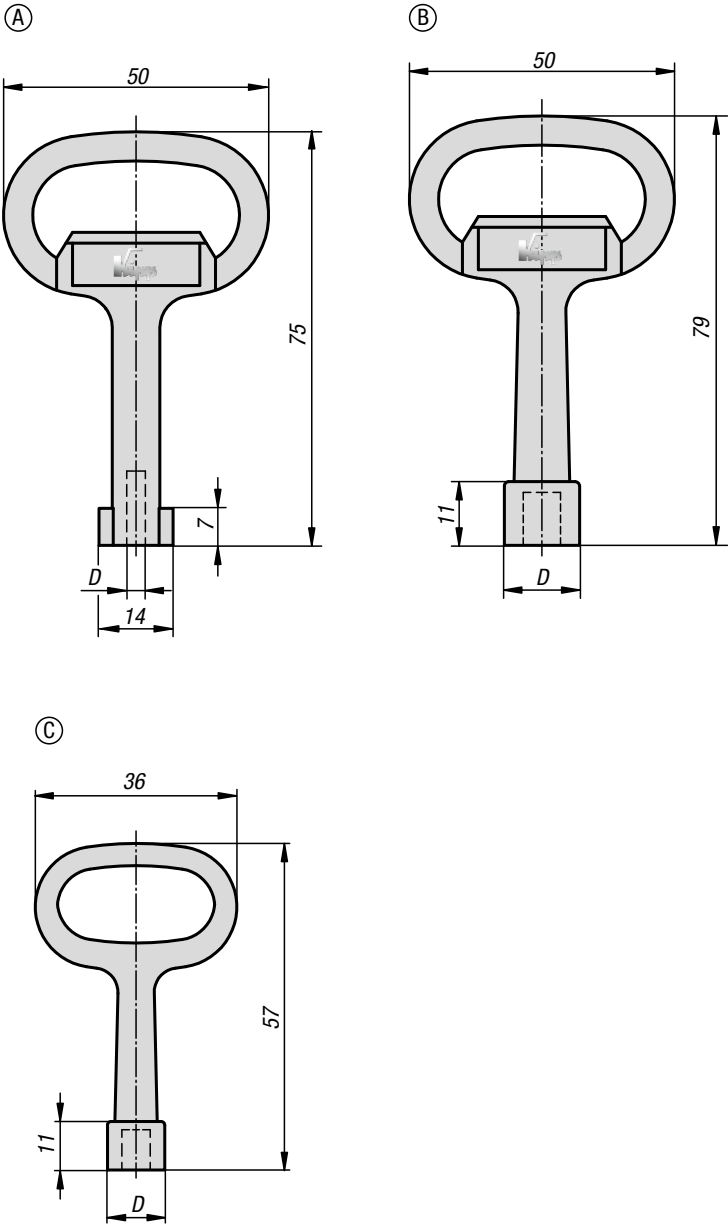


**Material:**  
Die-cast zinc.

**Version:**  
chromium-plated.

**Sample order:**  
K0535.43

**Note:**  
For operating compression latches and quarter-turn locks.



KIPP Keys for latches and locks

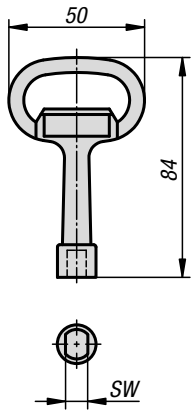
| Order No. | Form | Version 1       | D    |
|-----------|------|-----------------|------|
| K0535.43  | A    | double lug 3 mm | 3    |
| K0535.45  | A    | double lug 5 mm | 5    |
| K0535.17  | B    | square 7 mm     | 15   |
| K0535.18  | B    | square 8 mm     | 15   |
| K0535.16  | C    | square 6 mm     | 11,5 |



K1335

Keys

for latches and locks



**Material:**  
Die-cast zinc.

**Version:**  
Blue powder-coated.

**Sample order:**  
K1335.113

**Note:**  
For actuating the quarter-turn lock for sterile areas

KIPP Keys for latches and locks

| Order No. | Actuation   | SW |
|-----------|-------------|----|
| K1335.113 | double flat | 13 |

K1511

Keys

for quarter-turn locks

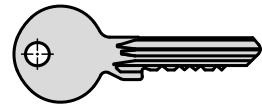


**Material:**  
Steel.

**Version:**  
nickel-plated.

**Sample order:**  
K1511.1333

**Note:**  
Key for actuating the quarter-turn lock.  
Supplied in pairs.



KIPP Quarter turn lock keys

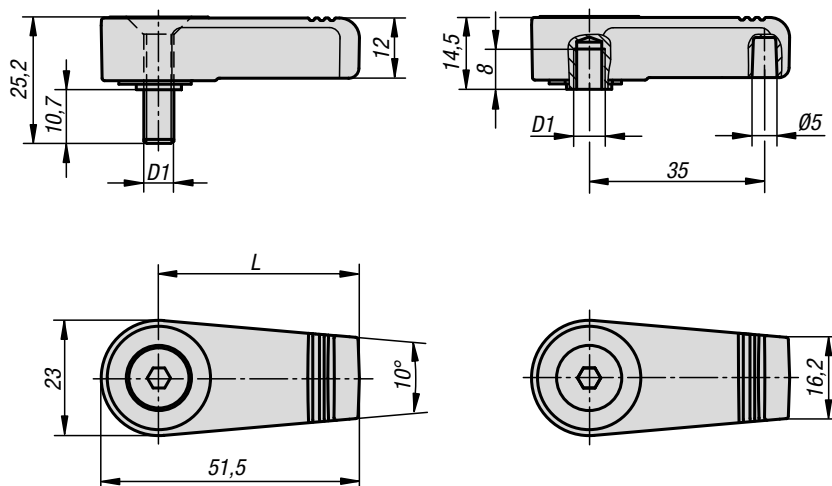
| Order No.  | Version 1 |
|------------|-----------|
| K1511.1333 | lock 1333 |



A large rectangular area filled with a light gray grid pattern, intended for taking notes.



# Stop latches


**Material:**

Housing die-cast zinc, powder-coated.  
Pin steel.  
Washer plastic.  
Circlip spring steel.  
Countersunk screw steel grade 8.8.

**Version:**

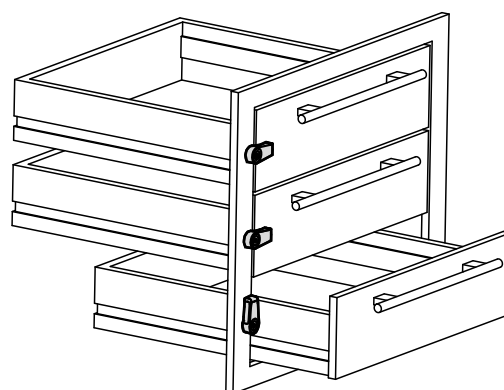
Housing black or red.  
Pin trivalent blue passivated.  
Circlip and countersunk screw, black.

**Sample order:**

K0271.140061

**Note:**

Engages every 90°.


**KIPP Stop latch**

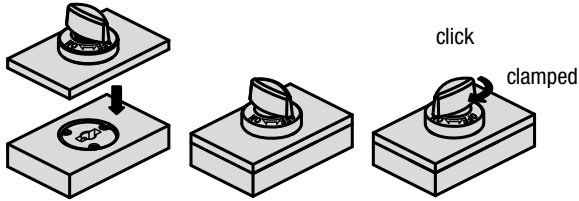
| Order No.       | Main colour | Version         | L  | D1 |
|-----------------|-------------|-----------------|----|----|
| K0271.140061    | black       | internal thread | 40 | M6 |
| K0271.140062    | red         | internal thread | 40 | M6 |
| K0271.140061X10 | black       | external thread | 40 | M6 |
| K0271.140062X10 | red         | external thread | 40 | M6 |

# Technical Information

## Quarter-turn clamp lock K1061 and clamping plate K1062



### 1. Application:



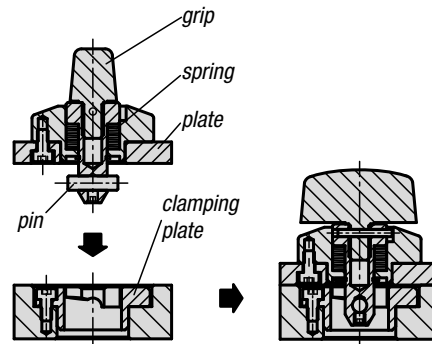
Make sure that the knob is in the "OFF" position.

Insert the pin of the quarter-turn clamp lock into the clamping plate.

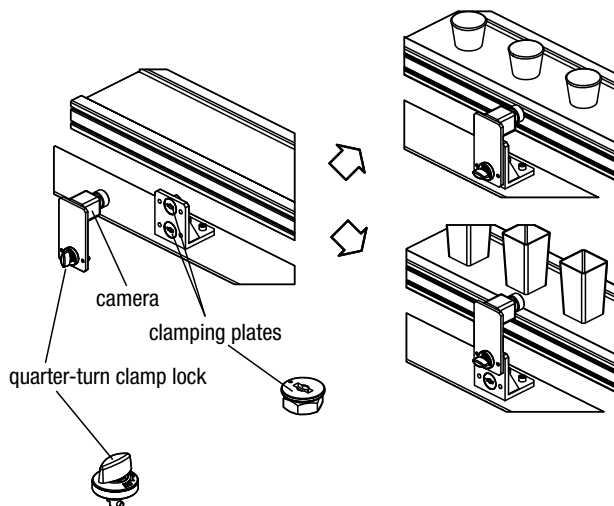
To lock components, turn the knob to the "ON" position. A click signals the opening/closing.

### 2. Function:

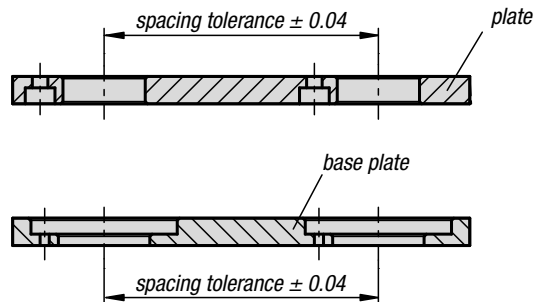
The knob is linked to the centre pin with a transverse pin. When the knob of the quarter-turn clamp lock is turned, the centre pin engages with the clamping plate and locks the components together.



### Application examples: Altering camera positions

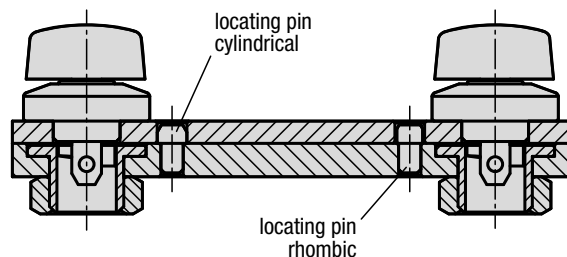


### Production tolerances:



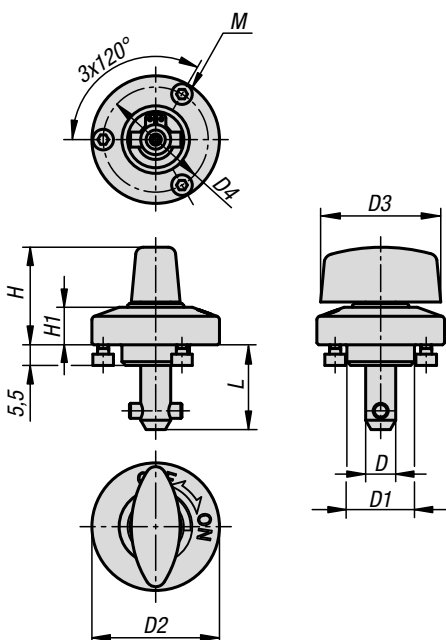
### Repeat accuracy:

A higher repeat accuracy can be achieved with the aid of additional locating pins (not supplied).

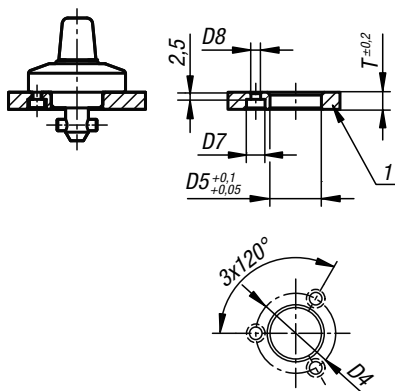


# Quarter-turn clamp locks stainless steel

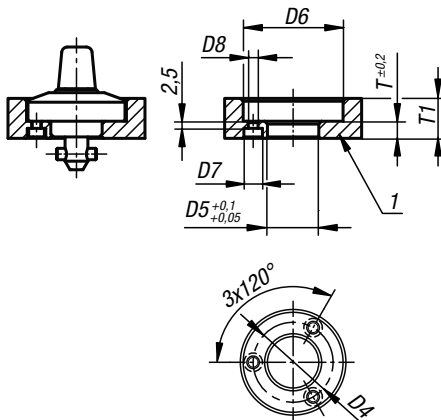
rotary knob plastic or stainless steel



(A)



(B)



## Material:

Housing stainless steel.

Pin steel or stainless steel.

Pin stainless steel.

Twist knob stainless steel or thermoplastic PA (polyamide)

## Version:

Housing bright.

Pin nickel plated or bright.

Pin bright.

Twist knob fibreglass reinforced PA, black.

Twist knob stainless steel, bright.

## Sample order:

K1061.516

## Note:

M2 or M3 mounting screws are supplied.

Form A mounting option for plate thickness 6 or 12 mm.

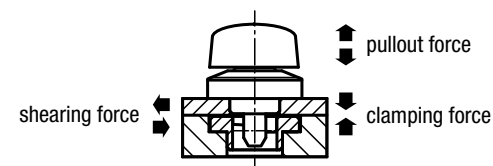
Form B mounting option for plate thickness 12 to 20 mm.

## Accessories:

Clamping plates K1062

## Drawing reference:

1) plate



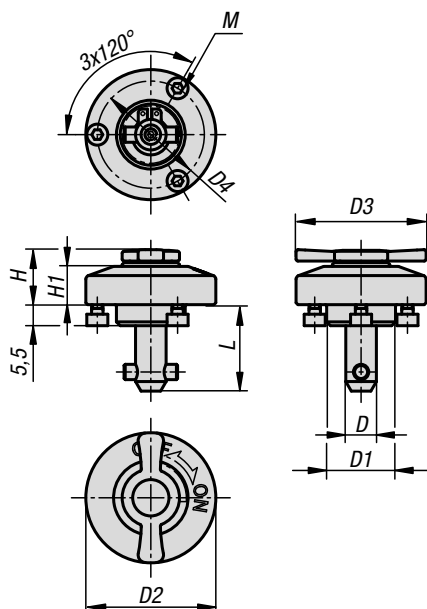
## KIPP Quarter-turn clamp locks stainless steel, rotary knob plastic or stainless steel

| Order No.<br>plastic<br>pins steel | Order No.<br>stainless steel<br>pins steel | Order No.<br>stainless steel<br>pin stainless steel | D | L    | D1 | D2 | D3 | D4 | H                | H1  | M    | D5 | D6 | D7  | D8  | T  | T1    |
|------------------------------------|--------------------------------------------|-----------------------------------------------------|---|------|----|----|----|----|------------------|-----|------|----|----|-----|-----|----|-------|
| K1061.516                          | K1061.5161                                 | K1061.15161                                         | 5 | 15,5 | 14 | 25 | 20 | 21 | 19 / 19 / 19     | 6,5 | M2x3 | 14 | 26 | 4,4 | 2,4 | 6  | 6-10  |
| K1061.817                          | K1061.8171                                 | K1061.18171                                         | 8 | 17   | 18 | 34 | 32 | 28 | 26 / 25,5 / 25,5 | 10  | M3x4 | 18 | 35 | 6,5 | 3,4 | 6  | 6-14  |
| K1061.823                          | K1061.8231                                 | K1061.18231                                         | 8 | 23   | 18 | 34 | 32 | 28 | 26 / 25,5 / 25,5 | 10  | M3x4 | 18 | 35 | 6,5 | 3,4 | 12 | 12-20 |

## KIPP Quarter-turn clamp lock, technical information

| Order No.<br>plastic<br>pins steel | Order No.<br>stainless steel<br>pins steel | Order No.<br>stainless steel<br>pin stainless steel | D | L    | Clamping force<br>N | Shearing force<br>kN | Pullout force F<br>kN | Temperature<br>resistance   |
|------------------------------------|--------------------------------------------|-----------------------------------------------------|---|------|---------------------|----------------------|-----------------------|-----------------------------|
| K1061.516                          | K1061.5161                                 | K1061.15161                                         | 5 | 15,5 | 60                  | 1,8                  | 1,2                   | ≤130 °C / ≤200 °C / ≤200 °C |
| K1061.817                          | K1061.8171                                 | K1061.18171                                         | 8 | 17   | 90                  | 3,2                  | 2,6                   | ≤130 °C / ≤200 °C / ≤200 °C |
| K1061.823                          | K1061.8231                                 | K1061.18231                                         | 8 | 23   | 90                  | 3,2                  | 2,6                   | ≤130 °C / ≤200 °C / ≤200 °C |

# Quarter-turn clamp locks flat

**Material:**

Housing stainless steel.  
Bolt steel  
Pin stainless steel  
Twist knob stainless steel.

**Version:**

Housing bright.  
Bolt nickel plated.  
Pin bright.  
Twist knob stainless steel, bright.

**Sample order:**

K1061.5162

**Note:**

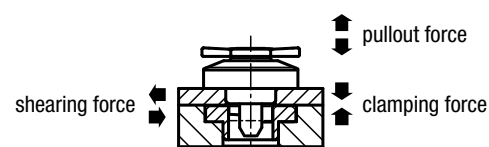
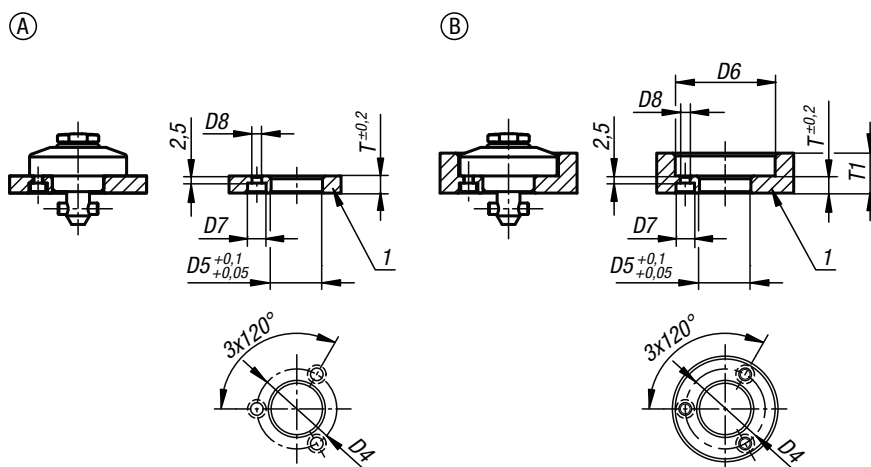
M2 or M3 mounting screws are supplied.  
Form A mounting option for plate thickness 6 or 12 mm.  
Form B mounting option for plate thickness 12 to 20 mm.

**Accessories:**

Clamping plates K1062

**Drawing reference:**

1) plate



## KIPP Quarter-turn clamp locks, flat

| Order No.  | D | D1 | D2 | D3 | D4 | H    | H1  | L    | M    | D5 | D6 | D7  | D8  | T  | T1    |
|------------|---|----|----|----|----|------|-----|------|------|----|----|-----|-----|----|-------|
| K1061.5162 | 5 | 14 | 25 | 20 | 21 | 11,5 | 6,5 | 15,5 | M2x3 | 14 | 26 | 4,4 | 2,4 | 6  | 6-10  |
| K1061.8172 | 8 | 18 | 34 | 32 | 28 | 15,4 | 10  | 17   | M3x4 | 18 | 35 | 6,5 | 3,4 | 6  | 6-14  |
| K1061.8232 | 8 | 18 | 34 | 32 | 28 | 15,4 | 10  | 23   | M3x4 | 18 | 35 | 6,5 | 3,4 | 12 | 12-20 |

## KIPP Quarter-turn clamp lock, technical information

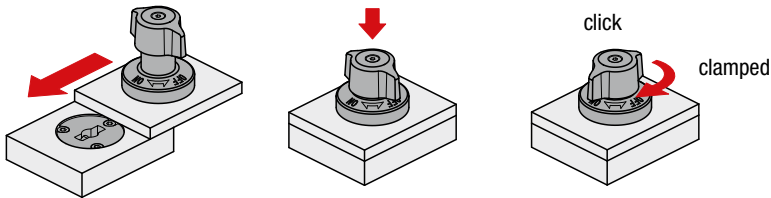
| Order No.  | Clamping force<br>N | Shearing force<br>kN | Pullout force F<br>kN | Temperature<br>resistance |
|------------|---------------------|----------------------|-----------------------|---------------------------|
| K1061.5162 | 60                  | 1,8                  | 1,2                   | ≤200 °C                   |
| K1061.8172 | 90                  | 3,2                  | 2,6                   | ≤200 °C                   |
| K1061.8232 | 90                  | 3,2                  | 2,6                   | ≤200 °C                   |

# Technical Information

## Quarter-turn clamp lock K1558 and clamping plate K1062



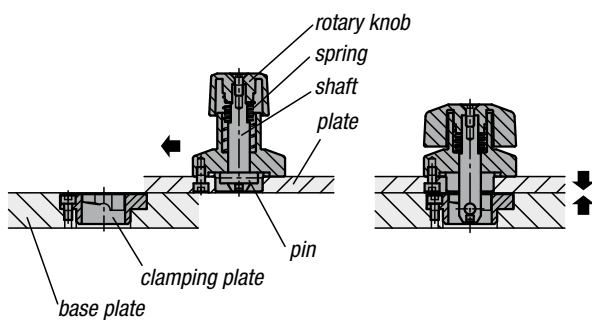
### 1. Application:



Check that the rotary knob is in the "OFF" position and that the pin is retracted.  
Push or place the quarter-turn clamp lock over the premounted clamping plate.  
Press the rotary knob down and turn to the "ON" position.  
When fully clamped, a click sound is heard.

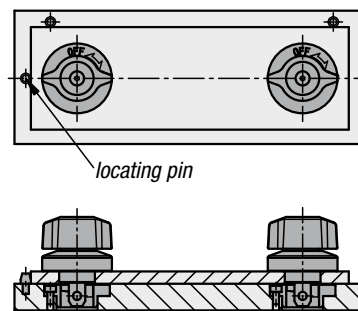
### 2. Function:

The knob is linked to the centre pin with a transverse pin. When the knob of the quarter-turn clamp lock is turned, the centre pin engages with the clamping plate and locks the components together.

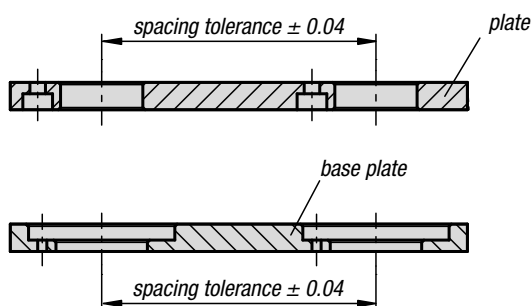


### Repeat accuracy:

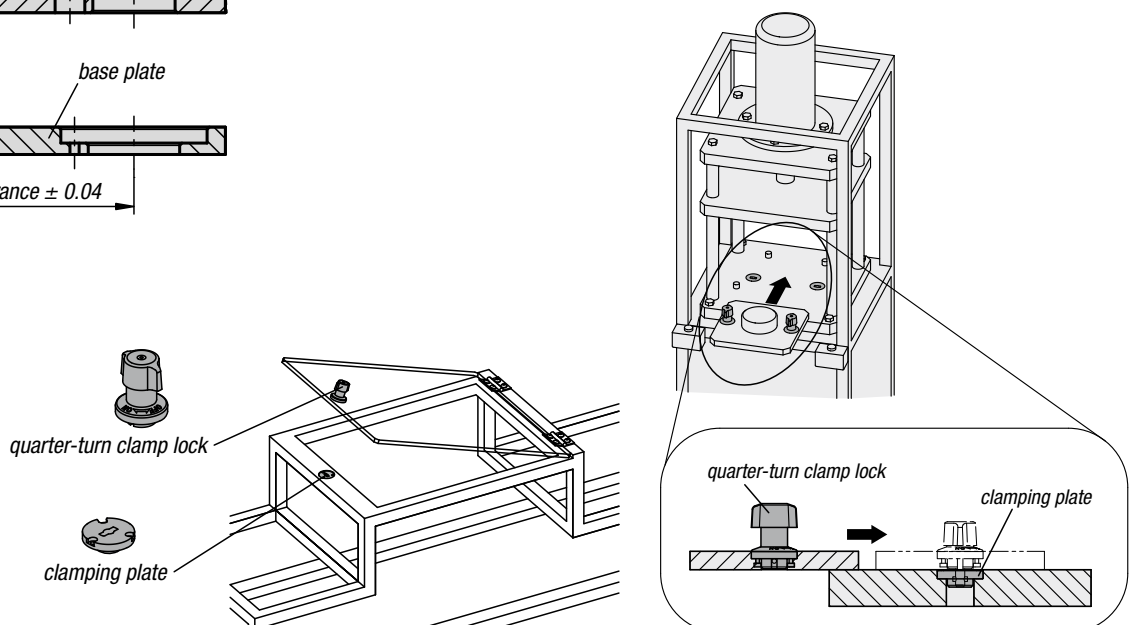
A higher repeat accuracy can be achieved with the aid of additional locating pins (not supplied).



### Production tolerances:

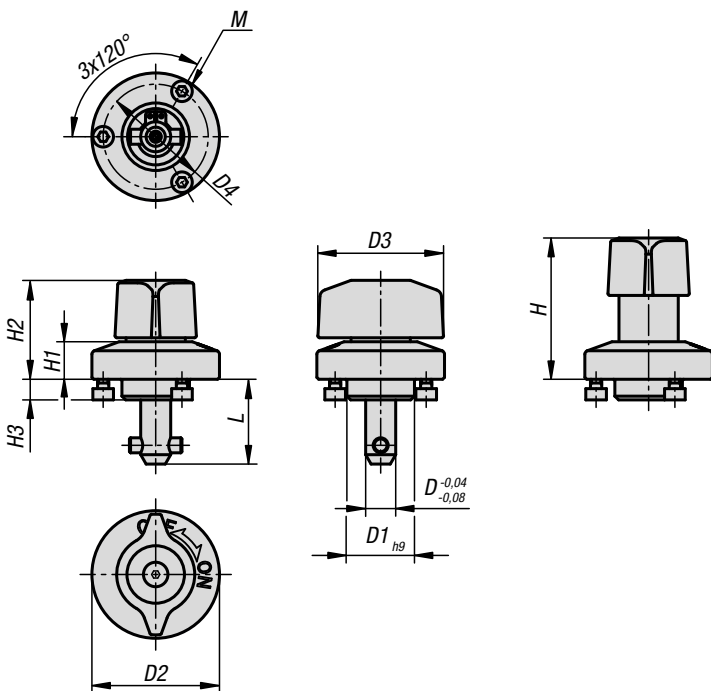


### Application examples:

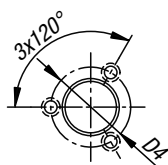
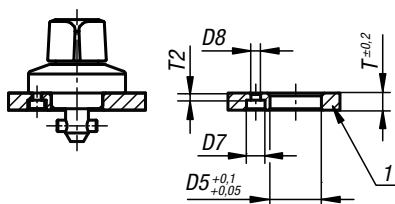


# Quarter-turn clamp locks, stainless steel

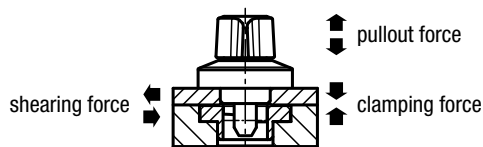
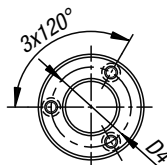
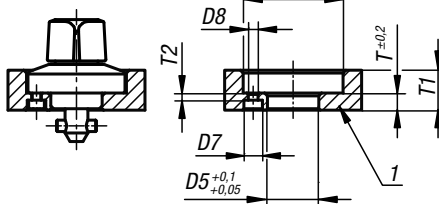
rotary knob plastic or stainless steel



Ⓐ



Ⓑ



Quarter-turn clamp locks are used for replacing and locking fixtures or hatches quickly and easily. Toolless clamping shortens setup times.

## Material:

Housing stainless steel.

Pin steel or stainless steel.

Pin stainless steel.

Knob stainless steel or thermoplastic PA (polyamide).

## Version:

Housing bright.

Pin nickel plated or bright.

Pin bright.

Knob reinforced PA fibreglass, black.

Knob stainless steel, bright.

## Sample order:

K1558.516

## Note:

Stainless steel fastening screws M2 or M3 are included.

Form A mounting option for plate thickness 6 mm.

Form B mounting option for plate thickness > 6 to 14 mm.

## Method of operation:

Check that the rotary knob is in the „OFF“ position and that the pin is retracted.

Push or place the quarter-turn clamp lock over the premounted clamping plate.

Press the rotary knob down and turn to the „ON“ position.

When fully clamped, a click sound is heard.

## Accessories:

Clamping plates K1062

## Drawing reference:

1) plate

## KIPP Quarter-turn clamp locks, stainless steel, rotary knob plastic or stainless steel

| Order No.<br>polyamide<br>pins steel | Order No.<br>stainless steel<br>pin stainless steel | D | L    | D1 | D2 | D3 | D4 | H  | H1  | H2   | H3  | M    | D5 | D6 | D7  | D8  | T | T1   | T2  |
|--------------------------------------|-----------------------------------------------------|---|------|----|----|----|----|----|-----|------|-----|------|----|----|-----|-----|---|------|-----|
| K1558.516                            | K1558.1516                                          | 5 | 15,5 | 14 | 25 | 25 | 21 | 30 | 6,5 | 20   | 5,5 | M2x3 | 14 | 26 | 4,4 | 2,4 | 6 | 6-10 | 2,5 |
| K1558.817                            | K1558.1817                                          | 8 | 17   | 18 | 34 | 34 | 28 | 38 | 10  | 26,5 | 5,5 | M3x4 | 18 | 35 | 6,5 | 3,4 | 6 | 6-14 | 2,5 |

## KIPP Quarter-turn clamp lock, technical information

| Order No.<br>polyamide<br>pins steel | Order No.<br>stainless steel<br>pin stainless steel | D | L    | Clamping force<br>N | Shearing force<br>kN | Pullout force<br>kN | Temperature<br>resistance |
|--------------------------------------|-----------------------------------------------------|---|------|---------------------|----------------------|---------------------|---------------------------|
| K1558.516                            | K1558.1516                                          | 5 | 15,5 | 60                  | 1,8                  | 1,2                 | ≤130 °C / ≤200 °C         |
| K1558.817                            | K1558.1817                                          | 8 | 17   | 90                  | 3,2                  | 0,4                 | ≤130 °C / ≤200 °C         |



## Clamping plates

for quarter-turn clamp locks



### Material:

Housing steel or stainless steel.  
Nut stainless steel.

### Version:

Housing nickel-plated or bright.  
Nut bright.

### Sample order:

K1062.50

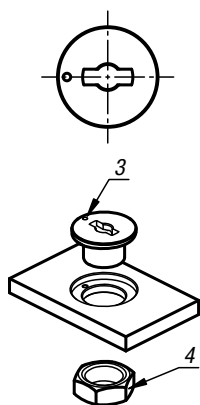
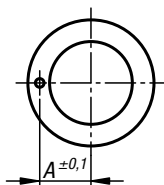
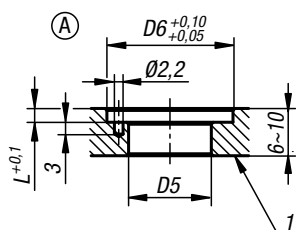
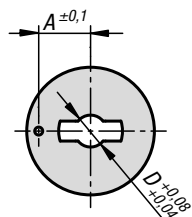
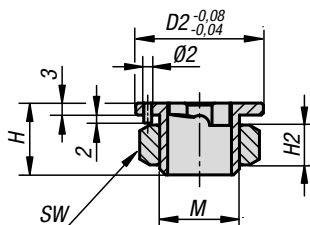
### Note:

M2 or M3 mounting screws are supplied.  
Form A mounting option for plate thickness 6 to 10 mm.  
Form B mounting option for plate thickness over 10 mm.

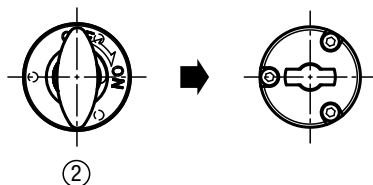
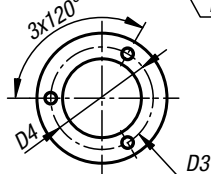
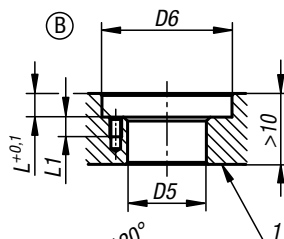
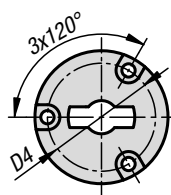
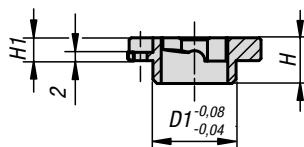
### Drawing reference:

- 1) plate
- 2) quarter-turn clamp lock
- 3) locating pin
- 4) nut

(A) Clamping plate surface mounted  
for plate thickness from 6 to 10 mm



(B) Clamping plate recessed  
for plate thickness > 10 mm



## KIPP Clamping plates for quarter-turn clamp locks

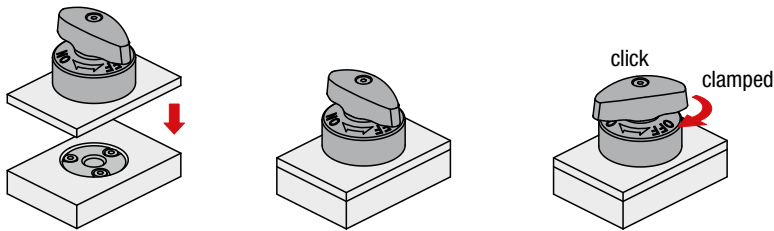
| Order No.<br>Form A<br>surface mounted | Order No.<br>Form B<br>countersunk | Main<br>material | D | D1     | D2 | D4   | A        | M           | H2   | SW   | H       | H1    | D3<br>for screw to<br>DIN 912 | D5      | D6      | L       | L1    |
|----------------------------------------|------------------------------------|------------------|---|--------|----|------|----------|-------------|------|------|---------|-------|-------------------------------|---------|---------|---------|-------|
| K1062.50                               | K1062.501                          | steel            | 5 | - / 14 | 25 | -/21 | 10,5 / - | M14X1,5 / - | 8/-  | 22/- | 16 / 9  | -/4,5 | - / M2                        | 15 / 14 | 25 / 26 | 3,5 / 5 | - / 4 |
| K1062.80                               | K1062.801                          | steel            | 8 | - / 20 | 32 | -/26 | 13 / -   | M20X1,5 / - | 10/- | 30/- | 18 / 11 | -/5,5 | - / M3                        | 21 / 20 | 32 / 33 | 3,5 / 6 | - / 5 |
| K1062.150                              | K1062.1501                         | stainless steel  | 5 | - / 14 | 25 | -/21 | 10,5 / - | M14X1,5 / - | 8/-  | 22/- | 16 / 9  | -/4,5 | - / M2                        | 15 / 14 | 25 / 26 | 3,5 / 5 | - / 4 |
| K1062.180                              | K1062.1801                         | stainless steel  | 8 | - / 20 | 32 | -/26 | 13 / -   | M20X1,5 / - | 10/- | 30/- | 18 / 11 | -/5,5 | - / M3                        | 21 / 20 | 32 / 33 | 3,5 / 6 | - / 5 |

# Technical Information

## Quarter-turn clamp lock K1559 and clamping plate K1560



### 1. Application:

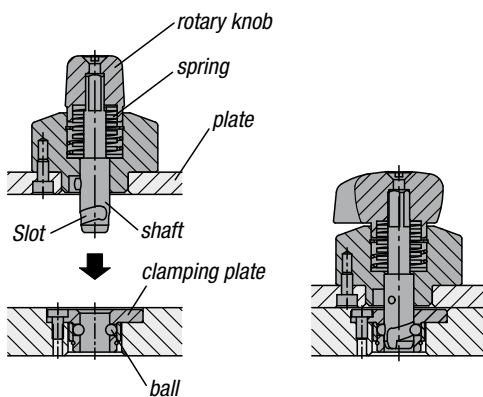


Check that the rotary knob is in the "OFF" position. Set the quarter-turn clamp lock in the premounted clamping plate.

Turn the rotary knob to the "ON" position. When fully clamped, a click sound is heard.

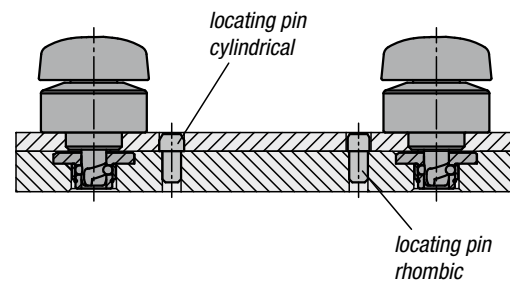
### 2. Function:

When connecting the quarter-turn clamp lock and clamping plate, the spiral slot travels down guided by the balls in the clamping plate. The spring is compressed and the components are clamped.

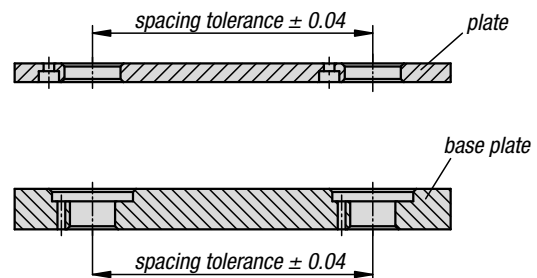


### Repeat accuracy:

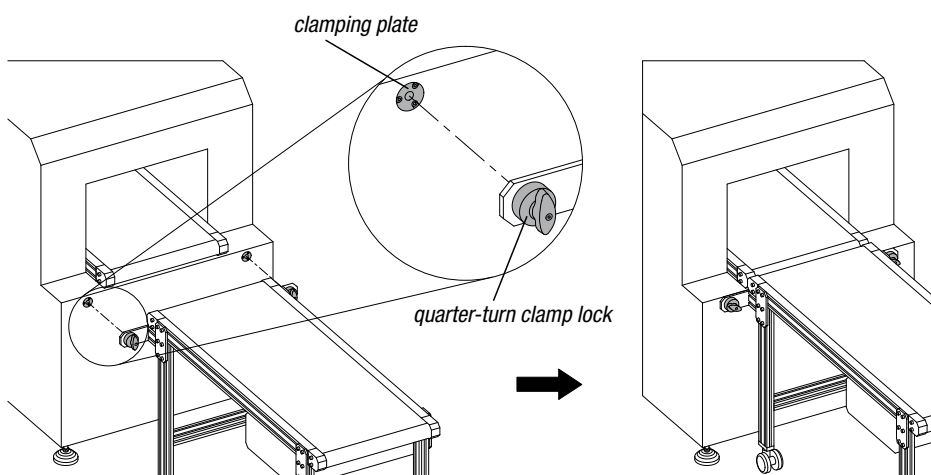
A higher repeat accuracy can be achieved with the aid of additional locating pins (not supplied).



### Production tolerances:

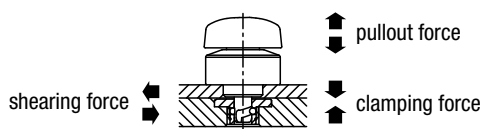
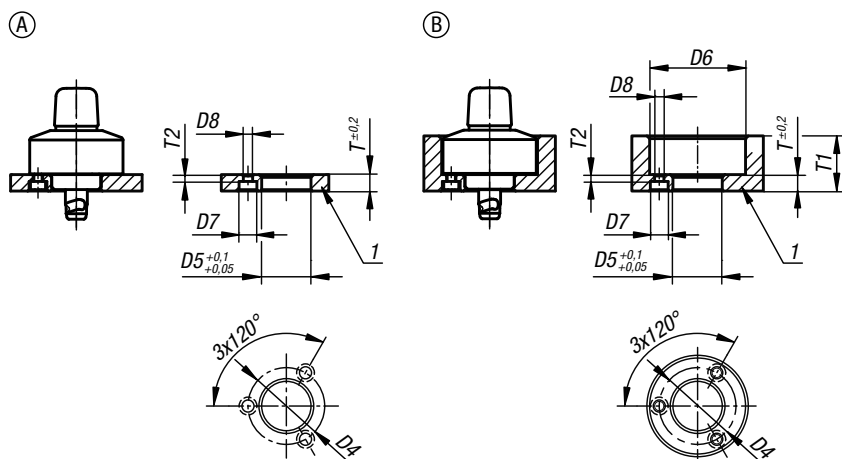
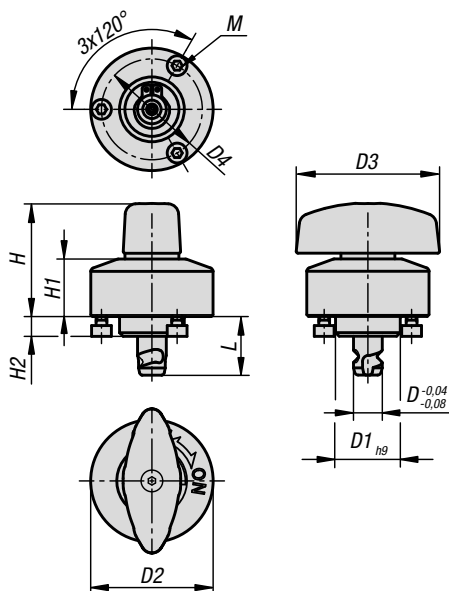


### Application examples:



# Quarter-turn clamp locks, stainless steel

twist knob plastic or stainless steel



Quarter-turn clamp locks are used for replacing and locking fixtures or hatches quickly and easily. Toolless clamping shortens setup times.

## Material:

Stainless steel housing.

Bolt steel.

Rotary knob stainless steel or thermoplastic PA (polyamide)

## Version:

Housing bright.

Bolt nickel plated.

Rotary knob PA fibreglass reinforced, black.

Rotary knob stainless steel, bright.

## Sample order:

K1559.816

## Note:

Stainless steel M3 fastening screws are included.

Form A mounting option for plate thickness 6 mm.

Form B mounting option for plate thickness > 6 to 14 mm.

## Method of operation:

Check that the rotary knob is in the „OFF“ position. Set the quarter-turn clamp lock in the premounted clamping plate.

Turn the rotary knob to the „ON“ position.

When fully clamped, a click sound is heard.

## Accessories:

Clamping plates K1560

## Drawing reference:

1) plate

## KIPP Quarter-turn clamp locks stainless steel, knob plastic or stainless steel

| Order No.  | Component material | Version 2  | D | L    | D1 | D2 | D3 | D4 | H    | H1 | H2  | M       | D5 | D6 | D7  | D8  | T | T1   | T2  |
|------------|--------------------|------------|---|------|----|----|----|----|------|----|-----|---------|----|----|-----|-----|---|------|-----|
| K1559.816  | polyamide          | pins steel | 8 | 16,3 | 18 | 34 | 40 | 28 | 31,5 | 16 | 5,5 | M03X0,5 | 18 | 35 | 6,5 | 3,4 | 6 | 6-20 | 2,5 |
| K1559.8161 | stainless steel    | pins steel | 8 | 16,3 | 18 | 34 | 40 | 28 | 31,5 | 16 | 5,5 | M03X0,5 | 18 | 35 | 6,5 | 3,4 | 6 | 6-20 | 2,5 |

## KIPP Quarter-turn clamp lock, technical information

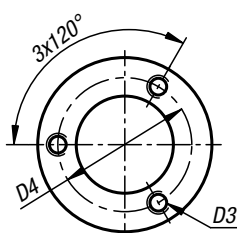
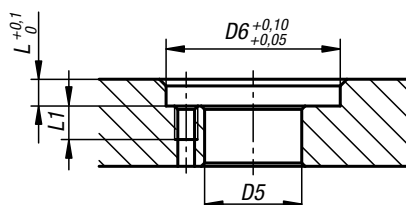
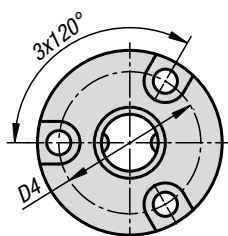
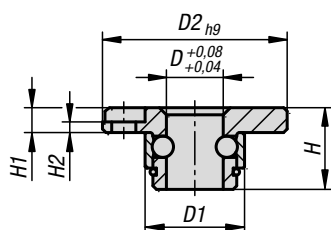
| Order No.  | Component material | Version 2  | D | L    | Clamping force N | Shearing force kN | Pullout force kN | Temperature resistance |
|------------|--------------------|------------|---|------|------------------|-------------------|------------------|------------------------|
| K1559.816  | polyamide          | pins steel | 8 | 16,3 | 400              | 4,8               | 1,6              | ≤130 °C / ≤200 °C      |
| K1559.8161 | stainless steel    | pins steel | 8 | 16,3 | 400              | 4,8               | 1,6              | ≤130 °C / ≤200 °C      |

## Clamping plates steel

for quarter-turn clamp locks



Clamping plate recessed  
for plate thickness > 9 mm



### Material:

Housing steel.

### Version:

Housing nickel-plated.

### Sample order:

K1560.801

### Note:

Stainless steel M3 fastening screws are included.  
Mounting option for plate thickness starting from 9 mm.

### Accessories:

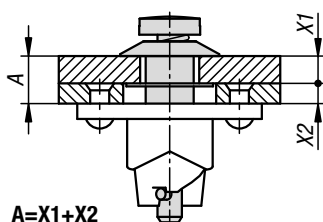
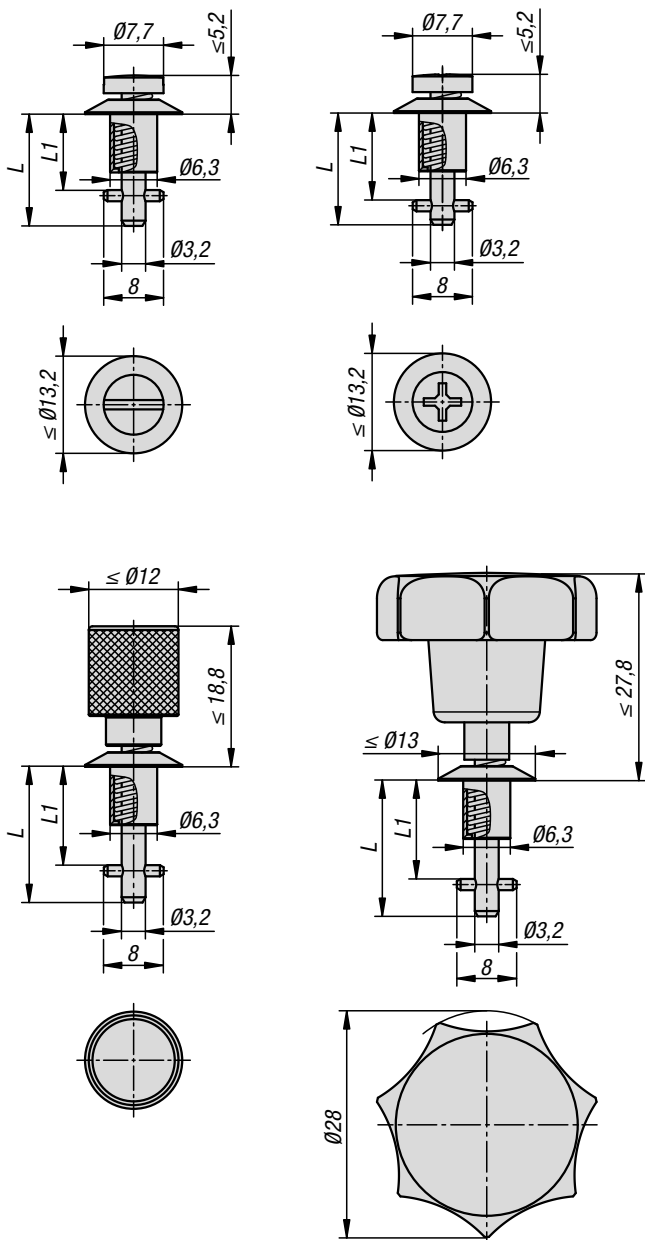
quarter-turn clamp lock K1559.



### KIPP Steel clamping plates for quarter-turn clamp locks

| Order No. | D | D1 | D2 | D3     | D4 | D5   | D6 | H    | H1  | H2  | L | L1 |
|-----------|---|----|----|--------|----|------|----|------|-----|-----|---|----|
| K1560.801 | 8 | 14 | 26 | M3x0,5 | 20 | 14,5 | 26 | 11,5 | 3,5 | 1,5 | 4 | 5  |

## Quarter turn latches



$$A=X1+X2$$

### Material:

Steel.

### Version:

Electro zinc-plated.

### Sample order:

K1730.111090

### Note:

Quarter-turn latches for securely holding and locking hatches, container lids, machine covers and similar. The lock is closed or opened by turning it through 90°. This moves the cross pin in the locking bolt through a curve in the bottom part of the lock, thus tensioning the spring. At the end point of the curve there is a little recess in which the cross pin engages. The pretensioning force generated in the lock by the spring ensures that the connection is held securely despite any vibrations.

All components in the locking system (locking bolt, retaining washer and bottom part) are captive components which are joined to the cover or the frame.

They are operated through a slot, cross slot, or without tools using a knurled knob or star grip.

The quarter turn latch always consists of a 1/4 turn lock, retaining washer and lock bottom part. (Please order the retaining washer and lock bottom part separately).

### Assembly:

A hole of 8 mm is drilled through the cover, the bolt with cross pin are pushed through and secured to the retaining washer from the rear. A 13 mm centre hole is drilled in the frame, with two mounting holes which depend on the hole pattern in the bottom part.

### Accessories:

Retaining washers K1731.

Lock bottom part K1732.

### Technical data:

Maximum tractive force 1300 N.

## Quarter turn latches

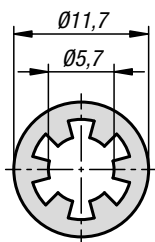


## KIPP Quarter turn latches

| Order No.<br>cross head | Order No.<br>slot head | Order No.<br>knurled head | Order No.<br>with star grip | A             | L                       | L1                      |
|-------------------------|------------------------|---------------------------|-----------------------------|---------------|-------------------------|-------------------------|
| K1730.111015            | K1730.211015           | K1730.311315              | K1730.411315                | 0,75 - 1,50   | 14,95/14,95/18,15/18,15 | 10,15/10,15/13,15/13,15 |
| K1730.111090            | K1730.211090           | K1730.311390              | K1730.411390                | 1,50 - 2,25   | 14,95/14,95/18,15/18,15 | 10,9/10,9/13,9/13,9     |
| K1730.111165            | K1730.211165           | K1730.311465              | K1730.411465                | 2,25 - 3,00   | 14,95/14,95/18,15/18,15 | 11,65/11,65/14,65/14,65 |
| K1730.111240            | K1730.211240           | K1730.311540              | K1730.411540                | 3,00 - 3,75   | 17,2/17,2/20,4/20,4     | 12,4/12,4/15,4/15,4     |
| K1730.111315            | K1730.211315           | K1730.311615              | K1730.411615                | 3,75 - 4,50   | 17,2/17,2/20,4/20,4     | 13,15/13,15/16,15/16,15 |
| K1730.111390            | K1730.211390           | K1730.311690              | K1730.411690                | 4,50 - 5,25   | 17,2/17,2/20,4/20,4     | 13,9/13,9/16,9/16,9     |
| K1730.111465            | K1730.211465           | K1730.311765              | K1730.411765                | 5,25 - 6,00   | 19,45/19,45/22,65/22,65 | 14,65/14,65/17,65/17,65 |
| K1730.111540            | K1730.211540           | K1730.311840              | K1730.411840                | 6,00 - 6,75   | 19,45/19,45/22,65/22,65 | 15,4/15,4/18,4/18,4     |
| K1730.111615            | K1730.211615           | K1730.311915              | K1730.411915                | 6,75 - 7,50   | 19,45/19,45/22,65/22,65 | 16,15/16,15/19,15/19,15 |
| K1730.111690            | K1730.211690           | K1730.311990              | K1730.411990                | 7,50 - 8,25   | 21,7/21,7/24,9/24,9     | 16,9/16,9/19,9/19,9     |
| K1730.111765            | K1730.211765           | K1730.312065              | K1730.412065                | 8,25 - 9,00   | 21,7/21,7/24,9/24,9     | 17,65/17,65/20,65/20,65 |
| K1730.111840            | K1730.211840           | K1730.312140              | K1730.412140                | 9,00 - 9,75   | 21,7/21,7/24,9/24,9     | 18,4/18,4/21,4/21,4     |
| K1730.111915            | K1730.211915           | K1730.312215              | K1730.412215                | 9,75 - 10,50  | 23,95/23,95/27,15/27,15 | 19,15/19,15/22,15/22,15 |
| K1730.111990            | K1730.211990           | K1730.312290              | K1730.412290                | 10,50 - 11,25 | 23,95/23,95/27,15/27,15 | 19,9/19,9/22,9/22,9     |
| K1730.112065            | K1730.212065           | K1730.312365              | K1730.412365                | 11,25 - 12,00 | 23,95/23,95/27,15/27,15 | 20,65/20,65/23,65/23,65 |
| K1730.112140            | K1730.212140           | K1730.312440              | K1730.412440                | 12,00 - 12,75 | 26,2/26,2/29,4/29,4     | 21,4/21,4/24,4/24,4     |
| K1730.112215            | K1730.212215           | K1730.312515              | K1730.412515                | 12,75 - 13,50 | 26,2/26,2/29,4/29,4     | 22,15/22,15/25,15/25,15 |
| K1730.112290            | K1730.212290           | K1730.312590              | K1730.412590                | 13,50 - 14,25 | 26,2/26,2/29,4/29,4     | 22,9/22,9/25,9/25,9     |
| K1730.112365            | K1730.212365           | K1730.312665              | K1730.412665                | 14,25 - 15,00 | 28,45/28,45/31,65/31,65 | 23,65/23,65/26,65/26,65 |
| K1730.112440            | K1730.212440           | K1730.312740              | K1730.412740                | 15,00 - 15,75 | 28,45/28,45/31,65/31,65 | 24,4/24,4/27,4/27,4     |
| K1730.112515            | K1730.212515           | K1730.312815              | K1730.412815                | 15,75 - 16,50 | 28,45/28,45/31,65/31,65 | 25,15/25,15/28,15/28,15 |
| K1730.112590            | K1730.212590           | K1730.312890              | K1730.412890                | 16,50 - 17,25 | 30,7/30,7/33,9/33,9     | 25,9/25,9/28,9/28,9     |
| K1730.112665            | K1730.212665           | K1730.312965              | K1730.412965                | 17,25 - 18,00 | 30,7/30,7/33,9/33,9     | 26,65/26,65/29,65/29,65 |
| K1730.112740            | K1730.212740           | K1730.313040              | K1730.413040                | 18,00 - 18,75 | 30,7/30,7/33,9/33,9     | 27,4/27,4/30,4/30,4     |
| K1730.112815            | K1730.212815           | K1730.313115              | K1730.413115                | 18,75 - 19,50 | 32,95/32,95/36,15/36,15 | 28,15/28,15/31,15/31,15 |
| K1730.112890            | K1730.212890           | K1730.313190              | K1730.413190                | 19,50 - 20,25 | 32,95/32,95/36,15/36,15 | 28,9/28,9/31,9/31,9     |
| K1730.112965            | K1730.212965           | K1730.313265              | K1730.413265                | 20,25 - 21    | 32,95/32,95/36,15/36,15 | 29,65/29,65/32,65/32,65 |

## Retaining washers

for quarter turn latches



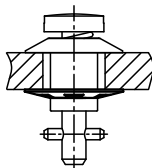
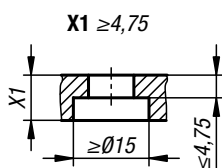
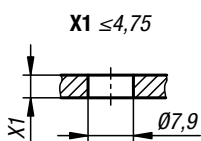
**Material:**  
Spring steel

**Version:**  
Electro zinc-plated.

**Sample order:**  
K1731.06

**Note:**  
Retaining washer for fastening the locking pin. This keeps the locking pin joined captively to the cover.

**Accessories:**  
Quarter turn latches K1730.



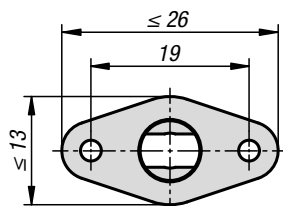
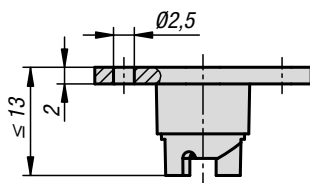
### KIPP Retaining washers for quarter turn latches

| Order No. | Item             | for Art. No. |
|-----------|------------------|--------------|
| K1731.06  | Retaining washer | K1730        |

# K1732

## Lock bottom parts

for quarter turn latches



**Material:**  
Die-cast zinc.

**Version:**  
nickel-plated.

**Sample order:**  
K1732.06

**Note:**  
The lock bottom part can be either screwed or riveted to the frame.

**Accessories:**  
Quarter turn latches K1730.

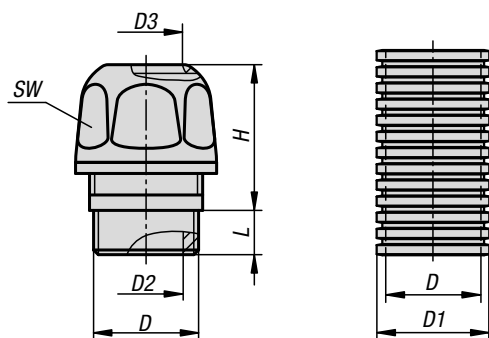


### KIPP Lock bottom parts for quarter turn latches

| Order No. | Item             | for Art. No. |
|-----------|------------------|--------------|
| K1732.06  | Lock bottom part | K1730        |

# Cable glands, stainless steel or plastic

in Hygienic DESIGN



## Material:

Stainless steel cable gland: Outer part 1.4404 Inner part 1.4305

Plastic cable gland: Polyamide. Cable gland seal: TPU. Hose: Polyamide.

## Version:

Cable gland: bright stainless steel, transparent plastic. Hose: coated

## Sample order:

K1453.12150

## Note:

Washers supplied.

EN 60423 metric thread.

IP rating 66, 68 up to 15 bar, 69K.

Tension relief corresponds to EU standard 62444.

EHEDG certified.

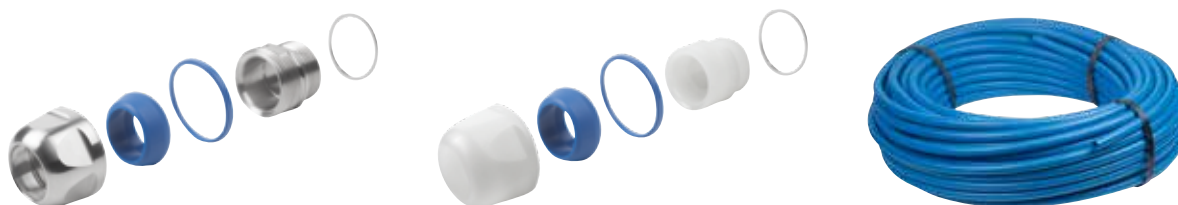
Seal insert ADI - free

## Temperature range:

Stainless steel cable gland: -40 °C to +85 °C.

Plastic cable gland: -20 °C to +85 °C.

Hose: -20 °C to +95 °C.



## KIPP Cable glands, stainless steel or plastic, in Hygienic DESIGN

| Order No.<br>stainless steel | Order No.<br>plastic | D       | D2   | D3    | H     | SW    | L  |
|------------------------------|----------------------|---------|------|-------|-------|-------|----|
| K1453.12150                  | -                    | M12X1,5 | 8    | 7-5   | 19    | 17    | 7  |
| K1453.16150                  | K1453.16151          | M16x1,5 | 10   | 9-7   | 21/25 | 20/22 | 9  |
| K1453.20150                  | K1453.20151          | M20X1,5 | 12,5 | 12-9  | 27/29 | 24/26 | 9  |
| K1453.25150                  | K1453.25151          | M25x1,5 | 18,5 | 18-15 | 27/31 | 30/32 | 10 |
| K1453.32150                  | K1453.32151          | M32x1,5 | 25,3 | 23-20 | 27/32 | 36/38 | 11 |

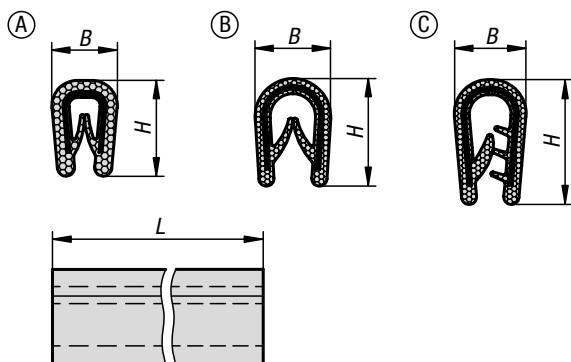
## KIPP Corrugated tube hose

| Order No.  | D    | D1   | L    | Nominal size |
|------------|------|------|------|--------------|
| K1461.1250 | 11,8 | 16   | 50 m | 12           |
| K1461.1750 | 15,6 | 21,6 | 50 m | 17           |



## Edge protection profiles

with steel retaining strip



### Material:

PVC.

### Version:

Black.

### Sample order:

K1367.010X2000  
(include length L)

### Note:

The edge protection profiles are used to cover and decorate the sharp edges of cut plate so that no additional processing is required.

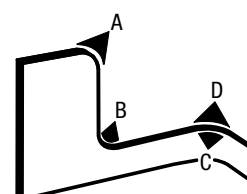
### Assembly:

Easy, quick and smooth assembly. The edge protection profile is easy to push on by hand, and remains in place even on radii or bends. No adhesive or fastening material required.

### On request:

Other lengths.

Minimum bend radius:

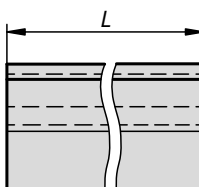
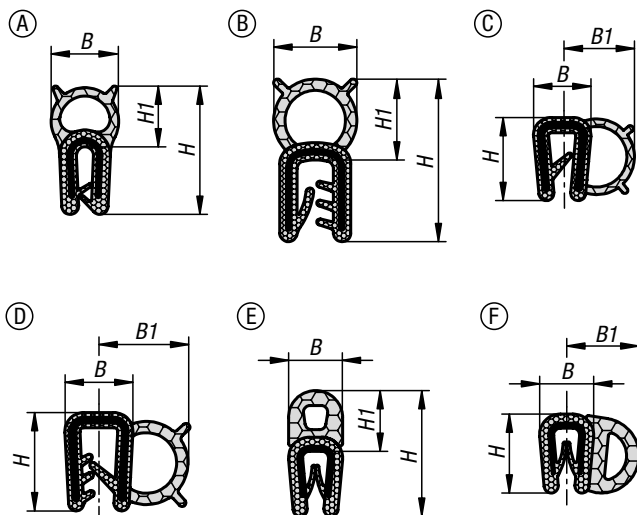


## KIPP Edge protection profiles with steel retaining strip

| Order No.  | Form | L                           | Clamping range<br>mm | Minimum bend radius<br>mm | B   | H    |
|------------|------|-----------------------------|----------------------|---------------------------|-----|------|
| K1367.010X | A    | 2000/5000/10000/20000/50000 | 1,0-2,0              | A=15 B=15 C=10 D=10       | 6,5 | 10   |
| K1367.114X | B    | 2000/5000/10000/20000/50000 | 1,0-4,0              | A=30 B=20 C=20 D=20       | 10  | 14,5 |
| K1367.217X | C    | 2000/5000/10000/20000/50000 | 4,0-6,0              | A=50 B=40 C=30 D=30       | 11  | 15,8 |

# Edge protection profiles

with integrated steel wire core



## Material:

Edge protection EPDM or PVC.  
Seal EPDM foam rubber.

## Version:

Black.

## Sample order:

K1368.015X2000  
(include length L)

## Note:

In addition to edge protection, these profiles also provide a sealing function against moisture, dust and dirt for other elements such as doors, hatches or housing covers. Depending on the shape of the foam rubber profile, they can be used in a wide range of applications.

We recommend compressing the sealing lip of the edge protection by max.50%.

To ensure the best possible seal, the lips should be compressed by 30-40%.

These specifications are recommendations; in practice, they are individually dependent on the application and the parts used.

The sizes edge protection profiles made from EPDM are UL50, UL50E and UL94HB certified.

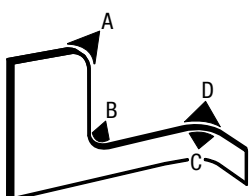
## Assembly:

Easy, quick and smooth assembly. The edge protection profile is easy to push on by hand and remains in place. No adhesive or fastening material required.

## On request:

Other lengths.

Minimum bend radius:

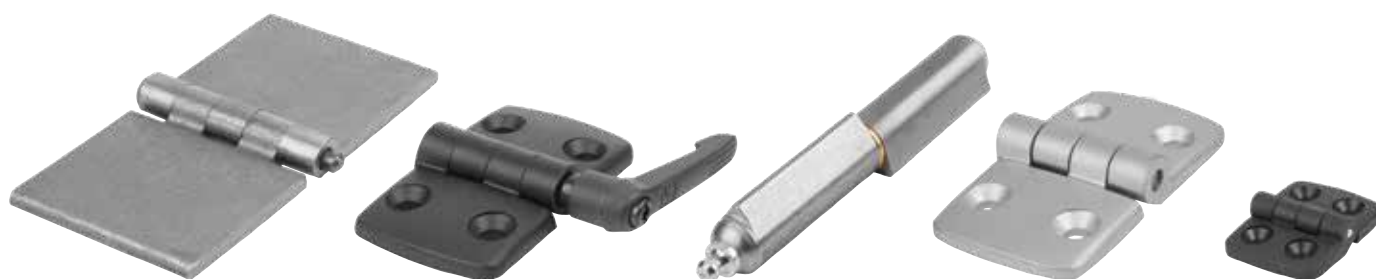


## KIPP Edge protection sealing profiles with integrated steel wire core

| Order No.  | Form | Main material | L                           | Clamping range mm | Minimum bend radius mm | B   | B1 | H  | H1 |
|------------|------|---------------|-----------------------------|-------------------|------------------------|-----|----|----|----|
| K1368.015X | A    | EPDM          | 2000/5000/10000/20000/50000 | 0,5-1,5           | A=50 B=180 C=25 D=25   | 8   | -  | 15 | 7  |
| K1368.122X | B    | EPDM          | 2000/5000/10000/20000/50000 | 1,0-3,0           | A=50 B=180 C=30 D=30   | 11  | -  | 22 | 11 |
| K1368.211X | C    | EPDM          | 2000/5000/10000/20000/50000 | 1,0-2,0           | A=100 B=200 C=100 D=60 | 8   | 9  | 11 | -  |
| K1368.313X | D    | EPDM          | 2000/5000/10000/20000/50000 | 2,0               | A=50 B=20 C=120 D=40   | 9   | 12 | 13 | -  |
| K1368.415X | E    | PVC           | 2000/5000/10000/20000/50000 | 1,0-2,0           | A=20 B=40 C=10 D=10    | 6,5 | -  | 15 | 7  |
| K1368.510X | F    | PVC           | 2000/5000/10000/20000/50000 | 1,0-2,0           | A=20 B=15 C=30 D=30    | 7   | 9  | 10 | -  |



# Hinges





# Technical information

## Hinges



### Hinges

We have listed a wide range of hinges on the following pages. Many more combinations are possible where hinges with guide tabs are required i.e. when combining aluminium profiles with different slot widths.

### Left and right hinge

Each lift-off hinge has a left and right version. Before ordering it should be known on which side the door or hatch is to be mounted.

#### Left hinge.

The left hinge half is fixed.  
The hatch or door opens from right to left.



#### Right hinge.

The right hinge half is fixed.  
The hatch or door opens from left to right.



#### Fixed hinge.

The hinge is non-liftoff.  
It is suitable for opening left or right.



### Guide tabs

Many hinges can be supplied on request with guide tabs for the slots of aluminium profiles. They secure the hinge against twisting and make it stronger. The hinges are designed in such a way that the guide tabs can simply be broken out with a screwdriver.



**without**  
guide tabs

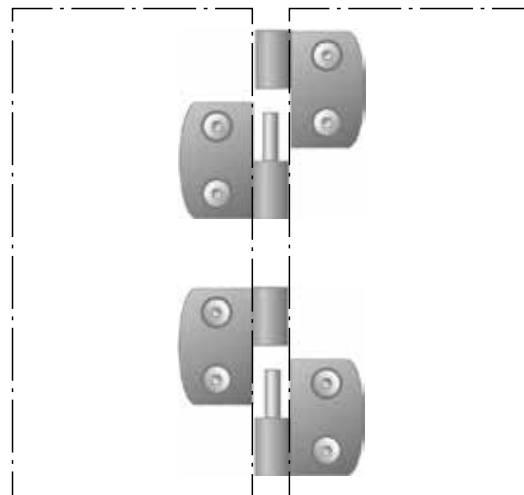


**with**  
guide tabs  
for aluminium  
profiles with slot



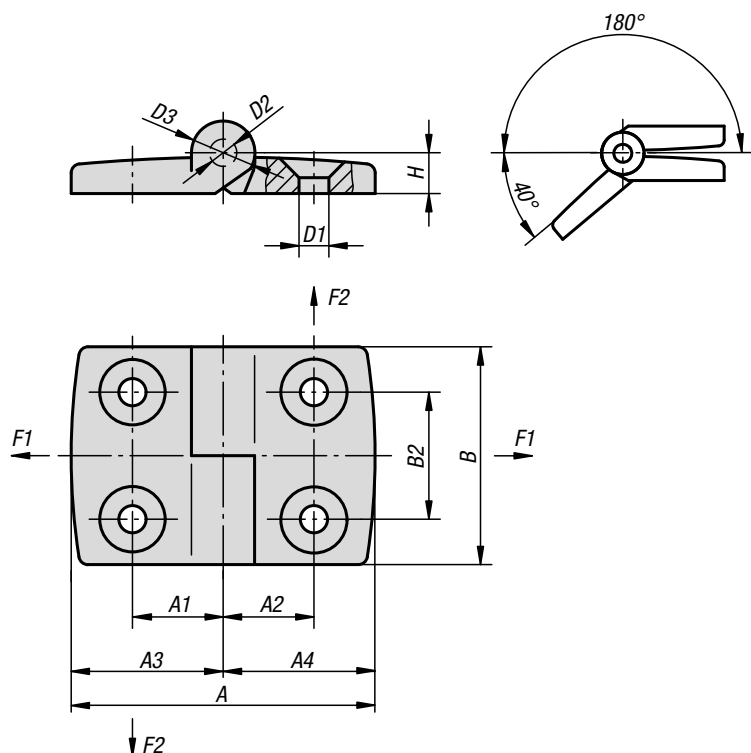
### Tip

If you want to fit a door or hatch so that it cannot be lifted off, you can still use a left and right lift-off hinge. The two hinges are fitted in the end position and secure each other mutually.



# Hinges

plastic, lift-off, left



## Material:

Fibreglass reinforced thermoplastic.  
Hinge pin stainless steel.

## Version:

Hinge black. Pin bright.

## Sample order:

K0434.1301825

## Note:

All hinges can be supplied on request with guide tabs for the slots of aluminium profiles (slots 6, 8 and 10). They facilitate assembly, secure the hinge against rotation and make it harder wearing.

The loading values given for the hinges are non-binding reference values without consideration of safety factors and exclude any liability. The values given are for information purposes only and do not constitute a legally binding assurance of properties.

The load values have been determined under laboratory conditions. Each user must determine individually whether the hinge is suitable for the respective application.

Different materials onto which the hinges are installed and the type of mounting, weather conditions and wear can influence the determined values.

## KIPP Hinges plastic, lift-off, left

| Order No.     | A    | A1   | A2   | A3   | A4   | B  | B2 | D1  | D2 | D3 | H | F1<br>N | F2<br>N |
|---------------|------|------|------|------|------|----|----|-----|----|----|---|---------|---------|
| K0434.1251515 | 52   | 15   | 15   | 26   | 26   | 48 | 28 | 6,6 | 6  | 14 | 9 | 625     | 425     |
| K0434.1251518 | 55,5 | 15   | 17,5 | 26   | 29,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 700     | 500     |
| K0434.1251520 | 61,5 | 15   | 20   | 26   | 35,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 700     | 400     |
| K0434.1251523 | 64,5 | 15   | 22,5 | 26   | 38,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 800     | 350     |
| K0434.1251525 | 69,5 | 15   | 25   | 26   | 43,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 800     | 325     |
| K0434.1251528 | 74,5 | 15   | 27,5 | 26   | 48,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 800     | 320     |
| K0434.1251533 | 83,5 | 15   | 32,5 | 26   | 57,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 800     | 240     |
| K0434.1301815 | 55,5 | 17,5 | 15   | 29,5 | 26   | 48 | 28 | 6,6 | 6  | 14 | 9 | 750     | 450     |
| K0434.1301818 | 59   | 17,5 | 17,5 | 29,5 | 29,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 750     | 500     |
| K0434.1301820 | 65   | 17,5 | 20   | 29,5 | 35,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 750     | 400     |
| K0434.1301823 | 68   | 17,5 | 22,5 | 29,5 | 38,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 800     | 350     |
| K0434.1301825 | 73   | 17,5 | 25   | 29,5 | 43,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 800     | 350     |
| K0434.1301828 | 78   | 17,5 | 27,5 | 29,5 | 48,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 800     | 350     |
| K0434.1301833 | 87   | 17,5 | 32,5 | 29,5 | 57,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 800     | 240     |
| K0434.1352015 | 61,5 | 20   | 15   | 35,5 | 26   | 48 | 28 | 6,6 | 6  | 14 | 9 | 750     | 400     |
| K0434.1352018 | 65   | 20   | 17,5 | 35,5 | 29,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 750     | 500     |
| K0434.1352020 | 71   | 20   | 20   | 35,5 | 35,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 750     | 400     |
| K0434.1352023 | 74   | 20   | 22,5 | 35,5 | 38,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 800     | 350     |
| K0434.1352025 | 79   | 20   | 25   | 35,5 | 43,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 800     | 350     |
| K0434.1352028 | 84   | 20   | 27,5 | 35,5 | 48,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 900     | 350     |
| K0434.1352033 | 93   | 20   | 32,5 | 35,5 | 57,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 800     | 240     |

## Hinges

plastic, lift-off, left



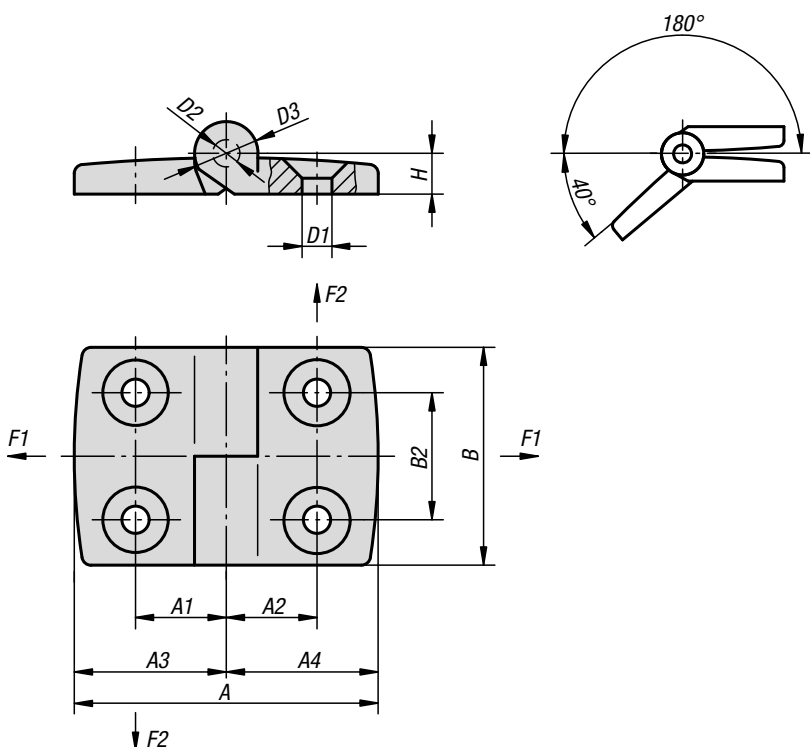
## KIPP Hinges plastic, lift-off, left

| Order No.     | A    | A1   | A2   | A3   | A4   | B  | B2 | D1  | D2 | D3 | H | F1<br>N | F2<br>N |
|---------------|------|------|------|------|------|----|----|-----|----|----|---|---------|---------|
| K0434.1402315 | 64,5 | 22,5 | 15   | 38,5 | 26   | 48 | 28 | 6,6 | 6  | 14 | 9 | 650     | 425     |
| K0434.1402318 | 68   | 22,5 | 17,5 | 38,5 | 29,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 750     | 500     |
| K0434.1402320 | 74   | 22,5 | 20   | 38,5 | 35,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 750     | 400     |
| K0434.1402323 | 77   | 22,5 | 22,5 | 38,5 | 38,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 800     | 400     |
| K0434.1402328 | 87   | 22,5 | 27,5 | 38,5 | 48,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 800     | 350     |
| K0434.1402333 | 96   | 22,5 | 32,5 | 38,5 | 57,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 800     | 240     |
| K0434.1452515 | 69,5 | 25   | 15   | 43,5 | 26   | 48 | 28 | 6,6 | 6  | 14 | 9 | 650     | 425     |
| K0434.1452518 | 73   | 25   | 17,5 | 43,5 | 29,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 750     | 500     |
| K0434.1452520 | 79   | 25   | 20   | 43,5 | 35,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 700     | 400     |
| K0434.1452523 | 82   | 25   | 22,5 | 43,5 | 38,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 800     | 350     |
| K0434.1452525 | 87   | 25   | 25   | 43,5 | 43,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 800     | 325     |
| K0434.1452528 | 92   | 25   | 27,5 | 43,5 | 48,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 800     | 320     |
| K0434.1452533 | 101  | 25   | 32,5 | 43,5 | 57,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 800     | 240     |
| K0434.1502815 | 74,5 | 27,5 | 15   | 48,5 | 26   | 48 | 28 | 6,6 | 6  | 14 | 9 | 650     | 425     |
| K0434.1502818 | 78   | 27,5 | 17,5 | 48,5 | 29,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 750     | 500     |
| K0434.1502820 | 84   | 27,5 | 20   | 48,5 | 35,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 700     | 400     |
| K0434.1502823 | 87   | 27,5 | 22,5 | 48,5 | 38,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 800     | 350     |
| K0434.1502825 | 92   | 27,5 | 25   | 48,5 | 43,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 800     | 325     |
| K0434.1502828 | 97   | 27,5 | 27,5 | 48,5 | 48,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 800     | 320     |
| K0434.1502833 | 106  | 27,5 | 32,5 | 48,5 | 57,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 800     | 240     |
| K0434.1603315 | 83,5 | 32,5 | 15   | 57,5 | 26   | 48 | 28 | 6,6 | 6  | 14 | 9 | 650     | 425     |
| K0434.1603318 | 87   | 32,5 | 17,5 | 57,5 | 29,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 750     | 500     |
| K0434.1603320 | 93   | 32,5 | 20   | 57,5 | 35,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 700     | 400     |
| K0434.1603323 | 96   | 32,5 | 22,5 | 57,5 | 38,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 800     | 350     |
| K0434.1603325 | 101  | 32,5 | 25   | 57,5 | 43,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 800     | 325     |
| K0434.1603328 | 106  | 32,5 | 27,5 | 57,5 | 48,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 900     | 320     |
| K0434.1603333 | 115  | 32,5 | 32,5 | 57,5 | 57,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 900     | 240     |



# Hinges

plastic, lift-off, right



## Material:

Fibreglass reinforced thermoplastic.  
Hinge pin stainless steel.

## Version:

Hinge black. Pin bright.

## Sample order:

K0434.2251523

## Note:

All hinges can be supplied on request with guide tabs for the slots of aluminium profiles (slots 6, 8 and 10). They facilitate assembly, secure the hinge against rotation and make it harder wearing.

The loading values given for the hinges are non-binding reference values without consideration of safety factors and exclude any liability. The values given are for information purposes only and do not constitute a legally binding assurance of properties.

## KIPP Hinges plastic, lift-off, right

| Order No.     | A    | A1   | A2   | A3   | A4   | B  | B2 | D1  | D2 | D3 | H | F1<br>N | F2<br>N |
|---------------|------|------|------|------|------|----|----|-----|----|----|---|---------|---------|
| K0434.2251515 | 52   | 15   | 15   | 26   | 26   | 48 | 28 | 6,6 | 6  | 14 | 9 | 625     | 425     |
| K0434.2251518 | 55,5 | 15   | 17,5 | 26   | 29,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 700     | 500     |
| K0434.2251520 | 61,5 | 15   | 20   | 26   | 35,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 700     | 400     |
| K0434.2251523 | 64,5 | 15   | 22,5 | 26   | 38,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 800     | 350     |
| K0434.2251525 | 69,5 | 15   | 25   | 26   | 43,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 800     | 325     |
| K0434.2251528 | 74,5 | 15   | 27,5 | 26   | 48,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 800     | 320     |
| K0434.2251533 | 83,5 | 15   | 32,5 | 26   | 57,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 800     | 240     |
| K0434.2301815 | 55,5 | 17,5 | 15   | 29,5 | 26   | 48 | 28 | 6,6 | 6  | 14 | 9 | 750     | 450     |
| K0434.2301818 | 59   | 17,5 | 17,5 | 29,5 | 29,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 750     | 500     |
| K0434.2301820 | 65   | 17,5 | 20   | 29,5 | 35,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 700     | 400     |
| K0434.2301823 | 68   | 17,5 | 22,5 | 29,5 | 38,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 800     | 350     |
| K0434.2301825 | 73   | 17,5 | 25   | 29,5 | 43,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 800     | 350     |
| K0434.2301828 | 78   | 17,5 | 27,5 | 29,5 | 48,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 800     | 350     |
| K0434.2301833 | 87   | 17,5 | 32,5 | 29,5 | 57,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 800     | 240     |
| K0434.2352015 | 61,5 | 20   | 15   | 35,5 | 26   | 48 | 28 | 6,6 | 6  | 14 | 9 | 700     | 400     |
| K0434.2352018 | 65   | 20   | 17,5 | 35,5 | 29,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 750     | 500     |
| K0434.2352020 | 71   | 20   | 20   | 35,5 | 35,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 750     | 400     |
| K0434.2352023 | 74   | 20   | 22,5 | 35,5 | 38,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 800     | 350     |
| K0434.2352025 | 79   | 20   | 25   | 35,5 | 43,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 800     | 350     |
| K0434.2352028 | 84   | 20   | 27,5 | 35,5 | 48,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 800     | 350     |
| K0434.2352033 | 93   | 20   | 32,5 | 35,5 | 57,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 800     | 240     |
| K0434.2402315 | 64,5 | 22,5 | 15   | 38,5 | 26   | 48 | 28 | 6,6 | 6  | 14 | 9 | 650     | 425     |
| K0434.2402318 | 68   | 22,5 | 17,5 | 38,5 | 29,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 750     | 500     |
| K0434.2402320 | 74   | 22,5 | 20   | 38,5 | 35,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 750     | 400     |

# Hinges

plastic, lift-off, right



The load values have been determined under laboratory conditions. Each user must determine individually whether the hinge is suitable for the respective application.

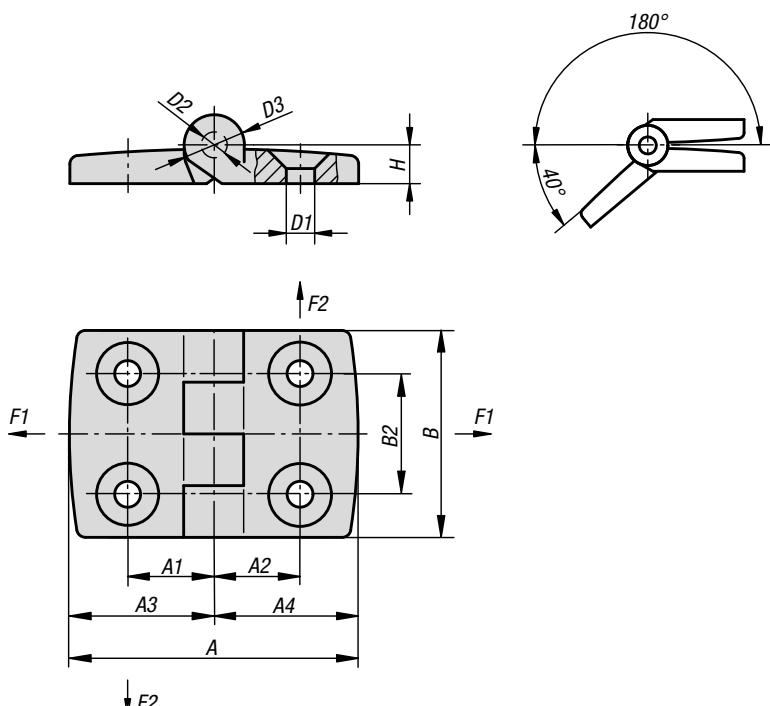
Different materials onto which the hinges are installed and the type of mounting, weather conditions and wear can influence the determined values.

## KIPP Hinges plastic, lift-off, right

| Order No.     | A    | A1   | A2   | A3   | A4   | B  | B2 | D1  | D2 | D3 | H | F1<br>N | F2<br>N |
|---------------|------|------|------|------|------|----|----|-----|----|----|---|---------|---------|
| K0434.2402323 | 77   | 22,5 | 22,5 | 38,5 | 38,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 800     | 350     |
| K0434.2402325 | 82   | 22,5 | 25   | 38,5 | 43,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 800     | 350     |
| K0434.2402328 | 87   | 22,5 | 27,5 | 38,5 | 48,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 800     | 350     |
| K0434.2402333 | 96   | 22,5 | 32,5 | 38,5 | 57,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 800     | 240     |
| K0434.2452515 | 69,5 | 25   | 15   | 43,5 | 26   | 48 | 28 | 6,6 | 6  | 14 | 9 | 650     | 425     |
| K0434.2452518 | 73   | 25   | 17,5 | 43,5 | 29,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 750     | 500     |
| K0434.2452520 | 79   | 25   | 20   | 43,5 | 35,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 700     | 400     |
| K0434.2452523 | 82   | 25   | 22,5 | 43,5 | 38,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 800     | 350     |
| K0434.2452525 | 87   | 25   | 25   | 43,5 | 43,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 800     | 325     |
| K0434.2452528 | 92   | 25   | 27,5 | 43,5 | 48,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 800     | 320     |
| K0434.2452533 | 101  | 25   | 32,5 | 43,5 | 57,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 800     | 240     |
| K0434.2502815 | 74,5 | 27,5 | 15   | 48,5 | 26   | 48 | 28 | 6,6 | 6  | 14 | 9 | 650     | 425     |
| K0434.2502818 | 78   | 27,5 | 17,5 | 48,5 | 29,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 750     | 500     |
| K0434.2502820 | 84   | 27,5 | 20   | 48,5 | 35,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 700     | 400     |
| K0434.2502823 | 87   | 27,5 | 22,5 | 48,5 | 38,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 800     | 350     |
| K0434.2502825 | 92   | 27,5 | 25   | 48,5 | 43,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 800     | 325     |
| K0434.2502828 | 97   | 27,5 | 27,5 | 48,5 | 48,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 800     | 320     |
| K0434.2502833 | 106  | 27,5 | 32,5 | 48,5 | 57,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 800     | 240     |
| K0434.2603318 | 87   | 32,5 | 17,5 | 57,5 | 29,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 750     | 500     |
| K0434.2603320 | 93   | 32,5 | 20   | 57,5 | 35,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 700     | 400     |
| K0434.2603323 | 96   | 32,5 | 22,5 | 57,5 | 38,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 800     | 350     |
| K0434.2603325 | 101  | 32,5 | 25   | 57,5 | 43,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 800     | 325     |
| K0434.2603328 | 106  | 32,5 | 27,5 | 57,5 | 48,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 900     | 320     |
| K0434.2603333 | 115  | 32,5 | 32,5 | 57,5 | 57,5 | 48 | 28 | 6,6 | 6  | 14 | 9 | 900     | 240     |

# Hinges

plastic

**Material:**

Fibreglass reinforced thermoplastic.  
Hinge pin stainless steel.

**Version:**

Hinge black. Pin bright.

**Sample order:**

K0435.251528

**Note:**

Hinges with different leaf lengths can be used left and right.

All hinges can be supplied on request with guide tabs for the slots of aluminium profiles (slots 6, 8 and 10). They facilitate assembly, secure the hinge against rotation and make it harder wearing.

The loading values given for the hinges are non-binding reference values without consideration of safety factors and exclude any liability. The values given are for information purposes only and do not constitute a legally binding assurance of properties.

The load values have been determined under laboratory conditions. Each user must determine individually whether the hinge is suitable for the respective application.

Different materials onto which the hinges are installed and the type of mounting, weather conditions and wear can influence the determined values.

## Scharniere

aus Kunststoff

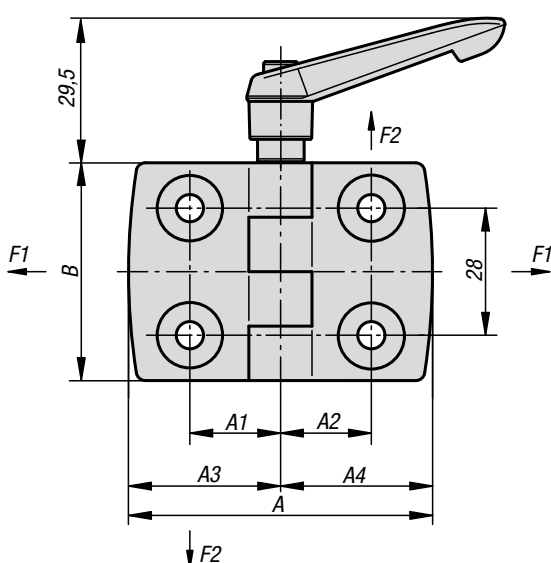
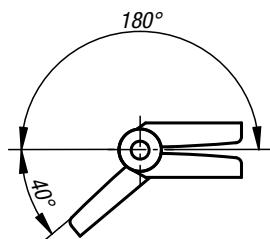
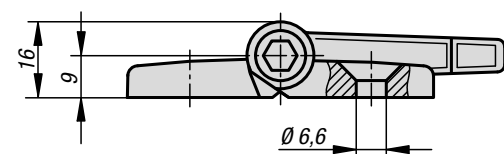


## KIPP Scharniere aus Kunststoff

| Bestellnummer | A    | A1   | A2   | A3   | A4   | B  | B2 | D1  | D2 | D3 | H   | F1<br>N | F2<br>N |
|---------------|------|------|------|------|------|----|----|-----|----|----|-----|---------|---------|
| K0435.201212  | 39   | 11,5 | 11,5 | 19,5 | 19,5 | 30 | 14 | 4,2 | 3  | 8  | 5,5 | 400     | 200     |
| K0435.251515  | 52   | 15   | 15   | 26   | 26   | 48 | 28 | 6,6 | 6  | 14 | 9   | 625     | 425     |
| K0435.251518  | 55,5 | 15   | 17,5 | 26   | 29,5 | 48 | 28 | 6,6 | 6  | 14 | 9   | 700     | 500     |
| K0435.251520  | 61,5 | 15   | 20   | 26   | 35,5 | 48 | 28 | 6,6 | 6  | 14 | 9   | 700     | 400     |
| K0435.251523  | 64,5 | 15   | 22,5 | 26   | 38,5 | 48 | 28 | 6,6 | 6  | 14 | 9   | 800     | 350     |
| K0435.251525  | 69,5 | 15   | 25   | 26   | 43,5 | 48 | 28 | 6,6 | 6  | 14 | 9   | 800     | 325     |
| K0435.251528  | 74,5 | 15   | 27,5 | 26   | 48,5 | 48 | 28 | 6,6 | 6  | 14 | 9   | 800     | 320     |
| K0435.251533  | 83,5 | 15   | 32,5 | 26   | 57,5 | 48 | 28 | 6,6 | 6  | 14 | 9   | 800     | 240     |
| K0435.301818  | 59   | 17,5 | 17,5 | 29,5 | 29,5 | 48 | 28 | 6,6 | 6  | 14 | 9   | 700     | 400     |
| K0435.301820  | 65   | 17,5 | 20   | 29,5 | 35,5 | 48 | 28 | 6,6 | 6  | 14 | 9   | 700     | 400     |
| K0435.301823  | 68   | 17,5 | 22,5 | 29,5 | 38,5 | 48 | 28 | 6,6 | 6  | 14 | 9   | 750     | 450     |
| K0435.301825  | 73   | 17,5 | 25   | 29,5 | 43,5 | 48 | 28 | 6,6 | 6  | 14 | 9   | 750     | 450     |
| K0435.301828  | 78   | 17,5 | 27,5 | 29,5 | 48,5 | 48 | 28 | 6,6 | 6  | 14 | 9   | 900     | 425     |
| K0435.301833  | 87   | 17,5 | 32,5 | 29,5 | 57,5 | 48 | 28 | 6,6 | 6  | 14 | 9   | 850     | 200     |
| K0435.352020  | 71   | 20   | 20   | 35,5 | 35,5 | 48 | 28 | 6,6 | 6  | 14 | 9   | 700     | 400     |
| K0435.352023  | 74   | 20   | 22,5 | 35,5 | 38,5 | 48 | 28 | 6,6 | 6  | 14 | 9   | 750     | 450     |
| K0435.352025  | 79   | 20   | 25   | 35,5 | 43,5 | 48 | 28 | 6,6 | 6  | 14 | 9   | 750     | 450     |
| K0435.352028  | 84   | 20   | 27,5 | 35,5 | 48,5 | 48 | 28 | 6,6 | 6  | 14 | 9   | 800     | 425     |
| K0435.352033  | 93   | 20   | 32,5 | 35,5 | 57,5 | 48 | 28 | 6,6 | 6  | 14 | 9   | 800     | 175     |
| K0435.402323  | 77   | 22,5 | 22,5 | 38,5 | 38,5 | 48 | 28 | 6,6 | 6  | 14 | 9   | 750     | 450     |
| K0435.402325  | 82   | 22,5 | 25   | 38,5 | 43,5 | 48 | 28 | 6,6 | 6  | 14 | 9   | 750     | 450     |
| K0435.402328  | 87   | 22,5 | 27,5 | 38,5 | 48,5 | 48 | 28 | 6,6 | 6  | 14 | 9   | 800     | 425     |
| K0435.402333  | 96   | 22,5 | 32,5 | 38,5 | 57,5 | 48 | 28 | 6,6 | 6  | 14 | 9   | 850     | 175     |
| K0435.452525  | 87   | 25   | 25   | 43,5 | 43,5 | 48 | 28 | 6,6 | 6  | 14 | 9   | 750     | 450     |
| K0435.452528  | 92   | 25   | 27,5 | 43,5 | 48,5 | 48 | 28 | 6,6 | 6  | 14 | 9   | 800     | 425     |
| K0435.452533  | 101  | 25   | 32,5 | 43,5 | 57,5 | 48 | 28 | 6,6 | 6  | 14 | 9   | 850     | 200     |
| K0435.502828  | 97   | 27,5 | 27,5 | 48,5 | 48,5 | 48 | 28 | 6,6 | 6  | 14 | 9   | 800     | 425     |
| K0435.502833  | 106  | 27,5 | 32,5 | 48,5 | 57,5 | 48 | 28 | 6,6 | 6  | 14 | 9   | 850     | 200     |
| K0435.603333  | 115  | 32,5 | 32,5 | 57,5 | 57,5 | 48 | 28 | 6,6 | 6  | 14 | 9   | 850     | 175     |

# Hinges

plastic, with locking lever



## Material:

Hinge and lever fibreglass reinforced thermoplastic.  
Hinge pin steel.  
Mechanism steel.

## Version:

Hinge black.  
Pin electro zinc-plated.  
Locking lever black.  
Mechanism black electro zinc-plated.

## Sample order:

K0436.251515

## Note:

The indexible lever enables the hinge to be locked in any position.

The loading values given for the hinges are non-binding reference values without consideration of safety factors and exclude any liability. The values given are for information purposes only and do not constitute a legally binding assurance of properties.

The load values have been determined under laboratory conditions. Each user must determine individually whether the hinge is suitable for the respective application.

Different materials onto which the hinges are installed and the type of mounting, weather conditions and wear can influence the determined values.

## On request:

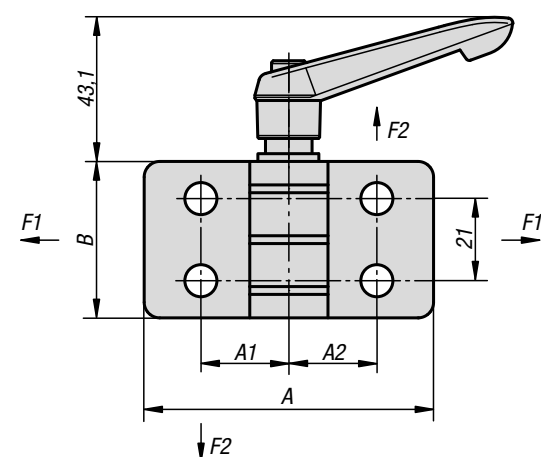
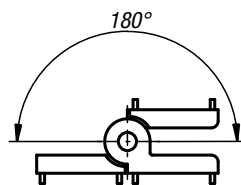
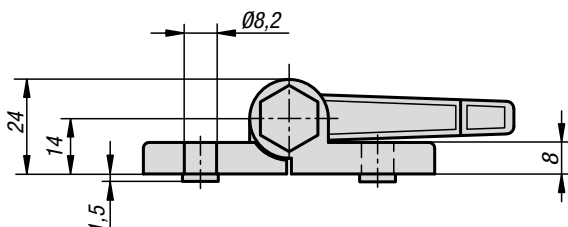
Hinges with guide tabs (slot 6, 8 and 10) for aluminium profiles.  
Unequal leaf combinations.

## KIPP Hinges plastic with locking lever

| Order No.    | A   | A1   | A2   | A3   | A4   | B  | F1<br>N | F2<br>N |
|--------------|-----|------|------|------|------|----|---------|---------|
| K0436.251515 | 52  | 15   | 15   | 26   | 26   | 48 | 500     | 380     |
| K0436.301818 | 59  | 17,5 | 17,5 | 29,5 | 29,5 | 48 | 700     | 400     |
| K0436.352020 | 72  | 20   | 20   | 36   | 36   | 48 | 700     | 400     |
| K0436.402323 | 77  | 22,5 | 22,5 | 38,5 | 38,5 | 48 | 750     | 450     |
| K0436.452525 | 87  | 25   | 25   | 43,5 | 43,5 | 48 | 750     | 450     |
| K0436.502828 | 97  | 27,5 | 27,5 | 48,5 | 48,5 | 48 | 800     | 425     |
| K0436.603333 | 115 | 32,5 | 32,5 | 57,5 | 57,5 | 48 | 850     | 175     |

## Hinges

die-cast zinc, with locking lever



### Material:

Hinge die-cast zinc.  
Hinge pin steel.  
Lever fibreglass reinforced thermoplastic.  
Mechanism steel.

### Version:

Hinge black powder-coated.  
Pin electro zinc-plated.  
Lever black.  
Mechanism black electro zinc-plated.

### Sample order:

K0442.40232300

### Note:

The indexible lever enables the hinge to be locked in any position.  
The hinges are available with or without guide tabs for aluminium profile slots.

The loading values given for the hinges are non-binding reference values without consideration of safety factors and exclude any liability. The values given are for information purposes only and do not constitute a legally binding assurance of properties.

The load values have been determined under laboratory conditions. Each user must determine individually whether the hinge is suitable for the respective application.

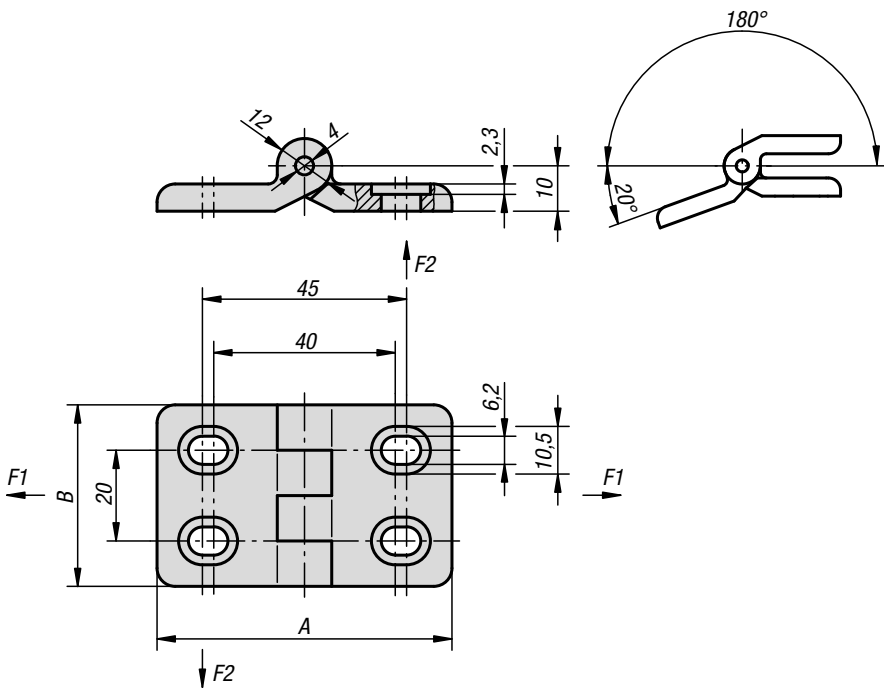
Different materials onto which the hinges are installed and the type of mounting, weather conditions and wear can influence the determined values.

### KIPP Hinges die-cast zinc, with locking lever

| Order No.      | A  | A1   | A2   | B  | Guide tabs for slot | F1 N | F2 N |
|----------------|----|------|------|----|---------------------|------|------|
| K0442.40232300 | 74 | 22,5 | 22,5 | 40 | -                   | 1500 | 650  |
| K0442.40232308 | 74 | 22,5 | 22,5 | 40 | 8                   | 1500 | 650  |
| K0442.40232310 | 74 | 22,5 | 22,5 | 40 | 10                  | 1500 | 650  |
| K0442.40232500 | 74 | 22,5 | 25   | 40 | -                   | 1500 | 650  |
| K0442.40232508 | 74 | 22,5 | 25   | 40 | 8                   | 1500 | 650  |
| K0442.40232510 | 74 | 22,5 | 25   | 40 | 10                  | 1500 | 650  |
| K0442.45252500 | 74 | 25   | 25   | 40 | -                   | 1500 | 650  |
| K0442.45252508 | 74 | 25   | 25   | 40 | 8                   | 1500 | 650  |
| K0442.45252510 | 74 | 25   | 25   | 40 | 10                  | 1500 | 650  |

Hinge

plastic, with elongated holes



**Material:**  
Fibreglass reinforced thermoplastic.  
Hinge pin stainless steel.

**Version:**  
Hinge black. Pin bright.

**Sample order:**  
K0437.402020

**Note:**  
Elongated holes enable easy horizontal adjustment.

The loading values given for the hinges are non-binding reference values without consideration of safety factors and exclude any liability. The values given are for information purposes only and do not constitute a legally binding assurance of properties.

The load values have been determined under laboratory conditions. Each user must determine individually whether the hinge is suitable for the respective application.

Different materials onto which the hinges are installed and the type of mounting, weather conditions and wear can influence the determined values.

KIPP Hinge plastic, with elongated holes

| Order No.    | A  | B  | F1<br>N | F2<br>N |
|--------------|----|----|---------|---------|
| K0437.402020 | 65 | 40 | 500     | 300     |

Hinges

plastic, lift-off, with guide tabs



**Material:**  
Fibreglass reinforced thermoplastic.  
Hinge pin stainless steel.  
Washer thermoplastic.

**Version:**  
Hinge and washer black. Pin bright.

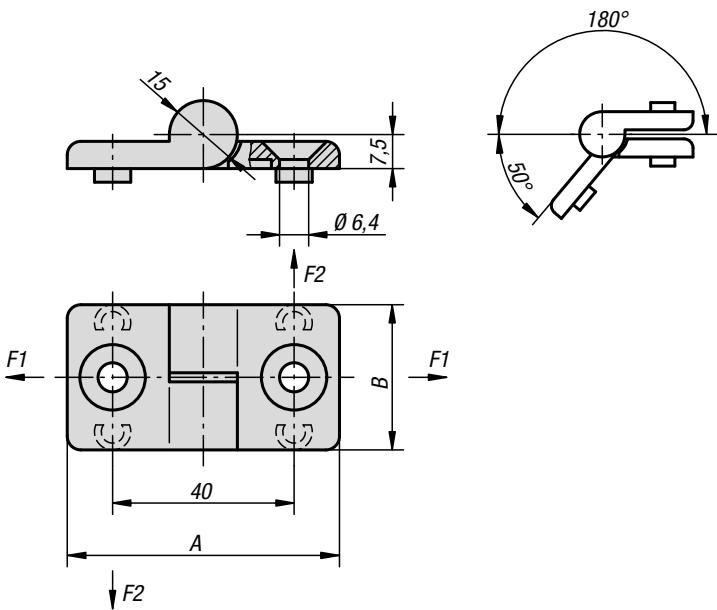
**Sample order:**  
K0438.1322020

**Note:**  
The hinges can be located in an 8 mm slot using the guide tabs.

The loading values given for the hinges are non-binding reference values without consideration of safety factors and exclude any liability. The values given are for information purposes only and do not constitute a legally binding assurance of properties.

The load values have been determined under laboratory conditions. Each user must determine individually whether the hinge is suitable for the respective application.

Different materials onto which the hinges are installed and the type of mounting, weather conditions and wear can influence the determined values.



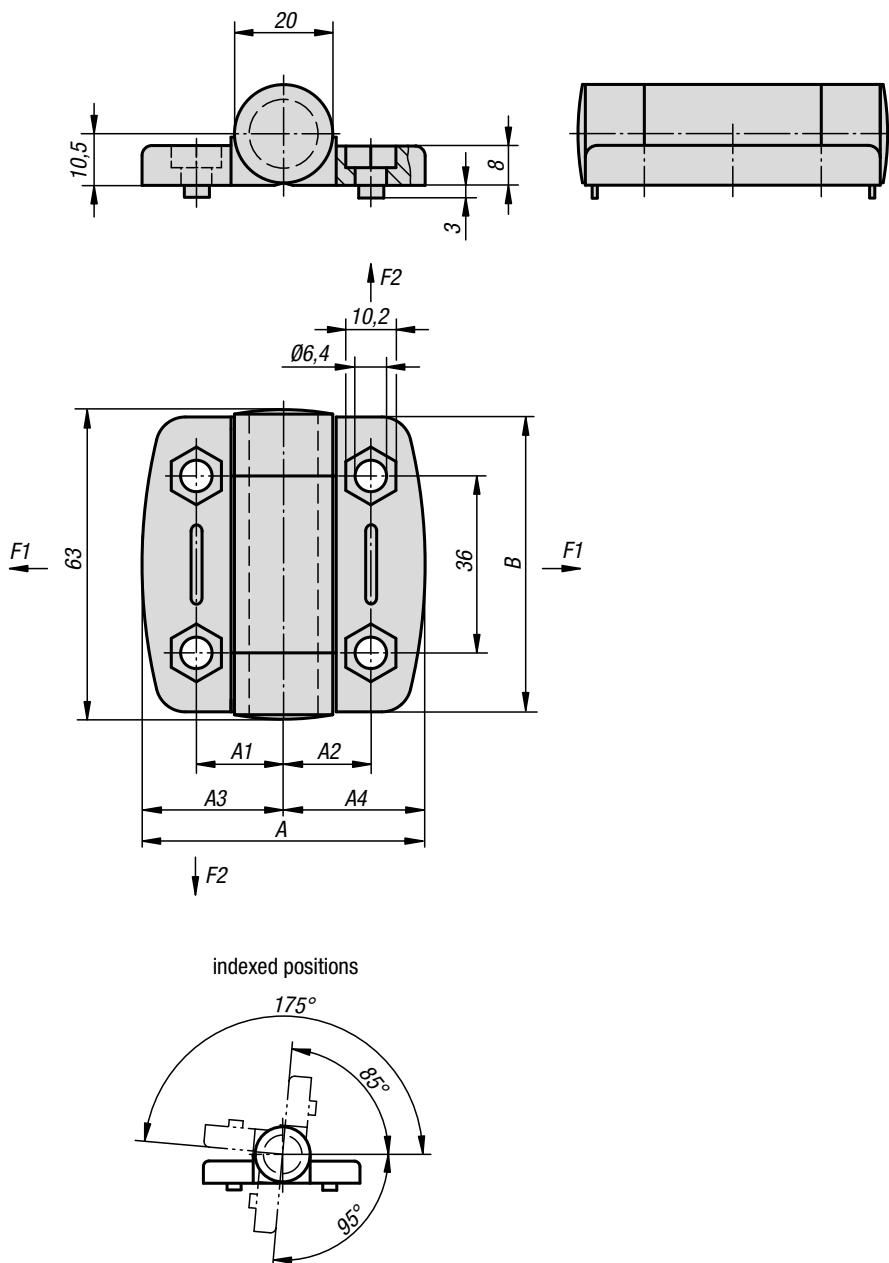
KIPP Hinges, plastic, lift-off, with guide tabs

| Order No.     | Version | A  | B  | F1<br>N | F2<br>N |
|---------------|---------|----|----|---------|---------|
| K0438.1322020 | left    | 60 | 32 | 200     | 100     |
| K0438.2322020 | right   | 60 | 32 | 200     | 100     |



# Hinges

plastic, with detent



## Material:

Hinge and caps fibreglass reinforced PA thermoplastic.  
Hinge pin stainless steel.

## Version:

Hinge and caps black.  
Pin bright.

## Sample order:

K0439.56181800

## Note:

These hinges have a detent mechanism. This mechanism holds a door or lid open at three different angles or tightly closed. The hinges are available with or without guide tabs for aluminium profile slots.

The loading values given for the hinges are non-binding reference values without consideration of safety factors and exclude any liability. The values given are for information purposes only and do not constitute a legally binding assurance of properties.

The load values have been determined under laboratory conditions. Each user must determine individually whether the hinge is suitable for the respective application.

Different materials onto which the hinges are installed and the type of mounting, weather conditions and wear can influence the determined values.

## KIPP Hinges plastic, with detent

| Order No.      | A    | A1    | A2    | A3    | A4    | B  | Guide tabs<br>for slot | F1<br>N | F2<br>N | Max.<br>torque<br>Nm |
|----------------|------|-------|-------|-------|-------|----|------------------------|---------|---------|----------------------|
| K0439.56181800 | 54   | 17,75 | 17,75 | 27    | 27    | 56 | -                      | 400     | 350     | 2                    |
| K0439.56181806 | 54   | 17,75 | 17,75 | 27    | 27    | 56 | 6                      | 400     | 350     | 2                    |
| K0439.56181808 | 54   | 17,75 | 17,75 | 27    | 27    | 56 | 8                      | 400     | 350     | 2                    |
| K0439.56232300 | 73,5 | 22,75 | 22,75 | 36,75 | 36,75 | 56 | -                      | 600     | 425     | 2                    |
| K0439.56232308 | 73,5 | 22,75 | 22,75 | 36,75 | 36,75 | 56 | 8                      | 600     | 425     | 2                    |
| K0439.56232310 | 73,5 | 22,75 | 22,75 | 36,75 | 36,75 | 56 | 10                     | 600     | 425     | 2                    |

# Hinges

plastic, with adjustable friction



## Material:

Hinge and caps, fibreglass reinforced PA thermoplastic.  
Metal parts stainless steel.

## Version:

Hinge and caps black.  
Metal parts bright.

## Sample order:

K0440.56181800

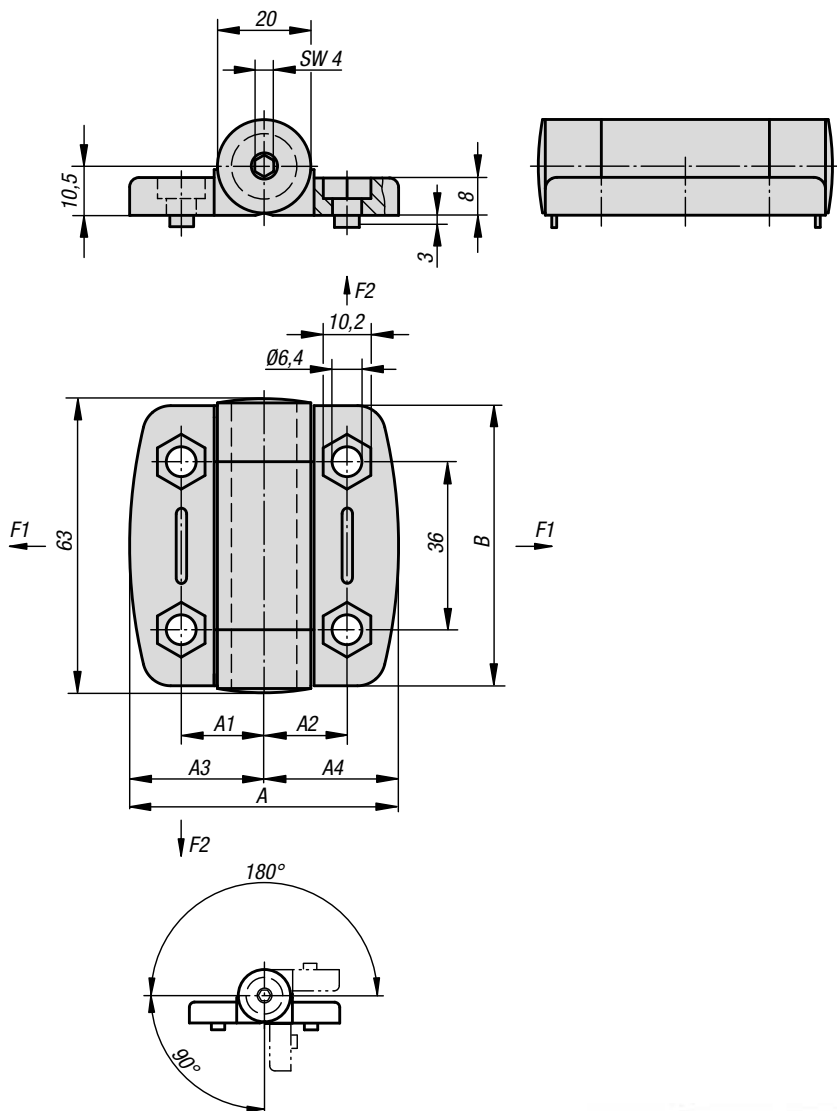
## Note:

These friction hinges enable doors or lids to remain open in any position. A set screw allows the amount of friction to be infinitely adjusted between 0-5 Nm. The hinges are available with or without guide tabs for aluminium profile slots.

The loading values given for the hinges are non-binding reference values without consideration of safety factors and exclude any liability. The values given are for information purposes only and do not constitute a legally binding assurance of properties.

The load values have been determined under laboratory conditions. Each user must determine individually whether the hinge is suitable for the respective application.

Different materials onto which the hinges are installed and the type of mounting, weather conditions and wear can influence the determined values.

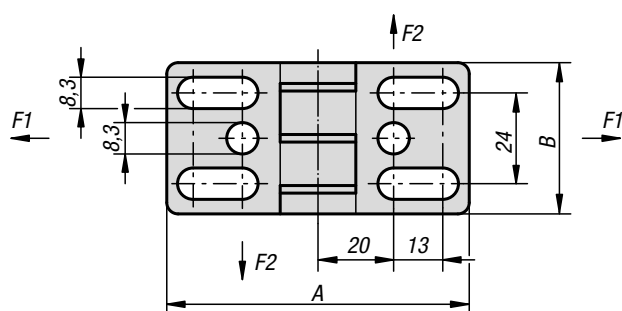
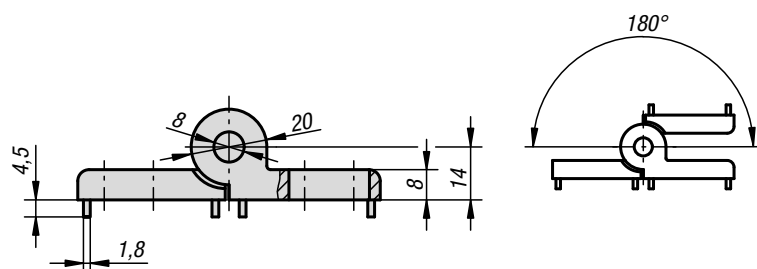


## KIPP Hinges plastic, with adjustable friction

| Order No.      | A    | A1    | A2    | A3    | A4    | B  | Guide tabs<br>for slot | F1<br>N | F2<br>N |
|----------------|------|-------|-------|-------|-------|----|------------------------|---------|---------|
| K0440.56181800 | 54   | 17,75 | 17,75 | 27    | 27    | 56 | -                      | 400     | 325     |
| K0440.56181806 | 54   | 17,75 | 17,75 | 27    | 27    | 56 | 6                      | 400     | 325     |
| K0440.56181808 | 54   | 17,75 | 17,75 | 27    | 27    | 56 | 8                      | 400     | 325     |
| K0440.56232300 | 73,5 | 22,75 | 22,75 | 36,75 | 36,75 | 56 | -                      | 600     | 425     |
| K0440.56232308 | 73,5 | 22,75 | 22,75 | 36,75 | 36,75 | 56 | 8                      | 600     | 425     |
| K0440.56232310 | 73,5 | 22,75 | 22,75 | 36,75 | 36,75 | 56 | 10                     | 600     | 425     |

# Hinges

die-cast zinc, with elongated holes



## Material:

Die-cast zinc.  
Hinge pin stainless steel.  
Washer thermoplastic.

## Version:

Hinge black powder-coated.  
Pin bright.  
Washer black.

## Sample order:

K0441.402020

## Note:

Elongated holes enable easy horizontal adjustment.

The loading values given for the hinges are non-binding reference values without consideration of safety factors and exclude any liability. The values given are for information purposes only and do not constitute a legally binding assurance of properties.

The load values have been determined under laboratory conditions. Each user must determine individually whether the hinge is suitable for the respective application.

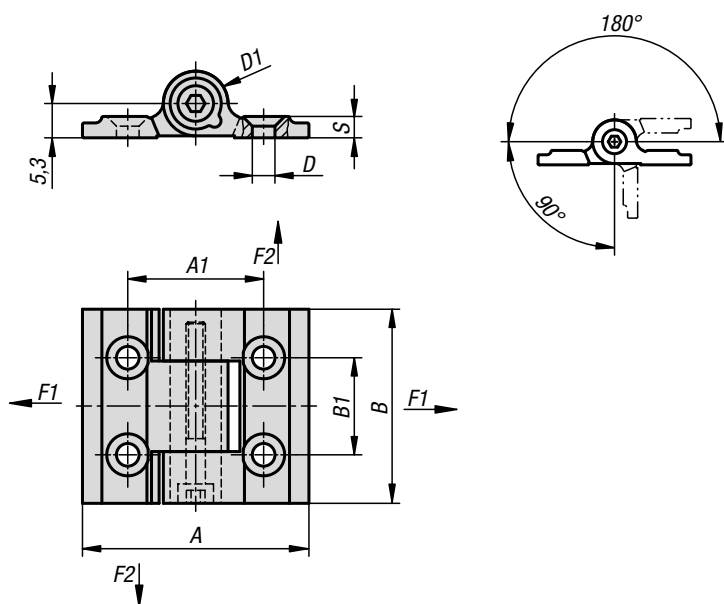
Different materials onto which the hinges are installed and the type of mounting, weather conditions and wear can influence the determined values.

## KIPP Hinges die-cast zinc, with elongated holes

| Order No.      | A  | B  | Guide tabs<br>for slot | F1<br>N | F2<br>N |
|----------------|----|----|------------------------|---------|---------|
| K0441.402020   | 80 | 40 | -                      | 1200    | 500     |
| K0441.40202008 | 80 | 40 | 8                      | 1200    | 500     |
| K0441.40202010 | 80 | 40 | 10                     | 1200    | 500     |

# Hinge

aluminium, with adjustable friction


**Material:**

Aluminium 6060 T5.  
End caps PA 6.6.  
Washers POM.

**Version:**

Black anodised

**Sample order:**

K1195.35301

**Note:**

These torque hinges enable doors to remain open in any position. A set screw enables the amount of friction to be infinitely adjusted between 0-1 Nm. Opening angle 270°.

Max. tensile strength: 2240 N

Max. shear strength: 1050 N

Fastened using DIN 7991 countersunk screws.

The loading values given for the hinges are non-binding reference values without consideration of safety factors and exclude any liability. The values given are for information purposes only and do not constitute a legally binding assurance of properties. These load values were determined under laboratory conditions. Each user must determine individually whether the hinge is suitable for the respective application.

Different materials onto which the hinges are installed and the type of mounting, weather conditions and wear can influence the determined values.

**Temperature range:**

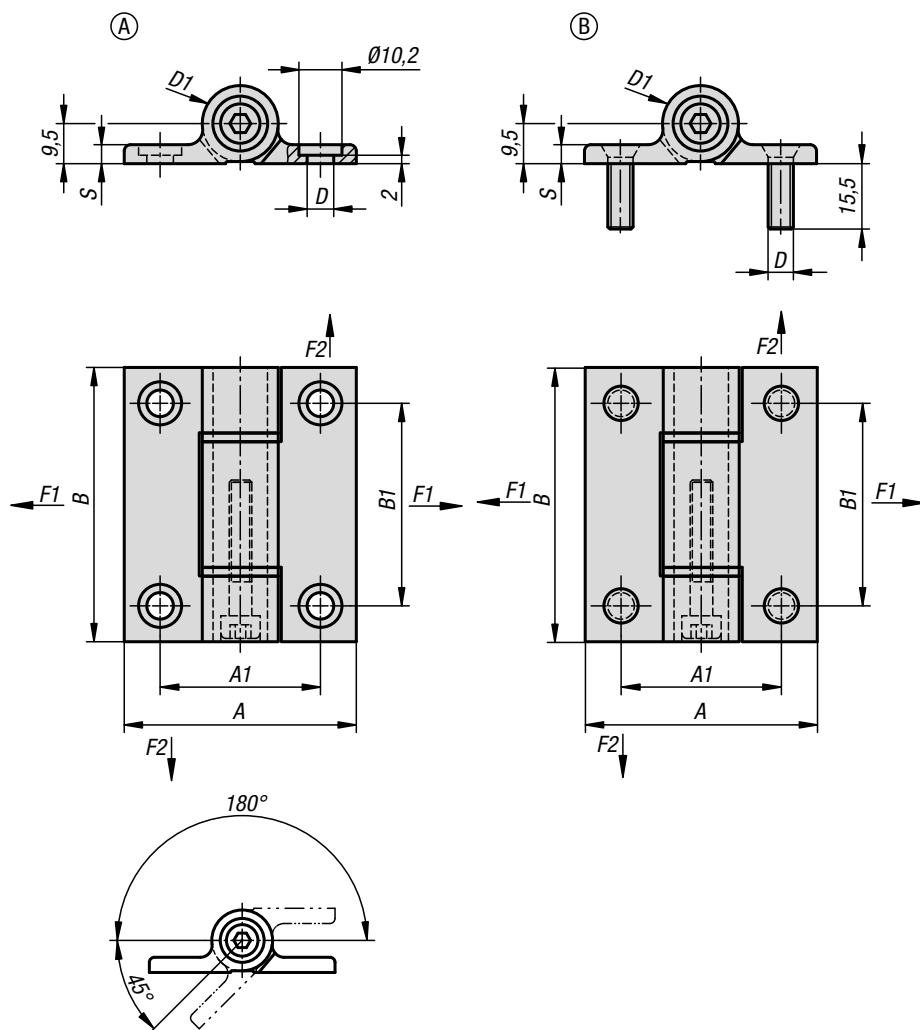
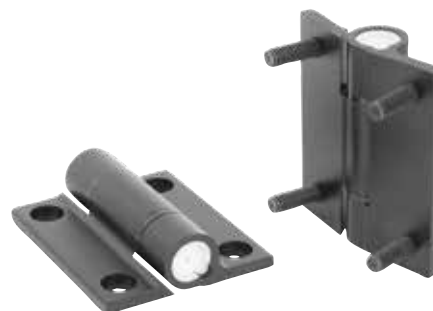
From -20°C to +80°C

**KIPP Hinge aluminium, with adjustable friction**

| Order No.   | A  | A1 | B  | B1 | D   | D1 | S   | F1<br>N | F2<br>N |
|-------------|----|----|----|----|-----|----|-----|---------|---------|
| K1195.35301 | 35 | 21 | 30 | 15 | 3,5 | 10 | 3,3 | 2460    | 1480    |

# Hinges

aluminium, with adjustable friction



## Material:

Aluminium 6060 T5.  
Sleeve POM.  
Set screw stainless steel.  
Washers PA.  
Fastening screws steel.

## Version:

Black anodised.  
Fastening screws electro zinc-plated.

## Sample order:

K1196.55651

## Note:

These torque hinges enable doors to remain open in any position. A set screw enables the amount of friction to be infinitely adjusted between 0-5 Nm. Opening angle 225°.

Max. tensile strength: 6000 N

Max. shear strength: 5000 N

The loading values given for the hinges are non-binding reference values without consideration of safety factors and exclude any liability. The values given are for information purposes only and do not constitute a legally binding assurance of properties. These load values were determined under laboratory conditions. Each user must determine individually whether the hinge is suitable for the respective application.

Different materials onto which the hinges are installed and the type of mounting, weather conditions and wear can influence the determined values.

## Temperature range:

From -20°C to +80°C

## Accessories:

Socket head screws with hexagon socket DIN 912/EN ISO 4762.

## Drawing reference:

Form A: fastened using DIN 912/EN ISO 4762 socket head screws.

Form B: fastened using threaded pins.

## KIPP Hinges aluminium, with adjustable friction

| Order No.    | Form | A  | A1 | B  | B1 | D   | D1 | S   | F1<br>N | F2<br>N |
|--------------|------|----|----|----|----|-----|----|-----|---------|---------|
| K1196.55651  | A    | 55 | 38 | 65 | 48 | 6,3 | 18 | 4,5 | 8960    | 8070    |
| K1196.556511 | B    | 55 | 38 | 65 | 48 | M6  | 18 | 4,5 | 8960    | 8070    |

Hinges, stainless steel

with preset friction



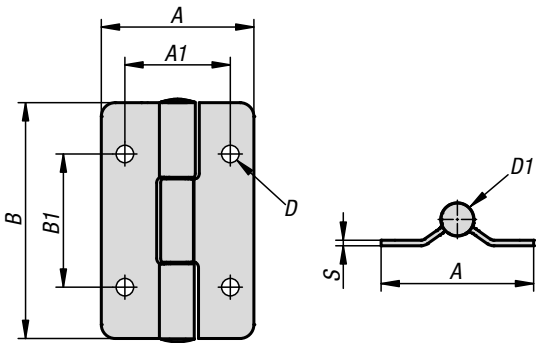
**Material:**  
Stainless steel 1.4310.

**Version:**  
Bright.

**Sample order:**  
K1518.55853

**Note:**  
Due to the constant and stable torque, the hinges permit door positioning in any angular orientation without the need for additional aids.  
Opening angle 270°.

**Accessories:**  
Hinges, stainless steel K1517

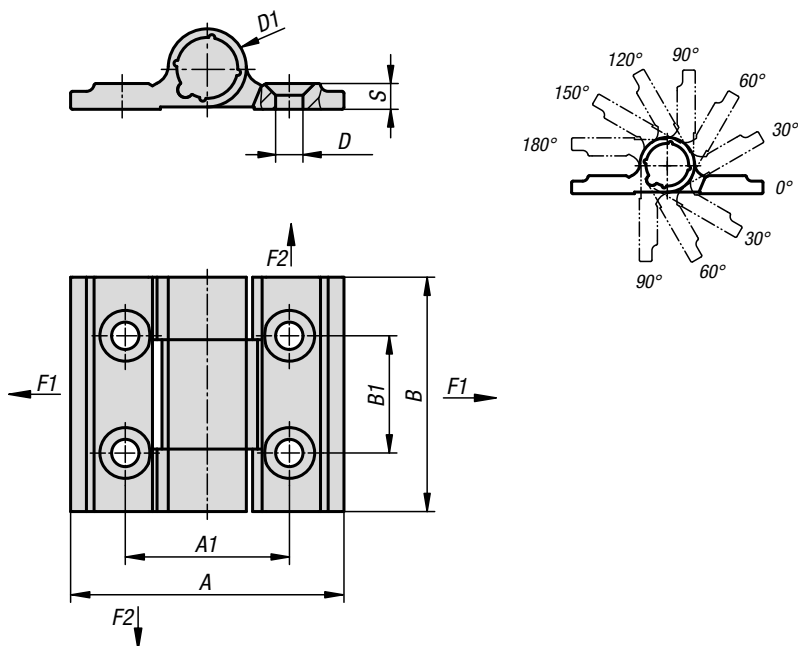


KIPP Hinges, stainless steel with preset friction

| Order No.   | A  | A1 | B  | B1 | D   | D1 | S | Max. torque Nm |
|-------------|----|----|----|----|-----|----|---|----------------|
| K1518.55853 | 55 | 38 | 85 | 48 | 6,3 | 12 | 2 | 3              |
| K1518.55855 | 55 | 38 | 85 | 48 | 6,3 | 16 | 2 | 5              |

# Hinge

aluminium, with detent


**Material:**

Aluminium 6060 T5.  
Screws and nuts stainless steel.  
Washers PA.

**Version:**

Black anodised

**Sample order:**

K1197.35301

**Note:**

These hinges have a detent mechanism. These index every 30° from 0° to 270° and hold doors or hatches open or tightly closed.  
The detent torque is not adjustable.  
Torque tolerance  $\pm 20\%$

Fastened using DIN 7991 countersunk screws.

The loading values given for the hinges are non-binding reference values without consideration of safety factors and exclude any liability. The values given are for information purposes only and do not constitute a legally binding assurance of properties. These load values were determined under laboratory conditions. Each user must determine individually whether the hinge is suitable for the respective application.

Different materials onto which the hinges are installed and the type of mounting, weather conditions and wear can influence the determined values.

**Temperature range:**

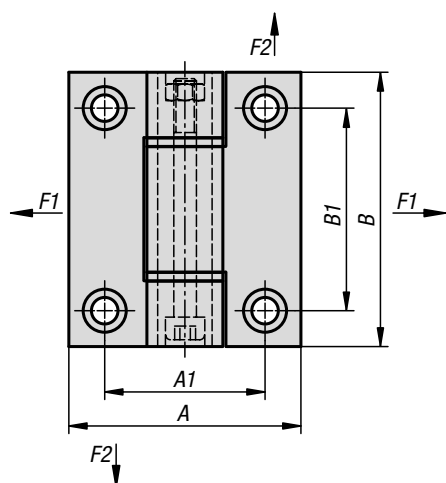
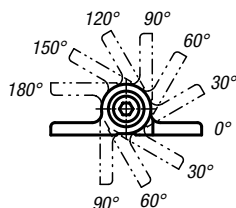
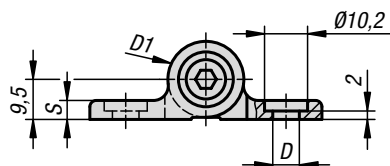
From -30°C to +70°C

**KIPP Hinge aluminium, with detent**

| Order No.   | A  | A1 | B  | B1 | D   | D1 | S   | F1<br>N | F2<br>N | Max.<br>torque<br>Nm |
|-------------|----|----|----|----|-----|----|-----|---------|---------|----------------------|
| K1197.35301 | 35 | 21 | 30 | 15 | 3,5 | 10 | 3,3 | 2260    | 1380    | 0,3                  |

# Hinges

aluminium, with detent



## Material:

Aluminium 6060 T5.  
Screws and nuts stainless steel.  
Washers PA.

## Version:

Black anodised

## Sample order:

K1198.556711

## Note:

These hinges have a detent mechanism. These index every 30° from 0° to 270° and hold doors or hatches open or tightly closed.  
The detent torque is not adjustable.

The hinges are designed for over 30,000 operating cycles.

Torque tolerance  $\pm 20\%$ .

Fastened using DIN 912/ DIN EN ISO 4762 cap screws.

The loading values given for the hinges are non-binding reference values, which do not consider safety factors and exclude any liability. The values given are for information purposes only and do not constitute a legally binding assurance of properties.  
These load values were determined under laboratory conditions. Each user must determine individually whether the hinge is suitable for the respective application.

Different materials onto which the hinges are installed and the type of mounting, weather conditions and wear can influence the determined values.

## Temperature range:

From -30°C to +70°C

## Accessories:

Socket head screws with hexagon socket DIN 912/EN ISO 4762.

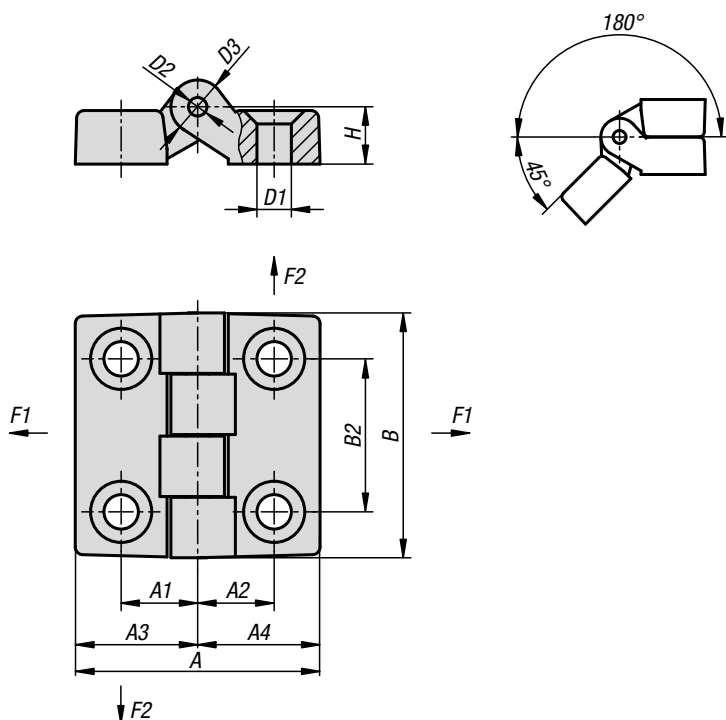
## KIPP Hinges aluminium, with detent

| Order No.    | A  | A1 | B  | B1 | D   | D1 | S   | F1<br>N | F2<br>N | Max.<br>torque<br>Nm |
|--------------|----|----|----|----|-----|----|-----|---------|---------|----------------------|
| K1198.556711 | 55 | 38 | 67 | 48 | 6,3 | 18 | 4,5 | 11300   | 5700    | 1,8                  |
| K1198.556712 | 55 | 38 | 67 | 48 | 6,3 | 18 | 4,5 | 11300   | 5700    | 2,5                  |
| K1198.556713 | 55 | 38 | 67 | 48 | 6,3 | 18 | 4,5 | 11300   | 5700    | 3,2                  |
| K1198.556715 | 55 | 38 | 67 | 48 | 6,3 | 18 | 4,5 | 11300   | 5700    | 5                    |



## Hinges plastic

with fastening holes



### Material:

Fibreglass reinforced thermoplastic.  
Hinge pin steel.

### Version:

Hinge black.  
Hinge pin electro zinc-plated.

### Sample order:

K1004.0161010

### Note:

Hinges with fastening holes for DIN 7991/UNI 5933 countersunk screws.

The loading values given for the hinges are non-binding reference values without consideration of safety factors and exclude any liability. The values given are for information purposes only and do not constitute a legally binding assurance of properties.

The load values have been determined under laboratory conditions. Each user must determine individually whether the hinge is suitable for the respective application.

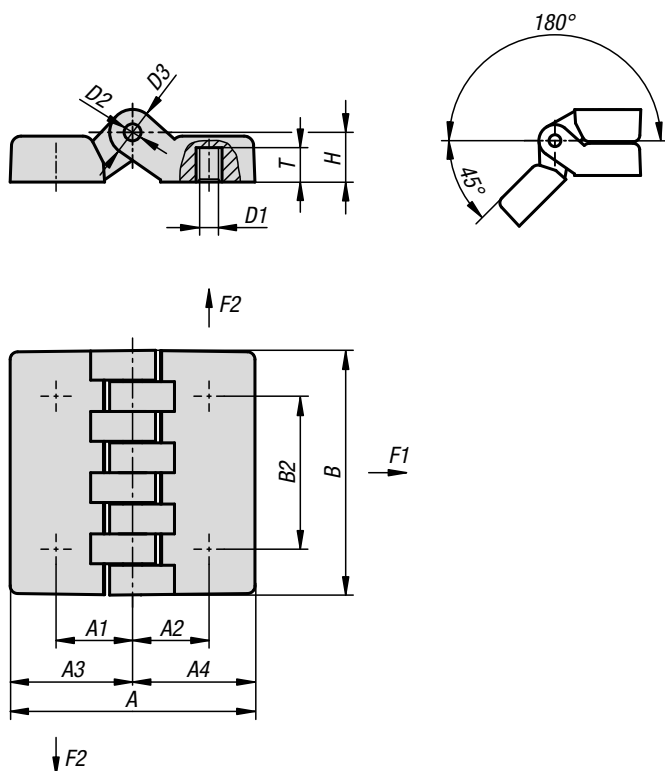
Different materials onto which the hinges are installed and the type of mounting, weather conditions and wear can influence the determined values.

## KIPP Plastic hinges with fastening holes

| Order No.       | A  | A1   | A2   | A3 | A4 | B  | B2 | D1   | D2 | D3 | H    | F1<br>N | F2<br>N |
|-----------------|----|------|------|----|----|----|----|------|----|----|------|---------|---------|
| K1004.004161010 | 32 | 10   | 10   | 16 | 16 | 32 | 20 | 4,5  | 3  | 7  | 7    | 1440    | 490     |
| K1004.006241515 | 48 | 15   | 15   | 24 | 24 | 48 | 30 | 6,5  | 5  | 10 | 10,5 | 1960    | 1470    |
| K1004.006322020 | 64 | 20   | 20   | 32 | 32 | 64 | 40 | 6,5  | 5  | 12 | 13   | 2990    | 1520    |
| K1004.008483232 | 96 | 31,5 | 31,5 | 48 | 48 | 96 | 60 | 8,5  | 8  | 16 | 16   | 4300    | 1810    |
| K1004.010483232 | 96 | 31,5 | 31,5 | 48 | 48 | 96 | 60 | 10,5 | 8  | 16 | 16   | 4300    | 1810    |

## Hinges plastic

with bushing



### Material:

Fibreglass reinforced thermoplastic.  
Hinge pin steel.  
Bushes brass.

### Version:

Hinge black.  
Hinge pin electro zinc-plated.

### Sample order:

K1005.05241515

### Note:

The loading values given for the hinges are non-binding reference values without consideration of safety factors and exclude any liability. The values given are for information purposes only and do not constitute a legally binding assurance of properties.

The load values have been determined under laboratory conditions. Each user must determine individually whether the hinge is suitable for the respective application.

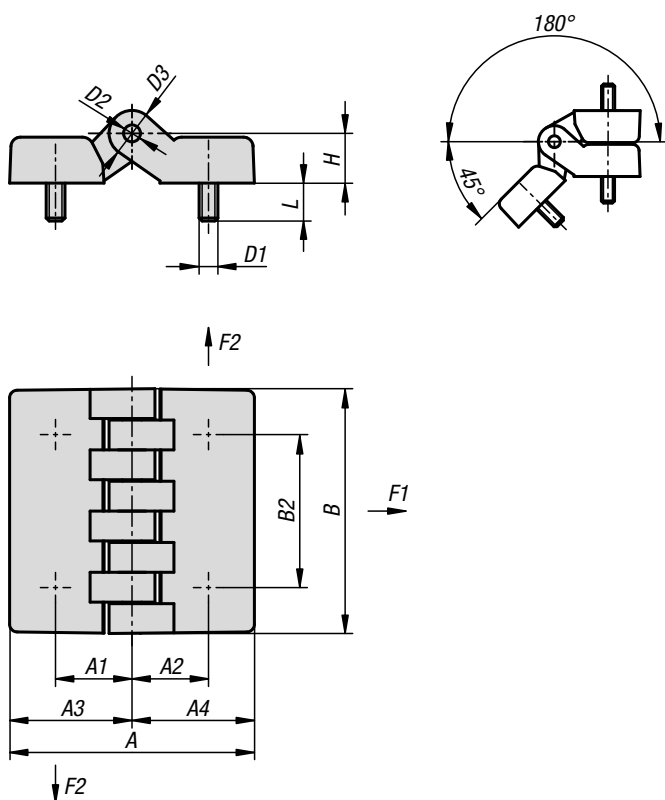
Different materials onto which the hinges are installed and the type of mounting, weather conditions and wear can influence the determined values.

## KIPP Hinges, plastic, with bushing

| Order No.      | A  | A1   | A2   | A3   | A4   | B  | B2 | D1  | D2 | D3 | H    | T  | F1<br>N | F2<br>N |
|----------------|----|------|------|------|------|----|----|-----|----|----|------|----|---------|---------|
| K1005.05241515 | 48 | 15   | 15   | 24   | 24   | 48 | 30 | M5  | 5  | 10 | 10,5 | 7  | 2000    | 1370    |
| K1005.06241515 | 48 | 15   | 15   | 24   | 24   | 48 | 30 | M6  | 5  | 10 | 10,5 | 7  | 2000    | 1370    |
| K1005.06322020 | 64 | 20   | 20   | 32   | 32   | 64 | 40 | M6  | 5  | 12 | 13   | 9  | 4100    | 1800    |
| K1005.08322020 | 64 | 20   | 20   | 32   | 32   | 64 | 40 | M8  | 5  | 12 | 13   | 9  | 4100    | 1800    |
| K1005.08483232 | 95 | 31,5 | 31,5 | 47,5 | 47,5 | 95 | 60 | M8  | 8  | 18 | 19   | 13 | 2450    | 2650    |
| K1005.10483232 | 95 | 31,5 | 31,5 | 47,5 | 47,5 | 95 | 60 | M10 | 8  | 18 | 19   | 13 | 2450    | 2650    |

## Hinges plastic

with fastening screws



### Material:

Fibreglass reinforced thermoplastic.  
Hinge pin steel.

### Version:

Hinge black.  
Hinge pin electro zinc-plated.

### Sample order:

K1006.05241515

### Note:

The loading values given for the hinges are non-binding reference values without consideration of safety factors and exclude any liability. The values given are for information purposes only and do not constitute a legally binding assurance of properties.

The load values have been determined under laboratory conditions. Each user must determine individually whether the hinge is suitable for the respective application.

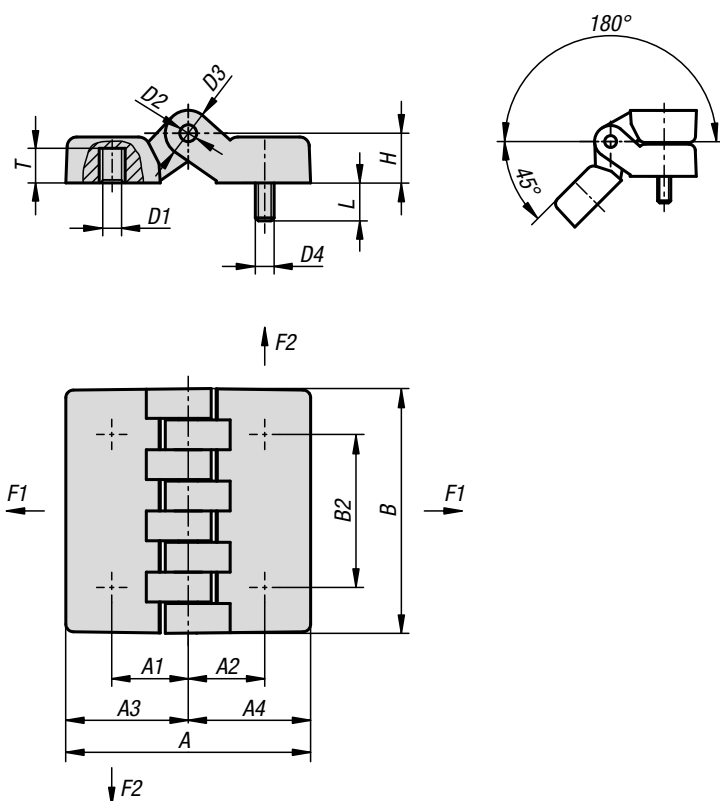
Different materials onto which the hinges are installed and the type of mounting, weather conditions and wear can influence the determined values.

### KIPP Hinges, plastic, with fastening screws

| Order No.      | A  | A1   | A2   | A3   | A4   | B  | B2 | D1  | D2 | D3 | H    | L  | F1<br>N | F2<br>N |
|----------------|----|------|------|------|------|----|----|-----|----|----|------|----|---------|---------|
| K1006.05241515 | 48 | 15   | 15   | 24   | 24   | 48 | 30 | M5  | 5  | 10 | 10,5 | 15 | 1780    | 1370    |
| K1006.06241515 | 48 | 15   | 15   | 24   | 24   | 48 | 30 | M6  | 5  | 10 | 10,5 | 15 | 1780    | 1370    |
| K1006.06322020 | 64 | 20   | 20   | 32   | 32   | 64 | 40 | M6  | 5  | 12 | 13   | 20 | 4120    | 1760    |
| K1006.08322020 | 64 | 20   | 20   | 32   | 32   | 64 | 40 | M8  | 5  | 12 | 13   | 20 | 4120    | 1760    |
| K1006.08483232 | 95 | 31,5 | 31,5 | 47,5 | 47,5 | 95 | 60 | M8  | 8  | 18 | 19   | 20 | 4900    | 1275    |
| K1006.10483232 | 95 | 31,5 | 31,5 | 47,5 | 47,5 | 95 | 60 | M10 | 8  | 18 | 19   | 20 | 4900    | 1275    |

## Hinges plastic

with bush and fastening screws



### Material:

Fibreglass reinforced thermoplastic.  
Hinge pin steel.  
Bushes brass.

### Version:

Hinge black.  
Hinge pin electro zinc-plated.

### Sample order:

K1007.05241515

### Note:

The loading values given for the hinges are non-binding reference values without consideration of safety factors and exclude any liability. The values given are for information purposes only and do not constitute a legally binding assurance of properties.

The load values have been determined under laboratory conditions. Each user must determine individually whether the hinge is suitable for the respective application.

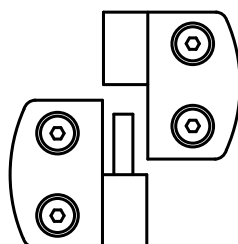
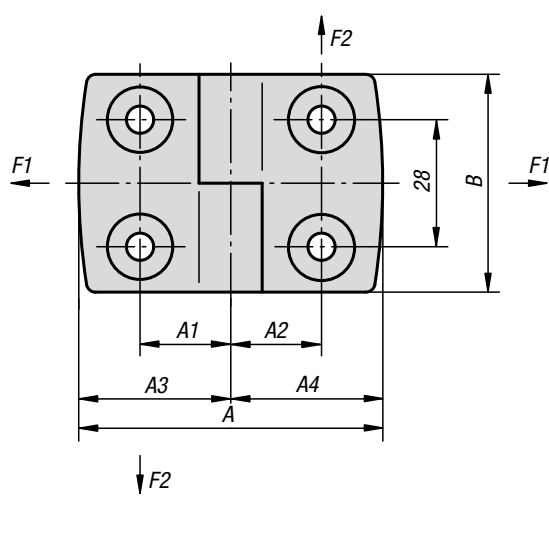
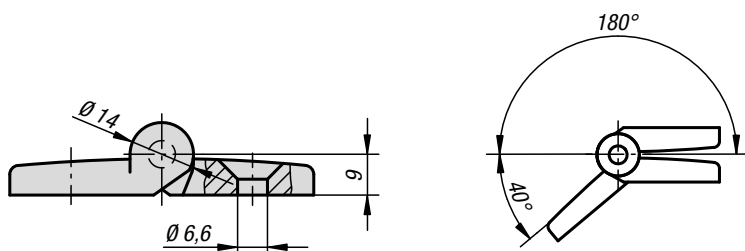
Different materials onto which the hinges are installed and the type of mounting, weather conditions and wear can influence the determined values.

## KIPP Hinges plastic with bush and fastening screws

| Order No.      | A  | A1   | A2   | A3   | A4   | B  | B2 | D1  | D2 | D3 | D4  | H    | L  | T  | F1<br>N | F2<br>N |
|----------------|----|------|------|------|------|----|----|-----|----|----|-----|------|----|----|---------|---------|
| K1007.05241515 | 48 | 15   | 15   | 24   | 24   | 48 | 30 | M5  | 5  | 10 | M5  | 10,5 | 15 | 7  | 1850    | 1350    |
| K1007.06241515 | 48 | 15   | 15   | 24   | 24   | 48 | 30 | M6  | 5  | 10 | M6  | 10,5 | 15 | 7  | 1850    | 1350    |
| K1007.06322020 | 64 | 20   | 20   | 32   | 32   | 64 | 40 | M6  | 5  | 12 | M6  | 13   | 20 | 9  | 4000    | 1600    |
| K1007.08322020 | 64 | 20   | 20   | 32   | 32   | 64 | 40 | M8  | 5  | 12 | M8  | 13   | 20 | 9  | 4000    | 1600    |
| K1007.08483232 | 95 | 31,5 | 31,5 | 47,5 | 47,5 | 95 | 60 | M8  | 8  | 18 | M8  | 19   | 20 | 13 | 3100    | 1400    |
| K1007.10483232 | 95 | 31,5 | 31,5 | 47,5 | 47,5 | 95 | 60 | M10 | 8  | 18 | M10 | 19   | 20 | 13 | 3100    | 1400    |

# Hinges

aluminium, lift-off, left



## Material:

Die-cast aluminium.  
Hinge pin stainless steel.

## Version:

Hinge matt nickel plated and chromed.  
Axle bright.

## Sample order:

K0579.1251515

## Note:

Hinges for panel elements and aluminium profiles.  
The hinges can be fitted with plastic caps on the hinge pin.

The loading values given for the hinges are non-binding reference values without consideration of safety factors and exclude any liability. The values given are for information purposes only and do not constitute a legally binding assurance of properties.

The load values have been determined under laboratory conditions. Each user must determine individually whether the hinge is suitable for the respective application.

Different materials onto which the hinges are installed and the type of mounting, weather conditions and wear can influence the determined values.

## On request:

Hinges with guide tabs for aluminium profiles (slots 5, 6, 8, 10, 12 and 14).  
Unequal leaf combinations.

## KIPP Hinges aluminium, lift-off, left

| Order No.     | A   | A1   | A2   | A3   | A4   | B  | F1<br>N | F2<br>N |
|---------------|-----|------|------|------|------|----|---------|---------|
| K0579.1251515 | 52  | 15   | 15   | 26   | 26   | 48 | 410     | 250     |
| K0579.1301818 | 59  | 17,5 | 17,5 | 29,5 | 29,5 | 48 | 450     | 280     |
| K0579.1352020 | 72  | 20   | 20   | 36   | 36   | 48 | 500     | 250     |
| K0579.1402323 | 77  | 22,5 | 22,5 | 38,5 | 38,5 | 48 | 550     | 200     |
| K0579.1452525 | 87  | 25   | 25   | 43,5 | 43,5 | 48 | 550     | 200     |
| K0579.1502828 | 97  | 27,5 | 27,5 | 48,5 | 48,5 | 48 | 550     | 175     |
| K0579.1603333 | 115 | 32,5 | 32,5 | 57,5 | 57,5 | 48 | 575     | 150     |

# Hinges

aluminium, lift-off, right



## Material:

Die-cast aluminium.  
Hinge pin stainless steel.

## Version:

Hinge matt nickel plated and chromed.  
Axle bright.

## Sample order:

K0579.2251515

## Note:

Hinges for panel elements and aluminium profiles.  
The hinges can be fitted with plastic caps on the hinge pin.

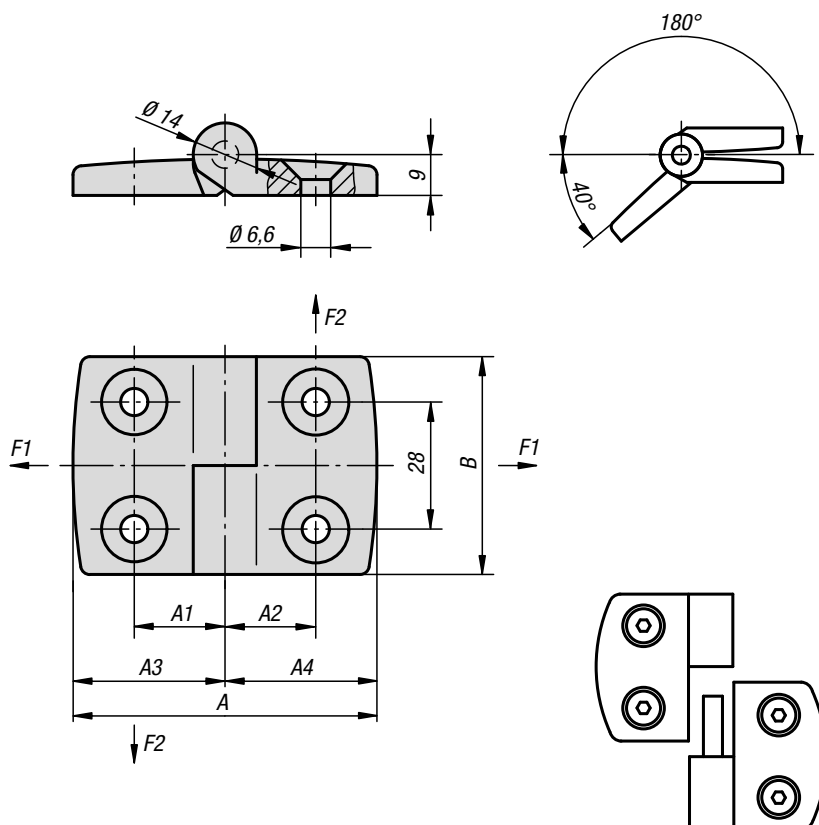
The loading values given for the hinges are non-binding reference values without consideration of safety factors and exclude any liability. The values given are for information purposes only and do not constitute a legally binding assurance of properties.

The load values have been determined under laboratory conditions. Each user must determine individually whether the hinge is suitable for the respective application.

Different materials onto which the hinges are installed and the type of mounting, weather conditions and wear can influence the determined values.

## On request:

Hinges with guide tabs for aluminium profiles (slots 5, 6, 8, 10, 12 and 14).  
Unequal leaf combinations.

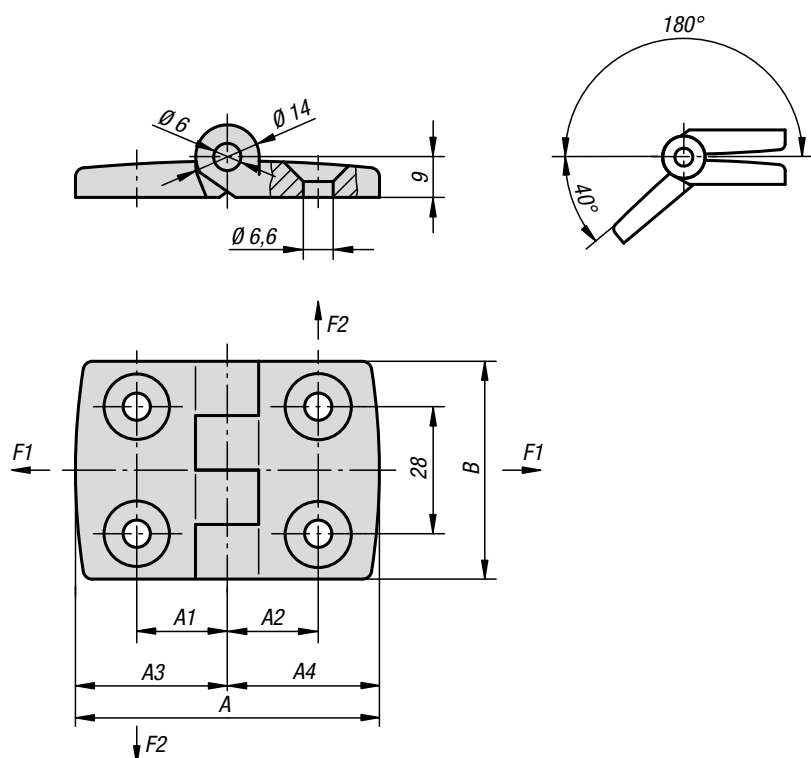


## KIPP Hinges aluminium, lift-off, right

| Order No.     | A   | A1   | A2   | A3   | A4   | B  | F1<br>N | F2<br>N |
|---------------|-----|------|------|------|------|----|---------|---------|
| K0579.2251515 | 52  | 15   | 15   | 26   | 26   | 48 | 410     | 250     |
| K0579.2301818 | 59  | 17,5 | 17,5 | 29,5 | 29,5 | 48 | 450     | 280     |
| K0579.2352020 | 72  | 20   | 20   | 36   | 36   | 48 | 500     | 250     |
| K0579.2402323 | 77  | 22,5 | 22,5 | 38,5 | 38,5 | 48 | 550     | 200     |
| K0579.2452525 | 87  | 25   | 25   | 43,5 | 43,5 | 48 | 550     | 200     |
| K0579.2502828 | 97  | 27,5 | 27,5 | 48,5 | 48,5 | 48 | 550     | 175     |
| K0579.2603333 | 115 | 32,5 | 32,5 | 57,5 | 57,5 | 48 | 575     | 150     |

# Hinges

aluminium

**Material:**

Die-cast aluminium.  
Hinge pin stainless steel.

**Version:**

Hinge matt nickel plated and chromed.  
Axle bright.

**Sample order:**

K0580.251515

**Note:**

Hinges for panel elements and aluminium profiles, non lift-off.

The hinges can be fitted with plastic caps on the hinge pin.

The loading values given for the hinges are non-binding reference values without consideration of safety factors and exclude any liability. The values given are for information purposes only and do not constitute a legally binding assurance of properties.

The load values have been determined under laboratory conditions. Each user must determine individually whether the hinge is suitable for the respective application.

Different materials onto which the hinges are installed and the type of mounting, weather conditions and wear can influence the determined values.

**On request:**

Hinges with guide tabs for aluminium profiles (slots 5, 6, 8, 10, 12 and 14).

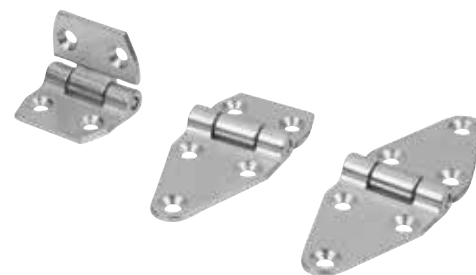
Unequal leaf combinations.

## KIPP Hinges aluminium

| Order No.    | A   | A1   | A2   | A3   | A4   | B  | F1<br>N | F2<br>N |
|--------------|-----|------|------|------|------|----|---------|---------|
| K0580.251515 | 52  | 15   | 15   | 26   | 26   | 48 | 275     | 215     |
| K0580.301818 | 59  | 17,5 | 17,5 | 29,5 | 29,5 | 48 | 325     | 225     |
| K0580.352020 | 72  | 20   | 20   | 36   | 36   | 48 | 325     | 225     |
| K0580.402323 | 77  | 22,5 | 22,5 | 38,5 | 38,5 | 48 | 400     | 250     |
| K0580.452525 | 87  | 25   | 25   | 43,5 | 43,5 | 48 | 400     | 250     |
| K0580.502828 | 97  | 27,5 | 27,5 | 48,5 | 48,5 | 48 | 400     | 250     |
| K0580.603333 | 115 | 32,5 | 32,5 | 57,5 | 57,5 | 48 | 400     | 100     |

## Hinges steel

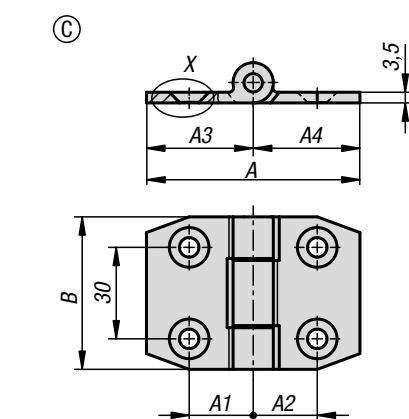
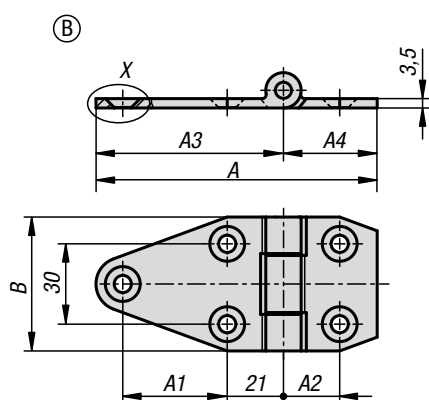
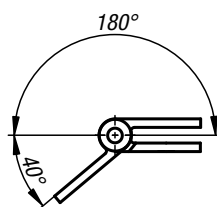
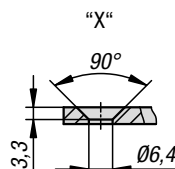
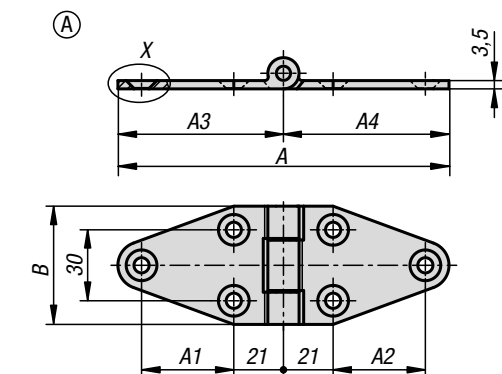
maintenance-free



**Material:**  
Profile steel.  
Bush Metaloplast.

**Version:**  
Steel parts electro zinc-plated.

**Sample order:**  
K1141.06707050



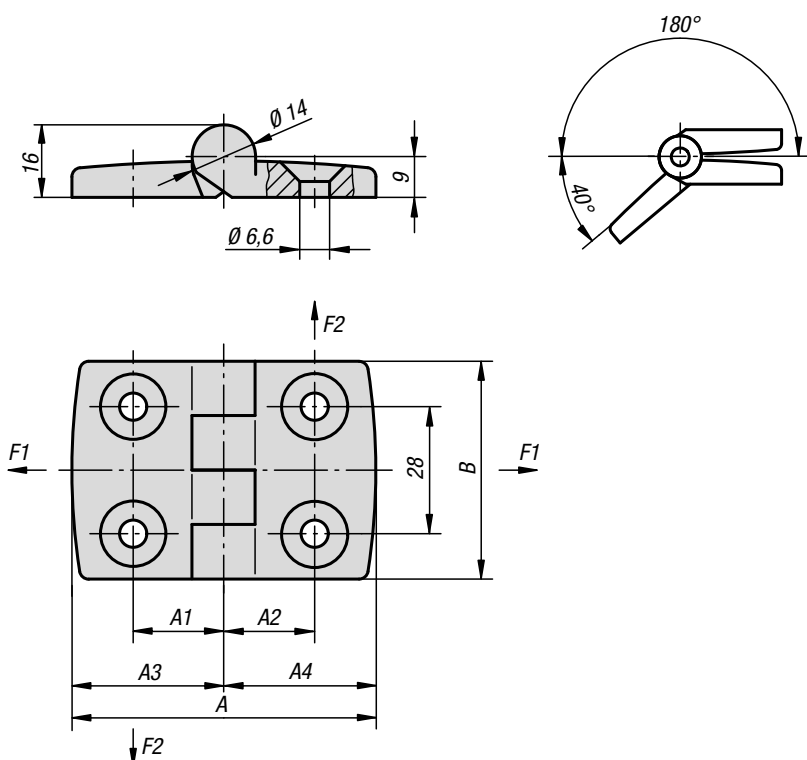
### KIPP Hinges steel, maintenance-free

| Order No.      | Form | A   | A1 | A2 | A3 | A4 | B  |
|----------------|------|-----|----|----|----|----|----|
| K1141.06707050 | A    | 140 | 39 | 39 | 70 | 70 | 50 |
| K1141.06703550 | B    | 105 | 39 | 21 | 70 | 35 | 50 |
| K1141.06353550 | C    | 70  | 21 | 21 | 35 | 35 | 50 |



## Hinges

stainless steel



### Material:

Stainless steel 1.4401.

### Version:

Polished.

### Sample order:

K1084.062615151

### Note:

Hinges for panel elements and aluminium profiles.

The loading values given for the hinges are non-binding reference values without consideration of safety factors and exclude any liability. The values given are for information purposes only and do not constitute a legally binding assurance of properties.

The load values have been determined under laboratory conditions. Each user must determine individually whether the hinge is suitable for the respective application.

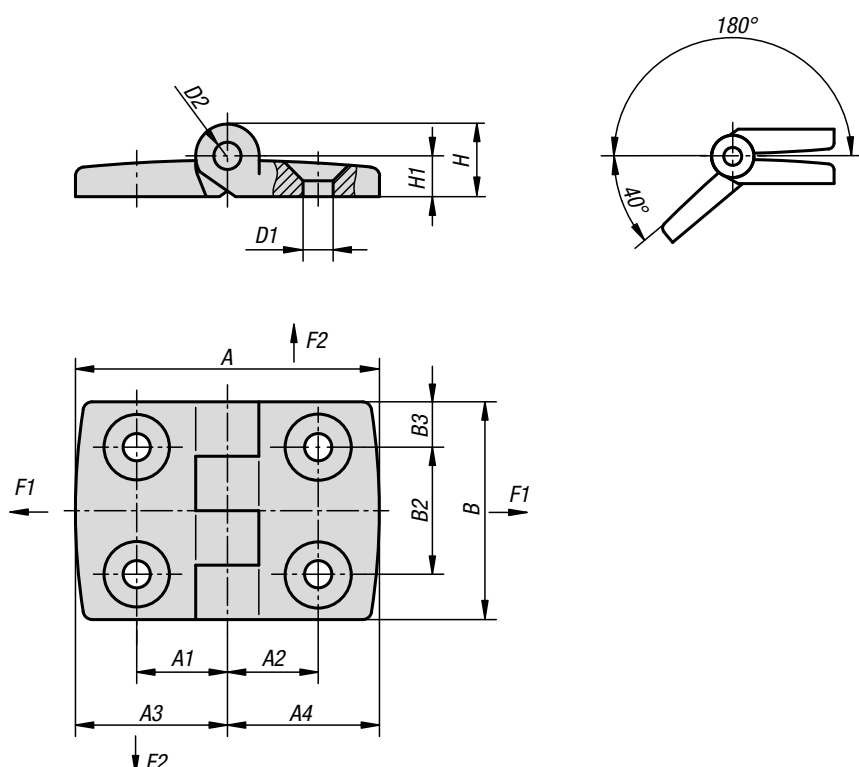
Different materials onto which the hinges are installed and the type of mounting, weather conditions and wear can influence the determined values.

## KIPP Hinges stainless steel

| Order No.       | A   | A1   | A2   | A3   | A4   | B  | F1<br>N | F2<br>N |
|-----------------|-----|------|------|------|------|----|---------|---------|
| K1084.062615151 | 52  | 15   | 15   | 26   | 26   | 48 | 700     | 560     |
| K1084.063018181 | 59  | 17,5 | 17,5 | 29,5 | 29,5 | 48 | 800     | 575     |
| K1084.064023231 | 77  | 22,5 | 22,5 | 38,5 | 38,5 | 48 | 900     | 675     |
| K1084.064525251 | 85  | 25   | 25   | 42,5 | 42,5 | 48 | 900     | 675     |
| K1084.066033331 | 113 | 32,5 | 32,5 | 56,5 | 56,5 | 48 | 900     | 260     |

## Hinge

stainless steel



### Material:

Hinge stainless steel 1.4401.

Pin stainless steel 1.4104.

### Version:

High-gloss polished.

### Sample order:

K1343.04191212

### Note:

Hinge for panel elements and aluminium profiles, non lift-off. Pin end closed. Screws countersunk, thus minimum dirt accumulation.

The loading values given for the hinges are non-binding reference values without consideration of safety factors and exclude any liability. The values given are for information purposes only and do not constitute a legally binding assurance of properties.

The load values have been determined under laboratory conditions. Each user must determine individually whether the hinge is suitable for the respective application.

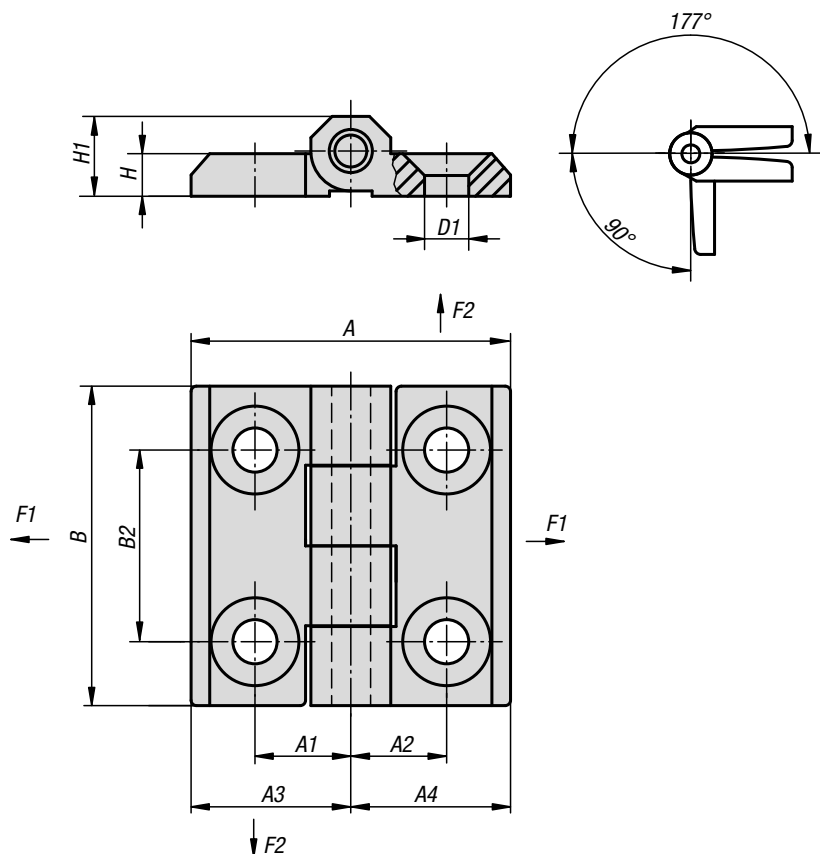
Different materials onto which the hinges are installed and the type of mounting, weather conditions and wear can influence the determined values.

### KIPP Hinge, stainless steel

| Order No.      | A  | A1   | A2   | A3 | A4 | B  | B2 | B3 | D1  | D2 | H   | H1  | F1<br>N | F2<br>N |
|----------------|----|------|------|----|----|----|----|----|-----|----|-----|-----|---------|---------|
| K1343.04191212 | 38 | 11,5 | 11,5 | 19 | 19 | 30 | 14 | 8  | 4,5 | 3  | 9,5 | 5,5 | 700     | 450     |

## Hinges

stainless steel



### Material:

Stainless steel 1.4401.

### Version:

Polished or blasted.

### Sample order:

K1085.052013131

### Note:

Hinges with fixed pin and countersunk holes.

The loading values given for the hinges are non-binding reference values without consideration of safety factors and exclude any liability. The values given are for information purposes only and do not constitute a legally binding assurance of properties.

The load values have been determined under laboratory conditions. Each user must determine individually whether the hinge is suitable for the respective application.

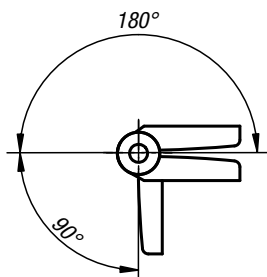
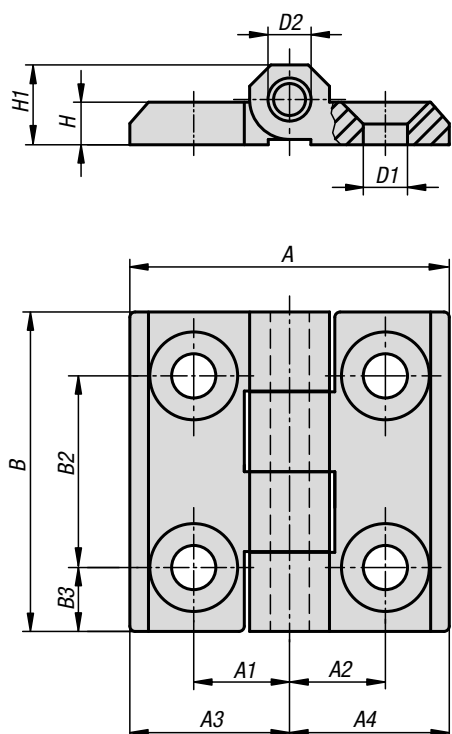
Different materials onto which the hinges are installed and the type of mounting, weather conditions and wear can influence the determined values.

### KIPP Hinges, stainless steel

| Order No.       | Main material      | Surface finish body | A  | A1   | A2   | A3   | A4   | B  | B2 | D1  | H | H1 | F1 N | F2 N |
|-----------------|--------------------|---------------------|----|------|------|------|------|----|----|-----|---|----|------|------|
| K1085.052013130 | stainless steel A2 | polished            | 39 | 12,5 | 12,5 | 19,5 | 19,5 | 39 | 25 | 5,5 | 4 | 9  | 800  | 600  |
| K1085.052013131 | stainless steel A2 | blasted             | 39 | 12,5 | 12,5 | 19,5 | 19,5 | 39 | 25 | 5,5 | 4 | 9  | 800  | 600  |
| K1085.062515150 | stainless steel A2 | polished            | 50 | 15   | 15   | 25   | 25   | 50 | 30 | 6,5 | 6 | 12 | 1100 | 900  |
| K1085.062515151 | stainless steel A2 | blasted             | 50 | 15   | 15   | 25   | 25   | 50 | 30 | 6,5 | 6 | 12 | 1100 | 900  |
| K1085.083018180 | stainless steel A4 | polished            | 60 | 18   | 18   | 30   | 30   | 60 | 36 | 8,5 | 8 | 15 | 2000 | 1500 |
| K1085.083018181 | stainless steel A4 | brushed             | 60 | 18   | 18   | 30   | 30   | 60 | 36 | 8,5 | 8 | 15 | 2000 | 1500 |

## Hinges

stainless steel



### Material:

Stainless steel 1.4401.

### Version:

Satin finished.

### Sample order:

K1341.05201313

### Note:

Hinge for extreme loads.

For right or left use.

Opening angle 270°.

Fastening with countersunk screws i.e. per DIN 7991.

The loading values given for the hinges are non-binding reference values, which do not consider safety factors and exclude any liability. The values given are for information purposes only and do not constitute a legally binding assurance of properties.

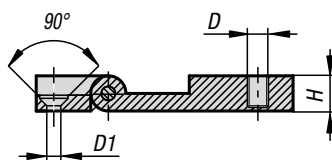
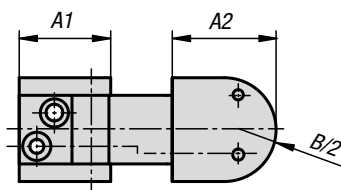
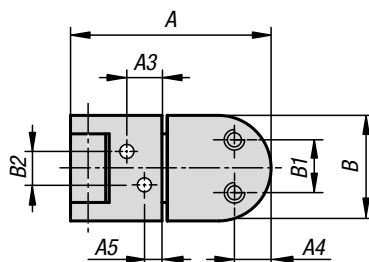
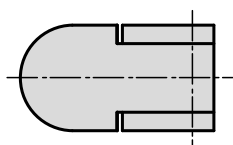
These load values were determined under laboratory conditions. Each user must determine individually whether the hinge is suitable for the respective application.

Wide differences in the materials on which the hinges are installed, the type of mounting, weather conditions and wear, can influence the determined values.

### KIPP Hinges, stainless steel

| Order No.      | A  | A1   | A2   | A3 | A4 | B  | B2 | B3  | D1  | D2 | H | H1   | Load capacity N |
|----------------|----|------|------|----|----|----|----|-----|-----|----|---|------|-----------------|
| K1341.05201313 | 40 | 12,5 | 12,5 | 20 | 20 | 40 | 25 | 7,5 | 5,2 | 4  | 5 | 9    | 2500            |
| K1341.06251515 | 50 | 15   | 15   | 25 | 25 | 50 | 30 | 10  | 6,2 | 6  | 6 | 11,5 | 5000            |
| K1341.08301818 | 60 | 18   | 18   | 30 | 30 | 60 | 36 | 12  | 8,3 | 8  | 8 | 15   | 8000            |
| K1341.06381528 | 63 | 28   | 15   | 38 | 25 | 50 | 30 | 10  | 6,5 | 6  | 6 | 11,5 | 5000            |
| K1341.06382828 | 76 | 28   | 28   | 38 | 38 | 50 | 30 | 10  | 6,5 | 6  | 6 | 11,5 | 5000            |

## Hinges, stainless steel



### Material:

Stainless steel 1.4301.

### Version:

Polished or blasted.

### Sample order:

K1809.57300

### Note:

The high-quality stainless steel hinges with fastening holes have an opening angle of 180°. The hinges can be used in the foodstuff, packaging, chemical and pharmaceutical industries.

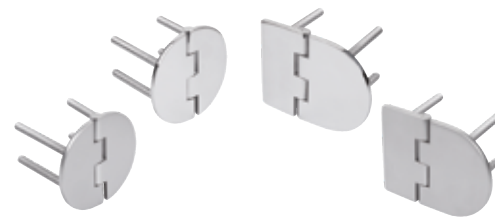
The hinges are available in polished or abrasive blasted versions.

## KIPP Hinges, stainless steel

| Order No.   | Surface finish body | A  | A1 | A2   | A3 | A4 | A5 | B  | B1 | B2  | H  | D  | D1 |
|-------------|---------------------|----|----|------|----|----|----|----|----|-----|----|----|----|
| K1809.57300 | polished            | 57 | 26 | 29,5 | 10 | 12 | 5  | 30 | 16 | 9,5 | 10 | M5 | 4  |
| K1809.57301 | blasted             | 57 | 26 | 29,5 | 10 | 12 | 5  | 30 | 16 | 9,5 | 10 | M5 | 4  |

## Hinges, stainless steel

with fastening screws



### Material:

Stainless steel 1.4301.

### Version:

Polished or blasted.

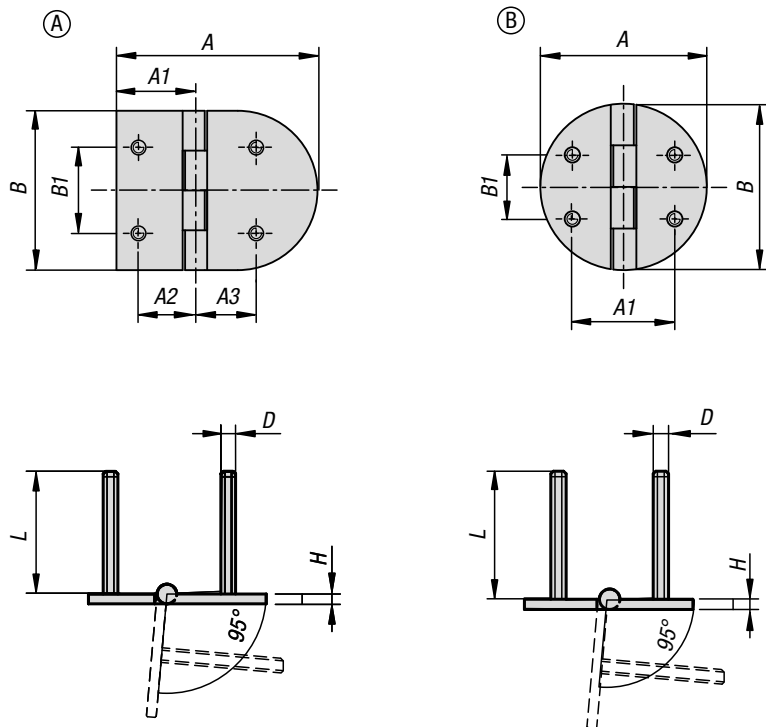
### Sample order:

K1810.82651

### Note:

The high quality stainless steel hinges with fastening screws have an opening angle of 95°. The hinges can be used in the foodstuff, packaging, chemical and pharmaceutical industries.

The hinges are available in polished or abrasive blasted versions.

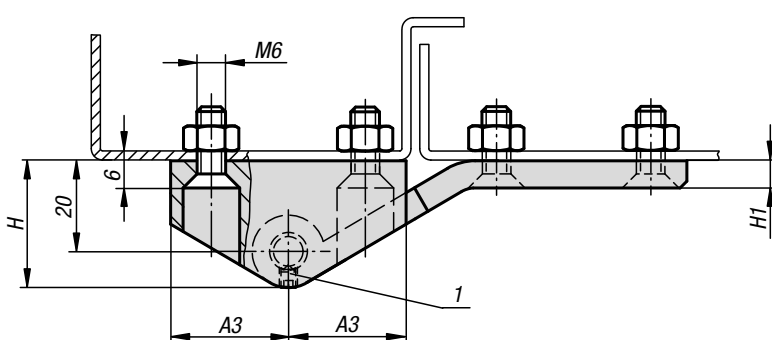
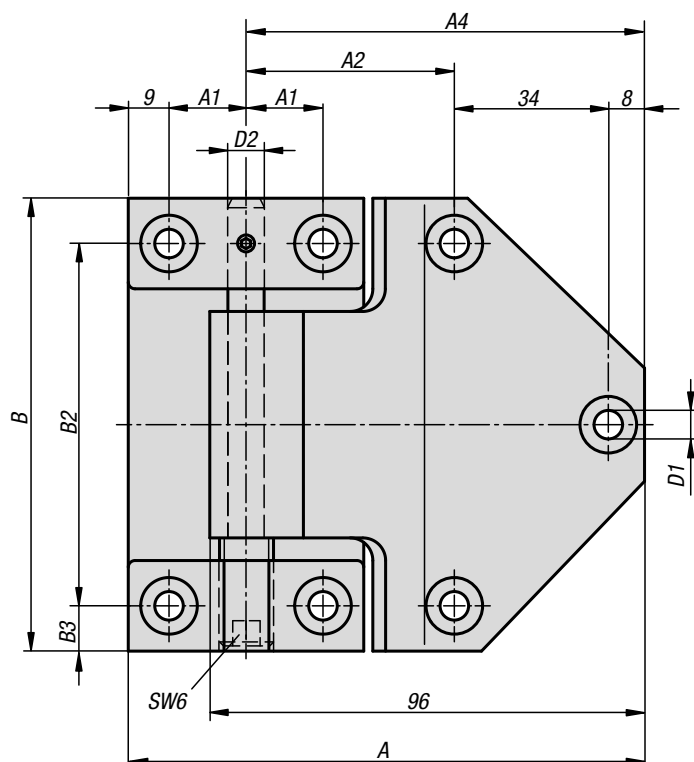


### KIPP Stainless steel hinges with fastening screws

| Order No.   | Form | Form definition | Surface finish body | A  | A1 | A2 | A3 | B  | B1 | H | D  | L  |
|-------------|------|-----------------|---------------------|----|----|----|----|----|----|---|----|----|
| K1810.82650 | A    | oval            | polished            | 82 | 32 | 23 | 25 | 65 | 32 | 4 | M6 | 50 |
| K1810.82651 | A    | oval            | blasted             | 82 | 32 | 23 | 25 | 65 | 32 | 4 | M6 | 50 |
| K1810.65650 | B    | round           | polished            | 65 | 40 | -  | -  | 65 | 25 | 4 | M6 | 50 |
| K1810.65651 | B    | round           | blasted             | 65 | 40 | -  | -  | 65 | 25 | 4 | M6 | 50 |

## Single leaf hinges

adjustable, stainless steel



### Material:

Stainless steel 1.4571.

### Version:

Satin finished.

### Sample order:

K1346.06884617

### Note:

Single leaf hinge for inwards opening doors, screws on from outside. A screw on the hinge pin allows height adjustment of  $\pm 4$  mm.

The addition of titanium in stainless steel 1.4571 increases the corrosion resistance.

The opening angle is max. 180°.

### Drawing reference:

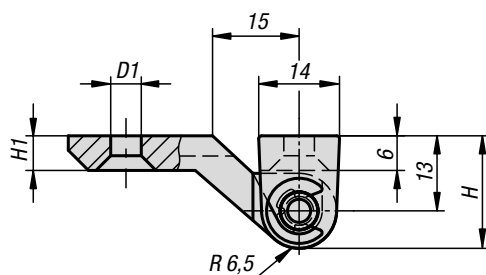
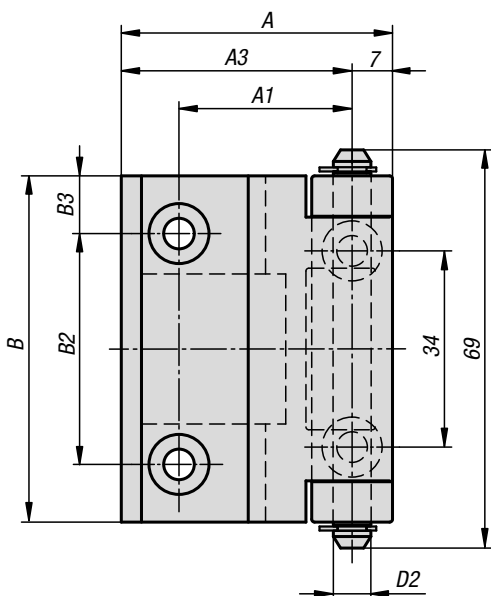
1) grub screw M4, DIN 916

### KIPP Single leaf hinges, adjustable, stainless steel

| Order No.      | A   | A1 | A2 | A3 | A4 | B   | B2 | B3 | D1  | D2 | H  | H1 |
|----------------|-----|----|----|----|----|-----|----|----|-----|----|----|----|
| K1346.06884617 | 114 | 17 | 46 | 26 | 88 | 100 | 80 | 10 | 6,3 | 8  | 28 | 6  |

## Hinge

stainless steel

**Material:**

Hinge body stainless steel 1.4401.

Pin and retaining rings stainless steel 1.4305.

**Version:**

Satin finished.

**Sample order:**

K1348.0540073000

**Note:**

Hinge for flush constructions.

Right or left mounting.

Ideal for mounting on narrow frames.

The opening angle is max. 220°.

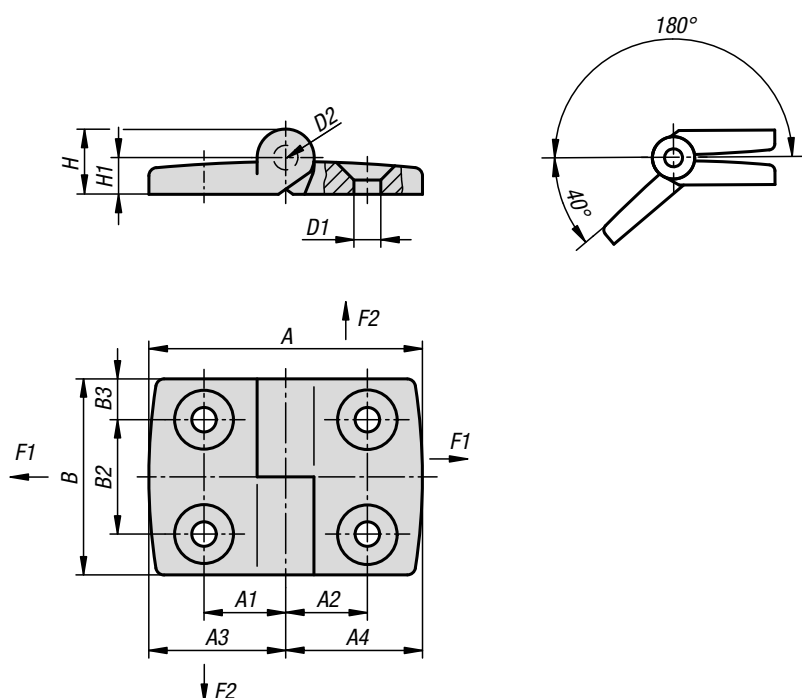
## KIPP Hinge, stainless steel

| Order No.        | A  | A1 | A3 | B  | B2 | B3 | D1  | D2  | H    | H1 |
|------------------|----|----|----|----|----|----|-----|-----|------|----|
| K1348.0540073000 | 47 | 30 | 40 | 60 | 40 | 10 | 5,3 | 6,5 | 19,5 | 6  |



## Hinges, stainless steel

lift-off, left



### Material:

Hinge stainless steel 1.4401.

Pin stainless steel 1.4104.

### Version:

High-gloss polished.

### Sample order:

K1345.16261515

### Note:

Hinge for panel elements and aluminium profiles, lift-off. Pin end closed. Screws countersunk, thus minimum dirt accumulation.

The loading values given for the hinges are non-binding reference values without consideration of safety factors and exclude any liability. The values given are for information purposes only and do not constitute a legally binding assurance of properties.

The load values have been determined under laboratory conditions. Each user must determine individually whether the hinge is suitable for the respective application.

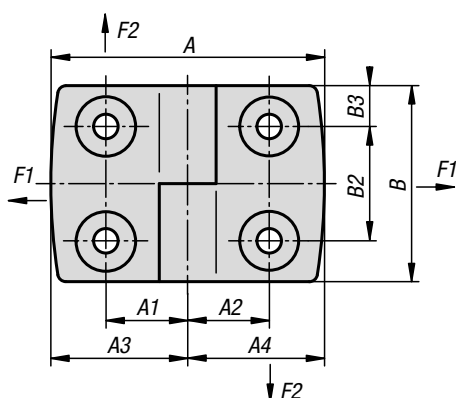
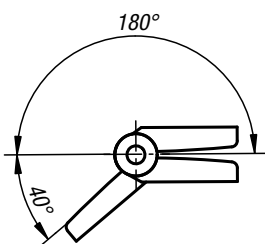
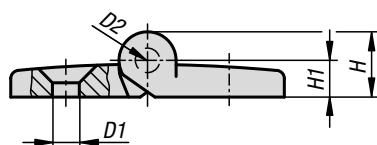
Different materials onto which the hinges are installed and the type of mounting, weather conditions and wear can influence the determined values.

## KIPP Hinges, stainless steel, lift-off, left

| Order No.      | A   | A1   | A2   | A3   | A4   | B  | B2 | B3 | D1  | D2 | H  | H1 | F1<br>N | F2<br>N |
|----------------|-----|------|------|------|------|----|----|----|-----|----|----|----|---------|---------|
| K1345.16261515 | 52  | 15   | 15   | 26   | 26   | 48 | 28 | 10 | 6,6 | 6  | 16 | 9  | 900     | 625     |
| K1345.16301818 | 59  | 17,5 | 17,5 | 29,5 | 29,5 | 48 | 28 | 10 | 6,6 | 6  | 16 | 9  | 1000    | 710     |
| K1345.16392323 | 77  | 22,5 | 22,5 | 38,5 | 38,5 | 48 | 28 | 10 | 6,6 | 6  | 16 | 9  | 1200    | 500     |
| K1345.16442525 | 87  | 25   | 25   | 43,5 | 43,5 | 48 | 28 | 10 | 6,6 | 6  | 16 | 9  | 1200    | 450     |
| K1345.16583333 | 115 | 32,5 | 32,5 | 57,5 | 57,5 | 48 | 28 | 10 | 6,6 | 6  | 16 | 9  | 1200    | 350     |

## Hinges, stainless steel

lift-off, right



### Material:

Hinge stainless steel 1.4401.

Pin stainless steel 1.4104.

### Version:

High-gloss polished.

### Sample order:

K1345.06261515

### Note:

Hinge for panel elements and aluminium profiles, lift-off. Pin end closed. Screws countersunk, thus minimum dirt accumulation.

The loading values given for the hinges are non-binding reference values without consideration of safety factors and exclude any liability. The values given are for information purposes only and do not constitute a legally binding assurance of properties.

The load values have been determined under laboratory conditions. Each user must determine individually whether the hinge is suitable for the respective application.

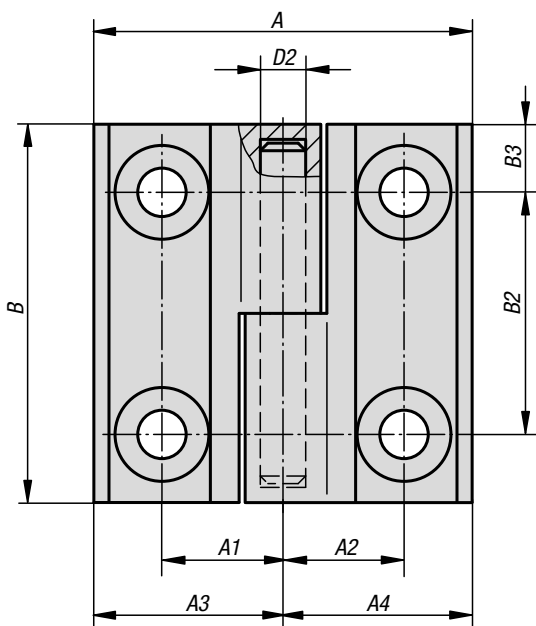
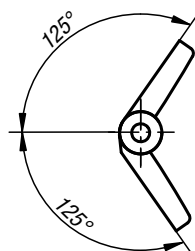
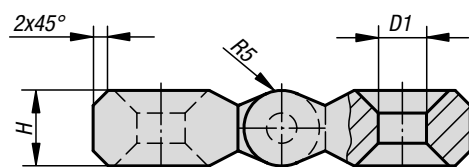
Different materials onto which the hinges are installed and the type of mounting, weather conditions and wear can influence the determined values.

## KIPP Hinges, stainless steel, lift-off, right

| Order No.      | A   | A1   | A2   | A3   | A4   | B  | B2 | B3 | D1  | D2 | H  | H1 | F1<br>N | F2<br>N |
|----------------|-----|------|------|------|------|----|----|----|-----|----|----|----|---------|---------|
| K1345.06261515 | 52  | 15   | 15   | 26   | 26   | 48 | 28 | 10 | 6,6 | 6  | 16 | 9  | 900     | 625     |
| K1345.06301818 | 59  | 17,5 | 17,5 | 29,5 | 29,5 | 48 | 28 | 10 | 6,6 | 6  | 16 | 9  | 1000    | 710     |
| K1345.06392323 | 77  | 22,5 | 22,5 | 38,5 | 38,5 | 48 | 28 | 10 | 6,6 | 6  | 16 | 9  | 1200    | 500     |
| K1345.06442525 | 87  | 25   | 25   | 43,5 | 43,5 | 48 | 28 | 10 | 6,6 | 6  | 16 | 9  | 1200    | 450     |
| K1345.06583333 | 115 | 32,5 | 32,5 | 57,5 | 57,5 | 48 | 28 | 10 | 6,6 | 6  | 16 | 9  | 1200    | 350     |

# Hinges lift-off

stainless steel



## Material:

Hinge and pin stainless steel 1.4401.

## Version:

Satin finished.

## Sample order:

K1342.06251616

## Note:

This double symmetry hinge can be mounted right or left.

The opening angle is max. 125°.

The loading values given for the hinges are non-binding reference values, which do not consider safety factors and exclude any liability. The values given are for information purposes only and do not constitute a legally binding assurance of properties.

These load values were determined under laboratory conditions. Each user must determine individually whether the hinge is suitable for the respective application.

Wide differences in the materials on which the hinges are installed, the type of mounting, weather conditions and wear, can influence the determined values.

## KIPP Hinges lift-off, stainless steel

| Order No.      | A  | A1 | A2 | A3 | A4 | B  | B2 | B3 | D1  | D2 | H  | Load capacity<br>N |
|----------------|----|----|----|----|----|----|----|----|-----|----|----|--------------------|
| K1342.06251616 | 50 | 16 | 16 | 25 | 25 | 50 | 32 | 9  | 6,4 | 6  | 10 | 5000               |

## Strap hinges,

steel or stainless steel



### Material:

Steel.  
Stainless steel 1.4301.

### Version:

Steel electro zinc-plated, chromed or matt brass plated.  
Stainless steel matt polished. Steel electro zinc-plated, chromed or matt brass plated.  
Stainless steel matt polished.

### Sample order:

K1347.0541041222200 K1347.0541041222200

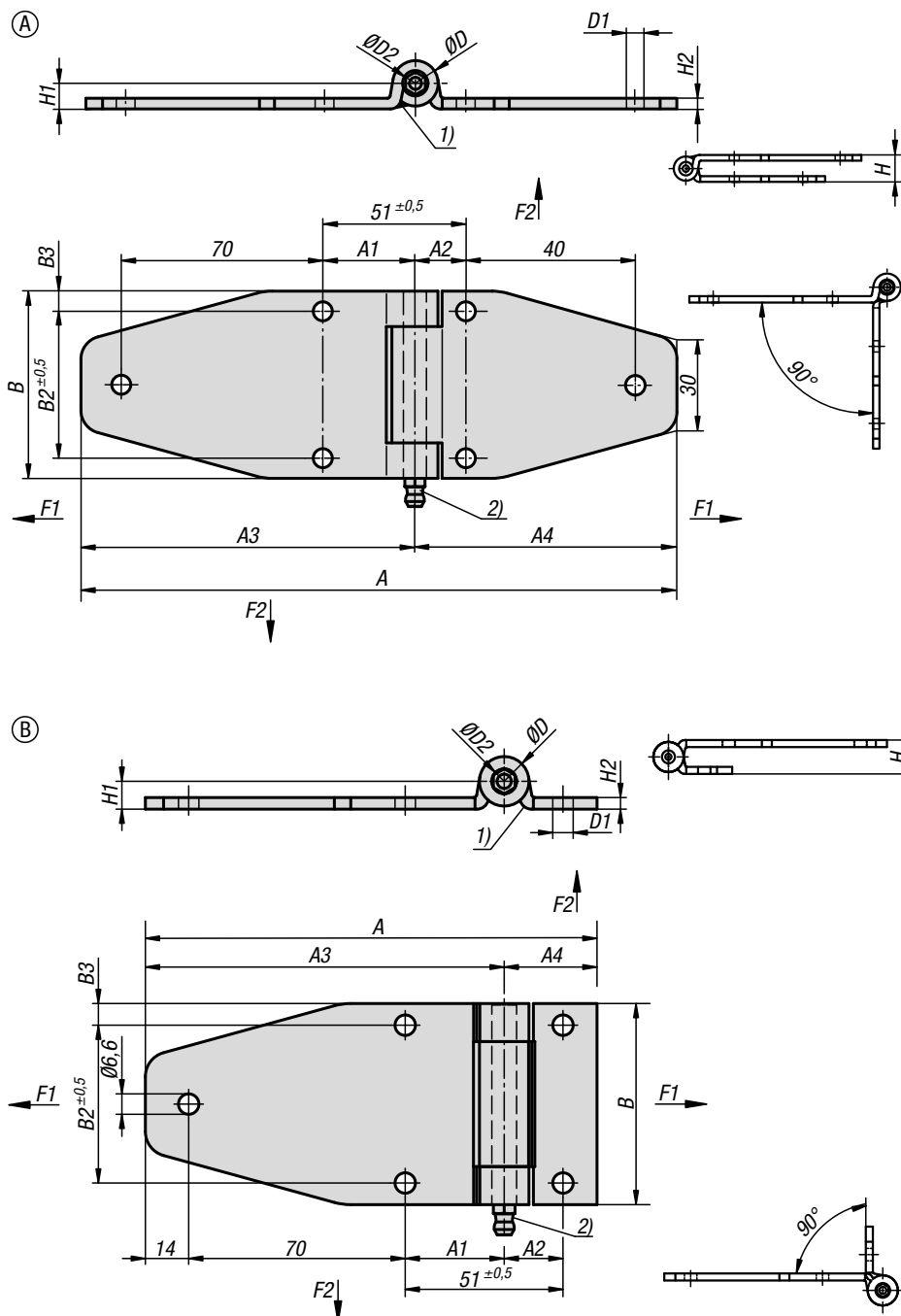
### Note:

Strap hinge for in-frame doors.  
The opening angle is max. 270°.

The loading values given for the hinges are non-binding reference values without consideration of safety factors and exclude any liability. The values given are for information purposes only and do not constitute a legally binding assurance of properties. These load values were determined under laboratory conditions. Each user must determine individually whether the hinge is suitable for the respective application. Different materials onto which the hinges are installed, the type of mounting, weather conditions and wear can influence the determined values.

### Drawing reference:

- 1) Both rolled ends of long leaf are welded
- 2) Grease nipple
- 3) Fixed pin

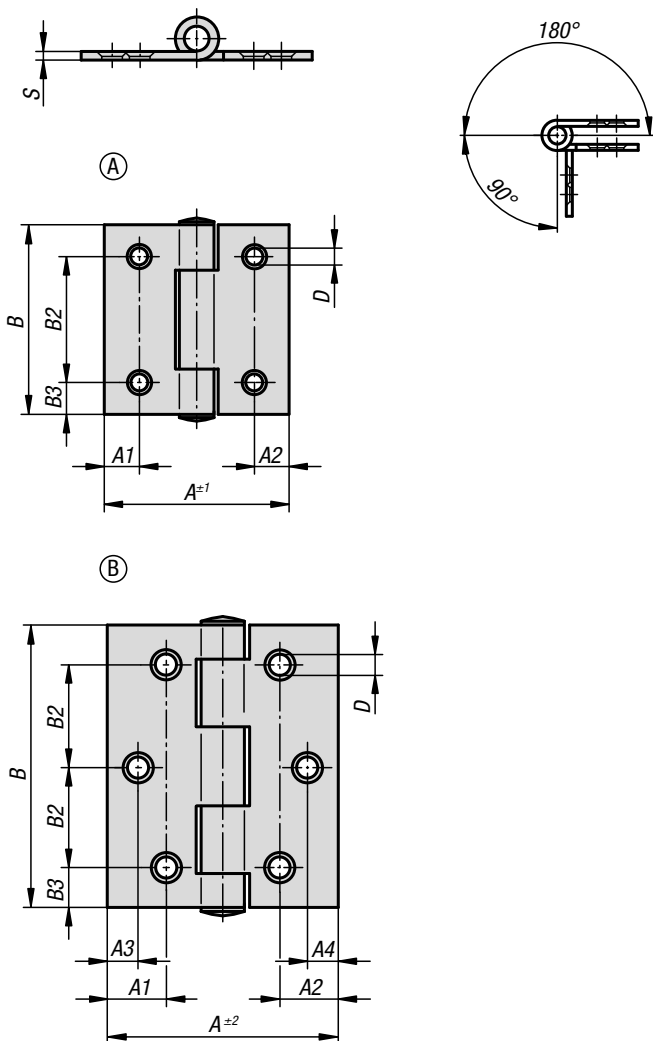
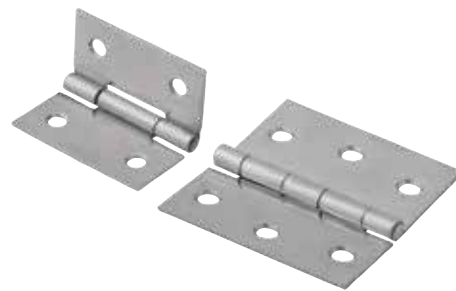


## KIPP Strap hinges, steel or stainless steel

| Order No.          | Form | Form definition | Main material      | Surface finish body | A   | A1 | A2 | A3  | A4 | B  | B2 | B3 | F1 N | F2 N |
|--------------------|------|-----------------|--------------------|---------------------|-----|----|----|-----|----|----|----|----|------|------|
| K1347.06701161932  | A    | longer leaf     | stainless steel A2 | matt polished       | 186 | 32 | 19 | 116 | 70 | 65 | 51 | 7  | -    | 2500 |
| K1347.067011619321 | A    | longer leaf     | steel              | galvanised          | 186 | 32 | 19 | 116 | 70 | 65 | 51 | 7  | 7500 | 1300 |

# Hinges

sheet steel or sheet stainless steel


**Material:**

Steel or stainless steel 1.4301.

**Version:**

Steel electro zinc-plated.

Stainless steel bright.

**Sample order:**

K1082.04201212

**Note:**

Rolled plate butt hinges.

Pins are riveted.

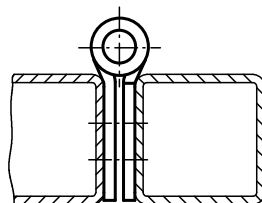
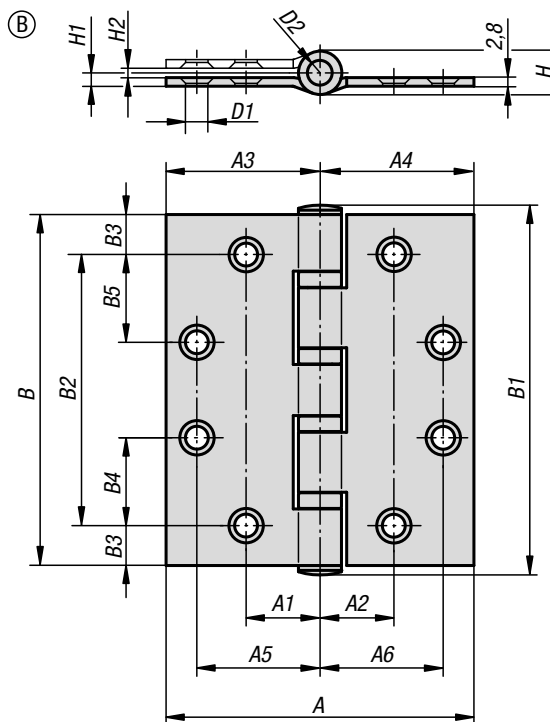
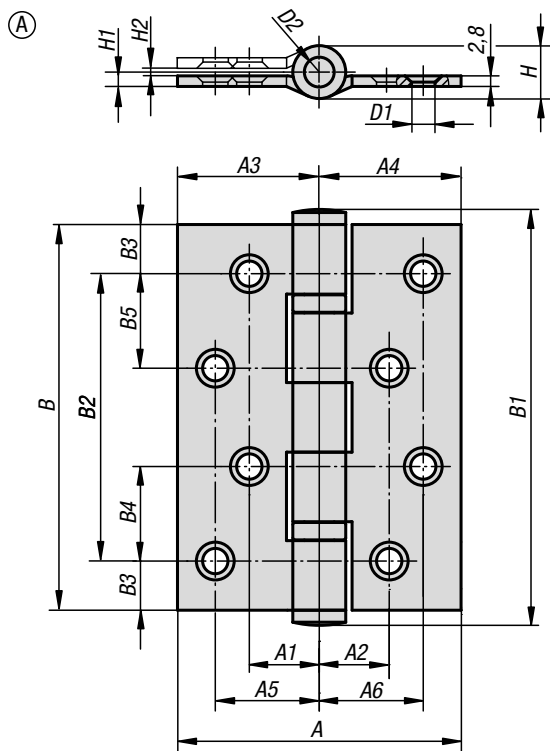
Screw holes countersunk.

## KIPP Hinges, sheet steel or sheet stainless steel

| Order No.       | Material           | Form | A1   | A2   | A3 | A4 | A  | B  | B2   | B3  | D   | S    |
|-----------------|--------------------|------|------|------|----|----|----|----|------|-----|-----|------|
| K1082.04201212  | steel              | A    | 8,5  | 8,5  | -  | -  | 40 | 40 | 25   | 7,5 | 4   | 1    |
| K1082.04301515  | steel              | B    | 15   | 15   | 8  | 8  | 60 | 60 | 22,5 | 7,5 | 4,5 | 1,5  |
| K1082.104201212 | stainless steel A2 | A    | 8,5  | 8,5  | -  | -  | 40 | 40 | 25   | 7,5 | 4   | 1    |
| K1082.104251414 | stainless steel A2 | B    | 11   | 11   | 8  | 8  | 50 | 50 | 18   | 7   | 4,5 | 1,25 |
| K1082.104301515 | stainless steel A2 | B    | 15   | 15   | 8  | 8  | 60 | 60 | 22,5 | 7,5 | 4,5 | 1,5  |
| K1082.105401515 | stainless steel A2 | B    | 25,3 | 25,3 | 12 | 12 | 80 | 80 | 30   | 10  | 5,2 | 1,5  |

## Butt hinges

stainless steel



**Material:**  
Stainless steel 1.4301.

**Version:**  
Matt polished.

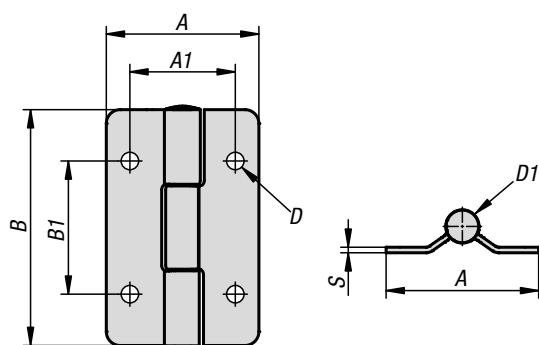
**Sample order:**  
K1349.06371919

**Note:**  
Butt hinge for inwards opening doors.  
The opening angle is max. 270°.

### KIPP Butt hinges stainless steel

| Order No.      | Form | A   | A1   | A2   | A3   | A4   | A5   | A6   | B   | B1  | B2 | B3 | B4   | B5   | D1  | D2 | H  | H1  | H2 | Load capacity N |
|----------------|------|-----|------|------|------|------|------|------|-----|-----|----|----|------|------|-----|----|----|-----|----|-----------------|
| K1349.06371919 | A    | 75  | 18,5 | 18,5 | 37,5 | 37,5 | 27,5 | 27,5 | 102 | 110 | 76 | 13 | 25   | 25   | 6,7 | 8  | 14 | 3,8 | 2  | 8000            |
| K1349.07502424 | B    | 100 | 24   | 24   | 50   | 50   | 40   | 40   | 114 | 120 | 88 | 13 | 28,5 | 28,5 | 7,3 | 8  | 14 | 4,3 | 3  | 8000            |

## Hinges, stainless steel

**Material:**

Stainless steel 1.4310.

**Version:**

Bright.

**Sample order:**

K1517.558512

**Note:**

Opening angle is max. 270°.

**Accessories:**

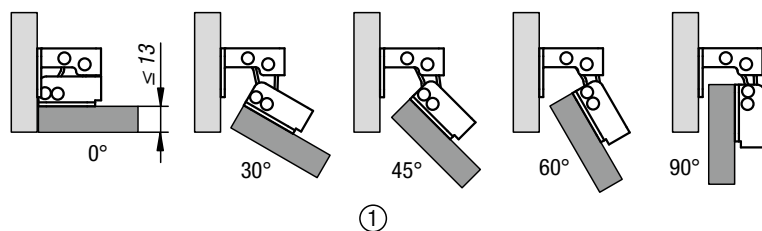
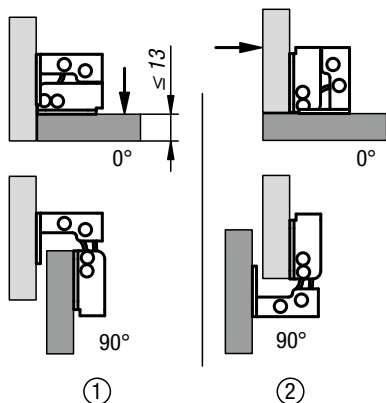
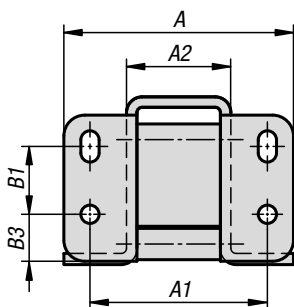
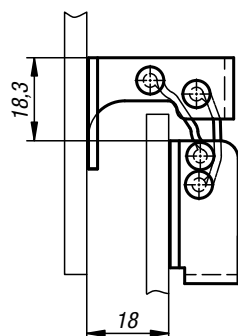
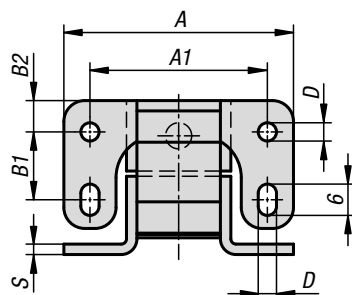
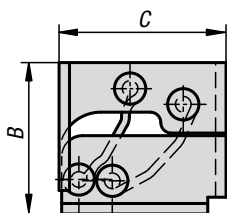
Hinges, stainless steel with preset friction K1518

## KIPP Hinges, stainless steel

| Order No.    | A  | A1 | B  | B1 | D   | D1 | S |
|--------------|----|----|----|----|-----|----|---|
| K1517.558512 | 55 | 38 | 85 | 48 | 6,3 | 12 | 2 |
| K1517.558516 | 55 | 38 | 85 | 48 | 6,3 | 16 | 2 |

# Hinges steel or stainless steel

internal, opening angle 90°



## Material:

Steel, pins and connecting elements 1.4016 stainless steel.  
Stainless steel, all components 1.4404 stainless steel.

## Version:

Electro zinc-plated.  
Bright.

## Sample order:

K1447.442932

## Assembly:

- For recessed or surface mounting.
- Can be mounted on right or left side.
- For horizontal or vertical applications.

## Drawing reference:

- 1) recessed mounting
- 2) surface mounting

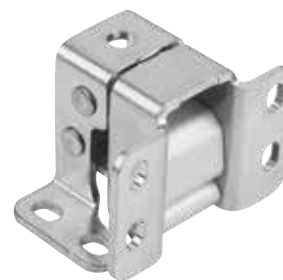
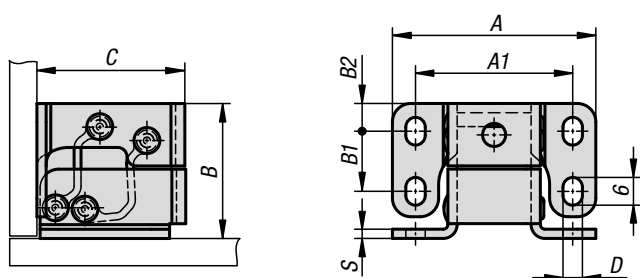
## KIPP Hinges steel or stainless steel, internal, opening angle 90°

| Order No.     | Main material      | A  | A1 | A2 | B  | B1 | B2 | B3  | C  | D   | S |
|---------------|--------------------|----|----|----|----|----|----|-----|----|-----|---|
| K1447.442932  | steel              | 44 | 34 | 20 | 29 | 13 | 6  | 9,5 | 32 | 3,5 | 2 |
| K1447.1442932 | stainless steel A4 | 44 | 34 | 20 | 29 | 13 | 6  | 9,5 | 32 | 3,5 | 2 |



# Hinges steel or stainless steel

internal, opening angle 125°


**Material:**

Steel, axis and connecting elements anodised aluminium.

Stainless steel 1.4404, axis and connecting elements anodised aluminium.

**Version:**

Electro zinc-plated.

Bright.

**Sample order:**

K1448.442932

**Note:**

The hinges are resistant to bending and torsion.

The opening angle depends on the door thickness:

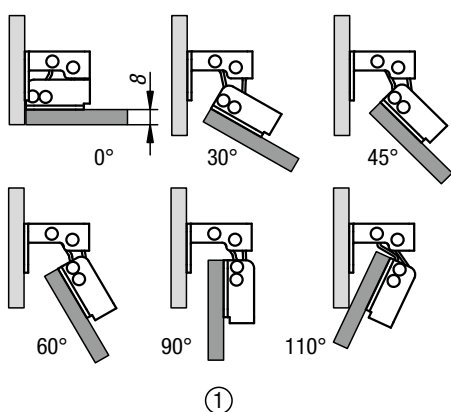
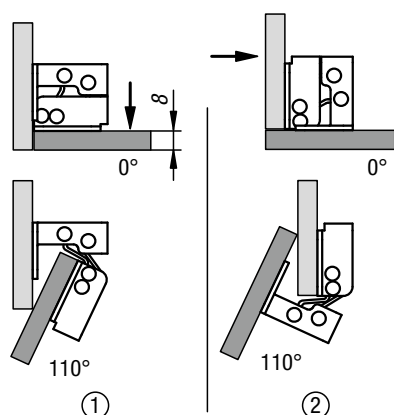
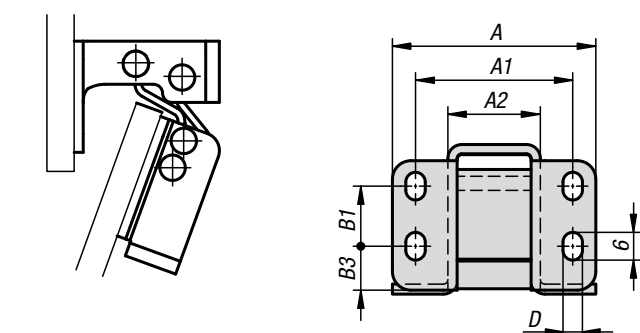
- max. 2 mm material thickness: opening angle 125°
- max. 8 mm material thickness: opening angle 110°
- max. 13 mm material thickness: opening angle 100°

**Assembly:**

- For recessed or surface mounting.
- Can be mounted on right or left side.
- For horizontal or vertical applications.

**Drawing reference:**

- 1) recessed mounting
- 2) surface mounting

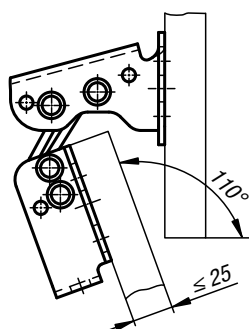
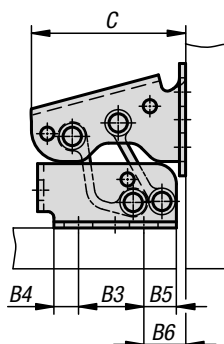
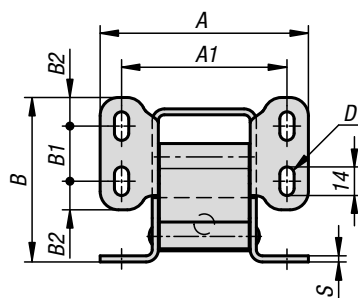


## KIPP Hinges steel or stainless steel, internal, opening angle 125°

| Order No.     | Main material      | A  | A1 | A2 | B  | B1 | B2 | B3  | C  | D   | S |
|---------------|--------------------|----|----|----|----|----|----|-----|----|-----|---|
| K1448.442932  | steel              | 44 | 34 | 20 | 29 | 13 | 6  | 9,5 | 32 | 4,2 | 2 |
| K1448.1442932 | stainless steel A4 | 44 | 34 | 20 | 29 | 13 | 6  | 9,5 | 32 | 4,2 | 2 |

# Hinge steel

internal, opening angle 110°


**Material:**

Steel, pins and connecting elements anodised aluminium.

**Version:**

Electro zinc-plated.

**Sample order:**

K1449.1028076

**Note:**

These hinges are the reinforced version.  
When hung on 2 hinges a 25 kg door can be opened and closed 10,000 times.

**Application:**

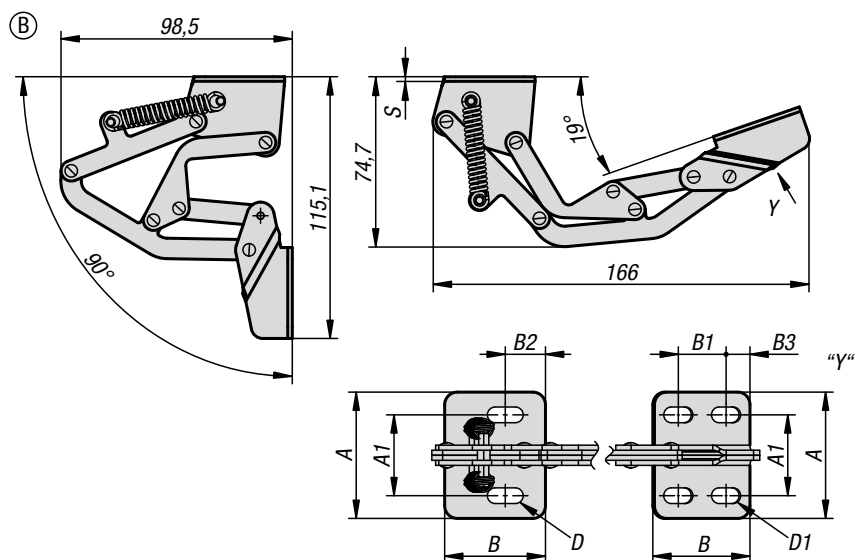
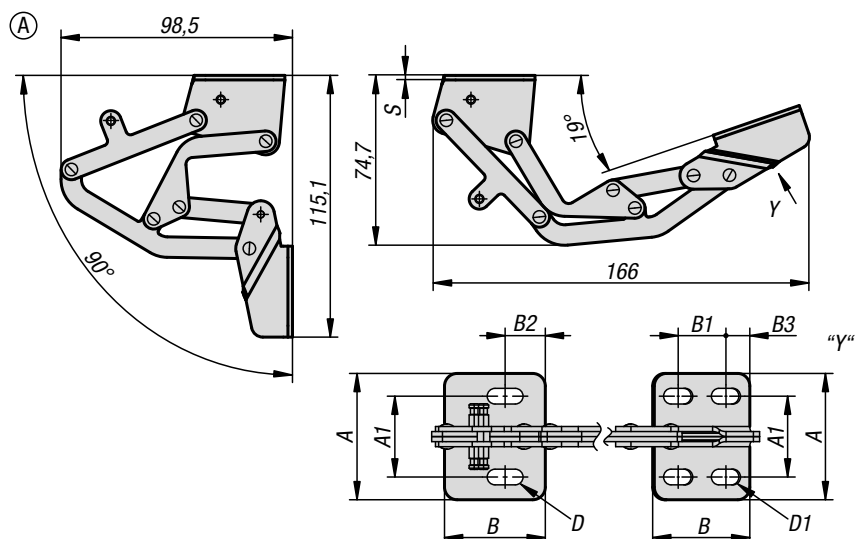
Invisible hinges for overlapping or inset doors.


**KIPP Hinge steel, internal, opening angle 110°**

| Order No.     | A   | A1 | B    | B1 | B2 | B3 | B4 | B5 | B6   | C  | D | S |
|---------------|-----|----|------|----|----|----|----|----|------|----|---|---|
| K1449.1028076 | 102 | 81 | 80,5 | 27 | 14 | 32 | 12 | 16 | 20,5 | 76 | 7 | 3 |

## Hinges, steel

in-frame opening angle 110°



**Material:**  
Steel.

**Version:**  
Electro zinc-plated.

**Sample order:**  
K1519.50400

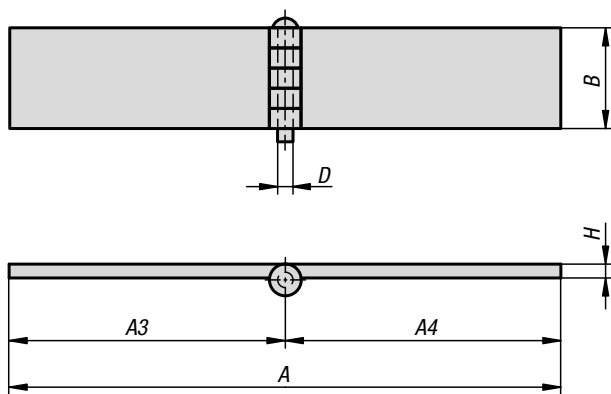
**Note:**  
The hinges are suitable exclusively for horizontal applications.  
The version with spring achieves a torque of 1.0 Nm when opening and a torque of 3.0 Nm when closing.  
Opening angle 110°.

### KIPP Hinges steel in-frame, opening angle 110°

| Order No.   | Form | Product type                 | A  | A1 | B  | B1 | B2 | B3 | D        | D1       | S |
|-------------|------|------------------------------|----|----|----|----|----|----|----------|----------|---|
| K1519.50400 | A    | in-frame hinge               | 50 | 32 | 40 | 20 | 16 | 10 | 6,2x14,2 | 6,2x12,2 | 2 |
| K1519.50401 | B    | hinges, in-frame with spring | 50 | 32 | 40 | 20 | 16 | 10 | 6,2x14,2 | 6,2x12,2 | 2 |

# Hinges

weldable


**Material:**

Steel.

**Version:**

Bright.

**Sample order:**

K1140.04030040

**Note:**

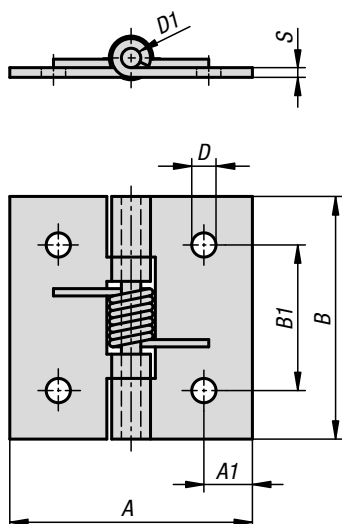
The hinges are made of weldable profile steel.

## KIPP Weldable hinges

| Order No.      | A   | A3 | A4 | B  | D | H |
|----------------|-----|----|----|----|---|---|
| K1140.04030040 | 80  | 40 | 40 | 30 | 4 | 3 |
| K1140.04040040 | 80  | 40 | 40 | 40 | 4 | 3 |
| K1140.06040030 | 60  | 30 | 30 | 40 | 6 | 5 |
| K1140.06040060 | 120 | 60 | 60 | 40 | 6 | 5 |
| K1140.06050060 | 120 | 60 | 60 | 50 | 6 | 5 |
| K1140.06060060 | 120 | 60 | 60 | 60 | 6 | 5 |
| K1140.08060080 | 160 | 80 | 80 | 60 | 8 | 6 |

# Spring hinges

steel, stainless steel or aluminium, 50 mm



## Material:

Steel, 1.4301 stainless steel or 5754 aluminium.  
Tension spring steel or stainless steel.

## Version:

Steel electro zinc-plated  
Stainless steel and aluminium, bright.  
Tension spring Zn/Al alloy.

## Sample order:

K1173.50500

## Note:

Barrel hinges.  
Opening angle 270°.

Opening spring torque:

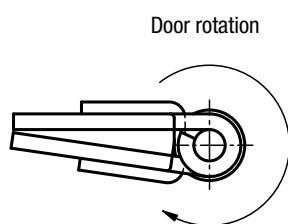
$M(0^\circ) : 1.5 \text{ Nm} / M(90^\circ) : 1.1 \text{ Nm} / M(180^\circ) : 0.65 \text{ Nm}$

Closing spring torque:

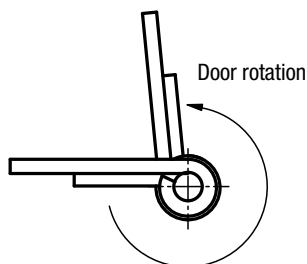
$M(0^\circ) : 0.25 \text{ Nm} / M(90^\circ) : 0.65 \text{ Nm} / M(180^\circ) : 1.1 \text{ Nm}$

By the aluminum hinges, the tension springs are steel alloyed with Zn/Al.

Hinges with closing spring



Hinges with opening spring



The loading values given for the hinges are non-binding reference values without consideration of safety factors and exclude any liability. The values given are for information purposes only and do not constitute a legally binding assurance of properties. These load values were determined under laboratory conditions. Each user must determine individually whether the hinge is suitable for the respective application.

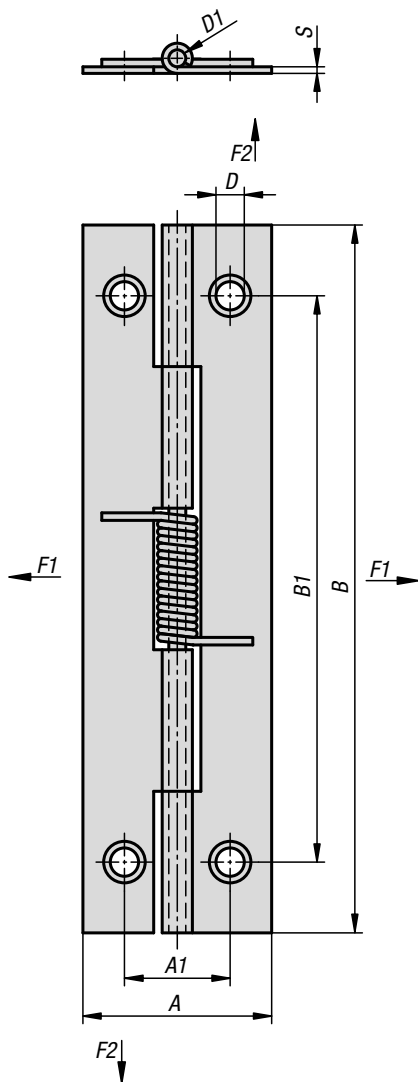
Different materials onto which the hinges are installed and the type of mounting, weather conditions and wear can influence the determined values.

## KIPP Spring hinges, steel, stainless steel or aluminium 50 mm

| Order No.    | Version 1     | Main material      | A  | A1 | B  | B1 | D | D1 | S | F1<br>N | F2<br>N |
|--------------|---------------|--------------------|----|----|----|----|---|----|---|---------|---------|
| K1173.50500  | spring open   | steel              | 50 | 9  | 50 | 30 | 5 | 4  | 2 | 1200    | 1200    |
| K1173.150500 | spring open   | stainless steel A2 | 50 | 10 | 50 | 30 | 5 | 4  | 2 | 2780    | 2830    |
| K1173.250500 | spring open   | aluminium          | 50 | 9  | 50 | 30 | 5 | 4  | 2 | 1030    | 2110    |
| K1173.50501  | spring closed | steel              | 50 | 9  | 50 | 30 | 5 | 4  | 2 | 1200    | 1200    |
| K1173.150501 | spring closed | stainless steel A2 | 50 | 10 | 50 | 30 | 5 | 4  | 2 | 2780    | 2830    |
| K1173.250501 | spring closed | aluminium          | 50 | 9  | 50 | 30 | 5 | 4  | 2 | 1030    | 2110    |

# Spring hinges

steel or stainless steel, 75 mm



## Material:

Steel or 1.4301 stainless steel.

Tension spring stainless steel.

## Version:

Bright.

## Sample order:

K1174.20750

## Note:

Barrel hinges.

Opening angle 270°.

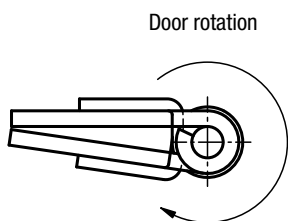
Opening spring torque:

$M(0^\circ) : 0.12 \text{ Nm} / M(90^\circ) : 0.09 \text{ Nm} / M(180^\circ) : 0.06 \text{ Nm}$

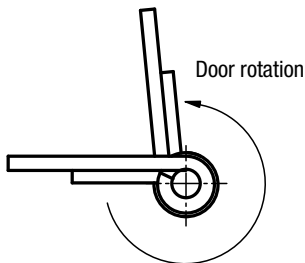
The loading values given for the hinges are non-binding reference values without consideration of safety factors and exclude any liability. The values given are for information purposes only and do not constitute a legally binding assurance of properties. These load values were determined under laboratory conditions. Each user must determine individually whether the hinge is suitable for the respective application.

Different materials onto which the hinges are installed and the type of mounting, weather conditions and wear can influence the determined values.

Hinges with closing spring



Hinges with opening spring

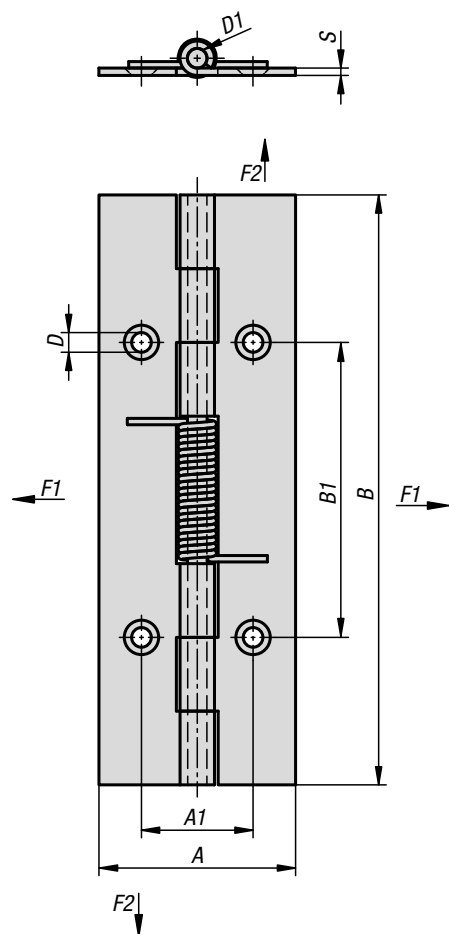


## KIPP Spring hinges steel or stainless steel, 75 mm

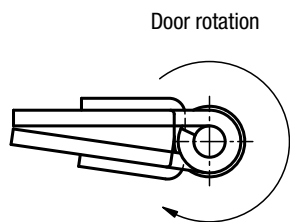
| Order No.    | Main material      | A  | A1   | B  | B1 | D   | D1  | S   | F1<br>N | F2<br>N |
|--------------|--------------------|----|------|----|----|-----|-----|-----|---------|---------|
| K1174.20750  | steel              | 20 | 11,2 | 75 | 60 | 2,8 | 1,8 | 0,8 | 1180    | 1210    |
| K1174.120750 | stainless steel A2 | 20 | 11,2 | 75 | 60 | 2,8 | 1,8 | 0,8 | 1430    | 1740    |

# Spring hinges

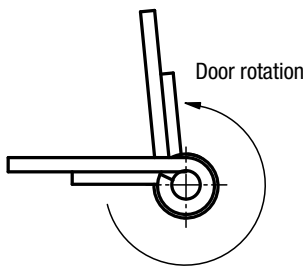
steel, stainless steel or aluminium, 120 mm



Hinges with closing spring



Hinges with opening spring



## Material:

Steel, 1.4301 stainless steel or 5754 aluminium.  
Tension spring steel or stainless steel.

## Version:

Steel bright or electro zinc-plated  
Stainless steel and aluminium, bright.  
Tension spring Zn/Al alloy.

## Sample order:

K1175.4012000

## Note:

Barrel hinges.  
Opening angle 270°.

Opening spring torque:

$M(0^\circ) : 0.85 \text{ Nm} / M(90^\circ) : 0.56 \text{ Nm} / M(180^\circ) : 0.28 \text{ Nm}$

Closing spring torque:

$M(0^\circ) : 0.28 \text{ Nm} / M(90^\circ) : 0.56 \text{ Nm} / M(180^\circ) : 0.85 \text{ Nm}$

By the aluminium hinges, the tension springs are steel alloyed with Zn/Al.

Form A: without holes

Form B: with holes

The loading values given for the hinges are non-binding reference values without consideration of safety factors and exclude any liability. The values given are for information purposes only and do not constitute a legally binding assurance of properties.

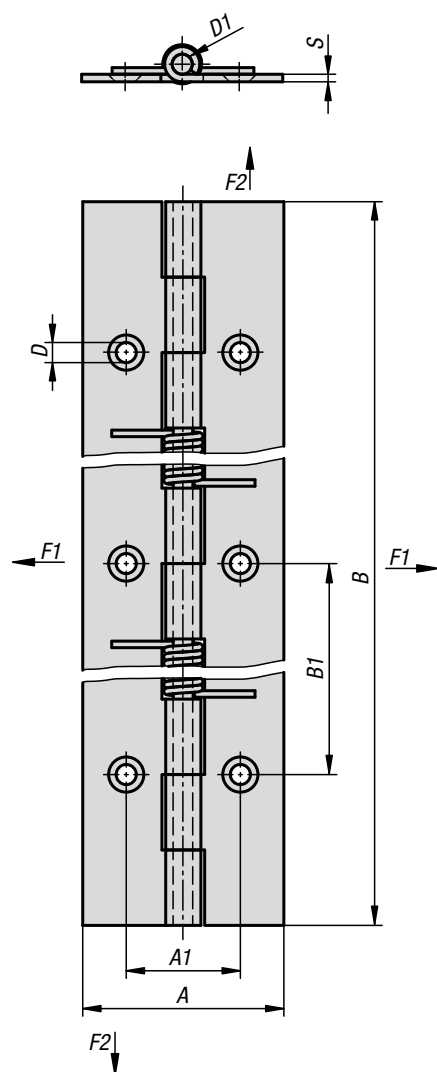
These load values were determined under laboratory conditions. Each user must determine individually whether the hinge is suitable for the respective application. Different materials onto which the hinges are installed and the type of mounting, weather conditions and wear can influence the determined values.

## KIPP Spring hinges, steel, stainless steel or aluminium 120 mm

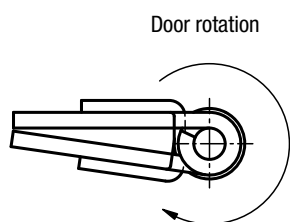
| Order No.      | Form | Version 1     | Main material      | A  | A1   | B   | B1 | D | D1 | S   | F1 N | F2 N  |
|----------------|------|---------------|--------------------|----|------|-----|----|---|----|-----|------|-------|
| K1175.4012000  | A    | spring open   | steel              | 40 | -    | 120 | -  | - | 4  | 1,5 | 1970 | 5420  |
| K1175.4012001  | B    | spring open   | steel              | 40 | 22,7 | 120 | 60 | 4 | 4  | 1,5 | 1970 | 5420  |
| K1175.14012000 | A    | spring open   | stainless steel A2 | 40 | -    | 120 | -  | - | 4  | 1,5 | 4100 | 10300 |
| K1175.14012001 | B    | spring open   | stainless steel A2 | 40 | 22,7 | 120 | 60 | 4 | 4  | 1,5 | 4100 | 10300 |
| K1175.24012000 | A    | spring open   | aluminium          | 40 | -    | 120 | -  | - | 4  | 1,5 | 1970 | 5420  |
| K1175.24012001 | B    | spring open   | aluminium          | 40 | 22,7 | 120 | 60 | 4 | 4  | 1,5 | 1970 | 5420  |
| K1175.4012010  | A    | spring closed | steel              | 40 | -    | 120 | -  | - | 4  | 1,5 | 1970 | 5420  |
| K1175.4012011  | B    | spring closed | steel              | 40 | 22,7 | 120 | 60 | 4 | 4  | 1,5 | 1970 | 5420  |
| K1175.14012010 | A    | spring closed | stainless steel A2 | 40 | -    | 120 | -  | - | 4  | 1,5 | 4100 | 10300 |
| K1175.14012011 | B    | spring closed | stainless steel A2 | 40 | 22,7 | 120 | 60 | 4 | 4  | 1,5 | 4100 | 10300 |
| K1175.24012010 | A    | spring closed | aluminium          | 40 | -    | 120 | -  | - | 4  | 1,5 | 1970 | 5420  |
| K1175.24012011 | B    | spring closed | aluminium          | 40 | 22,7 | 120 | 60 | 4 | 4  | 1,5 | 1970 | 5420  |

# Spring hinges

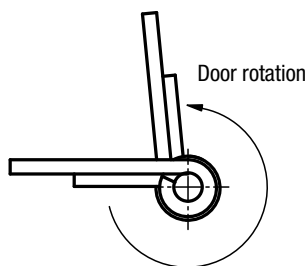
steel or stainless steel, 180 mm



Hinges with closing spring



Hinges with opening spring



## Material:

Steel or 1.4301 stainless steel.

Tension spring stainless steel.

## Version:

Steel bright or electro zinc-plated.

Stainless steel bright.

## Sample order:

K1176.4018000

## Note:

Barrel hinges.

Opening angle 270°.

Opening spring torque:

$M(0^\circ) : 1.7 \text{ Nm} / M(90^\circ) : 1.1 \text{ Nm} / M(180^\circ) : 0.56 \text{ Nm}$

Closing spring torque:

$M(0^\circ) : 0.56 \text{ Nm} / M(90^\circ) : 1.1 \text{ Nm} / M(180^\circ) : 1.7 \text{ Nm}$

Form A: without holes

Form B: with holes

The loading values given for the hinges are non-binding reference values without consideration of safety factors and exclude any liability. The values given are for information purposes only and do not constitute a legally binding assurance of properties. These load values were determined under laboratory conditions. Each user must determine individually whether the hinge is suitable for the respective application.

Different materials onto which the hinges are installed and the type of mounting, weather conditions and wear can influence the determined values.

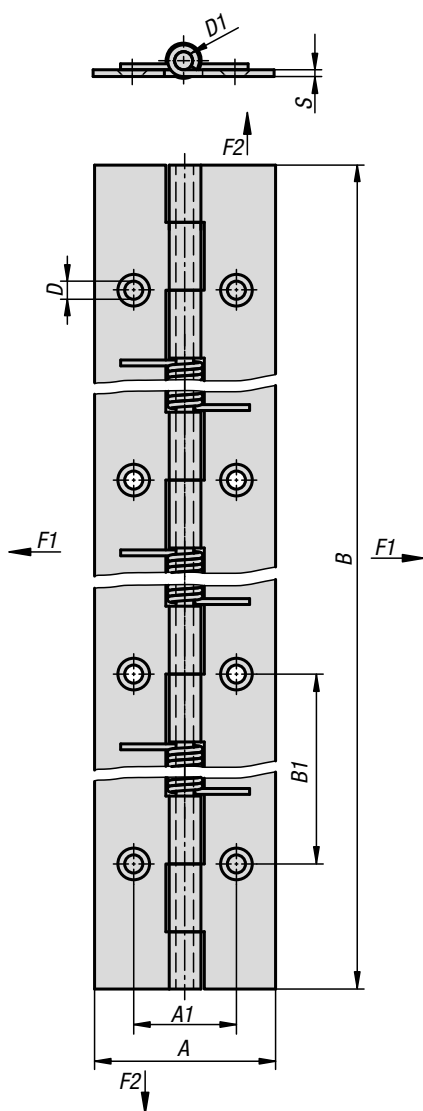
## KIPP Spring hinges steel or stainless steel, 180 mm

| Order No.      | Form | Version 1     | Main material      | A  | A1   | B   | B1 | D | D1 | S   | F1<br>N | F2<br>N |
|----------------|------|---------------|--------------------|----|------|-----|----|---|----|-----|---------|---------|
| K1176.4018000  | A    | spring open   | steel              | 40 | -    | 180 | -  | - | 4  | 1,5 | 4150    | 10750   |
| K1176.4018001  | B    | spring open   | steel              | 40 | 22,7 | 180 | 60 | 4 | 4  | 1,5 | 4150    | 10750   |
| K1176.14018000 | A    | spring open   | stainless steel A2 | 40 | -    | 180 | -  | - | 4  | 1,5 | 4150    | 10750   |
| K1176.14018001 | B    | spring open   | stainless steel A2 | 40 | 22,7 | 180 | 60 | 4 | 4  | 1,5 | 4150    | 10750   |
| K1176.4018010  | A    | spring closed | steel              | 40 | -    | 180 | -  | - | 4  | 1,5 | 4150    | 10750   |
| K1176.4018011  | B    | spring closed | steel              | 40 | 22,7 | 180 | 60 | 4 | 4  | 1,5 | 4150    | 10750   |
| K1176.14018010 | A    | spring closed | stainless steel A2 | 40 | -    | 180 | -  | - | 4  | 1,5 | 4150    | 10750   |
| K1176.14018011 | B    | spring closed | stainless steel A2 | 40 | 22,7 | 180 | 60 | 4 | 4  | 1,5 | 4150    | 10750   |

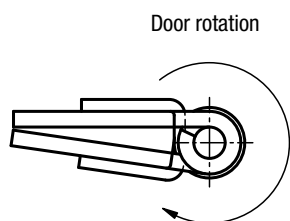


# Spring hinges

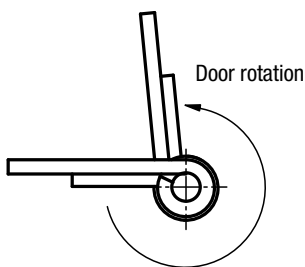
steel or stainless steel, 240 mm



Hinges with closing spring



Hinges with opening spring



## Material:

Steel or 1.4301 stainless steel.

Tension spring stainless steel.

## Version:

Steel bright or electro zinc-plated.

Stainless steel bright.

## Sample order:

K1177.4024000

## Note:

Barrel hinges.

Opening angle 270°.

Opening spring torque:

$M(0^\circ) : 2.55 \text{ Nm} / M(90^\circ) : 1.68 \text{ Nm} / M(180^\circ) : 0.84 \text{ Nm}$

Closing spring torque:

$M(0^\circ) : 0.84 \text{ Nm} / M(90^\circ) : 1.68 \text{ Nm} / M(180^\circ) : 2.55 \text{ Nm}$

Form A: without holes

Form B: with holes

The loading values given for the hinges are non-binding reference values without consideration of safety factors and exclude any liability. The values given are for information purposes only and do not constitute a legally binding assurance of properties.

These load values were determined under laboratory conditions. Each user must determine individually whether the hinge is suitable for the respective application.

Different materials onto which the hinges are installed and the type of mounting, weather conditions and wear can influence the determined values.

## KIPP Spring hinges steel or stainless steel, 240 mm

| Order No.      | Form | Version 1     | Main material      | A  | A1   | B   | B1 | D | D1 | S   | F1<br>N | F2<br>N |
|----------------|------|---------------|--------------------|----|------|-----|----|---|----|-----|---------|---------|
| K1177.4024000  | A    | spring open   | steel              | 40 | -    | 240 | -  | - | 4  | 1,5 | 5800    | 13100   |
| K1177.4024001  | B    | spring open   | steel              | 40 | 22,7 | 240 | 60 | 4 | 4  | 1,5 | 5800    | 13100   |
| K1177.14024000 | A    | spring open   | stainless steel A2 | 40 | -    | 240 | -  | - | 4  | 1,5 | 9200    | 20400   |
| K1177.14024001 | B    | spring open   | stainless steel A2 | 40 | 22,7 | 240 | 60 | 4 | 4  | 1,5 | 9200    | 20400   |
| K1177.4024010  | A    | spring closed | steel              | 40 | -    | 240 | -  | - | 4  | 1,5 | 5800    | 13100   |
| K1177.4024011  | B    | spring closed | steel              | 40 | 22,7 | 240 | 60 | 4 | 4  | 1,5 | 5800    | 13100   |
| K1177.14024010 | A    | spring closed | stainless steel A2 | 40 | -    | 240 | -  | - | 4  | 1,5 | 9200    | 20400   |
| K1177.14024011 | B    | spring closed | stainless steel A2 | 40 | 22,7 | 240 | 60 | 4 | 4  | 1,5 | 9200    | 20400   |

# Spring hinges

aluminium profile, 0.2 Nm



## Material:

Aluminium 6060 T5.  
Cover plug PA 6.6.

## Version:

Black anodised.  
Colourless anodised.

## Sample order:

K1178.353001

## Note:

The hinges are fitted with an integrated steel tension spring. This enables automatic opening and closing of doors and hatches.  
Opening angle 270°.

## Opening spring torque:

$M(0^\circ) : 0.23 \text{ Nm} / M(90^\circ) : 0.15 \text{ Nm} / M(180^\circ) : 0.08 \text{ Nm}$

## Closing spring torque:

$M(0^\circ) : 0.08 \text{ Nm} / M(90^\circ) : 0.15 \text{ Nm} / M(180^\circ) : 0.23 \text{ Nm}$

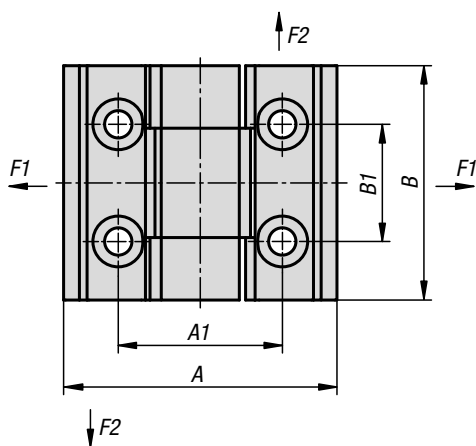
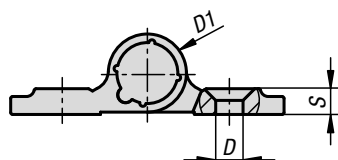
Fastened using DIN 7991 countersunk screws.

The loading values given for the hinges are non-binding reference values without consideration of safety factors and exclude any liability. The values given are for information purposes only and do not constitute a legally binding assurance of properties.

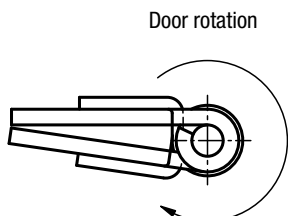
These load values were determined under laboratory conditions. Each user must determine individually whether the hinge is suitable for the respective application. Different materials onto which the hinges are installed and the type of mounting, weather conditions and wear can influence the determined values.

## Temperature range:

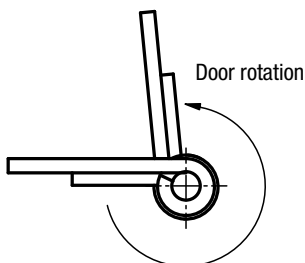
From -20°C to +80°C



Hinges with closing spring



Hinges with opening spring



## KIPP Spring hinges aluminium profile, 0.2 Nm

| Order No.    | Version 1     | Main colour | A  | A1 | B  | B1 | D   | D1 | S   |
|--------------|---------------|-------------|----|----|----|----|-----|----|-----|
| K1178.353001 | spring open   | black       | 35 | 21 | 30 | 15 | 3,5 | 10 | 3,3 |
| K1178.35300  | spring open   | colourless  | 35 | 21 | 30 | 15 | 3,5 | 10 | 3,5 |
| K1178.353011 | spring closed | black       | 35 | 21 | 30 | 15 | 3,5 | 10 | 3,3 |
| K1178.35301  | spring closed | colourless  | 35 | 21 | 30 | 15 | 3,5 | 10 | 3,5 |

# Spring hinges

aluminium profile, 0.35 Nm



## Material:

Aluminium 6060 T5.  
End caps PA 6.6.  
Washers POM.

## Version:

Black anodised.  
Colourless anodised.

## Sample order:

K1179.556701

## Note:

The hinges are equipped with an integrated steel tension spring. This allows automatic opening and closing of doors and hatches.  
Opening angle 270°.

Opening spring torque:

$M(0^\circ) : 0.35 \text{ Nm} / M(90^\circ) : 0.24 \text{ Nm} / M(180^\circ) : 0.12 \text{ Nm}$

Closing spring torque:

$M(0^\circ) : 0.12 \text{ Nm} / M(90^\circ) : 0.24 \text{ Nm} / M(180^\circ) : 0.35 \text{ Nm}$

These hinges are designed for more than 30,000 switching cycles.

Fastening with socket head screws as described in DIN 912/ DIN EN ISO 4762.

The loading values given for the hinges are non-binding reference values, which do not consider safety factors and exclude any liability. The values given are for information purposes only and do not constitute a legally binding assurance of properties.

These load values were determined under laboratory conditions. Each user must determine individually whether the hinge is suitable for the respective application.

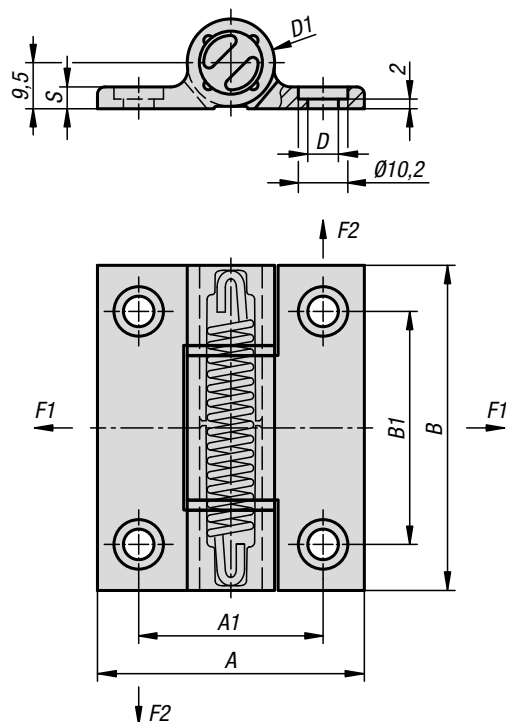
Wide differences in the materials on which the hinges are installed, the type of mounting, weather conditions and wear, can influence the determined values.

## Temperature range:

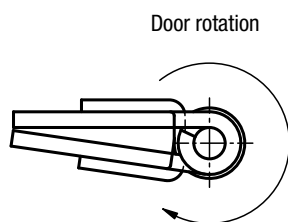
From -20°C to +80°C

## Accessories:

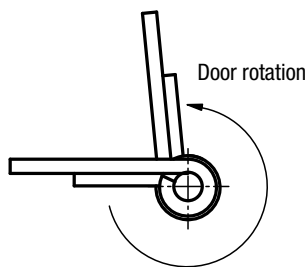
Socket head screws with hexagon socket DIN 912/ EN ISO 4762.



Hinges with closing spring



Hinges with opening spring



## KIPP Spring hinges aluminium profile, 0.35 Nm

| Order No.    | Version 1     | Main colour | Surface finish body | A  | A1 | B  | B1 | D   | D1 | S   | F1 N | F2 N |
|--------------|---------------|-------------|---------------------|----|----|----|----|-----|----|-----|------|------|
| K1179.556701 | spring open   | black       | anodised            | 55 | 38 | 67 | 48 | 6,3 | 18 | 4,5 | 5000 | 4200 |
| K1179.55670  | spring open   | colourless  | anodised            | 55 | 38 | 67 | 48 | 6,3 | 18 | 4,5 | 5000 | 4200 |
| K1179.556711 | spring closed | black       | anodised            | 55 | 38 | 67 | 48 | 6,3 | 18 | 4,5 | 5000 | 4200 |
| K1179.55671  | spring closed | colourless  | anodised            | 55 | 38 | 67 | 48 | 6,3 | 18 | 4,5 | 5000 | 4200 |

# Spring hinges

aluminium profile, 0.50 Nm


**Material:**

Aluminium 6060 T5.  
End caps PA 6.6.  
Washers POM.

**Version:**

Black anodised.  
Colourless anodised.

**Sample order:**

K1665.35600

**Note:**

The hinges are equipped with an integrated steel tension spring. This enables automatic opening and closing of doors and hatches.  
Opening angle 270°.

Opening spring torque:

$M(0^\circ) : 0.48 \text{ Nm} / M(90^\circ) : 0.3 \text{ Nm} / M(180^\circ) : 0.16 \text{ Nm}$

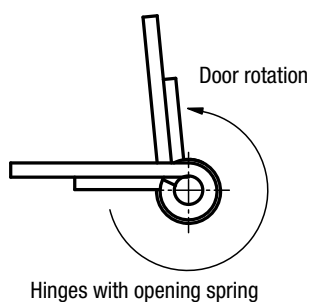
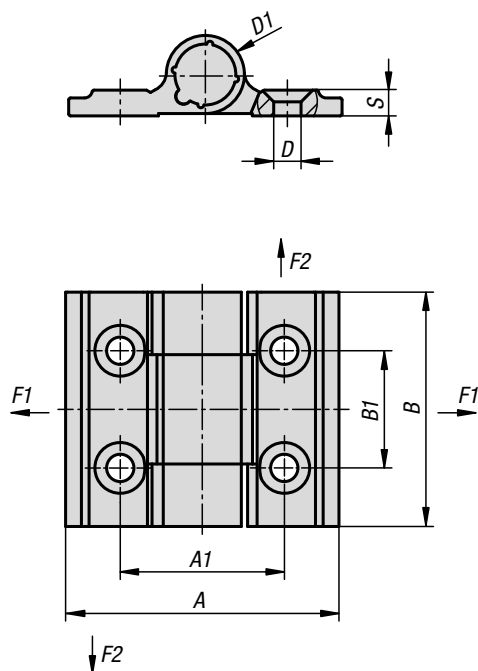
Fastened using DIN 7991 countersunk screws.

The loading values given for the hinges are non-binding reference values without consideration of safety factors and exclude any liability. The values given are for information purposes only and do not constitute a legally binding assurance of properties. These load values were determined under laboratory conditions. Each user must determine individually whether the hinge is suitable for the respective application.

Different materials onto which the hinges are installed and the type of mounting, weather conditions and wear can influence the determined values.

**Temperature range:**

From -20°C to +80°C



## KIPP Spring hinges aluminium profile, 0.50 Nm

| Order No.    | Version 1   | Main colour | A  | A1 | B  | B1 | D   | D1 | S   | F1<br>N | F2<br>N |
|--------------|-------------|-------------|----|----|----|----|-----|----|-----|---------|---------|
| K1665.354001 | spring open | black       | 35 | 21 | 60 | 30 | 3,5 | 10 | 3,3 | 2700    | 4200    |
| K1665.35400  | spring open | colourless  | 35 | 21 | 60 | 30 | 3,5 | 10 | 3,3 | 2700    | 4200    |

# Spring hinges

aluminium profile, 0.7 Nm



## Material:

Aluminium 6060 T5.

End caps PA 6.6.

Washers POM.

## Version:

Black anodised.

Colourless anodised.

## Sample order:

K1180.556701

## Note:

The hinges are equipped with an integrated steel tension spring. This allows automatic opening and closing of doors and hatches.

Opening angle 270°.

Opening spring torque:

$M(0^\circ) : 0.7 \text{ Nm} / M(90^\circ) : 0.45 \text{ Nm} / M(180^\circ) : 0.23 \text{ Nm}$

Closing spring torque:

$M(0^\circ) : 0.23 \text{ Nm} / M(90^\circ) : 0.45 \text{ Nm} / M(180^\circ) : 0.7 \text{ Nm}$

These hinges are designed for more than 30,000 switching cycles.

Fastening with socket head screws as described in DIN 912/ DIN EN ISO 4762.

The loading values given for the hinges are non-binding reference values, which do not consider safety factors and exclude any liability. The values given are for information purposes only and do not constitute a legally binding assurance of properties.

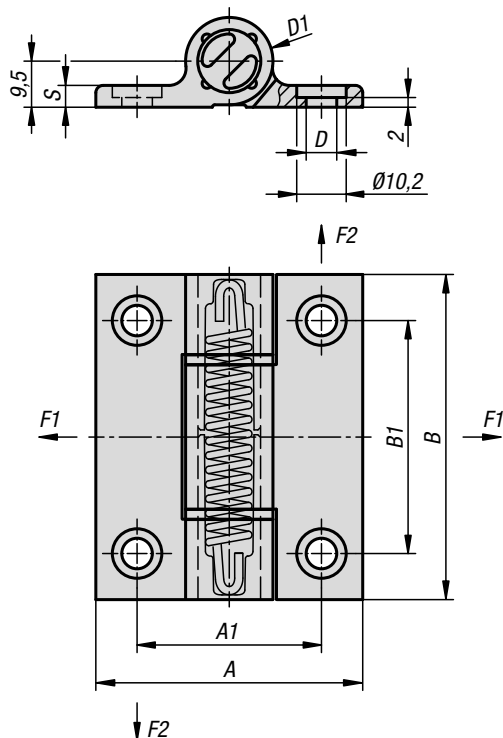
These load values were determined under laboratory conditions. Each user must determine individually whether the hinge is suitable for the respective application. Wide differences in the materials on which the hinges are installed, the type of mounting, weather conditions and wear, can influence the determined values.

## Temperature range:

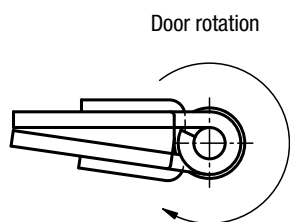
From -20°C to +80°C

## Accessories:

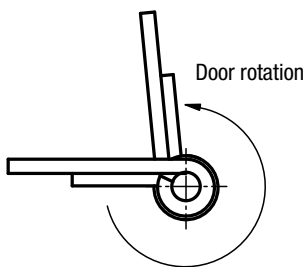
Socket head screws with hexagon socket DIN 912/ EN ISO 4762.



Hinges with closing spring



Hinges with opening spring

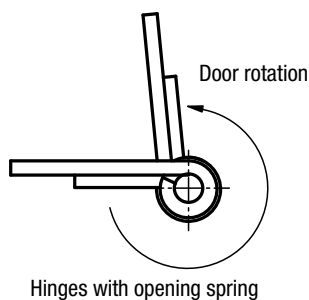
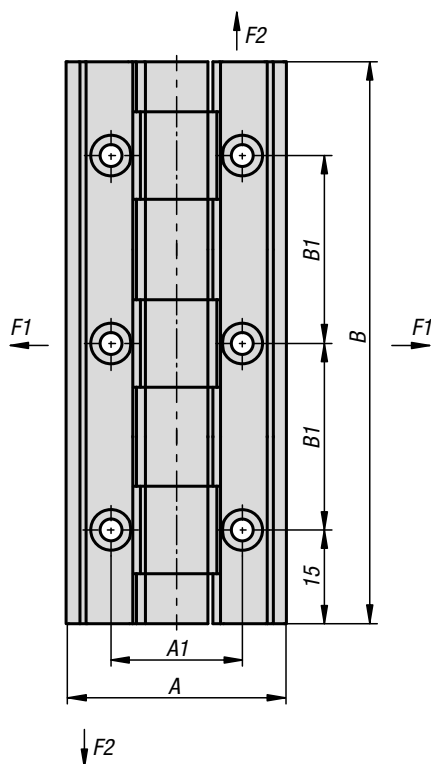
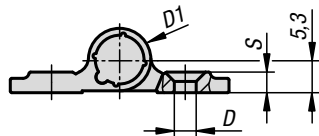


## KIPP Spring hinges aluminium profile, 0.7 Nm

| Order No.    | Version 1     | Main colour | A  | A1 | B  | B1 | D   | D1 | S   | F1<br>N | F2<br>N |
|--------------|---------------|-------------|----|----|----|----|-----|----|-----|---------|---------|
| K1180.556701 | spring open   | black       | 55 | 38 | 67 | 48 | 6,3 | 18 | 4,5 | 5000    | 4200    |
| K1180.55670  | spring open   | colourless  | 55 | 38 | 67 | 48 | 6,3 | 18 | 4,5 | 5000    | 4200    |
| K1180.556711 | spring closed | black       | 55 | 38 | 67 | 48 | 6,3 | 18 | 4,5 | 5000    | 4200    |
| K1180.55671  | spring closed | colourless  | 55 | 38 | 67 | 48 | 6,3 | 18 | 4,5 | 5000    | 4200    |

## Spring hinges

aluminium profile, 0.7 Nm, long version



### Material:

Aluminium 6060 T5.  
Cover plug PA 6.6.

### Version:

Black anodised.  
Colourless anodised.

### Sample order:

K1666.359001

### Note:

The hinges are equipped with an integrated steel tension spring. This enables automatic opening and closing of doors and hatches.  
Opening angle 270°.

### Opening spring torque:

$M(0^\circ) : 0.7 \text{ Nm} / M(90^\circ) : 0.5 \text{ Nm} / M(180^\circ) : 0.3 \text{ Nm}$

Fastened using DIN 7991 countersunk screws.

The loading values given for the hinges are non-binding reference values without consideration of safety factors and exclude any liability. The values given are for information purposes only and do not constitute a legally binding assurance of properties. These load values were determined under laboratory conditions. Each user must determine individually whether the hinge is suitable for the respective application.

Different materials onto which the hinges are installed and the type of mounting, weather conditions and wear can influence the determined values.

### Temperature range:

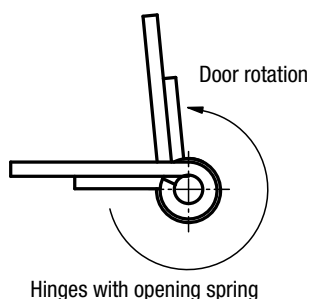
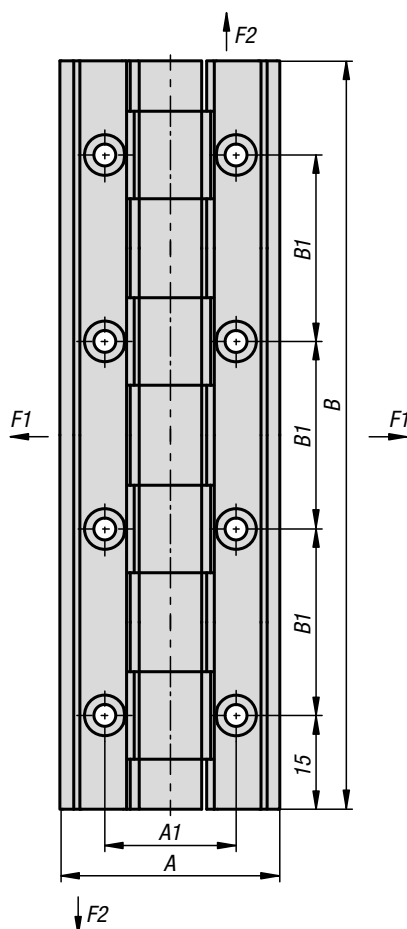
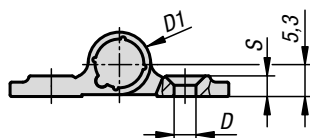
From  $-20^\circ\text{C}$  to  $+80^\circ\text{C}$

## KIPP Spring hinges aluminium profile, 0.7 Nm, long version

| Order No.    | Version 1   | Main colour | A  | A1 | B  | B1 | D   | D1 | S   | F1 N | F2 N |
|--------------|-------------|-------------|----|----|----|----|-----|----|-----|------|------|
| K1666.359001 | spring open | black       | 35 | 21 | 90 | 30 | 3,5 | 10 | 3,3 | 3400 | 7000 |
| K1666.35900  | spring open | colourless  | 35 | 21 | 90 | 30 | 3,5 | 10 | 3,3 | 3400 | 7000 |

# Spring hinges

aluminium profile, 0.9 Nm, long version



## Material:

Aluminium 6060 T5.  
Cover plug PA 6.6.

## Version:

Black anodised.  
Colourless anodised.

## Sample order:

K1667.3512001

## Note:

The hinges are equipped with an integrated steel tension spring. This enables automatic opening and closing of doors and hatches.  
Opening angle 270°.

## Opening spring torque:

$M(0^\circ) : 0.92 \text{ Nm} / M(90^\circ) : 0.7 \text{ Nm} / M(180^\circ) : 0.44 \text{ Nm}$

Fastened using DIN 7991 countersunk screws.

The loading values given for the hinges are non-binding reference values without consideration of safety factors and exclude any liability. The values given are for information purposes only and do not constitute a legally binding assurance of properties. These load values were determined under laboratory conditions. Each user must determine individually whether the hinge is suitable for the respective application.

Different materials onto which the hinges are installed and the type of mounting, weather conditions and wear can influence the determined values.

## Temperature range:

From -20°C to +80°C

## KIPP Spring hinges aluminium profile, 0.9 Nm, long version

| Order No.     | Version 1   | Main colour | A  | A1 | B   | B1 | D   | D1 | S   | F1 N | F2 N |
|---------------|-------------|-------------|----|----|-----|----|-----|----|-----|------|------|
| K1667.3512001 | spring open | black       | 35 | 21 | 120 | 30 | 3,5 | 10 | 3,3 | 3700 | 9900 |
| K1667.351200  | spring open | colourless  | 35 | 21 | 120 | 30 | 3,5 | 10 | 3,3 | 3700 | 9900 |

# Spring hinges

aluminium profile, 1.3 Nm



## Material:

Aluminium 6060 T5.  
End caps PA 6.6.  
Washers POM.

## Version:

Black anodised.  
Colourless anodised.

## Sample order:

K1181.556701

## Note:

The hinges are equipped with an integrated steel tension spring. This allows automatic opening and closing of doors and hatches.

Opening angle 180°.

Opening spring torque:

$M(0^\circ) : 1.3 \text{ Nm} / M(90^\circ) : 1.1 \text{ Nm} / M(180^\circ) : 0.9 \text{ Nm}$

Closing spring torque:

$M(0^\circ) : 0.5 \text{ Nm} / M(90^\circ) : 0.7 \text{ Nm} / M(180^\circ) : 1 \text{ Nm}$

These hinges are designed for more than 10,000 switching cycles.

Fastening with socket head screws as described in DIN 912/  
DIN EN ISO 4762.

The loading values given for the hinges are non-binding reference values, which do not consider safety factors and exclude any liability. The values given are for information purposes only and do not constitute a legally binding assurance of properties.

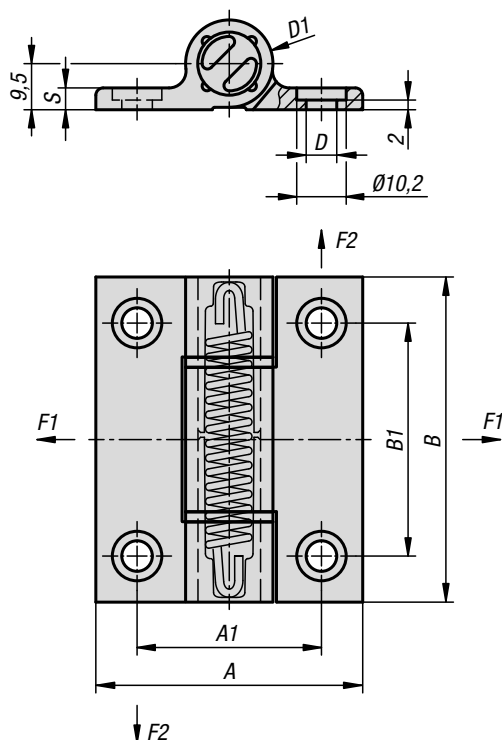
These load values were determined under laboratory conditions. Each user must determine individually whether the hinge is suitable for the respective application. Wide differences in the materials on which the hinges are installed, the type of mounting, weather conditions and wear, can influence the determined values.

## Temperature range:

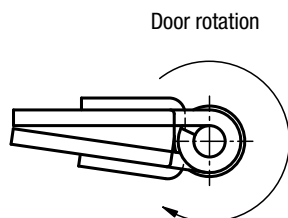
From -20°C to +80°C

## Accessories:

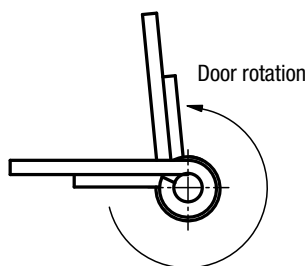
Socket head screws with hexagon socket DIN 912/  
EN ISO 4762.



Hinges with closing spring



Hinges with opening spring



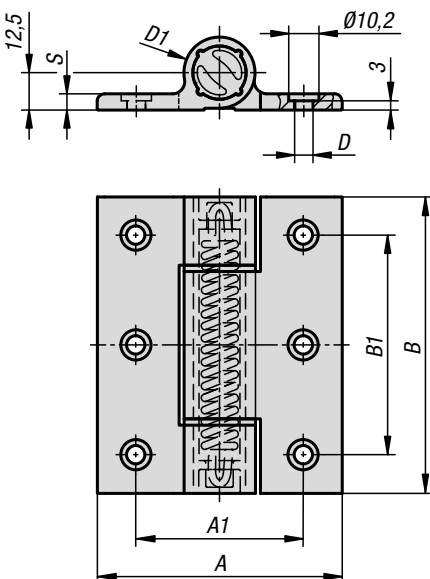
## KIPP Spring hinges aluminium profile, 1.3 Nm

| Order No.    | Version 1     | Main colour | A  | A1 | B  | B1 | D   | D1 | S   | F1<br>N | F2<br>N |
|--------------|---------------|-------------|----|----|----|----|-----|----|-----|---------|---------|
| K1181.556701 | spring open   | black       | 55 | 38 | 67 | 48 | 6,3 | 18 | 4,5 | 5000    | 4200    |
| K1181.55670  | spring open   | colourless  | 55 | 38 | 67 | 48 | 6,3 | 18 | 4,5 | 5000    | 4200    |
| K1181.556711 | spring closed | black       | 55 | 38 | 67 | 48 | 6,3 | 18 | 4,5 | 5000    | 4200    |
| K1181.55671  | spring closed | colourless  | 55 | 38 | 67 | 48 | 6,3 | 18 | 4,5 | 2650    | 2250    |

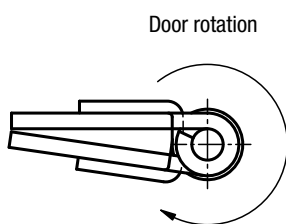


# Spring hinges

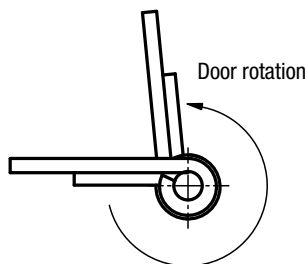
aluminium profile, 3.8 Nm



Hinges with closing spring



Hinges with opening spring



## Material:

Aluminium 6060 T5.  
End caps PA 6.6.  
Washers POM.

## Version:

Black anodised.  
Colourless anodised.

## Sample order:

K1182.8210001

## Note:

The hinges are equipped with an integrated steel tension spring. This enables automatic opening and closing of doors and hatches.

Opening angle 270°. Opening spring torque:

$M(0^\circ) : 3.8 \text{ Nm} / M(90^\circ) : 3.1 \text{ Nm} / M(180^\circ) : 2.4 \text{ Nm}$

Closing spring torque:

$M(0^\circ) : 2.2 \text{ Nm} / M(90^\circ) : 2.9 \text{ Nm} / M(180^\circ) : 3.5 \text{ Nm}$

Fastened using DIN 912/ DIN EN ISO 4762 cap screws.

The loading values given for the hinges are non-binding reference values without consideration of safety factors and exclude any liability. The values given are for information purposes only and do not constitute a legally binding assurance of properties. These load values were determined under laboratory conditions. Each user must determine individually whether the hinge is suitable for the respective application.

Different materials onto which the hinges are installed and the type of mounting, weather conditions and wear can influence the determined values.

## Temperature range:

From  $-20^\circ\text{C}$  to  $+80^\circ\text{C}$

## Accessories:

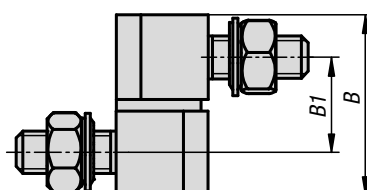
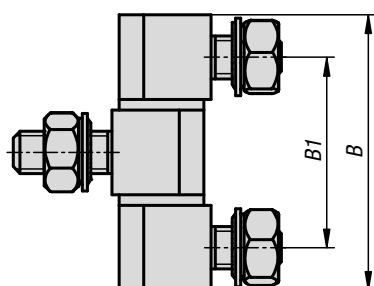
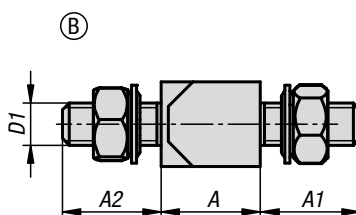
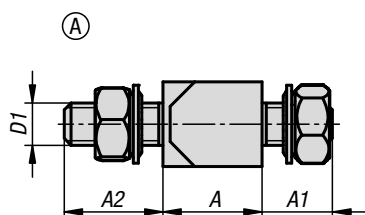
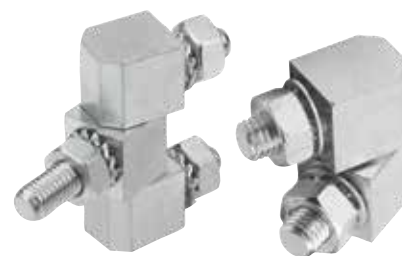
Socket head screws with hexagon socket DIN 912/ EN ISO 4762.

## KIPP Spring hinges aluminium profile, 3.8 Nm

| F2<br>N | Order No.     | Version 1     | Main<br>colour | A    | A1   | B   | B1 | D   | D1 | S   | F1<br>N |
|---------|---------------|---------------|----------------|------|------|-----|----|-----|----|-----|---------|
| 11900   | K1182.8210001 | spring open   | black          | 82,5 | 56,5 | 100 | 74 | 6,2 | 24 | 5,5 | 9000    |
| 11900   | K1182.8210000 | spring open   | colourless     | 82,5 | 56,5 | 100 | 74 | 6,2 | 24 | 5,5 | 9000    |
| 11900   | K1182.8210011 | spring closed | black          | 82,5 | 56,5 | 100 | 74 | 6,2 | 24 | 5,5 | 9000    |
| 11900   | K1182.8210001 | spring closed | colourless     | 82,5 | 56,5 | 100 | 74 | 6,2 | 24 | 5,5 | 9000    |

# Block hinges

with fastening nuts



## Material:

Steel.

Stainless steel 1.4305.

Stainless steel A4 1.4401.

## Version:

Steel electro zinc-plated.

Stainless steel bright.

## Sample order:

K1142.0614027

## Note:

Block hinges with fastening nuts for overlapping or inset doors.

Mounted with nuts (M6 or M8) from inside. The 3-part versions are not detachable.

The hinge can be used left or right. The opening angle is 180°. Supplied unassembled.

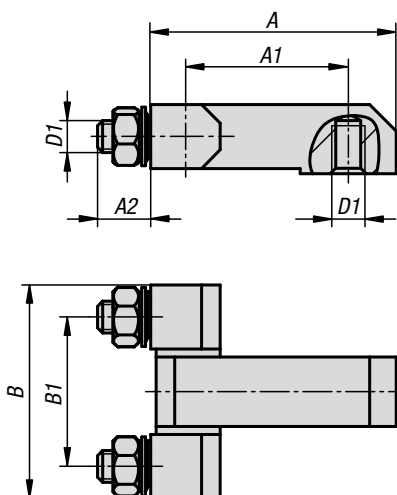
Fastening nuts and washers are supplied.

## KIPP Block hinges with fastening nuts

| Order No.       | Form | Main material   | Steel code | A  | A1 | A2 | B    | B1   | D1 |
|-----------------|------|-----------------|------------|----|----|----|------|------|----|
| K1142.0614027   | A    | steel           | -          | 13 | 10 | 14 | 39   | 27   | M6 |
| K1142.0820033   | A    | steel           | -          | 18 | 14 | 22 | 49   | 33   | M8 |
| K1142.10614027  | A    | stainless steel | 1.4305     | 13 | 10 | 14 | 39   | 27   | M6 |
| K1142.10820033  | A    | stainless steel | 1.4305     | 18 | 14 | 22 | 49   | 33   | M8 |
| K1142.20614027  | A    | stainless steel | 1.4401     | 13 | 10 | 14 | 39   | 27   | M6 |
| K1142.20820033  | A    | stainless steel | 1.4401     | 18 | 14 | 22 | 49   | 33   | M8 |
| K1142.10610135  | B    | steel           | -          | 13 | 10 | 10 | 25,3 | 13,5 | M6 |
| K1142.10814165  | B    | steel           | -          | 18 | 14 | 14 | 32,4 | 16,5 | M8 |
| K1142.110610135 | B    | stainless steel | 1.4305     | 13 | 10 | 10 | 25,3 | 13,5 | M6 |
| K1142.110814165 | B    | stainless steel | 1.4305     | 18 | 14 | 14 | 32,4 | 16,5 | M8 |

# Block hinges

with fastening nuts, long version


**Material:**

Steel.

Stainless steel 1.4305.

Stainless steel A4 1.4401.

**Version:**

Steel electro zinc-plated.

Stainless steel bright.

**Sample order:**

K1143.0630028

**Note:**

Block hinges with fastening nuts and extended middle section for inset doors.

Mounted with nuts (M6 or M8) from inside.

The hinge can be mounted left or right. The opening angle is 180°.

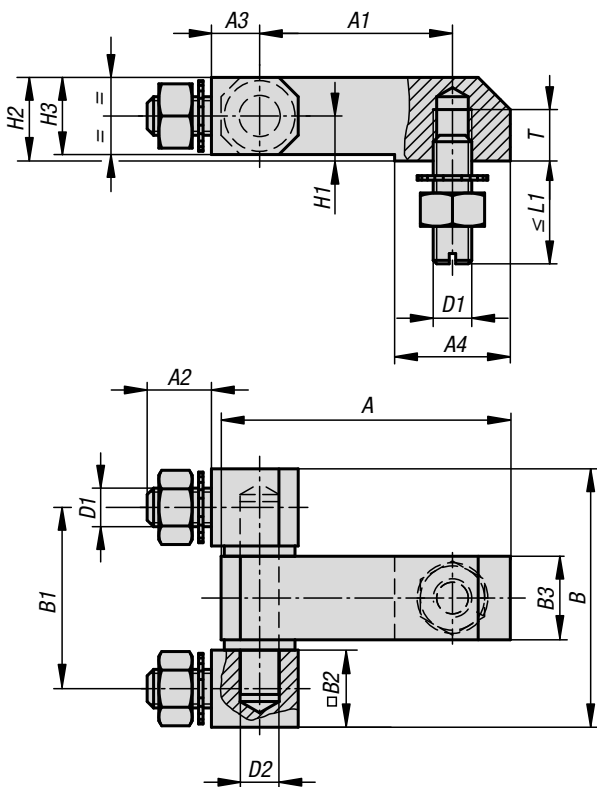
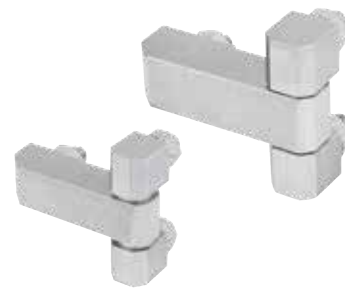
Supplied unassembled. Fastening nuts and washers are supplied.

## KIPP Block hinges with fastening nuts, long version

| Order No.      | Main material      | A  | A1 | A2 | B  | B1 | D1 |
|----------------|--------------------|----|----|----|----|----|----|
| K1143.0630028  | steel              | 45 | 30 | 10 | 40 | 28 | M6 |
| K1143.0829035  | steel              | 50 | 29 | 14 | 51 | 35 | M8 |
| K1143.10630028 | stainless steel    | 45 | 30 | 10 | 40 | 28 | M6 |
| K1143.10829035 | stainless steel    | 50 | 29 | 14 | 51 | 35 | M8 |
| K1143.20630028 | stainless steel A4 | 45 | 30 | 10 | 40 | 28 | M6 |
| K1143.20829035 | stainless steel A4 | 50 | 29 | 14 | 51 | 35 | M8 |

## Block hinges

with fastening nuts



### Material:

Hinge stainless steel 1.4305.

Fastening material stainless steel 1.4305.

### Version:

Polished.

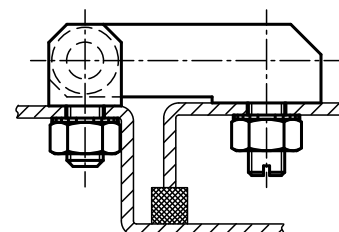
### Sample order:

K1338.10630028

### Note:

Block hinge for flush constructions.

Light and heavy types.

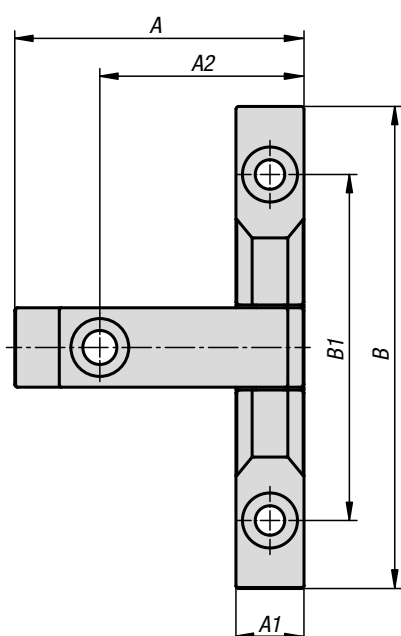
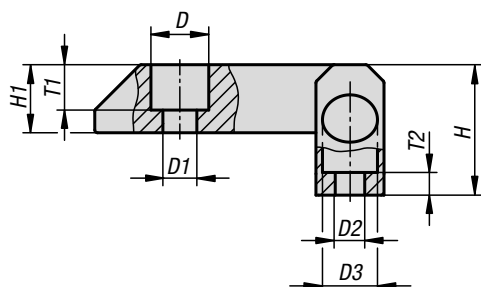


### KIPP Block hinges with fastening nuts

| Order No.      | A  | A1 | A2 | A3  | A4 | B    | B1   | B2 | B3 | D1 | D2 | H1 | H2 | H3 | L1 | T  | Load capacity N |
|----------------|----|----|----|-----|----|------|------|----|----|----|----|----|----|----|----|----|-----------------|
| K1338.10630028 | 45 | 30 | 10 | 7,5 | 18 | 40,2 | 28,2 | 12 | 13 | M6 | 6  | 7  | 13 | 12 | 16 | 8  | 2600            |
| K1338.10840035 | 61 | 40 | 14 | 10  | 26 | 51   | 35   | 16 | 18 | M8 | 8  | 10 | 18 | 16 | 20 | 10 | 4800            |

## Block hinges

with counterbore, long version



### Material:

Die-cast zinc.

### Version:

Electro zinc-plated, high-gloss chromed or black powder-coated.

### Sample order:

K1144.00630061

### Note:

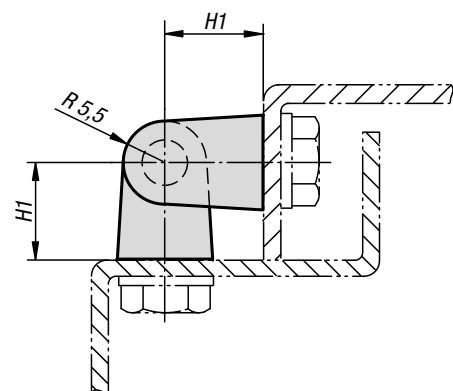
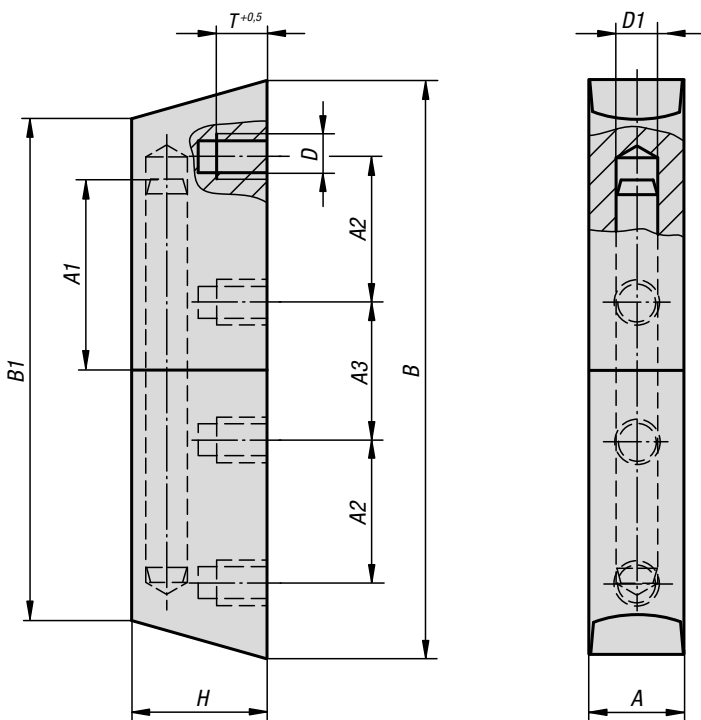
Block hinges for overlapping doors. Can be mounted left or right. Opening angle 180°. The hinges are supplied assembled.

## KIPP Block hinges with counterbore, long version

| Order No.      | Surface finish body | A  | A1 | A2 | B  | B1 | D    | D1 | D2  | D3  | H  | H1 | T1 | T2 |
|----------------|---------------------|----|----|----|----|----|------|----|-----|-----|----|----|----|----|
| K1144.00630061 | galvanised          | 51 | 12 | 36 | 85 | 61 | 10,2 | 6  | 5,2 | 9,7 | 23 | 12 | 8  | 4  |
| K1144.10630061 | high-gloss chromed  | 51 | 12 | 36 | 85 | 61 | 10,2 | 6  | 5,2 | 9,7 | 23 | 12 | 8  | 4  |
| K1144.20630061 | powder-coated       | 51 | 12 | 36 | 85 | 61 | 10,2 | 6  | 5,2 | 9,7 | 23 | 12 | 8  | 4  |

# In-line hinge stainless steel

lift-off, screw-on



**Material:**

Stainless steel 1.4401.

**Version:**

Satin finished.

**Sample order:**

K1304.1761218

**Note:**

Lift-off inline hinge, right or left mounting.

The sloping hinge ends prevent the accumulation of dirt.

## KIPP In-line hinge, stainless steel, lift-off, screw-on

| Order No.     | A    | A1 | A2 | A3 | B  | B1 | D  | D1 | T | H    | H1 |
|---------------|------|----|----|----|----|----|----|----|---|------|----|
| K1304.1761218 | 12,5 | 23 | 19 | 18 | 76 | 66 | M6 | 6  | 6 | 18,5 | 13 |

# Hinges weldable

stainless steel


**Material:**

Stainless steel 1.4301.

**Version:**

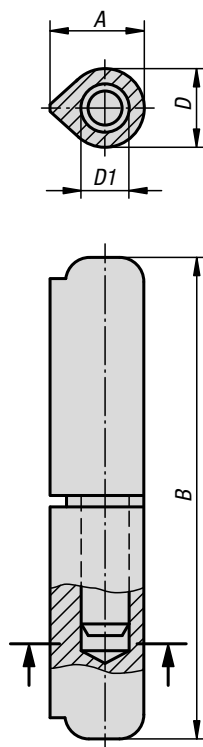
Bright.

**Sample order:**

K0985.013080033

**Note:**

The hinges are made of weldable profile steel.  
The pin is fixed into the lower part of the hinge.  
The differing steel qualities of the weld and the beam onto which the hinge is welded must be at least equal to or better than:  
Stainless steel 1.4301.


**KIPP Hinges weldable, stainless steel**

| Order No.       | A    | B   | D  | D1 |
|-----------------|------|-----|----|----|
| K0985.010060033 | 12   | 60  | 10 | 6  |
| K0985.013080033 | 15,5 | 80  | 13 | 8  |
| K0985.016100033 | 20   | 100 | 16 | 10 |
| K0985.016120033 | 20   | 120 | 16 | 11 |
| K0985.020150033 | 25,5 | 150 | 20 | 13 |
| K0985.020180033 | 25,5 | 180 | 20 | 14 |

# Hinges

weldable, stainless steel


**Material:**

Stainless steel 1.4404.

**Version:**

Satin finished.

**Sample order:**

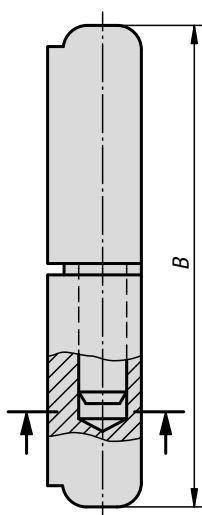
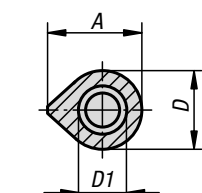
K1337.013079

**Note:**

The hinges are made of weldable profile steel.  
The pin is fixed into the lower part of the hinge.  
The differing steel qualities of the weld and the beam  
onto which the hinge is welded must be at least equal  
to or better than:  
Stainless steel 1.4404

**Advantages:**

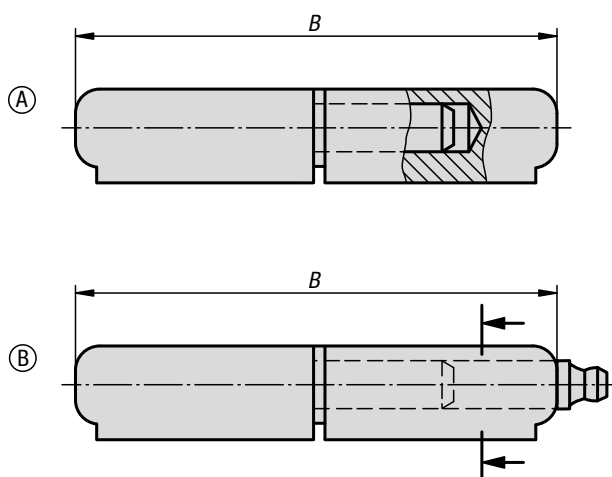
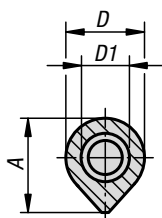
Resistant to acid and salt water


**KIPP Hinges weldable, stainless steel**

| Order No.    | A  | B   | D  | D1 |
|--------------|----|-----|----|----|
| K1337.016080 | 20 | 80  | 16 | 10 |
| K1337.016100 | 20 | 100 | 16 | 10 |
| K1337.016120 | 20 | 120 | 16 | 11 |



# Hinges weldable



## Material:

Hinge steel.  
Spacer washer brass.  
Hinge pin steel or brass.

## Version:

Grease nipple DIN 71412-D, electro zinc-plated steel.  
Steel parts, bright.

## Sample order:

K0984.011070012

## Note:

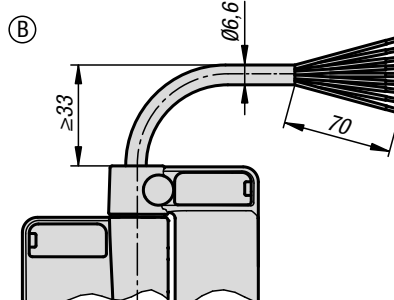
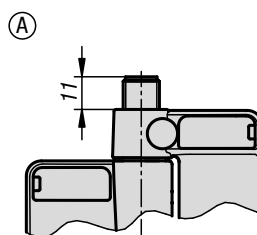
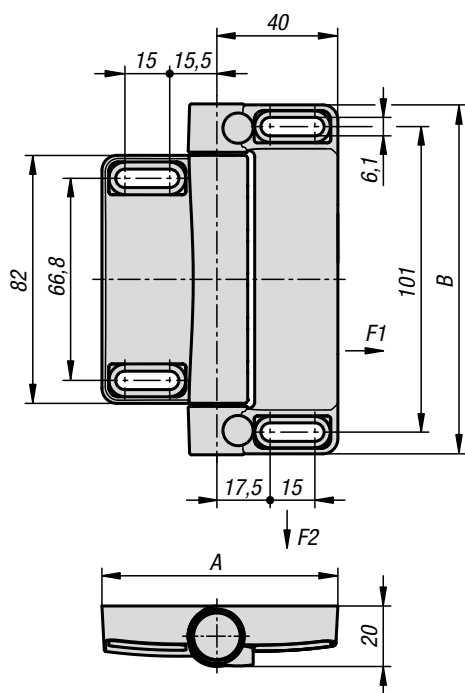
The hinges are made of weldable profile steel.  
The pin is fixed into the lower part of the hinge.  
The differing steel qualities of the weld and the beam onto which the hinge is welded must be at least equal to or better than:  
S235 JR+AR acc. to EN 10025-2:2004-10  
DIN 8563 part 3 or Fe E 235 acc. to SIA 161



## KIPP Hinges weldable

| Order No.       | Form | Component material | A    | B   | D  | D1 |
|-----------------|------|--------------------|------|-----|----|----|
| K0984.008040012 | A    | steel              | 9,7  | 40  | 8  | 5  |
| K0984.008050012 | A    | steel              | 9,7  | 50  | 8  | 5  |
| K0984.010060012 | A    | steel              | 12,7 | 60  | 10 | 6  |
| K0984.010070012 | A    | steel              | 12   | 70  | 10 | 6  |
| K0984.013080012 | A    | steel              | 15,5 | 80  | 13 | 8  |
| K0984.016100012 | A    | steel              | 20   | 100 | 16 | 10 |
| K0984.016120012 | A    | steel              | 20   | 120 | 16 | 11 |
| K0984.018135012 | A    | steel              | 22   | 135 | 18 | 12 |
| K0984.020150012 | A    | steel              | 25   | 150 | 20 | 13 |
| K0984.020180012 | A    | steel              | 25   | 180 | 20 | 14 |
| K0984.023200012 | A    | steel              | 28,5 | 200 | 23 | 16 |
| K0984.008040022 | A    | brass              | 9,7  | 40  | 8  | 5  |
| K0984.008050022 | A    | brass              | 9,7  | 50  | 8  | 5  |
| K0984.010060022 | A    | brass              | 12,7 | 60  | 10 | 6  |
| K0984.010070022 | A    | brass              | 12   | 70  | 10 | 6  |
| K0984.013080022 | A    | brass              | 15,5 | 80  | 13 | 8  |
| K0984.016100022 | A    | brass              | 20   | 100 | 16 | 10 |
| K0984.016120022 | A    | brass              | 20   | 120 | 16 | 11 |
| K0984.018135022 | A    | brass              | 22   | 135 | 18 | 12 |
| K0984.020150022 | A    | brass              | 25   | 150 | 20 | 13 |
| K0984.020180022 | A    | brass              | 25   | 180 | 20 | 14 |
| K0984.023200022 | A    | brass              | 28,5 | 200 | 23 | 16 |
| K0984.113080012 | B    | steel              | 16   | 80  | 13 | 8  |
| K0984.116100012 | B    | steel              | 20   | 100 | 16 | 10 |
| K0984.116120012 | B    | steel              | 20   | 120 | 16 | 10 |
| K0984.118135012 | B    | steel              | 22,5 | 135 | 18 | 12 |
| K0984.120150012 | B    | steel              | 25,5 | 150 | 20 | 13 |
| K0984.120180012 | B    | steel              | 25   | 180 | 20 | 14 |
| K0984.123200012 | B    | steel              | 29   | 200 | 23 | 16 |

# Security hinge switches



## Material:

Housing, die-cast zinc.  
Housing cover, plastic, self-extinguishing.  
Hinge bolts, die-cast zinc/steel C45.  
Contacts, silver-nickel alloy 10.

## Sample order:

K1499.781161111

## Note:

The security hinge switches are used for monitoring the position of swing-hinged safety doors, protective hatches and hoods. The protective device is monitored directly in the hinge.

By the universally pre-set versions, the switching angle is freely adjustable over the entire working range. A mounting aid ensures the quick alignment to doors and posts.

The additional hinges have the same appearance and dimensions as the security hinge switches.

The loading values given for the hinges are non-binding reference values without consideration of safety factors and exclude any liability. The values given are for information purposes only and do not constitute a legally binding assurance of properties.

The load values have been determined under laboratory conditions. Each user must determine individually whether the hinge is suitable for the respective application.

Different materials onto which the hinges are installed and the type of mounting, weather conditions and wear can influence the determined values.

## Application:

- Special machine construction
- Electronics industry
- Packaging machines
- Enclosures/profile systems
- Machine tools
- Measuring, processing, testing and laboratory technology

## Assembly:

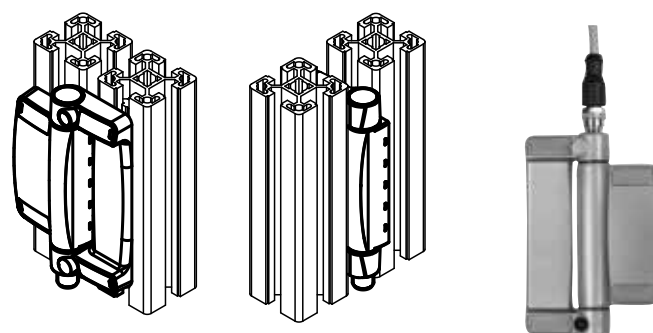
4x DIN 7984 or DIN EN ISO 4762 M6 socket head screws,

Tightening torque 4.3 Nm

General assembly instructions can be found in the accompanying operating instructions.

**Advantages:**

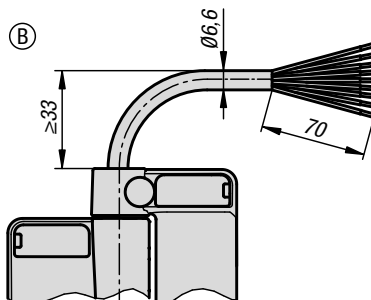
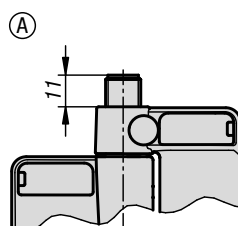
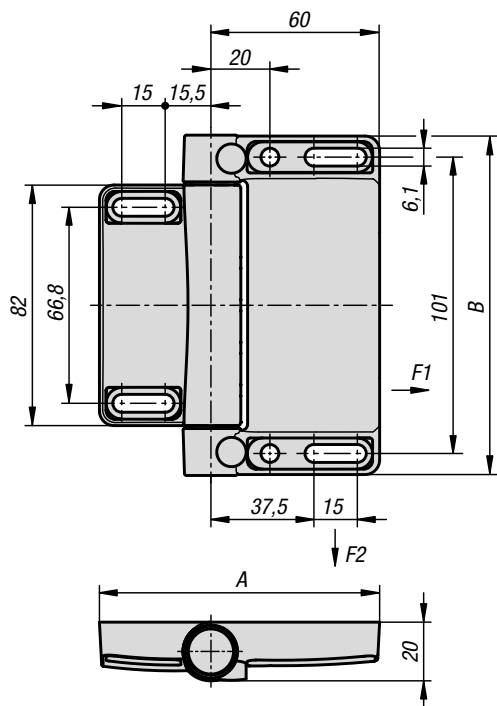
- Suitable for protection on swivel hatches
- Minimum assembly required, especially on conventional aluminium profiles
- Optimum integration into the surrounding structure
- Additional protection against tampering
- Hardly any mechanical wear

**KIPP Security hinge switches**

| Order No.       | Item                  | Form | A  | B   | Default setting   | Contacts | Connection type | Connection position | F1 N | F2 N |
|-----------------|-----------------------|------|----|-----|-------------------|----------|-----------------|---------------------|------|------|
| K1499.781161111 | Security Hinge Switch | A    | 78 | 116 | external mounting | 1C / 20  | connector       | bottom              | 5000 | 5000 |
| K1499.781161112 | Security Hinge Switch | A    | 78 | 116 | external mounting | 1C / 20  | connector       | top                 | 5000 | 5000 |
| K1499.781162111 | Security Hinge Switch | A    | 78 | 116 | universal         | 1C / 20  | connector       | bottom              | 5000 | 5000 |
| K1499.781162112 | Security Hinge Switch | A    | 78 | 116 | universal         | 1C / 20  | connector       | top                 | 5000 | 5000 |
| K1499.781161121 | Security Hinge Switch | B    | 78 | 116 | external mounting | 1C / 20  | cable           | bottom              | 5000 | 5000 |
| K1499.781161122 | Security Hinge Switch | B    | 78 | 116 | external mounting | 1C / 20  | cable           | top                 | 5000 | 5000 |
| K1499.781162121 | Security Hinge Switch | B    | 78 | 116 | universal         | 1C / 20  | cable           | bottom              | 5000 | 5000 |
| K1499.781162122 | Security Hinge Switch | B    | 78 | 116 | universal         | 1C / 20  | cable           | top                 | 5000 | 5000 |
| K1499.78116     | Additional Hinge      | -    | 78 | 116 | -                 | -        | -               | -                   | 5000 | 5000 |

## Security hinge switches

long version



### Material:

Housing, die-cast zinc.  
Housing cover, plastic, self-extinguishing.  
Hinge bolts, die-cast zinc/steel C45.  
Contacts, silver-nickel alloy 10.

### Sample order:

K1501.981161111

### Note:

The security hinge switches are used for monitoring the position of swing-hinged safety doors, protective hatches and hoods. The protective device is monitored directly in the hinge.

By the universally pre-set versions, the switching angle is freely adjustable over the entire working range. A mounting aid ensures the quick alignment to doors and posts.

The additional hinges have the same appearance and dimensions as the security hinge switches.

The loading values given for the hinges are non-binding reference values without consideration of safety factors and exclude any liability. The values given are for information purposes only and do not constitute a legally binding assurance of properties.

The load values have been determined under laboratory conditions. Each user must determine individually whether the hinge is suitable for the respective application.

Different materials onto which the hinges are installed and the type of mounting, weather conditions and wear can influence the determined values.

### Application:

- Special machine construction
- Electronics industry
- Packaging machines
- Enclosures/profile systems
- Machine tools
- Measuring, processing, testing and laboratory technology

### Assembly:

4x DIN 7984 or DIN EN ISO 4762 M6 socket head screws,

Tightening torque 4.3 Nm

General assembly instructions can be found in the accompanying operating instructions.

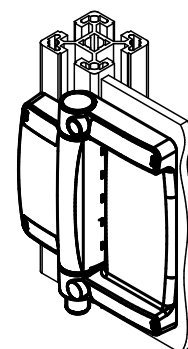
# Security hinge switches

long version



## Advantages:

- Suitable for protection on swivel hatches
- Minimum assembly required, especially on conventional aluminium profiles
- Optimum integration into the surrounding structure
- Additional protection against tampering
- Hardly any mechanical wear

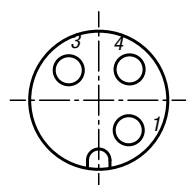
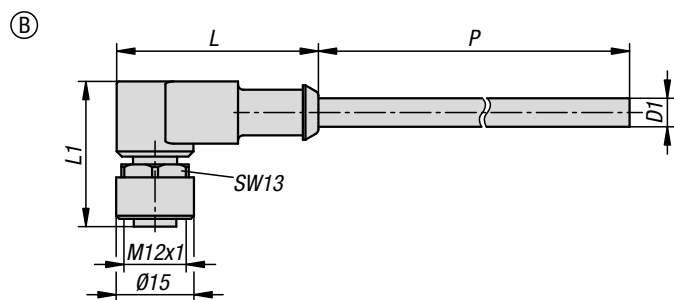
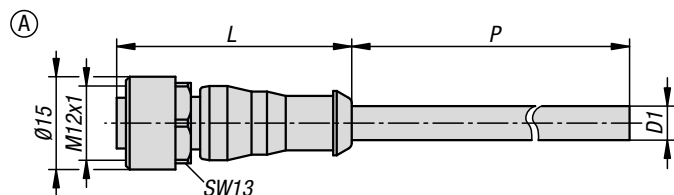


## KIPP Security hinge switches long version

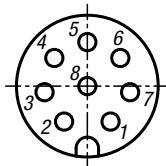
| Order No.       | Item                  | Form | A  | B   | Default setting   | Contacts | Connection type | Connection position | F1 N | F2 N |
|-----------------|-----------------------|------|----|-----|-------------------|----------|-----------------|---------------------|------|------|
| K1501.981161111 | Security Hinge Switch | A    | 98 | 116 | external mounting | 1C / 20  | connector       | bottom              | 5000 | 5000 |
| K1501.981161112 | Security Hinge Switch | A    | 98 | 116 | external mounting | 1C / 20  | connector       | top                 | 5000 | 5000 |
| K1501.981162111 | Security Hinge Switch | A    | 98 | 116 | universal         | 1C / 20  | connector       | bottom              | 5000 | 5000 |
| K1501.981162112 | Security Hinge Switch | A    | 98 | 116 | universal         | 1C / 20  | connector       | top                 | 5000 | 5000 |
| K1501.981161121 | Security Hinge Switch | B    | 98 | 116 | external mounting | 1C / 20  | cable           | bottom              | 5000 | 5000 |
| K1501.981161122 | Security Hinge Switch | B    | 98 | 116 | external mounting | 1C / 20  | cable           | top                 | 5000 | 5000 |
| K1501.981162121 | Security Hinge Switch | B    | 98 | 116 | universal         | 1C / 20  | cable           | bottom              | 5000 | 5000 |
| K1501.981162122 | Security Hinge Switch | B    | 98 | 116 | universal         | 1C / 20  | cable           | top                 | 5000 | 5000 |
| K1501.98116     | Additional Hinge      | -    | 98 | 116 | -                 | -        | -               | -                   | 5000 | 5000 |

## Connectors bush M12x1

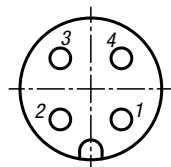
with screw lock



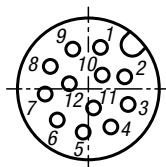
1 brown  
3 blue  
4 black



1 white  
2 brown  
3 green  
4 yellow  
5 grey  
6 pink  
7 blue  
8 red



1 brown  
2 white  
3 blue  
4 black



1 brown  
2 blue  
3 white  
4 green  
5 pink  
6 yellow  
7 black  
8 grey  
9 red  
10 violet  
11 grey-pink  
12 red-blue



### Material:

Housing: plastic.

Cable: PUR

(4 pole length 3 and 5 metres PVC.

8 pole length 10 metres PVC.

12 pole length 10 metres PVC).

Insulation braid: PP

(4 pole length 3 and 5 metres PVC.

8 pole length 10 metres PVC.

12 pole length 10 metres PVC).

Contact: copper alloy.

Contact surface: Au (gold).

Lock: nickel plated die-cast zinc.

### Version:

Bush (female).

Housing colour: black.

Cable colour: black.

### Sample order:

K1498.1203X5000

### Note:

Connector with screw lock.

Connector moulded to cable.

Wire ID acc. to DIN 47100 colour code.

Coding A. Recommended tightening torque for the lock 0.6 Nm.

The connectors are designed for use in plant, control and electrical appliance construction.

### Technical data:

No. of connection cycles:  $\geq 100$ .

## KIPP Connector bush M12x1, with screw lock

| Order No.        | Version 2 | Form | Form definition | P     | D1  | L    | No. of conductors<br>x conductor<br>cross-section | Safety rating | Operating voltage<br>V |
|------------------|-----------|------|-----------------|-------|-----|------|---------------------------------------------------|---------------|------------------------|
| -                | 3-pin     | A    | straight bush   | 2000  | 4,1 | 38   | 3 x 0,34 mm <sup>2</sup>                          | IP65/IP67     | 250 AC / 250 DC        |
| K1498.1203X5000  | 3-pin     | A    | straight bush   | 5000  | 4,1 | 38   | 3 x 0,34 mm <sup>2</sup>                          | IP65/IP67     | 250 AC / 250 DC        |
| K1498.1204X3000  | 4-pin     | A    | straight bush   | 3000  | 5   | 38   | N=4 X 0,34 mm <sup>2</sup>                        | IP65/IP67     | 250 AC / 250 DC        |
| K1498.1204X5000  | 4-pin     | A    | straight bush   | 5000  | 5   | 38   | N=4 X 0,34 mm <sup>2</sup>                        | IP65/IP67     | 250 AC / 250 DC        |
| K1498.1208X2500  | 8-pin     | A    | straight bush   | 2500  | 5,8 | 43,5 | 8 x 0,25 mm <sup>2</sup>                          | IP65/IP67     | 30 AC / 30 DC          |
| K1498.1208X5000  | 8-pin     | A    | straight bush   | 5000  | 5,8 | 43,5 | 8 x 0,25 mm <sup>2</sup>                          | IP65/IP67     | 30 AC / 30 DC          |
| K1498.1208X10000 | 8-pin     | A    | straight bush   | 10000 | 6   | 43,5 | 8 x 0,25 mm <sup>2</sup>                          | IP65/IP67     | 30 AC / 30 DC          |
| K1498.1212X3000  | 12-pin    | A    | straight bush   | 3000  | 6   | 43,5 | 12 x 0,14 mm <sup>2</sup>                         | IP65/IP67     | 30 AC / 30 DC          |
| K1498.1212X5000  | 12-pin    | A    | straight bush   | 5000  | 6   | 43,5 | 12 x 0,14 mm <sup>2</sup>                         | IP65/IP67     | 30 AC / 30 DC          |
| K1498.1212X10000 | 12-pin    | A    | straight bush   | 10000 | 6   | 43,5 | 12 x 0,14 mm <sup>2</sup>                         | IP65/IP67     | 30 AC / 30 DC          |



A large rectangular area filled with a light gray grid pattern, intended for taking notes.







## Swivel feet, levelling feet



## Modular structure of a swivel foot

### Application:

Swivel feet are of modular design. The components can be individually combined to match the application. The swivel feet are applicable for use on machines, plants and even office furniture.

### Modular design:

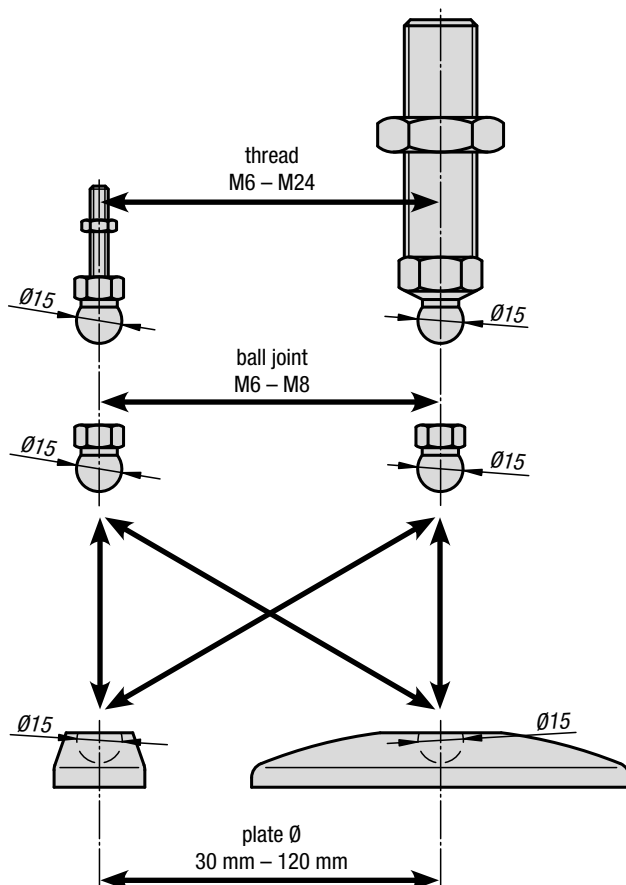
Swivel feet consist of two components - a plate and a threaded spindle or ball joint. **Any** plate can be combined with **any** threaded spindle or ball joint (see Fig. 1).

### Height of swivel foot:

Swivel feet always have a minimum height of  $H = 22.5$  mm independently of the plate, threaded spindle or ball joint size (see Fig. 2). When assembling with threaded spindle, the height of the complete swivel foot is calculated by adding 22.5 mm to the length of the threaded spindle + the height of the hexagon. (Total height of swivel foot =  $L + L_1 + 22.5$  mm).

When assembling with ball joint, the length  $L$  is void.

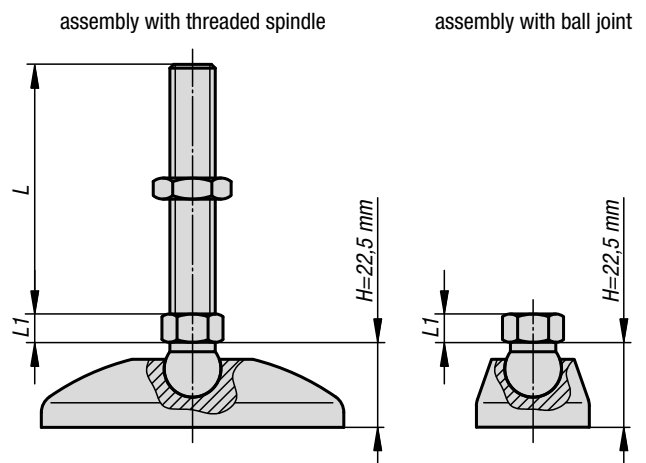
Fig. 1



### Assembly:

Using a plastic hammer, knock the ball of the threaded spindle or ball joint vertically into the swivel foot plate. If necessary, the two fastening holes (closed) in the swivel foot plate can be opened by simply punching them out to allow the swivel foot to be fastened to a base.

Fig. 2



Inclination angle of threaded spindle or ball joint:

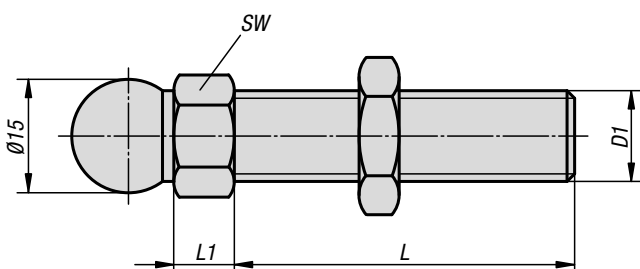


### Note for ordering:

If the swivel foot plate and the threaded spindle or ball joint are to be supplied assembled, please add the suffix "**assembled**" to the order number for the plate and the spindle or ball joint (see sample order on the relevant product page).

# Swivel feet threaded spindles

steel or stainless steel



## Material:

Steel or 1.4305 stainless steel

## Version:

Steel trivalent blue passivated.  
Stainless steel, bright.

## Sample order:

K0421.060151

K0421.060151 and K0415.1030 **assembled**

## Note for ordering:

If the threaded spindle and the plate are to be supplied assembled, please add the suffix **“assembled”** to the order number for the spindle and plate.  
(e.g. K0421.060151 and K0415.1030 **assembled**.)

## Note:

Swivel feet consist of a threaded spindle and a plate joined together. Any threaded spindle can be combined with any plate.

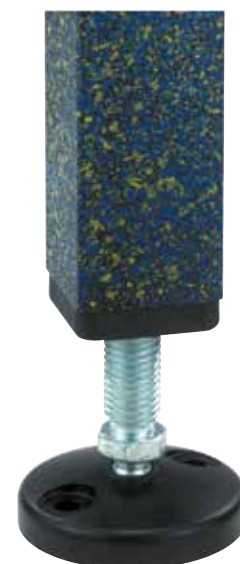
The height of the complete swivel foot can be calculated from the length of the threaded spindle + height of hexagon + 22.5 mm.

(Overall height of swivel foot = L + L1 + 22.5 mm)

Depending on the version, threaded spindles can have a thread undercut in front of the hexagon.

## KIPP Swivel feet threaded spindles

| Order No.<br>steel | Order No.<br>stainless steel | D1  | L   | L1   | SW | Load rating<br>max. kN |
|--------------------|------------------------------|-----|-----|------|----|------------------------|
| K0421.060151       | K0421.060152                 | M6  | 15  | 7,5  | 14 | 2                      |
| K0421.060301       | K0421.060302                 | M6  | 30  | 7,5  | 14 | 2                      |
| K0421.080401       | K0421.080402                 | M8  | 40  | 7,5  | 14 | 3,5                    |
| K0421.080801       | K0421.080802                 | M8  | 80  | 7,5  | 14 | 3,5                    |
| K0421.100451       | K0421.100452                 | M10 | 45  | 7,5  | 14 | 4,7                    |
| K0421.100701       | K0421.100702                 | M10 | 70  | 7,5  | 14 | 4,7                    |
| K0421.100901       | K0421.100902                 | M10 | 90  | 7,5  | 14 | 4,7                    |
| K0421.101251       | K0421.101252                 | M10 | 125 | 7,5  | 14 | 4,7                    |
| K0421.101501       | K0421.101502                 | M10 | 150 | 7,5  | 14 | 4,7                    |
| K0421.120451       | K0421.120452                 | M12 | 45  | 7,5  | 14 | 7,7                    |
| K0421.120661       | K0421.120662                 | M12 | 66  | 7,5  | 14 | 7,7                    |
| K0421.121001       | K0421.121002                 | M12 | 100 | 7,5  | 14 | 7,7                    |
| K0421.121251       | K0421.121252                 | M12 | 125 | 7,5  | 14 | 7,7                    |
| K0421.121501       | K0421.121502                 | M12 | 150 | 7,5  | 14 | 7,7                    |
| K0421.140661       | K0421.140662                 | M14 | 66  | 7,5  | 14 | 11,1                   |
| K0421.141001       | K0421.141002                 | M14 | 100 | 7,5  | 14 | 11,1                   |
| K0421.141251       | K0421.141252                 | M14 | 125 | 7,5  | 14 | 11,1                   |
| K0421.141501       | K0421.141502                 | M14 | 150 | 7,5  | 14 | 11,1                   |
| K0421.160661       | K0421.160662                 | M16 | 66  | 7,5  | 17 | 14,5                   |
| K0421.161001       | K0421.161002                 | M16 | 100 | 7,5  | 17 | 14,5                   |
| K0421.161251       | K0421.161252                 | M16 | 125 | 7,5  | 17 | 14,5                   |
| K0421.161501       | K0421.161502                 | M16 | 150 | 7,5  | 17 | 14,5                   |
| K0421.162001       | K0421.162002                 | M16 | 200 | 7,5  | 17 | 14,5                   |
| K0421.200851       | K0421.200852                 | M20 | 85  | 10,5 | 22 | 24,3                   |
| K0421.201001       | K0421.201002                 | M20 | 100 | 10,5 | 22 | 24,3                   |
| K0421.201251       | K0421.201252                 | M20 | 125 | 10,5 | 22 | 24,3                   |
| K0421.201501       | K0421.201502                 | M20 | 150 | 10,5 | 22 | 24,3                   |
| K0421.202001       | K0421.202002                 | M20 | 200 | 10,5 | 22 | 24,3                   |
| K0421.240851       | K0421.240852                 | M24 | 85  | 10,5 | 24 | 36,1                   |
| K0421.241001       | K0421.241002                 | M24 | 100 | 10,5 | 24 | 36,1                   |
| K0421.241251       | K0421.241252                 | M24 | 125 | 10,5 | 24 | 36,1                   |
| K0421.241501       | K0421.241502                 | M24 | 150 | 10,5 | 24 | 36,1                   |
| K0421.242001       | K0421.242002                 | M24 | 200 | 10,5 | 24 | 36,1                   |



# Swivel feet ball joints

with internal thread



## Material:

Steel or stainless steel 1.4301.

## Version:

Steel trivalent blue passivated.

Stainless steel, bright.

## Sample order:

K0422.061

K0422.061 and K0415.1030 **assembled**

## Note for ordering:

If the ball joint and plate are to be supplied assembled, please add the suffix "**assembled**" to the order number for the ball joint and plate.

(e.g. K0422.061 and K0415.1030 **assembled**.)

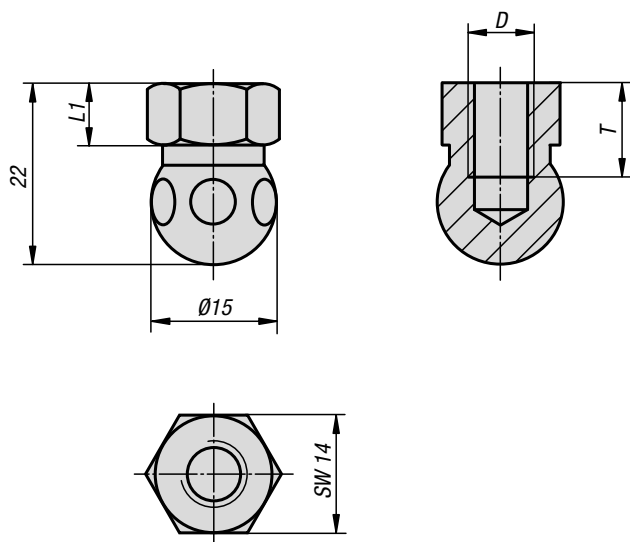
## Note:

For fastening swivel feet with standard screws.

Swivel feet consist of a ball joint and a plate. Any ball joint can be combined with any plate.

The height of the complete swivel foot is calculated by the height of the hexagon + 22.5 mm.

(Overall height of swivel foot = L1 + 22.5 mm).

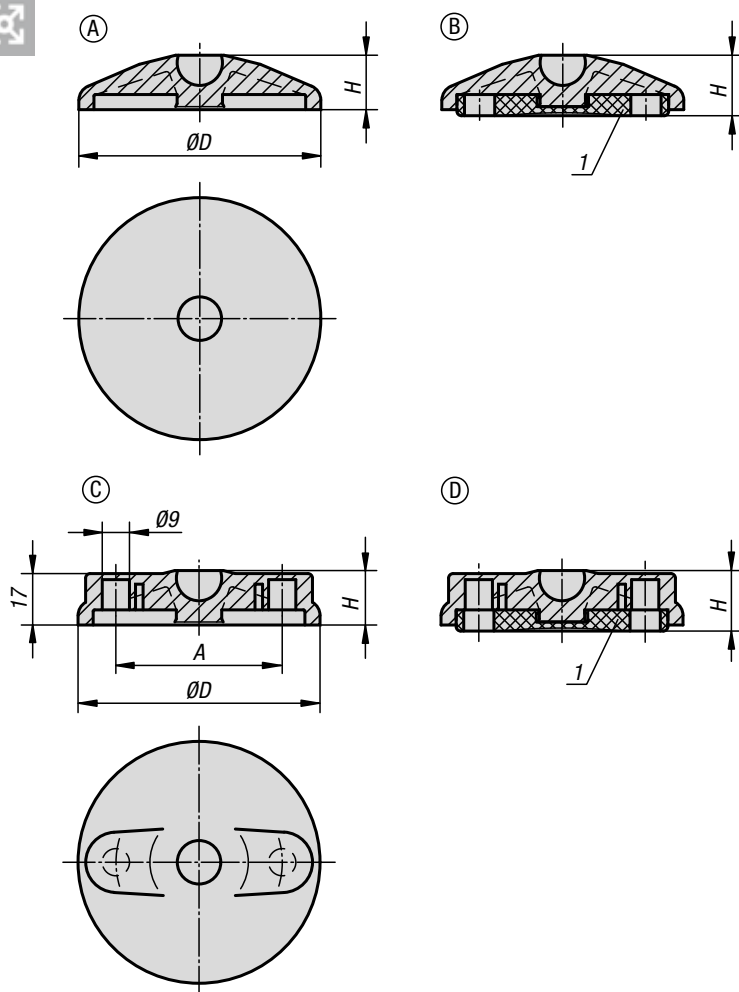


## KIPP Swivel feet ball joints with internal thread

| Order No.<br>steel | Order No.<br>stainless steel | D  | L1  | T  |
|--------------------|------------------------------|----|-----|----|
| K0422.061          | K0422.062                    | M6 | 7,5 | 10 |
| K0422.081          | K0422.082                    | M8 | 7,5 | 10 |

## Swivel feet plates

plastic



### Material:

Plates, thermoplastic, glass bead reinforced.  
Anti-slip plate thermoplastic elastomer.

### Version:

Black.

### Sample order:

K0415.1030  
K0415.1030 and K0421.060151 **assembled**

### Note for ordering:

If the swivel foot plate and the threaded spindle or ball joint are to be supplied assembled, please add the suffix **"assembled"** to the order number for the plate and the spindle or ball joint.  
(e.g. K0415.1030 and K0421.060151 **"assembled"**.)

### Note:

Swivel feet consist of a plate and a threaded spindle or ball joint. Any plate can be combined with any threaded spindle or ball joint. The anti-slip plate absorbs vibrations and prevents the swivel foot slipping.  
For matching threaded spindles see K0421.  
For matching ball joints see K0422.

### Drawing reference:

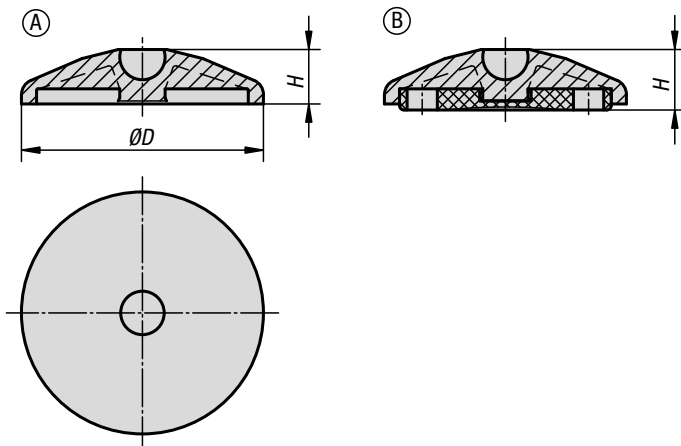
Form A without screw-on hole, without anti-slip plate  
Form B without screw-on hole, with anti-slip plate  
Form C with screw-on hole (closed), without anti-slip plate  
Form D with screw-on hole (closed), with anti-slip plate

### KIPP Swivel feet plates, plastic

| Order No.  | Form | D   | A  | H  | Load rating<br>max. kN |
|------------|------|-----|----|----|------------------------|
| K0415.1030 | A    | 30  | -  | 18 | 5                      |
| K0415.1040 | A    | 40  | -  | 18 | 9                      |
| K0415.1045 | A    | 45  | -  | 18 | 9                      |
| K0415.1050 | A    | 50  | -  | 18 | 9                      |
| K0415.1060 | A    | 60  | -  | 18 | 9                      |
| K0415.1080 | A    | 80  | -  | 18 | 9                      |
| K0415.1100 | A    | 100 | -  | 18 | 9                      |
| K0415.2030 | B    | 30  | -  | 20 | 5                      |
| K0415.2040 | B    | 40  | -  | 20 | 9                      |
| K0415.2045 | B    | 45  | -  | 20 | 9                      |
| K0415.2050 | B    | 50  | -  | 20 | 9                      |
| K0415.2060 | B    | 60  | -  | 20 | 9                      |
| K0415.2080 | B    | 80  | -  | 20 | 9                      |
| K0415.2100 | B    | 100 | -  | 20 | 9                      |
| K0415.3080 | C    | 80  | 55 | 18 | 9                      |
| K0415.3100 | C    | 100 | 74 | 18 | 9                      |
| K0415.3120 | C    | 120 | 94 | 18 | 9                      |
| K0415.4080 | D    | 80  | 55 | 20 | 9                      |
| K0415.4100 | D    | 100 | 74 | 20 | 9                      |
| K0415.4120 | D    | 120 | 94 | 20 | 9                      |

1) From plate Ø 80

# Swivel feet plates antistatic



## Material:

Plates, thermoplastic, glass bead reinforced.  
Anti-slip plate thermoplastic elastomer.

## Version:

Black.

## Sample order:

K0415.11040

## Note for ordering:

If the swivel foot plate and the threaded spindle or ball joint are to be supplied assembled, please add the suffix “**assembled**” to the order number for the plate and the spindle or ball joint.  
(e.g. K0415.1030 and K0421.060151 “**assembled**”).

## Note:

Swivel feet consist of a plate and a threaded spindle or ball joint. Any plate can be combined with any threaded spindle or ball joint. The anti-slip plate absorbs vibrations and prevents the swivel foot slipping.  
For matching threaded spindles see K0421.  
For matching ball joints see K0422.

## Safety:

These ESD products can also be used for devices, components and protection systems in areas with high risk of explosion.  
Use of these ESD products prevents the occurrence of electrostatic spark discharges, eliminating the potential ignition of gases and dusts which could lead to explosions in enclosed spaces.  
Manufacturers and operators must use and conform to ATEX directives for the protection of persons working in areas with high risk of explosion.  
These ESD products are certified by TÜV-Süd in relation to their electrical discharge capability.

## Target groups:

Device manufacturers required to conform to ATEX product directive 2014/34/EU.  
Operators required to conform to ATEX worker protection directive 1999/92/EC.

## Drawing reference:

Form A without screw-on hole, without anti-slip plate  
Form B without screw-on hole, with anti-slip plate

## KIPP Antistatic plate for swivel feet

| Order No.   | Form | D  | H  | Load rating<br>max. kN |
|-------------|------|----|----|------------------------|
| K0415.11040 | A    | 40 | 18 | 9                      |
| K0415.11050 | A    | 50 | 18 | 9                      |
| K0415.11060 | A    | 60 | 18 | 9                      |
| K0415.12040 | B    | 40 | 20 | 9                      |
| K0415.12050 | B    | 50 | 20 | 9                      |
| K0415.12060 | B    | 60 | 20 | 9                      |



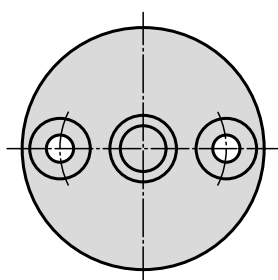
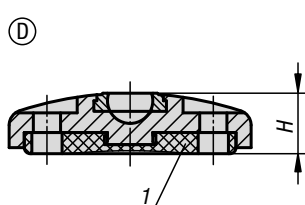
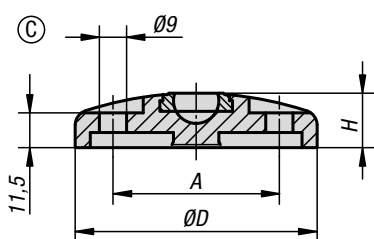
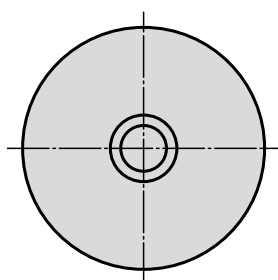
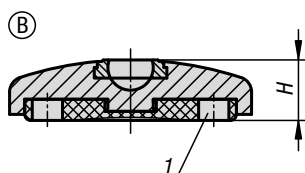
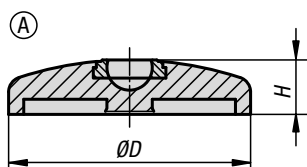
A large rectangular area filled with a light gray grid pattern, intended for taking notes.





## Swivel feet plates

die-cast zinc or stainless steel



### Material:

Plate die-cast zinc or stainless steel 1.4305.  
Anti-slip plate thermoplastic elastomer.

### Version:

Die-cast zinc plate, black powder-coated.  
Stainless steel plate, bright.

### Sample order:

K0416.10301

K0416.10301 and K0421.060151 **assembled**

### Note for ordering:

If the swivel foot plate and the threaded spindle or the ball joint are to be supplied assembled, please add the suffix "**assembled**" to the order number for the plate and the spindle or the ball joint.  
(e.g. K0416.10301 and K0421.060151 **assembled**).

### Note:

Swivel feet consist of a plate and a threaded spindle or ball joint. Any plate can be combined with any threaded spindle or ball joint. The anti-slip plate absorbs vibrations and prevents the swivel foot slipping.  
For matching threaded spindles see K0421.  
For matching ball joints see K0422.

### Drawing reference:

Form A without screw-on hole, without anti-slip plate  
Form B without screw-on hole, with anti-slip plate  
Form C with screw-on hole (open), without anti-slip plate  
Form D with screw-on hole (open), with anti-slip plate

1) From plate Ø 80

## Swivel feet plates

die-cast zinc or stainless steel



| Order No.   | Form | Main material   | D   | A  | H  | Load rating max. kN |
|-------------|------|-----------------|-----|----|----|---------------------|
| K0416.10301 | A    | zinc            | 30  | -  | 18 | 20                  |
| K0416.10401 | A    | zinc            | 40  | -  | 18 | 30                  |
| K0416.10451 | A    | zinc            | 45  | -  | 18 | 30                  |
| K0416.10501 | A    | zinc            | 50  | -  | 18 | 30                  |
| K0416.10601 | A    | zinc            | 60  | -  | 18 | 30                  |
| K0416.10801 | A    | zinc            | 80  | -  | 18 | 30                  |
| K0416.11001 | A    | zinc            | 100 | -  | 18 | 35                  |
| K0416.11201 | A    | zinc            | 120 | -  | 18 | 35                  |
| K0416.10302 | A    | stainless steel | 30  | -  | 18 | 20                  |
| K0416.10402 | A    | stainless steel | 40  | -  | 18 | 30                  |
| K0416.10452 | A    | stainless steel | 45  | -  | 18 | 30                  |
| K0416.10502 | A    | stainless steel | 50  | -  | 18 | 35                  |
| K0416.10602 | A    | stainless steel | 60  | -  | 18 | 35                  |
| K0416.10802 | A    | stainless steel | 80  | -  | 18 | 35                  |
| K0416.11002 | A    | stainless steel | 100 | -  | 18 | 40                  |
| K0416.11202 | A    | stainless steel | 120 | -  | 18 | 40                  |
| K0416.20401 | B    | zinc            | 40  | -  | 20 | 30                  |
| K0416.20601 | B    | zinc            | 60  | -  | 20 | 30                  |
| K0416.20802 | B    | stainless steel | 80  | -  | 20 | 35                  |
| K0416.20302 | B    | stainless steel | 30  | -  | 20 | 20                  |
| K0416.20451 | B    | zinc            | 45  | -  | 20 | 30                  |
| K0416.20502 | B    | stainless steel | 50  | -  | 20 | 35                  |
| K0416.21202 | B    | stainless steel | 120 | -  | 20 | 40                  |
| K0416.21201 | B    | zinc            | 120 | -  | 20 | 35                  |
| K0416.20301 | B    | zinc            | 30  | -  | 20 | 20                  |
| K0416.20801 | B    | zinc            | 80  | -  | 20 | 30                  |
| K0416.20452 | B    | stainless steel | 45  | -  | 20 | 30                  |
| K0416.21002 | B    | stainless steel | 100 | -  | 20 | 40                  |
| K0416.20501 | B    | zinc            | 50  | -  | 20 | 30                  |
| K0416.20602 | B    | stainless steel | 60  | -  | 20 | 35                  |
| K0416.21001 | B    | zinc            | 100 | -  | 20 | 35                  |
| K0416.20402 | B    | stainless steel | 40  | -  | 20 | 30                  |
| K0416.30801 | C    | zinc            | 80  | 55 | 18 | 30                  |
| K0416.31001 | C    | zinc            | 100 | 74 | 18 | 35                  |
| K0416.31201 | C    | zinc            | 120 | 94 | 18 | 35                  |
| K0416.30802 | C    | stainless steel | 80  | 55 | 18 | 35                  |
| K0416.31002 | C    | stainless steel | 100 | 74 | 18 | 40                  |
| K0416.31202 | C    | stainless steel | 120 | 94 | 18 | 40                  |
| K0416.40801 | D    | zinc            | 80  | 55 | 20 | 30                  |
| K0416.41001 | D    | zinc            | 100 | 74 | 20 | 35                  |
| K0416.41201 | D    | zinc            | 120 | 94 | 20 | 35                  |
| K0416.40802 | D    | stainless steel | 80  | 55 | 20 | 35                  |
| K0416.41002 | D    | stainless steel | 100 | 74 | 20 | 40                  |
| K0416.41202 | D    | stainless steel | 120 | 94 | 20 | 40                  |



## Swivel feet plates extended

plastic



### Material:

Plates, thermoplastic, fibreglass reinforced.  
Anti-slip plate thermoplastic elastomer.

### Version:

Black.

### Sample order:

K0654.1030

K0654.1030 and K0421.060151 **assembled**

### Note for ordering:

If the swivel foot plate and the threaded spindle or ball joint are to be supplied assembled, please add the suffix **"assembled"** to the order number for the plate and the spindle or ball joint.  
(e.g. K0654.30803 and K0421.060151 **assembled**.)

### Note:

Swivel feet consist of a plate and a threaded spindle or ball joint. Any plate can be combined with any threaded spindle or ball joint. The anti-slip plate absorbs vibrations and prevents the swivel foot slipping.

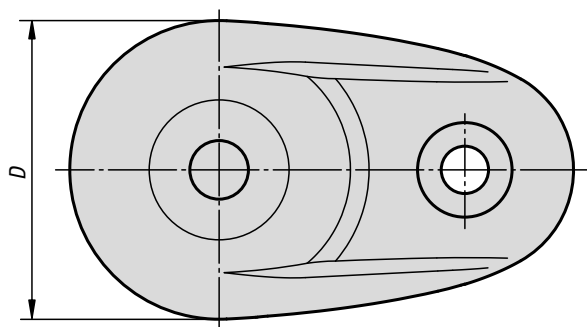
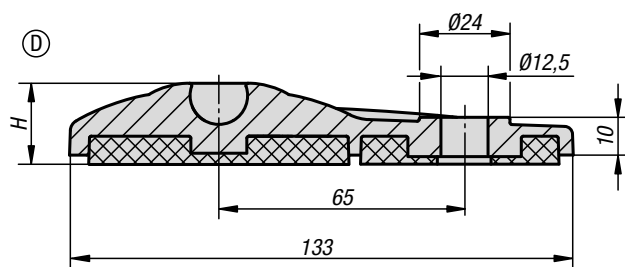
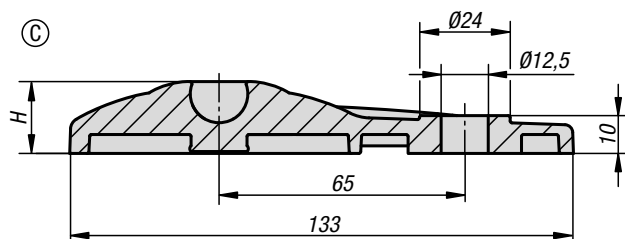
For matching threaded spindles see K0421.

For matching ball joints see K0422.

### Drawing reference:

Form C with screw-on hole, without anti-slip plate

Form D with screw-on hole, with anti-slip plate

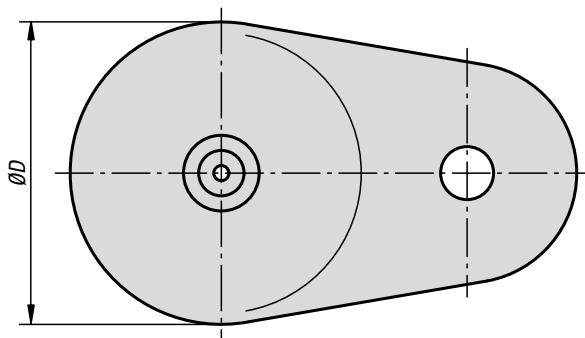
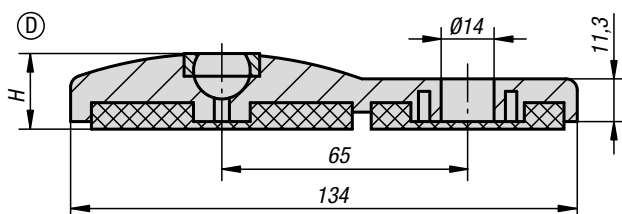
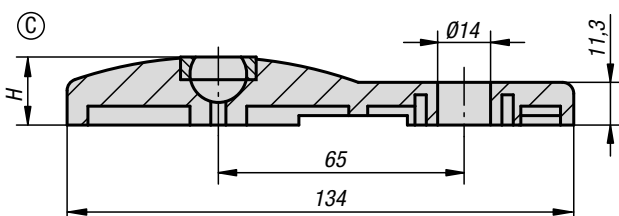


### KIPP Swivel feet plates extended, plastic

| Order No.   | Form | D  | H  | Load rating<br>max. kN |
|-------------|------|----|----|------------------------|
| K0654.30803 | C    | 80 | 19 | 30                     |
| K0654.40803 | D    | 80 | 21 | 30                     |

# Swivel feet plates extended

die-cast zinc



## Material:

Plate die-cast zinc.

Anti-slip plate thermoplastic elastomer.

## Version:

Plate black powder-coated.

## Sample order:

K0417.30801

K0417.30801 and K0421.060151 **assembled**

## Note for ordering:

If the swivel foot plate and the threaded spindle or ball joint are to be supplied assembled, please add the suffix **"assembled"** to the order number for the plate and the spindle or ball joint.

(e.g. K0417.30801 and K0421.060151 **assembled**.)

## Note:

Swivel feet consist of a plate and a threaded spindle or ball joint. Any plate can be combined with any threaded spindle or ball joint. The anti-slip plate absorbs vibrations and prevents the swivel foot slipping.

For matching threaded spindles see K0421.

For matching ball joints see K0422.

## Drawing reference:

Form C with screw-on hole, without anti-slip plate

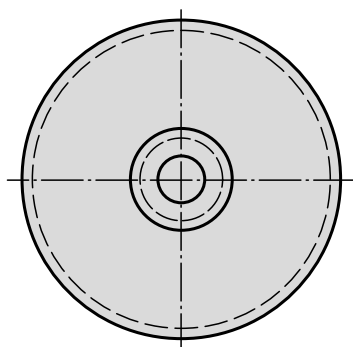
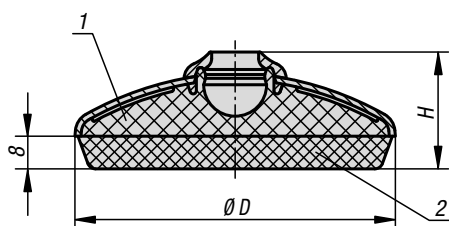
Form D with screw-on hole, with anti-slip plate

## KIPP Swivel feet plates extended, die-cast zinc

| Order No.   | Form | D  | H  | Load rating<br>max. kN |
|-------------|------|----|----|------------------------|
| K0417.30801 | C    | 80 | 18 | 30                     |
| K0417.40801 | D    | 80 | 20 | 30                     |

# Swivel feet plates

stainless steel



## Material:

Plates, stainless steel 1.4301.  
Core, thermoplastic PA.  
Rubber support TPE.

## Version:

Plate bright.  
Rubber support light grey with sealing lip, hardness 70 Shore A.  
Temp. range -20°C to +100°C.

## Sample order:

K0418.1060  
K0418.1060 and K0421.060152 **assembled**

## Note for ordering:

If the swivel foot plate and the threaded spindle or ball joint are to be supplied assembled, please add the suffix "**assembled**" to the order number for the plate and the spindle or ball joint. (e.g. K0418.1060 and K0421.060152 **assembled**.)

## Note:

The rubber support is joined with the stainless steel plate and the PA core by injection moulding. The rubber support is resistant to oil and water (up to 60 °C). In addition, it is furnished with antibacterial and antimicrobial protection and is thus outstandingly suited for sectors in the food industry.

Swivel feet consist of a plate and a threaded spindle or ball joint. Any plate can be combined with any threaded spindle or ball joint.

For matching threaded spindles see K0421.

For matching ball joints see K0422.

## Drawing reference:

- 1) PA-core
- 2) rubber base

## KIPP Swivel feet plates, stainless steel

| Order No.  | D    | H  | Load rating<br>max. kN |
|------------|------|----|------------------------|
| K0418.1060 | 58,5 | 29 | 7                      |
| K0418.1080 | 78,5 | 29 | 7                      |
| K0418.1100 | 98,5 | 29 | 7                      |

# Technical information

## Swivel feet and plates with vibration absorption



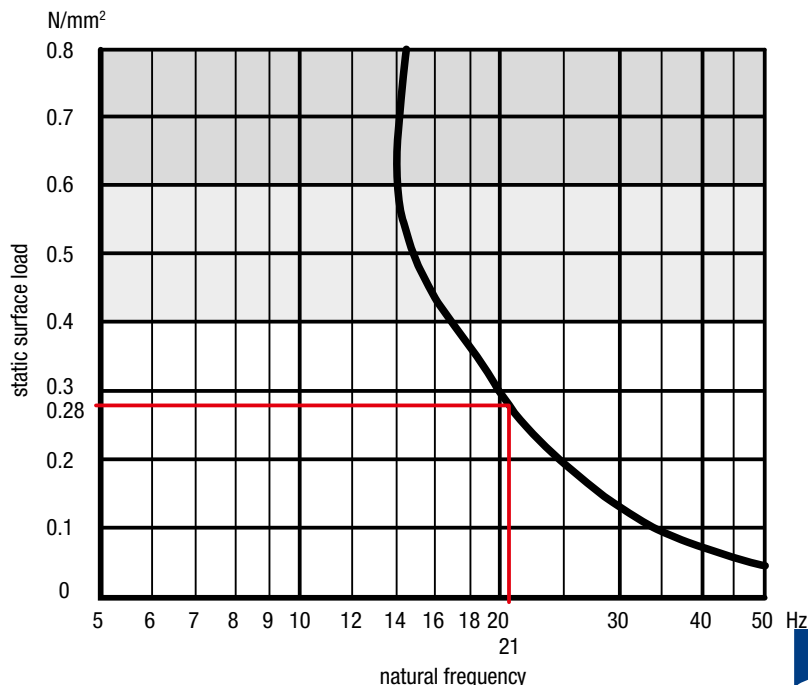
### Natural frequency:

Every sprung weight, such as a machine or piece of equipment, that is standing on swivel feet with vibration absorbers vibrates after an initial impetus at its own natural frequency (resonance frequency). In the diagram to the side (Fig. 1) the natural frequency of Sylomer V12 under pressure by various forces can be read. The optimum range of use is with a pressure of  $\leq 0.4 \text{ N/mm}^2$ . A maximum pressure of  $0.6 \text{ N/mm}^2$  should not be exceeded.

### Interference frequency:

The frequency emitted by a machine or a piece of equipment is known as its interference frequency. Effective vibration absorption is dependent on the interference frequency (the frequency to be absorbed) and the natural frequency of the absorption unit. The greater the difference in frequency between the natural frequency and the interference frequency, the better the absorption. An absorbing effect will only be achieved if the interference frequency is over  $\sqrt{2}$  times the natural frequency of the absorption unit.

Fig. 1



### Calculation example:

Swivel foot: M12, D1=30,5  
Loading: 300N

$$\text{Pressure: } \frac{F}{A} = \frac{300 \text{ N}}{529,5 \text{ mm}^2} = 0,57 \text{ N/mm}^2$$

$> 0,4 \text{ N/mm}^2$

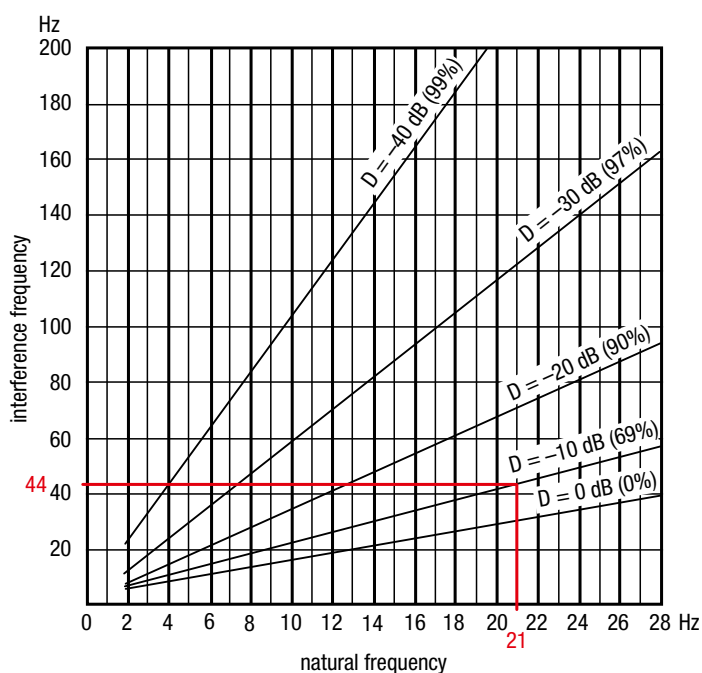
Swivel foot: M16, D1=40,5  
Loading: 300N

$$\text{Pressure: } \frac{F}{A} = \frac{300 \text{ N}}{1087,2 \text{ mm}^2} = 0,28 \text{ N/mm}^2$$

$< 0,4 \text{ N/mm}^2$

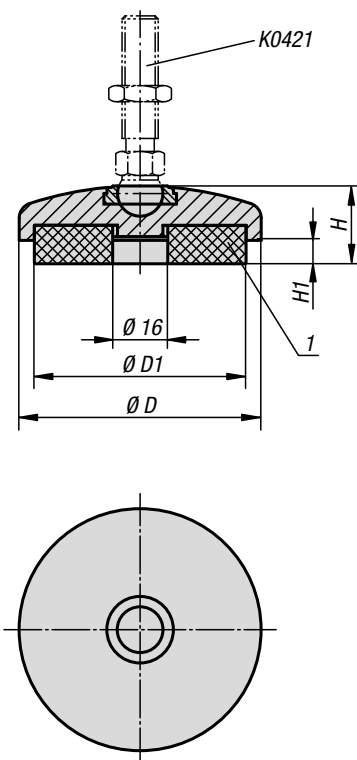
The M16 swivel foot is chosen since the pressure is  $\leq 0.4 \text{ N/mm}^2$ . From Fig. 1, a pressure of  $0.28 \text{ N/mm}^2$  gives a natural frequency of **21 Hz**. With an interference frequency of **44 Hz** an absorption effect of 69% is achieved (Fig. 2).

Fig. 2



# Swivel feet plates

with vibration absorption



## Drawing reference:

1) damper plate

## Material:

Plate die-cast zinc or stainless steel 1.4305.  
Damper plate PUR elastomere (Sylomer V12).

## Version:

Die-cast zinc plate, black powder-coated.  
Stainless steel plate, bright.  
Damper plate, grey, glued in, anti-slip.  
Temp. range -30 °C to +70 °C.

## Sample order:

K0419.20601

K0419.20601 and K0421.060151 **assembled**

## Note for ordering:

If the swivel foot plate and the threaded spindle or ball joint are to be supplied assembled, please add the suffix "**assembled**" to the order number for the plate and the spindle or ball joint.  
(e.g. K0419.20601 and K0421.060151 **assembled**.)

## Note:

The load rating given in the table is a recommendation of the **permanent static** load up to which the absorption unit should be used. This static load corresponds to a surface pressure of 0.4 N/mm<sup>2</sup>, at which the material achieves its optimum absorption properties. Here it is taken into account that under dynamic demands an additional load, up to 0.6 N/mm<sup>2</sup> may occur. The damper plate absorbs vibrations and prevents the swivel foot slipping.

Swivel feet consist of a plate and a threaded spindle or ball joint. Any plate can be combined with any threaded spindle or ball joint.

For matching threaded spindles see K0421.

For matching ball joints see K0422.

## KIPP Swivel feet plates, die-cast zinc

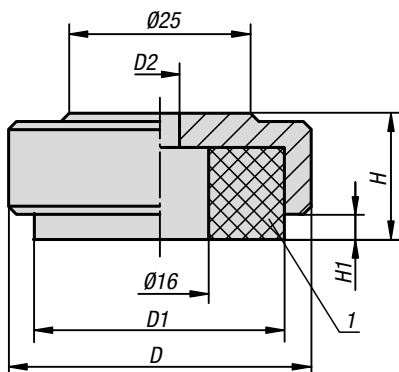
| Order No.   | D  | D1   | H  | H1<br>by 0 / 0.4 / 0.6<br>N/mm <sup>2</sup> | Load rating<br>max. kN |
|-------------|----|------|----|---------------------------------------------|------------------------|
| K0419.20401 | 40 | 30,5 | 25 | 7 / 5,9 / 4,8                               | 0,062                  |
| K0419.20501 | 50 | 40,5 | 25 | 7 / 5,9 / 4,8                               | 0,212                  |
| K0419.20601 | 60 | 50   | 25 | 7 / 5,9 / 4,8                               | 0,433                  |
| K0419.20801 | 80 | 68   | 25 | 7 / 5,9 / 4,8                               | 0,614                  |

## KIPP Swivel feet plates, stainless steel

| Order No.   | D  | D1   | H  | H1<br>by 0 / 0.4 / 0.6<br>N/mm <sup>2</sup> | Load rating<br>max. kN |
|-------------|----|------|----|---------------------------------------------|------------------------|
| K0419.20402 | 40 | 30,5 | 25 | 7 / 5,8 / 4,9                               | 0,212                  |
| K0419.20502 | 50 | 40,5 | 25 | 7 / 5,8 / 4,9                               | 0,435                  |
| K0419.20602 | 60 | 50   | 25 | 7 / 5,8 / 4,9                               | 0,705                  |
| K0419.20802 | 80 | 68   | 25 | 7 / 5,8 / 4,9                               | 1,372                  |

# Machine feet

with vibration absorption



## Material:

Plate steel or stainless steel 1.4404.

Damper plate PUR elastomer (Sylomer V12).

## Version:

Plate trivalent blue passivated or bright.

Damper plate grey, glued in, anti-slip.

Temp. range -30 °C to +70 °C.

## Sample order:

K0670.046

## Note:

The load rating given in the table is a recommendation of the **permanent static** load up to which the damper plate should be used.

This static load corresponds to a surface pressure of 0.4 N/mm<sup>2</sup>, at which the material reaches its optimum absorption properties. Here it is taken into account that under dynamic loading an additional load of up to 0.6 N/mm<sup>2</sup> may occur.

The damper plate absorbs vibrations and prevents the machine foot slipping.

## Drawing reference:

1) damper plate

## KIPP Machine feet with vibration absorption

| Order No.  | Main material   | D  | D1   | D2  | H  | H1<br>by 0 / 0.4 / 0.6<br>N/mm <sup>2</sup> | Load rating<br>max. kN |
|------------|-----------------|----|------|-----|----|---------------------------------------------|------------------------|
| K0670.036  | steel           | 36 | 30,5 | 5,5 | 15 | 4 / 2,8 / 1,9                               | 0,212                  |
| K0670.046  | steel           | 46 | 40,5 | 6,6 | 17 | 4 / 2,8 / 1,9                               | 0,435                  |
| K0670.056  | steel           | 56 | 50   | 9   | 19 | 4 / 2,8 / 1,9                               | 0,705                  |
| K0670.074  | steel           | 74 | 68   | 9   | 21 | 4 / 2,8 / 1,9                               | 1,372                  |
| K0670.1036 | stainless steel | 36 | 30,5 | 5,5 | 15 | 4 / 2,8 / 1,9                               | 0,212                  |
| K0670.1046 | stainless steel | 46 | 40,5 | 6,6 | 17 | 4 / 2,8 / 1,9                               | 0,435                  |
| K0670.1056 | stainless steel | 56 | 50   | 9   | 19 | 4 / 2,8 / 1,9                               | 0,705                  |



## Modular structure of a levelling foot

### Application:

Levelling feet are of modular design. The components can be individually combined to match the application. Levelling feet can be used on machines, plants and even office furniture.

### Modular design:

The levelling feet consist of two components - a plate and a threaded spindle.

**Any** plate can be combined with **any** threaded spindle (see Fig. 1).

### Levelling feet height:

Regardless of the plate or threaded spindle size, levelling feet always have a minimum height of  $H = 30 \text{ mm}$  (see Fig. 2). The height of the complete levelling foot is calculated from the length of the threaded spindle + 30 mm. (Total height of levelling foot =  $L + 30 \text{ mm}$ ).

Fig. 1

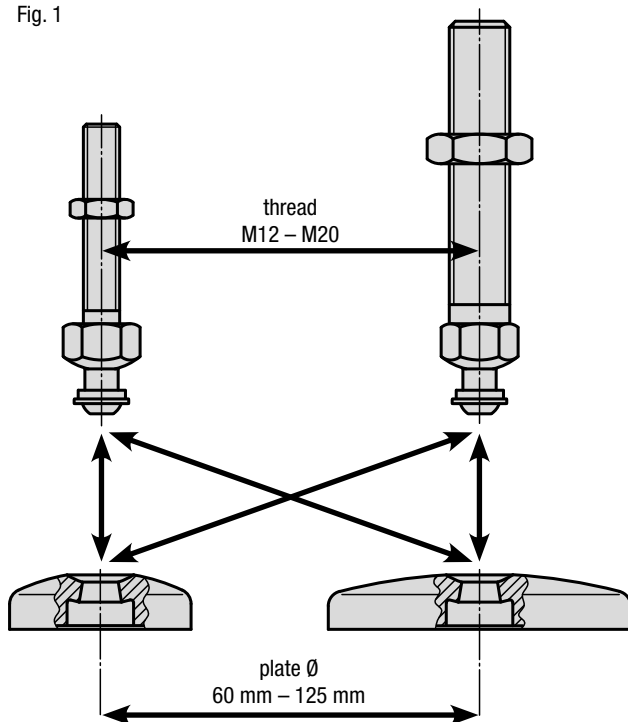
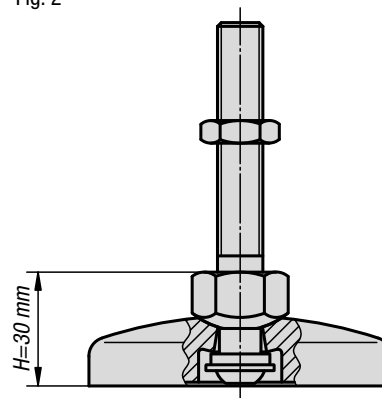


Fig. 2



### Inclination angle of threaded spindle:



### Mounting:

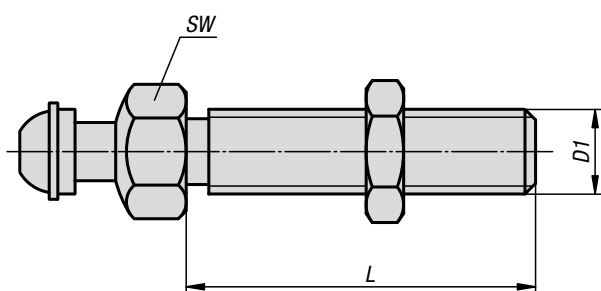
Insert the threaded spindle vertically into the levelling foot plate and fasten it from underneath with a spacer ring, washer and screw (no unintentional loosening of threaded spindle from the plate). If necessary, the two fastening holes (closed) in the levelling foot plate can be opened by simply punching them out to allow the levelling foot to be bolted to the floor.

### Note for ordering:

If the levelling foot plate and the threaded spindle are to be supplied assembled, please add the suffix **"assembled"** to the order number for the plate and spindle (see sample order on the relevant product page).

# Levelling feet threaded spindles

steel or stainless steel



## Material:

Steel or 1.4305 stainless steel

## Version:

Steel trivalent blue passivated.  
Stainless steel, bright.

## Sample order:

K0427.120661

K0427.120661 and K0423.1060 **assembled**

## Note for ordering:

If the threaded spindle and the levelling foot plate are to be supplied assembled, please add the suffix **"assembled"** to the order number for the spindle and plate. (e.g. K0427.120661 and K0423.1060 **assembled**.)

## Note:

Levelling feet consist of a plate and a threaded spindle. Any plate can be combined with any threaded spindle. The height of the complete levelling foot is calculated from the length of the threaded spindle + 30 mm. (Total height of levelling foot = L + 30 mm)

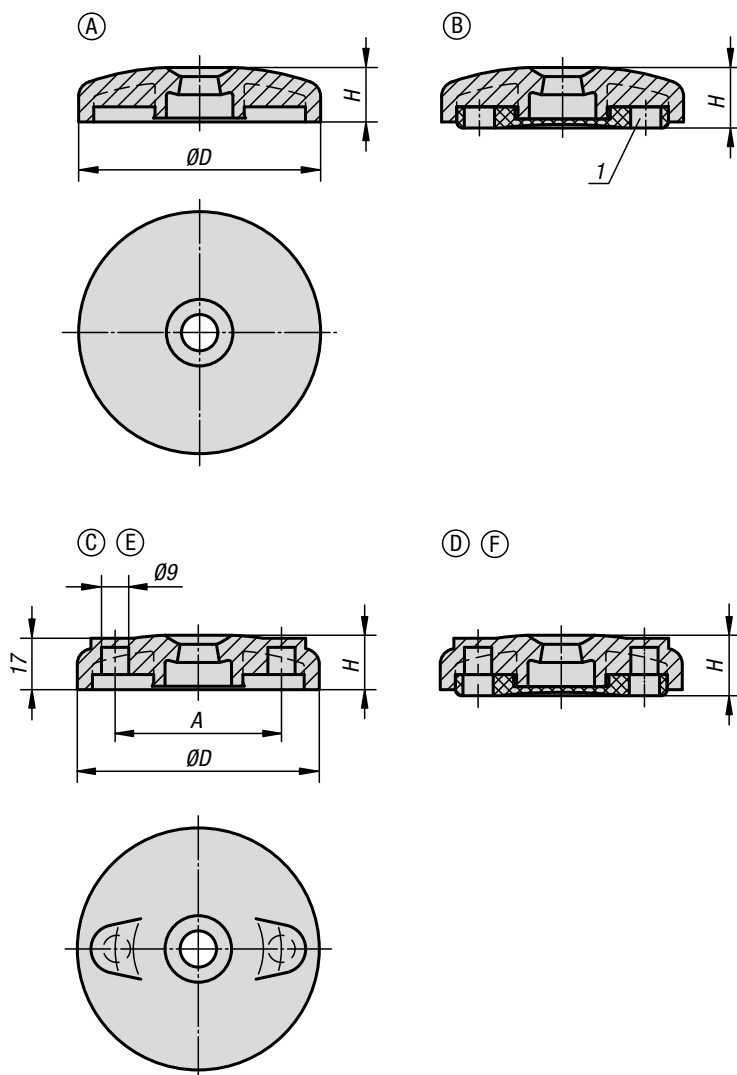


## KIPP Levelling feet threaded spindles steel or stainless steel

| Order No.<br>steel | Order No.<br>stainless steel | D1  | L   | SW | Load rating<br>max. kN |
|--------------------|------------------------------|-----|-----|----|------------------------|
| K0427.120661       | K0427.120662                 | M12 | 66  | 22 | 7,7                    |
| K0427.121001       | K0427.121002                 | M12 | 100 | 22 | 7,7                    |
| K0427.121251       | K0427.121252                 | M12 | 125 | 22 | 7,7                    |
| K0427.121501       | K0427.121502                 | M12 | 150 | 22 | 7,7                    |
| K0427.160661       | K0427.160662                 | M16 | 66  | 22 | 14,5                   |
| K0427.161001       | K0427.161002                 | M16 | 100 | 22 | 14,5                   |
| K0427.161251       | K0427.161252                 | M16 | 125 | 22 | 14,5                   |
| K0427.161501       | K0427.161502                 | M16 | 150 | 22 | 14,5                   |
| K0427.162001       | K0427.162002                 | M16 | 200 | 22 | 14,5                   |
| K0427.201001       | K0427.201002                 | M20 | 100 | 22 | 24,3                   |
| K0427.201251       | K0427.201252                 | M20 | 125 | 22 | 24,3                   |
| K0427.201501       | K0427.201502                 | M20 | 150 | 22 | 24,3                   |
| K0427.202001       | K0427.202002                 | M20 | 200 | 22 | 24,3                   |

## Levelling feet plates

plastic



### Material:

Plates, thermoplastic, fibreglass reinforced.  
Anti-slip plate thermoplastic elastomer.

### Version:

Black.

### Sample order:

K0423.1060  
K0423.1060 and K0427.120661 **assembled**

### Note for ordering:

If the levelling foot plate and the threaded spindle are to be supplied assembled, please add the suffix "**assembled**" to the order number for the plate and spindle. (e.g. K0423.1060 and K0427.120661 **assembled**.)

### Note:

Levelling feet consist of a plate and a threaded spindle. Any plate can be combined with any threaded spindle.  
The anti-slip plate absorbs vibrations and prevents the levelling foot slipping.  
For matching threaded spindles see K0427.

### Drawing reference:

Form A without screw-on hole, without anti-slip plate  
Form B without screw-on hole, with anti-slip plate  
Form C with screw-on hole (closed), without anti-slip plate  
Form D with screw-on hole (closed), with anti-slip plate  
Form E with screw-on hole (open), without anti-slip plate  
Form F with screw-on hole (open), with anti-slip plate

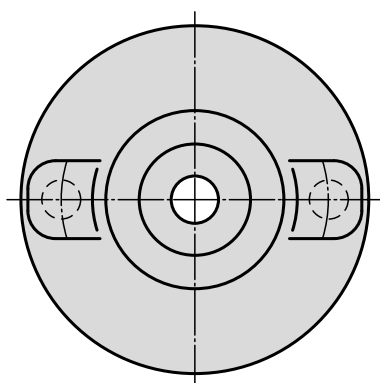
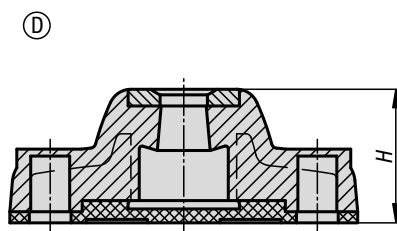
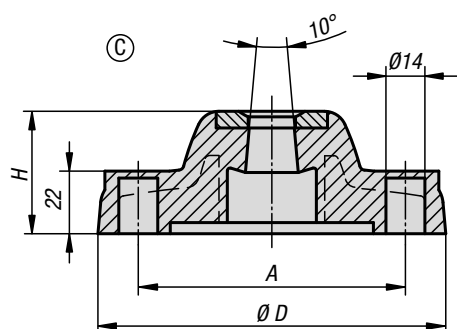
1) From plate Ø 80

## KIPP Levelling feet plates plastic

| Order No.  | Form | D   | A  | H  | Load rating<br>max. kN |
|------------|------|-----|----|----|------------------------|
| K0423.1060 | A    | 60  | -  | 18 | 12                     |
| K0423.1080 | A    | 80  | -  | 18 | 12                     |
| K0423.1100 | A    | 100 | -  | 18 | 12                     |
| K0423.2060 | B    | 60  | -  | 20 | 12                     |
| K0423.2080 | B    | 80  | -  | 20 | 12                     |
| K0423.2100 | B    | 100 | -  | 20 | 12                     |
| K0423.3080 | C    | 80  | 55 | 18 | 12                     |
| K0423.3100 | C    | 100 | 74 | 18 | 12                     |
| K0423.4080 | D    | 80  | 55 | 20 | 12                     |
| K0423.4100 | D    | 100 | 74 | 20 | 12                     |
| K0423.5080 | E    | 80  | 55 | 18 | 12                     |
| K0423.5100 | E    | 100 | 74 | 18 | 12                     |
| K0423.6080 | F    | 80  | 55 | 20 | 12                     |
| K0423.6100 | F    | 100 | 74 | 20 | 12                     |

## Levelling feet plates

plastic, heavy-duty version



### Material:

Plates, thermoplastic, fibreglass reinforced.  
Anti-slip plate thermoplastic elastomer.

### Version:

Black.

### Sample order:

K0424.31251

K0424.31251 and K0427.120661 **assembled**

### Note for ordering:

If the levelling foot plate and the threaded spindle are to be supplied assembled, please add the suffix "**assembled**" to the order number for the plate and spindle.  
(e.g. K0424.31251 and K0427.120661 **assembled**.)

### Note:

Levelling feet consist of a plate and a threaded spindle. Any plate can be combined with any threaded spindle. The anti-slip plate absorbs vibrations and prevents the levelling foot slipping.  
For matching threaded spindles see K0427.

### Drawing reference:

Form C with screw-on hole (closed), without anti-slip plate

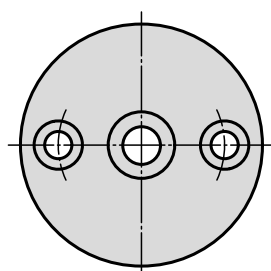
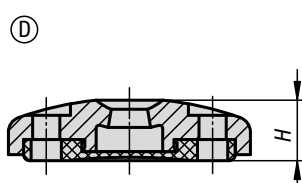
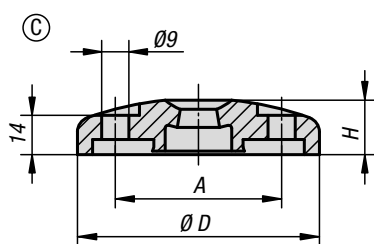
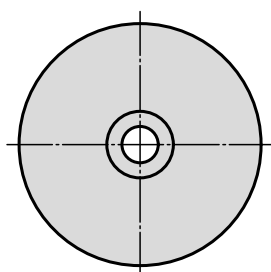
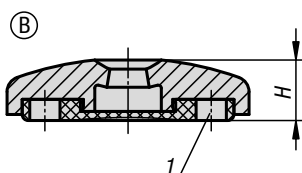
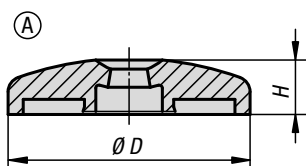
Form D with screw-on hole (closed), with anti-slip plate

## KIPP Levelling feet plates, plastic, heavy-duty version

| Order No.   | Form | D   | A   | H  | Load rating<br>max. kN |
|-------------|------|-----|-----|----|------------------------|
| K0424.31251 | C    | 125 | 96  | 44 | 18                     |
| K0424.31751 | C    | 175 | 135 | 45 | 25                     |
| K0424.41251 | D    | 125 | 96  | 48 | 18                     |
| K0424.41751 | D    | 175 | 135 | 49 | 25                     |

## Levelling feet plates

die-cast zinc or stainless steel



### Material:

Plate die-cast zinc or stainless steel 1.4305.  
Anti-slip plate thermoplastic elastomer.

### Version:

Die-cast zinc plate, black powder-coated.  
Stainless steel plate, bright.

### Sample order:

K0425.10601

K0425.10601 and K0427.120661 **assembled**

### Note for ordering:

If the levelling foot plate and the threaded spindle are to be supplied assembled, please add the suffix "**assembled**" to the order number for the plate and spindle.

(e.g. K0425.10601 and K0427.120661 **assembled**).

### Note:

Levelling feet consist of a plate and a threaded spindle. Any plate can be combined with any threaded spindle. The anti-slip plate absorbs vibrations and prevents the levelling foot slipping.

For matching threaded spindles see K0427.

### Drawing reference:

Form A without screw-on hole, without anti-slip plate

Form B without screw-on hole, with anti-slip plate

Form C with screw-on hole (open), without anti-slip plate

Form D with screw-on hole (open), with anti-slip plate

1) From plate  $\varnothing 80$

# Levelling feet plates

die-cast zinc or stainless steel



## KIPP Levelling feet plates die-cast zinc

| Order No.   | Form | Main material   | D   | A  | H  | Load rating max. kN |
|-------------|------|-----------------|-----|----|----|---------------------|
| K0425.10401 | A    | zinc            | 40  | -  | 18 | 20                  |
| K0425.10451 | A    | zinc            | 45  | -  | 18 | 25                  |
| K0425.10501 | A    | zinc            | 50  | -  | 18 | 25                  |
| K0425.10601 | A    | zinc            | 60  | -  | 18 | 35                  |
| K0425.10801 | A    | zinc            | 80  | -  | 18 | 35                  |
| K0425.11001 | A    | zinc            | 100 | -  | 18 | 35                  |
| K0425.11201 | A    | zinc            | 120 | -  | 18 | 35                  |
| K0425.10602 | A    | stainless steel | 60  | -  | 18 | 45                  |
| K0425.10802 | A    | stainless steel | 80  | -  | 18 | 45                  |
| K0425.11002 | A    | stainless steel | 100 | -  | 18 | 45                  |
| K0425.20601 | B    | zinc            | 60  | -  | 20 | 35                  |
| K0425.20801 | B    | zinc            | 80  | -  | 20 | 35                  |
| K0425.21001 | B    | zinc            | 100 | -  | 20 | 35                  |
| K0425.21201 | B    | zinc            | 120 | -  | 20 | 35                  |
| K0425.20602 | B    | stainless steel | 60  | -  | 20 | 45                  |
| K0425.20802 | B    | stainless steel | 80  | -  | 20 | 45                  |
| K0425.21002 | B    | stainless steel | 100 | -  | 20 | 45                  |
| K0425.30801 | C    | zinc            | 80  | 55 | 18 | 35                  |
| K0425.31001 | C    | zinc            | 100 | 74 | 18 | 35                  |
| K0425.30802 | C    | stainless steel | 80  | 55 | 18 | 45                  |
| K0425.31002 | C    | stainless steel | 100 | 74 | 18 | 45                  |
| K0425.40801 | D    | zinc            | 80  | 55 | 20 | 35                  |
| K0425.41001 | D    | zinc            | 100 | 74 | 20 | 35                  |
| K0425.40802 | D    | stainless steel | 80  | 55 | 20 | 45                  |
| K0425.41002 | D    | stainless steel | 100 | 74 | 20 | 45                  |

## Levelling feet plates extended

die-cast zinc



### Material:

Plate die-cast zinc.

Anti-slip plate thermoplastic elastomer.

### Version:

Plate black powder-coated.

### Sample order:

K0426.30801

K0426.30801 and K0427.120661 **assembled**

### Note for ordering:

If the levelling foot plate and the threaded spindle are to be supplied assembled, please add the suffix "**assembled**" to the order number for the plate and spindle.

(e.g. K0426.30801 and K0427.120661 **assembled**.)

### Note:

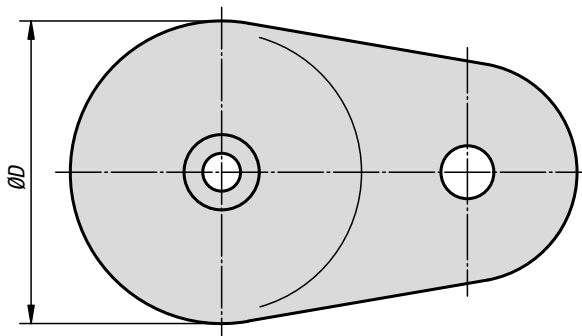
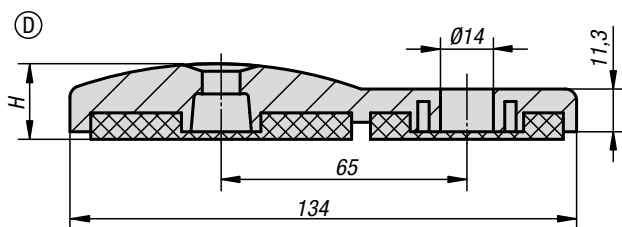
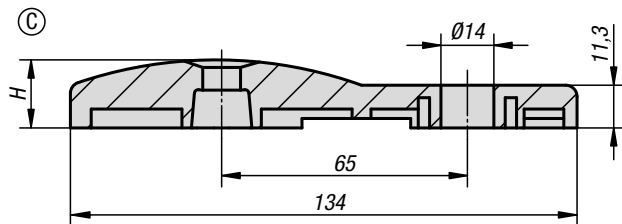
Levelling feet consist of a plate and a threaded spindle. Any plate can be combined with any threaded spindle. The anti-slip plate absorbs vibrations and prevents the levelling foot slipping.

For matching threaded spindles see K0427.

### Drawing reference:

Form C with screw-on hole, without anti-slip plate

Form D with screw-on hole, with anti-slip plate



## KIPP Levelling feet plates extended die-cast zinc

| Order No.   | Form | D  | H  | Load rating<br>max. kN |
|-------------|------|----|----|------------------------|
| K0426.30801 | C    | 80 | 18 | 35                     |
| K0426.40801 | D    | 80 | 20 | 35                     |



A large rectangular area filled with a fine grid of light gray lines, intended for taking notes or drawing.





## Modular structure of an ECO levelling foot

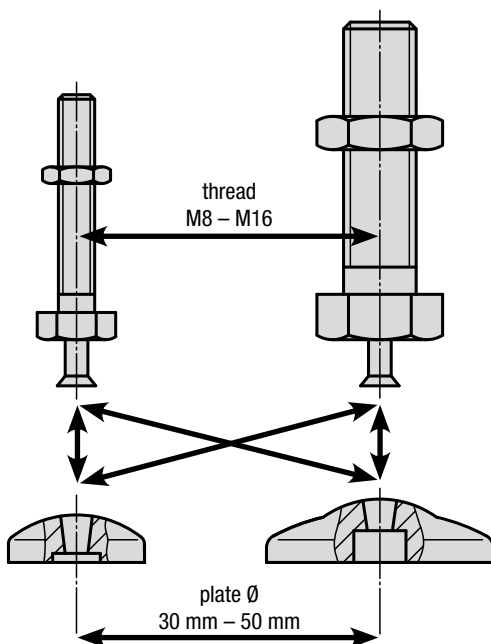
### Application:

ECO levelling feet are of modular design. The components can be individually combined to match the application. However, the threaded spindle is not screwed but pressed in permanently. The levelling feet are used for a wide range of machines, plants and even office furniture.

### Modular design:

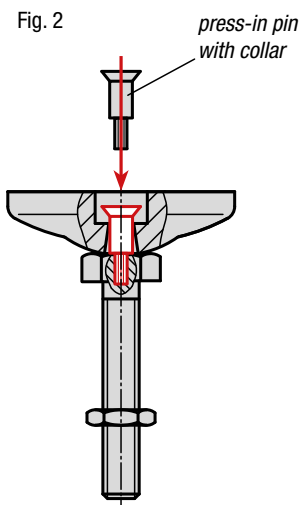
The levelling feet consist of two components - a plate and a threaded spindle. **Any** plate can be combined with **any** threaded spindle (see Fig. 1).

Fig. 1

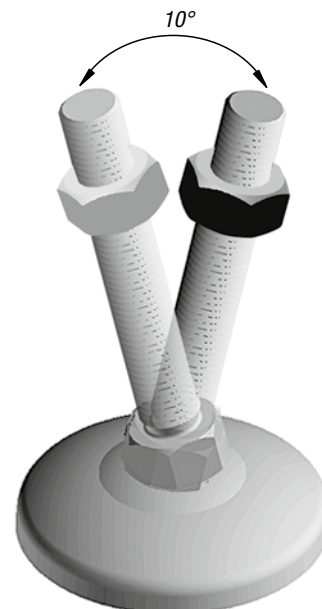


### Assembly:

Place levelling foot plate on threaded spindle and press pin in up to collar (threaded spindle cannot be inadvertently removed from plate).



Inclination angle of threaded spindle:



### Note for ordering:

If the levelling foot plate and the threaded spindle are to be supplied assembled, please add the suffix **"assembled"** to the order number for the plate and spindle (see sample order on the relevant product page).

# Levelling feet ECO threaded spindles

steel or stainless steel



**Material:**  
Steel or 1.4305 stainless steel

**Version:**  
Steel trivalent blue passivated.  
Stainless steel, bright.

**Sample order:**  
K0429.101201  
K0429.101201 and K0428.10301 **assembled**

**Note for ordering:**  
If the threaded spindle and the levelling foot plate are to be supplied assembled, please add the suffix "**assembled**" to the order number for the spindle and plate.  
(e.g. K0429.080251 and K0428.10301 **assembled**.)

**Note:**  
ECO levelling feet consist of a threaded spindle and a plate. Any threaded spindle can be combined with any plate.

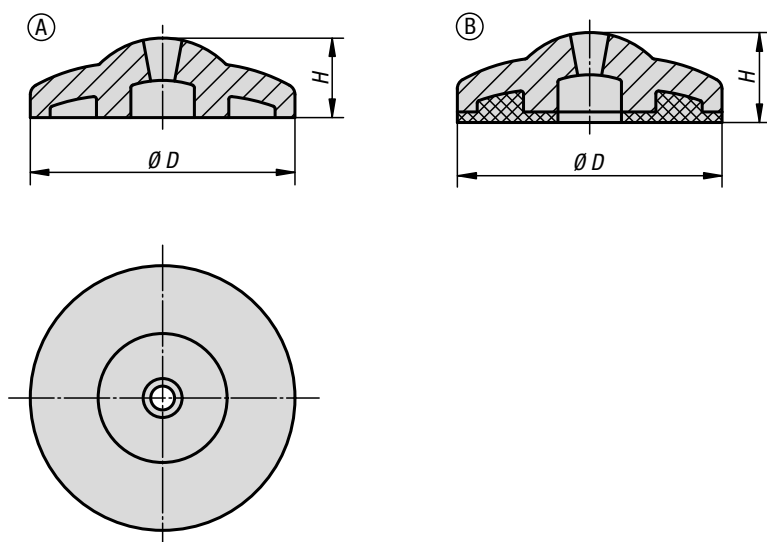


## KIPP Levelling feet ECO threaded spindles steel or stainless steel

| Order No.<br>steel | Order No.<br>stainless steel | D1  | L   | L1    | SW | Load rating<br>max. kN |
|--------------------|------------------------------|-----|-----|-------|----|------------------------|
| K0429.080251       | K0429.080252                 | M8  | 25  | 29,5  | 13 | 3,5                    |
| K0429.080401       | K0429.080402                 | M8  | 40  | 44,5  | 13 | 3,5                    |
| K0429.080501       | K0429.080502                 | M8  | 50  | 54,5  | 13 | 3,5                    |
| K0429.080701       | K0429.080702                 | M8  | 70  | 74,5  | 13 | 3,5                    |
| K0429.080801       | K0429.080802                 | M8  | 80  | 84,5  | 13 | 3,5                    |
| K0429.081001       | K0429.081002                 | M8  | 100 | 104,5 | 13 | 3,5                    |
| K0429.081201       | K0429.081202                 | M8  | 120 | 124,5 | 13 | 3,5                    |
| K0429.100251       | K0429.100252                 | M10 | 25  | 30    | 17 | 4,7                    |
| K0429.100401       | K0429.100402                 | M10 | 40  | 45    | 17 | 4,7                    |
| K0429.100501       | K0429.100502                 | M10 | 50  | 55    | 17 | 4,7                    |
| K0429.100701       | K0429.100702                 | M10 | 70  | 75    | 17 | 4,7                    |
| K0429.100801       | K0429.100802                 | M10 | 80  | 85    | 17 | 4,7                    |
| K0429.101001       | K0429.101002                 | M10 | 100 | 105   | 17 | 4,7                    |
| K0429.101201       | K0429.101202                 | M10 | 120 | 125   | 17 | 4,7                    |
| K0429.120251       | K0429.120252                 | M12 | 25  | 31    | 19 | 7,7                    |
| K0429.120401       | K0429.120402                 | M12 | 40  | 46    | 19 | 7,7                    |
| K0429.120501       | K0429.120502                 | M12 | 50  | 56    | 19 | 7,7                    |
| K0429.120701       | K0429.120702                 | M12 | 70  | 76    | 19 | 7,7                    |
| K0429.120801       | K0429.120802                 | M12 | 80  | 86    | 19 | 7,7                    |
| K0429.121001       | K0429.121002                 | M12 | 100 | 106   | 19 | 7,7                    |
| K0429.121201       | K0429.121202                 | M12 | 120 | 126   | 19 | 7,7                    |
| K0429.160501       | K0429.160502                 | M16 | 50  | 58,5  | 24 | 14,5                   |
| K0429.161001       | K0429.161002                 | M16 | 100 | 108,5 | 24 | 14,5                   |
| K0429.161501       | K0429.161502                 | M16 | 150 | 158,5 | 24 | 14,5                   |

## Levelling feet plates ECO

die-cast zinc, stainless steel or plastic



### Material:

Plate thermoplastic, die-cast zinc or stainless steel 1.4305.

Anti-slip plate thermoplastic elastomer.

### Version:

Thermoplastic plate black.

Die-cast zinc plate blue electro zinc-plated.

Stainless steel plate bright.

### Sample order:

K0428.10303

K0428.10303 and K0429.080801 **assembled**

### Note for ordering:

If the levelling foot plate and the threaded spindle are to be supplied assembled, please add the suffix "**assembled**" to the order number for the plate and spindle.

(e.g. K0428.10303 and K0429.080801 "**assembled**".)

### Note:

ECO levelling feet consist of a plate and a threaded spindle. Any plate can be combined with any threaded spindle.

The anti-slip plate absorbs vibrations and prevents the levelling foot slipping.

For matching threaded spindles see K0429.

### Drawing reference:

Form A without anti-slip plate

Form B with anti-slip plate

## KIPP Levelling feet plates ECO die-cast zinc

| Order No.   | Form | D  | H    | Load rating<br>max. kN |
|-------------|------|----|------|------------------------|
| K0428.10301 | A    | 30 | 11,5 | 16                     |
| K0428.10401 | A    | 40 | 12   | 18                     |
| K0428.10501 | A    | 50 | 14,5 | 20                     |
| K0428.20301 | B    | 30 | 13,5 | 16                     |
| K0428.20401 | B    | 40 | 14,5 | 18                     |
| K0428.20501 | B    | 50 | 17,5 | 20                     |

# Levelling feet plates ECO

die-cast zinc, stainless steel or plastic



## KIPP Levelling feet plates ECO stainless steel

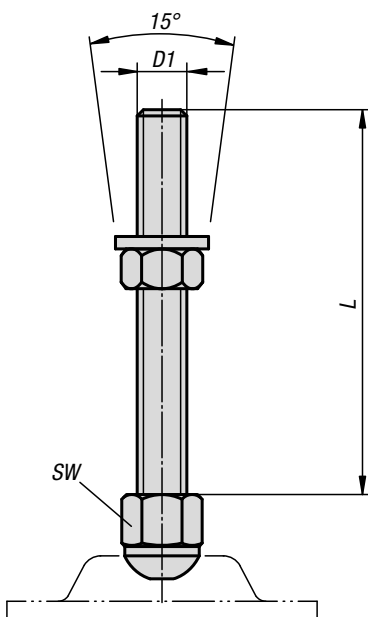
| Order No.   | Form | D  | H    | Load rating<br>max. kN |
|-------------|------|----|------|------------------------|
| K0428.10302 | A    | 30 | 11,5 | 22                     |
| K0428.10402 | A    | 40 | 12   | 24                     |
| K0428.10502 | A    | 50 | 14,5 | 26                     |
| K0428.20302 | B    | 30 | 13,5 | 22                     |
| K0428.20402 | B    | 40 | 14,5 | 24                     |
| K0428.20502 | B    | 50 | 17,5 | 26                     |

## KIPP Levelling feet plates ECO plastic

| Order No.   | Form | D  | H    | Load rating<br>max. kN |
|-------------|------|----|------|------------------------|
| K0428.10303 | A    | 30 | 11,5 | 15                     |
| K0428.10403 | A    | 40 | 12   | 15                     |
| K0428.10503 | A    | 50 | 14,5 | 15                     |
| K0428.20303 | B    | 30 | 13,5 | 15                     |
| K0428.20403 | B    | 40 | 14,5 | 15                     |
| K0428.20503 | B    | 50 | 17,5 | 15                     |

## Levelling feet threaded spindles

steel or stainless steel



### Material:

Steel or stainless steel 1.4301.

### Version:

Steel electro zinc-plated.

Stainless steel bright.

### Sample order:

K0669.080501

K0669.080501 and K0672.10801 **assembled**

### Note for ordering:

If the levelling foot plate and the threaded spindle are to be supplied assembled, please add the suffix "**assembled**" to the order number for the plate and spindle.

(e.g. K0669.080501 and K0672.10801 **assembled**).

### Note:

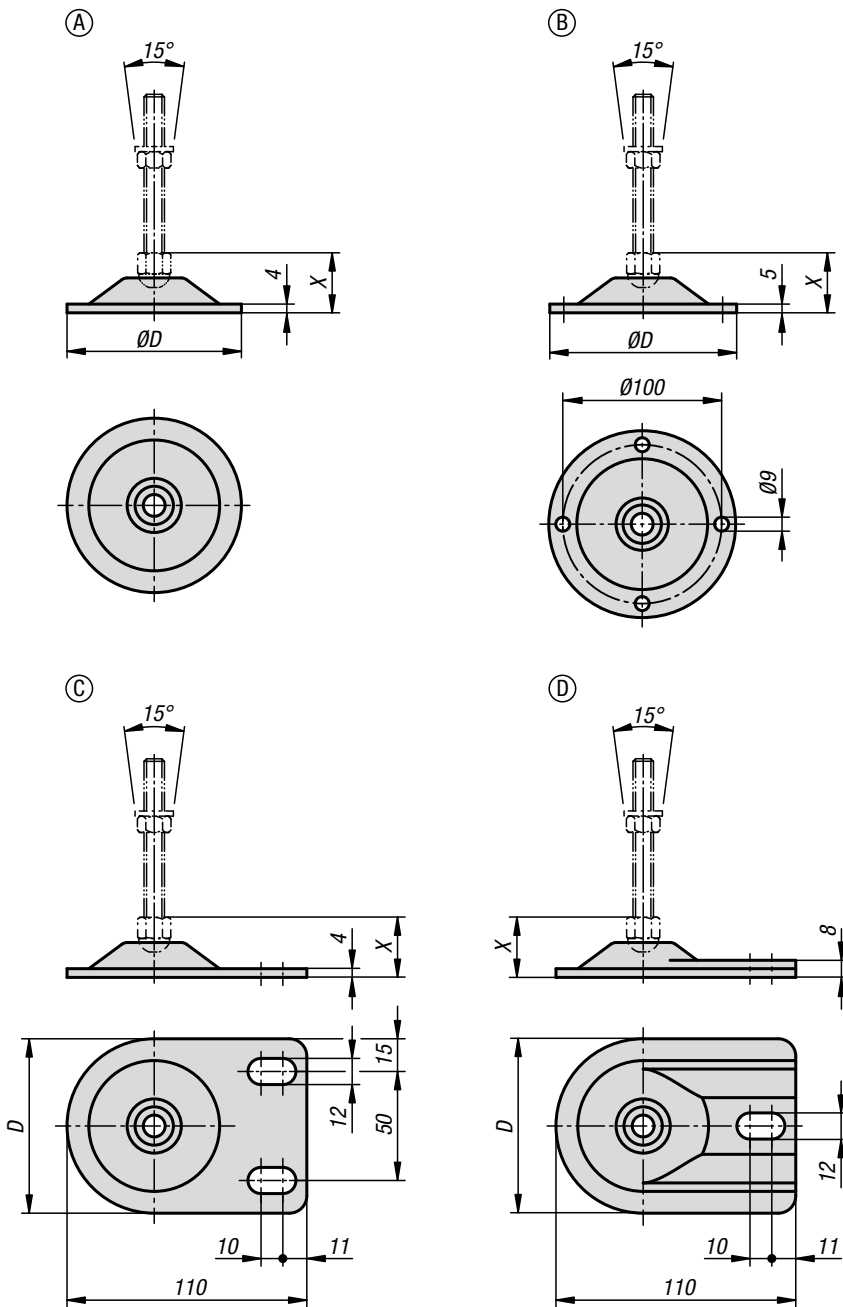
Levelling feet consist of a plate and a threaded spindle. Any threaded spindle can be combined with any plate.

## KIPP Levelling feet threaded spindles steel or stainless steel

| Order No.<br>steel | Order No.<br>stainless steel | D1  | L   | SW | Load rating<br>max. kN |
|--------------------|------------------------------|-----|-----|----|------------------------|
| K0669.080501       | K0669.080502                 | M8  | 50  | 17 | 40                     |
| K0669.080801       | K0669.080802                 | M8  | 80  | 17 | 40                     |
| K0669.081001       | K0669.081002                 | M8  | 100 | 17 | 40                     |
| K0669.081201       | K0669.081202                 | M8  | 120 | 17 | 40                     |
| K0669.081501       | K0669.081502                 | M8  | 150 | 17 | 40                     |
| K0669.100501       | K0669.100502                 | M10 | 50  | 17 | 40                     |
| K0669.100801       | K0669.100802                 | M10 | 80  | 17 | 40                     |
| K0669.101001       | K0669.101002                 | M10 | 100 | 17 | 40                     |
| K0669.101201       | K0669.101202                 | M10 | 120 | 17 | 40                     |
| K0669.101501       | K0669.101502                 | M10 | 150 | 17 | 40                     |
| K0669.120501       | K0669.120502                 | M12 | 50  | 19 | 40                     |
| K0669.120801       | K0669.120802                 | M12 | 80  | 19 | 40                     |
| K0669.121001       | K0669.121002                 | M12 | 100 | 19 | 40                     |
| K0669.121201       | K0669.121202                 | M12 | 120 | 19 | 40                     |
| K0669.121501       | K0669.121502                 | M12 | 150 | 19 | 40                     |
| K0669.160501       | K0669.160502                 | M16 | 50  | 24 | 40                     |
| K0669.160801       | K0669.160802                 | M16 | 80  | 24 | 40                     |
| K0669.161001       | K0669.161002                 | M16 | 100 | 24 | 40                     |
| K0669.161201       | K0669.161202                 | M16 | 120 | 24 | 40                     |
| K0669.161501       | K0669.161502                 | M16 | 150 | 24 | 40                     |
| K0669.200501       | K0669.200502                 | M20 | 50  | 30 | 40                     |
| K0669.200801       | K0669.200802                 | M20 | 80  | 30 | 40                     |
| K0669.201001       | K0669.201002                 | M20 | 100 | 30 | 40                     |
| K0669.201201       | K0669.201202                 | M20 | 120 | 30 | 40                     |
| K0669.201501       | K0669.201502                 | M20 | 150 | 30 | 40                     |

# Levelling foot plates

steel or stainless steel



①  
A, C, D: M8/M10 = 31 mm  
M12 = 32 mm  
M16 = 36 mm  
M20 = 39 mm

B: M8/M10 = 46 mm  
M12 = 48 mm  
M16 = 51 mm  
M20 = 54 mm



## Material:

Plate steel or stainless steel 1.4301.

## Version:

Steel chrome-plated.

Stainless steel polished.

## Sample order:

K0672.10801 K0672.10801 and K0669.080501  
**assembled**

## Note for ordering:

If the levelling foot plate and the threaded spindle are to be supplied assembled, please add the suffix “**assembled**” to the order number for the plate and spindle  
(e.g. K0672.10801 and K0669.080501 **assembled**).

## Note:

Levelling feet consist of a plate and a threaded spindle.  
Any plate can be combined with any threaded spindle.  
For matching threaded spindles, see K0669.

## Drawing reference:

1) X with spindle size:



## KIPP Levelling feet plates steel or stainless steel

| Order No.<br>steel | Order No.<br>stainless steel | Form | D   | Load rating<br>max. kN |
|--------------------|------------------------------|------|-----|------------------------|
| K0672.10801        | K0672.10802                  | A    | 80  | 20                     |
| K0672.21251        | K0672.21252                  | B    | 125 | 40                     |
| K0672.30801        | K0672.30802                  | C    | 80  | 20                     |
| K0672.40801        | K0672.40802                  | D    | 80  | 20                     |

## Levelling foot plates with rubber base

steel or stainless steel



### Material:

Plate steel or stainless steel 1.4301.  
Rubber base NBR, Shore 70A.

### Version:

Steel chromed.  
Stainless steel polished.

### Sample order:

K0673.10801  
K0673.10801 and K0669.080501 **assembled**

### Note for ordering:

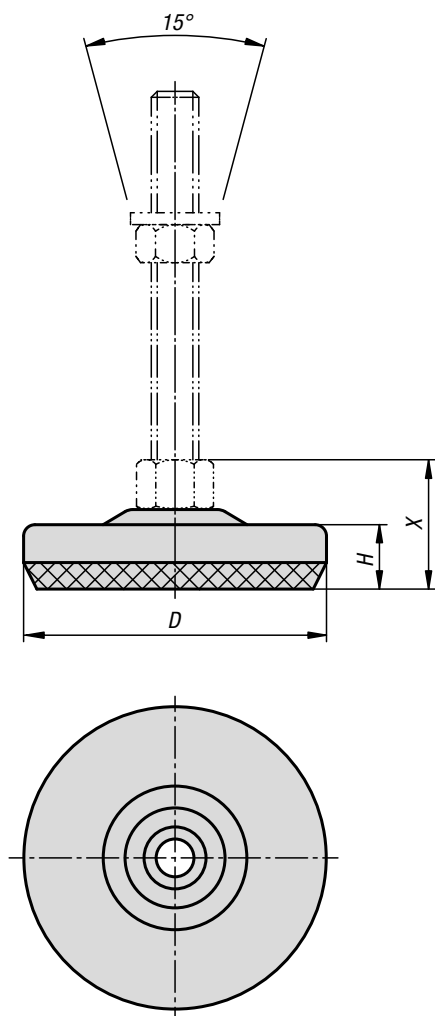
If the levelling foot plate and the threaded spindle are to be supplied assembled, please add the suffix "**assembled**" to the order number for the plate and spindle (e.g. K0673.10801 and K0669.080501 **assembled**).

### Note:

Levelling feet consist of a plate and a threaded spindle. Any plate can be combined with any threaded spindle. For matching threaded spindles see K0669.

### Drawing reference:

1) X with spindle size:



D = 80 :

①

M8/M10 = 37 mm  
M12 = 38 mm  
M16 = 42 mm  
M20 = 45 mm

D = 100 :

①

M8/M10 = 39 mm  
M12 = 40 mm  
M16 = 44 mm  
M20 = 47 mm

## KIPP Levelling foot plates with rubber base steel or stainless steel

| Order No.<br>steel | Order No.<br>stainless steel | D   | H  | Load rating<br>max. kN |
|--------------------|------------------------------|-----|----|------------------------|
| K0673.10801        | K0673.10802                  | 80  | 17 | 8,5                    |
| K0673.11001        | K0673.11002                  | 100 | 19 | 20                     |



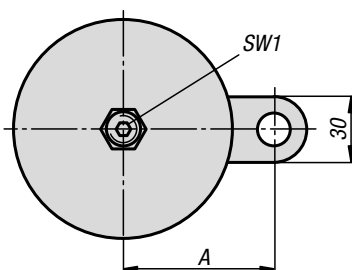
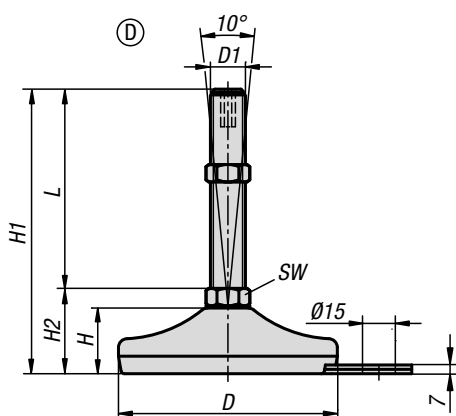
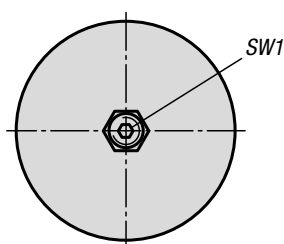
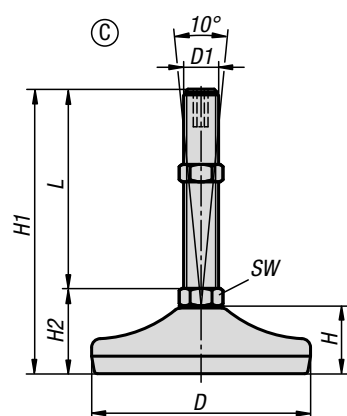
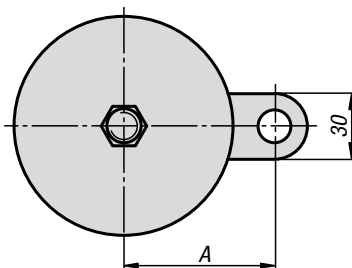
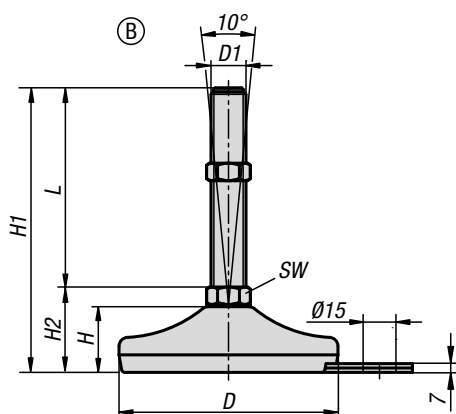
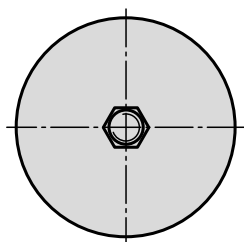
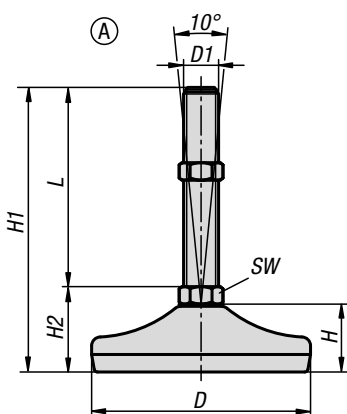
A large rectangular area filled with a light gray grid pattern, intended for handwritten notes.





# Levelling feet

steel or stainless steel



## Material:

Foot plate and threaded spindle steel or stainless steel.  
Rubber support (NBR) 80 Shore.

## Version:

Foot plate and threaded spindle electro zinc-plated steel.  
Foot plate polished stainless steel.  
Threaded spindle bright stainless steel.  
Rubber support, vulcanised, black.

## Sample order:

K0739.1108010X50  
(include length L)

## Note:

Levelling feet steel or stainless steel with pivoting threaded spindle and rubber base. The solid rubber base is permanently vulcanised to the sheet metal plate. The rubber base has an excellent surface grip. It is sound damping and impedes transmission of vibrations and impacts to the floor.

The load values specified in the table are based on a test series, in which a static load was applied perpendicular to the plates through the centre of the spindle. Radially acting forces such as those produced by vibrations or other shaking effects, affect the load rating and are not taken into account for the specified values.

For stainless steel feet from spindle size M16, the wrench sizes apply across two flats.

Supplied with matching nut.

## KIPP Form A

| Order No.      | Form | Main material   | D   | D1  | H  | H1    | H2   | SW | L                          | Load rating<br>max. kN<br>(static load only) |
|----------------|------|-----------------|-----|-----|----|-------|------|----|----------------------------|----------------------------------------------|
| K0739.1105010X | A    | steel           | 50  | M10 | 19 | 79    | 29   | 14 | 50/100                     | 4                                            |
| K0739.1105012X | A    | steel           | 50  | M12 | 19 | 79    | 29   | 14 | 50/100/150                 | 4                                            |
| K0739.1106010X | A    | steel           | 60  | M10 | 22 | 82    | 32   | 14 | 50/100                     | 7                                            |
| K0739.1106012X | A    | steel           | 60  | M12 | 22 | 82    | 32   | 14 | 50/100/150                 | 7                                            |
| K0739.1108010X | A    | steel           | 80  | M10 | 25 | 85    | 35   | 14 | 50/100                     | 10                                           |
| K0739.1108012X | A    | steel           | 80  | M12 | 25 | 85    | 35   | 14 | 50/100/150                 | 10                                           |
| K0739.1108014X | A    | steel           | 80  | M14 | 25 | 85    | 35   | 14 | 50/100/150                 | 10                                           |
| K0739.1108016X | A    | steel           | 80  | M16 | 25 | 135   | 35   | 16 | 100/150                    | 10                                           |
| K0739.1108020X | A    | steel           | 80  | M20 | 25 | 111   | 36   | 20 | 75/100/150/200             | 10                                           |
| K0739.1110020X | A    | steel           | 100 | M20 | 28 | 113,5 | 38,5 | 20 | 75/100/150/200/250         | 15                                           |
| K0739.1110024X | A    | steel           | 100 | M24 | 28 | 138,5 | 38,5 | 24 | 100/150/200/250            | 15                                           |
| K0739.1112020X | A    | steel           | 120 | M20 | 32 | 142,5 | 42,5 | 20 | 100/150/200                | 30                                           |
| K0739.1112024X | A    | steel           | 120 | M24 | 32 | 142,5 | 42,5 | 24 | 100/150/200                | 30                                           |
| K0739.1112030X | A    | steel           | 120 | M30 | 32 | 143,5 | 43,5 | 30 | 100/150/200                | 30                                           |
| K0739.1205010X | A    | stainless steel | 50  | M10 | 19 | 79    | 29   | 14 | 50/100                     | 4                                            |
| K0739.1205012X | A    | stainless steel | 50  | M12 | 19 | 79    | 29   | 14 | 50/100/150                 | 4                                            |
| K0739.1206010X | A    | stainless steel | 60  | M10 | 22 | 82    | 32   | 14 | 50/100                     | 7                                            |
| K0739.1206012X | A    | stainless steel | 60  | M12 | 22 | 82    | 32   | 14 | 50/100/150                 | 7                                            |
| K0739.1208010X | A    | stainless steel | 80  | M10 | 25 | 85    | 35   | 14 | 50/75/100/125              | 10                                           |
| K0739.1208012X | A    | stainless steel | 80  | M12 | 25 | 85    | 35   | 14 | 50/75/100/125/150          | 10                                           |
| K0739.1208014X | A    | stainless steel | 80  | M14 | 25 | 110   | 35   | 14 | 75/100/125/150/175         | 10                                           |
| K0739.1208016X | A    | stainless steel | 80  | M16 | 25 | 110   | 35   | 13 | 75/100/125/150/175         | 10                                           |
| K0739.1208020X | A    | stainless steel | 80  | M20 | 25 | 113   | 38   | 17 | 75/100/125/150/175/200/225 | 10                                           |
| K0739.1210020X | A    | stainless steel | 100 | M20 | 30 | 118   | 43   | 17 | 75/100/125/150/175/200     | 15                                           |
| K0739.1210024X | A    | stainless steel | 100 | M24 | 30 | 144   | 44   | 20 | 100/125/150/175/200        | 15                                           |
| K0739.1212020X | A    | stainless steel | 120 | M20 | 32 | 143   | 43   | 17 | 100/150/200                | 30                                           |
| K0739.1212024X | A    | stainless steel | 120 | M24 | 32 | 144   | 44   | 20 | 100/150/200                | 30                                           |
| K0739.1212030X | A    | stainless steel | 120 | M30 | 32 | 147   | 47   | 26 | 100/150/200                | 30                                           |

## KIPP Form B with fastening tab

| Order No.      | Form | Main material   | A  | D   | D1  | H  | H1    | H2   | SW | L                          | Load rating<br>max. kN<br>(static load only) |
|----------------|------|-----------------|----|-----|-----|----|-------|------|----|----------------------------|----------------------------------------------|
| K0739.2106010X | B    | steel           | 45 | 60  | M10 | 22 | 82    | 32   | 14 | 50/100                     | 7                                            |
| K0739.2106012X | B    | steel           | 45 | 60  | M12 | 22 | 82    | 32   | 14 | 50/100/150                 | 7                                            |
| K0739.2108010X | B    | steel           | 54 | 80  | M10 | 25 | 85    | 35   | 14 | 50/100                     | 10                                           |
| K0739.2108012X | B    | steel           | 54 | 80  | M12 | 25 | 85    | 35   | 14 | 50/100/150                 | 10                                           |
| K0739.2108014X | B    | steel           | 54 | 80  | M14 | 25 | 85    | 35   | 14 | 50/100/150                 | 10                                           |
| K0739.2108016X | B    | steel           | 54 | 80  | M16 | 25 | 135   | 35   | 16 | 100/150                    | 10                                           |
| K0739.2108020X | B    | steel           | 54 | 80  | M20 | 25 | 111   | 36   | 20 | 75/100/150/200             | 10                                           |
| K0739.2110020X | B    | steel           | 69 | 100 | M20 | 28 | 113,5 | 38,5 | 20 | 75/100/150/200/250         | 15                                           |
| K0739.2110024X | B    | steel           | 69 | 100 | M24 | 28 | 138,5 | 38,5 | 24 | 100/150/200/250            | 15                                           |
| K0739.2206010X | B    | stainless steel | 45 | 60  | M10 | 22 | 82    | 32   | 14 | 50/100                     | 7                                            |
| K0739.2206012X | B    | stainless steel | 45 | 60  | M12 | 22 | 82    | 32   | 14 | 50/100/150                 | 7                                            |
| K0739.2208010X | B    | stainless steel | 54 | 80  | M10 | 25 | 85    | 35   | 14 | 50/75/100/125              | 10                                           |
| K0739.2208012X | B    | stainless steel | 54 | 80  | M12 | 25 | 85    | 35   | 14 | 50/75/100/125/150          | 10                                           |
| K0739.2208014X | B    | stainless steel | 54 | 80  | M14 | 25 | 110   | 35   | 14 | 75/100/125/150/175         | 10                                           |
| K0739.2208016X | B    | stainless steel | 54 | 80  | M16 | 25 | 110   | 35   | 13 | 75/100/125/150/175         | 10                                           |
| K0739.2208020X | B    | stainless steel | 54 | 80  | M20 | 25 | 113   | 38   | 17 | 75/100/125/150/175/200/225 | 10                                           |
| K0739.2210020X | B    | stainless steel | 69 | 100 | M20 | 30 | 118   | 43   | 17 | 75/100/125/150/175/200     | 15                                           |
| K0739.2210024X | B    | stainless steel | 69 | 100 | M24 | 30 | 144   | 44   | 20 | 100/125/150/175/200        | 15                                           |

# Levelling feet

steel or stainless steel



## KIPP Form C with hexagon socket

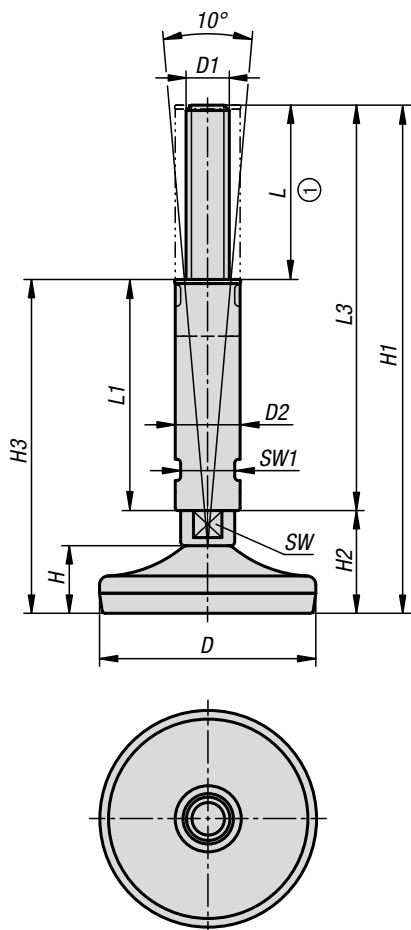
| Order No.      | Form | Main material   | D   | D1  | H  | H1    | H2   | SW | SW1 | L                  | Load rating<br>max. kN<br>(static load only) |
|----------------|------|-----------------|-----|-----|----|-------|------|----|-----|--------------------|----------------------------------------------|
| K0739.3105010X | C    | steel           | 50  | M10 | 19 | 79    | 29   | 14 | 5   | 50                 | 4                                            |
| K0739.3105012X | C    | steel           | 50  | M12 | 19 | 79    | 29   | 14 | 6   | 50/100             | 4                                            |
| K0739.3105016X | C    | steel           | 50  | M16 | 19 | 104   | 29   | 16 | 8   | 75/100/150         | 4                                            |
| K0739.3106010X | C    | steel           | 60  | M10 | 22 | 82    | 32   | 14 | 5   | 50                 | 7                                            |
| K0739.3106012X | C    | steel           | 60  | M12 | 22 | 82    | 32   | 14 | 6   | 50/100             | 7                                            |
| K0739.3106016X | C    | steel           | 60  | M16 | 22 | 108   | 33   | 16 | 8   | 75/100/150         | 7                                            |
| K0739.3108016X | C    | steel           | 80  | M16 | 25 | 135   | 35   | 16 | 8   | 100/150            | 10                                           |
| K0739.3108020X | C    | steel           | 80  | M20 | 25 | 111   | 36   | 20 | 10  | 75                 | 10                                           |
| K0739.3110020X | C    | steel           | 100 | M20 | 28 | 138,5 | 38,5 | 20 | 10  | 100/150            | 15                                           |
| K0739.3110024X | C    | steel           | 100 | M24 | 28 | 238,5 | 38,5 | 24 | 10  | 200                | 15                                           |
| K0739.3112020X | C    | steel           | 120 | M20 | 32 | 142,5 | 42,5 | 20 | 10  | 100/150/200        | 30                                           |
| K0739.3112024X | C    | steel           | 120 | M24 | 32 | 142,5 | 42,5 | 24 | 10  | 100/150/200        | 30                                           |
| K0739.3112030X | C    | steel           | 120 | M30 | 32 | 143,5 | 43,5 | 30 | 10  | 100/150/200        | 30                                           |
| K0739.3205010X | C    | stainless steel | 50  | M10 | 19 | 79    | 29   | 14 | 5   | 50                 | 4                                            |
| K0739.3205012X | C    | stainless steel | 50  | M12 | 19 | 79    | 29   | 14 | 6   | 50/100             | 4                                            |
| K0739.3205016X | C    | stainless steel | 50  | M16 | 19 | 104   | 29   | 13 | 8   | 75/100/150/200     | 4                                            |
| K0739.3206010X | C    | stainless steel | 60  | M10 | 22 | 82    | 32   | 14 | 5   | 50                 | 7                                            |
| K0739.3206012X | C    | stainless steel | 60  | M12 | 22 | 82    | 32   | 14 | 6   | 50/100             | 7                                            |
| K0739.3206016X | C    | stainless steel | 60  | M16 | 22 | 108   | 33   | 13 | 8   | 75/100/150/200     | 7                                            |
| K0739.3208016X | C    | stainless steel | 80  | M16 | 25 | 110   | 35   | 13 | 8   | 75/100/125/150/175 | 10                                           |
| K0739.3208020X | C    | stainless steel | 80  | M20 | 25 | 113   | 38   | 17 | 10  | 75/200             | 10                                           |
| K0739.3210020X | C    | stainless steel | 100 | M20 | 30 | 193   | 43   | 17 | 10  | 150                | 15                                           |
| K0739.3212020X | C    | stainless steel | 120 | M20 | 32 | 143   | 43   | 17 | 10  | 100/150/200        | 30                                           |
| K0739.3212024X | C    | stainless steel | 120 | M24 | 32 | 145   | 45   | 20 | 10  | 100/150/200        | 30                                           |
| K0739.3212030X | C    | stainless steel | 120 | M30 | 32 | 147   | 47   | 26 | 10  | 100/150/200        | 30                                           |

## KIPP Form D with hexagon socket and fastening tab

| Order No.      | Form | Main material   | A  | D  | D1  | H  | H1  | H2 | SW | SW1 | L              | Load rating<br>max. kN<br>(static load only) |
|----------------|------|-----------------|----|----|-----|----|-----|----|----|-----|----------------|----------------------------------------------|
| K0739.4106010X | D    | steel           | 45 | 60 | M10 | 22 | 82  | 32 | 14 | 5   | 50             | 7                                            |
| K0739.4106012X | D    | steel           | 45 | 60 | M12 | 22 | 82  | 32 | 14 | 6   | 50/100         | 7                                            |
| K0739.4106016X | D    | steel           | 45 | 60 | M16 | 22 | 108 | 33 | 16 | 8   | 75/100/150/200 | 7                                            |
| K0739.4206010X | D    | stainless steel | 45 | 60 | M10 | 22 | 82  | 32 | 14 | 5   | 50             | 7                                            |
| K0739.4206012X | D    | stainless steel | 45 | 60 | M12 | 22 | 82  | 32 | 14 | 6   | 50/100         | 7                                            |
| K0739.4206016X | D    | stainless steel | 45 | 60 | M16 | 22 | 108 | 33 | 13 | 8   | 75/100/150/200 | 7                                            |

## Levelling feet

stainless steel for sterile areas



### Material:

Foot plate and threaded spindle stainless steel 1.4301.  
Base and seal rubber (EPDM).

### Version:

Foot plate, polished.  
Threaded spindle, bright.  
Rubber base black.  
Rubber seal black.

### Sample order:

K0741.08016X143

### Note:

The levelling foot has an adjustment sleeve which covers the part of the thread. An O-ring is inserted inside the sleeve to prevent dirt from entering.

EPDM complies with the guidelines specified in the USDA documentation for rubber products.

The stainless steel levelling feet for sterile areas received the Equipment Acceptance Certificate of the USDA (US-Department of Agriculture).

The load values specified in the table are based on a test series in which a static load was applied perpendicular to the plates through the centre of the spindle. Radially acting forces such as those produced by vibrations or other shaking effects, affect the load rating and are not taken into account for the specified values.

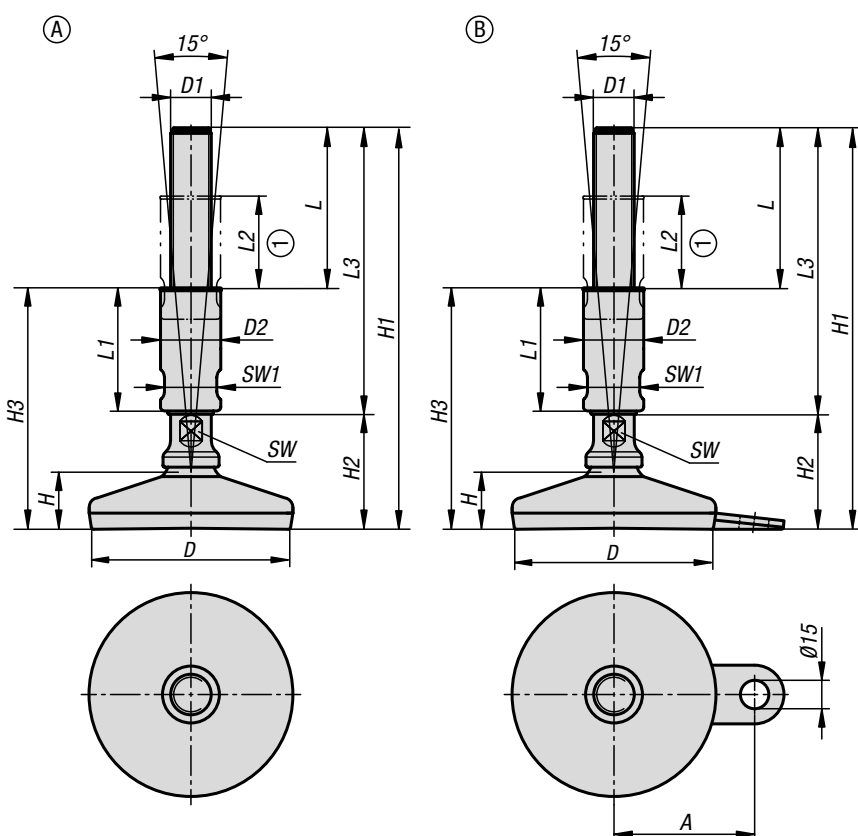
### Drawing reference:

1) Adjustment range

## KIPP Levelling feet stainless steel for sterile areas

| Order No.       | D   | D1  | D2 | H  | H1  | H2 | H3  | L  | L1 | L3  | SW | SW1 | Load rating<br>max. kN<br>(static load only) |
|-----------------|-----|-----|----|----|-----|----|-----|----|----|-----|----|-----|----------------------------------------------|
| K0741.08016X143 | 80  | M16 | 24 | 25 | 188 | 38 | 123 | 65 | 85 | 150 | 17 | 20  | 10                                           |
| K0741.08020X143 | 80  | M20 | 30 | 25 | 188 | 38 | 123 | 65 | 85 | 150 | 17 | 26  | 10                                           |
| K0741.10016X144 | 100 | M16 | 24 | 30 | 193 | 43 | 128 | 65 | 85 | 150 | 17 | 20  | 15                                           |
| K0741.10020X144 | 100 | M20 | 30 | 30 | 193 | 43 | 128 | 65 | 85 | 150 | 17 | 26  | 15                                           |
| K0741.10024X144 | 100 | M24 | 35 | 30 | 194 | 44 | 129 | 65 | 85 | 150 | 20 | 30  | 15                                           |
| K0741.12016X144 | 120 | M16 | 24 | 32 | 195 | 45 | 130 | 65 | 85 | 150 | 17 | 20  | 30                                           |
| K0741.12020X144 | 120 | M20 | 30 | 32 | 195 | 45 | 130 | 65 | 85 | 150 | 17 | 26  | 30                                           |
| K0741.12024X144 | 120 | M24 | 35 | 32 | 196 | 46 | 131 | 65 | 85 | 150 | 20 | 30  | 30                                           |
| K0741.15016X150 | 150 | M16 | 24 | 35 | 198 | 48 | 133 | 65 | 85 | 150 | 17 | 20  | 30                                           |
| K0741.15020X150 | 150 | M20 | 30 | 35 | 198 | 48 | 133 | 65 | 85 | 150 | 17 | 26  | 30                                           |
| K0741.15024X150 | 150 | M24 | 35 | 35 | 199 | 49 | 134 | 65 | 85 | 150 | 20 | 30  | 40                                           |

## Levelling feet in Hygienic DESIGN



### Material:

Foot plate and threaded spindle stainless steel 1.4301.  
Rubber base (NBR) Shore 85 +/-5, FDA tested.  
Rubber seal, silicone, FDA tested.

### Version:

Foot plate, high-gloss polished.  
Threaded spindle, bright.  
Rubber base, black.  
Rubber seal, blue.

### Sample order:

K1303.108016X140  
(include length L3)

### Note:

Certified according to 3-A Sanitary Standard.

The high surface quality, the double sealing of the thread and the special seal on the machine foot's spindle joint prevent dirt from sticking and reduce cleaning times to a minimum.

The machine foot is supplied with the 3-A logo.

### Application:

The machine foot is particularly suitable for machines, plants and appliances in the foodstuff industry, breweries, dairies, beverage and pharmaceutical industries.

### Accessories:

Hygienic USIT® seal and shim washer K1491.  
Hex cap nut with collar K1493.  
Thread cover K1821.

### Drawing reference:

1) Adjustment range

# Levelling feet in Hygienic DESIGN



## KIPP Form A

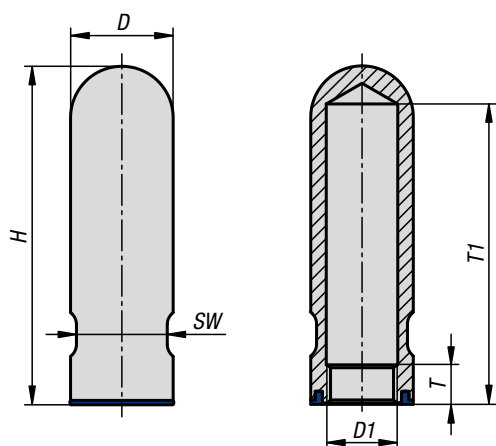
| Order No.     | Form | D   | D1  | D2 | H  | H1      | H2 | H3      | L      | L1    | L2    | L3      | SW | SW1 | Load rating<br>max. kN<br>(static load only) |
|---------------|------|-----|-----|----|----|---------|----|---------|--------|-------|-------|---------|----|-----|----------------------------------------------|
| K1303.106012X | A    | 60  | M12 | 24 | 23 | 191/241 | 51 | 112/137 | 79/104 | 60/85 | 45/70 | 140/190 | 13 | 20  | 10                                           |
| K1303.106016X | A    | 60  | M16 | 24 | 23 | 191/241 | 51 | 112/137 | 79/104 | 60/85 | 45/70 | 140/190 | 13 | 20  | 10                                           |
| K1303.108016X | A    | 80  | M16 | 24 | 25 | 193/243 | 53 | 114/139 | 79/104 | 60/85 | 45/70 | 140/190 | 13 | 20  | 20                                           |
| K1303.108020X | A    | 80  | M20 | 30 | 25 | 193/243 | 53 | 114/139 | 79/104 | 60/85 | 45/70 | 140/190 | 17 | 26  | 20                                           |
| K1303.108024X | A    | 80  | M24 | 35 | 25 | 193/243 | 53 | 114/139 | 79/104 | 60/85 | 45/70 | 140/190 | 20 | 30  | 20                                           |
| K1303.110016X | A    | 100 | M16 | 24 | 28 | 196/246 | 56 | 117/142 | 79/104 | 60/85 | 45/70 | 140/190 | 13 | 20  | 25                                           |
| K1303.110020X | A    | 100 | M20 | 30 | 28 | 196/246 | 56 | 117/142 | 79/104 | 60/85 | 45/70 | 140/190 | 17 | 26  | 25                                           |
| K1303.110024X | A    | 100 | M24 | 35 | 28 | 196/246 | 56 | 117/142 | 79/104 | 60/85 | 45/70 | 140/190 | 20 | 30  | 25                                           |
| K1303.112016X | A    | 120 | M16 | 24 | 32 | 200/250 | 60 | 121/146 | 79/104 | 60/85 | 45/70 | 140/190 | 13 | 20  | 30                                           |
| K1303.112020X | A    | 120 | M20 | 30 | 32 | 200/250 | 60 | 121/146 | 79/104 | 60/85 | 45/70 | 140/190 | 17 | 26  | 30                                           |
| K1303.112024X | A    | 120 | M24 | 35 | 32 | 200/250 | 60 | 121/146 | 79/104 | 60/85 | 45/70 | 140/190 | 20 | 30  | 30                                           |

## KIPP Form B with fastening tab

| Order No.     | Form | A  | D   | D1  | D2 | H  | H1      | H2 | H3      | L      | L1    | L2    | L3      | SW | SW1 | Load rating<br>max. kN<br>(static load only) |
|---------------|------|----|-----|-----|----|----|---------|----|---------|--------|-------|-------|---------|----|-----|----------------------------------------------|
| K1303.206012X | B    | 45 | 60  | M12 | 24 | 23 | 191/241 | 51 | 112/137 | 79/104 | 60/85 | 45/70 | 140/190 | 13 | 20  | 10                                           |
| K1303.206016X | B    | 45 | 60  | M16 | 24 | 23 | 191/241 | 51 | 112/137 | 79/104 | 60/85 | 45/70 | 140/190 | 13 | 20  | 10                                           |
| K1303.208016X | B    | 54 | 80  | M16 | 24 | 25 | 193/243 | 53 | 114/139 | 79/104 | 60/85 | 45/70 | 140/190 | 13 | 20  | 20                                           |
| K1303.208020X | B    | 54 | 80  | M20 | 30 | 25 | 193/243 | 53 | 114/139 | 79/104 | 60/85 | 45/70 | 140/190 | 17 | 26  | 20                                           |
| K1303.208024X | B    | 54 | 80  | M24 | 35 | 25 | 193/243 | 53 | 114/139 | 79/104 | 60/85 | 45/70 | 140/190 | 20 | 30  | 20                                           |
| K1303.210016X | B    | 69 | 100 | M16 | 24 | 28 | 196/246 | 56 | 117/142 | 79/104 | 60/85 | 45/70 | 140/190 | 13 | 20  | 25                                           |
| K1303.210020X | B    | 69 | 100 | M20 | 30 | 28 | 196/246 | 56 | 117/142 | 79/104 | 60/85 | 45/70 | 140/190 | 17 | 26  | 25                                           |
| K1303.210024X | B    | 69 | 100 | M24 | 35 | 28 | 196/246 | 56 | 117/142 | 79/104 | 60/85 | 45/70 | 140/190 | 20 | 30  | 25                                           |

## Thread cover, stainless steel

in Hygienic DESIGN



### Material:

Sleeve stainless steel 1.4301.  
Rubber seal silicon, FDA certified.

### Version:

Sleeve high-gloss polished.  
Rubber seal, blue.

### Sample order:

K1821.1116112

### Note:

Certified according to 3-A Sanitary Standard.  
The thread cover caps protruding male threads and thus protects them from dirt.  
The high surface finish quality prevents dirt from adhering and reduces cleaning times to a minimum.

### Application:

The thread cover is particularly suitable for machines, plants and appliances in the foodstuff, brewery, dairy, beverage and pharmaceutical industries.

### Accessories:

Levelling feet K1303.



## KIPP Thread cover, stainless steel, in Hygienic DESIGN

| Order No.     | D  | D1  | H   | T  | T1  | SW |
|---------------|----|-----|-----|----|-----|----|
| K1821.1112112 | 24 | M12 | 112 | 12 | 102 | 20 |
| K1821.1116112 | 24 | M16 | 112 | 12 | 102 | 20 |
| K1821.1120115 | 30 | M20 | 115 | 12 | 102 | 26 |
| K1821.1124115 | 35 | M24 | 115 | 12 | 102 | 30 |



A large rectangular area filled with a fine grid of light gray lines, intended for taking notes or drawing.





## Swivel feet

steel

**Material:**

Foot plate and threaded spindle steel.  
Anti-slip plate (NBR) 70 Shore.

**Version:**

Foot plate painted yellow.  
Threaded spindle electro zinc-plated.  
Anti-slip plate black.

**Sample order:**

K0742.005010X25  
(include length L)

**Note:**

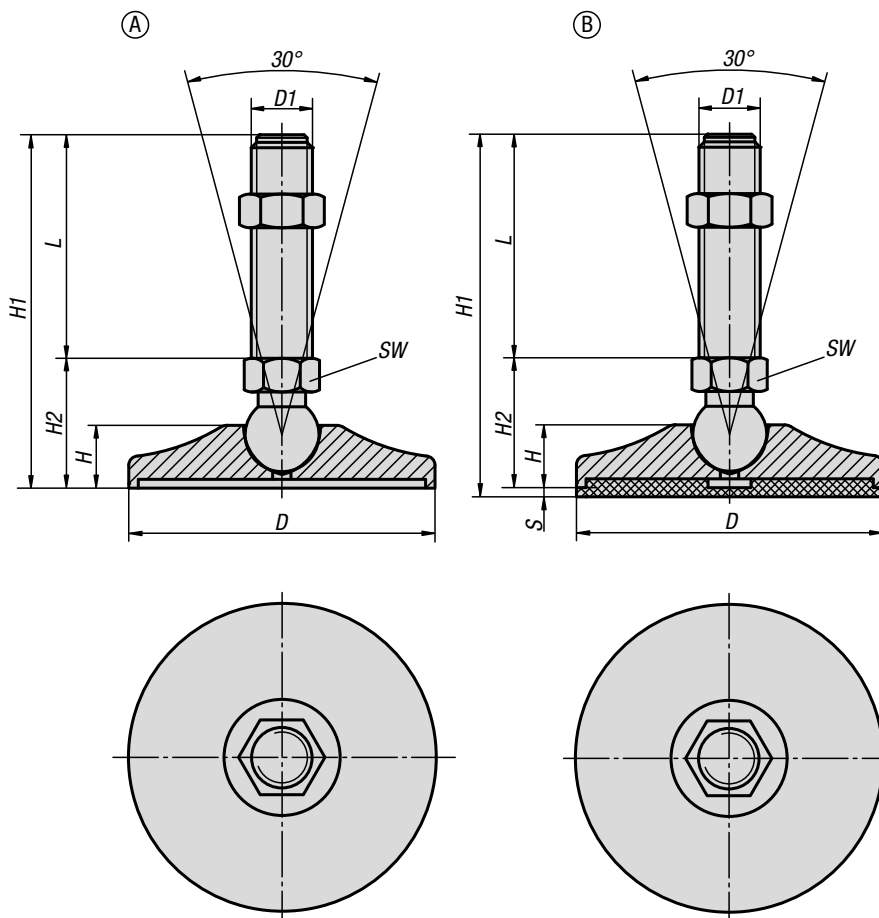
High load rated steel swivel feet with yellow painted plate, optional with an anti-slip plate. The anti-slip plate absorbs vibrations and prevents the swivel foot slipping.

The load values specified in the table are based on a test series, in which a static load was applied perpendicular to the plates through the centre of the spindle. Radially acting forces such as those produced by vibrations or other shaking effects, affect the load rating and are not taken into account for the specified values.

Supplied with matching nut.

**Drawing reference:**

Form A without anti-slip plate  
Form B with anti-slip plate



## Swivel feet

steel

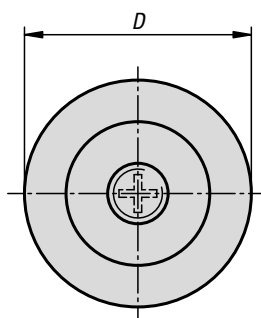
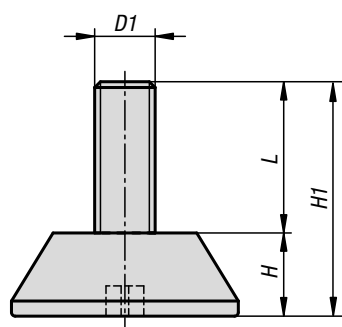


## KIPP Swivel feet, steel

| Order No.<br>Form A | D   | D1  | H    | H1                         | H2 | SW | L                         | Load rating<br>max. kN<br>(static load only) |
|---------------------|-----|-----|------|----------------------------|----|----|---------------------------|----------------------------------------------|
| K0742.005010X       | 50  | M10 | 16   | 53/78/103/128/153          | 28 | 14 | 25/50/75/100/125          | 15                                           |
| K0742.005012X       | 50  | M12 | 16   | 53/78/103/128/153          | 28 | 14 | 25/50/75/100/125          | 15                                           |
| K0742.005014X       | 50  | M14 | 16   | 53/78/103/128/153          | 28 | 14 | 25/50/75/100/125          | 15                                           |
| K0742.006514X       | 65  | M14 | 17   | 80/105/130/155/180         | 30 | 14 | 50/75/100/125/150         | 20                                           |
| K0742.006516X       | 65  | M16 | 17   | 80/105/130/155/180/205     | 30 | 16 | 50/75/100/125/150/175     | 20                                           |
| K0742.008016X       | 80  | M16 | 19,5 | 83/108/133/158/183/208/233 | 33 | 16 | 50/75/100/125/150/175/200 | 30                                           |
| K0742.008020X       | 80  | M20 | 19,5 | 111/136/161/186/211/236    | 36 | 17 | 75/100/125/150/175/200    | 30                                           |
| K0742.010016X       | 100 | M16 | 20   | 93/118/143/168/193/218/243 | 43 | 20 | 50/75/100/125/150/175/200 | 35                                           |
| K0742.010020X       | 100 | M20 | 20   | 118/143/168/193/218/243    | 43 | 20 | 75/100/125/150/175/200    | 45                                           |
| K0742.010024X       | 100 | M24 | 20   | 119/144/169/194/219/244    | 44 | 20 | 75/100/125/150/175/200    | 55                                           |

| Order No.<br>Form B | D   | D1  | H    | H1                         | H2 | S | SW | L                         | Load rating<br>max. kN<br>(static load only) |
|---------------------|-----|-----|------|----------------------------|----|---|----|---------------------------|----------------------------------------------|
| K0742.105010X       | 50  | M10 | 16   | 56/81/106/131/156          | 28 | 3 | 14 | 25/50/75/100/125          | 15                                           |
| K0742.105012X       | 50  | M12 | 16   | 56/81/106/131/156          | 28 | 3 | 14 | 25/50/75/100/125          | 15                                           |
| K0742.105014X       | 50  | M14 | 16   | 56/81/106/131/156          | 28 | 3 | 14 | 25/50/75/100/125          | 15                                           |
| K0742.106514X       | 65  | M14 | 17   | 83/108/133/158/183         | 30 | 3 | 14 | 50/75/100/125/150         | 20                                           |
| K0742.106516X       | 65  | M16 | 17   | 83/108/133/158/183/208     | 30 | 3 | 16 | 50/75/100/125/150/175     | 20                                           |
| K0742.108016X       | 80  | M16 | 19,5 | 86/111/136/161/186/211/236 | 33 | 3 | 16 | 50/75/100/125/150/175/200 | 30                                           |
| K0742.108020X       | 80  | M20 | 19,5 | 114/139/164/189/214/239    | 36 | 3 | 17 | 75/100/125/150/175/200    | 30                                           |
| K0742.110016X       | 100 | M16 | 20   | 96/121/146/171/196/221/246 | 43 | 3 | 20 | 50/75/100/125/150/175/200 | 35                                           |
| K0742.110020X       | 100 | M20 | 20   | 121/146/171/196/221/246    | 43 | 3 | 20 | 75/100/125/150/175/200    | 45                                           |
| K0742.110024X       | 100 | M24 | 20   | 122/147/172/197/222/247    | 44 | 3 | 20 | 75/100/125/150/175/200    | 55                                           |

# Levelling feet round


**Material:**

Polyamide.  
Screw, steel.

**Version:**

Black.  
Screw electro zinc-plated.

**Sample order:**

K0674.3006X020  
(include length L)

**Note:**

Levelling feet with cross slot in the base as assembly aid.  
Rigid version.

## KIPP Levelling feet round

| Order No.   | D  | D1  | H  | H1             | L              | Load rating<br>max. kN<br>(static load only) |
|-------------|----|-----|----|----------------|----------------|----------------------------------------------|
| K0674.3006X | 30 | M6  | 11 | 31/41          | 20/30          | 3                                            |
| K0674.3008X | 30 | M8  | 11 | 27/31/36/41/51 | 16/20/25/30/40 | 3                                            |
| K0674.3010X | 30 | M10 | 11 | 36/41/46       | 25/30/35       | 3                                            |
| K0674.4708X | 47 | M8  | 11 | 27/31/41/51    | 16/20/30/40    | 4                                            |
| K0674.4710X | 47 | M10 | 11 | 31/41/66       | 20/30/55       | 4                                            |

## Levelling feet round

with hex. collar

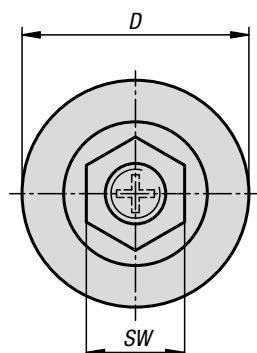
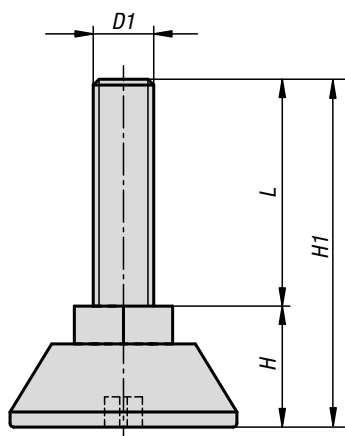


**Material:**  
Polyamide.  
Screw, steel.

**Version:**  
Black.  
Screw electro zinc-plated.

**Sample order:**  
K0675.3006X020  
(include length L)

**Note:**  
Levelling feet with hexagonal collar and cross slot in the base as assembly aid. Rigid version.

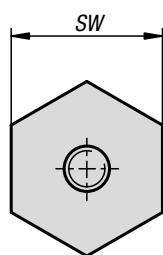
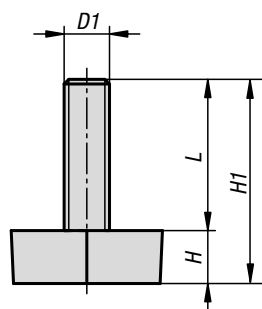


### KIPP Levelling feet round with hex. collar

| Order No.   | D  | D1  | H  | H1             | SW | L              | Load rating<br>max. kN<br>(static load only) |
|-------------|----|-----|----|----------------|----|----------------|----------------------------------------------|
| K0675.3006X | 30 | M6  | 16 | 36/46          | 13 | 20/30          | 3                                            |
| K0675.3008X | 30 | M8  | 16 | 31/36/41/46/56 | 13 | 15/20/25/30/40 | 3                                            |
| K0675.4708X | 47 | M8  | 16 | 31/36/46/56    | 13 | 15/20/30/40    | 4                                            |
| K0675.4710X | 47 | M10 | 16 | 36/46          | 17 | 20/30          | 4                                            |

## Levelling feet

with hex. base



### Material:

Polyethylene.  
Screw, steel.

### Version:

Black.  
Screw electro zinc-plated.

### Sample order:

K0676.2006X020  
(include length L)

### Note:

Levelling feet with hexagonal base. Rigid version.

## KIPP Levelling feet with hex. base

| Order No.   | D1  | H   | H1                  | SW | L           | Load rating<br>max. kN<br>(static load only) |
|-------------|-----|-----|---------------------|----|-------------|----------------------------------------------|
| K0676.2006X | M6  | 7   | 27/37/47/57         | 20 | 20/30/40/50 | 1,5                                          |
| K0676.2008X | M8  | 7   | 27/37/47/57         | 20 | 20/30/40/50 | 3                                            |
| K0676.2506X | M6  | 7,5 | 27,5/37,5/47,5/57,5 | 25 | 20/30/40/50 | 1,5                                          |
| K0676.2508X | M8  | 7,5 | 27,5/37,5/47,5/57,5 | 25 | 20/30/40/50 | 3                                            |
| K0676.2510X | M10 | 7,5 | 27,5/37,5           | 25 | 20/30       | 4                                            |
| K0676.3008X | M8  | 8   | 28/38/48/58         | 30 | 20/30/40/50 | 3                                            |
| K0676.3010X | M10 | 8   | 28/38               | 30 | 20/30       | 3                                            |

# Levelling feet

with knurled base


**Material:**

Polyamide.  
Screw, steel.

**Version:**

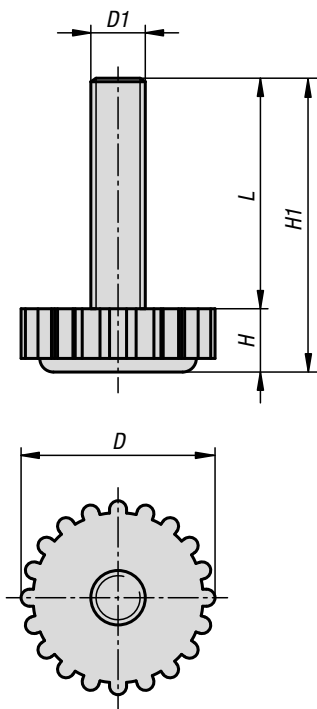
Black.  
Screw electro zinc-plated.

**Sample order:**

K0677.2805X016  
(include length L)

**Note:**

Levelling feet with knurled base. Rigid version.



## KIPP Levelling feet with knurled base

| Order No.   | D    | D1 | H   | H1                                 | L                    | Load rating<br>max. kN<br>(static load only) |
|-------------|------|----|-----|------------------------------------|----------------------|----------------------------------------------|
| K0677.2805X | 28,5 | M5 | 9,3 | 25,3/29,3/34,3/49,3                | 16/20/25/40          | 2                                            |
| K0677.2806X | 28,5 | M6 | 9,3 | 25,3/29,3/39,3/49,3/59,3           | 16/20/30/40/50       | 3,5                                          |
| K0677.2808X | 28,5 | M8 | 9,3 | 25,3/29,3/39,3/49,3/59,3/69,3/89,3 | 16/20/30/40/50/60/80 | 4,5                                          |

## Levelling feet



### Material:

Foot plate and threaded spindle in steel.

### Version:

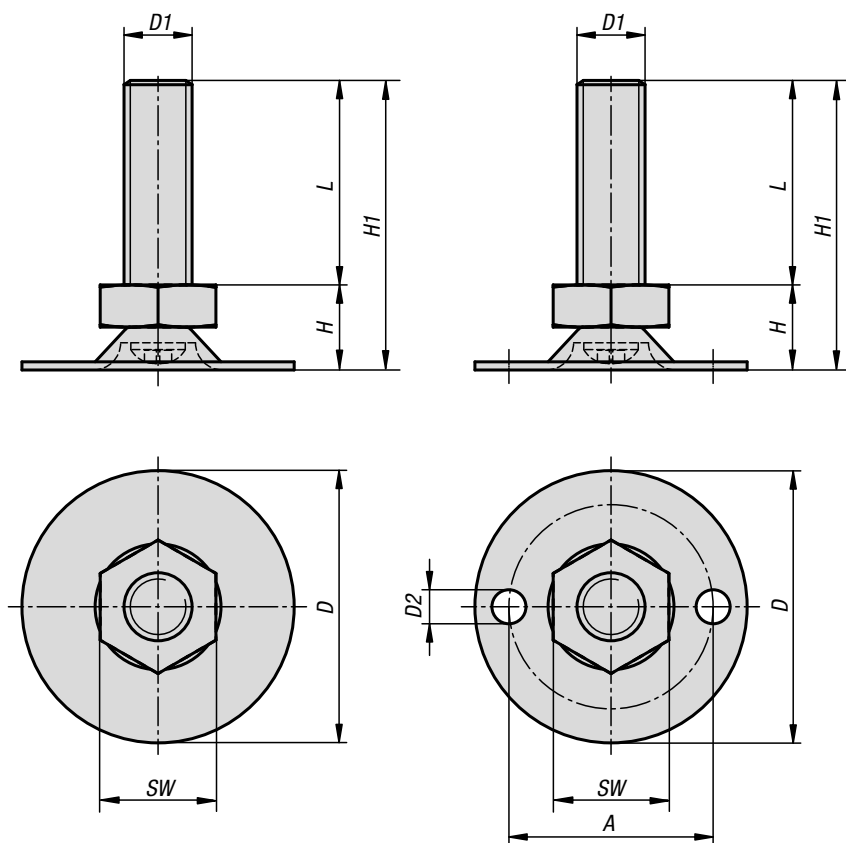
Foot plate and threaded spindle electro zinc-plated.

### Sample order:

K0678.03008X016  
(include length L)

### Note:

The threaded spindle is pressed into the rotatable base.



## KIPP Levelling feet

| Order No.<br>without hole | Order No.<br>with hole | A      | D  | D1  | D2    | H    | H1                            | SW | L                 | Load rating<br>max. kN<br>(static load only) |
|---------------------------|------------------------|--------|----|-----|-------|------|-------------------------------|----|-------------------|----------------------------------------------|
| K0678.03008X              | K0678.13008X           | -/24,3 | 30 | M8  | -/4   | 11   | 27/31/41/51/61                | 13 | 16/20/30/40/50    | 2,5                                          |
| K0678.03010X              | K0678.13010X           | -/24,3 | 30 | M10 | -/4   | 12,5 | 28,5/32,5/42,5/52,5/62,5/72,5 | 17 | 16/20/30/40/50/60 | 3,5                                          |
| K0678.04008X              | K0678.14008X           | -/30   | 40 | M8  | -/5   | 11   | 27/31/41/51/61                | 13 | 16/20/30/40/50    | 2,5                                          |
| K0678.04010X              | K0678.14010X           | -/30   | 40 | M10 | -/5   | 11   | 27/31/41/51/61/71             | 17 | 16/20/30/40/50/60 | 3,5                                          |
| K0678.05008X              | K0678.15008X           | -/35   | 50 | M8  | -/5,5 | 12,5 | 28,5/32,5/42,5/52,5/62,5      | 13 | 16/20/30/40/50    | 2,5                                          |
| K0678.05010X              | K0678.15010X           | -/35   | 50 | M10 | -/5,5 | 14   | 30/34/44/54/64/74             | 17 | 16/20/30/40/50/60 | 3,5                                          |
| K0678.06008X              | K0678.16008X           | -/46   | 60 | M8  | -/5,5 | 13,5 | 29,5/33,5/43,5/53,5/63,5      | 13 | 16/20/30/40/50    | 2,5                                          |
| K0678.06010X              | K0678.16010X           | -/46   | 60 | M10 | -/5,5 | 15   | 31/35/45/55/65/75             | 17 | 16/20/30/40/50/60 | 3,5                                          |

Levelling feet caps

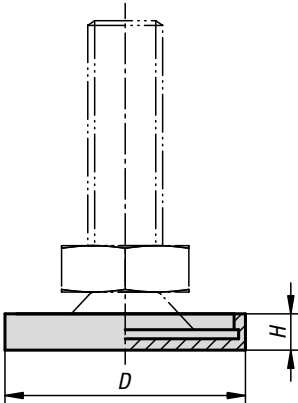


**Material:**  
Polyethylene

**Version:**  
Black.

**Sample order:**  
K0679.1030

**Note:**  
The caps protect the surface against scratch marks.

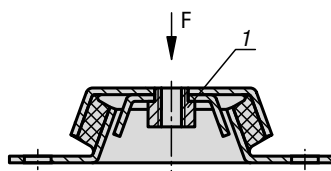
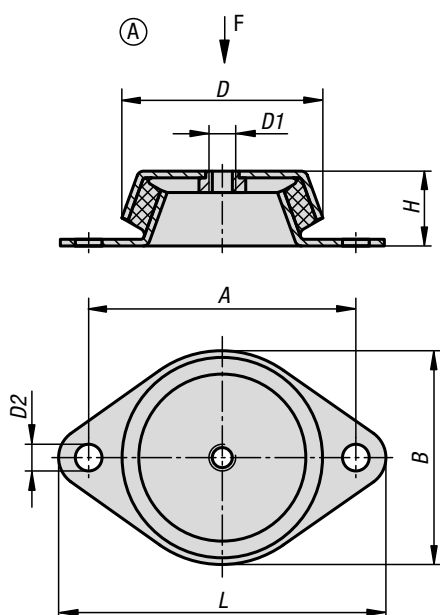


KIPP Levelling feet caps

| Order No.  | for foot plate Ø | D    | H   |
|------------|------------------|------|-----|
| K0679.1030 | 30               | 31,8 | 4,8 |
| K0679.1060 | 60               | 62   | 6,8 |



## Machine feet



### Material:

Metal parts, steel grade 5.6.  
Elastomer, natural rubber,  
medium hardness, Shore 60.

### Version:

Steel electro zinc-plated.

### Sample order:

K0687.062060

### Note:

These machine feet have proven themselves to be universally applicable elements for the elastic support of all types of machine. They are commonly used wherever large horizontal movements are to be avoided. The horizontal rigidity is higher in all directions than the vertical rigidity. If used correctly they are excellent at preventing the transfer of vibration and noise.

Machine feet with shear protection are available for situations where tensile forces are to be expected.

The indicated load data are reference values for static loads by rubber hardness of Shore 60A.

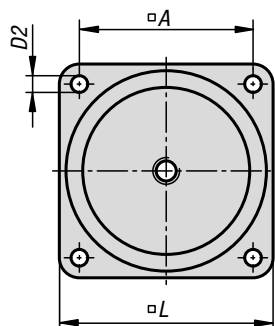
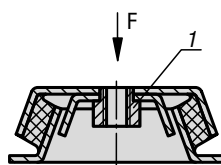
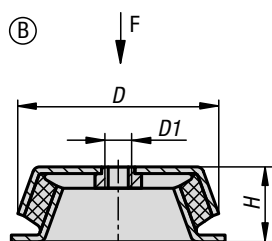
In contrast to those in the drawing, the holes D2 can also be elongated holes.

### On request:

Rubber hardness Shore 40 or 70 A.

### Drawing reference:

1) With shear protection

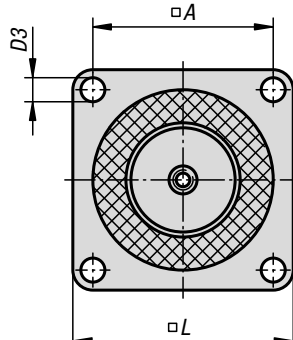
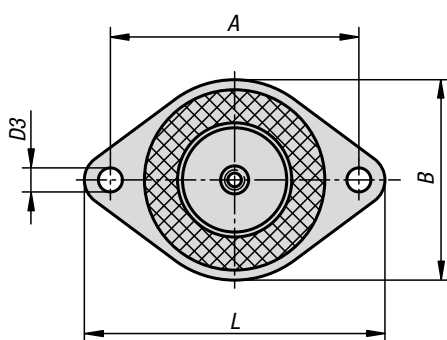
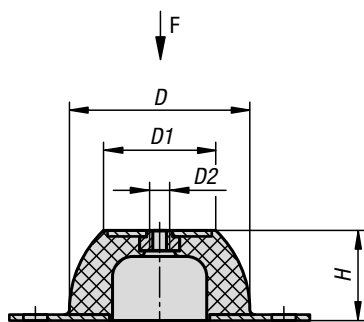


## KIPP Machine feet

| Order No.<br>without shear protection | Order No.<br>with tear protection | Form | A   | B   | D   | D1  | D2   | H  | L   | Load rating<br>max. kN |
|---------------------------------------|-----------------------------------|------|-----|-----|-----|-----|------|----|-----|------------------------|
| K0687.062060                          | K0687.062160                      | A    | 85  | 66  | 62  | M10 | 8,2  | 30 | 110 | 1,5                    |
| K0687.078060                          | K0687.078160                      | A    | 110 | 78  | 78  | M10 | 9    | 30 | 128 | 1,8                    |
| K0687.092060                          | K0687.092160                      | A    | 110 | 96  | 86  | M12 | 10,2 | 45 | 140 | 3                      |
| K0687.106060                          | K0687.106160                      | A    | 140 | 110 | 106 | M12 | 12,4 | 39 | 170 | 3,6                    |
| K0687.150060                          | K0687.150160                      | B    | 132 | -   | 150 | M16 | 12,5 | 51 | 168 | 8                      |

## Cup elements

type H2



K0686.13006360  
K0686.18008560

### Material:

Metal parts, steel, grade 5.6.  
Natural rubber, hardness Shore 40 or 60 A.

### Version:

Steel electro zinc-plated.

### Sample order:

K0686.03502040

### Note:

The cup elements are highly elastic both in radial and in axial direction and therefore offer an outstanding impact isolation.

The special shaping of the cup elements allows isolation of sound and vibrations of machines and assemblies with a low natural frequency. They are especially suitable for supporting sensitive instruments and small devices.

The elements must not be subjected to tensile stress.

### Temperature range:

-30 °C to +80 °C

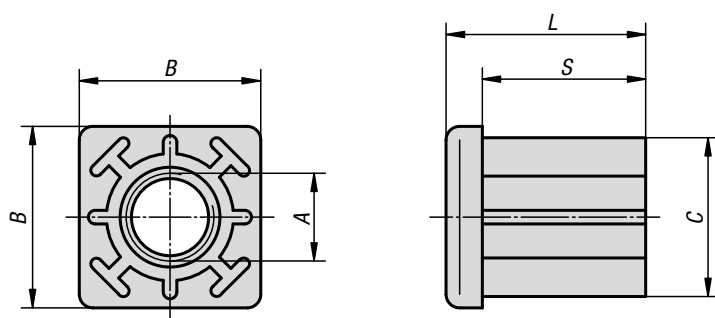


## KIPP Cup elements type H2

| Order No.      | Version   | A   | B   | D   | D1  | D2  | D3   | H  | L   | Load rating<br>max. kN |
|----------------|-----------|-----|-----|-----|-----|-----|------|----|-----|------------------------|
| K0686.03502040 | Shore 40A | 50  | 43  | 35  | 18  | M6  | 7    | 20 | 64  | 0,034                  |
| K0686.05002540 | Shore 40A | 66  | 56  | 50  | 33  | M8  | 8    | 25 | 85  | 0,2                    |
| K0686.07003540 | Shore 40A | 92  | 76  | 70  | 45  | M10 | 10   | 35 | 114 | 0,39                   |
| K0686.08504040 | Shore 40A | 110 | 96  | 85  | 53  | M10 | 11,5 | 40 | 136 | 0,68                   |
| K0686.09004540 | Shore 40A | 124 | 101 | 90  | 58  | M10 | 11,5 | 45 | 151 | 1,28                   |
| K0686.13006340 | Shore 40A | 120 | -   | 130 | 78  | M12 | 14,5 | 63 | 150 | 2,7                    |
| K0686.18008540 | Shore 40A | 160 | -   | 180 | 100 | M16 | 14,5 | 85 | 200 | 3,7                    |
| K0686.03502060 | Shore 60A | 50  | 43  | 35  | 18  | M6  | 7    | 20 | 64  | 0,09                   |
| K0686.05002560 | Shore 60A | 66  | 56  | 50  | 33  | M8  | 8    | 25 | 85  | 0,49                   |
| K0686.07003560 | Shore 60A | 92  | 76  | 70  | 45  | M10 | 10   | 35 | 114 | 0,78                   |
| K0686.08504060 | Shore 60A | 110 | 96  | 85  | 53  | M10 | 11,5 | 40 | 136 | 1,45                   |
| K0686.09004560 | Shore 60A | 124 | 101 | 90  | 58  | M10 | 11,5 | 45 | 151 | 2,15                   |
| K0686.13006360 | Shore 60A | 120 | -   | 130 | 78  | M12 | 14,5 | 63 | 150 | 4,9                    |
| K0686.18008560 | Shore 60A | 160 | -   | 180 | 100 | M16 | 14,5 | 85 | 200 | 7,35                   |

# Tube inserts square

with tapped bush


**Material:**

Body fibreglass reinforced thermoplastic.  
Threaded insert brass.

**Version:**

Insert black.  
Tapped bush nickel-plated.

**Sample order:**

K0430.103015

**Note:**

Threaded square inserts for attaching levelling feet, swivel feet and castors to square tubes.

## KIPP Tube inserts square with tapped bush

| Order No.    | A   | B  | C    | L  | S  | Suitable for square tubes | Load rating max. kN |
|--------------|-----|----|------|----|----|---------------------------|---------------------|
| K0430.103015 | M10 | 30 | 27,5 | 33 | 27 | 30 x 1,5                  | 5                   |
| K0430.123015 | M12 | 30 | 27,5 | 33 | 27 | 30 x 1,5                  | 5                   |
| K0430.143015 | M14 | 30 | 27,5 | 33 | 27 | 30 x 1,5                  | 5                   |
| K0430.163015 | M16 | 30 | 27,5 | 33 | 27 | 30 x 1,5                  | 5                   |
| K0430.103020 | M10 | 30 | 26,5 | 33 | 27 | 30 x 2                    | 5                   |
| K0430.123020 | M12 | 30 | 26,5 | 33 | 27 | 30 x 2                    | 5                   |
| K0430.143020 | M14 | 30 | 26,5 | 33 | 27 | 30 x 2                    | 5                   |
| K0430.163020 | M16 | 30 | 26,5 | 33 | 27 | 30 x 2                    | 5                   |
| K0430.104015 | M10 | 40 | 37,5 | 43 | 35 | 40 x 1,5                  | 8                   |
| K0430.124015 | M12 | 40 | 37,5 | 43 | 35 | 40 x 1,5                  | 8                   |
| K0430.144015 | M14 | 40 | 37,5 | 43 | 35 | 40 x 1,5                  | 8                   |
| K0430.164015 | M16 | 40 | 37,5 | 43 | 35 | 40 x 1,5                  | 8                   |
| K0430.204015 | M20 | 40 | 37,5 | 43 | 35 | 40 x 1,5                  | 8                   |
| K0430.104020 | M10 | 40 | 36,5 | 43 | 35 | 40 x 2                    | 10                  |
| K0430.124020 | M12 | 40 | 36,5 | 43 | 35 | 40 x 2                    | 10                  |
| K0430.144020 | M14 | 40 | 36,5 | 43 | 35 | 40 x 2                    | 10                  |
| K0430.164020 | M16 | 40 | 36,5 | 43 | 35 | 40 x 2                    | 10                  |
| K0430.204020 | M20 | 40 | 36,5 | 43 | 35 | 40 x 2                    | 10                  |
| K0430.104025 | M10 | 40 | 35,5 | 43 | 35 | 40 x 2,5                  | 10                  |
| K0430.124025 | M12 | 40 | 35,5 | 43 | 35 | 40 x 2,5                  | 10                  |
| K0430.144025 | M14 | 40 | 35,5 | 43 | 35 | 40 x 2,5                  | 10                  |
| K0430.164025 | M16 | 40 | 35,5 | 43 | 35 | 40 x 2,5                  | 10                  |
| K0430.204025 | M20 | 40 | 35,5 | 43 | 35 | 40 x 2,5                  | 10                  |
| K0430.104030 | M10 | 40 | 34,5 | 43 | 35 | 40 x 3                    | 10                  |
| K0430.124030 | M12 | 40 | 34,5 | 43 | 35 | 40 x 3                    | 10                  |
| K0430.144030 | M14 | 40 | 34,5 | 43 | 35 | 40 x 3                    | 10                  |
| K0430.164030 | M16 | 40 | 34,5 | 43 | 35 | 40 x 3                    | 10                  |
| K0430.204030 | M20 | 40 | 34,5 | 43 | 35 | 40 x 3                    | 10                  |

# Tube inserts square

with tapped bush

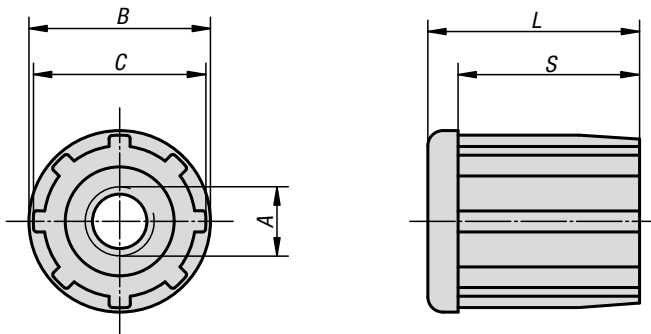


## KIPP Tube inserts square with tapped bush

| Order No.    | A   | B  | C    | L  | S  | Suitable for square tubes | Load rating max. kN |
|--------------|-----|----|------|----|----|---------------------------|---------------------|
| K0430.104040 | M10 | 40 | 32,5 | 43 | 35 | 40 x 4                    | 10                  |
| K0430.124040 | M12 | 40 | 32,5 | 43 | 35 | 40 x 4                    | 10                  |
| K0430.144040 | M14 | 40 | 32,5 | 43 | 35 | 40 x 4                    | 10                  |
| K0430.164040 | M16 | 40 | 32,5 | 43 | 35 | 40 x 4                    | 10                  |
| K0430.204040 | M20 | 40 | 32,5 | 43 | 35 | 40 x 4                    | 10                  |
| K0430.125015 | M12 | 50 | 47,5 | 55 | 44 | 50 x 1,5                  | 8                   |
| K0430.145015 | M14 | 50 | 47,5 | 55 | 44 | 50 x 1,5                  | 8                   |
| K0430.165015 | M16 | 50 | 47,5 | 55 | 44 | 50 x 1,5                  | 8                   |
| K0430.205015 | M20 | 50 | 47,5 | 55 | 44 | 50 x 1,5                  | 8                   |
| K0430.125020 | M12 | 50 | 46,5 | 55 | 44 | 50 x 2                    | 12                  |
| K0430.145020 | M14 | 50 | 46,5 | 55 | 44 | 50 x 2                    | 12                  |
| K0430.165020 | M16 | 50 | 46,5 | 55 | 44 | 50 x 2                    | 12                  |
| K0430.205020 | M20 | 50 | 46,5 | 55 | 44 | 50 x 2                    | 12                  |
| K0430.125025 | M12 | 50 | 45,5 | 55 | 44 | 50 x 2,5                  | 12                  |
| K0430.145025 | M14 | 50 | 45,5 | 55 | 44 | 50 x 2,5                  | 12                  |
| K0430.165025 | M16 | 50 | 45,5 | 55 | 44 | 50 x 2,5                  | 12                  |
| K0430.205025 | M20 | 50 | 45,5 | 55 | 44 | 50 x 2,5                  | 12                  |
| K0430.125030 | M12 | 50 | 44,5 | 55 | 44 | 50 x 3                    | 12                  |
| K0430.145030 | M14 | 50 | 44,5 | 55 | 44 | 50 x 3                    | 12                  |
| K0430.165030 | M16 | 50 | 44,5 | 55 | 44 | 50 x 3                    | 12                  |
| K0430.205030 | M20 | 50 | 44,5 | 55 | 44 | 50 x 3                    | 12                  |
| K0430.125040 | M12 | 50 | 42,5 | 55 | 44 | 50 x 4                    | 12                  |
| K0430.145040 | M14 | 50 | 42,5 | 55 | 44 | 50 x 4                    | 12                  |
| K0430.165040 | M16 | 50 | 42,5 | 55 | 44 | 50 x 4                    | 12                  |
| K0430.205040 | M20 | 50 | 42,5 | 55 | 44 | 50 x 4                    | 12                  |
| K0430.146020 | M14 | 60 | 56,5 | 55 | 45 | 60 x 2                    | 12                  |
| K0430.166020 | M16 | 60 | 56,5 | 55 | 45 | 60 x 2                    | 12                  |
| K0430.206020 | M20 | 60 | 56,5 | 55 | 45 | 60 x 2                    | 12                  |
| K0430.146030 | M14 | 60 | 54,5 | 55 | 45 | 60 x 3                    | 12                  |
| K0430.166030 | M16 | 60 | 54,5 | 55 | 45 | 60 x 3                    | 12                  |
| K0430.206030 | M20 | 60 | 54,5 | 55 | 45 | 60 x 3                    | 12                  |
| K0430.146040 | M14 | 60 | 52,5 | 55 | 45 | 60 x 4                    | 12                  |
| K0430.166040 | M16 | 60 | 52,5 | 55 | 45 | 60 x 4                    | 12                  |
| K0430.206040 | M20 | 60 | 52,5 | 55 | 45 | 60 x 4                    | 12                  |

## Tube inserts round

with tapped bush



### Material:

Body fibreglass reinforced thermoplastic.  
Threaded insert brass.

### Version:

Insert black.  
Tapped bush nickel-plated.

### Sample order:

K0431.103010

### Note:

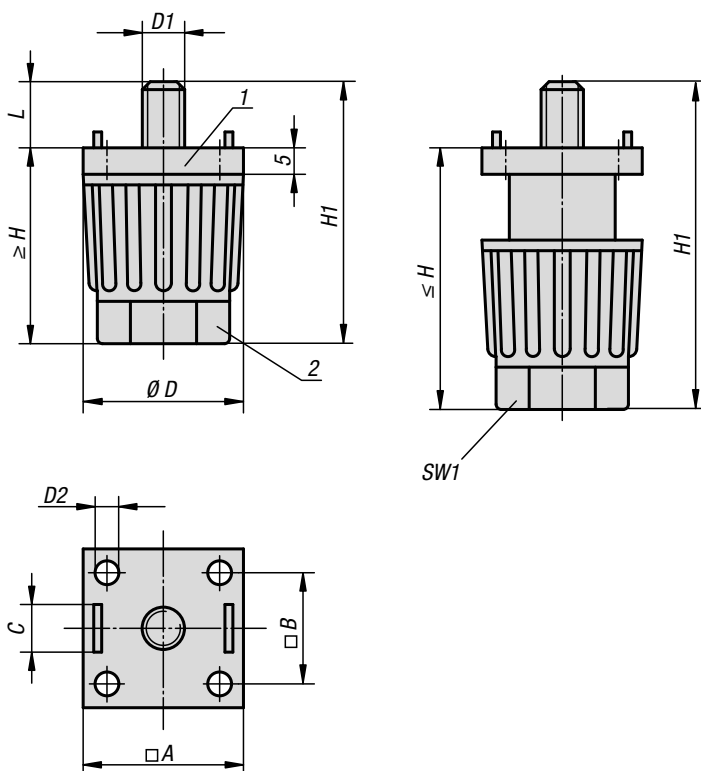
Threaded square inserts for attaching levelling feet, swivel feet and castors to round tubes.

## KIPP Tube inserts round with tapped bush

| Order No.    | A   | B  | C    | L  | S  | Suitable for tubes | Load rating<br>max. kN |
|--------------|-----|----|------|----|----|--------------------|------------------------|
| K0431.103010 | M10 | 30 | 28,4 | 33 | 27 | Ø 30 x 1           | 5                      |
| K0431.123010 | M12 | 30 | 28,4 | 33 | 27 | Ø 30 x 1           | 5                      |
| K0431.143010 | M14 | 30 | 28,4 | 33 | 27 | Ø 30 x 1           | 5                      |
| K0431.163010 | M16 | 30 | 28,4 | 33 | 27 | Ø 30 x 1           | 5                      |
| K0431.103815 | M10 | 38 | 35,5 | 43 | 35 | Ø 38 x 1,5         | 5                      |
| K0431.123815 | M12 | 38 | 35,5 | 43 | 35 | Ø 38 x 1,5         | 5                      |
| K0431.163815 | M16 | 38 | 35,5 | 43 | 35 | Ø 38 x 1,5         | 5                      |
| K0431.104215 | M10 | 42 | 39,9 | 43 | 35 | Ø 42,4 x 1,5       | 6                      |
| K0431.124215 | M12 | 42 | 39,9 | 43 | 35 | Ø 42,4 x 1,5       | 6                      |
| K0431.144215 | M14 | 42 | 39,9 | 43 | 35 | Ø 42,4 x 1,5       | 6                      |
| K0431.164215 | M16 | 42 | 39,9 | 43 | 35 | Ø 42,4 x 1,5       | 6                      |
| K0431.204215 | M20 | 42 | 39,9 | 43 | 35 | Ø 42,4 x 1,5       | 6                      |
| K0431.124815 | M12 | 48 | 45,8 | 55 | 44 | Ø 48,3 x 1,5       | 6                      |
| K0431.144815 | M14 | 48 | 45,8 | 55 | 44 | Ø 48,3 x 1,5       | 6                      |
| K0431.164815 | M16 | 48 | 45,8 | 55 | 44 | Ø 48,3 x 1,5       | 6                      |
| K0431.204815 | M20 | 48 | 45,8 | 55 | 44 | Ø 48,3 x 1,5       | 6                      |
| K0431.125015 | M12 | 50 | 48,4 | 55 | 44 | Ø 50,9 x 1,5       | 6                      |
| K0431.145015 | M14 | 50 | 48,4 | 55 | 44 | Ø 50,9 x 1,5       | 6                      |
| K0431.165015 | M16 | 50 | 48,4 | 55 | 44 | Ø 50,9 x 1,5       | 6                      |
| K0431.205015 | M20 | 50 | 48,4 | 55 | 44 | Ø 50,9 x 1,5       | 6                      |

## Levelling feet

for aluminium profiles



### Material:

Body fibreglass reinforced thermoplastic.  
Spindle and washer steel.

### Version:

Body black.  
Spindle and washer electro zinc-plated.

### Sample order:

K0432.300806

### Note:

These levelling feet are suitable for tables and lighter installations. The foot height is adjusted by turning the base nut by hand or spanner. The pins on the top flange centre the foot and prevent it turning. These levelling feet can be attached to aluminium profiles using T-slot nuts, no need for drilling.

### Drawing reference:

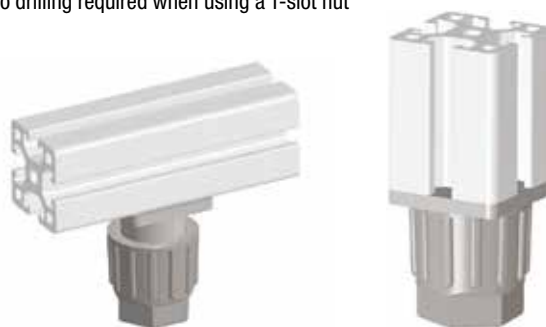
- 1) support flange
- 2) nut



Side mounted in profile keyway

no drilling required when using a T-slot nut

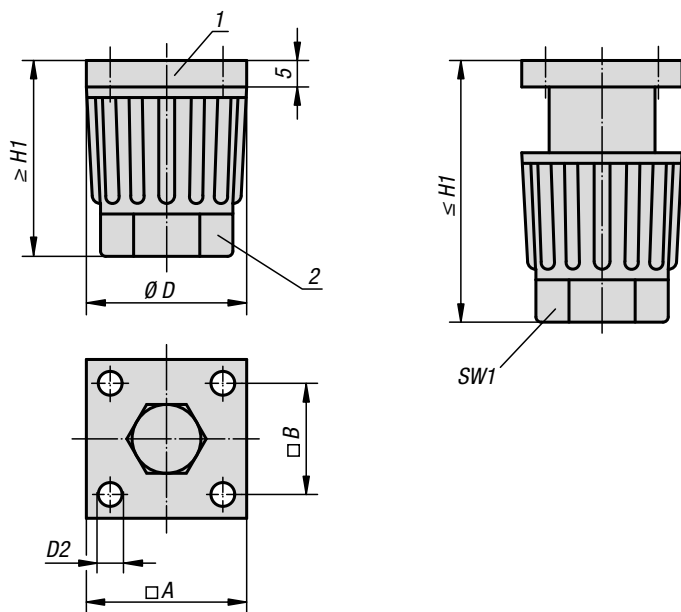
Profile end mounted



## KIPP Levelling feet for aluminium profiles

| Order No.    | A<br>for<br>aluminium profile | B    | C<br>for slot | D  | D1 | D2<br>for<br>countersunk screw | H     | H1    | L | SW1 | Load rating<br>max. kN<br>(static load only) |
|--------------|-------------------------------|------|---------------|----|----|--------------------------------|-------|-------|---|-----|----------------------------------------------|
| K0432.300806 | 30                            | 20,5 | 8             | 30 | M6 | M4                             | 35-50 | 44-59 | 9 | 22  | 1,5                                          |
| K0432.300808 | 30                            | 20,5 | 8             | 30 | M8 | M4                             | 35-50 | 44-59 | 9 | 22  | 1,5                                          |
| K0432.301006 | 30                            | 20,5 | 10            | 30 | M6 | M4                             | 35-50 | 44-59 | 9 | 22  | 1,5                                          |
| K0432.400808 | 40                            | 28   | 8             | 40 | M8 | M6                             | 45-65 | 54-74 | 9 | 30  | 1,5                                          |
| K0432.401006 | 40                            | 28   | 10            | 40 | M6 | M6                             | 45-65 | 54-74 | 9 | 30  | 1,5                                          |
| K0432.401008 | 40                            | 28   | 10            | 40 | M8 | M6                             | 45-65 | 54-74 | 9 | 30  | 1,5                                          |

## Levelling feet



**Material:**  
Body fibreglass reinforced thermoplastic.  
Hexagon head screw steel.

**Version:**  
Body black.  
Hexagon head screw electro zinc-plated.

**Sample order:**  
K0433.3004

**Note:**  
The flat top flange and sunken screw head make these levelling feet ideal for mounting on smooth surfaces. The foot height is adjusted by turning the base nut by hand or spanner.

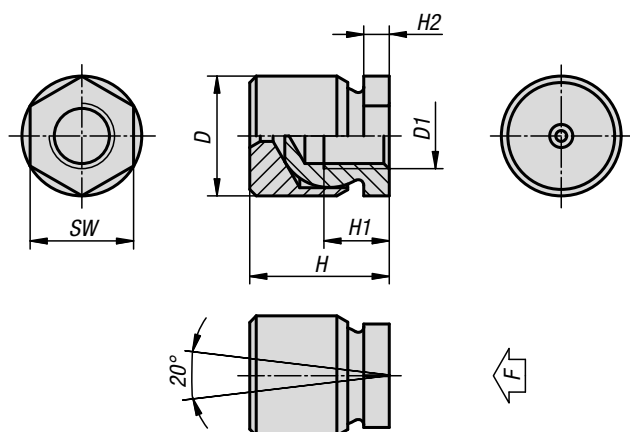
**Drawing reference:**  
1) support flange  
2) nut

### KIPP Levelling feet

| Order No.  | A  | B    | D  | D2 for countersunk screw | H1    | SW1 | Load rating max. kN (static load only) |
|------------|----|------|----|--------------------------|-------|-----|----------------------------------------|
| K0433.3004 | 30 | 20,5 | 30 | M4                       | 35-50 | 22  | 1,5                                    |
| K0433.4006 | 40 | 28   | 40 | M6                       | 45-65 | 30  | 1,5                                    |

# K0304

## Swivel thrust pads



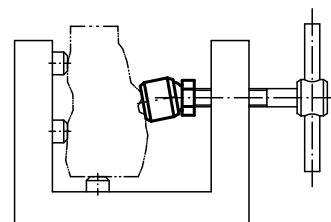
**Material:**  
Ball element case-hardened steel.  
Thrust pad ETG 100 steel.

**Version:**  
Black oxidised.

**Sample order:**  
K0304.10

### KIPP Swivel feet

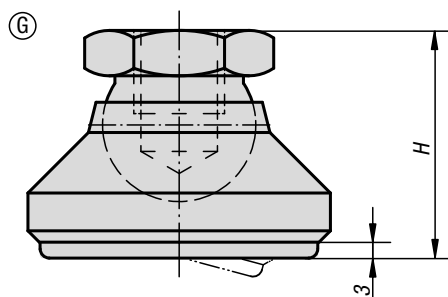
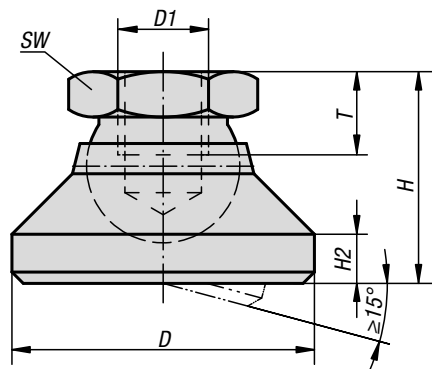
| Order No. | D  | D1  | H    | H1  | H2  | SW | Load rating max. kN |
|-----------|----|-----|------|-----|-----|----|---------------------|
| K0304.05  | 13 | M5  | 16,5 | 6,5 | 4   | 10 | 1,62                |
| K0304.06  | 13 | M6  | 16,5 | 8,5 | 4   | 10 | 2,33                |
| K0304.08  | 16 | M8  | 21   | 9   | 4   | 13 | 4,15                |
| K0304.10  | 19 | M10 | 23   | 10  | 4   | 17 | 6,48                |
| K0304.12  | 22 | M12 | 25,5 | 12  | 4,7 | 19 | 8,32                |
| K0304.16  | 25 | M16 | 29,5 | 14  | 5   | 24 | 13,94               |
| K0304.20  | 32 | M20 | 36   | 18  | 8,5 | 30 | 21                  |



## Swivel feet



Ⓐ Ⓑ Ⓒ Ⓓ



### Material:

Form A,G: Foot high carbon steel, ball element free-cutting steel.  
Form B: All stainless steel  
Form C: Foot POM, ball element free-cutting steel.  
Form D: Foot POM, ball element stainless steel.

Anti-slip plate thermoplastic elastomer.

### Version:

Form A: Ball element case-hardened and black oxidised.  
Form B: Bright.  
Form C: Ball element case-hardened and black oxidised.  
Form D: Ball element bright.  
Form G: Ball element case hardened and black oxidised, foot with anti-slip plate.

### Sample order:

K0395.112

### Note:

The anti-slip plate absorbs vibrations and prevents the swivel foot slipping  
The loading indicated in the table is a recommendation up to which permanent static load the swivel foot can be used.



## KIPP Swivel feet

| Order No.<br>Form A | Order No.<br>Form B | D  | D1  | H  | H2  | T   | SW | Load rating<br>max. kN |
|---------------------|---------------------|----|-----|----|-----|-----|----|------------------------|
| K0395.106           | K0395.306           | 20 | M6  | 15 | 2,5 | 8,5 | 10 | 10                     |
| K0395.108           | K0395.308           | 25 | M8  | 18 | 4   | 9   | 13 | 18                     |
| K0395.110           | K0395.310           | 32 | M10 | 22 | 5   | 10  | 17 | 20                     |
| K0395.112           | K0395.312           | 40 | M12 | 26 | 6   | 12  | 19 | 35                     |
| K0395.116           | K0395.316           | 50 | M16 | 32 | 7   | 14  | 24 | 45                     |
| K0395.120           | K0395.320           | 60 | M20 | 42 | 8   | 18  | 30 | 55                     |

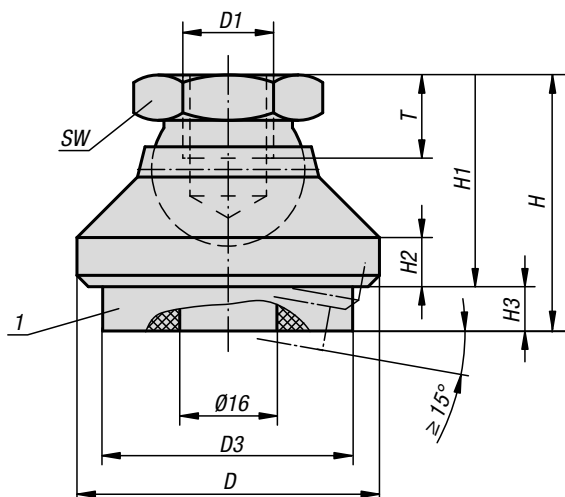
| Order No.<br>Form C | Order No.<br>Form D | D  | D1  | H  | H2  | T   | SW | Load rating<br>max. kN |
|---------------------|---------------------|----|-----|----|-----|-----|----|------------------------|
| K0395.506           | K0395.206           | 20 | M6  | 15 | 2,5 | 8,5 | 10 | 4                      |
| K0395.508           | K0395.208           | 25 | M8  | 18 | 4   | 9   | 13 | 7                      |
| K0395.510           | K0395.210           | 32 | M10 | 22 | 5   | 10  | 17 | 10                     |
| K0395.512           | K0395.212           | 40 | M12 | 26 | 6   | 12  | 19 | 18                     |
| K0395.516           | K0395.216           | 50 | M16 | 32 | 7   | 14  | 24 | 20                     |
| K0395.520           | K0395.220           | 60 | M20 | 42 | 8   | 18  | 30 | 22                     |

| Order No.<br>Form G | D  | D1  | H  | H2 | T  | SW | Load rating<br>max. kN<br>(static load only) |
|---------------------|----|-----|----|----|----|----|----------------------------------------------|
| K0395.410           | 32 | M10 | 25 | 5  | 10 | 17 | 12                                           |
| K0395.412           | 40 | M12 | 29 | 6  | 12 | 19 | 17                                           |
| K0395.416           | 50 | M16 | 35 | 7  | 14 | 24 | 20                                           |
| K0395.420           | 60 | M20 | 45 | 8  | 18 | 30 | 24                                           |



## Swivel feet

with vibration absorption



### Material:

Steel version:  
Foot high carbon steel.  
Ball element free-cutting steel.  
Stainless steel version:  
Foot and ball element stainless steel.

Damper plate PUR elastomer (Sylomer V12).

### Version:

Steel version:  
Foot black oxidised.  
Ball element case-hardened and black oxidised.  
Stainless steel version:  
Bright.

Anti-slip damper plate grey, glued in.  
Temp. range -30 °C to +70 °C.

### Sample order:

K0420.110

### Note:

The load rating given in the table is a recommendation of the permanent static load to which the damping element should be used.

This static load corresponds to a surface pressure of 0.4 N/mm<sup>2</sup> at which the material achieves its optimum absorption properties. It is taken into account that under dynamic loading an additional load of up to 0.6 N/mm<sup>2</sup> may occur.

The damper plate absorbs vibrations and prevents the swivel foot slipping.

For swivel feet without vibration absorption see article No. K0395.

### Drawing reference:

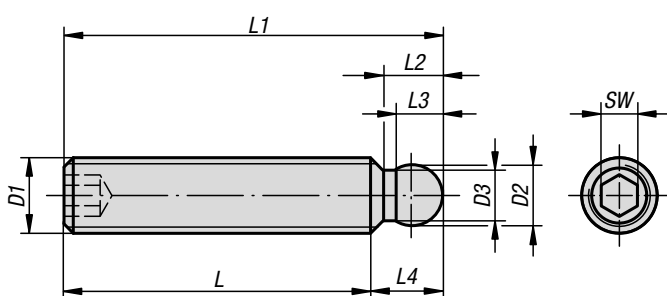
1) damper plate

## KIPP Swivel feet with vibration absorption

| Order No. | Main material   | D  | D1  | D3   | H  | H1 | H2 | H3<br>by 0 / 0.4 / 0.6<br>N/mm <sup>2</sup> | T  | SW | Load rating<br>max. kN |
|-----------|-----------------|----|-----|------|----|----|----|---------------------------------------------|----|----|------------------------|
| K0420.110 | steel           | 32 | M10 | 30,5 | 30 | 22 | 5  | 8 / 6,8 / 5,9                               | 10 | 17 | 0,212                  |
| K0420.112 | steel           | 40 | M12 | 30,5 | 34 | 26 | 6  | 8 / 6,8 / 5,9                               | 12 | 19 | 0,212                  |
| K0420.116 | steel           | 50 | M16 | 40,5 | 40 | 32 | 7  | 8 / 6,8 / 5,9                               | 14 | 24 | 0,435                  |
| K0420.120 | steel           | 60 | M20 | 50   | 50 | 42 | 8  | 8 / 6,8 / 5,9                               | 18 | 30 | 0,705                  |
| K0420.310 | stainless steel | 32 | M10 | 30,5 | 30 | 22 | 5  | 8 / 6,8 / 5,9                               | 10 | 17 | 0,212                  |
| K0420.312 | stainless steel | 40 | M12 | 30,5 | 34 | 26 | 6  | 8 / 6,8 / 5,9                               | 12 | 19 | 0,212                  |
| K0420.316 | stainless steel | 50 | M16 | 40,5 | 40 | 32 | 7  | 8 / 6,8 / 5,9                               | 14 | 24 | 0,435                  |
| K0420.320 | stainless steel | 60 | M20 | 50   | 50 | 42 | 8  | 8 / 6,8 / 5,9                               | 18 | 30 | 0,705                  |

## Grub screws

with ball thrust point



**Material:**

Steel grade 5.8.

**Version:**

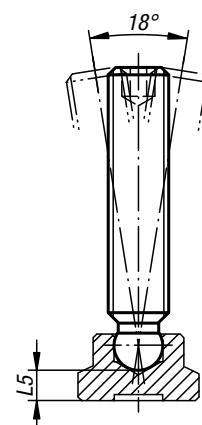
Black oxidised.

**Sample order:**

K0391.06X50 (include length L1.)

**Note:**

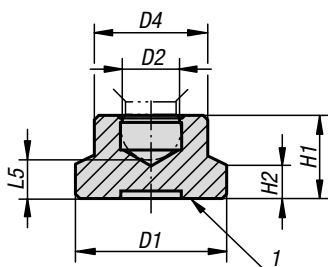
The grub screws are used in conjunction with a thrust pad K0393.



### KIPP Grub screws with ball thrust point

| Order No. | D1  | L1             | D2  | D3  | L    | L2  | L3  | L4  | L5  | SW |
|-----------|-----|----------------|-----|-----|------|-----|-----|-----|-----|----|
| K0391.06X | M6  | 30/35/40/50    | 4,5 | 3,5 | 24,5 | 4,3 | 3,7 | 5,5 | 3,8 | 3  |
| K0391.08X | M8  | 35/40/45/50/60 | 6   | 4,8 | 27,6 | 5,8 | 4,8 | 7,4 | 4,4 | 4  |
| K0391.10X | M10 | 50/55/60/65/80 | 8   | 6,5 | 41   | 7,2 | 6,3 | 9   | 5   | 5  |
| K0391.12X | M12 | 60/65/70/80    | 8   | 6,5 | 50,2 | 7,2 | 6,3 | 9,8 | 6,9 | 6  |

## Thrust pads



### Material:

Steel.

PA 6 plastic.

### Version:

Black oxidised.

Black plastic.

### Sample order:

K0393.08

### Note:

Suitable for grub screws with ballend pin.

### Drawing reference:

1) thrust face

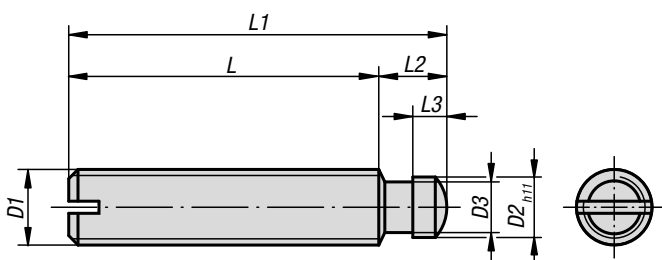


## KIPP Thrust pads

| Order No. | Form | Main material | D1 | D2  | D4  | H1  | H2  | L5  | Suitable for grub screws |
|-----------|------|---------------|----|-----|-----|-----|-----|-----|--------------------------|
| K0393.06  | A    | steel         | 15 | 4,4 | 8,6 | 7,6 | 2,5 | 3,8 | M6                       |
| K0393.08  | A    | steel         | 18 | 5,9 | 12  | 9   | 3,5 | 4,4 | M8                       |
| K0393.10  | A    | steel         | 21 | 7,9 | 15  | 11  | 4   | 5   | M10                      |
| K0393.12  | A    | steel         | 25 | 7,9 | 18  | 13  | 5   | 6,9 | M12                      |
| K0393.206 | A    | polyamide     | 15 | 4,4 | 8,6 | 7,6 | 2,5 | 3,8 | M6                       |
| K0393.208 | B    | polyamide     | 18 | 5,9 | 12  | 9   | 3,5 | 4,4 | M8                       |
| K0393.210 | C    | polyamide     | 21 | 7,9 | 15  | 11  | 4   | 5   | M10                      |
| K0393.212 | C    | polyamide     | 25 | 7,9 | 18  | 13  | 5   | 6,9 | M12                      |

## Grub screws

with thrust point DIN 6332



### Material:

Steel or stainless steel.

### Version:

Steel: thrust point case-hardened, black.  
Stainless steel: bright.

### Sample order:

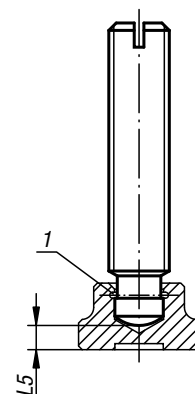
K0390.12X60 (include length L1.)

### Note:

The thrust journal of the grub screws per DIN 6332 is designed for direct clamping as well as for use in conjunction with a thrust pad K0392.

### Drawing reference:

1) snap ring

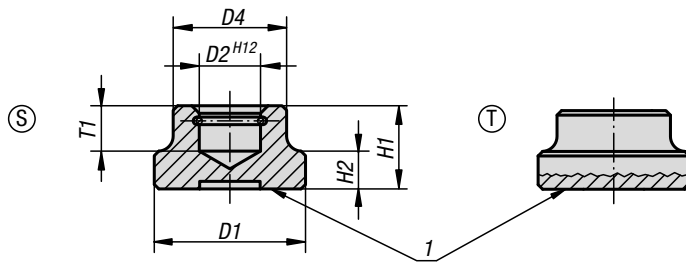


## KIPP Grub screws with thrust point DIN 6332

| Order No.<br>steel | Order No.<br>stainless steel | D1  | L1                | D2   | D3   | L    | L2  | L3  | L5  |
|--------------------|------------------------------|-----|-------------------|------|------|------|-----|-----|-----|
| K0390.06X          | K0390.061X                   | M6  | 30/35/40/50       | 4,5  | 4    | 24   | 6   | 2,5 | 2,2 |
| K0390.08X          | K0390.081X                   | M8  | 35/40/45/50/60    | 6    | 5,4  | 27,5 | 7,5 | 3   | 3   |
| K0390.10X          | K0390.101X                   | M10 | 50/55/60/65/80    | 8    | 7,2  | 41   | 9   | 4,5 | 3,6 |
| K0390.12X          | K0390.121X                   | M12 | 60/65/70/80/100   | 8    | 7,2  | 50   | 10  | 4,5 | 4,5 |
| K0390.14X          | K0390.141X                   | M14 | 60/80/100         | 10   | 9    | 48   | 12  | 5   | 5   |
| K0390.16X          | K0390.161X                   | M16 | 65/70/80/100/125  | 12   | 11   | 53   | 12  | 5   | 5,3 |
| K0390.20X          | K0390.201X                   | M20 | 80/90/100/125/150 | 15,5 | 14,4 | 66   | 14  | 5,5 | 5,6 |

## Thrust pads

DIN 6311 enhanced



### Material:

Steel: case-hardened. Snap ring spring steel.  
Stainless steel: bright. Snap ring stainless steel.

### Version:

Steel black oxidised.  
Stainless steel bright.

### Sample order:

K0392.12

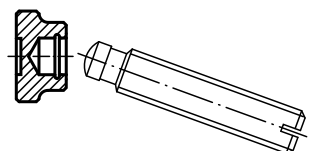
### Note:

To press onto a thrust point, incline the point as far as possible over the snap ring opening and twist in. The snap ring is supplied assembled.

### Drawing reference:

Form S: standard thrust pad  
Form T: low version, large thrust face

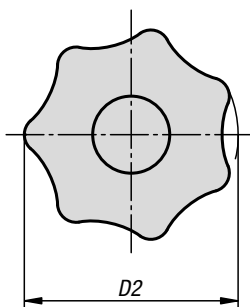
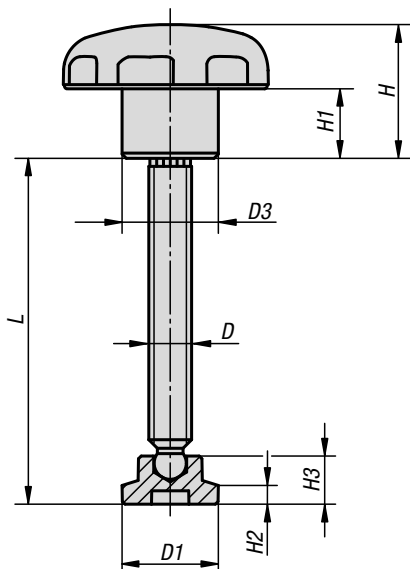
1) thrust face



## KIPP Thrust pads DIN 6311 enhanced

| Order No.<br>steel | Order No.<br>stainless steel | Form | D1 | D2   | D4 | H1 | H2  | T1  | For grub screws<br>with thrust point<br>DIN 6332 |
|--------------------|------------------------------|------|----|------|----|----|-----|-----|--------------------------------------------------|
| K0392.06           | K0392.061                    | S    | 12 | 4,6  | 10 | 7  | 2,5 | 4   | M6                                               |
| K0392.08           | K0392.081                    | S    | 16 | 6,1  | 12 | 9  | 4   | 5   | M8                                               |
| K0392.10           | K0392.101                    | S    | 20 | 8,1  | 15 | 11 | 5   | 6   | M10                                              |
| K0392.12           | K0392.121                    | S    | 25 | 8,1  | 18 | 13 | 7   | 7   | M12                                              |
| K0392.16           | K0392.161                    | S    | 32 | 12,1 | 22 | 15 | 7   | 7,5 | M16                                              |
| K0392.20           | K0392.201                    | S    | 40 | 15,6 | 28 | 16 | 9   | 8   | M20                                              |
| K0392.108          | -                            | T    | 25 | 6,1  | 12 | 8  | 4   | 4,5 | M8                                               |
| K0392.110          | -                            | T    | 32 | 8,1  | 18 | 10 | 6   | 6   | M10 / M12                                        |
| K0392.116          | -                            | T    | 40 | 12,1 | 22 | 12 | 7   | 7   | M16                                              |

## Thrust spindles



### Material:

Star grip: thermoplastic.

Bush: steel.

Grub screw: steel, grade 5.8.

Thrust pad: plastic PA 6.

### Version:

Star grip, thrust pad black.

Bush trivalent blue passivated.

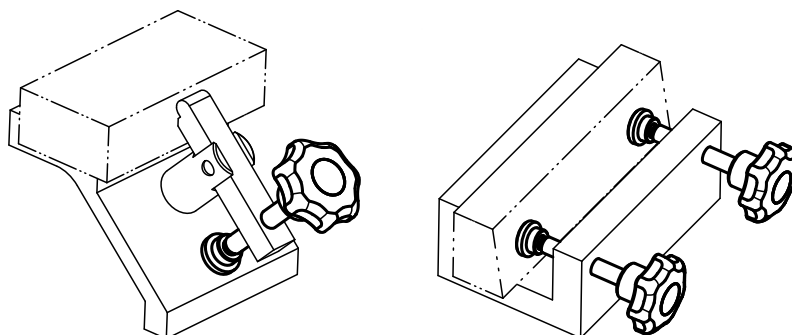
Grub screw black oxidised.

### Sample order:

K0394.06053

### Note:

The thrust pad is supplied loose. It can be lightly pressed onto the end of the spindle.



### KIPP Thrust spindles

| Order No.   | D   | D1 | D2 | D3 | L    | H  | H1 | H2  | H3  |
|-------------|-----|----|----|----|------|----|----|-----|-----|
| K0394.06053 | M6  | 15 | 32 | 14 | 53,8 | 20 | 10 | 2,5 | 7,6 |
| K0394.08064 | M8  | 18 | 40 | 18 | 64,6 | 25 | 13 | 3,5 | 9   |
| K0394.10070 | M10 | 21 | 50 | 22 | 70,1 | 32 | 17 | 4   | 11  |
| K0394.12086 | M12 | 25 | 63 | 26 | 86   | 40 | 21 | 5   | 13  |



## Tube connectors, profile connectors





# Technical information

## Thermoplastic tube clamping system



The tube clamping system is characterised by the attractive design and a special reducing sleeve concept.

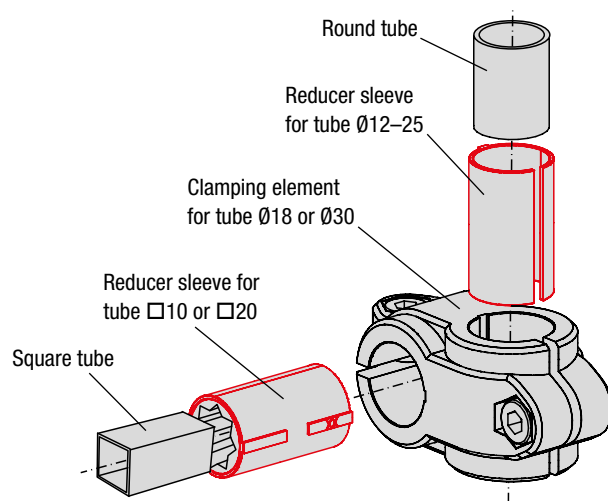
This unique concept and the associated clamping of different diameters and tube forms permit a flexibility never before achieved.

By simply exchanging a sleeve an existing tubular construction can be transformed into one with a different diameter or cross-section.

### Benefits:

- Only one clamping element per construction type.
- Tube reduction (from Ø30–12 or 25x25–10x10) with different reducer sleeves for round or square tubes.
- Tube diameter marked on each reducer sleeve.
- Locking tab on the sleeves prevents rotation in the clamping element.

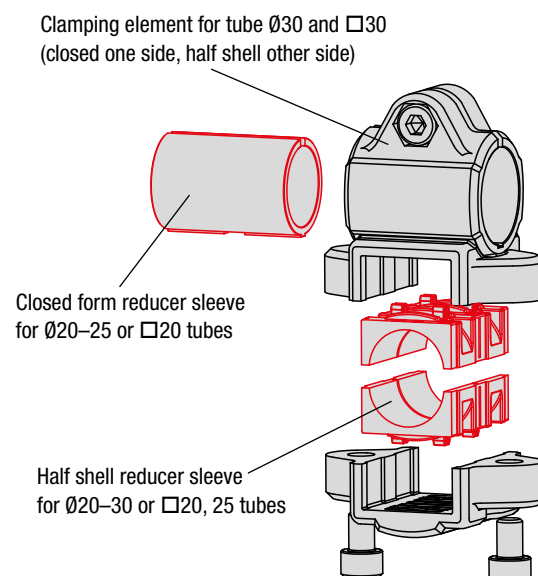
### Closed system (one-piece, slitted)



### Half shell elements (two-piece)

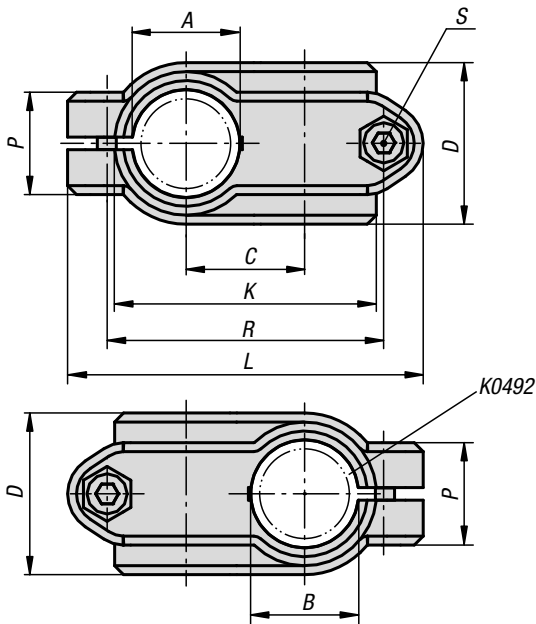
#### Note:

The clamping elements are supplied as standard with a DIN 7984 screw and a DIN 985 self-locking nut. Plastic clamp levers for locking are available on request.



Tube clamps cross

plastic



**Material:**  
Thermoplastic.  
DIN 7984 screws and DIN 985 nuts steel.

**Version:**  
Black.  
Screws and nuts electro zinc-plated.

**Sample order:**  
K0472.1818

**Note:**  
The standard size for round tubes is Ø18 mm or Ø30 mm.  
Use reducer sleeves K0492 if smaller tubes are to be clamped or a conversion from round to square tubes is required.

**On request:**  
Plastic clamping levers for tightening.

KIPP Tube clamps cross, plastic

| Order No.  | A  | B  | C  | D  | K  | L  | P    | R  | S     |
|------------|----|----|----|----|----|----|------|----|-------|
| K0472.1818 | 18 | 18 | 20 | 30 | 48 | 63 | 21   | 48 | M6x18 |
| K0472.3030 | 30 | 30 | 33 | 45 | 72 | 99 | 28,5 | 77 | M8x25 |

**Accessories:**  
- Reducer sleeves K0492  
- Round and square tubes K0493

Application using tube clamps



# Tube clamps cross

aluminium


**Material:**

Cast aluminium.  
DIN 7984 screws and DIN 985 nuts, steel.

**Version:**

Vibratory ground.  
Screws and nuts electro zinc-plated.

**Sample order:**

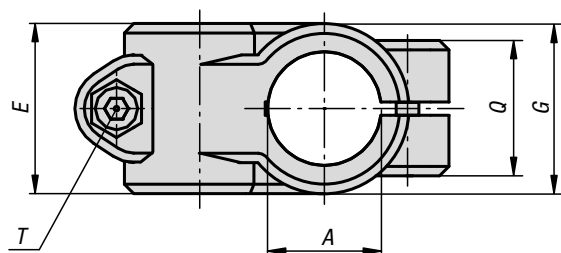
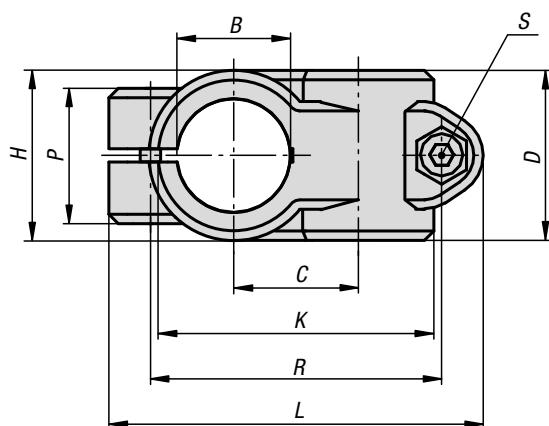
K0472.51818

**On request:**

Clamping levers for tightening.

**Accessories:**

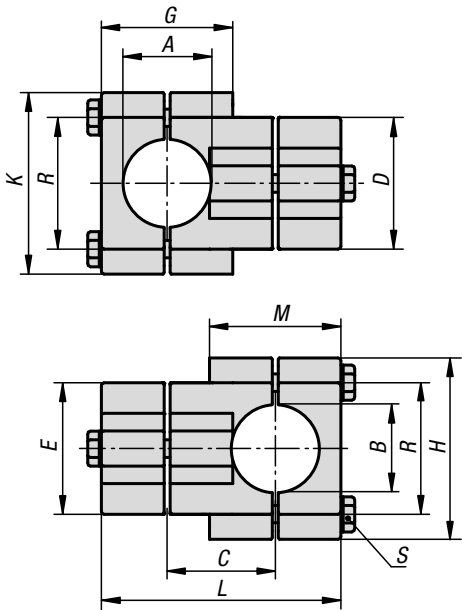
- Round and square tubes K0493



## KIPP Tube clamps cross, aluminium

| Order No.   | A     | B     | C  | D    | E    | G  | H  | K    | L     | P  | Q  | R     | S      | T      |
|-------------|-------|-------|----|------|------|----|----|------|-------|----|----|-------|--------|--------|
| K0472.51212 | 12,1  | 12,1  | 20 | 25,5 | 25,5 | -  | -  | 43,5 | 67    | 23 | 23 | 49    | M6x20  | M6x20  |
| K0472.51414 | 14,1  | 14,1  | 20 | 25,5 | 25,5 | -  | -  | 43,5 | 67    | 23 | 23 | 49    | M6x20  | M6x20  |
| K0472.51515 | 15,1  | 15,1  | 20 | 25,5 | 25,5 | -  | -  | 43,5 | 67    | 23 | 23 | 49    | M6x20  | M6x20  |
| K0472.51616 | 16,1  | 16,1  | 20 | 25,5 | 25,5 | -  | -  | 43,5 | 67    | 23 | 23 | 49    | M6x20  | M6x20  |
| K0472.51818 | 18,1  | 18,1  | 20 | 25,5 | 25,5 | -  | -  | 43,5 | 67    | 23 | 23 | 49    | M6x20  | M6x20  |
| K0472.52014 | 20,1  | 14,1  | 27 | 40   | 33   | 40 | 26 | 59   | 84    | 21 | 33 | 65    | M8x25  | M6x20  |
| K0472.52020 | 20,1  | 20,1  | 33 | 40   | 40   | -  | -  | 73   | 101   | 33 | 33 | 78    | M8x25  | M8x25  |
| K0472.52514 | 25,1  | 14,1  | 27 | 40   | 33   | 40 | 26 | 59   | 84    | 21 | 33 | 65    | M8x25  | M6x20  |
| K0472.52525 | 25,1  | 25,1  | 33 | 40   | 40   | -  | -  | 73   | 101   | 33 | 33 | 78    | M8x25  | M8x25  |
| K0472.53014 | 30,1  | 14,1  | 27 | 40   | 33   | 40 | 26 | 59   | 84    | 21 | 33 | 65    | M8x25  | M6x20  |
| K0472.53030 | 30,1  | 30,1  | 33 | 40   | 40   | -  | -  | 73   | 101   | 33 | 33 | 78    | M8x25  | M8x25  |
| K0472.54020 | 40,17 | 20,1  | 36 | 50   | 40   | 52 | 32 | 60   | 110   | 33 | 40 | 86,5  | M10x30 | M8x25  |
| K0472.54030 | 40,17 | 30,1  | 45 | 65   | 65   | 65 | 45 | 98   | 137,5 | 44 | 44 | 108,5 | M10x30 | M10x30 |
| K0472.54040 | 40,17 | 40,17 | 45 | 60   | 60   | -  | -  | 100  | 137   | 40 | 40 | 111   | M10x30 | M10x30 |
| K0472.55030 | 50,22 | 30,1  | 45 | 65   | 65   | 65 | 45 | 98   | 137,5 | 44 | 44 | 108,5 | M10x35 | M10x35 |
| K0472.55050 | 50,2  | 50,2  | 53 | 70   | 70   | -  | -  | 118  | 154   | 45 | 45 | 128   | M10x35 | M10x35 |

Tube clamps cross  
aluminium



**Material:**  
Cast aluminium.  
Screws and nuts steel.

**Version:**  
Vibratory ground.  
Screws and nuts electro zinc-plated.

**Sample order:**  
K0472.523030

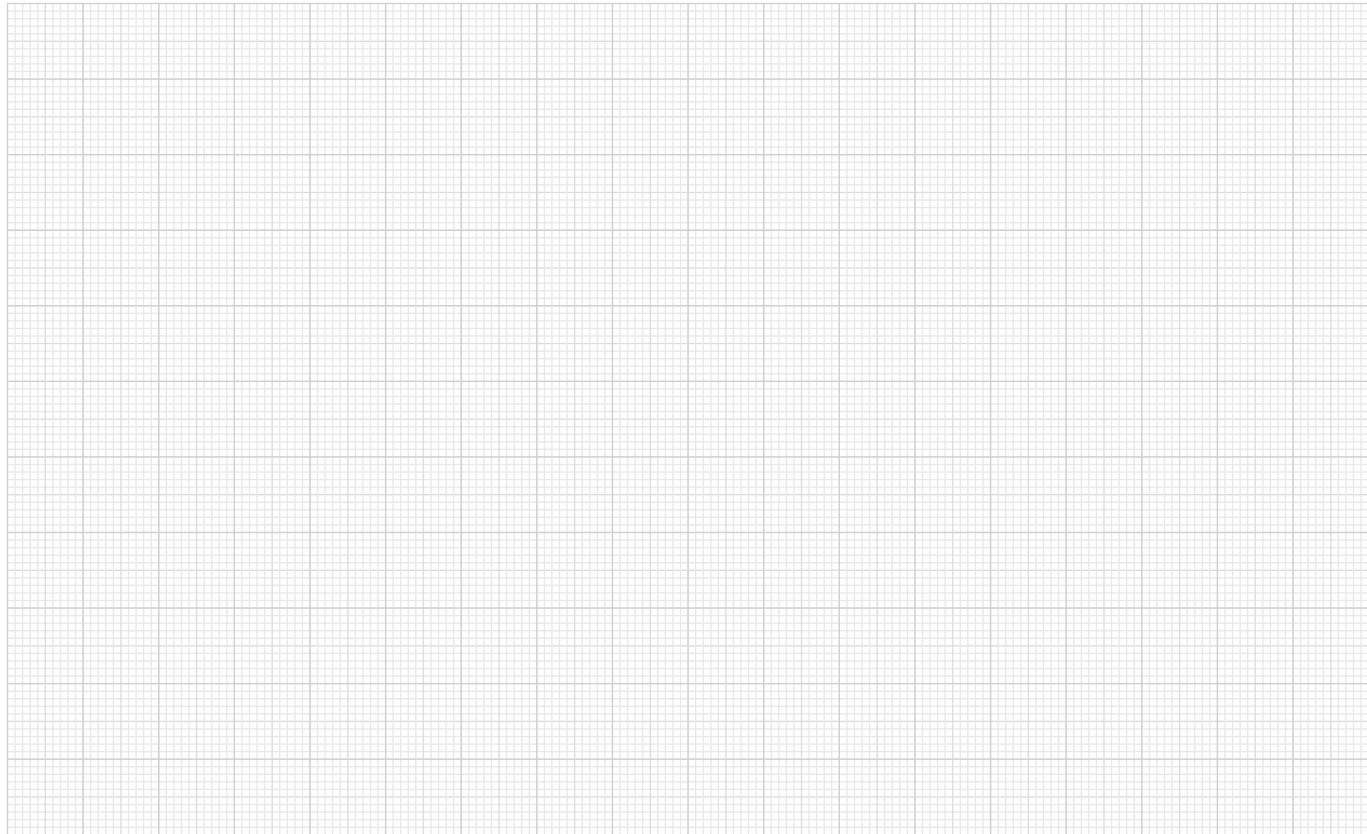
**On request:**  
Clamping levers for tightening and other diameters.

**Accessories:**  
- Round and square tubes K0493

KIPP Tube clamps cross, aluminium

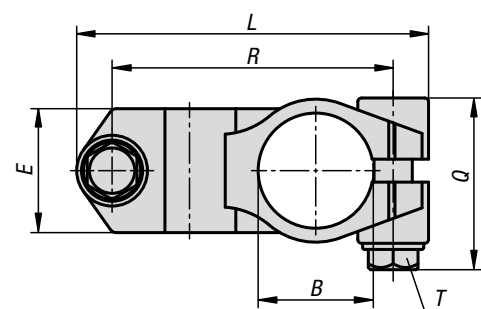
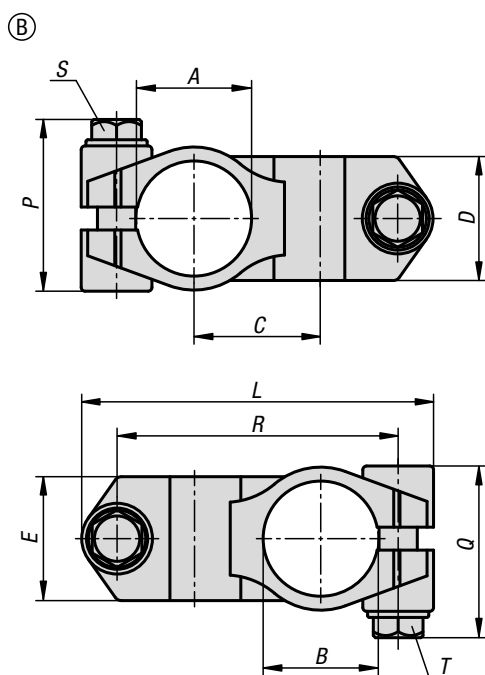
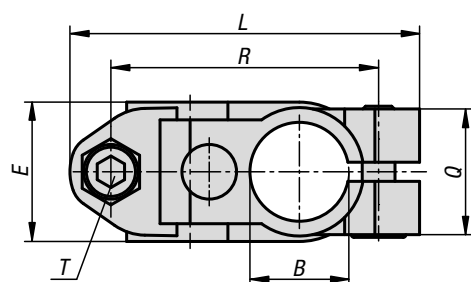
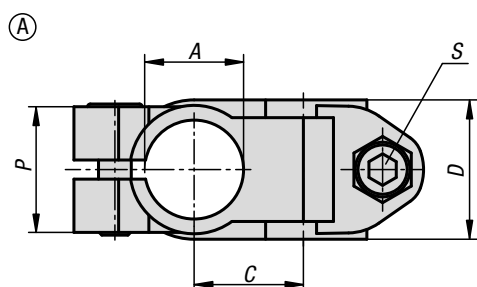
| Order No.    | A    | B    | C  | D  | E  | G  | H  | K  | L   | M  | R  | S     |
|--------------|------|------|----|----|----|----|----|----|-----|----|----|-------|
| K0472.523030 | 30,2 | 30,2 | 38 | 45 | 45 | 44 | 64 | 64 | 83  | 44 | 46 | M8x45 |
| K0472.524040 | 40,2 | 40,2 | 50 | 60 | 60 | 61 | 75 | 75 | 111 | 61 | 57 | M8x60 |

Notes



## Tube clamps cross

stainless steel



### Material:

Investment cast 1.4308 stainless steel.  
ISO 4762 cap screw and ISO 4032 hex nut, stainless steel.  
From ø30 mm ISO 4017 hex head bolt, stainless steel.

### Version:

Electropolished.

### Sample order:

K0472.11212

### Note:

The tube clamps with diameters 30 and 40 mm have a silicone sleeve that protects the thread of the hex head screw from contamination and damage.

### On request:

Clamping levers for tightening.

### Accessories:

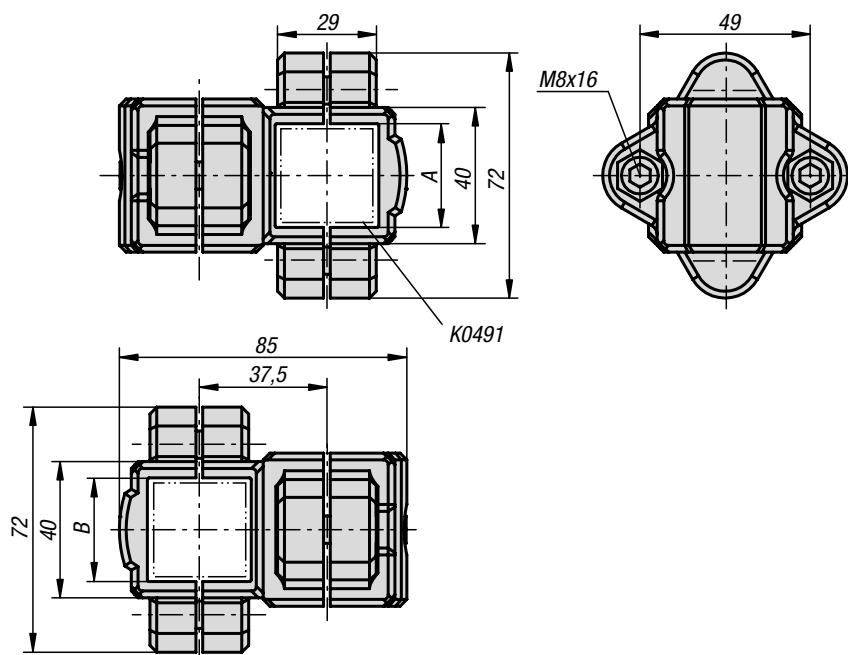
- Round and square tubes K0493

## KIPP Tube clamps cross, stainless steel

| Order No.   | Form | A     | B     | C  | D    | E    | L   | P    | Q    | R    | S      | T      |
|-------------|------|-------|-------|----|------|------|-----|------|------|------|--------|--------|
| K0472.11212 | A    | 12,1  | 12,1  | 20 | 25,5 | 25,5 | 64  | 23   | 23   | 49   | M6x18  | M6x18  |
| K0472.11414 | A    | 14,1  | 14,1  | 20 | 25,5 | 25,5 | 64  | 23   | 23   | 49   | M6x18  | M6x18  |
| K0472.11616 | A    | 16,1  | 16,1  | 20 | 25,5 | 25,5 | 64  | 23   | 23   | 49   | M6x18  | M6x18  |
| K0472.11818 | A    | 18,1  | 18,1  | 20 | 25,5 | 25,5 | 64  | 23   | 23   | 49   | M6x18  | M6x18  |
| K0472.12020 | A    | 20,1  | 20,1  | 21 | 25,5 | 25,5 | 64  | 23   | 23   | 49   | M6x18  | M6x18  |
| K0472.13030 | B    | 30,1  | 30,1  | 33 | 32,4 | 32,4 | 92  | 45,5 | 45,5 | 73,5 | M8x30  | M8x30  |
| K0472.14040 | B    | 40,17 | 40,17 | 42 | 40,4 | 40,4 | 118 | 52   | 52   | 95,5 | M10x35 | M10x35 |

## Tube clamps cross

plastic



### Material:

Thermoplastic.  
DIN 7984 screws and DIN 985 nuts steel.

### Version:

Black.  
Screws and nuts electro zinc-plated.

### Sample order:

K0473.3030

### Note:

These cross clamps are for 30 mm square tubes.  
Use reducer sleeves K0491 if smaller tubes are to be clamped or a conversion from square to round tubes is required.

### On request:

Plastic clamping levers for tightening.

### Accessories:

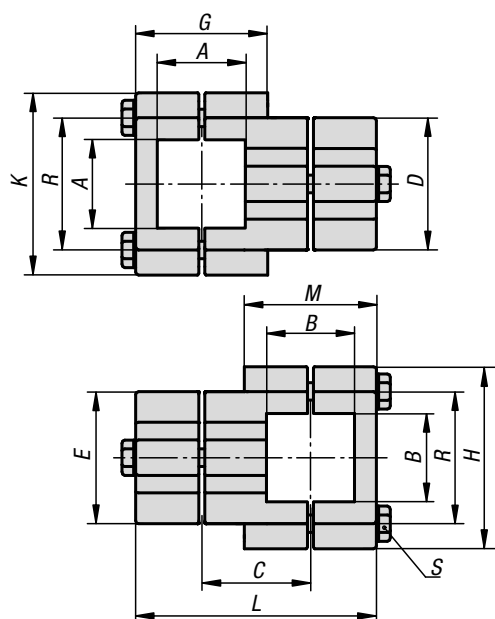
- Reducer sleeves K0491
- Round and square tubes K0493

### KIPP Tube clamps cross, plastic

| Order No.  | A  | B  |
|------------|----|----|
| K0473.3030 | 30 | 30 |

## Tube clamps cross

aluminium



### Material:

Cast aluminium.  
Screws and nuts steel.

### Version:

Vibratory ground.  
Screws and nuts electro zinc-plated.

### Sample order:

K0473.523030

### On request:

Levers for locking and other sizes for square tube.

### Accessories:

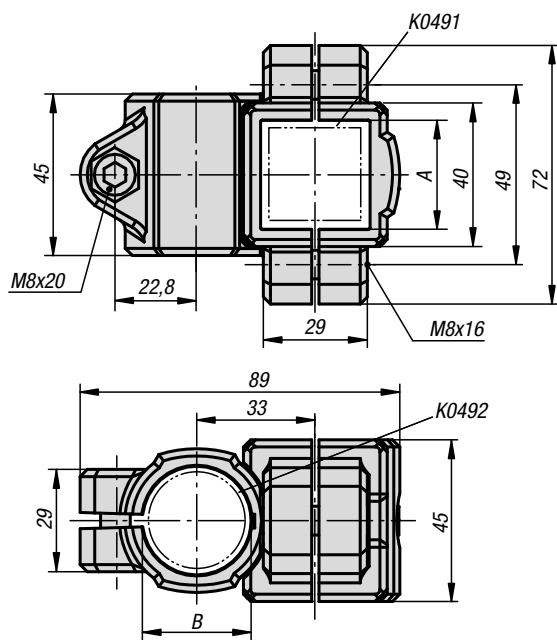
- Round and square tubes K0493

### KIPP Tube clamps cross, aluminium

| Order No.    | A    | B    | C  | D  | E  | G  | H  | K  | L   | M  | R  | S     |
|--------------|------|------|----|----|----|----|----|----|-----|----|----|-------|
| K0473.523030 | 30,2 | 30,2 | 38 | 45 | 45 | 44 | 64 | 64 | 83  | 44 | 46 | M8x45 |
| K0473.524040 | 40,3 | 40,3 | 50 | 60 | 60 | 61 | 75 | 75 | 111 | 61 | 57 | M8x60 |

## Tube clamps cross

plastic



KIPP Tube clamps cross, plastic

| Order No.  | A  | B  |
|------------|----|----|
| K0474.3030 | 30 | 30 |



**Material:**

Thermoplastic.  
DIN 7984 screws and DIN 985 nuts steel.

**Version:**

Black.  
Screws and nuts electro zinc-plated.

**Sample order:**

K0474.3030

**Note:**

These cross clamps are for 30 mm square and round tubes. Use reducer sleeves K0491 or K0492 if smaller tubes are to be clamped or a conversion from round to square tubes „or vice versa“ is required.

**On request:**

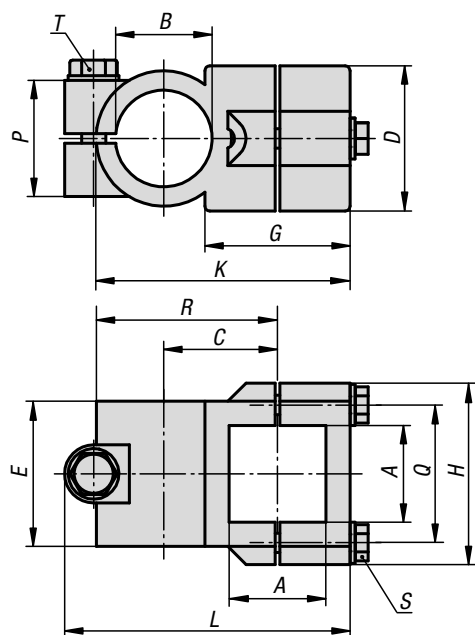
Plastic clamping levers for tightening.

**Accessories:**

- Reducer sleeves K0491 and K0492
- Round and square tubes K0493

## Tube clamps cross

aluminium



KIPP Tube clamps cross, aluminium



**Material:**

Cast aluminium.  
Screws and nuts steel.

**Version:**

Vibratory ground.  
Screws and nuts electro zinc-plated.

**Sample order:**

K0474.53030

**On request:**

Clamping levers for fastening and other diameters.

**Accessories:**

- Round and square tubes K0493

| Order No.   | A    | B    | C  | D  | E  | G  | H  | K   | L   | P  | Q  | R  | S     | T      |
|-------------|------|------|----|----|----|----|----|-----|-----|----|----|----|-------|--------|
| K0474.53030 | 30,2 | 30,1 | 33 | 45 | 45 | 40 | 62 | 76  | 86  | 33 | 46 | 55 | M8x35 | M8x35  |
| K0474.54040 | 40,3 | 40,2 | 47 | 60 | 60 | 60 | 75 | 105 | 117 | 48 | 57 | 75 | M8x45 | M10x50 |

# Tube clamps T-angle

plastic



## Material:

Thermoplastic.  
DIN 7984 screws and DIN 985 nuts steel.

## Version:

Black.  
Screws and nuts electro zinc-plated.

## Sample order:

K0475.1818

## Note:

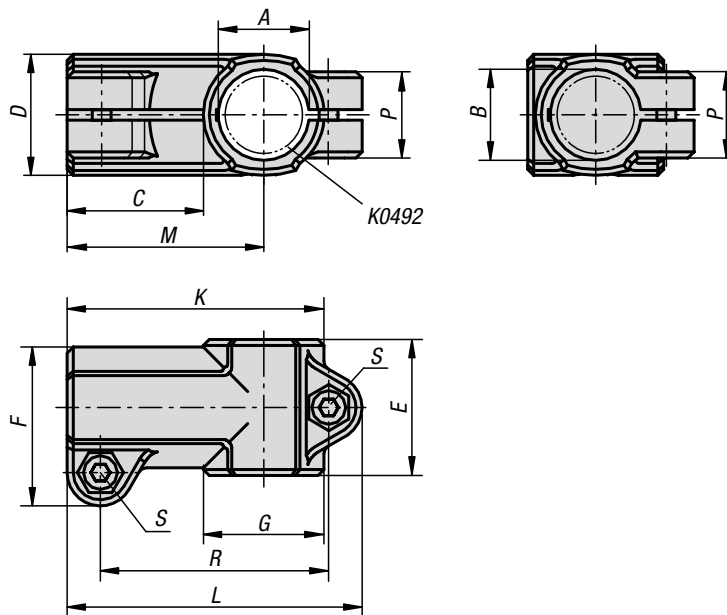
The standard size for round tubes is Ø18 mm or Ø30 mm.  
Use reducer sleeves K0492 if smaller tubes are to be clamped or a conversion from round to square tubes is required.

## On request:

Plastic clamping levers for tightening.

## Accessories:

- Reducer sleeves K0492
- Round and square tubes K0493



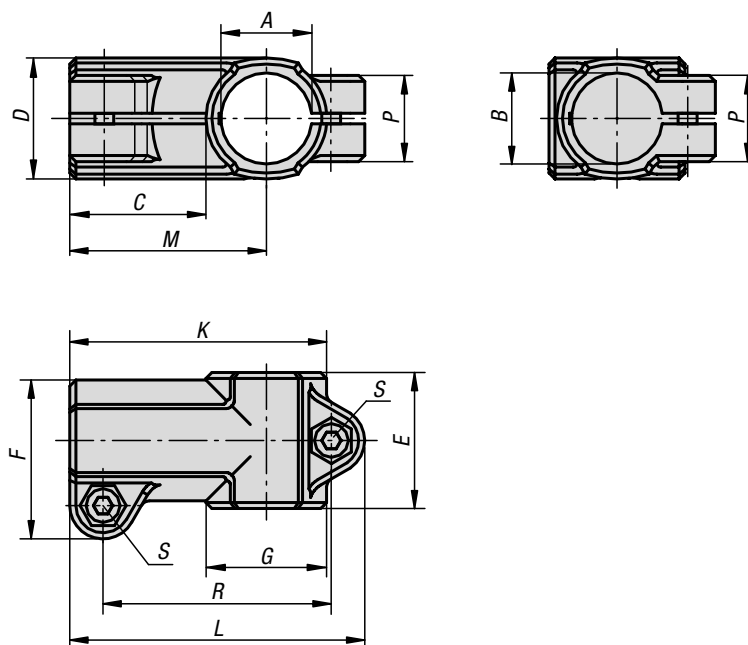
## KIPP Tube clamps T-angle, plastic

| Order No.  | A  | B  | C    | D  | E  | F    | G  | K    | L    | M  | P    | R    | S     |
|------------|----|----|------|----|----|------|----|------|------|----|------|------|-------|
| K0475.1818 | 18 | 18 | 30,5 | 25 | 30 | 34   | 25 | 55,5 | 64,5 | 43 | 21   | 49,5 | M6x18 |
| K0475.3030 | 30 | 30 | 45   | 40 | 45 | 52,5 | 40 | 85   | 97,5 | 65 | 28,5 | 75,5 | M8x25 |



# Tube clamps T-angle

aluminium


**Material:**

Cast aluminium.

DIN 7984 screws and DIN 985 nuts, steel.

**Version:**

Vibratory ground.

Screws and nuts electro zinc-plated.

**Sample order:**

K0475.51818

**On request:**

Levers for locking and other diameters.

**Accessories:**

- Round and square tubes K0493

## KIPP Tube clamps T-angle, aluminium

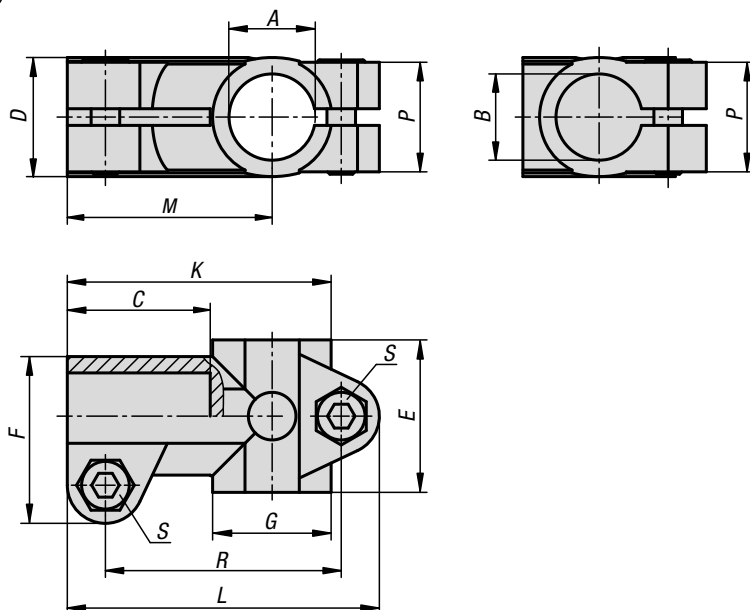
| Order No.   | A     | B     | C  | D  | E  | F    | G  | K   | L   | M  | P  | R    | S      |
|-------------|-------|-------|----|----|----|------|----|-----|-----|----|----|------|--------|
| K0475.51212 | 12,1  | 12,1  | 28 | 25 | 32 | 35,5 | 25 | 56  | 66  | 43 | 23 | 49   | M6x20  |
| K0475.51414 | 14,1  | 14,1  | 28 | 25 | 32 | 35,5 | 25 | 56  | 66  | 43 | 23 | 49   | M6x20  |
| K0475.51515 | 15,1  | 15,1  | 28 | 25 | 32 | 35,5 | 25 | 56  | 66  | 43 | 23 | 49   | M6x20  |
| K0475.51616 | 16,1  | 16,1  | 28 | 25 | 32 | 35,5 | 25 | 56  | 66  | 43 | 23 | 49   | M6x20  |
| K0475.51818 | 18,1  | 18,1  | 28 | 25 | 32 | 35,5 | 25 | 56  | 66  | 43 | 23 | 49   | M6x20  |
| K0475.52020 | 20,1  | 20,1  | 38 | 40 | 45 | 53   | 40 | 80  | 93  | 60 | 33 | 72,5 | M8x25  |
| K0475.52525 | 25,1  | 25,1  | 38 | 40 | 45 | 53   | 40 | 80  | 93  | 60 | 33 | 72,5 | M8x25  |
| K0475.53030 | 30,1  | 30,1  | 38 | 40 | 45 | 53   | 40 | 80  | 93  | 60 | 33 | 72,5 | M8x25  |
| K0475.54040 | 40,15 | 40,15 | 55 | 56 | 60 | 74   | 56 | 116 | 134 | 88 | 40 | 108  | M10x30 |
| K0475.55050 | 50,22 | 50,22 | 63 | 66 | 66 | 84   | 66 | 131 | 149 | 98 | 45 | 123  | M10x35 |

## Tube clamps T-angle

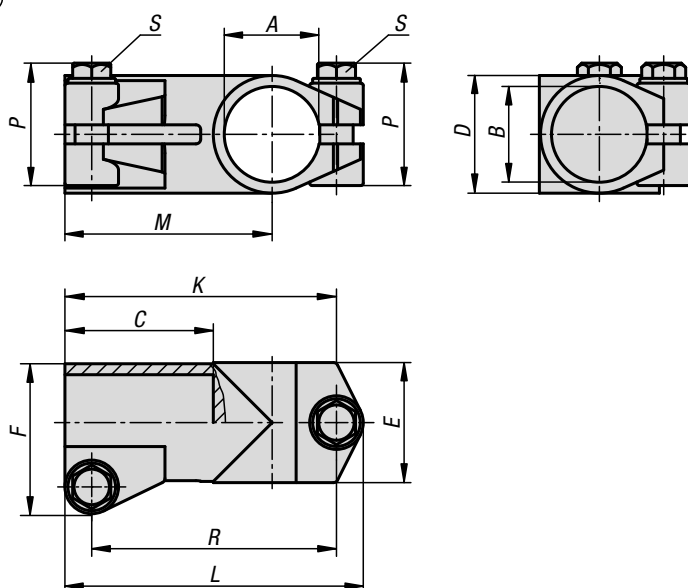
stainless steel



(A)



(B)



### Material:

Investment cast 1.4308 stainless steel.  
ISO 4762 cap screw and ISO 4032 hex nut, stainless steel.  
From ø30 mm ISO 4017 hex head bolt, stainless steel.

### Version:

Electropolished.

### Sample order:

K0475.11212

### Note:

The tube clamps with diameters 30 and 40 mm have a silicone sleeve that protects the thread of the hex head screw from contamination and damage.

### On request:

Clamping levers for tightening.

### Accessories:

- Round and square tubes K0493

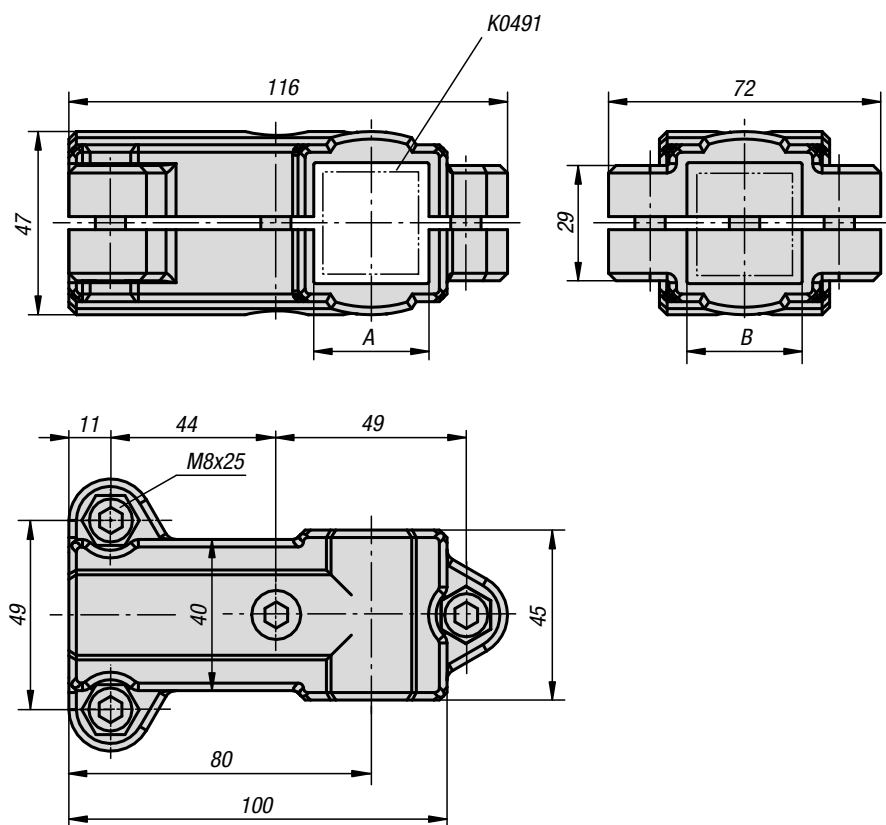


## KIPP Tube clamps T-angle stainless steel

| Order No.   | Form | A     | B     | C    | D    | E  | F  | G  | K    | L     | M  | P    | R     | S      |
|-------------|------|-------|-------|------|------|----|----|----|------|-------|----|------|-------|--------|
| K0475.11212 | A    | 12,1  | 12,1  | 30,5 | 25   | 32 | 35 | 25 | 55,5 | 65,5  | 43 | 23   | 49,5  | M6x18  |
| K0475.11414 | A    | 14,1  | 14,1  | 30,5 | 25   | 32 | 35 | 25 | 55,5 | 65,5  | 43 | 23   | 49,5  | M6x18  |
| K0475.11616 | A    | 16,1  | 16,1  | 30,5 | 25   | 32 | 35 | 25 | 55,5 | 65,5  | 43 | 23   | 49,5  | M6x18  |
| K0475.11818 | A    | 18,1  | 18,1  | 30,5 | 25   | 32 | 35 | 25 | 55,5 | 65,5  | 43 | 23   | 49,5  | M6x18  |
| K0475.12020 | A    | 20,1  | 20,1  | 30,5 | 25   | 32 | 35 | 25 | 55,5 | 65,5  | 43 | 23   | 49,5  | M6x18  |
| K0475.13030 | B    | 30,1  | 30,1  | 40   | 38,4 | 38 | 48 | -  | 78   | 87    | 58 | 45,5 | 69    | M8x30  |
| K0475.14040 | B    | 40,17 | 40,17 | 60   | 50,4 | 50 | 63 | -  | 112  | 124,9 | 87 | 52   | 102,5 | M10x35 |

# Tube clamps T-angle

plastic



## Material:

Thermoplastic.  
DIN 7984 screws and DIN 985 nuts steel.

## Version:

Black.  
Screws and nuts electro zinc-plated.

## Sample order:

K0476.3030

## Note:

These T-clamps are for 30 mm square tubes. Use reducer sleeves K0491 if smaller tubes are to be clamped or a conversion from square to round tubes is required.

## On request:

Plastic clamping levers for tightening.

## Accessories:

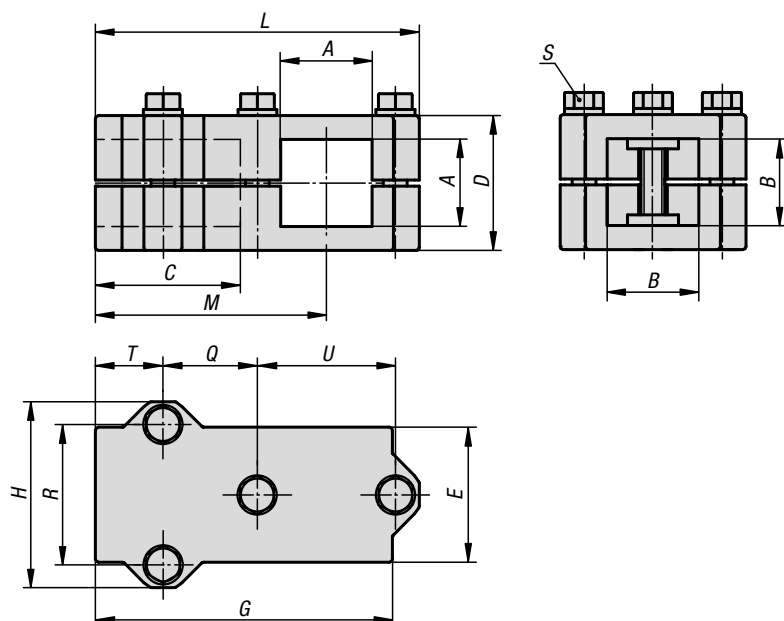
- Reducer sleeves K0491
- Round and square tubes K0493

## KIPP Tube clamps T-angle, plastic

| Order No.  | A  | B  |
|------------|----|----|
| K0476.3030 | 30 | 30 |

## Tube clamps T-angle

aluminium



### Material:

Cast aluminium.  
Screws and nuts steel.

### Version:

Vibratory ground.  
Screws and nuts electro zinc-plated.

### Sample order:

K0476.523030

### On request:

Levers for locking and other sizes for square tube.

### Accessories:

- Round and square tubes K0493

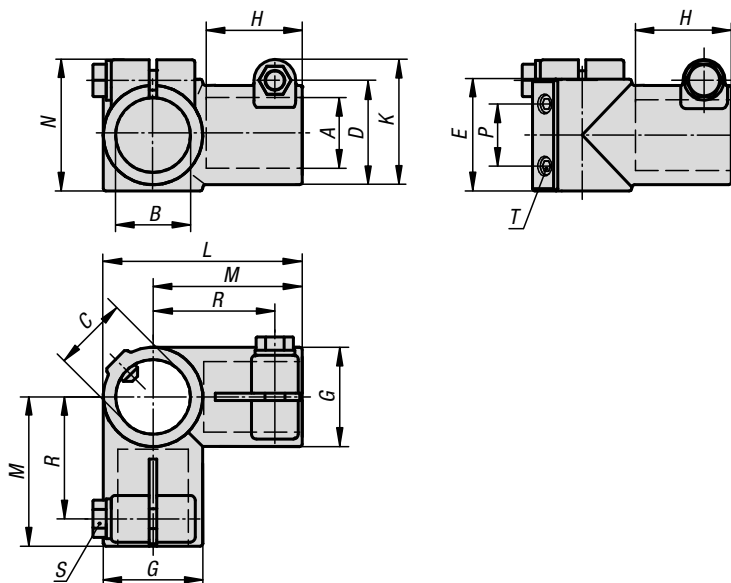


## KIPP Tube clamps T-angle, aluminium

| Order No.    | A    | B    | C  | D  | E  | G   | H  | L   | M  | Q    | R  | S     | T  | U  |
|--------------|------|------|----|----|----|-----|----|-----|----|------|----|-------|----|----|
| K0476.523030 | 30,3 | 30,3 | 46 | 45 | 45 | 100 | 62 | 108 | 77 | 31,5 | 46 | M8x45 | 23 | 46 |
| K0476.524040 | 40,4 | 40,4 | 60 | 60 | 60 | 129 | 75 | 136 | 99 | 40   | 57 | M8x60 | 30 | 57 |

## Tube clamps right-angle

aluminium



### Material:

Cast aluminium.  
Screws and nuts steel.

### Version:

Vibratory ground.  
Screws and nuts electro zinc-plated.

### Sample order:

K0476.530

### On request:

Clamping levers for tightening and other diameters.

### Accessories:

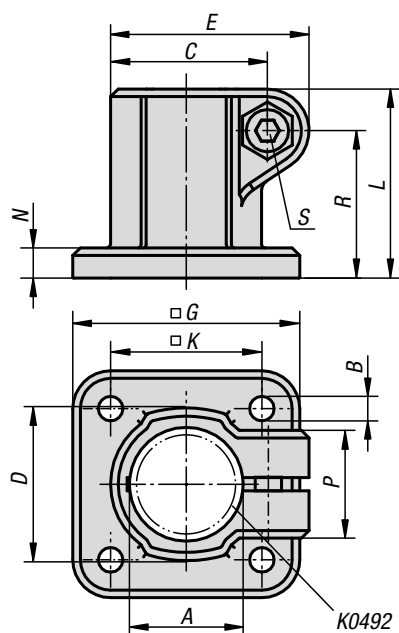
- Round and square tubes K0493

## KIPP Tube clamps right-angle, aluminium

| Order No. | A     | B     | C     | D  | E  | G  | H  | K  | L   | M   | N  | P  | R  | S      | T      |
|-----------|-------|-------|-------|----|----|----|----|----|-----|-----|----|----|----|--------|--------|
| K0476.530 | 30,1  | 30,1  | 30,1  | 40 | 45 | 40 | 38 | 51 | 80  | 60  | 53 | 25 | 49 | M8x25  | M8x15  |
| K0476.540 | 40,15 | 40,15 | 40,15 | 56 | 60 | 56 | 58 | 71 | 116 | 88  | 73 | 35 | 70 | M10x30 | M8x10  |
| K0476.550 | 50,22 | 50,22 | 50,22 | 66 | 70 | 66 | 70 | 78 | 136 | 108 | 80 | 40 | 90 | M10x35 | M10x15 |

# Tube clamps base

plastic



## Material:

Thermoplastic.

DIN 7984 screws and DIN 985 nuts steel.

## Version:

Black.

Screws and nuts electro zinc-plated.

## Sample order:

K0477.18

## Note:

The standard size for round tubes is Ø18 mm or Ø30 mm.

Use reducer sleeves K0492 if smaller tubes are to be clamped or a conversion from round to square tubes is required.

## On request:

Plastic clamping levers for tightening.

## Accessories:

- Reducer sleeves K0492
- Round and square tubes K0493

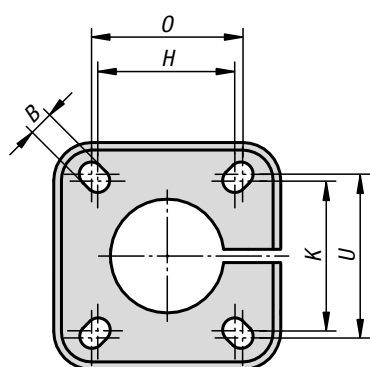
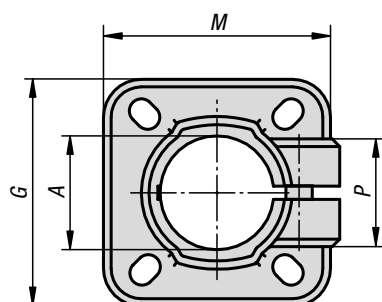
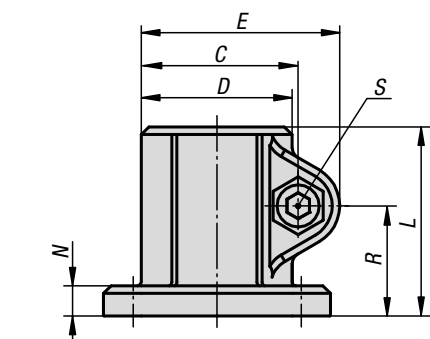


## KIPP Tube clamps base, plastic

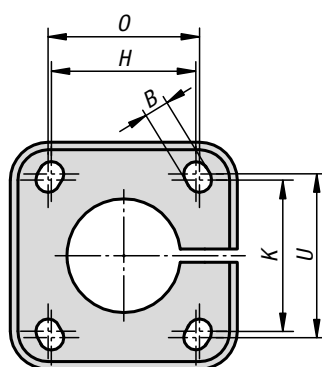
| Order No. | A  | B   | C    | D  | E    | G  | K  | L  | N | P    | R    | S     |
|-----------|----|-----|------|----|------|----|----|----|---|------|------|-------|
| K0477.18  | 18 | 5,3 | 26,5 | 26 | 34   | 45 | 30 | 32 | 5 | 21   | 24,5 | M6x18 |
| K0477.30  | 30 | 6,5 | 41,5 | 42 | 52,5 | 60 | 40 | 50 | 8 | 28,5 | 39   | M8x25 |

# Tube clamps base

aluminium



①



②

## Material:

Cast aluminium.

DIN 7984 screws and DIN 985 nuts, steel.

## Version:

Vibratory ground.

Screws and nuts electro zinc-plated.

## Sample order:

K0477.518

## On request:

Clamping levers for tightening and other diameters.

## Accessories:

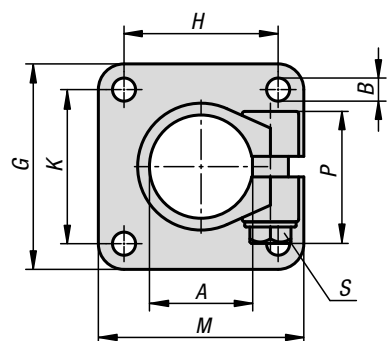
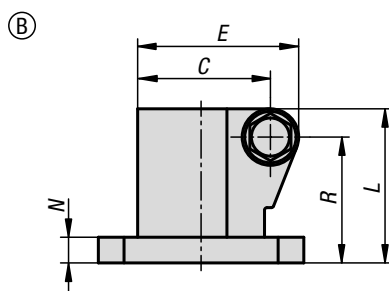
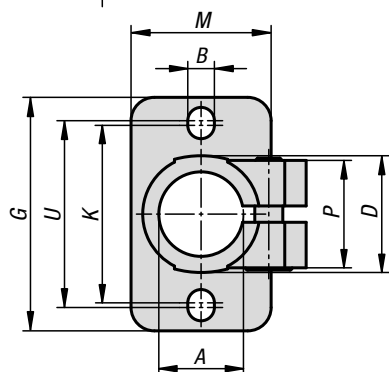
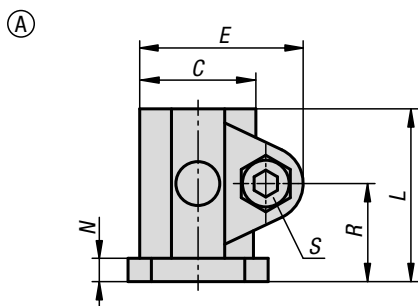
- Round and square tubes K0493

## KIPP Tube clamps base, aluminium

| Order No. | hole<br>arrangement | A     | B  | C    | D  | E    | G   | H  | K  | L  | M   | N  | O  | P  | R    | S      | U  |
|-----------|---------------------|-------|----|------|----|------|-----|----|----|----|-----|----|----|----|------|--------|----|
| K0477.512 | 1                   | 12,1  | 6  | 27   | 25 | 35,5 | 42  | 28 | 28 | 37 | 42  | 5  | 30 | 23 | 21   | M6x20  | 30 |
| K0477.514 | 1                   | 14,1  | 6  | 27   | 25 | 35,5 | 42  | 28 | 28 | 37 | 42  | 5  | 30 | 23 | 21   | M6x20  | 30 |
| K0477.515 | 1                   | 15,1  | 6  | 27   | 25 | 35,5 | 42  | 28 | 28 | 37 | 42  | 5  | 30 | 23 | 21   | M6x20  | 30 |
| K0477.516 | 1                   | 16,1  | 6  | 27   | 25 | 35,5 | 42  | 28 | 28 | 37 | 42  | 5  | 30 | 23 | 21   | M6x20  | 30 |
| K0477.518 | 1                   | 18,1  | 6  | 27   | 25 | 35,5 | 42  | 28 | 28 | 37 | 42  | 5  | 30 | 23 | 21   | M6x20  | 30 |
| K0477.520 | 2                   | 20,1  | 7  | 42,5 | 40 | 53   | 60  | 40 | 42 | 50 | 60  | 8  | 42 | 33 | 29   | M8x25  | 45 |
| K0477.525 | 2                   | 25,1  | 7  | 42,5 | 40 | 53   | 60  | 40 | 42 | 50 | 60  | 8  | 42 | 33 | 29   | M8x25  | 45 |
| K0477.530 | 2                   | 30,1  | 7  | 42,5 | 40 | 53   | 60  | 40 | 42 | 50 | 60  | 8  | 42 | 33 | 29   | M8x25  | 45 |
| K0477.540 | 1                   | 40,17 | 9  | 61   | 56 | 74   | 90  | 60 | 60 | 70 | 90  | 10 | 64 | 40 | 40   | M10x30 | 64 |
| K0477.550 | 1                   | 50,22 | 11 | 70   | 66 | 84   | 105 | 74 | 74 | 85 | 105 | 14 | 80 | 45 | 49,5 | M10x35 | 80 |

# Tube clamps base

stainless steel



## Material:

Investment cast 1.4308 stainless steel.  
ISO 4762 cap screw and ISO 4032 hex nut,  
stainless steel.  
From ø30 mm ISO 4017 hex head bolt, stainless  
steel.

## Version:

Electropolished.

## Sample order:

K0477.112

## Note:

The tube clamps with diameters 30 and 40 mm  
have a silicone sleeve that protects the thread  
of the hex head screw from contamination and  
damage.

## On request:

Clamping levers for tightening.

## Accessories:

- Round and square tubes K0493



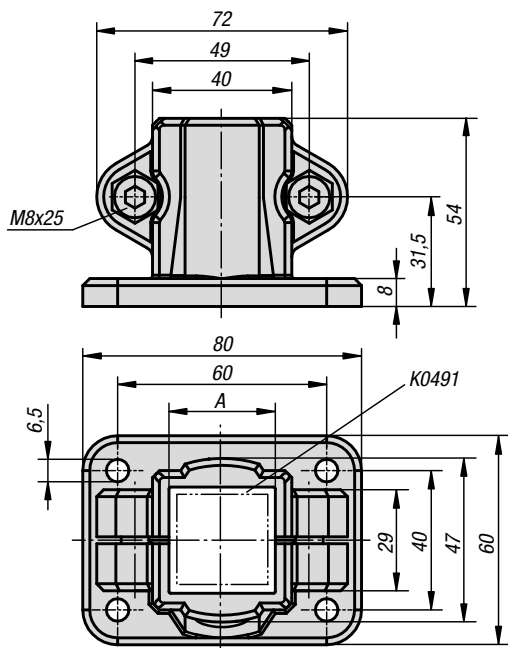
## KIPP Tube clamps base, stainless steel

| Order No. | Form | A     | B   | C    | D    | E  | G  | H  | K  | L  | M  | N  | P    | R    | S      | U  |
|-----------|------|-------|-----|------|------|----|----|----|----|----|----|----|------|------|--------|----|
| K0477.112 | A    | 12,1  | 5,7 | 27   | 25   | 35 | 50 | -  | 38 | 37 | 30 | 5  | 23   | 21   | M6x18  | 40 |
| K0477.114 | A    | 14,1  | 5,7 | 27   | 25   | 35 | 50 | -  | 38 | 37 | 30 | 5  | 23   | 21   | M6x18  | 40 |
| K0477.116 | A    | 16,1  | 5,7 | 27   | 25   | 35 | 50 | -  | 38 | 37 | 30 | 5  | 23   | 21   | M6x18  | 40 |
| K0477.118 | A    | 18,1  | 5,7 | 27   | 25   | 35 | 50 | -  | 38 | 37 | 30 | 5  | 23   | 21   | M6x18  | 40 |
| K0477.120 | A    | 20,1  | 5,7 | 27   | 25   | 35 | 50 | -  | 38 | 37 | 30 | 5  | 23   | 21   | M6x18  | 40 |
| K0477.130 | B    | 30,1  | 7   | 39   | 37,4 | 48 | 60 | 40 | 40 | 50 | 60 | 7  | 45,5 | 41   | M8x30  | -  |
| K0477.140 | B    | 40,17 | 9   | 51,7 | 49,4 | 63 | 80 | 60 | 60 | 60 | 80 | 10 | 52   | 48,7 | M10x35 | -  |



## Tube clamps base

plastic



KIPP Tube clamps base, plastic

| Order No. | A  |
|-----------|----|
| K0478.30  | 30 |



### Material:

Thermoplastic.  
DIN 7984 screws and DIN 985 nuts steel.

### Version:

Black.  
Screws and nuts electro zinc-plated.

### Sample order:

K0478.30

### Note:

These base clamps are for 30 mm square tubes. Use reducer sleeves K0491 if smaller tubes are to be clamped or a conversion from square to round tubes is required.

### On request:

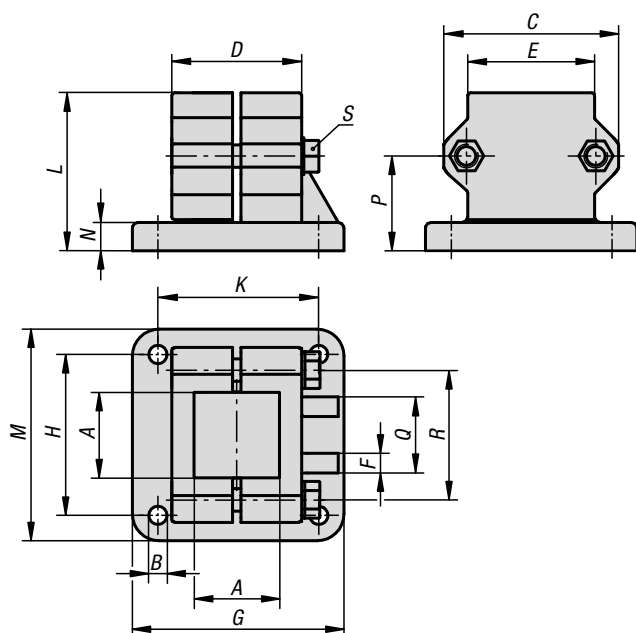
Plastic clamping levers for tightening.

### Accessories:

- Reducer sleeves K0491
- Round and square tubes K0493

## Tube clamps base

aluminium



KIPP Tube clamps base, aluminium



### Material:

Cast aluminium.  
Screws and nuts steel.

### Version:

Vibratory ground.  
Screws and nuts electro zinc-plated.

### Sample order:

K0478.5230

### On request:

Levers for locking and other sizes for square tube.

### Accessories:

- Round and square tubes K0493

| Order No.  | A    | B | C  | D  | E  | F | G   | H  | K  | L  | M   | N  | P    | Q  | R  | S     |
|------------|------|---|----|----|----|---|-----|----|----|----|-----|----|------|----|----|-------|
| K0478.5230 | 30,3 | 7 | 62 | 45 | 45 | 5 | 75  | 57 | 57 | 56 | 75  | 10 | 33,5 | 25 | 46 | M8x45 |
| K0478.5240 | 40,4 | 9 | 75 | 60 | 60 | 5 | 100 | 76 | 76 | 73 | 100 | 12 | 43   | 32 | 57 | M8x60 |

## Tube clamps flange

plastic



### Material:

Thermoplastic.  
DIN 7984 screws and DIN 985 nuts steel.

### Version:

Black.  
Screws and nuts electro zinc-plated.

### Sample order:

K0479.18

### Note:

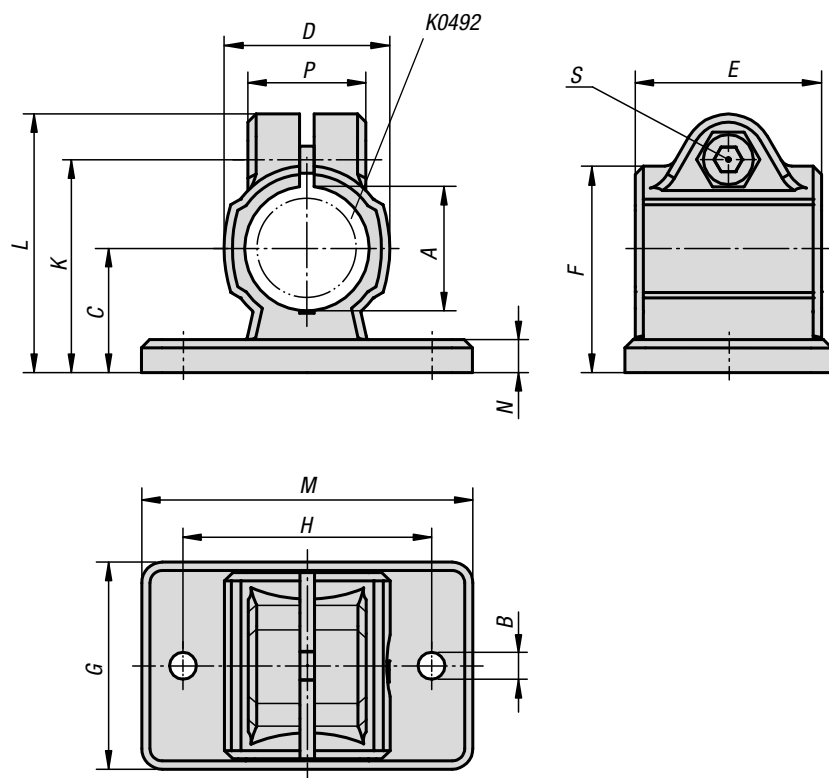
The standard size for round tubes is Ø18 mm or Ø30 mm.  
Use reducer sleeves K0492 if smaller tubes are to be clamped or a conversion from round to square tubes is required.

### On request:

Plastic clamping levers for tightening.

### Accessories:

- Reducer sleeves K0492
- Round and square tubes K0493

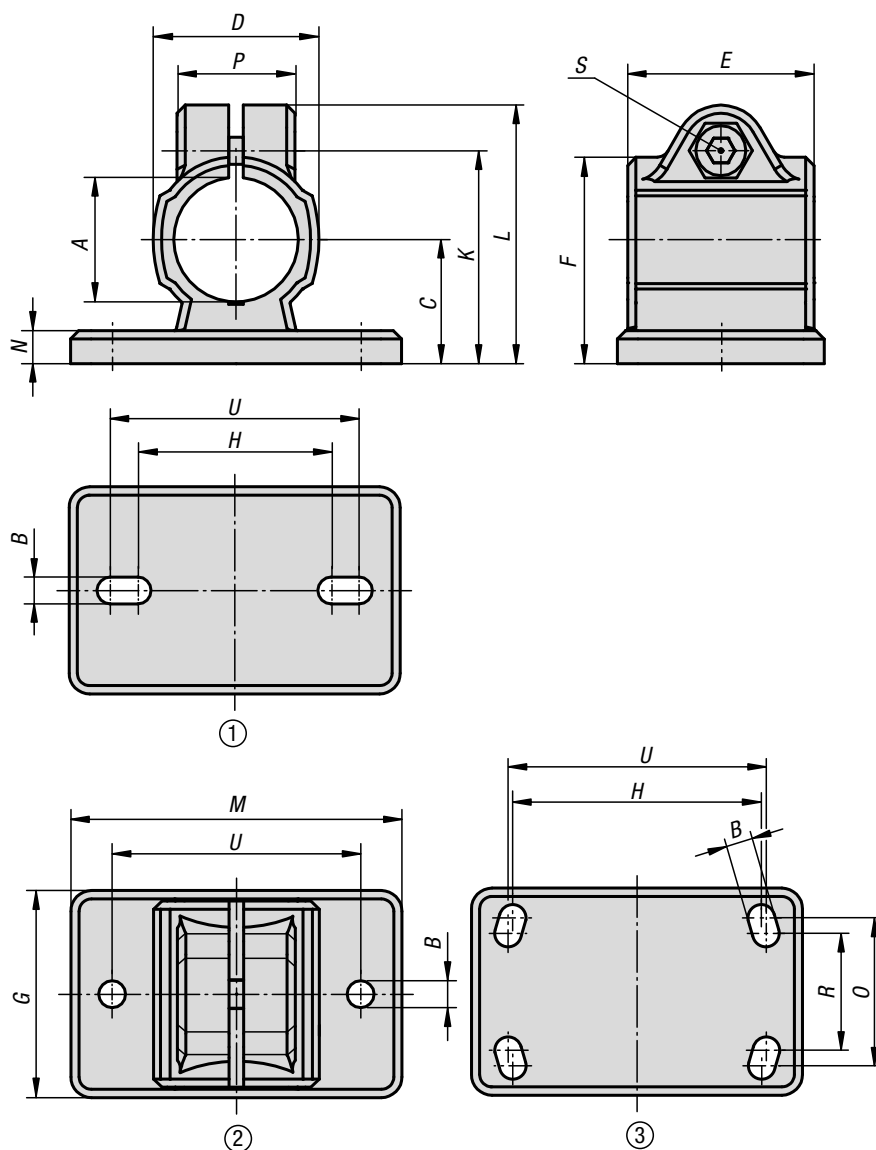


## KIPP Tube clamps, flange, plastic

| Order No. | A  | B   | C  | D  | E  | F    | G  | H  | K    | L    | M  | N | P    | S     |
|-----------|----|-----|----|----|----|------|----|----|------|------|----|---|------|-------|
| K0479.18  | 18 | 5,3 | 18 | 25 | 30 | 30,5 | 35 | 40 | 32   | 39,5 | 50 | 5 | 21   | M6x18 |
| K0479.30  | 30 | 6,5 | 30 | 40 | 45 | 50   | 50 | 60 | 51,5 | 62,5 | 80 | 8 | 28,5 | M8x25 |

# Tube clamps flange

aluminium



## Material:

Cast aluminium.  
DIN 7984 screws and DIN 985 nuts, steel.

## Version:

Vibratory ground.  
Screws and nuts electro zinc-plated.

## Sample order:

K0479.518

## Note:

\* Elongated hole

## On request:

Clamping levers for tightening and other diameters.

## Accessories:

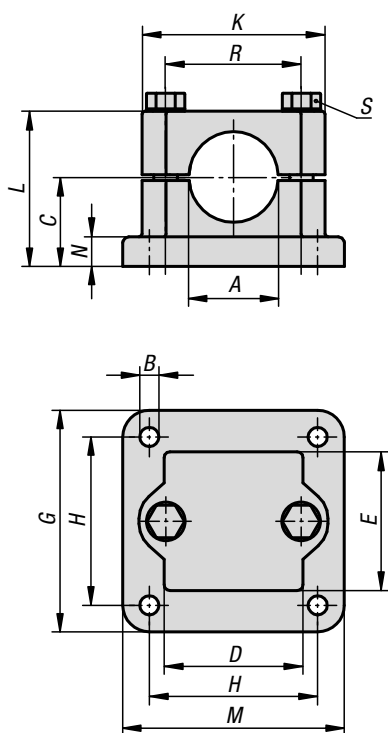
- Round and square tubes K0493

## KIPP Tube clamps, flange, aluminium

| Order No. | hole arrangement | A     | B          | C  | D  | E  | F  | G  | H  | K    | L  | M   | N  | O  | P  | R  | S      | U   |
|-----------|------------------|-------|------------|----|----|----|----|----|----|------|----|-----|----|----|----|----|--------|-----|
| K0479.512 | 1                | 12,1  | 5,5* (2x)  | 18 | 25 | 35 | 31 | 35 | 38 | 32,5 | 41 | 50  | 5  | -  | 23 | -  | M6x20  | 40  |
| K0479.514 | 2                | 14,1  | 5,5 (2x)   | 18 | 25 | 35 | 31 | 35 | -  | 32,5 | 41 | 50  | 5  | -  | 23 | -  | M6x20  | 40  |
| K0479.515 | 2                | 15,1  | 5,5 (2x)   | 18 | 25 | 35 | 31 | 35 | -  | 32,5 | 41 | 50  | 5  | -  | 23 | -  | M6x20  | 40  |
| K0479.516 | 1                | 16,1  | 5,5* (2x)  | 18 | 25 | 35 | 31 | 35 | 38 | 32,5 | 41 | 50  | 5  | -  | 23 | -  | M6x20  | 40  |
| K0479.518 | 2                | 18,1  | 5,5 (2x)   | 18 | 25 | 35 | 31 | 35 | -  | 32,5 | 41 | 50  | 5  | -  | 23 | -  | M6x20  | 40  |
| K0479.520 | 1                | 20,1  | 6,5* (2x)  | 30 | 40 | 40 | 50 | 55 | 53 | 53   | 63 | 78  | 7  | -  | 33 | -  | M8x25  | 60  |
| K0479.525 | 1                | 25,1  | 6,5* (2x)  | 30 | 40 | 40 | 50 | 55 | 53 | 53   | 63 | 78  | 7  | -  | 33 | -  | M8x25  | 60  |
| K0479.530 | 1                | 30,1  | 6,5* (2x)  | 30 | 40 | 40 | 50 | 55 | 53 | 53   | 63 | 78  | 7  | -  | 33 | -  | M8x25  | 60  |
| K0479.540 | 3                | 40,17 | 8,5* (4x)  | 42 | 56 | 60 | 70 | 80 | 80 | 74   | 87 | 105 | 10 | 60 | 40 | 52 | M10x30 | 82  |
| K0479.550 | 3                | 50,22 | 10,5* (4x) | 50 | 66 | 65 | 83 | 90 | 98 | 85   | 98 | 128 | 14 | 62 | 45 | 60 | M10x35 | 100 |

# Tube clamps flange

aluminium


**Material:**

Cast aluminium.  
Screws and nuts steel.

**Version:**

Vibratory ground.  
Screws and nuts electro zinc-plated.

**Sample order:**

K0479.5230

**On request:**

Clamping levers for tightening and other diameters.

**Accessories:**

- Round and square tubes K0493

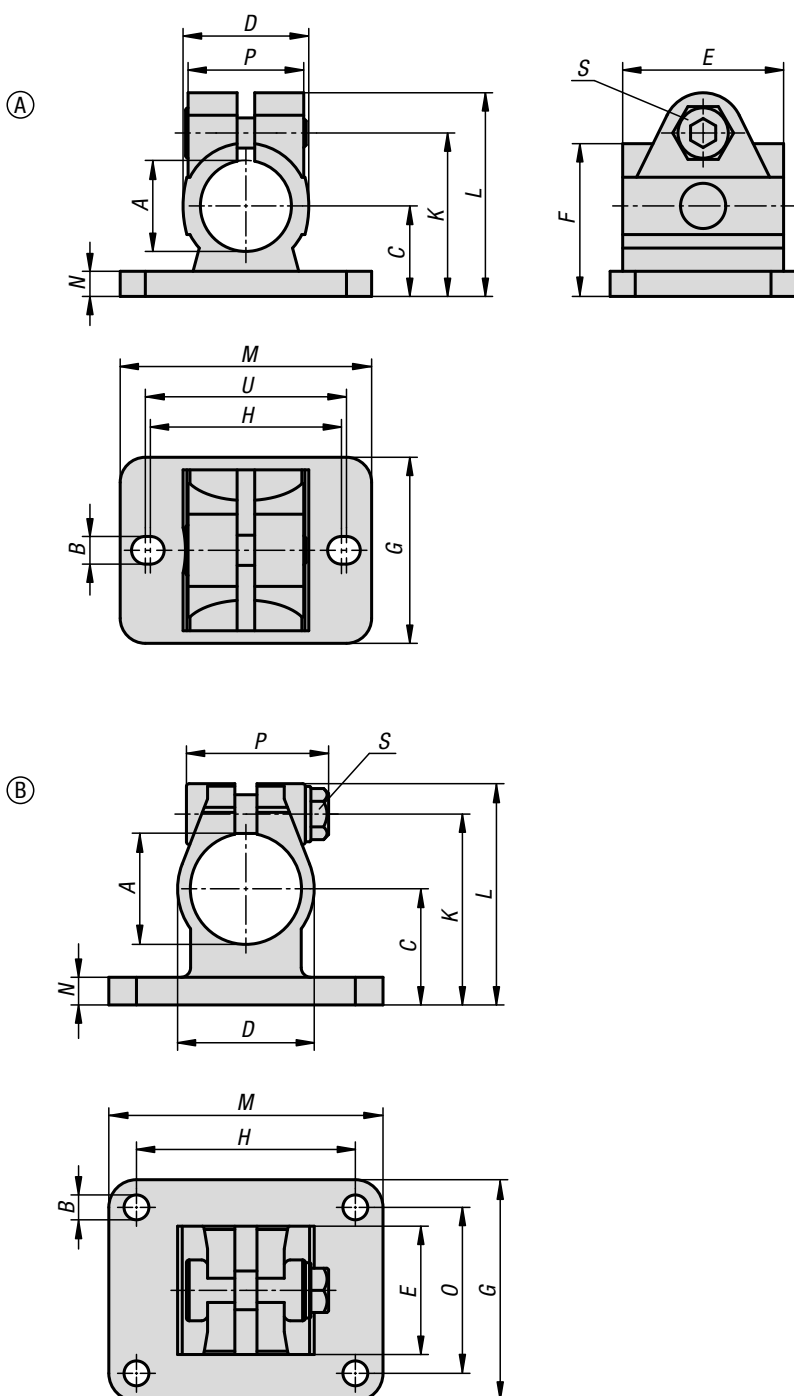


## KIPP Tube clamps, flange, aluminium

| Order No.  | A    | B | C  | D  | E  | G   | H  | K  | L    | M   | N  | R  | S     |
|------------|------|---|----|----|----|-----|----|----|------|-----|----|----|-------|
| K0479.5220 | 20,2 | 7 | 30 | 45 | 45 | 75  | 57 | 62 | 52,5 | 75  | 10 | 46 | M8x50 |
| K0479.5225 | 25,2 | 7 | 30 | 45 | 45 | 75  | 57 | 62 | 52,5 | 75  | 10 | 46 | M8x50 |
| K0479.5230 | 30,2 | 7 | 30 | 45 | 45 | 75  | 57 | 62 | 52,5 | 75  | 10 | 46 | M8x50 |
| K0479.5240 | 40,2 | 9 | 40 | 60 | 60 | 100 | 76 | 75 | 70   | 100 | 10 | 57 | M8x70 |

## Tube clamps flange

stainless steel



### Material:

Investment cast 1.4308 stainless steel.

ISO 4762 cap screw and ISO 4032 hex nut, stainless steel.

From ø30 mm ISO 4017 hex head bolt, stainless steel.

### Version:

Electropolished.

### Sample order:

K0479.112

### Note:

The tube clamps with diameters 30 and 40 mm have a silicone sleeve that protects the thread of the hex head screw from contamination and damage.

### On request:

Clamping levers for tightening.

### Accessories:

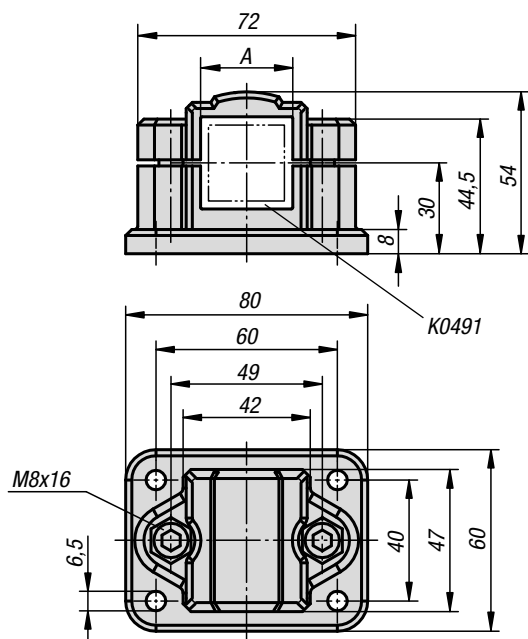
- Round and square tubes K0493

## KIPP Tube clamps flange, stainless steel

| Order No. | Form | A     | B   | C  | D    | E    | F    | G  | H  | K    | L    | M  | N  | O  | P    | S      | U  |
|-----------|------|-------|-----|----|------|------|------|----|----|------|------|----|----|----|------|--------|----|
| K0479.112 | A    | 12,1  | 5,5 | 18 | 25   | 32   | 30,4 | 37 | 38 | 32,5 | 40,5 | 50 | 5  | -  | 23   | M6x18  | 40 |
| K0479.114 | A    | 14,1  | 5,5 | 18 | 25   | 32   | 30,4 | 37 | 38 | 32,5 | 40,5 | 50 | 5  | -  | 23   | M6x18  | 40 |
| K0479.116 | A    | 16,1  | 5,5 | 18 | 25   | 32   | 30,4 | 37 | 38 | 32,5 | 40,5 | 50 | 5  | -  | 23   | M6x18  | 40 |
| K0479.118 | A    | 18,1  | 5,5 | 18 | 25   | 32   | 30,4 | 37 | 38 | 32,5 | 40,5 | 50 | 5  | -  | 23   | M6x18  | 40 |
| K0479.120 | A    | 20,1  | 5,5 | 18 | 25   | 32   | 30,4 | 37 | 38 | 32,5 | 40,5 | 50 | 5  | -  | 23   | M6x18  | 40 |
| K0479.130 | B    | 30,1  | 7   | 30 | 37,4 | 32,4 | -    | 55 | 60 | 50   | 59,2 | 78 | 7  | 40 | 45,5 | M8x30  | -  |
| K0479.140 | B    | 40,17 | 9   | 42 | 49,4 | 46,4 | -    | 80 | 60 | 69   | 80   | 80 | 10 | 60 | 52   | M10x35 | -  |

## Tube clamps flange

plastic



KIPP Tube clamps flange, plastic

| Order No. | A  |
|-----------|----|
| K0480.30  | 30 |

### Material:

Thermoplastic.  
DIN 7984 screws and DIN 985 nuts steel.

### Version:

Black.  
Screws and nuts electro zinc-plated.

### Sample order:

K0480.30

### Note:

These flange clamps are for 30 mm square tubes.  
Use reducer sleeves K0491 if smaller tubes are to be clamped or a conversion from square to round tubes is required.

### On request:

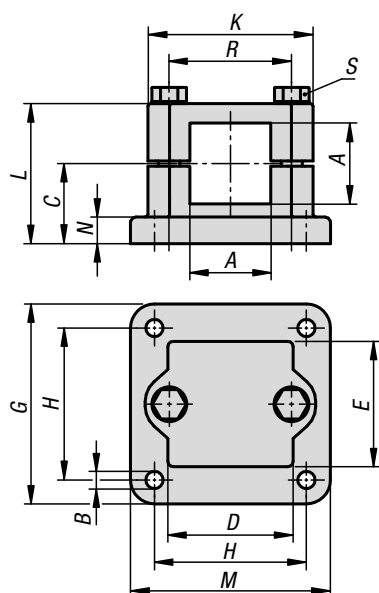
Plastic clamping levers for tightening.

### Accessories:

- Reducer sleeves K0491
- Round and square tubes K0493

## Tube clamps flange

aluminium



KIPP Tube clamps flange, aluminium

| Order No.  | A    | B | C  | D  | E  | G   | H  | K  | L    | M   | N  | R  | S     |
|------------|------|---|----|----|----|-----|----|----|------|-----|----|----|-------|
| K0480.5225 | 25,3 | 7 | 30 | 45 | 45 | 75  | 57 | 62 | 52,5 | 75  | 10 | 46 | M8x50 |
| K0480.5230 | 30,3 | 7 | 30 | 45 | 45 | 75  | 57 | 62 | 52,5 | 75  | 10 | 46 | M8x50 |
| K0480.5240 | 40,4 | 9 | 40 | 60 | 60 | 100 | 76 | 75 | 70   | 100 | 10 | 57 | M8x70 |

### Material:

Cast aluminium.  
Screws and nuts steel.

### Version:

Vibratory ground.  
Screws and nuts electro zinc-plated.

### Sample order:

K0480.5230

### On request:

Levers for locking and other sizes for square tube.

### Accessories:

- Round and square tubes K0493

## Tube clamps straight

plastic



### Material:

Thermoplastic.  
DIN 7984 screws and DIN 985 nuts steel.

### Version:

Black.  
Screws and nuts electro zinc-plated.

### Sample order:

K0481.30

### Note:

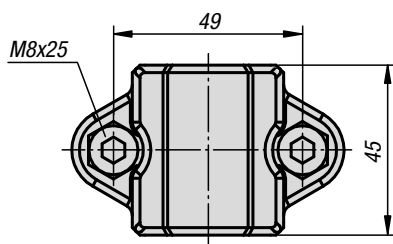
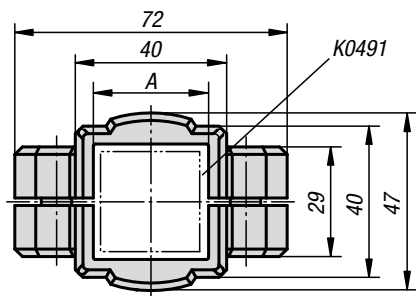
These straight clamps are for 30 mm square tubes.  
Use reducer sleeves K0491 if smaller tubes are to be clamped or a conversion from square to round tubes is required.

### On request:

Plastic clamping levers for tightening.

### Accessories:

- Reducer sleeves K0491
- Round and square tubes K0493



### KIPP Tube clamps straight, plastic

| Order No. | A  |
|-----------|----|
| K0481.30  | 30 |

# K0483

## Tube clamps straight

plastic



### Material:

Thermoplastic.  
DIN 7984 screws and DIN 985 nuts steel.

### Version:

Black.  
Screws and nuts electro zinc-plated.

### Sample order:

K0483.18

### Note:

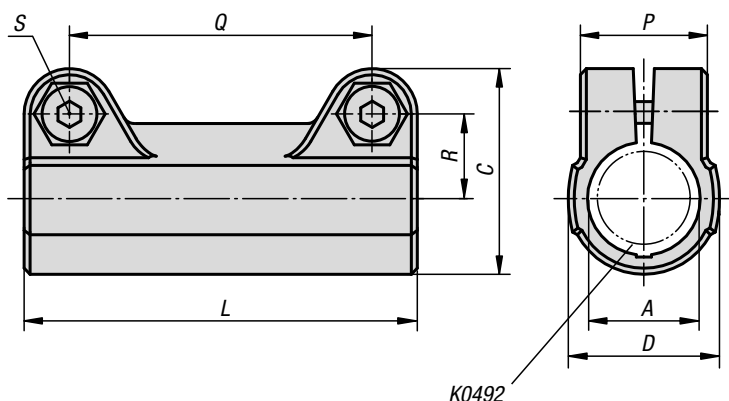
The standard size for round tubes is Ø18 mm or Ø30 mm. Use reducer sleeves K0492 if smaller tubes are to be clamped or a conversion from round to square tubes is required.

### On request:

Plastic clamping levers for tightening.

### Accessories:

- Reducer sleeves K0492
- Round and square tubes K0493

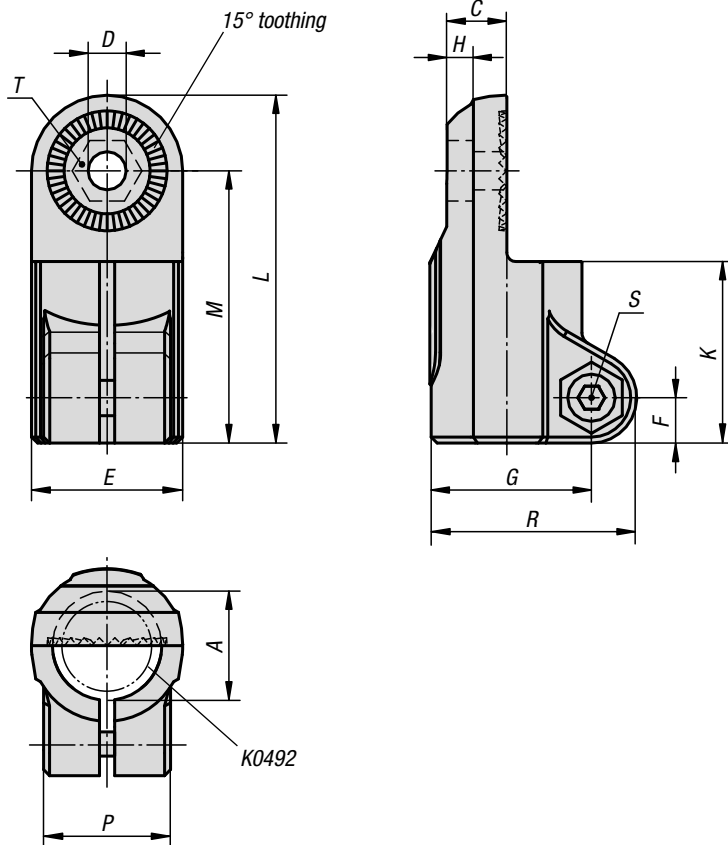


### KIPP Tube clamps straight, plastic

| Order No. | A  | C    | D  | L  | P    | Q  | R    | S     |
|-----------|----|------|----|----|------|----|------|-------|
| K0483.18  | 18 | 34   | 25 | 65 | 21   | 50 | 14   | M6x18 |
| K0483.30  | 30 | 52,5 | 40 | 95 | 28,5 | 73 | 22,8 | M8x25 |

## Tube clamps swivel half

sunken teeth, plastic



### Material:

Thermoplastic.

DIN 7984 screws and DIN 985 nuts steel.

### Version:

Black.

Screws and nuts electro zinc-plated.

### Sample order:

K0484.18

### Note:

Swivel half clamps with sunken teeth can be combined with swivel half clamps with raised teeth (K0485) to make a complete swivel clamp. The standard size for round tubes is Ø18 mm or Ø30 mm. Use reducer sleeves K0492 if smaller tubes are to be clamped or a conversion from round to square tubes is required.

### Assembly:

K0484.18 and K0485.18 can be combined using a DIN 985 M6 nut (K1148) and a DIN 6912 M6x18 cap screw (K1160).

K0484.30 and K0485.30 can be combined using a DIN 985 M8 nut (K1148) and a DIN 6912 M8x25 cap screw (K1160).

### On request:

Plastic clamping levers for tightening.

### Accessories:

- Reducer sleeves K0492
- Round and square tubes K0493

## KIPP Tube clamps swivel half, sunken teeth, plastic

| Order No. | A  | C    | D   | E  | F   | G    | H   | K  | L    | M  | P    | R    | S     | T          |
|-----------|----|------|-----|----|-----|------|-----|----|------|----|------|------|-------|------------|
| K0484.18  | 18 | 9,9  | 6,1 | 25 | 7,5 | 26,5 | 5,9 | 30 | 57,5 | 45 | 21   | 34   | M6x18 | M6-DIN 985 |
| K0484.30  | 30 | 16,5 | 8,1 | 40 | 11  | 41,5 | 6,5 | 45 | 88   | 68 | 28,5 | 52,5 | M8x25 | M8-DIN 985 |



# Tube clamps, swivel half

aluminium, with sunken teeth



## Material:

Cast aluminium.  
Screws and nuts steel.

## Version:

Vibratory ground.  
Screws and nuts electro zinc-plated.

## Sample order:

K0484.516

## Note:

Swivel half clamps with sunken teeth can be combined with swivel half clamps with raised teeth (K0485) to make a complete swivel clamp.

Max. torque when tightening the lockscrew:

M6: 10 Nm.

M8: 25 Nm.

M10: 50 Nm.

## On request:

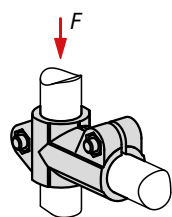
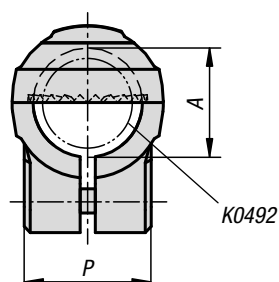
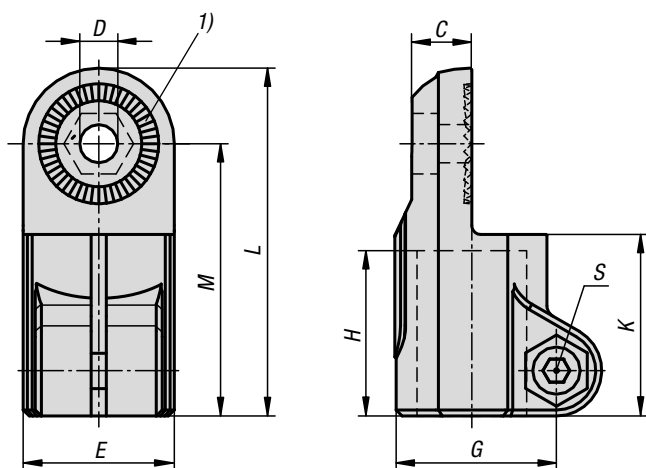
Clamping levers for tightening.

## Accessories:

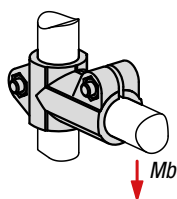
- Hex nut DIN 985
- Hex head bolt DIN 933
- Cap screw DIN 6912

## Drawing reference:

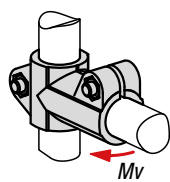
1) 15° toothing



Retaining force (kN)



Flexural torque (Nm)



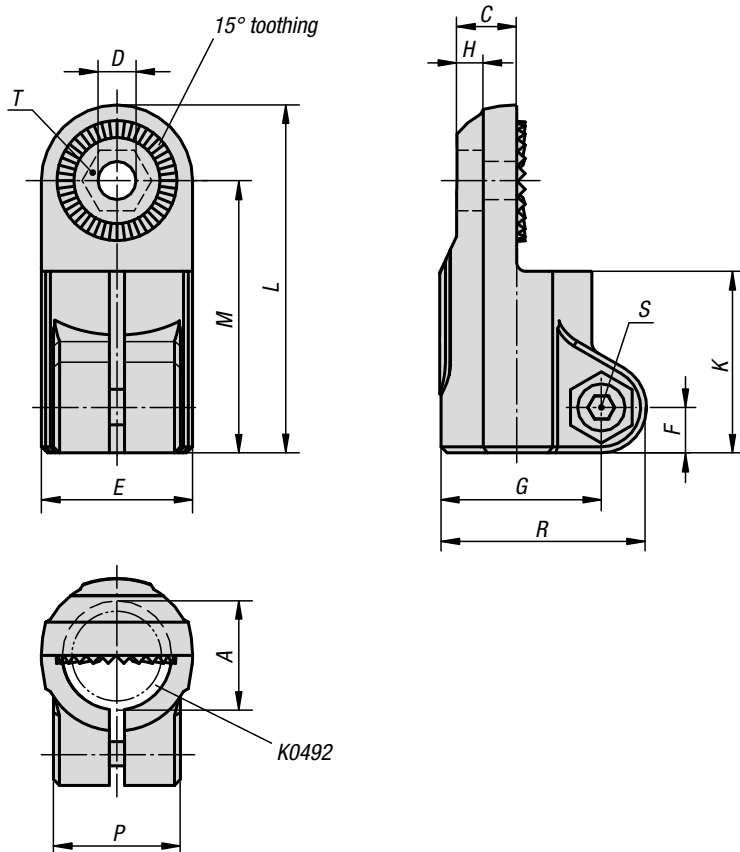
Torsional torque (Nm)

## KIPP Tube clamps, swivel half, aluminium, with sunken teeth

| Order No. | A    | C    | D   | E  | G    | H  | K  | L   | M   | P  | S   | F<br>kN | Mb (Nm) | Mv (Nm) |
|-----------|------|------|-----|----|------|----|----|-----|-----|----|-----|---------|---------|---------|
| K0484.512 | 12,1 | 10,5 | 7,5 | 26 | 29,4 | 25 | 30 | 57  | 44  | 21 | M6  | 3,6     | 28      | 9       |
| K0484.514 | 14,1 | 10,5 | 7,5 | 26 | 29,4 | 25 | 30 | 57  | 44  | 21 | M6  | 3,6     | 28      | 9       |
| K0484.516 | 16,1 | 10,5 | 7,5 | 26 | 29,4 | 25 | 30 | 57  | 44  | 21 | M6  | 3,6     | 28      | 9       |
| K0484.518 | 18,1 | 10,5 | 7,5 | 26 | 29,4 | 25 | 30 | 57  | 44  | 21 | M6  | 3,6     | 28      | 9       |
| K0484.520 | 20   | 16   | 9   | 40 | 40   | 45 | 50 | 93  | 73  | 33 | M8  | 4,9     | 91      | 94      |
| K0484.525 | 25,1 | 16   | 9   | 40 | 40   | 45 | 50 | 93  | 73  | 33 | M8  | 4,9     | 91      | 94      |
| K0484.530 | 30,1 | 16   | 9   | 40 | 40   | 45 | 50 | 93  | 73  | 33 | M8  | 4,9     | 91      | 94      |
| K0484.540 | 40,2 | 22   | 11  | 56 | 56   | 60 | 68 | 128 | 100 | 48 | M10 | 6       | 267     | 181     |

# Tube clamps swivel half

raised teeth, plastic



## Material:

Thermoplastic.

DIN 7984 screws and DIN 985 nuts steel.

## Version:

Black.

Screws and nuts electro zinc-plated.

## Sample order:

K0485.18

## Note:

Swivel half clamps with raised teeth can be combined with swivel half clamps with sunken teeth (K0484, K0486 or K0487) to make a complete swivel clamp.

The standard size for round tubes is Ø18 mm or Ø30 mm. Use reducer sleeves K0492 if smaller tubes are to be clamped or a conversion from round to square tubes is required.

## Assembly:

K0485.18 and K0484.18 can be combined using a DIN 985 M6 nut (K1148) and a DIN 6912 M6x18 cap screw (K1160).

K0485.30 and K0484.30 can be combined using a DIN 985 M8 nut (K1148) and a DIN 6912 M8x25 cap screw (K1160).

## On request:

Plastic clamping levers for tightening.

## Accessories:

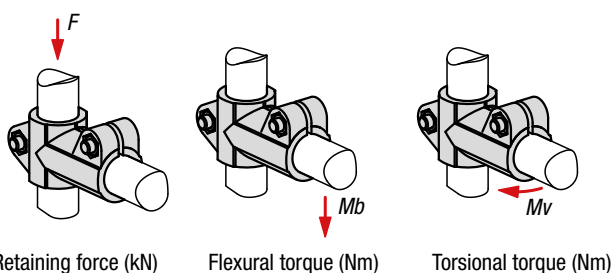
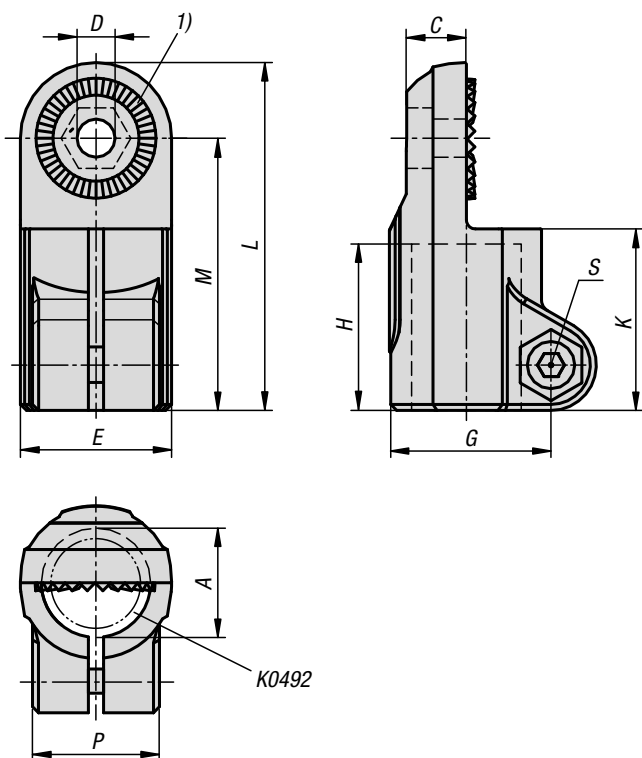
- Reducer sleeves K0492
- Round and square tubes K0493

## KIPP Tube clamps swivel half, raised teeth, plastic

| Order No. | A  | C    | D   | E  | F   | G    | H   | K  | L    | M  | P    | R    | S     | T          |
|-----------|----|------|-----|----|-----|------|-----|----|------|----|------|------|-------|------------|
| K0485.18  | 18 | 9,9  | 6,1 | 25 | 7,5 | 26,5 | 5,9 | 30 | 57,5 | 45 | 21   | 34   | M6x18 | M6-DIN 985 |
| K0485.30  | 30 | 16,5 | 8,1 | 40 | 11  | 41,5 | 6,5 | 45 | 88   | 68 | 28,5 | 52,5 | M8x25 | M8-DIN 985 |

# Tube clamps swivel half

aluminium, with raised teeth



## Material:

Cast aluminium.  
Screws and nuts steel.

## Version:

Vibratory ground.  
Screws and nuts electro zinc-plated.

## Sample order:

K0485.516

## Note:

Swivel half clamps with raised teeth can be combined with swivel half clamps with sunken teeth (K0484, K0486 or K0487) to make a complete swivel clamp.

Max. torque when tightening the lock screw:

M6: 10 Nm.

M8: 25 Nm.

M10: 50 Nm.

## On request:

Clamping levers for tightening.

## Accessories:

- Hex nut DIN 985
- Hex head bolt DIN 933
- Cap screw DIN 6912

## Drawing reference:

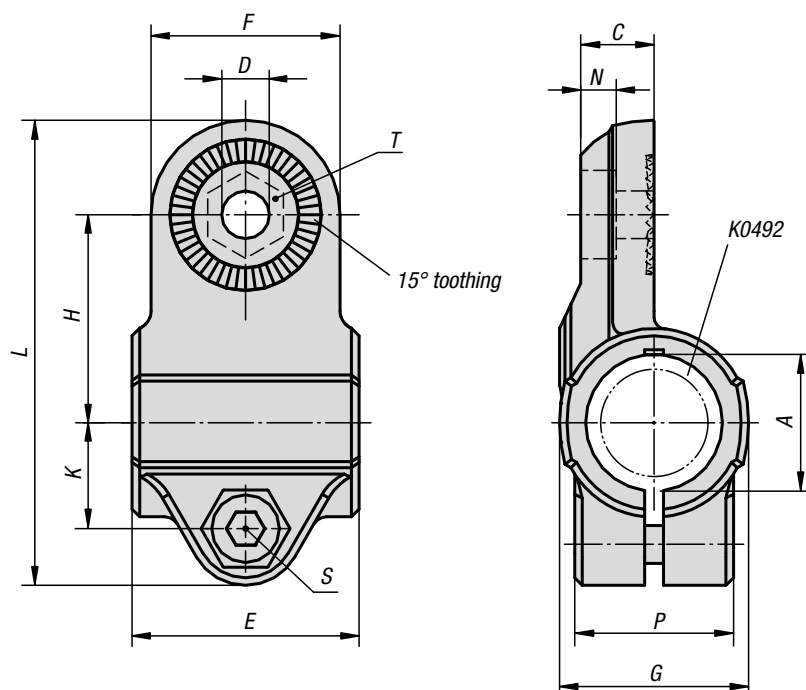
1) 15° tothing

## KIPP Tube clamps swivel half, aluminium, with raised teeth

| Order No. | A    | C    | D   | E  | G    | H  | K  | L   | M   | P  | S   | F<br>kN | Mb (Nm) | Mv (Nm) |
|-----------|------|------|-----|----|------|----|----|-----|-----|----|-----|---------|---------|---------|
| K0485.512 | 12,1 | 10,5 | 7,5 | 26 | 29,4 | 25 | 30 | 57  | 44  | 21 | M6  | 3,6     | 28      | 9       |
| K0485.514 | 14,1 | 10,5 | 7,5 | 26 | 29,4 | 25 | 30 | 57  | 44  | 21 | M6  | 3,6     | 28      | 9       |
| K0485.516 | 16,1 | 10,5 | 7,5 | 26 | 29,4 | 25 | 30 | 57  | 44  | 21 | M6  | 3,6     | 28      | 9       |
| K0485.518 | 18,1 | 10,5 | 7,5 | 26 | 29,4 | 25 | 30 | 57  | 44  | 21 | M6  | 3,6     | 28      | 9       |
| K0485.520 | 20   | 16   | 9   | 40 | 40   | 45 | 50 | 93  | 73  | 33 | M8  | 4,9     | 91      | 94      |
| K0485.525 | 25,1 | 16   | 9   | 40 | 40   | 45 | 50 | 93  | 73  | 33 | M8  | 4,9     | 91      | 94      |
| K0485.530 | 30,1 | 16   | 9   | 40 | 40   | 45 | 50 | 93  | 73  | 33 | M8  | 4,9     | 91      | 94      |
| K0485.540 | 40,2 | 22   | 11  | 56 | 56   | 60 | 68 | 128 | 100 | 48 | M10 | 6       | 267     | 181     |

# Tube clamps swivel half

sunken teeth, plastic



## Material:

Thermoplastic.  
DIN 7984 screws and DIN 985 nuts steel.

## Version:

Black.  
Screws and nuts electro zinc-plated.

## Sample order:

K0486.18

## Note:

Swivel half clamps with sunken teeth can be combined with swivel half clamps with raised teeth (K0485) to make a complete swivel clamp.

The standard size for round tubes is Ø18 mm or Ø30 mm. Use reducer sleeves K0492 if smaller tubes are to be clamped or a conversion from round to square tubes is required.

## On request:

Plastic clamping levers for tightening.

## Accessories:

- Reducer sleeves K0492
- Round and square tubes K0493

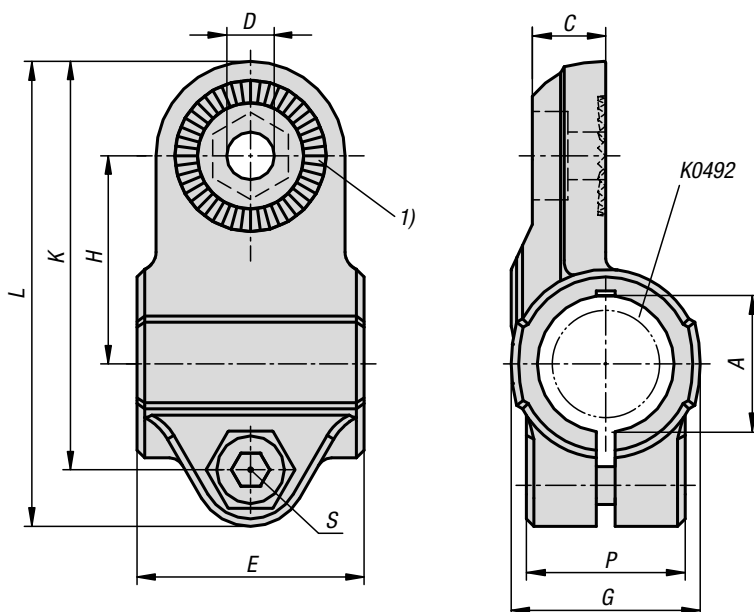


## KIPP Tube clamps swivel half, sunken teeth, plastic

| Order No. | A  | C    | D   | E  | F  | G  | H    | K    | L    | N   | P    | S     | T          |
|-----------|----|------|-----|----|----|----|------|------|------|-----|------|-------|------------|
| K0486.18  | 18 | 9,7  | 6,1 | 30 | 25 | 25 | 27,5 | 14   | 61,5 | 5,7 | 21   | M6x18 | M6-DIN 985 |
| K0486.30  | 30 | 16,5 | 8,1 | 45 | 40 | 40 | 43   | 22,5 | 95,5 | 6,5 | 28,5 | M8x25 | M8-DIN 985 |

# Tube clamps, swivel half

aluminium, with sunken teeth



## Material:

Cast aluminium.  
Screws and nuts steel.

## Version:

Vibratory ground.  
Screws and nuts electro zinc-plated.

## Sample order:

K0486.516

## Note:

Swivel half clamps with sunken teeth can be combined with swivel half clamps with raised teeth (K0485) to make a complete swivel clamp.

Max. torque when tightening the lockscrew:

M6: 10 Nm.

M8: 25 Nm.

M10: 50 Nm.

## On request:

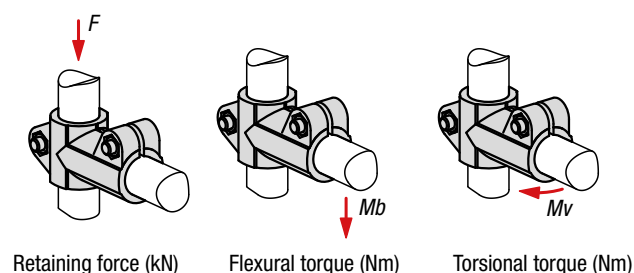
Clamping levers for tightening.

## Accessories:

- Hex nut DIN 985
- Hex head bolt DIN 933
- Cap screw DIN 6912

## Drawing reference:

1) 15° toothing



Retaining force (kN)

Flexural torque (Nm)

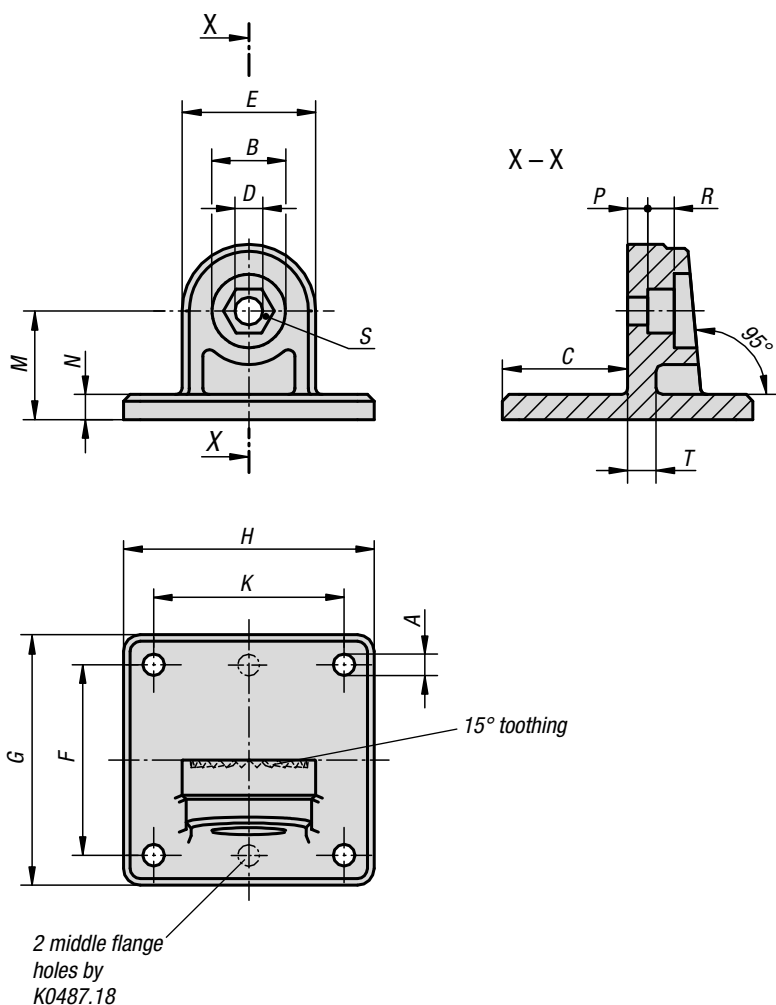
Torsional torque (Nm)

## KIPP Tube clamps, swivel half, aluminium, with sunken teeth

| Order No. | A    | C    | D   | E  | G  | H  | K   | L    | P  | S   | F<br>kN | Mb (Nm) | Mv (Nm) |
|-----------|------|------|-----|----|----|----|-----|------|----|-----|---------|---------|---------|
| K0486.512 | 12,1 | 10,5 | 7,5 | 30 | 26 | 27 | 56  | 64,5 | 21 | M6  | 2,7     | 38      | 15      |
| K0486.514 | 14,1 | 10,5 | 7,5 | 30 | 26 | 27 | 56  | 64,5 | 21 | M6  | 2,7     | 38      | 15      |
| K0486.516 | 16,1 | 10,5 | 7,5 | 30 | 26 | 27 | 56  | 64,5 | 21 | M6  | 2,7     | 38      | 15      |
| K0486.518 | 18,1 | 10,5 | 7,5 | 30 | 26 | 27 | 56  | 64,5 | 21 | M6  | 2,7     | 38      | 15      |
| K0486.520 | 20   | 16   | 9   | 40 | 40 | 43 | 85  | 93   | 33 | M8  | 6       | 133     | 85      |
| K0486.525 | 25,1 | 16   | 9   | 40 | 40 | 43 | 85  | 93   | 33 | M8  | 6       | 133     | 85      |
| K0486.530 | 30,1 | 16   | 9   | 40 | 40 | 43 | 85  | 93   | 33 | M8  | 6       | 133     | 85      |
| K0486.540 | 40,2 | 22   | 11  | 56 | 56 | 60 | 116 | 128  | 48 | M10 | 5,8     | 264     | 138     |

# Tube clamps swivel base

sunken teeth, plastic



## Material:

Thermoplastic.  
DIN 7984 screws and DIN 985 nuts steel.

## Version:

Black.  
Screws and nuts electro zinc-plated.

## Sample order:

K0487.18

## Note:

Swivel clamp bases can be combined with swivel half clamps with raised teeth (K0485) to make a complete swivel clamp.

## On request:

Plastic clamping levers for tightening.

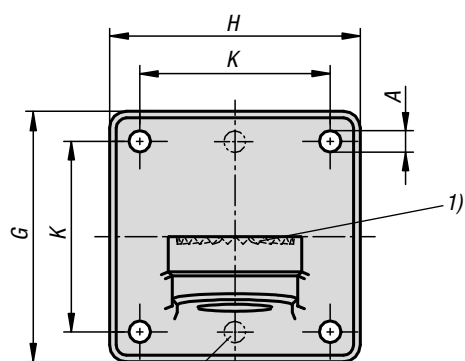
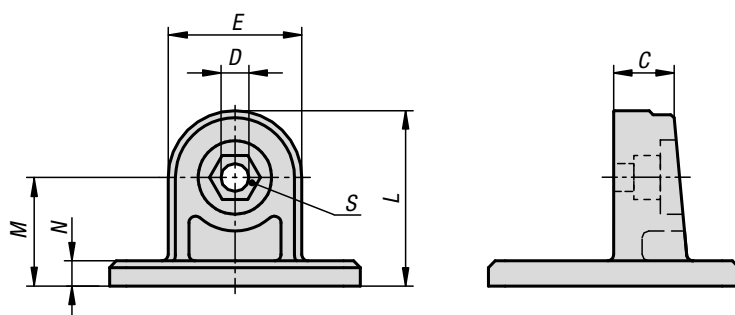
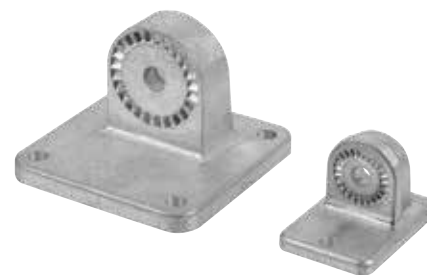


## KIPP Tube clamps swivel base, sunken teeth, plastic

| Order No. | A        | B  | C    | D   | E  | F  | G  | H  | K  | M    | N   | P   | R   | S          | T |
|-----------|----------|----|------|-----|----|----|----|----|----|------|-----|-----|-----|------------|---|
| K0487.18  | 5,3 (2x) | 15 | 25   | 6,1 | 25 | 40 | 50 | 35 | -  | 20   | 5   | 4,5 | 5,5 | M6-DIN 985 | 5 |
| K0487.30  | 6,5 (4x) | 22 | 37,5 | 8,1 | 40 | 60 | 75 | 75 | 60 | 32,5 | 7,5 | 6,6 | 8,2 | M8-DIN 985 | 7 |

# Tube clamps swivel base

aluminium, with sunken teeth



2 middle flange  
holes by  
K0487.518

## Material:

Cast aluminium.  
Screws and nuts steel.

## Version:

Vibratory ground.  
Screws and nuts electro zinc-plated.

## Sample order:

K0487.518

## Note:

Swivel half clamps with sunken teeth can be combined  
with swivel half clamps with raised teeth (K0485) to  
make a complete swivel clamp.

Max. torque when tightening the lockscrew:

M6: 10 Nm.

M8: 25 Nm.

M10: 50 Nm.

## On request:

Clamping levers for tightening.

## Accessories:

- Hex nut DIN 985
- Hex head bolt DIN 933
- Cap screw DIN 6912

## Drawing reference:

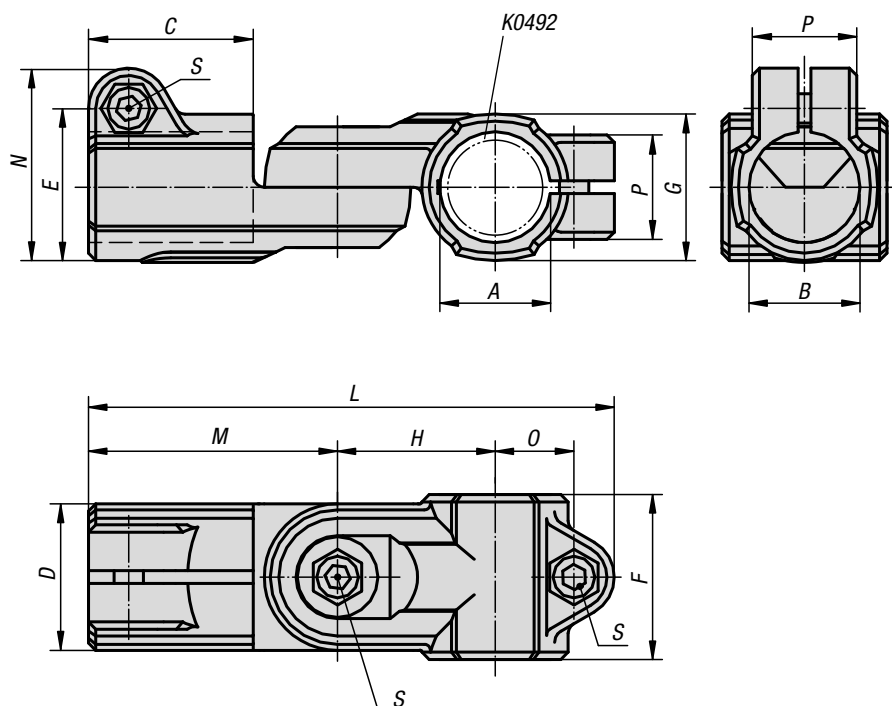
1) 15° toothing

## KIPP Tube clamps swivel base, aluminium, with sunken teeth

| Order No. | A        | C  | D  | E  | G   | H   | K  | L    | M  | N   | S   |
|-----------|----------|----|----|----|-----|-----|----|------|----|-----|-----|
| K0487.518 | 5,3 (2x) | 13 | 7  | 25 | 50  | 35  | 38 | 32,5 | 20 | 5   | M6  |
| K0487.530 | 6,5 (4x) | 16 | 9  | 40 | 75  | 75  | 57 | 52,5 | 33 | 7,5 | M8  |
| K0487.540 | 8,5 (4x) | 22 | 11 | 56 | 100 | 100 | 76 | 72   | 44 | 10  | M10 |

## Tube clamps swivel

plastic



### Material:

Thermoplastic.  
DIN 7984 screws and DIN 985 nuts steel.

### Version:

Black.  
Screws and nuts electro zinc-plated.

### Sample order:

K0488.18

### Note:

Swivel tube clamps can be infinitely rotated through 180°.  
The standard size for round tubes is Ø18 mm or Ø30 mm. Use reducer sleeves K0492 if smaller tubes are to be clamped or a conversion from round to square tubes is required.

### On request:

Plastic clamping levers for tightening.

### Accessories:

- Reducer sleeves K0492
- Round and square tubes K0493

### Attention:

Tightening torque for clamping screws:  
M6: 10 Nm  
M8: 25 Nm

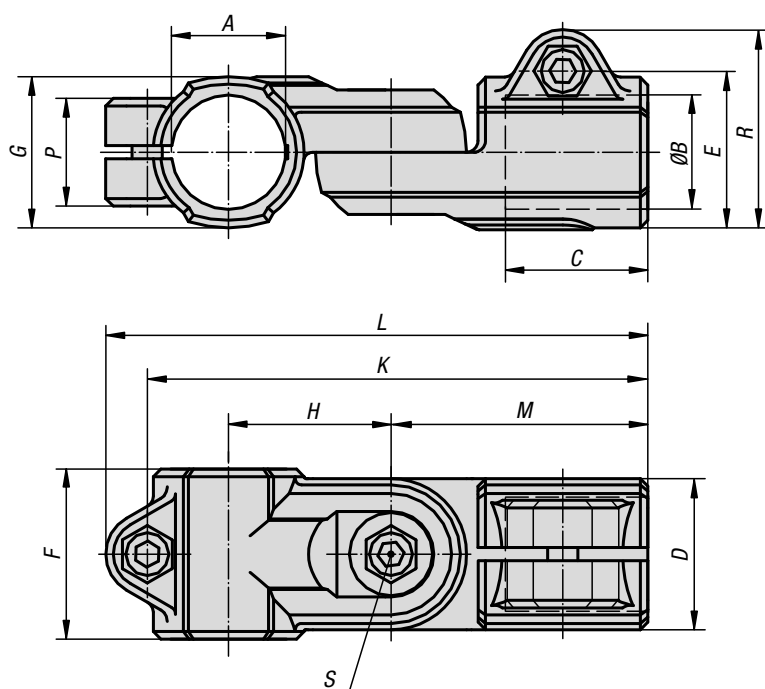
## KIPP Tube clamps swivel, plastic

| Order No. | A  | B  | C  | D  | E    | F  | G  | H    | L     | M  | N    | O    | P    | S     |
|-----------|----|----|----|----|------|----|----|------|-------|----|------|------|------|-------|
| K0488.18  | 18 | 18 | 30 | 25 | 26,5 | 30 | 25 | 27,5 | 94    | 45 | 34   | 14   | 21   | M6x18 |
| K0488.30  | 30 | 30 | 45 | 40 | 41,5 | 45 | 40 | 43   | 143,5 | 68 | 52,5 | 22,5 | 28,5 | M8x25 |



# Tube clamps swivel

aluminium



## Material:

Cast aluminium.

DIN 7984 cap screws and DIN 985 hex nuts, steel.

From A = 20.1 DIN 931 hex head screws.

## Version:

Vibratory ground.

Cap screw, hex head screw and hex nut.

## Sample order:

K0488.518

## Note:

Swivel tube clamps can be infinitely rotated through 180°.

## On request:

Clamping levers for tightening and other diameters.

## Accessories:

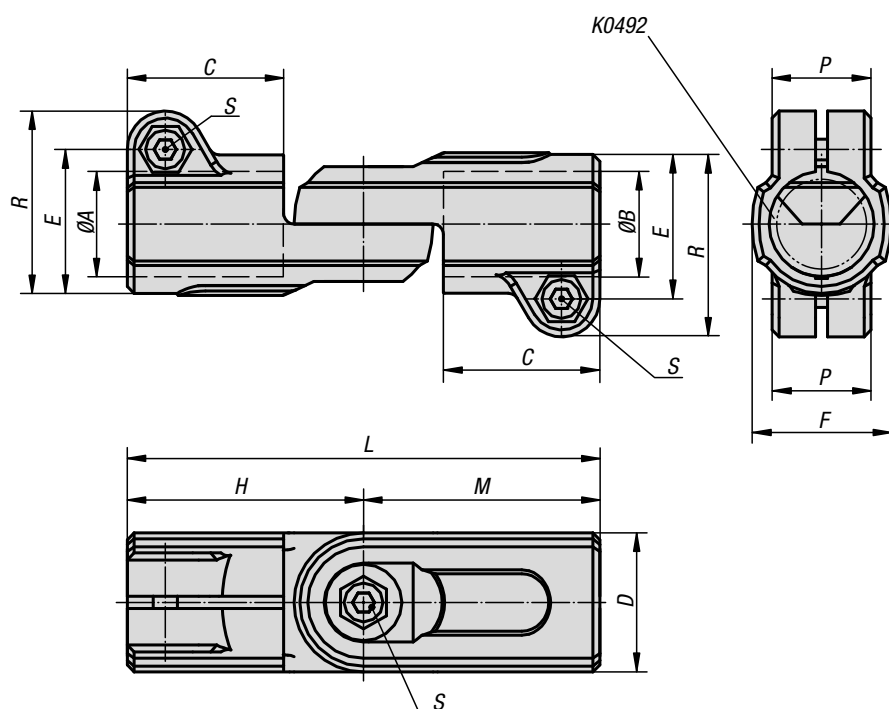
- Round and square tubes K0493

## KIPP Tube clamps swivel, aluminium

| Order No. | A    | B    | C  | D  | E    | F  | G  | H  | K   | L    | M   | P  | R    | S      |
|-----------|------|------|----|----|------|----|----|----|-----|------|-----|----|------|--------|
| K0488.512 | 12,1 | 12,1 | 25 | 26 | 29,4 | 30 | 26 | 27 | 87  | 95,5 | 44  | 21 | 37,5 | M6x18  |
| K0488.514 | 14,1 | 14,1 | 25 | 26 | 29,4 | 30 | 26 | 27 | 87  | 95,5 | 44  | 21 | 37,5 | M6x18  |
| K0488.516 | 16,1 | 16,1 | 25 | 26 | 29,4 | 30 | 26 | 27 | 87  | 95,5 | 44  | 21 | 37,5 | M6x18  |
| K0488.518 | 18,1 | 18,1 | 25 | 26 | 29,4 | 30 | 26 | 27 | 87  | 95,5 | 44  | 21 | 37,5 | M6x18  |
| K0488.520 | 20,1 | 20,1 | 45 | 40 | 42   | 40 | 40 | 43 | 138 | 147  | 73  | 33 | 52   | M8x35  |
| K0488.525 | 25,1 | 25,1 | 45 | 40 | 42   | 40 | 40 | 43 | 138 | 147  | 73  | 33 | 52   | M8x35  |
| K0488.530 | 30,1 | 30,1 | 45 | 40 | 42   | 40 | 40 | 43 | 138 | 147  | 73  | 33 | 52   | M8x35  |
| K0488.540 | 40,2 | 40,2 | 60 | 56 | 57   | 56 | 56 | 60 | 188 | 200  | 100 | 48 | 69   | M10x50 |

## Tube clamps swivel

plastic



### Material:

Thermoplastic.

DIN 7984 screws and DIN 985 nuts steel.

### Version:

Black.

Screws and nuts electro zinc-plated.

### Sample order:

K0489.18

### Note:

Swivel tube clamps can be infinitely rotated through 180°.

The standard size for round tubes is Ø18 mm or Ø30 mm. Use reducer sleeves K0492 if smaller tubes are to be clamped or a conversion from round to square tubes is required.

### On request:

Plastic clamping levers for tightening.

### Accessories:

- Reducer sleeves K0492
- Round and square tubes K0493

### Attention:

Tightening torque for clamping screws:

M6: 10 Nm

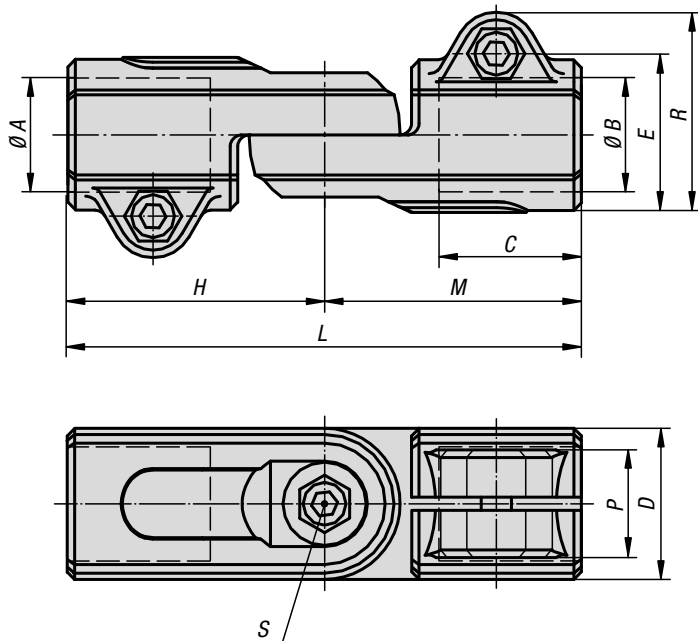
M8: 25 Nm

## KIPP Tube clamps swivel, plastic

| Order No. | A  | B  | C  | D  | E    | F  | H  | L   | M  | P    | R    | S     |
|-----------|----|----|----|----|------|----|----|-----|----|------|------|-------|
| K0489.18  | 18 | 18 | 30 | 25 | 26,5 | 25 | 45 | 90  | 45 | 21   | 34   | M6x18 |
| K0489.30  | 30 | 30 | 45 | 40 | 41,5 | 40 | 68 | 136 | 68 | 28,5 | 52,5 | M8x25 |

# Tube clamps swivel

aluminium



## Material:

Cast aluminium.

ISO 4762 cap screws and ISO 4032 hexagon nuts, steel.

Steel ISO 4017 hex head bolts and DIN 985 hex nuts from Ø20.

## Version:

Vibratory ground.

Screws and nuts electro zinc-plated.

## Sample order:

K0489.540

## Note:

Swivel tube clamps can be infinitely rotated through 180°.

## On request:

Clamping levers for tightening and other diameters.

## Accessories:

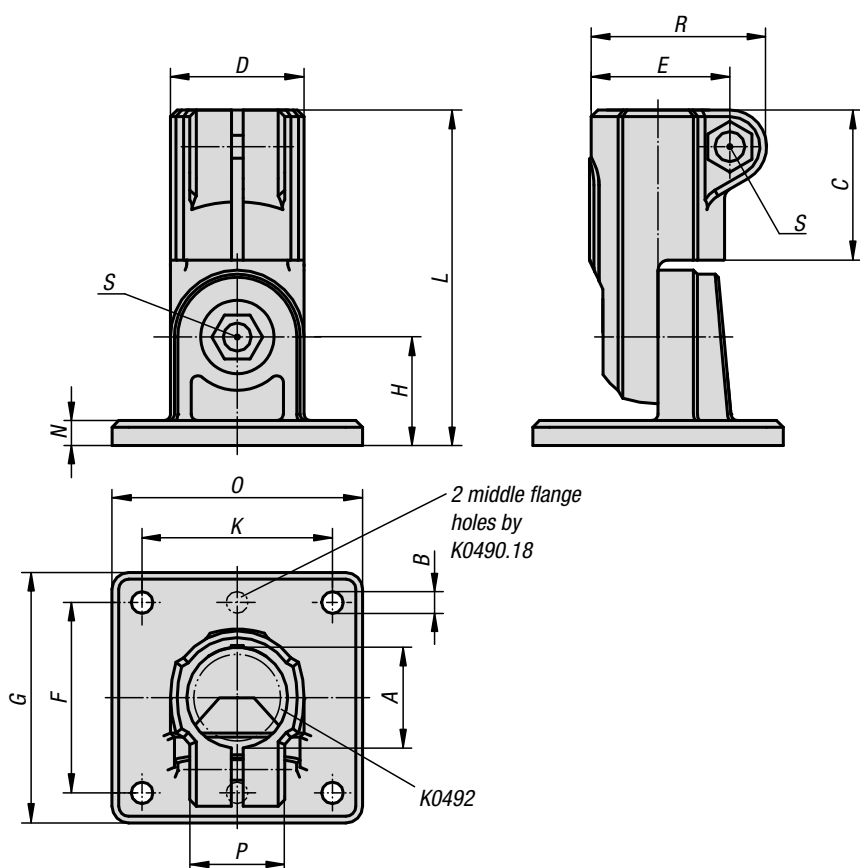
- Round and square tubes K0493

## KIPP Tube clamps swivel, aluminium

| Order No. | A     | B     | C  | D  | E    | H   | L   | M   | P  | R    | S      |
|-----------|-------|-------|----|----|------|-----|-----|-----|----|------|--------|
| K0489.512 | 12,1  | 12,1  | 25 | 26 | 29,4 | 44  | 88  | 44  | 21 | 37,5 | M6x18  |
| K0489.514 | 14,1  | 14,1  | 25 | 26 | 29,4 | 44  | 88  | 44  | 21 | 37,5 | M6x18  |
| K0489.516 | 16,1  | 16,1  | 25 | 26 | 29,4 | 44  | 88  | 44  | 21 | 37,5 | M6x18  |
| K0489.518 | 18,1  | 18,1  | 25 | 26 | 29,4 | 44  | 88  | 44  | 21 | 37,5 | M6x18  |
| K0489.520 | 20,1  | 20,1  | 45 | 40 | 40   | 73  | 146 | 73  | 33 | 51   | M8x35  |
| K0489.525 | 25,1  | 25,1  | 45 | 40 | 40   | 73  | 146 | 73  | 33 | 51   | M8x35  |
| K0489.530 | 30,1  | 30,1  | 45 | 40 | 40   | 73  | 146 | 73  | 33 | 51   | M8x35  |
| K0489.540 | 40,15 | 40,15 | 60 | 56 | 56   | 100 | 200 | 100 | 48 | 70   | M10x50 |

## Tube clamps swivel base

plastic



### Material:

Thermoplastic.

DIN 7984 screws and DIN 985 nuts steel.

### Version:

Black.

Screws and nuts electro zinc-plated.

### Sample order:

K0490.18

### Note:

Tube swivel clamps can be infinitely rotated through 180°.

The standard size for round tubes is Ø18 mm or Ø30 mm. Use reducer sleeves K0492 if smaller tubes are to be clamped or a conversion from round to square tubes is required.

### On request:

Plastic clamping levers for tightening.

### Accessories:

- Reducer sleeves K0492
- Round and square tubes K0493

### Attention:

Tightening torque for clamping screws:

M6: 10 Nm

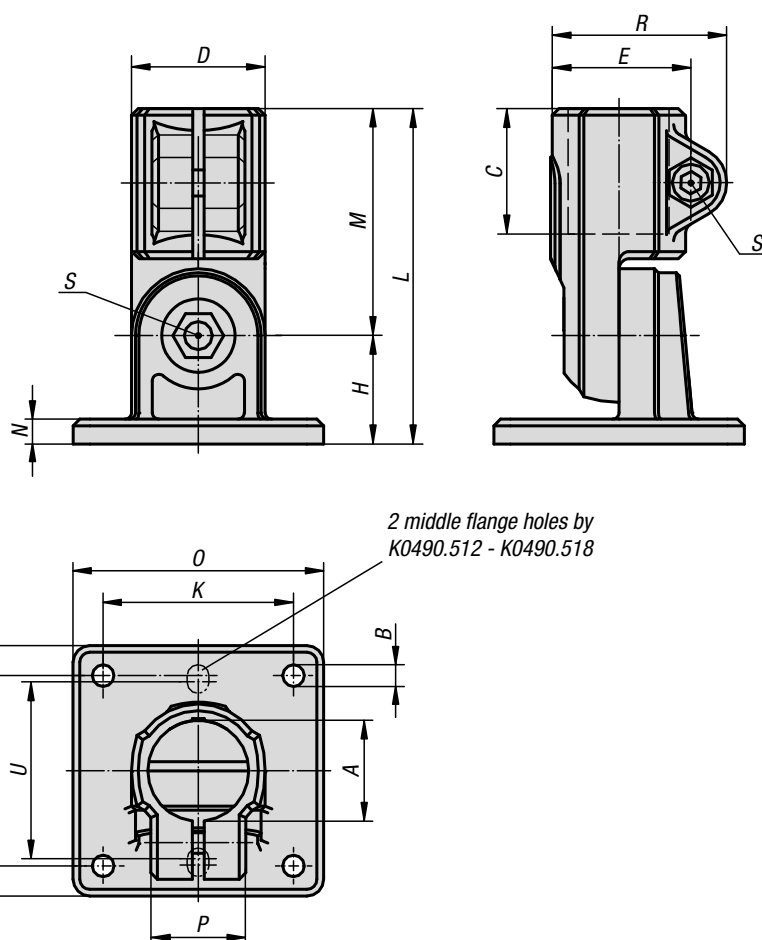
M8: 25 Nm

## KIPP Tube clamps swivel base, plastic

| Order No. | A  | B        | C  | D  | E    | F  | G  | H    | K  | L     | N   | O  | P    | R    | S     |
|-----------|----|----------|----|----|------|----|----|------|----|-------|-----|----|------|------|-------|
| K0490.18  | 18 | 5,3 (2x) | 30 | 25 | 26,5 | 40 | 50 | 20   | -  | 65    | 5   | 35 | 21   | 34   | M6x18 |
| K0490.30  | 30 | 6,5 (4x) | 45 | 40 | 41,5 | 60 | 75 | 32,5 | 60 | 100,5 | 7,5 | 75 | 28,5 | 52,5 | M8x25 |

# Tube clamps swivel base

aluminium

**Material:**

Cast aluminium.

DIN 7984 screws and DIN 985 nuts, steel.

**Version:**

Vibratory ground.

Screws and nuts electro zinc-plated.

**Sample order:**

K0490.518

**Note:**

Tube swivel clamps can be infinitely rotated through 180°.

\* Elongated hole

**On request:**

Clamping levers for tightening and other diameters.

**Accessories:**

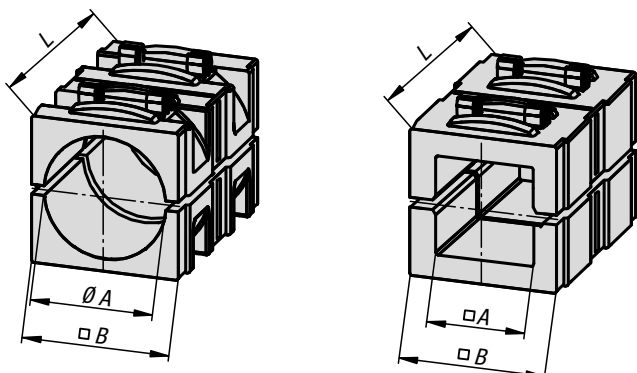
- Round and square tubes K0493

## KIPP Tube clamps swivel base, aluminium

| Order No. | A    | B       | C  | D  | E    | F  | G   | H  | K  | L   | M   | N  | O   | P  | R    | S      | U  |
|-----------|------|---------|----|----|------|----|-----|----|----|-----|-----|----|-----|----|------|--------|----|
| K0490.512 | 12,1 | 6* (2x) | 25 | 26 | 29,4 | 40 | 50  | 20 | -  | 64  | 44  | 5  | 35  | 21 | 37,5 | M6x18  | 38 |
| K0490.514 | 14,1 | 6* (2x) | 25 | 26 | 29,4 | 40 | 50  | 20 | -  | 64  | 44  | 5  | 35  | 21 | 37,5 | M6x18  | 38 |
| K0490.516 | 16,1 | 6* (2x) | 25 | 26 | 29,4 | 40 | 50  | 20 | -  | 64  | 44  | 5  | 35  | 21 | 37,5 | M6x18  | 38 |
| K0490.518 | 18,1 | 6* (2x) | 25 | 26 | 29,4 | 40 | 50  | 20 | -  | 64  | 44  | 5  | 35  | 21 | 37,5 | M6x18  | 38 |
| K0490.520 | 20,1 | 7* (4x) | 45 | 40 | 42   | 57 | 75  | 33 | 57 | 106 | 73  | 7  | 75  | 33 | 52   | M8x35  | -  |
| K0490.525 | 25,1 | 7* (4x) | 45 | 40 | 42   | 57 | 75  | 33 | 57 | 106 | 73  | 7  | 75  | 33 | 52   | M8x35  | -  |
| K0490.530 | 30,1 | 7* (4x) | 45 | 40 | 42   | 57 | 75  | 33 | 57 | 106 | 73  | 7  | 75  | 33 | 52   | M8x35  | -  |
| K0490.540 | 40,2 | 9* (4x) | 60 | 56 | 57   | 76 | 100 | 44 | 76 | 144 | 100 | 10 | 100 | 48 | 69   | M10x50 | -  |

## Reducer sleeves

square



**Material:**  
Thermoplastic.

**Version:**  
black.

**Sample order:**  
K0491.03020

**Note:**  
Reducer sleeves are for clamping smaller tubes or where a conversion of square to round tubes is required.

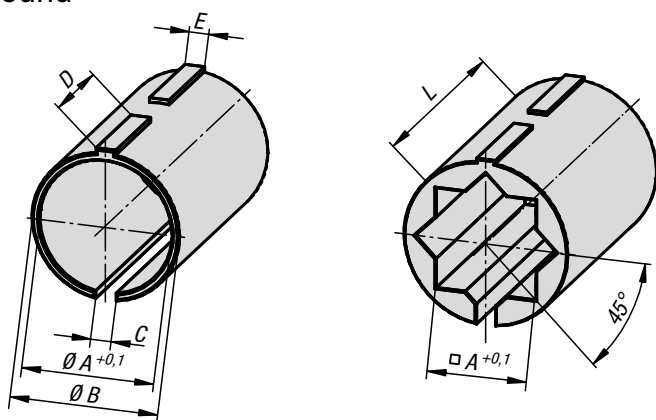
### KIPP Reducer sleeves, square

| Order No.   | Version 2        | A       | B    | L  |
|-------------|------------------|---------|------|----|
| K0491.03020 | for round tubes  | Ø 20,25 | 30,3 | 45 |
| K0491.03025 | for round tubes  | Ø 25,25 | 30,3 | 45 |
| K0491.03030 | for round tubes  | Ø 30,25 | 30,3 | 45 |
| K0491.13020 | for square tubes | 20,5    | 30,3 | 45 |
| K0491.13025 | for square tubes | 25,5    | 30,3 | 45 |

# K0492

## Reducer sleeves

round



**Material:**  
Thermoplastic.

**Version:**  
black.

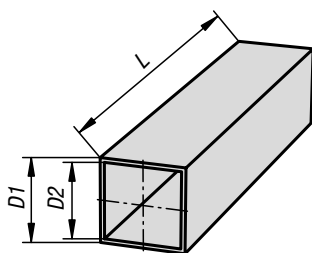
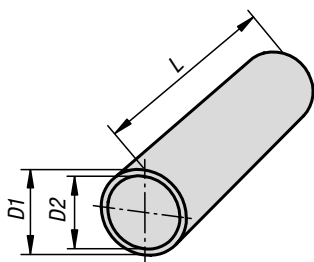
**Sample order:**  
K0492.03020

**Note:**  
Reducer sleeves are for clamping smaller tubes or where a conversion of round to square tubes is required.

### KIPP Reducer sleeves, round

| Order No.   | Version 2        | A     | B  | C   | D    | E   | L  |
|-------------|------------------|-------|----|-----|------|-----|----|
| K0492.01812 | for round tubes  | 12,25 | 18 | 2,5 | 11,9 | 2,4 | 30 |
| K0492.01814 | for round tubes  | 14,25 | 18 | 2,5 | 11,9 | 2,4 | 30 |
| K0492.01815 | for round tubes  | 15,25 | 18 | 2,5 | 11,9 | 2,4 | 30 |
| K0492.01816 | for round tubes  | 16,25 | 18 | 2,5 | 11,9 | 2,4 | 30 |
| K0492.03020 | for round tubes  | 20,25 | 30 | 3,5 | 18,9 | 3,4 | 45 |
| K0492.03025 | for round tubes  | 25,25 | 30 | 3,5 | 18,9 | 3,4 | 45 |
| K0492.11810 | for square tubes | 10,25 | 18 | 2,5 | 11,9 | 2,4 | 30 |
| K0492.13020 | for square tubes | 20,25 | 30 | 3,5 | 18,9 | 3,4 | 45 |

# Round and square tubes

**Material:**

Steel 1.0037.

Aluminium EN AW-6060.

**Version:**

Steel electro zinc-plated.

Aluminium anodised.

**Sample order:**

K0493.0112X500 (include length L)

**Note:**

The machined tolerances of these round and square tubes are individually matched to the tube clamping system.

\*Square aluminium size 10x10 are only available as solid bars.

**On request:**

- Custom cut length (L max. 5000 mm)
- Stainless steel tube (L max. 3000 mm)

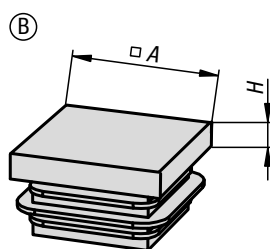
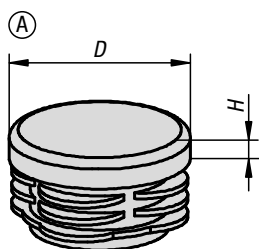
## KIPP Round tubes

| Order No.   | Main material | Description | D1       | D2 | L             |
|-------------|---------------|-------------|----------|----|---------------|
| K0493.0112X | steel         | Ø12 x 1,5   | 12 ±0,1  | 9  | 500/1000/2000 |
| K0493.0114X | steel         | Ø14 x 1,5   | 14 ±0,1  | 11 | 500/1000/2000 |
| K0493.0115X | steel         | Ø15 x 1,5   | 15 ±0,1  | 12 | 500/1000/2000 |
| K0493.0116X | steel         | Ø16 x 1,5   | 16 ±0,1  | 13 | 500/1000/2000 |
| K0493.0118X | steel         | Ø18 x 1,5   | 18 ±0,1  | 15 | 500/1000/2000 |
| K0493.0120X | steel         | Ø20 x 2     | 20 ±0,1  | 16 | 500/1000/2000 |
| K0493.0125X | steel         | Ø25 x 2     | 25 ±0,1  | 21 | 500/1000/2000 |
| K0493.0130X | steel         | Ø30 x 2     | 30 ±0,1  | 26 | 500/1000/2000 |
| K0493.0140X | steel         | Ø40 x 4     | 40 ±0,15 | 32 | 500/1000/2000 |
| K0493.0150X | steel         | Ø50 x 4     | 50 ±0,2  | 42 | 500/1000/2000 |
| K0493.0220X | aluminium     | Ø20 x 3     | 20 ±0,1  | 14 | 500/1000/2000 |
| K0493.0230X | aluminium     | Ø30 x 2     | 30 ±0,1  | 26 | 500/1000/2000 |
| K0493.0240X | aluminium     | Ø40 x 3     | 40 ±0,15 | 34 | 500/1000/2000 |
| K0493.0250X | aluminium     | Ø50 x 3     | 50 ±0,2  | 44 | 500/1000/2000 |

## KIPP Square tubes

| Order No.   | Main material | Description   | D1      | D2 | L             |
|-------------|---------------|---------------|---------|----|---------------|
| K0493.4120X | steel         | 20 x 20 x 1   | 20 ±0,3 | 18 | 500/1000/2000 |
| K0493.4125X | steel         | 25 x 25 x 1,5 | 25 ±0,3 | 22 | 500/1000/2000 |
| K0493.4130X | steel         | 30 x 30 x 2   | 30 ±0,3 | 26 | 500/1000/2000 |
| K0493.4140X | steel         | 40 x 40 x 3   | 40 ±0,4 | 34 | 500/1000/2000 |
| K0493.4210X | aluminium     | 10 x 10       | 10*     | -  | 500/1000/2000 |
| K0493.4220X | aluminium     | 20 x 20 x 1,5 | 20 ±0,2 | 17 | 500/1000/2000 |
| K0493.4230X | aluminium     | 30 x 30 x 2   | 30 ±0,2 | 26 | 500/1000/2000 |
| K0493.4240X | aluminium     | 40 x 40 x 4   | 40 ±0,3 | 32 | 500/1000/2000 |

# Tube end plugs



**Material:**  
Polyethylene

**Version:**  
black.

**Sample order:**  
K0494.025200

**Note:**  
These plugs are for corner protection and plugging the tube ends. They can be pushed in by hand or tapped in with a plastic hammer.



## KIPP Tube end plugs

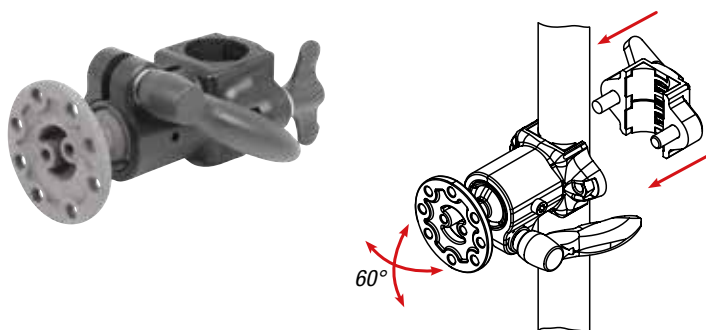
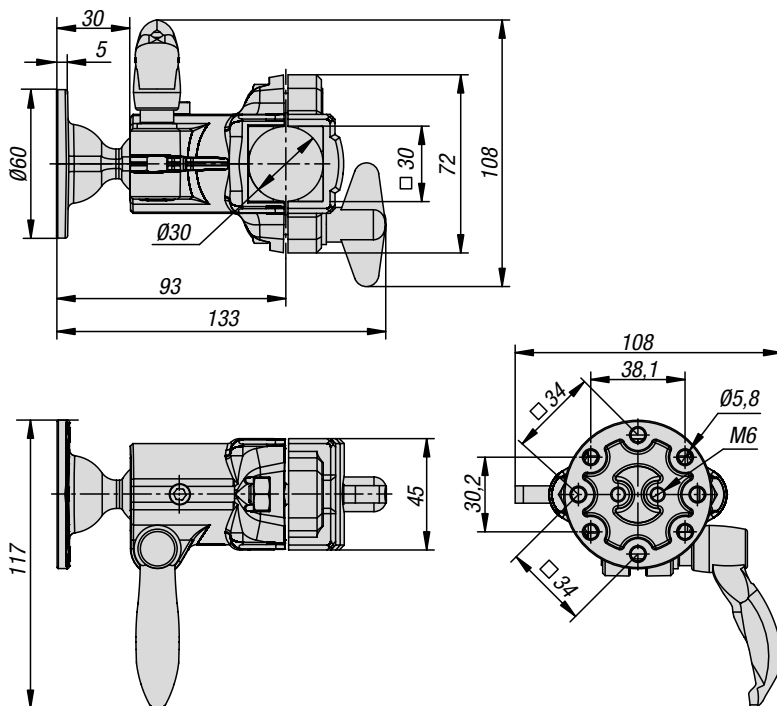
| Order No.    | Form | Version 2         | A  | D  | H | Suitable for    |
|--------------|------|-------------------|----|----|---|-----------------|
| K0494.018150 | A    | for round tubes   | -  | 18 | 5 | Ø18x0,8-2       |
| K0494.020200 | A    | for round tubes   | -  | 20 | 5 | Ø20 x 0,8-2,5   |
| K0494.025200 | A    | for round tubes   | -  | 25 | 5 | Ø25 x 1-3       |
| K0494.030200 | A    | for round tubes   | -  | 30 | 5 | Ø30 x 0,8-2,5   |
| K0494.040300 | A    | for round tubes   | -  | 40 | 5 | Ø40 x 1-3       |
| K0494.040400 | A    | for round tubes   | -  | 40 | 5 | Ø40 x 3-5       |
| K0494.050400 | A    | for round tubes   | -  | 50 | 5 | Ø50 x 2,5-4,5   |
| K0494.420100 | B    | for square tubing | 20 | -  | 5 | 20 x 20 x 0,8-3 |
| K0494.425150 | B    | for square tubing | 25 | -  | 5 | 25 x 25 x 1-3   |
| K0494.430200 | B    | for square tubing | 30 | -  | 5 | 30 x 30 x 1-2,5 |
| K0494.440300 | B    | for square tubing | 40 | -  | 5 | 40 x 40 x 1-3   |
| K0494.440400 | B    | for square tubing | 40 | -  | 5 | 40 x 40 x 3-5   |



## Monitor brackets



**K1510.3000**



**Material:**

High-strength material mix  
of thermoplastic/aluminium.



**Version:**

Black/bright.

**Sample order:**

K1510.3001

**Note:**

We offer three different basic brackets for industrial monitors and touch panels:

Compact:

space-saving, with a swivel range of 60°. For loads up to 10 kg (static). With universal mounting plate. The basic bracket is suitable for mounting on tubes size Ø30 mm or 30x30 mm. By using the optional reducer sleeve K0491 they can also be mounted on other sized tubes (Ø20 and Ø25 mm or 20x20 and 25x25 mm).

With rotary flange:

vibration-resistant, lockable monitor bracket with an angle adjustment of 90° in 15° increments. For monitors / control units up to 25 kg (static). With universal mounting plate. The basic bracket is suitable for mounting on tubes size Ø30 mm. By using the optional reducer sleeve K0492 they can also be mounted on other sized tubes (Ø20 and Ø25 mm or 20x20 mm).

With ball joint:

enables a swivel range of 60°. For loads up to 10 kg (static). With universal mounting plate. The basic bracket is suitable for mounting on tubes size Ø30 mm. By using the optional reducer sleeve K0492 they can also be mounted on other sized tubes (Ø20 and Ø25 mm or 20x20 mm).

Optional wall bracket, profile bracket, single/double support arms, tablet holder, keyboard tray or a VESA 50/75 or 75/100 connecting plate are available to offer various connections.

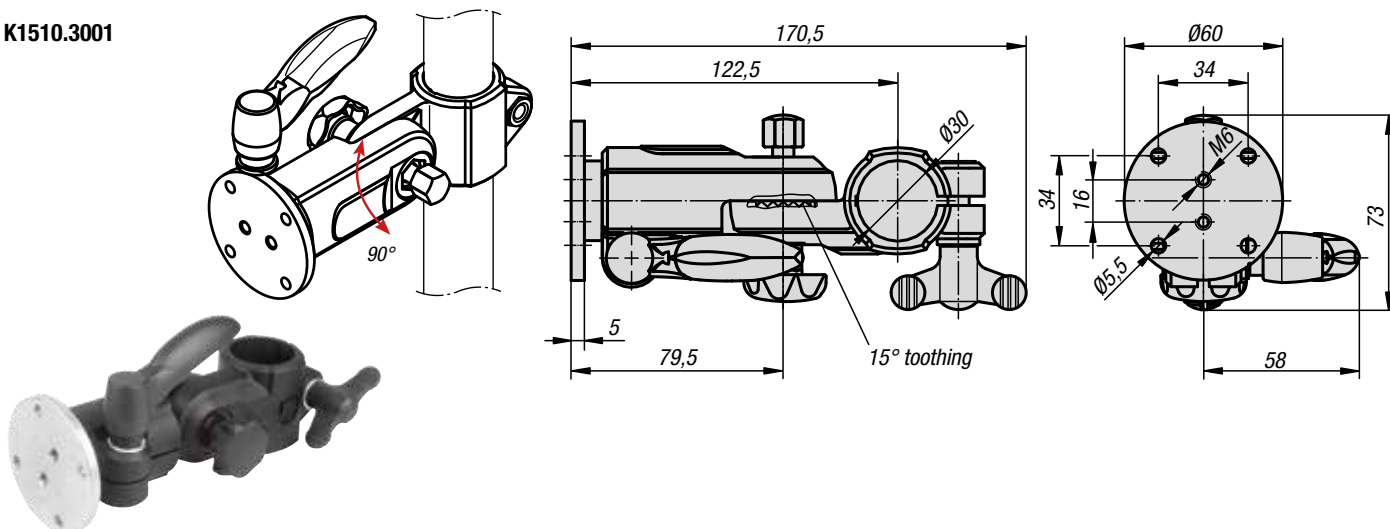
## KIPP Monitor brackets

| Order No.    | Image                                                                               | Version 1              |
|--------------|-------------------------------------------------------------------------------------|------------------------|
| K1510.3000   |  | compact                |
| K1510.3001   |  | with rotary flange     |
| K1510.3002   |  | with ball joint        |
| K1510.3003   |  | wall bracket           |
| K1510.3004   |  | profile bracket        |
| K1510.5075   |  | VESA adapter plate     |
| K1510.75100  |  | VESA adapter plate     |
| K1510.3010   |  | support arm single     |
| K1510.3012   |  | support arm double     |
| K1510.3014   |  | support arm double     |
| K1510.3016   |  | support arm telescopic |
| K1510.3018   |  | support arm telescopic |
| K1510.3020   |  | keyboard tray          |
| K1510.125200 |  | tablet holder          |

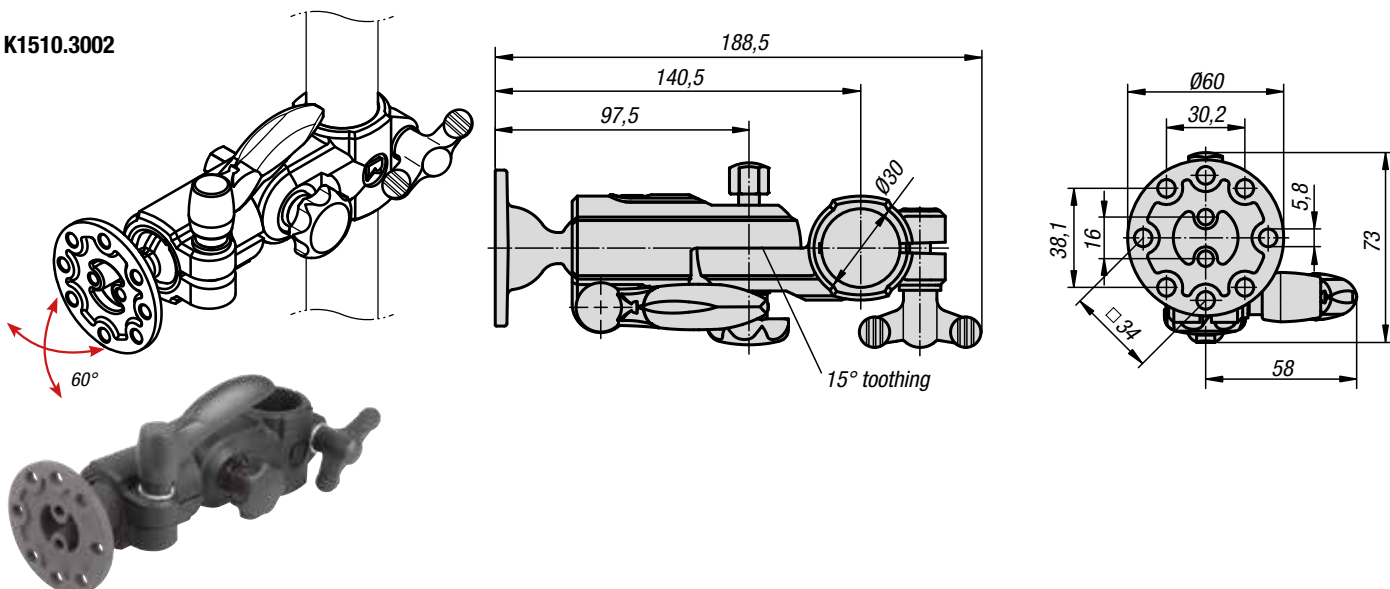
## Monitor brackets



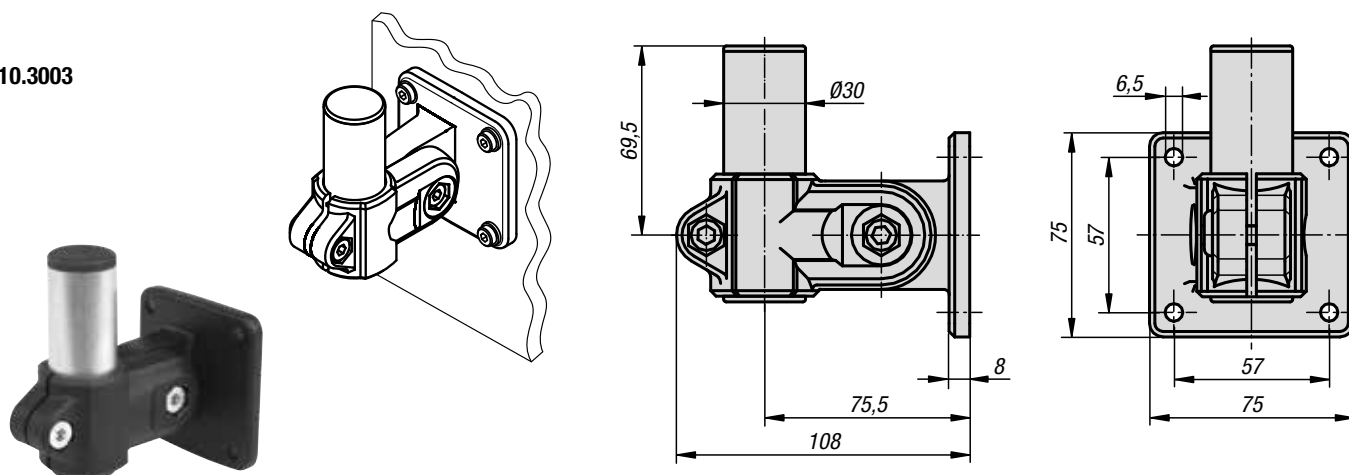
K1510.3001



K1510.3002



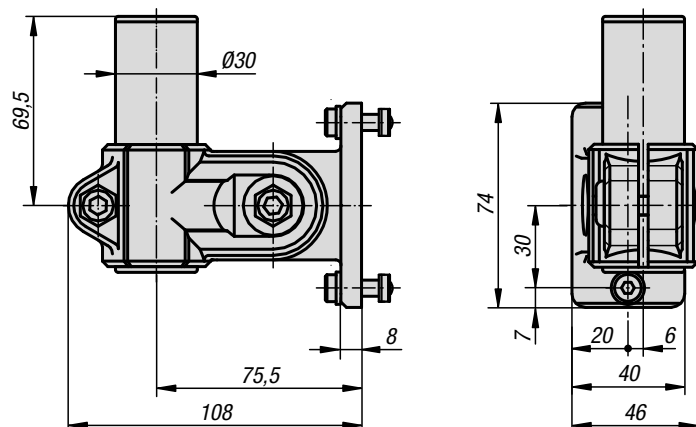
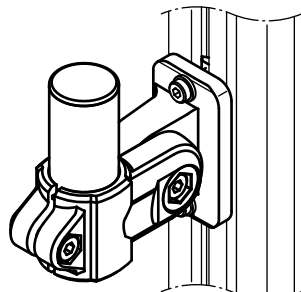
K1510.3003



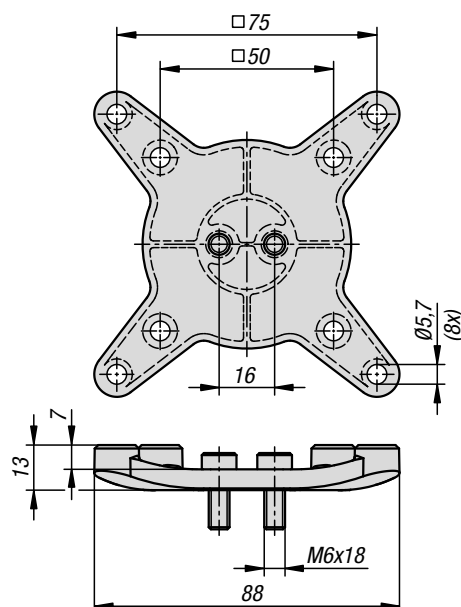
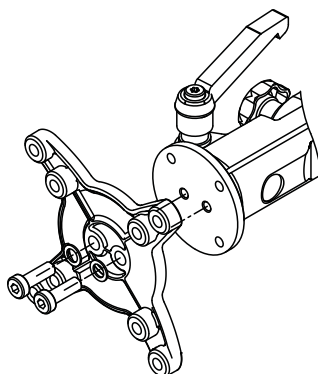
## Monitor brackets



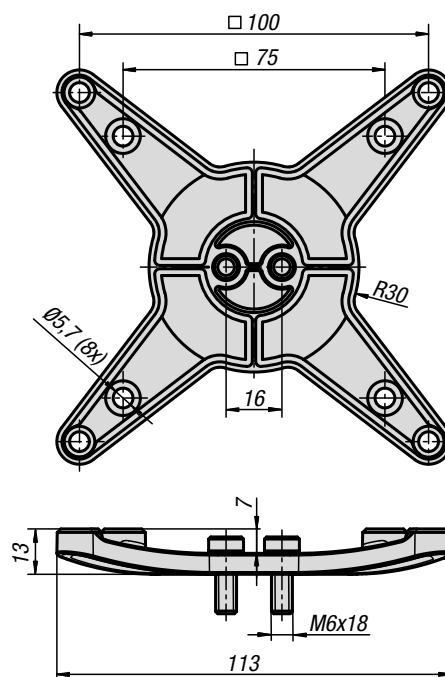
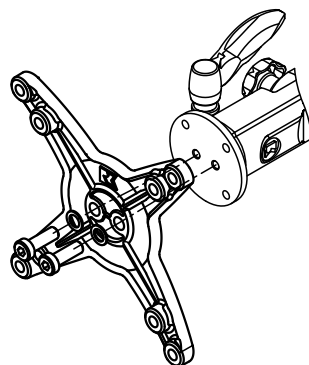
K1510.3004



K1510.5075



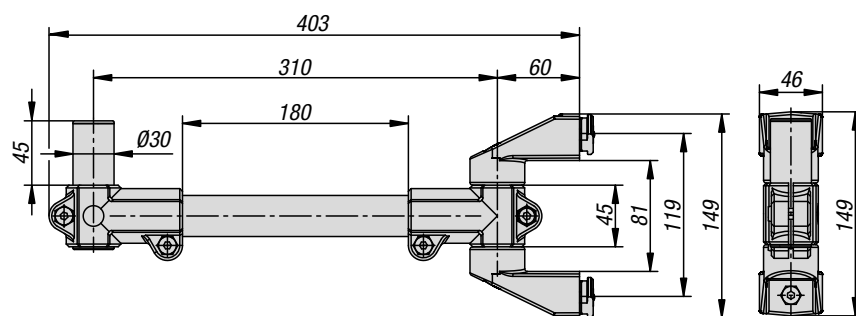
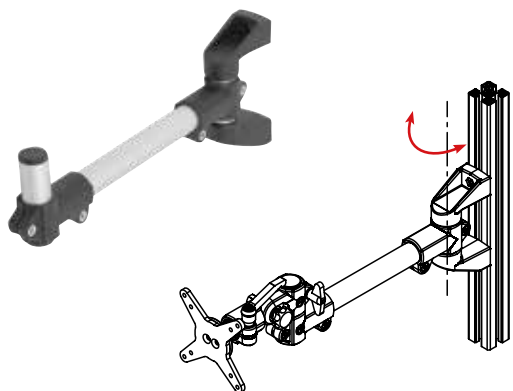
K1510.75100



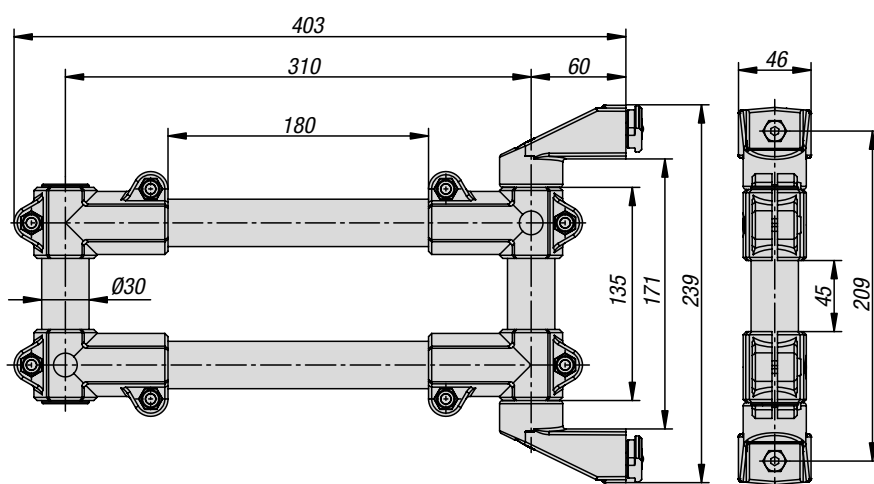
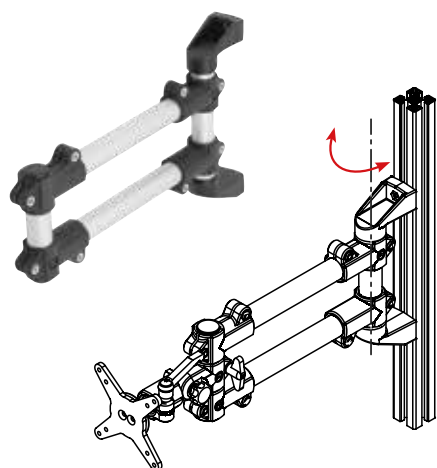
## Monitor brackets



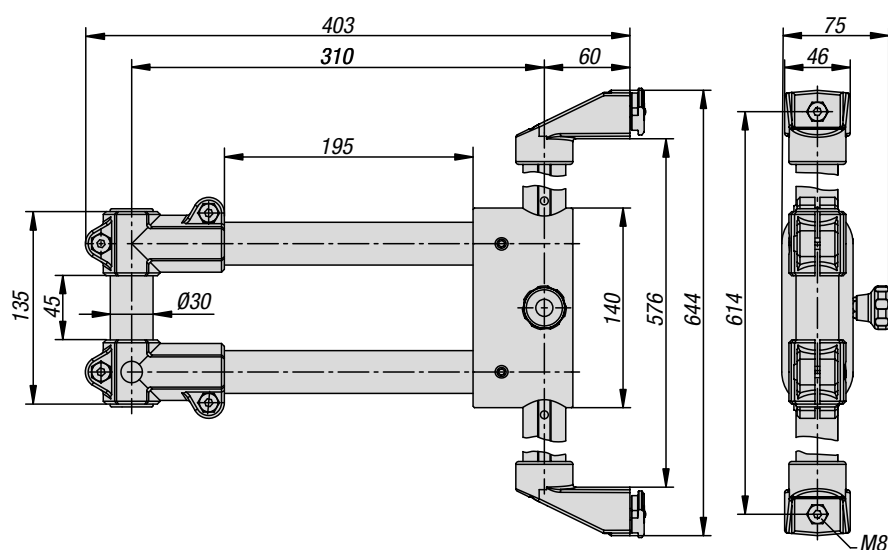
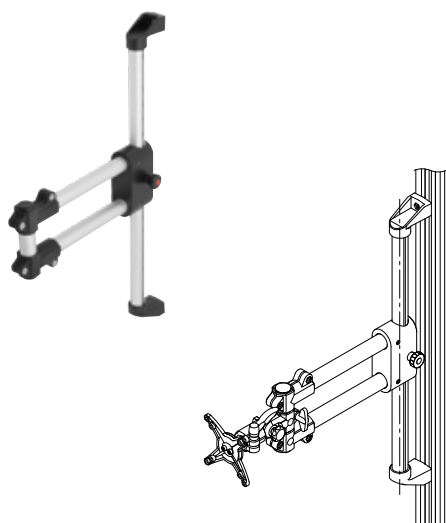
K1510.3010



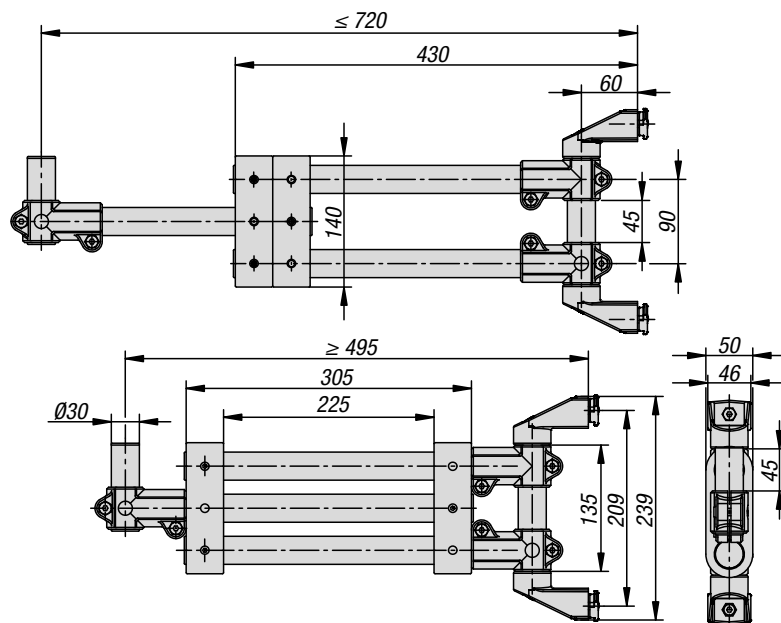
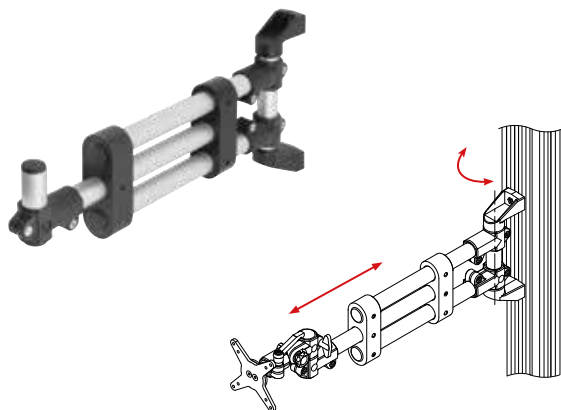
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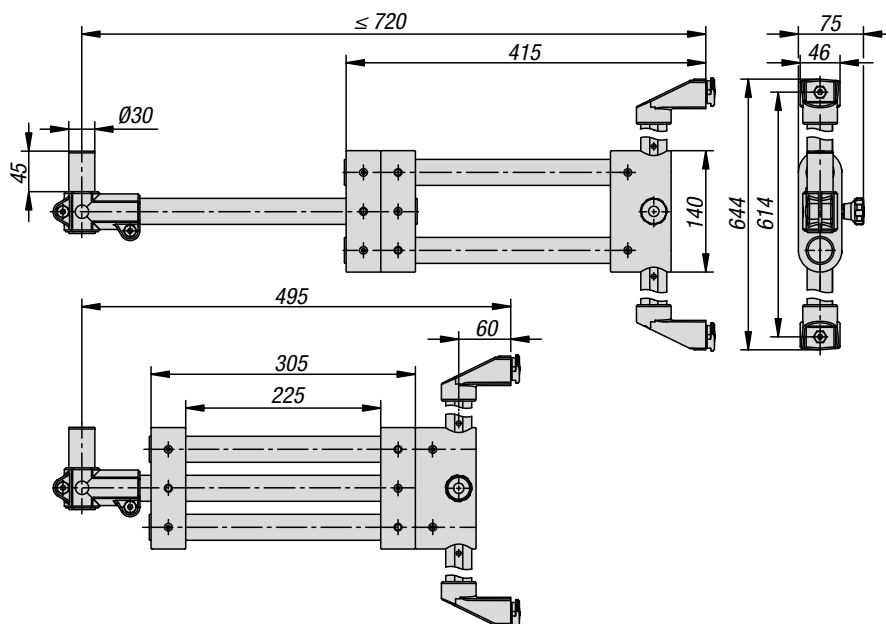
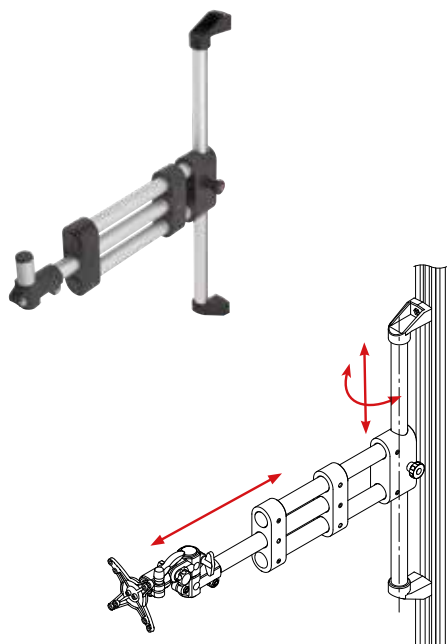
K1510.3014



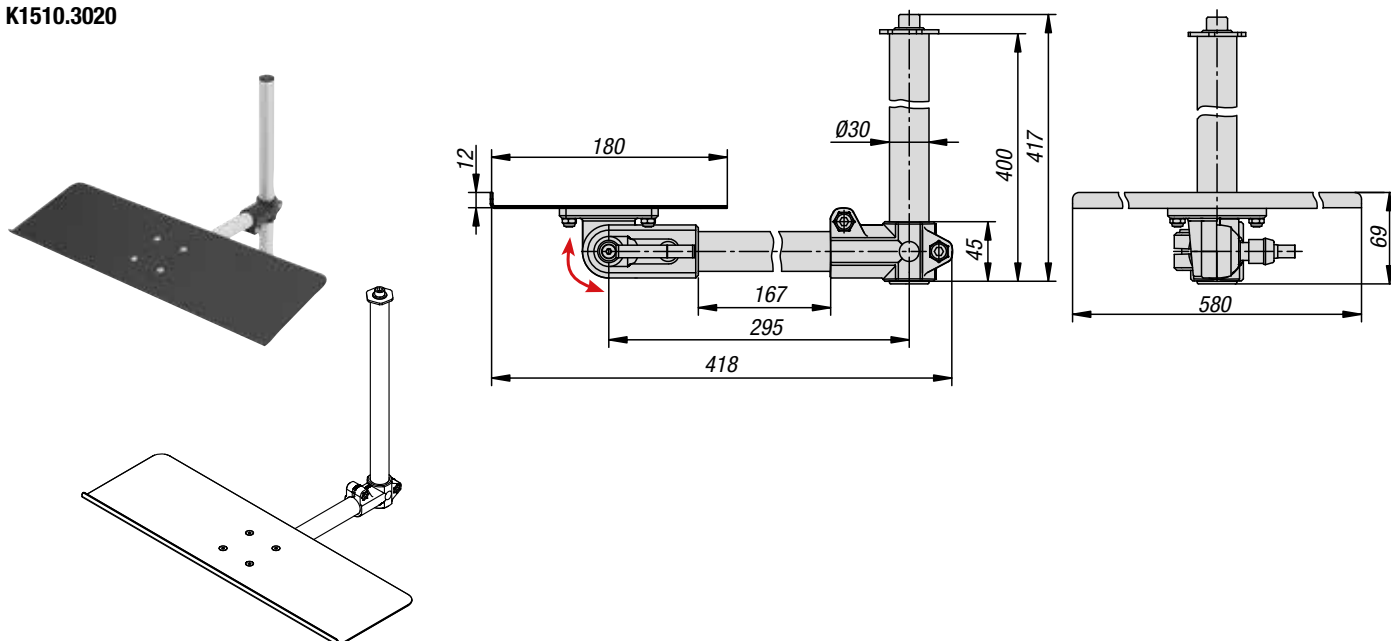
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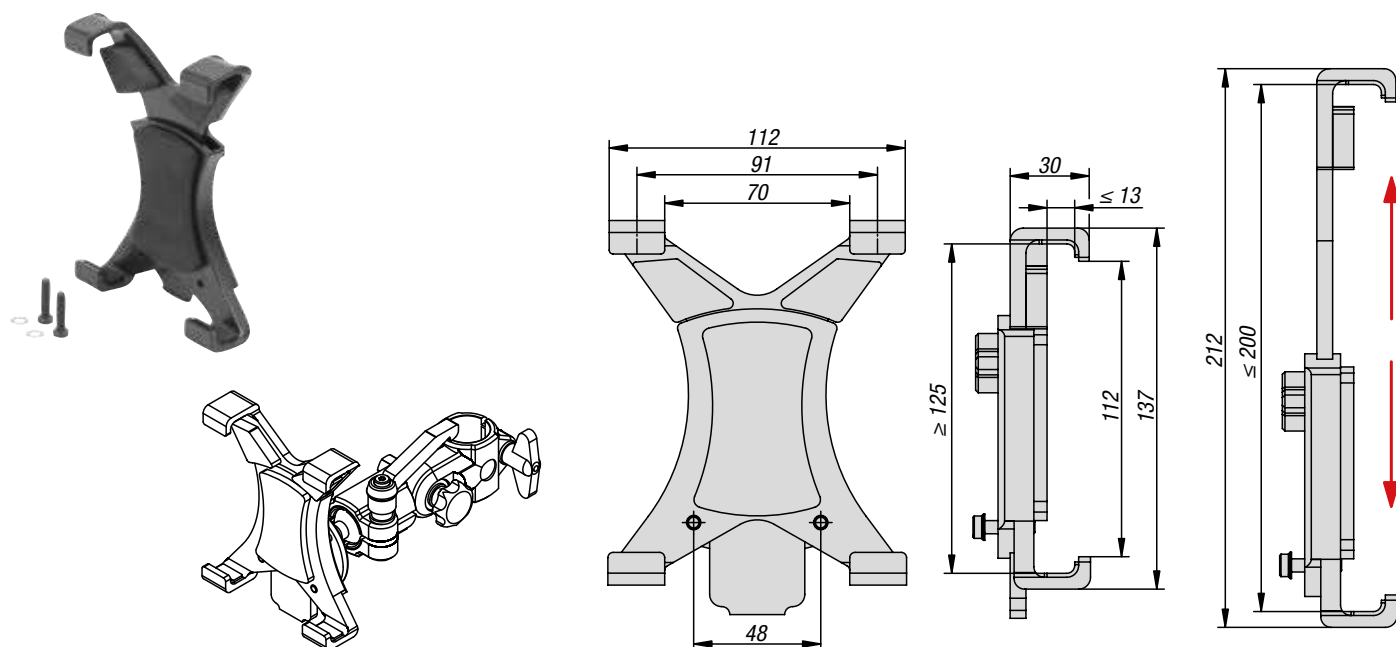
K1510.3018



K1510.3020

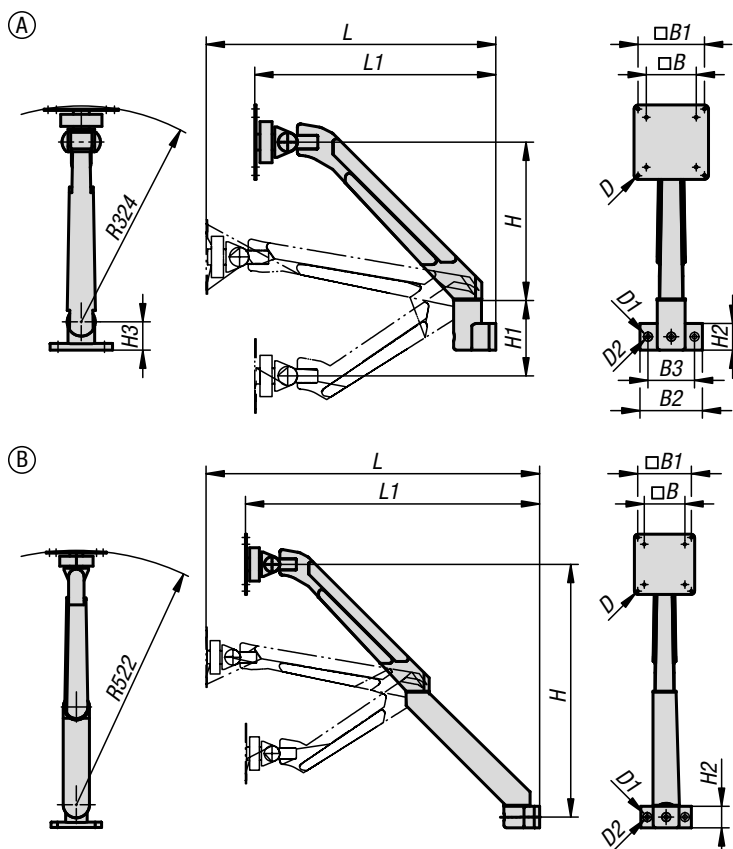


K1510.125200



## Monitor brackets, aluminium, height adjustable

4 or 5 axis



### Material:

Mounting plate steel/plastic.  
Monitor bracket aluminium.  
Bearing washers and sleeves plastic.  
Mounting flange aluminium.  
Mounting adapter aluminium.  
Screws steel.

### Version:

Mounting plate painted.  
Monitor bracket painted.  
Mounting flange painted.  
Mounting adapter painted.  
Screws electro zinc-plated.

### Sample order:

K1792.4360

### Note:

Screens weighing up to 10 kg can be attached to the monitor brackets and removed again as required without any effort. Furthermore, the height and the viewing angle of the monitor bracket arm can be adjusted. The mounted monitor can be rotated through 90°. The mounting plates of the monitor brackets are compatible with the VESA 75/100 standard.

### Application:

With the help of the hex key, the force that has to be applied to adjust the various axis can be increased or decreased.

### Supplied with:

4 axis monitor bracket:  
1x VESA mounting plate including 4x M4x12 Phillips head screws.  
1x 4 axis monitor bracket including covered cable guide.  
1x DIN 6912 M8x25 assembly screw.  
1x mounting adapter.  
2x DIN 6912 M8x16 assembly screws.  
1x 3mm hex key.  
1x 4mm hex key.

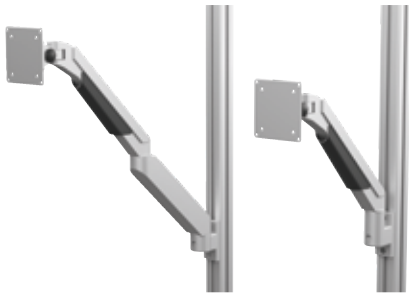
### 5 axis monitor bracket:

1x VESA mounting plate including 4x M4x12 Phillips head screws.  
1x 5 axis monitor bracket including covered cable guide.  
1x DIN 6912 M8x25 assembly screw.  
1x mounting adapter.

2x DIN 6912 M8x16 assembly screws.  
1x 3mm hex key.  
1x 4mm hex key.

Monitor brackets, aluminium, height adjustable

4 or 5 axis



KIPP Monitor bracket, aluminium, height adjustable, 4 axis

| Order No.  | Form | Form definition | B  | B1  | B2 | B3 | D   | D1   | D2 | H   | H1  | H2 | H3 | L   | L1  |
|------------|------|-----------------|----|-----|----|----|-----|------|----|-----|-----|----|----|-----|-----|
| K1792.4360 | A    | 4 axis          | 75 | 100 | 94 | 70 | 5,3 | 13,8 | 9  | 236 | 114 | 40 | 43 | 436 | 361 |

KIPP Monitor bracket, aluminium, height adjustable, 5 axis

| Order No.  | Form | Form definition | B  | B1  | B2 | B3 | D   | D1   | D2 | H   | H2 | L   | L1  |
|------------|------|-----------------|----|-----|----|----|-----|------|----|-----|----|-----|-----|
| K1792.6341 | B    | 5 axis          | 75 | 100 | 94 | 70 | 5,3 | 13,8 | 9  | 464 | 40 | 634 | 560 |



# Technical information on linear actuators



These linear actuators are efficient, economical and universally applicable. They ideally combine high rigidity, low deflection, high loads and easy handling. Four sizes are available for different applications and loads (tube sizes from Ø18 mm to Ø50 mm).

## Features:

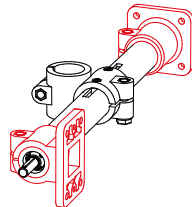
- Standard travel over 2000 mm possible
- Position accuracy up to  $\pm 0.2$  mm / 300 mm
- Travel speed up to 1.5 m/min
- Drive by trapezoid thread spindle
- Mounting position optional

## Technical description:

In a tube, a threaded spindle mounted on bearings with guide nut converts a rotation into linear movement of a carriage. The nut has a carrier key to prevent it turning.

## Mounting the linear actuator:

Depending on the mounting position and application, linear actuators can be mounted using our tube clamping elements.



## Speed:

$n$  = required spindle speed.

max. spindle speed with:  
plain bearing 80 rpm.  
ball bearing 250 rpm.

| Type E | Pitch mm |
|--------|----------|
| 18     | 2        |
| 30     | 3        |
| 40     | 4        |
| 50     | 4        |

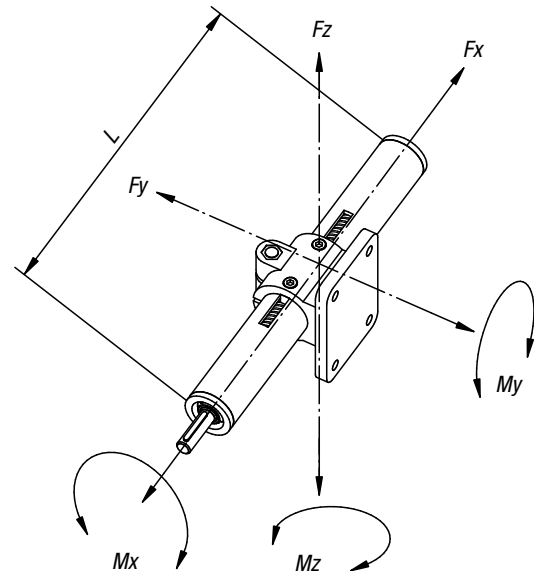
$$n [\text{rpm}] = \frac{\text{Speed [m/min]} \times 1000[\text{mm}]}{\text{Spindle pitch [mm]}}$$

## Load data\*:

F force [N]

M moment [Nm]

I area moment of inertia [cm<sup>4</sup>]



| Length    | Fx<br>500 | Fy<br>500 / 1000 / 1500 | Fz<br>500 / 1000 / 1500 |
|-----------|-----------|-------------------------|-------------------------|
| Type E 18 | 400       | 90 / 10 / -             | 60 / 8 / -              |
| Type E 30 | 800       | 500 / 60 / 10           | 500 / 50 / 9            |
| Type E 40 | 1000      | 2100 / 250 / 60         | 1900 / 140 / 50         |
| Type E 50 | 1700      | 3000 / 600 / 140        | 3000 / 600 / 140        |

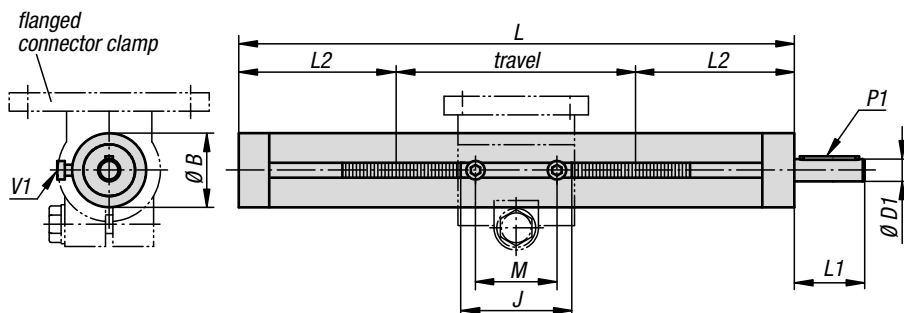
## Idling torques:

| Type E | Spindle with slide bearing<br>[Nm] | Spindle with<br>ball bearings [Nm] |
|--------|------------------------------------|------------------------------------|
| 18     | -                                  | 0,20                               |
| 30     | 0,45                               | 0,35                               |
| 40     | 0,65                               | 0,50                               |
| 50     | 1,20                               | 0,90                               |

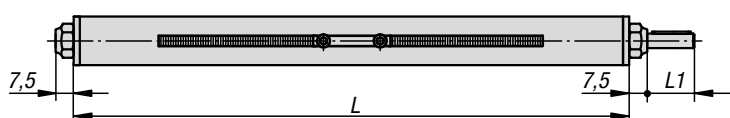
| Type E | Mx<br>Nm | My<br>Nm | Mz<br>Nm | Iy    | Iz    |
|--------|----------|----------|----------|-------|-------|
| 18     | 1,5      | 4        | 4        | 0,22  | 0,27  |
| 30     | 6        | 15       | 15       | 1,34  | 1,56  |
| 40     | 14       | 40       | 40       | 4,58  | 5,24  |
| 50     | 30       | 65       | 65       | 11,31 | 12,32 |

\* refers to guides (guide element deflection  $f = 0.5$  mm, static, end elements supported)

## Linear actuators



Linear actuator  
K0495.18...



### Material, version:

Precision tube DIN EN 10305, stainless steel 1.4301.

For type E 18, electro zinc-plated steel.

Trapezoid thread spindle steel, RH thread, rolled.

### Sample order:

K0495.300001X500

### Note:

Medium speed range, self-locking.

### On request:

LH thread, stainless steel, 2 drive pins, other travel lengths, handwheels.

### Accessories:

- Guide clamps K0496, K0497, K0498, K0499
- Tube clamps from our tube clamping system

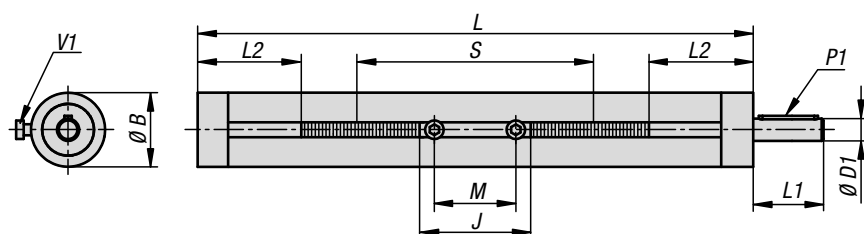
### Functional principle:

A rotating movement of the threaded spindle is converted into a linear movement of the guide carriage.

## KIPP Linear actuators

| Order No.         | Version 1          | Type E | Spindle | L    | Travel S | B  | D1    | J  | L1 | L2    | M  | P1<br>parallel key<br>DIN 6885 | V1    |
|-------------------|--------------------|--------|---------|------|----------|----|-------|----|----|-------|----|--------------------------------|-------|
| K0495.300001X300  | with plain bearing | 30     | Tr 14x3 | 300  | 100      | 30 | 8 h8  | 38 | 26 | 100   | 28 | 2 x 2 x 20                     | M4x8  |
| K0495.300001X500  | with plain bearing | 30     | Tr 14x3 | 500  | 300      | 30 | 8 h8  | 38 | 26 | 100   | 28 | 2 x 2 x 20                     | M4x8  |
| K0495.300001X800  | with plain bearing | 30     | Tr 14x3 | 800  | 600      | 30 | 8 h8  | 38 | 26 | 100   | 28 | 2 x 2 x 20                     | M4x8  |
| K0495.400001X300  | with plain bearing | 40     | Tr 20x4 | 300  | 91       | 40 | 12 h8 | 55 | 38 | 104,5 | 44 | 4 x 4 x 32                     | M6x10 |
| K0495.400001X500  | with plain bearing | 40     | Tr 20x4 | 500  | 291      | 40 | 12 h8 | 55 | 38 | 104,5 | 44 | 4 x 4 x 32                     | M6x10 |
| K0495.400001X800  | with plain bearing | 40     | Tr 20x4 | 800  | 591      | 40 | 12 h8 | 55 | 38 | 104,5 | 44 | 4 x 4 x 32                     | M6x10 |
| K0495.400001X1000 | with plain bearing | 40     | Tr 20x4 | 1000 | 791      | 40 | 12 h8 | 55 | 38 | 104,5 | 44 | 4 x 4 x 32                     | M6x10 |
| K0495.500001X500  | with plain bearing | 50     | Tr 20x4 | 500  | 265      | 50 | 12 h8 | 63 | 38 | 117,5 | 44 | 4 x 4 x 32                     | M6x10 |
| K0495.500001X800  | with plain bearing | 50     | Tr 20x4 | 800  | 565      | 50 | 12 h8 | 63 | 38 | 117,5 | 44 | 4 x 4 x 32                     | M6x10 |
| K0495.500001X1000 | with plain bearing | 50     | Tr 20x4 | 1000 | 765      | 50 | 12 h8 | 63 | 38 | 117,5 | 44 | 4 x 4 x 32                     | M6x10 |
| K0495.180101X300  | with ball bearing  | 18     | Tr 10x2 | 300  | 145      | 18 | 6 h9  | 24 | 17 | 77,5  | 18 | 2 x 2 x 12                     | M3x5  |
| K0495.180101X500  | with ball bearing  | 18     | Tr 10x2 | 500  | 345      | 18 | 6 h9  | 24 | 17 | 77,5  | 18 | 2 x 2 x 12                     | M3x5  |
| K0495.300101X300  | with ball bearing  | 30     | Tr 14x3 | 300  | 100      | 30 | 8 h8  | 38 | 26 | 100   | 28 | 2 x 2 x 20                     | M4x8  |
| K0495.300101X500  | with ball bearing  | 30     | Tr 14x3 | 500  | 300      | 30 | 8 h8  | 38 | 26 | 100   | 28 | 2 x 2 x 20                     | M4x8  |
| K0495.300101X800  | with ball bearing  | 30     | Tr 14x3 | 800  | 600      | 30 | 8 h8  | 38 | 26 | 100   | 28 | 2 x 2 x 20                     | M4x8  |
| K0495.400101X300  | with ball bearing  | 40     | Tr 20x4 | 300  | 91       | 40 | 12 h8 | 55 | 38 | 104,5 | 44 | 4 x 4 x 32                     | M6x10 |
| K0495.400101X500  | with ball bearing  | 40     | Tr 20x4 | 500  | 291      | 40 | 12 h8 | 55 | 38 | 104,5 | 44 | 4 x 4 x 32                     | M6x10 |
| K0495.400101X800  | with ball bearing  | 40     | Tr 20x4 | 800  | 591      | 40 | 12 h8 | 55 | 38 | 104,5 | 44 | 4 x 4 x 32                     | M6x10 |
| K0495.400101X1000 | with ball bearing  | 40     | Tr 20x4 | 1000 | 791      | 40 | 12 h8 | 55 | 38 | 104,5 | 44 | 4 x 4 x 32                     | M6x10 |
| K0495.500101X500  | with ball bearing  | 50     | Tr 20x4 | 500  | 265      | 50 | 12 h8 | 63 | 38 | 117,5 | 44 | 4 x 4 x 32                     | M6x10 |
| K0495.500101X800  | with ball bearing  | 50     | Tr 20x4 | 800  | 565      | 50 | 12 h8 | 63 | 38 | 117,5 | 44 | 4 x 4 x 32                     | M6x10 |
| K0495.500101X1000 | with ball bearing  | 50     | Tr 20x4 | 1000 | 765      | 50 | 12 h8 | 63 | 38 | 117,5 | 44 | 4 x 4 x 32                     | M6x10 |

## Linear actuators, stainless steel



### Material:

DIN EN 10305 precision tube, stainless steel 1.4301  
Trapezoidal thread spindle, right-hand thread, rolled, stainless steel 1.4301

### Sample order:

K0495.1300101X500

### Note:

Medium speed range, self-locking.

Travel  $S = \text{Length } L - (2 \times L2 + J)$ .

### On request:

Left-hand thread, 2 drive cones, other travels or handwheels.

### Accessories:

- Guides, stainless steel, K0496, K0498, K0499
- Clamping elements of the tubular connection system

### Functional principle:

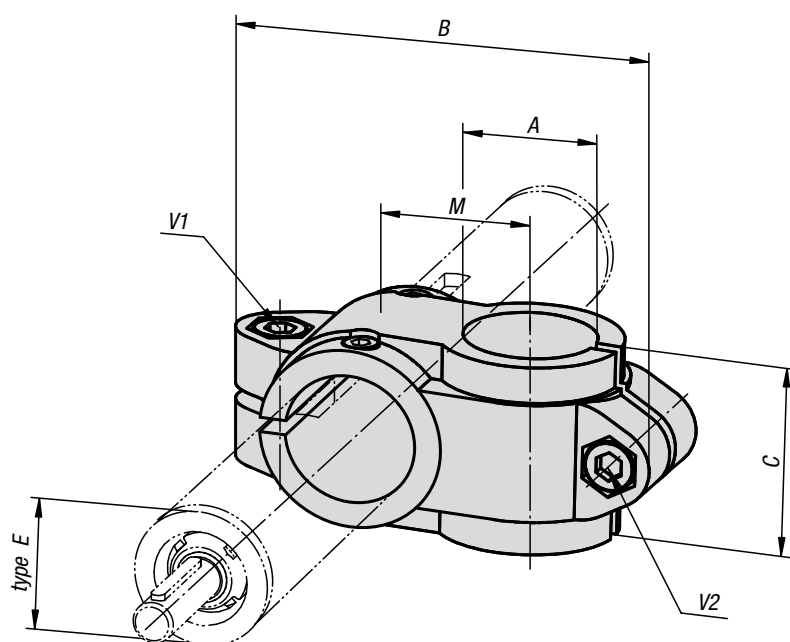
A rotating movement of the threaded spindle is converted into a linear movement of the guide carriage.

## KIPP Linear actuators, stainless steel

| Order No.          | Version 1         | Type E | Spindle | L    | Travel S | B  | D1    | J  | L1 | L2 | M  | P1<br>parallel key<br>DIN 6885 | V1    |
|--------------------|-------------------|--------|---------|------|----------|----|-------|----|----|----|----|--------------------------------|-------|
| K0495.1300101X300  | with ball bearing | 30     | Tr 14x3 | 300  | 109      | 30 | 8 h8  | 31 | 26 | 80 | 22 | 2 x 2 x 20                     | M4x8  |
| K0495.1300101X500  | with ball bearing | 30     | Tr 14x3 | 500  | 309      | 30 | 8 h8  | 31 | 26 | 80 | 22 | 2 x 2 x 20                     | M4x8  |
| K0495.1300101X800  | with ball bearing | 30     | Tr 14x3 | 800  | 609      | 30 | 8 h8  | 31 | 26 | 80 | 22 | 2 x 2 x 20                     | M4x8  |
| K0495.1400101X300  | with ball bearing | 40     | Tr 20x4 | 300  | 107      | 40 | 12 h8 | 39 | 38 | 77 | 28 | 4 x 4 x 32                     | M6x10 |
| K0495.1400101X500  | with ball bearing | 40     | Tr 20x4 | 500  | 307      | 40 | 12 h8 | 39 | 38 | 77 | 28 | 4 x 4 x 32                     | M6x10 |
| K0495.1400101X800  | with ball bearing | 40     | Tr 20x4 | 800  | 607      | 40 | 12 h8 | 39 | 38 | 77 | 28 | 4 x 4 x 32                     | M6x10 |
| K0495.1400101X1000 | with ball bearing | 40     | Tr 20x4 | 1000 | 807      | 40 | 12 h8 | 39 | 38 | 77 | 28 | 4 x 4 x 32                     | M6x10 |

# Linear actuator connector clamps

cross

**Material:**

Cast aluminium.

DIN 7984 screws and DIN 985 nuts, steel.

**Version:**

Black powder-coated.

Screws and nuts electro zinc-plated.

**Sample order:**

K0496.1818

**On request:**

Clamping levers for tightening.

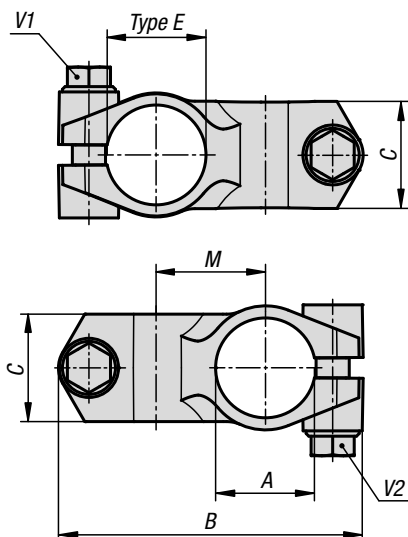


## KIPP Linear actuator connector clamps, cross

| Order No.  | Type E | A  | B   | C    | M  | V1     | V2     |
|------------|--------|----|-----|------|----|--------|--------|
| K0496.1818 | 18     | 18 | 66  | 25,5 | 20 | M6x16  | M6x16  |
| K0496.3020 | 30     | 20 | 99  | 40   | 33 | M8x25  | M8x25  |
| K0496.3030 | 30     | 30 | 99  | 40   | 33 | M8x25  | M8x25  |
| K0496.4020 | 40     | 20 | 109 | 40   | 36 | M10x30 | M8x25  |
| K0496.4040 | 40     | 40 | 137 | 60   | 45 | M10x30 | M10x30 |
| K0496.5040 | 50     | 40 | 154 | 70   | 54 | M10x35 | M10x35 |
| K0496.5050 | 50     | 50 | 154 | 70   | 54 | M10x35 | M10x35 |

# Linear actuator connector clamps, stainless steel

cross

**Material:**

Stainless steel, investment cast 1.4308.  
Screws, stainless steel A2.

**Version:**

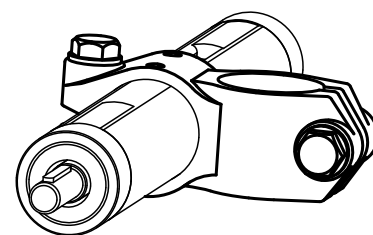
Electropolished.

**Sample order:**

K0496.13030

**On request:**

Clamping levers for tightening.

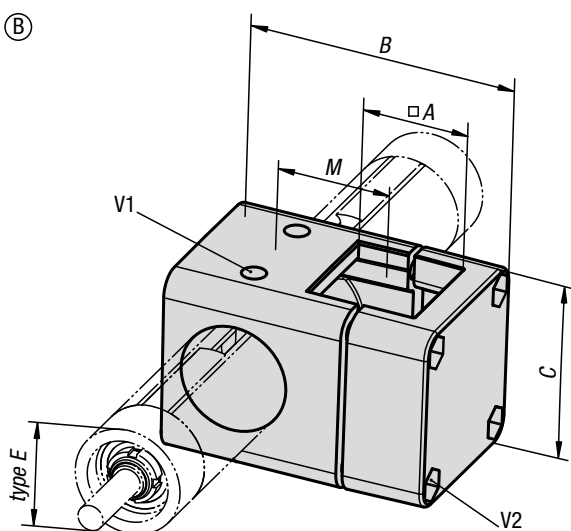
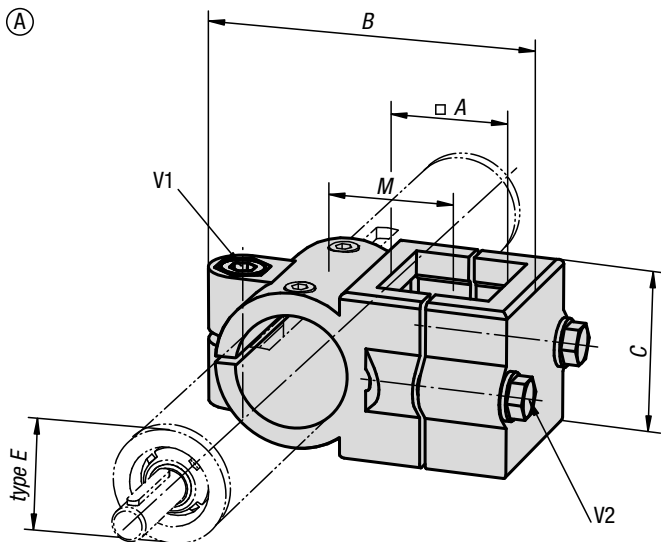


## KIPP Linear actuator connector clamps, stainless steel, cross

| Order No.   | Type E | A  | B   | C    | M  | V1     | V2     |
|-------------|--------|----|-----|------|----|--------|--------|
| K0496.13030 | 30     | 30 | 92  | 32,4 | 33 | M8x30  | M8x30  |
| K0496.14040 | 40     | 40 | 118 | 40   | 42 | M10x35 | M10x35 |

# Linear actuator connector clamps

cross

**Material:**

Cast aluminium.  
Screws and nuts steel.

**Version:**

Black powder-coated.  
Clamping screws and nuts electro zinc-plated.

**Sample order:**

K0497.4040

**On request:**

Clamping levers for tightening.

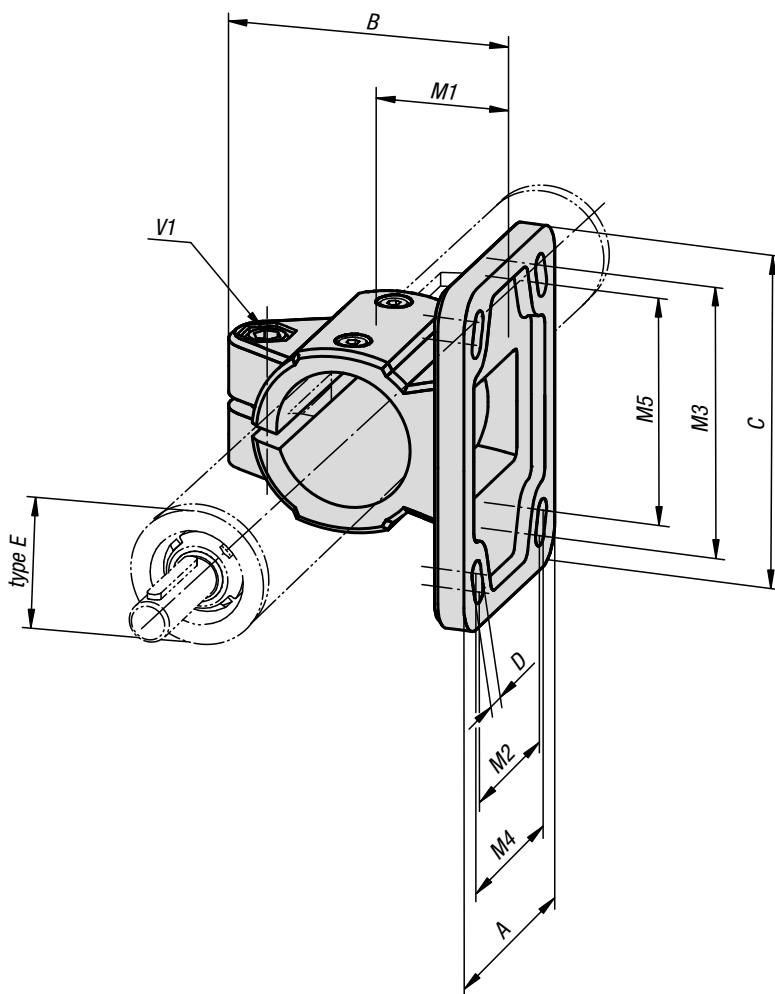


## KIPP Linear actuator connector clamps, cross

| Order No.  | Form | Type E | A  | B   | C  | M  | V1     | V2    |
|------------|------|--------|----|-----|----|----|--------|-------|
| K0497.3030 | A    | 30     | 30 | 86  | 45 | 33 | M8x35  | M8x35 |
| K0497.4040 | A    | 40     | 40 | 117 | 60 | 47 | M10x50 | M8x45 |
| K0497.5050 | B    | 50     | 50 | 126 | 86 | 53 | M8x50  | M8x50 |

## Linear actuator connector clamps

flange



### Material:

Cast aluminium.  
DIN 7984 screws and DIN 985 nuts, steel.

### Version:

Black powder-coated.  
Screws and nuts electro zinc-plated.

### Sample order:

K0498.50

### Note:

\* Elongated hole

### On request:

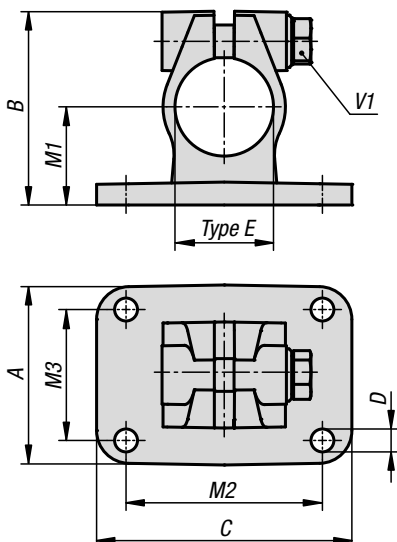
Clamping levers for tightening.

### KIPP Linear actuator connector clamps, flange

| Order No. | Type E | A  | B    | C   | D          | M1 | M2 | M3  | M4 | M5 | V1     |
|-----------|--------|----|------|-----|------------|----|----|-----|----|----|--------|
| K0498.18  | 18     | 37 | 42,5 | 50  | 5,5 (2x)   | 18 | -  | 40  | -  | -  | M6x16  |
| K0498.30  | 30     | 55 | 63   | 78  | 6,5* (2x)  | 30 | -  | 60  | -  | 53 | M8x25  |
| K0498.40  | 40     | 80 | 87   | 105 | 8,5* (4x)  | 42 | 52 | 82  | 60 | 80 | M10x30 |
| K0498.50  | 50     | 92 | 100  | 130 | 10,5* (4x) | 50 | 60 | 100 | 62 | 98 | M10x35 |

# Linear actuator connector clamps, stainless steel

flange



## Material:

Stainless steel, investment cast 1.4308.  
Screws, stainless steel A2.

## Version:

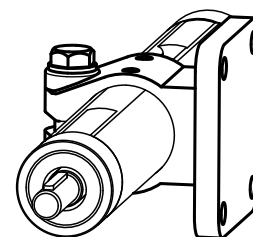
Electropolished.

## Sample order:

K0498.130

## On request:

Clamping levers for tightening.



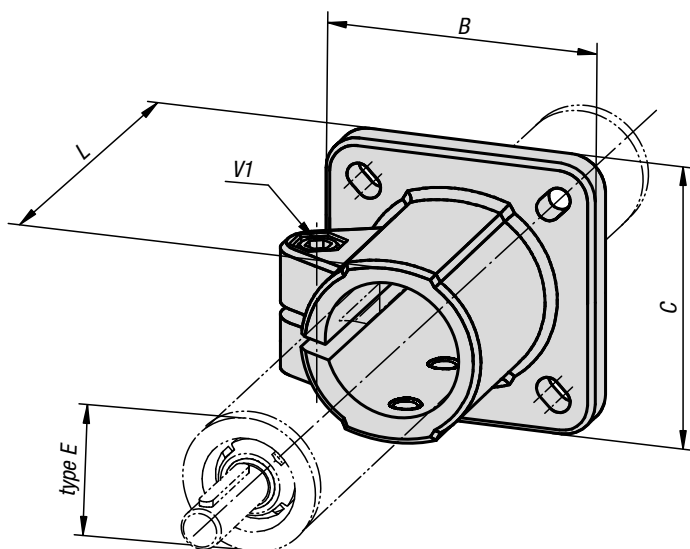
## KIPP Linear actuator connector clamps, stainless steel, flange

| Order No. | Type E | A  | B  | C  | D | M1 | M2 | M3 | V1     |
|-----------|--------|----|----|----|---|----|----|----|--------|
| K0498.130 | 30     | 55 | 59 | 78 | 7 | 30 | 60 | 40 | M8x30  |
| K0498.140 | 40     | 80 | 80 | 80 | 9 | 42 | 60 | 60 | M10x35 |



## Linear actuator connector clamps

base



### Material:

Cast aluminium.

DIN 7984 screws and DIN 985 nuts, steel.

### Version:

Black powder-coated.

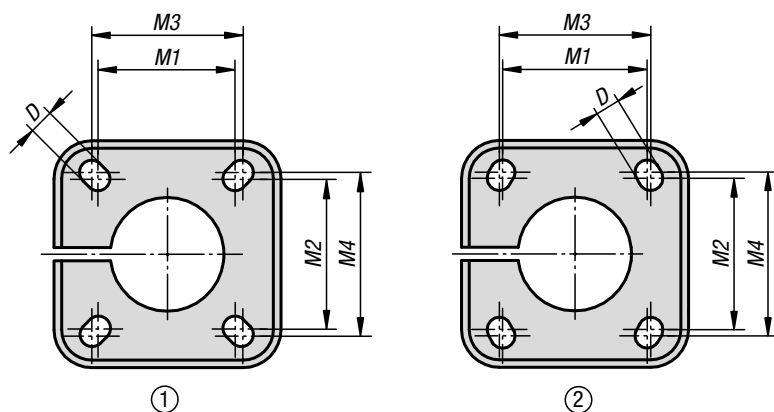
Screws and nuts electro zinc-plated.

### Sample order:

K0499.30

### On request:

Clamping levers for tightening.



### KIPP Linear actuator connector clamps base

| Order No. | hole arrangement | Type E | B   | C   | D    | L  | M1 | M2 | M3 | M4 | V1     |
|-----------|------------------|--------|-----|-----|------|----|----|----|----|----|--------|
| K0499.18  | 1                | 18     | 42  | 42  | 5,5  | 37 | 28 | 28 | 30 | 30 | M6x20  |
| K0499.30  | 2                | 30     | 60  | 60  | 6,5  | 50 | 40 | 42 | 42 | 45 | M8x25  |
| K0499.40  | 1                | 40     | 90  | 90  | 8,5  | 70 | 60 | 60 | 64 | 64 | M10x30 |
| K0499.50  | 1                | 50     | 105 | 105 | 10,5 | 85 | 74 | 74 | 80 | 80 | M10x35 |

Linear actuator connector clamps, stainless steel



base

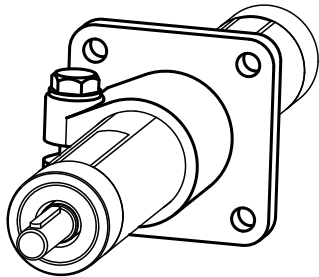
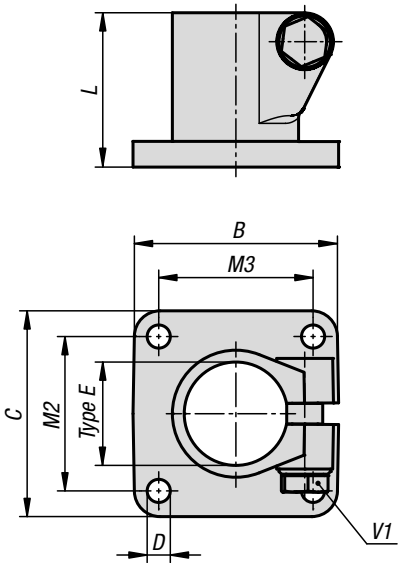


**Material:**  
Stainless steel, investment cast 1.4308.  
Screws, stainless steel A2.

**Version:**  
Electropolished.

**Sample order:**  
K0499.130

**On request:**  
Clamping levers for tightening.



KIPP Linear actuator connector clamps, stainless steel, base

| Order No. | Type E | B  | C  | D | L  | M2 | M3 | V1     |
|-----------|--------|----|----|---|----|----|----|--------|
| K0499.130 | 30     | 60 | 60 | 7 | 50 | 40 | 40 | M8x30  |
| K0499.140 | 40     | 80 | 80 | 9 | 60 | 60 | 60 | M10x35 |



A large grid of graph paper for taking notes.

# Technical information

## Square tube connectors



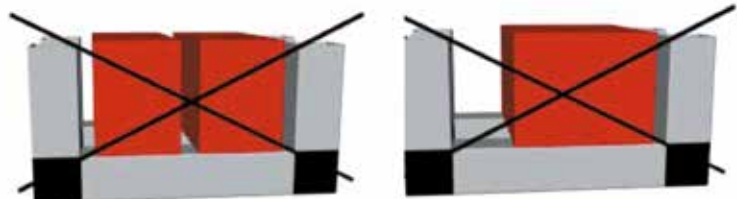
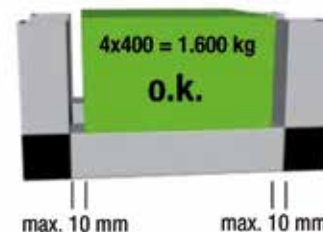
### High quality plastic tube connectors with steel core for joining square tubing

Creative use of these square tube connectors together with the specially developed aluminium profiles leads to unlimited construction possibilities. The system can be combined with many different materials e.g. laminated chipboard, glass or plastic plates. No screws required, the connectors are simply pushed into the appropriate square tubing. They can be dismantled and reused repeatedly. If removal should be prevented the connectors can be secured by gluing, screws or rivets.

### Loading of square tube connectors

25x25x1.5 and 30x30x2 square tube connectors with steel core have a compressive strength of max. 400 kg per horizontal spigot under the following conditions:

- the spacing between the exterior wall of the vertical tube and the outer edge of the load must not exceed 10 mm.
- the underside of the load is rigid enough that the applied force occurs only at the load corners (see diagram).
- the load is static i.e. no dynamic stress due to moving loads.



### Note:

Using items such as adjustable glides, screw plugs and swivel feet with the tube connectors can decrease the load values for the entire unit.

### Mitre cuts

Mitre cuts are required when finned square tubes are joined together with tube connectors at an angle. On request, we can supply our finned square tubes pre-cut with mitre cuts.

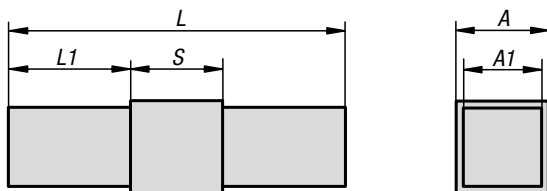


By mitre cuts the tube end is cut at 90° and a cut of 45° is made on the fin.

Anodizing on the tube occurs prior to the cut, so cut edges are not anodised.

# Square tube connectors

straight


**Material, version:**

Polyamide PA, black.

Core electro zinc-plated steel.

**Sample order:**

K0615.1201512

**Note:**

No screws required. The tube connectors are simply pushed into the appropriate square tubing. They can be dismantled and reused repeatedly.

**Accessories:**

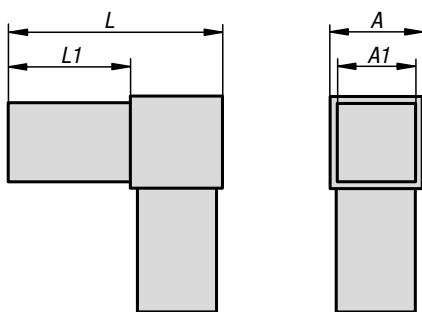
- Square tubes K0627
- Finned square tubes K0628


**KIPP Square tube connectors, straight**

| Order No.     | A  | A1 | L   | L1 | S  | Suitable for square tubes |
|---------------|----|----|-----|----|----|---------------------------|
| K0615.1201512 | 20 | 17 | 95  | 45 | 5  | 20 x 20 x 1,5             |
| K0615.1251512 | 25 | 22 | 133 | 54 | 25 | 25 x 25 x 1,5             |
| K0615.1302012 | 30 | 26 | 122 | 46 | 30 | 30 x 30 x 2               |

# Square tube connectors

two-way



## Material, version:

Polyamide PA, black.

Core electro zinc-plated steel.

## Sample order:

K0616.1201512

## Note:

No screws required. The tube connectors are simply pushed into the appropriate square tubing. They can be dismantled and reused repeatedly.

## Accessories:

- Square tubes K0627
- Finned square tubes K0628

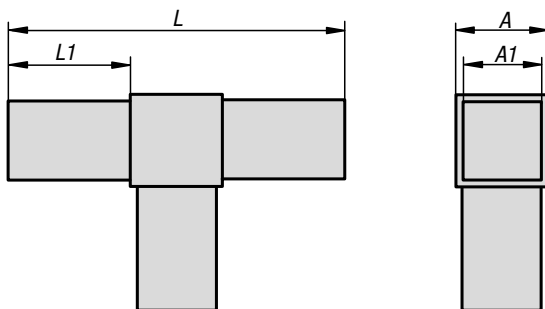


## KIPP Square tube connectors, two-way

| Order No.     | A  | A1 | L        | L1       | Suitable for square tubes |
|---------------|----|----|----------|----------|---------------------------|
| K0616.1201512 | 20 | 17 | 56       | 36       | 20 x 20 x 1,5             |
| K0616.1251512 | 25 | 22 | 73,5±0,7 | 48,5±0,7 | 25 x 25 x 1,5             |
| K0616.1302012 | 30 | 26 | 77       | 47       | 30 x 30 x 2               |

# Square tube connectors

three-way, flat


**Material, version:**

Polyamide PA, black.

Core electro zinc-plated steel.

**Sample order:**

K0617.1201512

**Note:**

No screws required. The tube connectors are simply pushed into the appropriate square tubing. They can be dismantled and reused repeatedly.

**Accessories:**

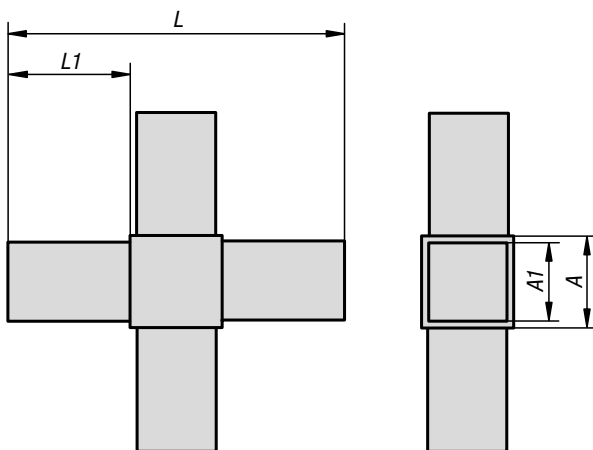
- Square tubes K0627
- Finned square tubes K0628


**KIPP Square tube connectors, three-way, flat**

| Order No.     | A  | A1 | L   | L1 | Suitable for square tubes |
|---------------|----|----|-----|----|---------------------------|
| K0617.1201512 | 20 | 17 | 92  | 36 | 20 x 20 x 1,5             |
| K0617.1251512 | 25 | 22 | 121 | 48 | 25 x 25 x 1,5             |
| K0617.1302012 | 30 | 26 | 124 | 47 | 30 x 30 x 2               |

# Square tube connectors

four-way, flat


**Material, version:**

Polyamide PA, black.

Core electro zinc-plated steel.

**Sample order:**

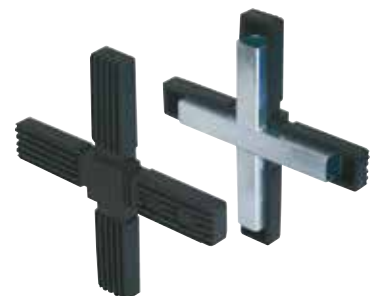
K0618.1201512

**Note:**

No screws required. The tube connectors are simply pushed into the appropriate square tubing. They can be dismantled and reused repeatedly.

**Accessories:**

- Square tubes K0627
- Finned square tubes K0628

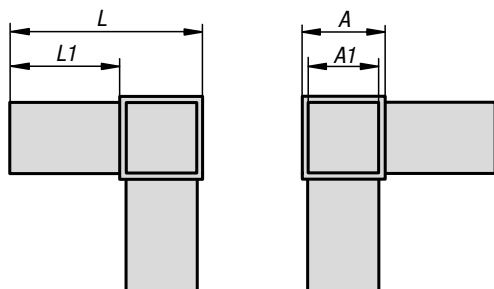

**KIPP Square tube connectors, four-way, flat**

| Order No.     | A  | A1 | L   | L1 | Suitable for square tubes |
|---------------|----|----|-----|----|---------------------------|
| K0618.1201512 | 20 | 17 | 92  | 36 | 20 x 20 x 1,5             |
| K0618.1251512 | 25 | 22 | 133 | 54 | 25 x 25 x 1,5             |
| K0618.1302012 | 30 | 26 | 124 | 47 | 30 x 30 x 2               |



# Square tube connectors

three-way


**Material, version:**

Polyamide PA, black.

Core electro zinc-plated steel.

**Sample order:**

K0619.1201512

**Note:**

No screws required. The tube connectors are simply pushed into the appropriate square tubing. They can be dismantled and reused repeatedly.

By item K0619.1201512 the cap closes central.

**Accessories:**

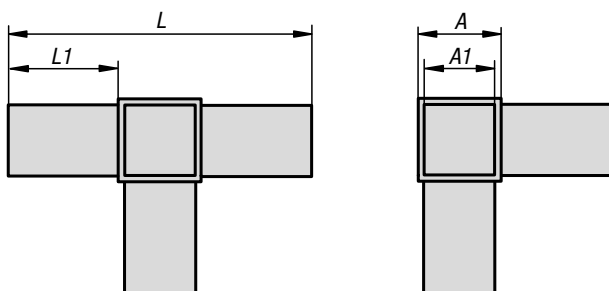
- Square tubes K0627
- Finned square tubes K0628


**KIPP Square tube connector, three-way**

| Order No.     | A  | A1 | L  | L1 | Suitable for square tubes |
|---------------|----|----|----|----|---------------------------|
| K0619.1201512 | 20 | 17 | 56 | 36 | 20 x 20 x 1,5             |
| K0619.1251512 | 25 | 22 | 73 | 48 | 25 x 25 x 1,5             |
| K0619.1302012 | 30 | 26 | 77 | 47 | 30 x 30 x 2               |

# Square tube connectors

four-way


**Material, version:**

Polyamide PA, black.

Core electro zinc-plated steel.

**Sample order:**

K0620.1201512

**Note:**

No screws required. The tube connectors are simply pushed into the appropriate square tubing. They can be dismantled and reused repeatedly.

By item K0620.1201512 the cap closes central.

**Accessories:**

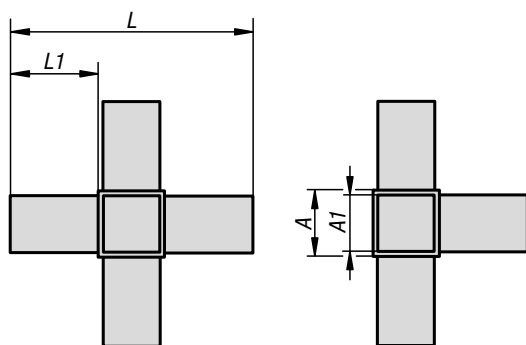
- Square tubes K0627
- Finned square tubes K0628


**KIPP Square tube connectors, four-way**

| Order No.     | A  | A1 | L   | L1   | Suitable for square tubes |
|---------------|----|----|-----|------|---------------------------|
| K0620.1201512 | 20 | 17 | 92  | 36   | 20 x 20 x 1,5             |
| K0620.1251512 | 25 | 22 | 122 | 48,5 | 25 x 25 x 1,5             |
| K0620.1302012 | 30 | 26 | 124 | 47   | 30 x 30 x 2               |

# Square tube connectors

five-way


**Material, version:**

Polyamide PA, black.

Core electro zinc-plated steel.

**Sample order:**

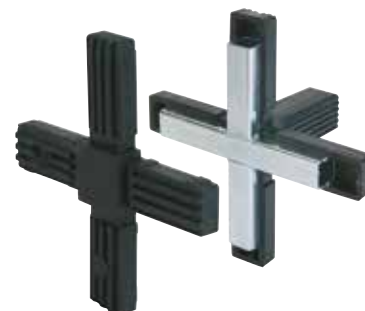
K0621.1201512

**Note:**

No screws required. The tube connectors are simply pushed into the appropriate square tubing. They can be dismantled and reused repeatedly.

**Accessories:**

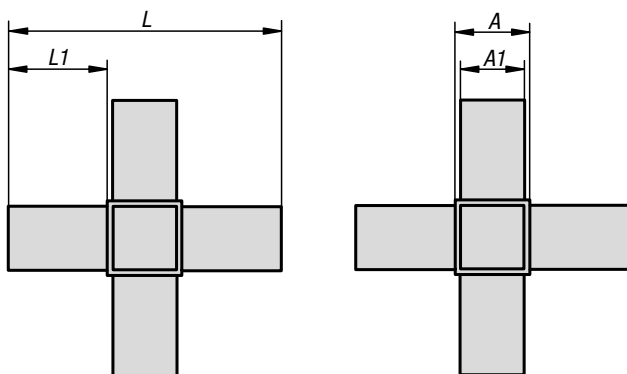
- Square tubes K0627
- Finned square tubes K0628


**KIPP Square tube connectors, five-way**

| Order No.     | A  | A1 | L   | L1 | Suitable for square tubes |
|---------------|----|----|-----|----|---------------------------|
| K0621.1201512 | 20 | 17 | 92  | 36 | 20 x 20 x 1,5             |
| K0621.1251512 | 25 | 22 | 135 | 55 | 25 x 25 x 1,5             |
| K0621.1302012 | 30 | 26 | 124 | 47 | 30 x 30 x 2               |

# Square tube connectors

six-way


**Material, version:**

Polyamide PA, black.

Core electro zinc-plated steel.

**Sample order:**

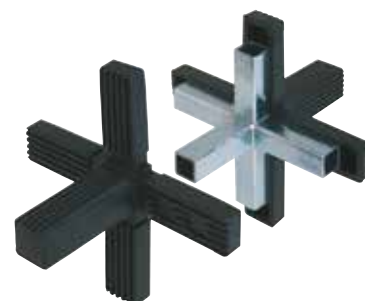
K0622.1201512

**Note:**

No screws required. The tube connectors are simply pushed into the appropriate square tubing. They can be dismantled and reused repeatedly.

**Accessories:**

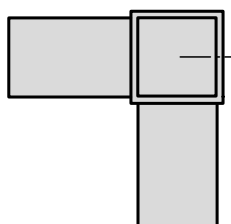
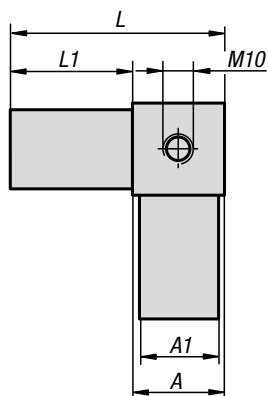
- Square tubes K0627
- Finned square tubes K0628


**KIPP Square tube connectors, six-way**

| Order No.     | A  | A1 | L   | L1 | Suitable for square tubes |
|---------------|----|----|-----|----|---------------------------|
| K0622.1201512 | 20 | 17 | 92  | 36 | 20 x 20 x 1,5             |
| K0622.1251512 | 25 | 22 | 129 | 52 | 25 x 25 x 1,5             |
| K0622.1302012 | 30 | 26 | 124 | 47 | 30 x 30 x 2               |

# Square tube connectors

three-way with tapped hole



## Material, version:

Polyamide PA, black.

Core electro zinc-plated steel.

## Sample order:

K0623.125151210

## Note:

No screws required. The tube connectors are simply pushed into the appropriate square tubing. They can be dismantled and reused repeatedly. For installing swivel feet, casters etc.

## Accessories:

- Square tubes K0627
- Finned square tubes K0628

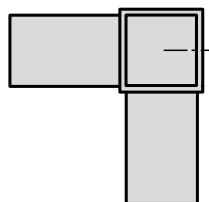
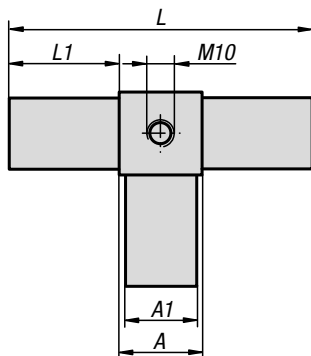


## KIPP Square tube connectors, three-way with tapped hole

| Order No.       | A  | A1 | L  | L1 | Suitable for square tubes |
|-----------------|----|----|----|----|---------------------------|
| K0623.125151210 | 25 | 22 | 73 | 48 | 25 x 25 x 1,5             |
| K0623.130201210 | 30 | 26 | 77 | 47 | 30 x 30 x 2               |

# Square tube connectors

four-way with tapped hole



## Material, version:

Polyamide PA, black.

Core electro zinc-plated steel.

## Sample order:

K0624.125151210

## Note:

No screws required. The tube connectors are simply pushed into the appropriate square tubing. They can be dismantled and reused repeatedly. For installing swivel feet, casters etc.

## Accessories:

- Square tubes K0627
- Finned square tubes K0628

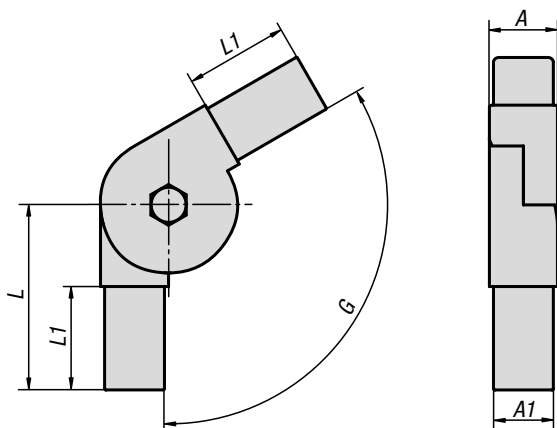
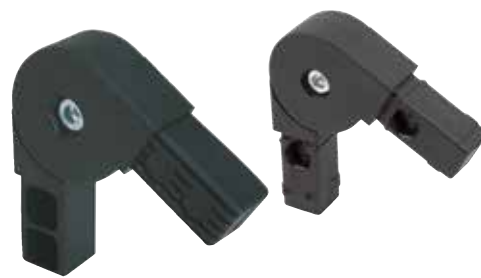


## KIPP Square tube connectors, four-way with tapped hole

| Order No.       | A  | A1 | L   | L1   | Suitable for square tubes |
|-----------------|----|----|-----|------|---------------------------|
| K0624.125151210 | 25 | 22 | 122 | 48,5 | 25 x 25 x 1,5             |
| K0624.130201210 | 30 | 26 | 124 | 47   | 30 x 30 x 2               |

# Square tube connectors

two-way swivel



## Material, version:

Polyamide PA, black.

DIN 6912 screws and DIN 934 nuts electro zinc-plated steel.

## Sample order:

K0625.1251511

## Note:

The tube connectors are simply pushed into the appropriate square tubing. They can be dismantled and reused repeatedly. The swivel angle can be seamlessly adjusted.

## Assembly:

There are two chambers in each of the two journals on the joint, into which hex nuts (not supplied) can be inserted if required to secure the journals in the tube:

- Connector 20x20: 10AF
- Connector 25x25: no chamber
- Connector 30x30: 13AF

## Accessories:

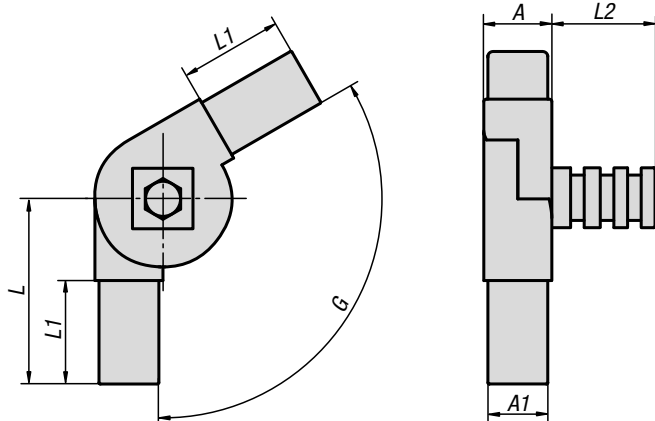
- Square tubes K0627
- Finned square tubes K0628

## KIPP Square tube connectors, two-way swivel

| Order No.     | A  | A1 | L  | L1 | G          | Suitable for square tubes |
|---------------|----|----|----|----|------------|---------------------------|
| K0625.1201511 | 20 | 17 | 59 | 34 | 0° - 190°  | 20 x 20 x 1,5             |
| K0625.1251511 | 25 | 22 | 68 | 38 | 0° - 190°  | 25 x 25 x 1,5             |
| K0625.1251512 | 25 | 22 | 59 | 38 | 45° - 195° | 25 x 25 x 1,5             |
| K0625.1302011 | 30 | 26 | 75 | 40 | 0° - 190°  | 30 x 30 x 2               |
| K0625.1302012 | 30 | 26 | 68 | 42 | 45° - 200° | 30 x 30 x 2               |

# Square tube connectors

three-way swivel



## Material, version:

Polyamide PA, black.

DIN 6912 screws and DIN 934 nuts electro zinc-plated steel.

## Sample order:

K0626.1251511

## Note:

The tube connectors are simply pushed into the appropriate square tubing. They can be dismantled and reused repeatedly. The swivel angle can be seamlessly adjusted. The third spigot can be revolved around its own axis.

## Assembly:

There are two chambers in each of the two journals on the joint, into which hex nuts (not supplied) can be inserted if required to secure the journals in the tube:

- Connector 20x20: 10AF
- Connector 25x25: no chamber
- Connector 30x30: 13AF

## Accessories:

- Square tubes K0627
- Finned square tubes K0628

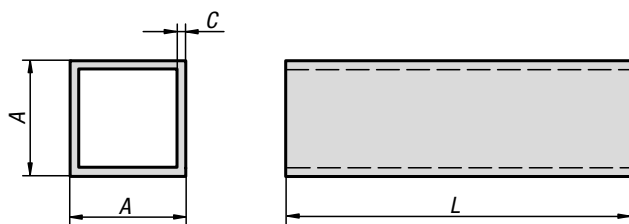


## KIPP Square tube connectors, three-way swivel

| Order No.     | A  | A1 | L  | L1 | L2 | G          | Suitable for square tubes |
|---------------|----|----|----|----|----|------------|---------------------------|
| K0626.1201511 | 20 | 17 | 59 | 34 | 42 | 0° - 190°  | 20 x 20 x 1,5             |
| K0626.1251511 | 25 | 22 | 68 | 38 | 42 | 0° - 190°  | 25 x 25 x 1,5             |
| K0626.1251512 | 25 | 22 | 59 | 38 | 42 | 45° - 195° | 25 x 25 x 1,5             |
| K0626.1302011 | 30 | 26 | 75 | 40 | 41 | 0° - 190°  | 30 x 30 x 2               |
| K0626.1302012 | 30 | 26 | 68 | 42 | 41 | 45° - 200° | 30 x 30 x 2               |



## Square tubes



**Material:**  
Aluminium profile.

**Version:**  
Silver anodised.

**Sample order:**  
K0628.125152X2000

**Note:**  
These square tubes are designed to suit our tube connectors.

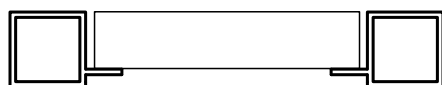
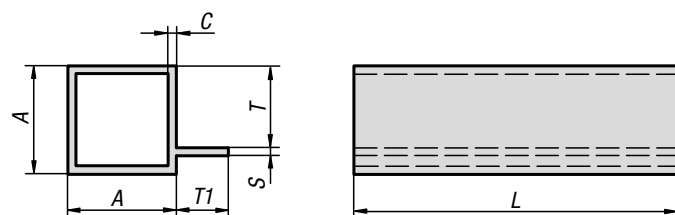
**On request:**  
- Other lengths (L max. 4000 mm)  
- Mitre cuts

### KIPP Square tubes

| Order No.         | A  | C   | L    |
|-------------------|----|-----|------|
| K0627.120152X2000 | 20 | 1,5 | 2000 |
| K0627.125152X2000 | 25 | 1,5 | 2000 |
| K0627.130202X2000 | 30 | 2   | 2000 |

## Square tubes

single-finned



**Material:**  
Aluminium profile.

**Version:**  
Silver anodised.

**Sample order:**  
K0628.125152X2000

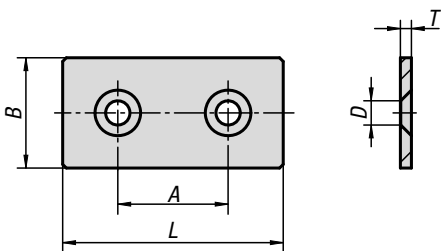
**Note:**  
These square tubes are designed to suit our tube connectors.

**On request:**  
- Other lengths (L max. 4000 mm)  
- Mitre cuts

### KIPP Square tubes with web

| Order No.         | A  | C   | L    | S | T  | T1 |
|-------------------|----|-----|------|---|----|----|
| K0628.125152X2000 | 25 | 1,5 | 2000 | 2 | 19 | 15 |

## Straps



**Material:**  
Steel.

**Version:**  
black powder-coated.

**Sample order:**  
K1042.06

**Note:**  
Universal fastening element for a rigid connection and linkage of profiles, panel elements or lightweight shelving.

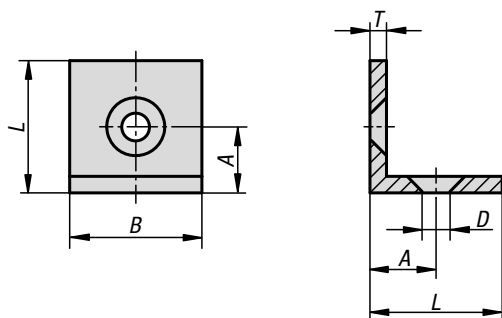


### KIPP Straps

| Order No. | Type  | Slot width | A  | B  | D<br>for screw | L  | T |
|-----------|-------|------------|----|----|----------------|----|---|
| K1042.061 | I     | 6          | 30 | 30 | M6             | 60 | 3 |
| K1042.081 | B & I | 8/10       | 40 | 40 | M8             | 80 | 5 |
| K1042.101 | B     | 8/10       | 45 | 45 | M8             | 90 | 5 |

# K1043

## Angles



**Material:**  
Steel.

**Version:**  
black powder-coated.

**Sample order:**  
K1043.06

**Note:**  
Universal fastening element for a rigid connection and linkage of profiles, panel elements or lightweight shelving.



### KIPP Angles

| Order No. | Type | Slot width | A  | B  | D<br>for screw | L  | T |
|-----------|------|------------|----|----|----------------|----|---|
| K1043.061 | I    | 6          | 15 | 30 | M6             | 30 | 3 |
| K1043.081 | I    | 8/10       | 20 | 40 | M8             | 40 | 5 |

## Angle sets

Type I



### Material:

Angle die-cast zinc.  
Screws and slot nuts steel.  
End cap polyamide, fibreglass reinforced.

### Version:

Angle painted aluminium tone.  
Screws and slot nuts electro zinc-plated.  
End cap black.

### Sample order:

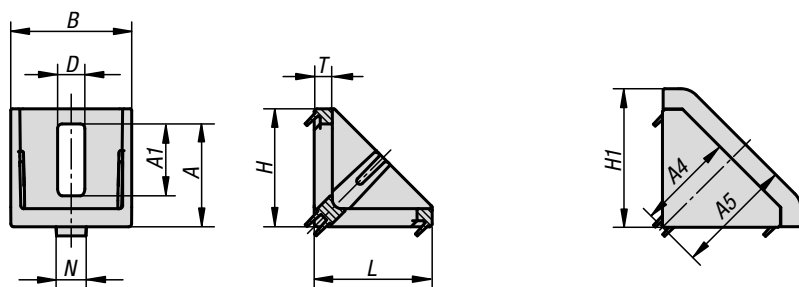
K1045.063030

### Note:

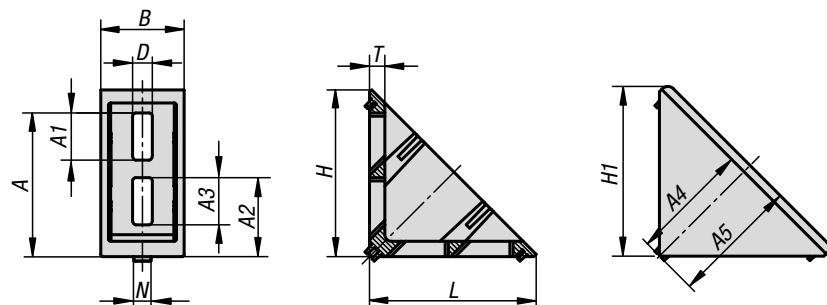
Suitable for reinforcing profile constructions and for frictional connection of profiles with each other without machining. Can also be used as fastening element (e.g. bracket) for any components.

The angles have centring lugs for accurate and twist-proof mounting. The centring lugs can be removed if necessary by breaking off i.e. for mounting plates. The open side can be closed off with the end cap.

30x30 / 40x40



40x80



### KIPP Angle sets Type I

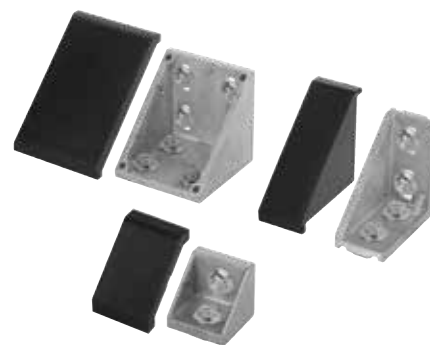
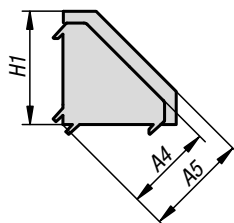
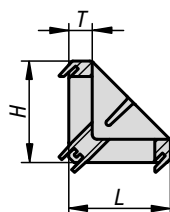
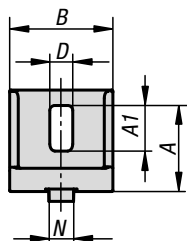
| Order No.    | Type | Slot width | Version | A    | A1   | A2 | A3   | A4   | A5   | B  | D   | H  | H1 | L  | N | T |
|--------------|------|------------|---------|------|------|----|------|------|------|----|-----|----|----|----|---|---|
| K1045.063030 | I    | 6          | 30 x 30 | 22,5 | 11   | -  | -    | 23   | 27   | 28 | 6,5 | 28 | 32 | 28 | 6 | 4 |
| K1045.084040 | I    | 8          | 40 x 40 | 34   | 24   | -  | -    | 32,5 | 39   | 40 | 9   | 39 | 46 | 39 | 8 | 6 |
| K1045.088080 | I    | 8          | 40 x 80 | 65,5 | 21,5 | 36 | 21,5 | 54,5 | 58,5 | 38 | 9   | 76 | 78 | 76 | 8 | 7 |

## Angle sets

Type B



30x30 / 40x40 / 45x45



### Material:

Angle die-cast aluminium.

Screws and slot nuts steel.

End cap polyamide, fibreglass reinforced.

### Version:

Angle bright.

Screws and slot nuts electro zinc-plated.

End cap black.

### Sample order:

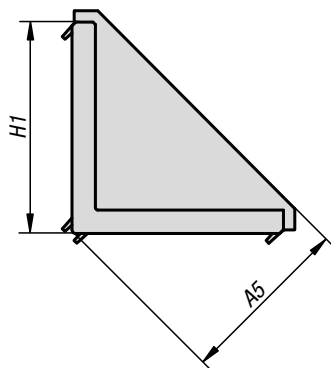
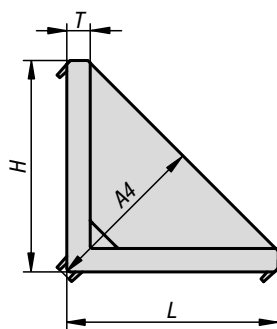
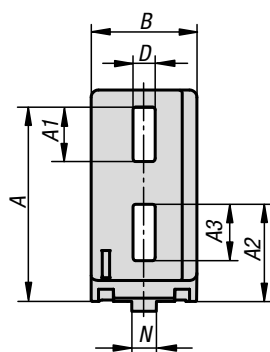
K1046.104040

### Note:

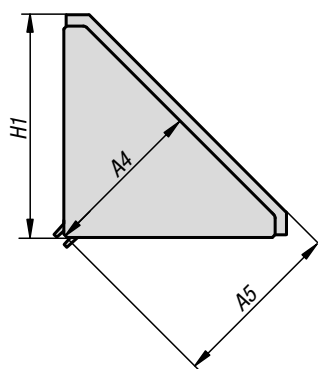
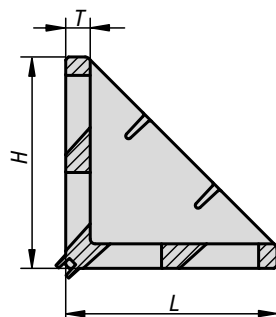
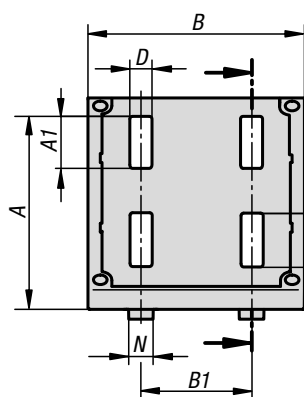
Suitable for reinforcing profile constructions and for frictional connection of profiles with each other without machining. Can also be used as fastening element (e.g. bracket) for any components.

The angles have centring lugs for accurate and twist-proof mounting. The centring lugs can be removed if necessary by breaking off i.e. for mounting plates. The open side can be closed off with the end cap.

30x60 / 40x80 / 45x90



80x80 / 90x90

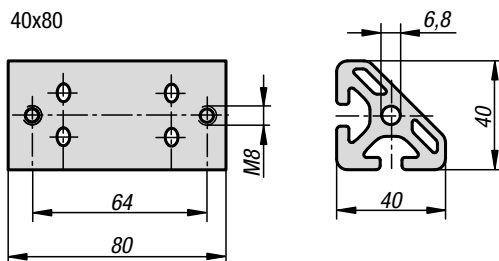
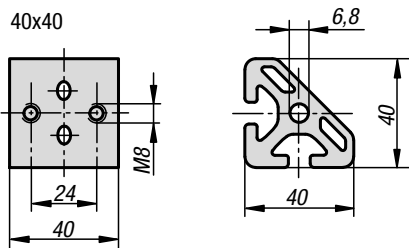
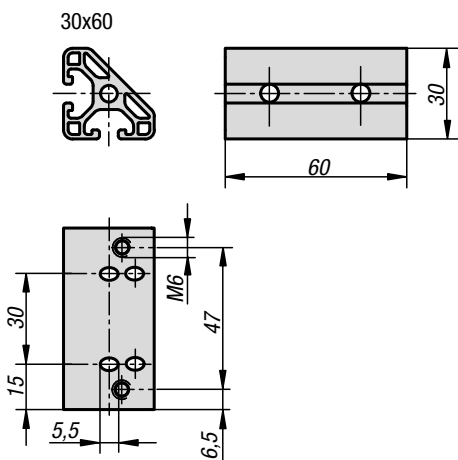
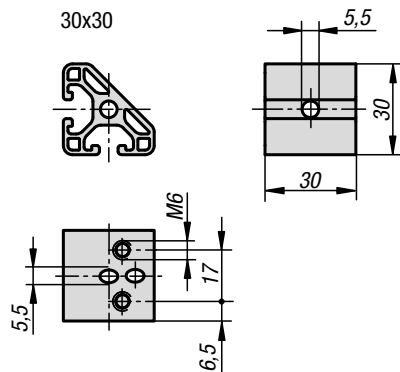


### KIPP Angle sets Type B

| Order No.    | Type | Slot width | Version | A    | A1   | A2   | A3 | A4   | A5   | B  | B1 | D   | H  | H1   | L  | N  | T   |
|--------------|------|------------|---------|------|------|------|----|------|------|----|----|-----|----|------|----|----|-----|
| K1046.083030 | B    | 8          | 30x30   | 22   | 9,5  | -    | -  | 23   | 29   | 28 | -  | 6,4 | 27 | 30   | 27 | 8  | 6   |
| K1046.083060 | B    | 8          | 30x60   | 51   | 11   | 23   | 11 | 44   | 49   | 28 | -  | 6,4 | 57 | 61   | 57 | 8  | 5,5 |
| K1046.104040 | B    | 10         | 40 x 40 | 29,5 | 20,5 | -    | -  | 29,5 | 36,5 | 38 | -  | 9   | 36 | 41,5 | 36 | 10 | 5,5 |
| K1046.104545 | B    | 10         | 45 x 45 | 35   | 18,5 | -    | -  | 35   | 44,5 | 42 | -  | 9   | 41 | 50,5 | 41 | 10 | 9,5 |
| K1046.104080 | B    | 10         | 40 x 80 | 68   | 20   | 35   | 23 | 59   | 64   | 38 | -  | 9   | 76 | 80   | 76 | 10 | 8,5 |
| K1046.104590 | B    | 10         | 45 x 90 | 79   | 22   | 39,5 | 23 | 67   | 72   | 43 | -  | 9   | 86 | 90   | 86 | 10 | 9,5 |
| K1046.108080 | B    | 10         | 80 x 80 | 68,5 | 20   | 35   | 20 | 58,5 | 65   | 74 | 40 | 9   | 76 | 82,5 | 76 | 10 | 8   |
| K1046.109090 | B    | 10         | 90 x 90 | 78,5 | 21   | 39   | 22 | 67   | 75   | 88 | 45 | 9   | 86 | 94,5 | 86 | 10 | 10  |

## Angle elements T1

Type I



**Material:**  
Aluminium.

**Version:**  
anodised.

**Sample order:**  
K1047.063030

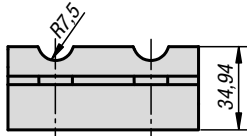
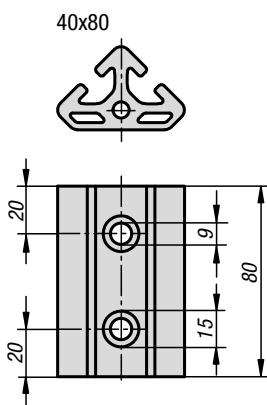
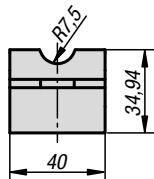
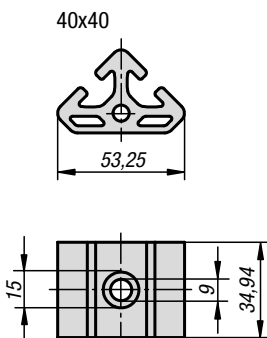
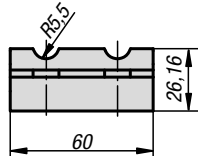
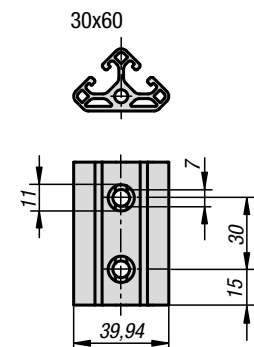
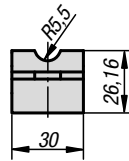
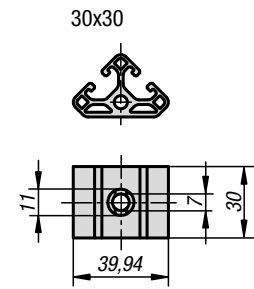
**Note:**  
Angle element for fastening a profile at a 45° angle and for making struts or ties.  
The angle element can be fastened with a universal connector set (remove rotation lock) and with ISO 7380 round-head screws.

### KIPP Angle elements, T1 Type I

| Order No.    | Type | Slot width | Version |
|--------------|------|------------|---------|
| K1047.063030 | I    | 6          | 30 x 30 |
| K1047.063060 | I    | 6          | 30 x 60 |
| K1047.084040 | I    | 8          | 40 x 40 |
| K1047.084080 | I    | 8          | 40 x 80 |

## Angle elements T2

Type I



### Material:

Aluminium.

### Version:

anodised.

### Sample order:

K1048.063030

### Note:

Angle element for fastening two profiles at a 45° angle and for making struts or ties.

The angle element can be fastened with universal connector sets and ISO 7380 round-head screws.

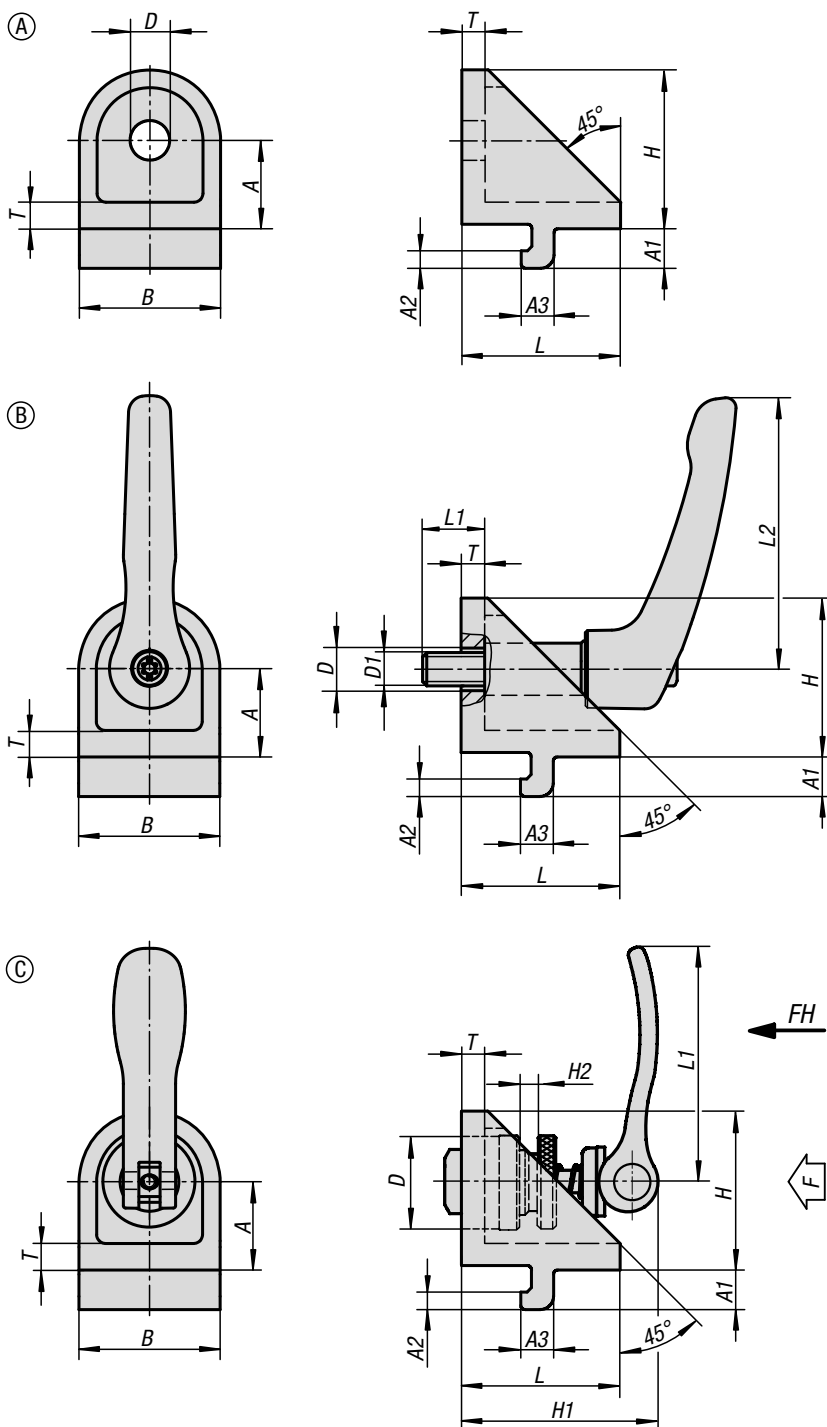


### KIPP Angle elements, T2 Type I

| Order No.    | Type | Slot width | Version |
|--------------|------|------------|---------|
| K1048.063030 | I    | 6          | 30 x 30 |
| K1048.063060 | I    | 6          | 30 x 60 |
| K1048.084040 | I    | 8          | 40 x 40 |
| K1048.084080 | I    | 8          | 40 x 80 |

## Clamping angles

Type I



### Material:

Clamping angle die-cast zinc.  
Grip die-cast zinc DIN EN 12844. Steel parts stainless steel 1.4305.  
Cam lever cast aluminium. Body steel.

### Version:

Clamping angle painted aluminium tone.  
Grip powder-coated. Stainless steel bright.  
Cam lever black powder-coated. Steel parts black oxidised.  
Slot key electro zinc-plated.

### Sample order:

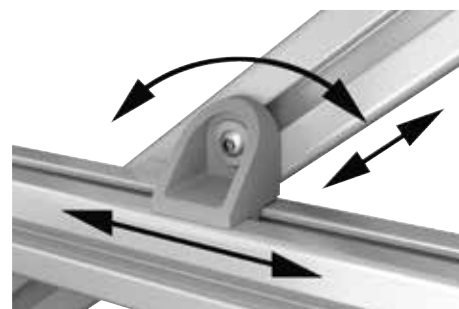
K1049.06

### Note:

The clamping angles are used for connecting two profiles of the same series that have contact on the side faces and cross at any angle.

Loosening the screw releases both clamps allowing free rotation and sliding along the slots.

The clamping angles are generally used in pairs or in combination with a joint angle.

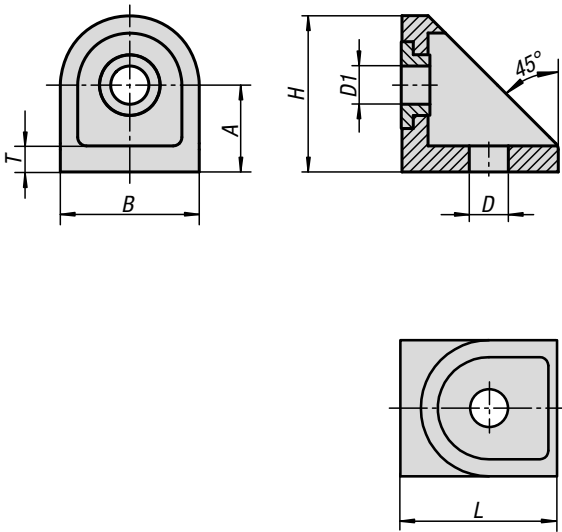


### KIPP Clamping angles Type I

| Order No.  | Type | Slot width | Form | Version 1            | A  | A1  | A2 | A3  | B  | D  | D1 | H  | H1 | H2 | L  | L1   | L2 | T |
|------------|------|------------|------|----------------------|----|-----|----|-----|----|----|----|----|----|----|----|------|----|---|
| K1049.06   | I    | 6          | A    | -                    | 15 | 6,3 | 3  | 5,7 | 24 | 7  | -  | 27 | -  | -  | 27 | -    | -  | 5 |
| K1049.08   | I    | 8          | A    | -                    | 20 | 9   | 4  | 7,5 | 32 | 9  | -  | 36 | -  | -  | 36 | -    | -  | 6 |
| K1049.0606 | I    | 6          | B    | with clamping lever  | 15 | 6,3 | 3  | 5,7 | 24 | 7  | M6 | 27 | -  | -  | 27 | 13   | 40 | 5 |
| K1049.0808 | I    | 8          | B    | with clamping lever  | 20 | 9   | 4  | 7,5 | 32 | 9  | M8 | 36 | -  | -  | 36 | 18   | 65 | 6 |
| K1049.0615 | I    | 6          | C    | with eccentric clamp | 15 | 6,3 | 3  | 5,7 | 24 | 15 | -  | 27 | 34 | 6  | 27 | 36,2 | -  | 5 |
| K1049.0820 | I    | 8          | C    | with eccentric clamp | 20 | 9   | 4  | 7,5 | 32 | 20 | -  | 36 | 44 | 8  | 36 | 52,3 | -  | 6 |

Joint angles

Type I



**Material:**  
Joint angle die-cast zinc.  
Pivot bush steel.

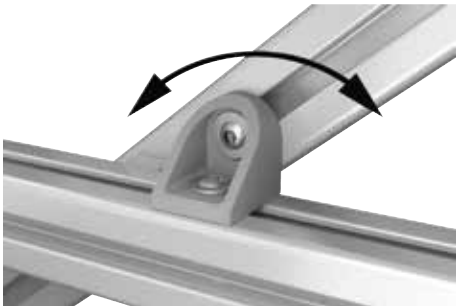
**Version:**  
Joint angle painted aluminium tone.  
Pivot bush electro zinc-plated.

**Sample order:**  
K1050.06

**Note:**  
The joint angles are used for connecting two profiles of the same series that have contact on the side faces and cross at any angle.

The joint angle acts as a fixed pivot point for the crossed profiles. When the screw is tightened the profile can still be freely rotated around the pivot bush.

The joint angles are generally used in combination with a clamping angle.



KIPP Joint angles Type I

| Order No. | Type | Slot width | A  | B  | D | D1  | H    | L  | T   |
|-----------|------|------------|----|----|---|-----|------|----|-----|
| K1050.06  | I    | 6          | 15 | 24 | 7 | 6,5 | 27   | 27 | 5   |
| K1050.08  | I    | 8          | 20 | 32 | 9 | 8,8 | 35,2 | 36 | 5,5 |



## Joints

Type B and Type I



### Material:

Joint die-cast zinc.  
Fastenings die-cast zinc.  
Spacer rings stainless steel.  
Tapped bushes and countersunk screws steel.  
Handle die-cast zinc DIN EN 12844. Metal parts stainless steel 1.4305.

### Version:

Joint painted aluminium tone.  
Fasteners electro zinc-plated.  
Spacer rings bright.  
Tapped bushes and countersunk screws electro zinc-plated.  
Handle powder-coated. Steel parts bright stainless steel.

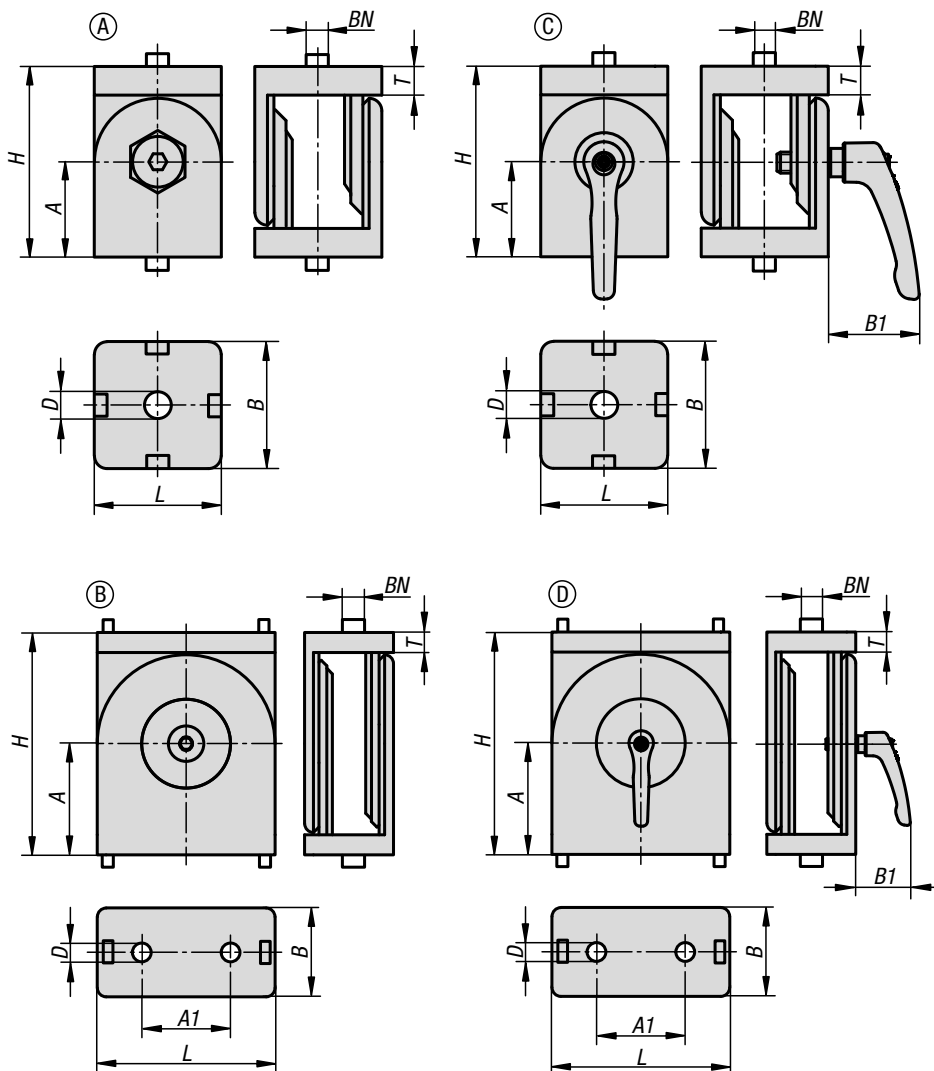
### Sample order:

K1051.063030

### Note:

Joints for connecting two profiles at any angle.  
The adjustment range is 0° to 180°. The joint can also be used as a heavy hinge.

When the spacer rings are inserted, the joint can move freely. When these are removed, the joint can be used as a rigid angle element. The joints are particularly suitable for use as adjustable brackets, swivel arms or similar applications.



# Joints

Type B and Type I



## KIPP Joints without clamping levers

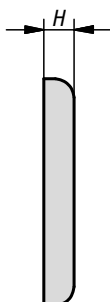
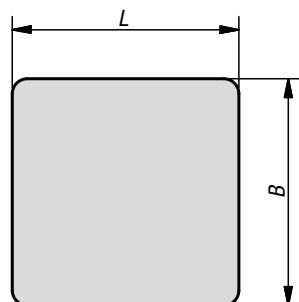
| Order No.    | Type | BN=Slot width | Form | A    | A1 | B  | D   | H   | L  | T |
|--------------|------|---------------|------|------|----|----|-----|-----|----|---|
| K1051.063030 | I    | 6             | A    | 22,5 | -  | 30 | 6,4 | 45  | 30 | 7 |
| K1051.084040 | I    | 8             | A    | 30   | -  | 40 | 8,4 | 60  | 40 | 9 |
| K1051.084080 | I    | 8             | B    | 50   | 40 | 40 | 8,4 | 100 | 80 | 9 |
| K1051.083030 | B    | 8             | A    | 22,5 | -  | 30 | 8,3 | 45  | 30 | 7 |
| K1051.104545 | B    | 10            | A    | 30   | -  | 45 | 8,5 | 60  | 45 | 8 |
| K1051.104590 | B    | 10            | B    | 50   | 45 | 45 | 8,5 | 100 | 90 | 9 |

## KIPP Joints with clamping levers

| Order No.     | Type | BN=Slot width | Form | A    | A1 | B  | B1   | D   | H   | L  | T |
|---------------|------|---------------|------|------|----|----|------|-----|-----|----|---|
| K1051.1063030 | I    | 6             | C    | 22,5 | -  | 30 | 31   | 6,4 | 45  | 30 | 7 |
| K1051.1084040 | I    | 8             | C    | 30   | -  | 40 | 31   | 8,4 | 60  | 40 | 9 |
| K1051.2084080 | I    | 8             | D    | 50   | 40 | 40 | 31   | 8,4 | 100 | 80 | 9 |
| K1051.1104545 | B    | 10            | C    | 30   | -  | 45 | 42,5 | 8,5 | 60  | 45 | 8 |
| K1051.2104590 | B    | 10            | D    | 50   | 45 | 45 | 42,5 | 8,5 | 100 | 90 | 9 |

## End caps

Type B and Type I



**Material:**

Polyamide fibreglass reinforced.

**Version:**

black.

**Sample order:**

K1053.06303011

**Note:**

Round edged covers with rotation lock for covering the profile ends. Prevents dirt from penetrating and avoids injuries. Simple clip-on mounting.

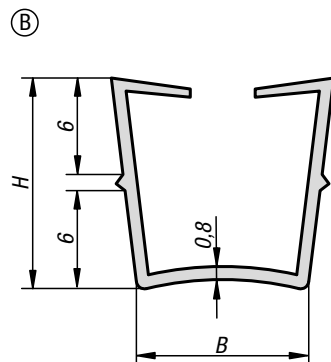
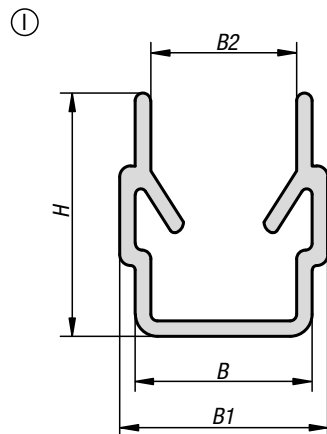


### KIPP End caps Type B and Type I

| Order No.      | Type | Slot width | Profile | B  | L  | H |
|----------------|------|------------|---------|----|----|---|
| K1053.06303011 | I    | 6          | 30x30   | 30 | 30 | 3 |
| K1053.06306011 | I    | 6          | 30x60   | 30 | 60 | 3 |
| K1053.06606011 | I    | 6          | 60x60   | 60 | 60 | 3 |
| K1053.08164011 | I    | 8          | 16x40   | 16 | 40 | 4 |
| K1053.08404011 | I    | 8          | 40x40   | 40 | 40 | 4 |
| K1053.08408011 | I    | 8          | 40x80   | 40 | 80 | 4 |
| K1053.08808011 | I    | 8          | 80x80   | 80 | 80 | 4 |
| K1053.08303021 | B    | 8          | 30x30   | 30 | 30 | 4 |
| K1053.08306021 | B    | 8          | 30x60   | 30 | 60 | 4 |
| K1053.10404021 | B    | 10         | 40x40   | 40 | 40 | 4 |
| K1053.10408021 | B    | 10         | 40x80   | 40 | 80 | 4 |
| K1053.10454521 | B    | 10         | 45x45   | 45 | 45 | 4 |
| K1053.10456021 | B    | 10         | 45x60   | 45 | 60 | 4 |
| K1053.10459021 | B    | 10         | 45x90   | 45 | 90 | 4 |
| K1053.10909021 | B    | 10         | 90x90   | 90 | 90 | 4 |

## Cover and adapter profiles

Type B and Type I



### Material:

Type I polypropylene.

Type B polypropylene + TPE.

### Version:

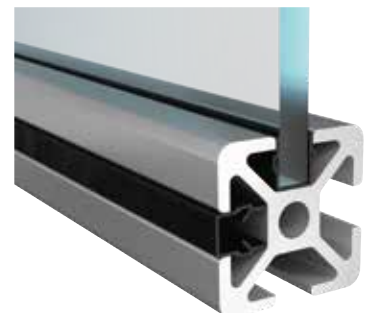
black or bright.

### Sample order:

K1054.06120351

### Note:

The cover and adapter profile made of flexible plastic are used for two different applications. As a cover profile it seals the profile slots against dust and dirt. As an adapter profile with the open side facing out it is used to hold panel elements.

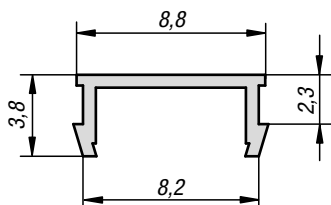


### KIPP Cover and adapter profiles Type B and Type I

| Order No.      | Main colour | Type | Slot width | B  | B1  | B2  | H   | Length | Panel element |
|----------------|-------------|------|------------|----|-----|-----|-----|--------|---------------|
| K1054.06120351 | black       | I    | 6          | 6  | 7   | 4,4 | 9,1 | 2000   | 2,0 - 3,5     |
| K1054.06120350 | natural     | I    | 6          | 6  | 7   | 4,4 | 9,1 | 2000   | 2,0 - 3,5     |
| K1054.08120601 | black       | I    | 8          | 8  | 9,4 | 6,6 | 9,1 | 2000   | 2,0 - 6,0     |
| K1054.08140601 | black       | I    | 8          | 8  | 9,4 | 6,6 | 11  | 2000   | 4,0 - 6,0     |
| K1054.08140600 | natural     | I    | 8          | 8  | 9,4 | 6,6 | 11  | 2000   | 4,0 - 6,0     |
| K1054.10220601 | black       | B    | 10         | 10 | -   | -   | 13  | 2000   | 2,0 - 6,0     |

## Cover profile

Type I



**Material:**  
PVC.

**Version:**  
black.

**Sample order:**  
K1055.0811

**Note:**

The cover profile made of flexible plastic is used as a cover for the profile slots to protect against dust and dirt.

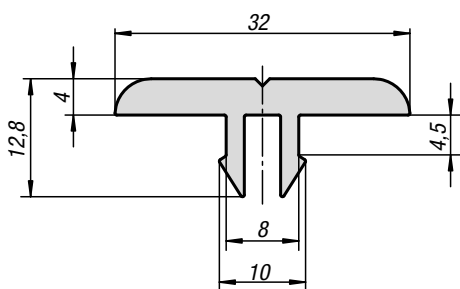
### KIPP Cover profile Type I

| Order No.  | Type | Slot width | Length |
|------------|------|------------|--------|
| K1055.0811 | I    | 8          | 2000   |

# K1056

## Slide rail

Type I



**Material:**  
Polyethylene-HD.

**Version:**  
black.

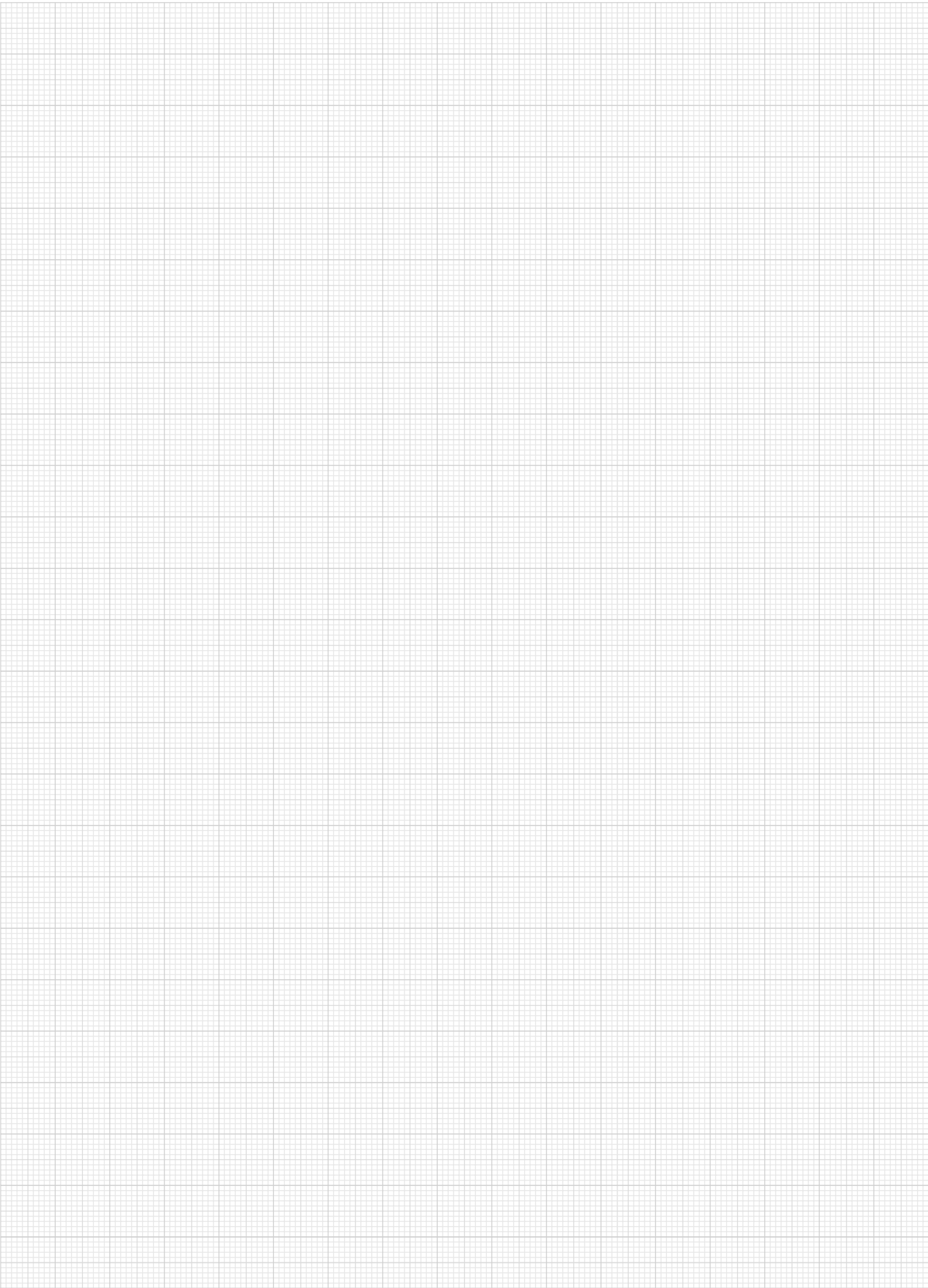
**Sample order:**  
K1056.0811

**Note:**

Low-wear slide rail with low slide friction for easy handling of goods. Slide rails can also be used as cover protection, impact protection and guide rails.

### KIPP Slide rail Type I

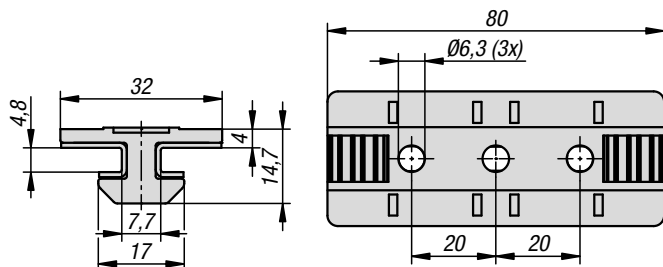
| Order No.    | Type | Slot width | Length |
|--------------|------|------------|--------|
| K1056.081321 | I    | 8          | 2000   |



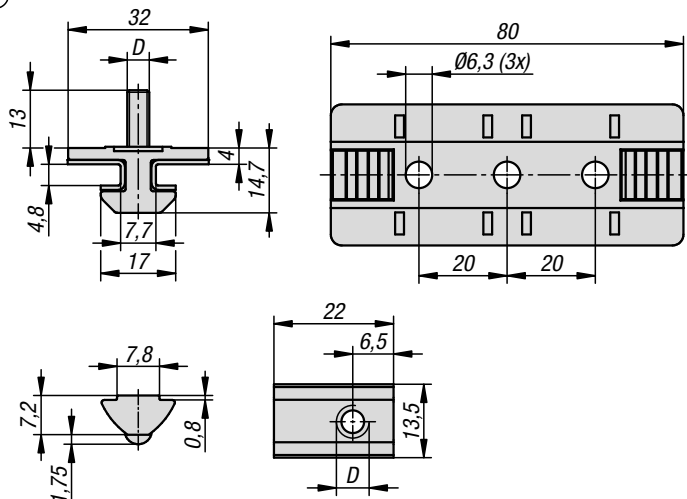
## Profile slider



⑤



① ②



### Material:

Body: die-cast zinc.  
Slide elements: plastic POM.  
Attachment parts: electro zinc-plated steel.  
O-ring: EPDM.

### Sample order:

K1806.2050

### Note:

Metal profile slider with clipped-on plastic slide element. Profile sliders enable low-wear linear movement of type I aluminium profiles with 8 mm slots. The absence of lubrication makes the system extremely insensitive to dirt.

The maximum permissible load for a profile slider is  
 $F_{max.} = 50 \text{ N}$ .

Slide guides with several slide carriages must be constructed as a combination of fixed bearing (Form F) and floating bearing (Form L). This compensates for form tolerances and ensures light movement.

Form S: A set for connecting any add-on elements.

Form L: A set to use as a floating bearing.

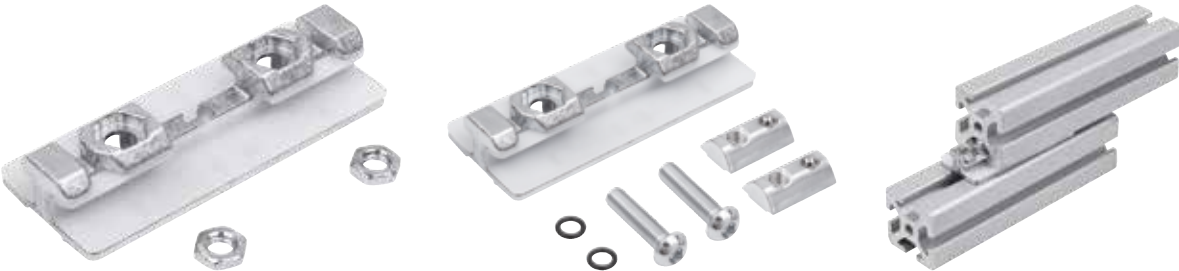
Form F: A set to use as a fixed bearing.

### Supplied with:

Style S: Profile slider with slide elements.  
2x DIN 439 B M6 hex nuts.

Style L: Profile slider with slide elements.  
2x ISO 7380 - M5x25 panhead screws.  
2x DIN 3771 - 5x1,5 O-rings.  
2x M5 slot keys for 8mm slots.

Style F: Profile slider with slide elements.  
2x ISO 7380 M6x25 panhead screws.  
2x DIN 3771 5x1,5 O-rings.  
2x M6 slot keys for 8 mm slots.



KIPP Profile slider

| Order No.  | Form | Form-Type |
|------------|------|-----------|
| K1806.1000 | S    | standard  |

| Order No.  | Form | Form-Type        | D  |
|------------|------|------------------|----|
| K1806.2050 | L    | floating bearing | M5 |

| Order No.  | Form | Form-Type     | D  |
|------------|------|---------------|----|
| K1806.3060 | F    | fixed bearing | M6 |

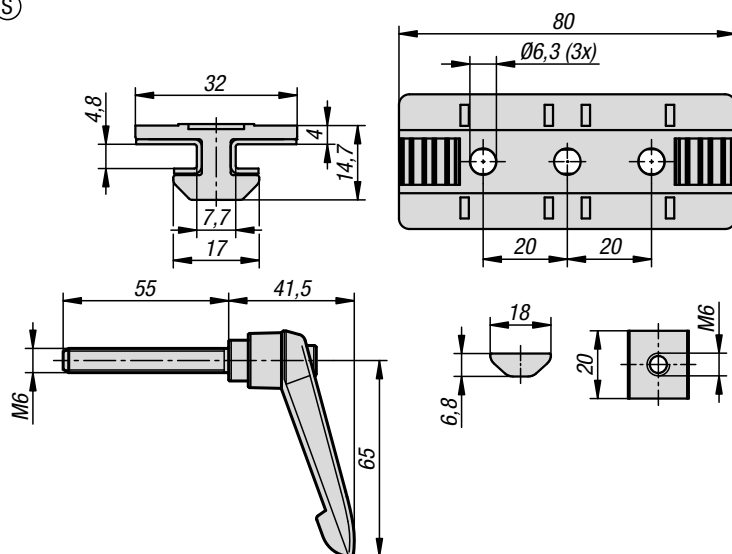


## Profile slider

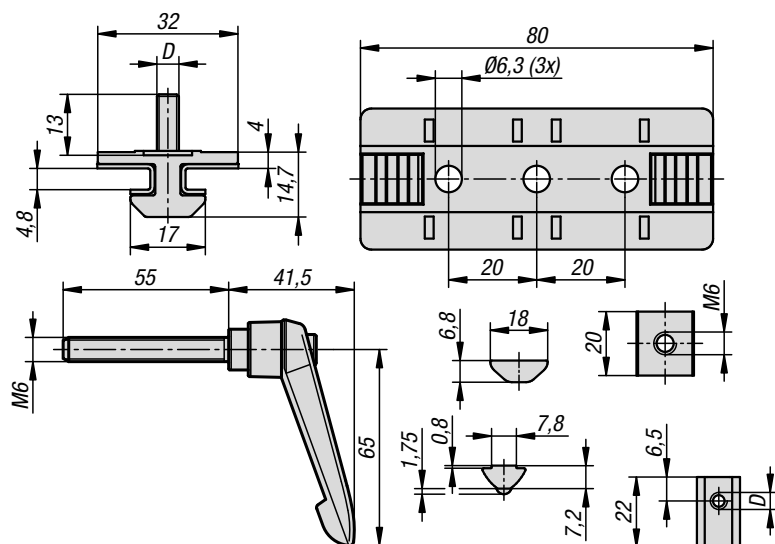
with clamping lever



⑤



① ②



### Material:

Body: die-cast zinc.  
Slide elements: plastic POM.  
Attachment parts: electro zinc-plated steel.  
O-ring: EPDM.  
Clamping lever: fibreglass reinforced plastic.  
Clamping lever mechanics: steel

### Sample order:

K1806.2051

### Note:

Metal profile slider with clipped-on plastic slide element. With an additional clamping lever for clamping the carriage system. Profile sliders enable low-wear linear movement of type I aluminium profiles with 8 mm slots. The absence of lubrication makes the system extremely insensitive to dirt.

The maximum permissible load for a profile slider is  $F_{max.} = 50 \text{ N}$ . The retaining force at a maximum tightening torque of 15 Nm is 600 N.

Slide guides with several slide carriages must be designed as a combination of fixed bearing (Form F) and floating bearing (Form L). This compensates for form tolerances and ensures light movement.

Form S: A set for connecting any add-on elements.

Form L: A set to use as a floating bearing.

Form F: A set to use as a fixed bearing.

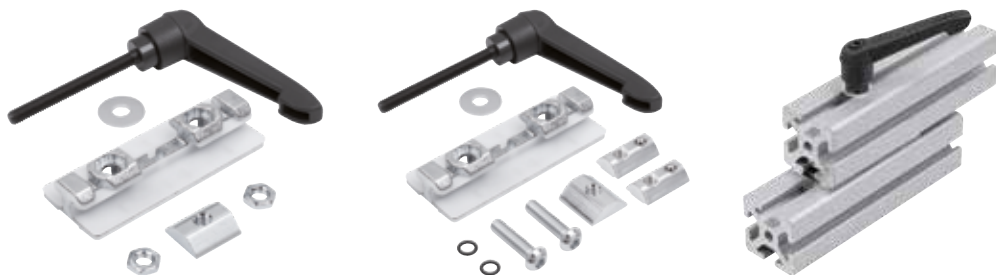
### Supplied with:

Form S: Profile slider with slide elements.  
2x DIN 439 B M6 hex nuts.  
1x M6x55 clamping lever with DIN 9021 6.4 mm washer and special M6 slot key for 8 mm slots.

Form L: Profile slider with slide elements.  
2x ISO 7380 - M5x25 panhead screws.  
2x DIN 3771 - 5x1,5 O-rings.  
2x M5 slot keys for 8mm slots.  
1x M6x55 clamping lever with DIN 9021 6.4 mm washer and special M6 slot key for 8 mm slots.

Form F: Profile slider with slide elements.  
2x ISO 7380 M6x25 panhead screws.  
2x DIN 3771 5x1,5 O-rings.  
2x M6 slot keys for 8 mm slots.  
1x M6x55 clamping lever with DIN 9021 6.4 mm washer and special M6 slot key for 8 mm slots.

Profile slider  
with clamping lever



KIPP Profile slider with clamping lever

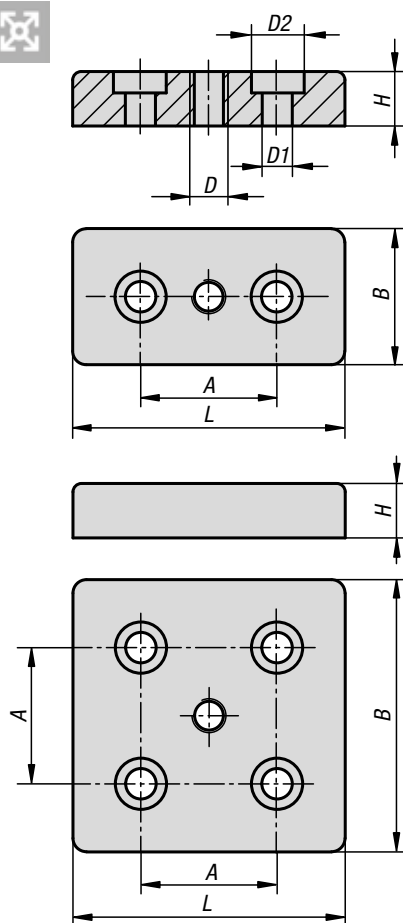
| Order No.  | Form | Form-Type |
|------------|------|-----------|
| K1806.1001 | S    | standard  |

| Order No.  | Form | Form-Type        | D  |
|------------|------|------------------|----|
| K1806.2051 | L    | floating bearing | M5 |

| Order No.  | Form | Form-Type     | D  |
|------------|------|---------------|----|
| K1806.3061 | F    | fixed bearing | M6 |

## Foot plates

Type B and Type I



### Material:

Die-cast zinc.

### Version:

bright or black powder-coated.

### Sample order:

K1057.0630601081

### Note:

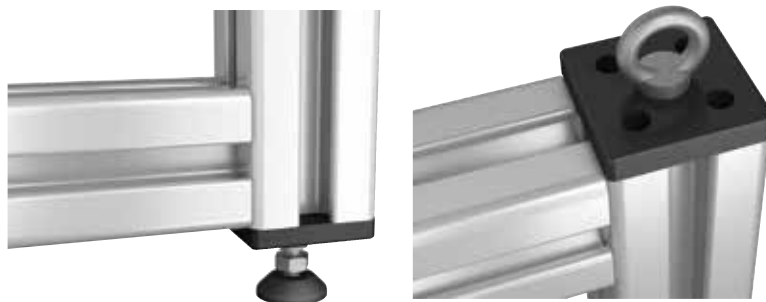
Used to mount levelling feet, rollers, eye bolts and other elements. Can also be mounted to the side of a profile using slot nuts.

## KIPP Foot plates Type B and Type I

| Order No.        | Finish | Type | Slot width | Profile | B  | L  | H  | A  | D   | D1   | D2 |
|------------------|--------|------|------------|---------|----|----|----|----|-----|------|----|
| K1057.0840801080 | bright | I    | 8          | 40x80   | 40 | 80 | 16 | 40 | M8  | 9    | 15 |
| K1057.0840801100 | bright | I    | 8          | 40x80   | 40 | 80 | 16 | 40 | M10 | 9    | 15 |
| K1057.0840801120 | bright | I    | 8          | 40x80   | 40 | 80 | 16 | 40 | M12 | 9    | 15 |
| K1057.0840801160 | bright | I    | 8          | 40x80   | 40 | 80 | 16 | 40 | M16 | 9    | 15 |
| K1057.0880801080 | bright | I    | 8          | 80x80   | 80 | 80 | 16 | 40 | M8  | 9    | 15 |
| K1057.0880801100 | bright | I    | 8          | 80x80   | 80 | 80 | 16 | 40 | M10 | 9    | 15 |
| K1057.0880801120 | bright | I    | 8          | 80x80   | 80 | 80 | 16 | 40 | M12 | 9    | 15 |
| K1057.0880801160 | bright | I    | 8          | 80x80   | 80 | 80 | 16 | 40 | M16 | 9    | 15 |
| K1057.1040802080 | bright | B    | 10         | 40x80   | 40 | 80 | 16 | 40 | M8  | 14,5 | 20 |
| K1057.1040802100 | bright | B    | 10         | 40x80   | 40 | 80 | 16 | 40 | M10 | 14,5 | 20 |
| K1057.1040802120 | bright | B    | 10         | 40x80   | 40 | 80 | 16 | 40 | M12 | 14,5 | 20 |
| K1057.1040802160 | bright | B    | 10         | 40x80   | 40 | 80 | 16 | 40 | M16 | 14,5 | 20 |
| K1057.1045902100 | bright | B    | 10         | 45x90   | 45 | 90 | 16 | 45 | M10 | 14,5 | 20 |
| K1057.1045902120 | bright | B    | 10         | 45x90   | 45 | 90 | 16 | 45 | M12 | 14,5 | 20 |
| K1057.1045902140 | bright | B    | 10         | 45x90   | 45 | 90 | 16 | 45 | M14 | 14,5 | 20 |
| K1057.1045902160 | bright | B    | 10         | 45x90   | 45 | 90 | 16 | 45 | M16 | 14,5 | 20 |
| K1057.1045902200 | bright | B    | 10         | 45x90   | 45 | 90 | 16 | 45 | M20 | 14,5 | 20 |
| K1057.1090902100 | bright | B    | 10         | 90x90   | 90 | 90 | 16 | 45 | M10 | 14,5 | 20 |
| K1057.1090902120 | bright | B    | 10         | 90x90   | 90 | 90 | 16 | 45 | M12 | 14,5 | 20 |
| K1057.1090902140 | bright | B    | 10         | 90x90   | 90 | 90 | 16 | 45 | M14 | 14,5 | 20 |
| K1057.1090902160 | bright | B    | 10         | 90x90   | 90 | 90 | 16 | 45 | M16 | 14,5 | 20 |
| K1057.1090902200 | bright | B    | 10         | 90x90   | 90 | 90 | 16 | 45 | M20 | 14,5 | 20 |

# Foot plates

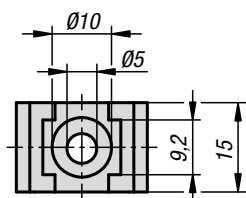
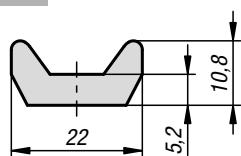
Type B and Type I



| Order No.        | Finish              | Type | Slot width | Profile | B  | L  | H  | A  | D   | D1   | D2 |
|------------------|---------------------|------|------------|---------|----|----|----|----|-----|------|----|
| K1057.0630601081 | black powder-coated | I    | 6          | 30x60   | 30 | 60 | 12 | 30 | M8  | 6,6  | 11 |
| K1057.0630601101 | black powder-coated | I    | 6          | 30x60   | 30 | 60 | 12 | 30 | M10 | 6,6  | 11 |
| K1057.0630601121 | black powder-coated | I    | 6          | 30x60   | 30 | 60 | 12 | 30 | M12 | 6,6  | 11 |
| K1057.0630601161 | black powder-coated | I    | 6          | 30x60   | 30 | 60 | 12 | 30 | M16 | 6,6  | 11 |
| K1057.0660601081 | black powder-coated | I    | 6          | 60x60   | 60 | 60 | 12 | 30 | M8  | 6,6  | 11 |
| K1057.0660601101 | black powder-coated | I    | 6          | 60x60   | 60 | 60 | 12 | 30 | M10 | 6,6  | 11 |
| K1057.0660601121 | black powder-coated | I    | 6          | 60x60   | 60 | 60 | 12 | 30 | M12 | 6,6  | 11 |
| K1057.0660601161 | black powder-coated | I    | 8          | 60x60   | 60 | 60 | 16 | 40 | M16 | 9    | 15 |
| K1057.0840801081 | black powder-coated | I    | 8          | 40x80   | 40 | 80 | 16 | 40 | M8  | 9    | 15 |
| K1057.0840801101 | black powder-coated | I    | 8          | 40x80   | 40 | 80 | 16 | 40 | M10 | 9    | 15 |
| K1057.0840801121 | black powder-coated | I    | 8          | 40x80   | 40 | 80 | 16 | 40 | M12 | 9    | 15 |
| K1057.0840801161 | black powder-coated | I    | 8          | 40x80   | 40 | 80 | 16 | 40 | M16 | 9    | 15 |
| K1057.0880801081 | black powder-coated | I    | 8          | 80x80   | 80 | 80 | 16 | 40 | M8  | 9    | 15 |
| K1057.0880801101 | black powder-coated | I    | 8          | 80x80   | 80 | 80 | 16 | 40 | M10 | 9    | 15 |
| K1057.0880801121 | black powder-coated | I    | 8          | 80x80   | 80 | 80 | 16 | 40 | M12 | 9    | 15 |
| K1057.0880801161 | black powder-coated | I    | 8          | 80x80   | 80 | 80 | 16 | 40 | M16 | 9    | 15 |
| K1057.0830602081 | black powder-coated | B    | 8          | 30x60   | 30 | 60 | 12 | 30 | M8  | 9    | 15 |
| K1057.0830602121 | black powder-coated | B    | 8          | 30x60   | 30 | 60 | 12 | 30 | M12 | 9    | 15 |
| K1057.0830602101 | black powder-coated | B    | 8          | 30x60   | 30 | 60 | 12 | 30 | M10 | 9    | 15 |
| K1057.1045902101 | black powder-coated | B    | 10         | 45x90   | 45 | 90 | 16 | 45 | M10 | 14,5 | 20 |
| K1057.1045902121 | black powder-coated | B    | 10         | 45x90   | 45 | 90 | 16 | 45 | M12 | 14,5 | 20 |
| K1057.1045902141 | black powder-coated | B    | 10         | 45x90   | 45 | 90 | 16 | 45 | M14 | 14,5 | 20 |
| K1057.1045902161 | black powder-coated | B    | 10         | 45x90   | 45 | 90 | 16 | 45 | M16 | 14,5 | 20 |
| K1057.1045902201 | black powder-coated | B    | 10         | 45x90   | 45 | 90 | 16 | 45 | M20 | 14,5 | 20 |
| K1057.1090902101 | black powder-coated | B    | 10         | 90x90   | 90 | 90 | 16 | 45 | M10 | 14,5 | 20 |
| K1057.1090902121 | black powder-coated | B    | 10         | 90x90   | 90 | 90 | 16 | 45 | M12 | 14,5 | 20 |
| K1057.1090902141 | black powder-coated | B    | 10         | 90x90   | 90 | 90 | 16 | 45 | M14 | 14,5 | 20 |
| K1057.1090902161 | black powder-coated | B    | 10         | 90x90   | 90 | 90 | 16 | 45 | M16 | 14,5 | 20 |
| K1057.1090902201 | black powder-coated | B    | 10         | 90x90   | 90 | 90 | 16 | 45 | M20 | 14,5 | 20 |



## Cable tie block



**Material:**  
Polyamide fibreglass reinforced.

**Version:**  
Black.

**Sample order:**  
K1278.01

**Note:**  
The cable tie block is a fastening component for cables and hoses. Can be mounted on panel elements or aluminium profiles (5 to 12 mm slots) with a cap screw or pan head screw and a slot key.

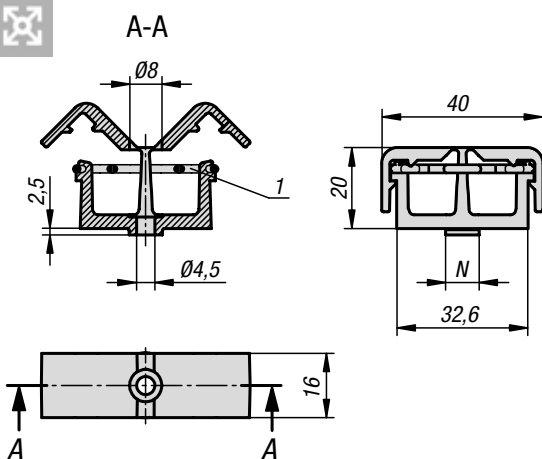
The cables and hoses are held in place using cable ties.

### KIPP Cable tie block

| Order No. | Slot width |
|-----------|------------|
| K1278.01  | 5-12       |

# K1279

## Cable clips



**Material:**  
Polyamide.  
O-ring FPM 70.

**Version:**  
Black.

**Sample order:**  
K1279.00

**Note:**  
The cable clip is a fastening component for cables and hoses with a diameter of up to 12 mm.

Can be mounted on panel elements or aluminium profiles (8 or 10 mm slots) with a cap screw or pan head screw and a slot key. The cables are held in place by the stretched O-ring.

With two separate channels.

**Drawing reference:**  
1) O-ring

### KIPP Cable clips

| Order No. | Slot width | N  |
|-----------|------------|----|
| K1279.00  | -          | -  |
| K1279.08  | 8          | 8  |
| K1279.10  | 10         | 10 |

Cable clips with T-slot key



**Material:**  
Polyamide.  
O-ring FPM 70.

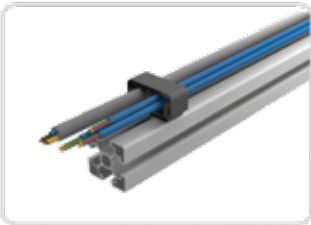
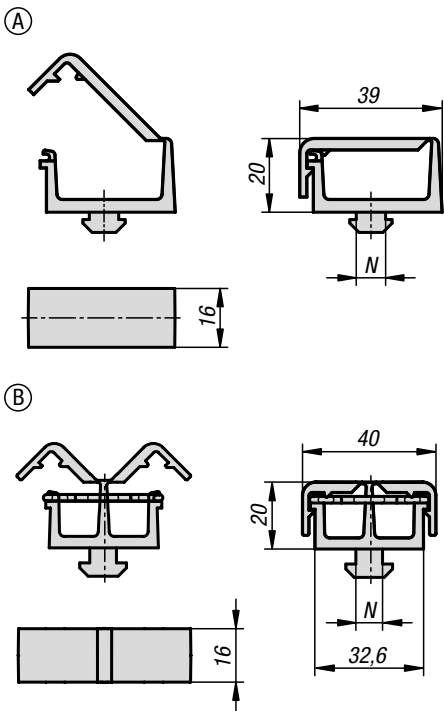
**Version:**  
Black.

**Sample order:**  
K1280.1108

**Note:**  
The cable clip is a fastening component for cables and hoses with a diameter up to 12 mm.

The clip is mounted by inserting the T-key into a T-slot and twisting through 90°. The cables are held in place by the stretched O-ring.

Form A: with one channel.  
Form B: with two separate channels.



KIPP Cable clips with T-slot key

| Order No.<br>Form A | Order No.<br>Form B | Version 2 | Slot width | N  |
|---------------------|---------------------|-----------|------------|----|
| K1280.1108          | K1280.2108          | type I    | 8          | 8  |
| K1280.1208          | K1280.2208          | type B    | 8          | 8  |
| K1280.1210          | K1280.2210          | type B    | 10         | 10 |

## Sensor holders

**Material:**

Polyamide fibreglass reinforced.

**Version:**

Black.

**Sample order:**

K1281.080

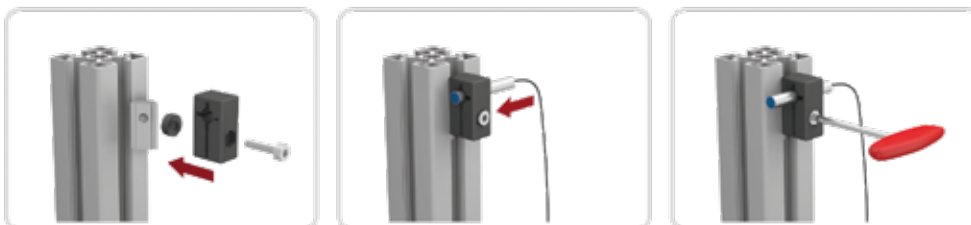
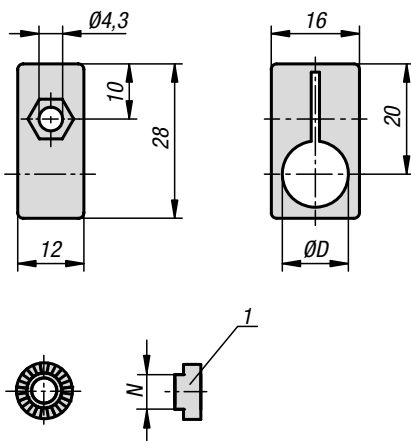
**Note:**

For fastening sensors and limit switches to aluminium profiles or panel elements.

Fastening pieces are available for various aluminium profile slot sizes. The fastening piece provides a positive rotation lock and can be adjusted in 15 increments. With no fastening piece the sensor holder can be infinitely adjusted in the angle.

**Drawing reference:**

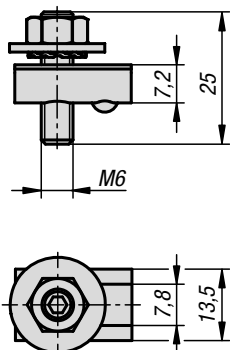
1) Fastening piece

**KIPP Sensor holders**

| Order No. | Item            | D  | N  |
|-----------|-----------------|----|----|
| K1281.080 | Sensor Holder   | 8  | -  |
| K1281.120 | Sensor Holder   | 12 | -  |
| K1281.905 | Fastening Piece | -  | 5  |
| K1281.906 | Fastening Piece | -  | 6  |
| K1281.908 | Fastening Piece | -  | 8  |
| K1281.910 | Fastening Piece | -  | 10 |

# Earthing terminal

type I



## KIPP Earthing terminal type I

| Order No.  | Version 2 | Slot width |
|------------|-----------|------------|
| K1282.0806 | type I    | 8          |



### Material:

Slot key, grub screw and serrated washer, steel.  
Nut and washer, brass.

### Version:

Slot key, grub screw and serrated washer, electro zinc-plated.

### Sample order:

K1282.0806

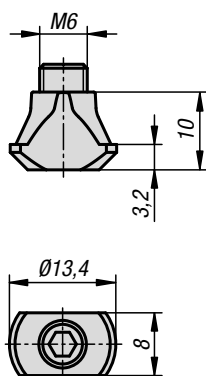
### Note:

For protecting installations and persons. Connectors for earthing aluminium profile structures and interconnecting the aluminium profiles by integrating them into the protective earth (PE) system. Conductive contact is established through defined destruction of the oxide layer in the slot base and on the slot flanks.

The cable lug must be positioned between the serrated washer and the washer during assembly.

# Potential equaliser

type I



### Material:

Steel.

### Version:

Electro zinc-plated.

### Sample order:

K1283.0806

### Note:

For generating electrostatic discharge (ESD). For safely equalising electrostatic charge of profiles. It is swivelled into the slot and screwed against the profiles at a 45° angle. A conductive connection is established by breaking through the oxide layer.

### Attention:

A potential equaliser is not an electrical connection of the protective earth (PE) system.



## KIPP Potential equaliser type I

| Order No.  | Version 2 | Slot width |
|------------|-----------|------------|
| K1283.0806 | type I    | 8          |



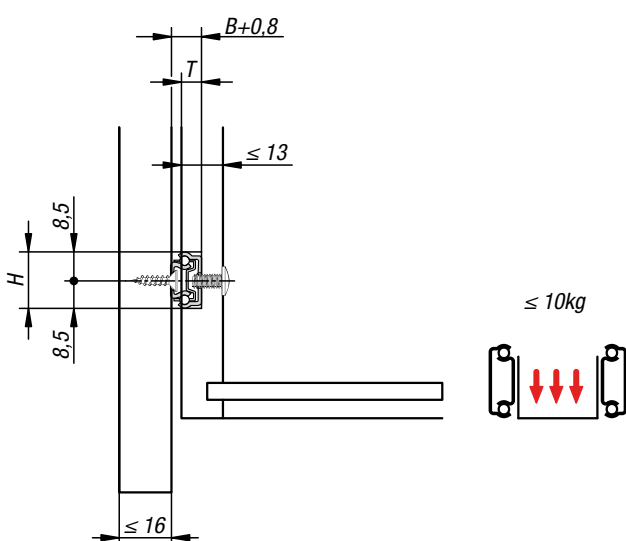
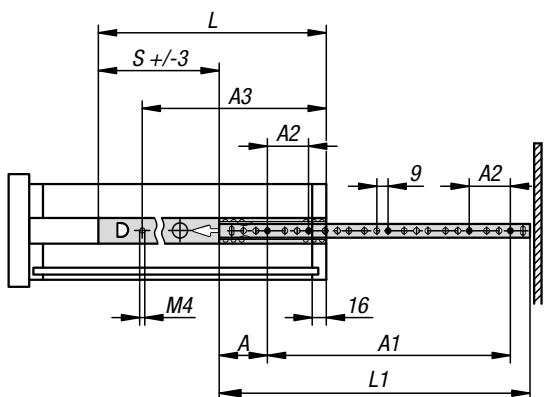


## Telescopic slides



## Telescopic slides, steel

for slot mounting, partial extension, load capacity up to 10 kg



**Material:**  
Steel slides.  
Plastic ball cages.  
C-steel balls.

**Version:**  
Slides electro zinc-plated.  
Balls hardened.

**Sample order:**  
K1566.0164

**Note for ordering:**  
Supplied in pairs

**Note:**  
On telescopic slides with partial extension, the travel is less than the installed length. These are a low-cost solution for guiding drawers or similar items with little friction and high lateral stability. Interlocking in closed position. The dynamic load capacity of the telescopic slides indicates the maximum load rating of a vertically mounted slide pair when the entire extension length is used. The specified load capacities refer to the maximum value for 20,000 cycles.

**Attention:**  
The load capacity of all telescopic slides is tested to DIN EN 15338 Level 1.

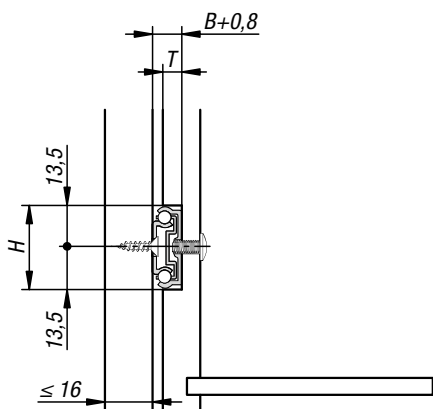
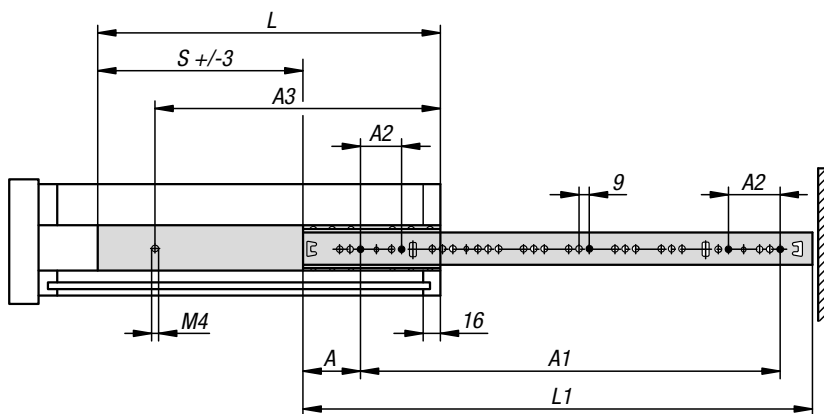


### KIPP Steel telescopic slides, for slot mounting, partial extension, load capacity up to 10 kg

| Order No.  | A  | A2 | A3  | B  | H  | L   | L1  | Travel S | T = slot depth | Loading per pair kg | Drawer depth from - to |
|------------|----|----|-----|----|----|-----|-----|----------|----------------|---------------------|------------------------|
| K1566.0133 | 37 | 32 | 101 | 10 | 17 | 133 | 150 | 85       | 6-7            | 10                  | 155 - 210              |
| K1566.0164 | 37 | 32 | 132 | 10 | 17 | 164 | 182 | 104      | 6-7            | 10                  | 185 - 260              |
| K1566.0185 | 37 | 32 | 153 | 10 | 17 | 185 | 182 | 125      | 6-7            | 10                  | 185 - 305              |
| K1566.0210 | 37 | 32 | 178 | 10 | 17 | 210 | 214 | 138      | 6-7            | 10                  | 220 - 340              |
| K1566.0217 | 37 | 32 | 185 | 10 | 17 | 217 | 214 | 145      | 6-7            | 10                  | 220 - 355              |
| K1566.0241 | 37 | 32 | 209 | 10 | 17 | 241 | 246 | 157      | 6-7            | 10                  | 250 - 390              |
| K1566.0249 | 37 | 32 | 217 | 10 | 17 | 249 | 246 | 165      | 6-7            | 10                  | 250 - 410              |
| K1566.0430 | 37 | 32 | 398 | 10 | 17 | 430 | 278 | 328      | 6-7            | 10                  | 430                    |
| K1566.0450 | 37 | 32 | 418 | 10 | 17 | 450 | 278 | 348      | 6-7            | 10                  | 450                    |
| K1566.0480 | 37 | 32 | 448 | 10 | 17 | 480 | 310 | 366      | 6-7            | 10                  | 480                    |
| K1566.0500 | 37 | 32 | 468 | 10 | 17 | 500 | 310 | 368      | 6-7            | 10                  | 500                    |
| K1566.0550 | 37 | 32 | 518 | 10 | 17 | 550 | 342 | 424      | 6-7            | 10                  | 550                    |

## Telescopic slides, steel

for slot mounting, partial extension, load capacity up to 12 kg



≤ 12kg



### Material:

Steel slides.  
Plastic ball cages.  
C-steel balls.

### Version:

Slides electro zinc-plated.  
Balls hardened.

### Sample order:

K1567.0328

### Note for ordering:

Supplied in pairs

### Note:

On slot-mounted telescopic slides with partial extension, the travel is shorter than the installed length. These are a low-cost solution for guiding drawers or similar items with little friction and high lateral stability. Interlocking in closed position. The dynamic load capacity of the telescopic slides indicates the maximum load rating of a vertically mounted slide pair when the entire extension length is used. The specified load capacities refer to the maximum value for 20,000 cycles.

### Attention:

The load capacity of all telescopic slides is tested to DIN EN 15338 Level 1.

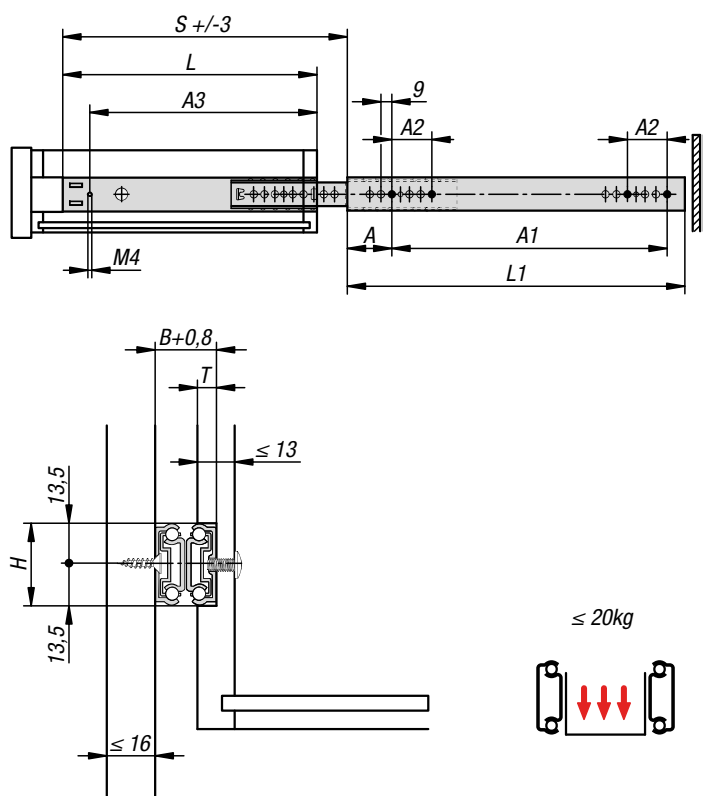


### KIPP Steel telescopic slides, for slot mounting, partial extension, load capacity up to 12 kg

| Order No.  | A  | A1  | A2 | A3  | B  | H  | L   | L1  | Travel S | T = slot depth | Loading per pair kg | Drawer depth from - to |
|------------|----|-----|----|-----|----|----|-----|-----|----------|----------------|---------------------|------------------------|
| K1567.0222 | 37 | 160 | 32 | 190 | 10 | 27 | 222 | 214 | 150      | 6-7            | 12                  | 230 - 350              |
| K1567.0328 | 37 | 288 | 32 | 296 | 10 | 27 | 328 | 342 | 232      | 6-7            | 12                  | 350 - 550              |

## Telescopic slides, steel

for slot mounting, over-extension, load capacity up to 20 kg



### Material:

Slides steel.  
Ball cages steel and plastic.  
Balls C-steel.

### Version:

Slides electro zinc-plated.  
Balls hardened.

### Sample order:

K1568.0310

### Note for ordering:

Supplied in pairs

### Note:

On slot-mounted telescopic slides with partial extension, the travel is shorter than the installed length. These are a low-cost solution for guiding drawers or similar items with little friction and high lateral stability. The dynamic load capacity of the telescopic slides indicates the maximum load rating of a vertically mounted slide pair when the entire extension length is used. The specified load capacities refer to the maximum value for 20,000 cycles.

### Attention:

The load capacity of all telescopic slides is tested to DIN EN 15338 Level 1.

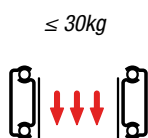
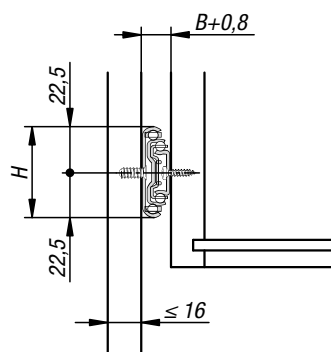
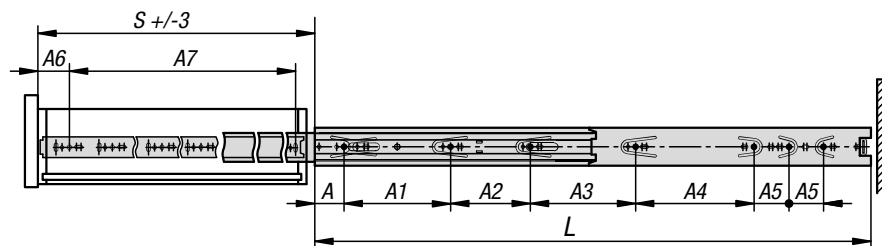


## KIPP Steel telescopic slides for slot mounting, over-extension, load capacity up to 20 kg

| Order No.  | A  | A1  | A2 | A3  | B    | H  | L   | L1  | Travel S | T = slot depth | Loading per pair kg | Drawer depth from - to |
|------------|----|-----|----|-----|------|----|-----|-----|----------|----------------|---------------------|------------------------|
| K1568.0197 | 36 | 192 | 32 | 165 | 19,4 | 27 | 197 | 246 | 274      | 6-7            | 20                  | 200 - 310              |
| K1568.0303 | 36 | 256 | 32 | 271 | 19,4 | 27 | 303 | 310 | 334      | 6-7            | 20                  | 310 - 450              |
| K1568.0328 | 36 | 256 | 32 | 296 | 19,4 | 27 | 328 | 310 | 365      | 6-7            | 20                  | 450 - 550              |

## Telescopic slides, steel

for side mounting, full extension, load capacity up to 30 kg



### Material:

Slides steel.  
Ball cages steel and plastic.  
Balls C-steel.

### Version:

Slides electro zinc-plated and trivalent blue passivated.  
Balls hardened.

### Sample order:

K1569.0300

### Note for ordering:

Supplied in pairs

### Note:

On telescopic slides with full extension, the travel is equal to the installed length, which ensures greater comfort and accessibility. Interlocking in closed position. When the release lever is actuated, the drawer can be taken out easily and separated from the guide.

The dynamic load capacity of the telescopic slides indicates the maximum load rating of a vertically mounted slide pair when the entire extension length is used. The specified load capacities refer to the maximum value for 20,000 cycles.

### Attention:

The load capacity of all telescopic slides is tested to DIN EN 15338 Level 1.

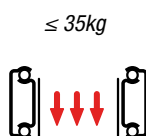
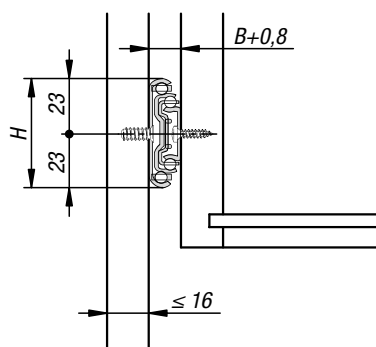
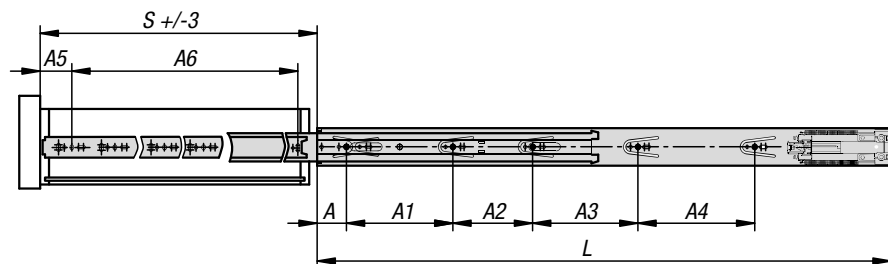


### KIPP Steel telescopic slides for side mounting, full extension, load capacity up to 30 kg

| Order No.  | A  | A1  | A2 | A3  | A4 | A5 | A6 | A7  | B    | H  | L   | Travel S | Loading per pair kg |
|------------|----|-----|----|-----|----|----|----|-----|------|----|-----|----------|---------------------|
| K1569.0250 | 35 | 128 | -  | -   | -  | -  | 35 | 192 | 12,7 | 45 | 250 | 250      | 30                  |
| K1569.0300 | 35 | 128 | 96 | -   | -  | -  | 35 | 242 | 12,7 | 45 | 300 | 300      | 30                  |
| K1569.0350 | 35 | 128 | 96 | -   | -  | -  | 35 | 292 | 12,7 | 45 | 350 | 350      | 30                  |
| K1569.0400 | 35 | 128 | 96 | 96  | -  | -  | 35 | 342 | 12,7 | 45 | 400 | 400      | 30                  |
| K1569.0450 | 35 | 128 | 96 | 128 | -  | -  | 35 | 392 | 12,7 | 45 | 450 | 450      | 30                  |
| K1569.0500 | 35 | 128 | 96 | 128 | 64 | -  | 35 | 442 | 12,7 | 45 | 500 | 500      | 30                  |
| K1569.0550 | 35 | 128 | 96 | 128 | 64 | 32 | 35 | 492 | 12,7 | 45 | 550 | 550      | 30                  |

## Telescopic slides, steel

for side mounting, full extension, load capacity up to 35 kg



### Material:

Slides steel.  
Ball cages steel and plastic.  
Balls C-steel.

### Version:

Slides electro zinc-plated and trivalent blue passivated.  
Balls hardened.

### Sample order:

K1571.0350

### Note for ordering:

Supplied in pairs

### Note:

On telescopic slides with full extension, the travel is equal to the installed length, which ensures greater comfort and accessibility. Interlocking in closed position. When the release lever is actuated, the drawer can be taken out easily and separated from the guide. When closing, the movement of the telescopic slides is dampened by the soft closing feature and they move automatically into the end position.

The dynamic load capacity of the telescopic slides indicates the maximum load rating of a vertically mounted slide pair when the entire extension length is used. The load capacities specified refer to the maximum value for 50,000 cycles.

### Attention:

The load capacity of all telescopic slides is tested to DIN EN 15338 Level 2.

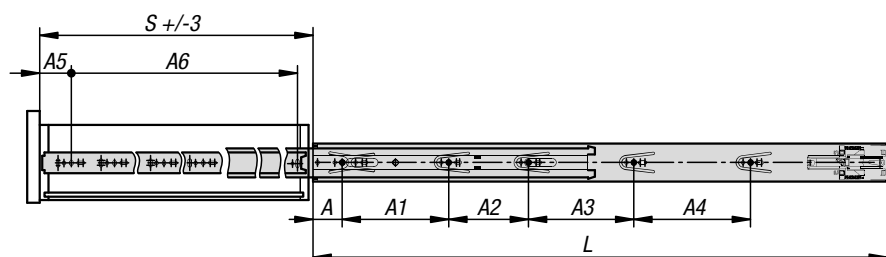


### KIPP Steel telescopic slides for side mounting, full extension, load capacity up to 35 kg

| Order No.  | A  | A1  | A2 | A3  | A4  | A5 | A6  | B    | H  | L   | Travel S | Loading per pair kg |
|------------|----|-----|----|-----|-----|----|-----|------|----|-----|----------|---------------------|
| K1571.0300 | 35 | 128 | -  | -   | -   | 35 | 171 | 12,7 | 46 | 300 | 300      | 35                  |
| K1571.0350 | 35 | 128 | 64 | -   | -   | 35 | 220 | 12,7 | 46 | 350 | 350      | 35                  |
| K1571.0400 | 35 | 128 | 64 | -   | -   | 35 | 254 | 12,7 | 46 | 400 | 400      | 35                  |
| K1571.0450 | 35 | 128 | 96 | -   | -   | 35 | 294 | 12,7 | 46 | 450 | 450      | 35                  |
| K1571.0500 | 35 | 128 | 96 | 64  | -   | 35 | 344 | 12,7 | 46 | 500 | 500      | 35                  |
| K1571.0550 | 35 | 128 | 96 | 128 | -   | 35 | 394 | 12,7 | 46 | 550 | 550      | 35                  |
| K1571.0600 | 35 | 128 | 96 | 160 | -   | 35 | 444 | 12,7 | 46 | 600 | 600      | 35                  |
| K1571.0650 | 35 | 128 | 96 | 128 | 96  | 35 | 494 | 12,7 | 46 | 650 | 650      | 35                  |
| K1571.0700 | 35 | 128 | 96 | 128 | 128 | 35 | 544 | 12,7 | 46 | 700 | 700      | 35                  |

## Telescopic slides, steel

for side mounting, full extension, load capacity up to 35 kg



### Material:

Slides steel.  
Ball cages steel and plastic.  
Balls C-steel.

### Version:

Slides electro zinc-plated and trivalent blue passivated.  
Balls hardened.

### Sample order:

K1572.0350

### Note for ordering:

Supplied in pairs

### Note:

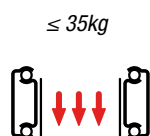
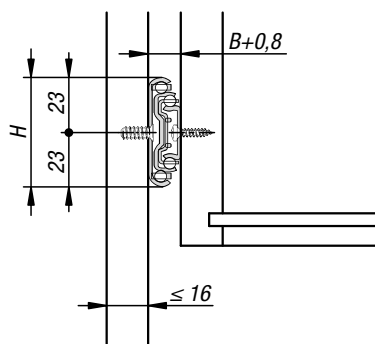
On telescopic slides with full extension, the travel is equal to the installed length, which ensures greater comfort and accessibility. Interlocking in closed position. When the release lever is actuated, the drawer can be taken out easily and separated from the guide.

When slight pressure is applied, the telescopic slides move out by themselves, almost silently.

The dynamic load capacity of the telescopic slides indicates the maximum load rating of a vertically mounted slide pair when the entire extension length is used. The load capacities specified refer to the maximum value for 50,000 cycles.

### Attention:

The load capacity of all telescopic slides is tested to DIN EN 15338 Level 2.



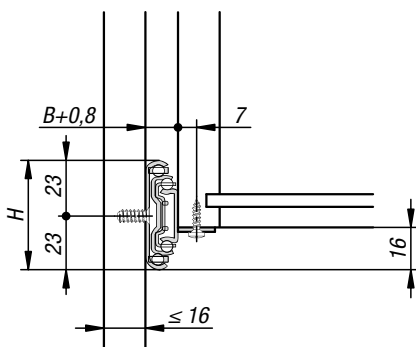
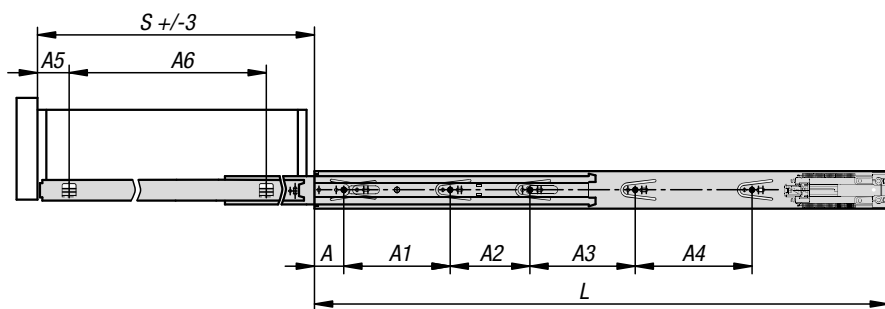
## KIPP Steel telescopic slides for side mounting, full extension, load capacity up to 35 kg

| Order No.  | A  | A1  | A2  | A3  | A4  | A5 | A6  | B    | H  | L   | Travel S | Loading per pair kg |
|------------|----|-----|-----|-----|-----|----|-----|------|----|-----|----------|---------------------|
| K1572.0300 | 35 | 128 | -   | -   | -   | 35 | 192 | 12,7 | 46 | 300 | 300      | 35                  |
| K1572.0350 | 35 | 128 | 64  | -   | -   | 35 | 242 | 12,7 | 46 | 350 | 350      | 35                  |
| K1572.0400 | 35 | 128 | 96  | -   | -   | 35 | 292 | 12,7 | 46 | 400 | 400      | 35                  |
| K1572.0450 | 35 | 128 | 160 | -   | -   | 35 | 342 | 12,7 | 46 | 450 | 450      | 35                  |
| K1572.0500 | 35 | 128 | 96  | 96  | -   | 35 | 392 | 12,7 | 46 | 500 | 500      | 35                  |
| K1572.0550 | 35 | 128 | 96  | 128 | -   | 35 | 442 | 12,7 | 46 | 550 | 550      | 35                  |
| K1572.0600 | 35 | 128 | 96  | 128 | 96  | 35 | 492 | 12,7 | 46 | 600 | 600      | 35                  |
| K1572.0650 | 35 | 128 | 96  | 128 | 128 | 35 | 542 | 12,7 | 46 | 650 | 650      | 35                  |
| K1572.0700 | 35 | 128 | 96  | 128 | 192 | 35 | 592 | 12,7 | 46 | 700 | 700      | 35                  |



## Telescopic slides, steel

for surface mounting, full extension, load capacity up to 35 kg



≤ 35kg



### Material:

Slides steel.  
Ball cages steel and plastic.  
Balls C-steel.

### Version:

Slides electro zinc-plated and trivalent blue passivated.  
Balls hardened.

### Sample order:

K1573.0350

### Note for ordering:

Supplied in pairs

### Note:

On telescopic slides with full extension, the travel is equal to the installed length, which ensures greater comfort and accessibility. Interlocking in closed position. When the release lever is actuated, the drawer can be taken out easily and separated from the guide. When closing, the movement of the telescopic slides is damped by the soft closing feature and they move automatically into the end position.

The side screw fittings on the inner rail are replaced by support brackets.

The dynamic load capacity of the telescopic slides indicates the maximum load rating of a vertically mounted slide pair when the entire extension length is used. The load-bearing capacities specified refer to the maximum value for 50,000 cycles.

### Attention:

The load capacity of all telescopic slides is tested to DIN EN 15338 Level 2.

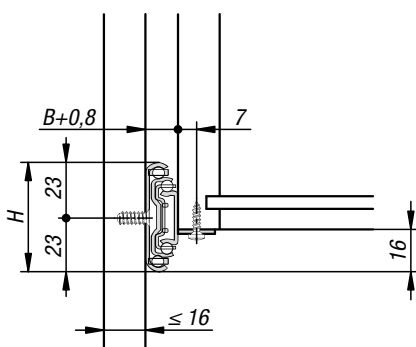
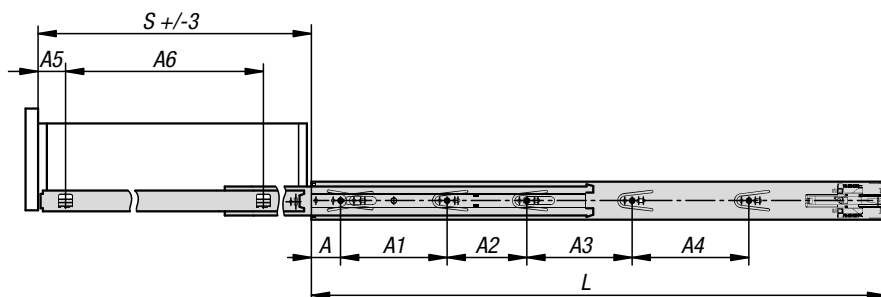


## KIPP Steel telescopic slides for surface mounting, full extension, load capacity up to 35 kg

| Order No.  | A  | A1  | A2 | A3  | A4  | A5 | A6  | B    | H  | L   | Travel S | Loading per pair kg |
|------------|----|-----|----|-----|-----|----|-----|------|----|-----|----------|---------------------|
| K1573.0300 | 35 | 128 | -  | -   | -   | 35 | 230 | 12,7 | 46 | 300 | 300      | 35                  |
| K1573.0350 | 35 | 128 | 64 | -   | -   | 35 | 280 | 12,7 | 46 | 350 | 350      | 35                  |
| K1573.0400 | 35 | 128 | 64 | -   | -   | 35 | 315 | 12,7 | 46 | 400 | 400      | 35                  |
| K1573.0450 | 35 | 128 | 96 | -   | -   | 35 | 365 | 12,7 | 46 | 450 | 450      | 35                  |
| K1573.0500 | 35 | 128 | 96 | 64  | -   | 35 | 415 | 12,7 | 46 | 500 | 500      | 35                  |
| K1573.0550 | 35 | 128 | 96 | 128 | -   | 35 | 465 | 12,7 | 46 | 550 | 550      | 35                  |
| K1573.0600 | 35 | 128 | 96 | 160 | -   | 35 | 515 | 12,7 | 46 | 600 | 600      | 35                  |
| K1573.0650 | 35 | 128 | 96 | 128 | 96  | 35 | 565 | 12,7 | 46 | 650 | 650      | 35                  |
| K1573.0690 | 35 | 128 | 96 | 128 | 128 | 35 | 615 | 12,7 | 46 | 690 | 690      | 35                  |

## Telescopic slides, steel

for surface mounting, full extension, load capacity up to 35 kg



≤ 35kg



### Material:

Slides steel.  
Ball cages steel and plastic.  
Balls C-steel.

### Version:

Slides electro zinc-plated and trivalent blue passivated.  
Balls hardened.

### Sample order:

K1574.0350

### Note for ordering:

Supplied in pairs

### Note:

On telescopic slides with full extension, the travel is equal to the installed length, which ensures greater comfort and accessibility. Interlocking in closed position. When the release lever is actuated, the drawer can be taken out easily and separated from the guide.

When slight pressure is applied, the telescopic slides move out by themselves, almost silently.

The side screw fittings on the inner rail are replaced by support brackets.

The dynamic load capacity of the telescopic slides indicates the maximum load rating of a vertically mounted slide pair when the entire extension length is used. The load capacities specified refer to the maximum value for 50,000 cycles.

### Attention:

The load capacity of all telescopic slides is tested to DIN EN 15338 Level 2.

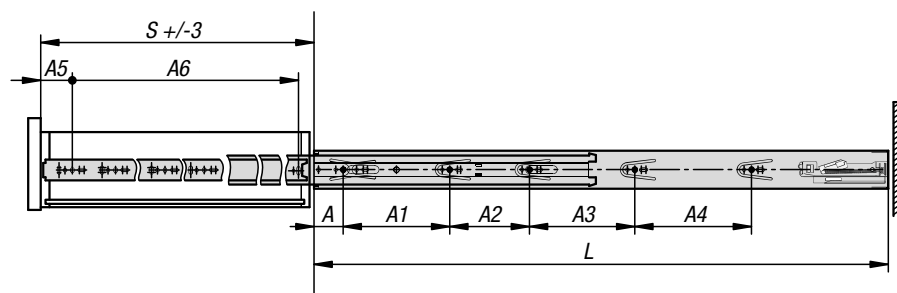


## KIPP Steel telescopic slides for surface mounting, full extension, load capacity up to 35 kg

| Order No.  | A  | A1  | A2  | A3  | A4  | A5 | A6  | B    | H  | L   | Travel S | Loading per pair kg |
|------------|----|-----|-----|-----|-----|----|-----|------|----|-----|----------|---------------------|
| K1574.0300 | 35 | 128 | -   | -   | -   | 35 | 192 | 12,7 | 46 | 300 | 300      | 35                  |
| K1574.0350 | 35 | 128 | 64  | -   | -   | 35 | 242 | 12,7 | 46 | 350 | 350      | 35                  |
| K1574.0400 | 35 | 128 | 96  | -   | -   | 35 | 292 | 12,7 | 46 | 400 | 400      | 35                  |
| K1574.0450 | 35 | 128 | 160 | -   | -   | 35 | 342 | 12,7 | 46 | 450 | 450      | 35                  |
| K1574.0500 | 35 | 128 | 96  | 96  | -   | 35 | 392 | 12,7 | 46 | 500 | 500      | 35                  |
| K1574.0550 | 35 | 128 | 96  | 128 | -   | 35 | 442 | 12,7 | 46 | 550 | 550      | 35                  |
| K1574.0600 | 35 | 128 | 96  | 128 | 96  | 35 | 492 | 12,7 | 46 | 600 | 600      | 35                  |
| K1574.0650 | 35 | 128 | 96  | 128 | 128 | 35 | 542 | 12,7 | 46 | 650 | 650      | 35                  |
| K1574.0700 | 35 | 128 | 96  | 128 | 192 | 35 | 592 | 12,7 | 46 | 700 | 700      | 35                  |

## Telescopic slides, steel

for side mounting, full extension, load capacity up to 40 kg



### Material:

Slides steel.  
Ball cages steel and plastic.  
Balls C-steel.

### Version:

Slides electro zinc-plated and trivalent blue passivated.  
Balls hardened.

### Sample order:

K1575.0350

### Note for ordering:

Supplied in pairs

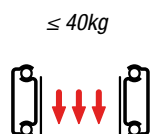
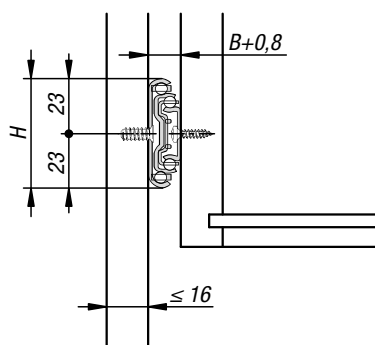
### Note:

On telescopic slides with full extension, the travel is equal to the installed length, which ensures greater comfort and accessibility. Interlocking in closed position. When the release lever is actuated, the drawer can be taken out easily and separated from the guide. When pushed back, the guide rails are automatically drawn to the end position by the integrated self-closing mechanism.

The dynamic load capacity of the telescopic slides indicates the maximum load rating of a vertically mounted slide pair when the entire extension length is used. The specified load capacities refer to the maximum value for 20,000 cycles.

### Attention:

The load capacity of all telescopic slides is tested to DIN EN 15338 Level 1.

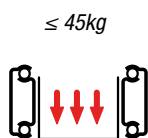
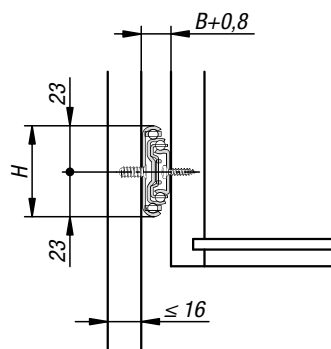
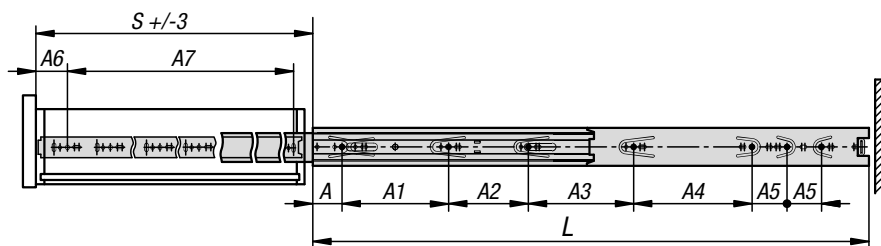


## KIPP Steel telescopic slides for side mounting, full extension, load capacity up to 40 kg

| Order No.  | A  | A1  | A2 | A3  | A4  | A5 | A6  | B    | H  | L   | Travel S | Loading per pair kg |
|------------|----|-----|----|-----|-----|----|-----|------|----|-----|----------|---------------------|
| K1575.0300 | 35 | 128 | -  | -   | -   | 35 | 208 | 12,7 | 46 | 300 | 270      | 40                  |
| K1575.0350 | 35 | 128 | -  | -   | -   | 35 | 240 | 12,7 | 46 | 350 | 350      | 40                  |
| K1575.0400 | 35 | 128 | 96 | -   | -   | 35 | 288 | 12,7 | 46 | 400 | 400      | 40                  |
| K1575.0450 | 35 | 128 | 96 | -   | -   | 35 | 320 | 12,7 | 46 | 450 | 450      | 40                  |
| K1575.0500 | 35 | 128 | 96 | 128 | -   | 35 | 352 | 12,7 | 46 | 500 | 500      | 40                  |
| K1575.0550 | 35 | 128 | 96 | 128 | -   | 35 | 416 | 12,7 | 46 | 550 | 550      | 40                  |
| K1575.0600 | 35 | 128 | 96 | 128 | 96  | 35 | 416 | 12,7 | 46 | 600 | 600      | 40                  |
| K1575.0650 | 35 | 128 | 96 | 128 | 128 | 35 | 544 | 12,7 | 46 | 650 | 650      | 40                  |
| K1575.0700 | 35 | 128 | 96 | 128 | 192 | 35 | 544 | 12,7 | 46 | 700 | 700      | 40                  |

## Telescopic slides, steel

for side mounting, full extension, load capacity up to 45 kg



### Material:

Slides steel.  
Ball cages steel and plastic.  
Balls C-steel.

### Version:

Slides electro zinc-plated and trivalent blue passivated.  
Balls hardened.

### Sample order:

K1577.0300

### Note for ordering:

Supplied in pairs

### Note:

On telescopic slides with full extension, the travel is equal to the installed length, which ensures greater comfort and accessibility. Interlocking in closed position. When the release lever is actuated, the drawer can be taken out easily and separated from the guide.

The dynamic load capacity of the telescopic slides indicates the maximum load rating of a vertically mounted slide pair when the entire extension length is used. The specified load capacities refer to the maximum value for 20,000 cycles.

### Attention:

The load capacity of all telescopic slides is tested to DIN EN 15338 Level 1.

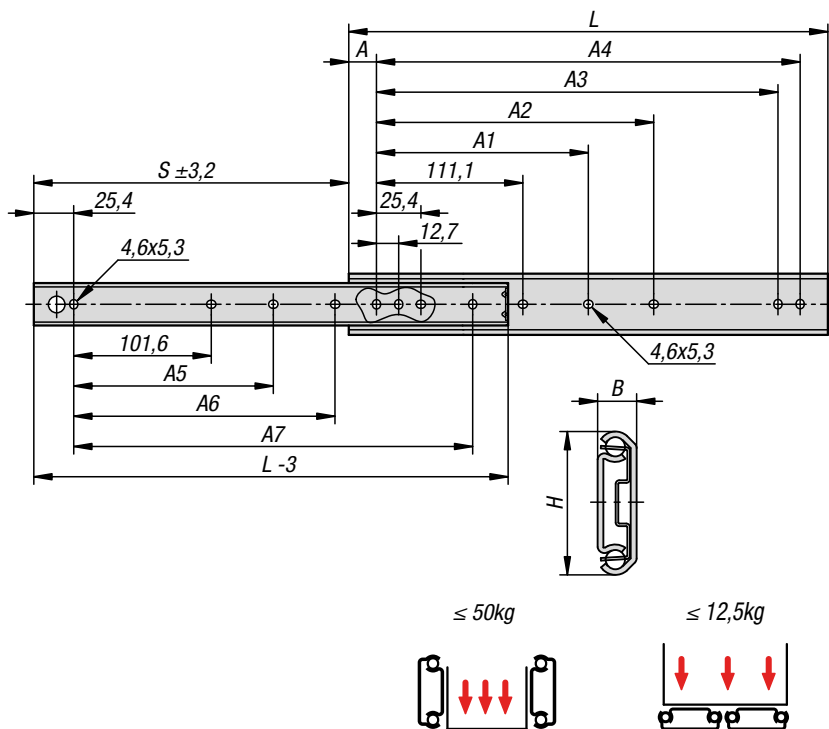


## KIPP Steel telescopic slides for side mounting, full extension, load capacity up to 45 kg

| Order No.  | A  | A1  | A2 | A3  | A4  | A5 | A6 | A7  | B    | H  | L   | Travel S | Loading per pair kg |
|------------|----|-----|----|-----|-----|----|----|-----|------|----|-----|----------|---------------------|
| K1577.0250 | 35 | 128 | -  | -   | -   | -  | 35 | 192 | 12,7 | 46 | 250 | 250      | 45                  |
| K1577.0300 | 35 | 128 | 96 | -   | -   | -  | 35 | 242 | 12,7 | 46 | 300 | 300      | 45                  |
| K1577.0350 | 35 | 128 | 96 | -   | -   | -  | 35 | 292 | 12,7 | 46 | 350 | 350      | 45                  |
| K1577.0400 | 35 | 128 | 96 | 96  | -   | -  | 35 | 342 | 12,7 | 46 | 400 | 400      | 45                  |
| K1577.0450 | 35 | 128 | 96 | 128 | -   | -  | 35 | 392 | 12,7 | 46 | 450 | 450      | 45                  |
| K1577.0500 | 35 | 128 | 96 | 128 | 64  | -  | 35 | 442 | 12,7 | 46 | 500 | 500      | 45                  |
| K1577.0550 | 35 | 128 | 96 | 128 | 64  | 32 | 35 | 492 | 12,7 | 46 | 550 | 550      | 45                  |
| K1577.0600 | 35 | 128 | 96 | 128 | 96  | 32 | 35 | 542 | 12,7 | 46 | 600 | 600      | 45                  |
| K1577.0650 | 35 | 128 | 96 | 128 | 160 | 32 | 35 | 592 | 12,7 | 46 | 650 | 650      | 45                  |
| K1577.0700 | 35 | 128 | 96 | 128 | 192 | 32 | 35 | 642 | 12,7 | 46 | 700 | 700      | 45                  |

# Telescopic slides, steel

for side mounting, partial extension, load capacity up to 50 kg


**Material:**

Slides steel.  
Ball cages steel.  
Balls, steel.

**Version:**

Slides electro zinc-plated.  
Ball cages steel.  
Balls hardened.

**Sample order:**

K1710.0356

**Note for ordering:**

Sold in pairs.

**Note:**

On telescopic slides with partial extension, the travel is less than the installed length.

The dynamic load capacity of the telescopic slides indicates the maximum load rating of a vertically mounted slide pair when the entire extension length is used.

The load capacity specified is calculated with a slide spacing of 450 mm and is based on the maximum value with 10,000 cycles.

The load capacity is ca. 75% lower by horizontal mounting.

The head height of the fastening screws should not exceed 2.5 mm otherwise there is a risk of collision with other parts of the slide.

**Temperature range:**

-20°C to +110°C.

**Advantages:**

Suitable for flat mounting  
Light running  
Precise guidance for high lateral stability

# Telescopic slides, steel

for side mounting, partial extension, load capacity up to 50 kg

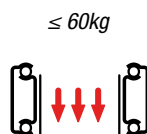
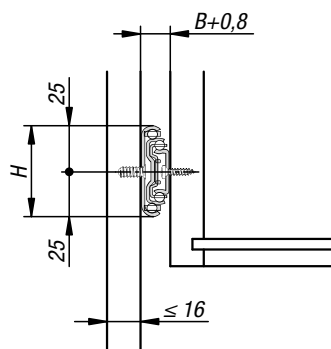
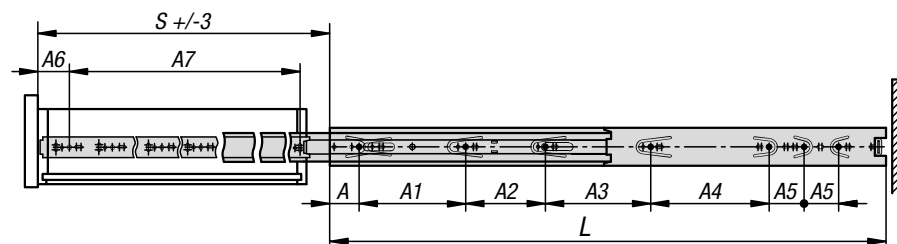
## KIPP Steel telescopic slides for side mounting, partial extension, load capacity up to 50 kg

| Order No.  | Assembly      | Product type | Loading<br>per pair<br>kg | Packaging type   |
|------------|---------------|--------------|---------------------------|------------------|
| K1710.0305 | side mounting | standard     | 50                        | 1 piece = 1 pair |
| K1710.0356 | side mounting | standard     | 50                        | 1 piece = 1 pair |
| K1710.0406 | side mounting | standard     | 45                        | 1 piece = 1 pair |
| K1710.0457 | side mounting | standard     | 45                        | 1 piece = 1 pair |
| K1710.0508 | side mounting | standard     | 40                        | 1 piece = 1 pair |
| K1710.0559 | side mounting | standard     | 40                        | 1 piece = 1 pair |
| K1710.0610 | side mounting | standard     | 35                        | 1 piece = 1 pair |
| K1710.0660 | side mounting | standard     | 30                        | 1 piece = 1 pair |
| K1710.0711 | side mounting | standard     | 30                        | 1 piece = 1 pair |

| Order No.  | A    | A1    | A2    | A3    | A4    | A5    | A6    | A7    | B   | H    | Travel<br>S | L   |
|------------|------|-------|-------|-------|-------|-------|-------|-------|-----|------|-------------|-----|
| K1710.0305 | 15,9 | -     | 149,2 | 260,3 | 273   | -     | 152,4 | 254   | 9,5 | 35,3 | 227         | 305 |
| K1710.0356 | 15,9 | -     | 200   | 311,1 | 323,8 | -     | 203,2 | 304,8 | 9,5 | 35,3 | 277         | 356 |
| K1710.0406 | 15,9 | -     | 250,8 | 361,9 | 374,6 | -     | 254   | 355,6 | 9,5 | 35,3 | 302         | 406 |
| K1710.0457 | 15,9 | 212,7 | 301,6 | 412,7 | 425,4 | 203,2 | 304,8 | 406,4 | 9,5 | 35,3 | 328         | 457 |
| K1710.0508 | 15,9 | 238,1 | 352,4 | 463,5 | 476,2 | 228,6 | 355,6 | 457,2 | 9,5 | 35,3 | 379         | 508 |
| K1710.0559 | 15,9 | 263,5 | 403,2 | 514,3 | 527   | 254   | 406,4 | 508   | 9,5 | 35,3 | 405         | 559 |
| K1710.0610 | 15,9 | 288,9 | 454   | 565,1 | 577,8 | 279,4 | 457,2 | 558,8 | 9,5 | 35,3 | 429         | 610 |
| K1710.0660 | 15,9 | 314,3 | 504,8 | 615,9 | 628,6 | 304,8 | 508   | 609,6 | 9,5 | 35,3 | 481         | 660 |
| K1710.0711 | 15,9 | 339,7 | 555,6 | 666,8 | 679,4 | 330,2 | 558,8 | 660,4 | 9,5 | 35,3 | 506         | 711 |

## Telescopic slides, steel

for side mounting, over-extension, load capacity up to 60 kg



### Material:

Slides steel.  
Ball cages steel and plastic.  
Balls C-steel.

### Version:

Slides electro zinc-plated and trivalent blue passivated.  
Balls hardened.

### Sample order:

K1578.0300

### Note for ordering:

Supplied in pairs

### Note:

On telescopic slides with over-extension, the travel is greater than the installed length. Interlocking in closed position. When the release lever is actuated, the drawer can be taken out easily and separated from the guide.

The dynamic load capacity of the telescopic slides indicates the maximum load rating of a vertically mounted slide pair when the entire extension length is used. The specified load capacities refer to the maximum value for 20,000 cycles.

### Attention:

The load capacity of all telescopic slides is tested to DIN EN 15338 Level 1.

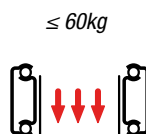
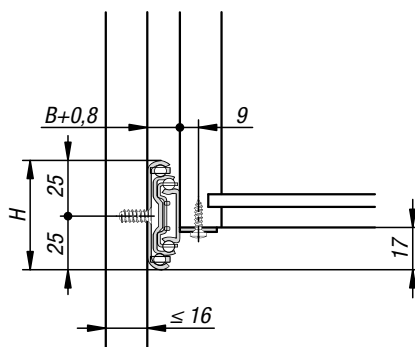
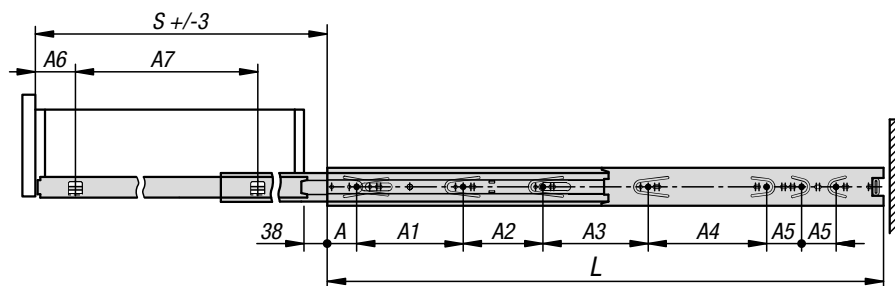


## KIPP Steel telescopic slides for side mounting, over-extension, load capacity up to 60 kg

| Order No.  | A  | A1  | A2 | A3  | A4  | A5 | A6 | A7  | B    | H  | L   | Travel S | Loading per pair kg |
|------------|----|-----|----|-----|-----|----|----|-----|------|----|-----|----------|---------------------|
| K1578.0250 | 35 | 128 | -  | -   | -   | -  | 35 | 192 | 12,7 | 50 | 250 | 288      | 60                  |
| K1578.0300 | 35 | 128 | 96 | -   | -   | -  | 35 | 242 | 12,7 | 50 | 300 | 338      | 60                  |
| K1578.0350 | 35 | 128 | 96 | -   | -   | -  | 35 | 292 | 12,7 | 50 | 350 | 388      | 60                  |
| K1578.0400 | 35 | 128 | 96 | 96  | -   | -  | 35 | 342 | 12,7 | 50 | 400 | 438      | 60                  |
| K1578.0450 | 35 | 128 | 96 | 128 | -   | -  | 35 | 392 | 12,7 | 50 | 450 | 488      | 60                  |
| K1578.0500 | 35 | 128 | 96 | 128 | 64  | -  | 35 | 442 | 12,7 | 50 | 500 | 538      | 60                  |
| K1578.0550 | 35 | 128 | 96 | 128 | 64  | 32 | 35 | 492 | 12,7 | 50 | 550 | 588      | 60                  |
| K1578.0600 | 35 | 128 | 96 | 128 | 96  | 32 | 35 | 542 | 12,7 | 50 | 600 | 638      | 60                  |
| K1578.0650 | 35 | 128 | 96 | 128 | 160 | 32 | 35 | 592 | 12,7 | 50 | 650 | 688      | 60                  |
| K1578.0700 | 35 | 128 | 96 | 128 | 192 | 32 | 35 | 642 | 12,7 | 50 | 700 | 738      | 60                  |

## Telescopic slides, steel

for surface mounting, over-extension, load capacity up to 60 kg



### Material:

Slides steel.  
Ball cages steel and plastic.  
Balls C-steel.

### Version:

Slides electro zinc-plated and trivalent blue passivated.  
Balls hardened.

### Sample order:

K1579.0400

### Note for ordering:

Supplied in pairs

### Note:

On telescopic slides with over-extension, the travel is greater than the installed length. Interlocking in closed position. When the release lever is actuated, the drawer can be taken out easily and separated from the guide.

The dynamic load capacity of the telescopic slides indicates the maximum load rating of a vertically mounted slide pair when the entire extension length is used. The specified load capacities refer to the maximum value for 20,000 cycles.

### Attention:

The load capacity of all telescopic slides is tested to DIN EN 15338 Level 1.



### KIPP Steel telescopic slides for surface mounting, over-extension, load capacity up to 60 kg

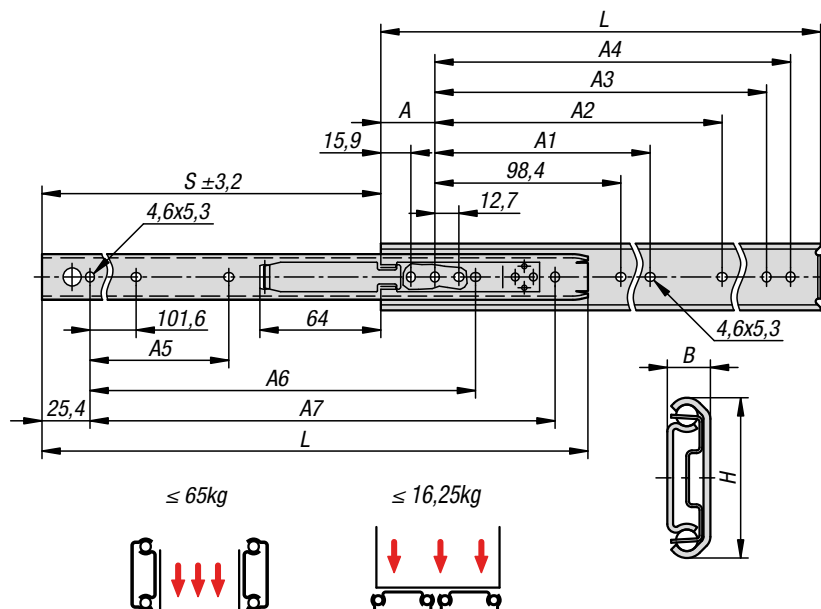
| Order No.  | A  | A1  | A2 | A3  | A4 | A5 | A6 | A7  | B    | H  | L   | Travel S | Loading per pair kg |
|------------|----|-----|----|-----|----|----|----|-----|------|----|-----|----------|---------------------|
| K1579.0350 | 35 | 128 | 96 | -   | -  | -  | 35 | 283 | 12,7 | 50 | 350 | 388      | 60                  |
| K1579.0400 | 35 | 128 | 96 | 96  | -  | -  | 35 | 333 | 12,7 | 50 | 400 | 438      | 60                  |
| K1579.0450 | 35 | 128 | 96 | 128 | -  | -  | 35 | 383 | 12,7 | 50 | 450 | 488      | 60                  |
| K1579.0500 | 35 | 128 | 96 | 128 | 64 | -  | 35 | 433 | 12,7 | 50 | 500 | 538      | 60                  |
| K1579.0550 | 35 | 128 | 96 | 128 | 64 | 32 | 35 | 483 | 12,7 | 50 | 550 | 588      | 60                  |
| K1579.0600 | 35 | 128 | 96 | 128 | 96 | 32 | 35 | 533 | 12,7 | 50 | 600 | 638      | 60                  |



## Telescopic slides, steel

for side mounting, partial extension, load capacity up to 65 kg

19"



### Material:

Slides steel.  
Ball cages steel.  
Balls, steel.

### Version:

Slides electro zinc-plated.  
Ball cages, electro zinc-plated.  
Balls hardened.

### Sample order:

K1711.0356

### Note for ordering:

Sold in pairs.

### Note:

On telescopic slides with partial extension, the travel is less than the installed length. Latches in open position. When the release lever is actuated, the drawer can be taken out easily and separated from the guide. The dynamic load capacity of the telescopic slides indicates the maximum load rating of a vertically mounted slide pair when the entire extension length is used.

The load capacity specified is calculated with a slide spacing of 450 mm and is based on the maximum value with 10,000 cycles.

The load capacity is ca. 75% lower by horizontal mounting.

The head height of the fastening screws should not exceed 2.5 mm otherwise there is a risk of collision with other parts of the slide.

### Temperature range:

-20°C to +70°C.

### Advantages:

Latches in open position  
Quick frontal release

# Telescopic slides, steel

for side mounting, partial extension, load capacity up to 65 kg

19"

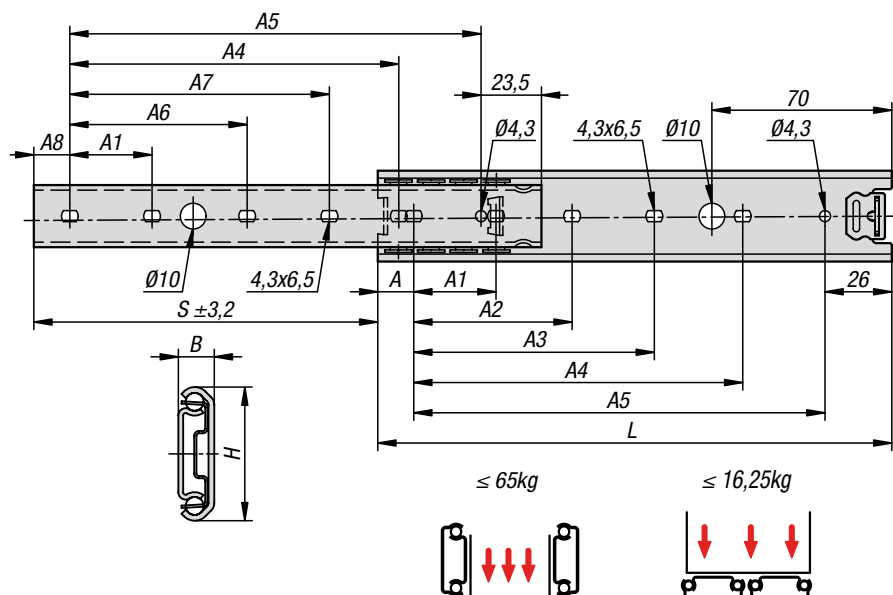
## KIPP Steel telescopic slides for side mounting, partial extension, load capacity up to 65 kg

| Order No.  | Assembly      | Product type | Loading<br>per pair<br>kg | Packaging type   |
|------------|---------------|--------------|---------------------------|------------------|
| K1711.0305 | side mounting | standard     | 65                        | 1 piece = 1 pair |
| K1711.0356 | side mounting | standard     | 65                        | 1 piece = 1 pair |
| K1711.0406 | side mounting | standard     | 60                        | 1 piece = 1 pair |
| K1711.0457 | side mounting | standard     | 55                        | 1 piece = 1 pair |
| K1711.0508 | side mounting | standard     | 50                        | 1 piece = 1 pair |
| K1711.0559 | side mounting | standard     | 40                        | 1 piece = 1 pair |
| K1711.0610 | side mounting | standard     | 35                        | 1 piece = 1 pair |
| K1711.0660 | side mounting | standard     | 30                        | 1 piece = 1 pair |
| K1711.0711 | side mounting | standard     | 30                        | 1 piece = 1 pair |

| Order No.  | A    | A1    | A2    | A3    | A4    | A5    | A6    | A7    | B   | H    | Travel<br>S | L   |
|------------|------|-------|-------|-------|-------|-------|-------|-------|-----|------|-------------|-----|
| K1711.0305 | 28,6 | -     | 136,5 | 247,6 | 260,3 | -     | 215,9 | 254   | 9,5 | 35,3 | 201,5       | 305 |
| K1711.0356 | 28,6 | -     | 187,3 | 298,4 | 311,1 | -     | 266,7 | 304,8 | 9,5 | 35,3 | 252,5       | 356 |
| K1711.0406 | 28,6 | -     | 238,1 | 349,2 | 361,9 | -     | 317,5 | 355,6 | 9,5 | 35,3 | 303         | 406 |
| K1711.0457 | 28,6 | 200   | 288,9 | 400   | 412,7 | 203,2 | 342,9 | 406,4 | 9,5 | 35,3 | 329         | 457 |
| K1711.0508 | 28,6 | 225,4 | 339,7 | 450,8 | 463,5 | 228,6 | 393,7 | 457,2 | 9,5 | 35,3 | 379,5       | 508 |
| K1711.0559 | 28,6 | 250,8 | 390,5 | 501,6 | 514,3 | 254   | 419,1 | 508   | 9,5 | 35,3 | 405         | 559 |
| K1711.0610 | 28,6 | 276,2 | 441,3 | 552,4 | 565,1 | 279,4 | 444,5 | 558,8 | 9,5 | 35,3 | 430,5       | 610 |
| K1711.0660 | 28,6 | 301,6 | 492,1 | 603,2 | 615,9 | 304,8 | 495,3 | 609,6 | 9,5 | 35,3 | 481,5       | 660 |
| K1711.0711 | 28,6 | 327   | 542,9 | 654   | 666,7 | 330,2 | 520,7 | 660,4 | 9,5 | 35,3 | 506,5       | 711 |

## Telescopic slides, stainless steel

for side mounting, partial extension, load capacity up to 65 kg



### Material:

Slides stainless steel 1.4301.  
Ball cage stainless steel 1.4301.  
Balls stainless steel 1.4034.

### Version:

Slides bright.  
Ball cages bright.  
Balls bright.

### Sample order:

K1712.0350

### Note for ordering:

Sold in pairs.

### Note:

On telescopic slides with partial extension, the travel is less than the installed length. Latches in closed position.

The dynamic load capacity of the telescopic slides indicates the maximum load rating of a vertically mounted slide pair when the entire extension length is used.

The load capacity specified is calculated with a slide spacing of 450 mm and is based on the maximum value with 10,000 or 80,000 cycles.

The load capacity is ca. 75% lower by horizontal mounting.

The head height of the fastening screws should not exceed 2.5 mm otherwise there is a risk of collision with other parts of the slide.

### Advantages:

Latches in closed position  
Suitable for flat mounting  
Light running

# Telescopic slides, stainless steel

for side mounting, partial extension, load capacity up to 65 kg



## KIPP Stainless steel telescopic slides for side mounting, partial extension, load capacity up to 65 kg

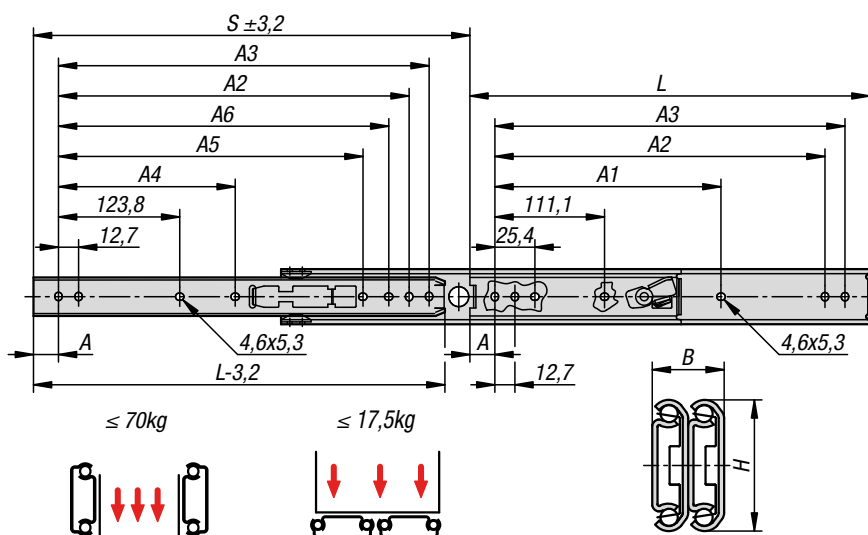
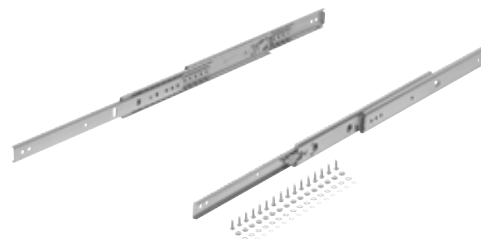
| Order No.  | Assembly      | Product type | Load capacity<br>per pair<br>(80,000 cycles) kg | Loading pair<br>(10,000 cycles)<br>kg | Packaging type   |
|------------|---------------|--------------|-------------------------------------------------|---------------------------------------|------------------|
| K1712.0300 | side mounting | standard     | 60                                              | 65                                    | 1 piece = 1 pair |
| K1712.0350 | side mounting | standard     | 57                                              | 63                                    | 1 piece = 1 pair |
| K1712.0400 | side mounting | standard     | 54                                              | 59                                    | 1 piece = 1 pair |
| K1712.0450 | side mounting | standard     | 50                                              | 57                                    | 1 piece = 1 pair |
| K1712.0500 | side mounting | standard     | 47                                              | 53                                    | 1 piece = 1 pair |
| K1712.0550 | side mounting | standard     | 45                                              | 50                                    | 1 piece = 1 pair |
| K1712.0600 | side mounting | standard     | 43                                              | 46                                    | 1 piece = 1 pair |
| K1712.0650 | side mounting | standard     | 41                                              | 43                                    | 1 piece = 1 pair |
| K1712.0700 | side mounting | standard     | 40                                              | 42                                    | 1 piece = 1 pair |

| Order No.  | A  | A1 | A2  | A3  | A4  | A5  | A6  | A7  | A8   | B   | H     | Travel<br>S | L   |
|------------|----|----|-----|-----|-----|-----|-----|-----|------|-----|-------|-------------|-----|
| K1712.0300 | 18 | 32 | -   | -   | 224 | 256 | 128 | 160 | 17,5 | 9,5 | 35,34 | 209         | 300 |
| K1712.0350 | 36 | 32 | 160 | 192 | 256 | 288 | 160 | 192 | 35,5 | 9,5 | 35,34 | 245         | 350 |
| K1712.0400 | 22 | 32 | 160 | 192 | 320 | 352 | 160 | 192 | 21,5 | 9,5 | 35,34 | 282         | 400 |
| K1712.0450 | 8  | 32 | 224 | 256 | 384 | 416 | 224 | 256 | 7,5  | 9,5 | 35,34 | 320         | 450 |
| K1712.0500 | 26 | 32 | 224 | 256 | 416 | 448 | 224 | 256 | 25,5 | 9,5 | 35,34 | 357         | 500 |
| K1712.0550 | 12 | 32 | 288 | 320 | 480 | 512 | 288 | 320 | 11,5 | 9,5 | 35,34 | 394         | 550 |
| K1712.0600 | 30 | 32 | 288 | 320 | 512 | 544 | 288 | 320 | 29,5 | 9,5 | 35,34 | 432         | 600 |
| K1712.0650 | 16 | 32 | 352 | 384 | 576 | 608 | 352 | 384 | 15,5 | 9,5 | 35,34 | 469         | 650 |
| K1712.0700 | 34 | 32 | 352 | 384 | 608 | 640 | 352 | 384 | 33,5 | 9,5 | 35,34 | 506         | 700 |

## Telescopic slides, steel

for side mounting, over-extension, load capacity up to 70 kg

19"



### Material:

Slides steel.  
Ball cages steel.  
Balls, steel.

### Version:

Slides electro zinc-plated.  
Ball cages, electro zinc-plated.  
Balls hardened.

### Sample order:

K1713.0356

### Note for ordering:

Sold in pairs.  
Fastening material included.

### Note:

On telescopic slides with over-extension, the travel is greater than the installed length. Latches in open position. When the release lever is actuated, the drawer can be taken out easily and separated from the guide. The dynamic load capacity of the telescopic slides indicates the maximum load rating of a vertically mounted slide pair when the entire extension length is used. The load capacities specified refer to the maximum value for 10,000 cycles.

The load capacity is ca. 75% lower by horizontal mounting.

The head height of the fastening screws should not exceed 2.5 mm otherwise there is a risk of collision with other parts of the slide.

### Temperature range:

-20°C to +110°C.

### Advantages:

Latches in open position  
Quick frontal release

# Telescopic slides, steel

for side mounting, over-extension, load capacity up to 70 kg

19"

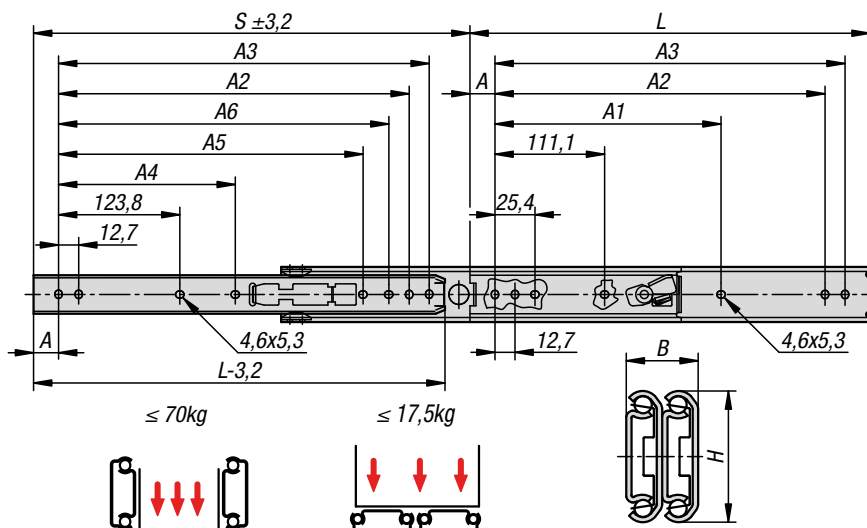
## KIPP Steel telescopic slides for side mounting, over-extension, load capacity up to 70 kg

| Order No.  | Assembly      | Product type | Loading<br>per pair<br>kg | Packaging type   |
|------------|---------------|--------------|---------------------------|------------------|
| K1713.0305 | side mounting | standard     | 70                        | 1 piece = 1 pair |
| K1713.0356 | side mounting | standard     | 68                        | 1 piece = 1 pair |
| K1713.0406 | side mounting | standard     | 65                        | 1 piece = 1 pair |
| K1713.0457 | side mounting | standard     | 62                        | 1 piece = 1 pair |
| K1713.0508 | side mounting | standard     | 57                        | 1 piece = 1 pair |
| K1713.0559 | side mounting | standard     | 52                        | 1 piece = 1 pair |
| K1713.0610 | side mounting | standard     | 46                        | 1 piece = 1 pair |
| K1713.0660 | side mounting | standard     | 41                        | 1 piece = 1 pair |
| K1713.0711 | side mounting | standard     | 36                        | 1 piece = 1 pair |

| Order No.  | A    | A1    | A2    | A3    | A4    | A5    | A6    | B    | H    | Travel<br>S | L   |
|------------|------|-------|-------|-------|-------|-------|-------|------|------|-------------|-----|
| K1713.0305 | 15,9 | -     | 260,3 | 273   | -     | -     | -     | 19,1 | 35,3 | 327         | 305 |
| K1713.0356 | 15,9 | -     | 311,1 | 323,8 | -     | -     | 298,4 | 19,1 | 35,3 | 378         | 356 |
| K1713.0406 | 15,9 | 250,8 | 361,9 | 374,6 | -     | -     | 349,2 | 19,1 | 35,3 | 429         | 406 |
| K1713.0457 | 15,9 | 301,6 | 412,7 | 425,4 | 212,7 | -     | 400   | 19,1 | 35,3 | 479,5       | 457 |
| K1713.0508 | 15,9 | 352,4 | 463,5 | 476,2 | 238,1 | 365,2 | 450,8 | 19,1 | 35,3 | 530,5       | 508 |
| K1713.0559 | 15,9 | 403,2 | 514,3 | 527   | 263,5 | 415,9 | 501,6 | 19,1 | 35,3 | 581         | 559 |
| K1713.0610 | 15,9 | 454   | 565,1 | 577,8 | 288,9 | 466,7 | 552,4 | 19,1 | 35,3 | 632         | 610 |
| K1713.0660 | 15,9 | 504,8 | 615,9 | 628,6 | 314,3 | 517,7 | 603,2 | 19,1 | 35,3 | 683         | 660 |
| K1713.0711 | 15,9 | 555,6 | 666,7 | 679,4 | 339,7 | 568,3 | 654   | 19,1 | 35,3 | 733,5       | 711 |

## Telescopic slides, stainless steel

for side mounting, over-extension, load capacity up to 70 kg



### Material:

Slides stainless steel 1.4301.  
Ball cage stainless steel 1.4301.  
Balls stainless steel 1.4034.

### Version:

Slides bright.  
Ball cages bright.  
Balls bright.

### Sample order:

K1714.0356

### Note for ordering:

Sold in pairs.

### Note:

On telescopic slides with over-extension, the travel is greater than the installed length. Latches in open position. When the release lever is actuated, the drawer can be taken out easily and separated from the guide. The dynamic load capacity of the telescopic slides indicates the maximum load rating of a vertically mounted slide pair when the entire extension length is used. The load capacity specified is calculated with a slide spacing of 450 mm and is based on the maximum value with 10,000 cycles.

The load capacity is ca. 75% lower by horizontal mounting.

The head height of the fastening screws should not exceed 2.5 mm otherwise there is a risk of collision with other parts of the slide.

### Temperature range:

-20°C to +110°C.

### Advantages:

Latches in open position  
Quick frontal release

# Telescopic slides, stainless steel

for side mounting, over-extension, load capacity up to 70 kg



## KIPP Stainless steel telescopic slides for side mounting, over-extension, load capacity up to 70 kg

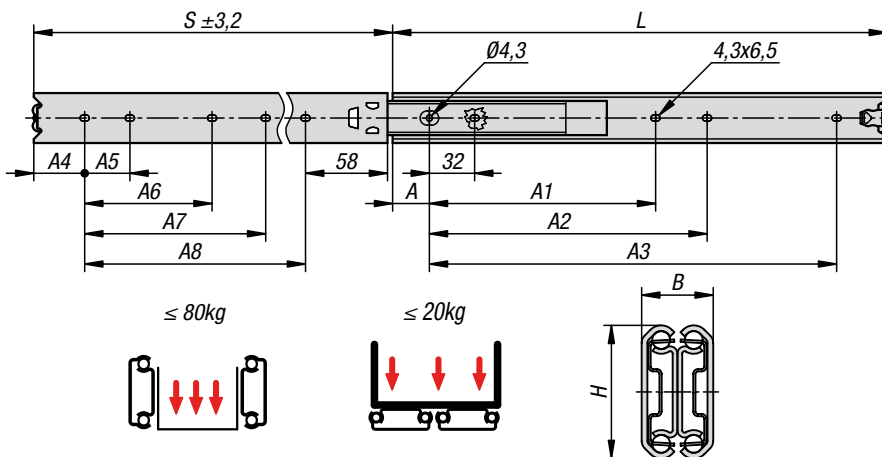
| Order No.  | Assembly      | Product type | Loading<br>per pair<br>kg | Packaging type   |
|------------|---------------|--------------|---------------------------|------------------|
| K1714.0305 | side mounting | standard     | 70                        | 1 piece = 1 pair |
| K1714.0356 | side mounting | standard     | 68                        | 1 piece = 1 pair |
| K1714.0406 | side mounting | standard     | 65                        | 1 piece = 1 pair |
| K1714.0457 | side mounting | standard     | 62                        | 1 piece = 1 pair |
| K1714.0508 | side mounting | standard     | 57                        | 1 piece = 1 pair |
| K1714.0559 | side mounting | standard     | 52                        | 1 piece = 1 pair |
| K1714.0610 | side mounting | standard     | 46                        | 1 piece = 1 pair |
| K1714.0660 | side mounting | standard     | 41                        | 1 piece = 1 pair |
| K1714.0711 | side mounting | standard     | 36                        | 1 piece = 1 pair |

| Order No.  | A    | A1    | A2    | A3    | A4    | A5    | A6    | B    | H    | Travel<br>S | L   |
|------------|------|-------|-------|-------|-------|-------|-------|------|------|-------------|-----|
| K1714.0305 | 15,9 | -     | 260,3 | 273   | -     | -     | -     | 19,1 | 35,3 | 327         | 305 |
| K1714.0356 | 15,9 | -     | 311,1 | 323,8 | -     | -     | 298,4 | 19,1 | 35,3 | 378         | 356 |
| K1714.0406 | 15,9 | 250,8 | 361,9 | 374,6 | -     | -     | 349,2 | 19,1 | 35,3 | 429         | 406 |
| K1714.0457 | 15,9 | 301,6 | 412,7 | 425,4 | 212,7 | -     | 400   | 19,1 | 35,3 | 479,5       | 457 |
| K1714.0508 | 15,9 | 352,4 | 463,5 | 476,2 | 238,1 | 365,2 | 450,8 | 19,1 | 35,3 | 530,5       | 508 |
| K1714.0559 | 15,9 | 403,2 | 514,3 | 527   | 263,5 | 415,9 | 501,6 | 19,1 | 35,3 | 581         | 559 |
| K1714.0610 | 15,9 | 454   | 565,1 | 577,8 | 288,9 | 466,7 | 552,4 | 19,1 | 35,3 | 632         | 610 |
| K1714.0660 | 15,9 | 504,8 | 615,9 | 628,6 | 314,3 | 517,7 | 603,2 | 19,1 | 35,3 | 683         | 660 |
| K1714.0711 | 15,9 | 555,6 | 666,7 | 679,4 | 339,7 | 568,3 | 654   | 19,1 | 35,3 | 733,5       | 711 |



## Telescopic slides, stainless steel

for side mounting, full extension, load capacity up to 80 kg



**Material:**

Slides stainless steel 1.4301.  
Ball cage stainless steel 1.4301.  
Balls stainless steel 1.4034.

**Version:**

Slides bright.  
Ball cages bright.  
Balls bright.

**Sample order:**

K1715.0350

**Note for ordering:**

Sold in pairs.

**Note:**

On telescopic slides with full extension, the travel is similar to the installed length, which ensures greater comfort and accessibility. Latches in closed position. The dynamic load capacity of the telescopic slides indicates the maximum load rating of a vertically mounted slide pair when the entire extension length is used. The load capacity specified is calculated with a slide spacing of 450 mm and is based on the maximum value with 10,000 or 80,000 cycles.

The load capacity is ca. 75% lower by horizontal mounting.

The head height of the fastening screws should not exceed 2.5 mm otherwise there is a risk of collision with other parts of the slide.

**Advantages:**

**Advantages:**  
Latches in closed position  
Suitable for flat mounting  
Light running

# Telescopic slides, stainless steel

for side mounting, full extension, load capacity up to 80 kg



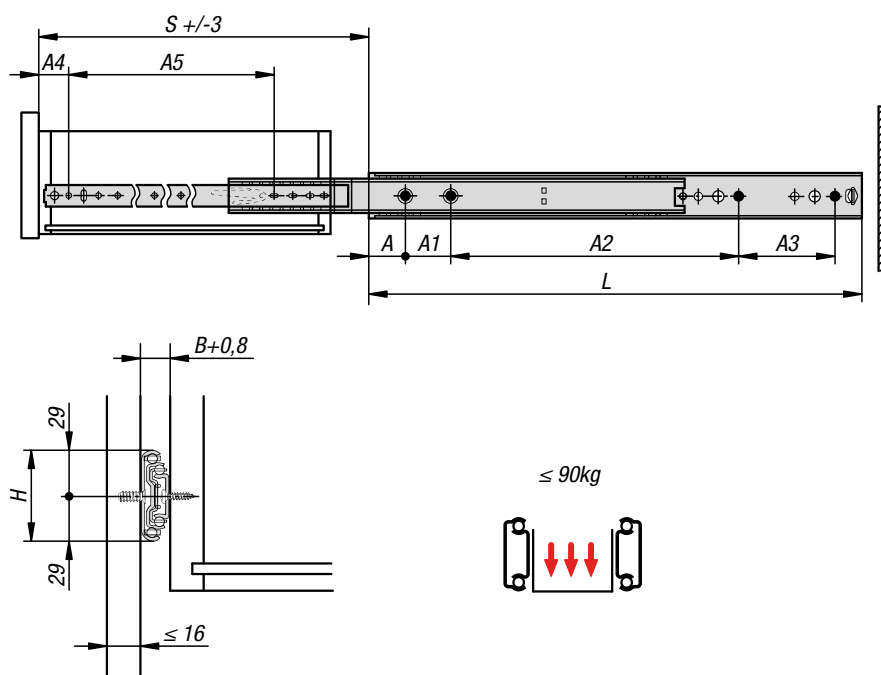
## KIPP Stainless steel telescopic slides for side mounting, full extension, load capacity up to 80 kg

| Order No.  | Assembly      | Product type | Load capacity<br>per pair<br>(80,000 cycles) kg | Loading pair<br>(10,000 cycles)<br>kg | Packaging type   |
|------------|---------------|--------------|-------------------------------------------------|---------------------------------------|------------------|
| K1715.0300 | side mounting | standard     | 50                                              | 65                                    | 1 piece = 1 pair |
| K1715.0350 | side mounting | standard     | 55                                              | 70                                    | 1 piece = 1 pair |
| K1715.0400 | side mounting | standard     | 60                                              | 75                                    | 1 piece = 1 pair |
| K1715.0450 | side mounting | standard     | 65                                              | 80                                    | 1 piece = 1 pair |
| K1715.0500 | side mounting | standard     | 57                                              | 75                                    | 1 piece = 1 pair |
| K1715.0550 | side mounting | standard     | 50                                              | 70                                    | 1 piece = 1 pair |
| K1715.0600 | side mounting | standard     | 45                                              | 65                                    | 1 piece = 1 pair |
| K1715.0700 | side mounting | standard     | 30                                              | 55                                    | 1 piece = 1 pair |

| Order No.  | A  | A1  | A2  | A3  | A4 | A5 | A6  | A7  | A8  | B    | H    | Travel<br>S | L   |
|------------|----|-----|-----|-----|----|----|-----|-----|-----|------|------|-------------|-----|
| K1715.0300 | 26 | -   | 192 | 224 | 18 | 32 | -   | -   | 224 | 19,1 | 35,3 | 304,5       | 300 |
| K1715.0350 | 26 | -   | 224 | 256 | 36 | 32 | -   | -   | 256 | 19,1 | 35,3 | 354         | 350 |
| K1715.0400 | 26 | -   | 192 | 320 | 22 | 32 | -   | 160 | 320 | 19,1 | 35,3 | 403         | 400 |
| K1715.0450 | 26 | -   | 224 | 352 | 40 | 32 | -   | 160 | 352 | 19,1 | 35,3 | 452         | 450 |
| K1715.0500 | 26 | 256 | 288 | 416 | 26 | 32 | 160 | 192 | 416 | 19,1 | 35,3 | 501         | 500 |
| K1715.0550 | 26 | 288 | 320 | 480 | 44 | 32 | 160 | 192 | 448 | 19,1 | 35,3 | 550,5       | 550 |
| K1715.0600 | 26 | 320 | 352 | 512 | 30 | 32 | 192 | 224 | 512 | 19,1 | 35,3 | 600         | 600 |
| K1715.0700 | 26 | 352 | 384 | 608 | 34 | 32 | 256 | 288 | 608 | 19,1 | 35,3 | 698         | 700 |

## Telescopic slides, steel

for side mounting, over-extension, load capacity up to 90 kg



### Material:

Slides steel.  
Ball cages steel and plastic.  
Balls C-steel.

### Version:

Slides electro zinc-plated and trivalent blue passivated.  
Balls hardened.

### Sample order:

K1580.0350

### Note for ordering:

Supplied in pairs

### Note:

On telescopic slides with over-extension, the travel is greater than the installed length. Interlocking in closed position. When the release lever is actuated, the drawer can be taken out easily and separated from the guide.

The dynamic load capacity of the telescopic slides indicates the maximum load rating of a vertically mounted slide pair when the entire extension length is used. The specified load capacities refer to the maximum value for 20,000 cycles.

### Attention:

The load capacity of all telescopic slides is tested to DIN EN 15338 Level 1.



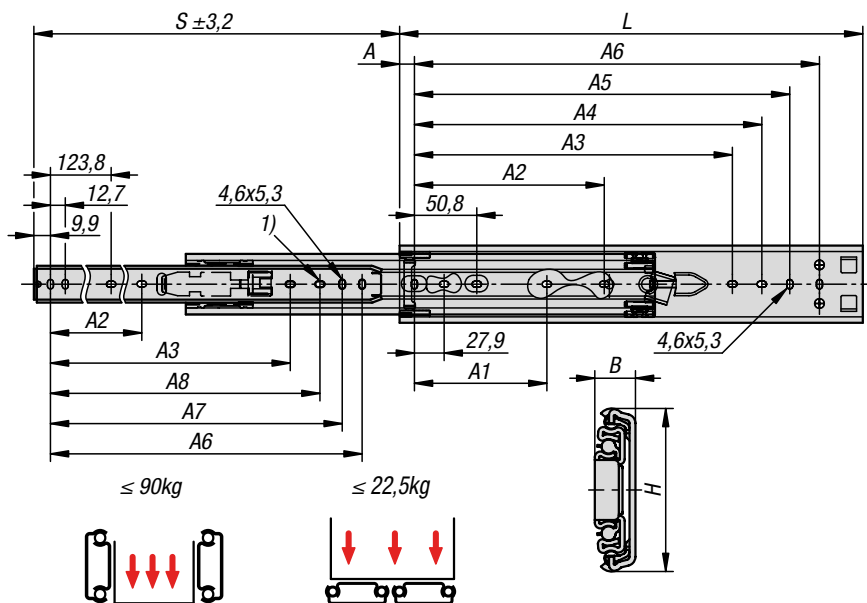
## KIPP Steel telescopic slides for side mounting, over-extension, load capacity up to 90 kg

| Order No.  | A     | A1 | A2  | A3  | A4    | A5    | B  | H  | L   | Travel S | Loading per pair kg |
|------------|-------|----|-----|-----|-------|-------|----|----|-----|----------|---------------------|
| K1580.0300 | 31,75 | 57 | 122 | -   | 31,75 | 233,5 | 19 | 58 | 300 | 338      | 90                  |
| K1580.0350 | 31,75 | 57 | 172 | -   | 31,75 | 283,5 | 19 | 58 | 350 | 388      | 90                  |
| K1580.0400 | 31,75 | 57 | 111 | 111 | 31,75 | 333,5 | 19 | 58 | 400 | 438      | 90                  |
| K1580.0450 | 31,75 | 57 | 136 | 136 | 31,75 | 383,5 | 19 | 58 | 450 | 488      | 90                  |
| K1580.0500 | 31,75 | 57 | 161 | 161 | 31,75 | 433,5 | 19 | 58 | 500 | 538      | 90                  |
| K1580.0550 | 31,75 | 57 | 186 | 186 | 31,75 | 483,5 | 19 | 58 | 550 | 588      | 90                  |
| K1580.0600 | 31,75 | 57 | 211 | 211 | 31,75 | 533,5 | 19 | 58 | 600 | 638      | 90                  |
| K1580.0650 | 31,75 | 57 | 236 | 236 | 31,75 | 583,5 | 19 | 58 | 650 | 688      | 90                  |
| K1580.0700 | 31,75 | 57 | 261 | 261 | 31,75 | 633,5 | 19 | 58 | 700 | 738      | 90                  |



## Telescopic slides, stainless steel

for side mounting, over-extension, load capacity up to 90 kg



### Material:

Slides stainless steel 1.4301.  
Ball cage stainless steel 1.4301.  
Balls stainless steel 1.4034.

### Version:

Slides bright.  
Ball cages bright.  
Balls bright.

### Sample order:

K1716.0356

### Note for ordering:

Sold in pairs.

### Note:

On telescopic slides with over-extension, the travel is greater than the installed length. Latches in open position. When the release lever is actuated, the drawer can be taken out easily and separated from the guide. The dynamic load capacity of the telescopic slides indicates the maximum load rating of a vertically mounted slide pair when the entire extension length is used. The load capacity specified is calculated with a slide spacing of 400 mm and is based on the maximum value with 10,000 cycles.

The load capacity is ca. 75% lower by horizontal mounting.

The head height of the fastening screws should not exceed 2.5 mm otherwise there is a risk of collision with other parts of the slide.

### Advantages:

Latches in open position  
Quick frontal release

### Drawing reference:

1) Mounting hole by K1716.0305 not provided

# Telescopic slides, stainless steel

for side mounting, over-extension, load capacity up to 90 kg



## KIPP Stainless steel telescopic slides for side mounting, over-extension, load capacity up to 90 kg

| Order No.  | Assembly      | Product type | Loading<br>per pair<br>kg | Packaging type   |
|------------|---------------|--------------|---------------------------|------------------|
| K1716.0305 | side mounting | standard     | 56                        | 1 piece = 1 pair |
| K1716.0356 | side mounting | standard     | 68                        | 1 piece = 1 pair |
| K1716.0406 | side mounting | standard     | 80                        | 1 piece = 1 pair |
| K1716.0457 | side mounting | standard     | 85                        | 1 piece = 1 pair |
| K1716.0508 | side mounting | standard     | 90                        | 1 piece = 1 pair |
| K1716.0559 | side mounting | standard     | 90                        | 1 piece = 1 pair |
| K1716.0610 | side mounting | standard     | 90                        | 1 piece = 1 pair |
| K1716.0660 | side mounting | standard     | 87                        | 1 piece = 1 pair |

| Order No.  | A    | A1    | A2    | A3    | A4    | A5    | A6    | A7    | A8    | B    | H    | Travel<br>S | L   |
|------------|------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|-------------|-----|
| K1716.0305 | 15,9 | -     | -     | -     | 209,6 | 235   | 260,4 | 247,7 | -     | 12,7 | 51,6 | 330         | 305 |
| K1716.0356 | 15,9 | -     | -     | -     | 260,4 | 285,8 | 311,2 | 298,5 | 285,8 | 12,7 | 51,6 | 381         | 356 |
| K1716.0406 | 15,9 | 123,8 | -     | -     | 311,2 | 336,6 | 362   | 349,3 | 336,6 | 12,7 | 51,6 | 432         | 406 |
| K1716.0457 | 15,9 | 123,8 | 177,8 | 314,4 | 362   | 387,4 | 412,8 | 400,1 | 387,4 | 12,7 | 51,6 | 483         | 457 |
| K1716.0508 | 15,9 | 123,8 | 203,2 | 365,3 | 412,8 | 438,2 | 463,6 | 450,9 | 438,2 | 12,7 | 51,6 | 533         | 508 |
| K1716.0559 | 15,9 | 123,8 | 228,6 | 416,1 | 463,6 | 489   | 514,4 | 501,7 | 489   | 12,7 | 51,6 | 584         | 559 |
| K1716.0610 | 15,9 | 123,8 | 254   | 466,9 | 514,4 | 539,8 | 565,2 | 552,5 | 539,8 | 12,7 | 51,6 | 635         | 610 |
| K1716.0660 | 15,9 | 123,8 | 279,4 | 517,7 | 565,2 | 590,6 | 616   | 603,3 | 590,6 | 12,7 | 51,6 | 686         | 660 |





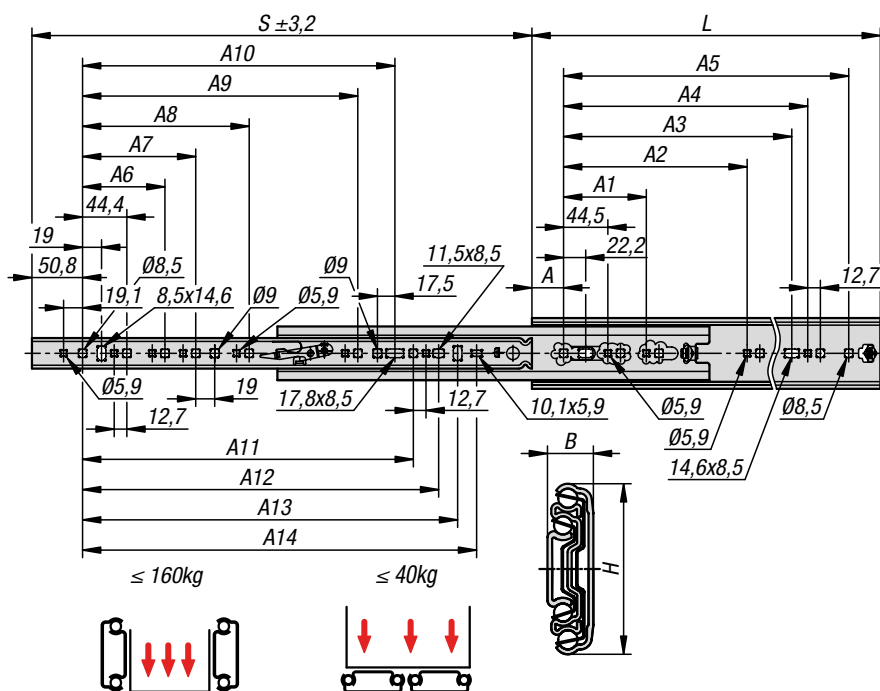
A large grid of graph paper for taking notes.





# Telescopic slides, steel

for side mounting, full extension, load capacity up to 160 kg



## Material:

Slides steel.  
Ball cages steel.  
Balls, steel.

## Version:

Slides electro zinc-plated.  
Ball cages, electro zinc-plated.  
Balls hardened.

## Sample order:

K1717.0356

## Note for ordering:

Sold in pairs.

## Note:

By telescopic slides with full extension, the travel is roughly equal to the installed length, which ensures greater comfort and accessibility. Latches in closed position. When the release lever is actuated, the drawer can be taken out easily and separated from the guide. The dynamic load capacity of the telescopic slides indicates the maximum load rating of a vertically mounted slide pair when the entire extension length is used. The load capacities specified refer to the maximum value for 80,000 cycles.

The load capacity is ca. 75% lower by horizontal mounting.

Suitable for a slide spacing up to 1,000 mm.

## Temperature range:

-20°C to +70°C.

## Advantages:

Latches in closed position  
Quick frontal release  
Suitable for flat mounting

# Telescopic slides, steel

for side mounting, full extension, load capacity up to 160 kg

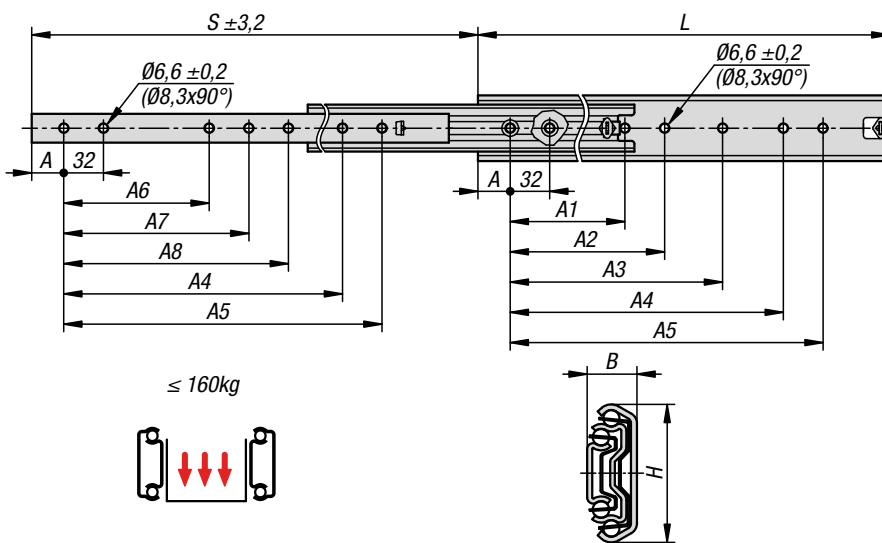
## KIPP Steel telescopic slides for side mounting, full extension, load capacity up to 160 kg

| Order No.  | Assembly      | Product type | Loading per pair kg | Packaging type   |
|------------|---------------|--------------|---------------------|------------------|
| K1717.0305 | side mounting | standard     | 140                 | 1 piece = 1 pair |
| K1717.0356 | side mounting | standard     | 140                 | 1 piece = 1 pair |
| K1717.0407 | side mounting | standard     | 150                 | 1 piece = 1 pair |
| K1717.0457 | side mounting | standard     | 150                 | 1 piece = 1 pair |
| K1717.0508 | side mounting | standard     | 160                 | 1 piece = 1 pair |
| K1717.0559 | side mounting | standard     | 160                 | 1 piece = 1 pair |
| K1717.0610 | side mounting | standard     | 160                 | 1 piece = 1 pair |
| K1717.0660 | side mounting | standard     | 160                 | 1 piece = 1 pair |
| K1717.0711 | side mounting | standard     | 160                 | 1 piece = 1 pair |
| K1717.0762 | side mounting | standard     | 160                 | 1 piece = 1 pair |
| K1717.0813 | side mounting | standard     | 160                 | 1 piece = 1 pair |
| K1717.0864 | side mounting | standard     | 160                 | 1 piece = 1 pair |
| K1717.0914 | side mounting | standard     | 160                 | 1 piece = 1 pair |

| Order No.  | A    | A1    | A2    | A3    | A4    | A5    | A6  | A7    | A8    | A9    | A10   | A11   | A12   | A13   | A14   | B    | H    | Travel S | L     |
|------------|------|-------|-------|-------|-------|-------|-----|-------|-------|-------|-------|-------|-------|-------|-------|------|------|----------|-------|
| K1717.0305 | 31,8 | -     | -     | 184,2 | 200,2 | 241,3 | -   | -     | -     | -     | -     | -     | -     | 179,4 | 198,5 | 19,1 | 70,8 | 304,8    | 304,8 |
| K1717.0356 | 31,8 | -     | -     | 235   | 251   | 292,1 | -   | -     | -     | -     | -     | -     | -     | 230,2 | 249,3 | 19,1 | 70,8 | 355,6    | 355,6 |
| K1717.0407 | 31,8 | -     | -     | 285,8 | 301,8 | 342,9 | 108 | -     | -     | -     | -     | 236,6 | 262   | 281   | 300,1 | 19,1 | 70,8 | 406,4    | 406,4 |
| K1717.0457 | 31,8 | -     | -     | 336,6 | 352,6 | 393,7 | 108 | -     | -     | -     | -     | 287,4 | 312,8 | 331,8 | 350,9 | 19,1 | 70,8 | 457,2    | 457,2 |
| K1717.0508 | 31,8 | -     | -     | 387,4 | 403,4 | 444,5 | 108 | 171,5 | -     | -     | -     | 338,2 | 363,6 | 382,6 | 401,7 | 19,1 | 70,8 | 508      | 508   |
| K1717.0559 | 31,8 | -     | -     | 438,2 | 454,2 | 495,3 | 108 | 171,5 | -     | -     | 328,7 | 389   | 414,4 | 433,4 | 452,5 | 19,1 | 70,8 | 558,8    | 558,8 |
| K1717.0610 | 31,8 | -     | -     | 489   | 505   | 546,1 | 108 | 171,5 | -     | -     | 379,5 | 439,8 | 465,2 | 484,2 | 503,3 | 19,1 | 70,8 | 609,6    | 609,6 |
| K1717.0660 | 31,8 | -     | -     | 539,8 | 555,8 | 596,9 | 108 | 171,5 | -     | -     | 430,3 | 490,6 | 516   | 535   | 554,1 | 19,1 | 70,8 | 660,4    | 660,4 |
| K1717.0711 | 31,8 | -     | -     | 590,6 | 606,6 | 647,7 | 108 | 171,5 | -     | -     | 481,1 | 541,4 | 566,8 | 585,8 | 604,9 | 19,1 | 70,8 | 711,2    | 711,2 |
| K1717.0762 | 31,8 | 203,2 | 469,9 | 641,4 | 657,4 | 698,5 | 108 | 171,5 | -     | -     | 531,9 | 592,2 | 617,6 | 636,6 | 655,7 | 19,1 | 70,8 | 762      | 762   |
| K1717.0813 | 31,8 | 203,2 | 520,7 | 692,2 | 708,2 | 749,3 | 108 | 171,5 | -     | -     | 582,7 | 643   | 688,4 | 687,4 | 706,5 | 19,1 | 70,8 | 812,8    | 812,8 |
| K1717.0864 | 31,8 | 203,2 | 571,5 | 743   | 759   | 800,1 | 108 | 171,5 | 349,3 | -     | 633,5 | 693,8 | 719,2 | 738,2 | 757,3 | 19,1 | 70,8 | 863,6    | 863,6 |
| K1717.0914 | 31,8 | 203,2 | 622,3 | 793,8 | 809,8 | 850,9 | 108 | 171,5 | 349,3 | 501,7 | 684,3 | 744,6 | 770   | 789   | 808,1 | 19,1 | 70,8 | 914,4    | 914,4 |

## Telescopic slides, steel

for side mounting, over-extension, load capacity up to 160 kg



### Material:

Slides steel.  
Ball cages steel.  
Balls, steel.

### Version:

Slides electro zinc-plated.  
Ball cages, electro zinc-plated.  
Balls hardened.

### Sample order:

K1718.0350

### Note for ordering:

Sold in pairs.

### Note:

On telescopic slides with over-extension, the travel is greater than the installed length. Latches in closed position. The dynamic load capacity of the telescopic slides indicates the maximum load rating of a vertically mounted slide pair when the entire extension length is used. The load capacity specified is calculated with a slide spacing of 450 mm and is based on the maximum value with 10,000 or 80,000 cycles.

Not suitable for horizontal mounting.

### Temperature range:

-20°C to +70°C.

### Advantages:

Latches in closed position  
Light running  
Precise guidance for high lateral stability

# Telescopic slides, steel

for side mounting, over-extension, load capacity up to 160 kg

## KIPP Steel telescopic slides for side mounting, over-extension, load capacity up to 160 kg

| Order No.  | Assembly      | Product type | Load capacity<br>per pair<br>(80,000 cycles) kg | Loading pair<br>(10,000 cycles)<br>kg | Packaging type   |
|------------|---------------|--------------|-------------------------------------------------|---------------------------------------|------------------|
| K1718.0300 | side mounting | standard     | 120                                             | 130                                   | 1 piece = 1 pair |
| K1718.0350 | side mounting | standard     | 120                                             | 140                                   | 1 piece = 1 pair |
| K1718.0400 | side mounting | standard     | 130                                             | 150                                   | 1 piece = 1 pair |
| K1718.0450 | side mounting | standard     | 140                                             | 160                                   | 1 piece = 1 pair |
| K1718.0500 | side mounting | standard     | 140                                             | 160                                   | 1 piece = 1 pair |
| K1718.0550 | side mounting | standard     | 140                                             | 160                                   | 1 piece = 1 pair |
| K1718.0600 | side mounting | standard     | 120                                             | 150                                   | 1 piece = 1 pair |
| K1718.0700 | side mounting | standard     | 110                                             | 130                                   | 1 piece = 1 pair |
| K1718.0790 | side mounting | standard     | 100                                             | 100                                   | 1 piece = 1 pair |
| K1718.0900 | side mounting | standard     | 80                                              | 90                                    | 1 piece = 1 pair |
| K1718.1000 | side mounting | standard     | 70                                              | 80                                    | 1 piece = 1 pair |
| K1718.1100 | side mounting | standard     | 60                                              | 70                                    | 1 piece = 1 pair |

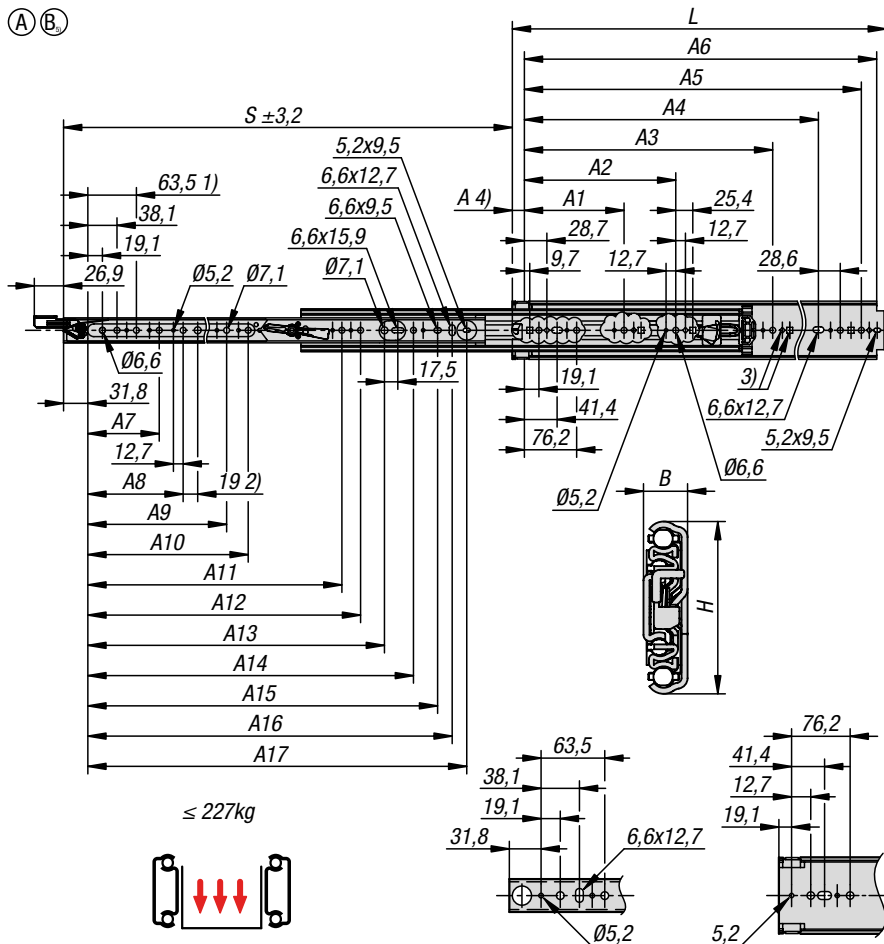
| Order No.  | A  | A1  | A2  | A3  | A4  | A5   | A6  | A7  | A8  | B    | H    | Travel<br>S | L    |
|------------|----|-----|-----|-----|-----|------|-----|-----|-----|------|------|-------------|------|
| K1718.0300 | 26 | -   | -   | -   | 192 | 224  | -   | -   | -   | 19,1 | 53,1 | 323,5       | 300  |
| K1718.0350 | 26 | -   | -   | -   | 224 | 256  | -   | -   | -   | 19,1 | 53,1 | 373,5       | 350  |
| K1718.0400 | 26 | -   | 160 | 192 | 288 | 320  | 128 | 160 | -   | 19,1 | 53,1 | 423,5       | 400  |
| K1718.0450 | 26 | -   | 160 | 192 | 320 | 352  | 128 | 160 | -   | 19,1 | 53,1 | 473,5       | 450  |
| K1718.0500 | 26 | -   | 192 | 224 | 384 | 416  | 160 | 192 | -   | 19,1 | 53,1 | 523,5       | 500  |
| K1718.0550 | 26 | -   | 192 | 224 | 416 | 448  | 160 | 192 | -   | 19,1 | 53,1 | 573,5       | 550  |
| K1718.0600 | 26 | -   | 256 | 288 | 480 | 512  | 192 | 256 | -   | 19,1 | 53,1 | 623,5       | 600  |
| K1718.0700 | 26 | 288 | 320 | 544 | 576 | 608  | 256 | 288 | 544 | 19,1 | 53,1 | 723,5       | 700  |
| K1718.0790 | 26 | -   | 352 | 384 | 672 | 704  | 320 | 352 | 384 | 19,1 | 53,1 | 803,5       | 790  |
| K1718.0900 | 26 | -   | 448 | 480 | 768 | 800  | 352 | 384 | 416 | 19,1 | 53,1 | 923,5       | 900  |
| K1718.1000 | 26 | 448 | 480 | 512 | 864 | 896  | 448 | 480 | -   | 19,1 | 53,1 | 1023,5      | 1000 |
| K1718.1100 | 26 | 448 | 544 | 576 | 992 | 1024 | 448 | 480 | 512 | 19,1 | 53,1 | 1123,5      | 1100 |

## Telescopic slides, steel

for side mounting, full extension, load capacity up to 272 kg



(A) (B)



### Material:

Slides steel.  
Ball cages steel.  
Balls, steel.

### Version:

Slides electro zinc-plated.  
Ball cages, electro zinc-plated.  
Balls hardened.

### Sample order:

1 Pair (latching both sides): K1719.\*\*\*\*0 (left) & K1719.\*\*\*\*1 (right)  
1 Pair (latching one side): K1719.\*\*\*\*0 (left) or K1719.\*\*\*\*1 (right) & K1720.\*\*\*\*

### Note for ordering:

Sold individually.

### Note:

By telescopic slides with full extension, the travel is roughly equal to the installed length, which ensures greater comfort and accessibility. Latches in open and closed positions. The telescopic slides can only be opened or closed after the release lever has been actuated. The dynamic load capacity of the telescopic slides indicates the maximum load rating of a vertically mounted slide pair when the entire extension length is used. The load capacities specified refer to the maximum value for 10,000 cycles.

Not suitable for horizontal mounting.

The head height of the fastening screws should not exceed 4,8 mm otherwise there is a risk of collision with other parts of the slide.

### Drawing reference:

- 1) Mounting hole by K1719.03050 and K1719.03051 not provided
- 2) Mounting hole by K1719.05590 and K1719.05591 not provided
- 3) Cut-out for carriage bolt
- 4) Reference dimension only, not a mounting hole
- 5) Form B, identical dimensions as the right-hand version

These telescopic slides cannot be ordered as a pair. If double sided latching is desired, a left and a right version must be ordered.

If single sided latching is desired, a combination with K1720 is possible.

### Advantages:

Latches in open and closed positions  
For heavy duty use  
Manual release  
Light running

### Accessories:

Steel telescopic slides K1720.

### Attention:

The maximum load rating refers to a pair of telescopic slides.

# Telescopic slides, steel

for side mounting, full extension, load capacity up to 272 kg

## KIPP Steel telescopic slides for side mounting, full extension, load capacity up to 272 kg

| Order No.   | Form | Form definition | Assembly      | Product type | Loading per pair kg | Packaging type        |
|-------------|------|-----------------|---------------|--------------|---------------------|-----------------------|
| K1719.03050 | A    | left            | side mounting | standard     | 272                 | packaged individually |
| K1719.03560 | A    | left            | side mounting | standard     | 272                 | packaged individually |
| K1719.04060 | A    | left            | side mounting | standard     | 272                 | packaged individually |
| K1719.04570 | A    | left            | side mounting | standard     | 272                 | packaged individually |
| K1719.05080 | A    | left            | side mounting | standard     | 272                 | packaged individually |
| K1719.05590 | A    | left            | side mounting | standard     | 272                 | packaged individually |
| K1719.06100 | A    | left            | side mounting | standard     | 267                 | packaged individually |
| K1719.06600 | A    | left            | side mounting | standard     | 264                 | packaged individually |
| K1719.07110 | A    | left            | side mounting | standard     | 261                 | packaged individually |
| K1719.07620 | A    | left            | side mounting | standard     | 258                 | packaged individually |
| K1719.08130 | A    | left            | side mounting | standard     | 256                 | packaged individually |
| K1719.08640 | A    | left            | side mounting | standard     | 256                 | packaged individually |
| K1719.09140 | A    | left            | side mounting | standard     | 248                 | packaged individually |
| K1719.10160 | A    | left            | side mounting | standard     | 237                 | packaged individually |
| K1719.10670 | A    | left            | side mounting | standard     | 228                 | packaged individually |
| K1719.12190 | A    | left            | side mounting | standard     | 204                 | packaged individually |
| K1719.13720 | A    | left            | side mounting | standard     | 196                 | packaged individually |
| K1719.15240 | A    | left            | side mounting | standard     | 182                 | packaged individually |

| Order No.   | A    | A1  | A2    | A3    | A4     | A5     | A6     | A7  | A8    | A9    | A10   | A11   | A12    | A13    | A14    | A15    | A16    | B    | H    | Travel S | L      |
|-------------|------|-----|-------|-------|--------|--------|--------|-----|-------|-------|-------|-------|--------|--------|--------|--------|--------|------|------|----------|--------|
| K1719.03050 | 12,7 | -   | -     | -     | 203,2  | 260,4  | 279,4  | -   | -     | -     | -     | -     | -      | -      | 153,9  | 179,3  | 198,4  | 19,1 | 76,2 | 304,8    | 304,8  |
| K1719.03560 | 12,7 | -   | -     | -     | 254    | 311,2  | 330,2  | -   | -     | -     | -     | -     | -      | -      | 204,7  | 230,1  | 249,2  | 19,1 | 76,2 | 355,6    | 355,6  |
| K1719.04060 | 12,7 | -   | -     | -     | 304,8  | 362    | 381    | -   | -     | -     | -     | -     | -      | -      | 255,5  | 280,9  | 300    | 19,1 | 76,2 | 406,4    | 406,4  |
| K1719.04570 | 12,7 | -   | -     | -     | 355,6  | 412,8  | 431,8  | 127 | -     | -     | -     | -     | -      | -      | 306,3  | 331,7  | 350,8  | 19,1 | 76,2 | 457,2    | 457,2  |
| K1719.05080 | 12,7 | -   | -     | -     | 406,4  | 463,6  | 482,6  | 127 | -     | -     | -     | -     | -      | 296,6  | 357,1  | 382,5  | 401,6  | 19,1 | 76,2 | 508      | 508    |
| K1719.05590 | 12,7 | -   | -     | -     | 457,2  | 514,4  | 533,4  | 127 | 190,5 | -     | -     | -     | -      | 347,7  | 407,9  | 433,3  | 452,4  | 19,1 | 76,2 | 558,8    | 558,8  |
| K1719.06100 | 12,7 | -   | -     | -     | 508    | 565,2  | 584,2  | 127 | 190,5 | -     | -     | -     | -      | 398,5  | 458,7  | 484,1  | 503,2  | 19,1 | 76,2 | 609,6    | 609,6  |
| K1719.06600 | 12,7 | -   | -     | -     | 558,8  | 616    | 635    | 127 | 190,5 | -     | -     | -     | -      | 449,3  | 509,5  | 534,9  | 554    | 19,1 | 76,2 | 660,4    | 660,4  |
| K1719.07110 | 12,7 | -   | -     | -     | 609,6  | 666,8  | 685,8  | 127 | 190,5 | -     | -     | -     | -      | 500,1  | 560,3  | 585,7  | 604,8  | 19,1 | 76,2 | 711,2    | 711,2  |
| K1719.07620 | 12,7 | 235 | -     | 501,7 | 660,4  | 717,6  | 736,6  | 127 | 190,5 | -     | -     | -     | -      | 550,9  | 611,1  | 636,5  | 655,6  | 19,1 | 76,2 | 762      | 762    |
| K1719.08130 | 12,7 | 235 | -     | 552,5 | 711,2  | 768,4  | 787,4  | 127 | 190,5 | -     | -     | -     | -      | 601,7  | 661,9  | 687,3  | 706,4  | 19,1 | 76,2 | 812,8    | 812,8  |
| K1719.08640 | 12,7 | 235 | -     | 603,2 | 762    | 819,1  | 838,2  | 127 | 190,5 | -     | 520,7 | -     | -      | 652,5  | 712,7  | 738,1  | 757,1  | 19,1 | 76,2 | 863,6    | 863,6  |
| K1719.09140 | 12,7 | 235 | -     | 654,1 | 812,8  | 869,9  | 889    | 127 | 190,5 | 368,3 | 520,7 | -     | -      | 703,3  | 763,5  | 788,9  | 807,9  | 19,1 | 76,2 | 914,4    | 914,4  |
| K1719.10160 | 12,7 | 235 | -     | 755,7 | 914,4  | 971,5  | 990,6  | 127 | 190,5 | 368,3 | -     | -     | -      | 804,9  | 865,1  | 890,5  | 909,5  | 19,1 | 76,2 | 1016     | 1016   |
| K1719.10670 | 12,7 | 235 | -     | 806,5 | 965,2  | 1022,4 | 1041,4 | 127 | 190,5 | 368,3 | -     | -     | -      | 855,7  | 915,9  | 941,3  | 960,4  | 19,1 | 76,2 | 1066,8   | 1066,8 |
| K1719.12190 | 12,7 | 235 | -     | 958,9 | 1117,6 | 1174,8 | 1193,8 | 127 | 190,5 | 368,3 | 520,7 | 825,5 | -      | 1008,1 | 1068,3 | 1093,7 | 1112,8 | 19,1 | 76,2 | 1219,2   | 1219,2 |
| K1719.13720 | 12,7 | 235 | -     | 958,9 | 1270   | 1327,2 | 1346,2 | 127 | 190,5 | 368,3 | 520,7 | 825,5 | -      | 1160,5 | 1220,8 | 1246,2 | 1265,2 | 19,1 | 76,2 | 1371,6   | 1371,6 |
| K1719.15240 | 12,7 | 235 | 596,6 | 958,9 | 1422,4 | 1479,5 | 1498,6 | 127 | 190,5 | 368,3 | 520,7 | 825,5 | 1130,3 | 1312,9 | 1373,1 | 1398,5 | 1417,8 | 19,1 | 76,2 | 1524     | 1524   |

# Telescopic slides, steel

for side mounting, full extension, load capacity up to 272 kg



| Order No.   | Form | Form definition | Assembly      | Product type | Loading per pair kg | Packaging type        |
|-------------|------|-----------------|---------------|--------------|---------------------|-----------------------|
| K1719.03051 | B    | right           | side mounting | standard     | 272                 | packaged individually |
| K1719.03561 | B    | right           | side mounting | standard     | 272                 | packaged individually |
| K1719.04061 | B    | right           | side mounting | standard     | 272                 | packaged individually |
| K1719.04571 | B    | right           | side mounting | standard     | 272                 | packaged individually |
| K1719.05081 | B    | right           | side mounting | standard     | 272                 | packaged individually |
| K1719.05591 | B    | right           | side mounting | standard     | 272                 | packaged individually |
| K1719.06101 | B    | right           | side mounting | standard     | 267                 | packaged individually |
| K1719.06601 | B    | right           | side mounting | standard     | 264                 | packaged individually |
| K1719.07111 | B    | right           | side mounting | standard     | 261                 | packaged individually |
| K1719.07621 | B    | right           | side mounting | standard     | 258                 | packaged individually |
| K1719.08131 | B    | right           | side mounting | standard     | 256                 | packaged individually |
| K1719.08641 | B    | right           | side mounting | standard     | 256                 | packaged individually |
| K1719.09141 | B    | right           | side mounting | standard     | 248                 | packaged individually |
| K1719.10161 | B    | right           | side mounting | standard     | 237                 | packaged individually |
| K1719.10671 | B    | right           | side mounting | standard     | 228                 | packaged individually |
| K1719.12191 | B    | right           | side mounting | standard     | 204                 | packaged individually |
| K1719.13721 | B    | right           | side mounting | standard     | 196                 | packaged individually |
| K1719.15241 | B    | right           | side mounting | standard     | 182                 | packaged individually |

| Order No.   | A    | A1  | A2    | A3    | A4     | A5     | A6     | A7  | A8    | A9    | A10   | A11   | A12    | A13    | A14    | A15    | A16    | B    | H    | Travel S | L      |
|-------------|------|-----|-------|-------|--------|--------|--------|-----|-------|-------|-------|-------|--------|--------|--------|--------|--------|------|------|----------|--------|
| K1719.03051 | 12,7 | -   | -     | -     | 203,2  | 260,4  | 279,4  | -   | -     | -     | -     | -     | -      | -      | 153,9  | 179,3  | 198,4  | 19,1 | 76,2 | 304,8    | 304,8  |
| K1719.03561 | 12,7 | -   | -     | -     | 254    | 311,2  | 330,2  | -   | -     | -     | -     | -     | -      | -      | 204,7  | 230,1  | 249,2  | 19,1 | 76,2 | 355,6    | 355,6  |
| K1719.04061 | 12,7 | -   | -     | -     | 304,8  | 362    | 381    | -   | -     | -     | -     | -     | -      | -      | 255,5  | 280,9  | 300    | 19,1 | 76,2 | 406,4    | 406,4  |
| K1719.04571 | 12,7 | -   | -     | -     | 355,6  | 412,8  | 431,8  | 127 | -     | -     | -     | -     | -      | -      | 306,3  | 331,7  | 350,8  | 19,1 | 76,2 | 457,2    | 457,2  |
| K1719.05081 | 12,7 | -   | -     | -     | 406,4  | 463,6  | 482,6  | 127 | -     | -     | -     | -     | -      | 296,6  | 357,1  | 382,5  | 401,6  | 19,1 | 76,2 | 508      | 508    |
| K1719.05591 | 12,7 | -   | -     | -     | 457,2  | 514,4  | 533,4  | 127 | 190,5 | -     | -     | -     | -      | 347,7  | 407,9  | 433,3  | 452,4  | 19,1 | 76,2 | 558,8    | 558,8  |
| K1719.06101 | 12,7 | -   | -     | -     | 508    | 565,2  | 584,2  | 127 | 190,5 | -     | -     | -     | -      | 398,5  | 458,7  | 484,1  | 503,2  | 19,1 | 76,2 | 609,6    | 609,6  |
| K1719.06601 | 12,7 | -   | -     | -     | 558,8  | 616    | 635    | 127 | 190,5 | -     | -     | -     | -      | 449,3  | 509,5  | 534,9  | 554    | 19,1 | 76,2 | 660,4    | 660,4  |
| K1719.07111 | 12,7 | -   | -     | -     | 609,6  | 666,8  | 685,8  | 127 | 190,5 | -     | -     | -     | -      | 500,1  | 560,3  | 585,7  | 604,8  | 19,1 | 76,2 | 711,2    | 711,2  |
| K1719.07621 | 12,7 | 235 | -     | 501,7 | 660,4  | 717,6  | 736,6  | 127 | 190,5 | -     | -     | -     | -      | 550,9  | 611,1  | 636,5  | 655,6  | 19,1 | 76,2 | 762      | 762    |
| K1719.08131 | 12,7 | 235 | -     | 552,5 | 711,2  | 768,4  | 787,4  | 127 | 190,5 | -     | -     | -     | -      | 601,7  | 661,9  | 687,3  | 706,4  | 19,1 | 76,2 | 812,8    | 812,8  |
| K1719.08641 | 12,7 | 235 | -     | 603,2 | 762    | 819,1  | 838,2  | 127 | 190,5 | -     | 520,7 | -     | -      | 652,5  | 712,7  | 738,1  | 757,1  | 19,1 | 76,2 | 863,6    | 863,6  |
| K1719.09141 | 12,7 | 235 | -     | 654,1 | 812,8  | 869,9  | 889    | 127 | 190,5 | 368,3 | 520,7 | -     | -      | 703,3  | 763,5  | 788,9  | 807,9  | 19,1 | 76,2 | 914,4    | 914,4  |
| K1719.10161 | 12,7 | 235 | -     | 755,7 | 914,4  | 971,5  | 990,6  | 127 | 190,5 | 368,3 | -     | -     | -      | 804,9  | 865,1  | 890,5  | 909,5  | 19,1 | 76,2 | 1016     | 1016   |
| K1719.10671 | 12,7 | 235 | -     | 806,5 | 965,2  | 1022,4 | 1041,4 | 127 | 190,5 | 368,3 | -     | -     | -      | 855,7  | 915,9  | 941,3  | 960,4  | 19,1 | 76,2 | 1066,8   | 1066,8 |
| K1719.12191 | 12,7 | 235 | -     | 958,9 | 1117,6 | 1174,8 | 1193,8 | 127 | 190,5 | 368,3 | 520,7 | 825,5 | -      | 1008,1 | 1068,3 | 1093,7 | 1112,8 | 19,1 | 76,2 | 1219,2   | 1219,2 |
| K1719.13721 | 12,7 | 235 | -     | 958,9 | 1270   | 1327,2 | 1346,2 | 127 | 190,5 | 368,3 | 520,7 | 825,5 | -      | 1160,5 | 1220,8 | 1246,2 | 1265,2 | 19,1 | 76,2 | 1371,6   | 1371,6 |
| K1719.15241 | 12,7 | 235 | 596,9 | 958,9 | 1422,4 | 1479,5 | 1498,6 | 127 | 190,5 | 368,3 | 520,7 | 825,5 | 1130,3 | 1312,9 | 1373,1 | 1398,5 | 1417,8 | 19,1 | 76,2 | 1524     | 1524   |



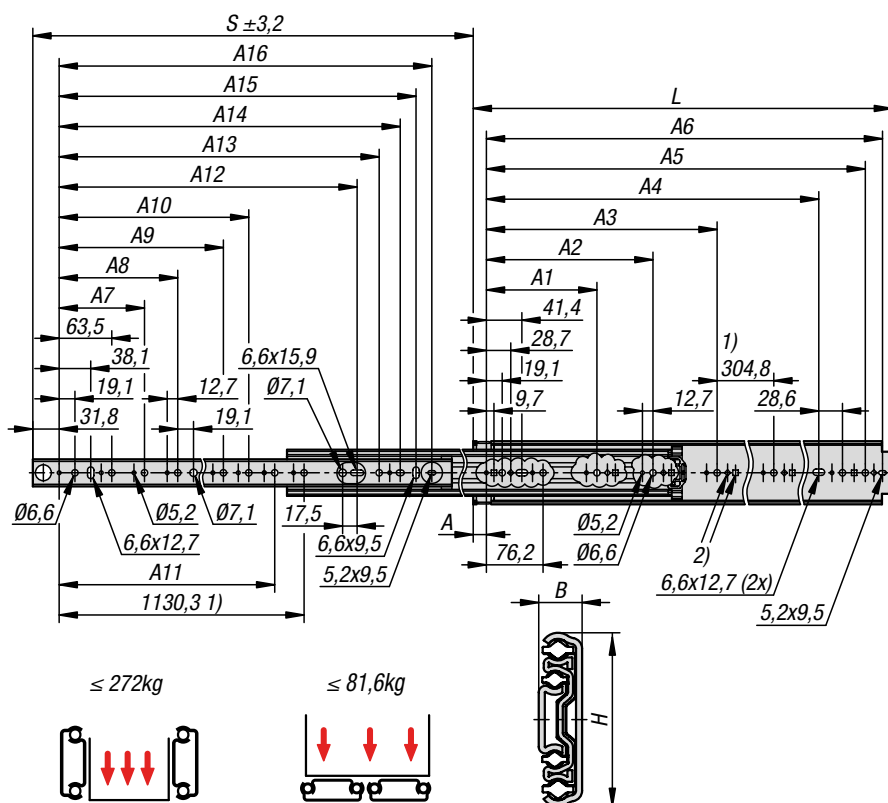
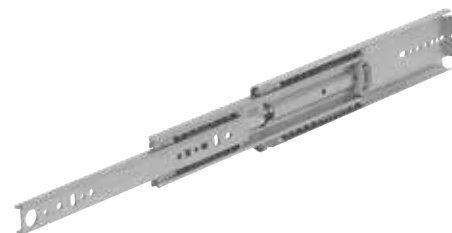
A large grid of graph paper for taking notes.





## Telescopic slides, steel

for side mounting, full extension, load capacity up to 272 kg



### Material:

Slides steel.  
Ball cages steel.  
Balls, steel.

### Version:

Slides electro zinc-plated.  
Ball cages, electro zinc-plated.  
Balls hardened.

### Sample order:

1 Pair (no latching): K1720\*\*\*\* & K1720.\*\*\*\*  
1 Pair (latching one side): K1719.\*\*\*\*0 (left) or  
K1719.\*\*\*\*1 (right) & K1720.\*\*\*\*

### Note for ordering:

Sold individually.

### Note:

By telescopic slides with full extension, the travel is roughly equal to the installed length, which ensures greater comfort and accessibility. The dynamic load capacity of the telescopic slides indicates the maximum load rating of a vertically mounted slide pair when the entire extension length is used. The load capacities specified refer to the maximum value for 10,000 cycles.

The load capacity is ca. 70% lower by horizontal mounting.

The head height of the fastening screws should not exceed 4,8 mm otherwise there is a risk of collision with other parts of the slide.

These telescopic slides cannot be ordered as a pair. If single sided latching is desired, a combination with K1719 is possible.

### Temperature range:

-20°C to +70°C.

### Advantages:

Suitable for flat mounting  
For heavy duty use  
Light running

### Accessories:

Steel telescopic slides K1719.

### Attention:

The maximum load rating refers to a pair of telescopic slides.

### Drawing reference:

1) Mounting hole by K1720.1524 provided  
2) Cut-out for carriage bolt

# Telescopic slides, steel

for side mounting, full extension, load capacity up to 272 kg



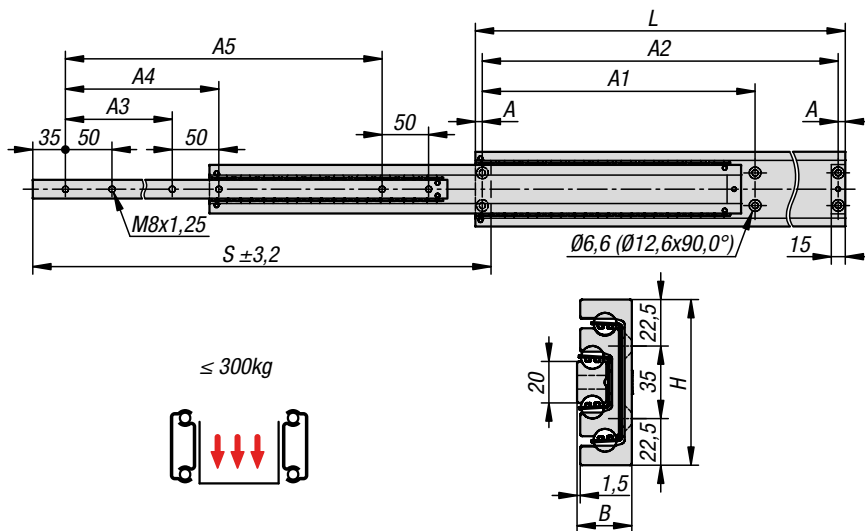
## KIPP Steel telescopic slides for side mounting, full extension, load capacity up to 272 kg

| Order No.  | Assembly      | Product type | Loading per pair kg | Packaging type        |
|------------|---------------|--------------|---------------------|-----------------------|
| K1720.0254 | side mounting | standard     | 272                 | packaged individually |
| K1720.0305 | side mounting | standard     | 272                 | packaged individually |
| K1720.0356 | side mounting | standard     | 272                 | packaged individually |
| K1720.0406 | side mounting | standard     | 272                 | packaged individually |
| K1720.0457 | side mounting | standard     | 272                 | packaged individually |
| K1720.0508 | side mounting | standard     | 272                 | packaged individually |
| K1720.0559 | side mounting | standard     | 272                 | packaged individually |
| K1720.0610 | side mounting | standard     | 267                 | packaged individually |
| K1720.0660 | side mounting | standard     | 264                 | packaged individually |
| K1720.0711 | side mounting | standard     | 261                 | packaged individually |
| K1720.0762 | side mounting | standard     | 258                 | packaged individually |
| K1720.0813 | side mounting | standard     | 256                 | packaged individually |
| K1720.0864 | side mounting | standard     | 253                 | packaged individually |
| K1720.0914 | side mounting | standard     | 248                 | packaged individually |
| K1720.1016 | side mounting | standard     | 237                 | packaged individually |
| K1720.1067 | side mounting | standard     | 228                 | packaged individually |
| K1720.1118 | side mounting | standard     | 218                 | packaged individually |
| K1720.1220 | side mounting | standard     | 204                 | packaged individually |
| K1720.1372 | side mounting | standard     | 196                 | packaged individually |
| K1720.1524 | side mounting | standard     | 182                 | packaged individually |

| Order No.  | A    | A1  | A2    | A3    | A4     | A5     | A6     | A7  | A8    | A9    | A10   | A11   | A12    | A13    | A14    | A15    | A16    | B    | H    | Travel S | L      |
|------------|------|-----|-------|-------|--------|--------|--------|-----|-------|-------|-------|-------|--------|--------|--------|--------|--------|------|------|----------|--------|
| K1720.0254 | 12,7 | -   | -     | -     | 152,4  | 209,6  | 228,6  | -   | -     | -     | -     | -     | -      | 103,1  | 128,5  | 147,6  | 166,6  | 19,1 | 76,2 | 254      | 254    |
| K1720.0305 | 12,7 | -   | -     | -     | 203,2  | 260,4  | 279,4  | -   | -     | -     | -     | -     | -      | 153,9  | 179,3  | 198,4  | 217,4  | 19,1 | 76,2 | 304,8    | 304,8  |
| K1720.0356 | 12,7 | -   | -     | -     | 254    | 311,2  | 330,2  | -   | -     | -     | -     | -     | -      | 204,7  | 230,1  | 249,2  | 268,2  | 19,1 | 76,2 | 355,6    | 355,6  |
| K1720.0406 | 12,7 | -   | -     | -     | 304,8  | 362    | 381    | 127 | -     | -     | -     | -     | -      | 255,5  | 280,9  | 300    | 319    | 19,1 | 76,2 | 406,4    | 406,4  |
| K1720.0457 | 12,7 | -   | -     | -     | 355,6  | 412,8  | 431,8  | 127 | -     | -     | -     | -     | 246,1  | 306,3  | 331,7  | 350,8  | 369,8  | 19,1 | 76,2 | 457,2    | 457,2  |
| K1720.0508 | 12,7 | -   | -     | -     | 406,4  | 463,6  | 482,6  | 127 | 190,5 | -     | -     | -     | 296,9  | 357,1  | 382,5  | 401,6  | 420,6  | 19,1 | 76,2 | 508      | 508    |
| K1720.0559 | 12,7 | -   | -     | -     | 457,2  | 514,4  | 533,4  | 127 | 190,5 | -     | -     | -     | 347,7  | 407,9  | 433,3  | 452,4  | 471,4  | 19,1 | 76,2 | 558,8    | 558,8  |
| K1720.0610 | 12,7 | -   | -     | -     | 508    | 565,2  | 584,2  | 127 | 190,5 | -     | -     | -     | 398,5  | 458,7  | 484,1  | 503,2  | 522,2  | 19,1 | 76,2 | 609,6    | 609,6  |
| K1720.0660 | 12,7 | -   | -     | -     | 558,8  | 616    | 635    | 127 | 190,5 | -     | -     | -     | 449,3  | 509,5  | 534,9  | 554    | 573    | 19,1 | 76,2 | 660,4    | 660,4  |
| K1720.0711 | 12,7 | -   | -     | -     | 609,6  | 666,8  | 685,8  | 127 | 190,5 | -     | -     | -     | 500,1  | 560,3  | 585,7  | 604,8  | 623,8  | 19,1 | 76,2 | 711,2    | 711,2  |
| K1720.0762 | 12,7 | 235 | -     | 501,7 | 660,4  | 717,6  | 736,6  | 127 | 190,5 | 368,3 | -     | -     | 550,9  | 611,1  | 636,5  | 655,6  | 674,6  | 19,1 | 76,2 | 762      | 762    |
| K1720.0813 | 12,7 | 235 | 393,7 | 552,5 | 711,2  | 768,4  | 787,4  | 127 | 190,5 | 368,3 | -     | -     | 601,7  | 661,9  | 687,3  | 706,4  | 725,4  | 19,1 | 76,2 | 812,8    | 812,8  |
| K1720.0864 | 12,7 | 235 | 419,1 | 603,3 | 762    | 819,2  | 838,2  | 127 | 190,5 | 368,3 | 469,9 | -     | 652,5  | 712,7  | 738,1  | 757,2  | 776,2  | 19,1 | 76,2 | 863,6    | 863,6  |
| K1720.0914 | 12,7 | 235 | 444,5 | 654,1 | 812,8  | 870    | 889    | 127 | 190,5 | 368,3 | 520,7 | -     | 703,3  | 763,5  | 788,9  | 808    | 827    | 19,1 | 76,2 | 914,4    | 914,4  |
| K1720.1016 | 12,7 | 235 | 546,1 | 755,7 | 914,4  | 971,6  | 990,6  | 127 | 190,5 | 368,3 | 520,7 | -     | 804,9  | 865,1  | 890,5  | 909,6  | 928,6  | 19,1 | 76,2 | 1016     | 1016   |
| K1720.1067 | 12,7 | 235 | 546,1 | 806,5 | 965,2  | 1022,4 | 1041,4 | 127 | 190,5 | 368,3 | 520,7 | -     | 855,7  | 915,9  | 941,3  | 960,4  | 979,4  | 19,1 | 76,2 | 1066,8   | 1066,8 |
| K1720.1118 | 12,7 | 235 | 546,1 | 857,3 | 1016   | 1073,2 | 1092,2 | 127 | 190,5 | 368,3 | 520,7 | -     | 906,5  | 966,7  | 992,1  | 1011,2 | 1030,2 | 19,1 | 76,2 | 1117,6   | 1117,6 |
| K1720.1220 | 12,7 | 235 | 596,9 | 958,9 | 1117,6 | 1174,8 | 1193,8 | 127 | 190,5 | 368,3 | 520,7 | 825,5 | 1008,1 | 1068,3 | 1093,7 | 1112,8 | 1131,8 | 19,1 | 76,2 | 1219,2   | 1219,2 |
| K1720.1372 | 12,7 | 235 | 596,9 | 958,9 | 1270   | 1327,2 | 1346,2 | 127 | 190,5 | 368,3 | 520,7 | 825,5 | 1160,5 | 1220,8 | 1246,2 | 1265,2 | 1284,2 | 19,1 | 76,2 | 1371,6   | 1371,6 |
| K1720.1524 | 12,7 | 235 | 596,9 | 958,9 | 1422,4 | 1479,6 | 1498,6 | 127 | 190,5 | 368,3 | 520,7 | 825,5 | 1312,9 | 1373,1 | 1398,5 | 1417,6 | 1436,6 | 19,1 | 76,2 | 1524     | 1524   |

## Telescopic slides, aluminium

for side mounting, full extension, load capacity up to 300 kg



**Material:**

Rail aluminium.  
Ball cage stainless steel 1.4301.  
Balls stainless steel 1.4021.

**Version:**

Slides bright.  
Ball cages bright.  
Balls bright.

**Sample order:**

K1721.0350

**Note for ordering:**

Sold in pairs.

**Note:**

By telescopic slides with full extension, the travel is roughly equal to the installed length, which ensures greater comfort and accessibility. The dynamic load capacity of the telescopic slides indicates the maximum load rating of a vertically mounted slide pair when the entire extension length is used. The load capacity specified is calculated with a slide spacing of 600 mm and is based on the maximum value with 10,000 cycles.

Not suitable for horizontal mounting.

Re-lubrication with high pressure grease is recommended after 2,000 cycles.

The end plate has been tested with the specified load rating over 10 cycles and a speed of 0.8 m/s. External end plates are also recommended.

**Temperature range:**

-20°C to +110°C.

# Telescopic slides, aluminium

for side mounting, full extension, load capacity up to 300 kg

## KIPP Aluminium telescopic slides for side mounting, full extension, load capacity up to 300 kg

| Order No.  | Assembly      | Product type | Loading<br>per pair<br>kg | Packaging type   |
|------------|---------------|--------------|---------------------------|------------------|
| K1721.0300 | side mounting | standard     | 240                       | 1 piece = 1 pair |
| K1721.0350 | side mounting | standard     | 255                       | 1 piece = 1 pair |
| K1721.0400 | side mounting | standard     | 270                       | 1 piece = 1 pair |
| K1721.0450 | side mounting | standard     | 285                       | 1 piece = 1 pair |
| K1721.0500 | side mounting | standard     | 300                       | 1 piece = 1 pair |
| K1721.0550 | side mounting | standard     | 300                       | 1 piece = 1 pair |
| K1721.0600 | side mounting | standard     | 300                       | 1 piece = 1 pair |
| K1721.0650 | side mounting | standard     | 295                       | 1 piece = 1 pair |
| K1721.0700 | side mounting | standard     | 290                       | 1 piece = 1 pair |
| K1721.0800 | side mounting | standard     | 270                       | 1 piece = 1 pair |
| K1721.0900 | side mounting | standard     | 250                       | 1 piece = 1 pair |
| K1721.1000 | side mounting | standard     | 230                       | 1 piece = 1 pair |

| Order No.  | A   | A1    | A2  | A3  | A4  | A5  | B    | H  | Travel<br>S | L    |
|------------|-----|-------|-----|-----|-----|-----|------|----|-------------|------|
| K1721.0300 | 7,5 | 142,5 | 285 | 75  | 125 | 150 | 26,5 | 80 | 300         | 300  |
| K1721.0350 | 7,5 | 167,5 | 335 | 100 | 150 | 200 | 26,5 | 80 | 350         | 350  |
| K1721.0400 | 7,5 | 192,5 | 385 | 125 | 175 | 250 | 26,5 | 80 | 400         | 400  |
| K1721.0450 | 7,5 | 217,5 | 435 | 150 | 200 | 300 | 26,5 | 80 | 450         | 450  |
| K1721.0500 | 7,5 | 242,5 | 485 | 175 | 225 | 350 | 26,5 | 80 | 500         | 500  |
| K1721.0550 | 7,5 | 267,5 | 535 | 200 | 250 | 400 | 26,5 | 80 | 550         | 550  |
| K1721.0600 | 7,5 | 292,5 | 585 | 225 | 275 | 450 | 26,5 | 80 | 600         | 600  |
| K1721.0650 | 7,5 | 317,5 | 635 | 250 | 300 | 500 | 26,5 | 80 | 650         | 650  |
| K1721.0700 | 7,5 | 342,5 | 685 | 275 | 325 | 550 | 26,5 | 80 | 700         | 700  |
| K1721.0800 | 7,5 | 392,5 | 785 | 325 | 375 | 650 | 26,5 | 80 | 800         | 800  |
| K1721.0900 | 7,5 | 442,5 | 885 | 375 | 425 | 750 | 26,5 | 80 | 900         | 900  |
| K1721.1000 | 7,5 | 492,5 | 985 | 425 | 475 | 850 | 26,5 | 80 | 1000        | 1000 |

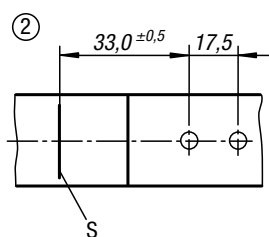
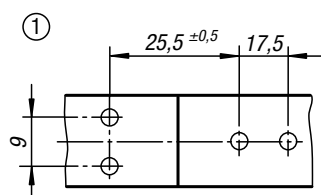
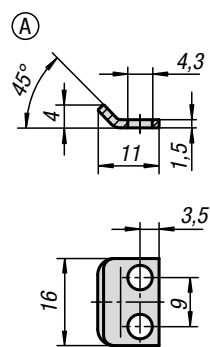
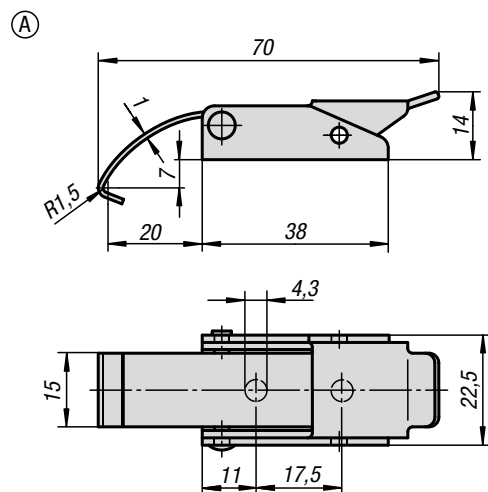


## Latches, snap locks, slam latches



# Latches

with spring clip



## Material:

Steel or stainless steel 1.4301.

## Version:

Steel trivalent blue passivated.  
Stainless steel bright.

## Sample order:

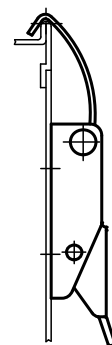
Latch K0043.1430701

Catch plate K0043.9143111

## Drawing reference:

- 1) Hole arrangement for mounting with catch plate
- 2) Hole arrangement for mounting without catch plate

S = contact edge



## KIPP Latches with spring clip

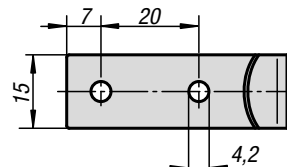
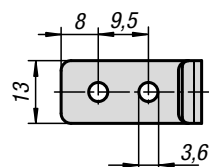
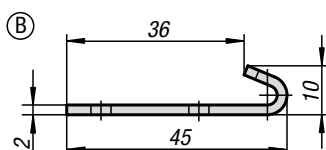
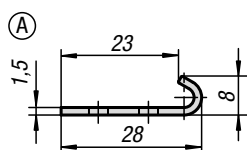
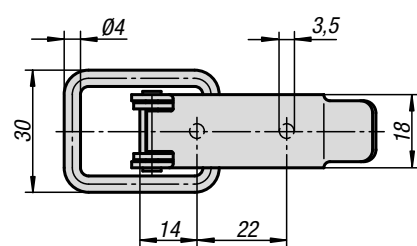
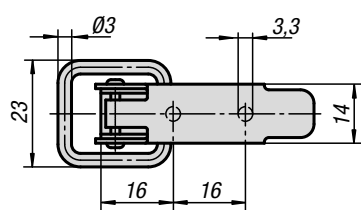
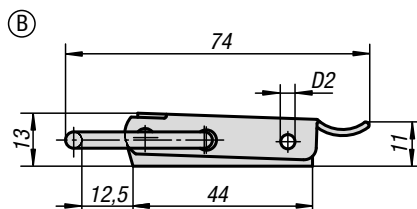
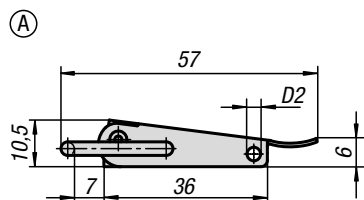
| Order No.<br>steel | Order No.<br>stainless steel | Form | Retaining<br>force<br>F1 N |
|--------------------|------------------------------|------|----------------------------|
| K0043.1430701      | K0043.1430702                | A    | 500                        |

## KIPP Catch plates

| Order No.<br>steel | Order No.<br>stainless steel | Form |
|--------------------|------------------------------|------|
| K0043.9143111      | K0043.9143112                | A    |

# Latches

with draw bail



## Material:

Steel or stainless steel 1.4301.

## Version:

Steel trivalent blue passivated.  
Stainless steel bright.

## Sample order:

Latch K0044.1330571

Catch plate K0044.9136281

## Note:

Latches with draw bail for securing and locking hatches, container lids, machine cladding etc. By exceeding the dead centre they resist vibration. The fastening force is applied by drawing on the bail.

The hole D2 can be used to secure against unintentional opening or attaching an official lead seal.

The latches can be screwed down or riveted.

Order catch plates separately.

The retaining force F1 applies to the latch, not the catch plate.



## KIPP Latches with draw bail

| Order No.<br>steel | Order No.<br>stainless steel | Form | D2  | Retaining<br>force<br>F1 N |
|--------------------|------------------------------|------|-----|----------------------------|
| K0044.1330571      | K0044.1330572                | A    | 2,8 | 1000                       |
| K0044.2350741      | K0044.2350742                | B    | 3,2 | 2000                       |

## KIPP Catch plates

| Order No.<br>steel | Order No.<br>stainless steel | Form |
|--------------------|------------------------------|------|
| K0044.9136281      | K0044.9136282                | A    |
| K0044.9242451      | K0044.9242452                | B    |



## Latch stainless steel

DIN 3133



### Material:

Stainless steel 1.4301.

### Version:

Vibratory ground.

### Sample order:

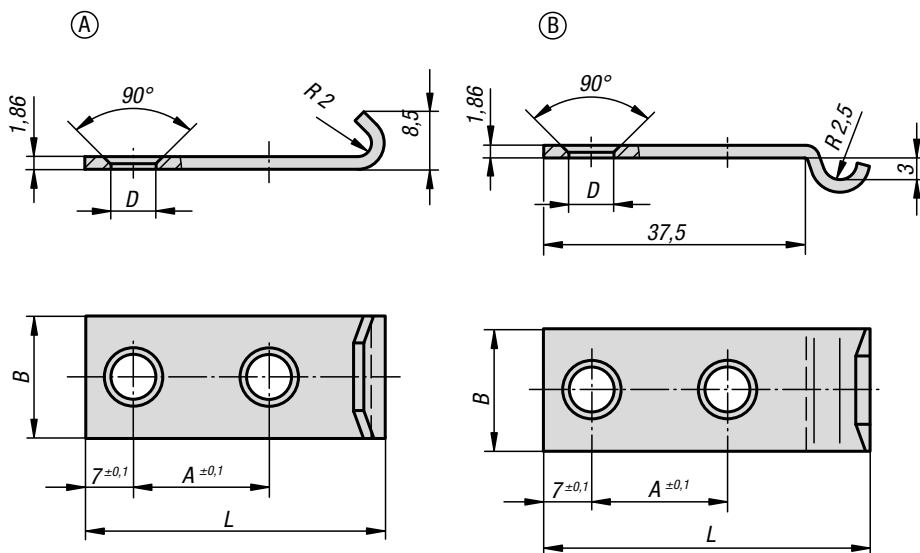
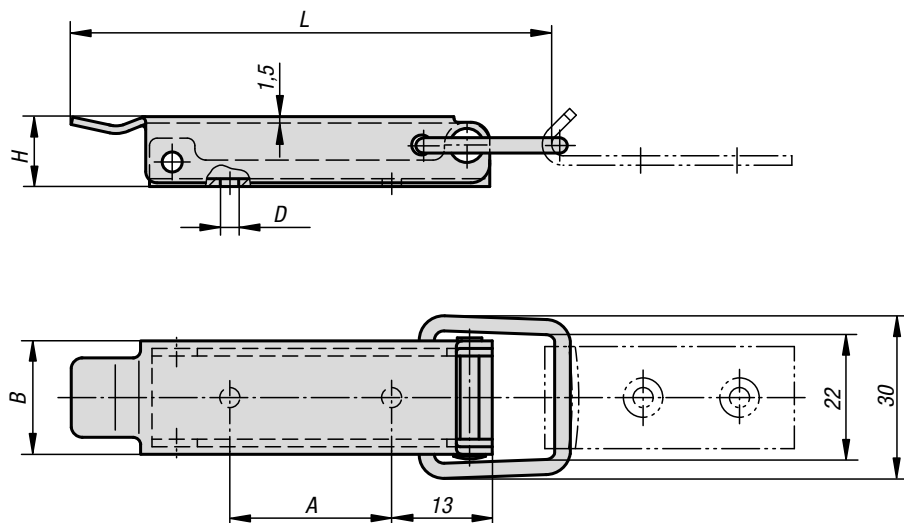
Latch K1336.350742

Catch plate K1336.91460442

### Note:

For quickly locking vertical or horizontal lids and hatches.

With security seal possibility.



### KIPP Latch stainless steel DIN 3133

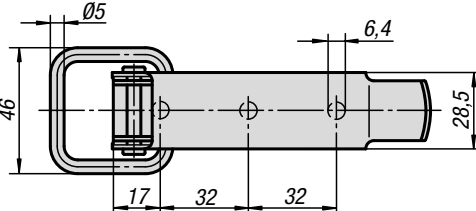
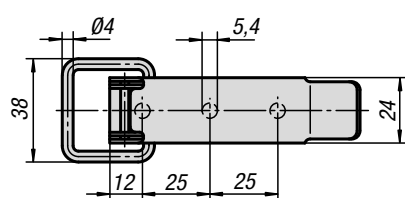
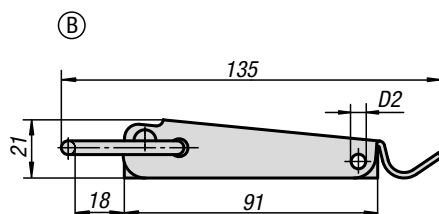
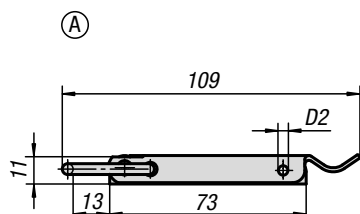
| Order No.    | L  | B  | H  | A  | D   |
|--------------|----|----|----|----|-----|
| K1336.350742 | 70 | 18 | 12 | 22 | 3,5 |

### KIPP Catch plates

| Order No.      | Form | L  | B  | A  | D   |
|----------------|------|----|----|----|-----|
| K1336.91460442 | A    | 44 | 18 | 20 | 4,8 |
| K1336.92460482 | B    | 48 | 18 | 20 | 4,8 |

# Latches

with draw bail



## Material:

Steel or stainless steel 1.4301.

## Version:

Steel trivalent blue passivated.  
Stainless steel bright.

## Sample order:

Latch K0045.1541091

Catch plate K0045.9143371

## Note:

Latches with draw bail for securing and locking hatches, container lids, machine cladding etc. By exceeding the dead centre they resist vibration. The fastening force is applied by drawing on the bail.

The hole D2 can be used to secure against unintentional opening or attaching an official lead seal.

The latches can be screwed down or riveted.

Order catch plates separately.

The retaining force F1 applies to the latch, not the catch plate.

## On request:

Lockable version with padlock bracket.



## KIPP Latches with draw bail

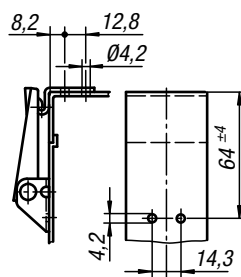
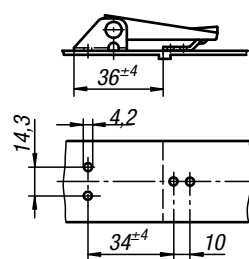
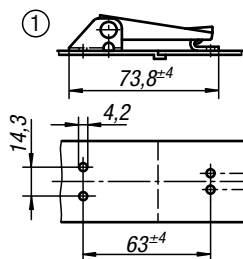
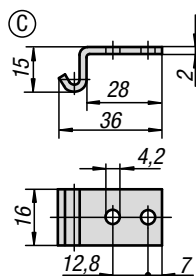
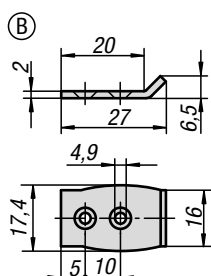
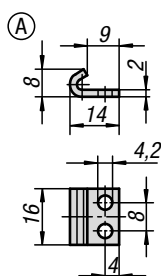
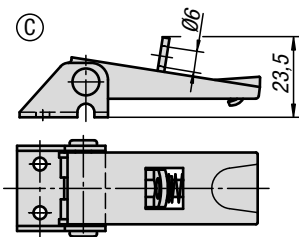
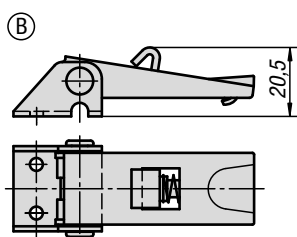
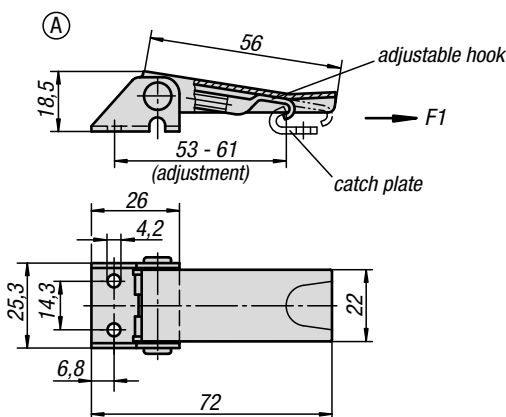
| Order No.<br>steel | Order No.<br>stainless steel | Form | D2  | Retaining<br>force<br>F1 N |
|--------------------|------------------------------|------|-----|----------------------------|
| K0045.1541091      | K0045.1541092                | A    | 3,2 | 2000                       |
| K0045.2641351      | K0045.2641352                | B    | 3,8 | 3000                       |

## KIPP Catch plates

| Order No.<br>steel | Order No.<br>stainless steel | Form |
|--------------------|------------------------------|------|
| K0045.9143371      | K0045.9143372                | A    |
| K0045.9254771      | K0045.9254772                | B    |

# Latches adjustable

fastening holes accessible



## Material:

Steel or stainless steel 1.4301.

## Version:

Steel trivalent blue passivated.  
Stainless steel bright.

## Sample order:

Latch K0046.1420721

Catch plate K0046.9142141

## Note:

Adjustable latches are secure locking systems for industrial applications. By exceeding the dead centre they resist vibration.

After the hook is engaged with the catch plate, the parts to be locked can be drawn together by up to 5 mm by pushing the lever down.

To compensate for tolerances or to create enough tension, the hook length can be adjusted using the M5 threaded spindle.

The latches can be screwed down or riveted.

Any catch plate can be combined with any latch.

Order required catch plate version separately.

The retaining force F1 applies to the latch, not the catch plate.

## Drawing reference:

Form A standard

Form B with safety catch

Form C with padlock bracket

1) Hole arrangements for assembly with catch plate

## KIPP Latches adjustable, fastening holes accessible

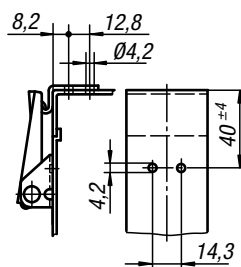
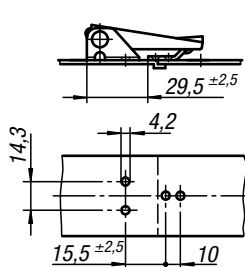
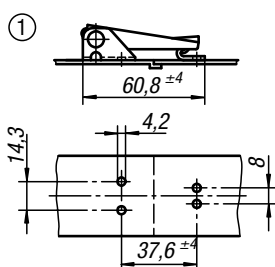
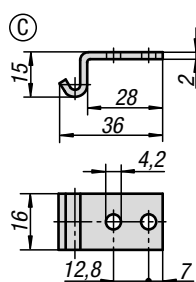
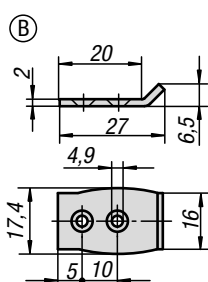
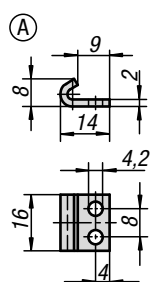
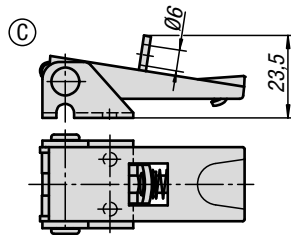
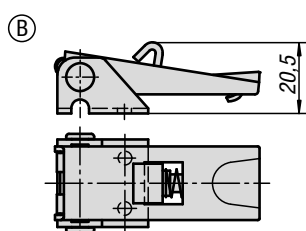
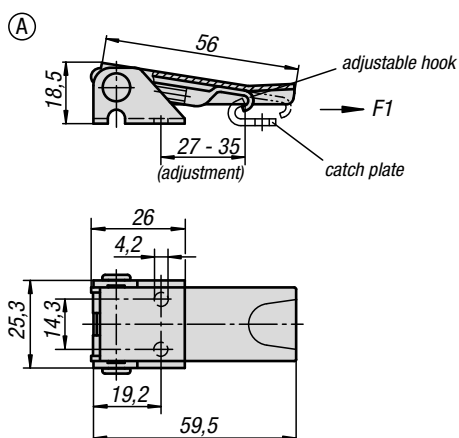
| Order No.<br>steel | Order No.<br>stainless steel | Form | Retaining<br>force<br>F1 N |
|--------------------|------------------------------|------|----------------------------|
| K0046.1420721      | K0046.1420722                | A    | 1000                       |
| K0046.2420721      | K0046.2420722                | B    | 1000                       |
| K0046.3420721      | K0046.3420722                | C    | 1000                       |

## KIPP Catch plates

| Order No.<br>steel | Order No.<br>stainless steel | Form |
|--------------------|------------------------------|------|
| K0046.9142141      | K0046.9142142                | A    |
| K0046.9242271      | K0046.9242272                | B    |
| K0046.9342381      | K0046.9342382                | C    |

## Latches adjustable

fastening holes covered



### Material:

Steel or stainless steel 1.4301.

### Version:

Steel trivalent blue passivated.  
Stainless steel bright.

### Sample order:

Latch K0047.1420601

Catch plate K0046.9142141

### Note:

Adjustable latches are secure locking systems for industrial applications. By exceeding the dead centre they resist vibration.

After the hook is engaged with the catch plate, the parts to be locked can be drawn together by up to 5 mm by pushing the lever down.

To compensate for tolerances or to create enough tension, the hook length can be adjusted using the M5 threaded spindle.

The latches can be screwed down or riveted.

Any catch plate can be combined with any latch.

Order required catch plate version separately.

The retaining force F1 applies to the latch, not the catch plate.

### Drawing reference:

Form A standard

Form B with safety catch

Form C with padlock bracket

1) Hole arrangements for assembly with catch plate

## KIPP Latches adjustable, fastening holes covered

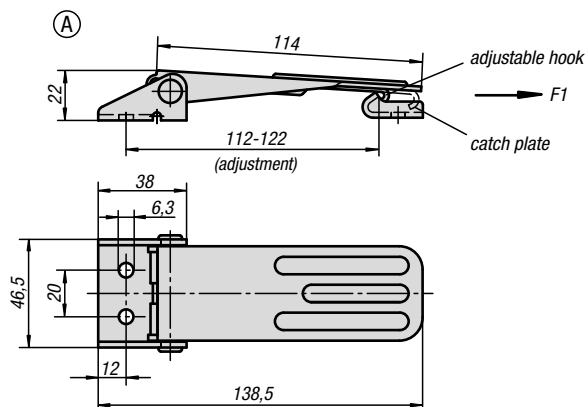
| Order No.<br>steel | Order No.<br>stainless steel | Form | Retaining<br>force<br>F1 N |
|--------------------|------------------------------|------|----------------------------|
| K0047.1420601      | K0047.1420602                | A    | 1000                       |
| K0047.2420601      | K0047.2420602                | B    | 1000                       |
| K0047.3420601      | K0047.3420602                | C    | 1000                       |

## KIPP Catch plates

| Order No.<br>steel | Order No.<br>stainless steel | Form |
|--------------------|------------------------------|------|
| K0046.9142141      | K0046.9142142                | A    |
| K0046.9242271      | K0046.9242272                | B    |
| K0046.9342381      | K0046.9342382                | C    |

# Latches adjustable

fastening holes accessible



## Material:

Steel or stainless steel 1.4301.

## Version:

Steel trivalent blue passivated.  
Stainless steel bright.

## Sample order:

Latch K0048.1631391

Catch plate K0048.9163281

## Note:

Adjustable latches are secure locking systems for industrial applications. By exceeding the dead center they resist vibration. These latches are very robust and have a low overall height.

After the hook is engaged with the catch plate, the parts to be locked can be drawn together by up to 6 mm by pushing the lever down. To compensate for tolerances or to create enough tension, the hook length can be adjusted using the M6 threaded spindle.

The latches can be screwed down or riveted.

Order required catch plate separately.

The retaining force F1 applies to the latch, not the catch plate.

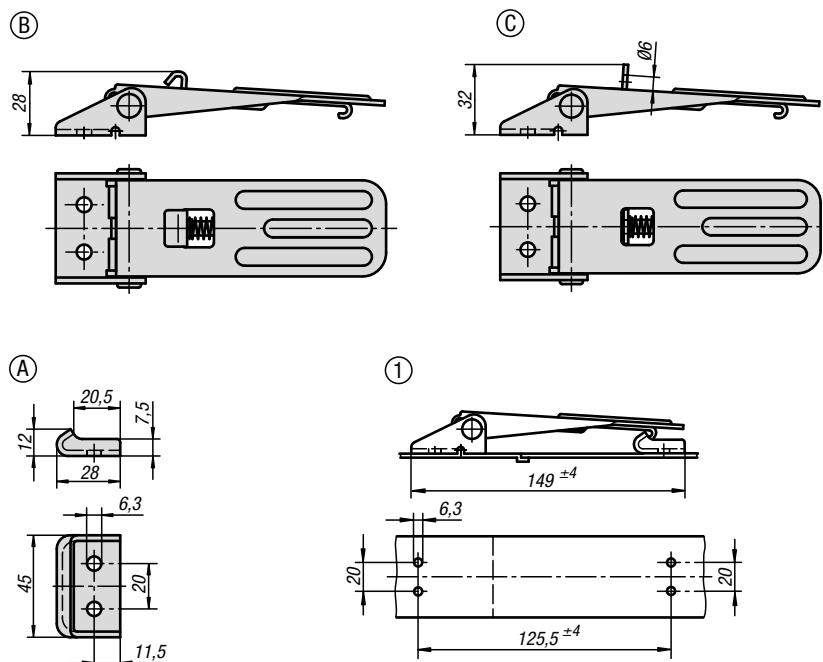
## Drawing reference:

Form A standard

Form B with lock

Form C with padlock hole

1) Hole arrangement for assembly with catch plate



## KIPP Latches adjustable, fastening holes accessible

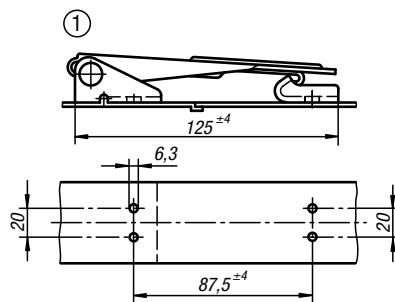
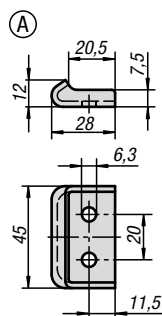
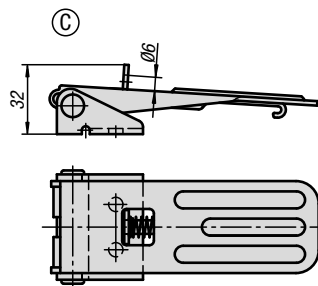
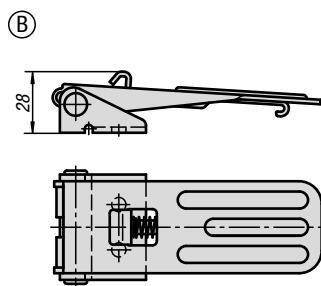
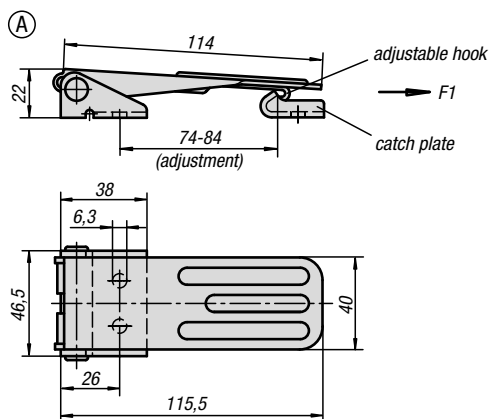
| Order No.<br>steel | Order No.<br>stainless steel | Form | Retaining<br>force<br>F1 N |
|--------------------|------------------------------|------|----------------------------|
| K0048.1631391      | K0048.1631392                | A    | 4000                       |
| K0048.2631391      | K0048.2631392                | B    | 4000                       |
| K0048.3631391      | K0048.3631392                | C    | 4000                       |

## KIPP Catch plates

| Order No.<br>steel | Order No.<br>stainless steel | Form |
|--------------------|------------------------------|------|
| K0048.9163281      | K0048.9163282                | A    |

# Latches adjustable

fastening holes covered



## Material:

Steel or stainless steel 1.4301.

## Version:

Steel trivalent blue passivated.  
Stainless steel bright.

## Sample order:

Latch K0049.1631161

Catch plate K0048.9163281

## Note:

Adjustable latches are secure locking systems for industrial applications. By exceeding the dead center they resist vibration. These latches are very robust and have a low overall height.

After the hook is engaged with the catch plate, the parts to be locked can be drawn together by up to 6 mm by pushing the lever down. To compensate for tolerances or to create enough tension, the hook length can be adjusted using the M6 threaded spindle.

The latches can be screwed down or riveted.

Order required catch plate separately.

The retaining force F1 applies to the latch, not the catch plate.

## Drawing reference:

Form A standard

Form B with lock

Form C with padlock hole

1) Hole arrangement for assembly with catch plate

## KIPP Latches adjustable, fastening holes covered

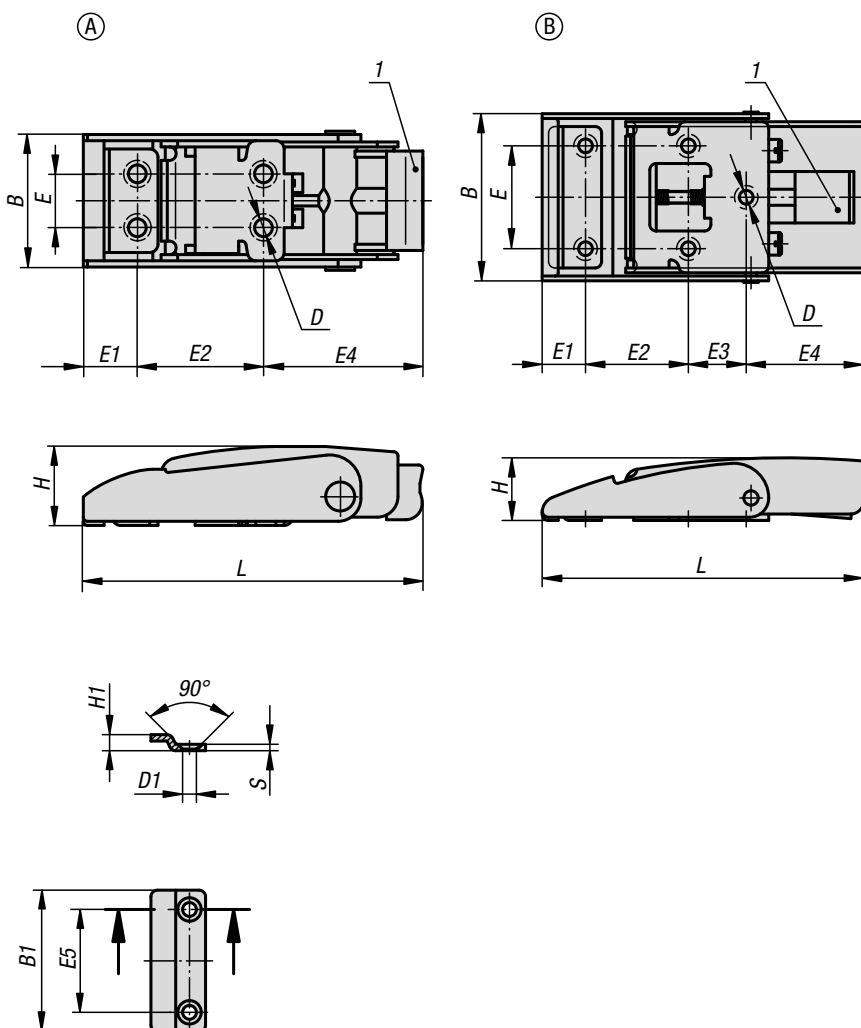
| Order No.<br>steel | Order No.<br>stainless steel | Form | Retaining<br>force<br>F1 N |
|--------------------|------------------------------|------|----------------------------|
| K0049.1631161      | K0049.1631162                | A    | 4000                       |
| K0049.2631161      | K0049.2631162                | B    | 4000                       |
| K0049.3631161      | K0049.3631162                | C    | 4000                       |

## KIPP Catch plates

| Order No.<br>steel | Order No.<br>stainless steel | Form |
|--------------------|------------------------------|------|
| K0048.9163281      | K0048.9163282                | A    |

## Latches with release

stainless steel



**Material:**  
Stainless steel 1.4301.

**Version:**  
Bright.  
The latch surface is satin finished.

**Sample order:**  
K1357.43082

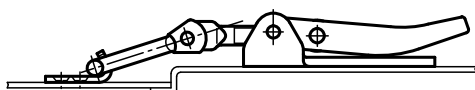
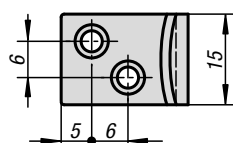
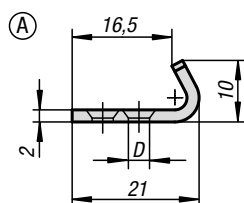
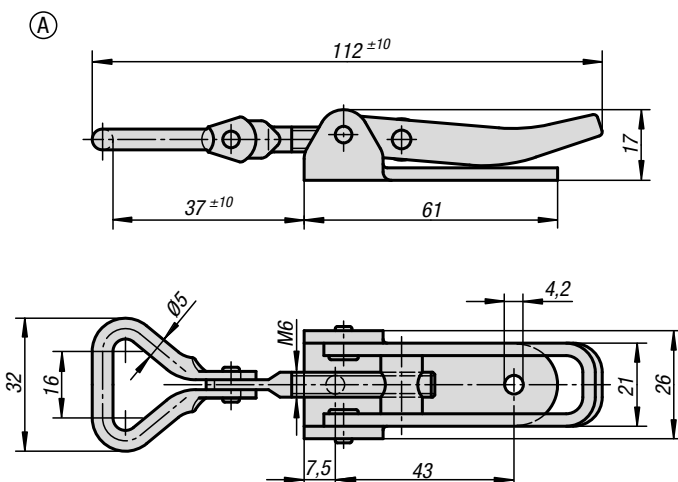
**Drawing reference:**  
1) Release

### KIPP Latches with release stainless steel

| Order No.   | Form | L   | E  | E1   | E2 | E3 | E4   | B    | H    | D   | B1 | E5 | H1 | D1  | S |
|-------------|------|-----|----|------|----|----|------|------|------|-----|----|----|----|-----|---|
| K1357.43082 | A    | 82  | 13 | 13,5 | 30 | -  | 38,5 | 33,6 | 19,5 | 4,3 | 25 | 13 | 5  | 4,3 | 2 |
| K1357.43100 | B    | 100 | 32 | 13,5 | 32 | 18 | 36,5 | 53   | 19,5 | 4,3 | 44 | 32 | 5  | 4,3 | 2 |

# Latches adjustable

with swing bail



## Material:

Steel or stainless steel 1.4301.

## Version:

Steel trivalent blue passivated.  
Stainless steel bright.

## Sample order:

Latch K0050.1421121

Catch plate K0050.9135211

## Note:

Adjustable latches are secure locking systems for industrial applications. By exceeding the dead center they resist vibration. To compensate for tolerances the latch has a swing mounted bail.

After the bail is engaged with the catch plate, the parts to be locked can be drawn together by up to 15 mm by pushing the lever down. To compensate for tolerances or to create enough tension the bail length can be adjusted by the M6 threaded spindle.

The latches can be screwed down or riveted. We recommend using countersunk screws for fastening the components.

Order catch plates separately.

The retaining force F1 applies to the latch, not the catch plate.

## On request:

Available with safety catch to prevent springing open.

## Accessories:

K0044.9242451

K0044.9242452

## Applications:

We recommend using countersunk screws for fastening the components.

## KIPP Latches adjustable, with swing bail

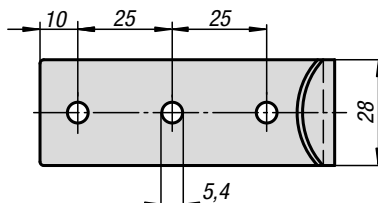
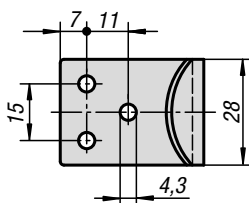
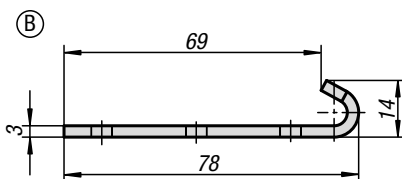
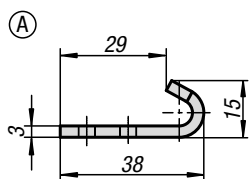
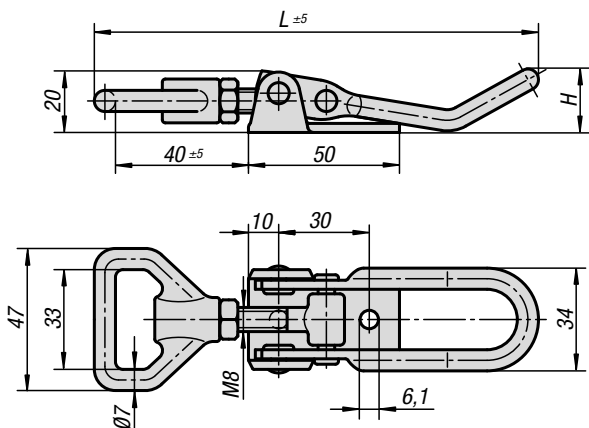
| Order No.<br>steel | Order No.<br>stainless steel | Form | Retaining<br>force<br>F1 N |
|--------------------|------------------------------|------|----------------------------|
| K0050.1421121      | K0050.1421122                | A    | 1000                       |

## KIPP Catch plates

| Order No.<br>steel | Order No.<br>stainless steel | Form | D   |
|--------------------|------------------------------|------|-----|
| K0050.9135211      | K0050.9135212                | A    | 3,7 |



# Latches adjustable


**Material:**

Steel or stainless steel 1.4301.

**Version:**

Steel trivalent blue passivated.  
Stainless steel bright.

**Sample order:**

Latch K0051.1611451

Catch plate K0051.9143381

**Note:**

Adjustable latches are secure locking systems for industrial applications. By exceeding the dead center they resist vibration.

After the bail engages with the catch plate, the parts to be locked can be drawn together by up to 15 mm by pushing the lever down. To compensate for tolerances or to create enough tension the bail length can be adjusted using the M8 spindle.

The latches can be screwed down or riveted. We recommend using countersunk screws for fastening the components.

Order the required catch plate version separately.

The retaining force F1 applies to the latch, not the catch plate.

**On request:**

Lockable version with padlock bracket.

**Applications:**

We recommend using countersunk screws for fastening the components.

## KIPP Latches adjustable

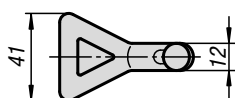
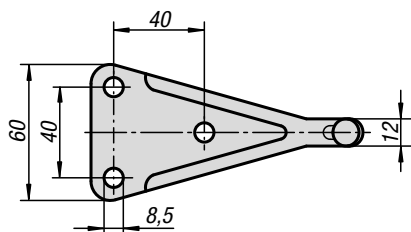
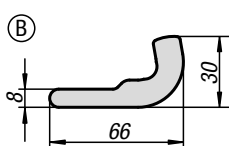
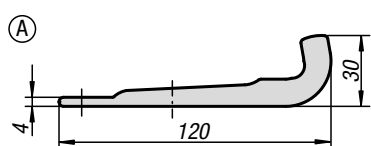
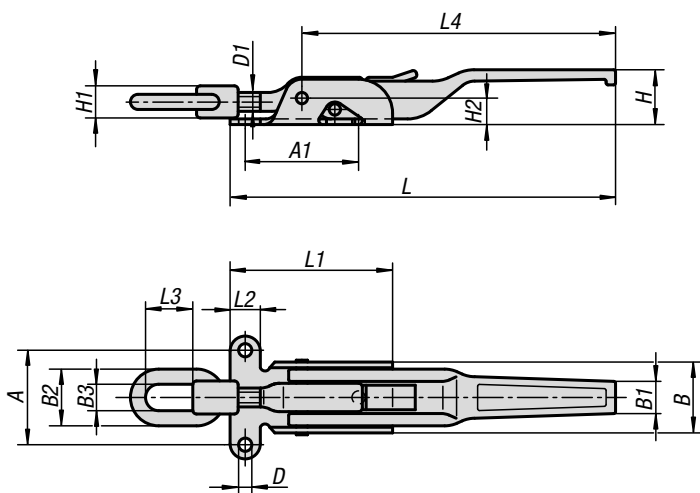
| Order No.<br>steel | Order No.<br>stainless steel | H  | L   | Retaining<br>force<br>F1 N |
|--------------------|------------------------------|----|-----|----------------------------|
| K0051.1611451      | K0051.1611452                | 21 | 145 | 6500                       |
| K0051.1611681      | K0051.1611682                | 36 | 168 | 6500                       |

## KIPP Catch plates

| Order No.<br>steel | Order No.<br>stainless steel | Form |
|--------------------|------------------------------|------|
| K0051.9143381      | K0051.9143382                | A    |
| K0051.9254781      | K0051.9254782                | B    |

# Latches adjustable

heavy-duty version



**Material:**  
Steel.

**Version:**  
Trivalent blue passivated.  
Catch plate Form B (weldable), bright.

**Sample order:**  
Latch K0052.1702041  
Catch plate K0052.91851201

**Note:**  
Heavy-duty forged latches for high tensile loads.  
Primarily used on utility vehicles, agricultural  
and construction machinery. A ratchet prevents  
unintentional opening when closed.

To compensate for tolerances or to create enough  
tension the bail can be adjusted using the spindle D1.

Order required catch plate version separately.

The retaining force F1 applies to the latch, not the  
catch plate.

## KIPP Latches adjustable, heavy-duty version

| Order No.     | A  | A1 | B  | B1 | B2 | B3 | D   | D1      | H  | H1 | H2 | L   | L1  | L2 | L3 | L4  | Retaining<br>force<br>F1 N |
|---------------|----|----|----|----|----|----|-----|---------|----|----|----|-----|-----|----|----|-----|----------------------------|
| K0052.1702041 | 49 | 62 | 37 | 18 | 30 | 14 | 7   | M10     | 30 | 17 | 14 | 204 | 86  | 16 | 25 | 165 | 20000                      |
| K0052.1852371 | 65 | 82 | 50 | 20 | 36 | 15 | 8,5 | M14x1,5 | 32 | 20 | 18 | 237 | 104 | 21 | 40 | 190 | 30500                      |

## KIPP Catch plates

| Order No.      | Form |
|----------------|------|
| K0052.91851201 | A    |
| K0052.92000601 | B    |

## Remote release, zinc



### Material:

Grip and housing die-cast zinc.

### Version:

Grip and housing powder-coated black or silver.

### Sample order:

K1481.2111114511

### Note:

When the grip is pulled out, hatches, covers, hoods or doors can be opened remotely and invisibly via Bowden cable.

The lockable releases are each supplied with 2 keys. The key can be removed in both positions (open and closed). The locks have a single key system, i.e. every lock can be opened with the same key. The Bowden cable is not included.

### Application:

The remote actuation is used where tight spaces make actuation difficult or where remote actuation is required for ergonomic or safety reasons.

### Assembly:

Form A: rear.

Form B: front.

### Advantages:

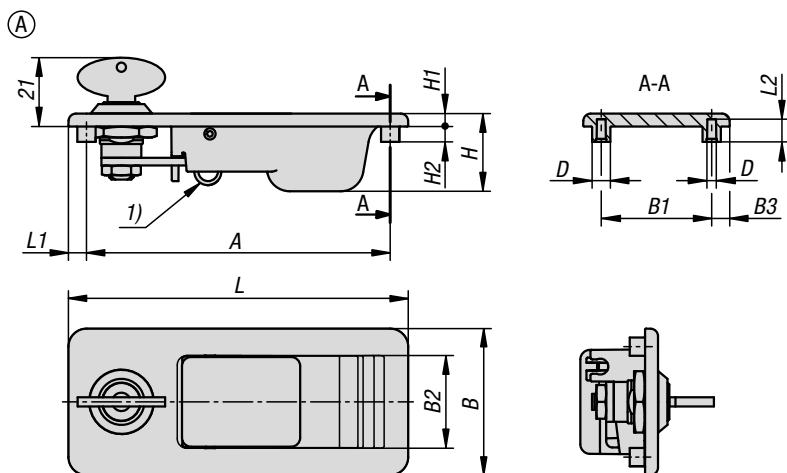
Actuation possible in inaccessible assembly spaces. Ergonomically optimised actuating position possible. Actuation possible even when safety distances are required.

### Accessories:

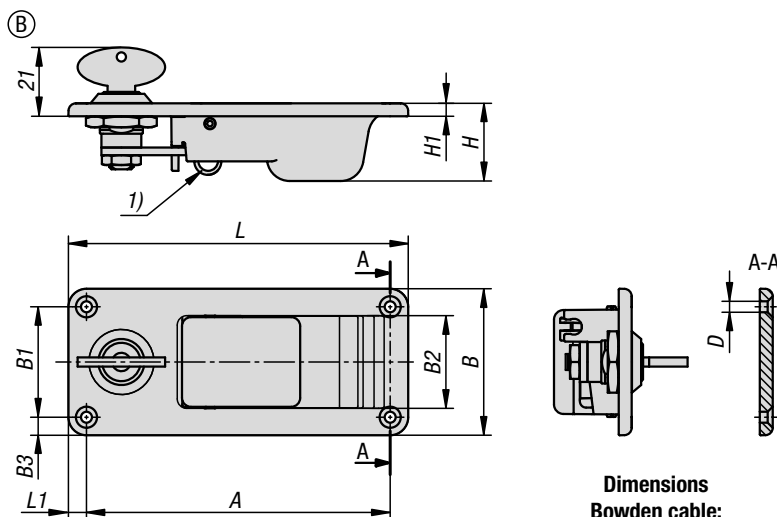
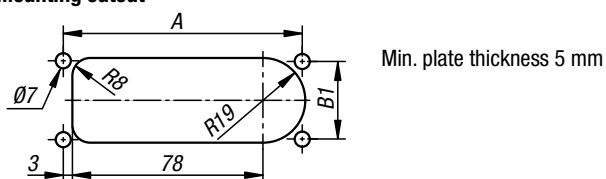
Bowden cable K1646.

### Drawing reference:

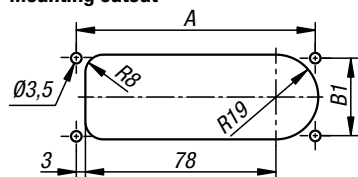
1) Bowden cable link



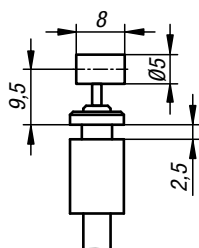
### Mounting cutout



### Mounting cutout



### Dimensions Bowden cable:

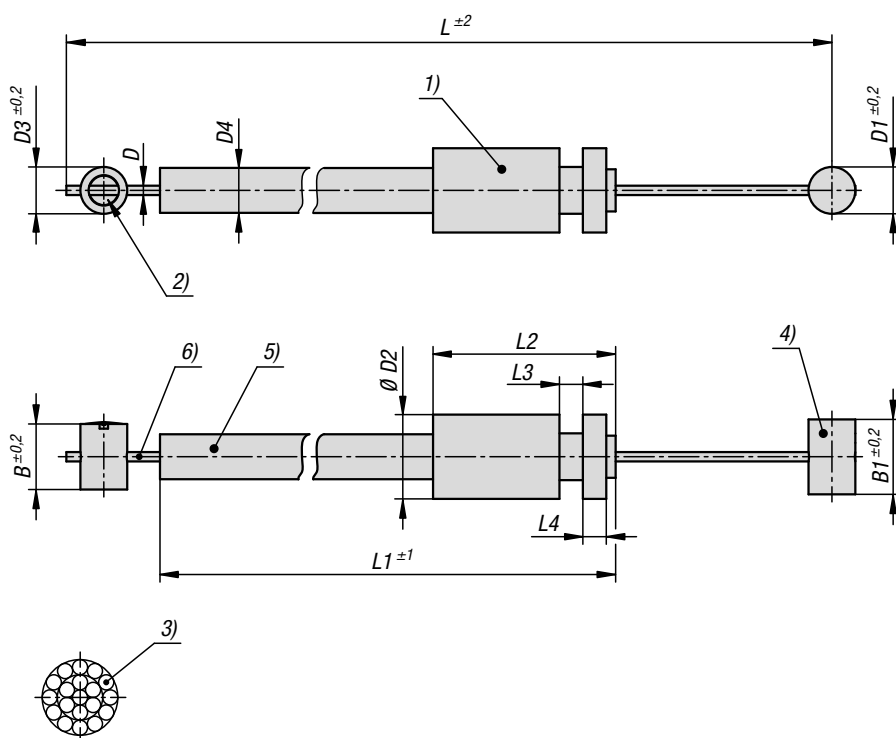


## KIPP Remote release, zinc

| Order No.        | Version 1 | Form | Main colour | Component colour | A  | B    | B1 | B2   | B3 | D    | D1 | H    | H2 | L     | L1 | L2  | Assembly                |
|------------------|-----------|------|-------------|------------------|----|------|----|------|----|------|----|------|----|-------|----|-----|-------------------------|
| K1481.2111114511 | with lock | A    | black       | black            | 99 | 47,9 | 36 | 30,1 | 6  | 2,65 | 6  | 25,5 | 5  | 110,9 | 6  | 7,4 | mounting from the rear  |
| K1481.2101114511 | with lock | B    | black       | black            | 99 | 47,9 | 36 | 30,1 | 6  | 3,4  | -  | 25,5 | -  | 110,9 | 6  | -   | mounting from the front |
| K1481.2111114510 | with lock | A    | silver      | silver           | 99 | 47,9 | 36 | 30,1 | 6  | 2,65 | 6  | 25,5 | 5  | 110,9 | 6  | 7,4 | mounting from the rear  |
| K1481.2101114510 | with lock | B    | silver      | silver           | 99 | 47,9 | 36 | 30,1 | 6  | 3,4  | -  | 25,5 | -  | 110,9 | 6  | -   | mounting from the front |
| K1481.2111114512 | with lock | A    | black       | silver           | 99 | 47,9 | 36 | 30,1 | 6  | 2,65 | 6  | 25,5 | 5  | 110,9 | 6  | 7,4 | mounting from the rear  |
| K1481.2101114512 | with lock | B    | black       | silver           | 99 | 47,9 | 36 | 30,1 | 6  | 3,4  | -  | 25,5 | -  | 110,9 | 6  | -   | mounting from the front |
| K1481.2111114521 | with lock | A    | silver      | black            | 99 | 47,9 | 36 | 30,1 | 6  | 2,65 | 6  | 25,5 | 5  | 110,9 | 6  | 7,4 | mounting from the rear  |
| K1481.2101114521 | with lock | B    | silver      | black            | 99 | 47,9 | 36 | 30,1 | 6  | 3,4  | -  | 25,5 | -  | 110,9 | 6  | -   | mounting from the front |

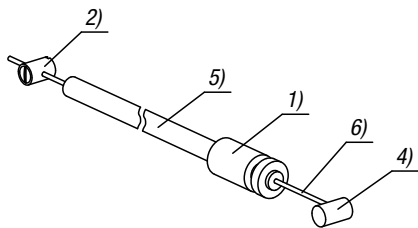
| Order No.        | Version 1    | Form | Main colour | Component colour | A  | B    | B1 | B2   | B3 | D    | D1 | H    | H2 | L     | L1 | L2  | Assembly                |
|------------------|--------------|------|-------------|------------------|----|------|----|------|----|------|----|------|----|-------|----|-----|-------------------------|
| K1481.2011114511 | without lock | A    | black       | black            | 99 | 47,9 | 36 | 30,1 | 6  | 2,65 | 6  | 25,5 | 5  | 110,9 | 6  | 7,4 | mounting from the rear  |
| K1481.2001114511 | without lock | B    | black       | black            | 99 | 47,9 | 36 | 30,1 | 6  | 3,4  | -  | 25,5 | -  | 110,9 | 6  | -   | mounting from the front |
| K1481.2011114510 | without lock | A    | silver      | silver           | 99 | 47,9 | 36 | 30,1 | 6  | 2,65 | 6  | 25,5 | 5  | 110,9 | 6  | 7,4 | mounting from the rear  |
| K1481.2001114510 | without lock | B    | silver      | silver           | 99 | 47,9 | 36 | 30,1 | 6  | 3,4  | -  | 25,5 | -  | 110,9 | 6  | -   | mounting from the front |
| K1481.2011114512 | without lock | A    | black       | silver           | 99 | 47,9 | 36 | 30,1 | 6  | 2,65 | 6  | 25,5 | 5  | 110,9 | 6  | 7,4 | mounting from the rear  |
| K1481.2001114512 | without lock | B    | black       | silver           | 99 | 47,9 | 36 | 30,1 | 6  | 3,4  | -  | 25,5 | -  | 110,9 | 6  | -   | mounting from the front |
| K1481.2011114521 | without lock | A    | silver      | black            | 99 | 47,9 | 36 | 30,1 | 6  | 2,65 | 6  | 25,5 | 5  | 110,9 | 6  | 7,4 | mounting from the rear  |
| K1481.2001114521 | without lock | B    | silver      | black            | 99 | 47,9 | 36 | 30,1 | 6  | 3,4  | -  | 25,5 | -  | 110,9 | 6  | -   | mounting from the front |

## Bowden cables



## Drawing reference:

- 1) Sleeve
- 2) Screw nipple
- 3) Body 1x19
- 4) Nipple
- 5) Sheath
- 6) Wire cable



## Material:

Wire cable stainless steel.  
Sheath, steel wire with inner and outer plastic coating.  
Sleeve POM.  
Nipple Zamac.  
Screw nipple steel.

## Version:

Bowden cable sheath and sleeve black.  
Screw nipple electro zinc-plated.

## Sample order:

K1646.11X110500

## Note:

Bowden cables transfer the traction force and are used in combination with a release as a remote control. There are different lengths available to select from. The Bowden cable can be shortened as required during installation to ensure a perfect fit in the respective application.

Note the following points when installing Bowden cables:

The length of the free end of the cable can change due to layout angle, bend radius and load factors.

When laying the cable, take particular care to ensure that the bend radius is not below the minimum value, which in this case is  $R = 65 \text{ mm}$ . A too small radius can lead to increased wear and higher friction. During installation, avoid bending the cable more than the minimum value as this can cause damage to the casing. Also, the casing is designed only to support pressure forces. If pulled too sharply, the inner coil will be stretched and permanently damaged.

Tensile strength 1000 N max.

## Supplied with:

Wire cable with nipple, sheath, sleeve and screw nipple.

## Accessories:

Remote release K1481.

## KIPP Bowden cables

| Order No.     | B | B1 | D   | D1 | D2 | D3 | D4  | L    | L1    | L2   | L3  | L4  |
|---------------|---|----|-----|----|----|----|-----|------|-------|------|-----|-----|
| K1646.11X0500 | 7 | 8  | 1,5 | 5  | 9  | 5  | 4,8 | 500  | 464,4 | 19,5 | 2,5 | 2,5 |
| K1646.11X1000 | 7 | 8  | 1,5 | 5  | 9  | 5  | 4,8 | 1000 | 964,4 | 19,5 | 2,5 | 2,5 |

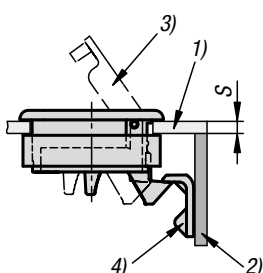
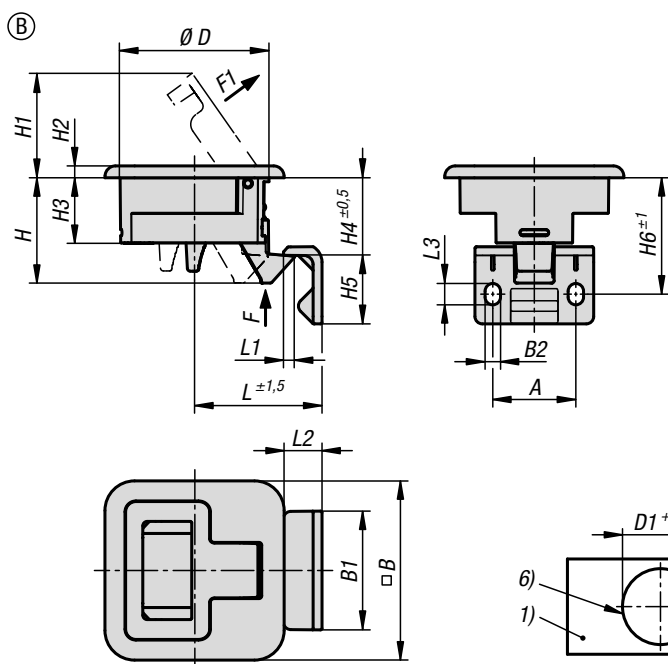
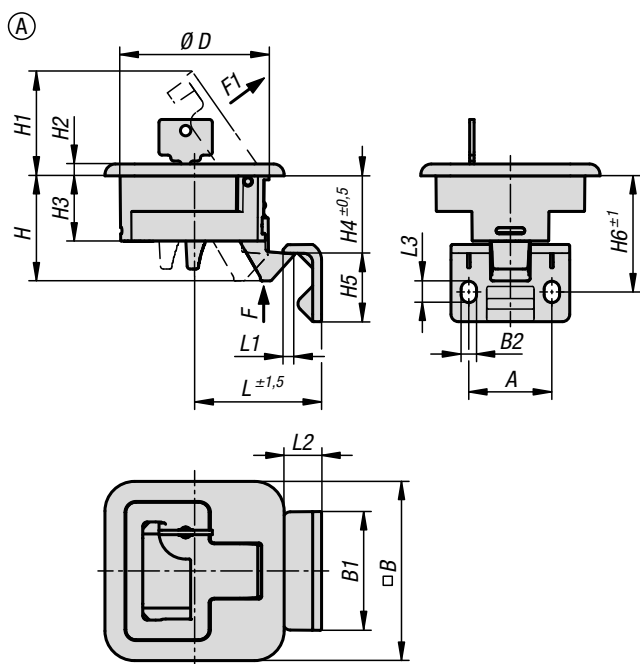


A large grid of graph paper for taking notes.



## Snap locks, plastic

with fold-down grip



### Material:

PC/ABS.

### Version:

Housing black, white or beige.

Grip black, chromed, white or beige.

### Sample order:

K1651.2102356000

### Note:

The fold-down grips enable these snap locks to be installed flush into doors, hatches or panels.

Available in different sizes for different door leaf thicknesses.

Additional security with lockable variants.

The spring-loaded grip prevents rattling.

Flammability (plastic version): listed UL94-HB.

Max. torque to tighten the screws: 2 Nm.

Form A: lockable

Form B: not lockable

### Method of operation:

When the grip is pulled, the latch retracts and the door can be opened. The door latches automatically when pushed shut. The latch can also be actuated from the rear.

### Application:

- Automobile industry
- Medical technology
- Machine construction
- Boat and ship building
- Aviation and aerospace
- Furniture industry

### Assembly:

1. Produce a mounting cutout as shown in the drawing.
2. Attach the catch plate.
3. Secure from the rear using the mounting parts supplied.

### Supplied with:

Mounting bracket with M5 screws and catch plate.

The lockable snap locks are each supplied with 2 keys.

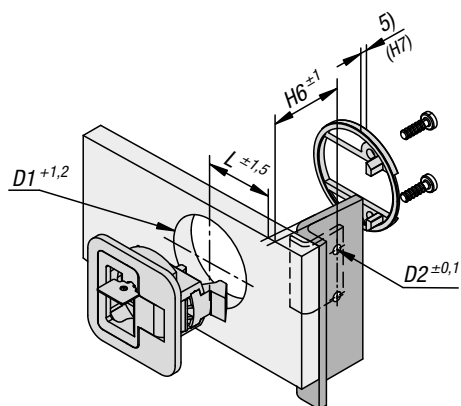
M5 screws for the catch plate are not supplied.

### Drawing reference:

- 1) Door leaf
- 2) Frame
- 3) Grip
- 4) Catch plate
- 5) Mounting bracket thickness (see Table H7)
- 6) Mounting cutout

# Snap locks, plastic

with fold-down grip



## KIPP Snap locks, plastic with fold-down grip

| Order No.<br>Form A<br>lockable | Order No.<br>Form B<br>not lockable | Main<br>colour | Component<br>colour | A  | B  | B1 | B2  | D  | D1 | D2  | H          | H1 | H2 | H3 | H4        | H5 |
|---------------------------------|-------------------------------------|----------------|---------------------|----|----|----|-----|----|----|-----|------------|----|----|----|-----------|----|
| K1651.2102356000                | K1651.2002356000                    | black          | black               | 28 | 60 | 40 | 5,2 | 50 | 50 | 5,5 | 35,41/35,5 | 35 | 4  | 22 | 26,1/26,2 | 23 |
| K1651.2107356000                | K1651.2007356000                    | black          | black               | 28 | 60 | 40 | 5,2 | 50 | 50 | 5,5 | 35,41/35,5 | 35 | 4  | 22 | 26,1/26,2 | 23 |
| K1651.2112356000                | K1651.2012356000                    | black          | black               | 28 | 60 | 40 | 5,2 | 50 | 50 | 5,5 | 35,41/35,5 | 35 | 4  | 22 | 26,1/26,2 | 23 |
| K1651.2117356000                | K1651.2017356000                    | black          | black               | 28 | 60 | 40 | 5,2 | 50 | 50 | 5,5 | 35,41/35,5 | 35 | 4  | 22 | 26,1/26,2 | 23 |
| K1651.2102356022                | K1651.2002356022                    | white          | white               | 28 | 60 | 40 | 5,2 | 50 | 50 | 5,5 | 35,41/35,5 | 35 | 4  | 22 | 26,1/26,2 | 23 |
| K1651.2107356022                | K1651.2007356022                    | white          | white               | 28 | 60 | 40 | 5,2 | 50 | 50 | 5,5 | 35,41/35,5 | 35 | 4  | 22 | 26,1/26,2 | 23 |
| K1651.2112356022                | K1651.2012356022                    | white          | white               | 28 | 60 | 40 | 5,2 | 50 | 50 | 5,5 | 35,41/35,5 | 35 | 4  | 22 | 26,1/26,2 | 23 |
| K1651.2117356022                | K1651.2017356022                    | white          | white               | 28 | 60 | 40 | 5,2 | 50 | 50 | 5,5 | 35,41/35,5 | 35 | 4  | 22 | 26,1/26,2 | 23 |
| K1651.2102356033                | K1651.2002356033                    | beige          | beige               | 28 | 60 | 40 | 5,2 | 50 | 50 | 5,5 | 35,41/35,5 | 35 | 4  | 22 | 26,1/26,2 | 23 |
| K1651.2107356033                | K1651.2007356033                    | beige          | beige               | 28 | 60 | 40 | 5,2 | 50 | 50 | 5,5 | 35,41/35,5 | 35 | 4  | 22 | 26,1/26,2 | 23 |
| K1651.2112356033                | K1651.2012356033                    | beige          | beige               | 28 | 60 | 40 | 5,2 | 50 | 50 | 5,5 | 35,41/35,5 | 35 | 4  | 22 | 26,1/26,2 | 23 |
| K1651.2117356033                | K1651.2017356033                    | beige          | beige               | 28 | 60 | 40 | 5,2 | 50 | 50 | 5,5 | 35,41/35,5 | 35 | 4  | 22 | 26,1/26,2 | 23 |
| K1651.2102356001                | K1651.2002356001                    | black          | chromed             | 28 | 60 | 40 | 5,2 | 50 | 50 | 5,5 | 35,41/35,5 | 35 | 4  | 22 | 26,1/26,2 | 23 |
| K1651.2107356001                | K1651.2007356001                    | black          | chromed             | 28 | 60 | 40 | 5,2 | 50 | 50 | 5,5 | 35,41/35,5 | 35 | 4  | 22 | 26,1/26,2 | 23 |
| K1651.2112356001                | K1651.2012356001                    | black          | chromed             | 28 | 60 | 40 | 5,2 | 50 | 50 | 5,5 | 35,41/35,5 | 35 | 4  | 22 | 26,1/26,2 | 23 |
| K1651.2117356001                | K1651.2017356001                    | black          | chromed             | 28 | 60 | 40 | 5,2 | 50 | 50 | 5,5 | 35,41/35,5 | 35 | 4  | 22 | 26,1/26,2 | 23 |

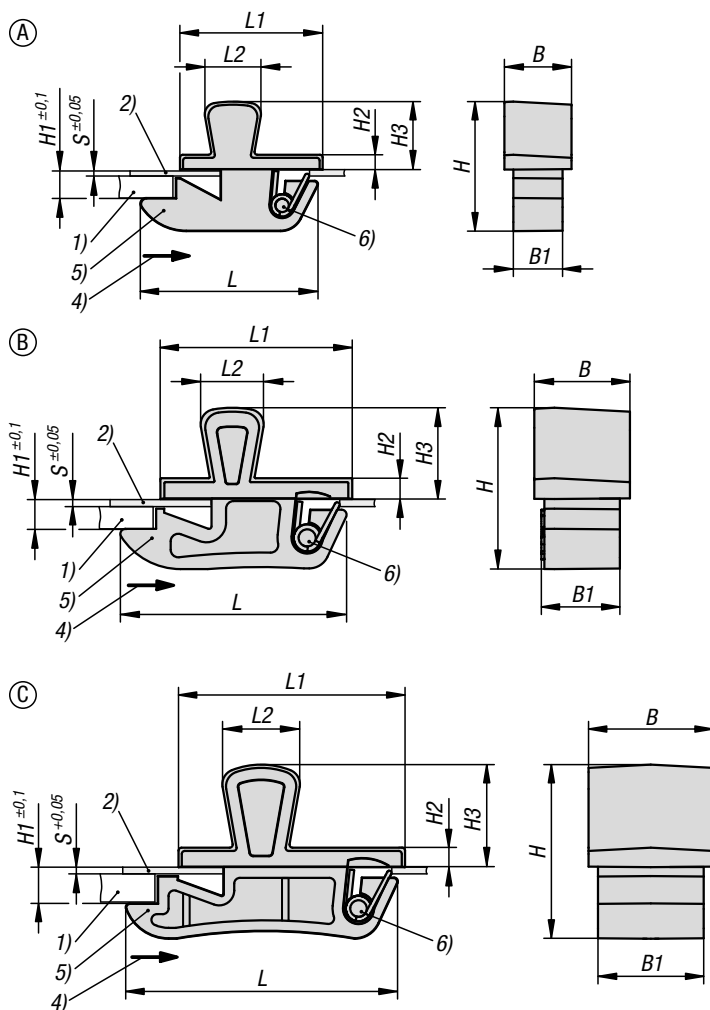


| Order No.<br>Form A<br>lockable | Order No.<br>Form B<br>not lockable | Component<br>colour | H6   | H7  | L    | L1  | L2   | L3  | F=retaining force (N) | Traction<br>force<br>F1 N | Temperature range<br>°C | S = Door thickness<br>in mm | Screws |
|---------------------------------|-------------------------------------|---------------------|------|-----|------|-----|------|-----|-----------------------|---------------------------|-------------------------|-----------------------------|--------|
| K1651.2102356000                | K1651.2002356000                    | black               | 39,2 | 14  | 42,9 | 3,8 | 12,7 | 7,2 | 270                   | 50                        | -30 to 60               | 2-7                         | M5X16  |
| K1651.2107356000                | K1651.2007356000                    | black               | 39,2 | 14  | 42,9 | 3,8 | 12,7 | 7,2 | 270                   | 50                        | -30 to 60               | 7-12                        | M5X20  |
| K1651.2112356000                | K1651.2012356000                    | black               | 39,2 | 3,8 | 42,9 | 3,8 | 12,7 | 7,2 | 270                   | 50                        | -30 to 60               | 12-17                       | M5X16  |
| K1651.2117356000                | K1651.2017356000                    | black               | 39,2 | 3,8 | 42,9 | 3,8 | 12,7 | 7,2 | 270                   | 50                        | -30 to 60               | 17-22                       | M5X20  |
| K1651.2102356022                | K1651.2002356022                    | white               | 39,2 | 14  | 42,9 | 3,8 | 12,7 | 7,2 | 270                   | 50                        | -30 to 60               | 2-7                         | M5X16  |
| K1651.2107356022                | K1651.2007356022                    | white               | 39,2 | 14  | 42,9 | 3,8 | 12,7 | 7,2 | 270                   | 50                        | -30 to 60               | 7-12                        | M5X20  |
| K1651.2112356022                | K1651.2012356022                    | white               | 39,2 | 3,8 | 42,9 | 3,8 | 12,7 | 7,2 | 270                   | 50                        | -30 to 60               | 12-17                       | M5X16  |
| K1651.2117356022                | K1651.2017356022                    | white               | 39,2 | 3,8 | 42,9 | 3,8 | 12,7 | 7,2 | 270                   | 50                        | -30 to 60               | 17-22                       | M5X20  |
| K1651.2102356033                | K1651.2002356033                    | beige               | 39,2 | 14  | 42,9 | 3,8 | 12,7 | 7,2 | 270                   | 50                        | -30 to 60               | 2-7                         | M5X16  |
| K1651.2107356033                | K1651.2007356033                    | beige               | 39,2 | 14  | 42,9 | 3,8 | 12,7 | 7,2 | 270                   | 50                        | -30 to 60               | 7-12                        | M5X20  |
| K1651.2112356033                | K1651.2012356033                    | beige               | 39,2 | 3,8 | 42,9 | 3,8 | 12,7 | 7,2 | 270                   | 50                        | -30 to 60               | 12-17                       | M5X16  |
| K1651.2117356033                | K1651.2017356033                    | beige               | 39,2 | 3,8 | 42,9 | 3,8 | 12,7 | 7,2 | 270                   | 50                        | -30 to 60               | 17-22                       | M5X20  |
| K1651.2102356001                | K1651.2002356001                    | chromed             | 39,2 | 14  | 42,9 | 3,8 | 12,7 | 7,2 | 270                   | 50                        | -30 to 60               | 2-7                         | M5X16  |
| K1651.2107356001                | K1651.2007356001                    | chromed             | 39,2 | 14  | 42,9 | 3,8 | 12,7 | 7,2 | 270                   | 50                        | -30 to 60               | 7-12                        | M5X20  |
| K1651.2112356001                | K1651.2012356001                    | chromed             | 39,2 | 3,8 | 42,9 | 3,8 | 12,7 | 7,2 | 270                   | 50                        | -30 to 60               | 12-17                       | M5X16  |
| K1651.2117356001                | K1651.2017356001                    | chromed             | 39,2 | 3,8 | 42,9 | 3,8 | 12,7 | 7,2 | 270                   | 50                        | -30 to 60               | 17-22                       | M5X20  |



## Snap locks, snap-in, plastic

with grip



### Material:

Lock PC/ABS.

Spring: stainless steel 1.4310.

### Version:

Lock black.

Spring bright.

### Sample order:

K1652.215090

### Note:

Snap locks are designed for installation in doors, hatches and covers.

Available in different sizes for different door leaf thicknesses.

Flammability: listed UL94-HB.

### Method of operation:

When the grip is pressed down, the latch retracts and the door can be opened. When the door is pushed to, a spring automatically latches it shut.

### Application:

- Automobile industry
- Medical technology
- Machine construction
- Equipment construction
- Industrial control cabinets

### Assembly:

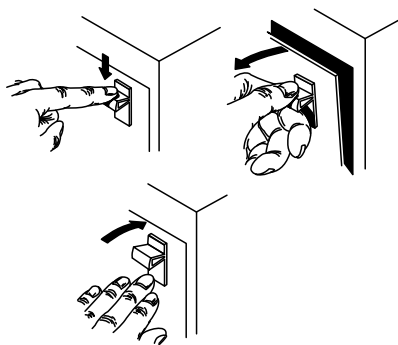
1. Produce a burr-free mounting cutout as shown in the drawing.
2. Insert the lock into the cutout from the front and push forwards.
3. Press the lock down to clip in.

### Drawing reference:

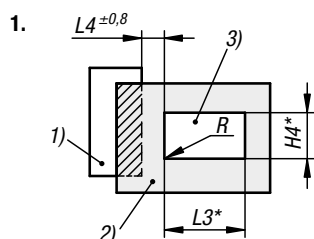
- 1) Frame
- 2) Door leaf
- 3) Mounting cutout
- 4) Actuation direction
- 5) Lock
- 6) Spring

## Snap locks, snap-in, plastic

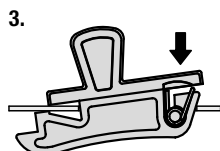
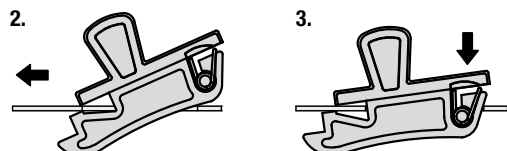
with grip



### Assembly:



\* Tolerances:  
Form A: H4 ±0,05  
L3 ±0,05  
Form B: H4 ±0,05  
L3 ±0,1  
Form C: H4 ±0,1  
L3 ±0,1

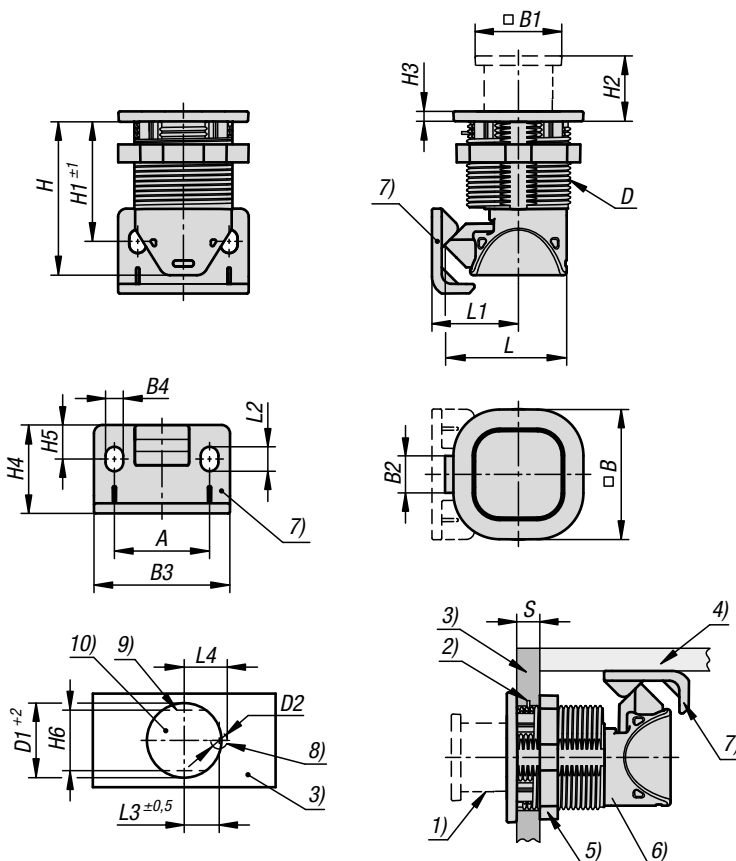


### KIPP Snap locks, snap-in, plastic, with grip

| Order No.    | Form | B    | B1  | H    | H1 = Total holding area | H2  | H3   | H4   | L    | L1    | L2   | L3   | L4  | R        | Max. operating load in N | Temperature range °C | S = Door thickness in mm |
|--------------|------|------|-----|------|-------------------------|-----|------|------|------|-------|------|------|-----|----------|--------------------------|----------------------|--------------------------|
| K1652.211060 | A    | 6    | 4,4 | 11,6 | 2,2                     | 1,3 | 6,1  | 4,57 | 15,9 | 12,75 | 5    | 8,33 | 4,8 | max. 0,1 | 25                       | -40 to 60            | 0,6                      |
| K1652.215090 | B    | 9,5  | 7,8 | 15,5 | 2,65                    | 2,1 | 9,1  | 8,2  | 22,5 | 19,05 | 6,3  | 12,7 | 6,4 | max. 0,1 | 90                       | -40 to 60            | 0,8                      |
| K1652.222160 | C    | 16,5 | 14  | 23,1 | 4,5                     | 2,6 | 13,6 | 14,3 | 36   | 30    | 10,3 | 22,2 | 9,5 | max. 0,1 | 130                      | -40 to 60            | 1                        |

## Snap locks, plastic

with knob



### Material:

PC/ABS.

### Version:

Black, chromed, white or beige.

### Sample order:

K1653.247401

### Note:

The push-in knob enables these snap locks to be installed flush into doors, hatches and panels.

Flammability: listed UL94-HB

Max. torque to tighten the nut: 4.2 Nm.

### Method of operation:

When not actuated, the knob is flush with the housing. When the knob is pressed, it springs out and can be used to pull the door open. The door latches automatically when pushed shut. Press the knob in again to make it flush with the housing.

### Application:

- Automobile industry
- Medical technology
- Machine construction
- Boat and ship building
- Aviation and aerospace
- Furniture industry

### Assembly:

1. Produce a mounting cutout as shown in the drawing.
2. Attach the catch plate.
3. Secure from the rear using the mounting nut.

### Supplied with:

Mounting nut and catch plate.

M5 screws for the catch plate are not supplied.

### Drawing reference:

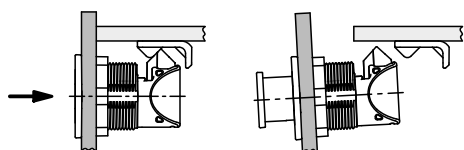
- 1) Knob
- 2) Guide pin to prevent twisting
- 3) Door leaf
- 4) Frame
- 5) Mounting nut
- 6) Housing
- 7) Catch plate
- 8) For guide pin (optional)
- 9) Cutout to prevent twisting (optional)
- 10) Mounting cutout

## Snap locks, plastic

with knob



Operating mode:



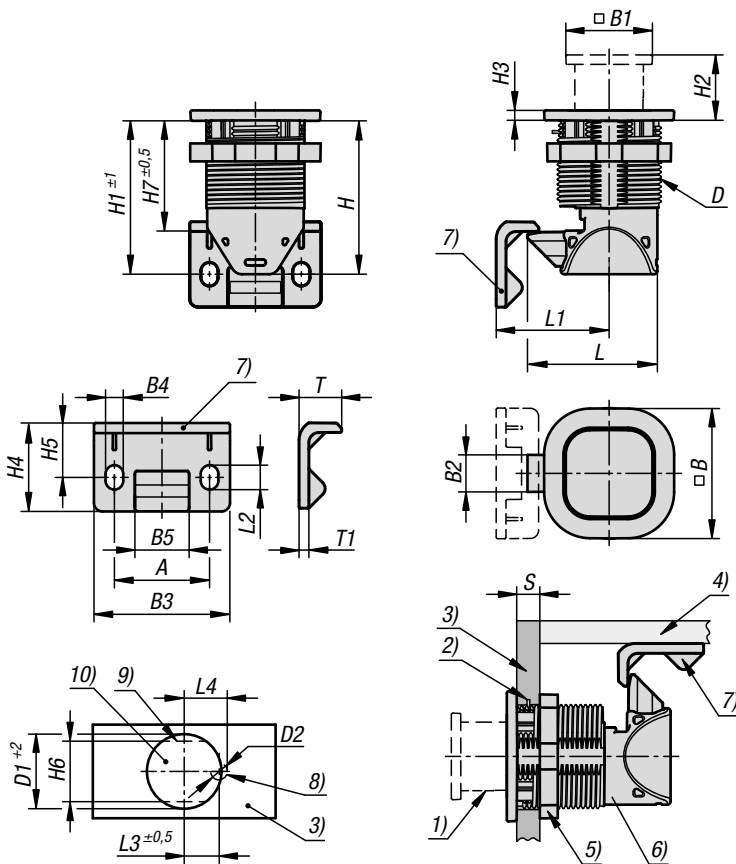
### KIPP Snap locks, plastic with knob

| Order No.    | Main colour | A  | B  | B1   | B2 | B3 | B4  | D       | D1 | D2 | H  | H1   | H2 | H3  | H4 | H5 | H6   |
|--------------|-------------|----|----|------|----|----|-----|---------|----|----|----|------|----|-----|----|----|------|
| K1653.247400 | black       | 28 | 40 | 26,5 | 12 | 40 | 5,2 | M32x1,5 | 32 | 7  | 47 | 36,6 | 17 | 3,2 | 26 | 10 | 30,2 |
| K1653.247401 | chromed     | 28 | 40 | 26,5 | 12 | 40 | 5,2 | M32x1,5 | 32 | 7  | 47 | 36,6 | 17 | 3,2 | 26 | 10 | 30,2 |
| K1653.247402 | white       | 28 | 40 | 26,5 | 12 | 40 | 5,2 | M32x1,5 | 32 | 7  | 47 | 36,6 | 17 | 3,2 | 26 | 10 | 30,2 |
| K1653.247403 | beige       | 28 | 40 | 26,5 | 12 | 40 | 5,2 | M32x1,5 | 32 | 7  | 47 | 36,6 | 17 | 3,2 | 26 | 10 | 30,2 |

| Order No.    | L     | L1   | L2  | L3 | L4   | Max. operating load in N | Temperature range °C | S = Door thickness in mm |
|--------------|-------|------|-----|----|------|--------------------------|----------------------|--------------------------|
| K1653.247400 | 37,55 | 26,5 | 7,2 | 15 | 18,5 | 310                      | -30 to 60            | 1,2-19                   |
| K1653.247401 | 37,55 | 26,5 | 7,2 | 15 | 18,5 | 310                      | -30 to 60            | 1,2-19                   |
| K1653.247402 | 37,55 | 26,5 | 7,2 | 15 | 18,5 | 310                      | -30 to 60            | 1,2-19                   |
| K1653.247403 | 37,55 | 26,5 | 7,2 | 15 | 18,5 | 310                      | -30 to 60            | 1,2-19                   |

## Snap locks, plastic

with twist knob



**Material:**  
PC/ABS.

**Version:**  
Black, chromed, white or beige.

**Sample order:**  
K1654.247401

**Note:**  
The flush knob enables these snap locks to be installed flush into doors, hatches and panels.  
The catch plate can also be used as a stop if there is no suitable strike surface available.

Flammability: listed UL94-HB  
Max. torque to tighten the nut: 4.2 Nm.

**Method of operation:**  
When not actuated, the knob is flush with the housing.  
When the knob is pressed, it springs out and can be used to retract the latch by twisting to the left or right. The door latches automatically when pushed shut. Press the knob in again to make it flush with the housing.

**Application:**  
- Automobile industry  
- Medical technology  
- Machine construction  
- Boat and ship building  
- Aviation and aerospace  
- Furniture industry

**Assembly:**  
1. Produce a mounting cutout as shown in the drawing.  
2. Attach the catch plate.  
3. Secure from the rear using the mounting nut.

**Supplied with:**  
Mounting nut and catch plate.  
M5 screws for the catch plate are not supplied.

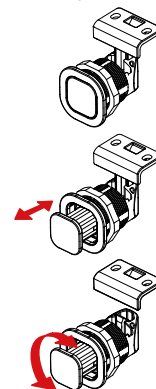
**Drawing reference:**  
1) Knob  
2) Guide pin to prevent twisting  
3) Door leaf  
4) Frame  
5) Mounting nut  
6) Housing  
7) Catch plate  
8) For guide pin (optional)  
9) Cutout to prevent twisting (optional)  
10) Mounting cutout

## Snap locks, plastic

with twist knob



Operating mode:

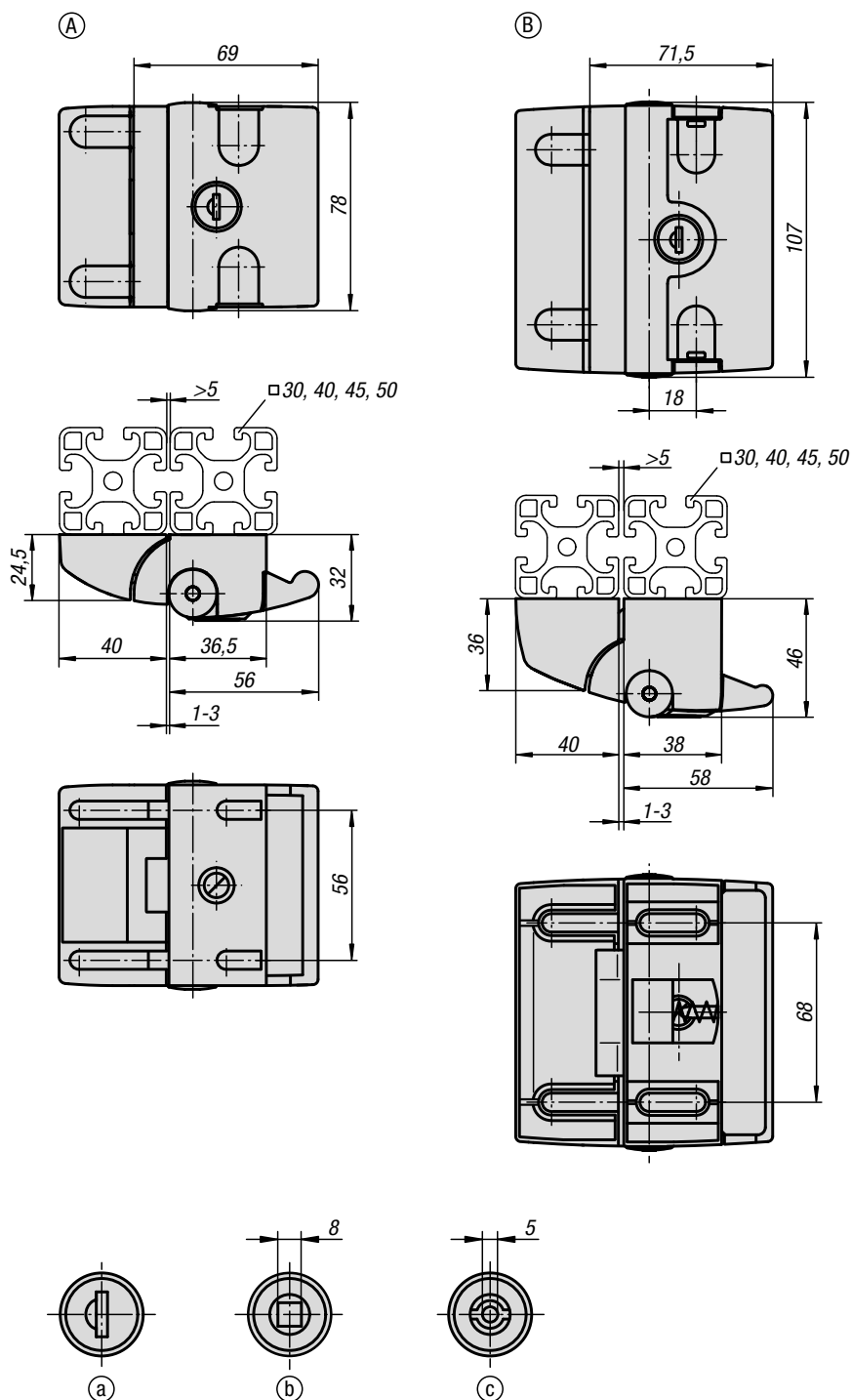


### KIPP Snap locks, plastic with twist knob

| Order No.    | Main colour | A  | B  | B1   | B2 | B3 | B4  | B5 | D       | D1 | D2 | H  | H1 | H2 | H3  | H4 | H5 | H6   | H7 |
|--------------|-------------|----|----|------|----|----|-----|----|---------|----|----|----|----|----|-----|----|----|------|----|
| K1654.247400 | black       | 28 | 40 | 26,5 | 12 | 40 | 5,2 | 16 | M32x1,5 | 32 | 7  | 47 | 47 | 17 | 3,2 | 26 | 16 | 30,2 | 34 |
| K1654.247401 | chromed     | 28 | 40 | 26,5 | 12 | 40 | 5,2 | 16 | M32x1,5 | 32 | 7  | 47 | 47 | 17 | 3,2 | 26 | 16 | 30,2 | 34 |
| K1654.247402 | white       | 28 | 40 | 26,5 | 12 | 40 | 5,2 | 16 | M32x1,5 | 32 | 7  | 47 | 47 | 17 | 3,2 | 26 | 16 | 30,2 | 34 |
| K1654.247403 | beige       | 28 | 40 | 26,5 | 12 | 40 | 5,2 | 16 | M32x1,5 | 32 | 7  | 47 | 47 | 17 | 3,2 | 26 | 16 | 30,2 | 34 |

| Order No.    | L     | L1    | L2  | L3 | L4   | T  | T1 | Max. operating load in N | Temperature range °C | S = Door thickness in mm |
|--------------|-------|-------|-----|----|------|----|----|--------------------------|----------------------|--------------------------|
| K1654.247400 | 39,87 | 34,42 | 7,2 | 15 | 18,5 | 13 | 3  | 310                      | -30 to 60            | 1,2-19                   |
| K1654.247401 | 39,87 | 34,42 | 7,2 | 15 | 18,5 | 13 | 3  | 310                      | -30 to 60            | 1,2-19                   |
| K1654.247402 | 39,87 | 34,42 | 7,2 | 15 | 18,5 | 13 | 3  | 310                      | -30 to 60            | 1,2-19                   |
| K1654.247403 | 39,87 | 34,42 | 7,2 | 15 | 18,5 | 13 | 3  | 310                      | -30 to 60            | 1,2-19                   |

## Slam latches



**Material:**  
Die cast aluminium.  
End caps plastic.

**Version:**  
Black powder-coated.  
End caps black.

**Sample order:**  
K1496.100561

**Note:**  
For the simple and safe locking of doors and hatches.  
Installed from the front without mechanical processing  
using M6 cylinder-head or cheese-head screws.  
Secured to prevent removal when locked.

The key-operated version is supplied with 2 keys.  
The key can be removed in both positions (open and  
closed). The locks are keyed alike, i.e. they can all be  
opened using the same key (euro key 5333).

The double-lug version is supplied with a double lug  
key.

**Drawing reference:**  
Actuation:  
a) single-key system  
b) square 8 mm  
c) double lug 5 mm



### KIPP Slam latches

| Order No.    | Form | Slot width | Actuation       |
|--------------|------|------------|-----------------|
| K1496.100561 | A    | 8/10       | not lockable    |
| K1496.170561 | A    | 8/10       | key             |
| K1496.118561 | A    | 8/10       | square 8 mm     |
| K1496.145561 | A    | 8/10       | double lug 5 mm |
| K1496.200681 | B    | 8/10       | not lockable    |
| K1496.270681 | B    | 8/10       | key             |

Emergency openers

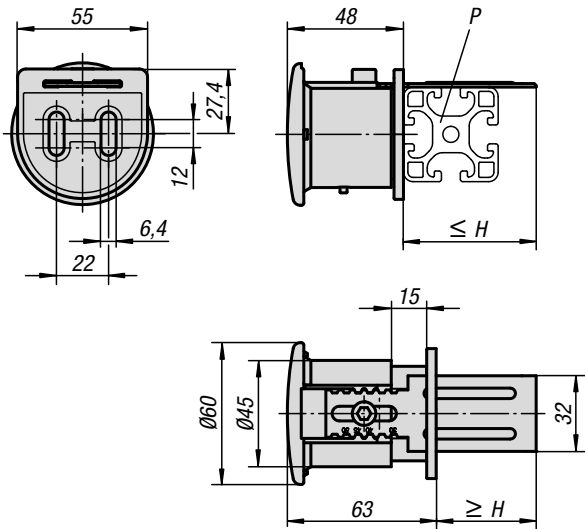


**Material:**  
Body plastic PA 6, fibreglass reinforced.  
Push button plastic PA 6, fibreglass reinforced.  
Release catch steel.

**Version:**  
Body black.  
Push button red.  
Release catch electro zinc-plated.

**Sample order:**  
K1497.93050

**Note:**  
Rear-side emergency release for slam latches.  
Installation with two socket head screws (preferably DIN 912 M6x12), no machining required. Suitable for all slam latches.



KIPP Emergency openers

| Order No.   | Slot width | H min. | H max. | P     |
|-------------|------------|--------|--------|-------|
| K1497.93050 | 8/10       | 30     | 50     | 30-50 |
| K1497.96080 | 8/10       | 60     | 80     | 60-80 |





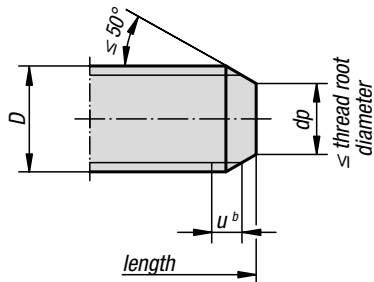
**Technical appendix**

**And more of the  
KIPP workholding  
programme**

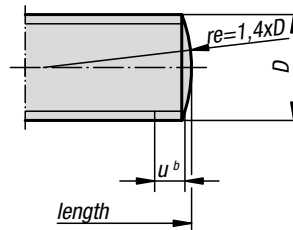
# DIN EN ISO 4753 thread ends DIN 6332 thrust points



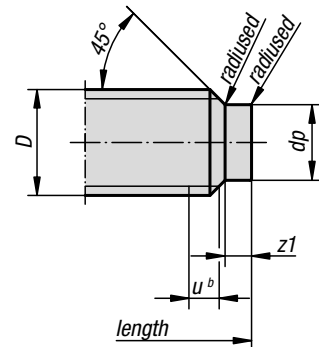
FL flat point



RN rounded end



SD short dog



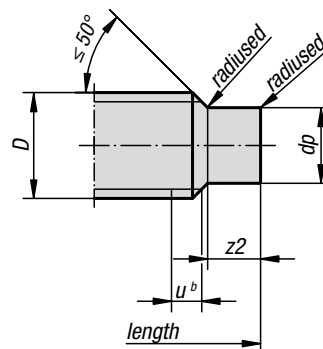
## Standard form:

DIN EN ISO 4753 flat point.

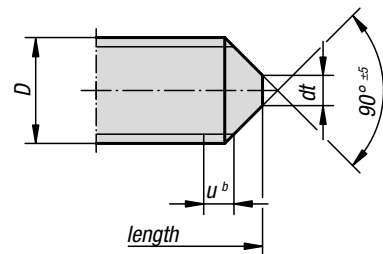
Any other thread end available at extra cost, depending on the quantity ordered.

$u^b$  = max. 2P incomplete thread

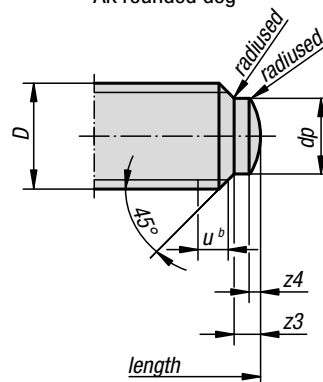
LD long dog



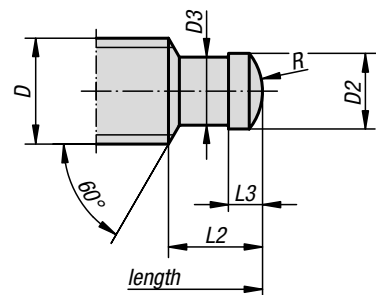
TC truncated cone



Ak rounded dog



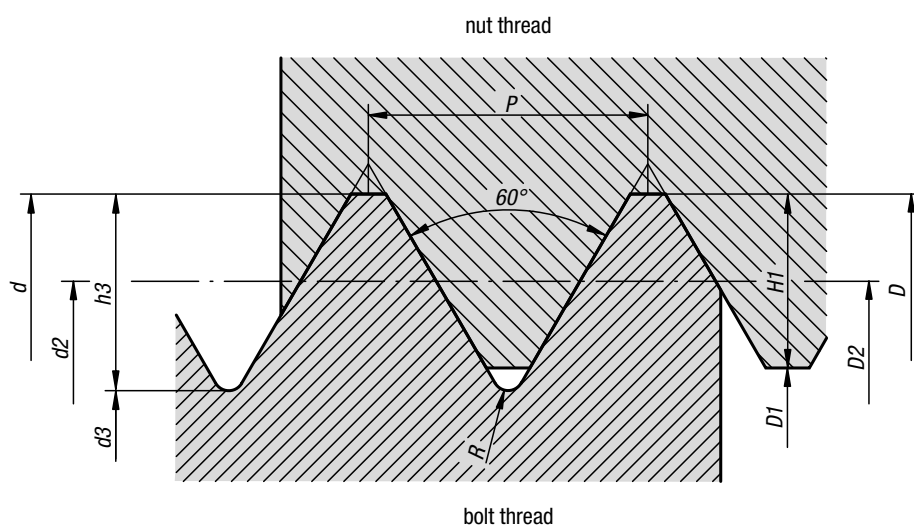
thrust point DIN 6332



| Thread diameter<br>D | Thread ends to DIN EN ISO 4753 |         |          |          |          |      | Thread ends with thrust points to DIN 6332 |         |     |     |    |
|----------------------|--------------------------------|---------|----------|----------|----------|------|--------------------------------------------|---------|-----|-----|----|
|                      | dp h13                         | dt h16* | z1 +IT14 | z2 +IT14 | z3 +IT14 | z4 ≈ | D2 h11                                     | D3 -0,1 | L2  | L3  | R  |
| M4                   | 2.5                            | —       | 1        | 2        | 1        | 0.5  | —                                          | —       | —   | —   | —  |
| M5                   | 3.5                            | —       | 1.25     | 2.5      | 1.25     | 0.6  | —                                          | —       | —   | —   | —  |
| M6                   | 4                              | 1.5     | 1.5      | 3        | 1.5      | 0.7  | 4.5                                        | 4       | 6   | 2.5 | 3  |
| M8                   | 5.5                            | 2       | 2        | 4        | 2        | 1    | 6                                          | 5.4     | 7.5 | 3   | 5  |
| M10                  | 7                              | 2.5     | 2.5      | 5        | 2.5      | 1    | 8                                          | 7.2     | 9   | 4.5 | 6  |
| M12                  | 8.5                            | 3       | 3        | 6        | 3        | 1.25 | 8                                          | 7.2     | 10  | 4.5 | 6  |
| M14                  | 10                             | 4       | 3.5      | 7        | 3.5      | 1.5  | —                                          | —       | —   | —   | —  |
| M16                  | 12                             | 4       | 4        | 8        | 4        | 1.75 | 12                                         | 11      | 12  | 5   | 9  |
| M18                  | 13                             | 5       | 4.5      | 9        | 4.5      | 2    | —                                          | —       | —   | —   | —  |
| M20                  | 15                             | 5       | 5        | 10       | 5        | 2    | 15.5                                       | 14.4    | 14  | 5.5 | 13 |
| M22                  | 17                             | 6       | 5.5      | 11       | 5.5      | 2.5  | —                                          | —       | —   | —   | —  |
| M24                  | 18                             | 6       | 6        | 12       | 6        | 2.5  | —                                          | —       | —   | —   | —  |
| M27                  | 21                             | 8       | 6.7      | 13.5     | 6.7      | 3    | —                                          | —       | —   | —   | —  |

\* Up to 5 mm diameter: thread end lightly flattened or lightly rounded.

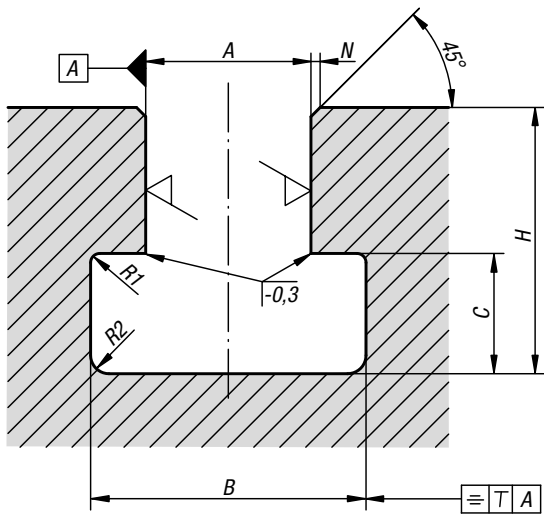
# ISO Metric Screw Threads to DIN 13



The medium tolerance class applies to the threads listed, i.e. 6H for nut threads and 6g for bolt threads. The (metal) threads in this catalogue are manufactured according to these tolerance classes.

## Coarse screw thread series 1

| Thread description<br>$d = D$ | Pitch<br>$P$ | Thread-pitch<br>$\emptyset$<br>$d_2 = D_2$ | Minor $\emptyset$<br>bolt<br>$d_3$ | Minor $\emptyset$<br>nut<br>$D_1$ | Thread depth<br>bolt<br>$h_3$ | Thread depth<br>nut<br>$H_1$ | Radius<br>$R$ | Core hole<br>drill<br>$\emptyset$ |
|-------------------------------|--------------|--------------------------------------------|------------------------------------|-----------------------------------|-------------------------------|------------------------------|---------------|-----------------------------------|
| M3                            | 0.5          | 2.68                                       | 2.39                               | 2.46                              | 0.31                          | 0.27                         | 0.07          | 2.5                               |
| M4                            | 0.7          | 3.55                                       | 3.14                               | 3.24                              | 0.43                          | 0.38                         | 0.10          | 3.3                               |
| M5                            | 0.8          | 4.48                                       | 4.02                               | 4.13                              | 0.49                          | 0.43                         | 0.12          | 4.2                               |
| M6                            | 1            | 5.35                                       | 4.77                               | 4.92                              | 0.61                          | 0.54                         | 0.14          | 5                                 |
| M8                            | 1.25         | 7.19                                       | 6.47                               | 6.65                              | 0.77                          | 0.68                         | 0.18          | 6.8                               |
| M10                           | 1.5          | 9.03                                       | 8.16                               | 8.38                              | 0.92                          | 0.81                         | 0.22          | 8.5                               |
| M12                           | 1.75         | 10.86                                      | 9.85                               | 10.11                             | 1.07                          | 0.95                         | 0.25          | 10.2                              |
| M16                           | 2            | 14.70                                      | 13.55                              | 13.84                             | 1.23                          | 1.08                         | 0.29          | 14                                |
| M20                           | 2.5          | 18.38                                      | 16.93                              | 17.29                             | 1.53                          | 1.35                         | 0.36          | 17.5                              |
| M24                           | 3            | 22.05                                      | 20.32                              | 20.75                             | 1.84                          | 1.62                         | 0.43          | 21                                |
| M30                           | 3.5          | 27.73                                      | 25.71                              | 26.21                             | 2.15                          | 1.89                         | 0.51          | 26.5                              |
| M36                           | 4            | 33.40                                      | 31.09                              | 31.67                             | 2.45                          | 2.17                         | 0.58          | 32                                |

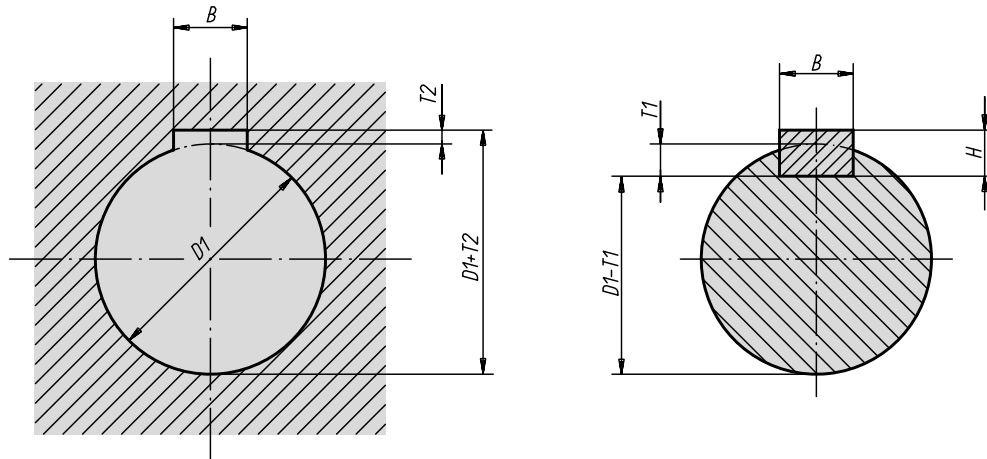


$\sqrt[6.3]{\phantom{x}} \left( \sqrt[1.6]{\phantom{x}} \text{ for tolerance H8 or } \sqrt[3.2]{\phantom{x}} \text{ for tolerance H12} \right)$

| A* | B    | B<br>permissible<br>deviation | C  | C<br>permissible<br>deviation | H<br>max. | H<br>min. | N<br>max. | R1<br>max. | R2<br>max. | T   |
|----|------|-------------------------------|----|-------------------------------|-----------|-----------|-----------|------------|------------|-----|
| 6  | 11   | $+1.5$<br>$0$                 | 5  | $+1$<br>$0$                   | 13        | 11        | 1         | 0.6        | 1          | 0.5 |
| 8  | 14.5 |                               | 7  |                               | 18        | 15        | 1         | 0.6        | 1          | 0.5 |
| 10 | 16   | $+2$<br>$0$                   | 7  |                               | 21        | 17        | 1         | 0.6        | 1          | 0.5 |
| 12 | 19   |                               | 8  |                               | 25        | 20        | 1         | 0.6        | 1          | 0.5 |
| 14 | 23   |                               | 9  | $+2$<br>$0$                   | 28        | 23        | 1.6       | 0.6        | 1.6        | 0.5 |
| 18 | 30   | $+3$<br>$0$                   | 12 |                               | 36        | 30        | 1.6       | 1          | 1.6        | 0.5 |
| 22 | 37   |                               | 16 |                               | 45        | 38        | 1.6       | 1          | 2.5        | 0.5 |
| 28 | 46   | $+4$<br>$0$                   | 20 |                               | 56        | 48        | 1.6       | 1          | 2.5        | 0.5 |
| 36 | 56   |                               | 25 | $+3$<br>$0$                   | 71        | 61        | 2.5       | 1          | 2.5        | 1   |
| 42 | 68   |                               | 32 |                               | 85        | 74        | 2.5       | 1.6        | 4          | 1   |

\* Tolerance H8 for tenon and clamping slots, H12 for clamping slots

# DIN 6885 keyways and parallel keys



## High form (sheet 1)

| For shaft<br>Ø<br>D1 | Shaft slot B*   |                    | Keyway B*       |                    | H  | T1<br>with top<br>clearance | T2<br>by top<br>clearance | T2<br>oversize      |
|----------------------|-----------------|--------------------|-----------------|--------------------|----|-----------------------------|---------------------------|---------------------|
|                      | tight fit<br>P9 | sliding fit<br>JS9 | tight fit<br>P9 | sliding fit<br>JS9 |    |                             |                           |                     |
| over 8 up to 10      | 3               | 3                  | 3               | 3                  | 3  | 1.8 <sup>+0.1</sup>         | 1.4 <sup>+0.1</sup>       | 0.9 <sup>+0.1</sup> |
| over 10 up to 12     | 4               | 4                  | 4               | 4                  | 4  | 2.5 <sup>+0.1</sup>         | 1.8 <sup>+0.1</sup>       | 1.2 <sup>+0.1</sup> |
| over 12 up to 17     | 5               | 5                  | 5               | 5                  | 5  | 3 <sup>+0.1</sup>           | 2.3 <sup>+0.1</sup>       | 1.7 <sup>+0.1</sup> |
| over 17 up to 22     | 6               | 6                  | 6               | 6                  | 6  | 3.5 <sup>+0.1</sup>         | 2.8 <sup>+0.1</sup>       | 2.2 <sup>+0.1</sup> |
| over 22 up to 30     | 8               | 8                  | 8               | 8                  | 7  | 4 <sup>+0.2</sup>           | 3.3 <sup>+0.2</sup>       | 2.4 <sup>+0.2</sup> |
| over 30 up to 38     | 10              | 10                 | 10              | 10                 | 8  | 5 <sup>+0.2</sup>           | 3.3 <sup>+0.2</sup>       | 2.4 <sup>+0.2</sup> |
| over 38 up to 44     | 12              | 12                 | 12              | 12                 | 8  | 5 <sup>+0.2</sup>           | 3.3 <sup>+0.2</sup>       | 2.4 <sup>+0.2</sup> |
| over 44 up to 50     | 14              | 14                 | 14              | 14                 | 9  | 5.5 <sup>+0.2</sup>         | 3.8 <sup>+0.2</sup>       | 2.9 <sup>+0.2</sup> |
| over 50 up to 58     | 16              | 16                 | 16              | 16                 | 10 | 6 <sup>+0.2</sup>           | 4.3 <sup>+0.2</sup>       | 3.4 <sup>+0.2</sup> |

## High form for machine tools (sheet 2)

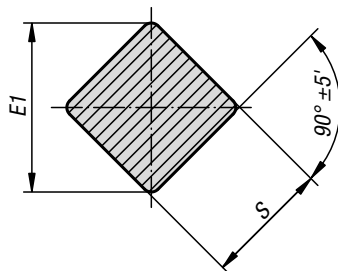
| For shaft<br>Ø<br>D1 | Shaft slot B*   |                    | Keyway B*       |                    | H  | T1                  | T2                  |
|----------------------|-----------------|--------------------|-----------------|--------------------|----|---------------------|---------------------|
|                      | tight fit<br>P9 | sliding fit<br>JS9 | tight fit<br>P9 | sliding fit<br>JS9 |    |                     |                     |
| over 10 up to 12     | 4               | 4                  | 4               | 4                  | 4  | 3 <sup>+0.1</sup>   | 1.1 <sup>+0.1</sup> |
| over 12 up to 17     | 5               | 5                  | 5               | 5                  | 5  | 3.8 <sup>+0.1</sup> | 1.3 <sup>+0.1</sup> |
| over 17 up to 22     | 6               | 6                  | 6               | 6                  | 6  | 4.4 <sup>+0.1</sup> | 1.7 <sup>+0.1</sup> |
| over 22 up to 30     | 8               | 8                  | 8               | 8                  | 7  | 5.4 <sup>+0.2</sup> | 1.7 <sup>+0.2</sup> |
| over 30 up to 38     | 10              | 10                 | 10              | 10                 | 8  | 6 <sup>+0.2</sup>   | 2.1 <sup>+0.2</sup> |
| over 38 up to 44     | 12              | 12                 | 12              | 12                 | 8  | 6 <sup>+0.2</sup>   | 2.1 <sup>+0.2</sup> |
| over 44 up to 50     | 14              | 14                 | 14              | 14                 | 9  | 6 <sup>+0.2</sup>   | 2.6 <sup>+0.2</sup> |
| over 50 up to 58     | 16              | 16                 | 16              | 16                 | 10 | 7.5 <sup>+0.2</sup> | 2.6 <sup>+0.2</sup> |

\* The indicated tolerances for slot widths apply, as a rule, for milled slots.  
ISO quality IT8 (i.e. P8 instead of P9, N8 instead of N9 and JS8 instead of JS9) are recommended for the width of broached slots.  
Tolerance H9 for the shaft keyway and D10 for the hub keyway are recommended for sliding fits.

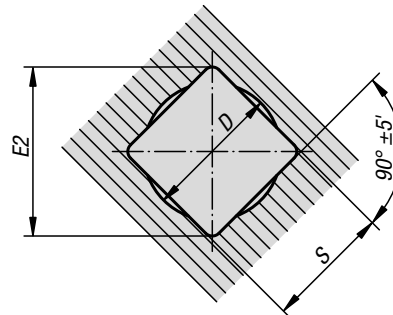
# Squares for DIN 79 operating spindles and operating parts



A External square



B Internal square



| S<br>H11 / h11 | D<br>max.* | E1<br>max. | E1<br>min.** | E2<br>min. |
|----------------|------------|------------|--------------|------------|
| 4              | 4.2        | 5          | 4.8          | 5.3        |
| 5              | 5.3        | 6.5        | 6            | 6.6        |
| 5.5            | 5.8        | 7          | 6.6          | 7.2        |
| 6              | 6.3        | 8          | 7.2          | 8.1        |
| 7              | 7.3        | 9          | 8.4          | 9.1        |
| 8              | 8.4        | 10         | 9.6          | 10.1       |
| 9              | 9.5        | 12         | 10.8         | 12.1       |
| 10             | 10.5       | 13         | 12           | 13.1       |
| 11             | 11.6       | 14         | 13.2         | 14.1       |
| 12             | 12.6       | 16         | 14.4         | 16.1       |
| 13             | 13.7       | 17         | 15.6         | 17.1       |
| 14             | 14.7       | 18         | 16.8         | 18.1       |
| 16             | 16.8       | 21         | 19.2         | 21.2       |
| 17             | 17.9       | 22         | 20.4         | 22.2       |
| 19             | 20         | 25         | 22.8         | 25.2       |
| 22             | 23.1       | 28         | 26.4         | 28.2       |

\* Internal squares are allowed to be recessed in the middle third of each side.  
D max. defines the borehole diameter which leaves appropriate clearance  
when disposed concentrically to the internal square.

\*\* External squares made on round steel bar may fall below the minimum size  
by the amount of tolerance on the steel bar, i.e. by h11.

# DIN ISO 1302 surface finish indication DIN ISO 2768 T1 and T2 general tolerances



## DIN ISO 1302 surface finish indication

| Surface symbol | Meaning                                                                                                                   |
|----------------|---------------------------------------------------------------------------------------------------------------------------|
|                | - remains in delivered condition<br>- material removal not permitted                                                      |
|                | - Material removal prescribed                                                                                             |
|                | - Material removal prescribed<br>- All surfaces have the same surface finish                                              |
|                | - Material removal prescribed<br>- Upper limit of the mean surface roughness (Rz) is 40 µm                                |
|                | - Material removal prescribed<br>- Upper limit of the mean surface roughness (Rz) is 6.3 µm<br>- Machining method: Ground |

- KIPP products are adapted and manufactured in such a way that they are suitable for their general purpose with reference to material and surface finish. As such, they meet all normal tolerance requirements.
- All dimensions are indicated in mm.
- The latest DIN standard sheet version applies to all parts made to DIN standards.
- Variations on dimensions without tolerance values are according to "DIN ISO 2768-mk".

## General tolerances for linear and angular dimensions (DIN ISO 2768 T1)

|                 |             | Linear Dimensions                                 |                |                 |                   |                    |                     |                      |                      |
|-----------------|-------------|---------------------------------------------------|----------------|-----------------|-------------------|--------------------|---------------------|----------------------|----------------------|
| Tolerance class |             | Deviations limits mm for nominal dimension ranges |                |                 |                   |                    |                     |                      |                      |
| abbreviation    | description | 0.5 up to 3                                       | over 3 up to 6 | over 6 up to 30 | over 30 up to 120 | over 120 up to 400 | over 400 up to 1000 | over 1000 up to 2000 | over 2000 up to 4000 |
| f               | fine        | ± 0.05                                            | ± 0.05         | ± 0.1           | ± 0.15            | ± 0.2              | ± 0.3               | ± 0.5                | –                    |
| m               | medium      | ± 0.1                                             | ± 0.1          | ± 0.2           | ± 0.3             | ± 0.5              | ± 0.8               | ± 1.2                | ± 2                  |
| c               | coarse      | ± 0.2                                             | ± 0.3          | ± 0.5           | ± 0.8             | ± 1.2              | ± 2                 | ± 3                  | ± 4                  |
| v               | very coarse | –                                                 | ± 0.5          | ± 1             | ± 1.5             | ± 2.5              | ± 4                 | ± 6                  | ± 8                  |

|                 |             | External Radii and Chamfer Heights                |                |        | Angular Dimensions                                                            |                  |                   |                    |          |
|-----------------|-------------|---------------------------------------------------|----------------|--------|-------------------------------------------------------------------------------|------------------|-------------------|--------------------|----------|
| Tolerance class |             | Deviations limits mm for nominal dimension ranges |                |        | Deviation limits degrees and minutes for nominal dimension ranges (short leg) |                  |                   |                    |          |
| abbreviation    | description | 0.5 up to 3                                       | over 3 up to 6 | over 6 | over 10                                                                       | over 10 up to 50 | over 50 up to 120 | over 120 up to 400 | over 400 |
| f               | fine        | ± 0.2                                             | ± 0.5          | ± 1    | ± 1°                                                                          | ± 0°30'          | ± 0°20'           | ± 0°10'            | ± 0°5'   |
| m               | medium      | ± 0.2                                             | ± 0.5          | ± 1    | ± 1°                                                                          | ± 0°30'          | ± 0°20'           | ± 0°10'            | ± 0°5'   |
| c               | coarse      | ± 0.4                                             | ± 1            | ± 2    | ± 1°30'                                                                       | ± 1°             | ± 0°30'           | ± 0°15'            | ± 0°10'  |
| v               | very coarse | ± 0.4                                             | ± 1            | ± 2    | ± 3°                                                                          | ± 2°             | ± 1°              | ± 0°30'            | ± 0°20'  |

## General Tolerances for Form and Position (DIN ISO 2768 T2)

|                 | Straightness and Flatness   |                     |                      |                       |                        |                         | Perpendicularity            |                       |                        |                         | Symmetry                    |                       |                        |                         | Run-out |
|-----------------|-----------------------------|---------------------|----------------------|-----------------------|------------------------|-------------------------|-----------------------------|-----------------------|------------------------|-------------------------|-----------------------------|-----------------------|------------------------|-------------------------|---------|
| Tolerance class | nominal dimension ranges mm |                     |                      |                       |                        |                         | nominal dimension ranges mm |                       |                        |                         | nominal dimension ranges mm |                       |                        |                         |         |
|                 | up to 10                    | over 10<br>up to 30 | over 30<br>up to 100 | over 100<br>up to 300 | over 300<br>up to 1000 | over 1000<br>up to 3000 | up to 100                   | over 100<br>up to 300 | over 300<br>up to 1000 | over 1000<br>up to 3000 | up to 100                   | over 100<br>up to 300 | over 300<br>up to 1000 | over 1000<br>up to 3000 |         |
| H               | 0.02                        | 0.05                | 0.1                  | 0.2                   | 0.3                    | 0.4                     | 0.2                         | 0.3                   | 0.4                    | 0.5                     | 0.5                         | 0.5                   | 0.5                    | 0.5                     | 0.1     |
| K               | 0.05                        | 0.1                 | 0.2                  | 0.4                   | 0.6                    | 0.8                     | 0.4                         | 0.6                   | 0.8                    | 1                       | 0.6                         | 0.6                   | 0.8                    | 1                       | 0.2     |
| L               | 0.1                         | 0.2                 | 0.4                  | 0.8                   | 1.2                    | 1.6                     | 0.6                         | 1                     | 1.5                    | 2                       | 0.6                         | 1                     | 1.5                    | 2                       | 0.5     |



# KIPP CLAMPING TECHNOLOGY

With more than 5000 components, KIPP offers a wide workholding range. The systems are of modular design and compatible with each other, guaranteeing minimum setup times for your machine tools.

All 21 product groups  
at a glance

Over 5000  
components

570 pages  
thick



Icon overview

More than 800  
new products

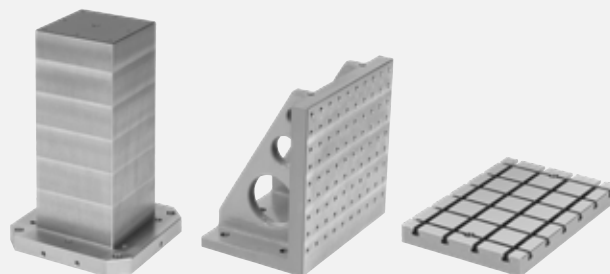
## WORKHOLDING TECHNOLOGY

Diverse component program for the universal clamping of workpieces. Logically structured product groups such as clamping elements, positioning elements and clamping accessories for machine tools. Freely combinable and very flexible.



## MODULAR CLAMPING TECHNOLOGY

Basic elements for modular workholding over grid holes. Standardised plates, towers and angles improve the flexibility and reduce the number of fixture elements in machining to a minimum.



## ZERO POINT CLAMPING TECHNOLOGY

Systems for quick, precise clamping and referencing with the zero-point clamping technology. The 5-axis module clamping system is available for multi-side machining. Other quick-change systems are the mechanical and pneumatic positioning and clamping systems.



## VICE CLAMPING TECHNOLOGY

Various vice types. 5-axis clamping systems for 5-sided machining. NC vices for 3-axis milling machines. Multi-clamping systems for large quantities. Centric vices with zero-point and automaton interface.



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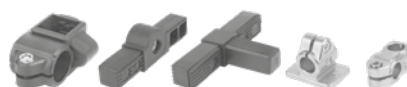
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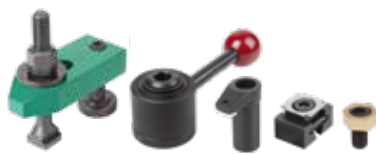
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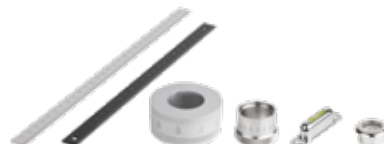
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# TRUST IN KIPP





HEINRICH KIPP WERK has been a quality partner to industry for more than 100 years.

We offer a comprehensive product spectrum with more than 65,000 elements in the sectors clamping technology, standard elements and operating parts.

We produce in our own machine shop located in Germany. This guarantees rapid response times and short logistics routes. Customers appreciate our vertical integration and many years of development experience.

Reliability. Durability. Sustainability.  
This is what our owner managed company has stood for from the very beginning.

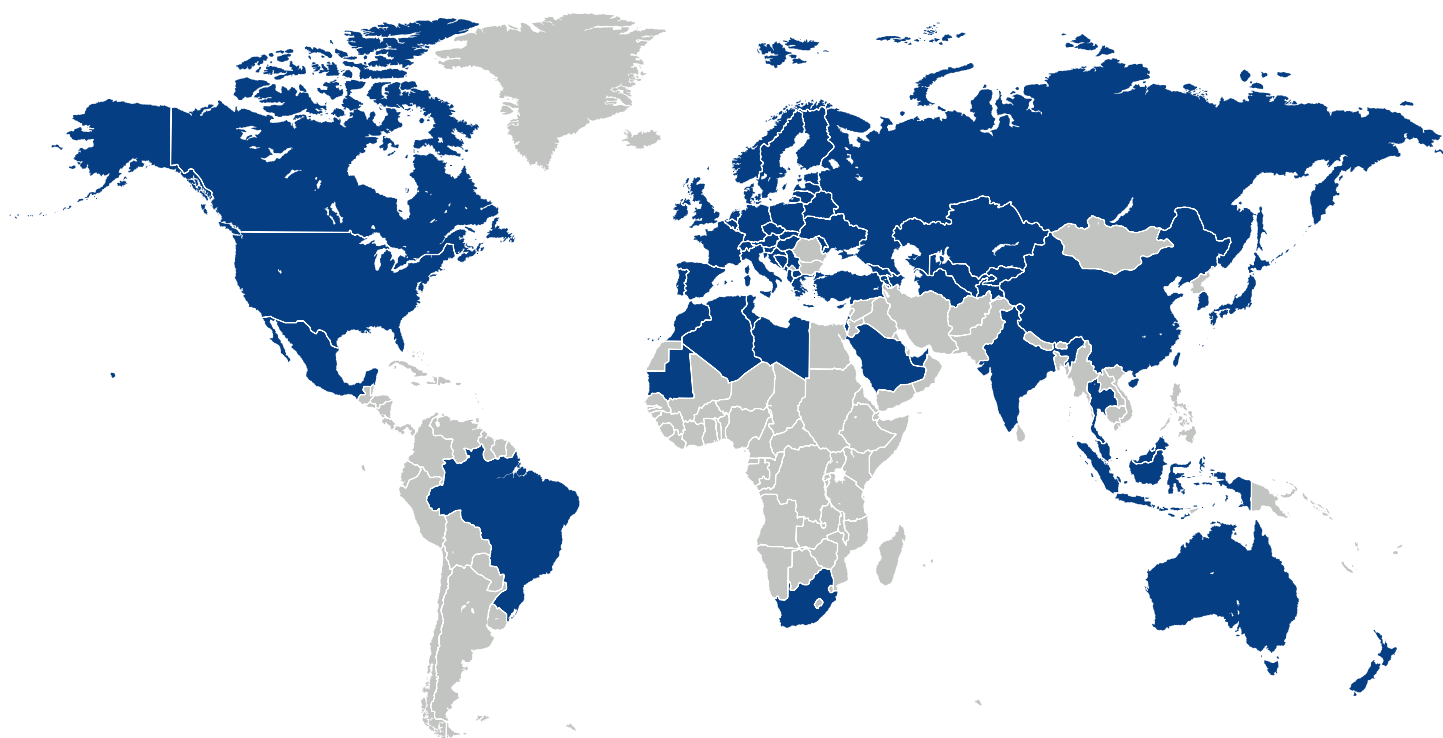


Nicolas Kipp

Heinrich Kipp

# LOCATIONS

HEINRICH KIPP WERK is present worldwide with 12 company branches and more than 50 agencies, and so guarantees a high level of delivery capability internationally. We have a well-developed service network and specialised consultants.



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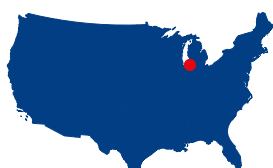
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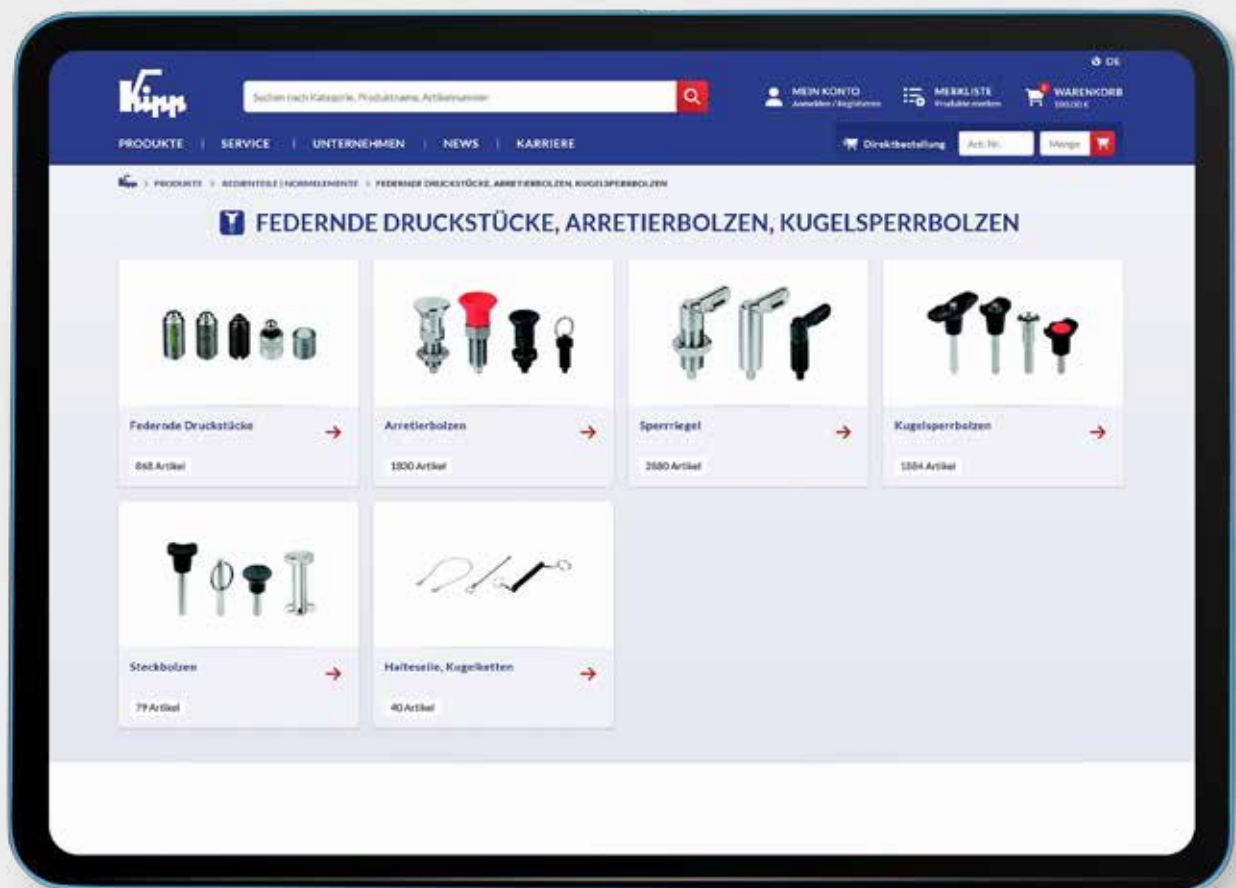


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## Professional advice

HEINRICH KIPP WERK has highly trained customer service staff and expert technical advisers with extensive experience.



## Delivery

The high-performance logistics system guarantees rapid response times and high supply availability. Customers can choose between standard, express or premium delivery.



# Special solutions

HEINRICH KIPP WERK produces at its site in Germany. Through our vertical range of manufacture and the extensive machine park, we can realise standard elements, assemblies and special solutions at any time.

We design a large number of near-standard and complex special elements - exactly to customer specifications. In our machine shop we have metal cutting, injection moulding and zinc die-casting machines. Our own toolmaking workshop ensures professional project implementation.

Completely assembled and with treated surface. Our quality control ensures highest quality. Sales technicians accompany every single project - from the quotation to feasibility studies and production.



Development/design



Toolmaking



Machining



Plastic injection moulding



Zinc die-casting



Grinding



Surface treatment



Assembly

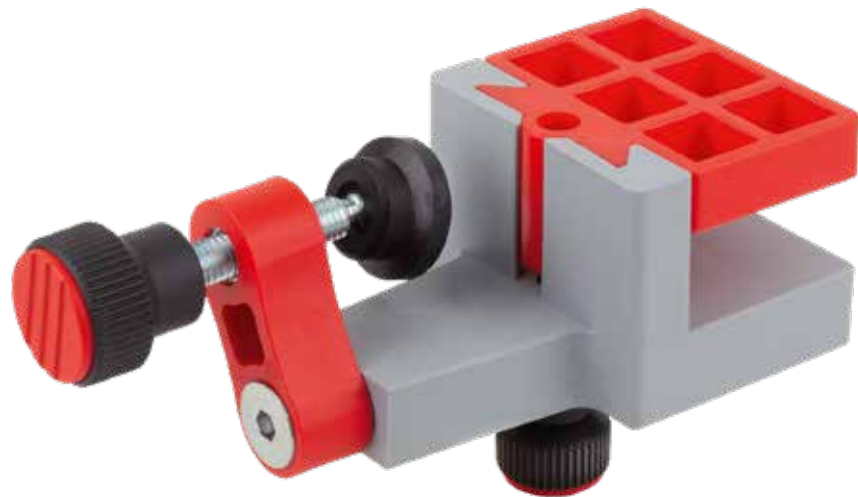


Logistics



**Cam lever  
stainless steel**

**Complex  
assemblies**



**Individualised  
operating elements**

## Product lines

### **NOVO grip**



Our NOVO grip product line is the classic in the plastic sector. Well thought out in every detail. Sophisticated design, easy-grip form and efficient price/performance.

### **SYMPA touch**



It's in the name. SYMPA touch, our product line for maximum ergonomics. The soft, anti-slip material sits perfectly in the hand.

### **NATURE grip**



Our NATURE grip product range is environmentally friendly and produced from bioplastic, which is made entirely from renewable raw materials.

### **MEDI grip**



MEDI grip is suitable for areas with high hygienic requirements. These operating parts contain micro-silver, which has an antibacterial effect on the surface.

### **FEATURE grip**



With the new FEATURE grip product range, KIPP has developed and offers smart components and solutions that deliver information and can be networked and so are suitable for Industry 4.0.

### **NOVOnox hygienic**



The stainless-steel products from the NOVOnox hygienic line target the foodstuff, pharmaceutical, chemical and packaging sectors.

## Material and surfaces

Besides the standard versions, other materials or grades can be supplied on request. At extra cost, different surface finishes such as matt or high-gloss trivalent passivated for steel parts, can be provided. In addition, for plastic coatings or injection-moulded plastic parts, other colour variants can be supplied on request.

## RoHS / REACH / POP

HEINRICH KIPP WERK supplies products that conform to the 2011/65/EU (incl. 2015/863/EU) directive. For exceptions, see the negative list. In accordance with REACH, we only use substances and compounds that are registered, not subject to authorisation under appendix XIV and not subject to any restriction under appendix XVII, and which are not part of (EU) 2019/1021 (POPs Regulation).



## 19" 19" TECHNOLOGY



Grips, rails and standard elements suitable for 19 inch systems. Compatible for applications in the IT sector, event technology, laboratories or computer centres.



## STAINLESS STEEL



Products marked with this symbol are made from stainless steel. The predominant material used here is the austenitic alloy 1.4305.



## ESD



These products are made from electrically conductive plastic. They can therefore be used in ESD secure areas where electrostatic sensitive components can often be found.



## ACCESSORIES alu profiles



The solution for connecting, clamping and holding aluminium profiles. All components perfectly match conventional profiles with 8 mm or 10 mm slot widths.



## DETECTABLE



Detectable products made from a special plastic can be quickly and reliably detected using detection systems.

### Thread versions

The threads are machined to the ISO DIN 13 tolerance class "medium" i.e. H6 for female threads and g6 for male threads. Male threads up to 60 mm long are generally supplied as a full thread. Screws from 70 mm long have 60 mm long threads.

Due to surface finish refinement, threads of aluminium grips may not be true to gauge. To toughen the material most of these threads are form pressed. The pull out resistance from aluminium with M5x10 is here 2000N.

# NOVOnox hygienic

The stainless steel products from the NOVOnox hygienic line target the foodstuff, pharmaceutical, chemical and packaging sectors.

**Hygienic DESIGN** – Operating parts and machine elements that fulfil special requirements. Radii, transitions, bevels, and surfaces are designed to impair wetting and can be easily cleaned or remain permanently unsoiled.

**Hygienic USIT®** – the perfectly coordinated sealing and fastening technology developed according to EHEDG guidelines. Polished surfaces, radii, bevels and form transitions are cavity-free.



## Stainless steel!

Material: 1.4404

Polished to  $Ra < 0.8 \mu m$



## 100 % seal!

Hygienic DESIGN  
sealing washer EU10/2011 and  
FDA conform thermoplastic (POM)

## System unit!

Hex head bolt including pre-fitted,  
replaceable sealing washer.

Material: 1.4404

Polished to  $Ra < 0.8 \mu m$

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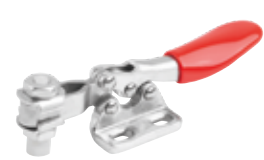
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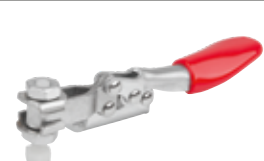
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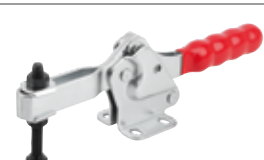
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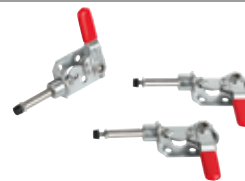
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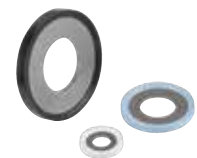
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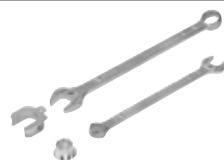
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**K0868**



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Washers with large OD  
DIN 9021  
**K1150**



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## Machine and fixture components

Shim washers  
DIN 988  
**K1151**



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Washers plastic  
captive  
**K1526**



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C-washers  
DIN 6372 enhanced  
**K0730**



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C-washers captive  
DIN 6371  
**K0703**



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Shoulder screws with  
slotted flat head  
DIN 923  
**K0704**



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Shoulder screws  
similar to DIN ISO 7379  
**K0705**



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Shoulder screws  
with hexagon head similar  
to DIN 609  
**K0706**



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Grub screws with flat point  
hexagon socket  
DIN EN ISO 4026  
**K0707**



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Grub screw with hexagon socket  
and pointed end  
DIN EN ISO 4027  
**K0797**



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Screws with countersunk head  
hexagon socket DIN EN ISO 10642  
**K0708**



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Socket head screws  
full thread,  
DIN 912 / DIN EN ISO 4762  
**K1159**



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Socket head screws  
DIN 912/DIN EN ISO 4762  
with thread lock  
**K0869**



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Socket head screws  
DIN 912 / DIN EN ISO 4762,  
steel or stainless steel  
**K0869**



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Socket head screws with low head  
DIN 6912  
**K1160**



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Eye bolts DIN 444, Form B  
with long thread  
**K1418**



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Eye bolts  
DIN 444, Form B  
**K0396**



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Studs  
with screw-in stop  
for gluing in  
**K0404**



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Stud sets  
with screw-in stop for gluing in  
**K0405**



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## Machine and fixture components

T-thrust screws  
with fixed or sliding T-bar,  
DIN 6304 or DIN 6306  
**K0756**



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Tommy bars  
with fixed or sliding T-bar,  
DIN 6305 or DIN 6307  
**K0755**



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Clamping force intensifiers  
**K0584**



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Threaded inserts  
**K0398**



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Threaded inserts reinforced  
**K0399**



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Threaded inserts solid body  
**K0400**



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Threaded inserts  
with internal thread, self-locking  
**K0401**



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Threaded inserts reinforced  
internal thread, self-locking  
**K0402**



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Repair kit  
**K0653**



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Threaded inserts self-tapping  
with cutting bores  
**K0979**



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Threaded inserts self-tapping  
with cutting slot  
**K0978**



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Drill bushes cylindrical  
DIN 179  
**K1021**



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Drill bushes flanged  
DIN 172  
**K1022**



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Nuts for T-slots  
DIN 508 enhanced  
**K0377**



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T-slot keys steel or  
stainless steel  
**K0378**



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Nuts for T-slots  
rhombic form  
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Parallel keys  
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Slot nuts  
twist-in Type I  
**K1023**



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## Machine and fixture components

Slot nuts  
twist-in, keyed Type I  
**K1024**



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Slot keys  
heavy duty Type I  
**K1025**



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Slot nuts  
twist-in Type B  
**K1026**



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Slot nuts  
twist-in with spring Type B  
**K1027**



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T-nuts  
**K1028**



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Hammer-head screws  
**K1029**



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Hexagon nuts with flange  
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Connecting sets standard  
Type I  
**K1031**



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Central screw  
Type B  
**K1040**



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Connecting sets  
universal  
Type I  
**K1032**



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Connecting sets central  
Type I  
**K1033**



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Connecting sets central  
Type B  
**K1034**



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Connecting sets central  
Type B  
**K1035**



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Connecting sets  
automatic  
Type I  
**K1036**



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Connecting sets automatic  
Type B  
**K1037**



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Pin connector sets  
Type B  
**K1038**



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Cube connector sets  
Type B  
**K1039**



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Threaded insert, steel,  
self-tapping  
type B  
**K1538**



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## Machine and fixture components

Assembly tool, steel  
for self-tapping threaded inserts,  
type B  
**K1538**



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Butt connector sets automatic  
Type I  
**K1041**



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Fastening sets  
for straps and angles  
**K1044**



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Shaft collars set screw  
DIN 705, steel  
**K0406**



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Shaft collars set screw  
DIN 705, stainless steel  
**K0406**



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Shaft collars with wing grip  
similar to DIN 705, steel  
**K0407**



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One-piece shaft collars  
slitted inside  
**K0611**



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One-piece shaft collars  
slitted outside  
**K0611**



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Shaft collars  
one-piece, with clamping lever  
**K0611**



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Shaft collars two-piece  
**K0612**



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Shaft collars  
tapped  
**K0986**



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Clamp hubs  
**K0376**



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Clevises  
with screw, steel or  
stainless steel  
**K0397**



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Swing screws  
**K0053**



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Clamping joints  
**K0133**



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Clamping joints  
individually adjustable  
**K0134**



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Multiple connectors  
**K0135**



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Clamping joints  
**K0136**



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# Machine and fixture components

Dial gauge collets  
for Ø8 shafts  
**K0629**



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Sliding clamps  
for slotted holes  
**K1070**



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Shim plates  
for sliding clamps  
for slotted hole  
**K1071**



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Sliding clamps  
for square bars  
**K1072**



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Base plates  
for sliding clamp  
for square bars  
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Ratchet elements  
steel or stainless steel  
**K1446**



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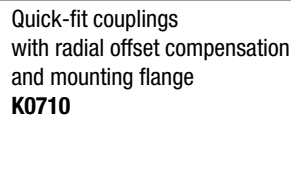


Joints



Quick-fit couplings  
with radial offset compensation  
**K0709**

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Quick-fit couplings  
with angular and radial offset  
compensation  
**K0711**

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Clevis joints with snap-in pin  
DIN 71752  
**K0731**



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Snap-in pins for clevis joints  
DIN 71752  
**K1139**



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Pins with circlip groove  
suitable for clevis  
**K1454**



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Pins with circlip groove  
suitable for clevis  
**K1455**



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Pins with split pin hole  
suitable for clevis  
**K1456**



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Clevis joints stainless steel  
DIN 71752  
**K0732**



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Clevis joints  
DIN 71752  
**K0733**



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Clevis, steel or stainless steel  
with male thread  
**K1459**



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Clevis tang, steel  
**K1460**



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Ball joints  
DIN 71802  
**K0734**



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Ball seats for ball joints  
DIN 71805  
**K0712**



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Ball studs for ball joints  
DIN 71803  
**K0713**



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Rod-end eyes  
**K0127**



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## Joints

Circlips for ball seats  
DIN 71805  
**K0714**



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Split pins  
DIN EN ISO 1234  
**K1136**



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R-clips  
similar to DIN 11024  
**K1137**



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Axial joints  
similar to DIN 71802  
**K0715**



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Rod ends with ball bearing  
external thread,  
DIN ISO 12240-4  
**K0716**



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Rod ends with ball bearing  
internal thread,  
DIN ISO 12240-4  
**K0717**



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Rod ends with plain bearing  
external thread,  
DIN ISO 12240-4  
**K0718**



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Rod ends with plain bearing  
internal thread,  
DIN ISO 12240-4  
**K0719**



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Rod ends with plain bearing  
external thread, stainless steel,  
DIN ISO 12240-4  
**K0720**



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Rod ends with plain bearing  
internal thread, stainless steel,  
DIN ISO 12240-4  
**K0721**



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Rod ends with plain bearing  
external thread, narrow version,  
DIN ISO 12240-4  
**K0722**



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Rod ends with plain bearing  
internal thread, narrow version,  
DIN ISO 12240-4  
**K0723**



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Spherical bearings K/E series  
DIN ISO 12240-1  
**K1324**



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Rod ends igubal® with plain bearing  
external thread,  
similar to DIN ISO 12240-4  
**K1465**



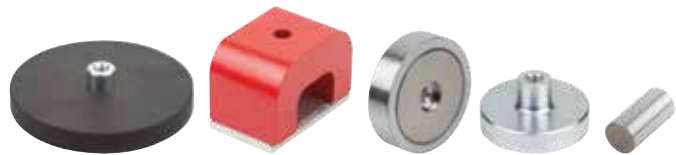
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Rod ends igubal® with plain bearing  
internal thread,  
similar to DIN ISO 12240-4  
**K1466**



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 **Magnets**



Magnets raw  
NdFeB, disc form  
**K1404**



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Magnets raw with hole  
NdFeB, disc form  
**K1405**



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Magnets raw  
NdFeB, block form  
**K1406**



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Magnets raw  
AlNiCo, bar type  
**K1407**



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Magnets deep pot  
AlNiCo with fitting tolerance  
**K0545**



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Magnets deep pot  
AlNiCo without fitting tolerance  
**K0546**



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Magnets deep pot with pin  
AlNiCo  
**K0547**



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Magnets shallow pot  
hard ferrite  
**K0548**



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Magnets shallow pot with thread  
hard ferrite  
**K0549**



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Magnets shallow pot with internal thread  
hard ferrite with stainless-steel housing  
**K1400**



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Magnets shallow pot  
SmCo  
**K0550**



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Magnets deep pot  
SmCo  
**K0551**



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Magnets deep pot  
NdFeB  
**K1395**



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Magnets deep pot with machinable magnetic face  
NdFeB  
**K1403**



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Magnets deep pot with internal thread  
NdFeB  
**K0552**



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Magnets shallow pot  
NdFeB  
**K0553**



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## Magnets

|                                                                                                                  |                                                                                     |                 |
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| <p>Magnets shallow pot with hook<br/>NdFeB<br/><b>K1402</b></p>                                                  |    | <p>Page 883</p> |
| <p>Magnets shallow pot with counterbore<br/>hard ferrite<br/><b>K0554</b></p>                                    |    | <p>Page 884</p> |
| <p>Magnets shallow pot with counterbore<br/>SmCo with stainless-steel housing<br/><b>K1399</b><br/>★</p>         |    | <p>Page 884</p> |
| <p>Magnets shallow pot with countersink<br/>hard ferrite<br/><b>K0555</b><br/>★</p>                              |   | <p>Page 885</p> |
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| <p>Magnets shallow pot with countersink<br/>SmCo<br/><b>K1401</b><br/>★</p>                                      |  | <p>Page 886</p> |
| <p>Magnets shallow pot with countersink<br/>NdFeB<br/><b>K1393</b></p>                                           |  | <p>Page 886</p> |
| <p>Magnets shallow pot with internal thread<br/>NdFeB<br/><b>K0556</b></p>                                       |  | <p>Page 887</p> |
| <p>Magnets shallow pot with internal thread<br/>hard ferrite<br/><b>K1394</b></p>                                |  | <p>Page 887</p> |

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| <p>Magnets deep pot<br/><b>K0557</b></p>                                                                   |    | <p>Page 888</p> |
| <p>Magnets shallow pot<br/><b>K0558</b></p>                                                                |    | <p>Page 888</p> |
| <p>Magnets button<br/><b>K0559</b></p>                                                                     |    | <p>Page 889</p> |
| <p>Magnets strong<br/><b>K0560</b></p>                                                                     |   | <p>Page 889</p> |
| <p>Protective rubber caps for shallow pot magnets<br/><b>K0561</b></p>                                     |  | <p>Page 890</p> |
| <p>Magnets shallow pot with internal thread<br/>NdFeB, with rubber protective jacket<br/><b>K0562</b></p>  |  | <p>Page 891</p> |
| <p>Magnets with internal thread<br/>NdFeB, rectangular, with rubber protective jacket<br/><b>K1396</b></p> |  | <p>Page 892</p> |
| <p>Magnets shallow pot with tapped pin<br/>NdFeB, with rubber protective jacket<br/><b>K0563</b></p>       |  | <p>Page 893</p> |
| <p>Magnets shallow pot with threaded pin<br/>NdFeB, with rubber protective jacket<br/><b>K0564</b></p>     |  | <p>Page 894</p> |



Magnets

Magnets deep pot with threaded pin  
NdFeB, rubber magnetic face  
**K1397**



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Magnets shallow pot with through hole  
NdFeB, with rubber protective jacket  
**K0565**



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Retaining magnets  
hard ferrite  
**K1398**



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# Buffer elements



Rubber buffers  
steel or stainless steel, type A  
**K0566**



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Rubber buffers  
type AT tapered  
**K0567**



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Rubber buffers  
steel or stainless steel, type B  
**K0568**



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Rubber buffers  
stainless steel, type B  
**K1321**



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Rubber buffers  
steel or stainless steel, type C  
**K0569**



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Rubber buffers  
stainless steel, type C  
**K1320**



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Rubber buffers  
type CT tapered  
**K0570**



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Rubber buffers  
steel or stainless steel, type D  
**K0571**



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Rubber buffers  
stainless steel, type D  
**K1318**



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Rubber buffers  
type DS suction foot  
**K0572**



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Rubber buffers  
type E  
**K0573**



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Rubber buffers  
stainless steel, type E  
**K1319**



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Rubber buffers  
parabolic  
**K0574**



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Rubber buffers  
conical  
**K0575**



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Rubber buffers  
spherical  
**K0576**



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## Level indicators, screw plugs

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|  | Oil level gauges<br><b>K0443</b>                                                            | Page 918 |
|  | Oil level gauges<br><b>K0444</b>                                                            | Page 919 |
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|  | Oil level gauges<br>with electronic temperature<br>monitoring<br><b>K1426</b>               | Page 921 |
|  | Oil level gauges<br>with electronic oil level and<br>temperature monitoring<br><b>K1427</b> | Page 922 |
|  | Oil level gauges<br>long version<br><b>K1100</b>                                            | Page 923 |
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|  | Oil level gauges<br>with electronic temperature<br>monitoring, long version<br><b>K1429</b>                  | Page 925     |  |
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|  | Oil level sight glasses<br><b>K0445</b>                                                                      | Page 928     |  |
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|  | Oil level sight glasses<br>aluminium, glass window<br><b>K0246</b>                                           | Page 931     |  |
|  | Screw plugs with hexagon<br>socket<br>DIN 906, tapered thread<br><b>K1129</b>                                | Page 932     |  |
|  | Screw plugs with collar<br>and hexagon socket<br>DIN 908<br><b>K1130</b>                                     | Page 933     |  |





## Level indicators, screw plugs

Screw plugs hex head with collar  
DIN 910  
**K1131**



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Screw plugs  
**K0450**



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Press-in plugs  
**K0451**



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★ Screw plugs with magnet  
**K0452**



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★ Screw plugs aluminium with magnet  
**K0453**



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★ Screw plugs  
**K0454**



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★ Plugs fill knurled cap  
**K0455**



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Screw plugs with hexagon socket  
**K1102**



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Screw plugs aluminium  
**K1104**



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Caps for filler necks  
**K0456**



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Vent screws  
**K0457**



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Vent screws with splash guard  
**K0458**



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Vent screws with check valve  
**K0459**



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Vent screws brass  
**K0460**



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Vent screws brass with check valve  
**K0461**



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Press-in plugs with dipstick  
**K0462**



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Vent screws with dipstick  
**K0465**



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Vent screws with check valve and dipstick  
**K0467**



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# Level indicators, screw plugs

Screw plugs  
with dipstick  
**K1101**



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Dipsticks  
**K0468**



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Filler necks  
**K0470**



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Filler necks  
**K1103**



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Filler necks  
**K0471**



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Grease nipples  
conical head DIN 71412  
**K1132**



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Grease nipple, steel, assortment  
box  
**K1539**



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Grease nipple caps  
for conical head grease nipples  
**K1133**



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Grease nipples  
flush type DIN 3405  
**K1134**



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Grease nipples  
button head DIN 3404  
**K1135**

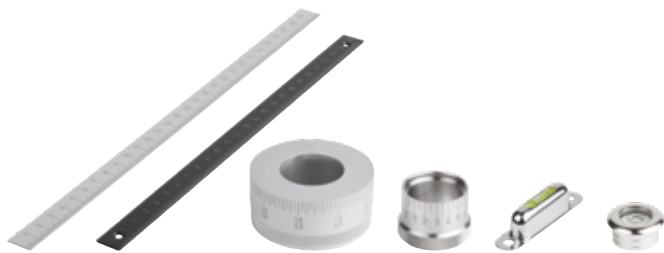


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Scales, scale rings, level vials



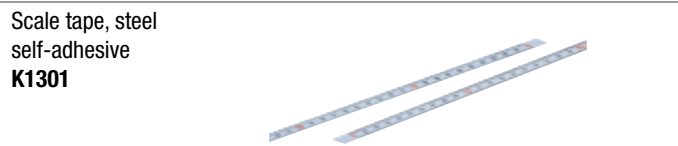
Linear scales  
self adhesive or with  
screw holes, aluminium  
**K0757**

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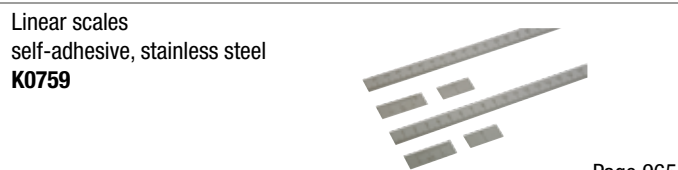
Linear scales  
self-adhesive or with screw holes,  
aluminium  
**K0758**

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Scale tape, steel  
self-adhesive  
**K1301**

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Linear scales  
self-adhesive, stainless steel  
**K0759**

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Bullseye levels  
in frame, to screw on  
**K1154**

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Bullseye levels  
in plastic frame  
**K1153**

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Bullseye levels  
with bead-edged frame  
**K1152**

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Bullseye levels  
in round frame  
**K1155**



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Bullseye level body  
**K1156**



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Bullseye level body  
plastic  
**K1157**



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Tubular bubble levels  
with frame to screw on  
**K1158**



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# Material handling



Swivel and fixed castors  
standard version  
**K1759**



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Swivel and fixed castors  
electrically conductive,  
standard version  
**K1759**



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Swivel and fixed castors  
heavy-duty version  
**K1760**



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Swivel and fixed castors  
steel plate, electrically conductive,  
heavy-duty version  
**K1760**



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Swivel and fixed castors  
standard version  
**K1761**



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Swivel and fixed castors  
steel plate, electrically conductive  
standard version  
**K1761**



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Swivel and fixed castors  
standard version  
**K1762**



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Swivel and fixed castors  
heavy-duty version  
**K1763**



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Swivel and fixed castors  
standard version  
**K1764**



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Swivel and fixed castors  
medium-duty version  
**K1765**



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Swivel and fixed castors  
steel plate, heavy-duty version  
**K1788**



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Steel plate swivel and fixed  
castors  
with soft rubber tyres  
**K1766**



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Steel plate swivel castors  
with soft rubber tyres and bolt hole  
**K1789**



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Swivel and fixed castors  
medium-duty version  
**K1767**



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Swivel and fixed castors  
heavy-duty version  
**K1768**



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Swivel and fixed castors  
welded steel heavy-duty version  
**K1769**



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# Material handling

|                                                                                     |  |              |
|-------------------------------------------------------------------------------------|--|--------------|
| Swivel and fixed castors<br>standard version<br><b>K1770</b>                        |  | Page 992     |
| Swivel and fixed castors<br>heavy-duty version<br><b>K1771</b>                      |  | Page 993     |
| Swivel and fixed castors<br>heavy-duty version<br><b>K1772</b>                      |  | Page 994-995 |
| ★ Swivel and fixed castors<br>stainless steel, standard version<br><b>K1773</b>     |  | Page 996     |
| ★ Swivel castors<br>compact version<br><b>K1774</b>                                 |  | Page 998-999 |
| ★ Swivel and fixed castors<br>steel plate, for sterile areas<br><b>K1775</b>        |  | Page 1000    |
| ★ Swivel and fixed castors<br>stainless steel, for sterile areas<br><b>K1790</b>    |  | Page 1001    |
| Swivel castors with bolt hole<br>stainless steel, for sterile areas<br><b>K1791</b> |  | Page 1002    |
| Wheels<br>rubber tyres on steel plate rims<br><b>K1776</b>                          |  | Page 1003    |

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| Wheels<br>rubber tyres on die-cast<br>aluminium rims<br><b>K1777</b>     |  | Page 1004 |
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| Guide rollers<br><b>K1779</b>                                            |  | Page 1006 |
| Wheels<br>aluminium rims with<br>injection-moulded tread<br><b>K1780</b> |  | Page 1007 |
| Rollers heavy-load<br><b>K1781</b>                                       |  | Page 1008 |
| Wheels heavy-load<br>wheel body welded<br><b>K1782</b>                   |  | Page 1009 |
| Wheels polyamide<br><b>K1783</b>                                         |  | Page 1010 |
| Wheels polyamide<br>heavy-duty version<br><b>K1784</b>                   |  | Page 1011 |
| Wheels thermoset<br>heat-resistant<br><b>K1785</b>                       |  | Page 1012 |



## Material handling

Elevating castors with foot  
with bolt hole or mounting plate  
**K1786**



Page 1013

Elevating castors  
with integrated machine foot  
**K1787**



Page 1014

Ring bolts  
DIN 580  
**K0767**



Page 1016

Ring bolts  
similar to DIN 580  
**K1333**



Page 1017

Ring nuts  
DIN 582  
**K0768**



Page 1018

Ring nuts  
similar to DIN 582  
**K1334**



Page 1019

Ring bolts rotatable  
high-strength grade 10  
**K0769**



Page 1020

Ring bolts  
swivel, 360° rotatable, grade 8  
**K0770**



Page 1021

Hoist rings, steel, 360° rotation  
grade 10  
**K1735**



Page 1022-1023

Weld-on D-rings  
**K0773**



Page 1024

D-Shackles  
**K1059**



Page 1025

Bow shackles  
**K1058**



Page 1026

Ball transfer units mini  
**K0749**



Page 1029

Ball transfer units with stud  
**K1322**



Page 1030

Ball transfer units  
with steel housing  
**K0760**



Page 1031

Ball transfer units  
with steel housing and plastic ball  
**K0761**



Page 1032

Ball transfer units  
with plastic housing  
**K1827**



Page 1033

Ball transfer units  
undersprung  
**K0762**



Page 1034



# Material handling

|                                                                                      |                                                                                     |           |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------|
| Ball transfer units<br>with solid steel housing<br><b>K0763</b>                      |    | Page 1035 |
| Ball transfer units heavy duty<br><b>K1323</b>                                       |    | Page 1036 |
| Ball transfer units heavy duty<br>suitable for outdoor use<br><b>K1325</b>           |    | Page 1037 |
| ★<br>Ball transfer units<br>with fastening holes, without<br>housing<br><b>K0764</b> |   | Page 1038 |
| ★<br>Ball transfer units<br>with spring clips<br><b>K0765</b>                        |  | Page 1039 |
| ★<br>Ball transfer units steel<br>with lockable ball<br><b>K1734</b>                 |  | Page 1040 |
| ★<br>Tolerance rings<br><b>K0766</b>                                                 |  | Page 1041 |







## Toggle clamps, power clamps





# Technical information



## Quick clamping - reliable fastening

### Durable and reliable

Now even more durable, more user-friendly and safer. This is the design aim that has been achieved in the new generation. You, the user, will notice the difference immediately: On first contact, the new toggle clamp has a good grip and is robust. It delivers fast, reliable and safe operation. High quality material ensures the necessary holding power.



### Advantages:

#### Impressively stable:

All models can easily withstand 300,000 clamping cycles

#### Durable:

High-quality bushings - without scoring

#### Extremely robust:

Corrosion-resistant NITROX COATING or stainless steel

#### Simple design

The fixed top nut eases spindle adjustment

#### Reliable:

Uniform force during opening and closing

#### Ideal where space is restricted:

Slim design supports safe operation

#### Optimum stability:

Conical clamping arm with U-profile

#### Safe application:

Nothing catches on the smooth edges

#### Fast and flexible:

Easy retrofitting thanks to a wide range of accessories

#### Ergonomic and slip-resistant:

Easy to operate when wearing work gloves

#### Non-reflecting

The NITROX-SURFACE is ideal for use with laser devices

#### Safe when opening:

More space between clamping arm and grip prevents pinching

#### Extremely compatible:

Oblong holes allows assembly on existing holes

### Secure fixation and locking with safety lock:

The inner locking system is a completely revolutionary development. Nothing gets caught or stuck. Operation is easy even when wearing work gloves.



### Operating principle of the safety locking mechanism:

Fig. 1:

Locking mechanism closed. Safe to use thanks to revolutionary grip - no pinch points or interfering contours



Fig. 2:

Inner rod locking mechanism with automatic safety catch. The lock is released by pulling the grip

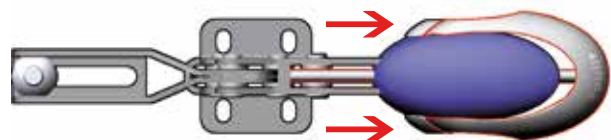
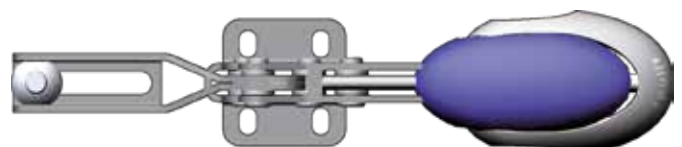


Fig. 3:

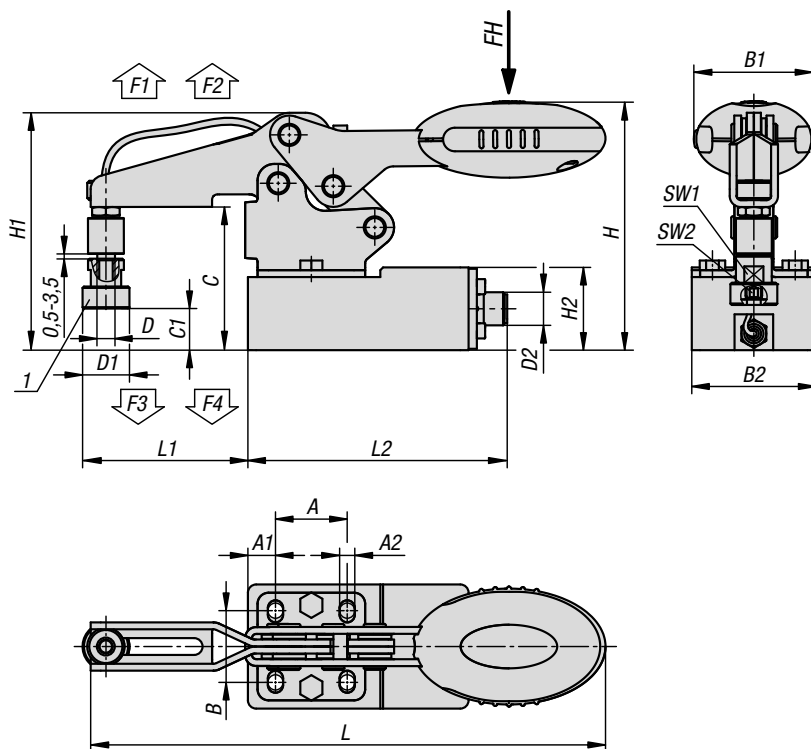
Locking mechanism open.

Release the grip to close the safety mechanism



## Toggle clamps, horizontal, stainless steel

with force sensor



### Drawing reference:

1) Clamping element K1464

### Material:

Clamp stainless steel.  
Grip polyamide.  
Force sensor stainless steel.  
Electronics housing stainless steel.

Spacer sleeve stainless steel.  
Grub screw stainless steel.  
Protective cap thermoplastic.

### Version:

Stainless steel parts bright.  
Protective cap black.

### Sample order:

K1463.10600011

### Note:

incl. 1 set clamping elements K1464

### Application:

Toggle clamps are used to hold and clamp workpieces. They are used as mounting and holding fixtures. The toggle clamp with force sensor enables measurement and adjustment of the retaining force. Workpieces can be defined and the retaining force recorded.

The clamping element is used to adjust the retaining force. Clamping elements with different heights are available for workpieces with different thicknesses.

### Accessories:

K1464

### Technical data:

Force sensor:

Nom. force  $F_{nom}$ : clamping force  $F4$

Calibration range: 0 - clamping force  $F4$

Overall system accuracy: 5%  $F_{nom}$

Limit force  $F_L$ : 120%  $F_{nom}$

Breaking force  $F_B$ : >200%  $F_{nom}$

Nom. temp. range  $B_{T,nom}$ : -20 - +60 °C

Amplifier electronics:

Operating voltage: 10 - 30 V DC

Output signal (rated output)  $C_{nom}$ : 4 - 20 mA 3-wire

Permitted load: <(U<sub>b</sub> - 10V)/0.024 A

Electrical connection: M12x1

Pin assignment:

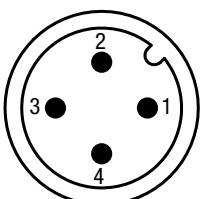
1: UB+

2: -

3: 0V / S-

4: S+

Protection class: IP66



# Toggle clamps, horizontal, stainless steel

with force sensor



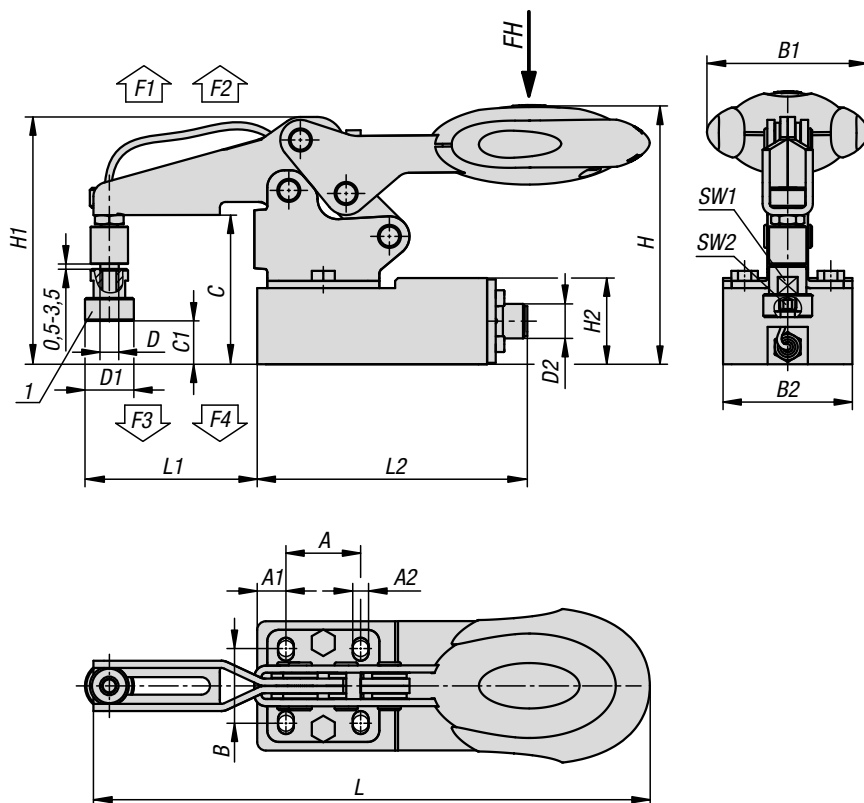
## KIPP Stainless steel toggle clamp, horizontal with force sensor

| Order No.      | Component colour    | Opening angle of holding arm | Opening angle of handle | Hand force FH N | Retaining force F1 N | Retaining force F2 N | Clamping force F3 N | Clamping force F4 N | Output signal |
|----------------|---------------------|------------------------------|-------------------------|-----------------|----------------------|----------------------|---------------------|---------------------|---------------|
| K1463.10600011 | black grey RAL 7021 | 86°                          | 67°                     | 160             | 1350                 | 1900                 | 720                 | 1200                | 4-20mA        |
| K1463.10800011 | black grey RAL 7021 | 86°                          | 67°                     | 200             | 2000                 | 2800                 | 830                 | 1400                | 4-20mA        |
| K1463.10600311 | red                 | 86°                          | 67°                     | 160             | 1350                 | 1900                 | 720                 | 1200                | 4-20mA        |
| K1463.10800311 | red                 | 86°                          | 67°                     | 200             | 2000                 | 2800                 | 830                 | 1400                | 4-20mA        |

| Order No.      | Component colour    | A  | A1 | A2  | B  | B1   | B2 | C    | C1        | D  | D1 | D2    | H     | H1   | H2 | L     | L1   | L2 | SW1 | SW2 |
|----------------|---------------------|----|----|-----|----|------|----|------|-----------|----|----|-------|-------|------|----|-------|------|----|-----|-----|
| K1463.10600011 | black grey RAL 7021 | 26 | 10 | 5,5 | 26 | 43,5 | 45 | 51,9 | max. 16,4 | M6 | 17 | M12x1 | 90,2  | 86,1 | 30 | 186,6 | 60   | 94 | 11  | 3   |
| K1463.10800011 | black grey RAL 7021 | 26 | 10 | 6,2 | 26 | 41,5 | 45 | 58,7 | max. 18,4 | M8 | 17 | M12x1 | 100,4 | 96,6 | 30 | 223,1 | 73,5 | 94 | 11  | 4   |
| K1463.10600311 | red                 | 26 | 10 | 5,5 | 26 | 43,5 | 45 | 51,9 | max. 16,4 | M6 | 17 | M12x1 | 90,2  | 86,1 | 30 | 186,6 | 60   | 94 | 11  | 3   |
| K1463.10800311 | red                 | 26 | 10 | 6,2 | 26 | 41,5 | 45 | 58,7 | max. 18,4 | M8 | 17 | M12x1 | 100,4 | 96,6 | 30 | 223,1 | 73,5 | 94 | 11  | 4   |

## Toggle clamps, horizontal, stainless steel

with safety interlock and force sensor



### Drawing reference:

1) Clamping element K1464

### Material:

Clamp stainless steel.  
Grip polyamide.  
Release lever TPE.  
Force sensor stainless steel.  
Electronics housing stainless steel.

Spacer sleeve stainless steel.  
Grub screw stainless steel.  
Protective cap thermoplastic.

### Version:

Stainless steel parts bright.  
Protective cap black.

### Sample order:

K1463.10610011

### Note:

incl. 1 set clamping elements K1464

### Application:

Toggle clamps are used to hold and clamp workpieces. They are used as mounting and holding fixtures. The toggle clamp with force sensor enables measurement and adjustment of the retaining force. Workpieces can be defined and the retaining force recorded.

The clamping element is used to adjust the retaining force. Clamping elements with different heights are available for workpieces with different thicknesses.

### Accessories:

K1464

### Technical data:

Force sensor:

Nom. force  $F_{nom}$ : clamping force  $F_4$

Calibration range: 0 - clamping force  $F_4$

Overall system accuracy: 5%  $F_{nom}$

Limit force  $F_L$ : 120%  $F_{nom}$

Breaking force  $F_B$ : >200%  $F_{nom}$

Nom. temp. range  $B_{T,nom}$ : -20 - +60 °C

Amplifier electronics:

Operating voltage: 10 - 30 V DC

Output signal (rated output)  $C_{nom}$ : 4 - 20 mA 3-wire

Permitted load: <(U<sub>b</sub> - 10V)/0.024 A

Electrical connection: M12x1

Pin assignment:

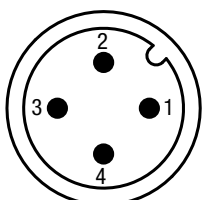
1: UB+

2: -

3: 0V / S-

4: S+

Protection class: IP66



# Toggle clamps, horizontal, stainless steel

with safety interlock and force sensor



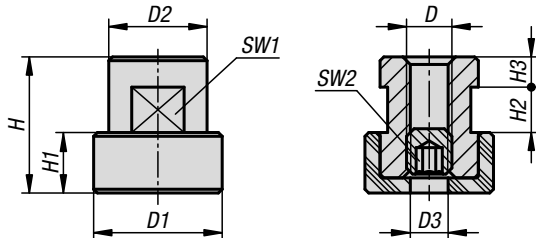
## KIPP Stainless steel toggle clamp, horizontal with safety interlock and force sensor

| Order No.      | Component colour    | Opening angle of holding arm | Opening angle of handle | Hand force FH N | Retaining force F1 N | Retaining force F2 N | Clamping force F3 N | Clamping force F4 N | Output signal |
|----------------|---------------------|------------------------------|-------------------------|-----------------|----------------------|----------------------|---------------------|---------------------|---------------|
| K1463.10610011 | black grey RAL 7021 | 86°                          | 67°                     | 160             | 1350                 | 1900                 | 720                 | 1200                | 4-20mA        |
| K1463.10810011 | black grey RAL 7021 | 86°                          | 67°                     | 200             | 2000                 | 2800                 | 830                 | 1400                | 4-20mA        |
| K1463.10610311 | red                 | 86°                          | 67°                     | 160             | 1350                 | 1900                 | 720                 | 1200                | 4-20mA        |
| K1463.10810311 | red                 | 86°                          | 67°                     | 200             | 2000                 | 2800                 | 830                 | 1400                | 4-20mA        |

| Order No.      | Component colour    | A  | A1 | A2  | B  | B1   | B2 | C    | C1        | D  | D1 | D2    | H     | H1   | H2 | L     | L1   | L2 | SW1 | SW2 |
|----------------|---------------------|----|----|-----|----|------|----|------|-----------|----|----|-------|-------|------|----|-------|------|----|-----|-----|
| K1463.10610011 | black grey RAL 7021 | 26 | 10 | 5,5 | 26 | 53,4 | 45 | 51,9 | max. 16,4 | M6 | 17 | M12x1 | 90,2  | 86,1 | 30 | 193,6 | 60   | 94 | 11  | 3   |
| K1463.10810011 | black grey RAL 7021 | 26 | 10 | 6,2 | 26 | 51,1 | 45 | 58,7 | max. 18,4 | M8 | 17 | M12x1 | 100,4 | 96,6 | 30 | 230,4 | 73,5 | 94 | 11  | 4   |
| K1463.10610311 | red                 | 26 | 10 | 5,5 | 26 | 53,4 | 45 | 51,9 | max. 16,4 | M6 | 17 | M12x1 | 90,2  | 86,1 | 30 | 193,6 | 60   | 94 | 11  | 3   |
| K1463.10810311 | red                 | 26 | 10 | 6,2 | 26 | 51,1 | 45 | 58,7 | max. 18,4 | M8 | 17 | M12x1 | 100,4 | 96,6 | 30 | 230,4 | 73,5 | 94 | 11  | 4   |

## Clamp elements adjustable

for toggle clamp with force sensor



### Material:

Spacer sleeve stainless steel.  
Grub screw stainless steel.  
Protective cap thermoplastic.

### Version:

Stainless steel bright.  
Thermoplastic black.

### Sample order:

K1464.11306X18

### Note:

The thermoplastic used is characterised by high mechanical strength and rigidity.

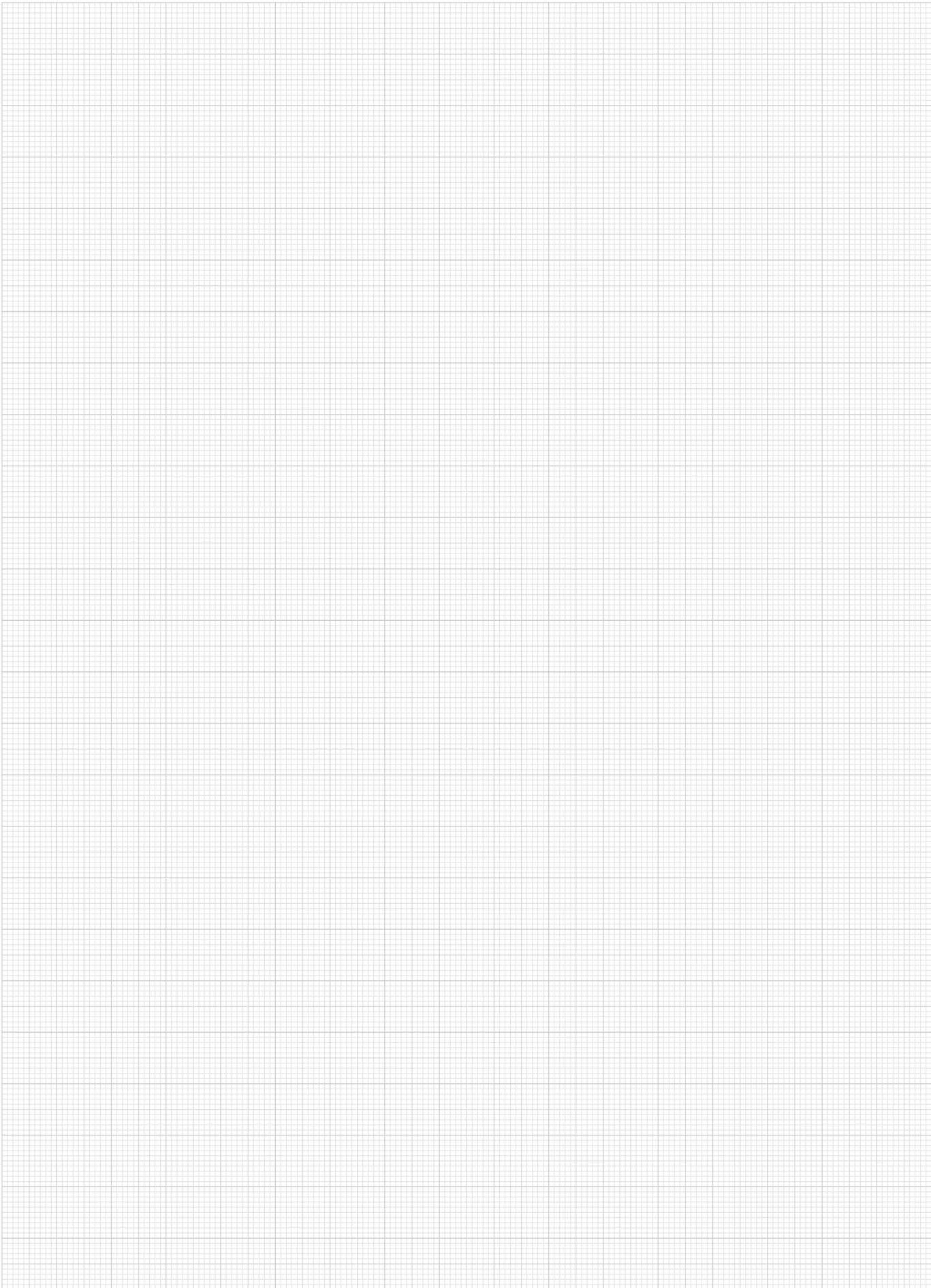
### Application:

The clamping element is used to adjust the clamping force of toggle clamps with force sensor. Clamping elements with different heights are available for workpieces with different thicknesses.

## KIPP Adjustable clamping elements for toggle clamps with force sensor

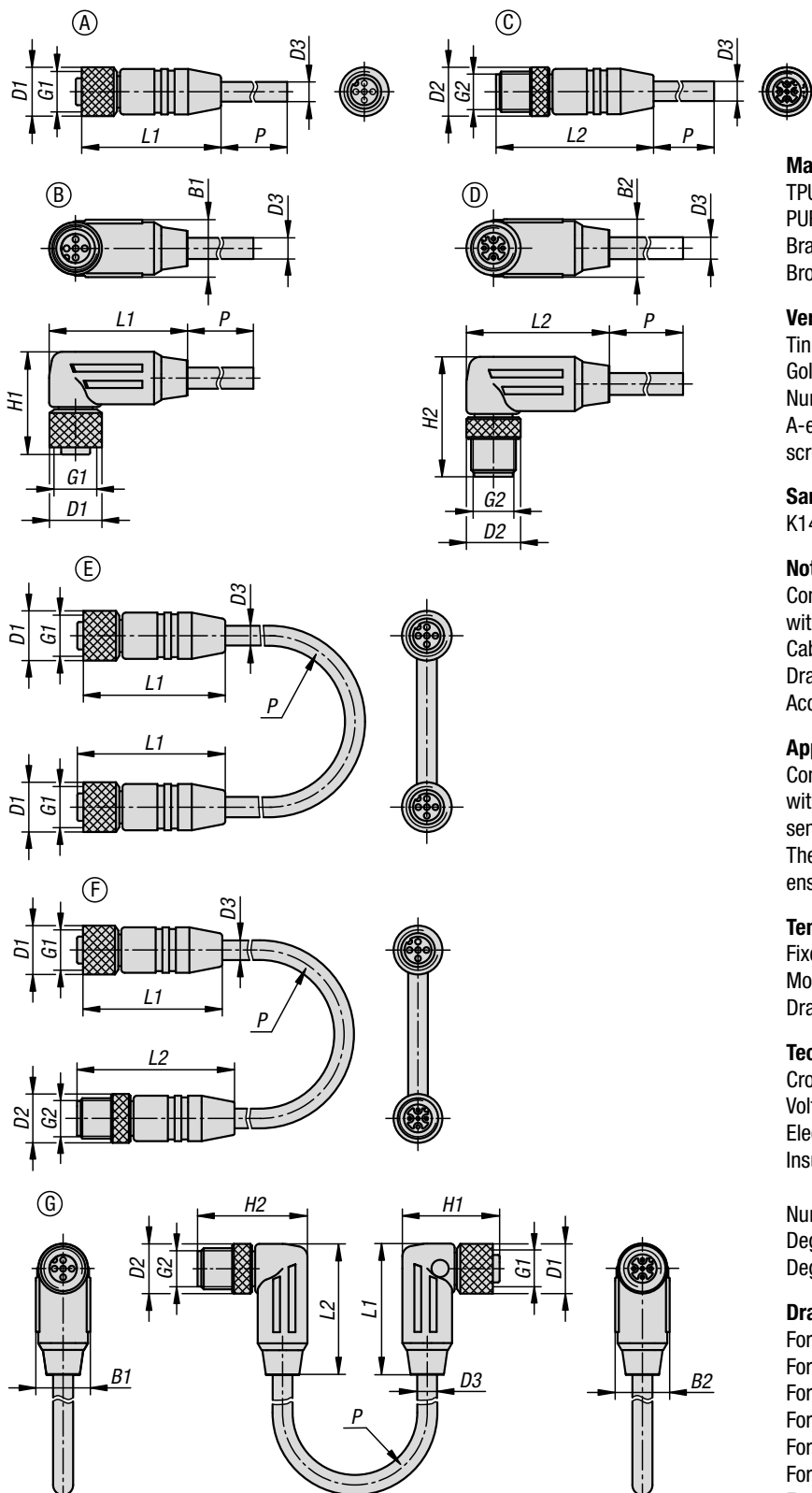
| Order No.      | Version 1  | D  | D1 | D2 | D3 | H  | H1 | H2 | H3 | SW1 | SW2 |
|----------------|------------|----|----|----|----|----|----|----|----|-----|-----|
| K1464.11306X18 | adjustable | M6 | 17 | 13 | 5  | 18 | 8  | 6  | 4  | 11  | 3   |
| K1464.11306X21 | adjustable | M6 | 17 | 13 | 5  | 21 | 8  | 6  | 4  | 11  | 3   |
| K1464.11306X23 | adjustable | M6 | 17 | 13 | 5  | 23 | 8  | 6  | 4  | 11  | 3   |
| K1464.11306X26 | adjustable | M6 | 17 | 13 | 5  | 26 | 8  | 6  | 4  | 11  | 3   |
| K1464.11306X29 | adjustable | M6 | 17 | 13 | 5  | 29 | 8  | 6  | 4  | 11  | 3   |
| K1464.11306X32 | adjustable | M6 | 17 | 13 | 5  | 32 | 8  | 6  | 4  | 11  | 3   |
| K1464.11308X22 | adjustable | M8 | 17 | 13 | 5  | 22 | 8  | 8  | 4  | 11  | 4   |
| K1464.11308X25 | adjustable | M8 | 17 | 13 | 5  | 25 | 8  | 8  | 4  | 11  | 4   |
| K1464.11308X28 | adjustable | M8 | 17 | 13 | 5  | 28 | 8  | 8  | 4  | 11  | 4   |
| K1464.11308X31 | adjustable | M8 | 17 | 13 | 5  | 31 | 8  | 8  | 4  | 11  | 4   |
| K1464.11308X34 | adjustable | M8 | 17 | 13 | 5  | 34 | 8  | 8  | 4  | 11  | 4   |
| K1464.11308X37 | adjustable | M8 | 17 | 13 | 5  | 37 | 8  | 8  | 4  | 11  | 4   |
| K1464.11308X40 | adjustable | M8 | 17 | 13 | 5  | 40 | 8  | 8  | 4  | 11  | 4   |
| K1464.11306    | set        | M6 | 17 | 13 | 5  | -  | 8  | 6  | 4  | 11  | 3   |
| K1464.11308    | set        | M8 | 17 | 13 | 5  | -  | 8  | 8  | 4  | 11  | 4   |





## Connectors with screw fitting

screened



### Material:

TPU housing.  
PUR cable sheath.  
Brass knurled nut.  
Bronze contacts.

### Version:

Tin-plated knurled nut.  
Gold-plated contacts.  
Number of pins: 5-pin  
A-encoded.  
screened.

### Sample order:

K1482.1215X2000

### Note:

Connectors  
with screw fitting. Connector moulded to cable.  
Cable, PVC-, silicon- and halogen-free.  
Drag-chain suitable.  
Accessory for toggle clamp with force sensor K1463.

### Application:

Connectors  
with screw fitting and cable serve as a connection cable for  
sensors and actuators.  
The cable screening protects from outside interference and  
ensures error-free signal transmission.

### Temperature range:

Fixed: -50 °C to +80 °C  
Moving: -25 °C to +80 °C  
Drag chain: -25 °C to +80 °C

### Technical data:

Cross-section: 5 x 0.34 mm<sup>2</sup>  
Voltage: U max. 60 V  
Electric current: I max. 4 A  
Insulation resistance: > 1 GΩ

Number of plug cycles: max. 100

Degree of contamination: 3

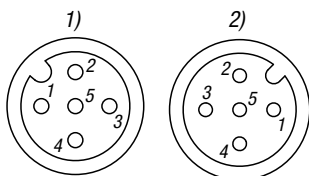
Degree of protection: IP67

### Drawing reference:

Form A: bush (female) straight  
Form B: bush (female) angled  
Form C: plug (male) straight  
Form D: plug (male) angled  
Form E: bush (female) straight + bush (female) straight  
Form F: bush (female) straight + plug (male) straight  
Form G: bush (female) angled + plug (male) angled

1) bush, 2) plug

1 = brown (BN)  
2 = white (WH)  
3 = blue (BU)  
4 = black (BK)  
5 = grey (GY)



## Connectors with screw fitting

screened



## KIPP Connectors with screw fitting screened

| Order No.        | Form | D1   | D3 | G1    | L1 | P     | No. of conductors<br>x conductor<br>cross-section |
|------------------|------|------|----|-------|----|-------|---------------------------------------------------|
| K1482.1215X2000  | A    | 14,5 | 6  | M12X1 | 43 | 2000  | 5X0,34 mm <sup>2</sup>                            |
| K1482.1215X5000  | A    | 14,5 | 6  | M12X1 | 43 | 5000  | 5X0,34 mm <sup>2</sup>                            |
| K1482.1215X10000 | A    | 14,5 | 6  | M12X1 | 43 | 10000 | 5X0,34 mm <sup>2</sup>                            |

| Order No.        | Form | B1   | D1   | D3 | G1    | H1    | L1    | P     | No. of conductors<br>x conductor<br>cross-section |
|------------------|------|------|------|----|-------|-------|-------|-------|---------------------------------------------------|
| K1482.1225X2000  | B    | 15,5 | 14,5 | 6  | M12X1 | 28,35 | 38,25 | 2000  | 5X0,34 mm <sup>2</sup>                            |
| K1482.1225X5000  | B    | 15,5 | 14,5 | 6  | M12X1 | 28,35 | 38,25 | 5000  | 5X0,34 mm <sup>2</sup>                            |
| K1482.1225X10000 | B    | 15,5 | 14,5 | 6  | M12X1 | 28,35 | 38,25 | 10000 | 5X0,34 mm <sup>2</sup>                            |

| Order No.        | Form | D2   | D3 | G2    | L2    | P     | No. of conductors<br>x conductor<br>cross-section |
|------------------|------|------|----|-------|-------|-------|---------------------------------------------------|
| K1482.1235X2000  | C    | 14,5 | 6  | M12X1 | 46,75 | 2000  | 5X0,34 mm <sup>2</sup>                            |
| K1482.1235X5000  | C    | 14,5 | 6  | M12X1 | 46,75 | 5000  | 5X0,34 mm <sup>2</sup>                            |
| K1482.1235X10000 | C    | 14,5 | 6  | M12X1 | 46,75 | 10000 | 5X0,34 mm <sup>2</sup>                            |

| Order No.       | Form | B2   | D2   | D3 | G2    | H2    | L2    | P    | No. of conductors<br>x conductor<br>cross-section |
|-----------------|------|------|------|----|-------|-------|-------|------|---------------------------------------------------|
| K1482.1245X5000 | D    | 15,5 | 14,5 | 6  | M12X1 | 32,05 | 38,25 | 5000 | 5X0,34 mm <sup>2</sup>                            |

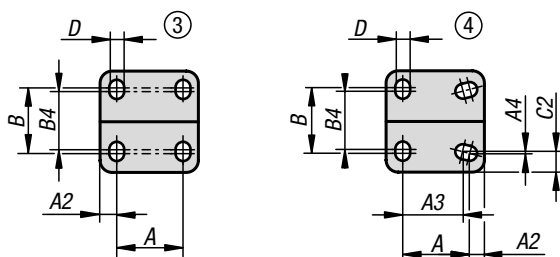
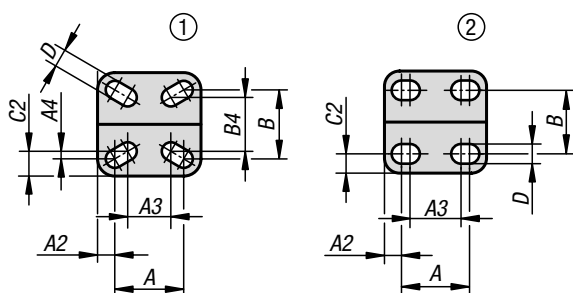
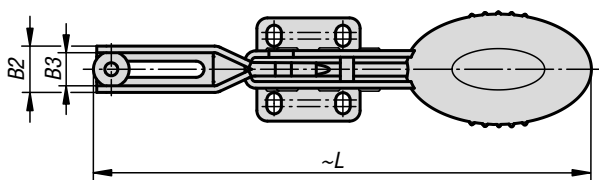
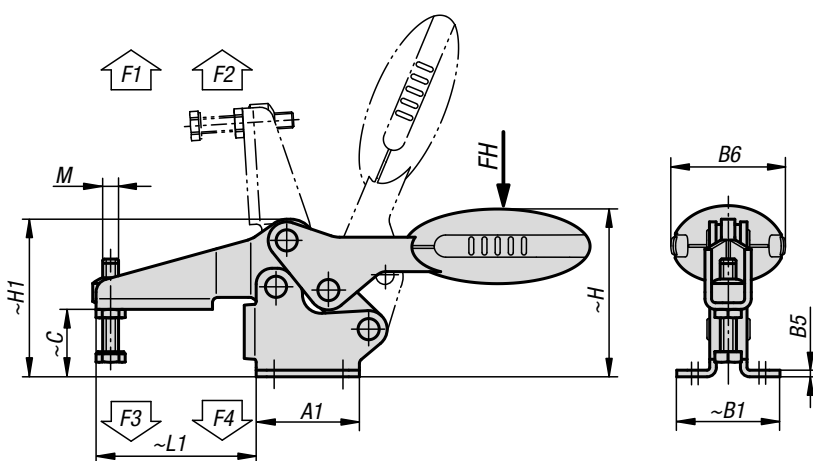
| Order No.           | Form | D1   | D3 | G1    | L1 | P     | No. of conductors<br>x conductor<br>cross-section |
|---------------------|------|------|----|-------|----|-------|---------------------------------------------------|
| K1482.1211215X5000  | E    | 14,5 | 6  | M12X1 | 43 | 5000  | 5X0,34 mm <sup>2</sup>                            |
| K1482.1211215X10000 | E    | 14,5 | 6  | M12X1 | 43 | 10000 | 5X0,34 mm <sup>2</sup>                            |

| Order No.           | Form | D1   | D2   | D3 | G1    | G2    | L1 | L2    | P     | No. of conductors<br>x conductor<br>cross-section |
|---------------------|------|------|------|----|-------|-------|----|-------|-------|---------------------------------------------------|
| K1482.1211235X1000  | F    | 14,5 | 14,5 | 6  | M12X1 | M12X1 | 43 | 46,75 | 1000  | 5X0,34 mm <sup>2</sup>                            |
| K1482.1211235X2000  | F    | 14,5 | 14,5 | 6  | M12X1 | M12X1 | 43 | 46,75 | 2000  | 5X0,34 mm <sup>2</sup>                            |
| K1482.1211235X5000  | F    | 14,5 | 14,5 | 6  | M12X1 | M12X1 | 43 | 46,75 | 5000  | 5X0,34 mm <sup>2</sup>                            |
| K1482.1211235X10000 | F    | 14,5 | 14,5 | 6  | M12X1 | M12X1 | 43 | 46,75 | 10000 | 5X0,34 mm <sup>2</sup>                            |

| Order No.          | Form | B1   | B2   | D1   | D2   | D3 | G1    | G2    | H1    | H2    | L1    | L2    | P    | No. of conductors<br>x conductor<br>cross-section |
|--------------------|------|------|------|------|------|----|-------|-------|-------|-------|-------|-------|------|---------------------------------------------------|
| K1482.1221245X1000 | G    | 15,5 | 15,5 | 14,5 | 14,5 | 6  | M12X1 | M12X1 | 28,35 | 32,05 | 38,25 | 38,25 | 1000 | 5X0,34 mm <sup>2</sup>                            |
| K1482.1221245X5000 | G    | 15,5 | 15,5 | 14,5 | 14,5 | 6  | M12X1 | M12X1 | 28,35 | 32,05 | 38,25 | 38,25 | 5000 | 5X0,34 mm <sup>2</sup>                            |

# Toggle clamps horizontal

with flat foot and adjustable clamping spindle



## Material:

Steel.  
Grip polyamide.

## Version:

Carbonitrided and black oxidised.  
Grip blue, black or red.

## Sample order:

K0660.005001  
(blue grip)

## Note for ordering:

Δ Enter the desired grip colour here.

## Note:

Maintenance-free high quality link bushings.  
Sustainable constant use of force during opening and closing. Optimum stability through the conical, U-profile clamping arm.

## Accessories:

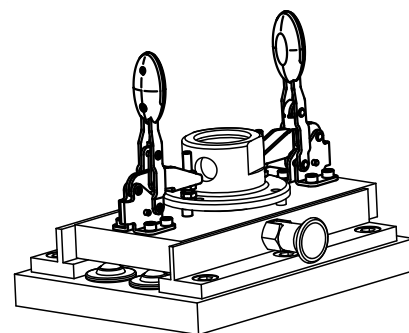
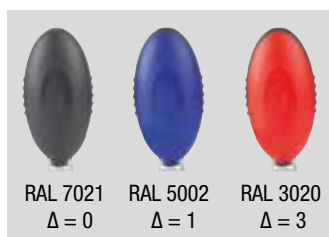
K0106  
K0098  
K0383  
K0388  
K0390  
K0391  
K0392  
K0393



Angle bracket for front face mounting (see accessories)

# Toggle clamps horizontal

with flat foot and adjustable clamping spindle



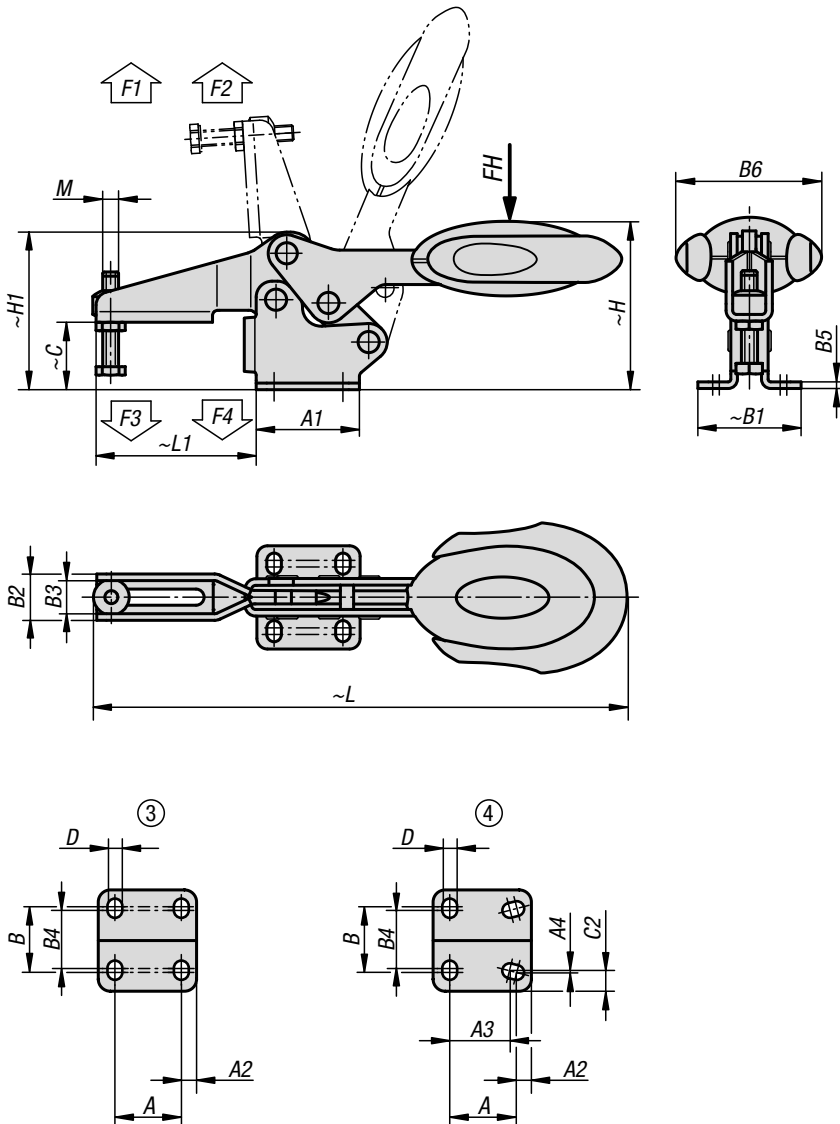
## KIPP Toggle clamps horizontal with flat foot and adjustable clamping spindle

| Order No.    | hole arrangement | Opening angle of holding arm | Opening angle of handle | Hand force FH N | Retaining force F1 N | Retaining force F2 N | Clamping force F3 N | Clamping force F4 N | Order No. Angle bracket |
|--------------|------------------|------------------------------|-------------------------|-----------------|----------------------|----------------------|---------------------|---------------------|-------------------------|
| K0660.00400Δ | 1                | 87°                          | 69°                     | 80              | 400                  | 500                  | 250                 | 300                 | K0098.02                |
| K0660.00500Δ | 2                | 86°                          | 67°                     | 100             | 650                  | 900                  | 550                 | 620                 | K0098.02                |
| K0660.00600Δ | 3                | 86°                          | 67°                     | 160             | 1350                 | 1900                 | 720                 | 1200                | K0098.04                |
| K0660.00800Δ | 3                | 86°                          | 67°                     | 200             | 2000                 | 2800                 | 830                 | 1400                | K0098.04                |
| K0660.01000Δ | 3                | 90°                          | 71°                     | 250             | 2200                 | 4500                 | 1200                | 2800                | K0098.06                |
| K0660.01200Δ | 4                | 88°                          | 68°                     | 280             | 2400                 | 5500                 | 1000                | 2800                | K0098.06                |

| Order No.    | M      | A    | A1 | A2  | A3   | A4   | B    | B1   | B2   | B3   | B4   | B5  | B6   | C    | C2   | D   | H     | H1    | L     | L1    |
|--------------|--------|------|----|-----|------|------|------|------|------|------|------|-----|------|------|------|-----|-------|-------|-------|-------|
| K0660.00400Δ | M4x16  | 16   | 24 | 4   | 12,8 | 0,95 | 16   | 24   | 10,2 | 7,2  | 14,1 | 1,5 | 20   | 11,7 | 4,95 | 4,2 | 28,7  | 26,3  | 91,8  | 23,7  |
| K0660.00500Δ | M5x25  | 18   | 27 | 4,5 | 13,5 | -    | 16,8 | 27,3 | 13,2 | 9,2  | -    | 2   | 22,5 | 17,2 | 5,25 | 5,5 | 43,4  | 38,9  | 125,7 | 41,8  |
| K0660.00600Δ | M6x35  | 26   | 39 | 6,5 | -    | -    | 28   | 39   | 17,5 | 12,5 | 23   | 2,5 | 43,5 | 25,4 | -    | 5,5 | 63,7  | 59,6  | 186,6 | 60,5  |
| K0660.00800Δ | M8x45  | 26   | 44 | 9   | -    | -    | 31   | 45   | 21   | 16   | 24   | 2,5 | 41,5 | 32,2 | -    | 6,2 | 73,9  | 70,1  | 223,1 | 74,9  |
| K0660.01000Δ | M10x55 | 41,5 | 59 | 9   | -    | -    | 43   | 59   | 26   | 19   | 39   | 3,5 | 47   | 40   | -    | 8,8 | 94,8  | 88    | 279,4 | 103,9 |
| K0660.01200Δ | M12x70 | 44   | 65 | 10  | 40   | 1    | 42   | 67   | 28   | 21   | 40   | 3,5 | 47   | 52,3 | 13,5 | 8,5 | 104,8 | 101,6 | 314,7 | 122   |

# Toggle clamps horizontal with safety interlock

with flat foot and adjustable clamping spindle


**Material:**

Steel.  
Grip polyamide.  
Unlocking bracket TPE.

**Version:**

Carbonitrided and black oxidised.  
Grip blue, black or red.

**Sample order:**

K0660.006101  
(blue grip)

**Note for ordering:**

Δ Enter the desired grip colour here.

**Note:**

Maintenance-free high quality link bushings.  
Sustainable constant force during opening and closing.  
Optimum stability through the conical, U-profile clamping arm. Including internal bar lock with automatic safety catch.

**Accessories:**

K0106  
K0098  
K0383  
K0388  
K0390  
K0391  
K0392  
K0393

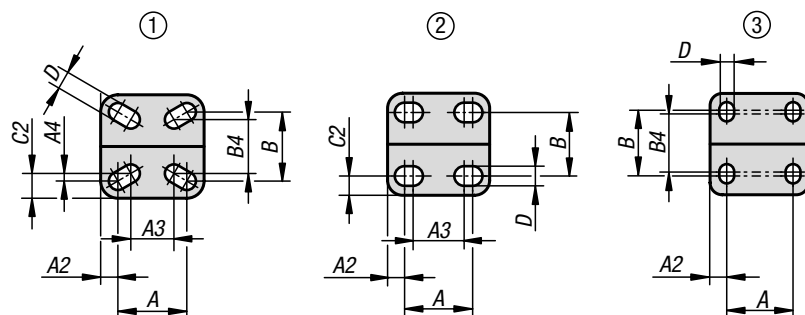
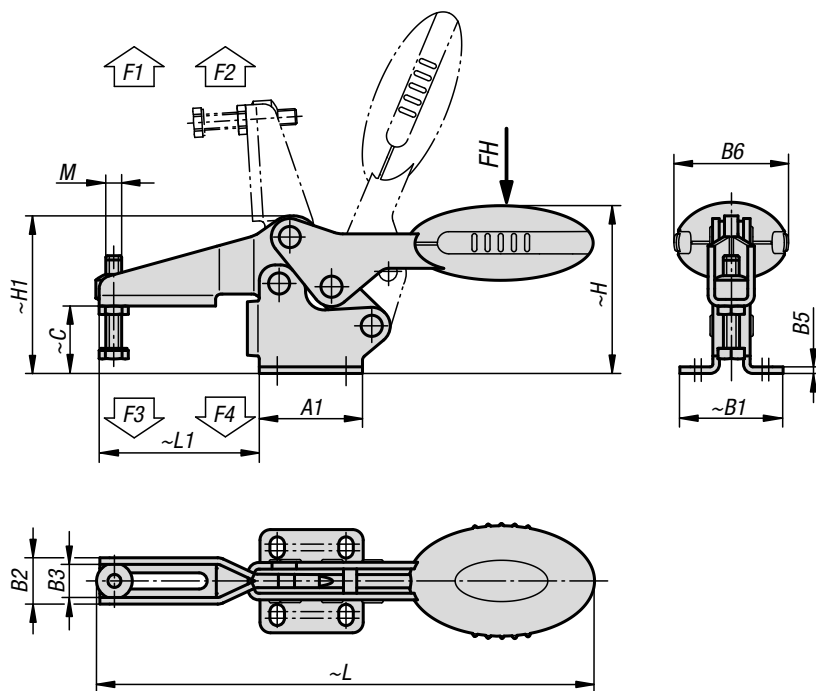
## KIPP Toggle clamps horizontal with safety interlock, with flat foot and adjustable clamping spindle

| Order No.    | hole arrangement | Opening angle of holding arm | Opening angle of handle | Hand force FH N | Retaining force F1 N | Retaining force F2 N | Clamping force F3 N | Clamping force F4 N | Order No. Angle bracket |
|--------------|------------------|------------------------------|-------------------------|-----------------|----------------------|----------------------|---------------------|---------------------|-------------------------|
| K0660.00610Δ | 3                | 86°                          | 67°                     | 160             | 1350                 | 1900                 | 720                 | 1200                | K0098.04                |
| K0660.00810Δ | 3                | 86°                          | 67°                     | 200             | 2000                 | 2800                 | 830                 | 1400                | K0098.04                |
| K0660.01010Δ | 3                | 90°                          | 71°                     | 250             | 2200                 | 4500                 | 1200                | 2800                | K0098.06                |
| K0660.01210Δ | 4                | 88°                          | 68°                     | 280             | 2400                 | 5500                 | 1000                | 2800                | K0098.06                |

| Order No.    | M      | A    | A1 | A2  | A3 | A4 | B  | B1 | B2   | B3   | B4 | B5  | B6   | C    | C2   | D   | H     | H1    | L     | L1    |
|--------------|--------|------|----|-----|----|----|----|----|------|------|----|-----|------|------|------|-----|-------|-------|-------|-------|
| K0660.00610Δ | M6x35  | 26   | 39 | 6,5 | -  | -  | 28 | 39 | 17,5 | 12,5 | 23 | 2,5 | 53,4 | 25,4 | -    | 5,5 | 63,7  | 59,6  | 193,3 | 60,5  |
| K0660.00810Δ | M8x45  | 26   | 44 | 9   | -  | -  | 31 | 45 | 21   | 16   | 24 | 2,5 | 51,1 | 32,2 | -    | 6,2 | 73,9  | 70,1  | 230,4 | 74,9  |
| K0660.01010Δ | M10x55 | 41,5 | 59 | 8,5 | -  | -  | 43 | 59 | 26   | 19   | 39 | 3,5 | 56,5 | 40   | -    | 8,8 | 94,8  | 88    | 286   | 103,9 |
| K0660.01210Δ | M12x70 | 44   | 65 | 10  | 40 | 1  | 42 | 67 | 28   | 21   | 40 | 3,5 | 56,5 | 52,3 | 13,5 | 8,5 | 104,8 | 101,6 | 321,3 | 122   |

## Toggle clamps horizontal

with flat foot and adjustable clamping spindle, stainless steel



**Material:**  
Stainless steel.  
Grip polyamide.

**Version:**  
Bright.  
Grip blue, black or red.

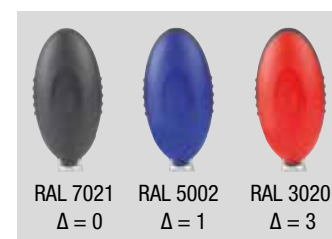
**Sample order:**  
K0660.105001  
(blue grip)

**Note for ordering:**  
Δ Enter the desired grip colour here.

**Note:**  
Maintenance-free high quality link bushings.  
Sustainable constant use of force during opening and closing. Optimum stability through the conical, U-profile clamping arm.

**On request:**  
Other grip colours.

**Accessories:**  
K0106  
K0384  
K0390  
K0392  
K0667



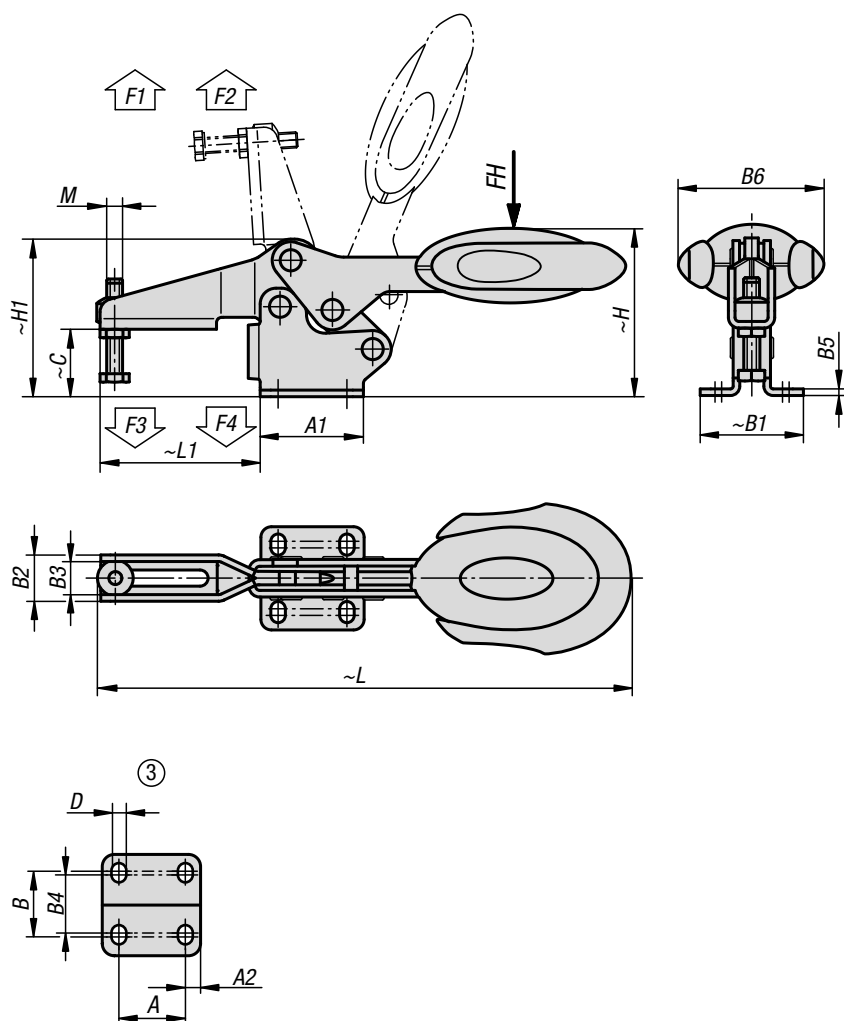
### KIPP Toggle clamps horizontal with flat foot, stainless steel

| Order No.    | hole arrangement | Opening angle of holding arm | Opening angle of handle | Hand force FH N | Retaining force F1 N | Retaining force F2 N | Clamping force F3 N | Clamping force F4 N |
|--------------|------------------|------------------------------|-------------------------|-----------------|----------------------|----------------------|---------------------|---------------------|
| K0660.10400Δ | 1                | 87°                          | 69°                     | 80              | 400                  | 500                  | 250                 | 300                 |
| K0660.10500Δ | 2                | 86°                          | 67°                     | 100             | 650                  | 900                  | 550                 | 620                 |
| K0660.10600Δ | 3                | 86°                          | 67°                     | 160             | 1350                 | 1900                 | 720                 | 1200                |
| K0660.10800Δ | 3                | 86°                          | 67°                     | 200             | 2000                 | 2800                 | 830                 | 1400                |

| Order No.    | M     | A  | A1 | A2  | A3   | A4   | B    | B1   | B2   | B3   | B4   | B5  | B6   | C    | C2   | D   | H    | H1   | L     | L1   |
|--------------|-------|----|----|-----|------|------|------|------|------|------|------|-----|------|------|------|-----|------|------|-------|------|
| K0660.10400Δ | M4x16 | 16 | 24 | 4   | 12,8 | 0,95 | 16   | 24   | 10,2 | 7,2  | 12,5 | 1,5 | 20   | 11,7 | 4,95 | 4,2 | 28,7 | 26,3 | 91,8  | 23,7 |
| K0660.10500Δ | M5x25 | 18 | 27 | 4,5 | 13,5 | -    | 16,8 | 27,3 | 13,2 | 9,2  | -    | 2   | 22,5 | 17,2 | 5,25 | 5,5 | 43,4 | 38,9 | 125,7 | 41,8 |
| K0660.10600Δ | M6x35 | 26 | 39 | 6,5 | -    | -    | 28   | 39   | 17,5 | 12,5 | 23   | 2,5 | 43,5 | 25,4 | -    | 5,5 | 63,7 | 59,6 | 186,6 | 60,5 |
| K0660.10800Δ | M8x45 | 26 | 44 | 9   | -    | -    | 31   | 45   | 21   | 16   | 24   | 2,5 | 41,5 | 32,2 | -    | 6,2 | 73,9 | 70,1 | 223,1 | 74,9 |

## Toggle clamps horizontal with safety interlock

with flat foot and adjustable clamping spindle, stainless steel



### Material:

Stainless steel.  
Grip polyamide.  
Unlocking bracket TPE.

### Version:

Bright.  
Grip blue, black or red.

### Sample order:

K0660.106101  
(blue grip)

### Note for ordering:

Δ Enter the desired grip colour here.

### Note:

Maintenance-free high quality link bushings.  
Sustainable constant force during opening and closing.  
Optimum stability through the conical, U-profile clamping arm. Including internal bar lock with automatic safety catch.

### On request:

Other grip colours.

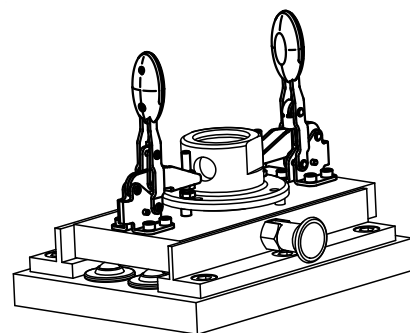
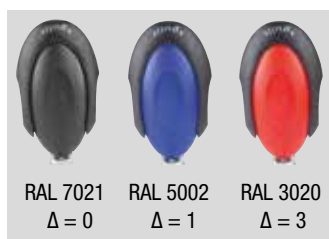
### Accessories:

K0106  
K0384  
K0390  
K0392  
K0667



# Toggle clamps horizontal with safety interlock

with flat foot and adjustable clamping spindle, stainless steel



## KIPP Toggle clamps horizontal with flat foot and safety interlock, stainless steel

| Order No.    | hole arrangement | Opening angle of holding arm | Opening angle of handle | Hand force FH N | Retaining force F1 N | Retaining force F2 N | Clamping force F3 N | Clamping force F4 N |
|--------------|------------------|------------------------------|-------------------------|-----------------|----------------------|----------------------|---------------------|---------------------|
| K0660.10610Δ | 3                | 86°                          | 67°                     | 160             | 1350                 | 1900                 | 720                 | 1200                |
| K0660.10810Δ | 3                | 86°                          | 67°                     | 200             | 2000                 | 2800                 | 830                 | 1400                |

| Order No.    | M     | A  | A1 | A2  | B  | B1 | B2   | B3   | B4 | B5  | B6   | C    | D   | H    | H1   | L     | L1   |
|--------------|-------|----|----|-----|----|----|------|------|----|-----|------|------|-----|------|------|-------|------|
| K0660.10610Δ | M6x35 | 26 | 39 | 6,5 | 28 | 39 | 17,5 | 12,5 | 23 | 2,5 | 53,4 | 25,4 | 5,5 | 63,7 | 59,6 | 193,3 | 60,5 |
| K0660.10810Δ | M8x45 | 26 | 44 | 9   | 31 | 45 | 21   | 16   | 24 | 2,5 | 51,1 | 32,2 | 6,2 | 73,9 | 70,1 | 230,4 | 74,9 |

# Horizontal antistatic toggle clamps

with flat foot and adjustable clamping spindle



## Material:

Steel.  
Grip polyamide.

## Version:

Nitro-carburised and black oxidised.  
Grip element graphite black.

## Sample order:

K0660.004024

## Note:

Maintenance-free high quality link bushes.  
Sustainable constant force during opening and closing.  
Optimum stability through the conical, U-profile clamping arm.

## Application:

Sensitive electrical or electronic equipment, components and devices (ESD sensitive elements) may be damaged or destroyed by electrostatic discharges (ESD) in the immediate vicinity.

Electrostatic discharges can come from people or through handling ESD sensitive components (e.g. during production, assembly, transport, storage etc).

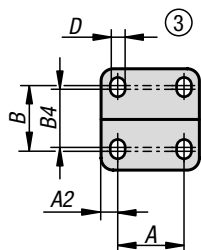
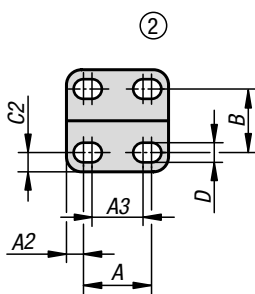
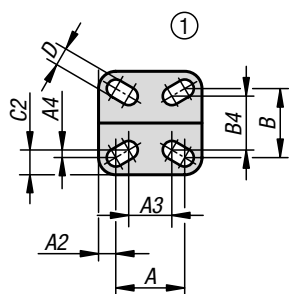
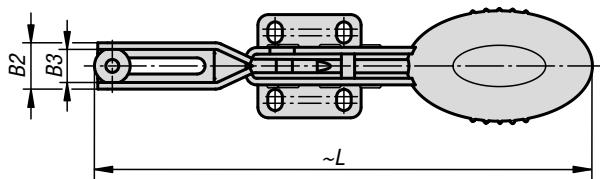
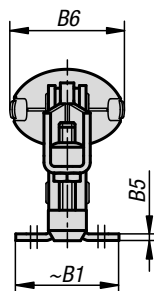
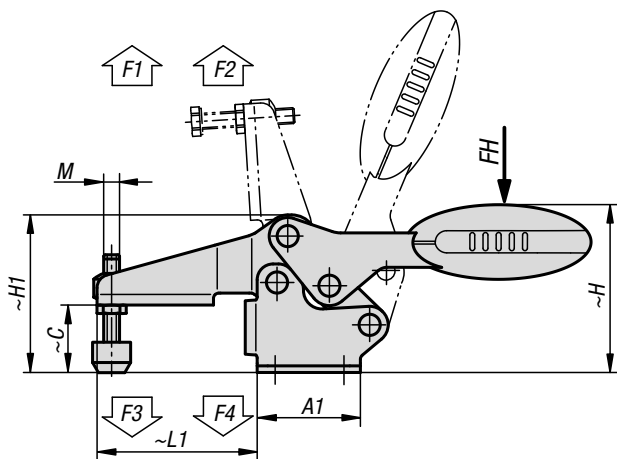
Electrically conductive products which conform to DIN EN 61340-5-1 are essential within electronic environments to prevent an electrostatic discharge. These products can be used for ESD applications or in ESD protection areas (EPA) in accordance with DIN EN 61340-5-1.

## Advantages:

- Made from a special electrically conductive plastic
- To protect sensitive electrical or electronic parts, components and devices
- Toggle clamps and power clamps are used in assembly and workholding fixtures
- Ergonomic and user-friendly grip

## Accessories:

K0098



# Horizontal antistatic toggle clamps

with flat foot and adjustable clamping spindle



## Safety:

These ESD products can also be used for devices, components and protection systems in areas where there is risk of explosion.

These ESD products prevent electrostatic spark discharges, and eliminate the risk of ignition of gases and dust which could lead to explosions in enclosed spaces.

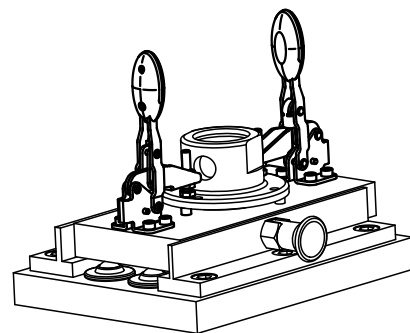
Manufacturers and operators must apply and comply with the ATEX directives for protecting persons working in areas where there is a risk of explosion.

These ESD products have been certified by TÜV-Süd for their electrical discharge capability.

## Target groups:

Device manufacturers required to conform to ATEX product directive 2014/34/EU.

Operators required to conform to ATEX worker protection directive 1999/92/EC.



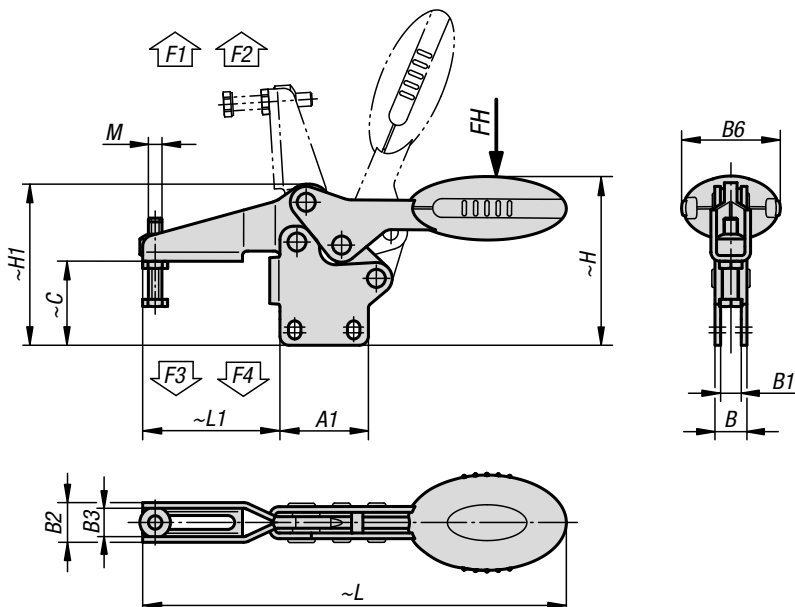
## KIPP Horizontal antistatic toggle clamps with horizontal foot

| Order No.    | Opening angle of holding arm | Opening angle of handle | Hand force FH N | Retaining force F1 N | Retaining force F2 N | Clamping force F3 N | Clamping force F4 N | Order No. Angle bracket |
|--------------|------------------------------|-------------------------|-----------------|----------------------|----------------------|---------------------|---------------------|-------------------------|
| K0660.004024 | 87°                          | 69°                     | 80              | 400                  | 500                  | 250                 | 300                 | K0098.02                |
| K0660.005024 | 86°                          | 67°                     | 100             | 650                  | 900                  | 550                 | 620                 | K0098.02                |
| K0660.006024 | 86°                          | 67°                     | 160             | 1350                 | 1900                 | 720                 | 1200                | K0098.04                |
| K0660.008024 | 86°                          | 67°                     | 200             | 2000                 | 2800                 | 830                 | 1400                | K0098.04                |

| Order No.    | hole arrangement | M     | A  | A1 | A2  | A3   | A4   | B    | B1   | B2   | B3   | B4   | B5  | B6   | C    | C2   | D   | H    | H1   | L     | L1   |
|--------------|------------------|-------|----|----|-----|------|------|------|------|------|------|------|-----|------|------|------|-----|------|------|-------|------|
| K0660.004024 | 1                | M4x16 | 16 | 24 | 4   | 12,8 | 0,95 | 16   | 24   | 10,2 | 7,2  | 14,1 | 1,5 | 20   | 11,7 | 4,95 | 4,2 | 28,7 | 26,3 | 91,8  | 23,7 |
| K0660.005024 | 2                | M5x25 | 18 | 27 | 4,5 | 13,5 | -    | 16,8 | 27,3 | 13,2 | 9,2  | -    | 2   | 22,5 | 17,2 | 5,25 | 5,5 | 43,4 | 38,9 | 125,7 | 41,8 |
| K0660.006024 | 3                | M6x35 | 26 | 39 | 6,5 | -    | -    | 28   | 39   | 17,5 | 12,5 | 23   | 2,5 | 43,5 | 25,4 | -    | 5,5 | 63,7 | 59,6 | 186,6 | 60,5 |
| K0660.008024 | 3                | M8x45 | 26 | 44 | 9   | -    | -    | 31   | 45   | 21   | 16   | 24   | 2,5 | 41,5 | 32,2 | -    | 6,2 | 73,9 | 70,1 | 223,1 | 74,9 |

# Toggle clamps horizontal

with straight foot and adjustable clamping spindle



## Material:

Steel.  
Grip polyamide.

## Version:

Carbonitrided and black oxidised.  
Grip blue, black or red.

## Sample order:

K0661.005001  
(blue grip)

## Note for ordering:

Δ Enter the desired grip colour here.

## Note:

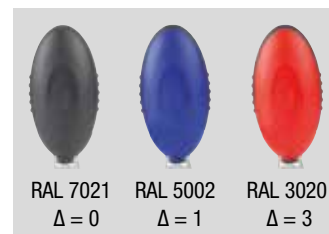
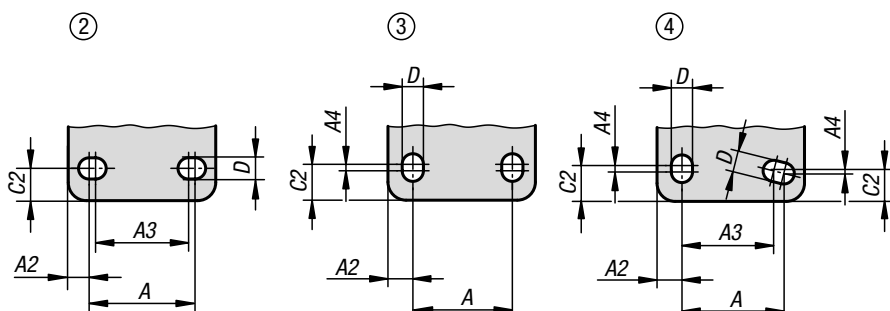
Maintenance-free high quality link bushings.  
Sustainable constant use of force during opening and closing. Optimum stability through the conical, U-profile clamping arm.

## On request:

Other grip colours.

## Accessories:

K0106  
K0383  
K0388  
K0390  
K0391  
K0392  
K0393



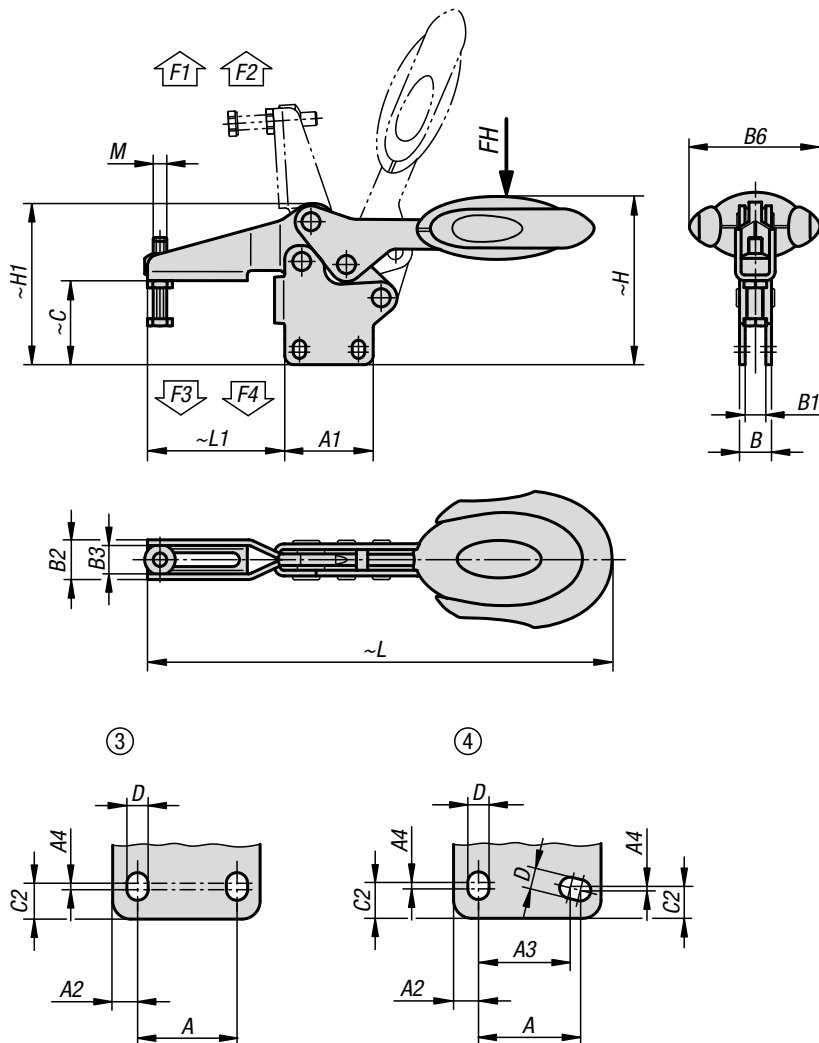
## KIPP Toggle clamps horizontal with straight foot and adjustable clamping spindle

| Order No.    | hole arrangement | Opening angle of holding arm | Opening angle of handle | Hand force FH N | Retaining force F1 N | Retaining force F2 N | Clamping force F3 N | Clamping force F4 N |
|--------------|------------------|------------------------------|-------------------------|-----------------|----------------------|----------------------|---------------------|---------------------|
| K0661.00500Δ | 2                | 86°                          | 67°                     | 100             | 650                  | 900                  | 550                 | 620                 |
| K0661.00600Δ | 3                | 86°                          | 67°                     | 160             | 1350                 | 1900                 | 720                 | 1200                |
| K0661.00800Δ | 3                | 86°                          | 67°                     | 200             | 2000                 | 2800                 | 830                 | 1400                |
| K0661.01000Δ | 3                | 90°                          | 71°                     | 250             | 2200                 | 4500                 | 1200                | 2800                |
| K0661.01200Δ | 4                | 88°                          | 68°                     | 280             | 2400                 | 5500                 | 1000                | 2800                |

| Order No.    | M      | A    | A1 | A2  | A3   | A4  | B    | B1  | B2   | B3   | B6   | C    | C2   | D   | H     | H1    | L     | L1    |
|--------------|--------|------|----|-----|------|-----|------|-----|------|------|------|------|------|-----|-------|-------|-------|-------|
| K0661.00500Δ | M5x25  | 18   | 27 | 4,5 | 13,5 | -   | 8,1  | 4,1 | 13,2 | 9,2  | 22,5 | 26,2 | 5,2  | 5,5 | 52,2  | 47,9  | 125,7 | 41,8  |
| K0661.00600Δ | M6x35  | 26   | 39 | 6,5 | -    | 2,5 | 14,1 | 9,1 | 17,5 | 12,5 | 43,5 | 36,9 | 8    | 5,5 | 75,2  | 71    | 186,6 | 60,5  |
| K0661.00800Δ | M8x45  | 26   | 44 | 9   | -    | 3,5 | 14,1 | 9,1 | 21   | 16   | 41,5 | 46,5 | 10,5 | 6,2 | 88,2  | 84,3  | 223,1 | 74,9  |
| K0661.01000Δ | M10x55 | 41,5 | 59 | 9   | -    | 2   | 16,2 | 9,2 | 26   | 19   | 47   | 59,6 | 10   | 8,8 | 114,3 | 107,5 | 279,4 | 103,9 |
| K0661.01200Δ | M12x70 | 44   | 65 | 11  | 40   | 1   | 16,2 | 9,2 | 28   | 21   | 47   | 75,9 | 13,5 | 8,5 | 128,4 | 125,2 | 314,7 | 122   |

# Toggle clamps horizontal with safety interlock

with straight foot and adjustable clamping spindle



## Material:

Steel.  
Grip polyamide.  
Unlocking bracket TPE.

## Version:

Carbonitrided and black oxidised.  
Grip blue, black or red.

## Sample order:

K0661.006101  
(blue grip)

## Note for ordering:

Δ Enter the desired grip colour here.

## Note:

Maintenance-free high quality link bushings.  
Sustainable constant force during opening and closing.  
Optimum stability through the conical, U-profile clamping arm. Including internal bar lock with automatic safety catch.

## On request:

Other grip colours.

## Accessories:

K0106  
K0383  
K0388  
K0390  
K0391  
K0392  
K0393



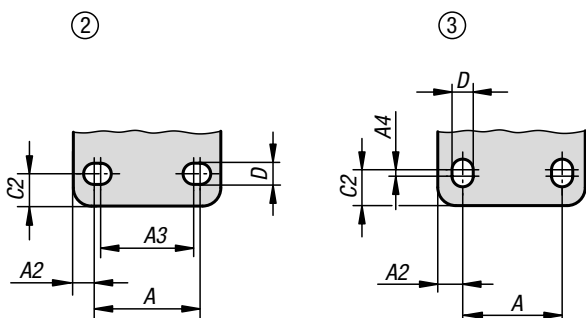
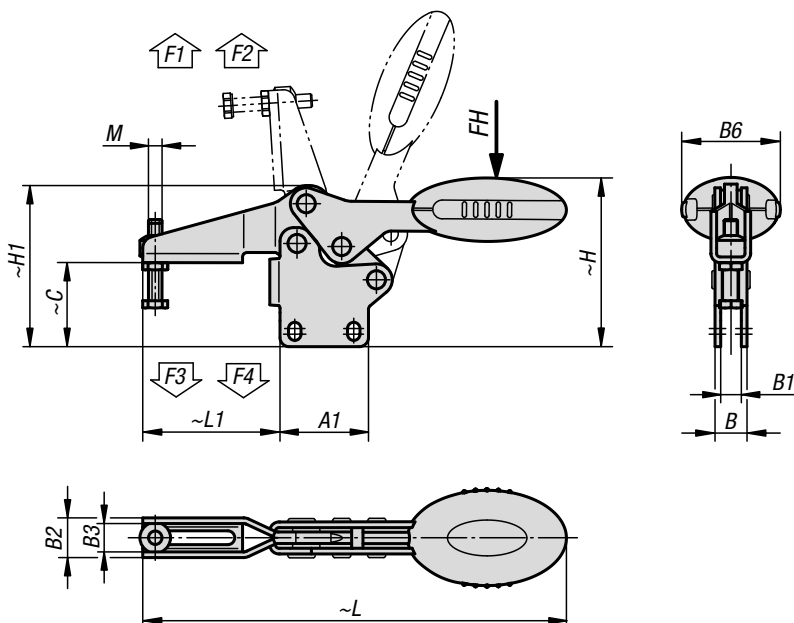
## KIPP Toggle clamps horizontal with safety interlock with straight foot and adjustable clamping spindle

| Order No.    | hole arrangement | Opening angle of holding arm | Opening angle of handle | Hand force FH N | Retaining force F1 N | Retaining force F2 N | Clamping force F3 N | Clamping force F4 N |
|--------------|------------------|------------------------------|-------------------------|-----------------|----------------------|----------------------|---------------------|---------------------|
| K0661.00610Δ | 3                | 86°                          | 67°                     | 160             | 1350                 | 1900                 | 720                 | 1200                |
| K0661.00810Δ | 3                | 86°                          | 67°                     | 200             | 2000                 | 2800                 | 830                 | 1400                |
| K0661.01010Δ | 3                | 90°                          | 71°                     | 250             | 2200                 | 4500                 | 1200                | 2800                |
| K0661.01210Δ | 4                | 88°                          | 68°                     | 280             | 2400                 | 5500                 | 1000                | 2800                |

| Order No.    | M      | A    | A1 | A2  | A3 | A4  | B    | B1  | B2   | B3   | B6   | C    | C2   | D   | H     | H1    | L     | L1    |
|--------------|--------|------|----|-----|----|-----|------|-----|------|------|------|------|------|-----|-------|-------|-------|-------|
| K0661.00610Δ | M6x35  | 26   | 39 | 6,5 | -  | 2,5 | 14,1 | 9,1 | 17,5 | 12,5 | 53,4 | 36,9 | 8    | 5,5 | 75,2  | 71    | 193,3 | 60,5  |
| K0661.00810Δ | M8x45  | 26   | 44 | 9   | -  | 3,5 | 14,1 | 9,1 | 21   | 16   | 51,1 | 46,5 | 10,5 | 6,2 | 88,2  | 84,3  | 230,4 | 74,9  |
| K0661.01010Δ | M10x55 | 41,5 | 59 | 9   | -  | 2   | 16,2 | 9,2 | 26   | 19   | 56,5 | 59,6 | 10   | 8,8 | 114,3 | 107,5 | 286   | 103,9 |
| K0661.01210Δ | M12x70 | 44   | 65 | 11  | 40 | 1   | 16,2 | 9,2 | 28   | 21   | 56,5 | 75,9 | 13,5 | 8,5 | 128,4 | 125,2 | 321,3 | 122   |

# Toggle clamps horizontal

with straight foot and adjustable clamping spindle, stainless steel



**Material:**  
Stainless steel.  
Grip polyamide.

**Version:**  
Bright.  
Grip blue, black or red.

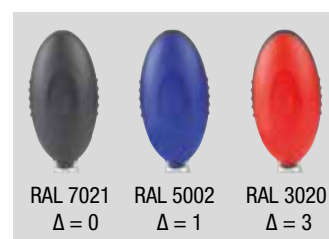
**Sample order:**  
K0661.105001  
(blue grip)

**Note for ordering:**  
 $\Delta$  Enter the desired grip colour here.

**Note:**  
Maintenance-free high quality link bushings.  
Sustainable constant use of force during opening and closing. Optimum stability through the conical, U-profile clamping arm.

**On request:**  
Other grip colours.

**Accessories:**  
K0106  
K0384  
K0390  
K0392  
K0667



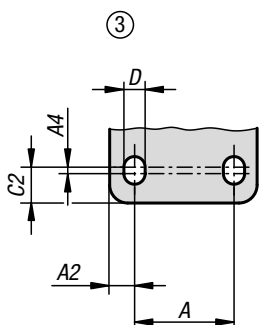
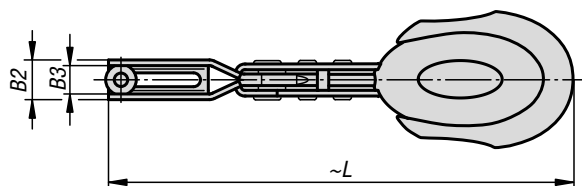
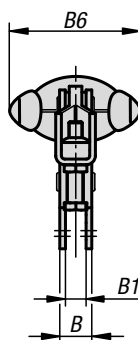
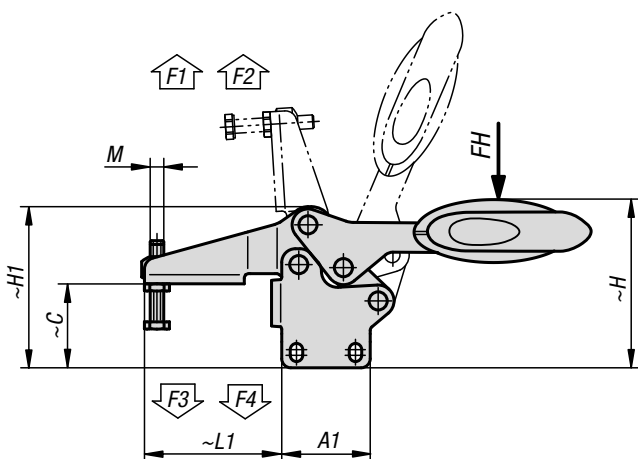
## KIPP Toggle clamps horizontal with straight foot and adjustable clamping spindle, stainless steel

| Order No.    | hole arrangement | Opening angle of holding arm | Opening angle of handle | Hand force FH N | Retaining force F1 N | Retaining force F2 N | Clamping force F3 N | Clamping force F4 N |
|--------------|------------------|------------------------------|-------------------------|-----------------|----------------------|----------------------|---------------------|---------------------|
| K0661.10500Δ | 2                | 86°                          | 67°                     | 100             | 650                  | 900                  | 550                 | 620                 |
| K0661.10600Δ | 3                | 86°                          | 67°                     | 160             | 1350                 | 1900                 | 720                 | 1200                |
| K0661.10800Δ | 3                | 86°                          | 67°                     | 200             | 2000                 | 2800                 | 830                 | 1400                |

| Order No.    | M     | A  | A1 | A2  | A3   | A4  | B    | B1  | B2   | B3   | B6   | C    | C2   | D   | H    | H1   | L     | L1   |
|--------------|-------|----|----|-----|------|-----|------|-----|------|------|------|------|------|-----|------|------|-------|------|
| K0661.10500Δ | M5x25 | 18 | 27 | 4,5 | 13,5 | -   | 8,1  | 4,1 | 13,2 | 9,2  | 22,5 | 26,2 | 5,2  | 5,5 | 52,2 | 47,9 | 125,7 | 41,8 |
| K0661.10600Δ | M6x35 | 26 | 39 | 6,5 | -    | 2,5 | 14,1 | 9,1 | 17,5 | 12,5 | 43,5 | 36,9 | 8    | 5,5 | 75,2 | 71   | 186,6 | 60,5 |
| K0661.10800Δ | M8x45 | 26 | 44 | 9   | -    | 3,5 | 14,1 | 9,1 | 21   | 16   | 41,5 | 46,5 | 10,5 | 6,2 | 88,2 | 84,3 | 223,1 | 74,9 |

# Toggle clamps horizontal with safety interlock

with straight foot and adjustable clamping spindle, stainless steel



## Material:

Stainless steel.  
Grip polyamide.  
Unlocking bracket TPE.

## Version:

Bright.  
Grip blue, black or red.

## Sample order:

K0661.106101  
(blue grip)

## Note for ordering:

Δ Enter the desired grip colour here.

## Note:

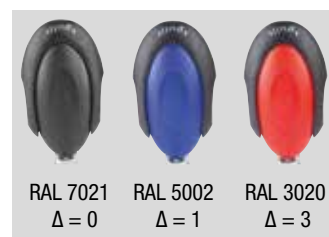
Maintenance-free high quality link bushings.  
Sustainable constant force during opening and closing.  
Optimum stability through the conical, U-profile clamping arm. Including internal bar lock with automatic safety catch.

## On request:

Other grip colours.

## Accessories:

K0106  
K0384  
K0390  
K0392  
K0667



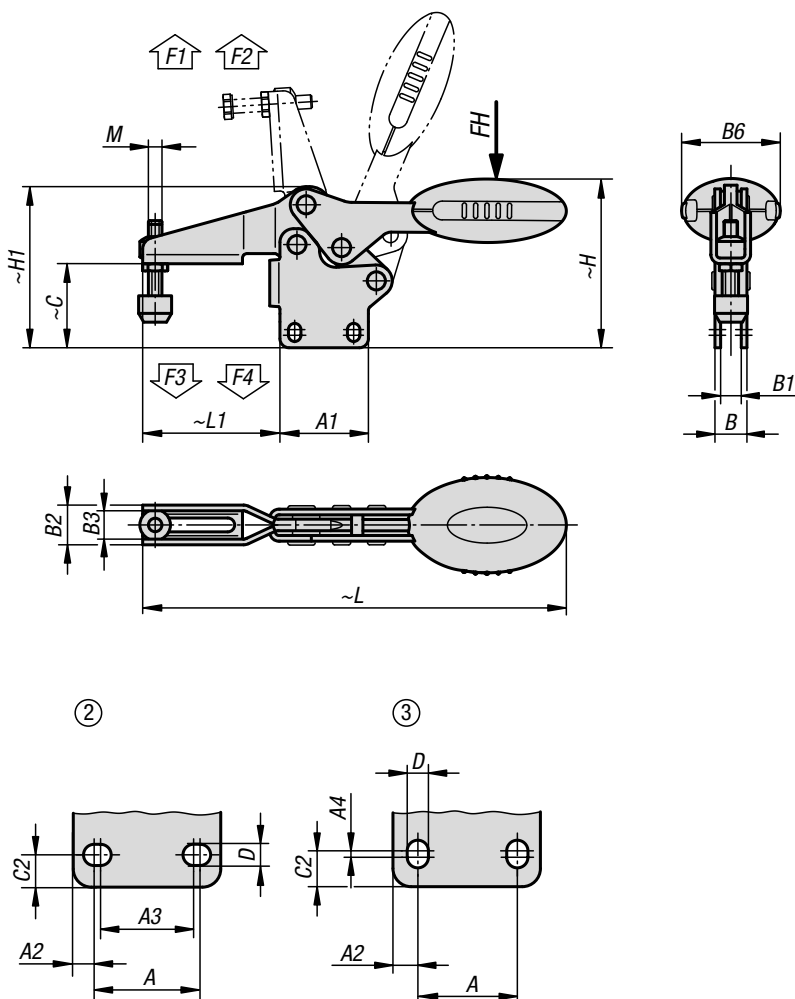
## KIPP Toggle clamps horizontal with safety interlock with straight foot and adjustable clamping spindle, stainless steel

| Order No.    | hole arrangement | Opening angle of holding arm | Opening angle of handle | Hand force FH N | Retaining force F1 N | Retaining force F2 N | Clamping force F3 N | Clamping force F4 N |
|--------------|------------------|------------------------------|-------------------------|-----------------|----------------------|----------------------|---------------------|---------------------|
| K0661.10610Δ | 3                | 86°                          | 67°                     | 160             | 1350                 | 1900                 | 720                 | 1200                |
| K0661.10810Δ | 3                | 86°                          | 67°                     | 200             | 2000                 | 2800                 | 830                 | 1400                |

| Order No.    | M     | A  | A1 | A2  | A4  | B    | B1  | B2   | B3   | B6   | C    | C2   | D   | H    | H1   | L     | L1   |
|--------------|-------|----|----|-----|-----|------|-----|------|------|------|------|------|-----|------|------|-------|------|
| K0661.10610Δ | M6x35 | 26 | 39 | 6,5 | 2,5 | 14,1 | 9,1 | 17,5 | 12,5 | 53,4 | 36,9 | 8    | 5,5 | 75,2 | 71   | 193,3 | 60,5 |
| K0661.10810Δ | M8x45 | 26 | 44 | 9   | 3,5 | 14,1 | 9,1 | 21   | 16   | 51,1 | 46,5 | 10,5 | 6,2 | 88,2 | 84,3 | 230,4 | 74,9 |

# Horizontal antistatic toggle clamps

with straight foot and adjustable clamping spindle



## Material:

Steel.  
Grip polyamide.

## Version:

Nitro-carburised and black oxidised.  
Grip element graphite black.

## Sample order:

K0661.005024

## Note:

Maintenance-free high quality link bushes.  
Sustainable constant force during opening and closing.  
Optimum stability through the conical, U-profile clamping arm.

## Application:

Sensitive electrical or electronic equipment, components and devices (ESD sensitive elements) may be damaged or destroyed by electrostatic discharges (ESD) in the immediate vicinity.

Electrostatic discharges can come from people or through handling ESD sensitive components (e.g. during production, assembly, transport, storage etc).

Electrically conductive products which conform to DIN EN 61340-5-1 are essential within electronic environments to prevent an electrostatic discharge.

These products can be used for ESD applications or in ESD protection areas (EPA) in accordance with DIN EN 61340-5-1.

## Advantages:

- Made from a special electrically conductive plastic
- To protect sensitive electrical or electronic parts, components and devices
- Toggle clamps and power clamps are used in assembly and workholding fixtures
- Ergonomic and user-friendly grip

## Safety:

These ESD products can also be used for devices, components and protection systems in areas where there is risk of explosion.

These ESD products prevent electrostatic spark discharges, and eliminate the risk of ignition of gases and dust which could lead to explosions in enclosed spaces.

Manufacturers and operators must apply and comply with the ATEX directives for protecting persons working in areas where there is a risk of explosion.

These ESD products have been certified by TÜV-Süd for their electrical discharge capability.

## Target groups:

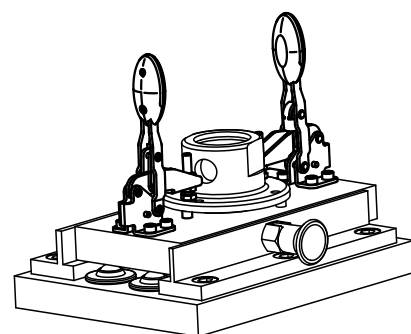
Device manufacturers required to conform to ATEX product directive 2014/34/EU.

Operators required to conform to ATEX worker protection directive 1999/92/EC.



# Horizontal antistatic toggle clamps

with straight foot and adjustable clamping spindle



## KIPP Horizontal antistatic toggle clamps with straight foot

| Order No.    | Opening angle of holding arm | Opening angle of handle | Hand force FH N | Retaining force F1 N | Retaining force F2 N | Clamping force F3 N | Clamping force F4 N |
|--------------|------------------------------|-------------------------|-----------------|----------------------|----------------------|---------------------|---------------------|
| K0661.005024 | 86°                          | 67°                     | 100             | 650                  | 900                  | 550                 | 620                 |
| K0661.006024 | 86°                          | 67°                     | 160             | 1350                 | 1900                 | 720                 | 1200                |
| K0661.008024 | 86°                          | 67°                     | 200             | 2000                 | 2800                 | 830                 | 1400                |

| Order No.    | hole arrangement | M     | A  | A1 | A2  | A3   | A4  | B    | B1  | B2   | B3   | B6   | C    | C2   | D   | H    | H1   | L     | L1   |
|--------------|------------------|-------|----|----|-----|------|-----|------|-----|------|------|------|------|------|-----|------|------|-------|------|
| K0661.005024 | 2                | M5x25 | 18 | 27 | 4,5 | 13,5 | -   | 8,1  | 4,1 | 13,2 | 9,2  | 22,5 | 26,2 | 5,2  | 5,5 | 52,2 | 47,9 | 125,7 | 41,8 |
| K0661.006024 | 3                | M6x35 | 26 | 39 | 6,5 | -    | 2,5 | 14,1 | 9,1 | 17,5 | 12,5 | 43,5 | 36,9 | 8    | 5,5 | 75,2 | 71   | 186,6 | 60,5 |
| K0661.008024 | 3                | M8x45 | 26 | 44 | 9   | -    | 3,5 | 14,1 | 9,1 | 21   | 16   | 41,5 | 46,5 | 10,5 | 6,2 | 88,2 | 84,3 | 223,1 | 74,9 |

## Toggle clamps vertical

with flat foot and adjustable clamping spindle



### Material:

Steel.  
Grip polyamide.

### Version:

Carbonitrided and black oxidised.  
Grip blue, black or red.

### Sample order:

K0662.005001  
(blue grip)

### Note for ordering:

Δ Enter the desired grip colour here.

### Note:

Maintenance-free high quality link bushings.  
Sustainable constant use of force during opening and closing. Optimum stability through the conical, U-profile clamping arm.

### On request:

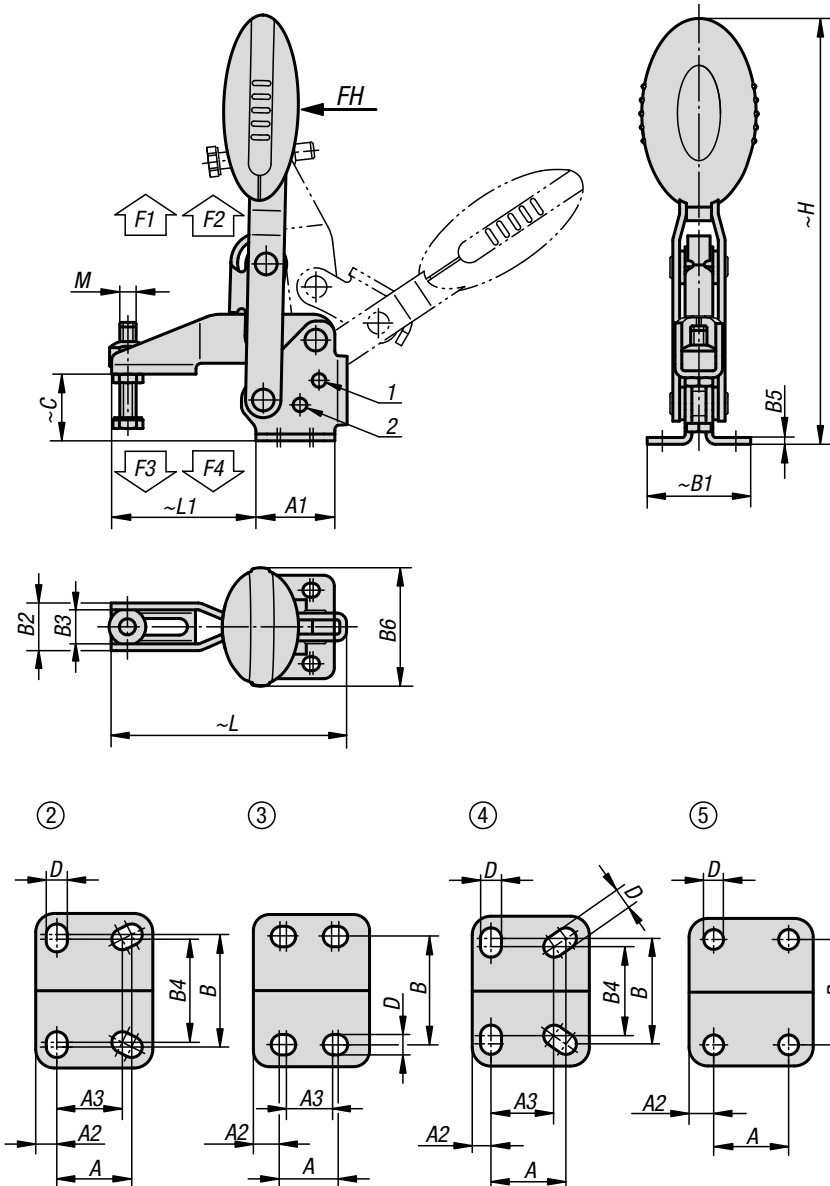
Other grip colours.

### Accessories:

K0106  
K0098  
K0383  
K0388  
K0390  
K0391  
K0392  
K0393

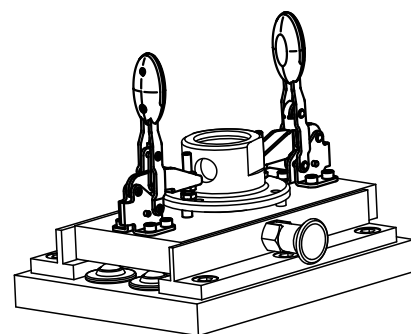
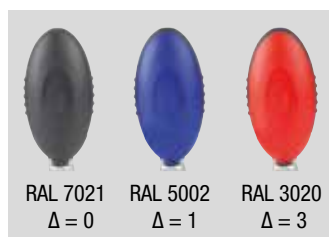
### Drawing reference:

1) stop pin position 1  
2) stop pin position 2



# Toggle clamps vertical

with flat foot and adjustable clamping spindle



## KIPP Toggle clamps vertical with flat foot and adjustable clamping spindle

| Order No.    | Opening angle<br>holding arm<br>position 1 | Opening angle<br>holding arm<br>position 2 | Opening angle<br>holding arm<br>stop pin removed | Opening angle<br>handle<br>position 1 | Opening angle<br>handle<br>position 2 | Opening angle<br>handle<br>stop pin removed |
|--------------|--------------------------------------------|--------------------------------------------|--------------------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------------|
| K0662.00500Δ | 100°                                       | -                                          | 147°                                             | 64°                                   | -                                     | 83°                                         |
| K0662.00600Δ | 56°                                        | 83°                                        | 152°                                             | 46°                                   | 56°                                   | 83°                                         |
| K0662.00800Δ | 13°                                        | 93°                                        | 158°                                             | 26°                                   | 61°                                   | 86°                                         |
| K0662.01000Δ | 6°                                         | 97°                                        | 176°                                             | 19°                                   | 59°                                   | 91°                                         |
| K0662.01200Δ | 11°                                        | 88°                                        | 164°                                             | 24°                                   | 60°                                   | 91°                                         |

| Order No.    | Hand<br>force<br>FH N | Retaining<br>force<br>F1 N | Retaining<br>force<br>F2 N | Clamping<br>force<br>F3 N | Clamping<br>force<br>F4 N | Order No.<br>Angle bracket |
|--------------|-----------------------|----------------------------|----------------------------|---------------------------|---------------------------|----------------------------|
| K0662.00500Δ | 100                   | 750                        | 1050                       | 620                       | 750                       | K0098.02                   |
| K0662.00600Δ | 160                   | 1350                       | 1650                       | 920                       | 1050                      | K0098.02                   |
| K0662.00800Δ | 190                   | 2000                       | 2800                       | 940                       | 1350                      | K0098.04                   |
| K0662.01000Δ | 250                   | 2500                       | 4500                       | 1500                      | 2800                      | K0098.06                   |
| K0662.01200Δ | 280                   | 3000                       | 5500                       | 1400                      | 2800                      | K0098.06                   |

| Order No.    | hole<br>arrangement | M      | A  | A1 | A2   | A3 | B  | B1 | B2   | B3   | B4 | B5  | B6   | C    | D   | H     | L     | L1    |
|--------------|---------------------|--------|----|----|------|----|----|----|------|------|----|-----|------|------|-----|-------|-------|-------|
| K0662.00500Δ | 2                   | M5x25  | 16 | 25 | 4,5  | 14 | 24 | 33 | 13,2 | 9,2  | 22 | 2   | 22,5 | 18   | 4,5 | 107,4 | 65,6  | 35    |
| K0662.00600Δ | 3                   | M6x35  | 14 | 29 | 7    | 12 | 27 | 38 | 17,5 | 12,5 | -  | 2,5 | 43,5 | 24,9 | 5,5 | 156,3 | 86,5  | 53    |
| K0662.00800Δ | 3                   | M8x45  | 21 | 39 | 9    | 19 | 32 | 45 | 20,6 | 15,6 | -  | 2,5 | 41,5 | 32,7 | 6,8 | 184,2 | 107   | 62    |
| K0662.01000Δ | 4                   | M10x55 | 32 | 50 | 8    | 27 | 45 | 64 | 25,5 | 18,5 | 38 | 3,5 | 47   | 38,7 | 9   | 223,9 | 153   | 95    |
| K0662.01200Δ | 5                   | M12x70 | 32 | 53 | 10,5 | -  | 45 | 63 | 28   | 21   | -  | 3,5 | 47   | 46,7 | 8,8 | 242,4 | 173,5 | 113,5 |

# Toggle clamps vertical with safety interlock

with flat foot and adjustable clamping spindle



## Material:

Steel.  
Grip polyamide.  
Unlocking bracket TPE.

## Version:

Carbonitrided and black oxidised.  
Grip blue, black or red.

## Sample order:

K0662.006101  
(blue grip)

## Note for ordering:

Δ Enter the desired grip colour here.

## Note:

Maintenance-free high quality link bushings.  
Sustainable constant force during opening and closing.  
Optimum stability through the conical, U-profile clamping arm. Including internal bar lock with automatic safety catch.

## On request:

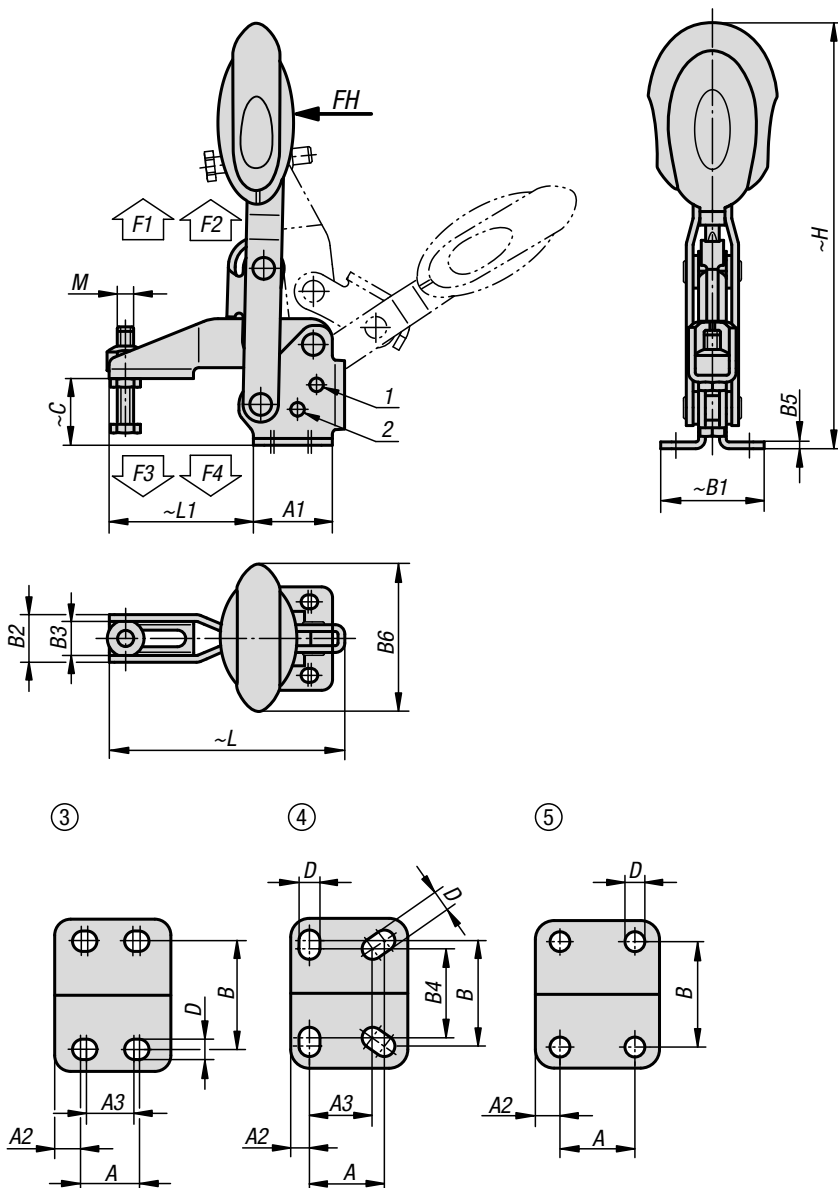
Other grip colours.

## Accessories:

K0106  
K0098  
K0383  
K0388  
K0390  
K0391  
K0392  
K0393

## Drawing reference:

1) stop pin position 1  
2) stop pin position 2



# Toggle clamps vertical with safety interlock

with flat foot and adjustable clamping spindle



## KIPP Toggle clamps vertical with safety interlock with flat foot and adjustable clamping spindle

| Order No.    | Opening angle<br>holding arm<br>position 1 | Opening angle<br>holding arm<br>position 2 | Opening angle<br>holding arm<br>stop pin removed | Opening angle<br>handle<br>position 1 | Opening angle<br>handle<br>position 2 | Opening angle<br>handle<br>stop pin removed |
|--------------|--------------------------------------------|--------------------------------------------|--------------------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------------|
| K0662.00610Δ | 56°                                        | 83°                                        | 152°                                             | 46°                                   | 56°                                   | 83°                                         |
| K0662.00810Δ | 13°                                        | 93°                                        | 158°                                             | 26°                                   | 61°                                   | 86°                                         |
| K0662.01010Δ | 6°                                         | 97°                                        | 176°                                             | 19°                                   | 59°                                   | 91°                                         |
| K0662.01210Δ | 11°                                        | 88°                                        | 164°                                             | 24°                                   | 60°                                   | 91°                                         |

| Order No.    | Hand<br>force<br>FH N | Retaining<br>force<br>F1 N | Retaining<br>force<br>F2 N | Clamping<br>force<br>F3 N | Clamping<br>force<br>F4 N | Order No.<br>Angle bracket |
|--------------|-----------------------|----------------------------|----------------------------|---------------------------|---------------------------|----------------------------|
| K0662.00610Δ | 160                   | 1350                       | 1650                       | 920                       | 1050                      | K0098.02                   |
| K0662.00810Δ | 190                   | 2000                       | 2800                       | 940                       | 1350                      | K0098.04                   |
| K0662.01010Δ | 250                   | 2500                       | 4500                       | 1500                      | 2800                      | K0098.06                   |
| K0662.01210Δ | 280                   | 3000                       | 5500                       | 1400                      | 2800                      | K0098.06                   |

| Order No.    | hole<br>arrangement | M      | A  | A1 | A2   | A3 | B  | B1 | B2   | B3   | B4 | B5  | B6   | C    | D   | H     | L     | L1    |
|--------------|---------------------|--------|----|----|------|----|----|----|------|------|----|-----|------|------|-----|-------|-------|-------|
| K0662.00610Δ | 3                   | M6x35  | 14 | 29 | 7    | 12 | 27 | 38 | 17,5 | 12,5 | -  | 2,5 | 53,4 | 24,9 | 5,5 | 163   | 86,5  | 53    |
| K0662.00810Δ | 3                   | M8x45  | 21 | 39 | 9    | 19 | 32 | 45 | 20,6 | 15,6 | -  | 2,5 | 51,1 | 32,7 | 6,8 | 191,4 | 107   | 62    |
| K0662.01010Δ | 4                   | M10x55 | 32 | 50 | 8    | 27 | 45 | 64 | 25,5 | 18,5 | 38 | 3,5 | 56,5 | 38,7 | 9   | 230,5 | 153   | 95    |
| K0662.01210Δ | 5                   | M12x70 | 32 | 53 | 10,5 | -  | 45 | 63 | 28   | 21   | -  | 3,5 | 56,5 | 46,7 | 8,8 | 249,1 | 173,5 | 113,5 |

## Toggle clamps vertical

with flat foot and adjustable clamping spindle, stainless steel



### Material:

Stainless steel.  
Grip polyamide.

### Version:

Bright.  
Grip blue, black or red.

### Sample order:

K0662.105001  
(blue grip)

### Note for ordering:

Δ Enter the desired grip colour here.

### Note:

Maintenance-free high quality link bushings.  
Sustainable constant use of force during opening and closing. Optimum stability through the conical, U-profile clamping arm.

### On request:

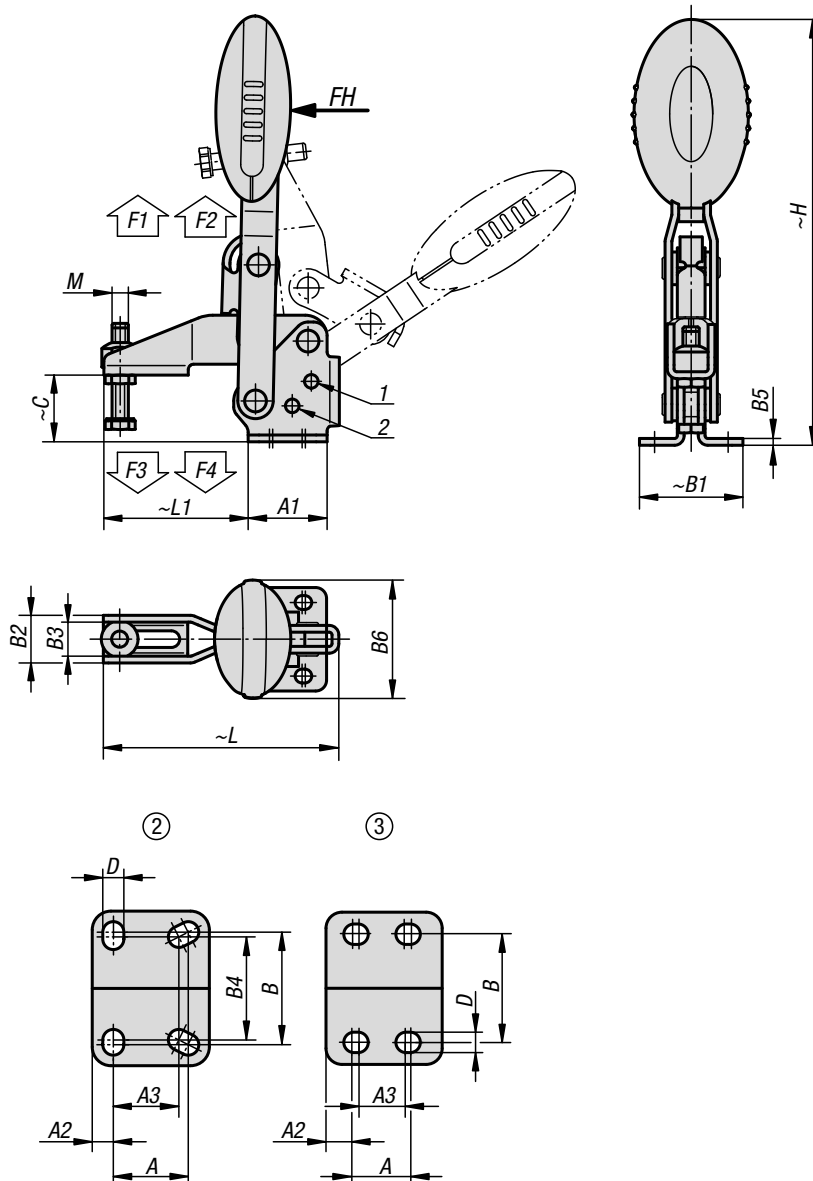
Other grip colours.

### Accessories:

K0106  
K0384  
K0390  
K0392  
K0667

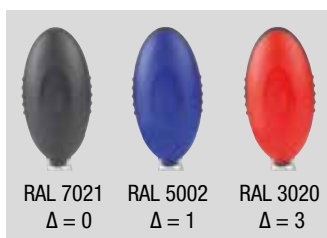
### Drawing reference:

1) stop pin position 1  
2) stop pin position 2

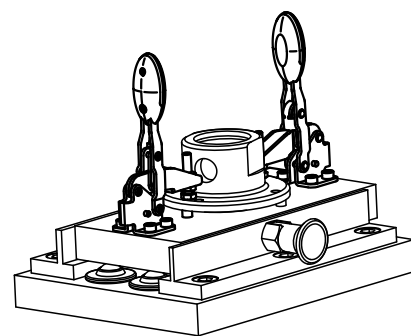


# Toggle clamps vertical

with flat foot and adjustable clamping spindle, stainless steel



RAL 7021  $\Delta = 0$  RAL 5002  $\Delta = 1$  RAL 3020  $\Delta = 3$



## KIPP Toggle clamps vertical with flat foot and adjustable clamping spindle, stainless steel

| Order No.    | Opening angle<br>holding arm<br>position 1 | Opening angle<br>holding arm<br>position 2 | Opening angle<br>holding arm<br>stop pin removed | Opening angle<br>handle<br>position 1 | Opening angle<br>handle<br>position 2 | Opening angle<br>handle<br>stop pin removed |
|--------------|--------------------------------------------|--------------------------------------------|--------------------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------------|
| K0662.10500Δ | 100°                                       | -                                          | 147°                                             | 64°                                   | -                                     | 83°                                         |
| K0662.10600Δ | 56°                                        | 83°                                        | 152°                                             | 46°                                   | 56°                                   | 83°                                         |
| K0662.10800Δ | 13°                                        | 93°                                        | 158°                                             | 26°                                   | 61°                                   | 86°                                         |

| Order No.    | Hand<br>force<br>FH N | Retaining<br>force<br>F1 N | Retaining<br>force<br>F2 N | Clamping<br>force<br>F3 N | Clamping<br>force<br>F4 N |
|--------------|-----------------------|----------------------------|----------------------------|---------------------------|---------------------------|
| K0662.10500Δ | 100                   | 750                        | 1050                       | 620                       | 750                       |
| K0662.10600Δ | 160                   | 1350                       | 1650                       | 920                       | 1050                      |
| K0662.10800Δ | 190                   | 2000                       | 2800                       | 940                       | 1350                      |

| Order No.    | hole<br>arrangement | M     | A  | A1 | A2  | A3 | B  | B1 | B2   | B3   | B4 | B5  | B6   | C    | D   | H     | L    | L1 |
|--------------|---------------------|-------|----|----|-----|----|----|----|------|------|----|-----|------|------|-----|-------|------|----|
| K0662.10500Δ | 2                   | M5x25 | 16 | 25 | 4,5 | 14 | 24 | 33 | 13,2 | 9,2  | 22 | 2   | 22,5 | 18   | 4,5 | 107,4 | 65,6 | 35 |
| K0662.10600Δ | 3                   | M6x35 | 14 | 29 | 7   | 12 | 27 | 38 | 17,5 | 12,5 | -  | 2,5 | 43,5 | 24,9 | 5,5 | 156,3 | 86,5 | 53 |
| K0662.10800Δ | 3                   | M8x45 | 21 | 39 | 9   | 19 | 32 | 45 | 20,6 | 15,6 | -  | 2,5 | 41,5 | 32,7 | 6,8 | 184,2 | 107  | 62 |

## Toggle clamps vertical with safety interlock

with flat foot and adjustable clamping spindle, stainless steel



### Material:

Stainless steel.  
Grip polyamide.  
Unlocking bracket TPE.

### Version:

Bright.  
Grip blue, black or red.

### Sample order:

K0662.106101  
(blue grip)

### Note for ordering:

Δ Enter the desired grip colour here.

### Note:

Maintenance-free high quality link bushings.  
Sustainable constant force during opening and closing.  
Optimum stability through the conical, U-profile clamping arm. Including internal bar lock with automatic safety catch.

### On request:

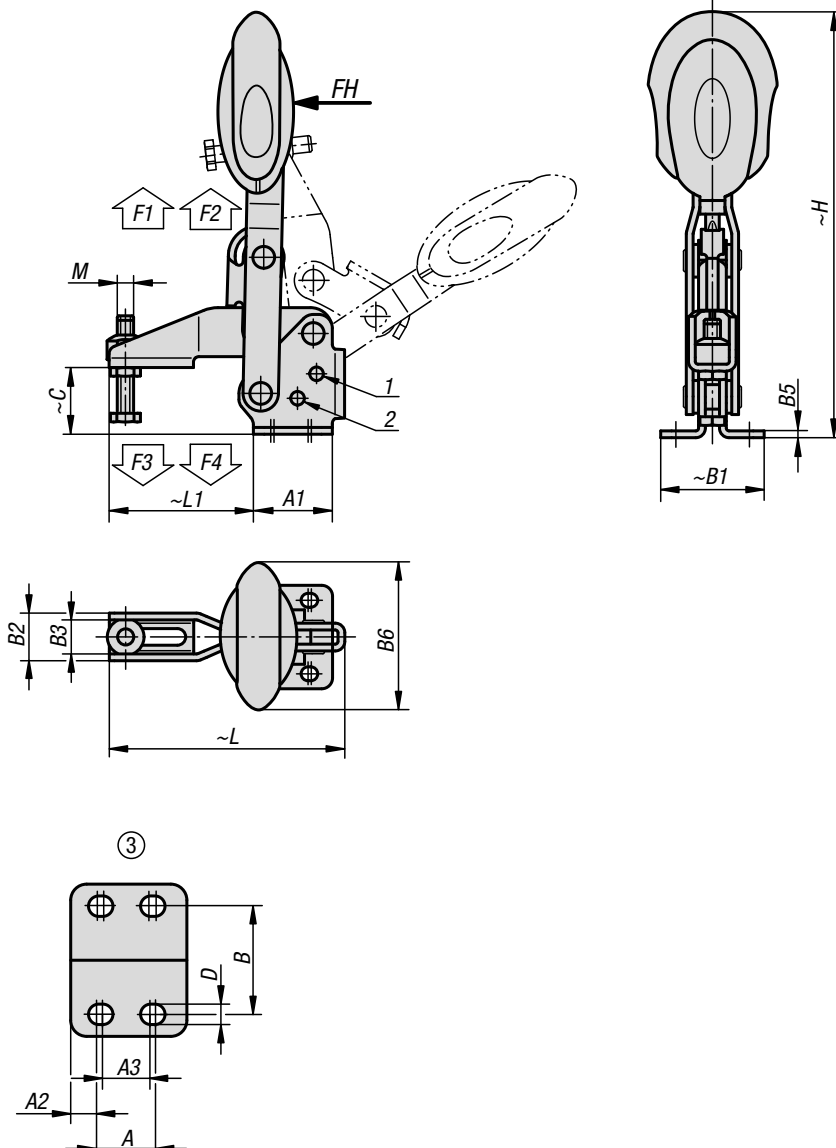
Other grip colours.

### Accessories:

K0106  
K0384  
K0390  
K0392  
K0667

### Drawing reference:

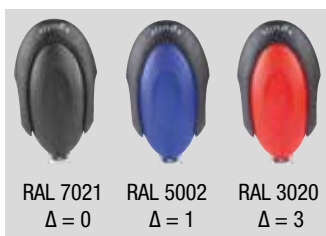
1) stop pin position 1  
2) stop pin position 2





# Toggle clamps vertical with safety interlock

with flat foot and adjustable clamping spindle, stainless steel



## KIPP Toggle clamps, vertical with safety interlock, with flat foot and adjustable clamping spindle, stainless steel

| Order No.    | Opening angle<br>holding arm<br>position 1 | Opening angle<br>holding arm<br>position 2 | Opening angle<br>holding arm<br>stop pin removed | Opening angle<br>handle<br>position 1 | Opening angle<br>handle<br>position 2 | Opening angle<br>handle<br>stop pin removed |
|--------------|--------------------------------------------|--------------------------------------------|--------------------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------------|
| K0662.10610Δ | 56°                                        | 83°                                        | 152°                                             | 46°                                   | 56°                                   | 83°                                         |
| K0662.10810Δ | 13°                                        | 93°                                        | 158°                                             | 26°                                   | 61°                                   | 86°                                         |

| Order No.    | Hand<br>force<br>FH N | Retaining<br>force<br>F1 N | Retaining<br>force<br>F2 N | Clamping<br>force<br>F3 N | Clamping<br>force<br>F4 N |
|--------------|-----------------------|----------------------------|----------------------------|---------------------------|---------------------------|
| K0662.10610Δ | 160                   | 1350                       | 1650                       | 920                       | 1050                      |
| K0662.10810Δ | 190                   | 2000                       | 2800                       | 940                       | 1350                      |

| Order No.    | hole<br>arrangement | M     | A  | A1 | A2 | A3 | B  | B1 | B2   | B3   | B5  | B6   | C    | D   | H     | L    | L1 |
|--------------|---------------------|-------|----|----|----|----|----|----|------|------|-----|------|------|-----|-------|------|----|
| K0662.10610Δ | 3                   | M6x35 | 14 | 29 | 7  | 12 | 27 | 38 | 17,5 | 12,5 | 2,5 | 53,4 | 24,9 | 5,5 | 163   | 86,5 | 53 |
| K0662.10810Δ | 3                   | M8x45 | 21 | 39 | 9  | 19 | 32 | 45 | 20,6 | 15,6 | 2,5 | 51,1 | 32,7 | 6,8 | 191,4 | 107  | 62 |

# Vertical antistatic toggle clamps

with horizontal foot and adjustable thrust spindle



## Material:

Steel.  
Grip polyamide.

## Version:

Nitro-carburised and black oxidised.  
Grip element graphite black.

## Sample order:

K0662.005024

## Note:

Maintenance-free high quality link bushes.  
Sustainable constant force during opening and closing.  
Optimum stability through the conical, U-profile clamping arm.

## Application:

Sensitive electrical or electronic equipment, components and devices (ESD sensitive elements) may be damaged or destroyed by electrostatic discharges (ESD) in the immediate vicinity.  
Electrostatic discharges can come from people or through handling ESD sensitive components (e.g. during production, assembly, transport, storage etc).  
Electrically conductive products which conform to DIN EN 61340-5-1 are essential within electronic environments to prevent an electrostatic discharge.  
These products can be used for ESD applications or in ESD protection areas (EPA) in accordance with DIN EN 61340-5-1.

## Advantages:

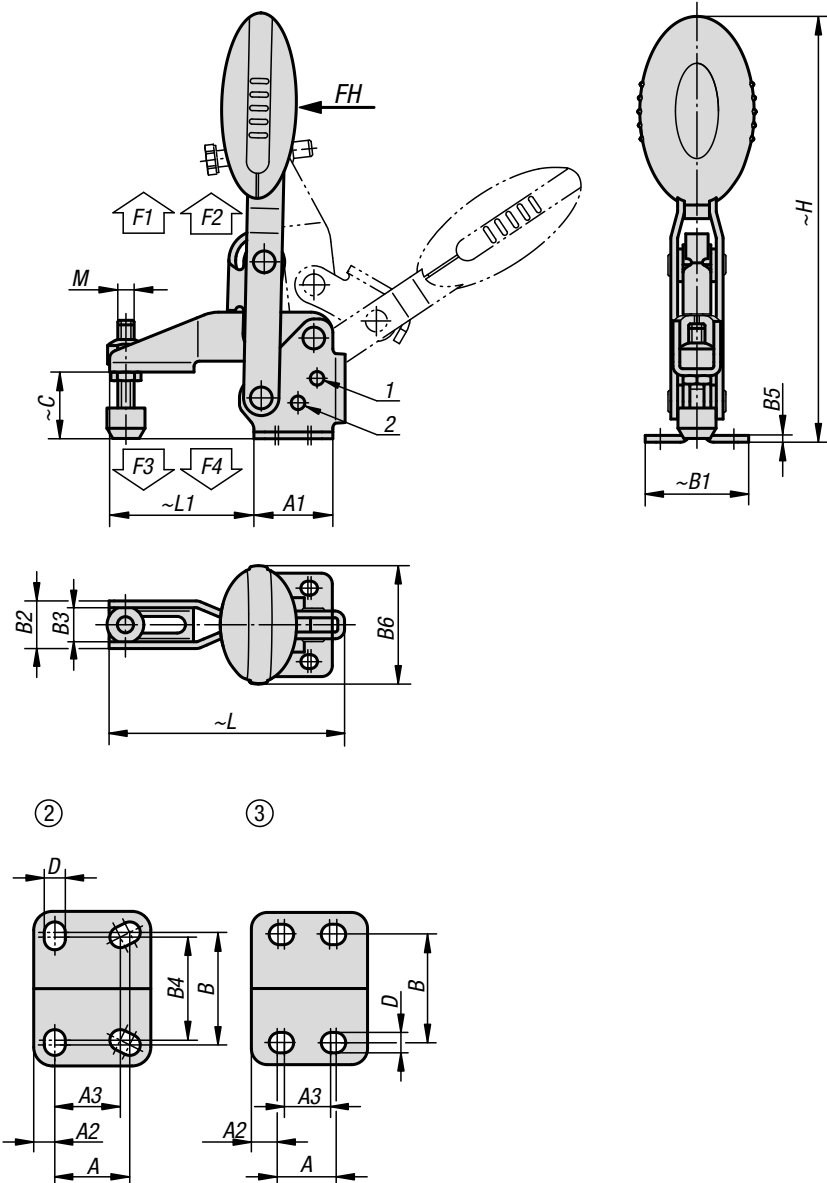
- Made from a special electrically conductive plastic
- To protect sensitive electrical or electronic parts, components and devices
- Toggle clamps and power clamps are used in assembly and workholding fixtures
- Ergonomic and user-friendly grip

## Accessories:

K0098

## Safety:

These ESD products can also be used for devices, components and protection systems in areas where there is risk of explosion.  
These ESD products prevent electrostatic spark discharges, and eliminate the risk of ignition of gases and dust which could lead to explosions in enclosed spaces.  
Manufacturers and operators must apply and comply with the ATEX directives for protecting persons working in areas where there is a risk of explosion.  
These ESD products have been certified by TÜV-Süd for their electrical discharge capability.



# Vertical antistatic toggle clamps

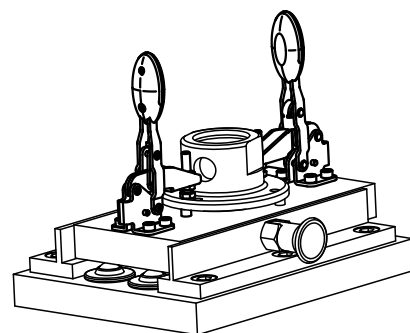
with horizontal foot and adjustable thrust spindle



## Target groups:

Device manufacturers required to conform to ATEX product directive 2014/34/EU.

Operators required to conform to ATEX worker protection directive 1999/92/EC.



## KIPP Vertical antistatic toggle clamps with horizontal foot

| Order No.    | Opening angle<br>holding arm<br>position 1 | Opening angle<br>holding arm<br>position 2 | Opening angle<br>holding arm<br>stop pin removed | Opening angle<br>handle<br>position 1 | Opening angle<br>handle<br>position 2 | Opening angle<br>handle<br>stop pin removed |
|--------------|--------------------------------------------|--------------------------------------------|--------------------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------------|
| K0662.005024 | 100°                                       | -                                          | 147°                                             | 64°                                   | -                                     | 83°                                         |
| K0662.006024 | 56°                                        | 83°                                        | 152°                                             | 46°                                   | 56°                                   | 83°                                         |
| K0662.008024 | 13°                                        | 93°                                        | 158°                                             | 26°                                   | 61°                                   | 86°                                         |

| Order No.    | Hand<br>force<br>FH N | Retaining<br>force<br>F1 N | Retaining<br>force<br>F2 N | Clamping<br>force<br>F3 N | Clamping<br>force<br>F4 N | Order No.<br>Angle bracket |
|--------------|-----------------------|----------------------------|----------------------------|---------------------------|---------------------------|----------------------------|
| K0662.005024 | 100                   | 750                        | 1050                       | 620                       | 750                       | K0098.02                   |
| K0662.006024 | 160                   | 1350                       | 1650                       | 920                       | 1050                      | K0098.04                   |
| K0662.008024 | 190                   | 2000                       | 2800                       | 940                       | 1350                      | K0098.04                   |

| Order No.    | hole<br>arrangement | M     | A  | A1 | A2  | A3 | B  | B1 | B2   | B3   | B4 | B5  | B6   | C    | D   | H     | L    | L1 |
|--------------|---------------------|-------|----|----|-----|----|----|----|------|------|----|-----|------|------|-----|-------|------|----|
| K0662.005024 | 2                   | M5x25 | 16 | 25 | 4,5 | 14 | 24 | 33 | 13,2 | 9,2  | 22 | 2   | 22,5 | 18   | 4,5 | 107,4 | 65,6 | 35 |
| K0662.006024 | 3                   | M6x35 | 14 | 29 | 7   | 12 | 27 | 38 | 17,5 | 12,5 | -  | 2,5 | 43,5 | 24,9 | 5,5 | 156,3 | 86,5 | 53 |
| K0662.008024 | 3                   | M8x45 | 21 | 39 | 9   | 19 | 32 | 45 | 20,6 | 15,6 | -  | 2,5 | 41,5 | 32,7 | 6,8 | 184,2 | 107  | 62 |

# Toggle clamps vertical

with straight foot and adjustable clamping spindle



**Material:**

Steel.  
Grip polyamide.

**Version:**

Carbonitrided and black oxidised.  
Grip blue, black or red.

**Sample order:**

K0663.005001  
(blue grip)

**Note for ordering:**

Δ Enter the desired grip colour here.

**Note:**

Maintenance-free high quality link bushings.  
Sustainable constant use of force during opening and closing. Optimum stability through the conical, U-profile clamping arm.

**On request:**

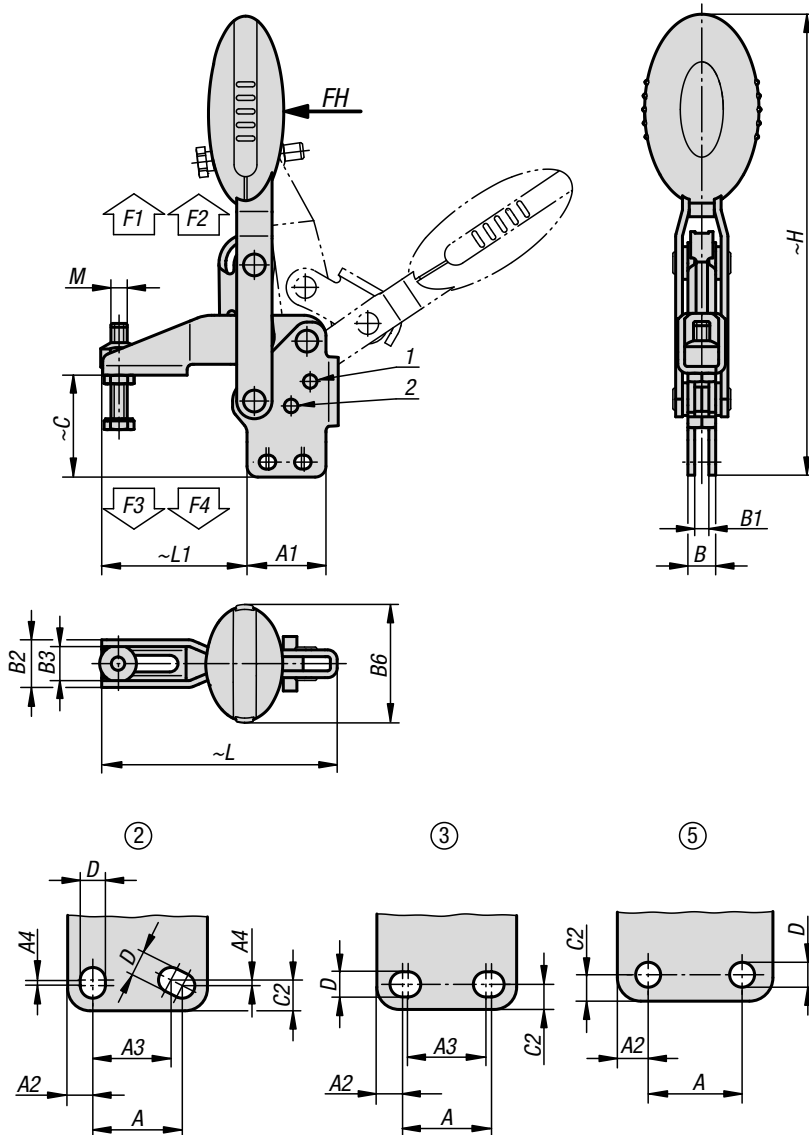
Other grip colours.

**Accessories:**

K0106  
K0383  
K0388  
K0390  
K0391  
K0392  
K0393

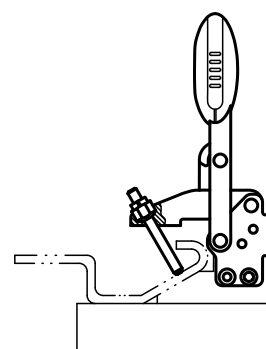
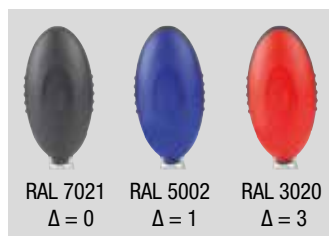
**Drawing reference:**

1) stop pin position 1  
2) stop pin position 2



# Toggle clamps vertical

with straight foot and adjustable clamping spindle



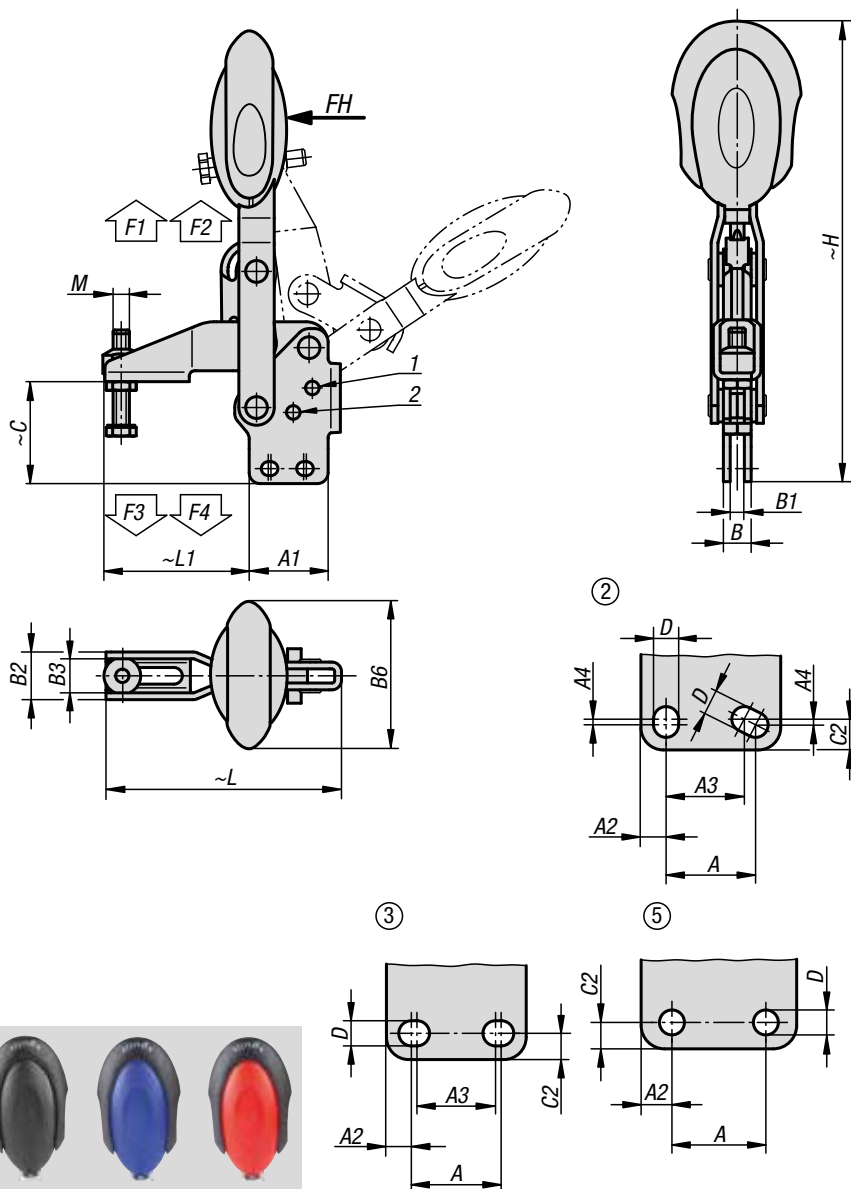
## KIPP Toggle clamps vertical with straight foot and adjustable clamping spindle

| Order No.    | Opening angle<br>holding arm<br>position 1 | Opening angle<br>holding arm<br>position 2 | Opening angle<br>holding arm<br>stop pin removed | Opening angle<br>handle<br>position 1 | Opening angle<br>handle<br>position 2 | Hand<br>force<br>FH N | Retaining<br>force<br>F1 N | Retaining<br>force<br>F2 N | Clamping<br>force<br>F3 N | Clamping<br>force<br>F4 N |
|--------------|--------------------------------------------|--------------------------------------------|--------------------------------------------------|---------------------------------------|---------------------------------------|-----------------------|----------------------------|----------------------------|---------------------------|---------------------------|
| K0663.00500Δ | 100°                                       | -                                          | 129°                                             | 64°                                   | -                                     | 100                   | 750                        | 1050                       | 620                       | 750                       |
| K0663.00600Δ | 56°                                        | 83°                                        | 141°                                             | 46°                                   | 56°                                   | 160                   | 1350                       | 1650                       | 920                       | 1050                      |
| K0663.00800Δ | 13°                                        | 93°                                        | 158°                                             | 26°                                   | 61°                                   | 190                   | 2000                       | 2800                       | 940                       | 1350                      |
| K0663.01000Δ | 6°                                         | 97°                                        | 176°                                             | 19°                                   | 59°                                   | 250                   | 2500                       | 4500                       | 1500                      | 2800                      |
| K0663.01200Δ | 11°                                        | 88°                                        | 164°                                             | 24°                                   | 60°                                   | 280                   | 3000                       | 5500                       | 1400                      | 2800                      |

| Order No.    | hole<br>arrangement | M      | A  | A1 | A2   | A3 | A4  | B    | B1  | B2   | B3   | B6   | C    | C2  | D   | H     | L     | L1    |
|--------------|---------------------|--------|----|----|------|----|-----|------|-----|------|------|------|------|-----|-----|-------|-------|-------|
| K0663.00500Δ | 2                   | M5x25  | 16 | 25 | 4,5  | 14 | 1   | 8,1  | 4,1 | 13,2 | 9,2  | 22,5 | 29,8 | 5,5 | 4,5 | 119,2 | 65,6  | 35    |
| K0663.00600Δ | 3                   | M6x35  | 14 | 29 | 7    | 12 | -   | 10,2 | 5,2 | 17,5 | 12,5 | 43,5 | 37,6 | 5,5 | 5,5 | 169   | 86,5  | 53    |
| K0663.00800Δ | 3                   | M8x45  | 21 | 39 | 9    | 19 | -   | 10,2 | 5,2 | 20,6 | 15,6 | 41,5 | 49   | 6,5 | 6,8 | 200,4 | 107   | 62    |
| K0663.01000Δ | 2                   | M10x55 | 32 | 50 | 8    | 27 | 3,5 | 14,1 | 7,1 | 25,5 | 18,5 | 47   | 62,3 | 13  | 9   | 247,4 | 153   | 95    |
| K0663.01200Δ | 5                   | M12x70 | 32 | 53 | 10,5 | -  | -   | 14,1 | 7,1 | 28   | 21   | 47   | 69,8 | 9   | 8,8 | 265,5 | 173,5 | 113,5 |

## Toggle clamps vertical with safety interlock

with straight foot and adjustable clamping spindle



### Material:

Steel.  
Grip polyamide.  
Unlocking bracket TPE.

### Version:

Carbonitrided and black oxidised.  
Grip blue, black or red.

### Sample order:

K0663.006101 (blue grip)

### Note for ordering:

Δ Enter the desired grip colour here.

### Note:

Maintenance-free high quality link bushings.  
Sustainable constant force during opening and closing.  
Optimum stability through the conical, U-profile clamping arm. Including internal bar lock with automatic safety catch.

### On request:

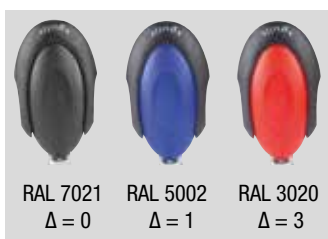
Other grip colours.

### Accessories:

K0106  
K0383  
K0388  
K0390  
K0391  
K0392  
K0393

### Drawing reference:

1) stop pin position 1  
2) stop pin position 2



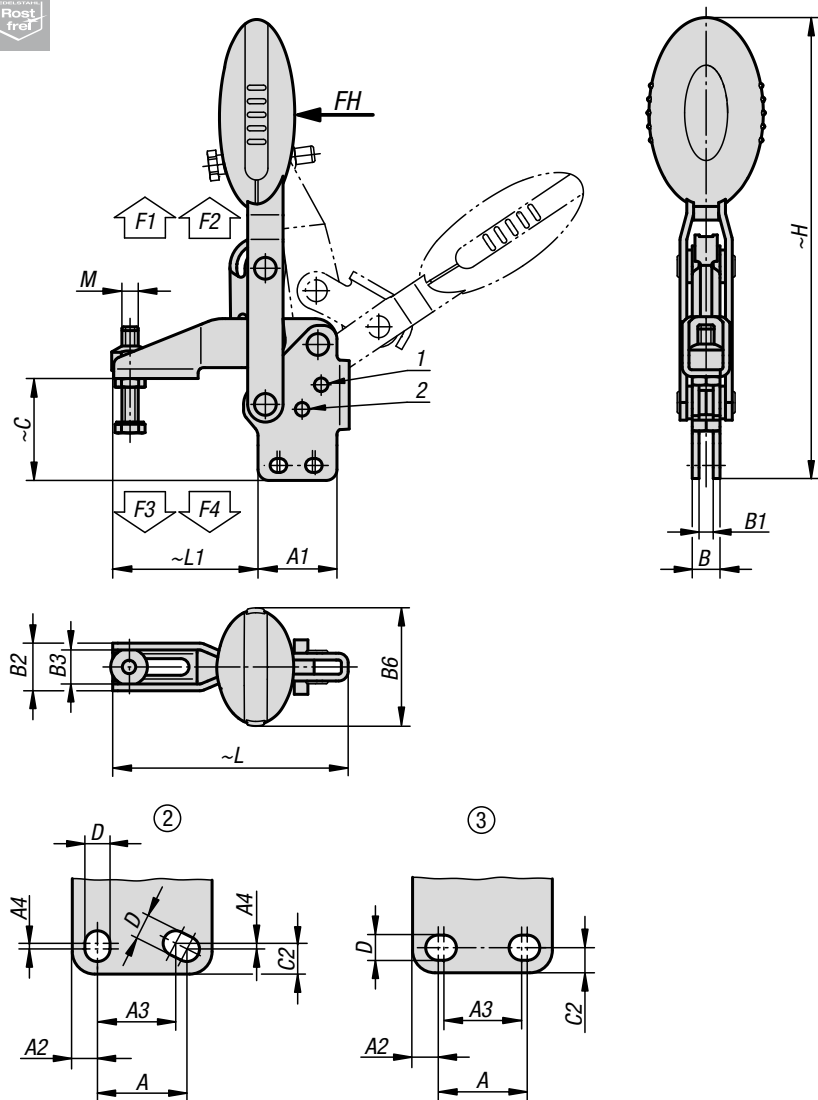
## KIPP Toggle clamps vertical with safety interlock, with straight foot and adjustable clamping spindle

| Order No.    | Opening angle<br>holding arm<br>position 1 | Opening angle<br>holding arm<br>position 2 | Opening angle<br>holding arm<br>stop pin removed | Opening angle<br>handle<br>position 1 | Opening angle<br>handle<br>position 2 | Hand<br>force<br>FH N | Retaining<br>force<br>F1 N | Retaining<br>force<br>F2 N | Clamping<br>force<br>F3 N | Clamping<br>force<br>F4 N |
|--------------|--------------------------------------------|--------------------------------------------|--------------------------------------------------|---------------------------------------|---------------------------------------|-----------------------|----------------------------|----------------------------|---------------------------|---------------------------|
| K0663.00610Δ | 56°                                        | 83°                                        | 141°                                             | 46°                                   | 56°                                   | 160                   | 1350                       | 1650                       | 920                       | 1050                      |
| K0663.00810Δ | 13°                                        | 93°                                        | 158°                                             | 26°                                   | 61°                                   | 190                   | 2000                       | 2800                       | 940                       | 1350                      |
| K0663.01010Δ | 6°                                         | 97°                                        | 176°                                             | 19°                                   | 59°                                   | 250                   | 2500                       | 4500                       | 1500                      | 2800                      |
| K0663.01210Δ | 11°                                        | 88°                                        | 164°                                             | 24°                                   | 60°                                   | 280                   | 3000                       | 5500                       | 1400                      | 2800                      |

| Order No.    | hole<br>arrangement | M      | A  | A1 | A2   | A3 | A4  | B    | B1  | B2   | B3   | B6   | C    | C2  | D   | H     | L     | L1    |
|--------------|---------------------|--------|----|----|------|----|-----|------|-----|------|------|------|------|-----|-----|-------|-------|-------|
| K0663.00610Δ | 3                   | M6x35  | 14 | 29 | 7    | 12 | -   | 10,2 | 5,2 | 17,5 | 12,5 | 53,4 | 37,6 | 5,5 | 5,5 | 175,7 | 86,5  | 53    |
| K0663.00810Δ | 3                   | M8x45  | 21 | 39 | 9    | 19 | -   | 10,2 | 5,2 | 20,6 | 15,6 | 51,1 | 49   | 6,5 | 6,8 | 207,6 | 107   | 62    |
| K0663.01010Δ | 2                   | M10x55 | 32 | 50 | 8    | 27 | 3,5 | 14,1 | 7,1 | 25,5 | 18,5 | 56,5 | 62,3 | 13  | 9   | 254   | 153   | 95    |
| K0663.01210Δ | 5                   | M12x70 | 32 | 53 | 10,5 | -  | -   | 14,1 | 7,1 | 28   | 21   | 56,5 | 69,8 | 9   | 8,8 | 272,1 | 173,5 | 113,5 |

# Toggle clamps vertical

with straight foot and adjustable clamping spindle, stainless steel



**Material:**  
Stainless steel.  
Grip polyamide.

**Version:**  
Bright.  
Grip blue, black or red.

**Sample order:**  
K0663.105001 (blue grip)

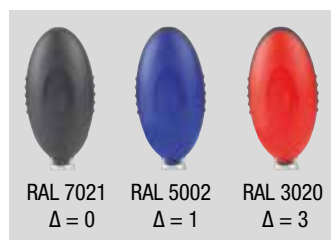
**Note for ordering:**  
Δ Enter the desired grip colour here.

**Note:**  
Maintenance-free high quality link bushings.  
Sustainable constant use of force during opening and closing. Optimum stability through the conical, U-profile clamping arm.

**On request:**  
Other grip colours.

**Accessories:**  
K0106  
K0384  
K0390  
K0392  
K0667

**Drawing reference:**  
1) stop pin position 1  
2) stop pin position 2



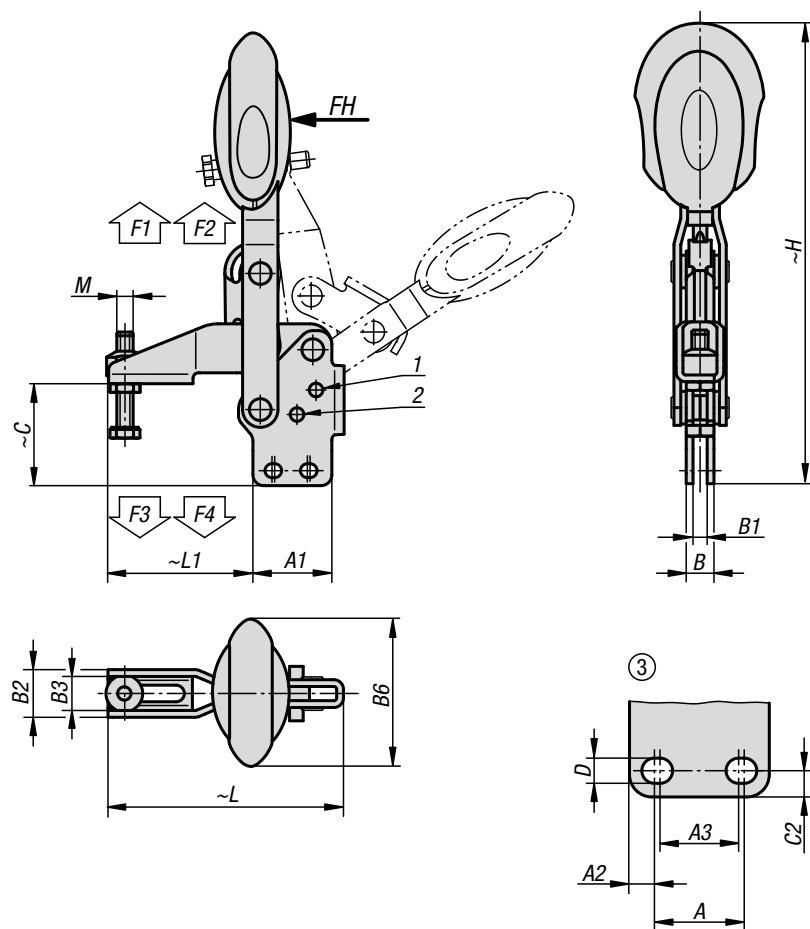
## KIPP Toggle clamps vertical with straight foot and adjustable clamping spindle, stainless steel

| Order No.    | Opening angle<br>holding arm<br>position 1 | Opening angle<br>holding arm<br>position 2 | Opening angle<br>holding arm<br>stop pin removed | Opening angle<br>handle<br>position 1 | Opening angle<br>handle<br>position 2 | Hand<br>force<br>FH N | Retaining<br>force<br>F1 N | Retaining<br>force<br>F2 N | Clamping<br>force<br>F3 N | Clamping<br>force<br>F4 N |
|--------------|--------------------------------------------|--------------------------------------------|--------------------------------------------------|---------------------------------------|---------------------------------------|-----------------------|----------------------------|----------------------------|---------------------------|---------------------------|
| K0663.10500Δ | 100°                                       | -                                          | 129°                                             | 64°                                   | -                                     | 100                   | 750                        | 1050                       | 620                       | 750                       |
| K0663.10600Δ | 56°                                        | 83°                                        | 141°                                             | 46°                                   | 56°                                   | 160                   | 1350                       | 1650                       | 920                       | 1050                      |
| K0663.10800Δ | 13°                                        | 93°                                        | 158°                                             | 26°                                   | 61°                                   | 190                   | 2000                       | 2800                       | 940                       | 1350                      |

| Order No.    | hole<br>arrangement | M     | A  | A1 | A2  | A3 | A4 | B    | B1  | B2   | B3   | B6   | C    | C2  | D   | H     | L    | L1 |
|--------------|---------------------|-------|----|----|-----|----|----|------|-----|------|------|------|------|-----|-----|-------|------|----|
| K0663.10500Δ | 2                   | M5x25 | 16 | 25 | 4,5 | 14 | 1  | 8,1  | 4,1 | 13,2 | 9,2  | 22,5 | 29,8 | 5,5 | 4,5 | 119,2 | 65,6 | 35 |
| K0663.10600Δ | 3                   | M6x35 | 14 | 29 | 7   | 12 | -  | 10,2 | 5,2 | 17,5 | 12,5 | 43,5 | 37,6 | 5,5 | 5,5 | 169   | 86,5 | 53 |
| K0663.10800Δ | 3                   | M8x45 | 21 | 39 | 9   | 19 | -  | 10,2 | 5,2 | 20,6 | 15,6 | 41,5 | 49   | 6,5 | 6,8 | 200,4 | 107  | 62 |

## Toggle clamps vertical with safety interlock

with straight foot and adjustable clamping spindle, stainless steel



### Material:

Stainless steel.  
Grip polyamide.  
Unlocking bracket TPE.

### Version:

Bright.  
Grip blue, black or red.

### Sample order:

K0663.106101  
(blue grip)

### Note for ordering:

Δ Enter the desired grip colour here.

### Note:

Maintenance-free high quality link bushings.  
Sustainable constant force during opening and closing.  
Optimum stability through the conical, U-profile clamping arm. Including internal bar lock with automatic safety catch.

### On request:

Other grip colours.

### Accessories:

K0106  
K0384  
K0390  
K0392  
K0667

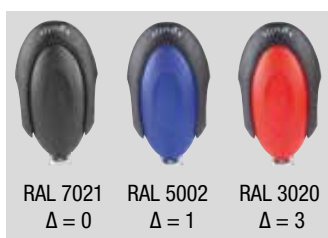
### Drawing reference:

1) stop pin position 1  
2) stop pin position 2



# Toggle clamps vertical with safety interlock

with straight foot and adjustable clamping spindle, stainless steel



## KIPP Toggle clamps vertical with safety interlock with straight foot and adjustable clamping spindle, stainless steel

| Order No.    | Opening angle<br>holding arm<br>position 1 | Opening angle<br>holding arm<br>position 2 | Opening angle<br>holding arm<br>stop pin removed | Opening angle<br>handle<br>position 1 | Opening angle<br>handle<br>position 2 | Hand<br>force<br>FH N | Retaining<br>force<br>F1 N | Retaining<br>force<br>F2 N | Clamping<br>force<br>F3 N | Clamping<br>force<br>F4 N |
|--------------|--------------------------------------------|--------------------------------------------|--------------------------------------------------|---------------------------------------|---------------------------------------|-----------------------|----------------------------|----------------------------|---------------------------|---------------------------|
| K0663.10610Δ | 56°                                        | 83°                                        | 141°                                             | 46°                                   | 56°                                   | 160                   | 1350                       | 1650                       | 920                       | 1050                      |
| K0663.10810Δ | 13°                                        | 93°                                        | 158°                                             | 26°                                   | 61°                                   | 190                   | 2000                       | 2800                       | 940                       | 1350                      |

| Order No.    | hole<br>arrangement | M     | A  | A1 | A2 | A3 | B    | B1  | B2   | B3   | B6   | C    | C2  | D   | H     | L    | L1 |
|--------------|---------------------|-------|----|----|----|----|------|-----|------|------|------|------|-----|-----|-------|------|----|
| K0663.10610Δ | 3                   | M6x35 | 14 | 29 | 7  | 12 | 10,2 | 5,2 | 17,5 | 12,5 | 53,4 | 37,6 | 5,5 | 5,5 | 175,7 | 86,5 | 53 |
| K0663.10810Δ | 3                   | M8x45 | 21 | 39 | 9  | 19 | 10,2 | 5,2 | 20,6 | 15,6 | 51,1 | 49   | 6,5 | 6,8 | 207,6 | 107  | 62 |

# Vertical antistatic toggle clamps

with straight foot and adjustable clamping spindle



## Material:

Steel.  
Grip polyamide.

## Version:

Nitro-carburised and black oxidised.  
Grip element graphite black.

## Sample order:

K0663.005024

## Note:

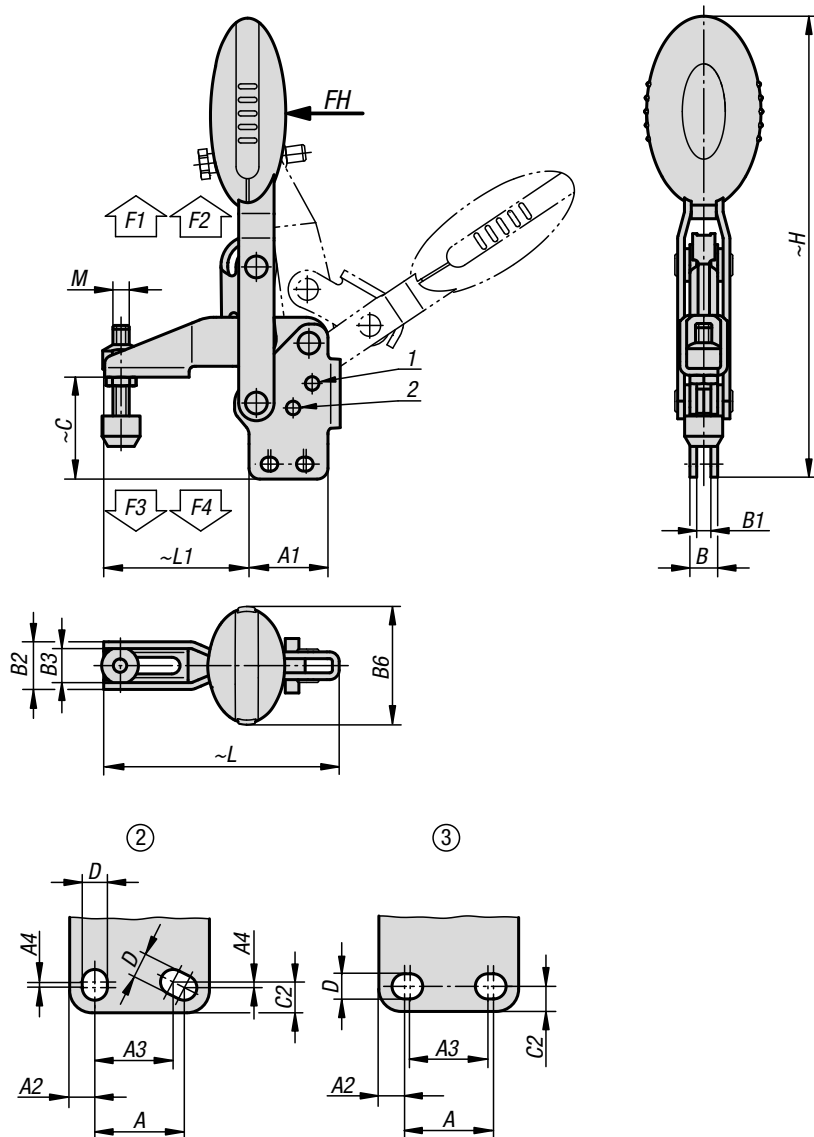
Maintenance-free high quality link bushes.  
Sustainable constant force during opening and closing.  
Optimum stability through the conical, U-profile clamping arm.

## Application:

Sensitive electrical or electronic equipment, components and devices (ESD sensitive elements) may be damaged or destroyed by electrostatic discharges (ESD) in the immediate vicinity.  
Electrostatic discharges can come from people or through handling ESD sensitive components (e.g. during production, assembly, transport, storage etc).  
Electrically conductive products which conform to DIN EN 61340-5-1 are essential within electronic environments to prevent an electrostatic discharge. These products can be used for ESD applications or in ESD protection areas (EPA) in accordance with DIN EN 61340-5-1.

## Advantages:

- Made from a special electrically conductive plastic
- To protect sensitive electrical or electronic parts, components and devices
- Toggle clamps and power clamps are used in assembly and workholding fixtures
- Ergonomic and user-friendly grip



# Vertical antistatic toggle clamps

with straight foot and adjustable clamping spindle



## Safety:

These ESD products can also be used for devices, components and protection systems in areas where there is risk of explosion.

These ESD products prevent electrostatic spark discharges, and eliminate the risk of ignition of gases and dust which could lead to explosions in enclosed spaces.

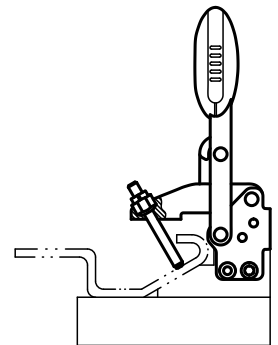
Manufacturers and operators must apply and comply with the ATEX directives for protecting persons working in areas where there is a risk of explosion.

These ESD products have been certified by TÜV-Süd for their electrical discharge capability.

## Target groups:

Device manufacturers required to conform to ATEX product directive 2014/34/EU.

Operators required to conform to ATEX worker protection directive 1999/92/EC.



## KIPP Vertical antistatic toggle clamps with straight foot

| Order No.    | Opening angle<br>holding arm<br>position 1 | Opening angle<br>holding arm<br>position 2 | Opening angle<br>holding arm<br>stop pin removed | Opening angle<br>handle<br>position 1 | Opening angle<br>handle<br>position 2 |
|--------------|--------------------------------------------|--------------------------------------------|--------------------------------------------------|---------------------------------------|---------------------------------------|
| K0663.005024 | 100°                                       | -                                          | 129°                                             | 64°                                   | -                                     |
| K0663.006024 | 56°                                        | 83°                                        | 141°                                             | 46°                                   | 56°                                   |
| K0663.008024 | 13°                                        | 93°                                        | 158°                                             | 26°                                   | 61°                                   |

| Order No.    | Hand<br>force<br>FH N | Retaining<br>force<br>F1 N | Retaining<br>force<br>F2 N | Clamping<br>force<br>F3 N | Clamping<br>force<br>F4 N |
|--------------|-----------------------|----------------------------|----------------------------|---------------------------|---------------------------|
| K0663.005024 | 100                   | 750                        | 1050                       | 620                       | 750                       |
| K0663.006024 | 160                   | 1350                       | 1650                       | 920                       | 1050                      |
| K0663.008024 | 190                   | 2000                       | 2800                       | 940                       | 1350                      |

| Order No.    | hole<br>arrangement | M     | A  | A1 | A2  | A3 | A4 | B    | B1  | B2   | B3   | B6   | C    | C2  | D   | H     | L    | L1 |
|--------------|---------------------|-------|----|----|-----|----|----|------|-----|------|------|------|------|-----|-----|-------|------|----|
| K0663.005024 | 2                   | M5x25 | 16 | 25 | 4,5 | 14 | 1  | 8,1  | 4,1 | 13,2 | 9,2  | 22,5 | 29,8 | 5,5 | 4,5 | 119,2 | 65,6 | 35 |
| K0663.006024 | 3                   | M6x35 | 14 | 29 | 7   | 12 | -  | 10,2 | 5,2 | 17,5 | 12,5 | 43,5 | 37,6 | 5,5 | 5,5 | 169   | 86,5 | 53 |
| K0663.008024 | 3                   | M8x45 | 21 | 39 | 9   | 19 | -  | 10,2 | 5,2 | 20,6 | 15,6 | 41,5 | 49   | 6,5 | 6,5 | 200,4 | 107  | 62 |

## Spherical seating nuts

**Material:**

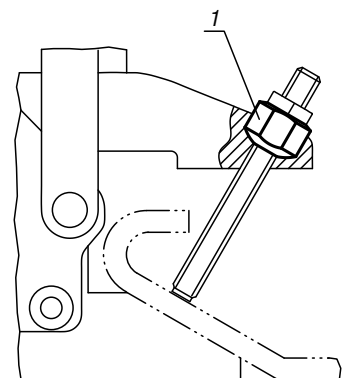
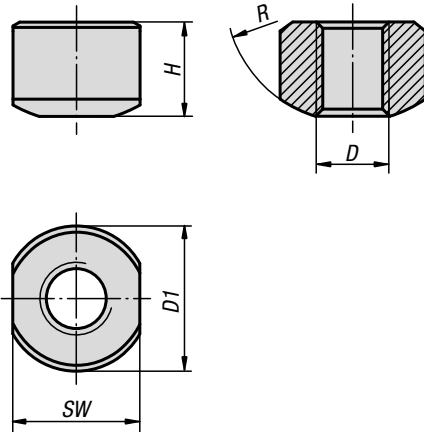
Steel or stainless steel.

**Version:**Steel black oxidised.  
Stainless steel bright.**Sample order:**

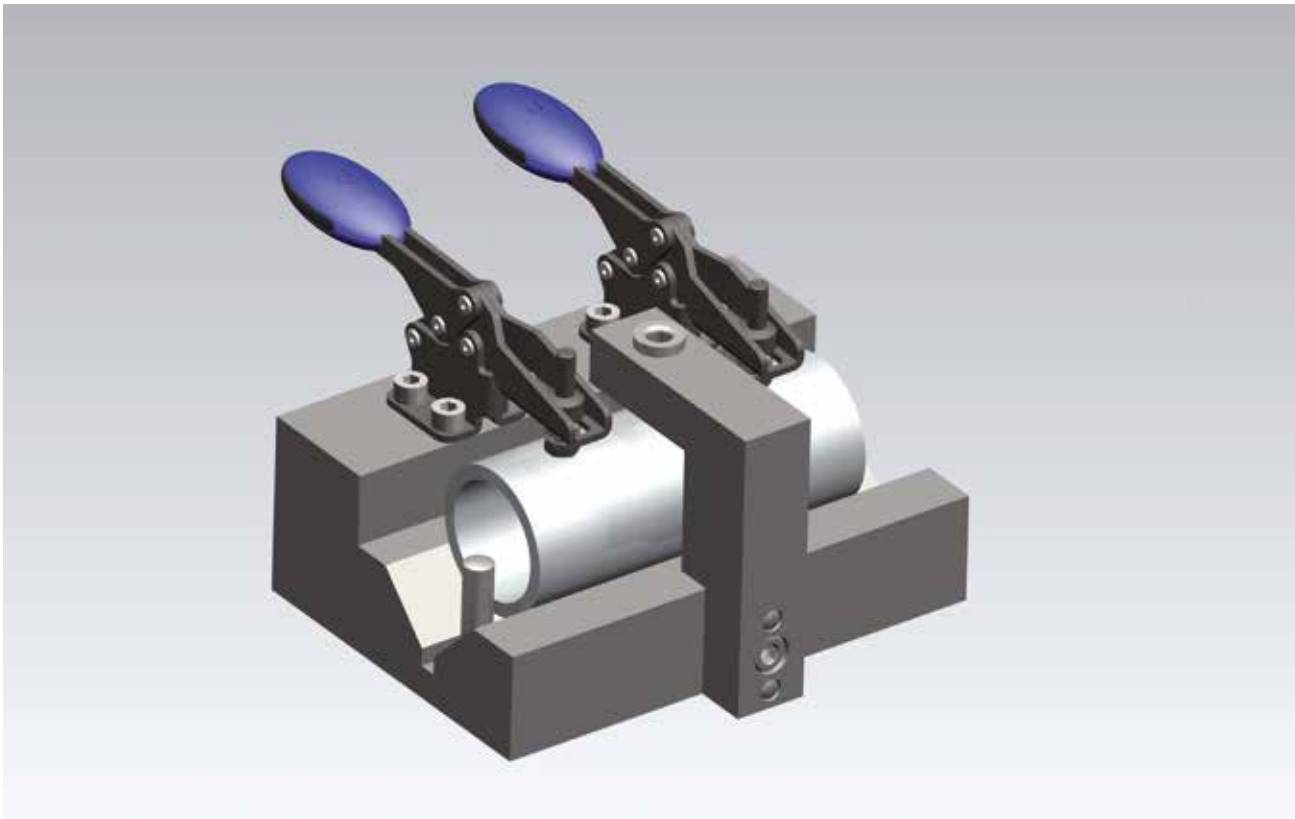
K0664.04

**Drawing reference:**

1) Weldable

**KIPP Spherical seating nuts**

| Order No.<br>steel | Order No.<br>stainless steel | D   | H    | D1   | SW   | R  |
|--------------------|------------------------------|-----|------|------|------|----|
| K0664.04           | K0664.104                    | M4  | 5,2  | 8    | 7    | 7  |
| K0664.05           | K0664.105                    | M5  | 6,7  | 10   | 9    | 9  |
| K0664.06           | K0664.106                    | M6  | 9,5  | 13,5 | 12,2 | 10 |
| K0664.08           | K0664.108                    | M8  | 12,8 | 18   | 15,3 | 12 |
| K0664.10           | -                            | M10 | 12,1 | 20   | 18,2 | 14 |
| K0664.12           | -                            | M12 | 14,8 | 23   | 20   | 16 |





A large grid of graph paper for taking notes.

# Technical information



Fig. 1:

## Clamp top dead centre.

Self-locking of the hinge prevents independent opening during the machining process.

Fig. 2:

## Clamp in intermediate position.

The holding arm approaches dead centre of the toggle hinge very rapidly when closing the clamp (swivel angle of handle  $\ll$  swivel angle of holding arm).

Fig. 3:

## Clamp open.

The wide opening angle of the clamping arm allows easy loading and unloading.



Fig. 1

Fig. 2

Fig. 3

Toggle clamps generate the maximum clamping force when the three pivots are in a straight line (dead centre position). A clamp is locked by moving one pivot beyond the dead centre position. The end position over dead centre is carefully chosen to retain the maximum clamping force while preventing inadvertent opening of the clamp due to vibration or varying loading.

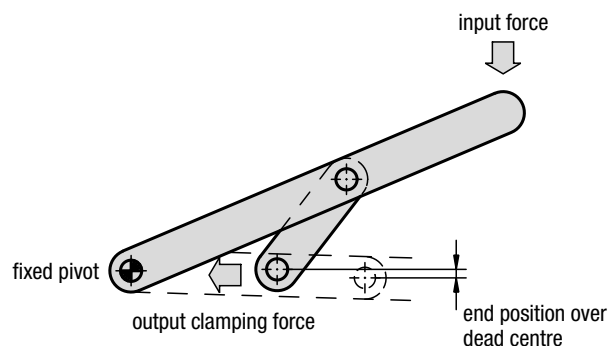
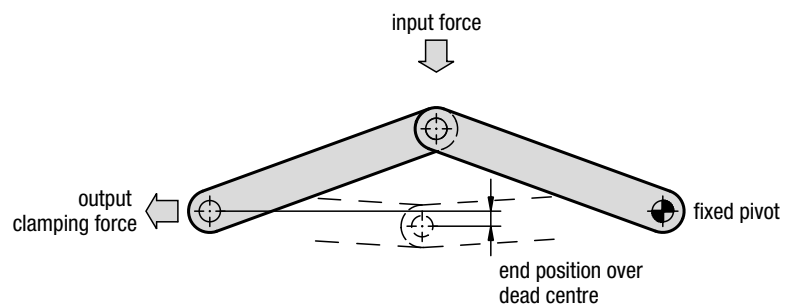
The force-multiplying characteristics of the toggle hinge mechanism put in practice in straight line action clamps can be used to carry out work such as light punching, drilling, forming, bonding, jointing, riveting, welding and locking.

## Retention force

The retention force is the force applied to the workpiece which the closed clamp can readily withstand without permanent distortion or loss of function.

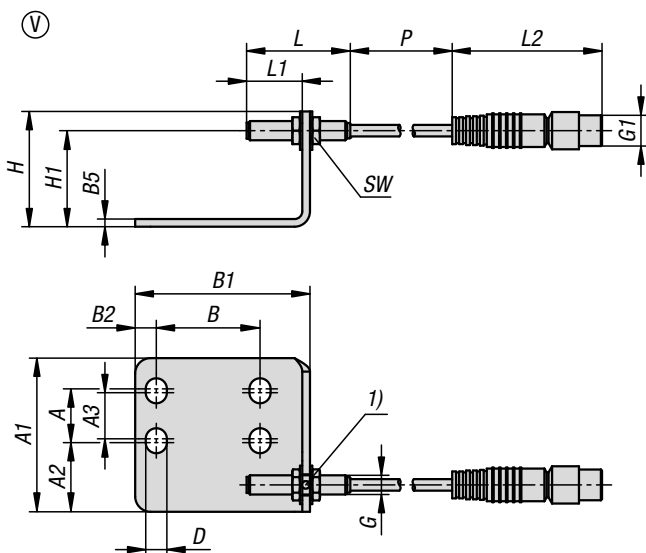
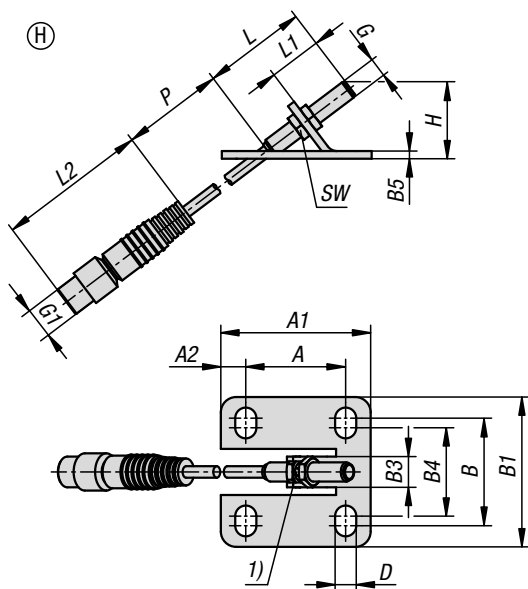
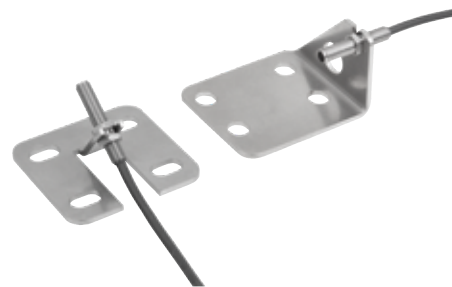
## Clamping force

The clamping force is the force applied to the workpiece by the clamping arm when it is closed. The hand forces indicated in the catalogue can achieve the corresponding clamping forces.



## Status sensors, stainless steel with bracket

for toggle clamps



Status sensors with brackets are used to monitor the actuated status of toggle clamps. The sensor detects whether the toggle clamp is open or closed and enables this status information to be processed electronically. The sensor is attached to the toggle clamp via the bracket.

**Material:**  
Stainless steel

**Version:**  
Bright.

**Sample order:**  
K1736.06111

**Note:**  
The status sensor and brackets are supplied unassembled.

**Assembly:**  
The status sensor is fastened to the bracket with the nuts and set to dimension L1.  
The bracket is attached with the toggle clamp screws through holes between the foot and the mounting surface.  
The switch point fine-tuning is carried out once the toggle clamp is mounted.  
The detailed procedure is described in the assembly instructions.

**Accessories:**  
K0660  
K0662  
K1278  
K1737

**Technical data:**  
Inductive sensor:  
Output circuit: PNP NO  
Operating voltage: 10 - 30 V DC  
Operating current: 100 mA  
Contact gap: 0.8 mm  
Switch frequency: 5000 Hz  
Short-circuit proof: yes  
Reverse polarity protection: yes  
Rating: IP 67  
Connection type: 0.3 m cable, PUR with plug  
Temperature range: -25 °C - +70 °C  
Approvals: CE, c UL us, EAC

**Safety:**  
Status sensors are not suitable for protecting people.



## Status sensors, stainless steel with bracket

for toggle clamps



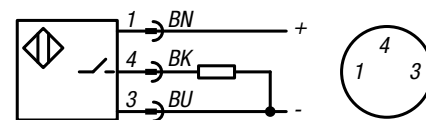
### Drawing reference:

1) LED-indicator

BN = brown

BK = black

BU = blue



### KIPP Status sensors, stainless steel with bracket for toggle clamps

| Order No.   | Form | A  | A1 | A2  | A3 | B  | B1   | B2  | B3 | B4 | B5 | D   | G      | G1   | H    | H1 | L  | L1   | L2 | P   | SW | for<br>toggle clamp | M=Spindle<br>toggle clamp |
|-------------|------|----|----|-----|----|----|------|-----|----|----|----|-----|--------|------|------|----|----|------|----|-----|----|---------------------|---------------------------|
| K1736.06111 | H    | 26 | 39 | 6,5 | -  | 28 | 39   | -   | 8  | 23 | 2  | 5,5 | M5X0,5 | M8x1 | 20,1 | -  | 27 | 13,8 | 39 | 300 | 7  | K0660               | M6x35                     |
| K1736.08111 | H    | 26 | 44 | 9   | -  | 31 | 45   | -   | 8  | 24 | 2  | 6,2 | M5X0,5 | M8x1 | 27,3 | -  | 27 | 20,6 | 39 | 300 | 7  | K0660               | M8x45                     |
| K1736.06121 | V    | 14 | 40 | 18  | 12 | 27 | 45,5 | 5,5 | -  | -  | 2  | 5,5 | M5X0,5 | M8x1 | 30   | 25 | 27 | 14,5 | 39 | 300 | 7  | K0662               | M6x35                     |
| K1736.08121 | V    | 21 | 45 | 15  | 19 | 32 | 49   | 6,5 | -  | -  | 2  | 6,8 | M5X0,5 | M8x1 | 30   | 25 | 27 | 14,5 | 39 | 300 | 7  | K0662               | M8x45                     |

## Toggle clamp mini, horizontal

with straight foot and adjustable clamping spindle

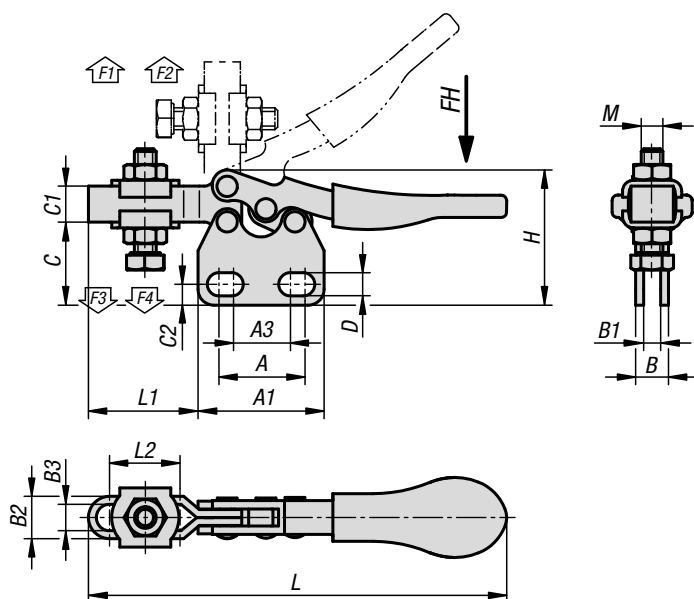


**Material:**  
Steel.

**Version:**  
Electro zinc-plated steel.  
Plastic handle, oil-resistant.

**Sample order:**  
K1243.0500

**Accessories:**  
K0101  
K1442  
K0103  
K0106  
K1441



### KIPP Toggle clamp mini, horizontal with straight foot and adjustable clamping spindle

| Order No.  | Opening angle of holding arm | Opening angle of handle | Hand force FH N | Retaining force F1 N | Retaining force F2 N | Clamping force F3 N | Clamping force F4 N |
|------------|------------------------------|-------------------------|-----------------|----------------------|----------------------|---------------------|---------------------|
| K1243.0500 | 90°                          | 75°                     | 50              | 250                  | 500                  | 150                 | 350                 |

| Order No.  | A    | A1   | A3   | B | B1 | B2 | B3 | C  | C1  | C2 | D   | H    | L  | L1   | L2   | M     |
|------------|------|------|------|---|----|----|----|----|-----|----|-----|------|----|------|------|-------|
| K1243.0500 | 15,9 | 23,8 | 11,1 | 6 | 3  | 8  | 5  | 16 | 6,8 | 4  | 4,4 | 25,3 | 79 | 20,7 | 13,5 | M4x20 |

## Toggle clamp mini, horizontal

with flat left foot and adjustable clamping spindle



### Material:

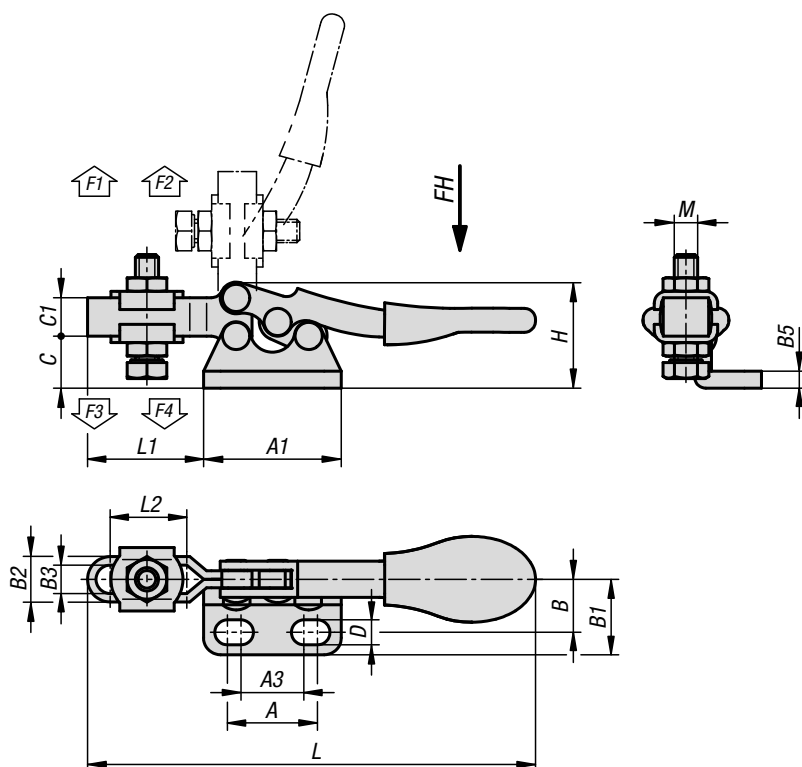
Steel.

### Version:

Electro zinc-plated steel.  
Plastic handle, oil-resistant.

### Sample order:

K1543.0250



### KIPP Toggle clamp mini, horizontal with flat left foot and adjustable clamping spindle

| Order No.  | Opening angle of holding arm | Opening angle of handle | Hand force FH N | Retaining force F1 N | Retaining force F2 N | Clamping force F3 N | Clamping force F4 N |
|------------|------------------------------|-------------------------|-----------------|----------------------|----------------------|---------------------|---------------------|
| K1543.0250 | 90°                          | 75°                     | 80              | 250                  | 500                  | 150                 | 350                 |

| Order No.  | A    | A1   | A3   | B   | B1   | B2 | B3 | B5 | C   | C1  | D   | H    | L  | L1   | L2   | M     |
|------------|------|------|------|-----|------|----|----|----|-----|-----|-----|------|----|------|------|-------|
| K1543.0250 | 15,9 | 24,3 | 11,1 | 9,4 | 13,3 | 8  | 5  | 3  | 9,2 | 6,8 | 4,4 | 18,7 | 79 | 20,5 | 13,5 | M4x20 |

## Toggle clamp mini, horizontal

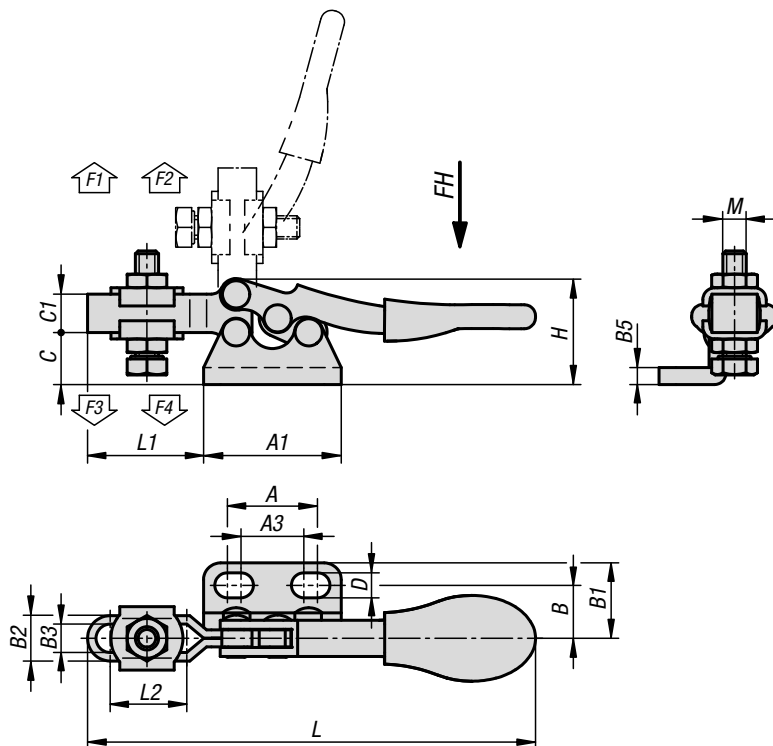
with horizontal foot right and adjustable clamping spindle



**Material:**  
Steel.

**Version:**  
Electro zinc-plated steel.  
Plastic handle, oil-resistant.

**Sample order:**  
K1544.0250



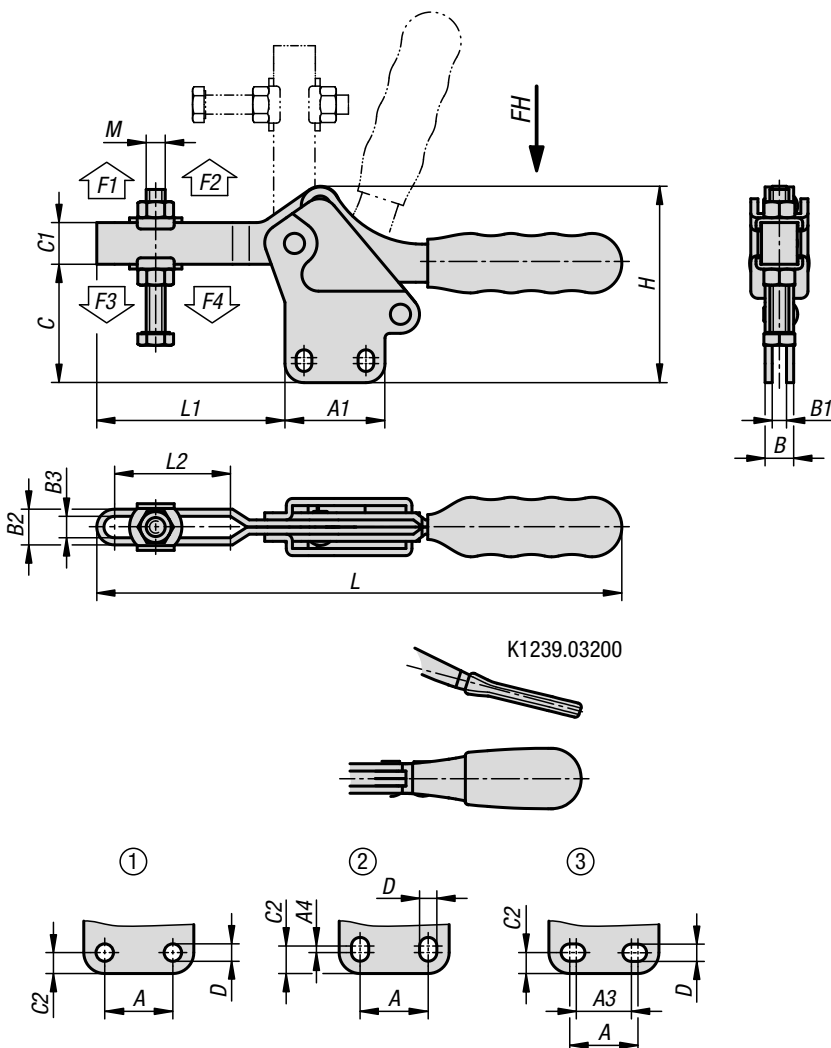
### KIPP Toggle clamp mini, horizontal with flat right foot and adjustable clamping spindle

| Order No.  | Opening angle of holding arm | Opening angle of handle | Hand force FH N | Retaining force F1 N | Retaining force F2 N | Clamping force F3 N | Clamping force F4 N |
|------------|------------------------------|-------------------------|-----------------|----------------------|----------------------|---------------------|---------------------|
| K1544.0250 | 90°                          | 75°                     | 80              | 250                  | 500                  | 150                 | 350                 |

| Order No.  | A    | A1   | A3   | B | B1   | B2  | B3 | B5 | C   | C1  | D   | H    | L  | L1   | L2   | M     |
|------------|------|------|------|---|------|-----|----|----|-----|-----|-----|------|----|------|------|-------|
| K1544.0250 | 15,9 | 24,3 | 11,1 | 8 | 13,3 | 9,4 | 5  | 3  | 9,2 | 6,8 | 4,4 | 18,7 | 79 | 20,5 | 13,5 | M4x20 |

## Toggle clamps horizontal

with straight foot and adjustable clamping spindle



**Material:**  
Steel.

**Version:**  
Electro zinc-plated steel.  
Plastic handle, oil-resistant.

**Sample order:**  
K1239.03200

**Note:**  
A neoprene thrust pad is supplied with versions K1239.01000, K1239.02500 and K1239.03200.

**Accessories:**

K0688  
K0689  
K0690  
K0101  
K1442  
K0102  
K0103  
K1443  
K0104  
K0106  
K1441

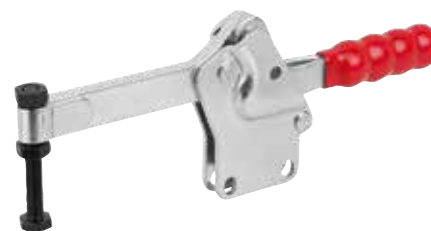
### KIPP Toggle clamps horizontal with straight foot and adjustable clamping spindle

| Order No.   | hole arrangement | Opening angle of holding arm | Opening angle of handle | Hand force FH N | Retaining force F1 N | Retaining force F2 N | Clamping force F3 N | Clamping force F4 N |
|-------------|------------------|------------------------------|-------------------------|-----------------|----------------------|----------------------|---------------------|---------------------|
| K1239.01000 | 1                | 96°                          | 78°                     | 50              | 500                  | 1000                 | 250                 | 600                 |
| K1239.02500 | 2                | 93°                          | 76°                     | 150             | 1200                 | 2500                 | 400                 | 1000                |
| K1239.03200 | 3                | 90°                          | 65°                     | 150             | 2000                 | 3200                 | 800                 | 1600                |
| K1239.03400 | 2                | 90°                          | 72°                     | 200             | 1400                 | 3400                 | 800                 | 1900                |
| K1239.05400 | 2                | 94°                          | 76°                     | 250             | 2400                 | 5400                 | 1100                | 3000                |
| K1239.06400 | 1                | 94°                          | 80°                     | 250             | 3000                 | 6400                 | 1100                | 3000                |

| Order No.   | A    | A1 | A3   | A4  | B  | B1 | B2   | B3   | C    | C1   | C2   | D   | H    | L   | L1   | L2   | M       |
|-------------|------|----|------|-----|----|----|------|------|------|------|------|-----|------|-----|------|------|---------|
| K1239.01000 | 13,5 | 25 | -    | -   | 8  | 4  | 9,3  | 5,1  | 27,5 | 9,5  | 5,1  | 5,2 | 47   | 110 | 37   | 25   | M5x35   |
| K1239.02500 | 26   | 38 | -    | 3   | 10 | 5  | 11,2 | 6,3  | 38,2 | 14   | 9    | 5,5 | 65,4 | 173 | 61   | 40,6 | M6x50   |
| K1239.03200 | 25,4 | 38 | 20,8 | -   | 12 | 6  | 14,7 | 8,7  | 48,3 | 12,7 | 6,4  | 6,7 | 61   | 173 | 71,6 | 39,1 | M8x63   |
| K1239.03400 | 26   | 42 | -    | 2,5 | 12 | 6  | 15   | 8,6  | 49,7 | 17,5 | 10,5 | 6,6 | 82,2 | 225 | 79   | 52,7 | M8x60   |
| K1239.05400 | 41,2 | 59 | -    | 2   | 16 | 8  | 19,4 | 11,5 | 63,8 | 23   | 10   | 8,7 | 109  | 277 | 108  | 79,5 | M10x80  |
| K1239.06400 | 41,2 | 66 | -    | -   | 20 | 10 | 23,2 | 13,7 | 79,6 | 26   | 12,9 | 8,7 | 131  | 308 | 128  | 93,5 | M12x100 |

## Toggle clamps horizontal

with straight foot and full holding arm



**Material:**  
Steel.

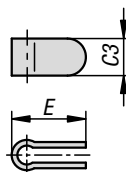
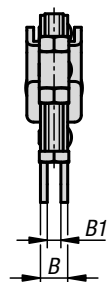
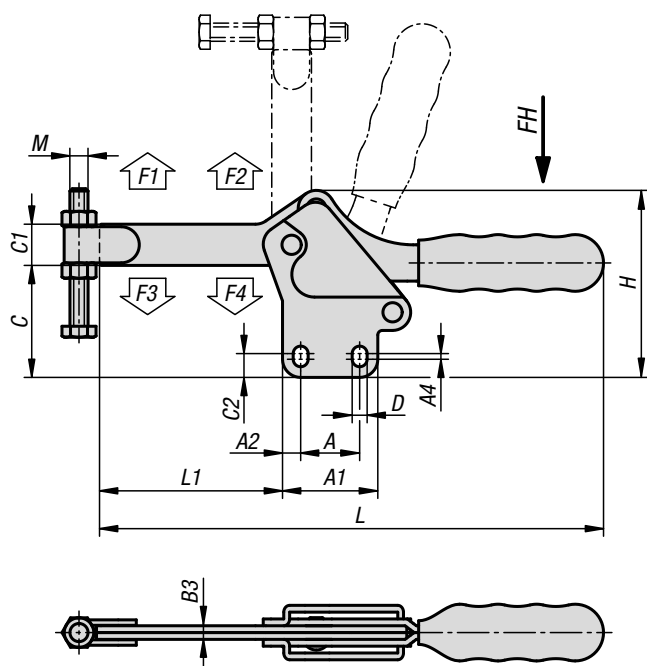
**Version:**  
Electro zinc-plated steel.  
Plastic handle, oil-resistant.

**Sample order:**  
K1433.03400

**Note:**  
spindle bracket weldable.

**Accessories:**

K0688  
K0689  
K0690  
K0101  
K1442  
K0102  
K0103  
K1443  
K0104  
K0106



### KIPP Toggle clamps horizontal with straight foot and full holding arm

| Order No.   | Opening angle of holding arm | Opening angle of handle | Hand force FH N | Retaining force F1 N | Retaining force F2 N | Clamping force F3 N | Clamping force F4 N |
|-------------|------------------------------|-------------------------|-----------------|----------------------|----------------------|---------------------|---------------------|
| K1433.03400 | 90°                          | 72°                     | 200             | 1400                 | 3400                 | 800                 | 1900                |
| K1433.05400 | 94°                          | 76°                     | 250             | 2400                 | 5400                 | 1100                | 3000                |

| Order No.   | A    | A1 | A2 | A4  | B  | B1 | B3 | C    | C1   | C2   | C3 | D   | E  | H    | L   | L1  | M      |
|-------------|------|----|----|-----|----|----|----|------|------|------|----|-----|----|------|-----|-----|--------|
| K1433.03400 | 26   | 42 | 8  | 2,5 | 12 | 6  | 6  | 49,7 | 17,5 | 10,5 | 16 | 6,6 | 31 | 82,5 | 224 | 82  | M8x60  |
| K1433.05400 | 41,2 | 59 | 9  | 2   | 16 | 8  | 8  | 63,8 | 23   | 10   | 20 | 8,7 | 40 | 109  | 280 | 111 | M10x80 |

## Mini toggle clamps, horizontal

with flat foot and fixed clamping spindle



### Material:

Steel or stainless steel.

### Version:

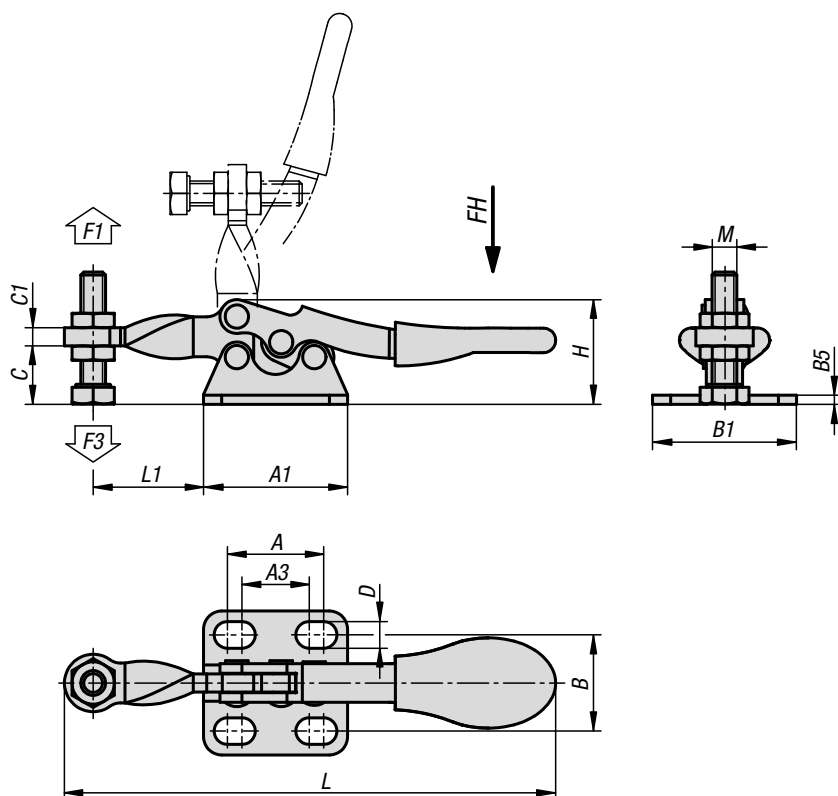
Electro zinc-plated steel.

Bright stainless steel.

Plastic handle, oil-resistant.

### Sample order:

K1541.00500



## KIPP Mini toggle clamps, horizontal with flat foot and fixed clamping spindle

| Order No.   | Main material   | Opening angle of holding arm | Opening angle of handle | Hand force FH N | Retaining force F1 N | Clamping force F3 N |
|-------------|-----------------|------------------------------|-------------------------|-----------------|----------------------|---------------------|
| K1541.00500 | steel           | 90°                          | 75°                     | 80              | 500                  | 250                 |
| K1541.10500 | stainless steel | 90°                          | 75°                     | 80              | 500                  | 250                 |

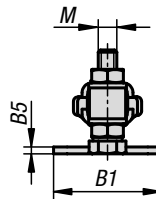
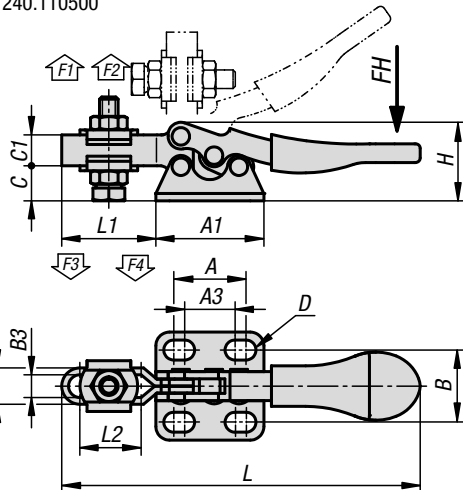
| Order No.   | Main material   | A    | A1   | A3   | B    | B1   | B5  | C   | C1 | D   | H    | L    | L1   | M     |
|-------------|-----------------|------|------|------|------|------|-----|-----|----|-----|------|------|------|-------|
| K1541.00500 | steel           | 15,9 | 23,8 | 11,1 | 15,9 | 23,8 | 1,5 | 9,7 | 3  | 4,4 | 17,3 | 81,2 | 18,3 | M4x20 |
| K1541.10500 | stainless steel | 15,9 | 23,8 | 11,1 | 15,9 | 23,8 | 1,5 | 9,7 | 3  | 4,4 | 17,3 | 81,2 | 18,3 | M4x20 |

## Toggle clamps horizontal

with flat foot and adjustable clamping spindle



K1240.010500  
K1240.110500



### Material:

Steel or stainless steel.

### Version:

Electro zinc-plated steel.  
Bright stainless steel.  
Plastic handle, oil-resistant.

### Sample order:

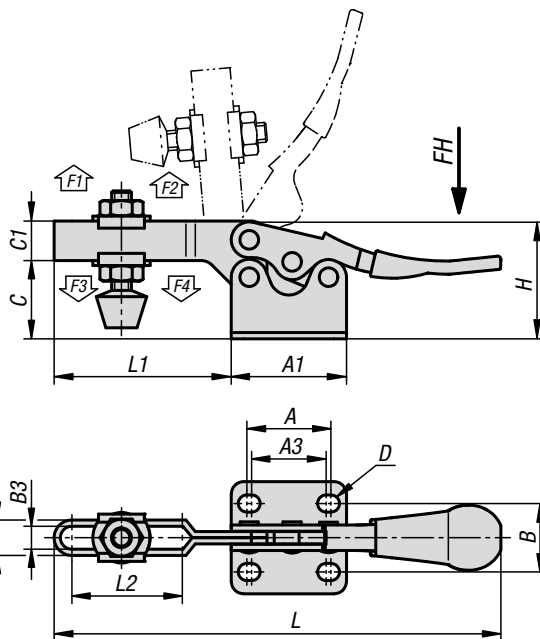
K1240.010500

### Note:

Version K1240.010500 has a nylon clamping spindle.  
A neoprene thrust pad is supplied with versions K1240.022000, K1240.033200 and K1240.045000.

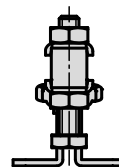
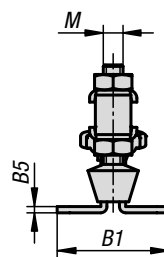
### Accessories:

K0688  
K0689  
K0690  
K0101  
K1442  
K0102  
K0103  
K1443  
K0104  
K0106  
K1441



K1240.022000

K1240.122000



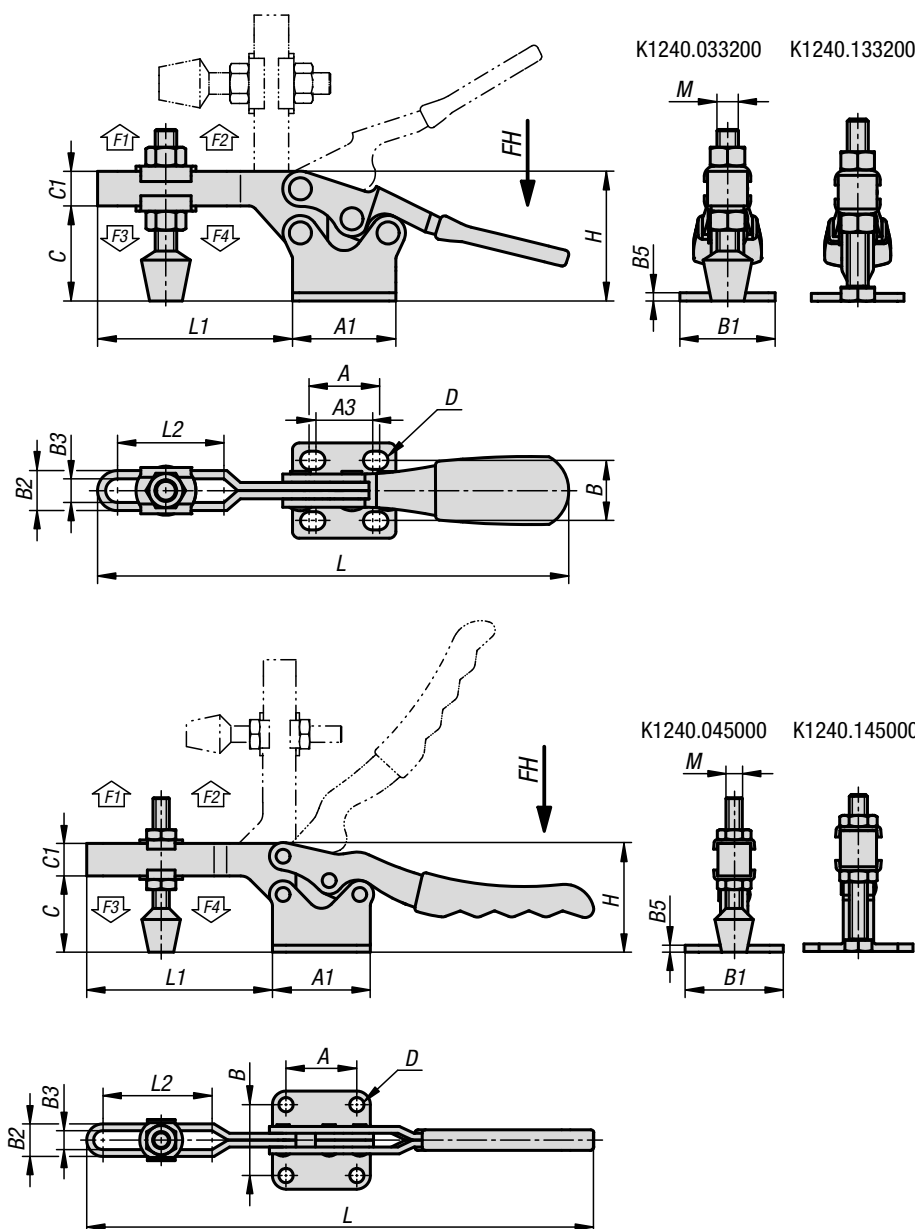
## KIPP Toggle clamps horizontal with flat foot and adjustable clamping spindle

| Order No.    | Main material   | Opening angle of holding arm | Opening angle of handle | Hand force FH N | Retaining force F1 N | Retaining force F2 N | Clamping force F3 N | Clamping force F4 N |
|--------------|-----------------|------------------------------|-------------------------|-----------------|----------------------|----------------------|---------------------|---------------------|
| K1240.010500 | steel           | 90°                          | 75°                     | 50              | 250                  | 500                  | 150                 | 350                 |
| K1240.022000 | steel           | 85°                          | 73°                     | 100             | 1000                 | 2000                 | 600                 | 1200                |
| K1240.033200 | steel           | 90°                          | 65°                     | 150             | 2000                 | 3200                 | 800                 | 1600                |
| K1240.045000 | steel           | 90°                          | 68°                     | 250             | 2200                 | 5000                 | 1100                | 3000                |
| K1240.110500 | stainless steel | 90°                          | 75°                     | 50              | 250                  | 500                  | 150                 | 350                 |
| K1240.122000 | stainless steel | 85°                          | 73°                     | 100             | 1000                 | 2000                 | 600                 | 1200                |
| K1240.133200 | stainless steel | 90°                          | 65°                     | 150             | 2000                 | 3200                 | 800                 | 1600                |
| K1240.145000 | stainless steel | 90°                          | 68°                     | 250             | 2200                 | 5000                 | 1100                | 3000                |



## Toggle clamps horizontal

with flat foot and adjustable clamping spindle



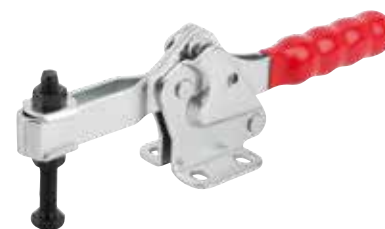
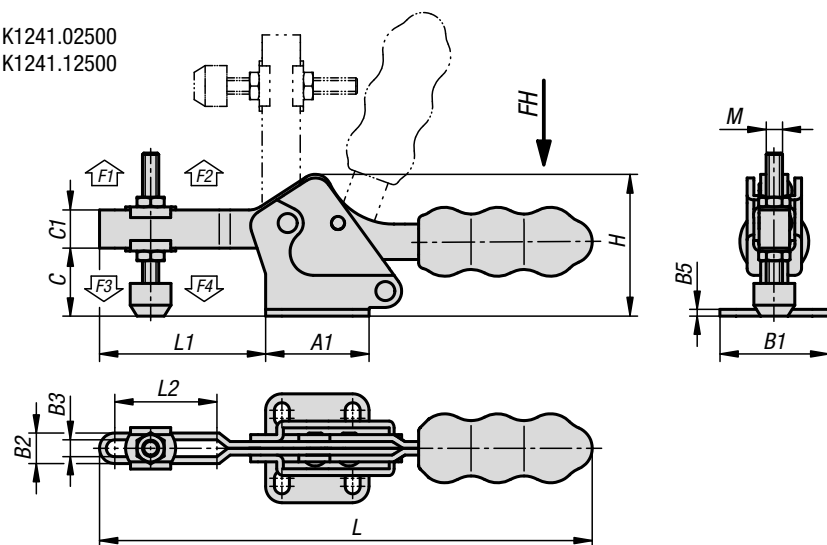
| Order No.    | Main material   | A    | A1   | A3   | B    | B1   | B2   | B3  | B5  | C    | C1   | D   | H    | L     | L1    | L2   | M      |
|--------------|-----------------|------|------|------|------|------|------|-----|-----|------|------|-----|------|-------|-------|------|--------|
| K1240.010500 | steel           | 15,9 | 23,8 | 11,1 | 15,9 | 23,8 | 8    | 5   | 1,5 | 7,7  | 6,8  | 4,4 | 17,3 | 79    | 20,7  | 13,5 | M4x20  |
| K1240.022000 | steel           | 27   | 37   | 25,4 | 22   | 36   | 11,4 | 7,4 | 2   | 25,1 | 12,7 | 5,5 | 37,8 | 143,5 | 56,9  | 35,7 | M6x44  |
| K1240.033200 | steel           | 25,4 | 38   | 20,8 | 22,2 | 35   | 14,7 | 8,7 | 3   | 34,9 | 12,7 | 6,7 | 47,6 | 173   | 71,6  | 39,1 | M8x63  |
| K1240.045000 | steel           | 41,3 | 57,1 | -    | 41,3 | 57,2 | 19   | 11  | 4   | 44,4 | 19   | 8,3 | 63,4 | 295,6 | 108,3 | 63,6 | M10x85 |
| K1240.110500 | stainless steel | 15,9 | 23,8 | 11,1 | 15,9 | 23,8 | 8    | 5   | 1,5 | 7,7  | 6,9  | 4,4 | 17,3 | 79    | 20,7  | 13,5 | M4x20  |
| K1240.122000 | stainless steel | 27   | 37   | 25,4 | 22   | 36   | 11,4 | 7,4 | 2   | 25,1 | 12,7 | 5,5 | 37,8 | 143,5 | 56,9  | 35,7 | M6x40  |
| K1240.133200 | stainless steel | 25,4 | 38   | 20,8 | 22,2 | 35   | 14,7 | 8,7 | 3   | 34,9 | 12,7 | 6,7 | 47,6 | 173   | 71,6  | 39,1 | M8x60  |
| K1240.145000 | stainless steel | 41,3 | 57,1 | -    | 41,3 | 57,2 | 19   | 11  | 4   | 44,4 | 19   | 8,3 | 63,4 | 295,6 | 108,3 | 63,6 | M10x80 |

## Toggle clamps horizontal

with flat foot and adjustable clamping spindle



K1241.02500  
K1241.12500



**Material:**  
Steel or stainless steel.

**Version:**  
Electro zinc-plated steel.  
Bright stainless steel.  
Plastic handle, oil-resistant.

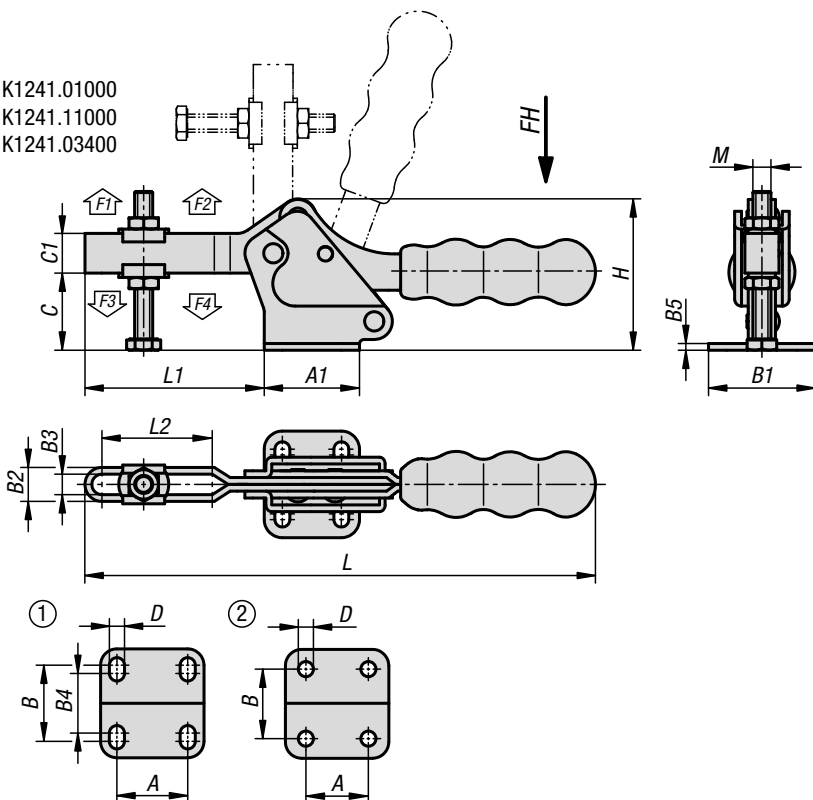
**Sample order:**  
K1241.02500

**Note:**  
A neoprene thrust pad is supplied with versions K1241.02500 and K1241.12500.

### Accessories:

K0688  
K0689  
K0690  
K0101  
K1442  
K0102  
K0103  
K1443  
K0104  
K0106  
K1441  
K1431

K1241.01000  
K1241.11000  
K1241.03400

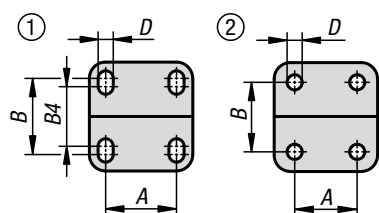
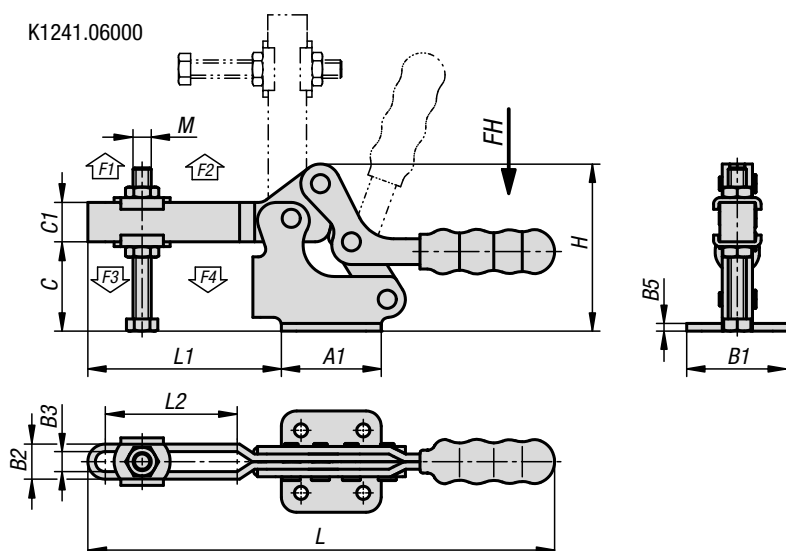
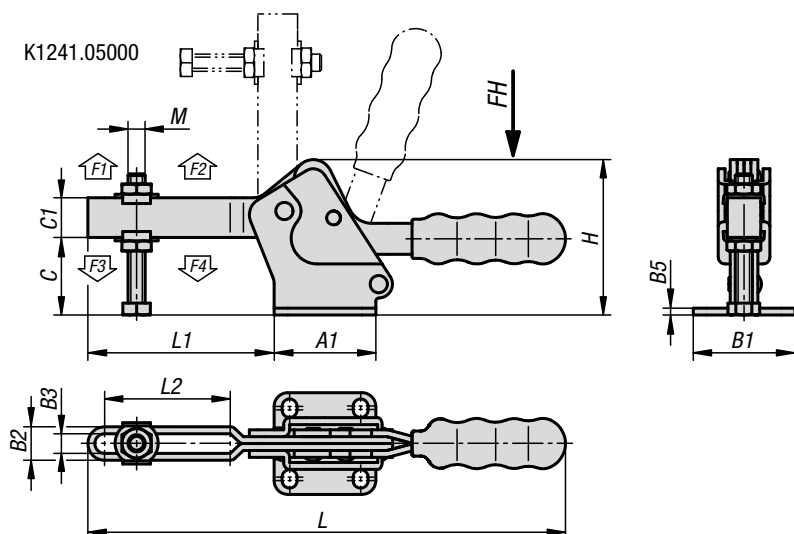


## KIPP Toggle clamps horizontal with flat foot and adjustable clamping spindle

| Order No.   | Main material   | hole arrangement | Opening angle of holding arm | Opening angle of handle | Hand force FH N | Retaining force F1 N | Retaining force F2 N | Clamping force F3 N | Clamping force F4 N |
|-------------|-----------------|------------------|------------------------------|-------------------------|-----------------|----------------------|----------------------|---------------------|---------------------|
| K1241.01000 | steel           | 2                | 96°                          | 78°                     | 80              | 500                  | 1000                 | 250                 | 500                 |
| K1241.02500 | steel           | 1                | 93°                          | 76°                     | 150             | 1200                 | 2500                 | 400                 | 1000                |
| K1241.03400 | steel           | 1                | 90°                          | 72°                     | 200             | 1400                 | 3400                 | 800                 | 1900                |
| K1241.05000 | steel           | 1                | 90°                          | 72°                     | 250             | 2200                 | 5000                 | 1100                | 3000                |
| K1241.06000 | steel           | 2                | 94°                          | 80°                     | 250             | 3000                 | 6000                 | 1200                | 3200                |
| K1241.11000 | stainless steel | 2                | 96°                          | 78°                     | 80              | 500                  | 1000                 | 250                 | 500                 |
| K1241.12500 | stainless steel | 1                | 93°                          | 76°                     | 150             | 1200                 | 2500                 | 400                 | 1000                |

## Toggle clamps horizontal

with flat foot and adjustable clamping spindle



| Order No.   | Main material   | A    | A1 | B    | B1 | B2   | B3   | B4 | B5  | C  | C1   | D   | H     | L   | L1  | L2   | M       |
|-------------|-----------------|------|----|------|----|------|------|----|-----|----|------|-----|-------|-----|-----|------|---------|
| K1241.01000 | steel           | 13,5 | 25 | 16,8 | 27 | 9,3  | 5,3  | -  | 2   | 19 | 9,5  | 5,2 | 38,5  | 112 | 37  | 22,8 | M5x40   |
| K1241.02500 | steel           | 26   | 38 | 28   | 40 | 11,2 | 6,2  | 22 | 2,5 | 25 | 14   | 5,5 | 52,1  | 173 | 61  | 37,5 | M6x50   |
| K1241.03400 | steel           | 26   | 42 | 31   | 47 | 15   | 9    | 26 | 3   | 34 | 17,5 | 6,6 | 66,5  | 225 | 79  | 48,6 | M8x60   |
| K1241.05000 | steel           | 41,2 | 59 | 43   | 59 | 19,4 | 11,4 | 39 | 4   | 45 | 23   | 8,7 | 90,1  | 277 | 108 | 72,9 | M10x80  |
| K1241.06000 | steel           | 41,2 | 66 | 41,3 | 67 | 23,2 | 13,2 | -  | 5   | 59 | 26   | 8,7 | 110,4 | 308 | 128 | 87,2 | M12x100 |
| K1241.11000 | stainless steel | 13,5 | 25 | 16,8 | 27 | 9,3  | 5,3  | -  | 2   | 19 | 9,5  | 5,2 | 38,5  | 112 | 37  | 22,8 | M5x40   |
| K1241.12500 | stainless steel | 26   | 38 | 28   | 40 | 11,2 | 6,2  | 22 | 2,5 | 25 | 14   | 5,5 | 52,1  | 173 | 61  | 37,5 | M6x50   |

## Toggle clamps horizontal

with flat foot and fixed clamping spindle



**Material:**  
Steel.

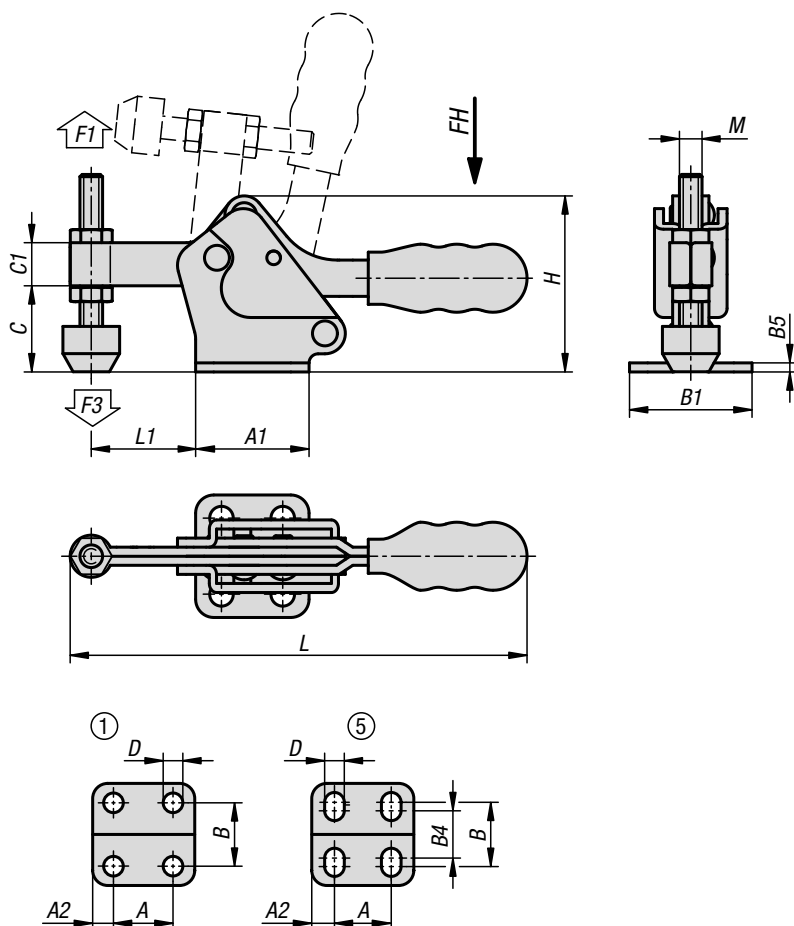
**Version:**  
Trivalent passivated.  
Clamping spindle and nuts phosphated.  
Plastic grip oil-resistant.

**Sample order:**  
K1434.00700

**Note:**  
The clamping spindle is supplied with a neoprene thrust pad.

**Accessories:**

K0688  
K0689  
K0101  
K1442  
K0102  
K0103  
K1443  
K0104  
K0106  
K1431



### KIPP Toggle clamps horizontal with flat foot and fixed clamping spindle

| Order No.   | hole arrangement | Opening angle of holding arm | Opening angle of handle | Hand force FH N | Retaining force F1 N | Clamping force F3 N |
|-------------|------------------|------------------------------|-------------------------|-----------------|----------------------|---------------------|
| K1434.00700 | 1                | 96°                          | 78°                     | 50              | 700                  | 300                 |
| K1434.01400 | 5                | 93°                          | 76°                     | 150             | 1400                 | 600                 |

| Order No.   | A    | A1 | A2  | B    | B1 | B4 | B5  | C  | C1  | D   | H    | L   | L1 | M     |
|-------------|------|----|-----|------|----|----|-----|----|-----|-----|------|-----|----|-------|
| K1434.00700 | 13,5 | 25 | 5,7 | 16,8 | 27 | -  | 2   | 19 | 9,5 | 5,2 | 38,8 | 101 | 23 | M5x35 |
| K1434.01400 | 26   | 38 | 6   | 28   | 40 | 22 | 2,5 | 25 | 14  | 5,5 | 53   | 156 | 38 | M6x50 |

## Toggle clamps horizontal

with flat foot and full holding arm



**Material:**  
Steel.

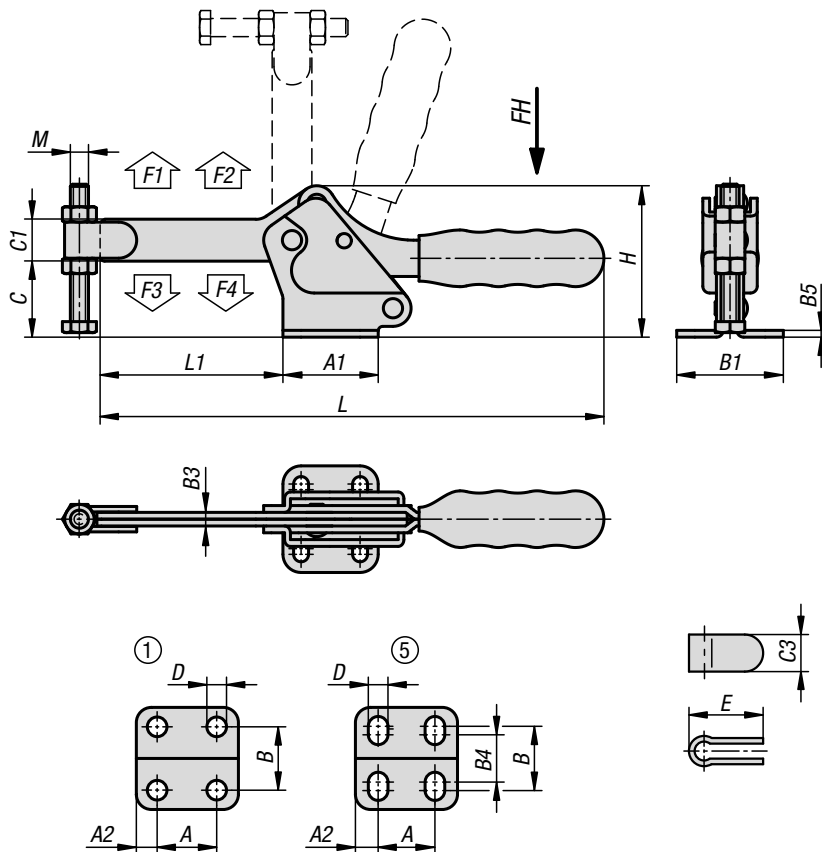
**Version:**  
Electro zinc-plated steel.  
Plastic handle, oil-resistant.

**Sample order:**  
K1435.01400

**Note:**  
spindle bracket weldable.

**Accessories:**

K0688  
K0689  
K0690  
K0101  
K1442  
K0102  
K0103  
K1443  
K0104  
K0106  
K1431



### KIPP Toggle clamps horizontal with flat foot and full holding arm

| Order No.   | hole arrangement | Opening angle of holding arm | Opening angle of handle | Hand force FH N | Retaining force F1 N | Retaining force F2 N | Clamping force F3 N | Clamping force F4 N |
|-------------|------------------|------------------------------|-------------------------|-----------------|----------------------|----------------------|---------------------|---------------------|
| K1435.01400 | 5                | 90°                          | 72°                     | 200             | 1400                 | 3400                 | 800                 | 1900                |
| K1435.02400 | 5                | 94°                          | 76°                     | 250             | 2400                 | 5400                 | 1100                | 3000                |
| K1435.03000 | 1                | 94°                          | 80°                     | 250             | 3000                 | 6400                 | 1100                | 3000                |

| Order No.   | A    | A1 | A2 | B    | B1 | B3 | B4 | B5 | C  | C1   | C3 | D   | E  | H    | L   | L1  | M       |
|-------------|------|----|----|------|----|----|----|----|----|------|----|-----|----|------|-----|-----|---------|
| K1435.01400 | 26   | 42 | 8  | 31   | 47 | 6  | 26 | 3  | 34 | 17,5 | 16 | 6,6 | 31 | 67   | 224 | 82  | M8x60   |
| K1435.02400 | 41,2 | 59 | 9  | 43   | 59 | 8  | 39 | 4  | 45 | 23   | 20 | 8,7 | 40 | 90,1 | 280 | 111 | M10x80  |
| K1435.03000 | 41,2 | 66 | 13 | 41,3 | 67 | 10 | -  | 5  | 59 | 26   | 23 | 8,7 | 44 | 111  | 307 | 130 | M12x100 |

## Toggle clamps horizontal

heavy duty with adjustable clamping spindle



### Material:

Steel.

### Version:

Electro zinc-plated steel.  
Plastic handle, oil-resistant.

### Sample order:

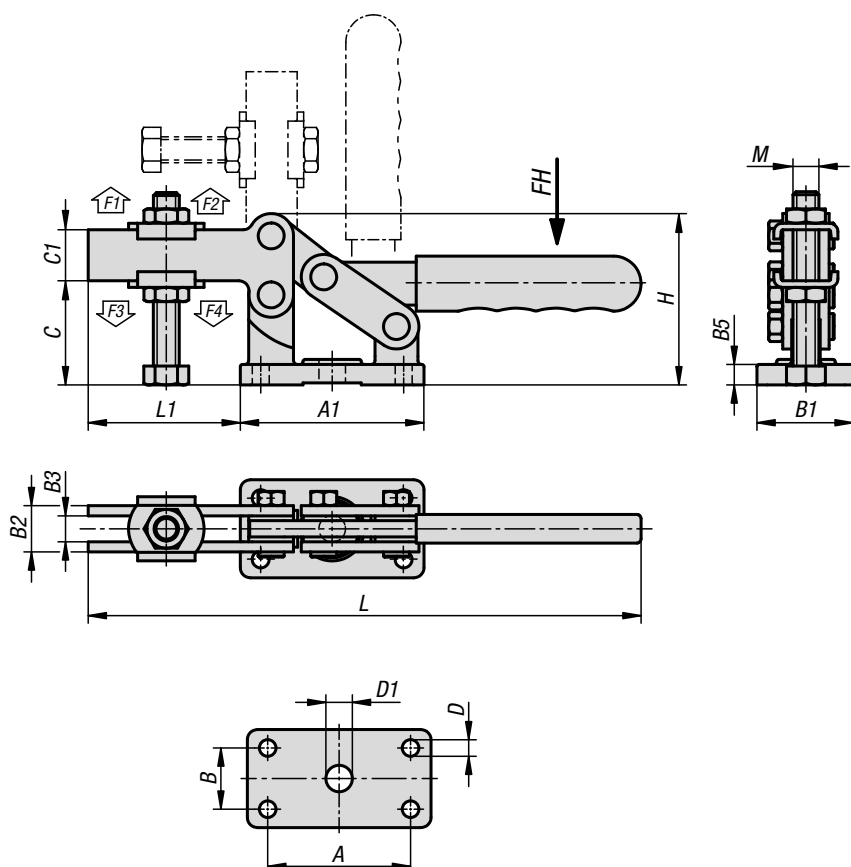
K1242.06000

### Note:

The clamp can only be mounted from below using M8 studs and DIN 934 hexagon nuts, see sketch.

### Accessories:

K0688  
K0689  
K1442  
K0102  
K0103  
K0106  
K1441

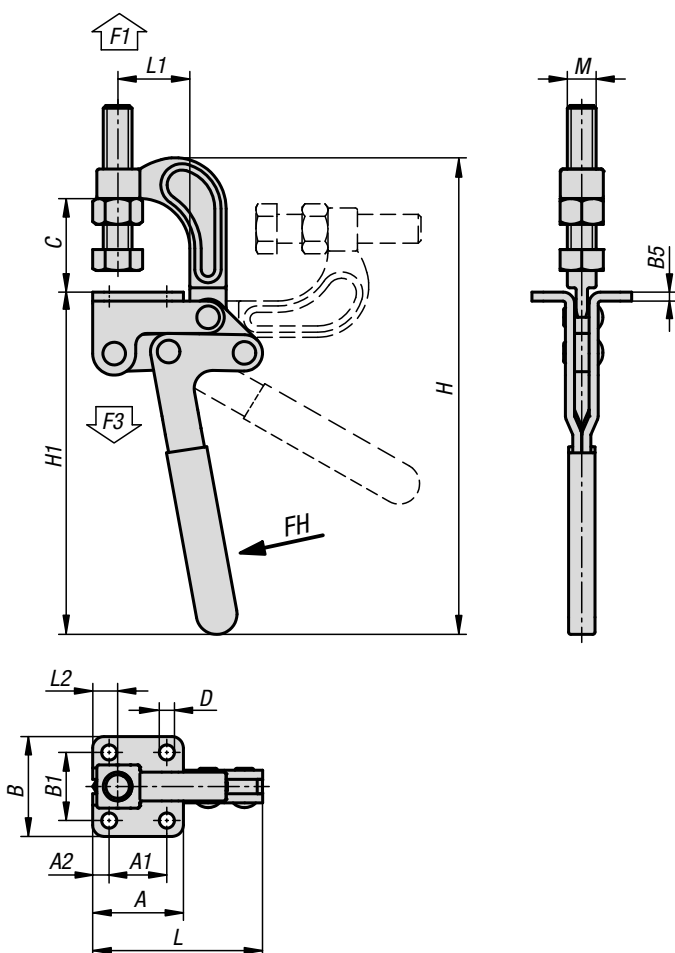


## KIPP Toggle clamps horizontal heavy-duty with adjustable clamping spindle

| Order No.   | Opening angle of holding arm | Opening angle of handle | Hand force FH N | Retaining force F1 N | Retaining force F2 N | Clamping force F3 N | Clamping force F4 N |
|-------------|------------------------------|-------------------------|-----------------|----------------------|----------------------|---------------------|---------------------|
| K1242.06000 | 91°                          | 93°                     | 250             | 3000                 | 6000                 | 1800                | 3400                |

| Order No.   | A  | A1 | B  | B1 | B2   | B3   | B5 | C  | C1 | D   | D1 | H    | L   | L1   | M       |
|-------------|----|----|----|----|------|------|----|----|----|-----|----|------|-----|------|---------|
| K1242.06000 | 70 | 90 | 30 | 48 | 22,7 | 12,7 | 10 | 51 | 25 | 8,3 | 13 | 83,9 | 271 | 74,5 | M12x100 |

## Toggle clamps pivot jaw

**Material:**

Steel. Draw bail in cast steel.  
Stainless steel.

**Version:**

Steel electro zinc-plated and passivated.  
Bright stainless steel.  
Plastic grip oil-resistant

**Sample order:**

K1439.03400

**Note:**

The pivot jaw toggle clamp is ideal for applications in which there is little mounting space at the sides. In this case the clamp plate is secured from below to the work surface.

## KIPP Toggle clamps pivot jaw

| Order No.   | Main material   | Opening angle of holding arm | Opening angle of handle | Hand force FH N | Retaining force F1 N | Clamping force F3 N |
|-------------|-----------------|------------------------------|-------------------------|-----------------|----------------------|---------------------|
| K1439.03400 | steel           | 90°                          | 50°                     | 250             | 3400                 | 1100                |
| K1439.13000 | stainless steel | 90°                          | 50°                     | 200             | 3000                 | 1000                |

| Order No.   | Main material   | A  | A1   | A2  | B  | B1 | B5 | C    | D   | H   | H1  | L    | L1   | L2 | M          |
|-------------|-----------------|----|------|-----|----|----|----|------|-----|-----|-----|------|------|----|------------|
| K1439.03400 | steel           | 40 | 25,4 | 7,3 | 44 | 30 | 4  | 41,2 | 6,7 | 210 | 153 | 74,6 | 31,8 | 14 | 1/2-13x2,5 |
| K1439.13000 | stainless steel | 40 | 25,4 | 7,3 | 44 | 30 | 4  | 41,2 | 6,7 | 210 | 153 | 74,6 | 31,8 | 14 | 1/2-13x2,5 |

## Toggle clamps vertical

with straight foot and fixed clamping spindle



### Material:

Steel.

### Version:

Electro zinc-plated steel.  
Plastic handle, oil-resistant.

### Sample order:

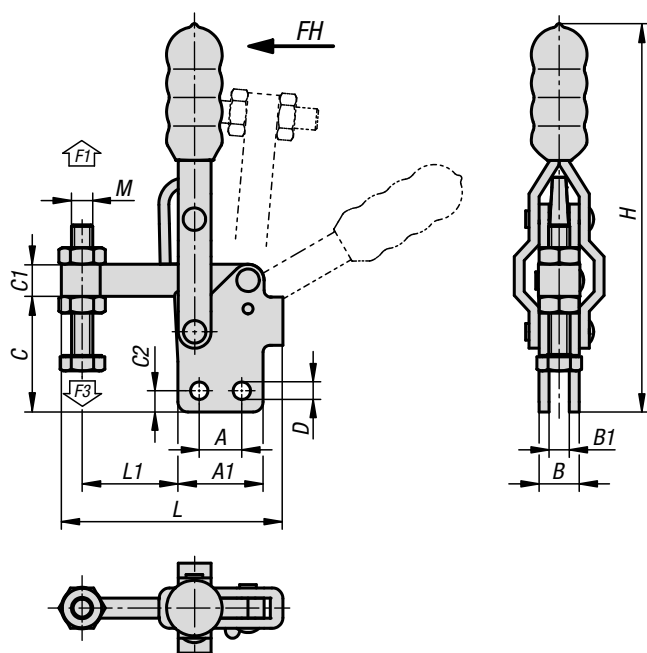
K1244.00800

### Note:

A neoprene thrust pad is supplied with version K1244.00800.

### Accessories:

K0688  
K0689  
K0690  
K0101  
K1442  
K0102  
K0103  
K1443  
K0104  
K0106



## KIPP Toggle clamps vertical with straight foot and fixed clamping spindle

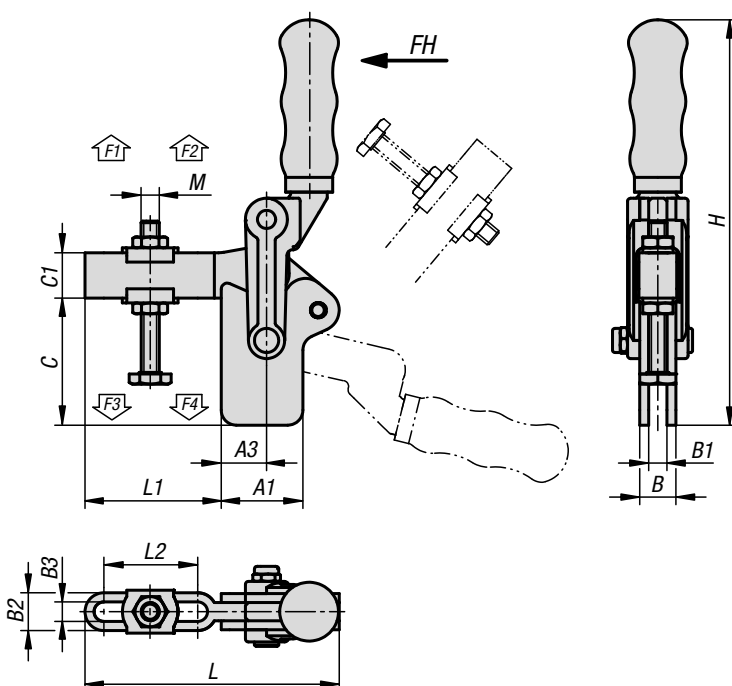
| Order No.   | Opening angle of holding arm | Opening angle of handle | Hand force FH N | Retaining force F1 N | Clamping force F3 N |
|-------------|------------------------------|-------------------------|-----------------|----------------------|---------------------|
| K1244.00800 | 95°                          | 60°                     | 100             | 800                  | 600                 |
| K1244.02400 | 90°                          | 70°                     | 150             | 2400                 | 1200                |
| K1244.03400 | 90°                          | 70°                     | 200             | 3400                 | 1600                |
| K1244.04400 | 90°                          | 70°                     | 250             | 4400                 | 1600                |
| K1244.05400 | 100°                         | 50°                     | 280             | 5400                 | 1800                |

| Order No.   | A    | A1   | B  | B1 | C     | C1   | C2   | D    | H   | L      | L1    | M       |
|-------------|------|------|----|----|-------|------|------|------|-----|--------|-------|---------|
| K1244.00800 | 12,7 | 25,4 | 12 | 6  | 34,5  | 9,6  | 6,4  | 5,2  | 116 | 65,8   | 28,6  | M6x44   |
| K1244.02400 | 19   | 35   | 12 | 6  | 48    | 17,5 | 7,5  | 7,1  | 194 | 87,7   | 40    | M8x50   |
| K1244.03400 | 32   | 50   | 16 | 8  | 64    | 22   | 9,5  | 8,3  | 240 | 124,25 | 65    | M10x80  |
| K1244.04400 | 32   | 53   | 20 | 10 | 70,4  | 25   | 9,5  | 8,7  | 245 | 138,25 | 74    | M12x100 |
| K1244.05400 | 50,8 | 76,2 | 20 | 10 | 113,5 | 31,8 | 12,7 | 12,3 | 335 | 197,5  | 107,8 | M16x150 |



## Toggle clamps vertical

heavy duty with adjustable clamping spindle



### Material:

Steel.

### Version:

Steel, hardened and passivated.  
Plastic handle, oil-resistant.

### Sample order:

K1245.06000

### Accessories:

K0688  
K0689  
K0101  
K1442  
K0102  
K0103  
K1443  
K0104  
K0106  
K1441

### KIPP Toggle clamps vertical heavy-duty with adjustable clamping spindle

| Order No.   | Opening angle of holding arm | Opening angle of handle | Hand force FH N | Retaining force F1 N | Retaining force F2 N | Clamping force F3 N | Clamping force F4 N |
|-------------|------------------------------|-------------------------|-----------------|----------------------|----------------------|---------------------|---------------------|
| K1245.06000 | 210°                         | 134°                    | 200             | 3000                 | 6000                 | 800                 | 900                 |

| Order No.   | A1 | A3 | B  | B1 | B2   | B3  | C  | C1 | H   | L  | L1 | L2 | M     |
|-------------|----|----|----|----|------|-----|----|----|-----|----|----|----|-------|
| K1245.06000 | 27 | 15 | 12 | 6  | 12,5 | 6,5 | 42 | 15 | 137 | 84 | 45 | 31 | M6x50 |

## Toggle clamps vertical

with straight foot and adjustable clamping spindle



### Material:

Steel.

### Version:

Electro zinc-plated steel.  
Plastic handle, oil-resistant.

### Sample order:

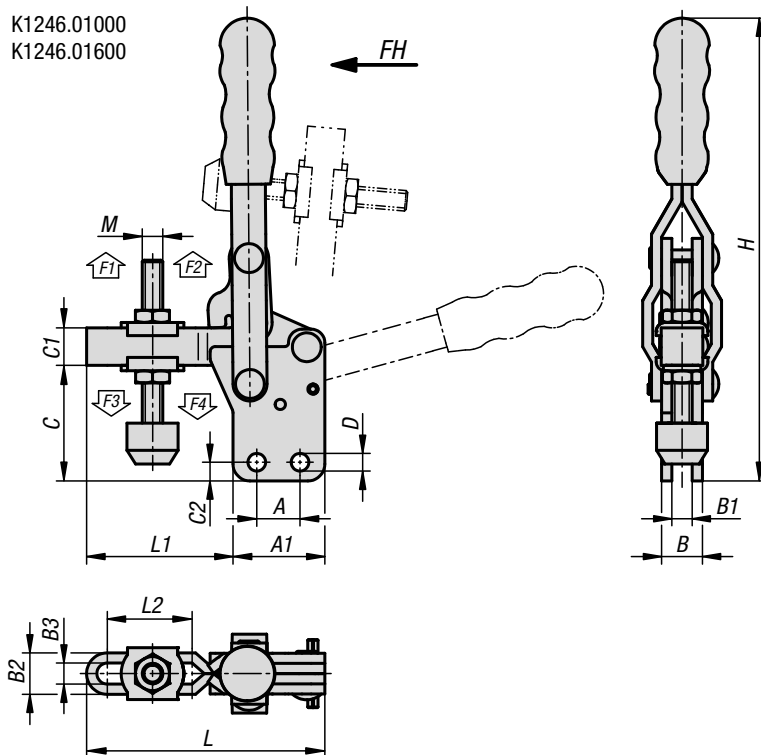
K1246.02400

### Note:

The clamping spindle is supplied with a neoprene thrust pad.

### Accessories:

K0688  
K0689  
K0690  
K0101  
K1442  
K0102  
K0103  
K1443  
K0104  
K0106  
K1441



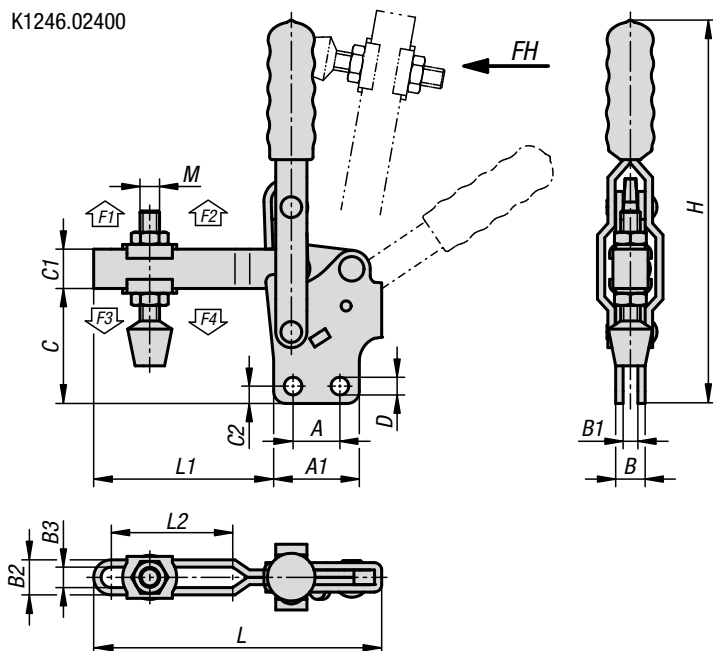
### KIPP Toggle clamps vertical with straight foot and adjustable clamping spindle

| Order No.   | Opening angle of holding arm | Opening angle of handle | Hand force FH N | Retaining force F1 N | Retaining force F2 N | Clamping force F3 N | Clamping force F4 N |
|-------------|------------------------------|-------------------------|-----------------|----------------------|----------------------|---------------------|---------------------|
| K1246.01000 | 120°                         | 85°                     | 80              | 700                  | 1000                 | 500                 | 750                 |
| K1246.01600 | 95°                          | 75°                     | 100             | 1200                 | 1600                 | 800                 | 1000                |
| K1246.02400 | 100°                         | 56°                     | 150             | 1200                 | 2400                 | 800                 | 1600                |
| K1246.04000 | 112°                         | 61°                     | 250             | 2000                 | 4000                 | 1400                | 3000                |

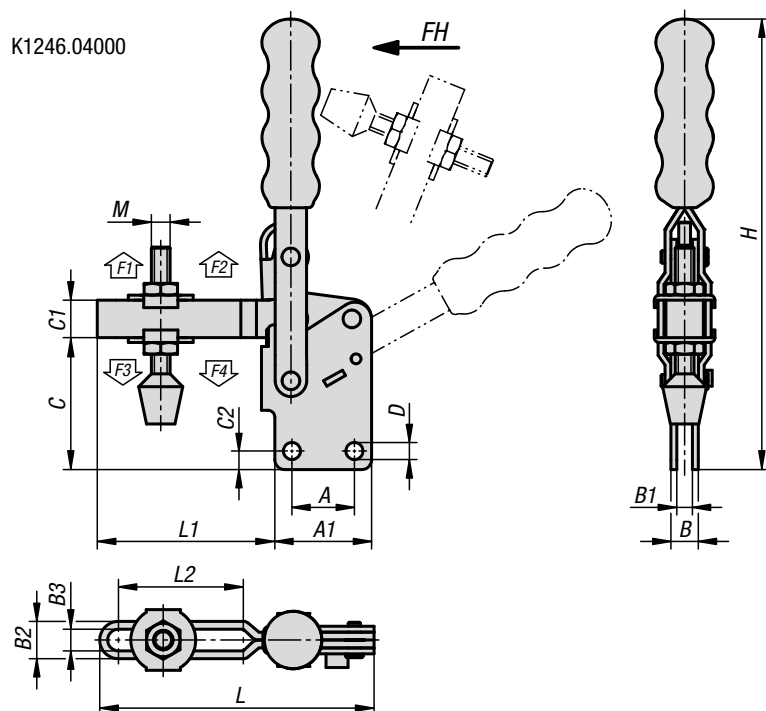
## Toggle clamps vertical

with straight foot and adjustable clamping spindle

K1246.02400



K1246.04000



| Order No.   | A    | A1   | B  | B1 | B2   | B3  | C    | C1 | C2  | D   | H    | L     | L1   | L2   | M      |
|-------------|------|------|----|----|------|-----|------|----|-----|-----|------|-------|------|------|--------|
| K1246.01000 | 16   | 26   | 8  | 4  | 9,5  | 5,5 | 27,6 | 9  | 5   | 4,4 | 99,7 | 57    | 31   | 16,6 | M5x40  |
| K1246.01600 | 12,7 | 27   | 12 | 6  | 12,2 | 6,2 | 34   | 11 | 5,5 | 5,2 | 136  | 70    | 43   | 24,9 | M6x50  |
| K1246.02400 | 19   | 34,9 | 12 | 6  | 14,3 | 8,3 | 46,8 | 16 | 7,1 | 7,2 | 156  | 117,2 | 73,2 | 49,4 | M8x63  |
| K1246.04000 | 31,8 | 49,2 | 14 | 8  | 19   | 11  | 67,2 | 19 | 9,5 | 8,7 | 229  | 139,5 | 90,3 | 63,5 | M10x85 |

## Toggle clamps vertical

with straight foot and adjustable clamping spindle



**Material:**  
Steel.

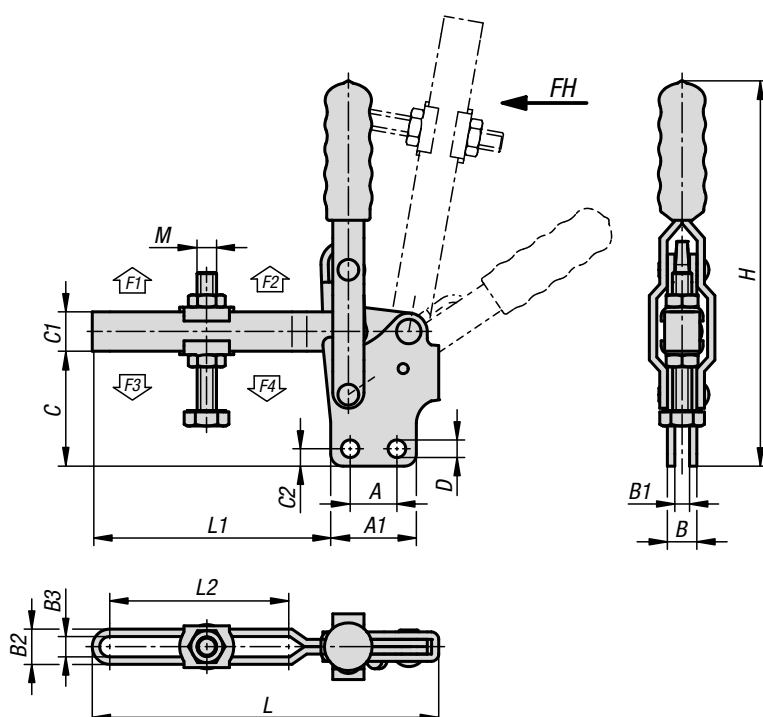
**Version:**  
Electro zinc-plated steel.  
Plastic handle, oil-resistant.

**Sample order:**  
K1248.02400

**Note:**  
A neoprene thrust pad is supplied with version K1248.02400.

**Accessories:**

K0688  
K0689  
K0690  
K0101  
K1442  
K0102  
K0103  
K1443  
K0104  
K0106  
K1441



### KIPP Toggle clamps vertical with straight foot and adjustable clamping spindle

| Order No.   | Opening angle of holding arm | Opening angle of handle | Hand force FH N | Retaining force F1 N | Retaining force F2 N | Clamping force F3 N | Clamping force F4 N |
|-------------|------------------------------|-------------------------|-----------------|----------------------|----------------------|---------------------|---------------------|
| K1248.02400 | 100°                         | 56°                     | 150             | 1200                 | 2400                 | 800                 | 1600                |
| K1248.07000 | 90°                          | 70°                     | 250             | 3200                 | 7000                 | 1400                | 3000                |
| K1248.08000 | 100°                         | 50°                     | 280             | 3000                 | 8000                 | 1800                | 3900                |

| Order No.   | A    | A1   | B  | B1 | B2   | B3   | C     | C1   | C2   | D    | H   | L     | L1  | L2   | M       |
|-------------|------|------|----|----|------|------|-------|------|------|------|-----|-------|-----|------|---------|
| K1248.02400 | 19   | 34,9 | 12 | 6  | 14,3 | 8,3  | 46,8  | 16   | 7,1  | 7,2  | 156 | 141   | 97  | 73,2 | M8x63   |
| K1248.07000 | 32   | 53   | 20 | 10 | 22,7 | 12,7 | 70,4  | 25   | 9,5  | 8,7  | 245 | 177   | 124 | 90   | M12x100 |
| K1248.08000 | 50,8 | 76,2 | 20 | 10 | 26,5 | 16,5 | 113,5 | 31,8 | 12,7 | 12,3 | 335 | 229,2 | 153 | 105  | M16x150 |

## Toggle clamps vertical

heavy-duty with fixed clamping spindle



### Material:

Steel.

### Version:

Steel, hardened and passivated.  
Plastic handle, oil-resistant.

### Sample order:

K1250.007000

### Note:

spindle bracket weldable.

### Accessories:

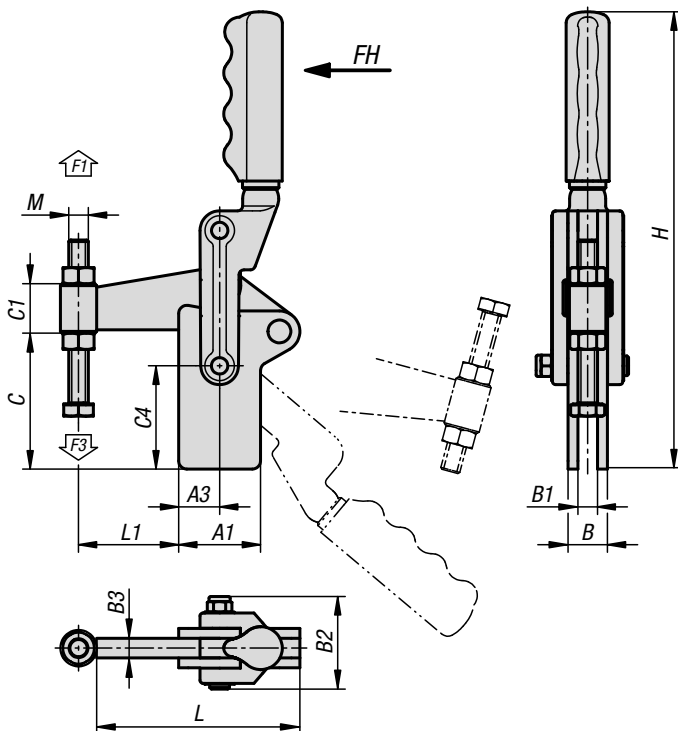
K1442

K0102

K0103

K1443

K0106



### KIPP Toggle clamps vertical heavy-duty with fixed clamping spindle

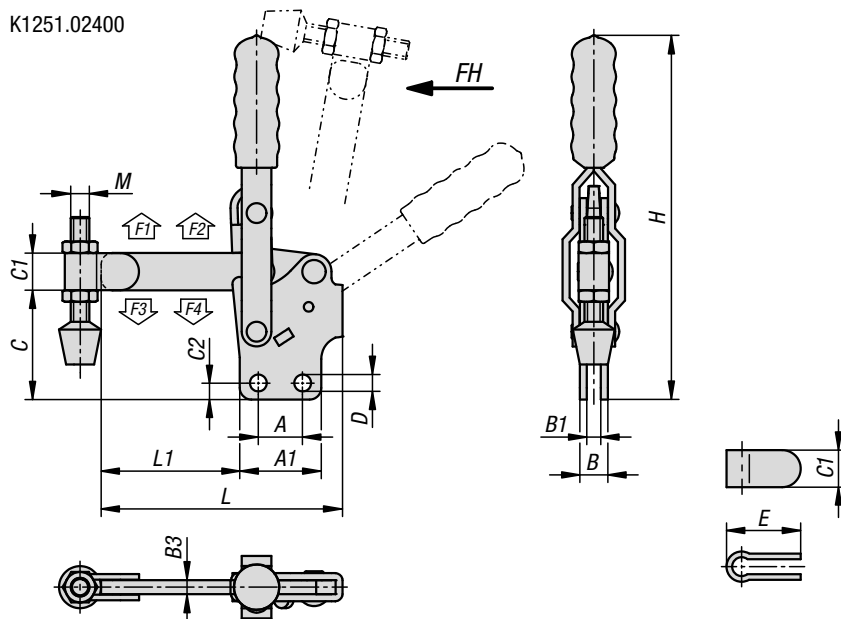
| Order No.    | Opening angle of holding arm | Opening angle of handle | Hand force FH N | Retaining force F1 N | Clamping force F3 N |
|--------------|------------------------------|-------------------------|-----------------|----------------------|---------------------|
| K1250.007000 | 205°                         | 130°                    | 300             | 7000                 | 1400                |
| K1250.012000 | 195°                         | 130°                    | 500             | 12000                | 1400                |
| K1250.014000 | 195°                         | 130°                    | 500             | 14000                | 1850                |

| Order No.    | A1 | A3 | B  | B1 | B2   | B3 | C   | C1 | C4 | H   | L   | L1   | M       |
|--------------|----|----|----|----|------|----|-----|----|----|-----|-----|------|---------|
| K1250.007000 | 45 | 25 | 20 | 10 | 49,5 | 10 | 70  | 30 | 50 | 243 | 105 | 51,1 | M10x80  |
| K1250.012000 | 50 | 25 | 24 | 12 | 56,5 | 12 | 85  | 30 | 63 | 279 | 124 | 61,1 | M12x100 |
| K1250.014000 | 63 | 40 | 32 | 16 | 67,5 | 16 | 108 | 38 | 78 | 325 | 158 | 75   | M16x150 |

## Toggle clamps vertical

with straight foot and full holding arm

K1251.02400



**Material:**  
Steel.

**Version:**  
Electro zinc-plated steel.  
Plastic handle, oil-resistant.

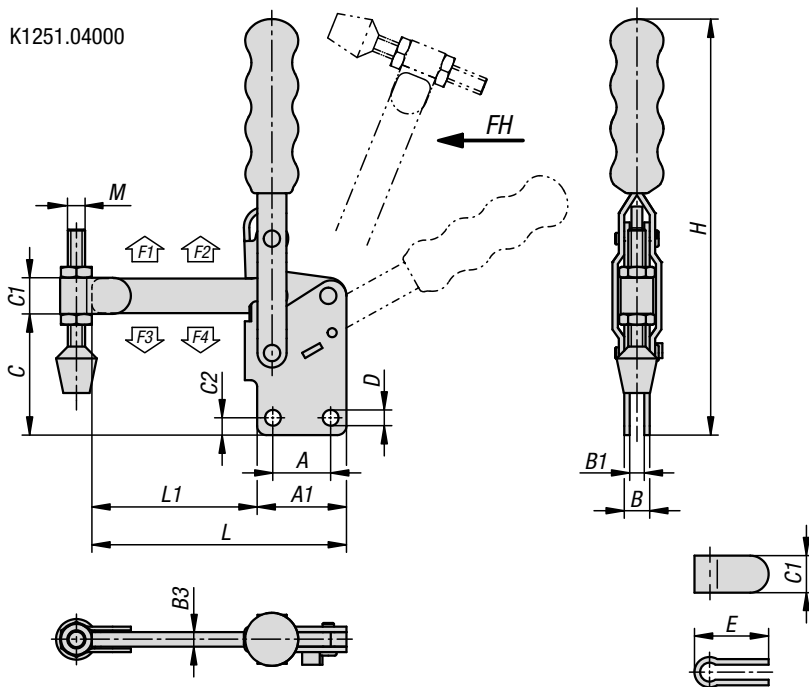
**Sample order:**  
K1251.04000

**Note:**  
The clamping spindle is supplied with a neoprene thrust pad.  
Spindle bracket is weldable.

**Accessories:**

K0688  
K0689  
K0690  
K0101  
K1442  
K0102  
K0103  
K1443  
K0104  
K0106

K1251.04000



### KIPP Toggle clamps vertical with straight foot and full holding arm

| Order No.   | Opening angle of holding arm | Opening angle of handle | Hand force FH N | Retaining force F1 N | Retaining force F2 N | Clamping force F3 N | Clamping force F4 N |
|-------------|------------------------------|-------------------------|-----------------|----------------------|----------------------|---------------------|---------------------|
| K1251.02400 | 100°                         | 56°                     | 150             | 1200                 | 2400                 | 800                 | 1600                |
| K1251.04000 | 112°                         | 61°                     | 250             | 2000                 | 4000                 | 1400                | 3000                |

| Order No.   | A    | A1   | B  | B1 | B3 | C    | C1 | C2  | D   | E  | H   | L     | L1   | M      |
|-------------|------|------|----|----|----|------|----|-----|-----|----|-----|-------|------|--------|
| K1251.02400 | 19   | 34,9 | 12 | 6  | 6  | 46,8 | 16 | 7,1 | 7,2 | 31 | 156 | 103,4 | 59,4 | M8x63  |
| K1251.04000 | 31,8 | 49,2 | 14 | 8  | 8  | 67,2 | 19 | 9,5 | 8,7 | 40 | 229 | 140,3 | 91,1 | M10x85 |

## Toggle clamps vertical

heavy-duty with fixed clamping spindle

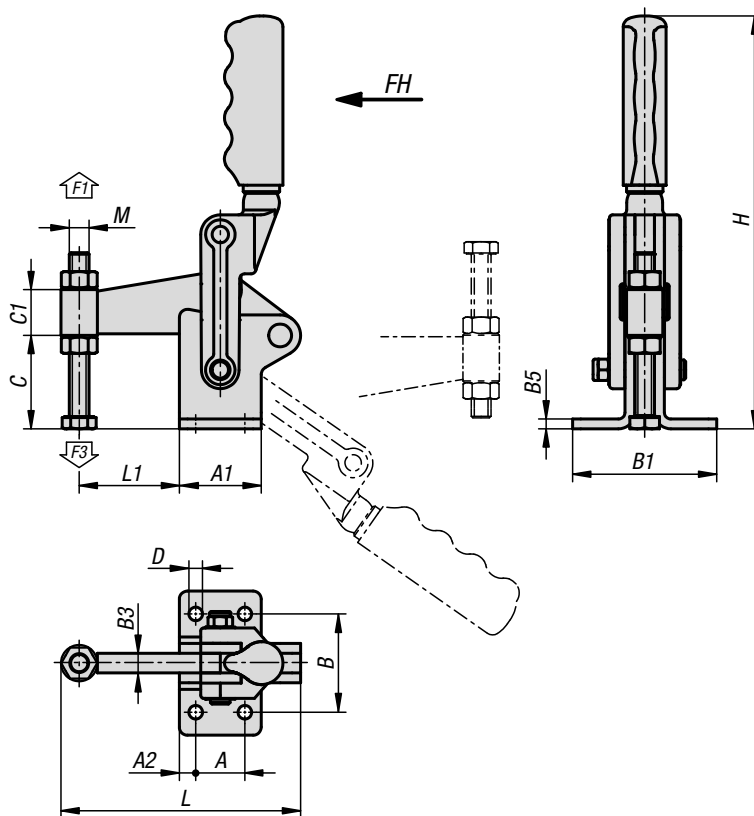


**Material:**  
Steel.

**Version:**  
Steel, hardened and passivated.  
Plastic handle, oil-resistant.

**Sample order:**  
K1253.012000

**Accessories:**  
K0688  
K0689  
K1442  
K0102  
K0103  
K0106



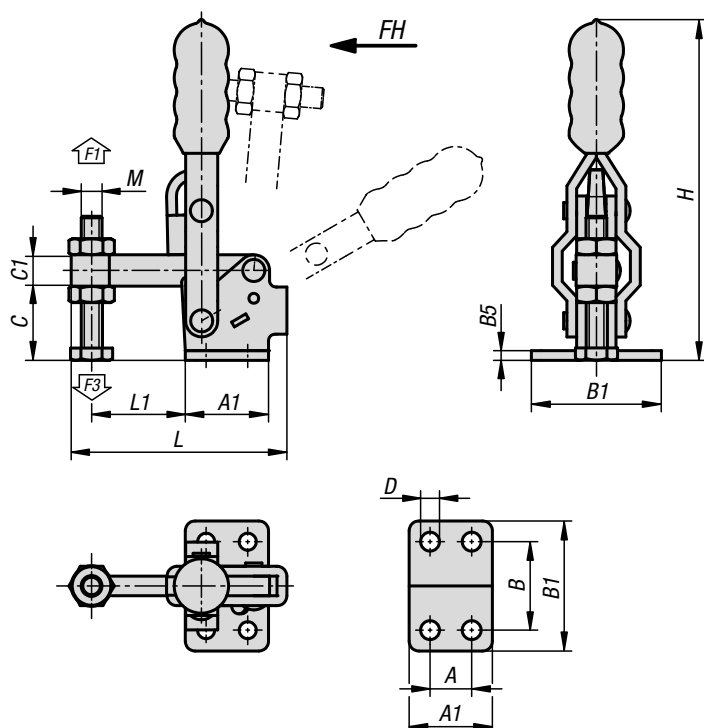
### KIPP Toggle clamps vertical heavy-duty with fixed clamping spindle

| Order No.    | Opening angle of holding arm | Opening angle of handle | Hand force FH N | Retaining force F1 N | Clamping force F3 N |
|--------------|------------------------------|-------------------------|-----------------|----------------------|---------------------|
| K1253.06000  | 180°                         | 120°                    | 300             | 6000                 | 1200                |
| K1253.012000 | 180°                         | 125°                    | 500             | 12000                | 1400                |
| K1253.014000 | 195°                         | 130°                    | 500             | 14000                | 1850                |

| Order No.    | A  | A1 | A2 | B  | B1  | B3 | B5 | C  | C1 | D    | H   | L      | L1   | M       |
|--------------|----|----|----|----|-----|----|----|----|----|------|-----|--------|------|---------|
| K1253.06000  | 25 | 45 | 10 | 50 | 67  | 10 | 5  | 48 | 30 | 8,3  | 221 | 127,2  | 51,1 | M12x100 |
| K1253.012000 | 30 | 50 | 10 | 60 | 88  | 12 | 6  | 58 | 30 | 8,3  | 252 | 146,2  | 61,1 | M12x100 |
| K1253.014000 | 40 | 63 | 12 | 75 | 105 | 16 | 8  | 75 | 38 | 10,3 | 295 | 185,25 | 75   | M16x150 |

## Toggle clamps mini vertical

with flat foot and fixed clamping spindle



### Material:

Steel or stainless steel.

### Version:

Electro zinc-plated steel.  
Bright stainless steel.  
Plastic handle, oil-resistant.

### Sample order:

K1254.0800

### Note:

A neoprene thrust pad is supplied with version K1254.0800.

### Accessories:

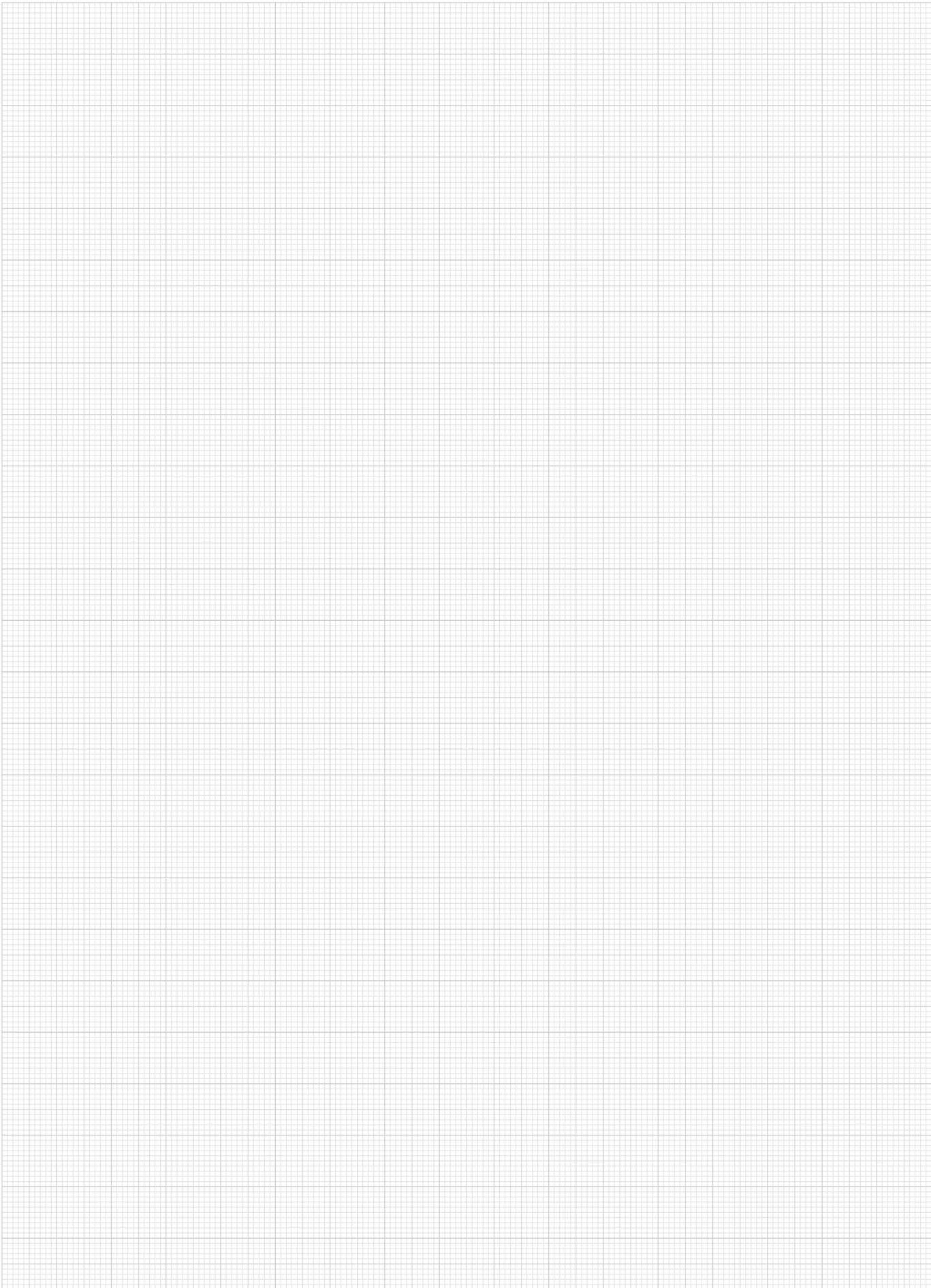
K0688  
K0689  
K0101  
K1442  
K0102  
K0103  
K1443  
K0104  
K0106

## KIPP Toggle clamps mini vertical with flat foot and fixed clamping spindle

| Order No.  | Main material   | Opening angle of holding arm | Opening angle of handle | Hand force FH N | Retaining force F1 N | Clamping force F3 N |
|------------|-----------------|------------------------------|-------------------------|-----------------|----------------------|---------------------|
| K1254.0800 | steel           | 95°                          | 60°                     | 100             | 800                  | 600                 |
| K1254.1800 | stainless steel | 95°                          | 60°                     | 100             | 800                  | 600                 |

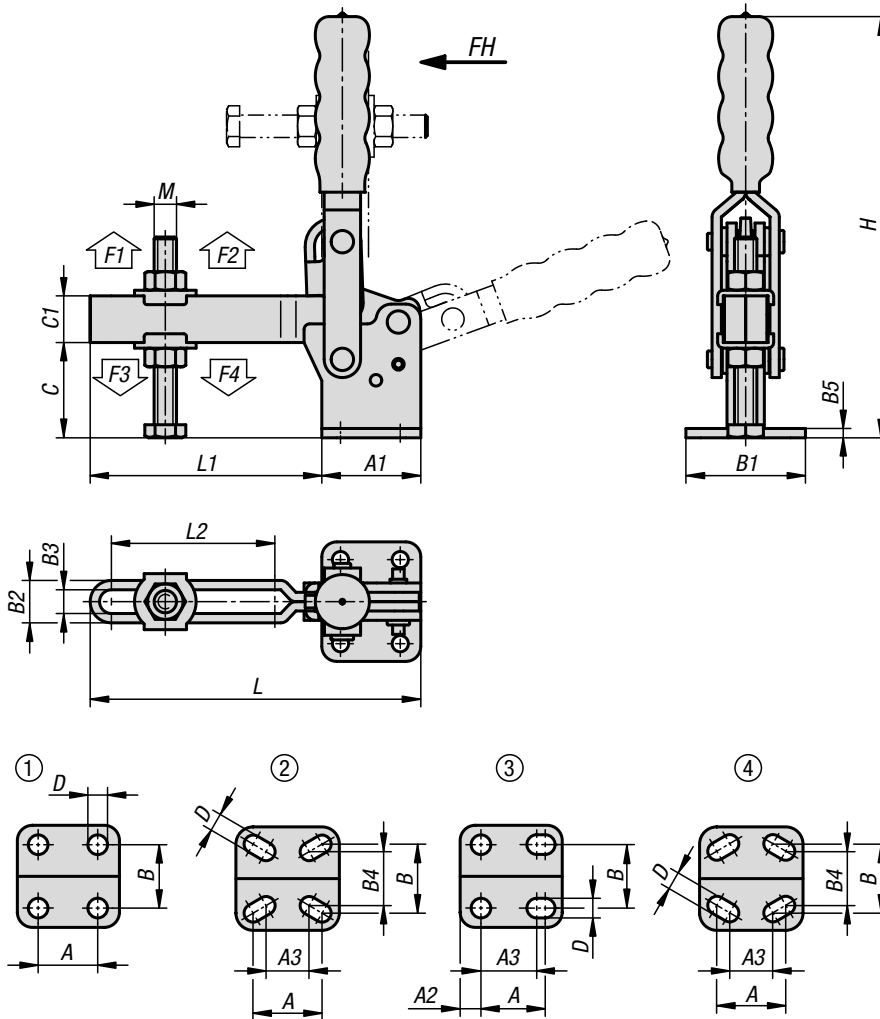
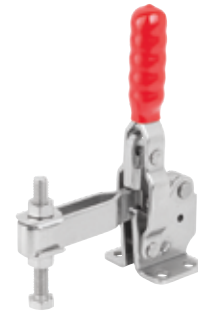
| Order No.  | Main material   | A    | A1   | B  | B1   | B5 | C    | C1  | D   | H   | L    | L1   | M     |
|------------|-----------------|------|------|----|------|----|------|-----|-----|-----|------|------|-------|
| K1254.0800 | steel           | 12,7 | 25,4 | 27 | 39,7 | 3  | 22,7 | 9,6 | 5,2 | 104 | 65,8 | 28,6 | M6x44 |
| K1254.1800 | stainless steel | 12,7 | 25,4 | 27 | 39,7 | 3  | 22,7 | 9,6 | 5,2 | 104 | 65,8 | 28,6 | M6x40 |





## Toggle clamps vertical

with flat foot and adjustable clamping spindle



### Material:

Steel or stainless steel.

### Version:

Electro zinc-plated steel.  
Bright stainless steel.  
Plastic handle, oil-resistant.

### Sample order:

K1255.001000

### Note:

A neoprene thrust pad is supplied with versions K1255.001000, K1255.101000, K1255.001800, K1255.010001, K1255.001600, K1255.101600, K1255.002400 and K1255.004000.

### Accessories:

K0688  
K0689  
K0690  
K0101  
K1442  
K0102  
K0103  
K1443  
K0104  
K0106  
K1441  
K1431



# Toggle clamps vertical

with flat foot and adjustable clamping spindle



## KIPP Toggle clamps vertical with flat foot and adjustable clamping spindle

| Order No.    | Main material   | hole arrangement | Opening angle of holding arm | Opening angle of handle | Hand force FH N | Retaining force F1 N | Retaining force F2 N | Clamping force F3 N | Clamping force F4 N |
|--------------|-----------------|------------------|------------------------------|-------------------------|-----------------|----------------------|----------------------|---------------------|---------------------|
| K1255.001000 | steel           | 1                | 120°                         | 85°                     | 50              | 700                  | 1000                 | 500                 | 700                 |
| K1255.001800 | steel           | 1                | 95°                          | 60°                     | 100             | 800                  | 1800                 | 600                 | 1200                |
| K1255.010001 | steel           | 2                | 96°                          | 69°                     | 50              | 700                  | 1000                 | 500                 | 800                 |
| K1255.001600 | steel           | 1                | 95°                          | 75°                     | 100             | 1200                 | 1600                 | 800                 | 1000                |
| K1255.002000 | steel           | 4                | 108°                         | 70°                     | 100             | 1000                 | 2000                 | 900                 | 1200                |
| K1255.002400 | steel           | 1                | 100°                         | 56°                     | 150             | 1200                 | 2400                 | 800                 | 1600                |
| K1255.002600 | steel           | 1                | 90°                          | 70°                     | 150             | 1000                 | 2600                 | 800                 | 1600                |
| K1255.004000 | steel           | 1                | 112°                         | 61°                     | 250             | 2000                 | 4000                 | 1400                | 3000                |
| K1255.040001 | steel           | 1                | 90°                          | 70°                     | 250             | 2000                 | 4000                 | 1400                | 3000                |
| K1255.007000 | steel           | 1                | 90°                          | 70°                     | 250             | 3200                 | 7000                 | 1400                | 3000                |
| K1255.003600 | steel           | 3                | 106°                         | 67°                     | 100             | 1800                 | 3600                 | 900                 | 1800                |
| K1255.008000 | steel           | 1                | 100°                         | 50°                     | 280             | 3000                 | 8000                 | 1800                | 3900                |
| K1255.101000 | stainless steel | 1                | 120°                         | 85°                     | 50              | 700                  | 1000                 | 500                 | 700                 |
| K1255.101800 | stainless steel | 1                | 95°                          | 60°                     | 100             | 800                  | 1800                 | 600                 | 1200                |
| K1255.101600 | stainless steel | 1                | 95°                          | 75°                     | 100             | 1200                 | 1600                 | 800                 | 1000                |
| K1255.102600 | stainless steel | 1                | 90°                          | 70°                     | 150             | 1000                 | 2600                 | 800                 | 1600                |
| K1255.102400 | stainless steel | 1                | 100°                         | 56°                     | 150             | 1200                 | 2400                 | 800                 | 1600                |
| K1255.104000 | stainless steel | 1                | 112°                         | 61°                     | 250             | 2000                 | 4000                 | 1400                | 3000                |

| Order No.    | Main material   | A    | A1   | A2 | A3   | B    | B1   | B2   | B3   | B4   | B5  | C    | C1   | D    | H     | L     | L1   | L2   | M       |
|--------------|-----------------|------|------|----|------|------|------|------|------|------|-----|------|------|------|-------|-------|------|------|---------|
| K1255.001000 | steel           | 16   | 26   | -  | -    | 24   | 34   | 9,5  | 5,5  | -    | 2   | 16   | 9    | 4,4  | 88    | 57    | 31   | 16,6 | M5x35   |
| K1255.001800 | steel           | 12,7 | 25,4 | -  | -    | 27   | 39,7 | 13   | 7    | -    | 3   | 22,7 | 9,5  | 5,2  | 104   | 64,7  | 33,7 | 19,9 | M6x44   |
| K1255.010001 | steel           | 16   | 29   | -  | 14   | 24   | 34   | 10   | 5    | 17,5 | 2,5 | 22   | 10   | 4,8  | 97    | 67    | 38   | 27,9 | M5x35   |
| K1255.001600 | steel           | 12,7 | 27   | -  | -    | 26,8 | 37,8 | 12,2 | 6,2  | -    | 3   | 23   | 11   | 5,2  | 125   | 70    | 43   | 24,9 | M6x50   |
| K1255.002000 | steel           | 19   | 35   | -  | 12,7 | 27   | 42   | 11   | 6    | 25   | 3   | 29   | 13   | 5,5  | 135   | 79    | 44   | 32,9 | M6x50   |
| K1255.002400 | steel           | 19   | 34,9 | -  | -    | 31,8 | 46   | 14,3 | 8,3  | -    | 3   | 31,8 | 16   | 7,2  | 141   | 117,2 | 73,2 | 49,4 | M8x63   |
| K1255.002600 | steel           | 19   | 35   | -  | -    | 32   | 47   | 14,9 | 8,9  | -    | 3   | 32   | 17,5 | 7,1  | 178   | 110,2 | 75,2 | 50,1 | M8x60   |
| K1255.004000 | steel           | 31,8 | 49,2 | -  | -    | 45,3 | 64,3 | 19   | 11   | -    | 3   | 44   | 19   | 8,7  | 206   | 139,5 | 90,3 | 63,5 | M10x85  |
| K1255.040001 | steel           | 32   | 50   | -  | -    | 45   | 64   | 18,6 | 10,6 | -    | 4   | 42   | 22   | 8,3  | 220,4 | 142,8 | 92,8 | 62,2 | M10x80  |
| K1255.007000 | steel           | 32   | 53   | -  | -    | 45   | 64   | 22,7 | 12,7 | -    | 5   | 51   | 25   | 8,7  | 226   | 177   | 124  | 90   | M12x100 |
| K1255.003600 | steel           | 25   | 43   | 9  | 19   | 33,7 | 51,2 | 14,8 | 8,8  | -    | 3   | 35   | 19   | 8    | 197   | 143   | 100  | 70   | M8x60   |
| K1255.008000 | steel           | 50,8 | 76,2 | -  | -    | 69,8 | 95,2 | 26,5 | 16,5 | -    | 8   | 82,1 | 31,8 | 12,3 | 303   | 229,2 | 153  | 105  | M16x150 |
| K1255.101000 | stainless steel | 16   | 26   | -  | -    | 24   | 34   | 9,5  | 5,5  | -    | 2   | 16   | 9    | 4,4  | 88    | 57    | 31   | 16,6 | M5x35   |
| K1255.101800 | stainless steel | 12,7 | 25,4 | -  | -    | 27   | 39,7 | 13   | 7    | -    | 3   | 22,7 | 9,5  | 5,2  | 104   | 64,7  | 33,7 | 19,9 | M6x40   |
| K1255.101600 | stainless steel | 12,7 | 27   | -  | -    | 26,8 | 37,8 | 12,2 | 6,2  | -    | 3   | 23   | 11   | 5,2  | 125   | 70    | 43   | 24,9 | M6x50   |
| K1255.102600 | stainless steel | 19   | 35   | -  | -    | 32   | 47   | 14,9 | 8,9  | -    | 3   | 32   | 17,5 | 7,1  | 178   | 110,2 | 75,2 | 50,1 | M8x60   |
| K1255.102400 | stainless steel | 19   | 34,9 | -  | -    | 31,8 | 46   | 14,3 | 8,3  | -    | 3   | 31,8 | 16   | 7,2  | 141   | 117,2 | 73,2 | 49,4 | M8x60   |
| K1255.104000 | stainless steel | 31,8 | 49,2 | -  | -    | 45,3 | 64,3 | 19   | 11   | -    | 3   | 44   | 19   | 8,7  | 206   | 139,5 | 90,3 | 63,5 | M10x80  |

## Toggle clamps vertical

with flat foot and adjustable clamping spindle



### Material:

Steel or stainless steel.

### Version:

Electro zinc-plated steel.

Bright stainless steel.

Plastic handle, oil-resistant.

### Sample order:

K1256.01000

### Note:

A neoprene thrust pad is supplied with version K1256.01000.

### Accessories:

K0101

K1442

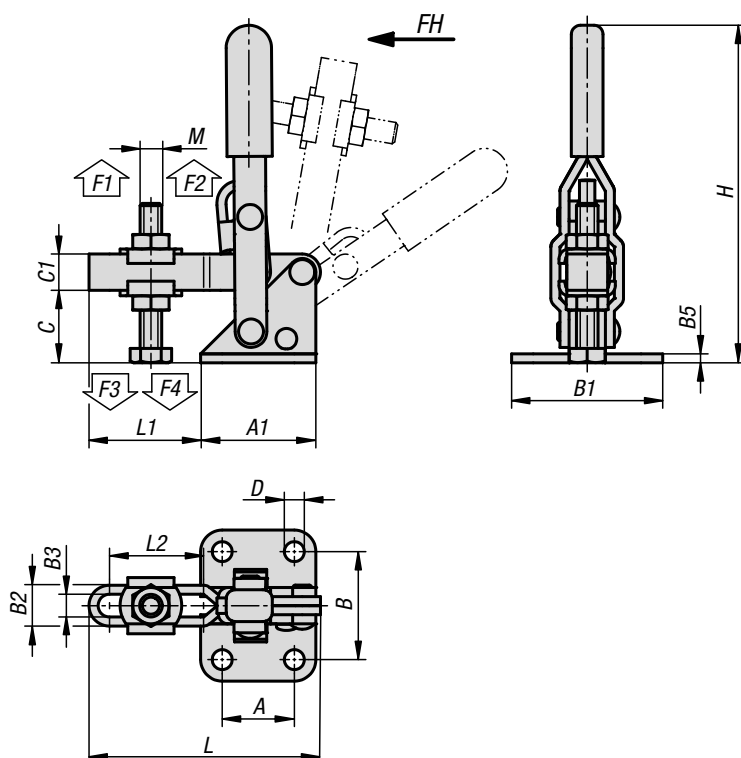
K0102

K0103

K1443

K0106

K1441



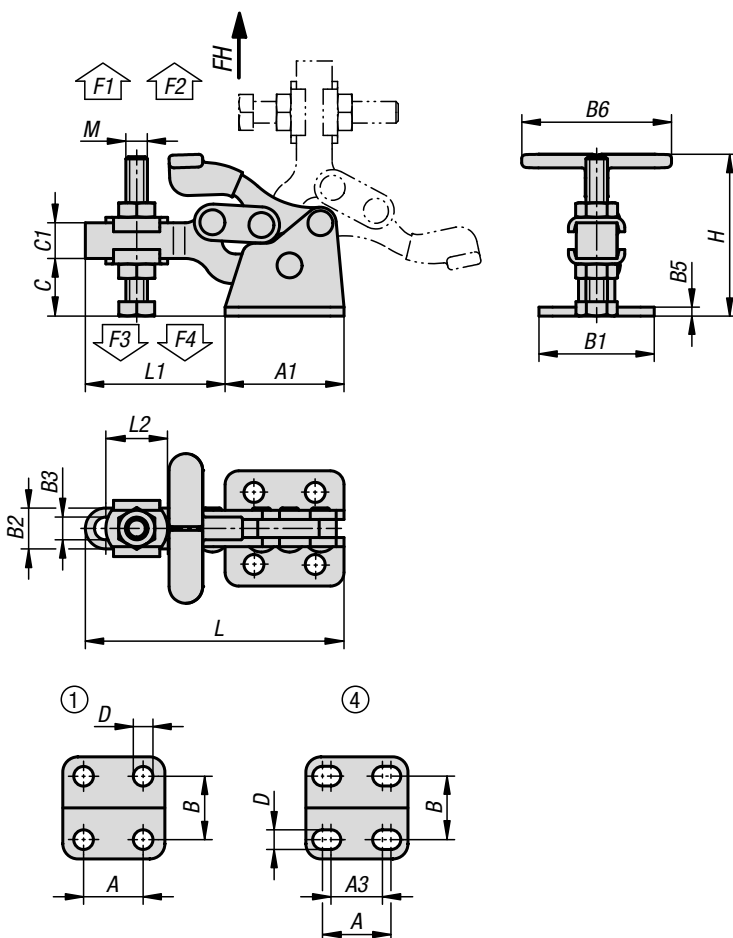
## KIPP Toggle clamps vertical with flat foot and adjustable clamping spindle

| Order No.   | Main material   | Opening angle of holding arm | Opening angle of handle | Hand force FH N | Retaining force F1 N | Retaining force F2 N | Clamping force F3 N | Clamping force F4 N |
|-------------|-----------------|------------------------------|-------------------------|-----------------|----------------------|----------------------|---------------------|---------------------|
| K1256.01000 | steel           | 100°                         | 56°                     | 50              | 700                  | 1000                 | 500                 | 700                 |
| K1256.11000 | stainless steel | 100°                         | 56°                     | 50              | 700                  | 1000                 | 500                 | 700                 |

| Order No.   | Main material   | A    | A1   | B    | B1   | B2 | B3 | B5 | C  | C1 | D   | H    | L  | L1   | L2   | M     |
|-------------|-----------------|------|------|------|------|----|----|----|----|----|-----|------|----|------|------|-------|
| K1256.01000 | steel           | 15,9 | 25,4 | 23,8 | 33,3 | 9  | 5  | 2  | 16 | 8  | 4,4 | 74,4 | 51 | 24,6 | 20,8 | M5x37 |
| K1256.11000 | stainless steel | 15,9 | 25,4 | 23,8 | 33,3 | 9  | 5  | 2  | 16 | 8  | 4,4 | 74,4 | 51 | 24,6 | 20,8 | M5x30 |

## Toggle clamps vertical

with flat foot and adjustable clamping spindle



### Material:

Steel or stainless steel.

### Version:

Electro zinc-plated steel.  
Bright stainless steel.  
Plastic handle, oil-resistant.

### Sample order:

K1257.011200

### Note:

A neoprene thrust pad is supplied with versions K1257.011200 and K1257.023400.

### Accessories:

K0688  
K0689  
K0690  
K0101  
K1442  
K0102  
K0103  
K1443  
K0104  
K0106  
K1441



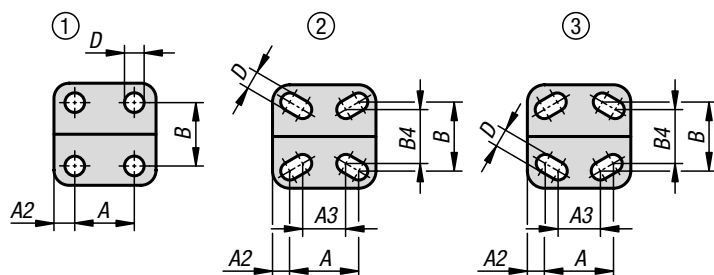
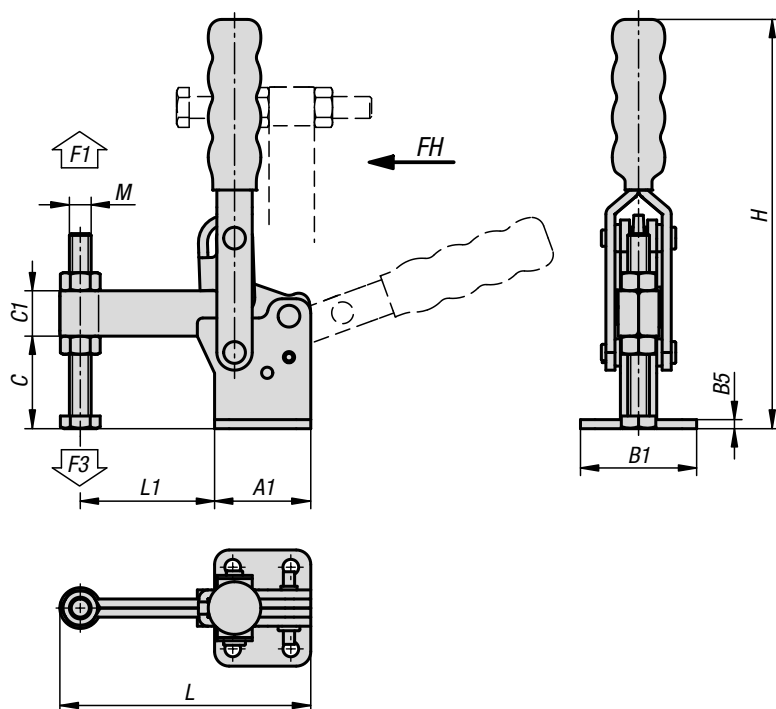
## KIPP Toggle clamps vertical with flat foot and adjustable clamping spindle

| Order No.    | Main material   | hole arrangement | Opening angle of holding arm | Opening angle of handle | Hand force FH N | Retaining force F1 N | Retaining force F2 N | Clamping force F3 N | Clamping force F4 N |
|--------------|-----------------|------------------|------------------------------|-------------------------|-----------------|----------------------|----------------------|---------------------|---------------------|
| K1257.011200 | steel           | 1                | 90°                          | 170°                    | 50              | 800                  | 1200                 | 500                 | 700                 |
| K1257.023400 | steel           | 4                | 90°                          | 170°                    | 200             | 1400                 | 3400                 | 800                 | 1800                |
| K1257.111200 | stainless steel | 1                | 90°                          | 170°                    | 50              | 800                  | 1200                 | 500                 | 700                 |

| Order No.    | Main material   | A    | A1   | A3 | B    | B1   | B2   | B3   | B5 | B6 | C    | C1  | D   | H  | L     | L1   | L2   | M      |
|--------------|-----------------|------|------|----|------|------|------|------|----|----|------|-----|-----|----|-------|------|------|--------|
| K1257.011200 | steel           | 13,5 | 26,2 | -  | 15,9 | 25,4 | 9    | 5    | 2  | 34 | 12,7 | 7,9 | 4,4 | 36 | 57    | 30,8 | 12,7 | M5x37  |
| K1257.023400 | steel           | 39   | 64,3 | 31 | 38,1 | 62,7 | 18,3 | 10,3 | 3  | 70 | 33,3 | 19  | 7,9 | 91 | 131,8 | 67,5 | 28   | M10x80 |
| K1257.111200 | stainless steel | 13,5 | 26,2 | -  | 15,9 | 25,4 | 9    | 5    | 2  | 34 | 12,7 | 7,9 | 4,4 | 36 | 57    | 30,8 | 12,7 | M5x30  |

## Toggle clamps vertical

with flat foot and fixed clamping spindle



**Material:**

Steel.

**Version:**

Trivalent passivated.

Clamping spindle and nuts phosphated.

Plastic grip oil-resistant.

**Sample order:**

K1438.00800

**Note:**

A neoprene thrust pad is supplied with version K1438.00800.

**Accessories:**

K0688

K0689

K0690

K0101

K1442

K0102

K0103

K1443

K0104

K0106

K1431



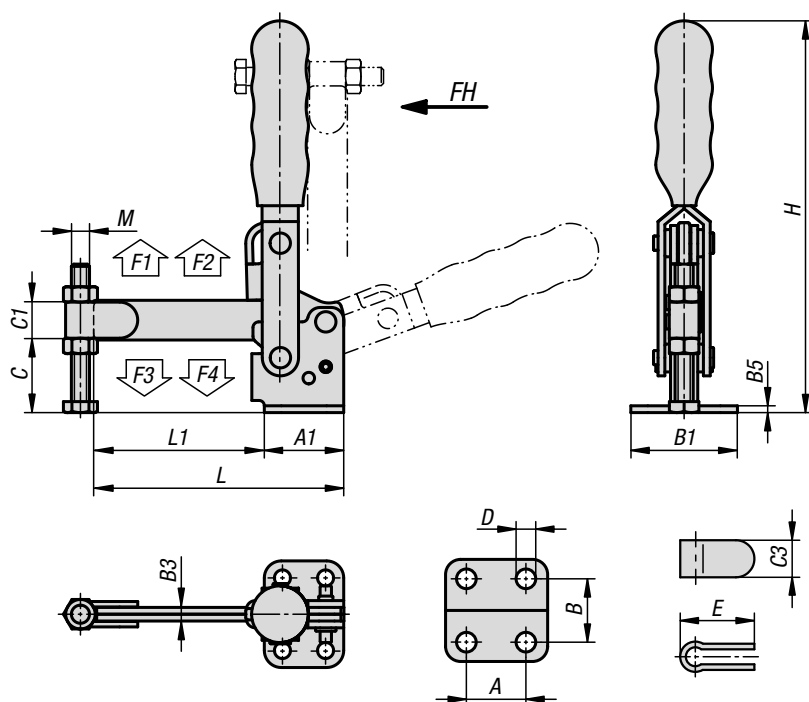
### KIPP Toggle clamps vertical with flat foot and fixed clamping spindle

| Order No.   | hole arrangement | Opening angle of holding arm | Opening angle of handle | Hand force FH N | Retaining force F1 N | Clamping force F3 N |
|-------------|------------------|------------------------------|-------------------------|-----------------|----------------------|---------------------|
| K1438.00800 | 2                | 96°                          | 69°                     | 50              | 800                  | 600                 |
| K1438.01500 | 3                | 108°                         | 70°                     | 100             | 1500                 | 1000                |
| K1438.02400 | 1                | 90°                          | 70°                     | 150             | 2400                 | 1200                |
| K1438.03400 | 1                | 90°                          | 70°                     | 200             | 3400                 | 1600                |
| K1438.04400 | 1                | 90°                          | 70°                     | 250             | 4400                 | 1600                |
| K1438.05400 | 1                | 100°                         | 50°                     | 280             | 5400                 | 1800                |

| Order No.   | A    | A1   | A2   | A3   | B    | B1   | B4   | B5  | C    | C1   | D    | H   | L     | L1    | M       |
|-------------|------|------|------|------|------|------|------|-----|------|------|------|-----|-------|-------|---------|
| K1438.00800 | 16   | 29   | 6,5  | 14   | 24   | 34   | 17,5 | 2,5 | 21,8 | 10,5 | 4,8  | 97  | 66,7  | 31,5  | M5x35   |
| K1438.01500 | 19   | 35   | 8    | 12,7 | 27   | 42   | 25   | 3   | 29   | 13   | 5,5  | 135 | 75,7  | 35    | M6x50   |
| K1438.02400 | 19   | 35   | 8    | -    | 32   | 47   | -    | 3   | 32   | 17,5 | 7,1  | 178 | 87,7  | 40    | M08x65  |
| K1438.03400 | 32   | 50   | 9    | -    | 45   | 64   | -    | 4   | 42   | 22   | 8,3  | 218 | 124,3 | 65    | M10x80  |
| K1438.04400 | 32   | 53   | 10   | -    | 45   | 64   | -    | 5   | 51   | 25   | 8,7  | 226 | 138,3 | 74    | M12x100 |
| K1438.05400 | 50,8 | 76,2 | 12,7 | -    | 69,8 | 95,2 | -    | 8   | 82,1 | 31,8 | 12,3 | 303 | 197,5 | 107,8 | M16x150 |

## Toggle clamps vertical

with flat foot and full holding arm



### Material:

Steel.

### Version:

Electro zinc-plated steel.  
Plastic handle, oil-resistant.

### Sample order:

K1258.04000

### Note:

A neoprene thrust pad is supplied with version K1258.04000. spindle bracket weldable.

### Accessories:

K0688  
K0689  
K0690  
K0101  
K1442  
K0102  
K0103  
K1443  
K0104  
K0106  
K1431



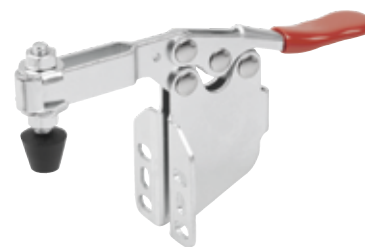
## KIPP Toggle clamps vertical with flat foot and full holding arm

| Order No.   | Opening angle of holding arm | Opening angle of handle | Hand force FH N | Retaining force F1 N | Retaining force F2 N | Clamping force F3 N | Clamping force F4 N |
|-------------|------------------------------|-------------------------|-----------------|----------------------|----------------------|---------------------|---------------------|
| K1258.02600 | 90°                          | 70°                     | 150             | 1000                 | 2600                 | 800                 | 1600                |
| K1258.04000 | 112°                         | 61°                     | 250             | 2000                 | 4000                 | 1400                | 3000                |
| K1258.04400 | 90°                          | 70°                     | 200             | 2200                 | 4400                 | 1400                | 2800                |
| K1258.07000 | 90°                          | 70°                     | 250             | 3200                 | 7000                 | 1400                | 3000                |
| K1258.08000 | 100°                         | 50°                     | 280             | 3000                 | 8000                 | 1800                | 3900                |

| Order No.   | A    | A1   | B    | B1   | B3 | B5 | C    | C1   | C3 | D    | E  | H   | L     | L1    | M       |
|-------------|------|------|------|------|----|----|------|------|----|------|----|-----|-------|-------|---------|
| K1258.02600 | 19   | 35   | 32   | 47   | 6  | 3  | 32   | 17,5 | 16 | 7,1  | 31 | 173 | 111,9 | 73,9  | M8x60   |
| K1258.04000 | 31,8 | 49,2 | 45,3 | 64,3 | 8  | 3  | 44   | 19   | 20 | 8,7  | 40 | 206 | 140,3 | 91,1  | M10x85  |
| K1258.04400 | 32   | 50   | 45   | 64   | 8  | 4  | 42   | 22   | 20 | 8,3  | 40 | 218 | 148   | 98    | M10x80  |
| K1258.07000 | 32   | 53   | 45   | 64   | 10 | 5  | 51   | 25   | 23 | 8,7  | 44 | 226 | 178   | 128   | M12x100 |
| K1258.08000 | 50,8 | 76,2 | 69,8 | 95,2 | 10 | 8  | 82,1 | 31,8 | 32 | 12,3 | 50 | 303 | 234   | 157,8 | M16x150 |

## Toggle clamp horizontal

with angled foot and adjustable clamping spindle

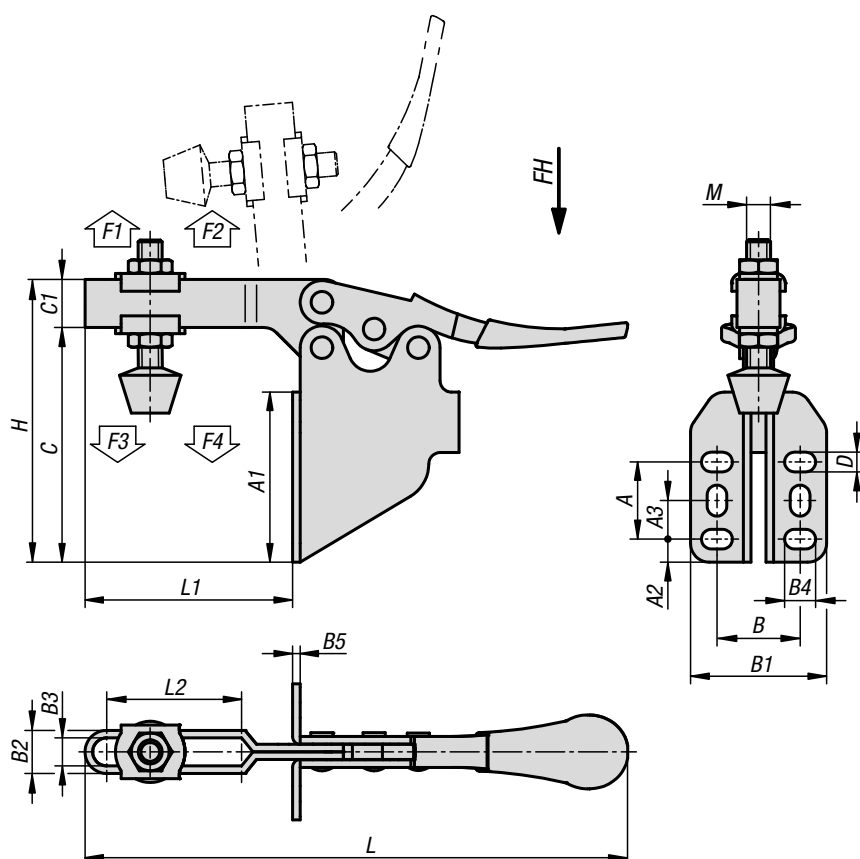


**Material:**  
Steel.

**Version:**  
Electro zinc-plated steel.  
Plastic handle, oil-resistant.

**Sample order:**  
K1542.01200

**Note:**  
The clamping spindle is supplied with a neoprene thrust pad.



### KIPP Toggle clamp horizontal with angled foot and adjustable clamping spindle

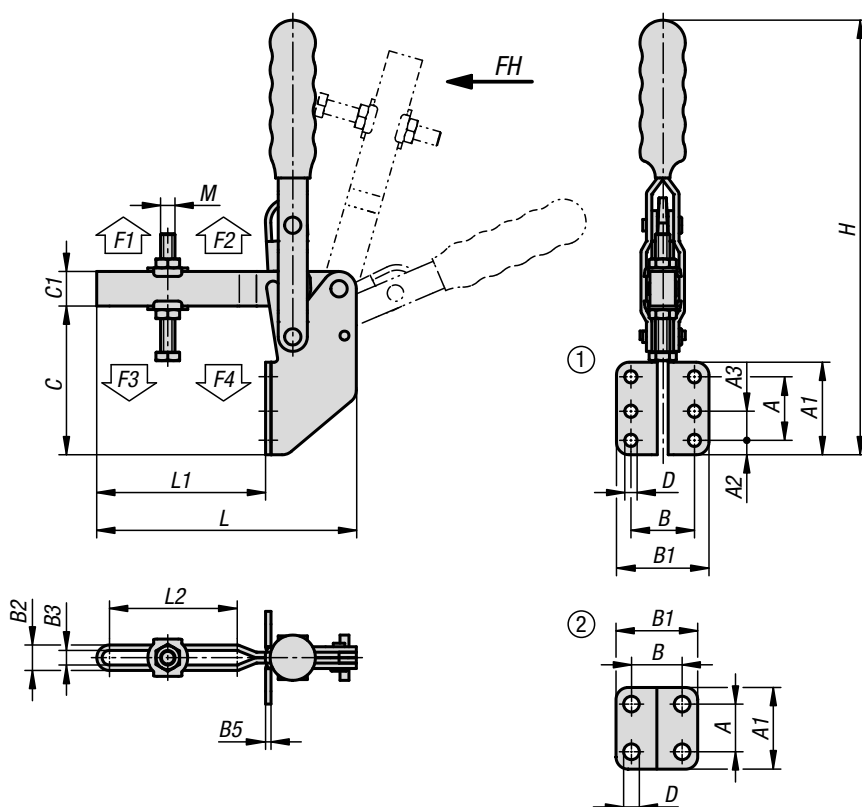
| Order No.   | Opening angle of holding arm | Opening angle of handle | Hand force FH N | Retaining force F1 N | Retaining force F2 N | Clamping force F3 N | Clamping force F4 N |
|-------------|------------------------------|-------------------------|-----------------|----------------------|----------------------|---------------------|---------------------|
| K1542.01200 | 85°                          | 73°                     | 100             | 600                  | 1200                 | 300                 | 700                 |
| K1542.02800 | 90°                          | 65°                     | 160             | 1200                 | 2800                 | 600                 | 1000                |

| Order No.   | A    | A1 | A2  | A3   | B    | B1   | B2   | B3  | B4  | B5 | C    | C1   | D   | H    | L     | L1   | L2   | M     |
|-------------|------|----|-----|------|------|------|------|-----|-----|----|------|------|-----|------|-------|------|------|-------|
| K1542.01200 | 20,4 | 45 | 6,1 | 10,2 | 22   | 36   | 11,4 | 7,4 | 8,2 | 2  | 62,1 | 12,7 | 5,2 | 74,8 | 143,5 | 54,9 | 35,6 | M6x44 |
| K1542.02800 | 21,4 | 40 | 5,9 | 10,7 | 27,6 | 42,4 | 14,7 | 8,7 | 9,7 | 3  | 67,2 | 12,7 | 6,7 | 79,9 | 173   | 68   | 39,1 | M8x63 |



## Toggle clamps vertical

with angled foot and adjustable clamping spindle



### Material:

Steel.

### Version:

Electro zinc-plated steel.  
Plastic handle, oil-resistant.

### Sample order:

K1259.01000

### Note:

A neoprene thrust pad is supplied with versions K1259.01000 and K1259.02000.

### Accessories:

K0688  
K0689  
K0690  
K0101  
K1442  
K0102  
K0103  
K1443  
K0104  
K0106  
K1441



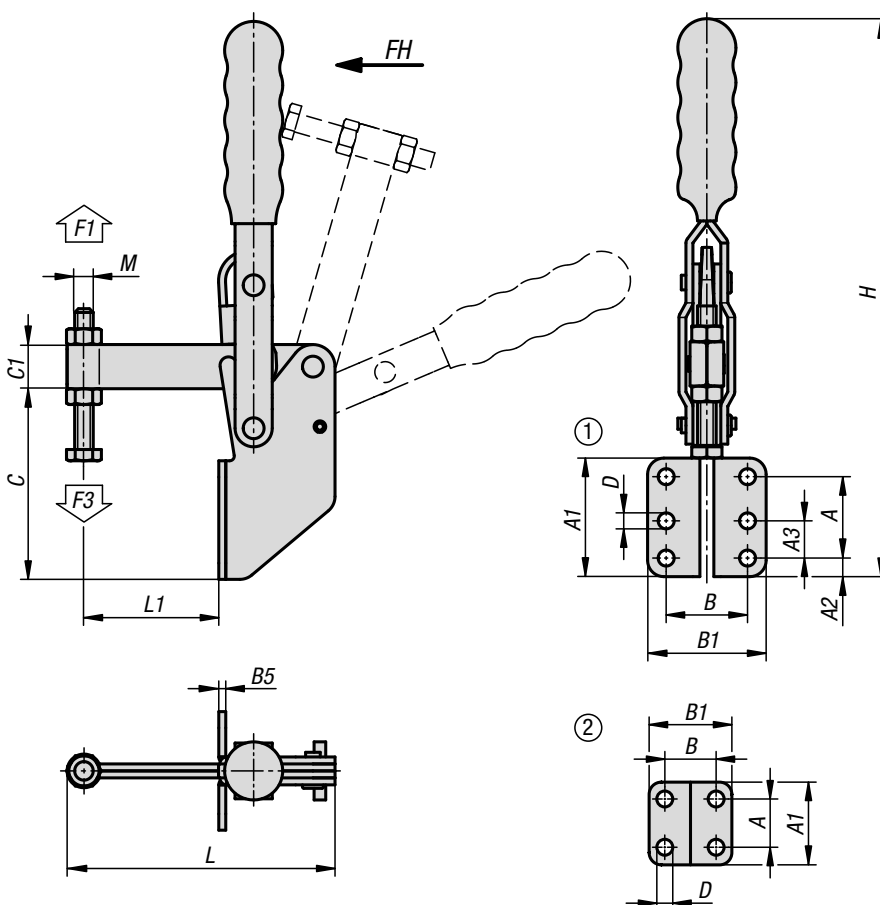
## KIPP Toggle clamps vertical with angled foot and adjustable clamping spindle

| Order No.   | Opening angle of holding arm | Opening angle of handle | Hand force FH N | Retaining force F1 N | Retaining force F2 N | Clamping force F3 N | Clamping force F4 N |
|-------------|------------------------------|-------------------------|-----------------|----------------------|----------------------|---------------------|---------------------|
| K1259.01000 | 96°                          | 69°                     | 50              | 700                  | 1000                 | 500                 | 800                 |
| K1259.02000 | 108°                         | 70°                     | 100             | 1000                 | 2000                 | 900                 | 1300                |
| K1259.03600 | 106°                         | 67°                     | 100             | 1800                 | 3600                 | 900                 | 1800                |

| Order No.   | A  | A1 | A2 | A3 | B    | B1 | B2   | B3  | B5  | C  | C1 | D   | H   | L   | L1 | L2   | M     |
|-------------|----|----|----|----|------|----|------|-----|-----|----|----|-----|-----|-----|----|------|-------|
| K1259.01000 | 14 | 29 | -  | -  | 17,5 | 28 | 10   | 5   | 2,5 | 44 | 10 | 4,9 | 121 | 67  | 31 | 26   | M5x35 |
| K1259.02000 | 19 | 35 | -  | -  | 26   | 42 | 11   | 6   | 3   | 64 | 13 | 5,5 | 170 | 79  | 35 | 29,5 | M6x50 |
| K1259.03600 | 35 | 51 | 8  | 16 | 35   | 51 | 14,8 | 8,8 | 3   | 82 | 19 | 6,8 | 244 | 143 | 93 | 70   | M8x60 |

## Toggle clamps vertical

with angled foot and fixed clamping spindle



### Material:

Steel.

### Version:

Trivalent passivated.  
Clamping spindle and nuts phosphated.  
Plastic grip oil-resistant.

### Sample order:

K1436.00800

### Note:

A neoprene thrust pad is supplied with versions K1436.00800 and K1436.01600.

### Accessories:

K0688  
K0689  
K0690  
K0101  
K1442  
K0102  
K0103  
K1443  
K0104  
K0106



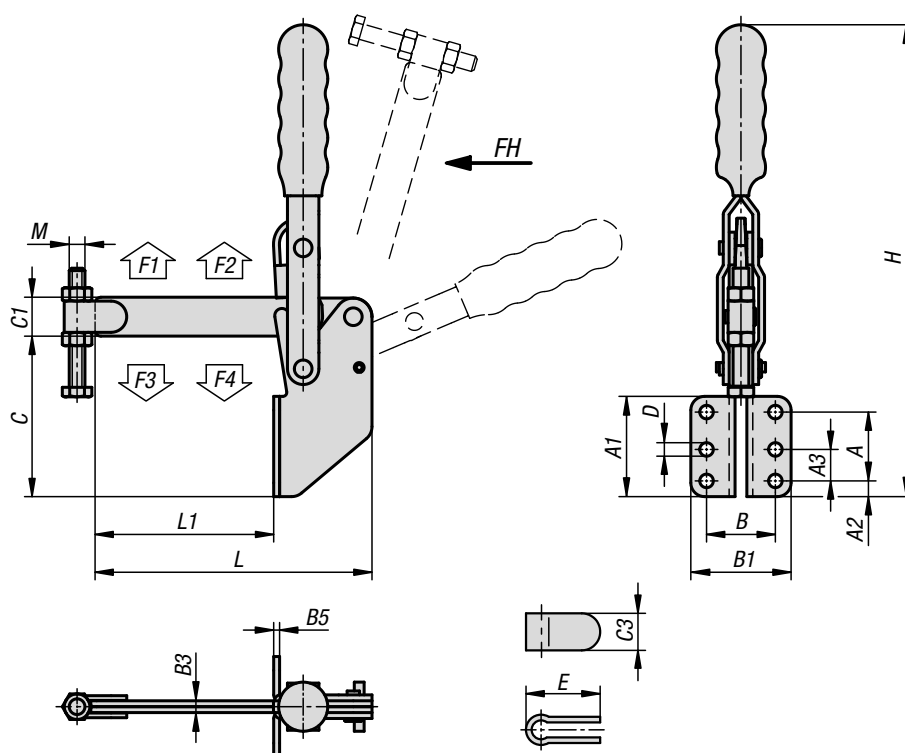
## KIPP Toggle clamps vertical with angled foot and fixed clamping spindle

| Order No.   | Opening angle of holding arm | Opening angle of handle | Hand force FH N | Retaining force F1 N | Clamping force F3 N |
|-------------|------------------------------|-------------------------|-----------------|----------------------|---------------------|
| K1436.00800 | 96°                          | 69°                     | 50              | 800                  | 600                 |
| K1436.01600 | 108°                         | 70°                     | 100             | 1600                 | 1100                |
| K1436.03000 | 106°                         | 67°                     | 100             | 3000                 | 1100                |

| Order No.   | A  | A1 | A2 | A3 | B    | B1 | B5  | C  | C1 | D   | H   | L     | L1   | M     |
|-------------|----|----|----|----|------|----|-----|----|----|-----|-----|-------|------|-------|
| K1436.00800 | 14 | 29 | -  | -  | 17,5 | 28 | 2,5 | 44 | 10 | 4,9 | 121 | 65,65 | 24,5 | M5x35 |
| K1436.01600 | 19 | 35 | -  | -  | 26   | 42 | 3   | 64 | 13 | 5,5 | 170 | 75,7  | 26   | M6x50 |
| K1436.03000 | 35 | 51 | 8  | 16 | 35   | 51 | 3   | 82 | 19 | 6,8 | 244 | 115,3 | 58   | M8x60 |

## Toggle clamps vertical

with angled foot and full holding arm



### Material:

Steel.

### Version:

Electro zinc-plated steel.  
Plastic handle, oil-resistant.

### Sample order:

K1437.03600

### Note:

spindle bracket weldable.

### Accessories:

K0688  
K0689  
K0690  
K0101  
K1442  
K0102  
K0103  
K1443  
K0104  
K0106

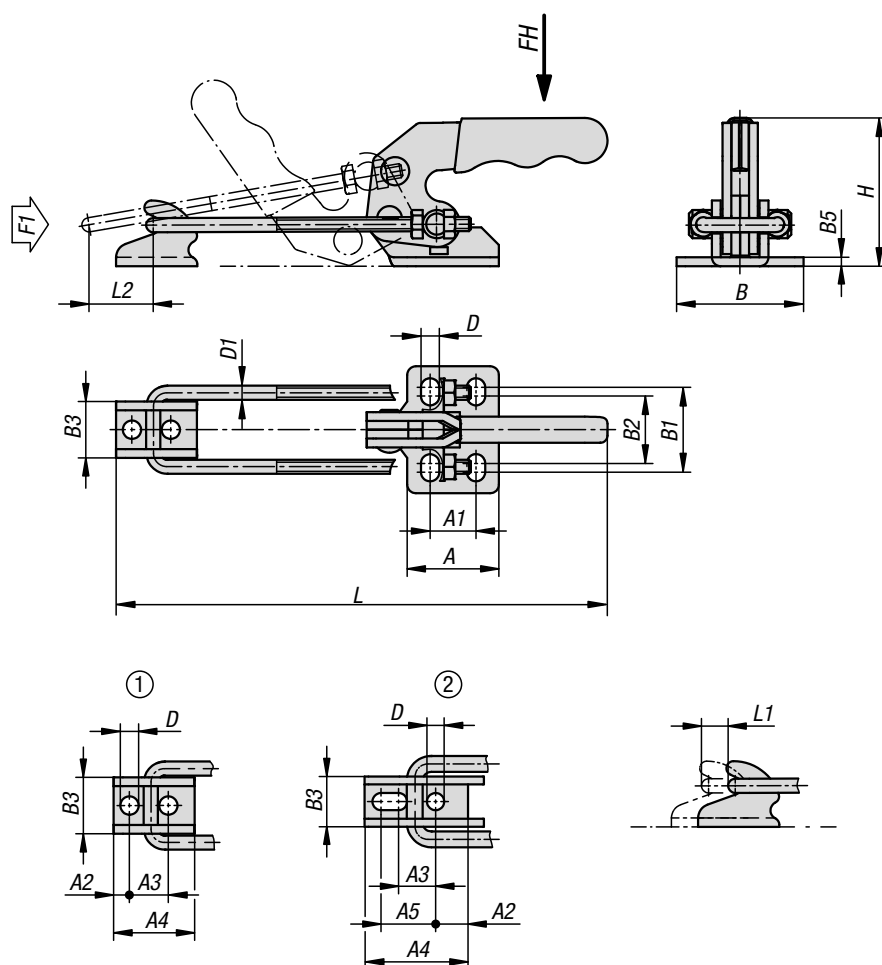
## KIPP Toggle clamps vertical with angled foot and full holding arm

| Order No.   | Opening angle of holding arm | Opening angle of handle | Hand force FH N | Retaining force F1 N | Retaining force F2 N | Clamping force F3 N | Clamping force F4 N |
|-------------|------------------------------|-------------------------|-----------------|----------------------|----------------------|---------------------|---------------------|
| K1437.03600 | 106°                         | 67°                     | 100             | 2000                 | 3600                 | 900                 | 1800                |

| Order No.   | A  | A1 | A2 | A3 | B  | B1 | B3 | B5 | C  | C1 | C3 | D   | E  | H   | L   | L1 | M     |
|-------------|----|----|----|----|----|----|----|----|----|----|----|-----|----|-----|-----|----|-------|
| K1437.03600 | 35 | 51 | 8  | 16 | 35 | 51 | 6  | 3  | 82 | 19 | 16 | 6,8 | 31 | 244 | 143 | 93 | M8x60 |

## Toggle clamps latch horizontal

with catch plate



### Material:

Steel or stainless steel.

### Version:

Electro zinc-plated steel.  
Bright stainless steel.  
Plastic handle, oil-resistant.

### Sample order:

K1260.02000

### Note:

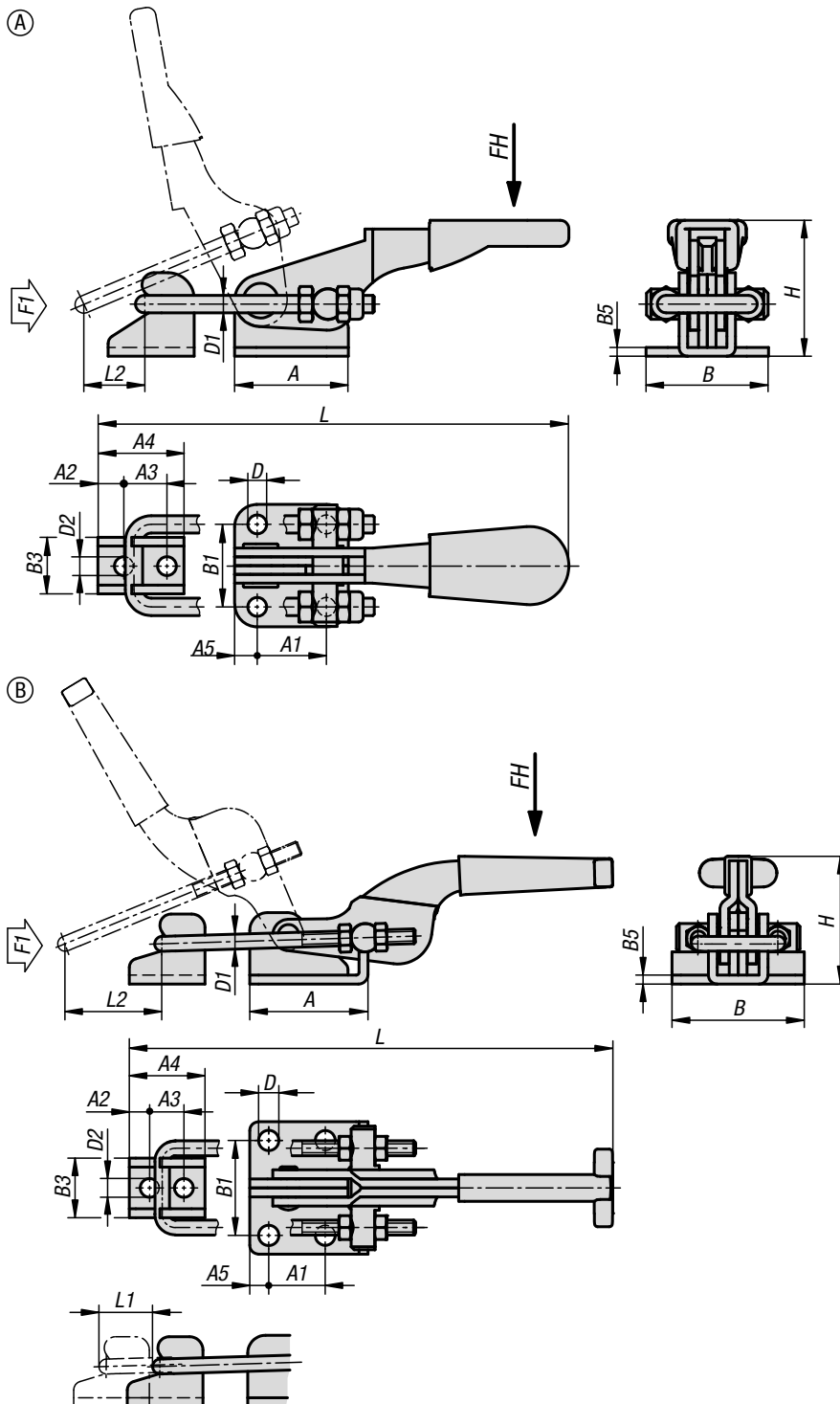
Latch toggle clamps are especially suitable for quickly closing and locking covers and hatches.  
The travel can be set by altering the hasp length.

## KIPP Toggle clamps latch horizontal with catch plate

| Order No.   | Main material   | hole arrangement | Traction force<br>F1 N | Hand force<br>FH N | A  | A1 | A2   | A3 | A4   | A5   | B  | B1 | B2   | B3 | B5  | D   | D1 | H    | Travel path<br>L min. | Travel path<br>L max. | L1   | Clamping travel<br>L2 |
|-------------|-----------------|------------------|------------------------|--------------------|----|----|------|----|------|------|----|----|------|----|-----|-----|----|------|-----------------------|-----------------------|------|-----------------------|
| K1260.02000 | steel           | 1                | 2000                   | 100                | 26 | 13 | 4,5  | 11 | 23   | -    | 36 | 24 | 19   | 16 | 2,5 | 5,2 | 4  | 42   | 101,7                 | 142,3                 | 40,6 | 16                    |
| K1260.04000 | steel           | 2                | 4000                   | 150                | 35 | 19 | 12,2 | 14 | 39,1 | 20,6 | 48 | 32 | 24,8 | 19 | 3   | 6,5 | 6  | 60,5 | 142,4                 | 192,2                 | 49,8 | 24                    |
| K1260.07000 | steel           | 1                | 7000                   | 200                | 51 | 32 | 8    | 19 | 40   | -    | 60 | 45 | 36   | 28 | 4   | 8,5 | 8  | 85,6 | 177,7                 | 234                   | 56,3 | 32                    |
| K1260.12000 | stainless steel | 1                | 2000                   | 100                | 26 | 13 | 4,5  | 11 | 23   | -    | 36 | 24 | 19   | 16 | 2,5 | 5,2 | 4  | 42   | 101,7                 | 142,3                 | 40,6 | 16                    |
| K1260.14000 | stainless steel | 2                | 4000                   | 150                | 35 | 19 | 12,2 | 14 | 39,1 | 20,6 | 48 | 32 | 24,8 | 19 | 3   | 6,5 | 6  | 60,5 | 142,4                 | 192,2                 | 49,8 | 24                    |
| K1260.17000 | stainless steel | 1                | 7000                   | 200                | 51 | 32 | 8    | 19 | 40   | -    | 64 | 45 | 36   | 28 | 4   | 8,6 | 8  | 76,6 | 177,7                 | 234                   | 56,3 | 32                    |

## Toggle clamps latch horizontal

with catch plate



**Material:**  
Steel or stainless steel.

**Version:**  
Electro zinc-plated steel.  
Bright stainless steel.  
Plastic handle, oil-resistant.

**Sample order:**  
K1261.03000

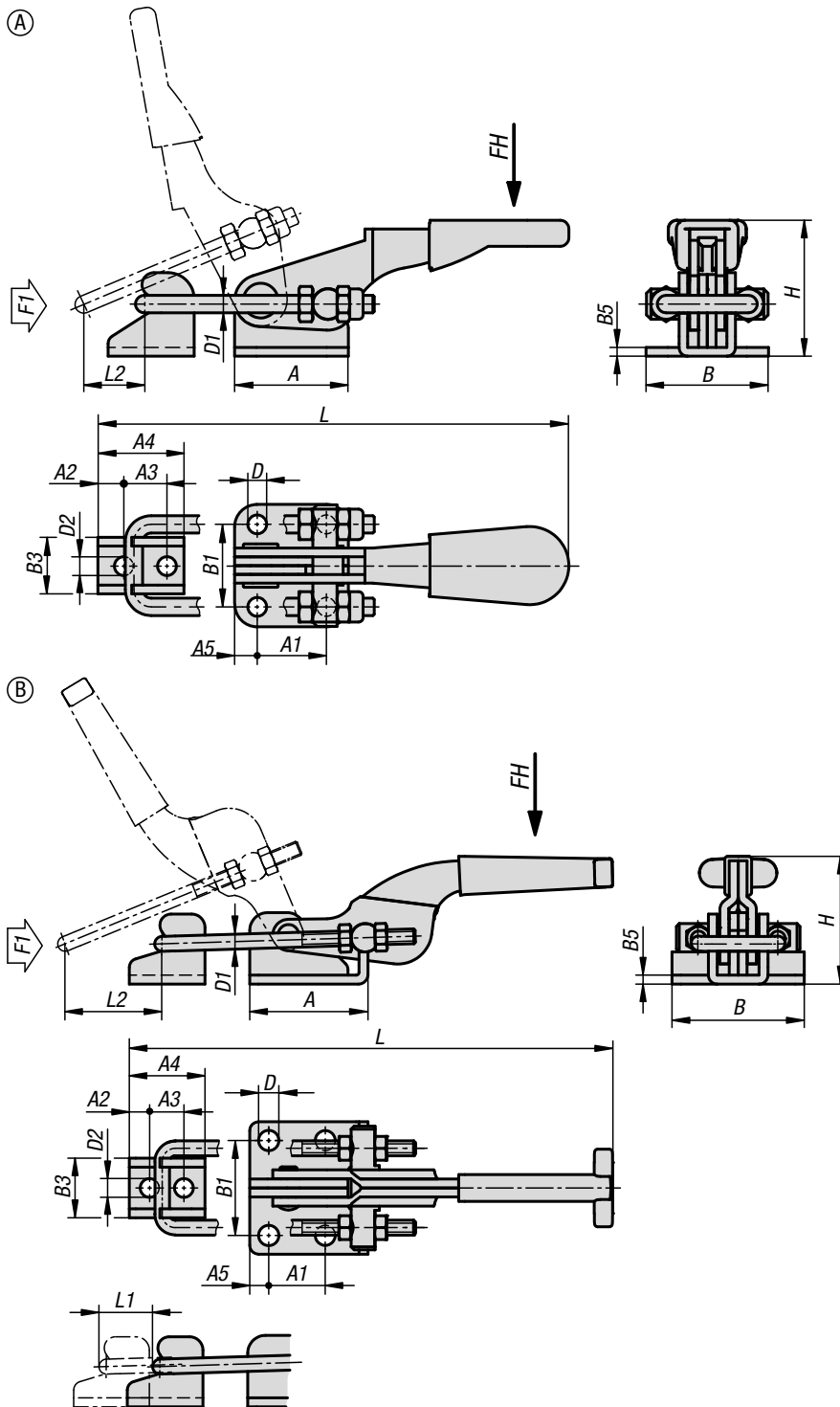
**Note:**  
Latch toggle clamps are especially suitable for quickly closing and locking covers and hatches.  
The travel can be set by altering the hasp length.

### KIPP Toggle clamps latch horizontal with catch plate

| Order No.   | Main material   | Form | Hand force<br>FH N | Traction force<br>F1 N | A    | A1   | A2  | A3   | A4   | A5  | B    | B1   | B3   | B5 | D   | D1 | D2  | H    | Travel path<br>L min. | Travel path<br>L max. | L1   | Clamping travel<br>L2 |
|-------------|-----------------|------|--------------------|------------------------|------|------|-----|------|------|-----|------|------|------|----|-----|----|-----|------|-----------------------|-----------------------|------|-----------------------|
| K1261.01600 | steel           | A    | 100                | 1600                   | 26,2 | 15,9 | 6   | 9,9  | 19,8 | 5,2 | 28,2 | 19   | 13   | 2  | 4,4 | 4  | 4,4 | 31,3 | 82,5                  | 112,5                 | 10,4 | 30                    |
| K1261.11600 | stainless steel | A    | 100                | 1600                   | 26,2 | 15,9 | 6   | 9,9  | 19,8 | 5,2 | 28,2 | 19   | 13   | 2  | 4,4 | 4  | 4,4 | 31,3 | 82,5                  | 112,5                 | 10,4 | 30                    |
| K1261.03000 | steel           | B    | 150                | 3000                   | 39,7 | 19   | 6,8 | 11,5 | 25,4 | 6,4 | 44,4 | 31,8 | 20   | 3  | 6,7 | 5  | 6,3 | 42   | 148,7                 | 170,3                 | 21,6 | 45                    |
| K1261.07000 | steel           | B    | 200                | 7000                   | 60,3 | 41,3 | 9,5 | 19,1 | 38,1 | 9,5 | 54   | 38,1 | 30,2 | 4  | 8,6 | 8  | 8,5 | 76,1 | 209,1                 | 232,8                 | 23,7 | 75                    |
| K1261.13000 | stainless steel | B    | 150                | 3000                   | 39,7 | 19   | 6,8 | 11,5 | 25,4 | 6,4 | 44,4 | 31,8 | 20   | 3  | 6,7 | 5  | 6,3 | 42   | 148,7                 | 170,3                 | 21,6 | 45                    |
| K1261.17000 | stainless steel | B    | 200                | 7000                   | 60,3 | 41,3 | 9,5 | 19,1 | 38,1 | 9,5 | 54   | 38,1 | 30,2 | 4  | 8,6 | 8  | 8,5 | 76,1 | 209,1                 | 232,8                 | 23,7 | 75                    |

## Toggle clamps latch horizontal

heavy-duty with catch plate



### Material:

Steel. Body and catch plate cast steel.  
Grip ductile iron (SGI).

### Version:

Trivalent passivated.  
Plastic grip oil-resistant.

### Sample order:

K1262.020000

### Note:

Horizontal latch toggle clamps are especially suitable for quickly closing and locking covers and hatches. The travel can be set by altering the hasp length.

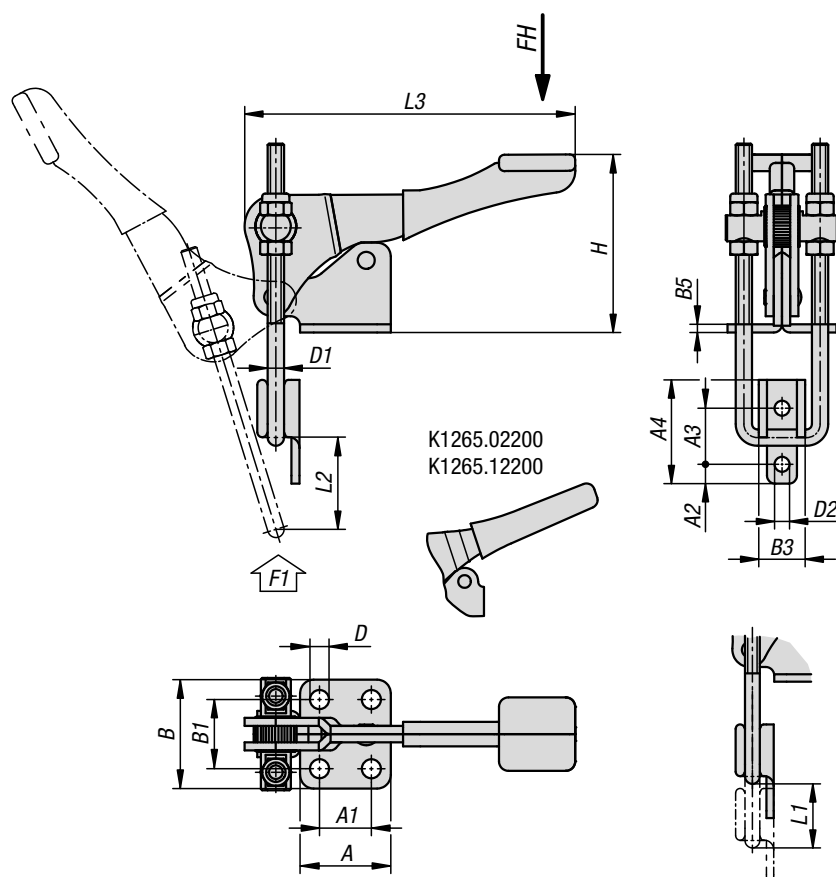
### KIPP Toggle clamps, latch, horizontal, heavy-duty with catch plate

| Order No.    | Opening angle of handle | Hand force FH N | Traction force F1 N | Retaining force F2 N | Travel path L min. | Travel path L max. | Travel path L1 min. | Travel path L1 max. | Clamping travel L2 |
|--------------|-------------------------|-----------------|---------------------|----------------------|--------------------|--------------------|---------------------|---------------------|--------------------|
| K1262.020000 | 138°                    | 600             | 16500               | 20000                | 270                | 320                | 38                  | 88                  | 60                 |
| K1262.040000 | 120°                    | 600             | 19000               | 40000                | 335                | 395                | 52                  | 112                 | 70                 |

| Order No.    | A    | A1 | A2 | A3 | A4 | B  | B1 | B3 | B5 | D    | D1 | H     | T    |
|--------------|------|----|----|----|----|----|----|----|----|------|----|-------|------|
| K1262.020000 | 59,5 | 24 | 37 | 18 | 65 | 74 | 50 | 28 | 10 | 10,4 | 10 | 114,3 | 27   |
| K1262.040000 | 82   | 36 | 44 | 22 | 78 | 84 | 56 | 34 | 12 | 12,4 | 12 | 131   | 33,5 |

## Toggle clamps latch vertical

with catch plate



### Material:

Steel or stainless steel.

### Version:

Electro zinc-plated steel.  
Bright stainless steel.  
Plastic handle, oil-resistant.

### Sample order:

K1265.02200

### Note:

Latch toggle clamps are especially suitable for quickly closing and locking covers and hatches.  
The travel can be set by altering the hasp length.

## KIPP Toggle clamps latch vertical with catch plate

| Order No.   | Main material   | Hand force FH N | Traction force F1 N | A    | A1   | A2  | A3   | A4   | B  | B1   | B3   | B5 | D   | D1 | D2  | H    | L1   | Clamping travel L2 | L3    |
|-------------|-----------------|-----------------|---------------------|------|------|-----|------|------|----|------|------|----|-----|----|-----|------|------|--------------------|-------|
| K1265.02200 | steel           | 100             | 2200                | 26   | 13   | 4   | 14,3 | 25,4 | 35 | 22   | 13,5 | 2  | 5,3 | 4  | 4,4 | 55   | 12,2 | 38                 | 81    |
| K1265.04500 | steel           | 150             | 4500                | 33,3 | 19,1 | 7,1 | 20,6 | 38,1 | 40 | 25,4 | 17   | 3  | 7,1 | 6  | 5,6 | 65,4 | 20,3 | 50                 | 121,5 |
| K1265.07000 | steel           | 200             | 9000                | 47,6 | 31,8 | 9,5 | 27   | 54   | 53 | 36,5 | 30   | 4  | 8,7 | 8  | 8,7 | 85,5 | 29,4 | 63                 | 132,4 |
| K1265.12200 | stainless steel | 100             | 2200                | 26   | 13   | 4   | 14,3 | 25,4 | 35 | 22   | 13,5 | 2  | 5,3 | 4  | 4,4 | 55   | 12,2 | 38                 | 81    |
| K1265.14500 | stainless steel | 150             | 4500                | 33,3 | 19,1 | 7,1 | 20,6 | 38,1 | 40 | 25,4 | 17   | 3  | 7,1 | 6  | 5,6 | 65,4 | 20,3 | 50                 | 121,5 |
| K1265.17000 | stainless steel | 200             | 9000                | 47,6 | 31,8 | 9,5 | 27   | 54   | 53 | 36,5 | 30   | 4  | 8,7 | 8  | 8,7 | 92   | 29,4 | 63                 | 132,4 |

## Toggle clamps latch horizontal

heavy-duty with catch plate



### Material:

Steel or stainless steel.

### Version:

Electro zinc-plated steel.

Bright stainless steel.

Plastic handle, oil-resistant.

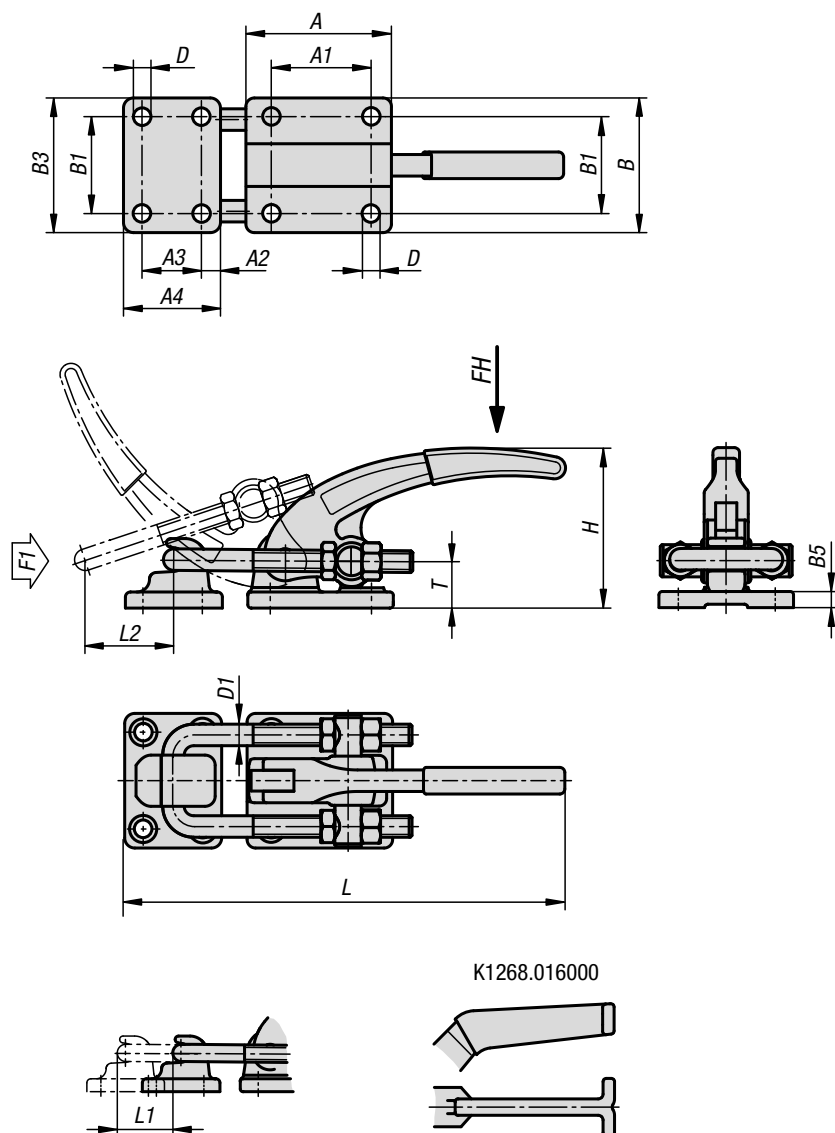
### Sample order:

K1268.016000

### Note:

Latch toggle clamps are especially suitable for quickly closing and locking covers and hatches.

The travel can be set by altering the hasp length.



K1268.016000

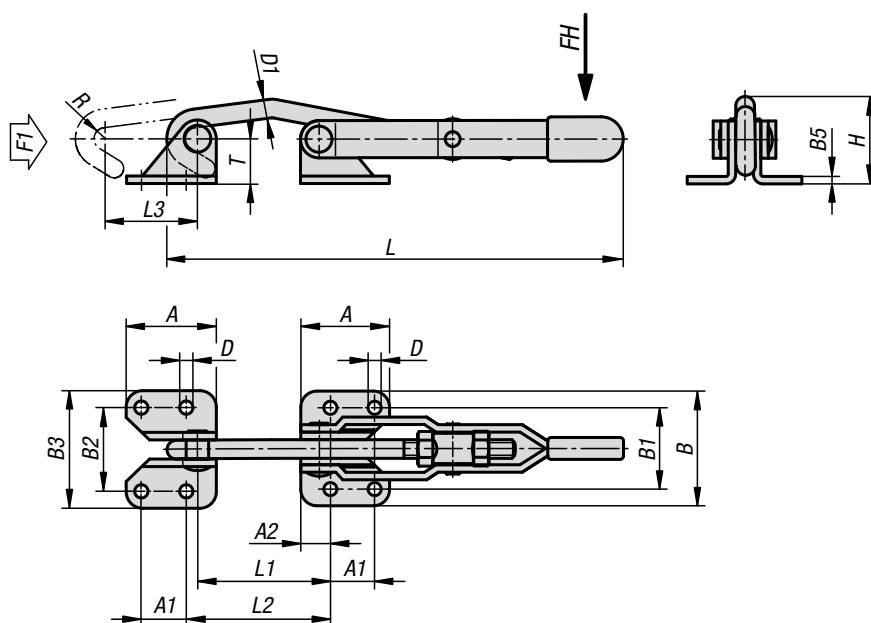
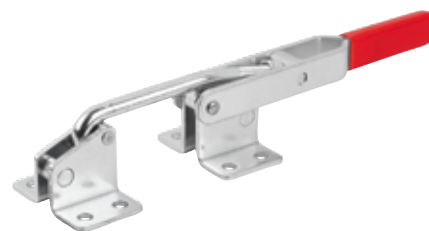
## KIPP Toggle clamps, latch, horizontal, heavy-duty with catch plate

| Order No.    | Main material   | Hand force<br>FH N | Traction force<br>F1 N | A    | A1   | A2   | A3   | A4   | B    | B1   | B3   | B5  | D    | D1   | H    | Travel path<br>L min. | Travel path<br>L max. | L1   | Clamping travel<br>L2 | T    |
|--------------|-----------------|--------------------|------------------------|------|------|------|------|------|------|------|------|-----|------|------|------|-----------------------|-----------------------|------|-----------------------|------|
| K1268.016000 | steel           | 300                | 16000                  | 85,8 | 57,2 | -    | 34,9 | 57,2 | 79,4 | 57,2 | 80,5 | 9,6 | 10,3 | 9,6  | 95,5 | 274,5                 | 297,3                 | 22,8 | 87                    | 28,6 |
| K1268.030000 | steel           | 500                | 30000                  | 85,8 | 57,2 | 11,2 | 34,9 | 57,2 | 79,4 | 57,2 | 80,5 | 9,6 | 10,3 | 12,7 | 93,8 | 249,6                 | 278                   | 28,4 | 50                    | 28,6 |
| K1268.130000 | stainless steel | 500                | 30000                  | 85,8 | 57,2 | 11,2 | 34,9 | 57,2 | 79,4 | 57,2 | 80,5 | 9,6 | 10,3 | 12,7 | 93,8 | 249,6                 | 278                   | 28,4 | 50                    | 28,6 |



## Toggle clamps hook horizontal

with catch plate



### Material:

Steel or stainless steel.

### Version:

Electro zinc-plated steel.  
Bright stainless steel.  
Plastic handle, oil-resistant.

### Sample order:

K1270.02500

### Note:

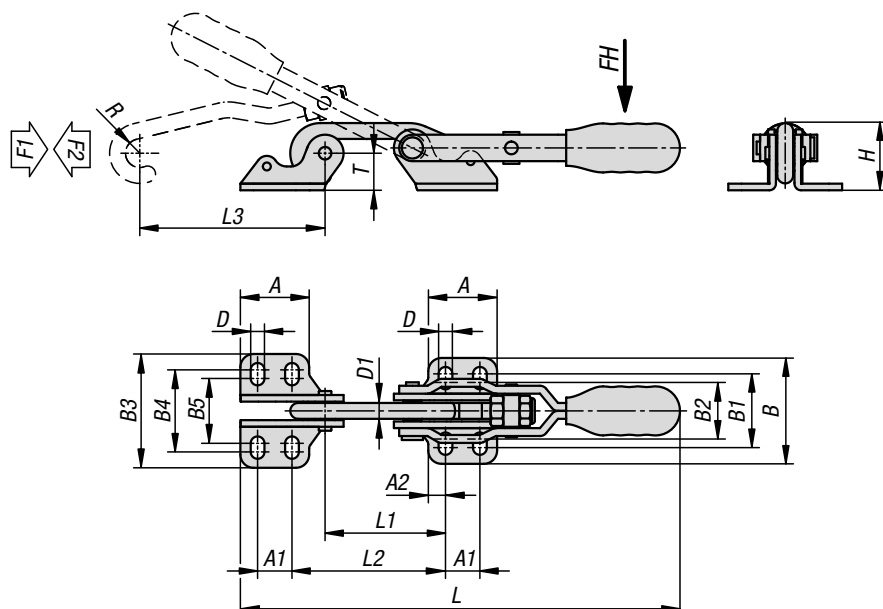
Horizontal hook toggle clamps are especially suitable for quickly closing and locking covers and hatches. The amount of travel can be set by altering the hook length. Adjustment length: 0 - 5 mm.

## KIPP Toggle clamps hook horizontal with catch plate

| Order No.   | Main material   | Hand force FH N | Traction force F1 N | A    | A1   | A2   | B    | B1   | B2   | B3   | B5 | D    | D1   | H    | L     | L1   | L2   | Clamping travel L3 | R   | T    |
|-------------|-----------------|-----------------|---------------------|------|------|------|------|------|------|------|----|------|------|------|-------|------|------|--------------------|-----|------|
| K1270.02500 | steel           | 150             | 2500                | 38,1 | 19   | 12,7 | 49,2 | 34,9 | 36,8 | 51,1 | 3  | 5,6  | 8    | 36,5 | 212   | 71,1 | 75,8 | 100                | 4,9 | 16,9 |
| K1270.04000 | steel           | 150             | 4000                | 47,6 | 31,8 | 7,9  | 65,7 | 49,2 | 49,2 | 65,7 | 4  | 8,7  | 9,5  | 57,4 | 287,5 | 86,9 | 82,1 | 133,8              | 7   | 33   |
| K1270.05000 | steel           | 200             | 5000                | 54   | 28,6 | 12,7 | 85,7 | 60,3 | 60,3 | 85,7 | 5  | 10,3 | 12,7 | 67   | 337,5 | 90,4 | 91,9 | 153                | 8   | 42,6 |
| K1270.12500 | stainless steel | 150             | 2500                | 38,1 | 19   | 12,7 | 49,2 | 34,9 | 36,8 | 51,1 | 3  | 5,6  | 8    | 36,5 | 212   | 71,1 | 75,8 | 100                | 4,9 | 16,9 |

## Toggle clamps hook horizontal

with catch plate



### Material:

Steel or stainless steel.

### Version:

Electro zinc-plated steel.  
Bright stainless steel.  
Plastic handle, oil-resistant.

### Sample order:

K1432.02000

### Note:

Horizontal hook toggle clamps are especially suitable for quickly closing and locking covers and hatches. The amount of travel can be set by altering the hook length. Adjustment length: 0 - 5 mm.

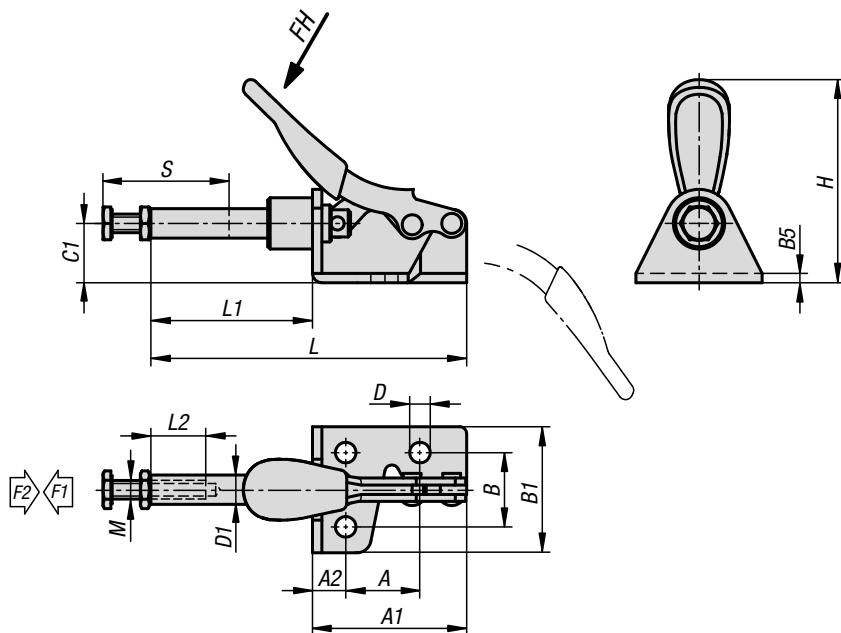
## KIPP Toggle clamps hook horizontal with catch plate

| Order No.   | Main material   | Opening angle of handle | Hand force FH N | Traction force F1 N | Retaining force F2 N |
|-------------|-----------------|-------------------------|-----------------|---------------------|----------------------|
| K1432.02000 | steel           | 153°                    | 100             | 1500                | 2000                 |
| K1432.04000 | steel           | 155°                    | 160             | 3000                | 4000                 |
| K1432.07000 | steel           | 155°                    | 200             | 4000                | 7000                 |
| K1432.12000 | stainless steel | 153°                    | 100             | 1500                | 2000                 |
| K1432.14000 | stainless steel | 155°                    | 160             | 3000                | 4000                 |
| K1432.17000 | stainless steel | 155°                    | 200             | 4000                | 7000                 |

| Order No.   | Main material   | A  | A1 | A2  | B    | B1   | B2   | B3 | B4 | B5   | D   | D1 | H    | L   | L1   | L2  | Clamping travel L3 | R   | T  |
|-------------|-----------------|----|----|-----|------|------|------|----|----|------|-----|----|------|-----|------|-----|--------------------|-----|----|
| K1432.02000 | steel           | 26 | 13 | 6,5 | 40   | 28   | 21,5 | 43 | 31 | 24,5 | 5,2 | 6  | 25,4 | 167 | 45,5 | 58  | 70                 | 5,4 | 14 |
| K1432.04000 | steel           | 35 | 19 | 8   | 52   | 36   | 29   | 57 | 41 | 34   | 6,5 | 8  | 35   | 247 | 68,2 | 84  | 90                 | 7   | 20 |
| K1432.07000 | steel           | 51 | 32 | 9,5 | 71,5 | 52,5 | 43,5 | 78 | 59 | 50   | 8,5 | 12 | 49,3 | 314 | 84   | 104 | 115                | 10  | 27 |
| K1432.12000 | stainless steel | 26 | 13 | 6,5 | 40   | 28   | 21,5 | 43 | 31 | 24,5 | 5,2 | 6  | 25,4 | 167 | 45,5 | 58  | 70                 | 5,4 | 14 |
| K1432.14000 | stainless steel | 35 | 19 | 8   | 52   | 36   | 29   | 57 | 41 | 34   | 6,5 | 8  | 35   | 247 | 68,2 | 84  | 90                 | 7   | 20 |
| K1432.17000 | stainless steel | 51 | 32 | 9,5 | 71,5 | 52,5 | 43,5 | 78 | 59 | 50   | 8,5 | 12 | 49,3 | 314 | 84   | 104 | 115                | 10  | 27 |

## Mini push-pull toggle clamp

with mounting bracket



### Material:

Steel or stainless steel.

### Version:

Electro zinc-plated steel.  
Bright stainless steel.  
Plastic handle, oil-resistant.

### Sample order:

K1545.00500

### Note:

The clamps lock in the open and closed handle positions.  
This means they can clamp during the pushing or pulling actions.

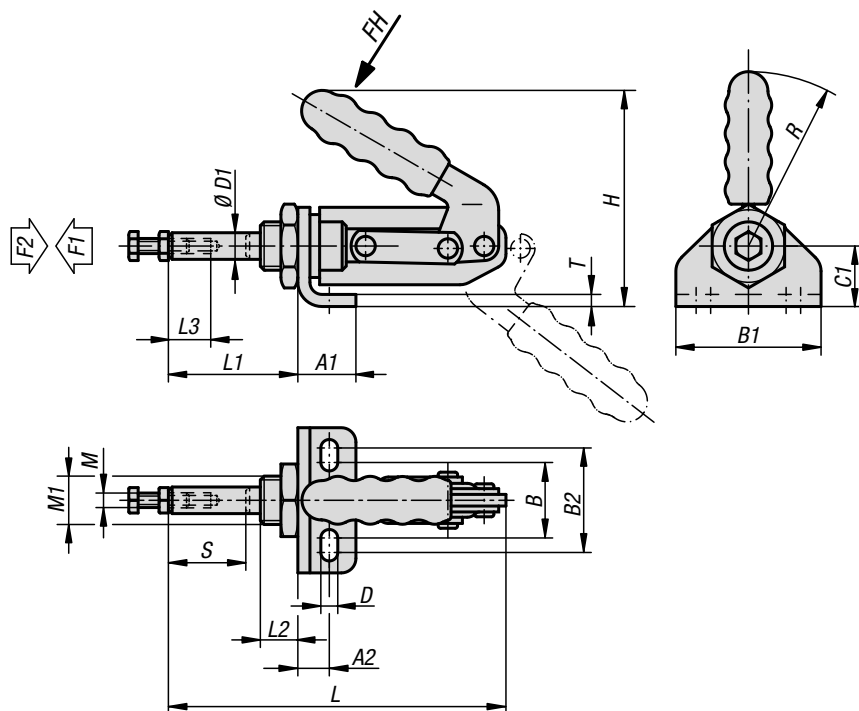
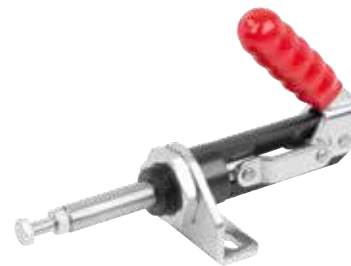
### KIPP Push-Pull Mini-Clamp with mounting bracket

| Order No.   | Main material   | Opening angle of handle | Hand force FH N | Clamping force F1 N | Retaining force F2 N |
|-------------|-----------------|-------------------------|-----------------|---------------------|----------------------|
| K1545.00500 | steel           | 190°                    | 80              | 500                 | 500                  |
| K1545.10500 | stainless steel | 190°                    | 80              | 500                 | 500                  |

| Order No.   | Main material   | A    | A1 | A2  | B    | B1 | B5 | C1   | D   | D1  | H    | L    | L1   | L2 | M     | Travel S |
|-------------|-----------------|------|----|-----|------|----|----|------|-----|-----|------|------|------|----|-------|----------|
| K1545.00500 | steel           | 15,9 | 33 | 7,1 | 15,9 | 27 | 2  | 12,7 | 4,4 | 6,3 | 43,5 | 67,9 | 34,9 | 12 | M4x20 | 17       |
| K1545.10500 | stainless steel | 15,9 | 33 | 7,1 | 15,9 | 27 | 2  | 12,7 | 4,4 | 6,3 | 43,5 | 67,9 | 34,9 | 12 | M4x20 | 17       |

## Push-pull toggle clamp

with mounting bracket



### Material:

Steel.

### Version:

Steel electro zinc-plated and passivated.  
Plastic handle oil-resistant.

### Sample order:

K1546.02400

### Note:

As the push-pull toggle clamps lock in open and closed handle positions, they can be used to clamp when pushing or pulling.

The fastening nut supplied allows the clamps to be mounted in any desired position.

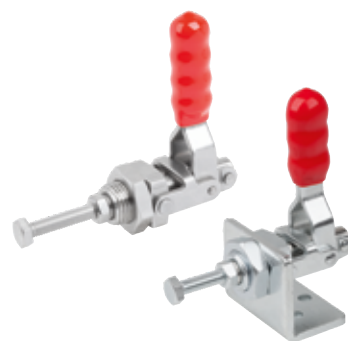
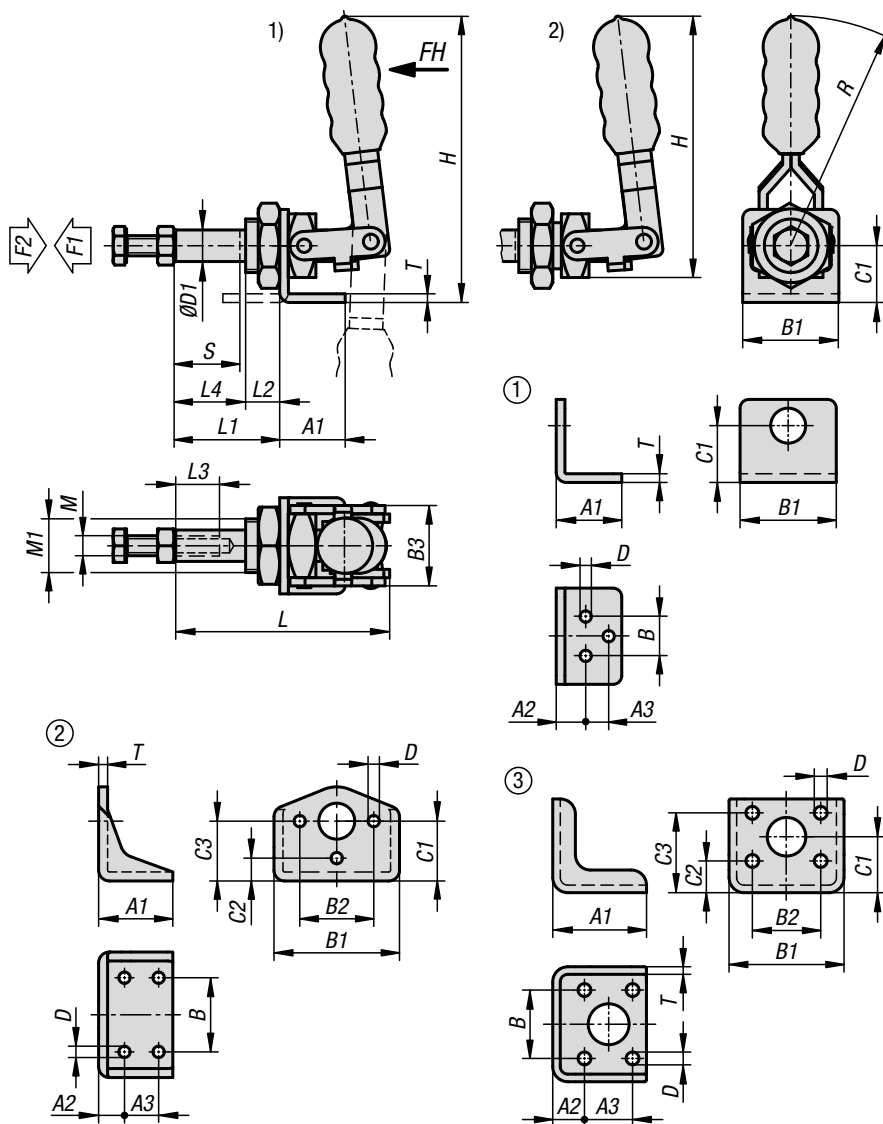
## KIPP Push-Pull Clamps with mounting bracket

| Order No.   | Opening angle of handle | Hand force FH N | Clamping force F1 N | Retaining force F2 N |
|-------------|-------------------------|-----------------|---------------------|----------------------|
| K1546.02400 | 190°                    | 150             | 1200                | 2400                 |
| K1546.04000 | 185°                    | 180             | 2000                | 4000                 |

| Order No.   | A1   | A2   | B  | B1 | B2 | C1 | D   | D1 | H   | L   | L1   | L2   | L3 | M   | M1      | R  | T   | Travel S |
|-------------|------|------|----|----|----|----|-----|----|-----|-----|------|------|----|-----|---------|----|-----|----------|
| K1546.02400 | 22,4 | 13,4 | 30 | 57 | 42 | 25 | 6,5 | 11 | 85  | 136 | 51   | 13   | 12 | M6  | M20x1,5 | 60 | 4   | 32       |
| K1546.04000 | 28   | 15,5 | 30 | 64 | 45 | 30 | 8,5 | 16 | 120 | 173 | 59,5 | 17,5 | 20 | M10 | M24x1,5 | 90 | 4,5 | 38       |

# Push-pull toggle clamp

with mounting bracket



## Material:

Steel or stainless steel.

## Version:

Steel electro zinc-plated and passivated.  
Bright stainless steel.  
Plastic grip oil-resistant

## Sample order:

K1547.01000

## Note:

As the push-pull toggle clamps lock in open and closed handle positions, they can be used to clamp when pushing or pulling.

The fastening nut supplied allows the clamps to be mounted in any desired position.

## Attention:

The stainless steel versions come without mounting bracket.

## Drawing reference:

1) with mounting bracket  
2) without mounting bracket

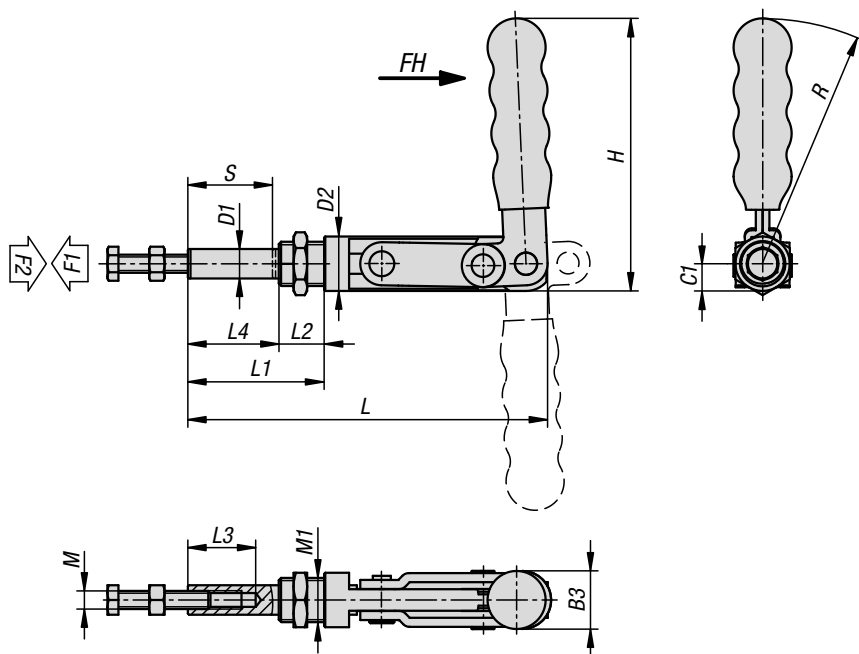
## KIPP Push-Pull Clamps with mounting bracket

| Order No.<br>steel<br>with mounting bracket | Order No.<br>stainless steel<br>without mounting bracket | hole<br>arrangement | M   | M1      | R    | Travel<br>S | Opening<br>angle of<br>handle | Hand<br>force<br>FH N | Clamping<br>force<br>F1 N | Retaining<br>force<br>F2 N |
|---------------------------------------------|----------------------------------------------------------|---------------------|-----|---------|------|-------------|-------------------------------|-----------------------|---------------------------|----------------------------|
| K1547.01000                                 | K1547.11000                                              | 1/-                 | M6  | M16x1,5 | 68,5 | 20,3        | 189°                          | 40                    | 500                       | 1000                       |
| K1547.02000                                 | K1547.12000                                              | 2/-                 | M8  | M20x1,5 | 90   | 40          | 186°                          | 60                    | 1000                      | 2000                       |
| K1547.04000                                 | K1547.14000                                              | 3/-                 | M10 | M27x2   | 127  | 66,7        | 181°                          | 100                   | 2000                      | 4000                       |

| Order No.<br>steel<br>with mounting bracket | Order No.<br>stainless steel<br>without mounting bracket | A1     | A2     | A3     | B      | B1     | B2     | B3     | C1   | C2     | C3     | D     | D1   | H         | L     | L1        | L2       | L3   | L4   | T   |
|---------------------------------------------|----------------------------------------------------------|--------|--------|--------|--------|--------|--------|--------|------|--------|--------|-------|------|-----------|-------|-----------|----------|------|------|-----|
| K1547.01000                                 | K1547.11000                                              | 30/-   | 13,5/- | 10,5/- | 18/-   | 44/-   | -      | 24/-   | 26/- | -      | -      | 5,2/- | 9,4  | 94,5/78   | 64,3  | 30/34     | 8,7/12,7 | 15,8 | 21,3 | 4/- |
| K1547.02000                                 | K1547.12000                                              | 41,3/- | 14,4/- | 19/-   | 41,3/- | 69,9/- | 41,3/- | 28,6/- | 33/- | 12,7/- | 33,3/- | 5,6/- | 10,9 | 123/100,9 | 118,7 | 41,7/46,7 | 11/16    | 25,4 | 40,7 | 5/- |
| K1547.04000                                 | K1547.14000                                              | 62/-   | 21/-   | 31,8/- | 45,2/- | 76/-   | 45,2/- | 40/-   | 37/- | 21/-   | 52,8/- | 8,5/- | 15,9 | 164,5/143 | 169,2 | 86/91     | 17/22    | 32   | 69   | 5/- |

## Toggle clamps push-pull

without mounting bracket



### Material:

Steel.

### Version:

Trivalent passivated.

Connecting rod, guide body and thrust screw phosphated.

Plastic grip oil-resistant.

### Sample order:

K1440.03500

### Note:

As the push-pull toggle clamps lock in open and closed handle positions, they can be used to clamp when pushing or pulling.

The fastening nut supplied allows the clamps to be mounted in any desired position.

### Accessories:

K0101  
K1442  
K0102  
K0103  
K1443  
K0106

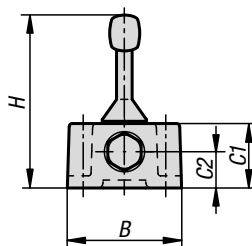
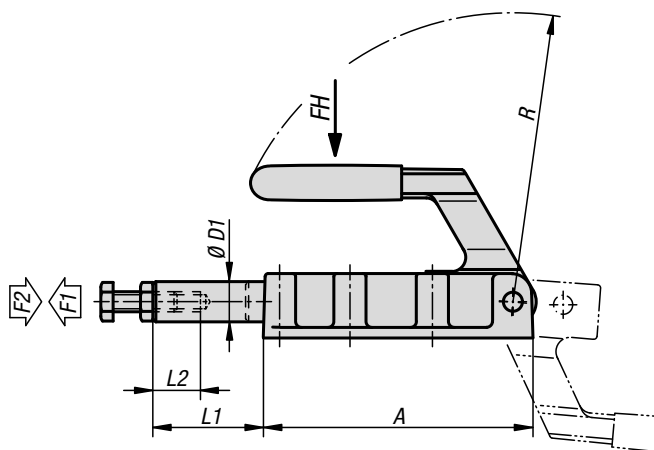
## KIPP Toggle clamps push-pull without mounting bracket

| Order No.   | Opening angle of handle | Hand force FH N | Clamping force F1 N | Retaining force F2 N |
|-------------|-------------------------|-----------------|---------------------|----------------------|
| K1440.03500 | 185°                    | 100             | 1400                | 3500                 |
| K1440.05500 | 185°                    | 140             | 1500                | 5500                 |
| K1440.07500 | 185°                    | 160             | 1600                | 7500                 |

| Order No.   | B3   | C1   | D1 | D2   | H     | L     | L1   | L2 | L3 | L4   | M      | M1      | R     | Travel S |
|-------------|------|------|----|------|-------|-------|------|----|----|------|--------|---------|-------|----------|
| K1440.03500 | 24   | 9,5  | 10 | 19   | 104,5 | 126,4 | 52   | 16 | 18 | 36   | M6x25  | M16x1,5 | 95    | 31       |
| K1440.05500 | 25,6 | 12   | 13 | 24   | 120,5 | 158,5 | 60   | 20 | 30 | 40   | M8x40  | M20x1,5 | 108,5 | 38       |
| K1440.07500 | 29   | 14,3 | 16 | 28,6 | 146,3 | 234,9 | 92,8 | 23 | 40 | 69,8 | M10x50 | M24x1,5 | 132   | 67       |

# Push-pull clamps

heavy-duty version with handle



## Material:

Steel.  
Body and handle ductile iron (SG iron)

## Version:

Phosphated.  
Plastic grip oil-resistant.

## Sample order:

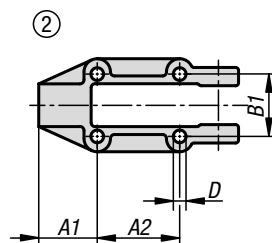
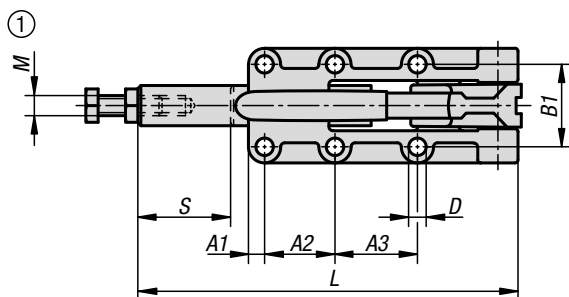
K0087.250003

## Note:

The clamps lock in the open and closed handle positions. They can be used for thrust or tension clamping. These clamps also have travel limitation for advance and retraction.

## Accessories:

K0101  
K0102  
K0103  
K0106



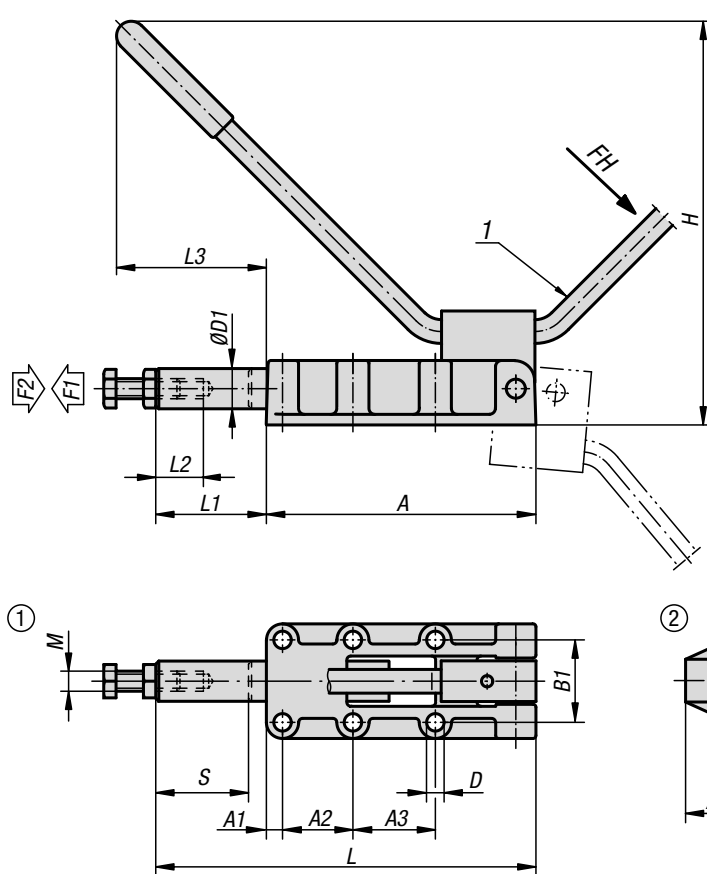
## KIPP Push-pull clamps heavy-duty version with handle

| Order No.    | hole arrangement | Component colour | Opening angle of handle | Hand force FH N | Retaining force F2 N | Clamping force F1 N |
|--------------|------------------|------------------|-------------------------|-----------------|----------------------|---------------------|
| K0087.0600   | 2                | blue             | 185°                    | 140             | 6000                 | 3000                |
| K0087.1200   | 1                | blue             | 185°                    | 150             | 12000                | 5000                |
| K0087.2500   | 1                | blue             | 185°                    | 170             | 25000                | 5000                |
| K0087.5000   | 1                | blue             | 185°                    | 200             | 50000                | 7000                |
| K0087.060003 | 2                | red              | 185°                    | 140             | 6000                 | 3000                |
| K0087.120003 | 1                | red              | 185°                    | 150             | 12000                | 5000                |
| K0087.250003 | 1                | red              | 185°                    | 170             | 25000                | 5000                |
| K0087.500003 | 1                | red              | 185°                    | 200             | 50000                | 7000                |

| Order No.    | A   | A1 | A2   | A3 | B  | B1   | C1 | C2 | D    | D1 | H   | L   | L1  | L2 | M   | R   | Travel S |
|--------------|-----|----|------|----|----|------|----|----|------|----|-----|-----|-----|----|-----|-----|----------|
| K0087.0600   | 89  | 25 | 36,5 | -  | 46 | 33,4 | 23 | 12 | 5,5  | 14 | 63  | 127 | 38  | 30 | M8  | 95  | 32       |
| K0087.1200   | 133 | 8  | 35   | 41 | 61 | 41   | 32 | 18 | 8,5  | 20 | 88  | 188 | 55  | 40 | M10 | 143 | 50       |
| K0087.2500   | 197 | 11 | 45   | 45 | 82 | 54   | 41 | 22 | 10,3 | 25 | 108 | 300 | 103 | 60 | M12 | 200 | 75       |
| K0087.5000   | 254 | 10 | 70   | 70 | 85 | 57   | 50 | 28 | 10,3 | 30 | 127 | 390 | 136 | 60 | M16 | 245 | 100      |
| K0087.060003 | 89  | 25 | 36,5 | -  | 46 | 33,4 | 23 | 12 | 5,5  | 14 | 63  | 127 | 38  | 30 | M8  | 95  | 32       |
| K0087.120003 | 133 | 8  | 35   | 41 | 61 | 41   | 32 | 18 | 8,5  | 20 | 88  | 188 | 55  | 40 | M10 | 143 | 50       |
| K0087.250003 | 197 | 11 | 45   | 45 | 82 | 54   | 41 | 22 | 10,3 | 25 | 108 | 300 | 103 | 60 | M12 | 200 | 75       |
| K0087.500003 | 254 | 10 | 70   | 70 | 85 | 57   | 50 | 28 | 10,3 | 30 | 127 | 390 | 136 | 60 | M16 | 245 | 100      |

# Push-pull clamps

heavy-duty version with reversible hand lever



## Material:

Steel.  
Body ductile iron (SG iron)

## Version:

Phosphated.  
Lever trivalent passivated.  
Plastic grip oil-resistant.

## Sample order:

K0088.060003

## Note:

The clamps lock in the open and closed handle positions. They can be used for thrust or tension clamping.  
These clamps also have travel limitation for advance and retraction.

## Accessories:

K0099  
K0101  
K0102  
K0103  
K0106

## Drawing reference:

1) handle can be mounted right or left

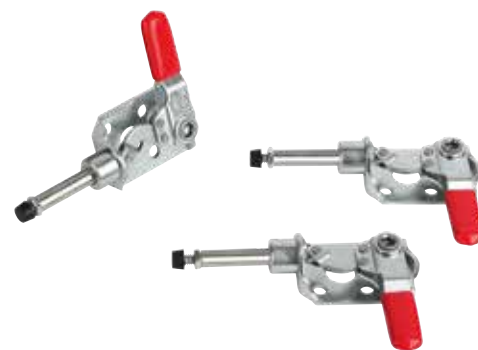
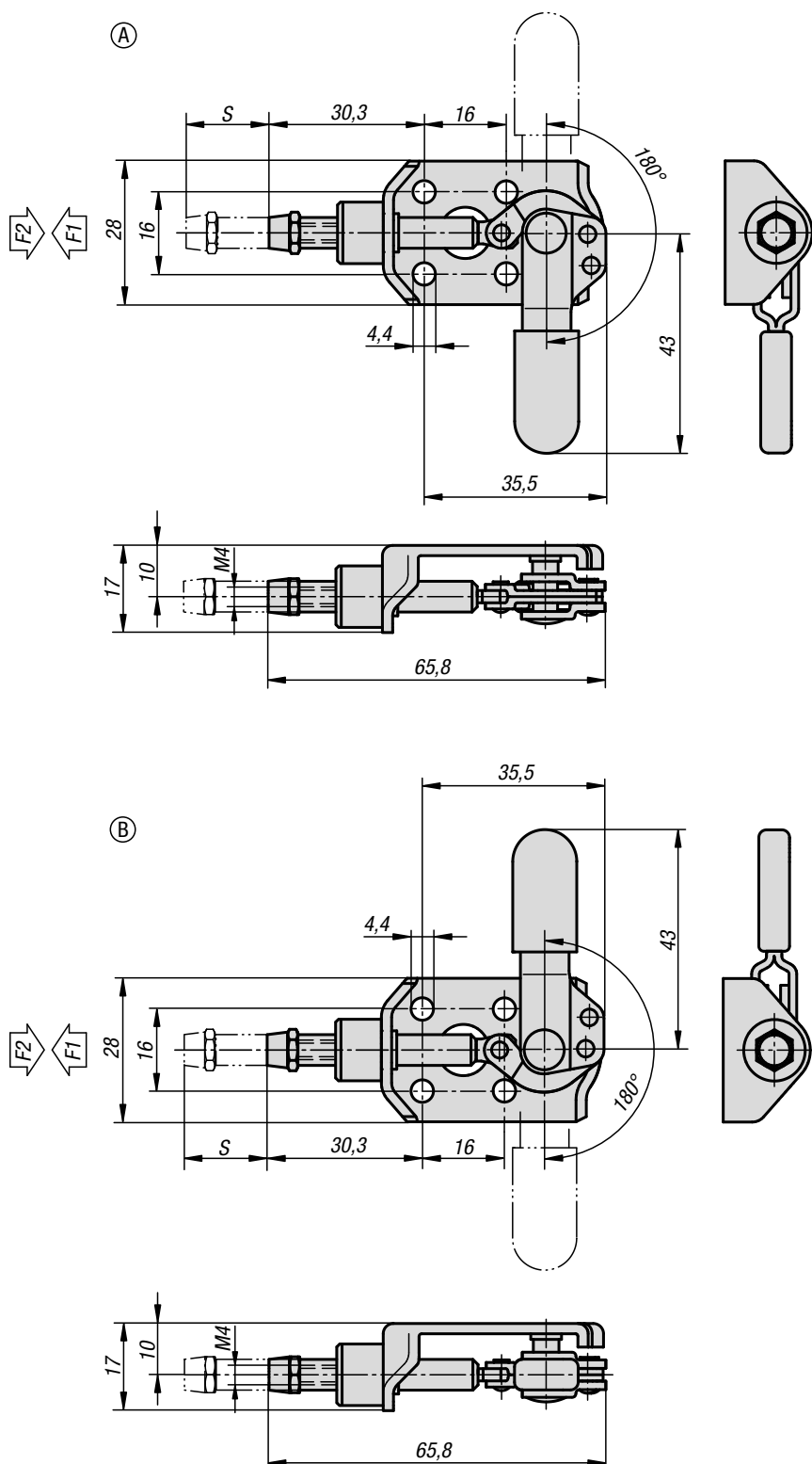
## KIPP Push-pull clamps heavy-duty version with reversible hand lever

| Order No.    | Component colour | A   | A1 | A2   | A3 | B  | B1   | C1 | C2 | D    | D1 | H   | L   | L1  | L2 | L3  | M   | Travel S | Hand force FH N | Retaining force F2 N | Opening angle of handle |
|--------------|------------------|-----|----|------|----|----|------|----|----|------|----|-----|-----|-----|----|-----|-----|----------|-----------------|----------------------|-------------------------|
| K0088.0600   | blue             | 89  | 25 | 36,5 | -  | 46 | 33,4 | 23 | 12 | 5,5  | 14 | 127 | 127 | 38  | 30 | 65  | M8  | 32       | 140             | 6000                 | 185°                    |
| K0088.1200   | blue             | 133 | 8  | 35   | 41 | 61 | 41   | 32 | 18 | 8,5  | 20 | 196 | 188 | 55  | 40 | 106 | M10 | 50       | 150             | 12000                | 185°                    |
| K0088.2500   | blue             | 197 | 11 | 45   | 45 | 82 | 54   | 41 | 22 | 10,3 | 25 | 270 | 300 | 103 | 60 | 125 | M12 | 75       | 170             | 25000                | 185°                    |
| K0088.5000   | blue             | 254 | 10 | 70   | 70 | 85 | 57   | 50 | 28 | 10,3 | 30 | 360 | 390 | 136 | 60 | 155 | M16 | 100      | 200             | 50000                | 185°                    |
| K0088.060003 | red              | 89  | 25 | 36,5 | -  | 46 | 33,4 | 23 | 12 | 5,5  | 14 | 127 | 127 | 38  | 30 | 65  | M8  | 32       | 140             | 6000                 | 185°                    |
| K0088.120003 | red              | 133 | 8  | 35   | 41 | 61 | 41   | 32 | 18 | 8,5  | 20 | 196 | 188 | 55  | 40 | 106 | M10 | 50       | 150             | 12000                | 185°                    |
| K0088.250003 | red              | 197 | 11 | 45   | 45 | 82 | 54   | 41 | 22 | 10,3 | 25 | 270 | 300 | 103 | 60 | 125 | M12 | 75       | 170             | 25000                | 185°                    |
| K0088.500003 | red              | 254 | 10 | 70   | 70 | 85 | 57   | 50 | 28 | 10,3 | 30 | 360 | 390 | 136 | 60 | 155 | M16 | 100      | 200             | 50000                | 185°                    |

| Order No.    | Thrust rod extended / Clamping force F1 N                                                                                                     |
|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| K0088.0600   | 5mm/1100N, 10mm/700N, 15mm/750N, 20mm/800N, 25mm/850N, 30mm/1460N, 31mm/1900N, 32mm/5800N                                                     |
| K0088.1200   | 5mm/1670N, 10mm/900N, 15mm/730N, 20mm/700N, 25mm/720N, 30mm/850N, 35mm/1000N, 40mm/1100N, 45mm/1500N, 48mm/2200N, 49mm/2900N, 50mm/9300N      |
| K0088.2500   | 10mm/1000N, 20mm/720N, 30mm/600N, 40mm/700N, 50mm/880N, 60mm/1180N, 70mm/1900N, 72mm/2300N, 74mm/3530N, 75mm/11000N                           |
| K0088.5000   | 10mm/1800N, 20mm/1100N, 30mm/750N, 40mm/800N, 50mm/820N, 70mm/1000N, 80mm/1300N, 90mm/1900N, 95mm/2500N, 97mm/3100N, 99mm/4500N, 100mm/12100N |
| K0088.060003 | 5mm/1100N, 10mm/700N, 15mm/750N, 20mm/800N, 25mm/850N, 30mm/1460N, 31mm/1900N, 32mm/5800N                                                     |
| K0088.120003 | 5mm/1670N, 10mm/900N, 15mm/730N, 20mm/700N, 25mm/720N, 30mm/850N, 35mm/1000N, 40mm/1100N, 45mm/1500N, 48mm/2200N, 49mm/2900N, 50mm/9300N      |
| K0088.250003 | 10mm/1000N, 20mm/720N, 30mm/600N, 40mm/700N, 50mm/880N, 60mm/1180N, 70mm/1900N, 72mm/2300N, 74mm/3530N, 75mm/11000N                           |
| K0088.500003 | 10mm/1800N, 20mm/1100N, 30mm/750N, 40mm/800N, 50mm/820N, 70mm/1000N, 80mm/1300N, 90mm/1900N, 95mm/2500N, 97mm/3100N, 99mm/4500N, 100mm/12100N |



## Toggle clamps mini push-pull



**Material:**  
Steel.

**Version:**  
Trivalent passivated.  
Plastic grip oil resistant.

**Sample order:**  
K0745.10050

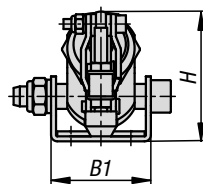
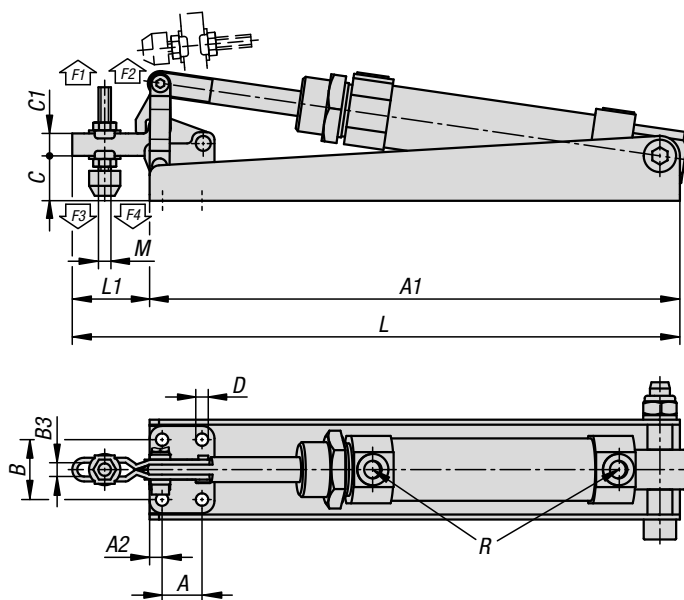
**Note:**  
Push-pull toggle clamps with very low profile. As the clamps lock in the open and closed handle positions, they can be used to clamp when pushing or pulling.

**Drawing reference:**  
Form A: Thrust exerted by rotating handle to the right  
Form B: Thrust exerted by rotating handle to the left

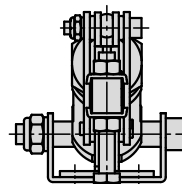
### KIPP Toggle clamps mini push-pull

| Order No.   | Form | Travel<br>S | Retaining<br>force<br>F2 N | Retaining<br>force<br>F1 N |
|-------------|------|-------------|----------------------------|----------------------------|
| K0745.10050 | A    | 16          | 500                        | 500                        |
| K0745.20050 | B    | 16          | 500                        | 500                        |

## Horizontal Pneumatic Clamps



K1548.01600  
K1548.03000



### Material:

Lever parts and clamping spindle steel.

### Version:

Lever parts trivalent passivated.  
Clamping spindle and nuts phosphated.  
Cylinder bright.

### Sample order:

K1548.01000

### Note:

A neoprene thrust pad is supplied with versions K1548.01000 and K1548.01200.

### Pneumatic cylinder:

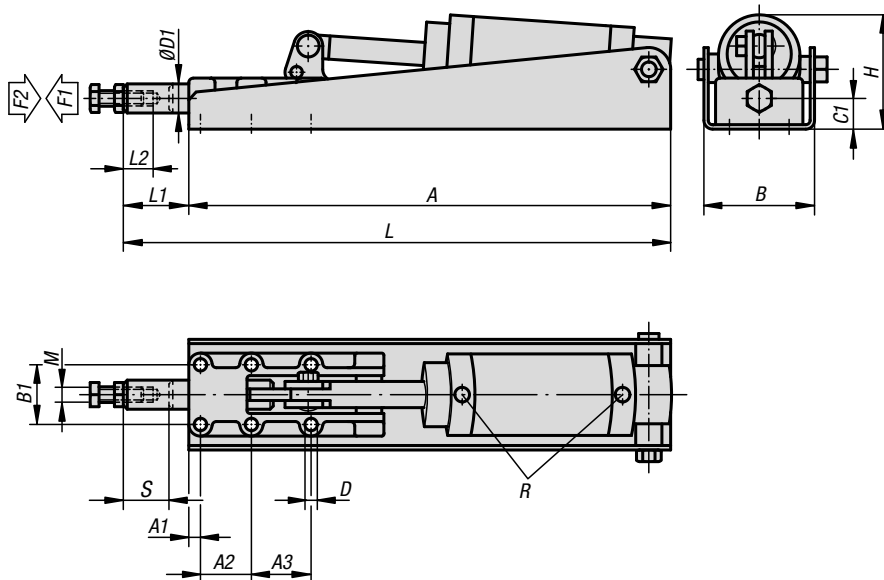
Double-acting without end of stroke dampening.

## KIPP Horizontal Pneumatic Clamps

| Order No.   | Opening angle of holding arm | Air consumption per cycle | Holding force at 6 bar F1 N | Holding force at 6 bar F2 N | Clamping force at 6 bar F3 N | Clamping force at 6 bar F4 N | Operating pressure bar | strokes per min. at 6 bar |
|-------------|------------------------------|---------------------------|-----------------------------|-----------------------------|------------------------------|------------------------------|------------------------|---------------------------|
| K1548.01000 | 70°                          | 0,06 dm <sup>3</sup>      | 1000                        | 1500                        | 800                          | 1200                         | 2 - 6                  | 60                        |
| K1548.01200 | 85°                          | 0,08 dm <sup>3</sup>      | 1200                        | 1800                        | 1000                         | 1500                         | 2 - 6                  | 60                        |
| K1548.01600 | 90°                          | 0,28 dm <sup>3</sup>      | 1600                        | 2400                        | 1200                         | 1800                         | 2 - 6                  | 50                        |
| K1548.03000 | 85°                          | 0,32 dm <sup>3</sup>      | 3000                        | 5400                        | 2400                         | 4800                         | 2 - 6                  | 50                        |

| Order No.   | A    | A1    | A2 | B    | B1 | B3   | C    | C1   | D   | H     | L     | L1   | M       | R    |
|-------------|------|-------|----|------|----|------|------|------|-----|-------|-------|------|---------|------|
| K1548.01000 | 16   | 212,5 | 5  | 24   | 40 | 5,5  | 18   | 9    | 4,5 | 52    | 243,5 | 31   | M5x35   | G1/8 |
| K1548.01200 | 12,7 | 218   | 7  | 26,8 | 48 | 6,2  | 25   | 11   | 5,2 | 61,5  | 261   | 43   | M6x50   | G1/8 |
| K1548.01600 | 19   | 270   | 8  | 32   | 59 | 8,9  | 34,5 | 17,5 | 7,1 | 85,2  | 345,2 | 75,2 | M08x65  | G1/8 |
| K1548.03000 | 32   | 311,5 | 10 | 45   | 76 | 13,2 | 53,5 | 25   | 8,7 | 117,5 | 435,5 | 124  | M12x100 | G1/8 |

## Pneumatic push-pull clamps



### Material:

Lever parts, bracket and thrust rod, steel.  
Thrust rod housing ductile iron (SG iron)

### Version:

Phosphated. Cylinder bright.

### Sample order:

K1549.06000

### Pneumatic cylinder:

Double-acting without end of stroke dampening.

## KIPP Pneumatic push-pull clamps

| Order No.   | Thrust rod extended / Clamping force F1 N                             | Retaining force F2 N | Air consumption per cycle | Operating pressure bar | strokes per min. at 6 bar |
|-------------|-----------------------------------------------------------------------|----------------------|---------------------------|------------------------|---------------------------|
| K1549.06000 | 5mm/300N, 10mm/400N, 15mm/600N, 200mm/800N, 24mm/1500N                | 6000                 | 0,04 dm <sup>3</sup>      | 2 - 6                  | 60                        |
| K1549.12000 | 5mm/1200N, 10mm/1400N, 15mm/1600N, 20mm/1800N, 25mm/2300N, 30mm/4000N | 12000                | 0,1 dm <sup>3</sup>       | 2 - 6                  | 50                        |
| K1549.25000 | 5mm/1400N, 10mm/1600N, 20mm/2000N, 30mm/2400N, 40mm/3000N, 49mm/7000N | 25000                | 0,25 dm <sup>3</sup>      | 2 - 6                  | 40                        |

| Order No.   | A   | A1 | A2   | A3 | B    | B1   | C1 | D    | D1   | H    | L   | L1  | L2 | M   | R    | Travel S |
|-------------|-----|----|------|----|------|------|----|------|------|------|-----|-----|----|-----|------|----------|
| K1549.06000 | 284 | 25 | 36,5 | -  | 59   | 33,4 | 14 | 5,5  | 14   | 46,2 | 325 | 41  | 30 | M8  | G1/8 | 25       |
| K1549.12000 | 380 | 8  | 35   | 41 | 76,5 | 41   | 21 | 8,5  | 19,9 | 66,5 | 435 | 55  | 40 | M10 | G1/8 | 32       |
| K1549.25000 | 475 | 12 | 45   | 45 | 96   | 54   | 26 | 10,3 | 25   | 94,5 | 577 | 102 | 60 | M12 | G1/8 | 50       |

## Toggle press, manual version



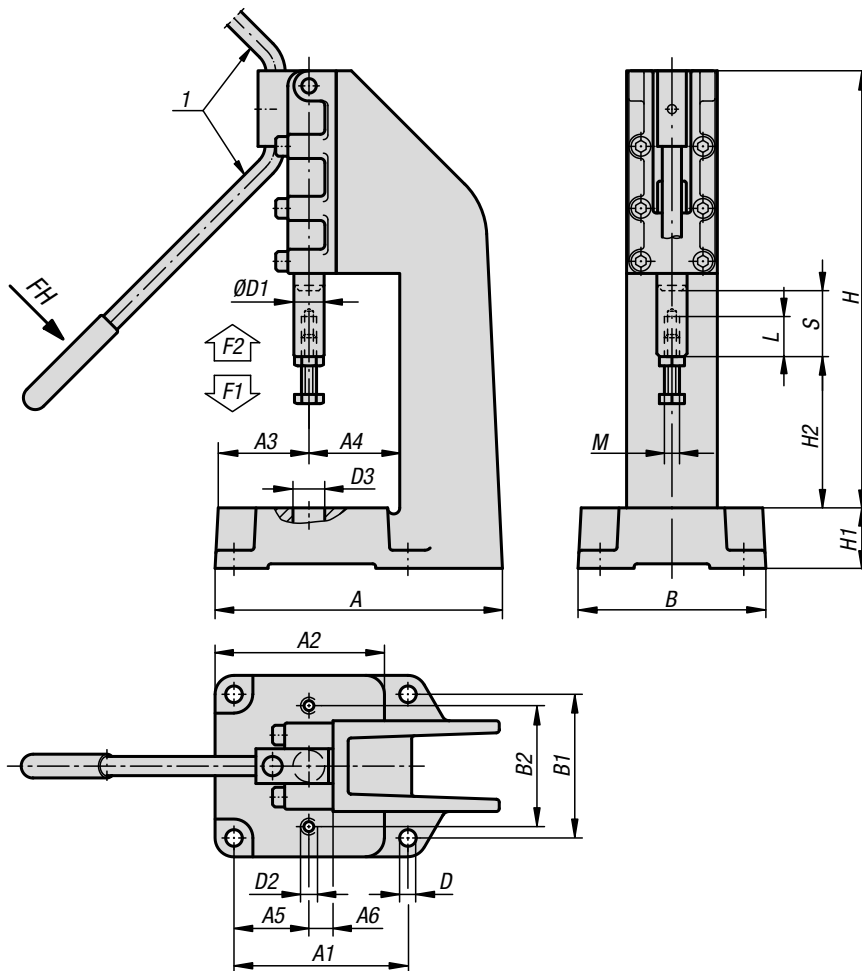
**Material:**  
Press stand cast steel.  
For push-pull clamp see K0088

**Version:**  
Press uprights painted blue.  
For push-pull toggle clamps, see K0088.

**Sample order:**  
K1550.06000

**Note:**  
The thrust clamps can be re-ordered as a complete assembly kit. See K0088 for specifications.

**Drawing reference:**  
1) handle can be mounted right or left

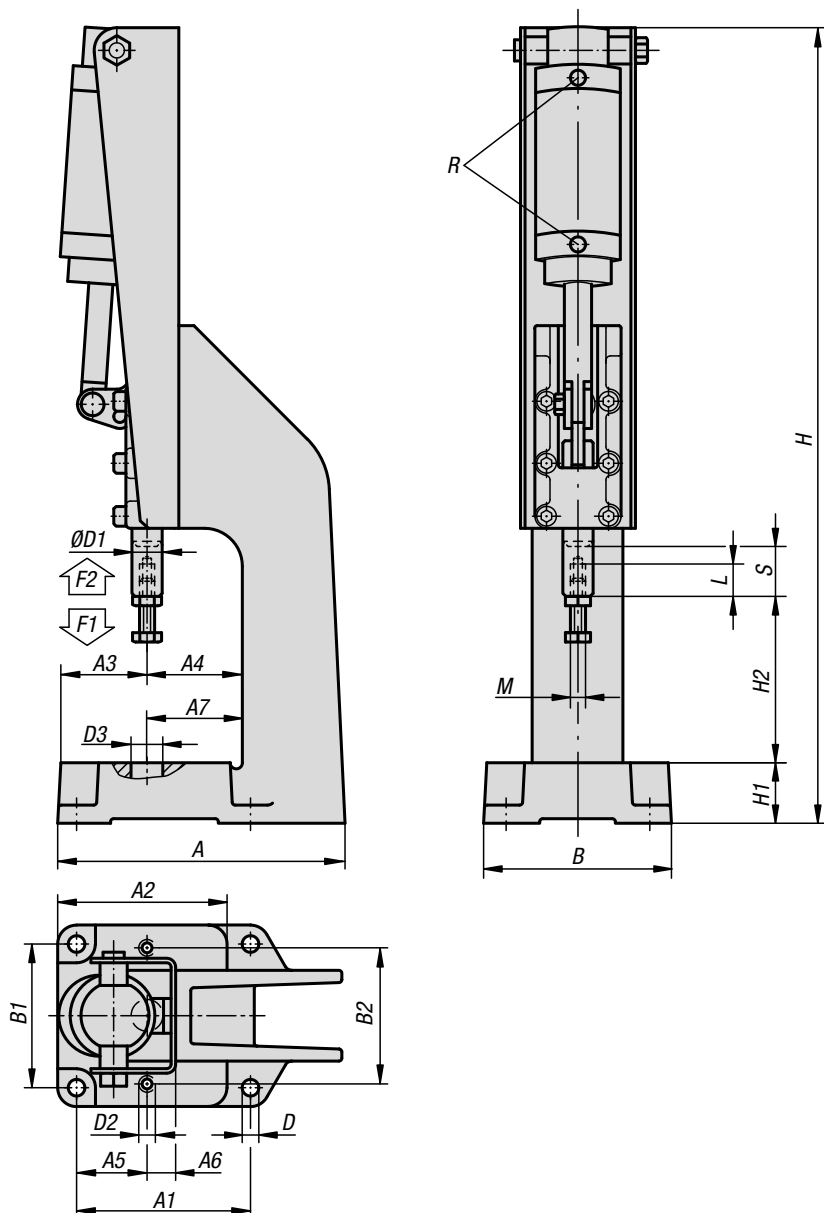


### KIPP Toggle Presses for manual operation

| Order No.   | Opening angle of handle | Hand force FH N | Clamping force F1 N | Retaining force F2 N |
|-------------|-------------------------|-----------------|---------------------|----------------------|
| K1550.06000 | 185°                    | 140             | 3000                | 6000                 |
| K1550.12000 | 185°                    | 160             | 5000                | 12000                |
| K1550.25000 | 185°                    | 180             | 7000                | 25000                |

| Order No.   | A   | A1  | A2  | A3 | A4 | A5   | A6 | B   | B1  | B2 | D  | D1   | D2  | D3   | H   | H1 | H2  | L  | M   | Travel S |
|-------------|-----|-----|-----|----|----|------|----|-----|-----|----|----|------|-----|------|-----|----|-----|----|-----|----------|
| K1550.06000 | 157 | 95  | 95  | 56 | 44 | 46,5 | 12 | 105 | 80  | 70 | 9  | 14   | M8  | 15,5 | 202 | 32 | 75  | 30 | M8  | 32       |
| K1550.12000 | 210 | 115 | 113 | 62 | 60 | 49,6 | 18 | 126 | 95  | 80 | 11 | 19,9 | M10 | 20   | 290 | 40 | 100 | 40 | M10 | 50       |
| K1550.25000 | 238 | 145 | 139 | 65 | 75 | 52   | 22 | 150 | 125 | 90 | 11 | 25   | M10 | 30   | 418 | 50 | 120 | 60 | M12 | 75       |

## Toggle presses for pneumatic operation



### Material:

Press uprights cast steel.

For pneumatic push-pull clamps, see K1549.

### Version:

Press uprights painted blue.

For pneumatic push-pull clamps, see K1549.

### Sample order:

K1551.06000

### Note:

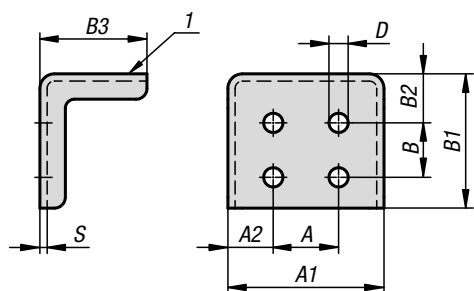
Double-acting cylinder without end position damping.  
Pneumatic push-pull clamps can be reordered as a complete assembly kit. For technical data and clamping forces, see K1549.

## KIPP Toggle presses for pneumatic operation

| Order No.   | Clamping force<br>F1 N | Retaining force<br>F2 N | Operating pressure<br>bar | Air consumption<br>per cycle | strokes<br>per min.<br>at 6 bar |
|-------------|------------------------|-------------------------|---------------------------|------------------------------|---------------------------------|
| K1551.06000 | 3000                   | 6000                    | 2 - 6                     | 0,04 dm <sup>3</sup>         | 60                              |
| K1551.12000 | 5000                   | 12000                   | 2 - 6                     | 0,1 dm <sup>3</sup>          | 50                              |
| K1551.25000 | 7000                   | 25000                   | 2 - 6                     | 0,25 dm <sup>3</sup>         | 40                              |

| Order No.   | A   | A1  | A2  | A3   | A4 | A5   | A6 | A7 | B   | B1  | B2 | D  | D1   | D2  | D3   | H   | H1 | H2  | L  | M   | R    | Travel<br>S |
|-------------|-----|-----|-----|------|----|------|----|----|-----|-----|----|----|------|-----|------|-----|----|-----|----|-----|------|-------------|
| K1551.06000 | 157 | 95  | 95  | 53,9 | 46 | 46,5 | 12 | 44 | 105 | 80  | 70 | 9  | 14   | M8  | 15,5 | 412 | 32 | 96  | 30 | M8  | G1/8 | 25          |
| K1551.12000 | 210 | 115 | 113 | 59   | 63 | 49,6 | 18 | 60 | 126 | 95  | 80 | 11 | 19,9 | M10 | 20   | 575 | 40 | 155 | 40 | M10 | G1/8 | 32          |
| K1551.25000 | 238 | 145 | 139 | 61   | 79 | 52   | 22 | 75 | 150 | 125 | 90 | 11 | 25   | M10 | 30   | 747 | 50 | 222 | 60 | M12 | G1/8 | 50          |

## Angle brackets

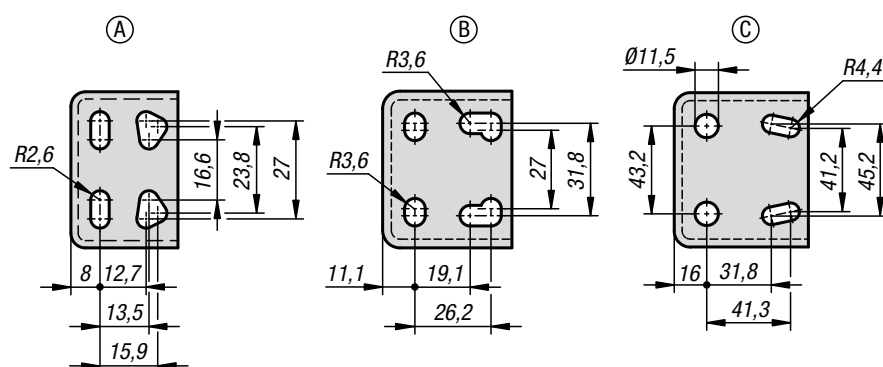


**Material:**  
Steel.

**Version:**  
Trivalent passivated.

**Sample order:**  
K1431.02

**Drawing reference:**  
1) mount clamp on this face

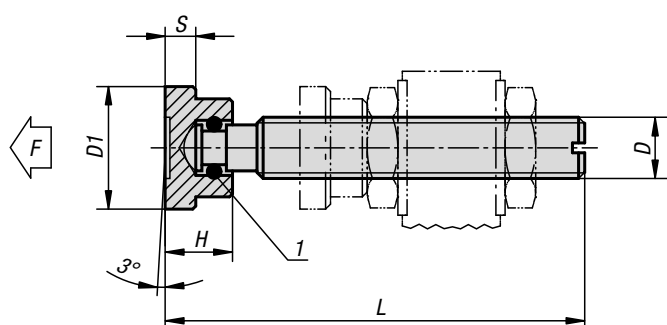


### KIPP Angle brackets

| Order No. | Form | A    | A1 | A2   | B    | B1   | B2   | B3   | D   | S |
|-----------|------|------|----|------|------|------|------|------|-----|---|
| K1431.02  | A    | 18   | 43 | 12,5 | 15   | 37   | 13,5 | 29,5 | 5,3 | 2 |
| K1431.04  | B    | 25,4 | 54 | 14,3 | 19,1 | 41,5 | 12   | 44,5 | 5,5 | 3 |
| K1431.06  | C    | 44   | 76 | 16   | 32   | 62   | 21   | 66   | 8,5 | 4 |

# Thrust screws

with thrust pad


**Material:**

Screw and thrust pad steel.

**Version:**

Screw black.

Thrust pad black oxidised.

Screw pin and thrust pad case-hardened.

**Sample order:**

K0688.10X63

**Drawing reference:**

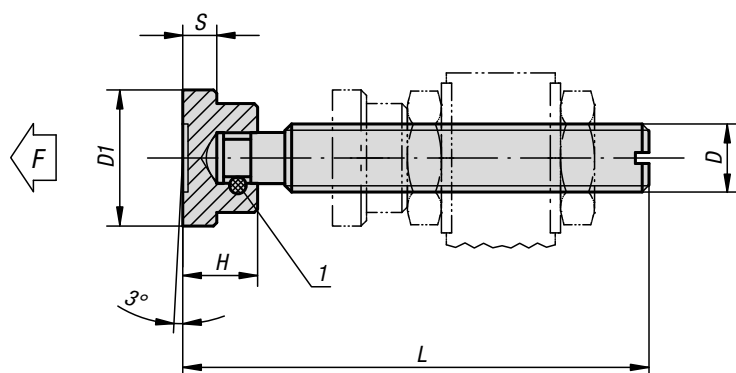
1) snap ring

## KIPP Thrust screws with thrust pad

| Order No. | L                          | H  | D   | D1 | S   | F<br>max. kN |
|-----------|----------------------------|----|-----|----|-----|--------------|
| K0688.06X | 32/37/42/52                | 7  | M6  | 12 | 2,5 | 1            |
| K0688.08X | 38/43/48/53/63             | 9  | M8  | 16 | 4   | 2,3          |
| K0688.10X | 53,5/58,5/63,5/68,5/83,5   | 11 | M10 | 20 | 5   | 3,5          |
| K0688.12X | 64,5/69,5/74,5/84,5/104,5  | 13 | M12 | 25 | 6   | 4,6          |
| K0688.16X | 70,3/75,3/85,3/105,3/130,3 | 15 | M16 | 32 | 7   | 6            |

# Thrust screws

with thrust pad



## Material:

Screw and thrust pad steel.

## Version:

Screw black.

Thrust pad black oxidised.

Screw pin and thrust pad case-hardened.

## Sample order:

K0689.10X84

## Drawing reference:

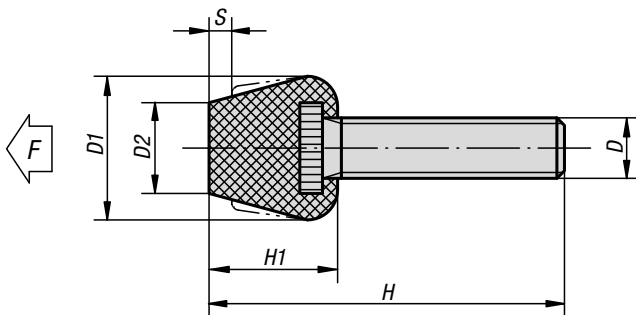
1) retaining pin

## KIPP Thrust screws with thrust pad

| Order No.    | L   | H  | D   | D1 | S   | F<br>max. kN |
|--------------|-----|----|-----|----|-----|--------------|
| K0689.06X52  | 52  | 7  | M6  | 12 | 2,5 | 1            |
| K0689.08X63  | 63  | 9  | M8  | 16 | 4   | 2,3          |
| K0689.10X84  | 84  | 11 | M10 | 20 | 5   | 3,5          |
| K0689.12X104 | 104 | 13 | M12 | 25 | 6   | 4,6          |
| K0689.14X105 | 105 | 14 | M14 | 28 | 6   | 5            |
| K0689.16X130 | 130 | 15 | M16 | 32 | 7   | 6            |



## Thrust screws neoprene

**Material:**

Screw steel.

Thrust pad neoprene.

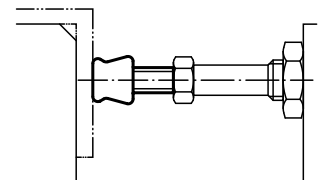
**Version:**

Neoprene pad moulded onto screw end.

Screw copper-plated.

**Sample order:**

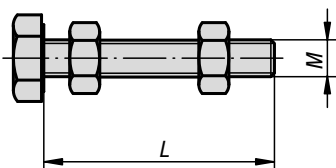
K0690.08

**KIPP Thrust screws neoprene**

| Order No. | H  | H1 | D        | D1 | D2 | S<br>max. | F<br>max. N |
|-----------|----|----|----------|----|----|-----------|-------------|
| K0690.08  | 63 | 17 | M8 x 46  | 19 | 12 | 3         | 750         |
| K0690.081 | 43 | 17 | M8 x 26  | 19 | 12 | 3         | 750         |
| K0690.10  | 80 | 19 | M10 x 61 | 19 | 14 | 3,5       | 1000        |
| K0690.101 | 55 | 19 | M10 x 36 | 19 | 14 | 3,5       | 1000        |

## Clamping spindles

rigid

**Material:**

Polyamide, steel or stainless steel.

**Version:**Spindle and nuts, electro zinc-plated.  
K1442.204020 made from nylon.**Sample order:**

K1442.005035

**Note:**

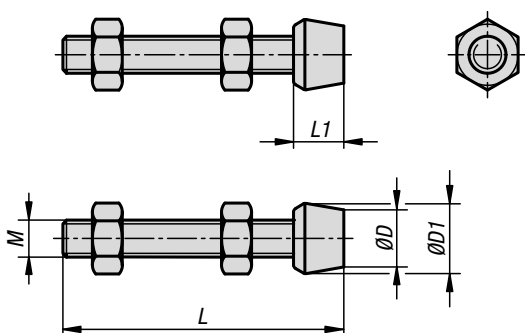
The clamping spindle K1442.204020 is supplied with one nut.

## KIPP Clamping spindles, rigid

| Order No.    | Main material   | Form | M   | L   |
|--------------|-----------------|------|-----|-----|
| K1442.204020 | polyamide       | A    | M4  | 20  |
| K1442.004025 | steel           | A    | M4  | 25  |
| K1442.004040 | steel           | A    | M4  | 40  |
| K1442.005035 | steel           | A    | M5  | 35  |
| K1442.006025 | steel           | A    | M6  | 25  |
| K1442.006050 | steel           | A    | M6  | 50  |
| K1442.008040 | steel           | A    | M8  | 40  |
| K1442.008060 | steel           | A    | M8  | 60  |
| K1442.010050 | steel           | A    | M10 | 50  |
| K1442.010080 | steel           | A    | M10 | 80  |
| K1442.012075 | steel           | A    | M12 | 75  |
| K1442.012100 | steel           | A    | M12 | 100 |
| K1442.016150 | steel           | A    | M16 | 150 |
| K1442.104020 | stainless steel | A    | M4  | 20  |
| K1442.105030 | stainless steel | A    | M5  | 30  |
| K1442.105035 | stainless steel | A    | M5  | 35  |
| K1442.106040 | stainless steel | A    | M6  | 40  |
| K1442.106050 | stainless steel | A    | M6  | 50  |
| K1442.108060 | stainless steel | A    | M8  | 60  |
| K1442.110080 | stainless steel | A    | M10 | 80  |

# Clamping spindles

with vulcanized neoprene thrust pad



## Material:

Threaded spindle and nuts in steel or stainless steel.  
Thrust pad neoprene.

## Version:

Threaded spindle and nuts electro zinc-plated or bright.

## Sample order:

K1443.050372

## KIPP Clamping spindles with vulcanised neoprene thrust pad

| Order No.     | Main material   | D  | D1 | M   | L   | L1  |
|---------------|-----------------|----|----|-----|-----|-----|
| K1443.040421  | steel           | 8  | 12 | M4  | 42  | 10  |
| K1443.050372  | steel           | 10 | 10 | M5  | 37  | 5,7 |
| K1443.060441  | steel           | 10 | 16 | M6  | 44  | 14  |
| K1443.080631  | steel           | 13 | 19 | M8  | 63  | 19  |
| K1443.100851  | steel           | 15 | 24 | M10 | 85  | 26  |
| K1443.121001  | steel           | 25 | 31 | M12 | 100 | 26  |
| K1443.1040251 | stainless steel | 8  | 12 | M4  | 25  | 10  |
| K1443.1050421 | stainless steel | 11 | 13 | M5  | 42  | 10  |
| K1443.1060501 | stainless steel | 10 | 16 | M6  | 50  | 14  |
| K1443.1080641 | stainless steel | 13 | 19 | M8  | 64  | 19  |
| K1443.1100851 | stainless steel | 24 | 30 | M10 | 85  | 26  |

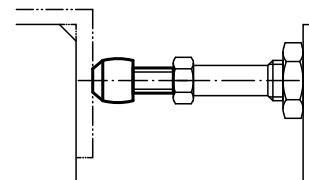
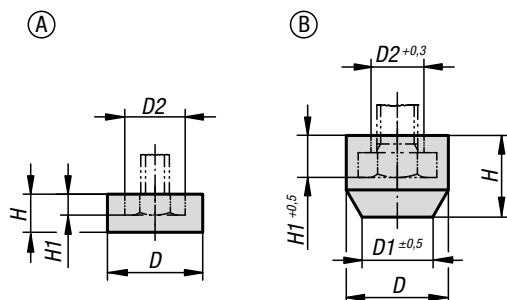
## Protective caps



**Material:**  
Neoprene or Polyamide.

**Version:**  
Neoprene black, oil resistant, Shore hardness 75A.  
Polyamide white.

**Sample order:**  
K0106.03



### KIPP Protective caps

| Order No. | Form | Main material | D    | D1   | D2   | H   | H1  | for screws |
|-----------|------|---------------|------|------|------|-----|-----|------------|
| K0106.06  | A    | polyamide     | 9    | -    | 6,6  | 4   | 2,3 | M3         |
| K0106.01  | B    | neoprene      | 11   | 6,6  | 5,5  | 8,5 | 4   | M4         |
| K0106.02  | B    | neoprene      | 12,5 | 7,3  | 6,5  | 10  | 4,7 | M5         |
| K0106.03  | B    | neoprene      | 15   | 9,9  | 8,5  | 12  | 5,8 | M6         |
| K0106.04  | B    | neoprene      | 19   | 12,7 | 11   | 15  | 7,1 | M8         |
| K0106.07  | B    | neoprene      | 23   | 15   | 14,5 | 18  | 9   | M10        |
| K0106.05  | B    | neoprene      | 26   | 19   | 16,5 | 20  | 10  | M12        |
| K0106.08  | B    | neoprene      | 33   | 24   | 22   | 27  | 13  | M16        |

# Antistatic protective caps



**Material:**  
Neoprene.

**Version:**  
Neoprene black, oil resistant, Shore hardness 75A.

**Sample order:**  
K0106.0124

**Application:**  
Sensitive electrical or electronic equipment, components and devices (ESD sensitive elements) may be damaged or destroyed by electrostatic discharges (ESD) in the immediate vicinity.  
Electrostatic discharges can come from people or through handling ESD sensitive components (e.g. during production, assembly, transport, storage etc).  
Electrically conductive products which conform to DIN EN 61340-5-1 are essential within electronic environments to prevent an electrostatic discharge. These products can be used for ESD applications or in ESD protection areas (EPA) in accordance with DIN EN 61340-5-1.

**Advantages:**

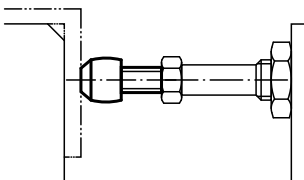
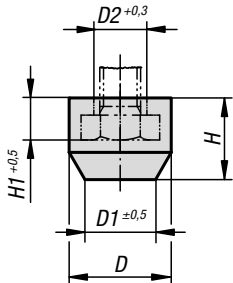
- Made from a special electrically conductive plastic
- To protect sensitive electrical or electronic parts, components and devices

**Safety:**

These ESD products can also be used for devices, components and protection systems in areas where there is risk of explosion.  
These ESD products prevent electrostatic spark discharges, and eliminate the risk of ignition of gases and dust which could lead to explosions in enclosed spaces.  
Manufacturers and operators must apply and comply with the ATEX directives for protecting persons working in areas where there is a risk of explosion.  
These ESD products have been certified by TÜV-Süd for their electrical discharge capability.

**Target groups:**

Device manufacturers required to conform to ATEX product directive 2014/34/EU.  
Operators required to conform to ATEX worker protection directive 1999/92/EC.

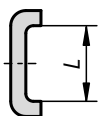
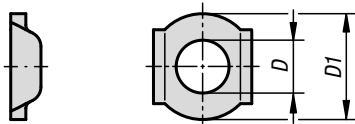


## KIPP Antistatic protective caps

| Order No.  | D    | D1   | D2   | H   | H1  | for screws |
|------------|------|------|------|-----|-----|------------|
| K0106.0124 | 11   | 6,6  | 5,5  | 8,5 | 4   | M4         |
| K0106.0224 | 12,5 | 7,3  | 6,8  | 10  | 4,7 | M5         |
| K0106.0324 | 15   | 9,9  | 8,5  | 12  | 5,8 | M6         |
| K0106.0424 | 19   | 12,7 | 11,3 | 15  | 7,1 | M8         |

## Locking washers

for clamping spindles



### Material:

Steel or stainless steel 1.4301.

### Version:

Steel electro zinc-plated.

Stainless steel bright.

### Sample order:

K1441.0041

## KIPP Locking washers for clamping spindles

| Order No.<br>steel | Order No.<br>stainless steel | D<br>through hole<br>for | D1   | L    |
|--------------------|------------------------------|--------------------------|------|------|
| K1441.0041         | K1441.1041                   | M4                       | 12,7 | 8,7  |
| K1441.0051         | K1441.1051                   | M5                       | 12,6 | 9,7  |
| K1441.0061         | K1441.1061                   | M6                       | 14   | 12   |
| K1441.0062         | K1441.1062                   | M6                       | 15   | 13,5 |
| K1441.0081         | K1441.1081                   | M8                       | 22   | 15,5 |
| K1441.0101         | K1441.1101                   | M10                      | 25   | 19   |
| K1441.0121         | -                            | M12                      | 33   | 24   |
| K1441.0161         | -                            | M16                      | 35   | 27   |

Adapter block

aluminium

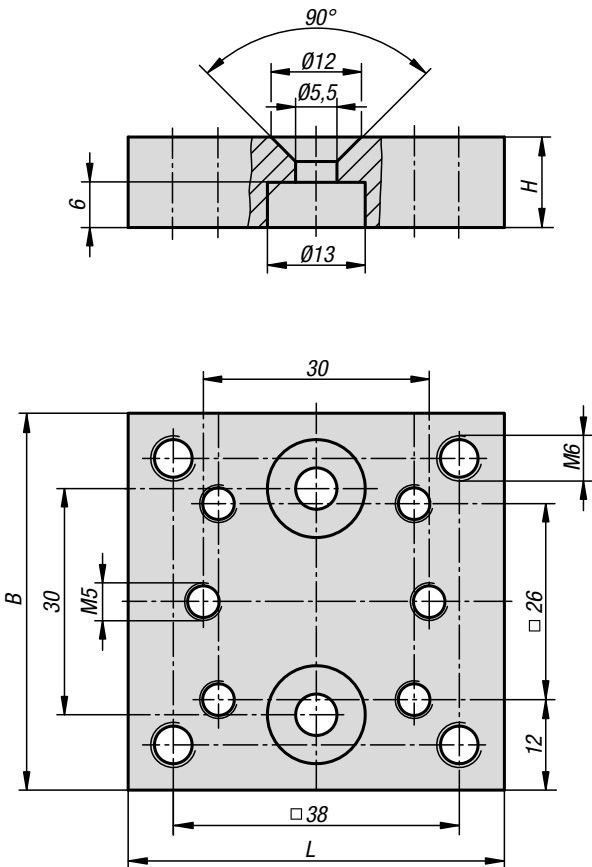


**Material:**  
Aluminium.

**Version:**  
natural tone anodised

**Sample order:**  
K1210.5050

**Note:**  
Adapter blocks are used as risers in combination with the round adapter plates K1211.  
Fastening screws and nuts for assembling the block are supplied.

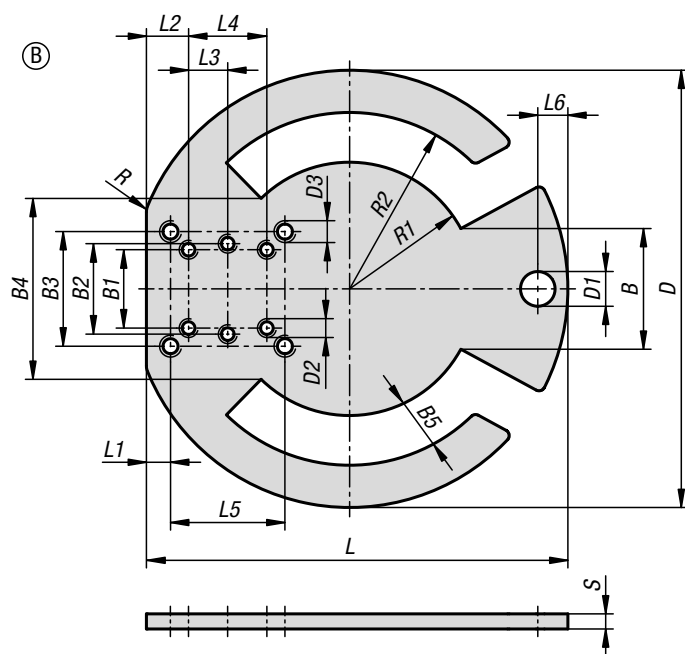
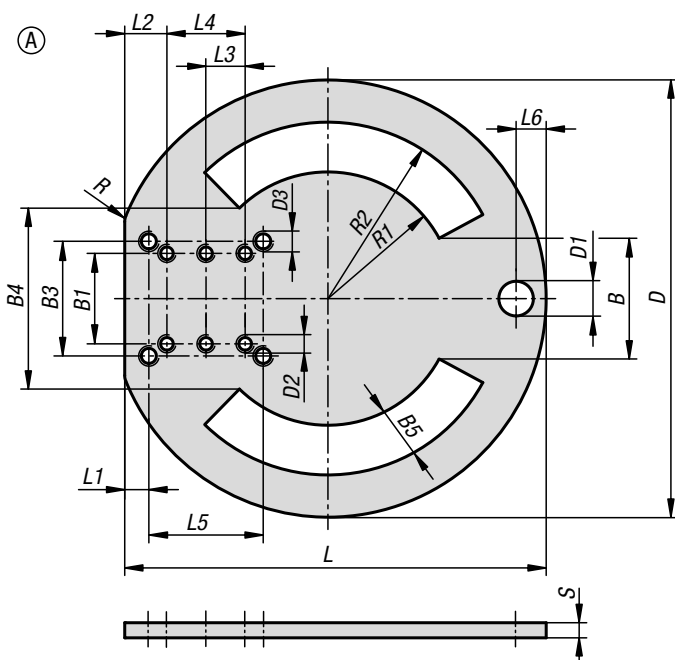


KIPP Adapter block, aluminium

| Order No.  | B  | H  | L  |
|------------|----|----|----|
| K1210.5050 | 50 | 12 | 50 |

## Adapter plate

round



**Material:**  
Steel.

**Version:**  
Electro zinc-plated and trivalent blue passivated.

**Sample order:**  
K1211.145

**Note:**  
Adapter plates can be used in combination with toggle clamps. They enable toggle clamps to be positioned flexibly.  
The adapter plates are clamped to the machine table using eccentric clamp modules.

**Advantages:**  
Flexible movement and positioning.  
Flexible height construction using the adapter block.  
Easy assembly through the opening in Form B.

**Accessories:**  
Eccentric clamp modules K0754  
Toggle clamp K....

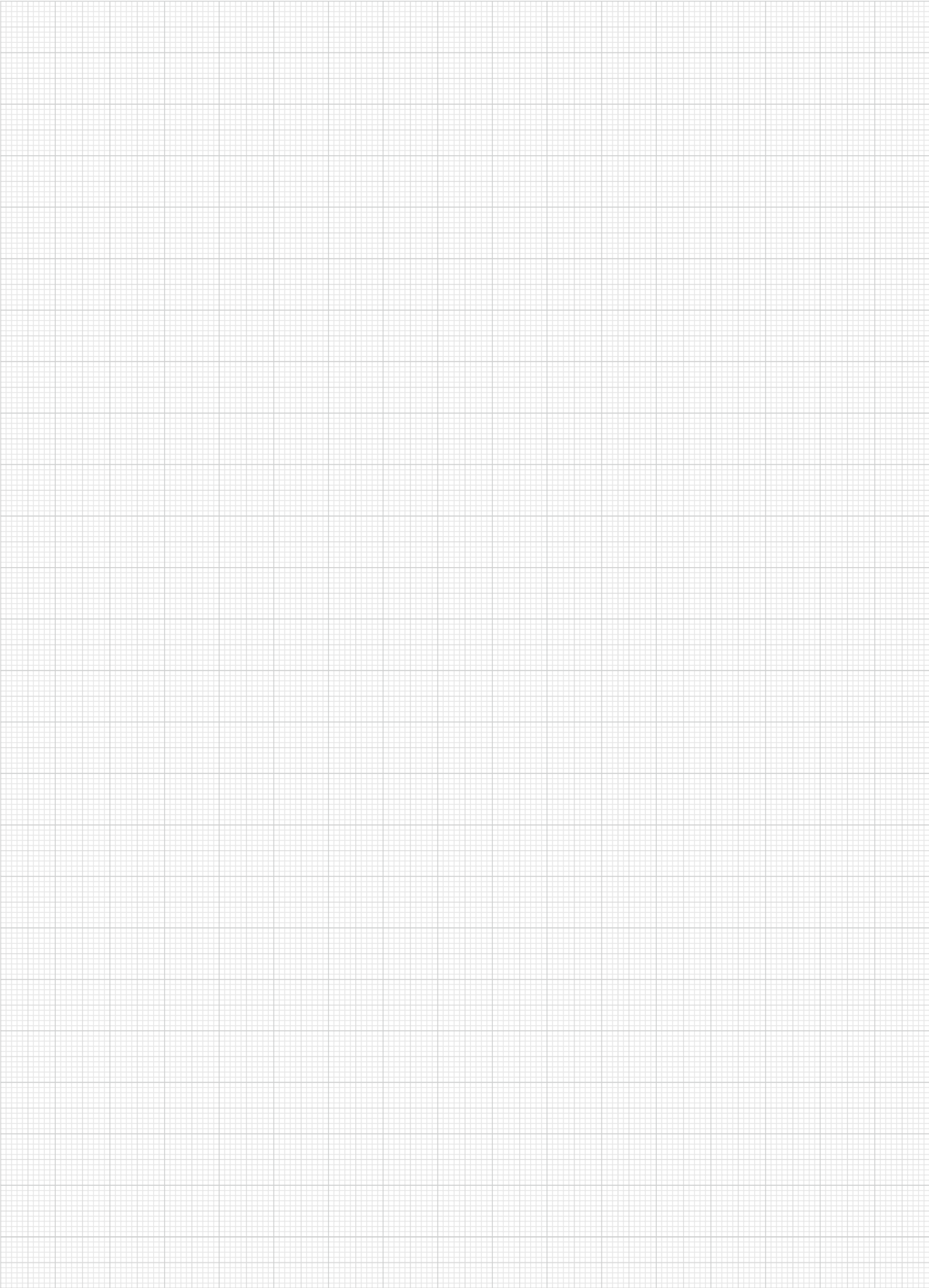
**Drawing reference:**  
Form A: closed  
Form B: open



### KIPP Adapter plate, round

| Order No.  | Form | Version 2 | B  | B1 | B2 | B3 | B4 | B5   | D   | D1   | D2 | D3 | L   | L1 | L2 | L3 | L4 | L5 | L6 | R | R1 | R2   | S |
|------------|------|-----------|----|----|----|----|----|------|-----|------|----|----|-----|----|----|----|----|----|----|---|----|------|---|
| K1211.145  | A    | closed    | 40 | 30 | -  | 38 | 60 | 16,5 | 145 | 11,5 | M5 | M6 | 140 | 8  | 14 | 13 | 26 | 38 | 10 | 5 | 42 | 58,5 | 5 |
| K1211.1145 | B    | open      | 40 | 30 | 30 | 38 | 60 | 16,5 | 145 | 11,5 | M5 | M6 | 140 | 8  | 14 | 13 | 26 | 38 | 10 | 5 | 42 | 58,5 | 5 |





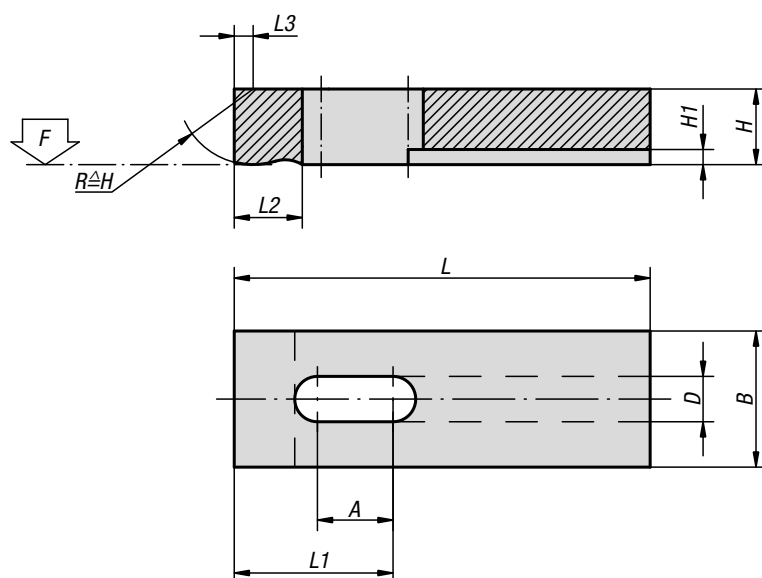


## Clamping elements



## Clamp straps

slotted heel



### Material:

Carbon steel 1.1191

### Version:

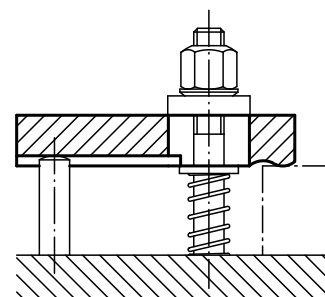
Black oxidised.

### Sample order:

K0001.101

### Note:

For suitable supports and adjustable rest pads, see K0305 and K0306.



### KIPP Clamp straps, slotted heel

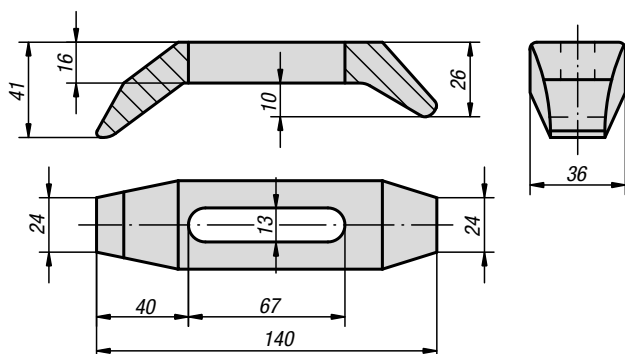
| Order No. | A  | B  | D   | H  | H1  | L   | L1 | L2 | L3  | F<br>kN |
|-----------|----|----|-----|----|-----|-----|----|----|-----|---------|
| K0001.05  | 8  | 12 | 5,5 | 8  | 3   | 32  | 14 | 8  | 1,2 | 3,42    |
| K0001.06  | 10 | 16 | 7   | 10 | 3   | 40  | 17 | 10 | 1,6 | 4,82    |
| K0001.08  | 12 | 20 | 9   | 12 | 4   | 50  | 22 | 12 | 2   | 8,77    |
| K0001.10  | 16 | 25 | 11  | 16 | 4,5 | 63  | 28 | 16 | 2,5 | 13,9    |
| K0001.12  | 20 | 32 | 14  | 20 | 5   | 80  | 35 | 20 | 3   | 20,2    |
| K0001.14  | 25 | 40 | 16  | 25 | 6   | 100 | 44 | 25 | 4   | 27,6    |
| K0001.16  | 42 | 50 | 18  | 30 | 6   | 160 | 73 | 32 | 5   | 37,8    |
| K0001.20  | 52 | 60 | 22  | 30 | 8   | 200 | 92 | 40 | 6   | 58,8    |
| K0001.051 | 13 | 12 | 5,5 | 8  | 3   | 50  | 23 | 8  | 1,2 | 3,42    |
| K0001.061 | 17 | 16 | 7   | 10 | 3   | 63  | 29 | 10 | 1,6 | 4,82    |
| K0001.081 | 21 | 20 | 9   | 12 | 4   | 80  | 37 | 12 | 2   | 8,77    |
| K0001.101 | 26 | 25 | 11  | 16 | 4,5 | 100 | 46 | 16 | 2,5 | 13,9    |
| K0001.121 | 33 | 32 | 14  | 20 | 5   | 125 | 58 | 20 | 3   | 20,2    |
| K0001.141 | 42 | 40 | 16  | 30 | 6   | 160 | 74 | 25 | 4   | 27,6    |

## Clamp straps

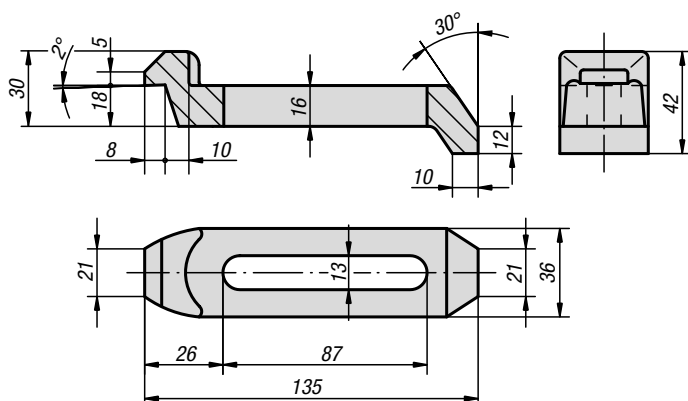
assorted, long slot



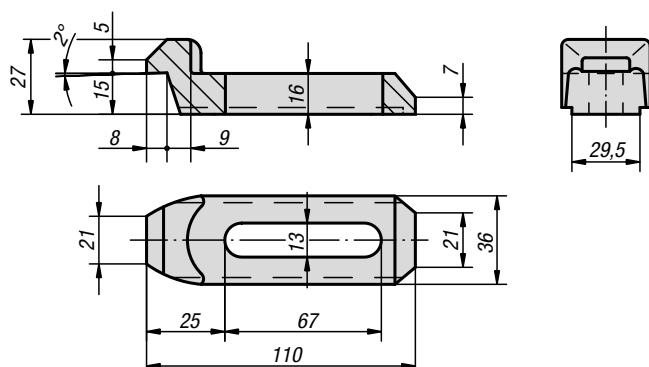
K0002.01 (0,5 kg)



K0002.05 (0,48 kg)



K0002.10 (0,35 kg)

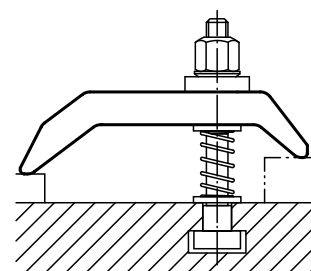


**Material:**  
Carbon steel 1.7225

**Version:**  
Tempered to 1000 N/mm<sup>2</sup>, black oxidised.

**Sample order:**  
K0002.10

**Note:**  
These are the same clamp straps that are used with the adjustment units K0004.

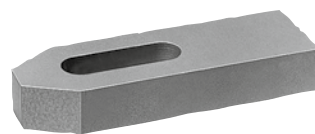


### KIPP Clamp straps, assorted, long slot

| Order No. | Item        |
|-----------|-------------|
| K0002.01  | Clamp Strap |
| K0002.05  | Clamp Strap |
| K0002.10  | Clamp Strap |

## Clamp straps

DIN 6314 straight, steel or aluminium



### Material:

Carbon steel or EN AW-7022.

### Version:

Steel painted.

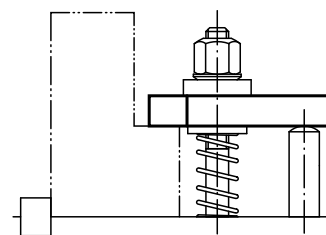
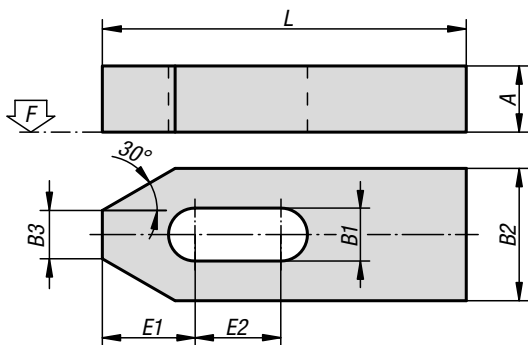
Aluminium bright.

### Sample order:

K1516.16

### Note:

When using spherical washers use the wide series K0729 Form G.



### KIPP Clamp straps DIN 6314 straight, steel or aluminium

| Order No.<br>high carbon steel | Order No.<br>aluminium | L   | A  | B1 | B2 | B3 | E1   | E2 | F<br>kN | for<br>screw |
|--------------------------------|------------------------|-----|----|----|----|----|------|----|---------|--------------|
| K1516.06                       | K1516.206              | 50  | 10 | 7  | 20 | 8  | 13,5 | 13 | 4,82    | M6           |
| K1516.08                       | K1516.208              | 60  | 12 | 9  | 25 | 10 | 14,5 | 13 | 8,77    | M8           |
| K1516.10                       | K1516.210              | 80  | 15 | 11 | 30 | 12 | 20,5 | 19 | 13,9    | M10          |
| K1516.12                       | K1516.212              | 100 | 20 | 14 | 40 | 14 | 28   | 26 | 20,2    | M12/M14      |
| K1516.14                       | K1516.214              | 125 | 20 | 14 | 40 | 14 | 28   | 36 | 20,2    | M12/M14      |
| K1516.16                       | K1516.216              | 125 | 25 | 18 | 50 | 18 | 35   | 27 | 37,8    | M16/M18      |
| K1516.18                       | K1516.218              | 160 | 25 | 18 | 50 | 18 | 35   | 47 | 37,8    | M16/M18      |
| K1516.20                       | K1516.220              | 160 | 30 | 22 | 60 | 22 | 41   | 38 | 58,8    | M20/M22      |
| K1516.201                      | K1516.2201             | 200 | 30 | 22 | 60 | 22 | 41   | 58 | 58,8    | M20/M22      |
| K1516.24                       | K1516.224              | 200 | 30 | 26 | 70 | 26 | 48   | 54 | 84,7    | M24          |
| K1516.241                      | K1516.2241             | 250 | 35 | 26 | 70 | 26 | 48   | 79 | 84,7    | M24          |
| K1516.30                       | K1516.230              | 250 | 40 | 34 | 80 | 34 | 62   | 66 | 135     | M30/M32      |
| K1516.301                      | K1516.2301             | 315 | 50 | 34 | 80 | 34 | 62   | 96 | 135     | M30/M32      |

## Clamp strap assemblies



### Material:

Carbon steel.  
Screws tempered to 8.8.

### Version:

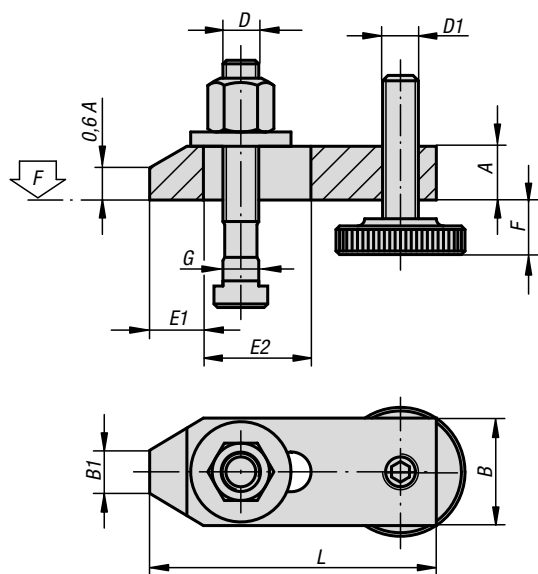
Clamp painted. Screws black oxidised.

### Sample order:

K0003.1616

### Note:

"F" is dependent on the depth of the DIN 650 slot.



## KIPP Clamp strap assemblies

| Order No.  | L   | A  | B  | B1 | E1 | E2 | F     | G<br>for<br>T-slot | D       | D1  | F<br>kN |
|------------|-----|----|----|----|----|----|-------|--------------------|---------|-----|---------|
| K0003.1010 | 80  | 15 | 30 | 12 | 15 | 30 | 8-32  | 10                 | M10x80  | M10 | 13,9    |
| K0003.1212 | 100 | 20 | 40 | 14 | 21 | 40 | 10-40 | 12                 | M12x100 | M12 | 20,2    |
| K0003.1214 | 100 | 20 | 40 | 14 | 21 | 40 | 10-38 | 14                 | M12x100 | M12 | 20,2    |
| K0003.1616 | 125 | 25 | 50 | 18 | 26 | 45 | 13-49 | 16                 | M16x125 | M16 | 37,8    |
| K0003.1618 | 125 | 25 | 50 | 18 | 26 | 45 | 13-46 | 18                 | M16x125 | M16 | 37,8    |
| K0003.2020 | 160 | 30 | 60 | 22 | 30 | 60 | 16-65 | 20                 | M20x160 | M20 | 58,8    |
| K0003.2022 | 160 | 30 | 60 | 22 | 30 | 60 | 16-65 | 22                 | M20x160 | M20 | 58,8    |

## Clamp straps

with adjustment unit



### Material:

Base, ductile iron.

Clamp strap and clamping screw carbon steel.

### Version:

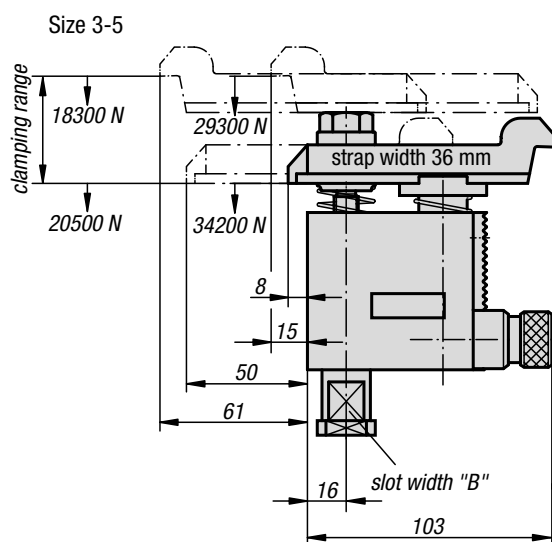
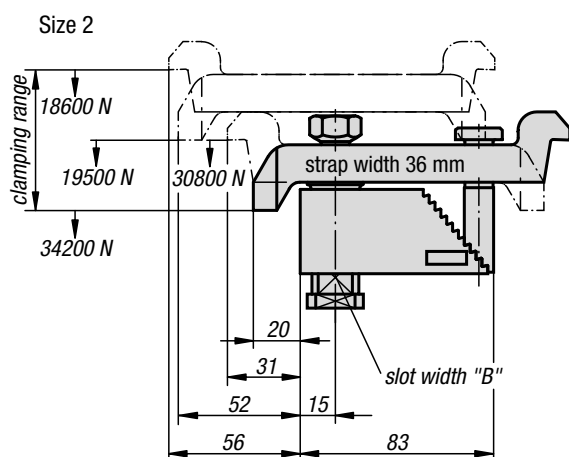
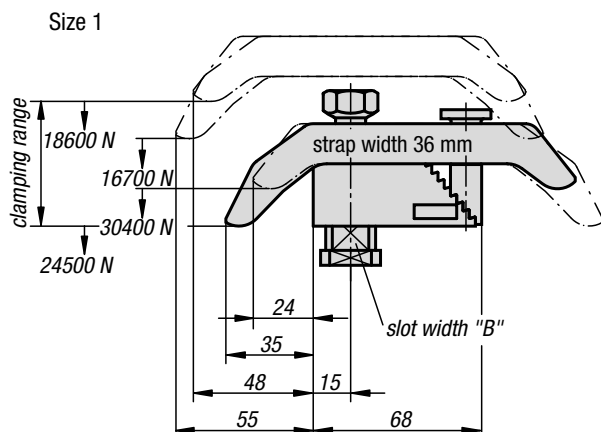
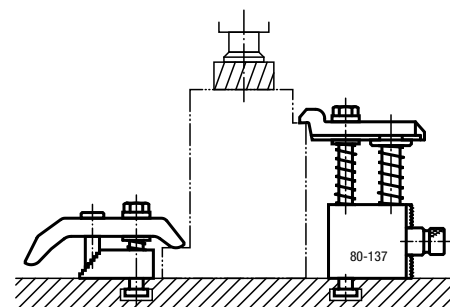
Black oxidised.

### Sample order:

K0004.40X16 (include slot width B)

### Note:

These clamp strap modules are universal, flexible clamps constructed from individual components building a compact unit. There are no loose parts which first have to be altered for a clamping operation. The compact design allows these clamps to be placed close to the workpiece enabling the full area of the machine table to be used.

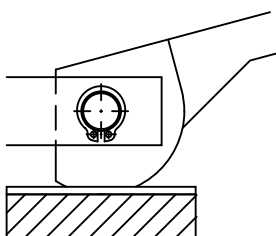
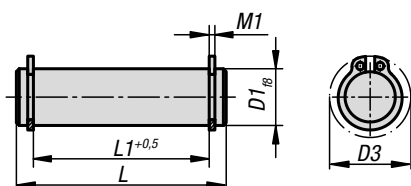


## KIPP Clamp straps with adjustment unit

| Order No. | Size | Clamp range | Slot width B<br>DIN 650 |
|-----------|------|-------------|-------------------------|
| K0004.10X | 1    | 0-35        | 12/14/16/18             |
| K0004.20X | 2    | 25-85       | 12/14/16/18             |
| K0004.30X | 3    | 80-137      | 12/14/16/18             |
| K0004.40X | 4    | 125-224     | 12/14/16/18             |
| K0004.50X | 5    | 160-300     | 12/14/16/18             |



## Hinge pins steel or stainless steel

**Material:**

Steel or stainless steel.

**Version:**

Steel version:

tempered to 1000 - 1200 N/mm<sup>2</sup>, black oxidised.

Stainless steel version:

tempered to 900 - 1050 N/mm<sup>2</sup>, bright.**Sample order:**

K0007.08

**Note for ordering:**

2 matching DIN 471 circlips are supplied.

**Note:**

For use with:

Cam levers K0008 and K0009.

Eye bolts K0396 and K1418.

Clevis K0397.

**Advantages:**

Ground OD.

High dimensional accuracy.

Suitable for use as spare part.

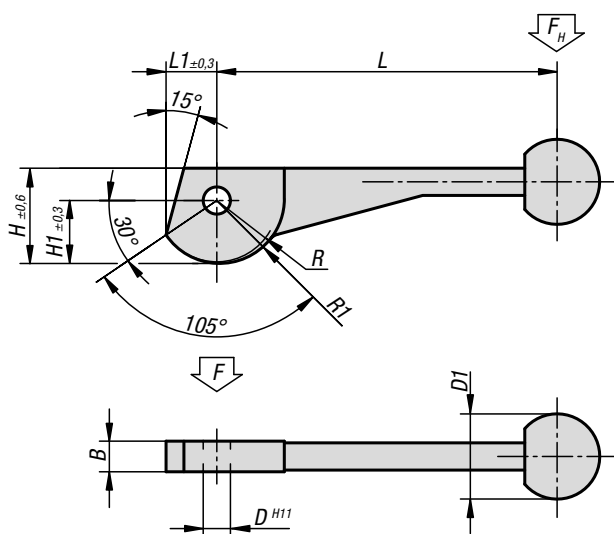
Matching circlips included.

## KIPP Hinge pins steel or stainless steel

| Order No.<br>steel | Order No.<br>stainless steel | D1 | L  | L1 | M1  | D3   |
|--------------------|------------------------------|----|----|----|-----|------|
| K0007.05           | K0007.105                    | 5  | 18 | 13 | 0,7 | 10,7 |
| K0007.06           | K0007.106                    | 6  | 22 | 17 | 0,8 | 12,2 |
| K0007.081          | K0007.108                    | 8  | 20 | 16 | 0,9 | 15,2 |
| K0007.082          | K0007.1081                   | 8  | 27 | 21 | 0,9 | 15,2 |
| K0007.08           | K0007.1082                   | 8  | 30 | 25 | 0,9 | 15,2 |
| K0007.101          | K0007.110                    | 10 | 25 | 20 | 1,1 | 17,6 |
| K0007.102          | K0007.1101                   | 10 | 35 | 29 | 1,1 | 17,6 |
| K0007.10           | K0007.1102                   | 10 | 37 | 32 | 1,1 | 17,6 |
| K0007.121          | K0007.112                    | 12 | 31 | 25 | 1,1 | 19,6 |
| K0007.122          | K0007.1121                   | 12 | 37 | 31 | 1,1 | 19,6 |
| K0007.12           | K0007.1122                   | 12 | 46 | 40 | 1,1 | 19,6 |
| K0007.14           | K0007.114                    | 14 | 44 | 37 | 1,1 | 22   |
| K0007.16           | K0007.116                    | 16 | 48 | 41 | 1,1 | 24,4 |
| K0007.18           | K0007.118                    | 18 | 58 | 51 | 1,3 | 26,8 |

## Cam levers

single



### Material:

Carbon steel 1.7220.

Ball grip plastic.

### Version:

Tempered and black oxidised.

### Sample order:

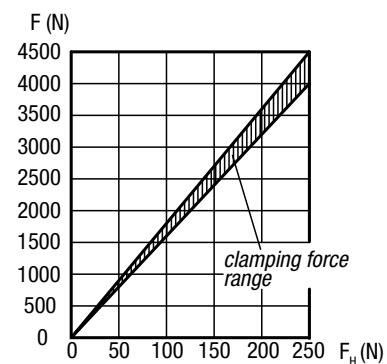
K0008.10

### Note:

Suitable hinge pin, see K0007.

The cam lever is an eccentric lever that moves along a logarithmic spiral. Its clamping properties are even over the entire contact surface of the cam.

Force diagram



### KIPP Cam levers, single

| Order No. | L     | L1   | B  | H    | H1   | D  | D1 | R    | R1   |
|-----------|-------|------|----|------|------|----|----|------|------|
| K0008.08  | 104±2 | 14,9 | 9  | 28,2 | 18,7 | 8  | 25 | 17,2 | 19,2 |
| K0008.10  | 123±2 | 18,6 | 12 | 34,8 | 23,3 | 10 | 30 | 21,5 | 24   |
| K0008.12  | 146±3 | 24,3 | 14 | 43,8 | 30,3 | 12 | 30 | 28   | 31,2 |

## Cam levers

double



### Material:

Carbon steel 1.7220.

Ball grip plastic.

### Version:

Tempered and black oxidised.

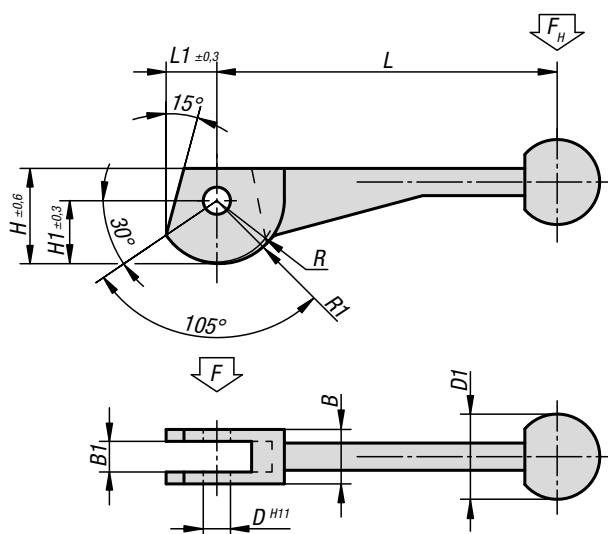
### Sample order:

K0009.12

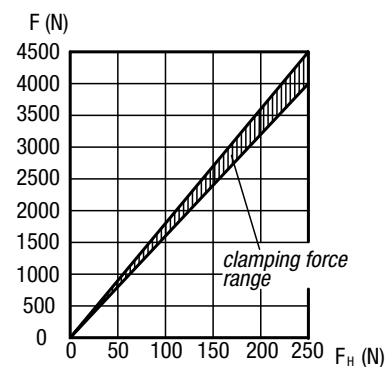
### Note:

Suitable hinge pin, see K0007.

The cam lever is an eccentric lever that moves along a logarithmic spiral. Its clamping properties are even over the entire contact surface of the cam.



Force diagram

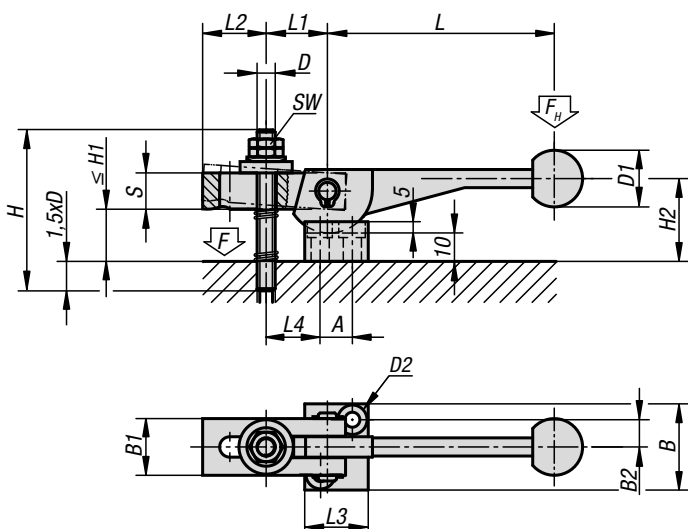


### KIPP Cam levers, double

| Order No. | L     | L1   | B  | B1 | H    | H1   | D  | D1 | R    | R1   |
|-----------|-------|------|----|----|------|------|----|----|------|------|
| K0009.08  | 104±2 | 14,9 | 16 | 9  | 28,2 | 18,7 | 8  | 25 | 17,2 | 19,2 |
| K0009.10  | 123±2 | 18,6 | 20 | 12 | 34,8 | 23,3 | 10 | 30 | 21,5 | 24   |
| K0009.12  | 146±3 | 24,3 | 25 | 14 | 43,8 | 30,3 | 12 | 30 | 28   | 31,2 |

## Cam clamps

single



### Material:

Cam lever carbon steel 1.7220.

Strap carbon steel 1.1191.

### Version:

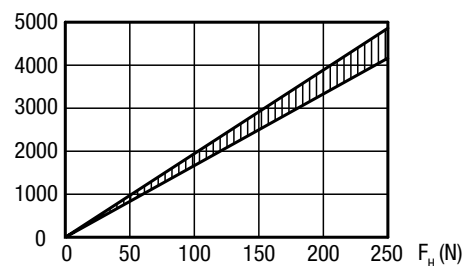
Black oxidised.

### Sample order:

K0010.10

Force diagram

F (N)

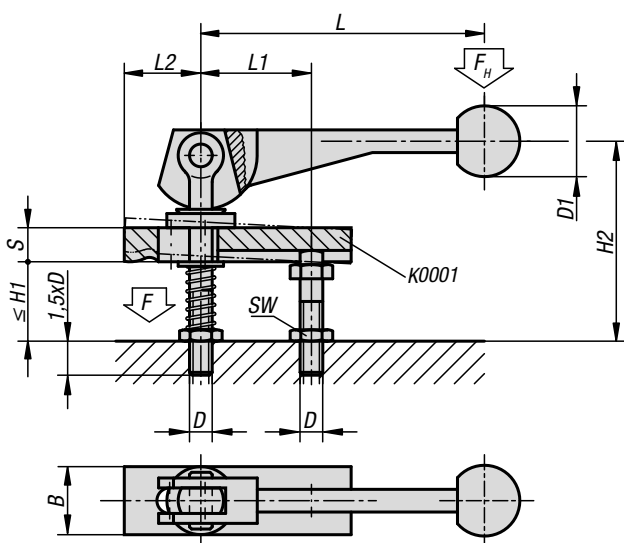


## KIPP Cam clamps, single

| Order No. | L     | L1 | L2 | L3 | L4 | B  | B1 | B2   | S  | H   | H1<br>max. | H2 | D   | D1 | D2 | A  | SW |
|-----------|-------|----|----|----|----|----|----|------|----|-----|------------|----|-----|----|----|----|----|
| K0010.08  | 104±2 | 27 | 28 | 28 | 27 | 38 | 25 | 12   | 16 | 70  | 25         | 34 | M8  | 25 | 7  | 14 | 13 |
| K0010.10  | 123±2 | 34 | 36 | 32 | 35 | 41 | 32 | 13,5 | 20 | 80  | 24         | 40 | M10 | 30 | 7  | 16 | 17 |
| K0010.12  | 146±3 | 43 | 45 | 37 | 45 | 43 | 40 | 14,5 | 25 | 100 | 31         | 48 | M12 | 30 | 7  | 19 | 19 |

## Cam clamps

double



### Material:

Cam lever carbon steel 1.7220.  
Strap carbon steel 1.1191

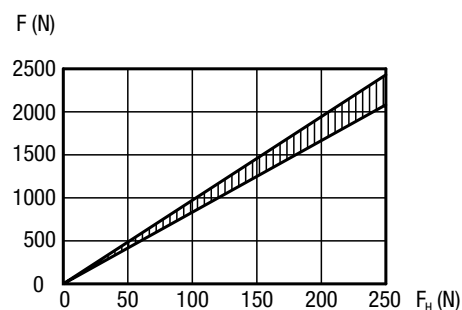
### Version:

Black oxidised.

### Sample order:

K0011.12

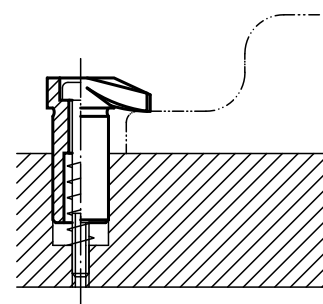
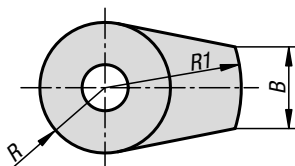
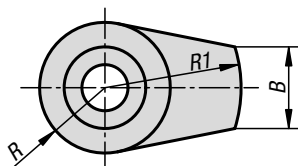
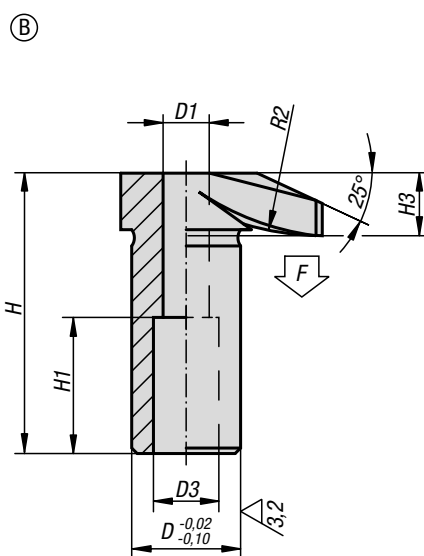
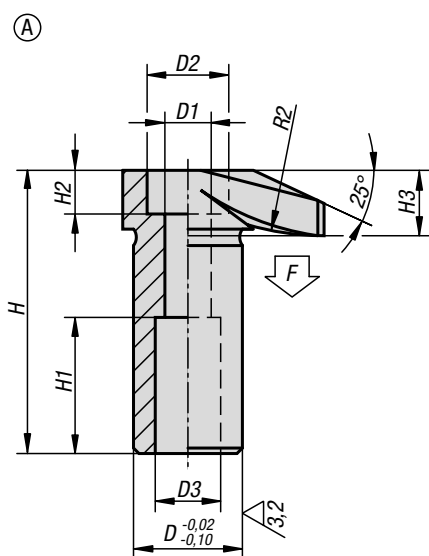
Force diagram



## KIPP Cam clamps, double

| Order No. | L     | L1 | L2 | B  | S  | H1<br>max. | H2  | D   | D1 | SW |
|-----------|-------|----|----|----|----|------------|-----|-----|----|----|
| K0011.08  | 104±2 | 39 | 37 | 20 | 12 | 28         | 74  | M8  | 25 | 13 |
| K0011.10  | 123±2 | 49 | 46 | 25 | 16 | 39         | 92  | M10 | 30 | 17 |
| K0011.12  | 146±3 | 61 | 58 | 32 | 20 | 49         | 120 | M12 | 30 | 19 |

## Hook clamps



**Material:**  
Carbon steel, tempered.

**Version:**  
Black oxidised.

**Sample order:**  
K0012.10

**Accessories:**  
Springs K1554 and socket head screws K0869.

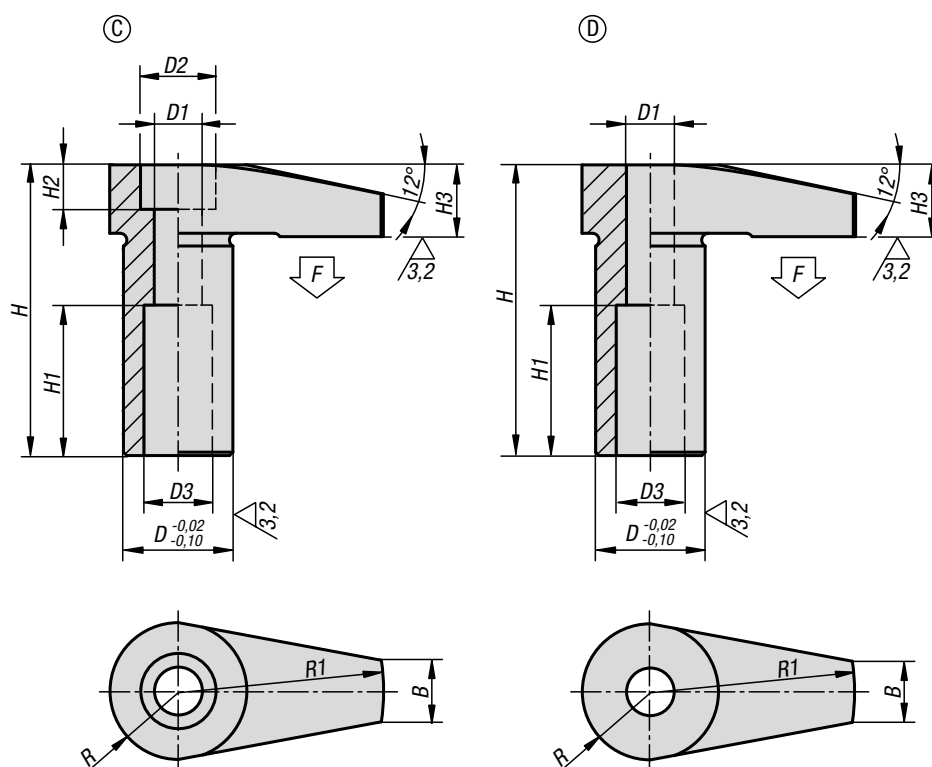
### KIPP Hook clamps

| Order No. | Form | D  | D1   | D2 | D3 | H  | H1 | H2 | H3 | B  | R  | R1 | R2 | F<br>max. kN |
|-----------|------|----|------|----|----|----|----|----|----|----|----|----|----|--------------|
| K0012.06  | A    | 16 | 6,5  | 11 | 10 | 42 | 20 | 6  | 10 | 11 | 9  | 20 | 30 | 4,8          |
| K0012.08  | A    | 20 | 8,5  | 15 | 12 | 52 | 25 | 8  | 12 | 15 | 12 | 25 | 50 | 8,8          |
| K0012.10  | A    | 25 | 10,5 | 18 | 14 | 66 | 32 | 10 | 16 | 17 | 14 | 32 | 60 | 13,9         |
| K0012.12  | A    | 32 | 12,5 | 20 | 17 | 83 | 40 | 12 | 20 | 20 | 18 | 40 | 80 | 20,2         |

| Order No. | Form | D  | D1   | D3 | H    | H1 | H3   | B  | R  | R1 | R2 | F<br>max. kN |
|-----------|------|----|------|----|------|----|------|----|----|----|----|--------------|
| K0012.106 | B    | 16 | 6,5  | 10 | 41,5 | 20 | 9,5  | 11 | 9  | 20 | 30 | 4,8          |
| K0012.108 | B    | 20 | 8,5  | 12 | 51,5 | 25 | 11,5 | 15 | 12 | 25 | 50 | 8,8          |
| K0012.110 | B    | 25 | 10,5 | 14 | 65,5 | 32 | 15,5 | 17 | 14 | 32 | 60 | 13,9         |
| K0012.112 | B    | 32 | 12,5 | 17 | 82,5 | 40 | 19,5 | 20 | 18 | 40 | 80 | 20,2         |

## Hook clamps

with long hook



**Material:**  
Carbon steel, tempered.

**Version:**  
Black oxidised.

**Sample order:**  
K0012.406

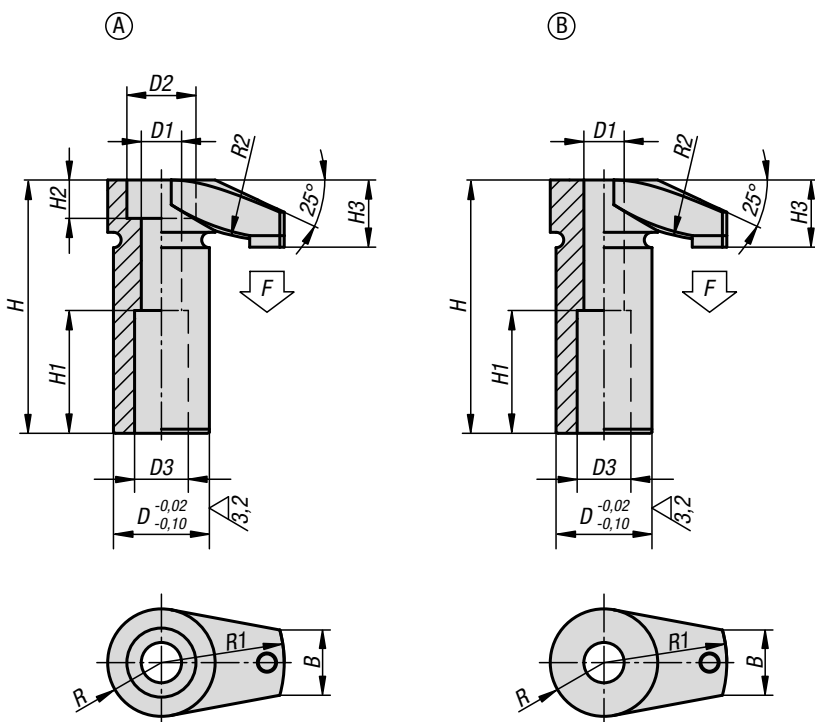
### KIPP Hook clamps with long hook

| Order No. | Form | B  | D  | D1   | D2 | D3 | H    | H1 | H2 | H3   | R    | R1 | F<br>max. kN |
|-----------|------|----|----|------|----|----|------|----|----|------|------|----|--------------|
| K0012.406 | C    | 9  | 16 | 7    | 11 | 10 | 42,5 | 22 | 6  | 10,5 | 10   | 30 | 4,5          |
| K0012.408 | C    | 12 | 20 | 8,6  | 15 | 12 | 52,5 | 25 | 8  | 12,5 | 12,5 | 40 | 6,5          |
| K0012.410 | C    | 18 | 25 | 10,6 | 18 | 14 | 66,5 | 32 | 10 | 16,5 | 16   | 50 | 11,8         |

| Order No. | Form | B  | D  | D1   | D3 | H    | H1 | H3   | R    | R1 | F<br>max. kN |
|-----------|------|----|----|------|----|------|----|------|------|----|--------------|
| K0012.506 | D    | 9  | 16 | 7    | 10 | 42,5 | 22 | 10,5 | 10   | 30 | 4,5          |
| K0012.508 | D    | 12 | 20 | 8,6  | 12 | 52,5 | 25 | 12,5 | 12,5 | 40 | 6,5          |
| K0012.510 | D    | 18 | 25 | 10,6 | 14 | 66,5 | 32 | 16,5 | 16   | 50 | 11,8         |

## Hook clamps

with soft pad



### Material:

Carbon steel.

Soft pad POM or polyurethane 99 Shore A.

### Version:

Tempered and black oxidised.

### Sample order:

K0012.206

### Note:

The pressed in plastic inserts offer optimal damage protection for sensitive workpiece faces.

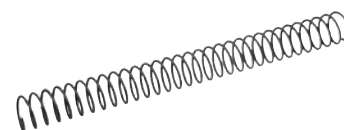
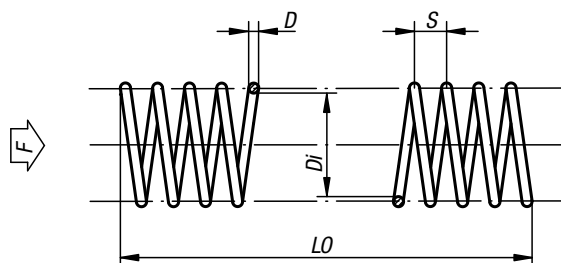
## KIPP Hook clamps with soft pad

| Order No.  | Form | Component material | D  | D1   | D2 | D3 | H    | H1 | H2 | H3   | B  | R  | R1 | R2 | F max. kN |
|------------|------|--------------------|----|------|----|----|------|----|----|------|----|----|----|----|-----------|
| K0012.206  | A    | polyacetal         | 16 | 6,5  | 11 | 10 | 42   | 20 | 6  | 10,5 | 11 | 9  | 20 | 30 | 4,8       |
| K0012.208  | A    | polyacetal         | 20 | 8,5  | 15 | 12 | 52   | 25 | 8  | 13,5 | 15 | 12 | 25 | 50 | 8,8       |
| K0012.210  | A    | polyacetal         | 25 | 10,5 | 18 | 14 | 66   | 32 | 10 | 17,5 | 17 | 14 | 32 | 60 | 11,6      |
| K0012.212  | A    | polyacetal         | 32 | 12,5 | 20 | 17 | 83   | 40 | 12 | 21   | 20 | 18 | 40 | 80 | 18,8      |
| K0012.2106 | B    | polyacetal         | 16 | 6,5  | -  | 10 | 41,5 | 20 | -  | 10   | 11 | 9  | 20 | 30 | 4,8       |
| K0012.2108 | B    | polyacetal         | 20 | 8,5  | -  | 12 | 51,5 | 25 | -  | 13   | 15 | 12 | 25 | 50 | 8,8       |
| K0012.2110 | B    | polyacetal         | 25 | 10,5 | -  | 14 | 65,5 | 32 | -  | 17   | 17 | 14 | 32 | 60 | 11,6      |
| K0012.2112 | B    | polyacetal         | 32 | 12,5 | -  | 17 | 82,5 | 40 | -  | 21   | 20 | 18 | 40 | 80 | 18,8      |
| K0012.306  | A    | polyurethane       | 16 | 6,5  | 11 | 10 | 42   | 20 | 6  | 10,5 | 11 | 9  | 20 | 30 | 4,8       |
| K0012.308  | A    | polyurethane       | 20 | 8,5  | 15 | 12 | 52   | 25 | 8  | 13,5 | 15 | 12 | 25 | 50 | 8,8       |
| K0012.310  | A    | polyurethane       | 25 | 10,5 | 18 | 14 | 66   | 32 | 10 | 17,5 | 17 | 14 | 32 | 60 | 11,6      |
| K0012.312  | A    | polyurethane       | 32 | 12,5 | 20 | 17 | 83   | 40 | 12 | 21   | 20 | 18 | 40 | 80 | 18,8      |
| K0012.3106 | B    | polyurethane       | 16 | 6,5  | -  | 10 | 41,5 | 20 | -  | 10   | 11 | 9  | 20 | 30 | 4,8       |
| K0012.3108 | B    | polyurethane       | 20 | 8,5  | -  | 12 | 51,5 | 25 | -  | 13   | 15 | 12 | 25 | 50 | 8,8       |
| K0012.3110 | B    | polyurethane       | 25 | 10,5 | -  | 14 | 65,5 | 32 | -  | 17   | 17 | 14 | 32 | 60 | 11,6      |
| K0012.3112 | B    | polyurethane       | 32 | 12,5 | -  | 17 | 82,5 | 40 | -  | 21   | 20 | 18 | 40 | 80 | 18,8      |



## Springs

for clamp straps



### Material:

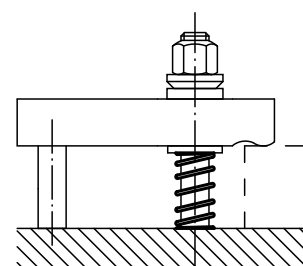
Spring steel wire EN 10270-1-DH.

### Sample order:

K1554.12

### Note:

Springs are only available in 400 mm lengths.



### KIPP Springs for clamp straps

| Order No. | D   | Di   | LO  | S | Spring force<br>F approx. N | Compression<br>factor under f |
|-----------|-----|------|-----|---|-----------------------------|-------------------------------|
| K1554.06  | 1   | 6,5  | 400 | 3 | 32                          | 1,3                           |
| K1554.08  | 1   | 8,5  | 400 | 4 | 25                          | 2,1                           |
| K1554.10  | 1,2 | 10,5 | 400 | 4 | 35                          | 2,7                           |
| K1554.12  | 1,4 | 12,5 | 400 | 5 | 47                          | 3,3                           |
| K1554.14  | 1,5 | 14,5 | 400 | 6 | 50                          | 4                             |
| K1554.16  | 1,6 | 16,5 | 400 | 7 | 53                          | 4,8                           |
| K1554.18  | 1,8 | 18,5 | 400 | 7 | 68                          | 5,4                           |
| K1554.20  | 1,8 | 20,5 | 400 | 8 | 62                          | 6,5                           |
| K1554.24  | 2   | 25   | 400 | 9 | 70                          | 8,6                           |

## Hook clamps

with collar



**Material:**

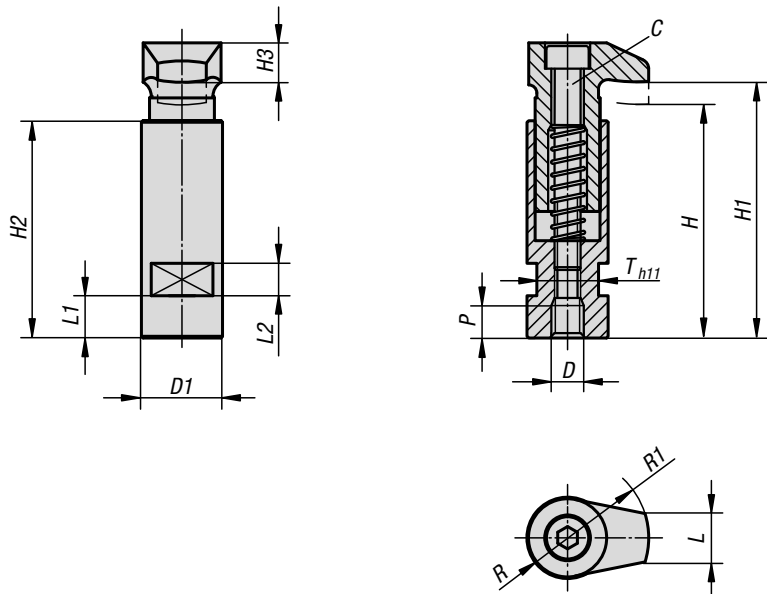
Carbon steel.

**Version:**

Tempered and black oxidised.

**Sample order:**

K0013.06



### KIPP Hook clamps with collar

| Order No. | C   | D   | D1 | H   | H1  | H2  | H3 | L  | L1 | L2 | P  | R  | R1 | T  | Clamping force<br>kN |
|-----------|-----|-----|----|-----|-----|-----|----|----|----|----|----|----|----|----|----------------------|
| K0013.06  | M6  | M6  | 20 | 56  | 60  | 53  | 10 | 11 | 9  | 8  | 8  | 9  | 20 | 17 | 4,82                 |
| K0013.08  | M6  | M8  | 20 | 56  | 60  | 53  | 10 | 11 | 9  | 8  | 8  | 9  | 20 | 17 | 8,77                 |
| K0013.10  | M8  | M10 | 25 | 72  | 79  | 67  | 12 | 15 | 13 | 10 | 10 | 12 | 25 | 19 | 13,9                 |
| K0013.12  | M10 | M12 | 32 | 88  | 96  | 82  | 16 | 17 | 18 | 12 | 12 | 14 | 32 | 27 | 20,2                 |
| K0013.16  | M12 | M16 | 40 | 109 | 118 | 102 | 20 | 20 | 22 | 12 | 16 | 18 | 40 | 32 | 37,8                 |

## Hook clamps

with collar



### Material:

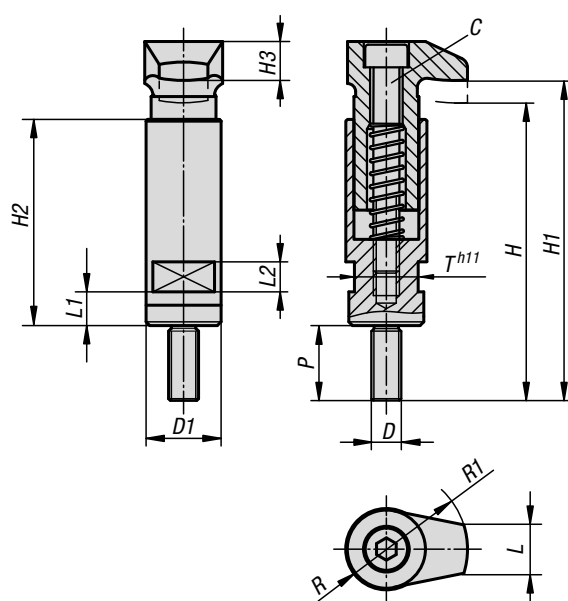
Carbon steel.

### Version:

Tempered and black oxidised.

### Sample order:

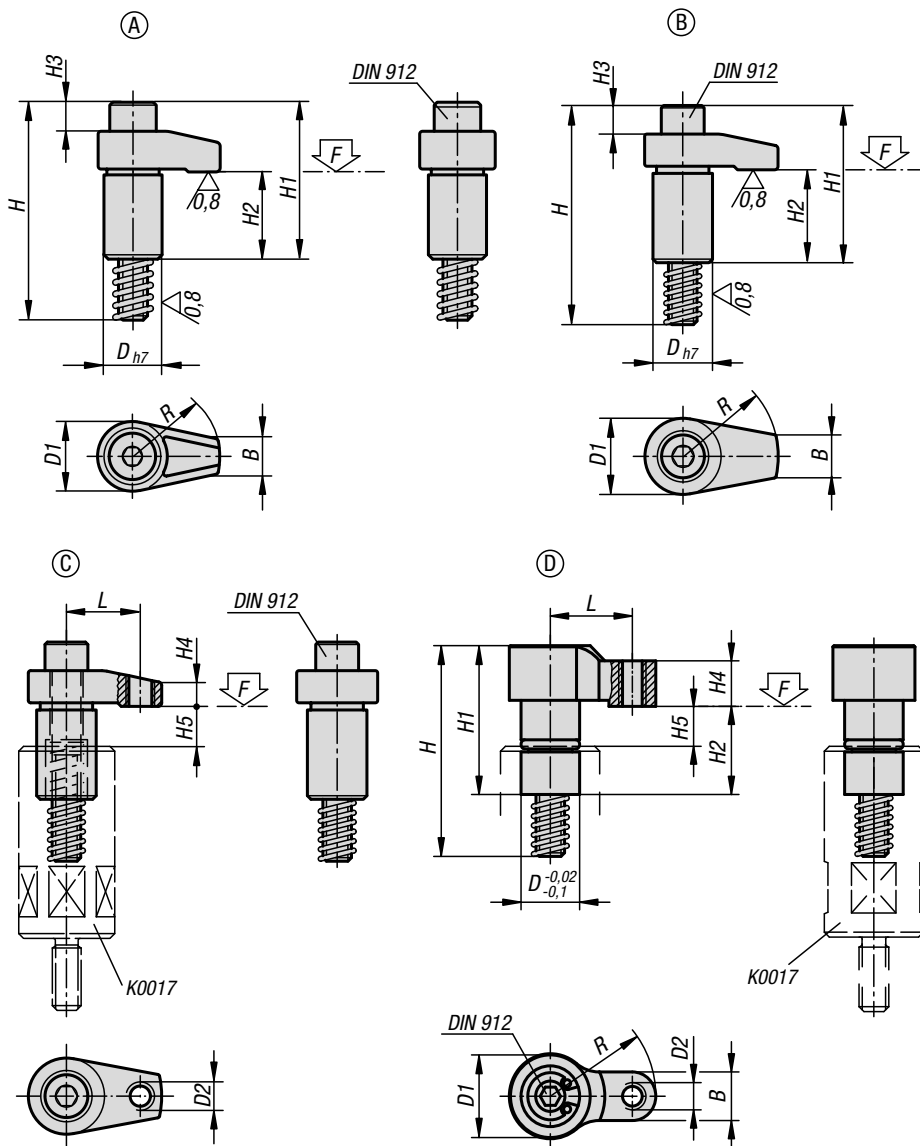
K0013.708



## KIPP Hook clamps with collar

| Order No. | C   | D   | D1 | H   | H1  | H2  | H3 | L  | L1 | L2 | P  | R  | R1 | T  | Clamping force<br>kN |
|-----------|-----|-----|----|-----|-----|-----|----|----|----|----|----|----|----|----|----------------------|
| K0013.706 | M6  | M6  | 20 | 56  | 60  | 53  | 10 | 11 | 9  | 8  | 20 | 9  | 20 | 17 | 4,82                 |
| K0013.708 | M6  | M8  | 20 | 56  | 60  | 53  | 10 | 11 | 9  | 8  | 20 | 9  | 20 | 17 | 8,77                 |
| K0013.710 | M8  | M10 | 25 | 72  | 79  | 67  | 12 | 15 | 13 | 10 | 25 | 12 | 25 | 19 | 13,9                 |
| K0013.712 | M10 | M12 | 32 | 88  | 96  | 82  | 16 | 17 | 18 | 12 | 30 | 14 | 32 | 27 | 20,2                 |
| K0013.716 | M12 | M16 | 40 | 109 | 118 | 102 | 20 | 20 | 22 | 12 | 30 | 18 | 40 | 32 | 37,8                 |

## Hook clamps



### Material:

Carbon steel, tempered.

### Version:

Form A-C: black oxidised. Shaft diameter ground.  
Form D: black oxidised.

### Sample order:

K0014.216040

### Note:

The stated clamping forces (F max.) and tightening torques are valid within the stated clamping ranges (H5).

### Advantages:

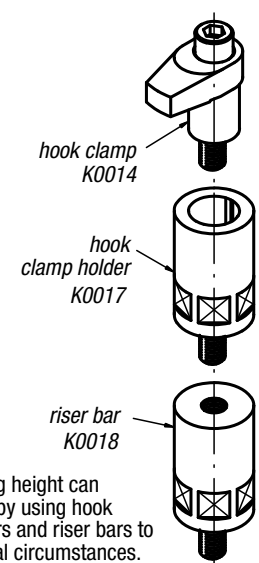
Compact design for use in the tightest of spaces  
Diverse versions and sizes

### Accessories:

Hook clamp holders K0017.

Hook clamp holders K0851.

Extensions for jack screws K0018.

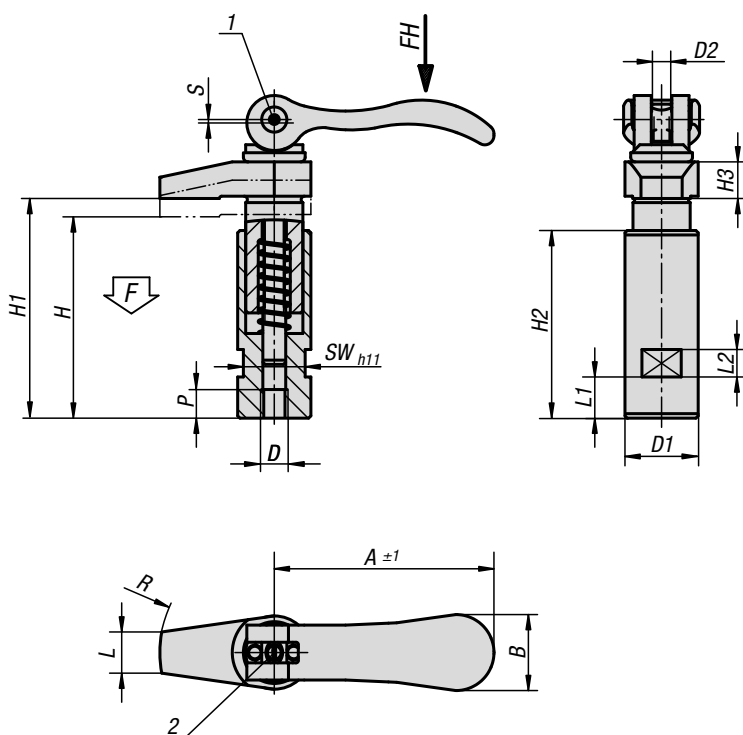


## KIPP Hook clamps

| Order No.    | Form | D  | D1 | D2  | H   | H1   | H2   | H3 | H4  | H5<br>max.<br>clamping range | B  | L  | R  | Socket<br>head screw<br>DIN 912 | Tightening<br>torque<br>max. Nm | F<br>max. kN |
|--------------|------|----|----|-----|-----|------|------|----|-----|------------------------------|----|----|----|---------------------------------|---------------------------------|--------------|
| K0014.110030 | A    | 20 | 25 | -   | 75  | 54   | 30   | 9  | 10  | 12                           | 12 | -  | 30 | M10x65                          | 37,2                            | 13           |
| K0014.110040 | A    | 20 | 25 | -   | 75  | 54   | 30   | 9  | 10  | 12                           | 12 | -  | 40 | M10x65                          | 31,4                            | 9,8          |
| K0014.208020 | B    | 18 | 22 | -   | 58  | 37   | 23   | 2  | 7   | 10                           | 10 | -  | 20 | M8x50                           | 37,2                            | 13,6         |
| K0014.208025 | B    | 18 | 22 | -   | 58  | 37   | 23   | 2  | 7   | 10                           | 10 | -  | 25 | M8x50                           | 32,3                            | 10,9         |
| K0014.208030 | B    | 18 | 22 | -   | 58  | 37   | 23   | 2  | 7   | 10                           | 10 | -  | 30 | M8x50                           | 29,4                            | 9            |
| K0014.212040 | B    | 25 | 32 | -   | 92  | 66   | 39   | 11 | 12  | 15                           | 18 | -  | 40 | M12x80                          | 58,8                            | 17,5         |
| K0014.212050 | B    | 25 | 32 | -   | 92  | 68   | 39   | 11 | 12  | 15                           | 18 | -  | 50 | M12x80                          | 49                              | 14           |
| K0014.212060 | B    | 25 | 32 | -   | 92  | 68   | 39   | 11 | 12  | 15                           | 18 | -  | 60 | M12x80                          | 45,1                            | 11,6         |
| K0014.216040 | B    | 32 | 36 | -   | 101 | 75   | 39   | 15 | 15  | 15                           | 22 | -  | 40 | M16x85                          | 166,6                           | 37,9         |
| K0014.216050 | B    | 32 | 36 | -   | 101 | 75   | 39   | 15 | 15  | 15                           | 22 | -  | 50 | M16x85                          | 147                             | 30,4         |
| K0014.216060 | B    | 32 | 36 | -   | 101 | 75   | 39   | 15 | 15  | 15                           | 22 | -  | 60 | M16x85                          | 127,4                           | 25,2         |
| K0014.312140 | C    | 25 | 32 | M12 | 92  | 66   | 39   | 11 | 10  | 15                           | 18 | 31 | 40 | M12x80                          | 58,8                            | 22,6         |
| K0014.312150 | C    | 25 | 32 | M12 | 92  | 68   | 39   | 11 | 13  | 15                           | 18 | 38 | 50 | M12x80                          | 49                              | 18,5         |
| K0014.312160 | C    | 25 | 32 | M12 | 92  | 68   | 39   | 11 | 13  | 15                           | 18 | 46 | 60 | M12x80                          | 45,1                            | 15,2         |
| K0014.316150 | C    | 32 | 36 | M12 | 101 | 75   | 39   | 15 | 16  | 15                           | 22 | 38 | 50 | M16x85                          | 147                             | 38           |
| K0014.316160 | C    | 32 | 36 | M12 | 101 | 75   | 39   | 15 | 16  | 15                           | 22 | 46 | 60 | M16x85                          | 127,4                           | 33           |
| K0014.404118 | D    | 10 | 14 | M4  | 37  | 24,5 | 14,5 | -  | 7,5 | 3                            | 8  | 14 | 18 | M4x30                           | 2,7                             | 2            |
| K0014.406122 | D    | 12 | 16 | M5  | 44  | 30,5 | 17,5 | -  | 9,5 | 4                            | 10 | 17 | 22 | M6x35                           | 7                               | 3,5          |

## Hook clamps

with collar and cam lever



### Material:

Body and hook, high-carbon steel.  
Handles, cast aluminium EN AC-46200.  
Thrust washer, fibreglass reinforced plastic PA 66 GF 35-X.  
Hinge pin, stud and washer stainless steel 1.4305.

### Version:

Body and hook tempered and black oxidised.  
Handles, black powder-coated.  
Thrust washer black.  
Hinge pin, stud and washer bright.

### Sample order:

K0013.106

### Note:

Ideal for clamping where the parts are to be inserted from above as the hook can be swivelled out of the way.

The exact clamping height is set by the fine thread on the stud using a screwdriver. This setting can be secured with the locking screw. The length S corresponds to the cam travel.

### Drawing reference:

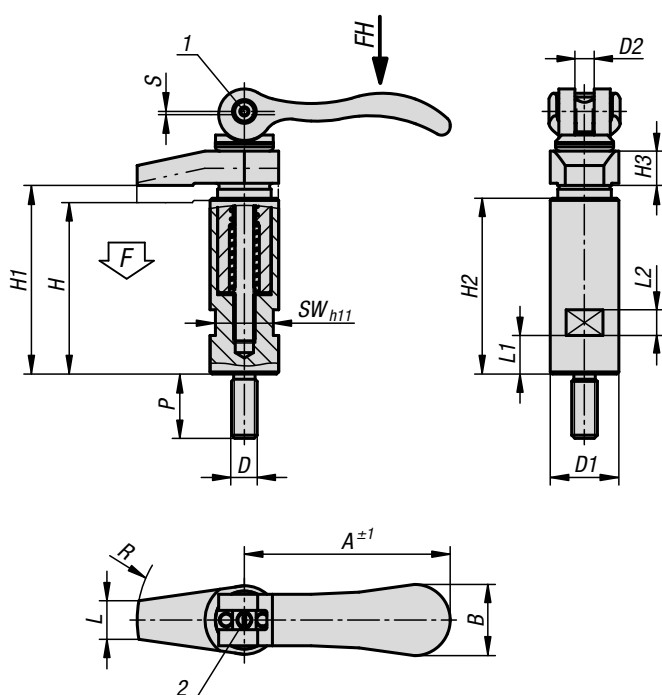
- 1) Locking screw for pin
- 2) Screw for fine adjustment of lever

## KIPP Hook clamps with collar and cam lever

| Order No. | D   | D1 | D2      | H  | H1 | H2 | H3 | L  | L1 | L2 | A    | B    | P  | R  | SW | Travel<br>S | F<br>kN | Hand<br>force<br>FH N |
|-----------|-----|----|---------|----|----|----|----|----|----|----|------|------|----|----|----|-------------|---------|-----------------------|
| K0013.106 | M6  | 20 | M6x0,5  | 56 | 60 | 53 | 10 | 9  | 9  | 8  | 70,4 | 21,5 | 8  | 30 | 17 | 1,2         | 4       | 120                   |
| K0013.108 | M8  | 20 | M6x0,5  | 56 | 60 | 53 | 10 | 9  | 9  | 8  | 70,4 | 21,5 | 8  | 30 | 17 | 1,2         | 4       | 120                   |
| K0013.110 | M10 | 25 | M8x0,75 | 72 | 79 | 67 | 12 | 12 | 13 | 10 | 96   | 33,3 | 10 | 40 | 19 | 1,5         | 8       | 350                   |
| K0013.112 | M12 | 32 | M8x0,75 | 88 | 96 | 82 | 15 | 18 | 18 | 12 | 96   | 33,3 | 12 | 50 | 27 | 1,5         | 8       | 350                   |

## Hook clamps

with collar and cam lever



### Material:

Body and hook, high-carbon steel.  
Handles, cast aluminium EN AC-46200.  
Thrust washer, fibreglass reinforced plastic PA 66 GF 35-X.  
Hinge pin, stud and washer stainless steel 1.4305.

### Version:

Body and hook tempered and black oxidised.  
Handles, black powder-coated.  
Thrust washer black.  
Hinge pin, stud and washer bright.

### Sample order:

K0013.208

### Note:

Ideal for clamping where the parts are to be inserted from above as the hook can be swivelled out of the way.

The exact clamping height is set by the fine thread on the stud using a screwdriver. This setting can be secured with the locking screw. The length S corresponds to the cam travel.

### Drawing reference:

- 1) Locking screw for pin
- 2) Screw for fine adjustment of lever

## KIPP Hook clamps with collar and cam lever

| Order No. | D   | D1 | D2      | H  | H1 | H2 | H3 | L  | L1 | L2 | A    | B    | P  | R  | SW | Travel<br>S | F<br>kN | Hand<br>force<br>FH N |
|-----------|-----|----|---------|----|----|----|----|----|----|----|------|------|----|----|----|-------------|---------|-----------------------|
| K0013.206 | M6  | 20 | M6x0,5  | 56 | 60 | 53 | 10 | 9  | 9  | 8  | 70,4 | 21,5 | 20 | 30 | 17 | 1,2         | 4       | 120                   |
| K0013.208 | M8  | 20 | M6x0,5  | 56 | 60 | 53 | 10 | 9  | 9  | 8  | 70,4 | 21,5 | 20 | 30 | 17 | 1,2         | 4       | 120                   |
| K0013.210 | M10 | 25 | M8x0,75 | 72 | 79 | 67 | 12 | 12 | 13 | 10 | 96   | 33,3 | 25 | 40 | 19 | 1,5         | 8       | 350                   |
| K0013.212 | M12 | 32 | M8x0,75 | 88 | 96 | 82 | 18 | 18 | 18 | 12 | 96   | 33,3 | 30 | 50 | 27 | 1,5         | 8       | 350                   |

# Hook clamp

with collar and adjustable handle with clamping force intensifier



Components are clamped using the hook clamps with collar and clamping force intensifier by manually operating the clamping lever.

With clamping levers with integrated clamp force intensifier, the retaining force can be increased by up to 75% compared with standard clamping levers. In addition, less effort is required when clamping and releasing.

When clamping, the retaining force is increased by the integrated axial needle bearing which creates very low surface friction on the fixed contact surface. The hardened stopper discs are designed for high retaining forces and the load rating of the bearing ensures long service life.

## Material:

Body and hook clamp, carbon steel.  
Grip die-cast zinc acc. to DIN EN 12844.  
Clamping force intensifier steel parts grade 5.8

## Version:

Body and hook clamp tempered and black oxidised.  
Grip plastic coated.  
Clamping force intensifier steel parts black oxidised.  
Axial needle bearing with hardened and ground stopper discs.

## Sample order:

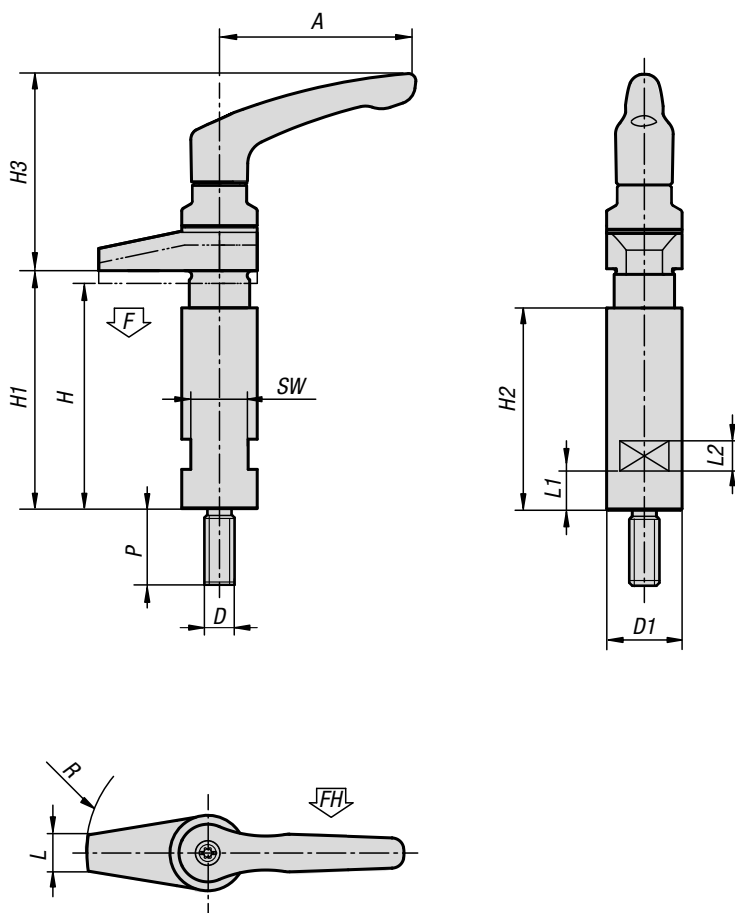
K0013.410

## Method of operation:

In the default position, the handle is engaged with the threaded insert through a toothed ring. By lifting the handle, it can be repositioned and re-engaged in the toothed ring by spring force.

## On request:

Other grip colours.



## KIPP Hook clamp with collar and clamping lever with clamping force intensifier

| Order No. | D   | P  | D1 | H  | H1 | H3   | L2 | L1 | A  | H2 | SW | R  | L  | F<br>kN | Hand<br>force<br>FH N |
|-----------|-----|----|----|----|----|------|----|----|----|----|----|----|----|---------|-----------------------|
| K0013.410 | M10 | 25 | 25 | 72 | 79 | 65,1 | 10 | 13 | 65 | 67 | 19 | 40 | 12 | 6,1     | 130                   |
| K0013.412 | M12 | 30 | 32 | 88 | 96 | 80,9 | 12 | 18 | 80 | 82 | 27 | 50 | 18 | 8,7     | 170                   |



# Hook clamp

with collar and clamping lever with clamping force intensifier



Components are clamped using the hook clamps with collar and clamping lever with clamping force intensifier by manually operating the clamping lever.

With clamping levers with integrated clamp force intensifier, the retaining force can be increased by up to 75% compared with standard clamping levers. In addition, less effort is required when clamping and releasing.

When clamping, the retaining force is increased by the integrated axial needle bearing which creates very low surface friction on the fixed contact surface. The hardened stopper discs are designed for high retaining forces and the load rating of the bearing ensures long service life.

## Material:

Body and hook clamp, carbon steel.  
Grip die-cast zinc acc. to DIN EN 12844.  
Clamping force intensifier steel parts grade 5.8

## Version:

Body and hook clamp tempered and black oxidised.  
Grip plastic coated.  
Clamping force intensifier steel parts black oxidised.  
Axial needle bearing with hardened and ground stopper discs.

## Sample order:

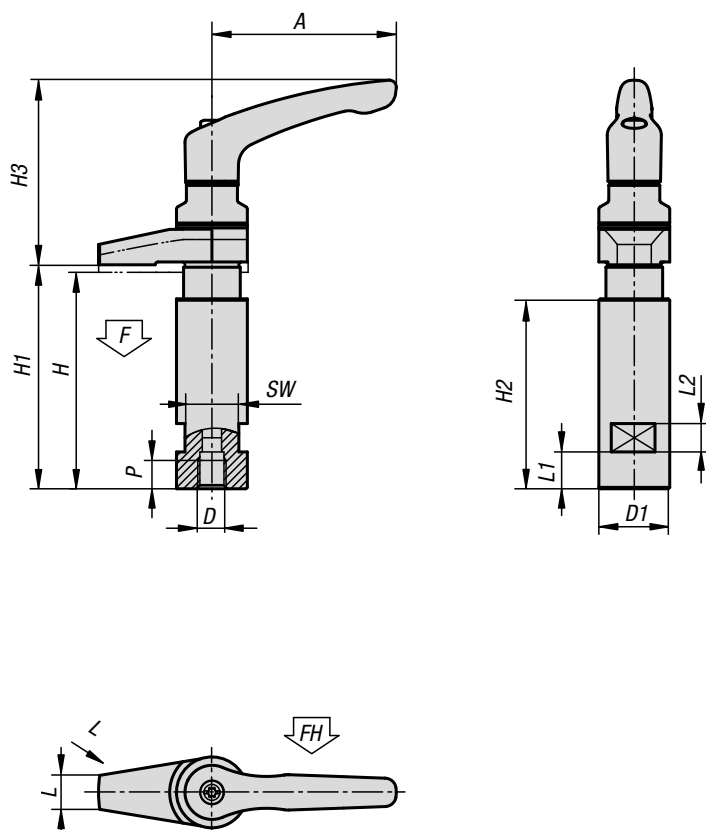
K0013.310

## Method of operation:

In the default position, the handle is engaged with the threaded insert through a toothed ring. By lifting the handle, it can be repositioned and re-engaged in the toothed ring by spring force.

## On request:

Other grip colours.

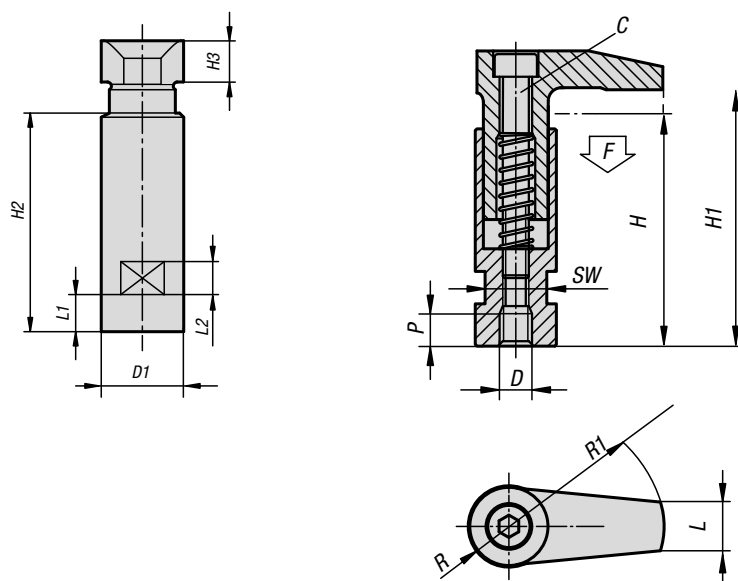


## KIPP Hook clamp with collar and clamping lever with clamping force intensifier

| Order No. | D   | P  | D1 | H  | H1 | H3   | L2 | L1 | A  | H2 | SW | R  | L  | F<br>kN | Hand<br>force<br>FH N |
|-----------|-----|----|----|----|----|------|----|----|----|----|----|----|----|---------|-----------------------|
| K0013.310 | M10 | 10 | 25 | 72 | 79 | 65,1 | 10 | 13 | 65 | 67 | 19 | 40 | 12 | 6,1     | 130                   |
| K0013.312 | M12 | 12 | 32 | 88 | 96 | 80,9 | 12 | 18 | 80 | 82 | 27 | 50 | 18 | 8,7     | 170                   |

## Hook clamp with collar

with long clamping claw



### Material:

Carbon steel.

### Version:

Tempered and black oxidised.

### Sample order:

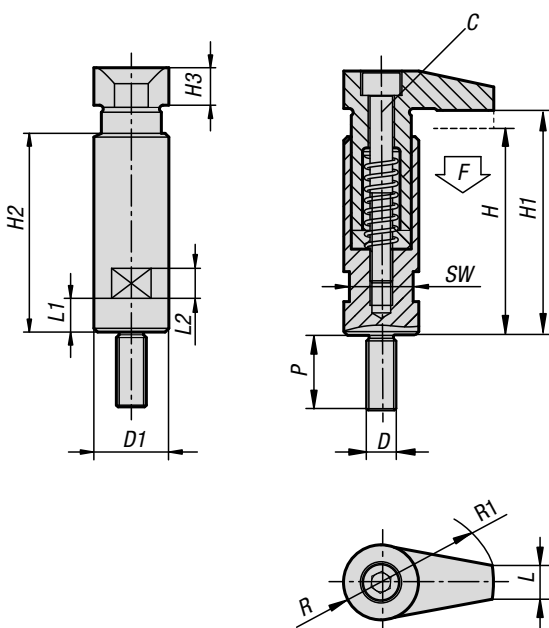
K0013.510

### KIPP Hook clamp with collar with long clamping claw

| Order No. | C   | D   | D1 | H  | H1 | H2 | H3   | L  | L1 | L2 | P  | R    | R1 | SW | Clamping force kN |
|-----------|-----|-----|----|----|----|----|------|----|----|----|----|------|----|----|-------------------|
| K0013.506 | M6  | M6  | 20 | 56 | 60 | 53 | 10,5 | 9  | 11 | 8  | 8  | 10   | 30 | 17 | 4,5               |
| K0013.508 | M6  | M8  | 20 | 56 | 60 | 53 | 10,5 | 9  | 11 | 8  | 8  | 10   | 30 | 17 | 4,5               |
| K0013.510 | M8  | M10 | 25 | 72 | 79 | 67 | 12,5 | 12 | 15 | 10 | 10 | 12,5 | 40 | 19 | 6,5               |
| K0013.512 | M10 | M12 | 32 | 88 | 96 | 82 | 16,5 | 18 | 17 | 12 | 12 | 16,5 | 50 | 27 | 11,8              |

## Hook clamp with collar

with long clamping claw



### Material:

Carbon steel.

### Version:

Tempered and black oxidised.

### Sample order:

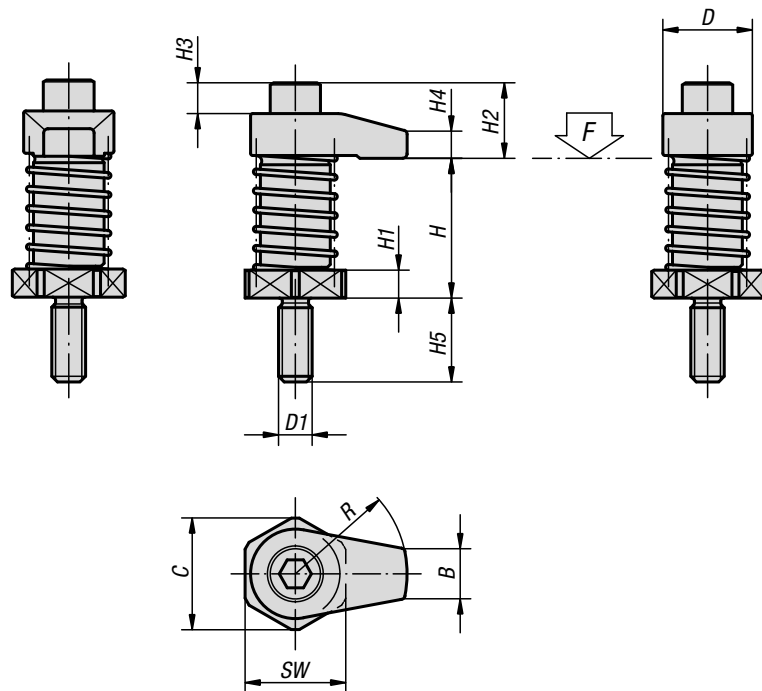
K0013.608

## KIPP Hook clamp with collar with long clamping claw

| Order No. | C   | D   | D1 | H  | H1 | H2 | H3   | L  | L1 | L2 | P  | R    | R1 | SW | Clamping force kN |
|-----------|-----|-----|----|----|----|----|------|----|----|----|----|------|----|----|-------------------|
| K0013.606 | M6  | M6  | 20 | 56 | 60 | 53 | 10,5 | 9  | 11 | 8  | 20 | 10   | 30 | 17 | 4,5               |
| K0013.608 | M6  | M8  | 20 | 56 | 60 | 53 | 10,5 | 9  | 11 | 8  | 20 | 10   | 30 | 17 | 4,5               |
| K0013.610 | M8  | M10 | 25 | 72 | 79 | 67 | 12,5 | 12 | 15 | 10 | 25 | 12,5 | 40 | 19 | 6,5               |
| K0013.612 | M10 | M12 | 32 | 88 | 96 | 82 | 16,5 | 18 | 17 | 12 | 30 | 16,5 | 50 | 27 | 11,8              |

# Hook clamps

with collar


**Material:**

Hook clamps and hook clamp holders carbon steel, tempered.

**Version:**

Black oxidised.

**Sample order:**

K0015.12060

**Note:**

Hook clamps with collar can be screwed directly into grid holes etc. without counterbore.

For suitable riser elements, see riser bars K0018.

## KIPP Hook clamps with collar

| Order No.   | D  | D1  | H<br>clamping range | H1 | H2 | H3 | H4 | H5 | B  | C  | R  | SW | Tightening<br>torque<br>max. Nm | F<br>max. kN |
|-------------|----|-----|---------------------|----|----|----|----|----|----|----|----|----|---------------------------------|--------------|
| K0015.08020 | 22 | M8  | 35-45               | 6  | 14 | 2  | 7  | 19 | 10 | 25 | 20 | 22 | 20                              | 7,9          |
| K0015.08025 | 22 | M8  | 35-45               | 6  | 14 | 2  | 7  | 19 | 10 | 25 | 25 | 22 | 20                              | 7,3          |
| K0015.08030 | 22 | M8  | 35-45               | 6  | 14 | 2  | 7  | 19 | 10 | 25 | 30 | 22 | 20                              | 6,7          |
| K0015.08120 | 22 | M8  | 45-55               | 16 | 14 | 2  | 7  | 19 | 10 | 25 | 20 | 22 | 20                              | 7,9          |
| K0015.08125 | 22 | M8  | 45-55               | 16 | 14 | 2  | 7  | 19 | 10 | 25 | 25 | 22 | 20                              | 7,3          |
| K0015.08130 | 22 | M8  | 45-55               | 16 | 14 | 2  | 7  | 19 | 10 | 25 | 30 | 22 | 20                              | 6,7          |
| K0015.12040 | 32 | M12 | 50-65               | 10 | 27 | 11 | 10 | 30 | 18 | 40 | 40 | 36 | 45                              | 13,5         |
| K0015.12050 | 32 | M12 | 50-65               | 10 | 29 | 11 | 12 | 30 | 18 | 40 | 50 | 36 | 45                              | 12,6         |
| K0015.12060 | 32 | M12 | 50-65               | 10 | 29 | 11 | 12 | 30 | 18 | 40 | 60 | 36 | 45                              | 11,7         |
| K0015.12140 | 32 | M12 | 65-80               | 25 | 27 | 11 | 10 | 30 | 18 | 40 | 40 | 36 | 45                              | 13,5         |
| K0015.12150 | 32 | M12 | 65-80               | 25 | 29 | 11 | 12 | 30 | 18 | 40 | 50 | 36 | 45                              | 12,6         |
| K0015.12160 | 32 | M12 | 65-80               | 25 | 29 | 11 | 12 | 30 | 18 | 40 | 60 | 36 | 45                              | 11,7         |
| K0015.16040 | 36 | M16 | 50-65               | 10 | 36 | 15 | 15 | 30 | 22 | 40 | 40 | 36 | 60                              | 13,4         |
| K0015.16050 | 36 | M16 | 50-65               | 10 | 36 | 15 | 15 | 30 | 22 | 40 | 50 | 36 | 60                              | 12,4         |
| K0015.16060 | 36 | M16 | 50-65               | 10 | 36 | 15 | 15 | 30 | 22 | 40 | 60 | 36 | 60                              | 12           |
| K0015.16140 | 36 | M16 | 65-80               | 25 | 36 | 15 | 15 | 30 | 22 | 40 | 40 | 36 | 60                              | 13,4         |
| K0015.16150 | 36 | M16 | 65-80               | 25 | 36 | 15 | 15 | 30 | 22 | 40 | 50 | 36 | 60                              | 12,4         |
| K0015.16160 | 36 | M16 | 65-80               | 25 | 36 | 15 | 15 | 30 | 22 | 40 | 60 | 36 | 60                              | 12           |

## Hook clamps with mounting bracket



### Material:

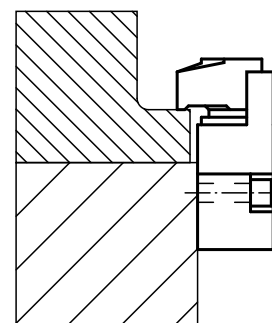
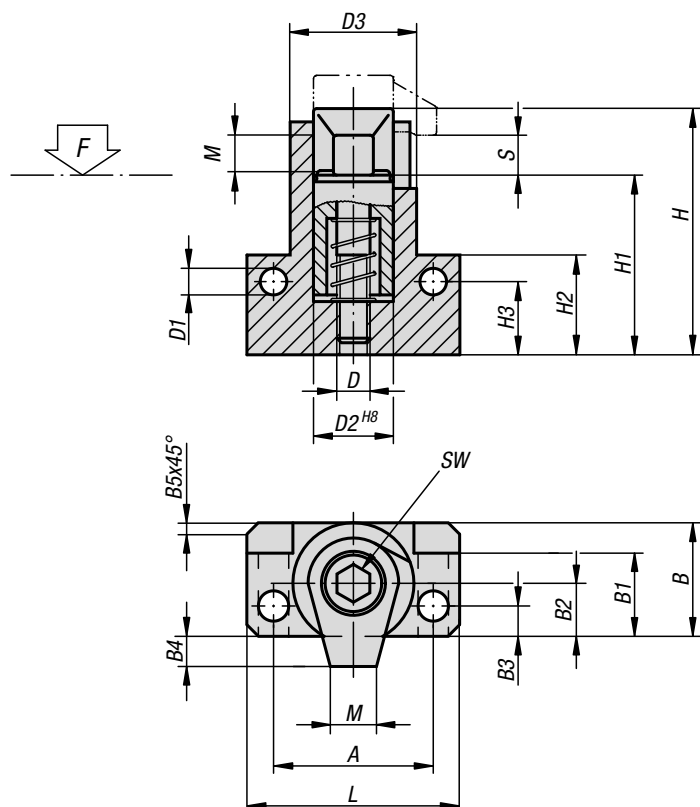
Hook clamps and clamping screw carbon steel, tempered.

### Version:

Black oxidised.

### Sample order:

K0016.12



### KIPP Hook clamps with mounting bracket

| Order No. | D   | D1   | D2 | D3 | A  | B    | B1   | B2   | B3  | B4   | B5  | H   | H1   | H2 | H3 | L  | M  | S | SW | Tightening torque max. Nm | F max. kN |
|-----------|-----|------|----|----|----|------|------|------|-----|------|-----|-----|------|----|----|----|----|---|----|---------------------------|-----------|
| K0016.08  | M8  | 6,4  | 20 | 28 | 38 | 26   | 19,5 | 12   | 6   | 6    | 2,5 | 62  | 47,5 | 25 | 18 | 50 | 10 | 4 | 6  | 30                        | 17        |
| K0016.10  | M10 | 8,4  | 24 | 34 | 48 | 31   | 22,5 | 14   | 7,5 | 9    | 3   | 74  | 57,5 | 30 | 21 | 64 | 12 | 5 | 8  | 50                        | 18        |
| K0016.12  | M12 | 10,5 | 28 | 40 | 55 | 36,5 | 26   | 16,5 | 9   | 10,5 | 3,5 | 87  | 67   | 35 | 24 | 75 | 15 | 5 | 10 | 60                        | 20        |
| K0016.16  | M16 | 12,8 | 34 | 48 | 65 | 43,5 | 31   | 19,5 | 10  | 16,5 | 4   | 112 | 87   | 45 | 32 | 88 | 20 | 5 | 14 | 120                       | 24        |

## Hook clamp with mounting bracket

with extended clamping claw



### Material:

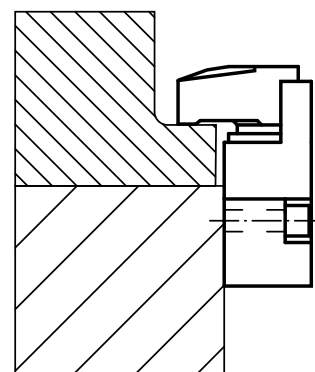
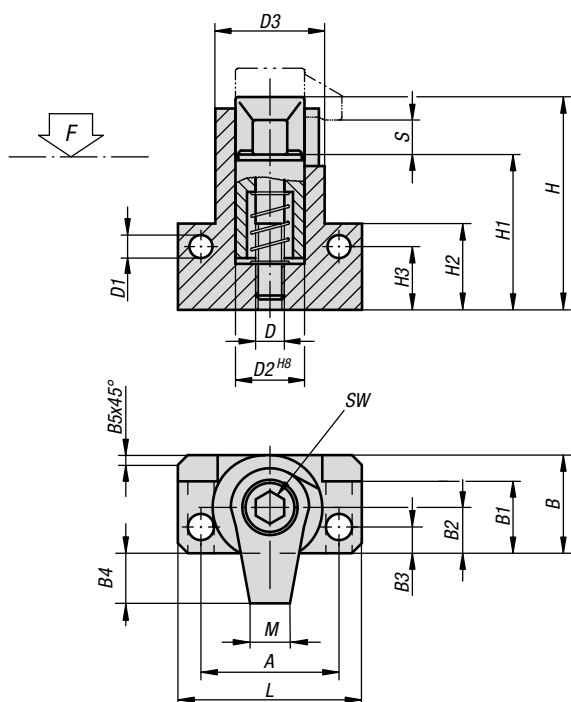
Hook clamps and clamping screw carbon steel, tempered.

### Version:

Black oxidised.

### Sample order:

K0016.0826



### KIPP Hook clamp with extended clamping claw, with mounting bracket

| Order No.  | D   | D1   | D2 | D3 | A  | B    | B1   | B2   | B3  | B4   | B5  | H    | H1 | H2 | H3 | L  | M  | S | SW | Tightening torque max. Nm | F max. kN |
|------------|-----|------|----|----|----|------|------|------|-----|------|-----|------|----|----|----|----|----|---|----|---------------------------|-----------|
| K0016.0618 | M6  | 6,4  | 16 | 28 | 38 | 26   | 19,5 | 12   | 6   | 18   | 2,5 | 54,5 | 44 | 25 | 18 | 50 | 9  | 4 | 5  | 7,5                       | 4,5       |
| K0016.0826 | M8  | 8,4  | 20 | 34 | 48 | 31   | 22,5 | 14   | 7,5 | 26   | 3   | 65   | 53 | 30 | 21 | 64 | 12 | 5 | 6  | 15                        | 6,5       |
| K0016.1033 | M10 | 10,5 | 24 | 40 | 55 | 36,5 | 26   | 16,5 | 9   | 33,5 | 3,5 | 77,5 | 61 | 35 | 24 | 75 | 18 | 5 | 8  | 30                        | 11,8      |

## Hook clamp holders



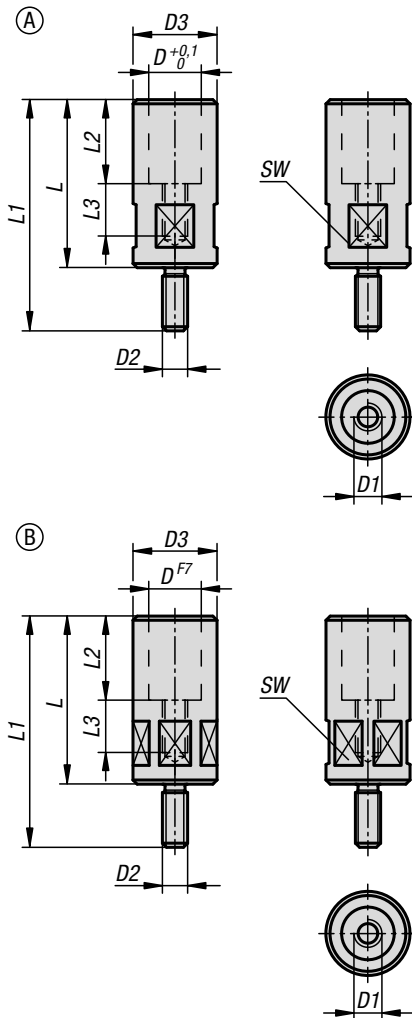
**Material:**  
Carbon steel.

**Version:**  
Black oxidised.

**Sample order:**  
K0017.12080

**Note:**  
Hook clamp holders are for holding and raising hook clamps.

**Accessories:**  
Hook clamps K0014.  
Extensions for jack screws K0018.



### KIPP Hook clamp holders

| Order No.   | Form | Form-Type    | D  | D1  | D2  | D3 | L   | L1  | L2 | L3 | SW | Tightening torque max. Nm |
|-------------|------|--------------|----|-----|-----|----|-----|-----|----|----|----|---------------------------|
| K0017.04035 | A    | with square  | 10 | M4  | M6  | 14 | 35  | 46  | 16 | 13 | 12 | 2,7                       |
| K0017.06040 | A    | with square  | 12 | M6  | M8  | 16 | 40  | 54  | 19 | 14 | 13 | 7                         |
| K0017.08055 | B    | with hexagon | 18 | M8  | M8  | 24 | 55  | 74  | 25 | 20 | 22 | 29,4                      |
| K0017.10063 | B    | with hexagon | 20 | M10 | M12 | 32 | 63  | 93  | 30 | 21 | 30 | 39,2                      |
| K0017.10080 | B    | with hexagon | 20 | M10 | M12 | 32 | 80  | 110 | 30 | 23 | 30 | 39,2                      |
| K0017.12080 | B    | with hexagon | 25 | M12 | M12 | 40 | 80  | 110 | 40 | 25 | 36 | 49                        |
| K0017.12100 | B    | with hexagon | 25 | M12 | M12 | 40 | 100 | 130 | 40 | 28 | 36 | 49                        |
| K0017.16080 | B    | with hexagon | 32 | M16 | M16 | 50 | 80  | 110 | 40 | 25 | 46 | 78,4                      |
| K0017.16100 | B    | with hexagon | 32 | M16 | M16 | 50 | 100 | 130 | 40 | 28 | 46 | 78,4                      |

## Hook clamp holders



**Material:**

Carbon steel.

**Version:**

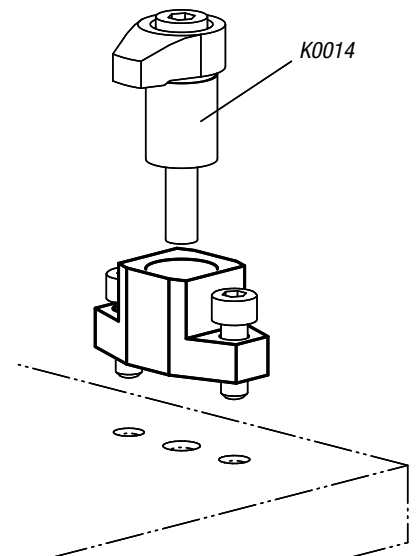
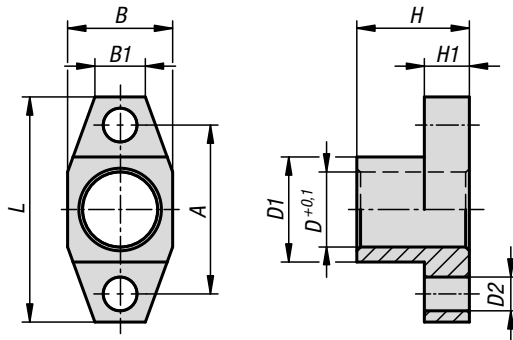
Black oxidised.

**Sample order:**

K0851.08025

**Accessories:**

Hook clamps K0014.

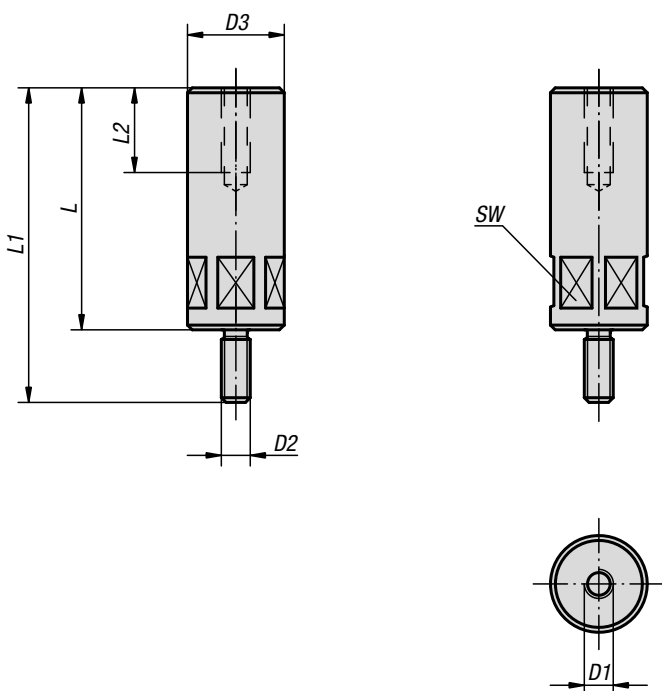


### KIPP Hook clamp holders

| Order No.    | A  | B  | B1   | D  | D1 | D2   | H  | H1 | L  |
|--------------|----|----|------|----|----|------|----|----|----|
| K0851.040161 | 24 | 14 | 7,6  | 10 | 14 | 4,3  | 16 | 6  | 34 |
| K0851.060191 | 28 | 16 | 8,5  | 12 | 16 | 5,3  | 19 | 8  | 40 |
| K0851.08025  | 38 | 24 | 11,3 | 18 | 24 | 6,6  | 25 | 10 | 50 |
| K0851.10030  | 45 | 28 | 13,4 | 20 | 28 | 9    | 30 | 12 | 60 |
| K0851.12040  | 55 | 35 | 15   | 25 | 35 | 11   | 40 | 14 | 75 |
| K0851.16040  | 65 | 42 | 20,2 | 32 | 42 | 13,5 | 40 | 16 | 85 |



## Riser bars



**Material:**  
Carbon steel.

**Version:**  
Black oxidised.

**Sample order:**  
K0018.16050

**Note:**  
The height of the hook clamps and hook clamp holders can be raised using these riser bars.

## KIPP Riser bars

| Order No.   | D1  | D2  | D3 | L   | L1  | L2 | SW | Tightening torque max. Nm |
|-------------|-----|-----|----|-----|-----|----|----|---------------------------|
| K0018.08032 | M8  | M8  | 24 | 32  | 51  | 20 | 22 | 29,4                      |
| K0018.08040 | M8  | M8  | 24 | 40  | 59  | 20 | 22 | 29,4                      |
| K0018.08050 | M8  | M8  | 24 | 50  | 69  | 20 | 22 | 29,4                      |
| K0018.08065 | M8  | M8  | 24 | 65  | 84  | 20 | 22 | 29,4                      |
| K0018.12050 | M12 | M12 | 40 | 50  | 80  | 35 | 36 | 49                        |
| K0018.12065 | M12 | M12 | 40 | 65  | 95  | 35 | 36 | 49                        |
| K0018.12080 | M12 | M12 | 40 | 80  | 110 | 35 | 36 | 49                        |
| K0018.12100 | M12 | M12 | 40 | 100 | 130 | 35 | 36 | 49                        |
| K0018.12125 | M12 | M12 | 40 | 125 | 155 | 35 | 36 | 49                        |
| K0018.12160 | M12 | M12 | 40 | 160 | 190 | 35 | 36 | 49                        |
| K0018.12200 | M12 | M12 | 40 | 200 | 230 | 35 | 36 | 49                        |
| K0018.16050 | M16 | M16 | 50 | 50  | 80  | 35 | 46 | 78,4                      |
| K0018.16065 | M16 | M16 | 50 | 65  | 95  | 35 | 46 | 78,4                      |
| K0018.16080 | M16 | M16 | 50 | 80  | 110 | 35 | 46 | 78,4                      |
| K0018.16100 | M16 | M16 | 50 | 100 | 130 | 35 | 46 | 78,4                      |
| K0018.16125 | M16 | M16 | 50 | 125 | 155 | 35 | 46 | 78,4                      |
| K0018.16160 | M16 | M16 | 60 | 160 | 190 | 35 | 55 | 78,4                      |
| K0018.16200 | M16 | M16 | 60 | 200 | 230 | 35 | 55 | 78,4                      |

# Swing clamps


**Material:**

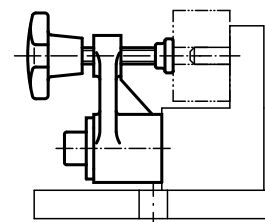
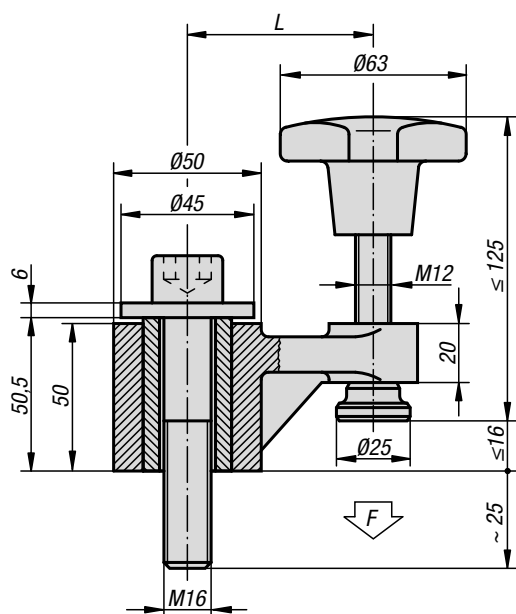
Body malleable iron.  
Sleeve carbon steel 1.1191.  
Screw carbon steel 1.1181.  
Thrust pad mild steel 1.0301.

**Version:**

Painted.  
Thrust pads case-hardened.

**Sample order:**

K0019.01


**KIPP Swing clamps**

| Order No. | L   | Clamping force<br>N |
|-----------|-----|---------------------|
| K0019.01  | 63  | 5000                |
| K0019.02  | 100 | 3000                |



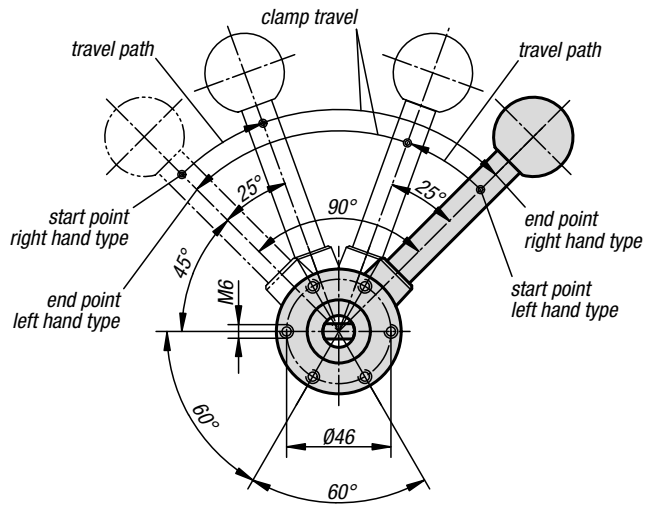
A large rectangular area filled with a light gray grid pattern, intended for taking notes.



# Clamping element "actima"



View from below

**Material:**

Steel.

Housing thermoplastic.

Ball knob thermoset PF 31.

Accessories steel.

**Version:**

Black oxidised.

Housing black.

Ball knob, red.

Accessories black oxidised.

**Sample order:**

K0020.10

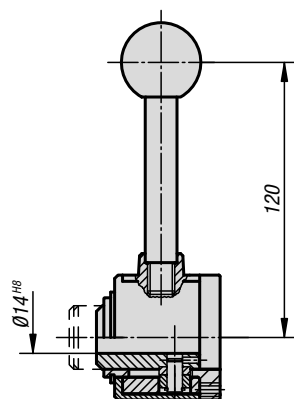
**Note:**

The travel path is 10 mm. Self-locking occurs in any position within only 2 mm of clamp travel, so workpieces with tolerances of up to 1.5 mm can be safely clamped. The Actima clamping device can be mounted in any horizontal or vertical position. Standard parts enable further applications and are available as optional accessories.

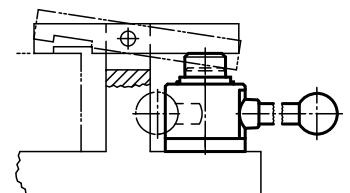
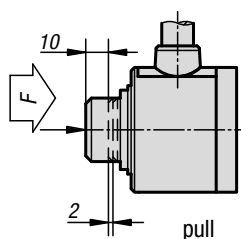
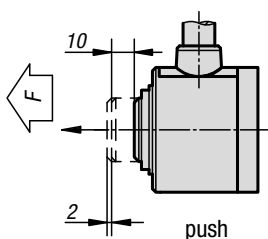
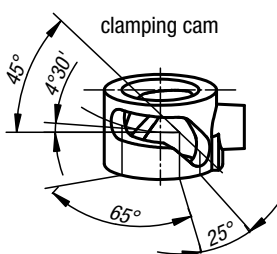
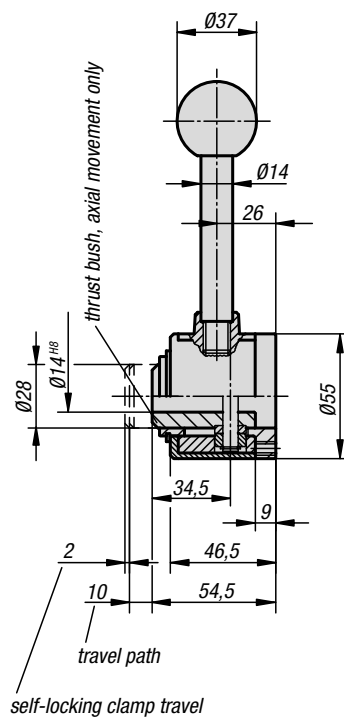
All parts of the cam system subject to heavy loads are case-hardened (thrust sleeve and accessories only if specified).

The maximum permissible clamping force is approximately 4905 N.

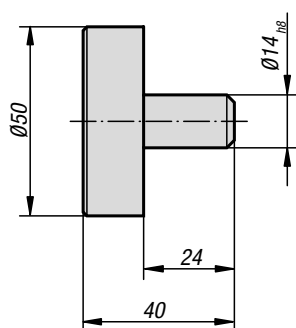
drilled through



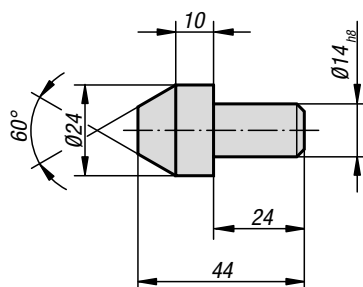
with transverse axis in bore



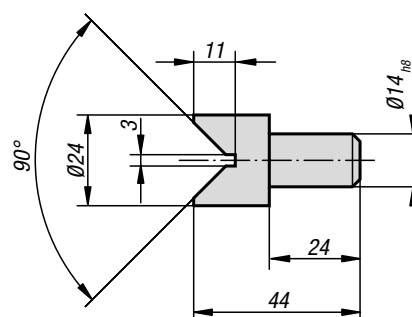
## Clamping element "actima"



plate



conus



prism

## KIPP "actima" clamping element with transverse axis in bore

| Order No. | Version             |
|-----------|---------------------|
| K0020.10  | right-hand / thrust |
| K0020.15  | right-hand / pull   |
| K0020.20  | left-hand / thrust  |
| K0020.25  | left-hand / pull    |

## KIPP "actima" clamping element with drilled through bore

| Order No. | Version             |
|-----------|---------------------|
| K0020.30  | right-hand / thrust |
| K0020.35  | right-hand / pull   |
| K0020.40  | left-hand / thrust  |
| K0020.45  | left-hand / pull    |

## KIPP "actima" accessories

| Order No. | Item  |
|-----------|-------|
| K0020.02  | Plate |
| K0020.03  | Conus |
| K0020.04  | Prism |



**Material:**

Steel.

Ball knob thermoset PF 31

**Version:**

Housing painted silver-grey hammertone.

All other parts and accessories black oxidised.

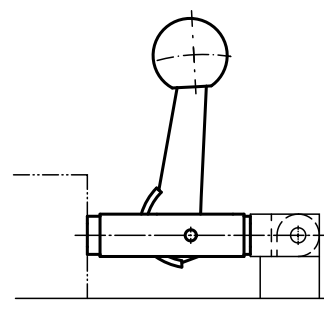
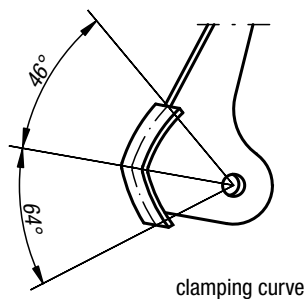
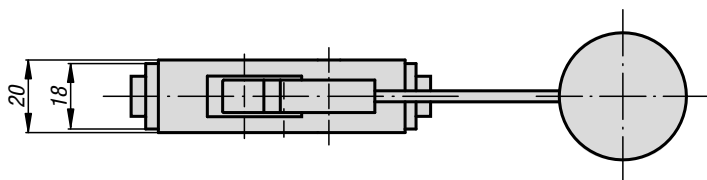
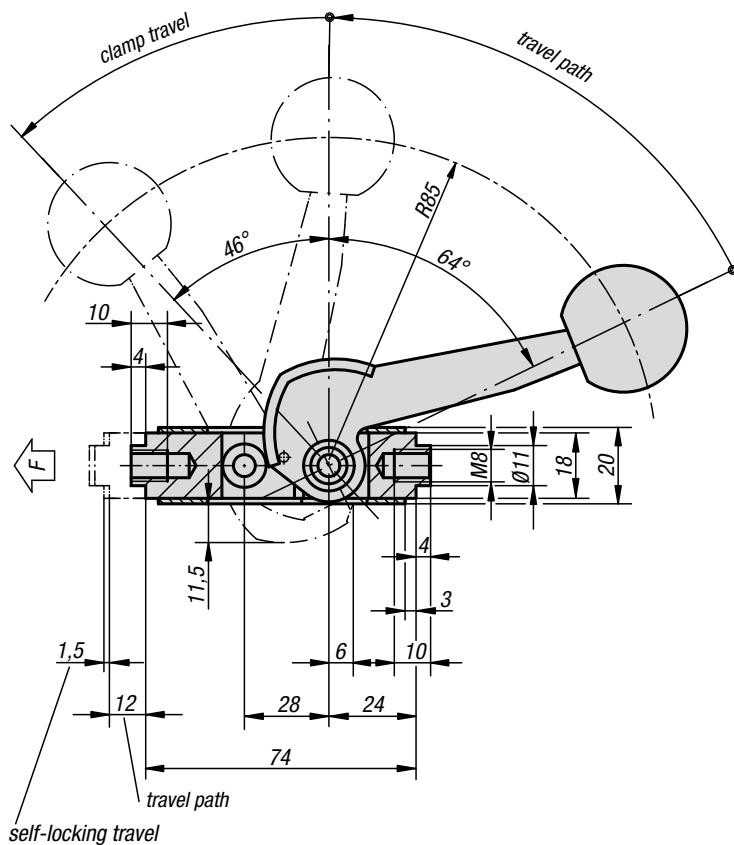
Ball knob red.

**Sample order:**

K0021.01

**Note:**

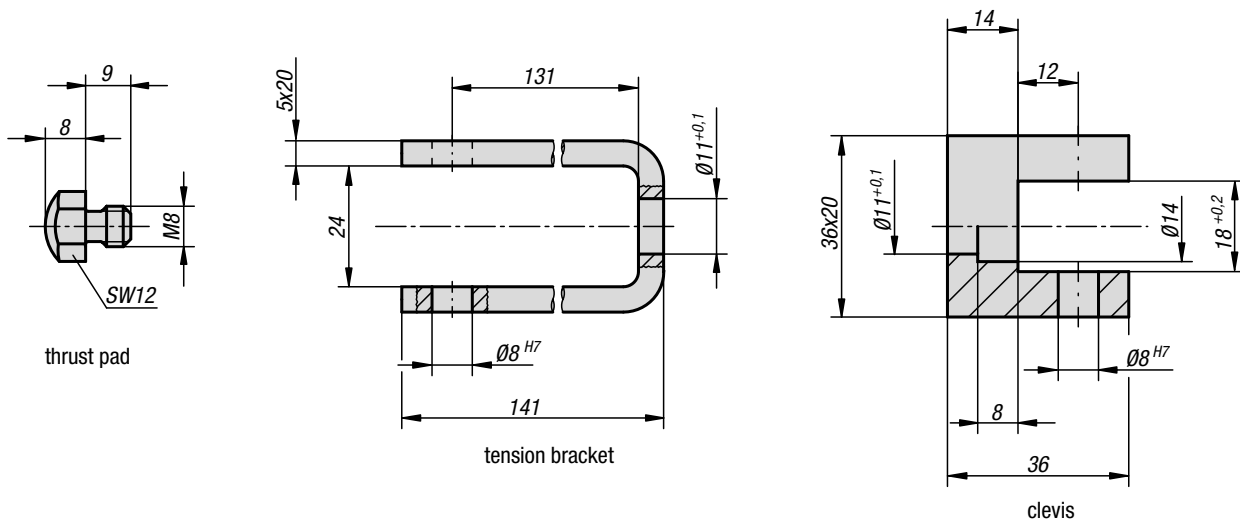
The travel path is 12 mm. Self-locking occurs in any position within only 1.5 mm of clamp travel, allowing workpieces with tolerances of up to 1 mm to be securely clamped. The arness clamping element can be fitted in any horizontal or vertical position. Several standard parts have been developed to achieve individual adaptation for various circumstances and are available as optional accessories. The thrust pad and all parts of the cam system subject to heavy loads are case-hardened. The maximum permissible clamping force is approximately 4905 N.



### KIPP Clamping element “arness”

| Order No. | Dimensions  |
|-----------|-------------|
| K0021.01  | see drawing |

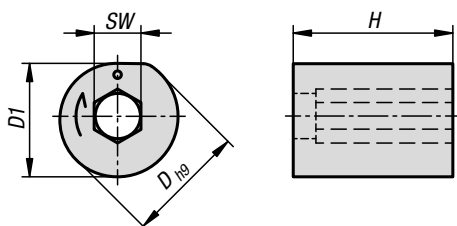
## Clamping element "arness"



## KIPP "arness" accessories

| Order No. | Item            |
|-----------|-----------------|
| K0021.02  | Clevis          |
| K0021.03  | Tension bracket |
| K0021.04  | Thrust pad      |

## Clamp cam brass

**Material:**

Brass.

**Sample order:**

K1457.0808

**Application:**

These clamping cams are used to fixate components in workpieces.

The clamped components can be easily and quickly released again.

Workpieces and components can be accurately positioned in an assembly.

**Advantages:**

Using the cam clamps often saves the need for complex cross holes for clamping screws.

The bore for the clamping cam can be produced cost-effectively in the same machine set-up as the bore or slot for the component to be clamped.

**Functional principle:**

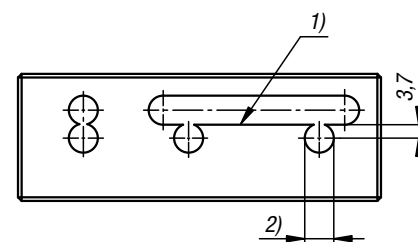
Insert the component to be clamped and the clamping cam into the workpiece. The indent mark on the clamp cam top face should be adjacent the part to be clamped.

The clamp cam is rotated with an hex key in the direction of the arrow.

The part can be released again by turning the cam in the opposite direction.

**Drawing reference:**

- 1) Clamping edge
- 2) 8 H9 min. depth 8

**KIPP Clamp cam brass**

| Order No.  | D | D1  | H | SW |
|------------|---|-----|---|----|
| K1457.0808 | 8 | 7,5 | 8 | 3  |





A large rectangular area filled with a light gray grid pattern, intended for taking notes.



# Fixture clamps machinable


**Material:**

Cam screw alloyed steel.  
Clamping disc steel.

**Version:**

Cam screw and clamping disc black oxidised.

**Sample order:**

K0022.06

**Note:**

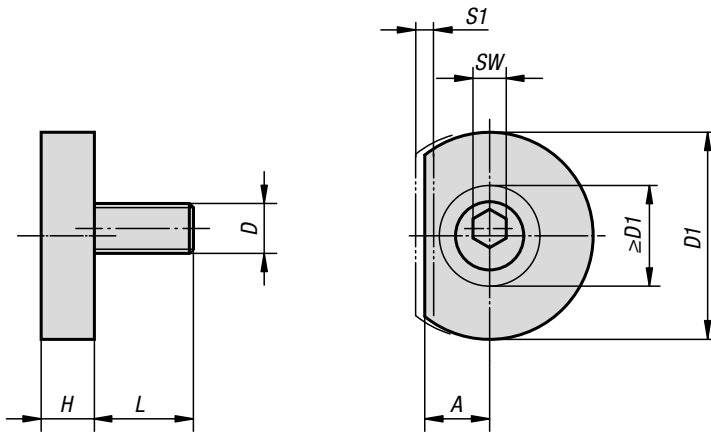
These fixture clamps have a round washer that can be machined to suit the contour of the workpiece being clamped. This allows positive clamping for round, contoured or fragile workpieces. The flat edge is the same distance from the screw centre as our hexagonal fixture clamps K0026 allowing an interchange between the two.

“A” = distance from workpiece to screw centre (cam screw).

“D1 min.” = maximum depth of contour.

**On request:**

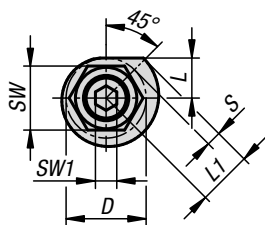
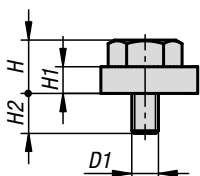
Replacement cam screws.



## KIPP Fixture clamps machinable

| Order No. | A    | D   | D1   | D1 min. | H    | L    | SW | S1 (travel) | Clamping force kN |
|-----------|------|-----|------|---------|------|------|----|-------------|-------------------|
| K0022.06  | 7,8  | M6  | 24,9 | 12,1    | 6,4  | 11,9 | 4  | 1,01        | 3,3               |
| K0022.10  | 10,2 | M10 | 31,2 | 17,2    | 8,9  | 18   | 7  | 1,52        | 8,9               |
| K0022.12  | 12,7 | M12 | 37,6 | 22,4    | 11,4 | 22,9 | 8  | 2,03        | 17,8              |
| K0022.16  | 15   | M16 | 43,9 | 26,1    | 14   | 28,6 | 12 | 2,54        | 26,7              |

## Clamping cams



**Material:**  
Carbon steel.

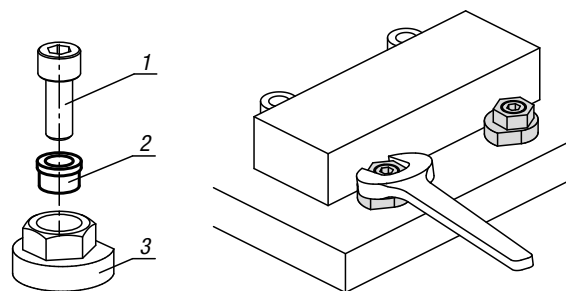
**Version:**  
Black oxidised.

**Sample order:**  
K1694.10

**Assembly:**  
1. Screw the locking screw into the collar bush and fixture clamp and screw onto the baseplate.  
2. The workpiece is clamped by tightening the fixture clamp with a spanner.

**Advantages:**  
- Compact design  
- Quick and easy clamping of components

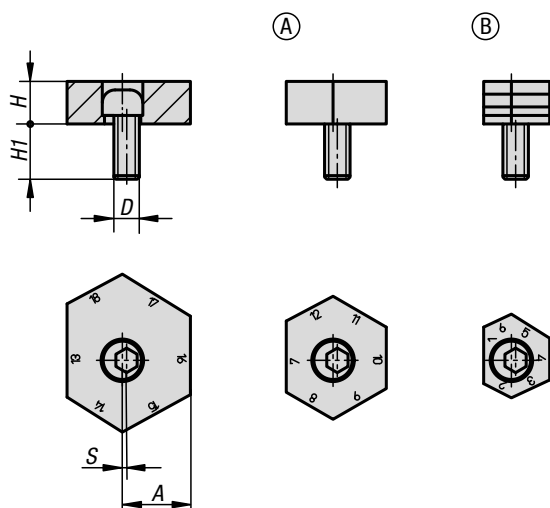
**Drawing reference:**  
1) Locking screw  
2) Collar bush  
3) Fixture clamp



### KIPP Clamping cams

| Order No. | D  | D1  | H  | H1 | H2 | L  | L1   | SW | SW1 | Clamping force<br>kN | Travel<br>S | Tightening torque<br>max. Nm |
|-----------|----|-----|----|----|----|----|------|----|-----|----------------------|-------------|------------------------------|
| K1694.08  | 24 | M8  | 16 | 8  | 12 | 12 | 16,4 | 19 | 6   | 5,2                  | 4,4         | 50                           |
| K1694.10  | 30 | M10 | 20 | 10 | 15 | 15 | 20,5 | 24 | 8   | 8                    | 5,5         | 75                           |
| K1694.12  | 34 | M12 | 24 | 12 | 18 | 17 | 23,2 | 27 | 10  | 9,3                  | 6,2         | 90                           |

# Fixture clamps unequal hexagon



These unequal hexagon fixture clamps can minimise the cost of clamping in fixtures. The clamping range can be altered up to 17 mm from the same tapped hole. Simply rotate the hexagon washer.

**Material:**

Cam screw steel tempered to 10.9.  
Hexagon washer mild steel.

**Version:**

Cam screw black oxidised.  
Hexagon washer hardened and black oxidised.

**Sample order:**

K0023.13

**Note:**

The washers are available with smooth edges for machined faces or with serrated edges for rough faces. The „distance A“ is set by simply turning the hexagonal clamp, the 6 edges of which have a distance to the centre of the screw that differs by 1 mm in each case.

**On request:**

Replacement cam screws.

## KIPP Fixture clamps unequal hexagon

| Order No.<br>Form A<br>smooth | Order No.<br>Form B<br>serrated | Distance A<br>by face No.                | D   | H  | H1 | S<br>(cam travel) | Clamping<br>force<br>kN |
|-------------------------------|---------------------------------|------------------------------------------|-----|----|----|-------------------|-------------------------|
| K0023.09                      | K0023.13                        | 1/12, 2/13, 3/14, 4/15, 5/16, 6/17       | M12 | 10 | 22 | 1                 | 18                      |
| K0023.10                      | K0023.14                        | 7/18, 8/19, 9/20, 10/21, 11/22, 12/23    | M12 | 10 | 22 | 1                 | 18                      |
| K0023.11                      | K0023.15                        | 13/24, 14/25, 15/26, 16/27, 17/28, 18/29 | M12 | 10 | 22 | 1                 | 18                      |

# Spiral cam screws



**Material:**  
Steel.

**Version:**  
Case-hardened ( $56 \pm 1$  HRC) and blue electro zinc-plated.  
Grade 8.8

**Sample order:**  
K0024.0408

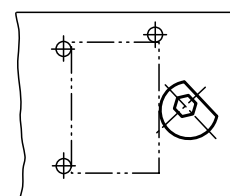
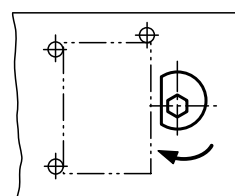
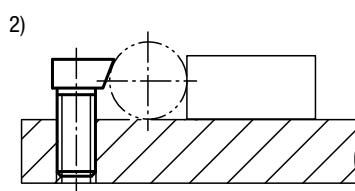
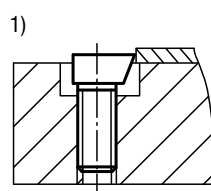
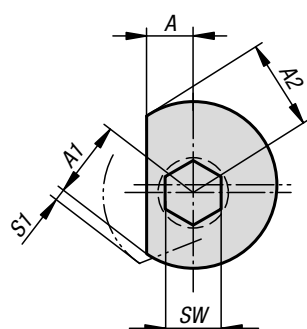
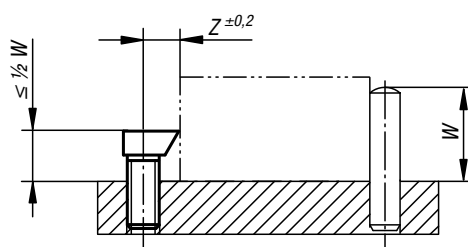
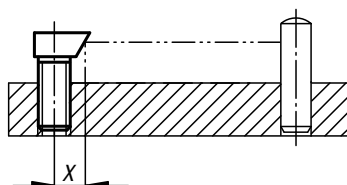
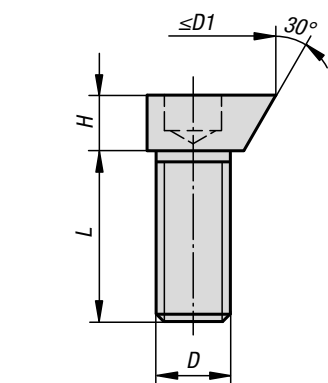
**Note:**  
Robust, compact spiral cam clamping screws that exert a positive down force on diverse workpiece forms.

**Assembly:**  
Drill and tap several holes at a distance X or Z (see diagram). Screw the cam screw into the required height and position with the flat side to the workpiece. Position the workpiece and tighten the cam screw with a hexagon key. Full clamping is achieved with approximately a 1/3 rotation. Lubricate the tapped hole regularly.

Place stops on the face towards which the screw turns to prevent the workpiece rotating away.

**On request:**  
Spiral cam screws with LH thread.

**Drawing reference:**  
1) clamping sheet metal  
2) clamping round parts

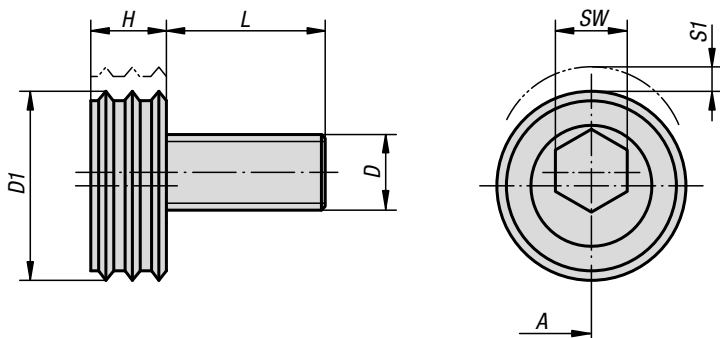


## KIPP Spiral cam screws

| Order No.  | A   | A1   | A2   | D   | D1 max. | H | L  | SW  | S1 (travel) | X    | Z   | Clamping force kN | Tightening torque max. Nm |
|------------|-----|------|------|-----|---------|---|----|-----|-------------|------|-----|-------------------|---------------------------|
| K0024.0408 | 3   | 4,6  | 4    | M4  | 9,2     | 3 | 8  | 2,5 | 0,6         | 3,5  | 4,2 | 0,09              | 1,5                       |
| K0024.0510 | 3,5 | 5,7  | 5    | M5  | 11,4    | 4 | 10 | 3   | 0,7         | 4,2  | 5,2 | 0,1               | 2                         |
| K0024.0612 | 4,5 | 7,1  | 6,1  | M6  | 14,2    | 5 | 12 | 4   | 1           | 5,4  | 6,4 | 0,3               | 4,5                       |
| K0024.0816 | 5,5 | 8,9  | 7,7  | M8  | 18      | 6 | 16 | 5   | 1,2         | 6,6  | 8   | 2,7               | 20                        |
| K0024.1020 | 6,5 | 11,1 | 9,4  | M10 | 22,2    | 7 | 20 | 6   | 1,7         | 8,3  | 9,8 | 4                 | 30                        |
| K0024.1224 | 8   | 13,5 | 11,6 | M12 | 27      | 9 | 24 | 8   | 1,9         | 10,1 | 12  | 5,4               | 44                        |

# Cam screws

with knife edge washer


**Material:**

Knife edge washer.  
Cam screw carbon steel.

**Version:**

Cam screw tempered to 10.9 and black oxidised.  
Knife edge washer hardened and anodised.

**Sample order:**

K0025.16

**Note:**

Also called knife edge clamps.  
The hardened knife edge washer is suitable for  
clamping rough cut stock, castings, forgings etc.

"A" = distance from workpiece to screw centre (cam  
screw).

**On request:**

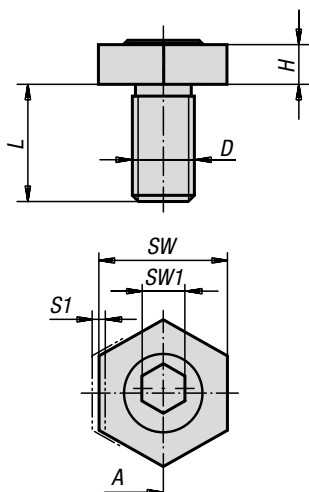
Replacement cam screws.

## KIPP Cam screws with knife edge washer

| Order No. | A    | D   | D1   | L    | H    | SW | S1<br>(travel) | Clamping<br>force<br>kN | Tightening<br>torque<br>max. Nm |
|-----------|------|-----|------|------|------|----|----------------|-------------------------|---------------------------------|
| K0025.12  | 12,7 | M12 | 25,4 | 22,5 | 9,6  | 8  | 2              | 18                      | 88                              |
| K0025.16  | 15   | M16 | 30,1 | 26,8 | 12,7 | 12 | 2,5            | 27                      | 135                             |

# Cam screws

with hexagon washer



## Material:

Cam screw carbon steel.  
Hex washer brass.

## Version:

Cam screw tempered to 10.9 and black oxidised.

## Sample order:

K0026.12

## Note:

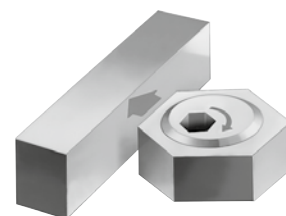
Also called fixture clamps.

The minimal height of this fixture clamp allows numerous clamping problems in fixture and equipment construction to be solved. The brass hex washer offers a gentle yet extremely stable and safe clamping of workpieces. By using several fixture clamps entire pallets can be set-up.

"A" = distance from workpiece to screw centre (cam screw).

## On request:

Replacement cam screws.



## KIPP Cam screws with hexagon washer

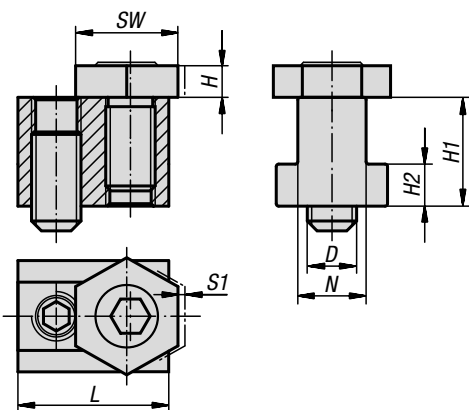
| Order No. | A    | D   | H    | L  | SW   | SW1 | S1<br>(travel) | Clamping<br>force<br>kN | Tightening<br>torque<br>max. Nm |
|-----------|------|-----|------|----|------|-----|----------------|-------------------------|---------------------------------|
| K0026.04  | 3,8  | M4  | 2,8  | 10 | 8    | 3   | 0,8            | 0,9                     | 2,2                             |
| K0026.06  | 7,8  | M6  | 4,8  | 12 | 16   | 4   | 1              | 3,4                     | 8,5                             |
| K0026.08  | 10,2 | M8  | 4,8  | 15 | 20,6 | 5   | 1              | 3,6                     | 11,3                            |
| K0026.10  | 10,2 | M10 | 6,4  | 20 | 20,6 | 7   | 1,6            | 9,0                     | 28,06                           |
| K0026.12  | 12,7 | M12 | 9,5  | 25 | 25,4 | 8   | 2              | 18,0                    | 88                              |
| K0026.16  | 15   | M16 | 12,7 | 30 | 30,2 | 12  | 2,5            | 27,0                    | 135                             |





# Cam screws

with hexagon washer, for T-slots



## Material:

Carbon steel.  
Hex washer brass.

## Version:

Tempered to 10.9 and black oxidised.

## Sample order:

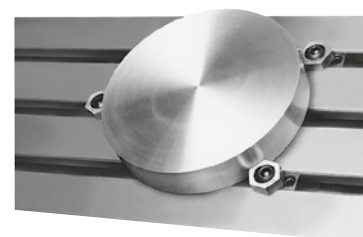
K0027.12

## Note:

Also called fixture clamps for T-slots.  
These fixture clamps can be used directly on machine tables or other tables with T-slots. The grub screw at the rear locks the T-nut in the slot. Thin shims are recommended to prevent marking the bottom of the T-slot.

## On request:

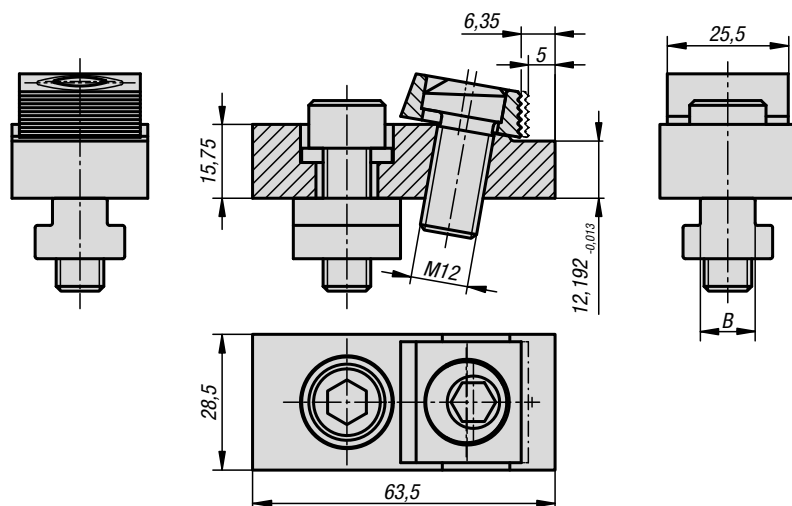
Replacement cam screws.



## KIPP Cam screws with hexagon washer, for T-slots

| Order No. | D   | N  | H    | H1   | H2  | L    | SW | S1<br>(travel) | Clamping<br>force<br>kN |
|-----------|-----|----|------|------|-----|------|----|----------------|-------------------------|
| K0027.08  | M6  | 8  | 4,8  | 9,6  | 4,5 | 23   | 16 | 1              | 3,4                     |
| K0027.10  | M6  | 10 | 4,8  | 14   | 4,5 | 23   | 16 | 1              | 3,4                     |
| K0027.12  | M8  | 12 | 4,8  | 15,5 | 6,5 | 28   | 21 | 1              | 3,6                     |
| K0027.14  | M10 | 14 | 6,4  | 22   | 8,5 | 30,5 | 21 | 1,6            | 9                       |
| K0027.16  | M12 | 16 | 9,5  | 22,5 | 9   | 30,5 | 25 | 2              | 18                      |
| K0027.18  | M12 | 18 | 9,5  | 28,5 | 10  | 34,5 | 25 | 2              | 18                      |
| K0027.20  | M16 | 20 | 12,7 | 32   | 12  | 39   | 30 | 2,5            | 27                      |
| K0027.22  | M16 | 22 | 12,7 | 38,2 | 14  | 44   | 30 | 2,5            | 27                      |

# Cam clamps with riser

**Material:**

Steel.

**Version:**

Body tempered and black oxidised.  
Square washer case hardened and brass-plated.

**Sample order:**

K0028.16

**Note:**

Also called riser clamps.  
These cam clamps with riser can be used directly on machine tables. A positive down force is exerted during clamping.

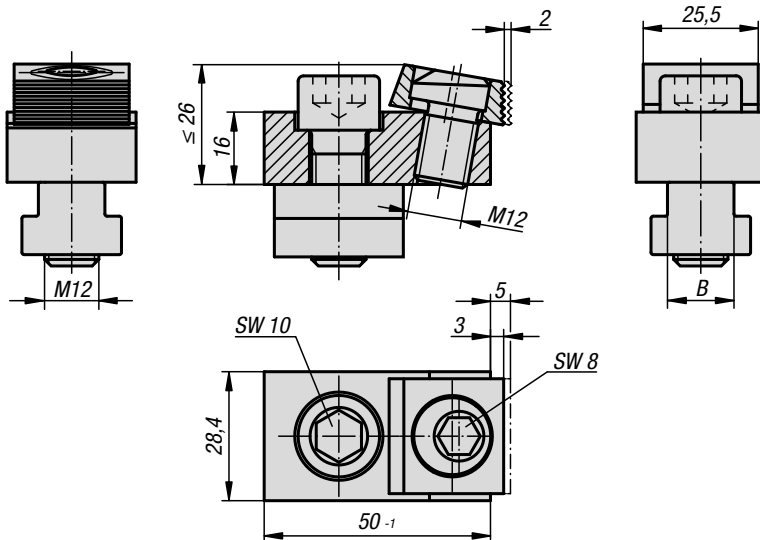
**On request:**

Replacement cam screws.

## KIPP Cam clamps with riser

| Order No. | B<br>Slot width | Clamping<br>force<br>kN |
|-----------|-----------------|-------------------------|
| K0028.12  | 12              | 12                      |
| K0028.14  | 14              | 12                      |
| K0028.16  | 16              | 12                      |
| K0028.18  | 18              | 12                      |

# Toe clamps for T-slots


**Material:**

Steel.

**Version:**

Body tempered and black oxidised.  
Square washer case hardened and brass-plated.

**Sample order:**

K0029.14

**Note:**

These toe clamps can be used on machine tables or adapter plates. The positive down force holds the workpiece down on the supporting surface. The square washer can adapt slightly to an angular position i.e. the workpiece does not have to be exactly parallel. The clamping washer has a smooth side for machined surfaces and a serrated side for rough faces.

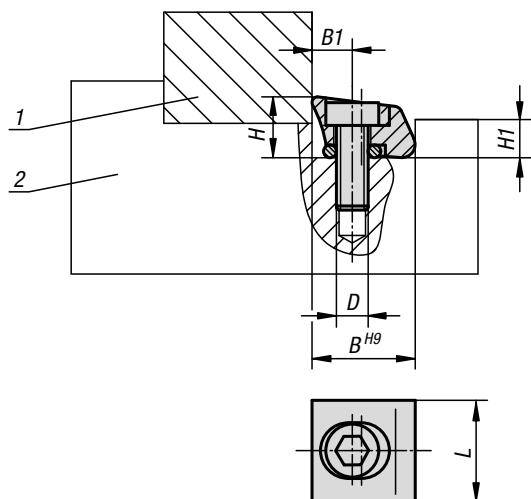
**On request:**

Replacement cam screws.

## KIPP Toe clamps for T-slots

| Order No. | B<br>Slot width  | Clamping<br>force<br>kN |
|-----------|------------------|-------------------------|
| K0029.00  | without slot key | 18                      |
| K0029.14  | 14               | 18                      |
| K0029.16  | 16               | 18                      |
| K0029.18  | 18               | 18                      |

## Chock clamps



### Material:

Clamping element steel or brass.

### Version:

Steel hardened.

### Sample order:

K0030.113

### Note:

Also known as pitbull clamps.  
Extremely space-saving design.  
No protruding edges due to lateral clamping.  
Positive down force.

### Drawing reference:

- 1) workpiece
- 2) Fixture

## KIPP Chock clamps

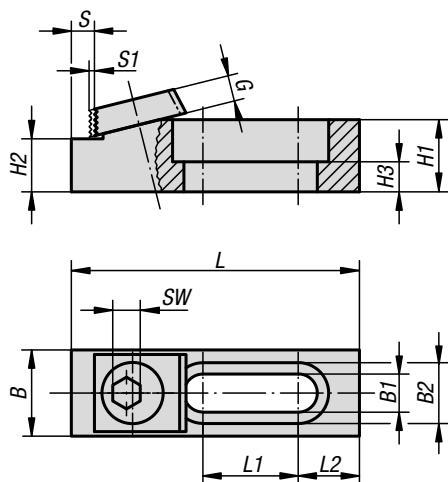
| Order No. | Version         | Main material | D      | B     | B1  | H    | H1  | L   | Clamping travel | Clamping force kN | Tightening torque max. Nm |
|-----------|-----------------|---------------|--------|-------|-----|------|-----|-----|-----------------|-------------------|---------------------------|
| K0030.110 | with knife edge | steel         | M2,5x8 | 9,5   | 3,8 | 6    | 3,6 | 9,5 | 0,15            | 2,8               | 1,8                       |
| K0030.113 | with knife edge | steel         | M4x12  | 12,7  | 5,1 | 8    | 4,8 | 13  | 0,4             | 6,6               | 5,6                       |
| K0030.119 | with knife edge | steel         | M6X16  | 19,05 | 7,6 | 11,5 | 7,2 | 19  | 0,6             | 16                | 22,5                      |
| K0030.210 | with blunt edge | steel         | M2,5x8 | 9,5   | 3,8 | 6    | 3,6 | 9,5 | 0,15            | 2,8               | 1,8                       |
| K0030.213 | with blunt edge | steel         | M4x12  | 12,7  | 5,1 | 8    | 4,8 | 13  | 0,4             | 6,6               | 5,6                       |
| K0030.219 | with blunt edge | steel         | M6X16  | 19,05 | 7,6 | 11,5 | 7,2 | 19  | 0,6             | 16                | 22,5                      |
| K0030.310 | with blunt edge | brass         | M2,5x8 | 9,5   | 3,8 | 6    | 3,6 | 9,5 | 0,15            | 0,9               | 0,56                      |
| K0030.313 | with blunt edge | brass         | M4x12  | 12,7  | 5,1 | 8    | 4,8 | 13  | 0,4             | 1,8               | 2,8                       |
| K0030.319 | with blunt edge | brass         | M6X16  | 19,05 | 7,6 | 11,5 | 7,2 | 19  | 0,6             | 4,2               | 5,6                       |

## Cam clamps

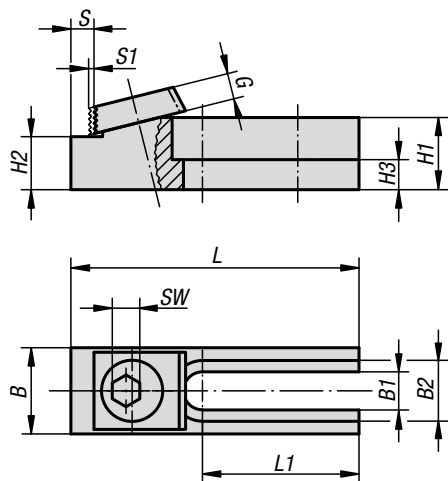
adjustable with riser



K0031.08, K0031.12



K0031.16



### Material:

Steel.

### Version:

Body tempered, black oxidised, riser faces ground.  
Square washer case hardened and brass-plated.

### Sample order:

K0031.12

### Note:

Also called multi-fixture clamps and stops.  
Cost-effective custom made clamping fixtures can be produced using the adjustable riser cam clamps together with the matching riser stops.

### On request:

Replacement cam screws.

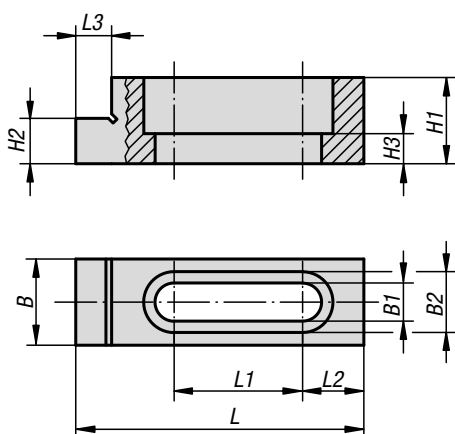
## KIPP Cam clamps adjustable with riser

| Order No. | suitable fastening screw | L    | L1   | L2   | B    | B1  | B2   | H1   | H2            | H3  | S   | S1  | G    | SW | Long hole | Clamping force kN | Tightening torque max. Nm |
|-----------|--------------------------|------|------|------|------|-----|------|------|---------------|-----|-----|-----|------|----|-----------|-------------------|---------------------------|
| K0031.08  | M8                       | 63,5 | 21   | 13,5 | 19   | 8,4 | 13,4 | 15,9 | 11,684 -0,013 | 6,6 | 6,3 | 1,2 | 5,3  | 7  | closed    | 8,9               | 28                        |
| K0031.12  | M12                      | 95,1 | 42,7 | 12,7 | 28,5 | 13  | 19,8 | 15,9 | 12,192 -0,013 | 6,9 | 7,1 | 2   | 9,5  | 8  | closed    | 17,8              | 88                        |
| K0031.16  | M16                      | 107  | 46,3 | -    | 38   | 17  | 24,8 | 41   | 35,001 -0,013 | 21  | 8,3 | 2,5 | 12,7 | 12 | open      | 26,7              | 135                       |

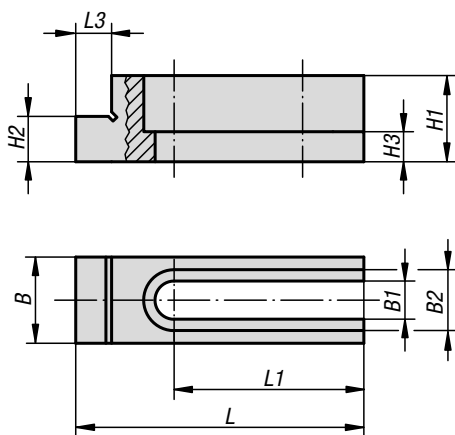
## Riser stops



K0032.08, K0032.12



K0032.16



### Material:

Steel.

### Version:

Tempered, black oxidised.  
Riser faces ground.

### Sample order:

K0032.12

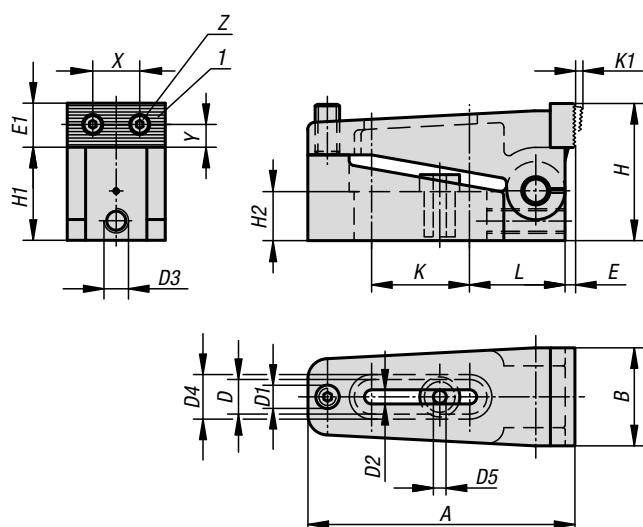
### Note:

Also called multi-fixture clamps and stops.  
Cost-effective custom made clamping fixtures can be produced using the adjustable riser cam clamps together with the matching riser stops.

## KIPP Riser stops

| Order No. | for screws | L    | L1   | L2   | L3  | B    | B1   | B2   | H1   | H2            | H3   | Long hole |
|-----------|------------|------|------|------|-----|------|------|------|------|---------------|------|-----------|
| K0032.08  | M8         | 63,5 | 28,3 | 13,5 | 7,9 | 19   | 8,4  | 13,4 | 19   | 11,684 -0,013 | 6,6  | closed    |
| K0032.12  | M12        | 95,2 | 42,7 | 12,7 | 7,9 | 28,5 | 13,4 | 19,8 | 22   | 12,192 -0,013 | 6,9  | closed    |
| K0032.16  | M16        | 107  | 46,2 | -    | 9,5 | 38   | 17   | 24,8 | 50,7 | 35,001 -0,013 | 21,3 | open      |

## Side clamps



### Material:

Body steel.  
Jaw mild steel.  
Centring bush carbon steel

### Version:

Black oxidised.  
Jaw plates case-hardened.

### Sample order:

K0033.006

### Note:

The jaws are reversible - smooth side for machined surfaces, serrated side for rough surfaces. A positive down force is also exerted during clamping.

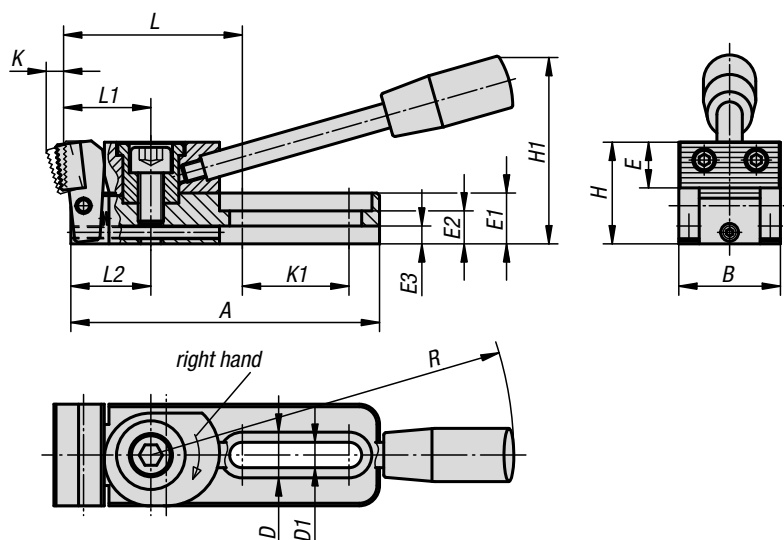
### Drawing reference:

1) reversible jaw

## KIPP Side clamps

| Order No. | A   | B  | D    | D1  | D2 | D3  | D4 | D5   | E   | E1 | H  | H1 | H2   | K    | K1  | L  | X    | Y   | Z  | F=Retaining force N |
|-----------|-----|----|------|-----|----|-----|----|------|-----|----|----|----|------|------|-----|----|------|-----|----|---------------------|
| K0033.006 | 73  | 25 | 12,2 | M6  | 7  | M6  | 16 | 6,5  | 2,5 | 11 | 35 | 24 | 12,4 | 25,5 | 2,5 | 27 | 12   | 4,5 | M3 | 10000               |
| K0033.010 | 110 | 39 | 18,2 | M10 | 11 | M10 | 24 | 10,5 | 4   | 18 | 56 | 38 | 20   | 40,5 | 4   | 39 | 20,5 | 8   | M5 | 40000               |
| K0033.016 | 170 | 58 | 26,2 | M16 | 17 | M10 | 35 | 17   | 7   | 27 | 85 | 60 | 30   | 60,5 | 7   | 61 | 32   | 13  | M8 | 100000              |

## Side clamps

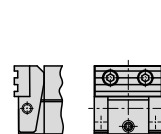
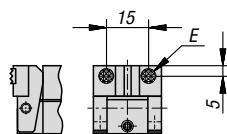
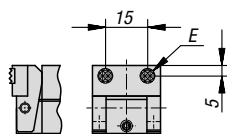
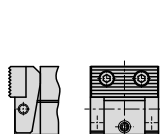


Form A  
steel jaw  
serrated

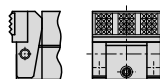
Form B  
jaw with 2 round  
carbide inserts

Form C  
jaw with 2 round  
carbide inserts  
and central prism

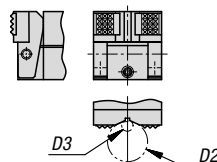
Form D  
POM jaw  
serrated



3 rectangular  
carbide inserts



2 rectangular carbide  
inserts and central prism



**Material:**

Steel.

**Version:**

Case-hardened and black oxidised.

**Sample order:**

K0034.006010

**Note:**

This is a quick-action side clamp where workpieces are clamped by rotating a cam wheel which exerts pressure on the swivel jaw, simultaneously producing a positive down force.

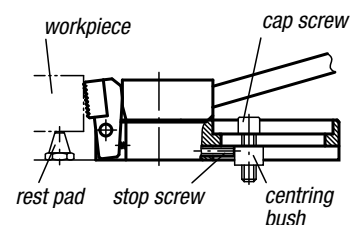
Using the stop screw and centring bush (see diagram), the side clamp can be mounted and positioned on a modular grid system.

The versions K0034.006010, K0034.006015, K0034.006030 and K0034.006035 have 2 round carbide inserts.

**Clamping force:**

K0034.006... = 3800 N

K0034.010... = 7200 N

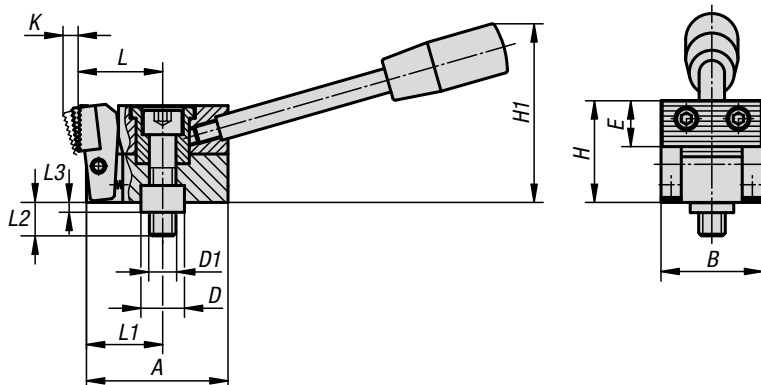


## KIPP Side clamps

| Order No.    | Form | Version 1 | A     | B  | D  | D1   | D2<br>max. | D3<br>min. | E    | E1 | E2 | E3 | H  | H1 | K   | K1 | L    | L1 | L2   | R   | F=Retaining<br>force N |
|--------------|------|-----------|-------|----|----|------|------------|------------|------|----|----|----|----|----|-----|----|------|----|------|-----|------------------------|
| K0034.006005 | A    | right     | 78    | 25 | 12 | 6,2  | -          | -          | 11   | 12 | 8  | 4  | 25 | 45 | 4   | 26 | 46,5 | 22 | 20   | 110 | 3800                   |
| K0034.010005 | A    | right     | 121,5 | 40 | 18 | 10,2 | -          | -          | 18   | 20 | 13 | 7  | 40 | 74 | 6   | 42 | 71   | 35 | 31,5 | 143 | 7200                   |
| K0034.006025 | A    | left      | 78    | 25 | 12 | 6,2  | -          | -          | 11   | 12 | 8  | 4  | 25 | 45 | 4   | 26 | 46,5 | 22 | 20   | 110 | 3800                   |
| K0034.010025 | A    | left      | 121,5 | 40 | 18 | 10,2 | -          | -          | 18   | 20 | 13 | 7  | 40 | 74 | 6   | 42 | 71   | 35 | 31,5 | 143 | 7200                   |
| K0034.006010 | B    | right     | 78    | 25 | 12 | 6,2  | -          | -          | ø8   | 12 | 8  | 4  | 24 | 45 | 3,5 | 26 | 46,5 | 22 | 20   | 110 | 3800                   |
| K0034.010010 | B    | right     | 121,5 | 40 | 18 | 10,2 | -          | -          | 12,7 | 20 | 13 | 7  | 39 | 74 | 5,5 | 42 | 73   | 35 | 31,5 | 143 | 7200                   |
| K0034.006030 | B    | left      | 78    | 25 | 12 | 6,2  | -          | -          | ø8   | 12 | 8  | 4  | 24 | 45 | 3,5 | 26 | 46,5 | 22 | 20   | 110 | 3800                   |
| K0034.010030 | B    | left      | 121,5 | 40 | 18 | 10,2 | -          | -          | 12,7 | 20 | 13 | 7  | 39 | 74 | 5,5 | 42 | 73   | 35 | 31,5 | 143 | 7200                   |
| K0034.006015 | C    | right     | 78    | 25 | 12 | 6,2  | 9,5        | 2,5        | ø8   | 12 | 8  | 4  | 24 | 45 | 3,5 | 26 | 46,5 | 22 | 20   | 110 | 3800                   |
| K0034.010015 | C    | right     | 121,5 | 40 | 18 | 10,2 | 27         | 4,5        | 12,7 | 20 | 13 | 7  | 39 | 74 | 5,5 | 42 | 73   | 35 | 31,5 | 143 | 7200                   |
| K0034.006035 | C    | left      | 78    | 25 | 12 | 6,2  | 9,5        | 2,5        | ø8   | 12 | 8  | 4  | 24 | 45 | 3,5 | 26 | 46,5 | 22 | 20   | 110 | 3800                   |
| K0034.010035 | C    | left      | 121,5 | 40 | 18 | 10,2 | 27         | 4,5        | 12,7 | 20 | 13 | 7  | 39 | 74 | 5,5 | 42 | 73   | 35 | 31,5 | 143 | 7200                   |
| K0034.006020 | D    | right     | 78    | 25 | 12 | 6,2  | -          | -          | 11   | 12 | 8  | 4  | 25 | 45 | 4   | 26 | 46,5 | 22 | 20   | 110 | 3800                   |
| K0034.010020 | D    | right     | 121,5 | 40 | 18 | 10,2 | -          | -          | 18   | 20 | 13 | 7  | 40 | 74 | 6   | 42 | 70,5 | 35 | 31,5 | 143 | 7200                   |
| K0034.006040 | D    | left      | 78    | 25 | 12 | 6,2  | -          | -          | 11   | 12 | 8  | 4  | 25 | 45 | 4   | 26 | 46,5 | 22 | 20   | 110 | 3800                   |
| K0034.010040 | D    | left      | 121,5 | 40 | 18 | 10,2 | -          | -          | 18   | 20 | 13 | 7  | 40 | 74 | 6   | 42 | 70,5 | 35 | 31,5 | 143 | 7200                   |



## Side clamps



**Material:**  
Steel.

**Version:**  
Case-hardened and black oxidised.

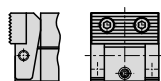
**Sample order:**  
K0035.006005

**Note:**  
This is a quick-action side clamp where workpieces are clamped by rotating a cam wheel which exerts pressure on the swivel jaw, simultaneously producing a positive down force.  
Using the centring bush (see diagram), the side clamp can be mounted and positioned on a modular grid system.

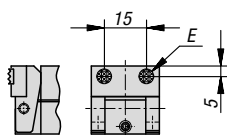
The versions K0035.006010, K0035.006015, K0035.006030 and K0035.006035 have 2 round carbide inserts.

**Clamping force:**  
K0035.006... = 3800 N  
K0035.010... = 7200 N

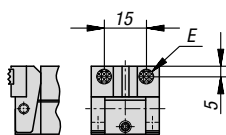
Form A  
steel jaw  
serrated



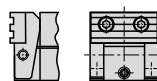
Form B  
jaw with 2 round  
carbide inserts



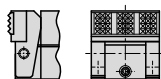
Form C  
jaw with 2 round  
carbide inserts  
and central prism



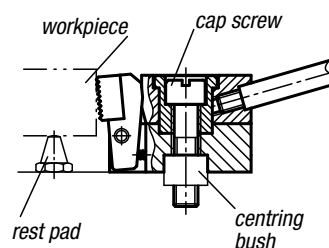
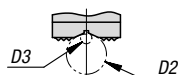
Form D  
POM jaw  
serrated



3 rectangular  
carbide inserts



2 rectangular carbide  
inserts and central prism

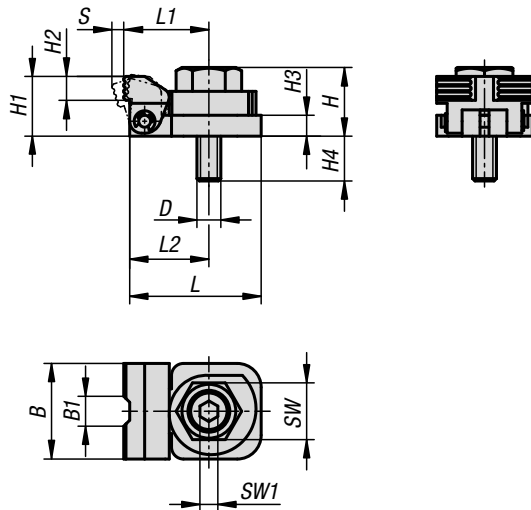


### KIPP Side clamps

| Order No.    | Form | Version 1 | A    | B  | D  | D1  | D2<br>max. | D3<br>min. | E    | H  | H1 | K   | L    | L1   | L2 | L3 | R   | F=Retaining<br>force N |
|--------------|------|-----------|------|----|----|-----|------------|------------|------|----|----|-----|------|------|----|----|-----|------------------------|
| K0035.006005 | A    | right     | 38,5 | 25 | 12 | M6  | -          | -          | 11   | 25 | 45 | 4   | 22   | 20   | 17 | 4  | 110 | 3800                   |
| K0035.010005 | A    | right     | 58,5 | 40 | 18 | M10 | -          | -          | 18   | 40 | 74 | 6   | 35   | 31,5 | 27 | 6  | 143 | 7200                   |
| K0035.006025 | A    | left      | 38,5 | 25 | 12 | M6  | -          | -          | 11   | 25 | 45 | 4   | 22   | 20   | 17 | 4  | 110 | 3800                   |
| K0035.010025 | A    | left      | 58,5 | 40 | 18 | M10 | -          | -          | 18   | 40 | 74 | 6   | 35   | 31,5 | 27 | 6  | 143 | 7200                   |
| K0035.006010 | B    | right     | 38,5 | 25 | 12 | M6  | -          | -          | ø8   | 24 | 45 | 3,5 | 22   | 20   | 17 | 4  | 110 | 3800                   |
| K0035.010010 | B    | right     | 58,5 | 40 | 18 | M10 | -          | -          | 12,7 | 39 | 74 | 5,5 | 37   | 31,5 | 27 | 6  | 143 | 7200                   |
| K0035.006030 | B    | left      | 38,5 | 25 | 12 | M6  | -          | -          | ø8   | 24 | 45 | 3,5 | 22   | 20   | 17 | 4  | 110 | 3800                   |
| K0035.010030 | B    | left      | 58,5 | 40 | 18 | M10 | -          | -          | 12,7 | 39 | 74 | 5,5 | 37   | 31,5 | 27 | 6  | 143 | 7200                   |
| K0035.006015 | C    | right     | 38,5 | 25 | 12 | M6  | 9,5        | 2,5        | ø8   | 24 | 45 | 3,5 | 22   | 20   | 17 | 4  | 110 | 3800                   |
| K0035.010015 | C    | right     | 58,5 | 40 | 18 | M10 | 27         | 4,5        | 12,7 | 39 | 74 | 5,5 | 37   | 31,5 | 27 | 6  | 143 | 7200                   |
| K0035.006035 | C    | left      | 38,5 | 25 | 12 | M6  | 9,5        | 2,5        | ø8   | 24 | 45 | 3,5 | 22   | 20   | 17 | 4  | 110 | 3800                   |
| K0035.010035 | C    | left      | 58,5 | 40 | 18 | M10 | 27         | 4,5        | 12,7 | 39 | 74 | 5,5 | 37   | 31,5 | 27 | 6  | 143 | 7200                   |
| K0035.006020 | D    | right     | 38,5 | 25 | 12 | M6  | -          | -          | 11   | 25 | 45 | 4,5 | 22   | 20   | 17 | 4  | 110 | 3800                   |
| K0035.010020 | D    | right     | 58,5 | 40 | 18 | M10 | -          | -          | 18   | 40 | 74 | 7   | 34,5 | 31,5 | 27 | 6  | 143 | 7200                   |
| K0035.006040 | D    | left      | 38,5 | 25 | 12 | M6  | -          | -          | 11   | 25 | 45 | 4,5 | 22   | 20   | 17 | 4  | 110 | 3800                   |
| K0035.010040 | D    | left      | 58,5 | 40 | 18 | M10 | -          | -          | 18   | 40 | 74 | 7   | 34,5 | 31,5 | 27 | 6  | 143 | 7200                   |

## Side clamp

with cam



### Material:

Carbon steel.

### Version:

Black oxidised.

### Sample order:

K1695.101

### Assembly:

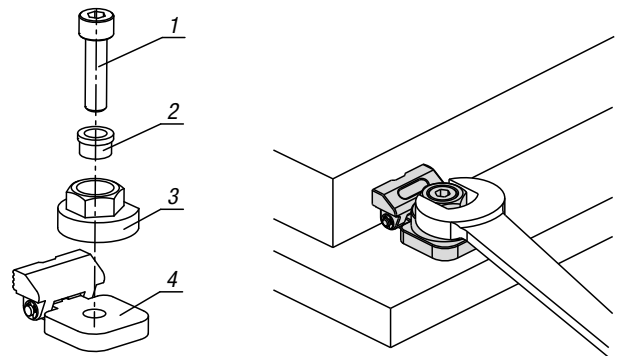
1. Screw the locking screw into the collar bush, fixture clamp and clamping unit and screw onto the baseplate.
2. The workpiece is clamped by tightening the fixture clamp with a spanner.

### Advantages:

- Compact design
- Quick and easy clamping of components
- Pull-down effect

### Drawing reference:

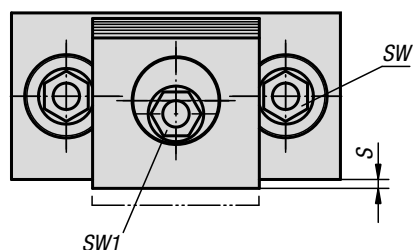
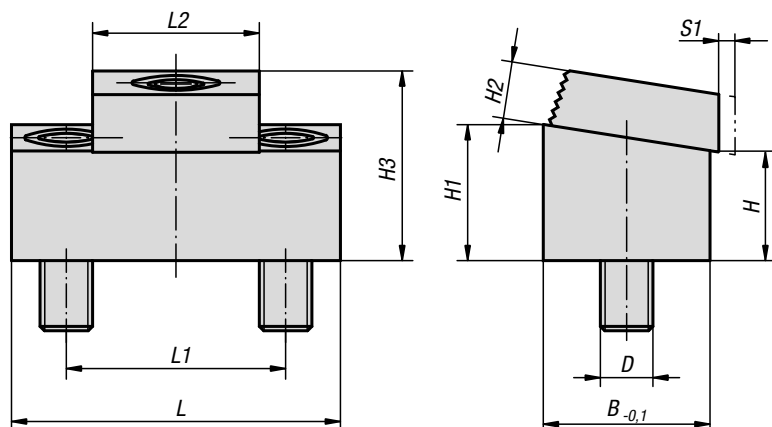
- 1) Locking screw
- 2) Collar bush
- 3) Fixture clamp
- 4) Clamping unit



### KIPP Side clamp with cam

| Order No. | B  | B1 | D   | H  | H1 | H2 | H3 | H4 | L  | L1   | L2   | SW | SW1 | Travel S | Clamping force kN | Tightening torque max. Nm |
|-----------|----|----|-----|----|----|----|----|----|----|------|------|----|-----|----------|-------------------|---------------------------|
| K1695.081 | 32 | 10 | M8  | 23 | 20 | 8  | 7  | 15 | 44 | 28,5 | 26,5 | 19 | 6   | 4        | 3,5               | 45                        |
| K1695.101 | 40 | 12 | M10 | 29 | 25 | 10 | 9  | 16 | 54 | 35   | 33   | 24 | 8   | 5        | 5,5               | 55                        |
| K1695.121 | 46 | 14 | M12 | 35 | 30 | 12 | 11 | 17 | 62 | 39,5 | 37,5 | 27 | 10  | 5,5      | 7                 | 70                        |

# Toe clamps compact



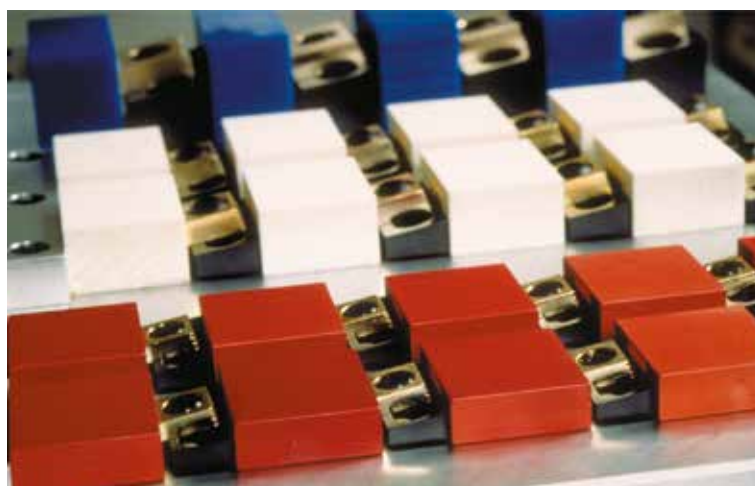
**Material:**  
Steel.

**Version:**  
Body tempered and black oxidised.  
Square washer case-hardened and brass-plated.

**Sample order:**  
K0036.10

**Note:**  
This cam action compact toe clamp requires very little space to produce multi-fixture clamping.  
Workpieces can be clamped in series by using the back side of a clamp as a stop for the next row.  
Mount preferably in slots with  $B +0.05$  mm. The height of the clamp can be adjusted by altering the slot depth.

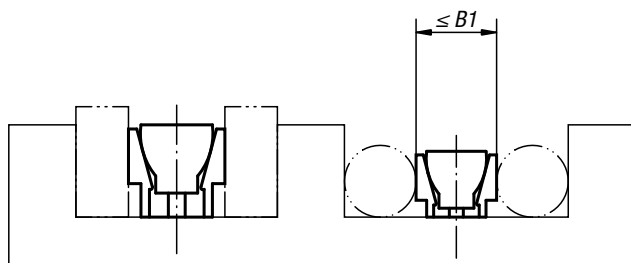
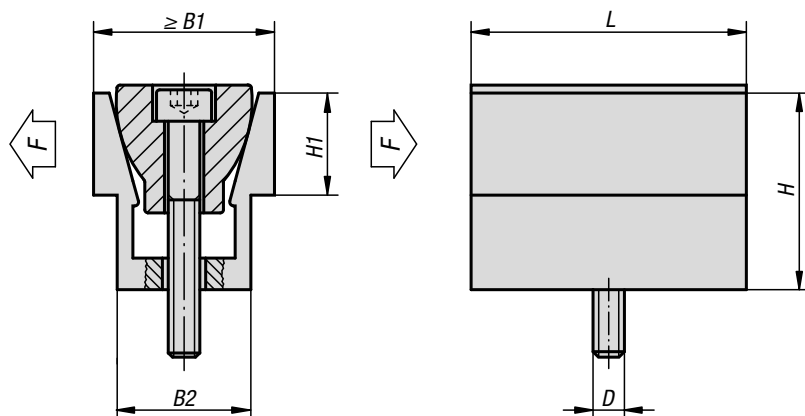
Example of series clamping using compact toe clamps



## KIPP Toe clamps compact

| Order No. | L    | L1   | L2   | B    | H    | H1   | H2  | H3<br>max. | S    | D   | S1<br>(travel) | SW | SW1 | Clamping<br>force<br>kN | Tightening<br>torque<br>max. Nm |
|-----------|------|------|------|------|------|------|-----|------------|------|-----|----------------|----|-----|-------------------------|---------------------------------|
| K0036.08  | 43,2 | 25,4 | 19   | 19   | 12,7 | 15,7 | 6,4 | 21,4       | 1,5  | M8  | 1,6            | 5  | 7   | 8,9                     | 28                              |
| K0036.10  | 54   | 33,5 | 25,4 | 25,4 | 11,4 | 15,4 | 9,7 | 24,5       | 1,8  | M10 | 2              | 7  | 8   | 17,8                    | 88                              |
| K0036.12  | 75   | 50,8 | 38   | 38,1 | 25,5 | 31,5 | 13  | 43         | 2,05 | M12 | 2,5            | 10 | 12  | 26,7                    | 135                             |

# Wedge clamps


**Material:**

Channel aluminium profile.  
Wedge hardened steel.

**Version:**

Channel anodised.  
Wedge black oxidised.

**Sample order:**

K0037.08

**Note:**

Two workpieces can be held simultaneously with the wedge clamp. They are ideal for clamping round or rectangular pieces. The compact design allows space-saving series clamping.

**Drawing reference:**

In clamped position dimension B1 max. given in the table should be achieved.

## KIPP Wedge clamps

| Order No. | D   | L    | B1<br>min. - max. | B2   | H    | H1   | Clamping<br>force<br>max. kN | Tightening<br>torque<br>max. Nm |
|-----------|-----|------|-------------------|------|------|------|------------------------------|---------------------------------|
| K0037.04  | M4  | 15,9 | 12,3 - 13,1       | 10,4 | 12,7 | 5,6  | 2,2                          | 3,4                             |
| K0037.06  | M6  | 23,8 | 18,6 - 19,9       | 16,1 | 19   | 9,5  | 6,7                          | 14,3                            |
| K0037.08  | M8  | 31,7 | 24,8 - 26,6       | 20,8 | 25,4 | 12,7 | 8,9                          | 14,5                            |
| K0037.12  | M12 | 47,6 | 37,3 - 39,7       | 30,8 | 38,1 | 19   | 15,6                         | 38,4                            |
| K0037.16  | M16 | 63,5 | 49,7 - 52,8       | 41,2 | 50,8 | 25,4 | 26,7                         | 74,6                            |

## Wedge clamps

machinable



### Material:

Channel aluminium profile.  
Wedge hardened steel.

### Version:

Channel anodised.  
Wedge black oxidised.

### Sample order:

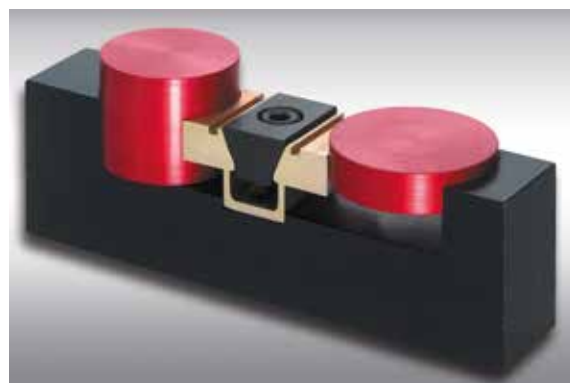
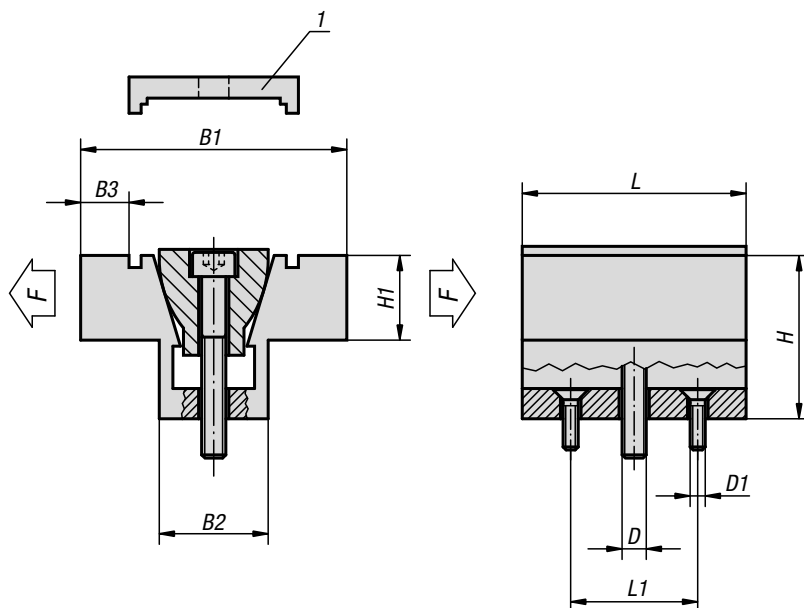
K0038.08

### Note:

Two workpieces can be held simultaneously with the wedge clamp. The jaws have extra material allowing them to be machined to conform to the shape of the workpiece. The compact design allows space-saving series clamping.

### Drawing reference:

1) The locking plate is only used for machining the form, not for clamping the workpiece.



### KIPP Wedge clamps machinable

| Order No. | D   | D1 | L    | L1    | B1<br>min. - max. | B2   | B3   | H    | H1   | Clamping<br>force<br>max. kN | Tightening<br>torque<br>max. Nm |
|-----------|-----|----|------|-------|-------------------|------|------|------|------|------------------------------|---------------------------------|
| K0038.04  | M4  | M2 | 15,7 | 10,16 | 28,6 - 29,1       | 10,6 | 4,6  | 12,7 | 6,3  | 2,2                          | 3,4                             |
| K0038.06  | M6  | M4 | 23,9 | 15,9  | 38,1 - 39         | 16,1 | 6,6  | 19,1 | 9,4  | 6,7                          | 14,3                            |
| K0038.08  | M8  | M4 | 31,8 | 20,6  | 50,8 - 52         | 20,8 | 9,9  | 25,4 | 12,7 | 8,9                          | 14,5                            |
| K0038.12  | M12 | M5 | 47,5 | 30,5  | 76,2 - 78         | 30,9 | 15,7 | 38,1 | 19   | 15,6                         | 38,4                            |
| K0038.16  | M16 | M6 | 63,5 | 41,28 | 101,6 - 103,9     | 41,3 | 20,3 | 50,8 | 25,4 | 26,7                         | 74,6                            |

# Wedge clamps



The functioning principle make the wedge clamps ideal for multi-clamping.

The wedge shape creates high clamping forces. The wedge clamps can be used for clamping in conjunction with the clamping rail or mounted in tapped holes or T-slots.

Tightening the clamping screw moves the two clamping segments outwards and press the workpieces against the fixed jaws of the machining fixture.

The double wedge has an elongated hole allowing for movement and to compensate for tolerances. Displacement: M12 =  $\pm 1$  mm.

## Material:

Double wedge and clamping segments mild steel.

## Version:

Double wedge and clamping segments hardened, phosphated.

## Sample order:

K1748.05002

## Note:

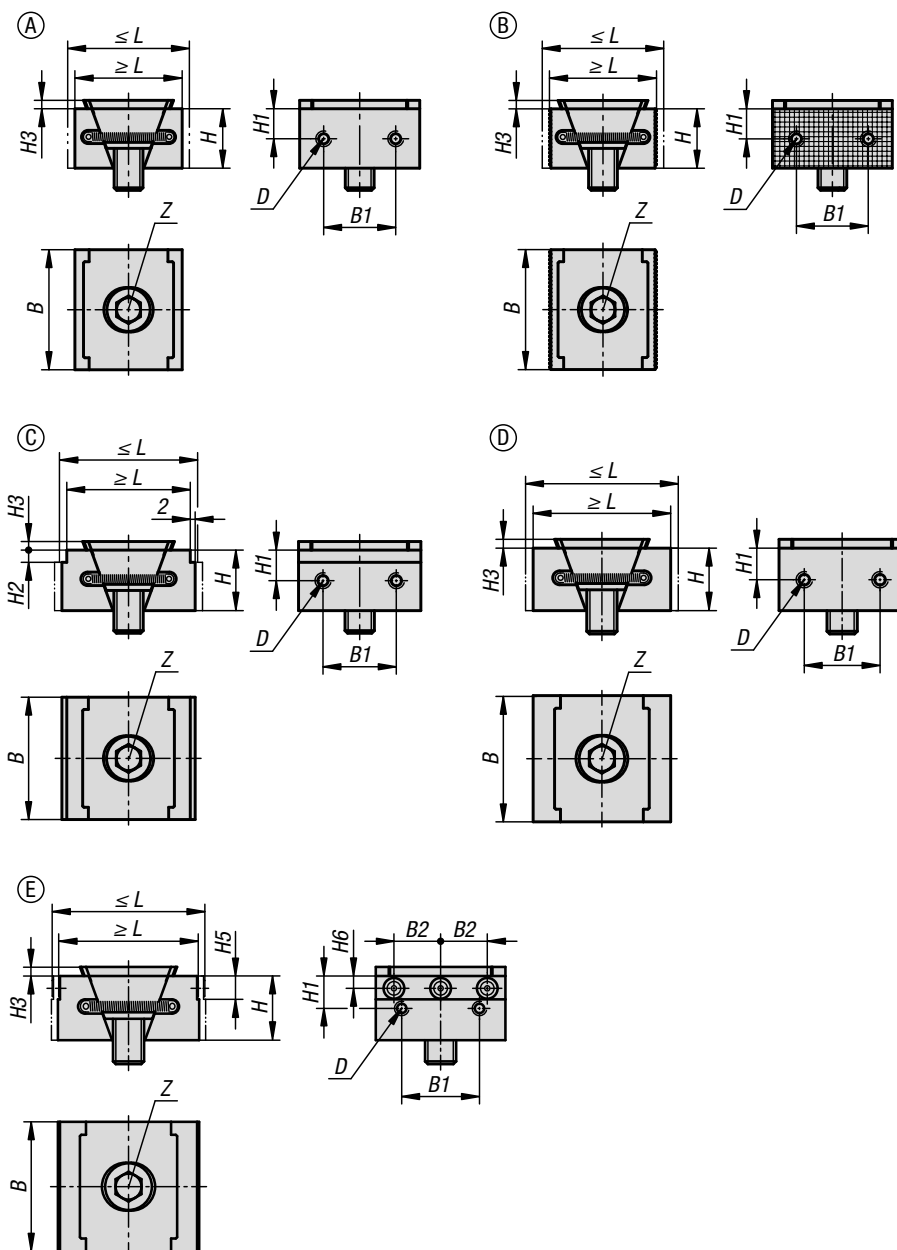
The two screw-on holes in the clamping faces also enable seating ledges to be mounted so as to optimise the clamping depth of the workpieces.

## Supplied with:

Wedge clamps.  
Fastening screw.

## Drawing reference:

Form A: Smooth jaw face  
Form B: Serrated jaw facet  
Form C: With step  
Form D: With machining allowance  
Form E: With jaw pins

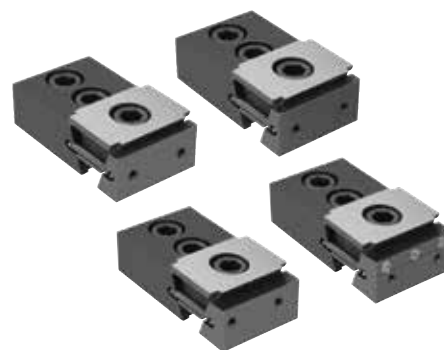


## KIPP Wedge clamps

| Order No.     | Form | L<br>min. | L<br>max. | B  | H  | B1 | B2 | H1   | H2 | H3  | H5 | H6   |
|---------------|------|-----------|-----------|----|----|----|----|------|----|-----|----|------|
| K1748.0500112 | A    | 44,5      | 50,5      | 50 | 25 | 30 | -  | 12,5 | -  | 3,5 | -  | -    |
| K1748.0500212 | B    | 44,5      | 50,5      | 50 | 25 | 30 | -  | 12,5 | -  | 3,5 | -  | -    |
| K1748.0502312 | C    | 50,5      | 56,5      | 50 | 25 | 30 | -  | 12,5 | 2  | 3,5 | -  | -    |
| K1748.0505312 | C    | 50,5      | 56,5      | 50 | 25 | 30 | -  | 12,5 | 5  | 3,5 | -  | -    |
| K1748.0500412 | D    | 54,5      | 60,5      | 50 | 25 | 30 | -  | 12,5 | -  | 3,5 | -  | -    |
| K1748.0500512 | E    | 54        | 60        | 50 | 25 | 30 | 18 | 12,5 | -  | 3,5 | 9  | 4,75 |

| Order No.     | Form | D<br>Internal<br>thread | Z<br>cap screw<br>DIN 912 | Clamping<br>force<br>max. kN | Tightening<br>torque<br>max. Nm |
|---------------|------|-------------------------|---------------------------|------------------------------|---------------------------------|
| K1748.0500112 | A    | M5                      | M12x25                    | 30                           | 85                              |
| K1748.0500212 | B    | M5                      | M12x25                    | 30                           | 85                              |
| K1748.0502312 | C    | M5                      | M12x25                    | 30                           | 85                              |
| K1748.0505312 | C    | M5                      | M12x25                    | 30                           | 85                              |
| K1748.0500412 | D    | M5                      | M12x25                    | 30                           | 85                              |
| K1748.0500512 | E    | M5                      | M12x25                    | 30                           | 85                              |

# Wedge clamps with fixed jaw



The functioning principle make the wedge clamps ideal for multi-clamping. The wedge shape creates high clamping forces. These wedge clamps set into a T-slot for clamping.

Tightening the clamping screw moves the clamping segments outwards and presses the workpiece against the fixed jaws of the machining fixture.

The wedge has a slightly elongated hole allowing for movement to compensate for tolerances.

Displacement: M12 =  $\pm 1,0$  mm.

## Material:

Double wedge and clamping segments mild steel.

## Version:

Double wedge and clamping segments hardened, phosphated.

## Sample order:

K1745.0502

## Note:

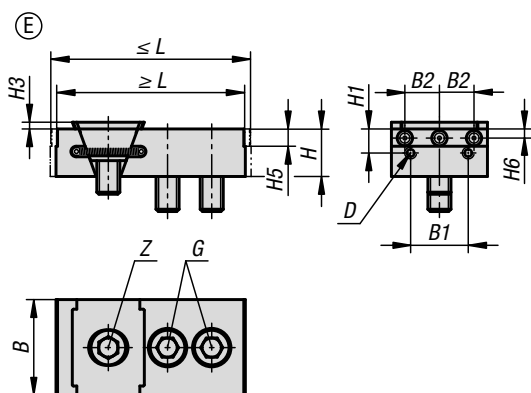
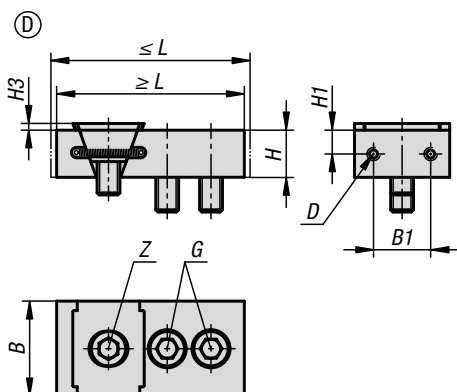
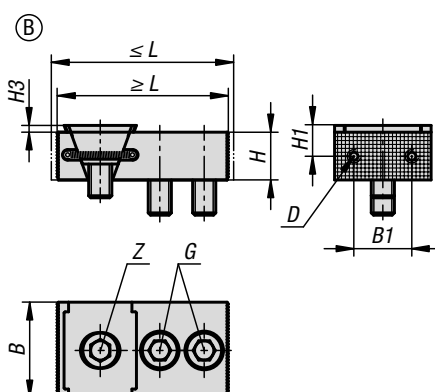
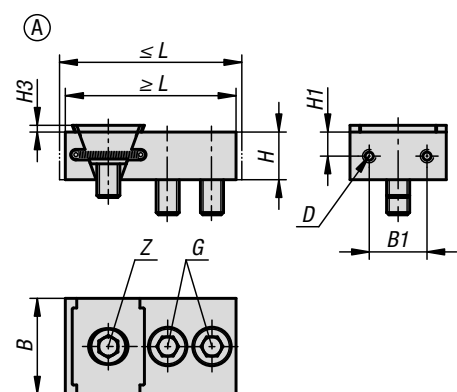
The two screw-on holes in the clamping faces also enable seating ledges to be mounted so as to optimise the clamping depth of the workpieces. The underside is carbide-coated. This increases the coefficient of friction.

## Supplied with:

Wedge clamps  
Fastening screws.

## Drawing reference:

Form A: Smooth jaw face  
Form B: Serrated jaw face  
Form D: With machining allowance  
Form E: With jaw pins





## Wedge clamps with fixed jaw



## KIPP Wedge clamps with fixed jaw

| Order No.     | Form | L<br>min. | L<br>max. | B  | H  | B1 | B2 | H1   | H3  | H5 | H6   |
|---------------|------|-----------|-----------|----|----|----|----|------|-----|----|------|
| K1745.0500112 | A    | 88,5      | 94,5      | 50 | 25 | 30 | -  | 12,5 | 3,5 | -  | -    |
| K1745.0500212 | B    | 88,5      | 94,5      | 50 | 25 | 30 | -  | 12,5 | 3,5 | -  | -    |
| K1745.0500412 | D    | 98,5      | 104,5     | 50 | 25 | 30 | -  | 12,5 | 3,5 | -  | -    |
| K1745.0500512 | E    | 98        | 104       | 50 | 25 | 30 | 18 | 12,5 | 3,5 | 9  | 4,75 |

| Order No.     | Form | D<br>Internal<br>thread | G<br>cap screw<br>DIN 912 | Z<br>cap screw<br>DIN 912 | Clamping<br>force<br>max. kN | Tightening<br>torque<br>max. Nm |
|---------------|------|-------------------------|---------------------------|---------------------------|------------------------------|---------------------------------|
| K1745.0500112 | A    | M5                      | M12x30                    | M12x25                    | 30                           | 85                              |
| K1745.0500212 | B    | M5                      | M12x30                    | M12x25                    | 30                           | 85                              |
| K1745.0500412 | D    | M5                      | M12x30                    | M12x25                    | 30                           | 85                              |
| K1745.0500512 | E    | M5                      | M12x30                    | M12x25                    | 30                           | 85                              |

# Wedge clamps

jaw face smooth or serrated



## Material:

Wedge and jaw segments carbon steel.

## Version:

Wedge and jaw segments hardened, black.

## Sample order:

K0039.2208

## Note:

The functioning principle make the wedge clamps ideal for series clamping. The wedge form can exert high clamping forces.

These wedge clamps can be mounted in grid holes or T-slots. Tightening the socket screw moves the wedge down and the jaws out pressing the workpieces against the fixtures fixed stops.

The wedge has a slightly elongated hole allowing for movement to compensate for tolerances.

## Spread width:

M8 =  $\pm 0.5$  mm

M10 =  $\pm 1.0$  mm

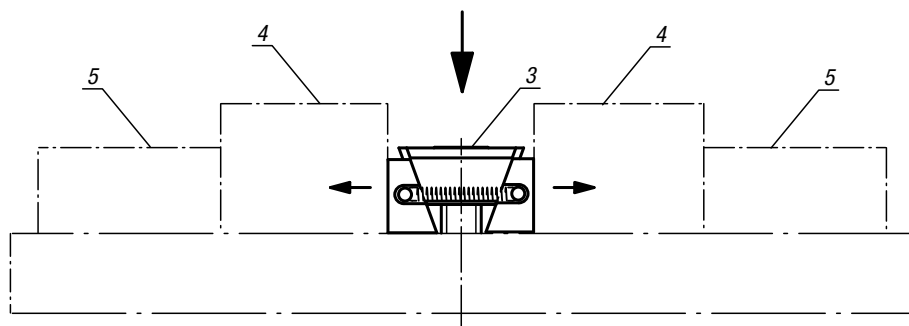
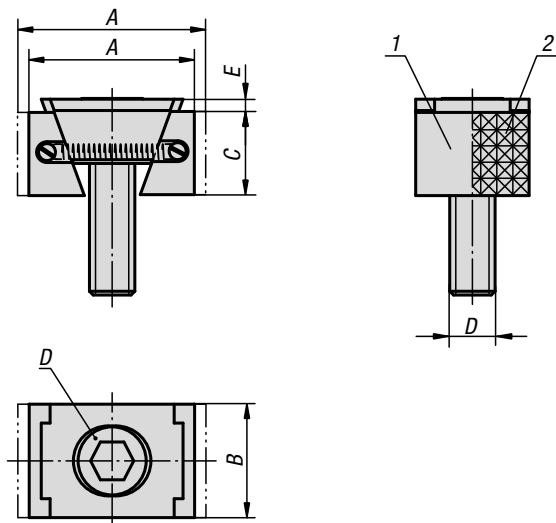
M12 =  $\pm 1.0$  mm

M16 =  $\pm 1.5$  mm

## Drawing reference:

D) DIN 6912 cap screw

- 1) Jaw face smooth
- 2) Jaw face serrated
- 3) Wedge clamps
- 4) Workpiece
- 5) Fixed stop



## KIPP Wedge clamps, narrow version

| Order No.<br>smooth | Order No.<br>serrated | A<br>min. | A<br>max. | B  | C  | D      | E   | Clamping<br>force<br>max. kN | Tightening<br>torque<br>max. Nm |
|---------------------|-----------------------|-----------|-----------|----|----|--------|-----|------------------------------|---------------------------------|
| K0039.1108          | K0039.2108            | 30,5      | 33,5      | 24 | 15 | M8X25  | 2   | 15                           | 25                              |
| K0039.1110          | K0039.2110            | 32        | 37        | 28 | 19 | M10X25 | 3,5 | 20                           | 49                              |
| K0039.1112          | K0039.2112            | 44        | 49,5      | 30 | 22 | M12X40 | 3,5 | 30                           | 85                              |
| K0039.1116          | K0039.2116            | 55        | 62        | 40 | 29 | M16X60 | 4   | 50                           | 210                             |

## KIPP Wedge clamps, wide version

| Order No.<br>smooth | Order No.<br>serrated | A<br>min. | A<br>max. | B  | C  | D      | E   | Clamping<br>force<br>max. kN | Tightening<br>torque<br>max. Nm |
|---------------------|-----------------------|-----------|-----------|----|----|--------|-----|------------------------------|---------------------------------|
| K0039.1208          | K0039.2208            | 30,5      | 33,5      | 30 | 15 | M8X25  | 2   | 15                           | 25                              |
| K0039.1210          | K0039.2210            | 32        | 37        | 38 | 19 | M10X25 | 3,5 | 20                           | 49                              |
| K0039.1212          | K0039.2212            | 44        | 49,5      | 48 | 22 | M12X40 | 3,5 | 30                           | 85                              |
| K0039.1216          | K0039.2216            | 55        | 62        | 48 | 29 | M16X60 | 4   | 50                           | 210                             |

# Wedge clamps

machinable


**Material:**

Wedge and jaw segments carbon steel.

**Version:**

Wedge and jaw segments tempered, black.

**Sample order:**

K0649.3110

**Note:**

The special feature of these wedge clamps is the machinable jaws. This extra material enables the jaws to be machined to suit the geometry of the workpiece. In addition, the functioning principle makes them suitable for series clamping. The wedge shape creates high clamping forces.

The wedge clamps can be mounted in tapped holes or T-slots. Tightening the clamping screw moves the two clamping segments outwards and press the workpieces against the fixed jaws of the machining fixture.

The wedge has a slightly elongated hole allowing for movement to compensate for tolerances.

**Spread width:**

M8 = ±0.5 mm

M10 = ±1.0 mm

M12 = ±1.0 mm

M16 = ±1.5 mm

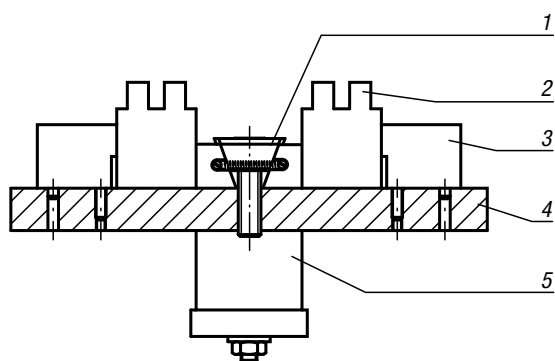
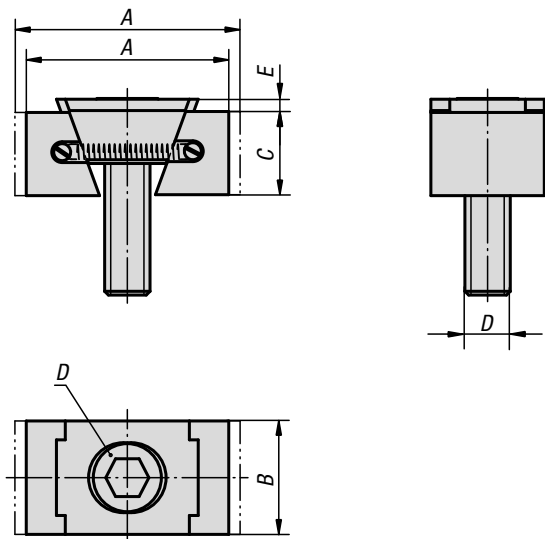
**Attention:**

These wedge clamps have a machining allowance per jaw of 3 mm for version M8 and 5 mm for versions M10, M12 and M16.

**Drawing reference:**

D) DIN 6912 cap screw

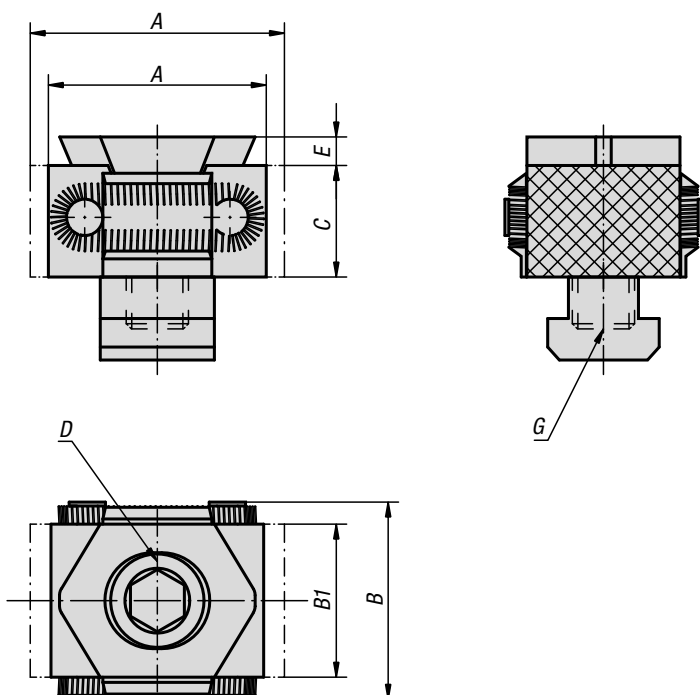
- 1) wedge clamps
- 2) workpiece
- 3) fixed stop
- 4) base plate
- 5) hydraulic/pneumatic cylinder


**KIPP Wedge clamps, machinable**

| Order No.  | Version | A<br>min. | A<br>max. | B  | C  | D      | E   | Clamping<br>force<br>max. kN | Tightening<br>torque<br>max. Nm |
|------------|---------|-----------|-----------|----|----|--------|-----|------------------------------|---------------------------------|
| K0649.3108 | narrow  | 36,5      | 39,5      | 24 | 15 | M8X25  | 2   | 11                           | 19                              |
| K0649.3110 | narrow  | 42        | 47        | 28 | 19 | M10X25 | 3,5 | 15                           | 37                              |
| K0649.3112 | narrow  | 54        | 59,5      | 30 | 22 | M12X40 | 3,5 | 23                           | 65                              |
| K0649.3116 | narrow  | 65        | 72        | 40 | 29 | M16X60 | 4   | 38                           | 160                             |
| K0649.3208 | wide    | 36,5      | 39,5      | 30 | 15 | M8X25  | 2   | 11                           | 19                              |
| K0649.3210 | wide    | 42        | 47        | 38 | 19 | M10X25 | 3,5 | 15                           | 37                              |
| K0649.3212 | wide    | 54        | 59,5      | 48 | 22 | M12X40 | 3,5 | 23                           | 65                              |
| K0649.3216 | wide    | 65        | 72        | 48 | 29 | M16X60 | 4   | 38                           | 160                             |

## Wedge clamps

jaw faces serrated



### Material:

Body and clamping segments tool steel.

### Version:

Body hardened.

Jaw segments hardened (49-51 HRC) black oxidised.

Wedge faces ground.

### Sample order:

K0040.1618

### Note:

The compact design makes these wedge clamps ideal for horizontal and vertical series clamping. The hardened and ground wedge faces can exert high clamping forces.

These wedge clamps can be mounted in grid holes or T-slots. Tightening the DIN 912 socket screw moves the wedge down and the jaws out pressing the workpieces against the fixtures fixed stops.

**The jaws of version K0040.08 and K0040.0810 are not serrated.**

The wedge has a slightly elongated hole allowing for movement.

Spread width:

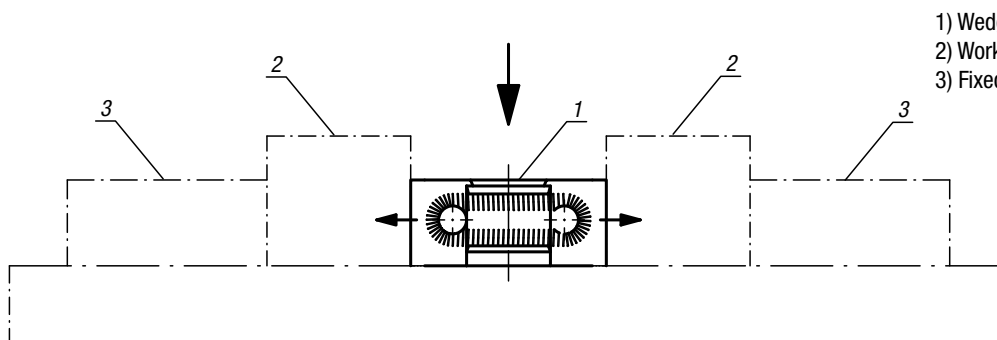
K0040.08 =  $\pm 0.5$  mm

K0040.12 =  $\pm 1.0$  mm

K0040.16 =  $\pm 1.5$  mm.

### Drawing reference:

D) DIN 912 cap screw

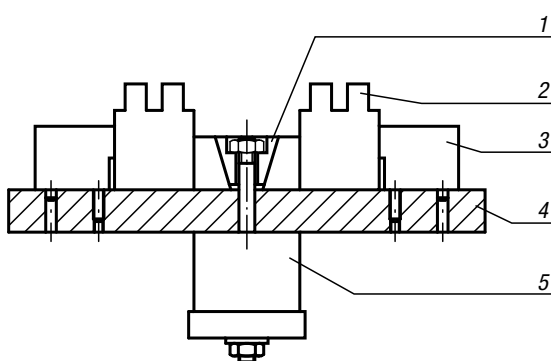
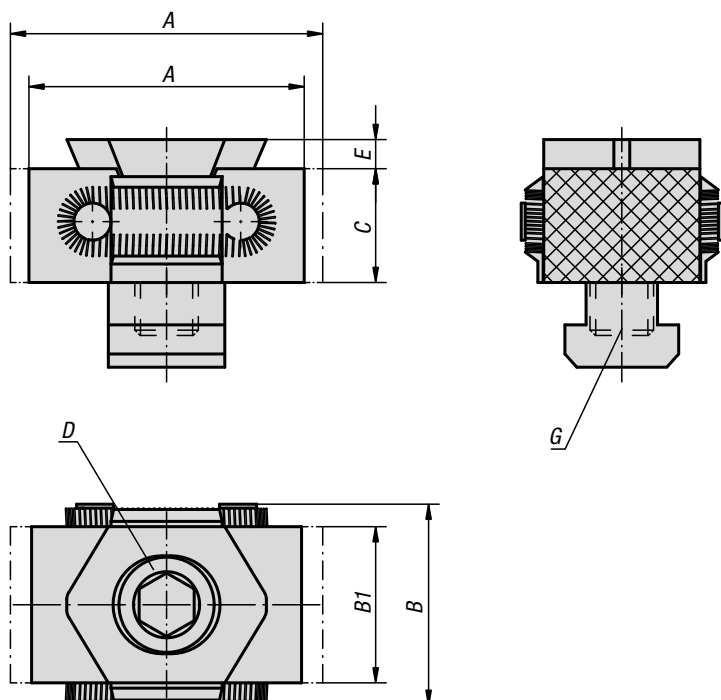


## KIPP Wedge clamps, jaw faces serrated

| Order No.  | Version 1 | A min. | A max. | B  | B1 | C  | D      | E   | Version 2       | G   | Clamping force max. kN | Tightening torque max. Nm |
|------------|-----------|--------|--------|----|----|----|--------|-----|-----------------|-----|------------------------|---------------------------|
| K0040.08   | smooth    | 27     | 31     | 29 | 21 | 15 | M8X25  | 2,5 | for tapped hole | M8  | 15                     | 25                        |
| K0040.0810 | smooth    | 27     | 31     | 29 | 21 | 15 | M8X25  | 2,5 | for t-slot      | 10  | 15                     | 25                        |
| K0040.12   | serrated  | 42     | 49     | 41 | 30 | 22 | M12X40 | 4   | for tapped hole | M12 | 30                     | 85                        |
| K0040.1214 | serrated  | 42     | 49     | 41 | 30 | 22 | M12X30 | 4   | for t-slot      | 14  | 30                     | 85                        |
| K0040.16   | serrated  | 57     | 66     | 56 | 42 | 29 | M16X60 | 5   | for tapped hole | M16 | 50                     | 210                       |
| K0040.1618 | serrated  | 57     | 66     | 56 | 42 | 29 | M16X50 | 5   | for t-slot      | 18  | 50                     | 210                       |

## Wedge clamps

machinable



### Material:

Body tool steel.

Jaw segments tool steel (30 HRC).

### Version:

Body hardened.

Jaw segments black oxidised.

Wedge faces ground.

### Sample order:

K0041.12

### Note:

These wedge clamps have a machining allowance per jaw of 3 mm for version K0041.08 and 5 mm for versions K0041.12 and K0041.16.

This extra material allows the jaws to be machined to suit the form of the workpiece.

**The jaws version K0041.08 and K0041.0810 are not serrated.**

Spread width:

K0041.08 =  $\pm 0.5$  mm

K0041.12 =  $\pm 1.0$  mm

K0041.16 =  $\pm 1.5$  mm

### On request:

Pre-formed jaw segments or other hardness grades.

### Drawing reference:

D) DIN 912 cap screw

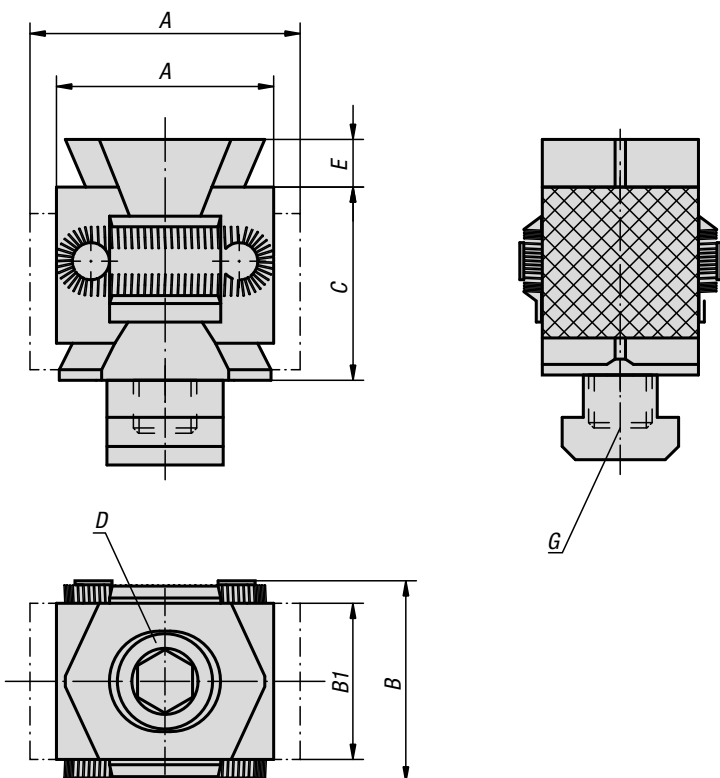
- 1) wedge clamps
- 2) workpiece
- 3) fixed stop
- 4) base plate
- 5) hydraulic/pneumatic cylinder

### KIPP Wedge clamps machinable

| Order No.  | A min. | A max. | B  | B1 | C  | D      | E   | Version 2       | G   | Clamping force max. kN | Tightening torque max. Nm |
|------------|--------|--------|----|----|----|--------|-----|-----------------|-----|------------------------|---------------------------|
| K0041.08   | 33     | 37     | 29 | 21 | 15 | M8X25  | 2,5 | for tapped hole | M8  | 15                     | 25                        |
| K0041.0810 | 33     | 37     | 29 | 21 | 15 | M8X25  | 2,5 | for t-slot      | 10  | 15                     | 25                        |
| K0041.12   | 52     | 59     | 41 | 30 | 22 | M12X40 | 4   | for tapped hole | M12 | 30                     | 85                        |
| K0041.1214 | 52     | 59     | 41 | 30 | 22 | M12X30 | 4   | for t-slot      | 14  | 30                     | 85                        |
| K0041.16   | 67     | 76     | 56 | 42 | 29 | M16X60 | 5   | for tapped hole | M16 | 50                     | 210                       |
| K0041.1618 | 67     | 76     | 56 | 42 | 29 | M16X50 | 5   | for t-slot      | 18  | 50                     | 210                       |

# Wedge clamps double wedge

jaw faces serrated



## Material:

Body and jaw segments tool steel.

## Version:

Body hardened.

Jaw segments hardened (49-51 HRC) and black oxidised.

Wedge faces ground.

## Sample order:

K0042.1214

## Note:

The compact design makes these double wedge clamps ideal for horizontal and vertical series clamping. The hardened and ground wedge faces can exert high clamping forces.

These wedge clamps can be mounted in grid holes or T-slots. Tightening the DIN 912 socket screw pulls the wedges together and the jaws out pressing the workpieces against the fixtures fixed stops.

The double wedges create a positive down force.

Spread width:

K0042.12 =  $\pm 1.0$  mm

K0042.16 =  $\pm 1.5$  mm

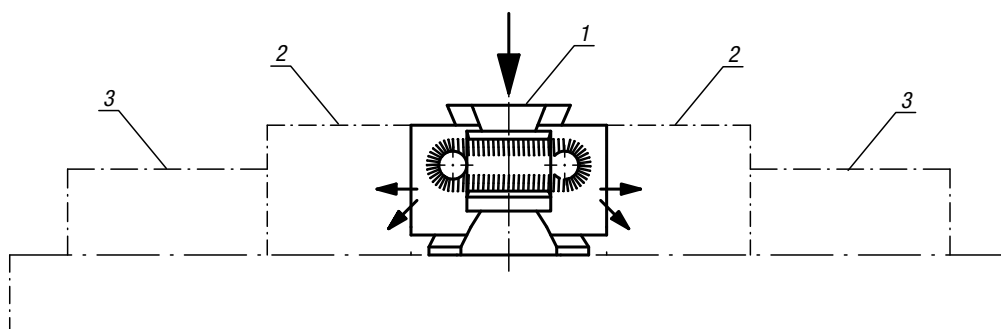
## Drawing reference:

D) DIN 912 cap screw

1) Wedge clamps

2) Workpiece

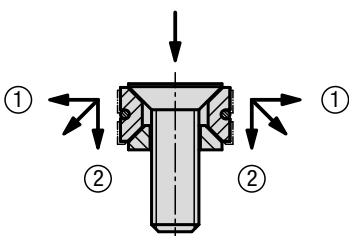
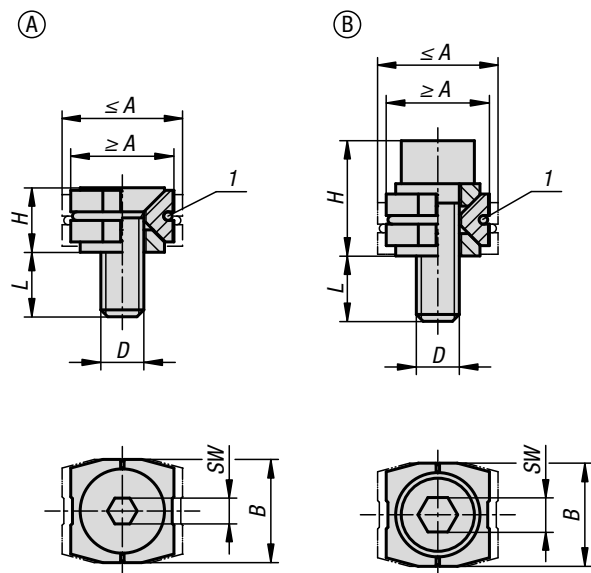
3) Fixed stop



## KIPP Wedge clamps double wedge, jaw faces serrated

| Order No.  | A min. | A max. | B  | B1 | C  | D      | E | Version 2       | G   | Clamping force max. kN | Tightening torque max. Nm |
|------------|--------|--------|----|----|----|--------|---|-----------------|-----|------------------------|---------------------------|
| K0042.12   | 42     | 49     | 41 | 30 | 36 | M12X60 | 5 | for tapped hole | M12 | 40                     | 85                        |
| K0042.1214 | 42     | 49     | 41 | 30 | 36 | M12X50 | 5 | for t-slot      | 14  | 40                     | 85                        |
| K0042.16   | 57     | 67     | 56 | 42 | 50 | M16X80 | 5 | for tapped hole | M16 | 60                     | 210                       |
| K0042.1618 | 57     | 67     | 56 | 42 | 50 | M16X70 | 5 | for t-slot      | 18  | 60                     | 210                       |

# Wedge clamps



(Jaws exert positive down force)  
 ① Horizontal thrust against workpiece  
 ② Vertical thrust prevents the workpiece lifting

**Material:**  
Carbon steel.

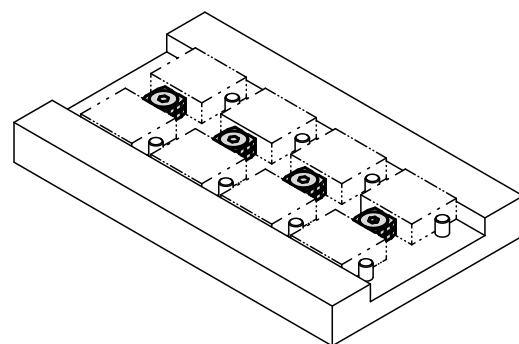
**Version:**  
Jaw plate hardened (33–39 HRC) and black oxidised.

**Sample order:**  
K1167.11205

**Note:**  
Due to the functioning principle, wedge clamps are suitable for clamping in series.  
The wedges generate higher clamping forces.  
The wedge clamps are available with cap screws or countersunk screws.  
Wedge clamps with pull-down effect.

**Drawing reference:**  
Dimension L refers to  $\leq A$ .  
Dimension H refers to  $\geq A$ .

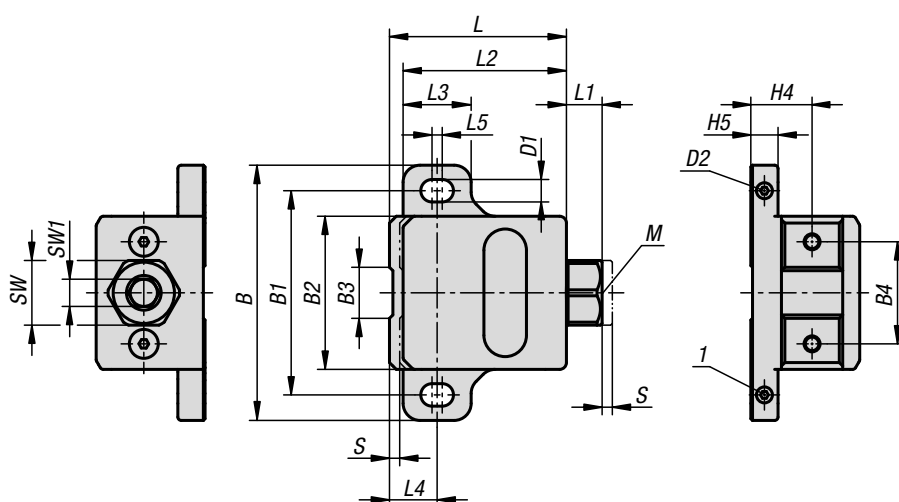
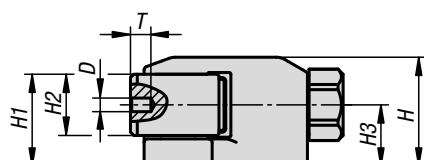
1) O-ring



## KIPP Wedge clamps

| Order No.   | Form | Version 2              | A min. | A max. | B    | D     | H    | L    | SW | Clamping force max. kN | Tightening torque max. Nm |
|-------------|------|------------------------|--------|--------|------|-------|------|------|----|------------------------|---------------------------|
| K1167.11205 | A    | with csk. screw        | 12     | 14     | 12   | M5X15 | 7,5  | 9,5  | 3  | 2                      | 4,3                       |
| K1167.11506 | A    | with csk. screw        | 15     | 17     | 14,8 | M6X16 | 8,7  | 9,3  | 4  | 3,5                    | 7,3                       |
| K1167.11808 | A    | with csk. screw        | 18,5   | 21,5   | 18,4 | M8X20 | 11,8 | 11,3 | 5  | 5                      | 18                        |
| K1167.21205 | B    | with socket head screw | 12     | 14     | 12   | M5X16 | 13,4 | 9,6  | 4  | 3                      | 5,4                       |
| K1167.21506 | B    | with socket head screw | 15     | 17     | 14,8 | M6X18 | 15,8 | 10,2 | 5  | 4,5                    | 9,1                       |
| K1167.21808 | B    | with socket head screw | 18,5   | 21,5   | 18,4 | M8X25 | 21,2 | 14,9 | 6  | 9                      | 22                        |

## Side clamp



### Material:

Carbon steel.

### Version:

Body black oxidised.

Clamping face ground.

### Sample order:

K1697.0900

### Note:

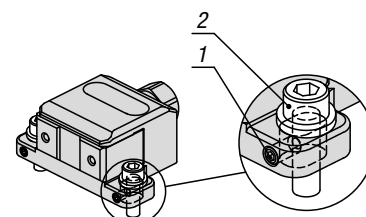
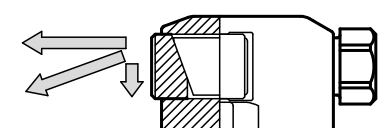
Tighten the setscrew to prevent the side clamp sliding back during the clamping process.

### Advantages:

- High clamping force
- Ground clamping face
- Pull-down force prevents the workpiece lifting

### Drawing reference:

- 1) Setscrew
- 2) Cap screw



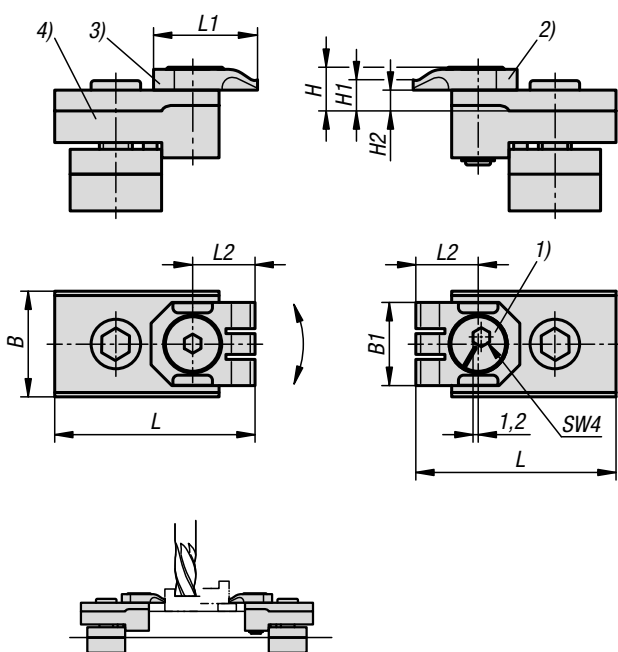
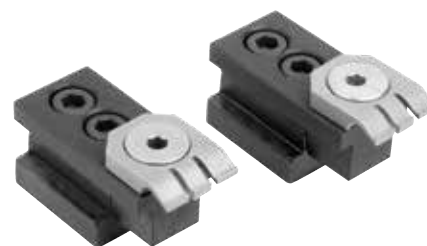
## KIPP Side clamp

| Order No.  | B   | B1 | B2 | B3 | B4 | D  | D1  | D2   | H  | H1 | H2 | H3 | H4 | H5 | L  | L1 | L2 | L3 | L4 | L5 | SW | SW1 | T | Travel<br>S | Clamping<br>force<br>kN | Tightening<br>torque<br>max. Nm |
|------------|-----|----|----|----|----|----|-----|------|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|---|-------------|-------------------------|---------------------------------|
| K1697.0900 | 75  | 60 | 45 | 15 | 30 | M4 | 6,6 | M4x6 | 32 | 27 | 18 | 18 | 18 | 8  | 52 | 10 | 48 | 20 | 14 | 3  | 19 | 8   | 6 | 3           | 9                       | 25                              |
| K1697.1400 | 100 | 80 | 60 | 20 | 40 | M5 | 8,6 | M5x8 | 40 | 33 | 22 | 22 | 22 | 10 | 69 | 13 | 63 | 26 | 19 | 4  | 24 | 10  | 8 | 4           | 14                      | 50                              |



## Flat clamp, steel

for T-slot



Workpiece clamped directly on the table top or supported on rests from below (e.g. for drilling though).

### Material:

Steel body.  
Clamping element and stop made from spring steel.

### Version:

Base element tempered.

### Sample order:

K1540.10

### Note for ordering:

The order number includes one pair, made up of a clamping element and a stop.

### Note:

By turning the cam screw on the clamping element the workpiece is forced downwards (positive down force). The clamping element also forces the workpiece against the stop, thereby providing a flat parallel seating.

The stop side provides a reference that makes precise replications possible.

Cam hub: 1.2 mm.

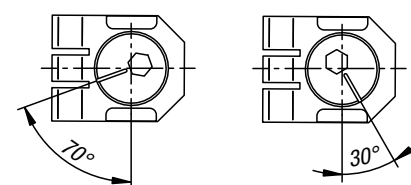
### Application:

Suitable for clamping multiple and individual parts on fixtures and T-slot tables.

### Drawing reference:

- 1) Cam screw
- 2) Clamping element
- 3) Stop
- 4) Body

### Using the cam

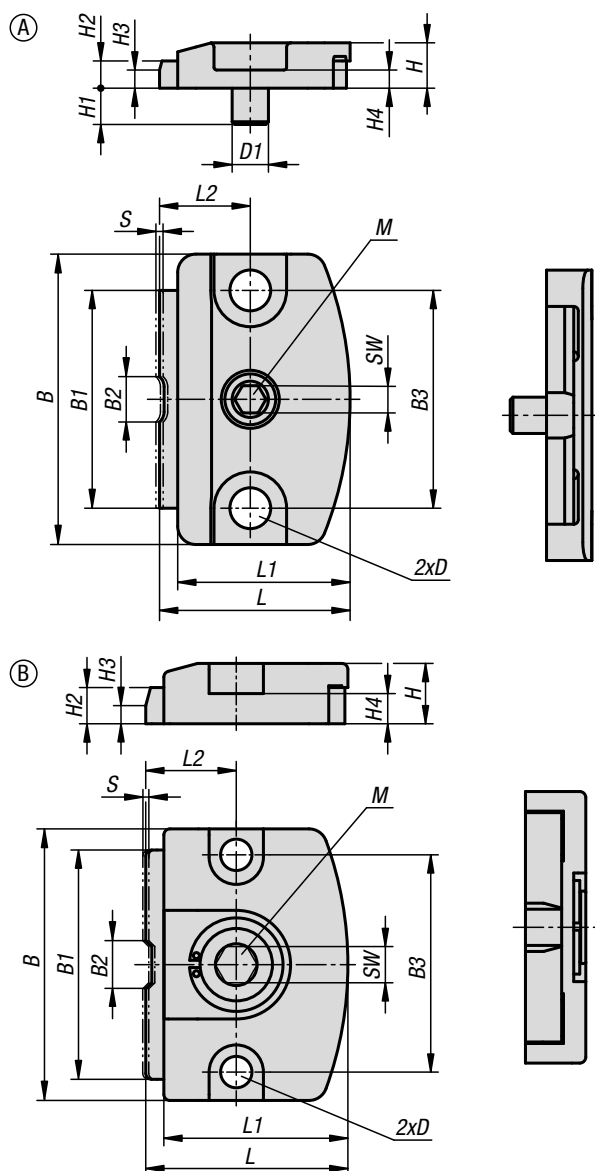


## KIPP Flat clamp, steel, for T-slot

| Order No. | B  | B1 | H    | H1  | H2 | L  | L1 | L2 | SW | Slot width | F kN | Tightening torque Nm |
|-----------|----|----|------|-----|----|----|----|----|----|------------|------|----------------------|
| K1540.10  | 18 | 20 | 10,5 | 7,5 | 5  | 46 | 25 | 15 | 4  | 10         | 4    | 9                    |
| K1540.12  | 18 | 20 | 10,5 | 7,5 | 5  | 48 | 25 | 15 | 4  | 12         | 4    | 9                    |
| K1540.14  | 22 | 20 | 10,5 | 7,5 | 5  | 52 | 25 | 15 | 4  | 14         | 4    | 9                    |
| K1540.16  | 25 | 20 | 10,5 | 7,5 | 5  | 48 | 25 | 15 | 4  | 16         | 4    | 9                    |
| K1540.18  | 25 | 20 | 10,5 | 7,5 | 5  | 48 | 25 | 15 | 4  | 18         | 4    | 9                    |

## T-slot clamp

with cam



**Material:**  
Carbon steel.

**Version:**  
Black oxidised.

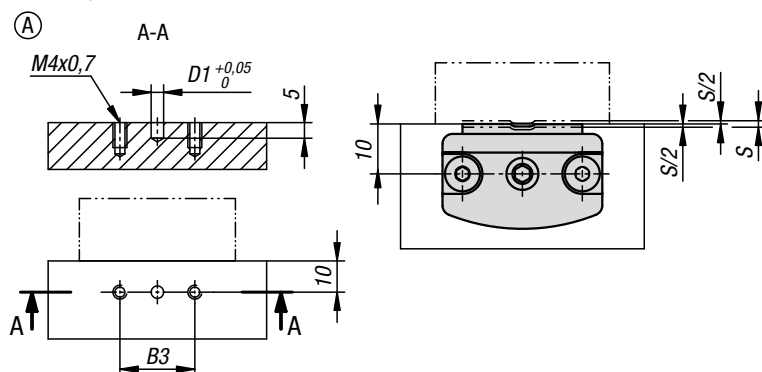
**Sample order:**  
K1696.10400

**Note:**  
Form A with locating pin.  
Form B without locating pin.

**Assembly:**  
See drawing (Form A).

**Advantages:**  
- Compact and flat design  
- Quick and easy clamping of components

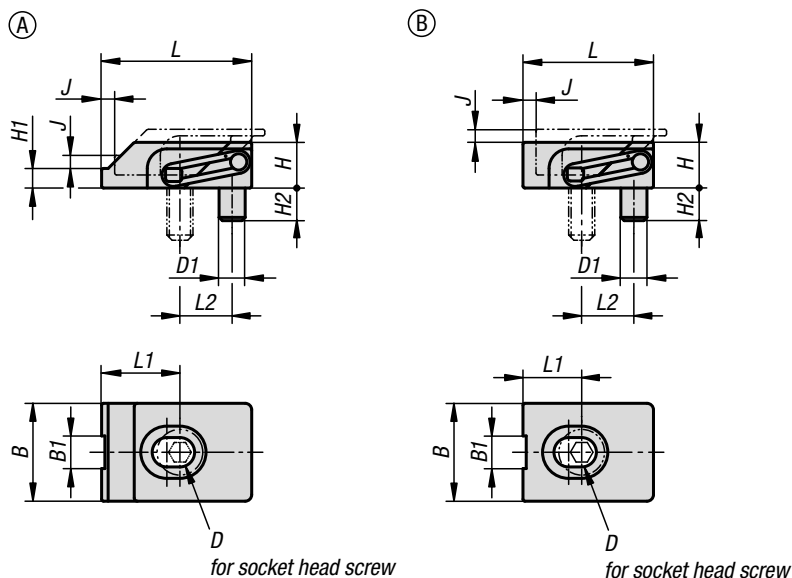
### mounting instructions:



### KIPP T-slot clamp with cam

| Order No.   | Form | B  | B1 | B2 | B3 | D   | D1 | H  | H1 | H2 | H3 | H4 | L    | L1   | L2 | SW | Travel<br>S | Clamping<br>force<br>kN | Tightening<br>torque<br>max. Nm |
|-------------|------|----|----|----|----|-----|----|----|----|----|----|----|------|------|----|----|-------------|-------------------------|---------------------------------|
| K1696.00130 | A    | 32 | 24 | 5  | 24 | 4,5 | 4  | 5  | 4  | 3  | 2  | 2  | 21   | 19   | 10 | 3  | 0,8         | 1,3                     | 2,1                             |
| K1696.10400 | B    | 45 | 38 | 8  | 36 | 5,2 | -  | 10 | -  | 6  | 3  | 5  | 33,5 | 30,5 | 15 | 6  | 1           | 4                       | 10                              |
| K1696.10600 | B    | 70 | 60 | 12 | 55 | 8,2 | -  | 15 | -  | 9  | 5  | 7  | 50   | 46   | 22 | 10 | 2           | 6                       | 27                              |

## Flat clamps



**Material:**  
Carbon steel.

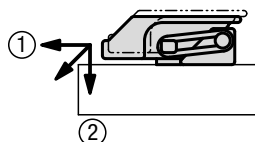
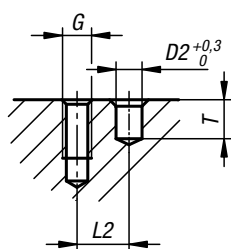
**Version:**  
Hardened (33–39 HRC) and black oxidised.

**Sample order:**  
K1168.204

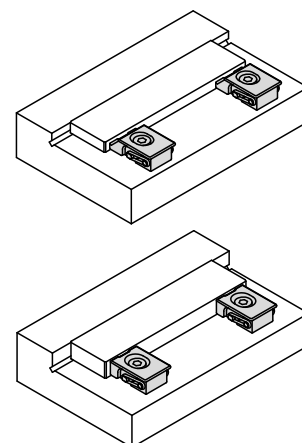
**Note:**  
Particularly low workpieces can be clamped using these flat clamps.  
Clamping element with pull-down effect.  
Clamping element and fixed block in one compact unit.

**Drawing reference:**  
Dimension L1 refers to clamped state.

### installation instructions



- (Jaws exert positive down force)
- ① Horizontal thrust against workpiece
  - ② Vertical thrust prevents the workpiece lifting



### KIPP Flat clamps

| Order No. | Form | B  | B1 | D1 | D2 | G  | H | H1 | H2 | J   | L  | L1 | L2 | T | Clamping force max. kN | Tightening torque max. Nm |
|-----------|------|----|----|----|----|----|---|----|----|-----|----|----|----|---|------------------------|---------------------------|
| K1168.104 | A    | 15 | 5  | 4  | 4  | M4 | 7 | 3  | 5  | 2   | 23 | 12 | 8  | 6 | 2                      | 2,7                       |
| K1168.105 | A    | 19 | 7  | 5  | 5  | M5 | 9 | 4  | 6  | 2,5 | 28 | 14 | 10 | 7 | 3                      | 5,4                       |
| K1168.204 | B    | 15 | 5  | 4  | 4  | M4 | 7 | -  | 5  | 2   | 20 | 9  | 8  | 6 | 2,5                    | 2,7                       |
| K1168.205 | B    | 19 | 7  | 5  | 5  | M5 | 9 | -  | 6  | 2,5 | 25 | 11 | 10 | 7 | 3,5                    | 5,4                       |

## Mandrel collets, steel

with cam lever



**With this patented clamping system, two components can be positioned without tools via form fit and then clamped together by frictional connection. The clamping range and the holding force is adjustable.**

### Material:

Handles, cast aluminium, EN AC-46200.  
Thrust washer, fibreglass reinforced PA 66 GF 35 X plastic.  
Hinge pin stainless steel.  
Tie rod, washer, collet, disc spring, steel.

### Version:

Grips fine structure powder-coated, black or red RAL 3003.  
Thrust washer, black.  
Washer blue passivated.  
Tie rod and collet black oxidised.

### Sample order:

K1500.1001

### Note:

It is recommended that the cam lever is in a vertical position when the collet is positioned in the bore.  
The function of the clamping system was tested in bores with tolerance H7. All values for retaining force are guide values and are given without safety factor.  
The suitability for the respective application must be checked by the user.

### Advantages:

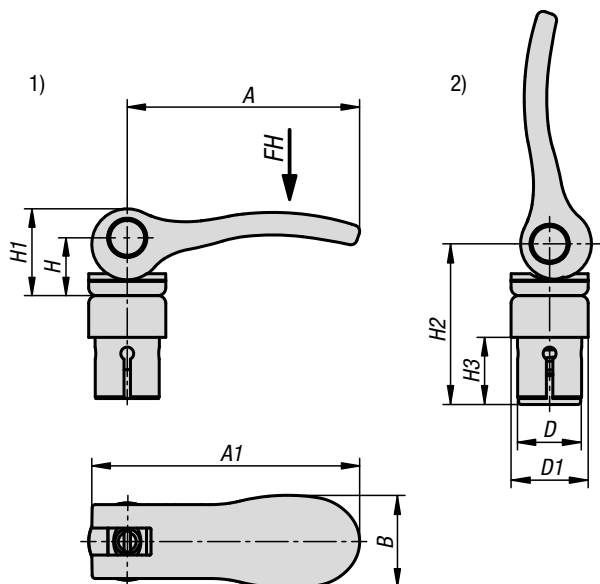
Two components can be joined together without tools. The components are perfectly centred in the clamped state. The compact design means that the mandrel collet with cam lever can even be used in blind holes. There are no specific dimensional requirements for the holes. Additionally, the surfaces and design do not need to have any specific properties.

### Functional principle:

The clamping system is inserted in the hole in the open state. At the beginning of the locking process, the mandrel collet expands and clamps itself in the lower component. The integrated disc spring assembly creates a positive down force that also clamps the two components to one another at the end of the locking process.

### Drawing reference:

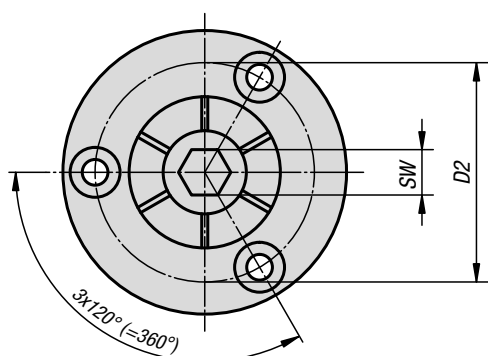
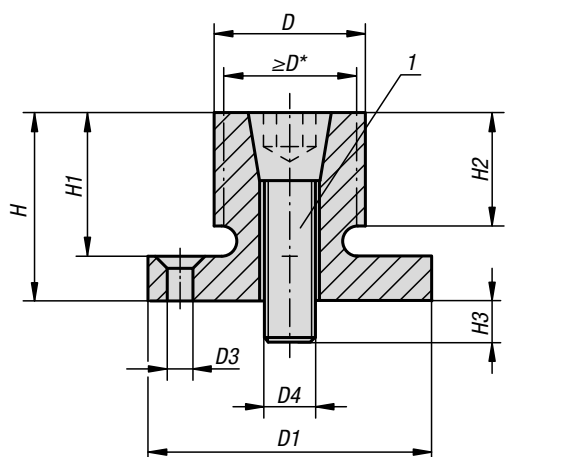
- 1) actuated
- 2) not actuated



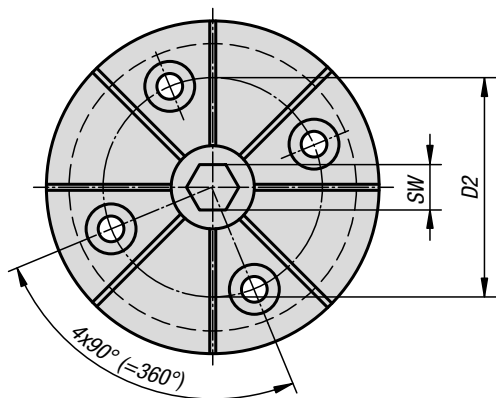
## KIPP Mandrel collets, steel with cam lever

| Order No.<br>black | Order No.<br>red | A    | A1   | B    | D  | D1   | H    | H1 | H2 | H3   | Hand<br>force<br>FH N | Holding<br>force<br>F kN |
|--------------------|------------------|------|------|------|----|------|------|----|----|------|-----------------------|--------------------------|
| K1500.1001         | K1500.1004       | 36,2 | 41,7 | 14,4 | 10 | 12   | 9    | 13 | 25 | 10,4 | 90                    | 1,35                     |
| K1500.1202         | K1500.1205       | 52,3 | 59,1 | 18   | 12 | 15,4 | 11,2 | 17 | 30 | 12,6 | 100                   | 3                        |
| K1500.1403         | K1500.1406       | 70,4 | 79,2 | 21,5 | 14 | 18,1 | 14,5 | 22 | 35 | 14,7 | 120                   | 3,3                      |

## Mandrel collets



K0357.1630175



### Material:

Mandrel mild steel.  
Taper-head screw low-carbon steel

### Version:

Mandrel black oxidised.  
Taper-head screw case-hardened.

### Sample order:

K0357.081420

### Note:

The mandrel collet is ideal for finish machining turned parts. The diameter "D" can be turned or milled to suit the workpiece ID.

Low design - no interfering clamp straps.  
Tightened using a hex socket wrench or hydraulics.

\* D min. = smallest diameter to which "D" may be turned or milled.

### Assembly:

Expand the mandrel approx. 0.1 mm over the relaxed diameter. Turn or mill the mandrel to suit the internal diameter of the workpiece. The base flange can be centred in a pocket or using dowel pins.

### Drawing reference:

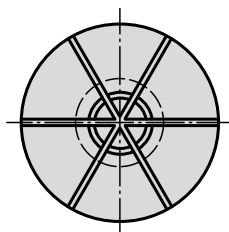
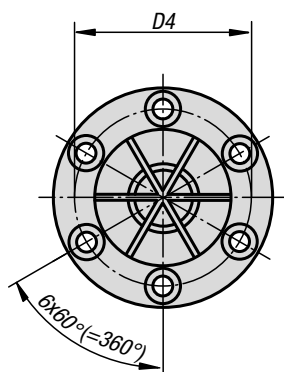
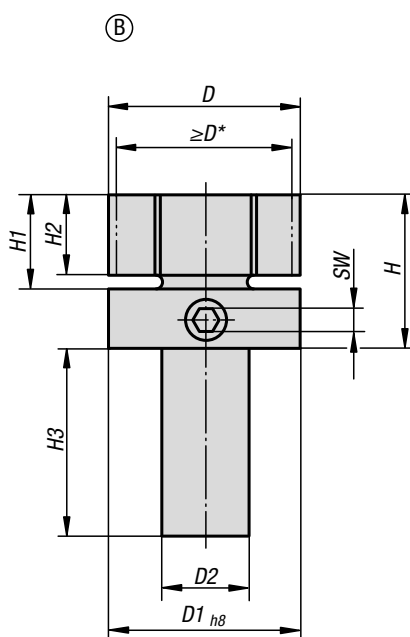
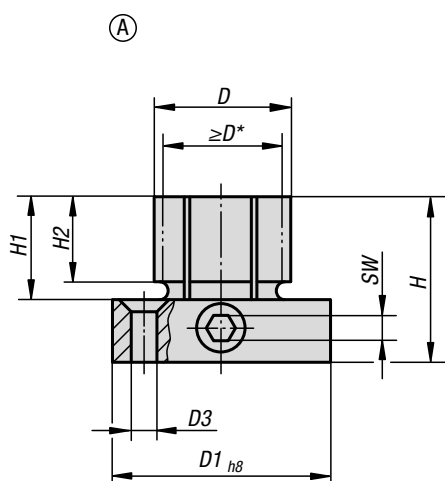
1) taper-head screw

## KIPP Mandrel collets

| Order No.     | D    | D min. | D1       | D2   | D3 for screw ISO 10642 | D4 Tapered-head bolt | H    | H1   | H2   | H3  | SW Tapered-head bolt | Tightening torque max. Nm | Clamping force max. kN |
|---------------|------|--------|----------|------|------------------------|----------------------|------|------|------|-----|----------------------|---------------------------|------------------------|
| K0357.020407  | 7,4  | 4,1    | 20 h9    | 13,7 | M2                     | M2                   | 10,7 | 7,6  | 6,1  | 4,1 | 1,5                  | 0,7                       | 1,1                    |
| K0357.040812  | 12,4 | 8      | 29,72 h9 | 21   | M3                     | M4                   | 21,8 | 16   | 15   | 8   | 3                    | 5                         | 4,2                    |
| K0357.061214  | 14,2 | 12,2   | 31,5 h9  | 23,1 | M3                     | M6                   | 24,9 | 19   | 15   | 12  | 5                    | 17                        | 8,5                    |
| K0357.081420  | 20   | 13,5   | 37,5 h9  | 29   | M3                     | M8                   | 24,9 | 19   | 15   | 14  | 6                    | 34                        | 11,1                   |
| K0357.062027  | 27   | 18     | 50 h9    | 39,4 | M4                     | M10                  | 28,6 | 22,2 | 17,5 | 17  | 8                    | 60                        | 20                     |
| K0357.102535  | 35,3 | 23     | 56 h9    | 45,5 | M4                     | M12                  | 31,8 | 25,4 | 20,6 | 21  | 10                   | 150                       | 26,3                   |
| K0357.123442  | 42   | 29,3   | 69,5 h8  | 55,9 | M5                     | M16                  | 39,6 | 31,8 | 27   | 22  | 14                   | 280                       | 44,5                   |
| K0357.123452  | 51,5 | 29,3   | 75,5 h9  | 63,9 | M5                     | M16                  | 39,6 | 31,8 | 27   | 22  | 14                   | 280                       | 44,5                   |
| K0357.163077  | 77,7 | 29,3   | 107,5 h9 | 92,5 | M6                     | M16                  | 45,5 | 37,6 | 32,3 | 20  | 14                   | 280                       | 44,5                   |
| K0357.1630103 | 103  | 29,3   | 132,9 h9 | 118  | M6                     | M16                  | 45,5 | 37,6 | 32,3 | 20  | 14                   | 280                       | 44,5                   |
| K0357.1630175 | 175  | 29,3   | 132,9 h9 | 118  | M6                     | M16                  | 45,5 | 37,6 | 32,3 | 20  | 14                   | 280                       | 44,5                   |

## Mandrel collets

with side lock



### Material:

Mandrel mild steel.  
Clamping screw carbon steel.

### Version:

Mandrel black oxidised.  
Clamping screw tempered to 10.9, hardened and PTFE coated.

### Sample order:

K0643.118029

### Note:

The side lock make these mandrel collets ideal for finish machining parts with blind internal diameters. The diameter "D" can be turned or milled to suit the workpiece ID.

Manual tightening with hexagon socket wrench.

\* D min. = smallest diameter to which "D" may be turned or milled.

### Assembly:

Expand the mandrel approx. 0.1 mm over the relaxed diameter. Turn or mill the mandrel to suit the internal diameter of the workpiece. A locking ring is included for machining.

The shank or flange is centred in a reamed hole or pocket.

Form A is supplied with 6 fastening screws.

### Drawing reference:

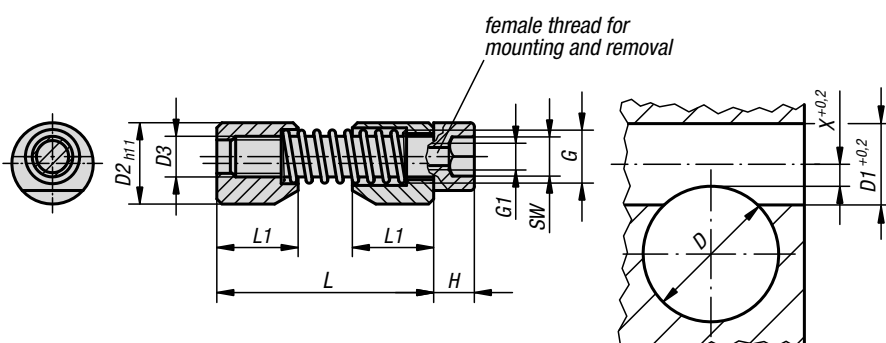
Form A:  
for machining centres, drilling and milling machines  
Form B:  
with shaft for holding in lathe chucks



### KIPP Mandrel collets with side lock

| Order No.    | Form | D    | D min. | D1   | D2 | D3<br>for screw<br>ISO 10642 | D4   | H    | H1   | H2   | H3 | SW | Tightening<br>torque<br>max. Nm | Clamping<br>force<br>max. kN |
|--------------|------|------|--------|------|----|------------------------------|------|------|------|------|----|----|---------------------------------|------------------------------|
| K0643.118029 | A    | 28,7 | 17,8   | 50   | -  | M4                           | 39,4 | 41,3 | 22,4 | 17,5 | -  | 6  | 66                              | 20                           |
| K0643.218053 | B    | 53,3 | 18     | 53,3 | 25 | -                            | -    | 44,4 | 25,4 | 21   | 45 | 6  | 66                              | 20                           |

## Shaft clamping units



**Material:**  
Jaws steel.  
Spring 1.4310.  
Screw grade 8.8.

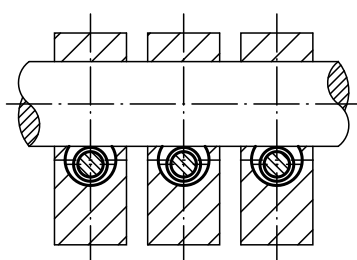
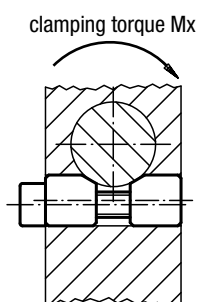
**Version:**  
Jaws black oxidised.  
Screw blue electro zinc-plated.

**Sample order:**  
K0375.04

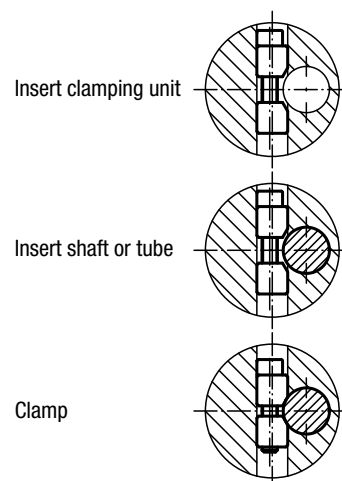
**Note:**  
These shaft clamping units are the simple alternative to conventional shaft clamping (slot and grub screw). The units are suitable for various materials (metal, plastic, wood etc). To loosen a jammed clamp simply hit it axially or extract it using a screw in the jaw end or screw head.

axial and radial clamping

adjusting and clamping



Special hex key with a threaded pin.  
The pin is screwed into the hole G1 in the head of the cap screw to aid in positioning or removing the clamping unit.

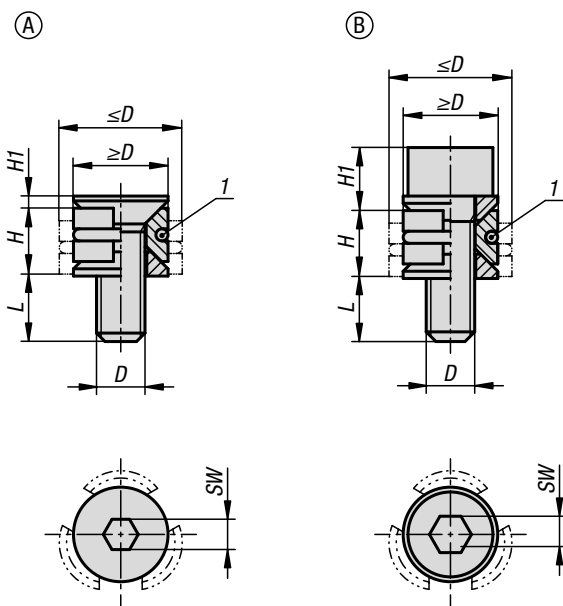


### KIPP Shaft clamping units

| Order No. | D min. | D max. | D1 | D2 | D3  | G   | G1   | H  | L max. | L1 | SW | X   | Clamping torque Mx Nm | Tightening torque max. Nm | Order No. assembly tool |
|-----------|--------|--------|----|----|-----|-----|------|----|--------|----|----|-----|-----------------------|---------------------------|-------------------------|
| K0375.04  | 6      | 10     | 8  | 8  | M4  | M5  | M2,5 | 4  | 27     | 8  | 3  | 2,8 | max. 20               | 2,9                       | K0375.904               |
| K0375.05  | 10     | 15     | 10 | 10 | M5  | M6  | M3   | 5  | 33     | 10 | 4  | 3,3 | max. 45               | 6                         | K0375.905               |
| K0375.06  | 15     | 20     | 12 | 12 | M6  | M7  | M4   | 6  | 39     | 12 | 5  | 3,5 | max. 100              | 10                        | K0375.906               |
| K0375.08  | 20     | 30     | 16 | 16 | M8  | M10 | M5   | 8  | 46     | 16 | 6  | 4   | max. 170              | 25                        | K0375.908               |
| K0375.10  | 30     | 40     | 20 | 20 | M10 | M12 | M6   | 10 | 53     | 20 | 8  | 4,8 | max. 290              | 46                        | K0375.910               |
| K0375.12  | 40     | 60     | 25 | 25 | M12 | M14 | M8   | 12 | 70     | 25 | 10 | 5,6 | max. 450              | 82                        | K0375.912               |
| K0375.16  | 60     | 125    | 30 | 30 | M16 | M18 | M10  | 16 | 81     | 30 | 14 | 7,9 | max. 650              | 206                       | K0375.916               |

## Centring clamps

round



**Material:**  
Carbon steel.

**Version:**  
Hardened (33–39 HRC) and black oxidised.

**Sample order:**  
K1166.10804

**Note:**  
The centring clamp enables a workpiece to be centred and clamped in the bore.  
The wedges generate higher clamping forces.  
The centring clamp is available with a cap screw or countersunk screw.  
Centring clamp with pull-down effect.

**Drawing reference:**  
Form A: with countersunk screw  
Form B: with cap screw

Dimension H refers to the height at  $\geq D$ .  
Dimension L refers to the length at  $\leq D$

1) O-ring

### KIPP Centring clamp round

| Order No.   | Form | D     | D min. | D max. | H    | H1   | L    | SW  | Clamping force max. kN | Tightening torque Nm |
|-------------|------|-------|--------|--------|------|------|------|-----|------------------------|----------------------|
| K1166.10804 | A    | M4x12 | 8      | 10,3   | 5,5  | 0,9  | 7,3  | 2,5 | 0,9                    | 2,1                  |
| K1166.11005 | A    | M5X15 | 10     | 12,3   | 6,4  | 1,1  | 9,1  | 3   | 1,5                    | 4,3                  |
| K1166.11206 | A    | M6X18 | 12     | 16,3   | 8,6  | 1,3  | 11,2 | 4   | 2,1                    | 7,3                  |
| K1166.11608 | A    | M8X25 | 16     | 22     | 11,5 | 1,6  | 16,2 | 5   | 4                      | 18                   |
| K1166.20804 | B    | M4x12 | 8      | 10,3   | 5,5  | 5,1  | 7,1  | 3   | 1,5                    | 2,7                  |
| K1166.21005 | B    | M5X15 | 10     | 12,3   | 6,4  | 6,2  | 9    | 4   | 2,5                    | 5,4                  |
| K1166.21206 | B    | M6X18 | 12     | 16,3   | 8,6  | 7,9  | 10,6 | 5   | 5                      | 9,1                  |
| K1166.21608 | B    | M8X25 | 16     | 22     | 11,5 | 10,4 | 15,4 | 6   | 9                      | 25                   |

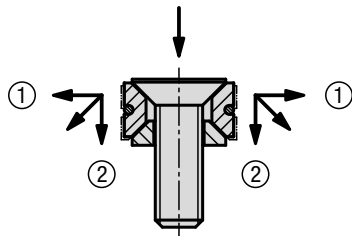


# Centring clamps

round

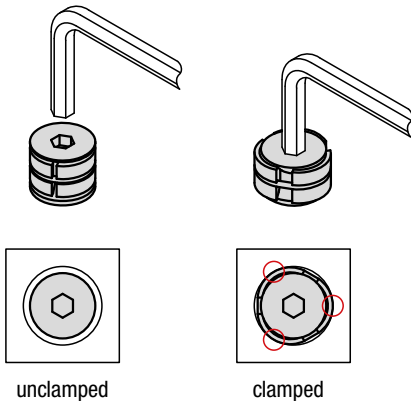
## Technical information:

- These clamps grip the inside diameter of a workpiece.
- The wedge shape enables high clamping forces on the workpiece.

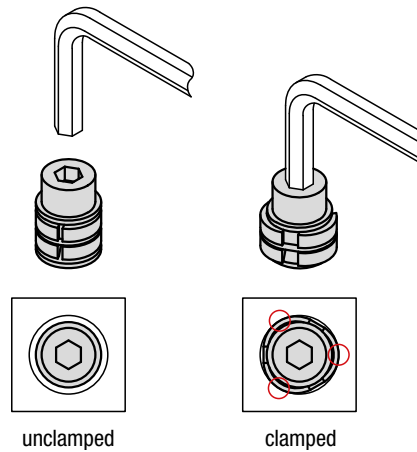


- (Jaws exert positive down force)
- ① Horizontal thrust against workpiece
  - ② Vertical thrust prevents the workpiece lifting

Form A:

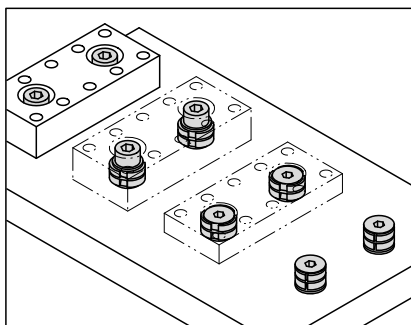


Form B:

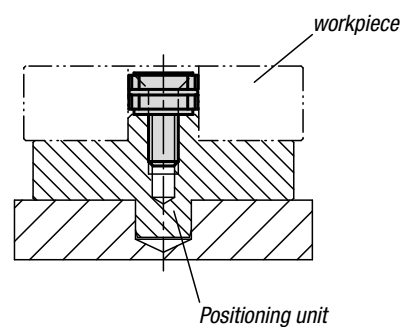


## Note:

The clamp makes point contact with the bore wall when clamped.



For accurate repeat positioning use these clamps together with a positioning unit. Clamping is carried out with the centring clamp.



## Centring clamps

with ball or hexagon segments



### Material:

Body 1.2842.

Ball and hex segments 1.4112.

Tension spring 1.4310.

### Version:

Body hardened and black oxidised.

Ball and hex segments hardened and ground.

### Sample order:

K0358.101203

### Application:

To position and centre existing bores on the machining surface.

### Advantages:

- Precise self-centring.
- Distortion free clamping.
- Large spread range.
- Low overall height.

### Technical data:

Repetitive accuracy  $\pm 0.025$

Concentric accuracy  $\pm 0.05$

### Drawing reference:

Form A:

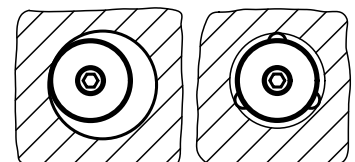
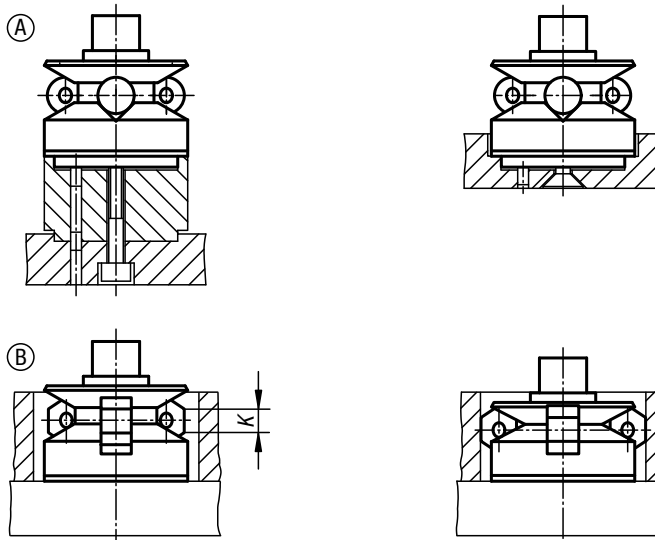
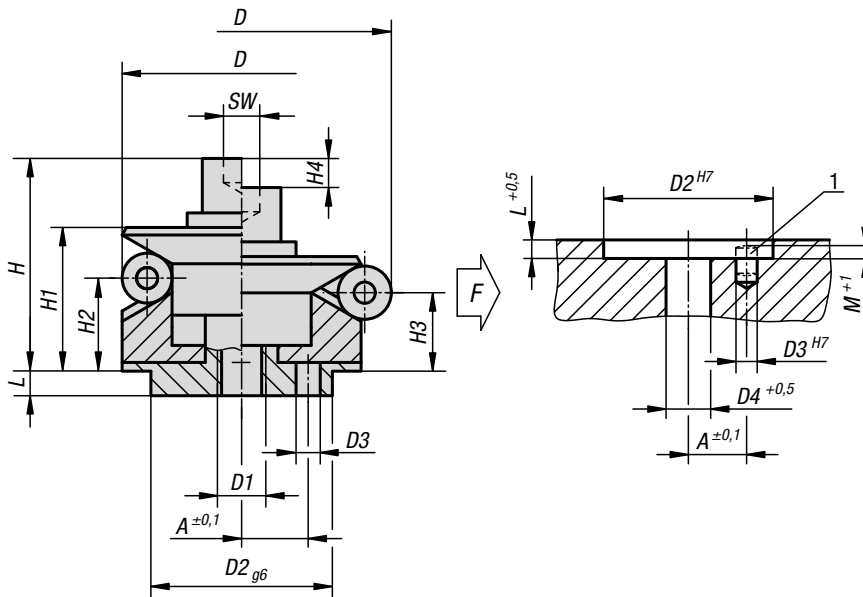
With balls for holes where light marking is acceptable.

Form B:

With hexagons for sensitive hole surfaces.

1) Mounting aid:

pin to accurately position the mandrel segments.



# Centring clamps

with ball or hexagon segments



## KIPP Centring clamps with ball segments

| Order No.    | Form | A   | D max. | D min. | D1  | D2 | D3  | D4   | H    | H1   | H2   | H3   | H4  | L   | M   | SW | Ball Ø | No. of balls | Clamping force max. kN | Tightening torque max. Nm |
|--------------|------|-----|--------|--------|-----|----|-----|------|------|------|------|------|-----|-----|-----|----|--------|--------------|------------------------|---------------------------|
| K0358.101203 | A    | 3,5 | 14,2   | 11,7   | M4  | 10 | 1,5 | 4,3  | 15   | 10   | 4,2  | 3    | 1,5 | 3,5 | 2,5 | 3  | 2,5    | 3            | 0,5                    | 5                         |
| K0358.101504 | A    | 4,5 | 18,5   | 14,5   | M4  | 12 | 2   | 4,3  | 19,5 | 14,5 | 9,8  | 8,6  | 2,3 | 5,5 | 3   | 3  | 4      | 3            | 3,5                    | 5                         |
| K0358.101905 | A    | 5,5 | 22,5   | 18,5   | M5  | 15 | 2,5 | 5,3  | 23,5 | 16,5 | 11,6 | 10,4 | 2,3 | 7,5 | 3   | 4  | 4      | 3            | 4                      | 10                        |
| K0358.102306 | A    | 7   | 26,5   | 22,5   | M6  | 20 | 3   | 6,4  | 28,8 | 19,8 | 14,2 | 13   | 2,3 | 6   | 4   | 5  | 4      | 3            | 4,5                    | 17                        |
| K0358.102706 | A    | 7   | 30,5   | 26,5   | M6  | 20 | 3   | 6,4  | 28,8 | 19,8 | 14,2 | 13   | 2,3 | 6   | 4,5 | 5  | 4      | 3            | 4,5                    | 17                        |
| K0358.103106 | A    | 9   | 38,5   | 30,5   | M6  | 25 | 4   | 6,4  | 32,7 | 23,1 | 14,2 | 11,9 | 4,6 | 7   | 4,5 | 5  | 8      | 3            | 4,5                    | 17                        |
| K0358.103908 | A    | 11  | 46,5   | 38,5   | M8  | 30 | 4   | 8,4  | 39,2 | 27,2 | 17,8 | 15,5 | 4,6 | 7,5 | 4,5 | 6  | 8      | 6            | 6,5                    | 43                        |
| K0358.104708 | A    | 11  | 54,5   | 46,5   | M8  | 30 | 4   | 8,4  | 39,2 | 27,2 | 18   | 15,7 | 4,6 | 7,5 | 4,5 | 6  | 8      | 6            | 6,5                    | 43                        |
| K0358.105510 | A    | 15  | 70,5   | 54,5   | M10 | 45 | 5   | 10,5 | 54,6 | 40,6 | 23,7 | 19,1 | 9,3 | 9   | 5,5 | 8  | 16     | 6            | 8                      | 79                        |
| K0358.107112 | A    | 17  | 86,5   | 70,5   | M12 | 60 | 5   | 13   | 63,1 | 46,1 | 28,3 | 23,7 | 9,3 | 10  | 5,5 | 10 | 16     | 6            | 10                     | 141                       |
| K0358.108712 | A    | 25  | 102,5  | 86,5   | M16 | 60 | 5   | 17   | 73   | 51   | 30,2 | 25,7 | 9,3 | 10  | 5,5 | 14 | 16     | 6            | 12,5                   | 354                       |

## KIPP Centring clamps with hexagon segments

| Order No.    | Form | A   | D min. | D max. | D1  | D2 | D3  | D4   | H    | H1   | H2   | H3   | H4  | L   | M   | K  | SW | No. of hex | Clamping force max. kN | Tightening torque max. Nm |
|--------------|------|-----|--------|--------|-----|----|-----|------|------|------|------|------|-----|-----|-----|----|----|------------|------------------------|---------------------------|
| K0358.201504 | B    | 4,5 | 14,5   | 18,5   | M4  | 12 | 2   | 4,3  | 19,5 | 14,5 | 9,8  | 8,6  | 2,3 | 5,5 | 3   | 4  | 3  | 3          | 3,5                    | 5                         |
| K0358.201905 | B    | 5,5 | 18,5   | 22,5   | M5  | 15 | 2,5 | 5,3  | 23,5 | 16,5 | 11,6 | 10,4 | 2,3 | 7,5 | 3   | 4  | 4  | 3          | 4                      | 10                        |
| K0358.202306 | B    | 7   | 22,5   | 26,5   | M6  | 20 | 3   | 6,4  | 28,8 | 19,8 | 14,2 | 13   | 2,3 | 6   | 4   | 4  | 5  | 3          | 4,5                    | 17                        |
| K0358.202706 | B    | 7   | 26,5   | 30,5   | M6  | 20 | 3   | 6,4  | 28,8 | 19,8 | 14,2 | 13   | 2,3 | 6   | 4,5 | 4  | 5  | 3          | 4,5                    | 17                        |
| K0358.203106 | B    | 9   | 30,5   | 38,5   | M6  | 25 | 4   | 6,4  | 32,7 | 23,1 | 14,2 | 11,9 | 4,6 | 7   | 4,5 | 8  | 5  | 3          | 4,5                    | 17                        |
| K0358.203908 | B    | 11  | 38,5   | 46,5   | M8  | 30 | 4   | 8,4  | 39,2 | 27,2 | 17,8 | 15,5 | 4,6 | 7,5 | 4,5 | 8  | 6  | 6          | 6,5                    | 43                        |
| K0358.204708 | B    | 11  | 46,5   | 54,5   | M8  | 30 | 4   | 8,4  | 39,2 | 27,2 | 18   | 15,7 | 4,6 | 7,5 | 4,5 | 8  | 6  | 6          | 6,5                    | 43                        |
| K0358.205510 | B    | 15  | 54,5   | 70,5   | M10 | 45 | 5   | 10,5 | 54,6 | 40,6 | 23,7 | 19,1 | 9,3 | 9   | 5,5 | 16 | 8  | 6          | 8                      | 79                        |
| K0358.207112 | B    | 17  | 70,5   | 86,5   | M12 | 60 | 5   | 13   | 63,1 | 46,1 | 28,3 | 23,7 | 9,3 | 10  | 5,5 | 16 | 10 | 6          | 10                     | 141                       |
| K0358.208712 | B    | 25  | 86,5   | 102,5  | M16 | 60 | 5   | 17   | 73   | 51   | 30,2 | 25,7 | 9,3 | 10  | 5,5 | 16 | 14 | 6          | 12,5                   | 354                       |

## Centring clamps

with ball or hexagon segments



### Material:

Body 1.2842.  
Ball and hex segments 1.4112.  
Tension spring 1.4310.

### Version:

Body hardened and black oxidised.  
Ball and hex segments hardened and ground.

### Sample order:

K0644.0101203

### Application:

For centre positioning and clamping in blind holes.  
Operated from below, manual or automatic using pneumatics or hydraulics.

### Advantages:

- Precise self-centring.
- Distortion free clamping.
- Large spread range.
- Low overall height.
- Positive down force.

### Technical data:

Repetitive accuracy  $\pm 0.025$   
Concentric accuracy  $\pm 0.05$

### Drawing reference:

Form A:

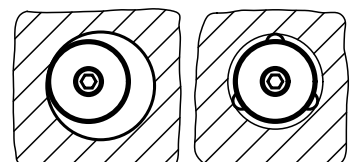
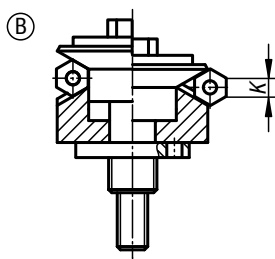
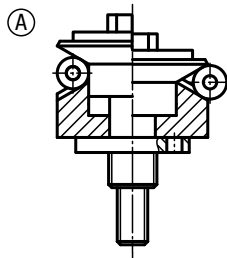
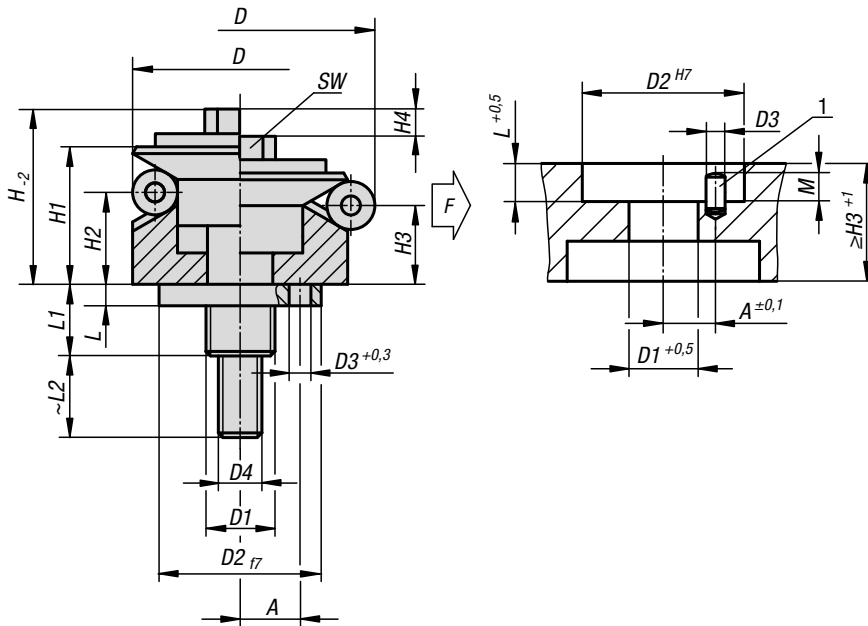
With balls for holes where light marking is acceptable.

Form B:

With hexagons for sensitive hole surfaces.

1) Mounting aid:

pin to accurately position the mandrel segments.



# Centring clamps

with ball or hexagon segments



## KIPP Centring clamps with ball segments

| Order No.     | Form | A   | D<br>min. | D<br>max. | D1      | D2 | D3  | D4  | H    | H1   | H2   | H3   | H4  | L   | L1   | L2 | M   | SW  | Ball Ø | No. of<br>balls | Clamping<br>force<br>max. kN | Tightening<br>torque<br>max. Nm |
|---------------|------|-----|-----------|-----------|---------|----|-----|-----|------|------|------|------|-----|-----|------|----|-----|-----|--------|-----------------|------------------------------|---------------------------------|
| K0644.0101203 | A    | 3,5 | 11,7      | 14,2      | M5      | 10 | 1,5 | M3  | 12,8 | 10   | 4,2  | 3    | 1,4 | 3,5 | 11   | 10 | 2   | 5,5 | 2,5    | 3               | 0,5                          | 2                               |
| K0644.0101503 | A    | 4,5 | 14,5      | 18,5      | M6      | 12 | 2   | M3  | 17,3 | 14,5 | 9,8  | 8,6  | 2,3 | 5,5 | 14,1 | 12 | 2,5 | 5,5 | 4      | 3               | 3,5                          | 2                               |
| K0644.0101904 | A    | 5,5 | 18,5      | 22,5      | M8      | 15 | 2,5 | M4  | 20,9 | 16,5 | 11,6 | 10,4 | 2,3 | 7,5 | 18,2 | 14 | 3,5 | 7   | 4      | 3               | 4                            | 5                               |
| K0644.0102305 | A    | 7   | 22,5      | 26,5      | M10     | 20 | 3   | M5  | 25,4 | 19,8 | 14,2 | 13   | 2,3 | 6   | 17,4 | 15 | 3,5 | 8   | 4      | 3               | 4,5                          | 10                              |
| K0644.0102705 | A    | 7   | 26,5      | 30,5      | M10     | 20 | 3   | M5  | 25,4 | 19,8 | 14,2 | 13   | 2,3 | 6   | 17,4 | 15 | 3,5 | 8   | 4      | 3               | 4,5                          | 10                              |
| K0644.0103106 | A    | 9   | 30,5      | 38,5      | M12     | 25 | 4   | M6  | 30,3 | 23,1 | 14,2 | 11,9 | 4,6 | 7   | 21,9 | 20 | 3,5 | 10  | 8      | 3               | 4,5                          | 17                              |
| K0644.0103906 | A    | 11  | 38,5      | 46,5      | M12     | 30 | 4   | M6  | 34,2 | 27,2 | 17,8 | 15,5 | 4,6 | 7,5 | 22,5 | 20 | 4,5 | 10  | 8      | 6               | 6,5                          | 17                              |
| K0644.0104706 | A    | 11  | 46,5      | 54,5      | M12     | 30 | 4   | M6  | 34,2 | 27,2 | 18   | 15,7 | 4,6 | 7,5 | 22,5 | 20 | 6,5 | 10  | 8      | 6               | 6,5                          | 17                              |
| K0644.0105508 | A    | 15  | 54,5      | 70,5      | M14x1,5 | 45 | 5   | M8  | 49,9 | 40,6 | 23,7 | 19,1 | 9,3 | 9   | 24,5 | 32 | 6,5 | 13  | 16     | 6               | 8                            | 43                              |
| K0644.0107108 | A    | 17  | 70,5      | 86,5      | M16x1,5 | 60 | 5   | M8  | 55,4 | 46,1 | 28,3 | 23,7 | 9,3 | 10  | 29,4 | 20 | 6,5 | 13  | 16     | 6               | 10                           | 43                              |
| K0644.0108708 | A    | 25  | 86,5      | 102,5     | M16x1,5 | 60 | 5   | M10 | 61,6 | 51   | 30,2 | 25,7 | 9,3 | 10  | 29,4 | 25 | 6,5 | 17  | 16     | 6               | 12,5                         | 79                              |

## KIPP Centring clamps with hexagon segments

| Order No.     | Form | A   | D<br>min. | D<br>max. | D1  | D2 | D3  | D4  | H    | H1   | H2   | H3   | H4  | L   | L1   | L2 | M   | K  | SW  | No. of<br>hex | Clamping<br>force<br>max. kN | Tightening<br>torque<br>max. Nm |
|---------------|------|-----|-----------|-----------|-----|----|-----|-----|------|------|------|------|-----|-----|------|----|-----|----|-----|---------------|------------------------------|---------------------------------|
| K0644.0201503 | B    | 4,5 | 14,5      | 18,5      | M6  | 12 | 2   | M3  | 17,3 | 14,5 | 9,8  | 8,6  | 1,4 | 5,5 | 14,1 | 12 | 2,5 | 4  | 5,5 | 3             | 3,5                          | 2                               |
| K0644.0201904 | B    | 5,5 | 18,5      | 22,5      | M8  | 15 | 2,5 | M4  | 20,9 | 16,5 | 11,6 | 10,4 | 2,3 | 7,5 | 18,2 | 14 | 3,5 | 4  | 7   | 3             | 4                            | 5                               |
| K0644.0202305 | B    | 7   | 22,5      | 26,5      | M10 | 20 | 3   | M5  | 25,4 | 19,8 | 14,2 | 13   | 2,3 | 6   | 17,4 | 15 | 3,5 | 4  | 8   | 3             | 4,5                          | 10                              |
| K0644.0202705 | B    | 7   | 26,5      | 30,5      | M10 | 20 | 3   | M5  | 25,4 | 19,8 | 14,2 | 13   | 2,3 | 6   | 17,4 | 15 | 3,5 | 4  | 8   | 3             | 4,5                          | 10                              |
| K0644.0203106 | B    | 9   | 30,5      | 38,5      | M12 | 25 | 4   | M6  | 30,3 | 23,1 | 14,2 | 11,9 | 4,6 | 7   | 21,9 | 20 | 3,5 | 8  | 10  | 6             | 4,5                          | 17                              |
| K0644.0203906 | B    | 11  | 38,5      | 46,5      | M12 | 30 | 4   | M6  | 34,2 | 27,2 | 17,8 | 15,5 | 4,6 | 7,5 | 22,5 | 20 | 4,5 | 8  | 10  | 6             | 6,5                          | 17                              |
| K0644.0204706 | B    | 11  | 46,5      | 54,5      | M12 | 30 | 4   | M6  | 34,2 | 27,2 | 18   | 15,7 | 4,6 | 7,5 | 22,5 | 20 | 6,5 | 8  | 10  | 6             | 6,5                          | 17                              |
| K0644.0205508 | B    | 15  | 54,5      | 70,5      | M14 | 45 | 5   | M8  | 49,9 | 40,6 | 23,7 | 19,1 | 9,3 | 9   | 24,5 | 32 | 6,5 | 16 | 13  | 6             | 8                            | 43                              |
| K0644.0207108 | B    | 17  | 70,5      | 86,5      | M16 | 60 | 5   | M8  | 55,4 | 46,1 | 28,3 | 23,7 | 9,3 | 10  | 29,4 | 20 | 6,5 | 16 | 13  | 6             | 10                           | 43                              |
| K0644.0208708 | B    | 25  | 86,5      | 102,5     | M16 | 60 | 5   | M10 | 61,6 | 51   | 30,2 | 25,7 | 9,3 | 10  | 29,4 | 25 | 6,5 | 16 | 16  | 6             | 12,5                         | 79                              |

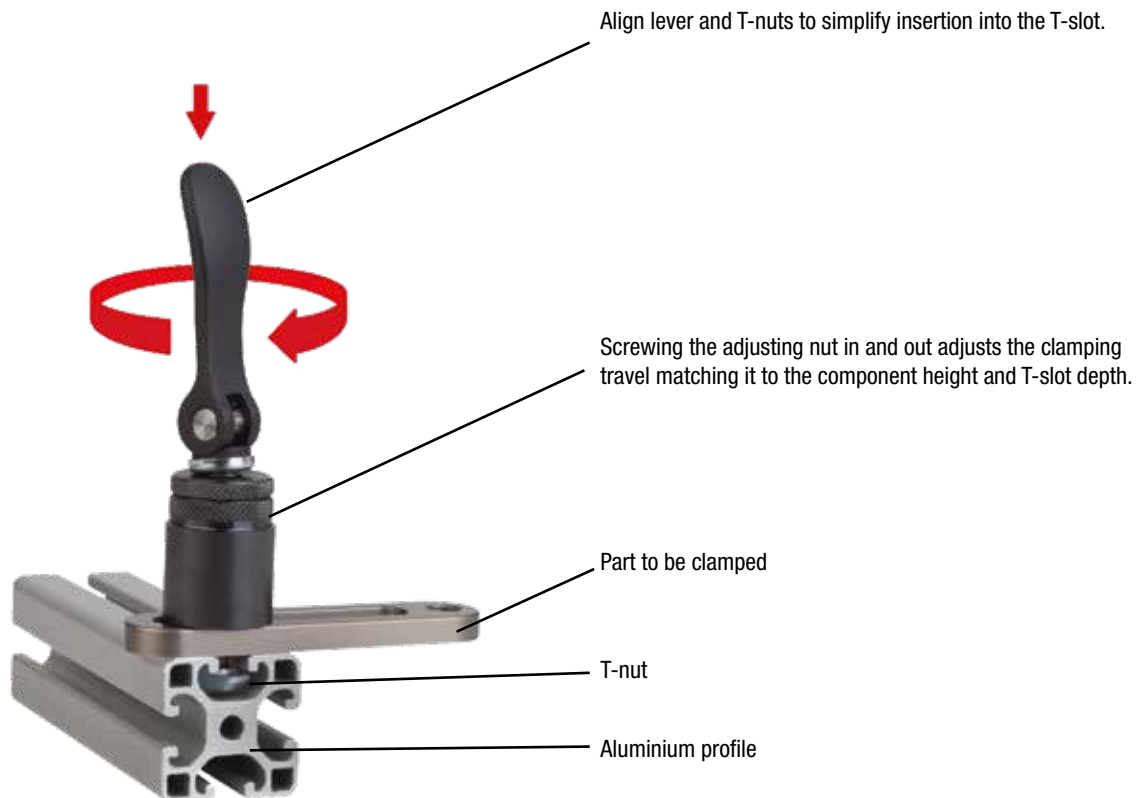


A large rectangular area filled with a fine grid of light gray lines, intended for taking notes or drawing.

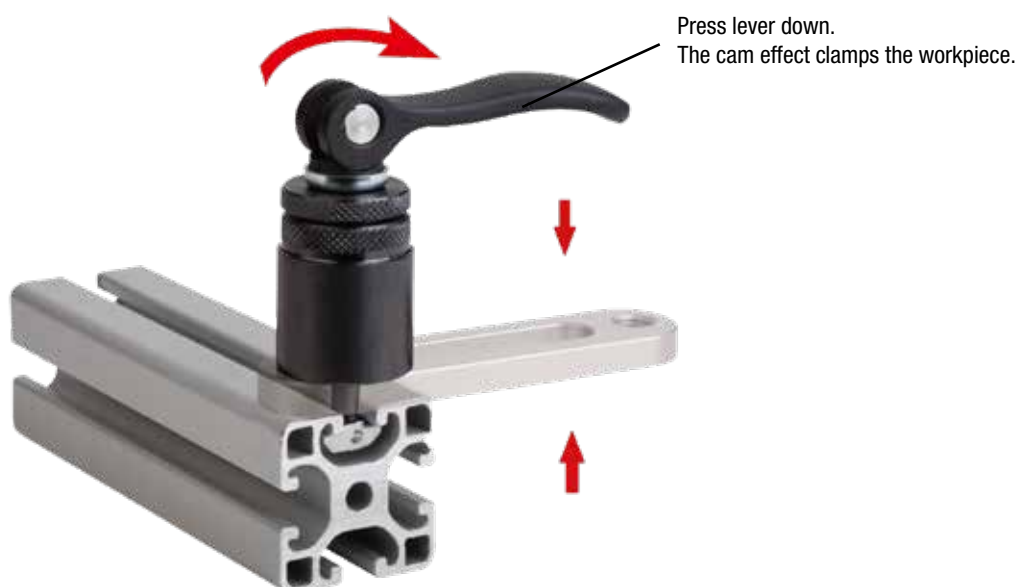
# Mounting instructions for eccentric clamp module



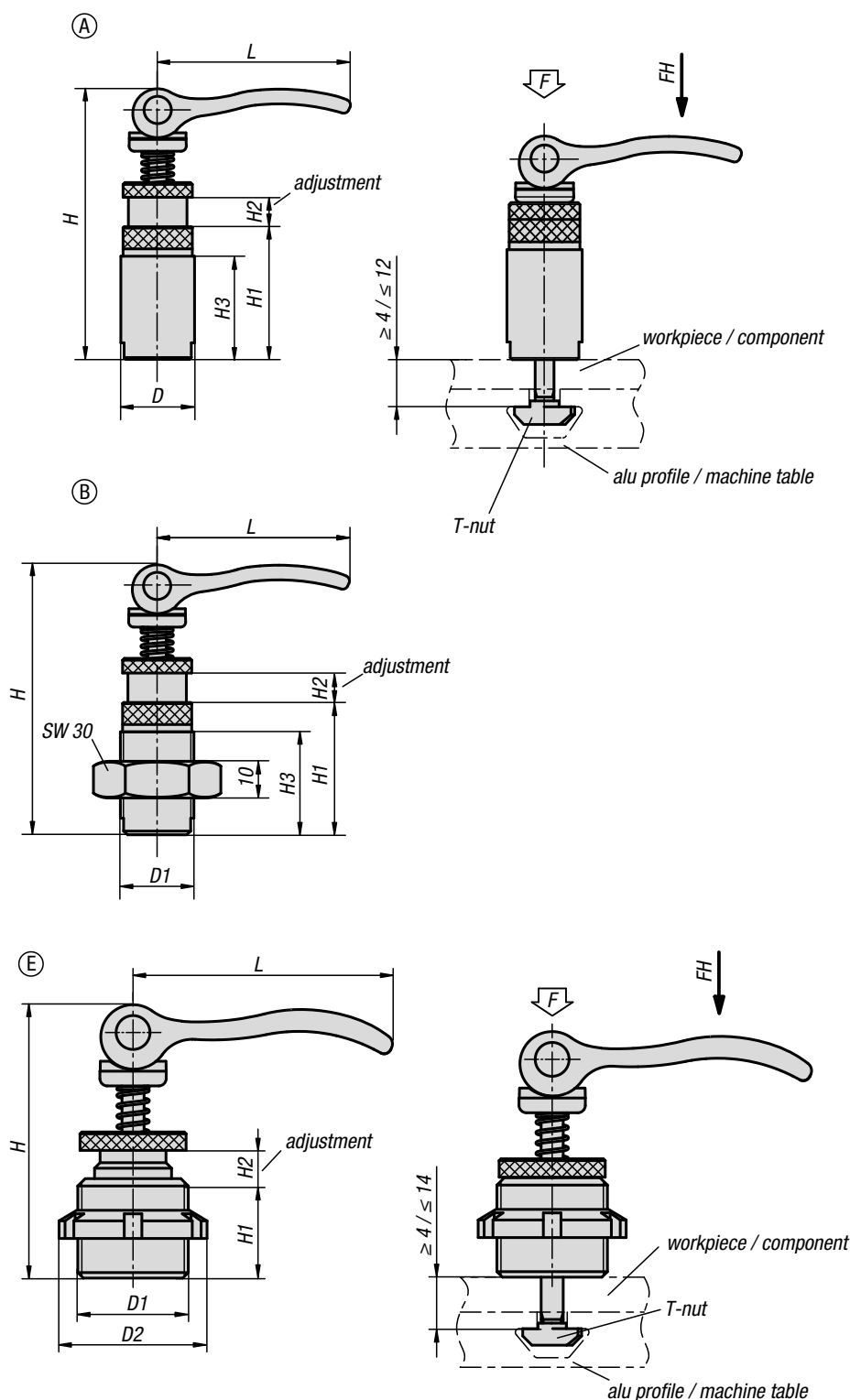
## Insert by pushing and rotating



## Swivel down to clamp



## Eccentric clamp modules



**Material:**  
Body steel.  
Cam levers cast aluminium.

**Version:**  
Body black oxidised.  
T-nut electro zinc-plated.  
Cam levers black powder coated.

**Sample order:**  
K0754.00200808

**Note:**  
The clamp module is inserted into the T-slot from above and secured using the cam lever, no other tools required.

**Advantages:**  
The eccentric clamp modules can be used on conventional aluminium profile systems or on T-slot tables as stops, fasteners or clamps for components and workpieces.

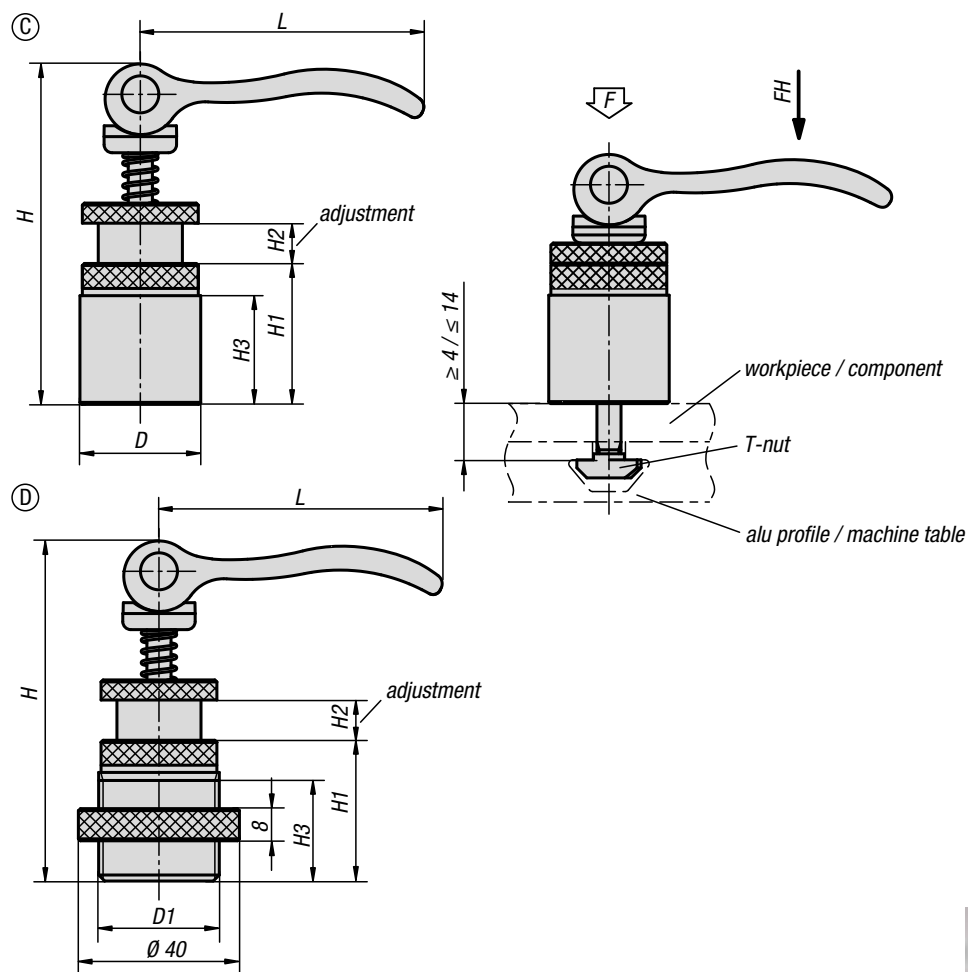


### KIPP Eccentric clamp modules

| Order No.      | Form | D  | D1      | H    | H1 | H2 | H3 | L    | suitable for slot width | Clamping force F (kN) | Hand force FH N |
|----------------|------|----|---------|------|----|----|----|------|-------------------------|-----------------------|-----------------|
| K0754.00200808 | A    | 20 | -       | 73,5 | 36 | 8  | 28 | 52,3 | 8                       | 2,5                   | 100             |
| K0754.10200808 | B    | -  | M20x1,5 | 73,5 | 36 | 8  | 28 | 52,3 | 8                       | 2,5                   | 100             |



## Eccentric clamp modules



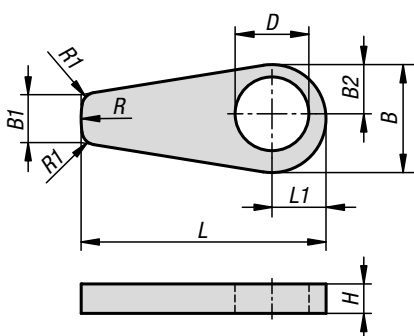
### KIPP Eccentric clamp modules

| Order No.      | Form | D  | D1    | H    | H1 | H2 | H3 | L    | suitable for slot width | Clamping force F (kN) | Hand force FH N |
|----------------|------|----|-------|------|----|----|----|------|-------------------------|-----------------------|-----------------|
| K0754.21150606 | C    | 15 | -     | 34   | 10 | 6  | 7  | 35   | 6                       | 1,5                   | 90              |
| K0754.21201008 | C    | 20 | -     | 44   | 13 | 8  | 10 | 52   | 8                       | 2,5                   | 100             |
| K0754.21301008 | C    | 30 | -     | 84,6 | 35 | 10 | 25 | 70,4 | 8                       | 4                     | 120             |
| K0754.31301008 | D    | -  | M30x2 | 84,6 | 35 | 10 | 25 | 70,4 | 8                       | 4                     | 120             |

| Order No.      | Form | D1    | D2 | H  | H1 | H2 | L  | suitable for slot width | Clamping force F (kN) | Hand force FH N |
|----------------|------|-------|----|----|----|----|----|-------------------------|-----------------------|-----------------|
| K0754.41150706 | E    | M15X1 | 25 | 39 | 14 | 7  | 35 | 6                       | 1,5                   | 90              |
| K0754.41200908 | E    | M20X1 | 32 | 50 | 18 | 9  | 52 | 8                       | 2,5                   | 100             |

## Cam clamps

for eccentric clamp modules



### Material:

Steel or POM

### Version:

black oxidised. White.

### Sample order:

K1212.2008

### Note:

Cam clamps for indirect clamping of sensitive parts in combination with pivot bearings or Form C eccentric clamp modules.

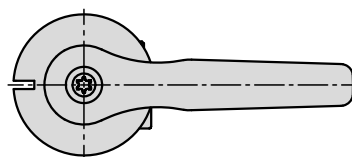
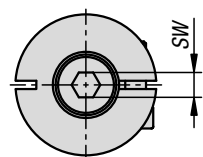
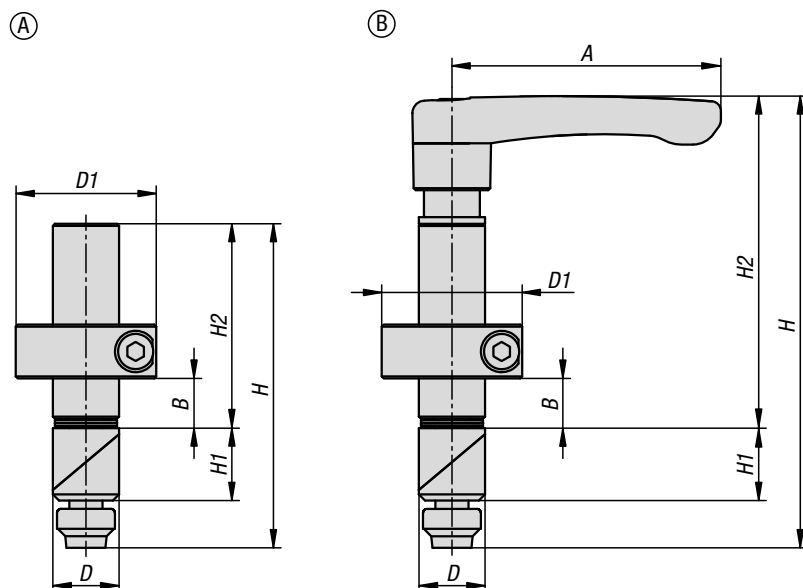
### Advantages:

Tool-less operation.

## KIPP Cam clamps for eccentric clamp modules

| Order No.   | Main material | B    | B1    | B2    | D    | H  | L     | L1    | R    | R1 |
|-------------|---------------|------|-------|-------|------|----|-------|-------|------|----|
| K1212.1506  | steel         | 22,1 | 10    | 10,05 | 15,1 | 6  | 50    | 11,05 | 22   | 3  |
| K1212.2008  | steel         | 29,4 | 13,34 | 13,37 | 20,1 | 8  | 66,67 | 14,7  | 29,4 | 3  |
| K1212.3010  | steel         | 44,1 | 20    | 20,05 | 30,1 | 10 | 100   | 22,05 | 44   | 3  |
| K1212.23010 | POM           | 44,1 | 20    | 20,05 | 30,1 | 10 | 100   | 22,05 | 44   | 3  |

## Clamping pin, steel



### Material:

Handle die-cast zinc acc. to DIN EN 12844.  
Locating pin and wedges steel 1.0715.  
Shaft collar steel.

### Version:

Handle black, plastic coated.  
Centring pin and shaft collar phosphated.  
Wedges black oxidised.  
Lasered division marks.

### Sample order:

K1503.0016

### Note:

The screw is tightened or the clamping lever is turned to expand the two wedges in the hole. The infinitely adjustable shaft collar enables one or more stop elements with various thicknesses to be securely fixated.

### Application:

These clamping pins are perfect for fixing standard stop elements with various thicknesses to hole grid boards / welding tables with hole Ø 16 mm or 28 mm.

### Advantages:

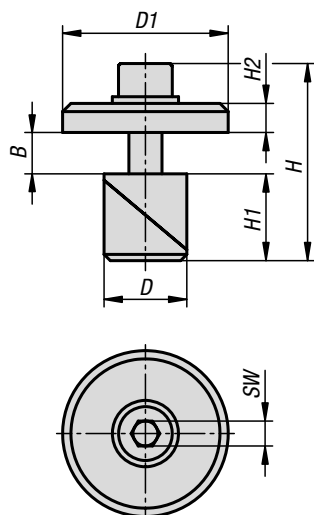
Infinitely adjustable clamping range of 0-36 mm and 0-75 mm.  
Not affected by the diameter or surface quality of the bore (up to H12).  
Clamping range can be easily preset using the scale.  
Gentle clamping in the bore.  
Pull-down effect even with thin table material ( $\geq 8$  mm or  $\geq 4$  mm).  
Compatible with conventional stop elements.

## KIPP Clamping pin, steel

| Order No.  | Form | A  | D  | D1 | H   | H1   | H2  | SW | B<br>Clamp range |
|------------|------|----|----|----|-----|------|-----|----|------------------|
| K1503.0016 | A    | -  | 16 | 34 | 78  | 17,5 | 49  | 6  | 0-36             |
| K1503.0028 | A    | -  | 28 | 48 | 129 | 28   | 90  | 6  | 0-75             |
| K1503.0116 | B    | 65 | 16 | 34 | 109 | 17,5 | 80  | -  | 0-36             |
| K1503.0128 | B    | 80 | 28 | 48 | 168 | 28   | 129 | -  | 0-75             |

## Clamping pin, steel or stainless steel

with washer



### Material:

Washer steel 1.0715.

Wedges steel 1.0715 or stainless steel 1.4305.

### Version:

Washer electro zinc-plated.

Wedges black oxidised or blank.

### Sample order:

K1504.016

### Note:

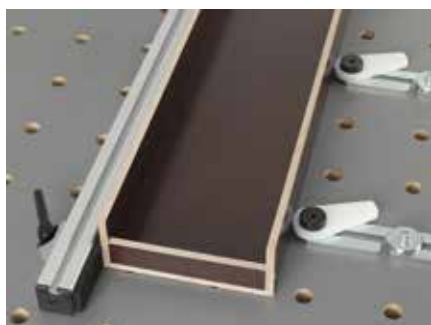
For fixating adapter plates, angles and plates open on grid hole tables or plates with Ø16 mm, Ø20 mm or Ø28 mm holes. Can also be used as a point end stop for positioning and fixating exchange clamping plates. By turning the cap screw, the lock wedges expand in the bore.

### Advantages:

Functions also in thin table material (metal:  $\geq 8$  mm or  $\geq 4$  mm ; wood  $\geq 18$  mm).

Gentle clamping in the bore.

Low height.

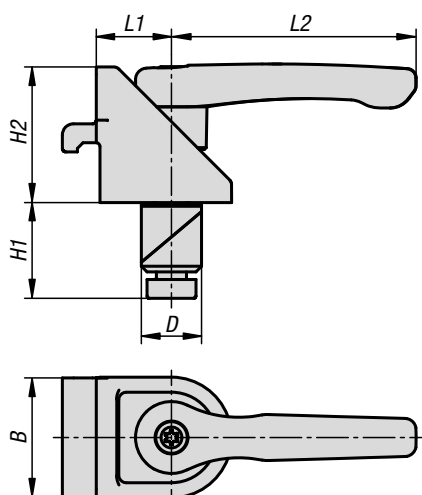


### KIPP Clamping pin steel or stainless steel with washer

| Order No. | Main material   | D  | D1 | H  | H1   | H2 | SW | B<br>Clamp range |
|-----------|-----------------|----|----|----|------|----|----|------------------|
| K1504.016 | steel           | 16 | 40 | 48 | 17,5 | 7  | 6  | 0-14             |
| K1504.120 | stainless steel | 20 | 40 | 48 | 21   | 7  | 6  | 0-10             |
| K1504.028 | steel           | 28 | 40 | 68 | 28   | 7  | 6  | 0-23             |

## Clamping pin, steel or stainless steel

with clamping angle



### Material:

Handle die-cast zinc acc. to DIN EN 12844.

Clamping angle die-cast zinc.

Wedges steel 1.0715 or stainless steel 1.4305.

### Version:

Handle black, plastic coated.

Wedges black oxidised or blank.

### Sample order:

K1505.016

### Note:

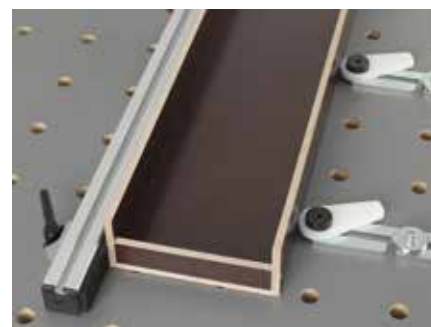
The clamping angles are suitable for fixating aluminium profiles on to grid hole tables or plates with Ø16 mm, Ø20 mm or Ø28 mm holes, e.g. an end stops. Loosen the clamping lever to detract the wedges and enable free rotation and movement. Clamping pins with clamping angles are mostly used in pairs.

### Advantages:

Functions also in thin table material (metal:  $\geq 8$  mm or  $\geq 4$  mm ; wood  $\geq 18$  mm).

Gentle clamping in the bore.

Tool-less operation.

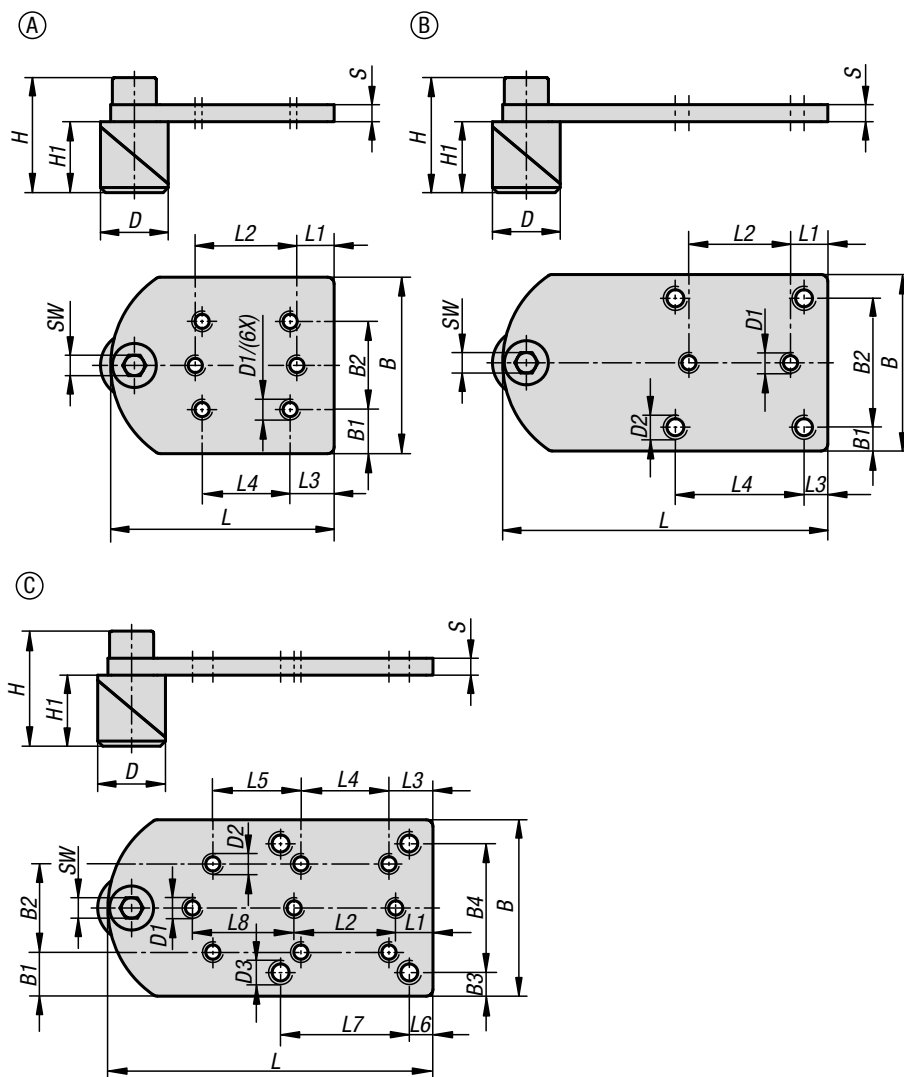


## KIPP Clamping pin steel or stainless steel with clamping angle

| Order No. | Main material   | B  | D  | H1 | H2 | L1 | L2 |
|-----------|-----------------|----|----|----|----|----|----|
| K1505.016 | steel           | 32 | 16 | 25 | 36 | 20 | 65 |
| K1505.120 | stainless steel | 32 | 20 | 21 | 36 | 20 | 65 |
| K1505.028 | steel           | 32 | 28 | 36 | 36 | 20 | 65 |

## Clamping pin, steel or stainless steel

with adapter plate



### Material:

Adapter plate steel.

Wedges steel 1.0715 or stainless steel 1.4305.

### Version:

Adapter plate electro zinc-plated.

Wedges black oxidised or blank.

### Sample order:

K1506.0016

### Note:

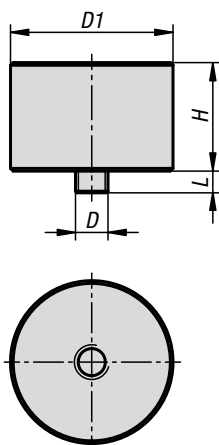
The adapter plates enable the toggle clamp to be compatible with hole pattern 3 or 4, for hole grid plates or plates with Ø16 mm, Ø20 mm or Ø28 mm holes. The clamping pin parts lock in the hole when the cap screw is turned.

## KIPP Clamping pin, steel or stainless steel with adapter plate

| Order No.  | Form | Main material   | B  | B1 | B2 | B3 | B4 | D  | D1 | D2 | D3 | H    | H1   | L  | L1 | L2 | L3 | L4 | L5 | L6 | L7 | L8 | S | SW |
|------------|------|-----------------|----|----|----|----|----|----|----|----|----|------|------|----|----|----|----|----|----|----|----|----|---|----|
| K1506.0016 | A    | steel           | 52 | 13 | 26 | -  | -  | 16 | M5 | -  | -  | 30,5 | 17,5 | 66 | 11 | 30 | 13 | 26 | -  | -  | -  | -  | 5 | 6  |
| K1506.1020 | A    | stainless steel | 52 | 13 | 26 | -  | -  | 20 | M5 | -  | -  | 34   | 21   | 66 | 11 | 30 | 13 | 26 | -  | -  | -  | -  | 5 | 6  |
| K1506.0028 | A    | steel           | 52 | 13 | 26 | -  | -  | 28 | M5 | -  | -  | 41   | 28   | 66 | 11 | 30 | 13 | 26 | -  | -  | -  | -  | 5 | 6  |
| K1506.0116 | B    | steel           | 52 | 7  | 38 | -  | -  | 16 | M5 | M6 | -  | 30,5 | 17,5 | 96 | 11 | 30 | 7  | 38 | -  | -  | -  | -  | 5 | 6  |
| K1506.1120 | B    | stainless steel | 52 | 7  | 38 | -  | -  | 20 | M5 | M6 | -  | 34   | 21   | 96 | 11 | 30 | 7  | 38 | -  | -  | -  | -  | 5 | 6  |
| K1506.0128 | B    | steel           | 52 | 7  | 38 | -  | -  | 28 | M5 | M6 | -  | 41   | 28   | 96 | 11 | 30 | 7  | 38 | -  | -  | -  | -  | 5 | 6  |
| K1506.0216 | C    | steel           | 52 | 13 | 26 | 7  | 38 | 16 | M5 | M5 | M6 | 30,5 | 17,5 | 96 | 11 | 30 | 13 | 26 | 26 | 7  | 38 | 30 | 5 | 6  |
| K1506.1220 | C    | stainless steel | 52 | 13 | 26 | 7  | 38 | 20 | M5 | M5 | M6 | 34   | 21   | 96 | 11 | 30 | 13 | 26 | 26 | 7  | 38 | 30 | 5 | 6  |
| K1506.0228 | C    | steel           | 52 | 13 | 26 | 7  | 38 | 28 | M5 | M5 | M6 | 41   | 28   | 96 | 11 | 30 | 13 | 26 | 26 | 7  | 38 | 30 | 5 | 6  |

# Pivot bearing, steel

with external thread



## Material:

Pivot bearing steel 1.0715.  
Threaded pin steel.

## Version:

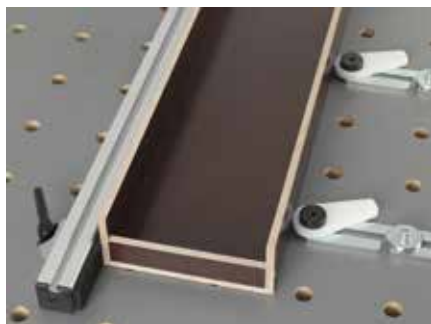
Pivot bearing black oxidised. Screw electro zinc-plated.

## Sample order:

K1507.3006X04

## Note:

Pivot bearings are used in combination with plates and a cam clamp for indirect clamping.

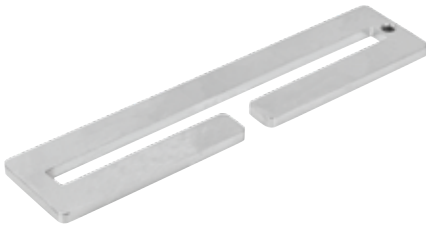


## KIPP Pivot bearing steel, with external thread

| Order No.     | D  | D1 | H  | L |
|---------------|----|----|----|---|
| K1507.3006X04 | M6 | 30 | 20 | 4 |

Plate, steel

open



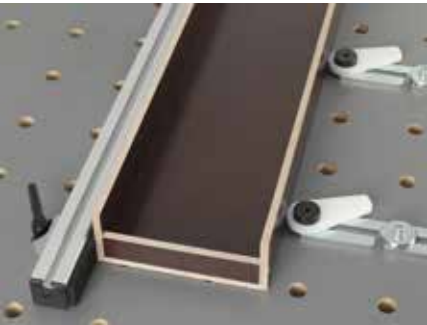
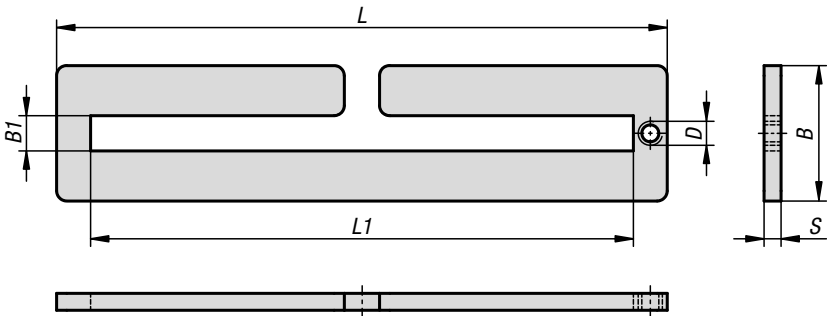
**Material:**  
Steel.

**Version:**  
Electro zinc-plated and trivalent blue passivated.

**Sample order:**  
K1508.0180X40

**Note:**  
Plates can be used in combination with a pivot bearing and cam clamp for indirect clamping. The plates are fastened to grid hole tables using clamping pins and washers. They can also be clamped to machine slot tables by combining with eccentric clamp modules.

**Advantages:**  
Flexible movement and positioning.  
infinitely adjustable



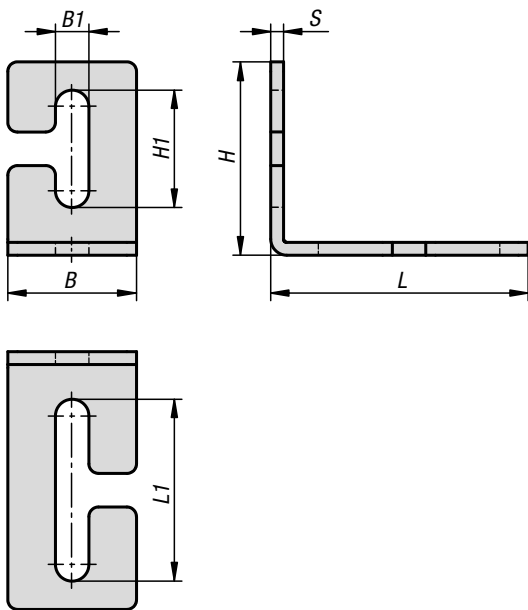
KIPP Plates steel, open

| Order No.     | B  | B1   | D  | L   | L1  | S |
|---------------|----|------|----|-----|-----|---|
| K1508.0180X40 | 40 | 10,4 | M6 | 180 | 160 | 5 |



## Angle, steel

open

**Material:**

Steel.

**Version:**

Electro zinc-plated and trivalent blue passivated.

**Sample order:**

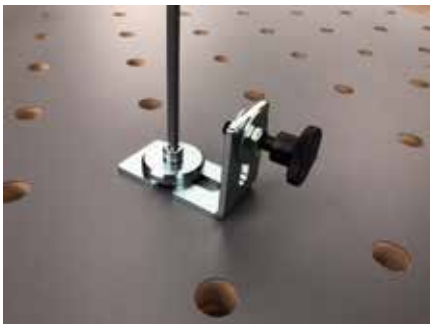
K1509.0804060

**Note:**

The angle can also be used as an end stop on grid hole and slot tables. Fine adjustment is possible when used in combination with knurled screws. The angles are fastened to grid hole tables using clamping pins and washers. They can also be clamped to machine slot tables by combining with eccentric clamp modules.

**Advantages:**

Flexible movement and positioning.  
The opening enables easy assembly.  
Infinitely adjustable

**KIPP Angle, steel, open**

| Order No.     | B  | B1   | H  | H1 | L  | L1 | S |
|---------------|----|------|----|----|----|----|---|
| K1509.0804060 | 40 | 10,4 | 60 | 36 | 80 | 56 | 4 |



## Spring plungers, indexing plungers, ball lock pins



## Spring plungers

with slot and ball, steel



### Material:

Sleeve steel grade 5.8.

Ball steel.

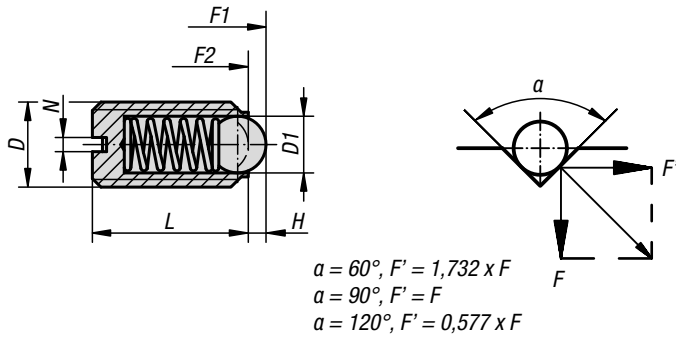
Spring grade D steel wire.

### Version:

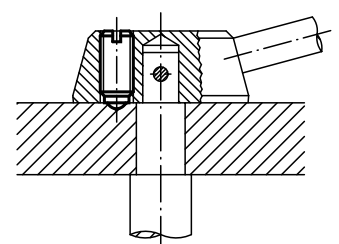
Black oxidised. Ball hardened.

### Sample order:

K0309.203



handle indexing



# Spring plungers

with slot and ball, steel



## KIPP Spring plungers with slot and ball, standard spring

| Order No. | D   | D1  | L  | H   | N   | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|-----------|-----|-----|----|-----|-----|--------------------------------------------------|------------------------------------------------|
| K0309.03  | M3  | 1,5 | 7  | 0,4 | 0,4 | 1,5                                              | 3                                              |
| K0309.04  | M4  | 2,5 | 9  | 0,8 | 0,6 | 4                                                | 10                                             |
| K0309.05  | M5  | 3   | 12 | 0,9 | 0,8 | 6                                                | 11                                             |
| K0309.06  | M6  | 3,5 | 14 | 1   | 1   | 9                                                | 13                                             |
| K0309.08  | M8  | 5   | 16 | 1,5 | 1,2 | 15                                               | 30                                             |
| K0309.10  | M10 | 6   | 19 | 2   | 1,6 | 20                                               | 40                                             |
| K0309.12  | M12 | 8   | 22 | 2,5 | 2   | 30                                               | 55                                             |
| K0309.16  | M16 | 10  | 24 | 3,5 | 2,5 | 65                                               | 125                                            |
| K0309.20  | M20 | 12  | 30 | 4,5 | 2,5 | 80                                               | 160                                            |

## KIPP Spring plungers with slot and ball, reinforced spring

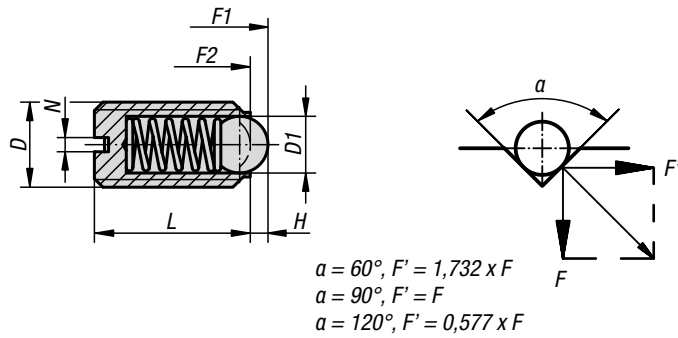
| Order No. | D   | D1  | L  | H   | N   | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|-----------|-----|-----|----|-----|-----|--------------------------------------------------|------------------------------------------------|
| K0309.203 | M3  | 1,5 | 7  | 0,4 | 0,4 | 5                                                | 7                                              |
| K0309.204 | M4  | 2,5 | 9  | 0,8 | 0,6 | 12                                               | 22                                             |
| K0309.205 | M5  | 3   | 12 | 0,9 | 0,8 | 19                                               | 30                                             |
| K0309.206 | M6  | 3,5 | 14 | 1   | 1   | 28                                               | 40                                             |
| K0309.208 | M8  | 5   | 16 | 1,5 | 1,2 | 47                                               | 73                                             |
| K0309.210 | M10 | 6   | 19 | 2   | 1,6 | 66                                               | 100                                            |
| K0309.212 | M12 | 8   | 22 | 2,5 | 2   | 66                                               | 120                                            |
| K0309.216 | M16 | 10  | 24 | 3,5 | 2,5 | 90                                               | 180                                            |
| K0309.220 | M20 | 12  | 30 | 4,5 | 2,5 | 115                                              | 240                                            |

## KIPP Spring plungers with slot and ball, long version, standard spring

| Order No. | D   | D1  | L  | H   | N   | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|-----------|-----|-----|----|-----|-----|--------------------------------------------------|------------------------------------------------|
| K0309.404 | M4  | 2,5 | 16 | 0,8 | 0,6 | 4                                                | 10                                             |
| K0309.405 | M5  | 3   | 20 | 0,9 | 0,8 | 6                                                | 11                                             |
| K0309.406 | M6  | 3,5 | 25 | 1   | 1   | 9                                                | 13                                             |
| K0309.408 | M8  | 5   | 30 | 1,5 | 1,2 | 15                                               | 30                                             |
| K0309.410 | M10 | 6   | 35 | 2   | 1,6 | 20                                               | 40                                             |
| K0309.412 | M12 | 8   | 40 | 2,5 | 2   | 30                                               | 55                                             |
| K0309.416 | M16 | 10  | 45 | 3,5 | 2,5 | 65                                               | 125                                            |

## Spring plungers

with slot and ball, stainless steel



### Material:

Sleeve 1.4305.

Ball 1.4034.

Spring 1.4310.

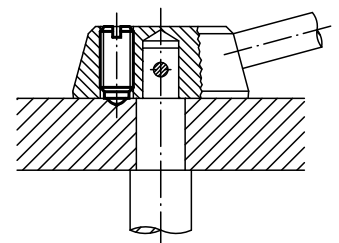
### Version:

Bright. Ball hardened.

### Sample order:

K0310.203

handle indexing



# Spring plungers

with slot and ball, stainless steel



## KIPP Spring plungers with slot and ball, standard spring

| Order No. | D   | D1  | L  | H   | N   | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|-----------|-----|-----|----|-----|-----|--------------------------------------------------|------------------------------------------------|
| K0310.03  | M3  | 1,5 | 7  | 0,4 | 0,4 | 1,5                                              | 3                                              |
| K0310.04  | M4  | 2,5 | 9  | 0,8 | 0,6 | 4                                                | 10                                             |
| K0310.05  | M5  | 3   | 12 | 0,9 | 0,8 | 6                                                | 11                                             |
| K0310.06  | M6  | 3,5 | 14 | 1   | 1   | 9                                                | 13                                             |
| K0310.08  | M8  | 5   | 16 | 1,5 | 1,2 | 15                                               | 30                                             |
| K0310.10  | M10 | 6   | 19 | 2   | 1,6 | 20                                               | 35                                             |
| K0310.12  | M12 | 8   | 22 | 2,5 | 2   | 30                                               | 55                                             |
| K0310.16  | M16 | 10  | 24 | 3,5 | 2,5 | 65                                               | 125                                            |
| K0310.20  | M20 | 12  | 30 | 4,5 | 2,5 | 80                                               | 160                                            |

## KIPP Spring plungers with slot and ball, reinforced spring

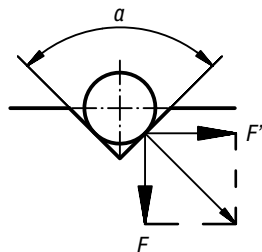
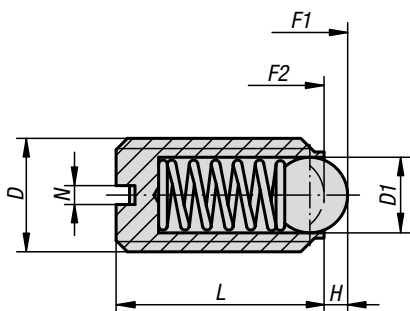
| Order No. | D   | D1  | L  | H   | N   | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|-----------|-----|-----|----|-----|-----|--------------------------------------------------|------------------------------------------------|
| K0310.203 | M3  | 1,5 | 7  | 0,4 | 0,4 | 5                                                | 7                                              |
| K0310.204 | M4  | 2,5 | 9  | 0,8 | 0,6 | 12                                               | 22                                             |
| K0310.205 | M5  | 3   | 12 | 0,9 | 0,8 | 19                                               | 30                                             |
| K0310.206 | M6  | 3,5 | 14 | 1   | 1   | 28                                               | 40                                             |
| K0310.208 | M8  | 5   | 16 | 1,5 | 1,2 | 47                                               | 73                                             |
| K0310.210 | M10 | 6   | 19 | 2   | 1,6 | 66                                               | 100                                            |
| K0310.212 | M12 | 8   | 22 | 2,5 | 2   | 66                                               | 120                                            |
| K0310.216 | M16 | 10  | 24 | 3,5 | 2,5 | 90                                               | 180                                            |
| K0310.220 | M20 | 12  | 30 | 4,5 | 2,5 | 115                                              | 240                                            |

## KIPP Spring plungers with slot and ball, long version, standard spring

| Order No. | D   | D1  | L  | H   | N   | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|-----------|-----|-----|----|-----|-----|--------------------------------------------------|------------------------------------------------|
| K0310.404 | M4  | 2,5 | 16 | 0,8 | 0,6 | 4                                                | 10                                             |
| K0310.405 | M5  | 3   | 20 | 0,9 | 0,8 | 6                                                | 11                                             |
| K0310.406 | M6  | 3,5 | 25 | 1   | 1   | 9                                                | 13                                             |
| K0310.408 | M8  | 5   | 30 | 1,5 | 1,2 | 15                                               | 30                                             |
| K0310.410 | M10 | 6   | 35 | 2   | 1,6 | 20                                               | 35                                             |
| K0310.412 | M12 | 8   | 40 | 2,5 | 2   | 30                                               | 55                                             |
| K0310.416 | M16 | 10  | 45 | 3,5 | 2,5 | 65                                               | 125                                            |

## Spring plungers

with slot and POM ball, plastic



$$\begin{aligned} \alpha &= 60^\circ, F' = 1,732 \times F \\ \alpha &= 90^\circ, F' = F \\ \alpha &= 120^\circ, F' = 0,577 \times F \end{aligned}$$



**Material:**  
Sleeve plastic.  
Ball POM.  
Spring 1.4310 wire.

**Version:**  
Ball, white.

**Sample order:**  
K0311.10

**Note:**  
Spring plungers are used for indexing and positioning.  
They can also be used as ejectors.

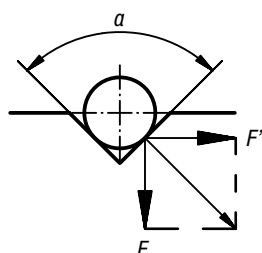
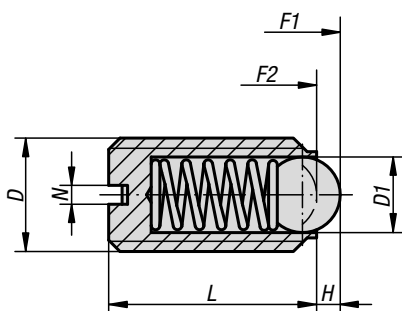
### KIPP Spring plungers with slot and POM ball, plastic

| Order No. | D   | D1  | H   | L  | N   | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|-----------|-----|-----|-----|----|-----|--------------------------------------------------|------------------------------------------------|
| K0311.06  | M6  | 3,5 | 1   | 14 | 1   | 9                                                | 13                                             |
| K0311.08  | M8  | 5   | 1,5 | 16 | 1,2 | 15                                               | 30                                             |
| K0311.10  | M10 | 6   | 2   | 19 | 1,6 | 20                                               | 40                                             |

# K0312

## Spring plungers

with slot and stainless steel ball, plastic



$$\begin{aligned} \alpha &= 60^\circ, F' = 1,732 \times F \\ \alpha &= 90^\circ, F' = F \\ \alpha &= 120^\circ, F' = 0,577 \times F \end{aligned}$$



**Material:**  
Sleeve plastic.  
Ball 1.4034 stainless steel.  
Spring 1.4310.

**Version:**  
Ball, hardened.

**Sample order:**  
K0312.10

**Note:**  
Spring plungers are used for indexing and positioning.  
They can also be used as ejectors.

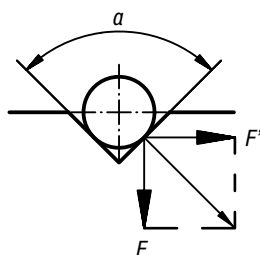
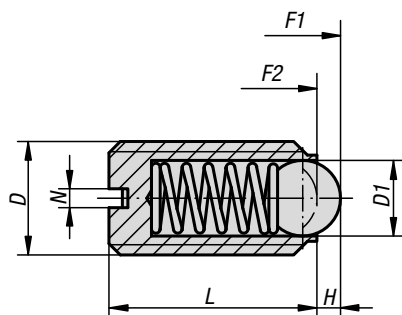
### KIPP Spring plungers with slot and stainless steel ball, plastic

| Order No. | D   | D1  | H   | L  | N   | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|-----------|-----|-----|-----|----|-----|--------------------------------------------------|------------------------------------------------|
| K0312.06  | M6  | 3,5 | 1   | 14 | 1   | 9                                                | 13                                             |
| K0312.08  | M8  | 5   | 1,5 | 16 | 1,2 | 15                                               | 30                                             |
| K0312.10  | M10 | 6   | 2   | 19 | 1,6 | 20                                               | 40                                             |



# Spring plungers

with slot and ceramic ball, stainless steel



$$\begin{aligned} \alpha &= 60^\circ, F' = 1,732 \times F \\ \alpha &= 90^\circ, F' = F \\ \alpha &= 120^\circ, F' = 0,577 \times F \end{aligned}$$

## Material:

Sleeve 1.4305.  
Ceramic ball  $\text{Si}_3\text{N}_4$ .  
Spring 1.4310.

## Version:

Bright.

## Sample order:

K0609.05

## Note:

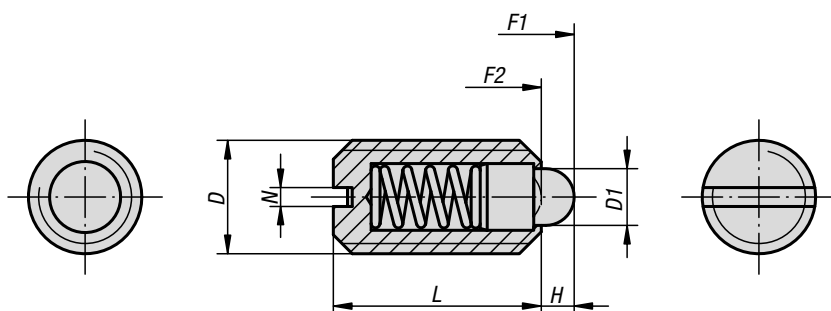
The combination of excellent material properties is a special feature of silicon nitride ( $\text{Si}_3\text{N}_4$ ). These include high resilience and stability, excellent wear properties and good chemical resistance.

## KIPP Spring plungers with slot and ceramic ball, stainless steel

| Order No. | D   | D1  | H   | L  | N   | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|-----------|-----|-----|-----|----|-----|--------------------------------------------------|------------------------------------------------|
| K0609.05  | M5  | 3   | 0,9 | 12 | 0,8 | 6                                                | 11                                             |
| K0609.06  | M6  | 3,5 | 1   | 14 | 1   | 9                                                | 13                                             |
| K0609.08  | M8  | 5   | 1,5 | 16 | 1,2 | 15                                               | 30                                             |
| K0609.10  | M10 | 6   | 2   | 19 | 1,6 | 20                                               | 35                                             |
| K0609.12  | M12 | 8   | 2,5 | 22 | 2   | 30                                               | 55                                             |
| K0609.16  | M16 | 10  | 3,5 | 24 | 2,5 | 65                                               | 125                                            |

## Spring plungers

with slot and thrust pin, steel



**Material:**  
Sleeve steel grade 5.8.  
Thrust pin steel.  
Spring steel wire grade D.

**Version:**  
Black oxidised.  
Thrust pin hardened.

**Sample order:**  
K0313.10

### KIPP Spring plungers with slot and thrust pin, standard spring force

| Order No. | D   | D1  | H   | L  | N   | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|-----------|-----|-----|-----|----|-----|--------------------------------------------------|------------------------------------------------|
| K0313.04  | M4  | 1,8 | 1,5 | 9  | 0,6 | 6                                                | 20                                             |
| K0313.05  | M5  | 2,4 | 2   | 12 | 0,8 | 6                                                | 20                                             |
| K0313.06  | M6  | 2,7 | 2   | 14 | 1   | 7                                                | 20                                             |
| K0313.08  | M8  | 4   | 2   | 16 | 1,2 | 15                                               | 30                                             |
| K0313.10  | M10 | 4,5 | 2,5 | 19 | 1,6 | 20                                               | 35                                             |
| K0313.12  | M12 | 6   | 3,5 | 22 | 2   | 30                                               | 55                                             |
| K0313.16  | M16 | 8,5 | 4,5 | 24 | 2,5 | 45                                               | 100                                            |
| K0313.20  | M20 | 10  | 6,5 | 30 | 2,5 | 60                                               | 120                                            |

### KIPP Spring plungers with slot and thrust pin, light spring force

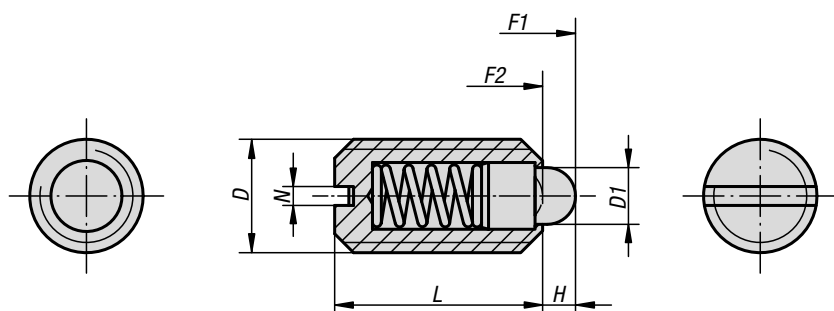
| Order No. | D   | D1  | H   | L  | N   | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|-----------|-----|-----|-----|----|-----|--------------------------------------------------|------------------------------------------------|
| K0313.104 | M4  | 1,8 | 1,5 | 9  | 0,6 | 3                                                | 10                                             |
| K0313.105 | M5  | 2,4 | 2   | 12 | 0,8 | 3                                                | 10                                             |
| K0313.106 | M6  | 2,7 | 2   | 14 | 1   | 4                                                | 10                                             |
| K0313.108 | M8  | 4   | 2   | 16 | 1,2 | 7                                                | 15                                             |
| K0313.110 | M10 | 4,5 | 2,5 | 19 | 1,6 | 9                                                | 16                                             |
| K0313.112 | M12 | 6   | 3,5 | 22 | 2   | 14                                               | 26                                             |
| K0313.116 | M16 | 8,5 | 4,5 | 24 | 2,5 | 22                                               | 50                                             |
| K0313.120 | M20 | 10  | 6,5 | 30 | 2,5 | 30                                               | 60                                             |

### KIPP Spring plungers with slot and thrust pin, reinforced spring force

| Order No. | D   | D1  | H   | L  | N   | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|-----------|-----|-----|-----|----|-----|--------------------------------------------------|------------------------------------------------|
| K0313.205 | M5  | 2,4 | 2   | 12 | 0,8 | 9                                                | 25                                             |
| K0313.206 | M6  | 2,7 | 2   | 14 | 1   | 11                                               | 25                                             |
| K0313.208 | M8  | 4   | 2   | 16 | 1,2 | 22                                               | 43                                             |
| K0313.210 | M10 | 4,5 | 2,5 | 19 | 1,6 | 20                                               | 54                                             |
| K0313.212 | M12 | 6   | 3,5 | 22 | 2   | 36                                               | 94                                             |
| K0313.216 | M16 | 8,5 | 4,5 | 24 | 2,5 | 60                                               | 110                                            |

## Spring plungers

with slot and thrust pin, stainless steel



**Material:**  
Sleeve 1.4305.  
Thrust pin 1.4034.  
Spring 1.4310.

**Version:**  
Bright.  
Thrust pin hardened.

**Sample order:**  
K0314.10



### KIPP Spring plungers with slot and thrust pin, standard spring force

| Order No. | D   | D1  | H   | L  | N   | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|-----------|-----|-----|-----|----|-----|--------------------------------------------------|------------------------------------------------|
| K0314.04  | M4  | 1,8 | 1,5 | 9  | 0,6 | 6                                                | 20                                             |
| K0314.05  | M5  | 2,4 | 2   | 12 | 0,8 | 6                                                | 20                                             |
| K0314.06  | M6  | 2,7 | 2   | 14 | 1   | 7                                                | 20                                             |
| K0314.08  | M8  | 4   | 2   | 16 | 1,2 | 15                                               | 30                                             |
| K0314.10  | M10 | 4,5 | 2,5 | 19 | 1,6 | 20                                               | 35                                             |
| K0314.12  | M12 | 6   | 3,5 | 22 | 2   | 30                                               | 55                                             |
| K0314.16  | M16 | 8,5 | 4,5 | 24 | 2,5 | 45                                               | 100                                            |
| K0314.20  | M20 | 10  | 6,5 | 30 | 2,5 | 60                                               | 120                                            |

### KIPP Spring plungers with slot and thrust pin, light spring force

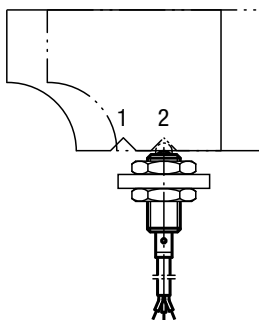
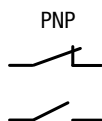
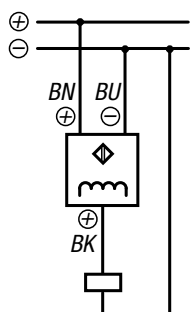
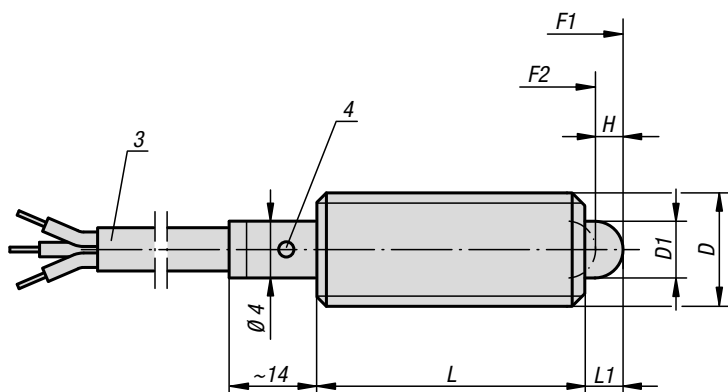
| Order No. | D   | D1  | H   | L  | N   | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|-----------|-----|-----|-----|----|-----|--------------------------------------------------|------------------------------------------------|
| K0314.104 | M4  | 1,8 | 1,5 | 9  | 0,6 | 3                                                | 10                                             |
| K0314.105 | M5  | 2,4 | 2   | 12 | 0,8 | 3                                                | 10                                             |
| K0314.106 | M6  | 2,7 | 2   | 14 | 1   | 4                                                | 10                                             |
| K0314.108 | M8  | 4   | 2   | 16 | 1,2 | 7                                                | 15                                             |
| K0314.110 | M10 | 4,5 | 2,5 | 19 | 1,6 | 9                                                | 16                                             |
| K0314.112 | M12 | 6   | 3,5 | 22 | 2   | 14                                               | 26                                             |
| K0314.116 | M16 | 8,5 | 4,5 | 24 | 2,5 | 22                                               | 50                                             |
| K0314.120 | M20 | 10  | 6,5 | 30 | 2,5 | 30                                               | 60                                             |

### KIPP Spring plungers with slot and thrust pin, reinforced spring force

| Order No. | D   | D1  | H   | L  | N   | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|-----------|-----|-----|-----|----|-----|--------------------------------------------------|------------------------------------------------|
| K0314.205 | M5  | 2,4 | 2   | 12 | 0,8 | 9                                                | 25                                             |
| K0314.206 | M6  | 2,7 | 2   | 14 | 1   | 11                                               | 25                                             |
| K0314.208 | M8  | 4   | 2   | 16 | 1,2 | 22                                               | 43                                             |
| K0314.210 | M10 | 4,5 | 2,5 | 19 | 1,6 | 20                                               | 54                                             |
| K0314.212 | M12 | 6   | 3,5 | 22 | 2   | 36                                               | 94                                             |
| K0314.216 | M16 | 8,5 | 4,5 | 24 | 2,5 | 60                                               | 110                                            |

## Spring plungers

with status sensor



### Material:

Sleeve, thrust pin and spring steel.  
Inductive proximity switch.

### Version:

Black oxidised.  
Thrust pin hardened.

### Sample order:

K0656.5081

### Note:

An electrical control signal can be sent via the built-in end switch.

Voltage:  $U = 10 - 30 \text{ V DC}$

Current:  $I_{\text{max.}} = 200 \text{ mA}$

Temperature range:  $-25 \text{ °C} - +70 \text{ °C}$

Protection class: IP 67

### Safety:

Spring plungers with status sensor are not suitable for personal protection.

### Drawing reference:

3) cable Ø 3.5 mm; length ca. 2 m

4) LED-indicator

BN = brown

BK = black

BU = blue

Example of position feedback:

Pos. 1: slide engaged

Pos. 2: slide disengaged

## KIPP Spring plungers with status sensor

| Order No.  | Version 2       | D   | D1  | H | L  | L1 | Switching contact from stroke H1 | Spring force initial pressure F1 approx. N | Spring force final pressure F2 approx. N |
|------------|-----------------|-----|-----|---|----|----|----------------------------------|--------------------------------------------|------------------------------------------|
| K0656.5061 | normally closed | M6  | 2,7 | 2 | 27 | 3  | 1,2 - 1,6                        | 7                                          | 20                                       |
| K0656.5081 | normally closed | M8  | 4   | 2 | 29 | 3  | 1,2 - 1,8                        | 15                                         | 30                                       |
| K0656.5101 | normally closed | M10 | 4,5 | 3 | 36 | 4  | 2,2 - 2,8                        | 26                                         | 44                                       |
| K0656.5062 | normally open   | M6  | 2,7 | 2 | 27 | 3  | 1,2 - 1,6                        | 7                                          | 20                                       |
| K0656.5082 | normally open   | M8  | 4   | 2 | 29 | 3  | 1,2 - 1,8                        | 15                                         | 30                                       |
| K0656.5102 | normally open   | M10 | 4,5 | 3 | 36 | 4  | 2,2 - 2,8                        | 26                                         | 44                                       |



A large grid of graph paper for taking notes.



## Spring plungers

with hexagon socket and ball, steel



### Material:

Sleeve steel grade 5.8.

Ball steel.

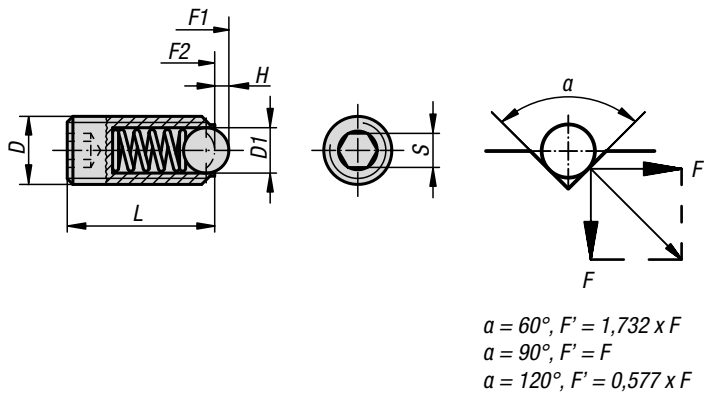
Spring grade D steel wire.

### Version:

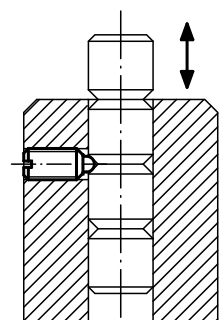
Black oxidised. Ball hardened.

### Sample order:

K0315.210



column indexing



# Spring plungers

with hexagon socket and ball, steel



## KIPP Spring plungers with hexagon socket and ball, standard spring

| Order No. | D   | D1  | H   | L  | S   | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|-----------|-----|-----|-----|----|-----|--------------------------------------------------|------------------------------------------------|
| K0315.03  | M3  | 1,5 | 0,4 | 9  | 1,5 | 1,5                                              | 3                                              |
| K0315.04  | M4  | 2,5 | 0,8 | 10 | 2   | 4                                                | 10                                             |
| K0315.05  | M5  | 3   | 0,9 | 14 | 2,5 | 6                                                | 11                                             |
| K0315.06  | M6  | 3,5 | 1   | 15 | 3   | 9                                                | 13                                             |
| K0315.08  | M8  | 5   | 1,5 | 18 | 4   | 15                                               | 30                                             |
| K0315.10  | M10 | 6   | 2   | 23 | 5   | 20                                               | 40                                             |
| K0315.12  | M12 | 8   | 2,5 | 26 | 6   | 30                                               | 55                                             |
| K0315.16  | M16 | 10  | 3,5 | 33 | 8   | 65                                               | 125                                            |
| K0315.20  | M20 | 12  | 4,5 | 43 | 10  | 80                                               | 160                                            |
| K0315.24  | M24 | 15  | 5,5 | 48 | 12  | 90                                               | 180                                            |

## KIPP Spring plungers with hexagon socket and ball, reinforced spring

| Order No. | D   | D1  | H   | L  | S   | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|-----------|-----|-----|-----|----|-----|--------------------------------------------------|------------------------------------------------|
| K0315.203 | M3  | 1,5 | 0,4 | 9  | 1,5 | 5                                                | 7                                              |
| K0315.204 | M4  | 2,5 | 0,8 | 10 | 2   | 12                                               | 22                                             |
| K0315.205 | M5  | 3   | 0,9 | 14 | 2,5 | 19                                               | 30                                             |
| K0315.206 | M6  | 3,5 | 1   | 15 | 3   | 28                                               | 40                                             |
| K0315.208 | M8  | 5   | 1,5 | 18 | 4   | 47                                               | 73                                             |
| K0315.210 | M10 | 6   | 2   | 23 | 5   | 66                                               | 100                                            |
| K0315.212 | M12 | 8   | 2,5 | 26 | 6   | 66                                               | 120                                            |
| K0315.216 | M16 | 10  | 3,5 | 33 | 8   | 90                                               | 180                                            |
| K0315.220 | M20 | 12  | 4,5 | 43 | 10  | 115                                              | 240                                            |
| K0315.224 | M24 | 15  | 5,5 | 48 | 12  | 130                                              | 270                                            |

## KIPP Spring plungers with hexagon socket and ball, long version, standard spring

| Order No. | D   | D1  | H   | L  | S   | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|-----------|-----|-----|-----|----|-----|--------------------------------------------------|------------------------------------------------|
| K0315.404 | M4  | 2,5 | 0,8 | 16 | 2   | 4                                                | 10                                             |
| K0315.405 | M5  | 3   | 0,9 | 20 | 2,5 | 6                                                | 11                                             |
| K0315.406 | M6  | 3,5 | 1   | 25 | 3   | 9                                                | 13                                             |
| K0315.408 | M8  | 5   | 1,5 | 30 | 4   | 15                                               | 30                                             |
| K0315.410 | M10 | 6   | 2   | 35 | 5   | 20                                               | 40                                             |
| K0315.412 | M12 | 8   | 2,5 | 40 | 6   | 30                                               | 55                                             |
| K0315.416 | M16 | 10  | 3,5 | 45 | 8   | 65                                               | 125                                            |

## Spring plungers

with hexagon socket and ball, stainless steel



### Material:

Sleeve 1.4305.

Ball 1.4034.

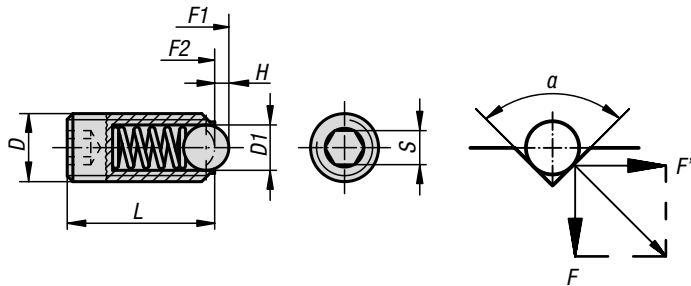
Spring 1.4310.

### Version:

Bright. Ball hardened.

### Sample order:

K0316.210

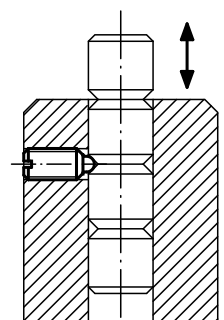


$$\alpha = 60^\circ, F' = 1,732 \times F$$

$$\alpha = 90^\circ, F' = F$$

$$\alpha = 120^\circ, F' = 0,577 \times F$$

column indexing





# Spring plungers

with hexagon socket and ball, stainless steel



## KIPP Spring plungers with hexagon socket and ball, standard spring

| Order No. | D   | D1  | H   | L  | S   | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|-----------|-----|-----|-----|----|-----|--------------------------------------------------|------------------------------------------------|
| K0316.03  | M3  | 1,5 | 0,4 | 9  | 1,5 | 1,5                                              | 3                                              |
| K0316.04  | M4  | 2,5 | 0,8 | 10 | 2   | 4                                                | 10                                             |
| K0316.05  | M5  | 3   | 0,9 | 14 | 2,5 | 6                                                | 11                                             |
| K0316.06  | M6  | 3,5 | 1   | 15 | 3   | 9                                                | 13                                             |
| K0316.08  | M8  | 5   | 1,5 | 18 | 4   | 15                                               | 30                                             |
| K0316.10  | M10 | 6   | 2   | 23 | 5   | 20                                               | 35                                             |
| K0316.12  | M12 | 8   | 2,5 | 26 | 6   | 30                                               | 55                                             |
| K0316.16  | M16 | 10  | 3,5 | 33 | 8   | 65                                               | 125                                            |
| K0316.20  | M20 | 12  | 4,5 | 43 | 10  | 80                                               | 160                                            |
| K0316.24  | M24 | 15  | 5,5 | 48 | 12  | 90                                               | 180                                            |

## KIPP Spring plungers with hexagon socket and ball, reinforced spring

| Order No. | D   | D1  | H   | L  | S   | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|-----------|-----|-----|-----|----|-----|--------------------------------------------------|------------------------------------------------|
| K0316.203 | M3  | 1,5 | 0,4 | 9  | 1,5 | 5                                                | 7                                              |
| K0316.204 | M4  | 2,5 | 0,8 | 10 | 2   | 12                                               | 22                                             |
| K0316.205 | M5  | 3   | 0,9 | 14 | 2,5 | 19                                               | 30                                             |
| K0316.206 | M6  | 3,5 | 1   | 15 | 3   | 28                                               | 40                                             |
| K0316.208 | M8  | 5   | 1,5 | 18 | 4   | 47                                               | 73                                             |
| K0316.210 | M10 | 6   | 2   | 23 | 5   | 66                                               | 100                                            |
| K0316.212 | M12 | 8   | 2,5 | 26 | 6   | 66                                               | 120                                            |
| K0316.216 | M16 | 10  | 3,5 | 33 | 8   | 90                                               | 180                                            |
| K0316.220 | M20 | 12  | 4,5 | 43 | 10  | 115                                              | 240                                            |
| K0316.224 | M24 | 15  | 5,5 | 48 | 12  | 130                                              | 270                                            |

## KIPP Spring plungers with hexagon socket and ball, long version, standard spring

| Order No. | D   | D1  | H   | L  | S   | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|-----------|-----|-----|-----|----|-----|--------------------------------------------------|------------------------------------------------|
| K0316.404 | M4  | 2,5 | 0,8 | 16 | 2   | 4                                                | 10                                             |
| K0316.405 | M5  | 3   | 0,9 | 20 | 2,5 | 6                                                | 11                                             |
| K0316.406 | M6  | 3,5 | 1   | 25 | 3   | 9                                                | 13                                             |
| K0316.408 | M8  | 5   | 1,5 | 30 | 4   | 15                                               | 30                                             |
| K0316.410 | M10 | 6   | 2   | 35 | 5   | 20                                               | 35                                             |
| K0316.412 | M12 | 8   | 2,5 | 40 | 6   | 30                                               | 55                                             |
| K0316.416 | M16 | 10  | 3,5 | 45 | 8   | 65                                               | 125                                            |

# Spring plungers

with hexagon socket and ceramic ball, stainless steel


**Material:**

Sleeve 1.4305.  
Ceramic ball  $\text{Si}_3\text{N}_4$ .  
Spring 1.4310.

**Version:**

Bright.

**Sample order:**

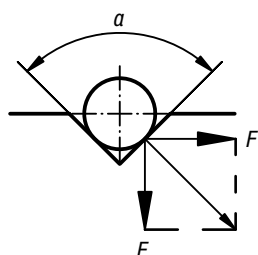
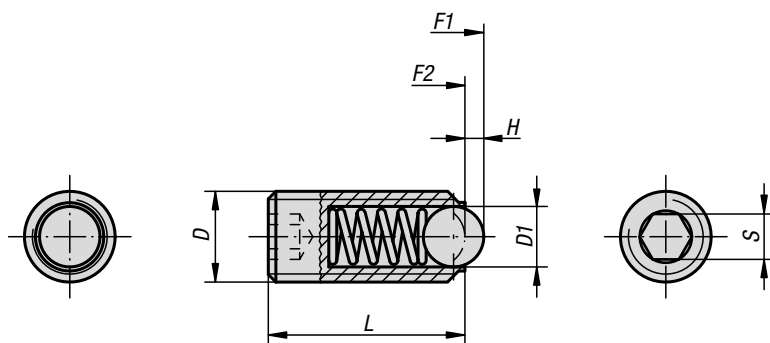
K0610.05

**Note:**

The combination of excellent material properties is a special feature of silicon nitride ( $\text{Si}_3\text{N}_4$ ). These include high resilience and stability, excellent wear properties and good chemical resistance.

**Advantages:**

High temperature resistance.

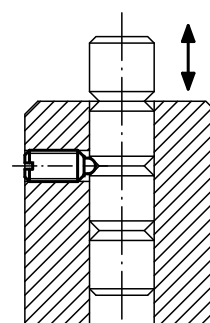


$$\alpha = 60^\circ, F' = 1,732 \times F$$

$$\alpha = 90^\circ, F' = F$$

$$\alpha = 120^\circ, F' = 0,577 \times F$$

column indexing

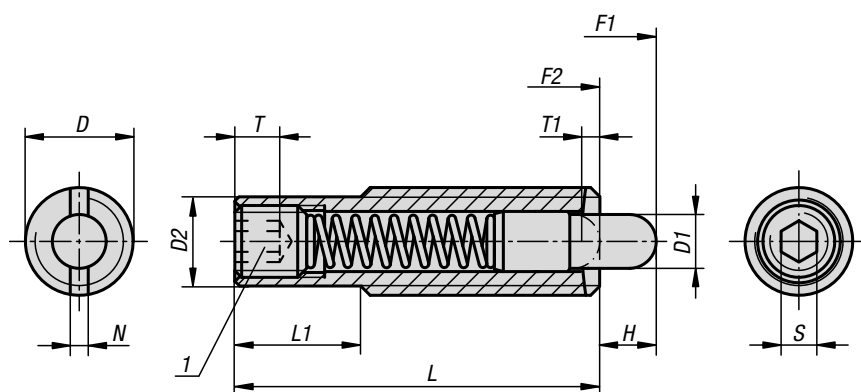


## KIPP Spring plungers with hexagon socket and ceramic ball, stainless steel

| Order No. | D   | D1  | H   | L  | S   | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|-----------|-----|-----|-----|----|-----|--------------------------------------------------|------------------------------------------------|
| K0610.05  | M5  | 3   | 0,9 | 14 | 2,5 | 6                                                | 11                                             |
| K0610.06  | M6  | 3,5 | 1   | 15 | 3   | 9                                                | 13                                             |
| K0610.08  | M8  | 5   | 1,5 | 18 | 4   | 15                                               | 30                                             |
| K0610.10  | M10 | 6   | 2   | 23 | 5   | 20                                               | 35                                             |
| K0610.12  | M12 | 8   | 2,5 | 26 | 6   | 30                                               | 55                                             |
| K0610.16  | M16 | 10  | 3,5 | 33 | 8   | 65                                               | 125                                            |

# Spring plungers

with hexagon socket and thrust pin, long version



## Material:

Sleeve steel grade 5.8.  
Thrust pin steel.  
Spring steel wire grade D.

## Version:

Black oxidised.  
Thrust pin hardened.

## Sample order:

K0657.616X60

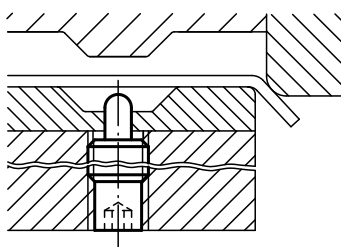
## Note:

These spring plungers are chiefly used as ejectors and spring stops in machine construction.

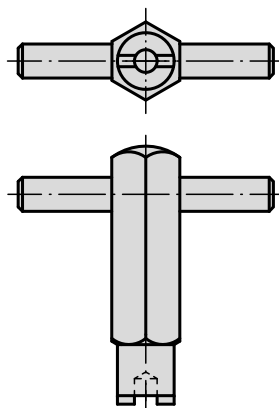
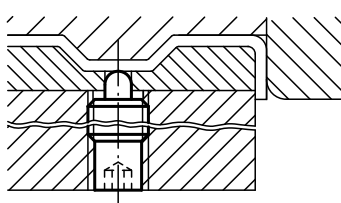
## Drawing reference:

1) grub screw glued in

bending



ready to eject



## KIPP Spring thrust pin with hexagon socket and thrust pin, long version

| Order No.     | D   | D1  | D2   | L   | L1 | H  | T | T1  | N   | S   | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N | Order No.<br>Assembly key |
|---------------|-----|-----|------|-----|----|----|---|-----|-----|-----|--------------------------------------------------|------------------------------------------------|---------------------------|
| K0657.608X30  | M8  | 3,5 | 6,2  | 30  | 10 | 6  | 2 | 1,4 | 1,2 | 2,5 | 8                                                | 20                                             | K0317.908                 |
| K0657.608X40  | M8  | 3,5 | 6,2  | 40  | 20 | 8  | 2 | 1,4 | 1,2 | 2,5 | 10                                               | 28                                             | K0317.908                 |
| K0657.608X50  | M8  | 3,5 | 6,2  | 50  | 30 | 10 | 2 | 1,4 | 1,2 | 2,5 | 12                                               | 38                                             | K0317.908                 |
| K0657.608X60  | M8  | 3,5 | 6,2  | 60  | 40 | 15 | 2 | 1,4 | 1,2 | 2,5 | 15                                               | 45                                             | K0317.908                 |
| K0657.610X40  | M10 | 4   | 8    | 40  | 10 | 8  | 2 | 1,4 | 1,6 | 3   | 12                                               | 30                                             | K0317.910                 |
| K0657.610X50  | M10 | 4   | 8    | 50  | 20 | 10 | 2 | 1,4 | 1,6 | 3   | 16                                               | 46                                             | K0317.910                 |
| K0657.610X60  | M10 | 4   | 8    | 60  | 30 | 15 | 2 | 1,4 | 1,6 | 3   | 20                                               | 55                                             | K0317.910                 |
| K0657.610X80  | M10 | 4   | 8    | 80  | 50 | 20 | 2 | 1,4 | 1,6 | 3   | 25                                               | 65                                             | K0317.910                 |
| K0657.612X50  | M12 | 6   | 9,6  | 50  | 20 | 10 | 3 | 2   | 2   | 4   | 20                                               | 50                                             | K0317.912                 |
| K0657.612X60  | M12 | 6   | 9,6  | 60  | 30 | 15 | 3 | 2   | 2   | 4   | 25                                               | 76                                             | K0317.912                 |
| K0657.612X80  | M12 | 6   | 9,6  | 80  | 50 | 20 | 3 | 2   | 2   | 4   | 35                                               | 102                                            | K0317.912                 |
| K0657.612X100 | M12 | 6   | 9,6  | 100 | 70 | 25 | 3 | 2   | 2   | 4   | 40                                               | 102                                            | K0317.912                 |
| K0657.616X60  | M16 | 7,5 | 13,4 | 60  | 30 | 12 | 6 | 2,5 | 2,5 | 5   | 30                                               | 64                                             | K0317.916                 |
| K0657.616X80  | M16 | 7,5 | 13,4 | 80  | 50 | 20 | 6 | 2,5 | 2,5 | 5   | 30                                               | 110                                            | K0317.916                 |
| K0657.616X100 | M16 | 7,5 | 13,4 | 100 | 70 | 30 | 6 | 2,5 | 2,5 | 5   | 30                                               | 120                                            | K0317.916                 |
| K0657.616X120 | M16 | 7,5 | 13,4 | 120 | 90 | 40 | 6 | 2,5 | 2,5 | 5   | 20                                               | 130                                            | K0317.916                 |

## Spring plungers

with hexagon socket and thrust pin, steel



### Material:

Sleeve steel grade 5.8.  
Thrust pin steel.  
Spring steel wire grade D.

### Version:

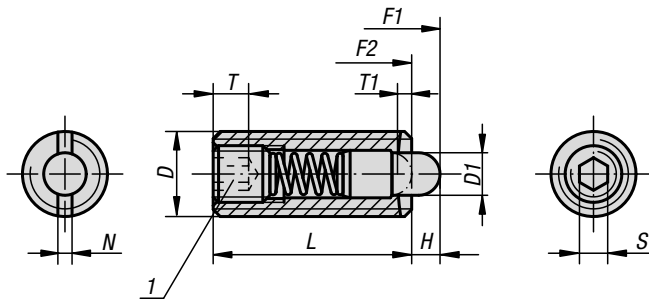
Black oxidised.  
Thrust pin hardened.

### Sample order:

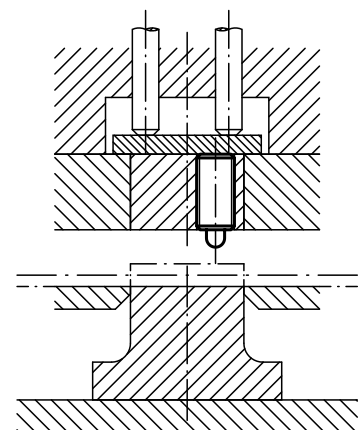
K0317.16

### Drawing reference:

1) grub screw glued in

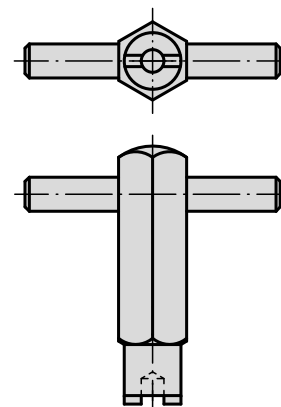


application example



# Spring plungers

with hexagon socket and thrust pin, steel



## KIPP Spring plungers with hexagon socket and thrust pin, standard spring force

| Order No. | D   | D1  | H   | L  | T   | T1  | N   | S   | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N | Order No.<br>Assembly key |
|-----------|-----|-----|-----|----|-----|-----|-----|-----|--------------------------------------------------|------------------------------------------------|---------------------------|
| K0317.03  | M3  | 1   | 1,5 | 10 | 1,5 | 1   | 0,4 | 0,7 | 0,5                                              | 3                                              | K0317.903                 |
| K0317.04  | M4  | 1,5 | 1,5 | 15 | 2   | 0,6 | 0,6 | 1,3 | 5                                                | 16                                             | K0317.904                 |
| K0317.05  | M5  | 2,4 | 2,3 | 18 | 2   | 0,8 | 0,8 | 1,5 | 6                                                | 20                                             | K0317.905                 |
| K0317.06  | M6  | 2,7 | 2,5 | 20 | 2,5 | 1   | 1   | 2   | 7                                                | 20                                             | K0317.906                 |
| K0317.08  | M8  | 3,5 | 3   | 22 | 3   | 1,4 | 1,2 | 2,5 | 9                                                | 35                                             | K0317.908                 |
| K0317.10  | M10 | 4   | 3   | 22 | 3,5 | 1,4 | 1,6 | 3   | 9                                                | 35                                             | K0317.910                 |
| K0317.12  | M12 | 6   | 4   | 28 | 5   | 2   | 2   | 4   | 12                                               | 55                                             | K0317.912                 |
| K0317.16  | M16 | 7,5 | 5   | 32 | 6   | 2,5 | 2,5 | 5   | 45                                               | 100                                            | K0317.916                 |
| K0317.20  | M20 | 10  | 7   | 40 | 8   | 3   | 2,5 | 6   | 60                                               | 120                                            | -                         |
| K0317.24  | M24 | 12  | 10  | 52 | 10  | 3   | 2,5 | 8   | 80                                               | 160                                            | -                         |

## KIPP Spring plungers with hexagon socket and thrust pin, light spring force

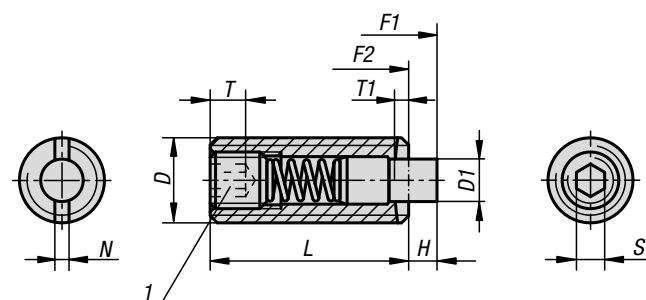
| Order No. | D   | D1  | H   | L  | T   | T1  | N   | S   | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N | Order No.<br>Assembly key |
|-----------|-----|-----|-----|----|-----|-----|-----|-----|--------------------------------------------------|------------------------------------------------|---------------------------|
| K0317.104 | M4  | 1,5 | 1,5 | 15 | 2   | 0,6 | 0,6 | 1,3 | 2                                                | 7                                              | K0317.904                 |
| K0317.105 | M5  | 2,4 | 2,3 | 18 | 2   | 0,8 | 0,8 | 1,5 | 3                                                | 10                                             | K0317.905                 |
| K0317.106 | M6  | 2,7 | 2,5 | 20 | 2,5 | 1   | 1   | 2   | 3                                                | 9                                              | K0317.906                 |
| K0317.108 | M8  | 3,5 | 3   | 22 | 3   | 1,4 | 1,2 | 2,5 | 4                                                | 16                                             | K0317.908                 |
| K0317.110 | M10 | 4   | 3   | 22 | 3,5 | 1,4 | 1,6 | 3   | 4                                                | 16                                             | K0317.910                 |
| K0317.112 | M12 | 6   | 4   | 28 | 5   | 2   | 2   | 4   | 5                                                | 27                                             | K0317.912                 |
| K0317.116 | M16 | 7,5 | 5   | 32 | 6   | 2,5 | 2,5 | 5   | 20                                               | 45                                             | K0317.916                 |

## KIPP Spring plungers with hexagon socket and thrust pin, reinforced spring force

| Order No. | D   | D1  | H   | L  | T   | T1  | N   | S   | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N | Order No.<br>Assembly key |
|-----------|-----|-----|-----|----|-----|-----|-----|-----|--------------------------------------------------|------------------------------------------------|---------------------------|
| K0317.205 | M5  | 2,4 | 2,3 | 18 | 2   | 0,8 | 0,8 | 1,5 | 11                                               | 29                                             | K0317.905                 |
| K0317.206 | M6  | 2,7 | 2,5 | 20 | 2,5 | 1   | 1   | 2   | 14                                               | 37                                             | K0317.906                 |
| K0317.208 | M8  | 3,5 | 3   | 22 | 3   | 1,4 | 1,2 | 2,5 | 22                                               | 65                                             | K0317.908                 |
| K0317.210 | M10 | 4   | 3   | 22 | 3,5 | 1,4 | 1,6 | 3   | 19                                               | 70                                             | K0317.910                 |
| K0317.212 | M12 | 6   | 4   | 28 | 5   | 2   | 2   | 4   | 25                                               | 85                                             | K0317.912                 |
| K0317.216 | M16 | 7,5 | 5   | 32 | 6   | 2,5 | 2,5 | 5   | 60                                               | 150                                            | K0317.916                 |
| K0317.220 | M20 | 10  | 7   | 40 | 8   | 3   | 2,5 | 6   | 75                                               | 190                                            | -                         |
| K0317.224 | M24 | 12  | 10  | 52 | 10  | 3   | 2,5 | 8   | 95                                               | 240                                            | -                         |

## Spring plungers

with hexagon socket and flattened thrust pin, steel



### Material:

Sleeve steel grade 5.8.  
Thrust pin steel.  
Spring steel wire grade D.

### Version:

Black oxidised.  
Thrust pin hardened.

### Sample order:

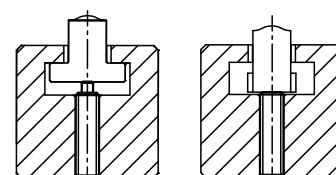
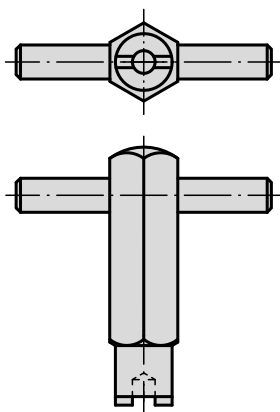
K1370.16

### Note:

These spring plungers are chiefly used as ejectors and spring stops in machine construction.  
The thrust pin is actuated in the axial direction.

### Drawing reference:

1) grub screw glued in

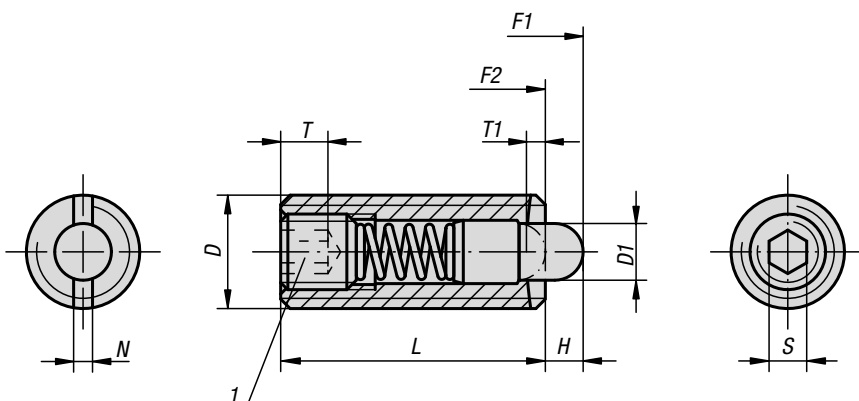


### KIPP Spring plungers with hexagon socket and flattened thrust pin, standard spring force

| Order No. | D   | D1  | H   | L  | T   | T1  | N   | S   | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N | Order No.<br>Assembly key |
|-----------|-----|-----|-----|----|-----|-----|-----|-----|--------------------------------------------------|------------------------------------------------|---------------------------|
| K1370.05  | M5  | 2,4 | 2,3 | 18 | 2   | 0,8 | 0,8 | 1,5 | 6                                                | 20                                             | K0317.905                 |
| K1370.06  | M6  | 2,7 | 2,5 | 20 | 2,5 | 1   | 1   | 2   | 7                                                | 20                                             | K0317.906                 |
| K1370.08  | M8  | 3,5 | 3   | 22 | 3   | 1,4 | 1,2 | 2,5 | 9                                                | 35                                             | K0317.908                 |
| K1370.10  | M10 | 4   | 3   | 22 | 3,5 | 1,4 | 1,6 | 3   | 9                                                | 35                                             | K0317.910                 |
| K1370.12  | M12 | 6   | 4   | 28 | 5   | 2   | 2   | 4   | 12                                               | 55                                             | K0317.912                 |
| K1370.16  | M16 | 7,5 | 5   | 32 | 6   | 2,5 | 2,5 | 5   | 45                                               | 100                                            | K0317.916                 |
| K1370.20  | M20 | 10  | 7   | 40 | 8   | 3   | 2,5 | 6   | 60                                               | 120                                            | -                         |

# Spring plungers

with hexagon socket and POM thrust pin, steel



## Material:

Sleeve steel grade 5.8.  
Thrust pin POM.  
Spring grade D steel wire.

## Version:

Black oxidised.

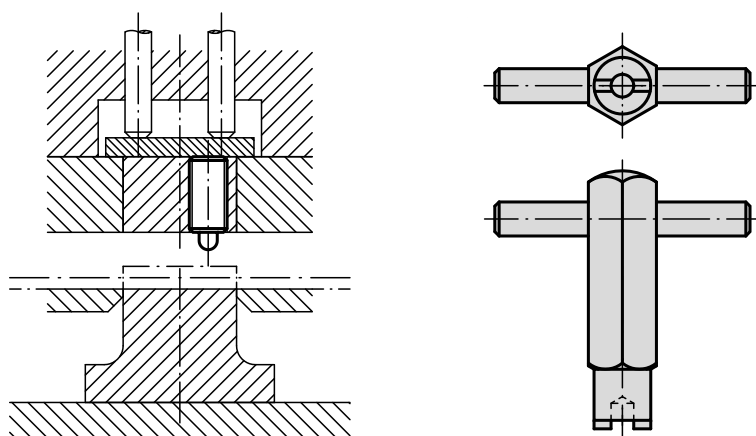
## Sample order:

K0318.16

## Drawing reference:

1) grub screw glued in

application example



## KIPP Spring plungers with hexagon socket and thrust pin, standard spring force

| Order No. | D   | D1  | H   | L  | T   | T1  | N   | S   | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N | Order No.<br>Assembly key |
|-----------|-----|-----|-----|----|-----|-----|-----|-----|--------------------------------------------------|------------------------------------------------|---------------------------|
| K0318.03  | M3  | 1   | 1,5 | 10 | 1,5 | 1   | 0,4 | 0,7 | 0,5                                              | 3                                              | K0317.903                 |
| K0318.04  | M4  | 1,5 | 1,5 | 15 | 2   | 0,6 | 0,6 | 1,3 | 5                                                | 16                                             | K0317.904                 |
| K0318.05  | M5  | 2,4 | 2,3 | 18 | 2   | 0,8 | 0,8 | 1,5 | 6                                                | 20                                             | K0317.905                 |
| K0318.06  | M6  | 2,7 | 2,5 | 20 | 2,5 | 1   | 1   | 2   | 7                                                | 20                                             | K0317.906                 |
| K0318.08  | M8  | 3,5 | 3   | 22 | 3   | 1,4 | 1,2 | 2,5 | 9                                                | 35                                             | K0317.908                 |
| K0318.10  | M10 | 4   | 3   | 22 | 3,5 | 1,4 | 1,6 | 3   | 9                                                | 35                                             | K0317.910                 |
| K0318.12  | M12 | 6   | 4   | 28 | 5   | 2   | 2   | 4   | 12                                               | 55                                             | K0317.912                 |
| K0318.16  | M16 | 7,5 | 5   | 32 | 6   | 2,5 | 2,5 | 5   | 45                                               | 100                                            | K0317.916                 |

## KIPP Spring plungers with hexagon socket and thrust pin, light spring force

| Order No. | D   | D1  | H   | L  | T   | T1  | N   | S   | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N | Order No.<br>Assembly key |
|-----------|-----|-----|-----|----|-----|-----|-----|-----|--------------------------------------------------|------------------------------------------------|---------------------------|
| K0318.104 | M4  | 1,5 | 1,5 | 15 | 2   | 0,6 | 0,6 | 1,3 | 2                                                | 7                                              | K0317.904                 |
| K0318.105 | M5  | 2,4 | 2,3 | 18 | 2   | 0,8 | 0,8 | 1,5 | 3                                                | 10                                             | K0317.905                 |
| K0318.106 | M6  | 2,7 | 2,5 | 20 | 2,5 | 1   | 1   | 2   | 3                                                | 9                                              | K0317.906                 |
| K0318.108 | M8  | 3,5 | 3   | 22 | 3   | 1,4 | 1,2 | 2,5 | 4                                                | 16                                             | K0317.908                 |
| K0318.110 | M10 | 4   | 3   | 22 | 3,5 | 1,4 | 1,6 | 3   | 4                                                | 16                                             | K0317.910                 |
| K0318.112 | M12 | 6   | 4   | 28 | 5   | 2   | 2   | 4   | 5                                                | 27                                             | K0317.912                 |
| K0318.116 | M16 | 7,5 | 5   | 32 | 6   | 2,5 | 2,5 | 5   | 20                                               | 45                                             | K0317.916                 |

## Spring plungers

with hexagon socket and flattened POM thrust pin, steel



### Material:

Sleeve steel grade 5.8.  
Thrust pin POM.  
Spring grade D steel wire.

### Version:

Black oxidised.

### Sample order:

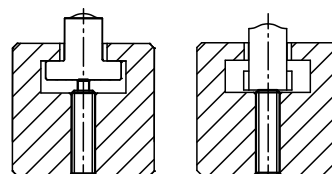
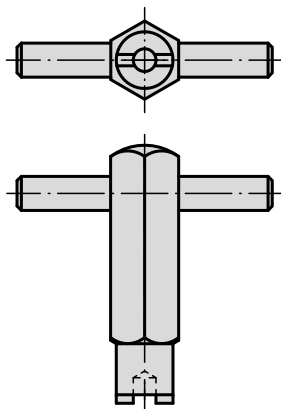
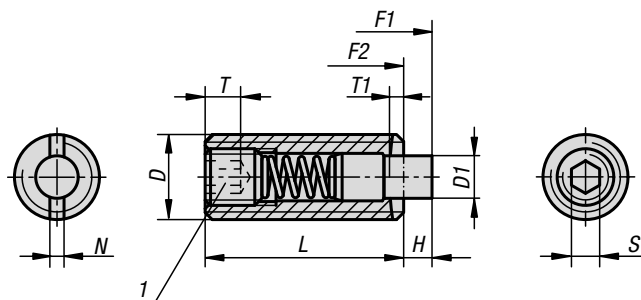
K1372.16

### Note:

These spring plungers are chiefly used as ejectors and spring stops in machine construction.  
The thrust pin is actuated in the axial direction.

### Drawing reference:

1) grub screw glued in



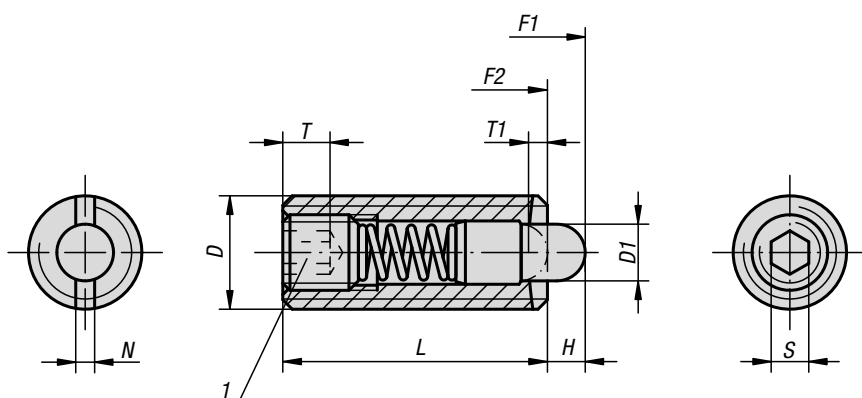
### KIPP Spring plungers with hexagon socket and flattened thrust pin, standard spring force

| Order No. | D   | D1  | H   | L  | T   | T1  | N   | S   | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N | Order No.<br>Assembly key |
|-----------|-----|-----|-----|----|-----|-----|-----|-----|--------------------------------------------------|------------------------------------------------|---------------------------|
| K1372.05  | M5  | 2,4 | 2,3 | 18 | 2   | 0,8 | 0,8 | 1,5 | 6                                                | 20                                             | K0317.905                 |
| K1372.06  | M6  | 2,7 | 2,5 | 20 | 2,5 | 1   | 1   | 2   | 7                                                | 20                                             | K0317.906                 |
| K1372.08  | M8  | 3,5 | 3   | 22 | 3   | 1,4 | 1,2 | 2,5 | 9                                                | 35                                             | K0317.908                 |
| K1372.10  | M10 | 4   | 3   | 22 | 3,5 | 1,4 | 1,6 | 3   | 9                                                | 35                                             | K0317.910                 |
| K1372.12  | M12 | 6   | 4   | 28 | 5   | 2   | 2   | 4   | 12                                               | 55                                             | K0317.912                 |
| K1372.16  | M16 | 7,5 | 5   | 32 | 6   | 2,5 | 2,5 | 5   | 45                                               | 100                                            | K0317.916                 |



## Spring plungers

with hexagon socket and thrust pin, stainless steel



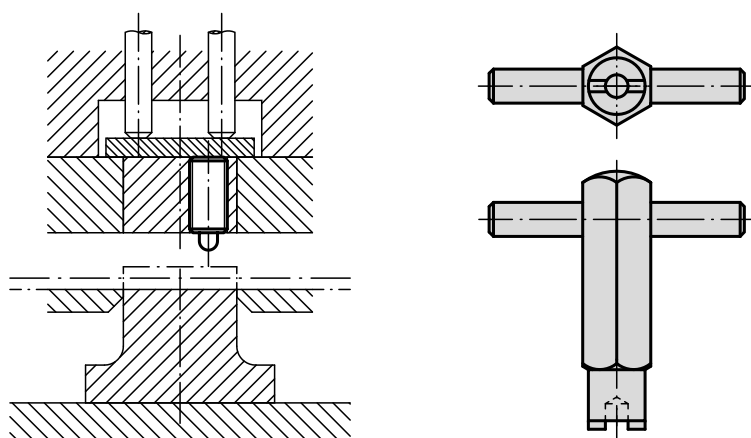
**Material:**  
Sleeve 1.4305.  
Thrust pin 1.4034.  
Spring 1.4310.

**Version:**  
Bright.  
Thrust pin hardened.

**Sample order:**  
K0319.16

**Drawing reference:**  
1) grub screw glued in

application example



### KIPP Spring plungers with hexagon socket and thrust pin, standard spring force

| Order No. | D   | D1  | H   | L  | T   | T1  | N   | S   | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N | Order No.<br>Assembly key |
|-----------|-----|-----|-----|----|-----|-----|-----|-----|--------------------------------------------------|------------------------------------------------|---------------------------|
| K0319.03  | M3  | 1   | 1,5 | 10 | 1,5 | 1   | 0,4 | 0,7 | 0,4                                              | 2,5                                            | K0317.903                 |
| K0319.04  | M4  | 1,5 | 1,5 | 15 | 2   | 0,6 | 0,6 | 1,3 | 5                                                | 16                                             | K0317.904                 |
| K0319.05  | M5  | 2,4 | 2,3 | 18 | 2   | 0,8 | 0,8 | 1,5 | 5                                                | 17                                             | K0317.905                 |
| K0319.06  | M6  | 2,7 | 2,5 | 20 | 2,5 | 1   | 1   | 2   | 6                                                | 17                                             | K0317.906                 |
| K0319.08  | M8  | 3,5 | 3   | 22 | 3   | 1,4 | 1,2 | 2,5 | 7                                                | 29                                             | K0317.908                 |
| K0319.10  | M10 | 4   | 3   | 22 | 3,5 | 1,4 | 1,6 | 3   | 8                                                | 31                                             | K0317.910                 |
| K0319.12  | M12 | 6   | 4   | 28 | 5   | 2   | 2   | 4   | 10                                               | 47                                             | K0317.912                 |
| K0319.16  | M16 | 7,5 | 5   | 32 | 6   | 2,5 | 2,5 | 5   | 38                                               | 85                                             | K0317.916                 |

### KIPP Spring plungers with hexagon socket and thrust pin, reinforced spring force

| Order No. | D   | D1  | H   | L  | T   | T1  | N   | S   | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N | Order No.<br>Assembly key |
|-----------|-----|-----|-----|----|-----|-----|-----|-----|--------------------------------------------------|------------------------------------------------|---------------------------|
| K0319.205 | M5  | 2,4 | 2,3 | 18 | 2   | 0,8 | 0,8 | 1,5 | 9                                                | 26                                             | K0317.905                 |
| K0319.206 | M6  | 2,7 | 2,5 | 20 | 2,5 | 1   | 1   | 2   | 11                                               | 35                                             | K0317.906                 |
| K0319.208 | M8  | 3,5 | 3   | 22 | 3   | 1,4 | 1,2 | 2,5 | 15                                               | 48                                             | K0317.908                 |
| K0319.210 | M10 | 4   | 3   | 22 | 3,5 | 1,4 | 1,6 | 3   | 15                                               | 58                                             | K0317.910                 |
| K0319.212 | M12 | 6   | 4   | 28 | 5   | 2   | 2   | 4   | 19                                               | 74                                             | K0317.912                 |

## Spring plungers

with hexagon socket and flattened thrust pin, stainless steel



### Material:

Sleeve 1.4305.  
Thrust pin 1.4034.  
Spring 1.4310.

### Version:

Bright.  
Thrust pin hardened.

### Sample order:

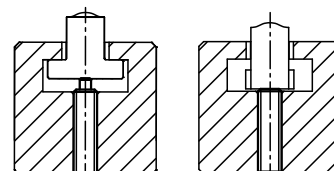
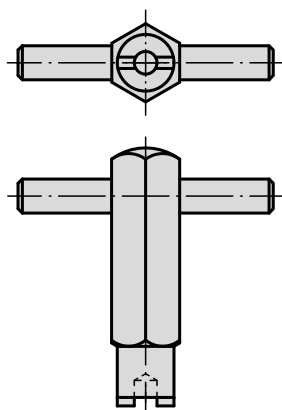
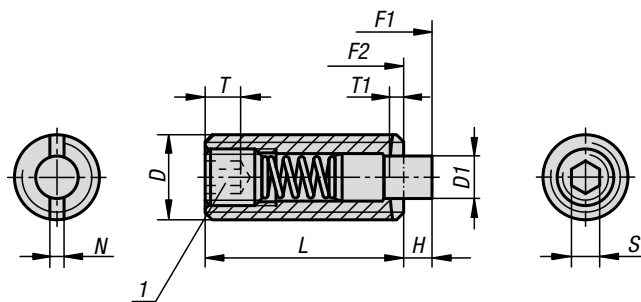
K1379.16

### Note:

These spring plungers are chiefly used as ejectors and spring stops in machine construction.  
The thrust pin is actuated in the axial direction.

### Drawing reference:

1) grub screw glued in

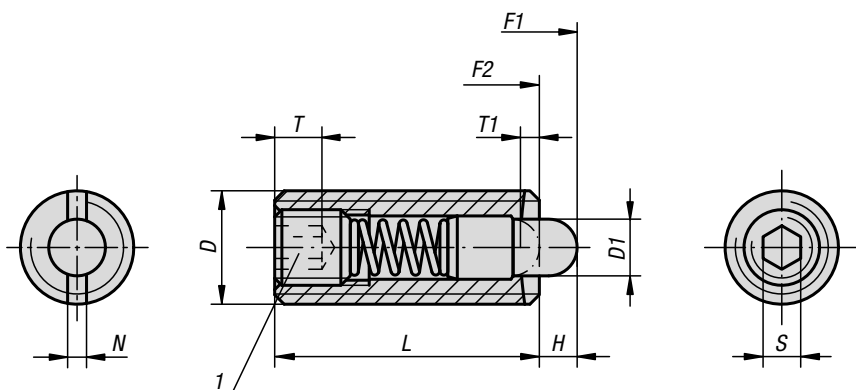


### KIPP Spring plungers with hexagon socket and flattened thrust pin, standard spring force

| Order No. | D   | D1  | H   | L  | T   | T1  | N   | S   | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N | Order No.<br>Assembly key |
|-----------|-----|-----|-----|----|-----|-----|-----|-----|--------------------------------------------------|------------------------------------------------|---------------------------|
| K1379.05  | M5  | 2,4 | 2,3 | 18 | 2   | 0,8 | 0,8 | 1,5 | 5                                                | 17                                             | K0317.905                 |
| K1379.06  | M6  | 2,7 | 2,5 | 20 | 2,5 | 1   | 1   | 2   | 6                                                | 17                                             | K0317.906                 |
| K1379.08  | M8  | 3,5 | 3   | 22 | 3   | 1,4 | 1,2 | 2,5 | 7                                                | 29                                             | K0317.908                 |
| K1379.10  | M10 | 4   | 3   | 22 | 3,5 | 1,4 | 1,6 | 3   | 8                                                | 31                                             | K0317.910                 |
| K1379.12  | M12 | 6   | 4   | 28 | 5   | 2   | 2   | 4   | 10                                               | 47                                             | K0317.912                 |
| K1379.16  | M16 | 7,5 | 5   | 32 | 6   | 2,5 | 2,5 | 5   | 38                                               | 85                                             | K0317.916                 |

## Spring plungers

with hexagon socket and POM thrust pin, stainless steel



### Material:

Sleeve 1.4305.  
Thrust pin POM.  
Spring 1.4310.

### Version:

Bright.

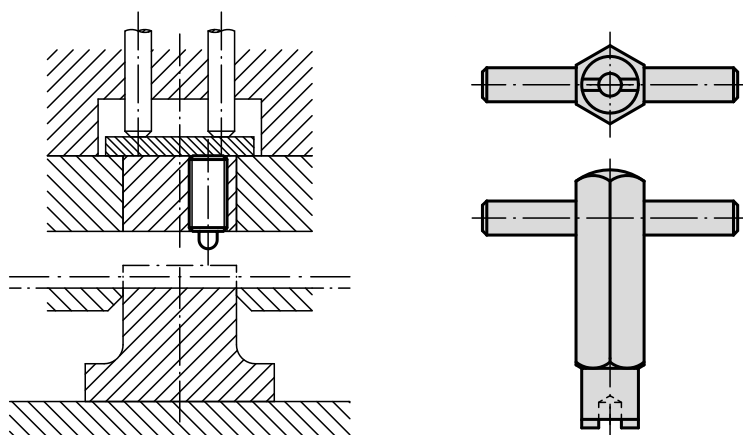
### Sample order:

K0320.16

### Drawing reference:

1) grub screw glued in

application example



## KIPP Spring plungers with hexagon socket and POM thrust pin, stainless steel

| Order No. | D   | D1  | H   | L  | T   | T1  | N   | S   | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N | Order No.<br>Assembly key |
|-----------|-----|-----|-----|----|-----|-----|-----|-----|--------------------------------------------------|------------------------------------------------|---------------------------|
| K0320.03  | M3  | 1   | 1,5 | 10 | 1,5 | 1   | 0,4 | 0,7 | 0,5                                              | 3                                              | K0317.903                 |
| K0320.04  | M4  | 1,5 | 1,5 | 15 | 2   | 0,6 | 0,6 | 1,3 | 5                                                | 16                                             | K0317.904                 |
| K0320.05  | M5  | 2,4 | 2,3 | 18 | 2   | 0,8 | 0,8 | 1,5 | 5                                                | 17                                             | K0317.905                 |
| K0320.06  | M6  | 2,7 | 2,5 | 20 | 2,5 | 1   | 1   | 2   | 6                                                | 17                                             | K0317.906                 |
| K0320.08  | M8  | 3,5 | 3   | 22 | 3   | 1,4 | 1,2 | 2,5 | 7                                                | 29                                             | K0317.908                 |
| K0320.10  | M10 | 4   | 3   | 22 | 3,5 | 1,4 | 1,6 | 3   | 8                                                | 31                                             | K0317.910                 |
| K0320.12  | M12 | 6   | 4   | 28 | 5   | 2   | 2   | 4   | 10                                               | 47                                             | K0317.912                 |
| K0320.16  | M16 | 7,5 | 5   | 32 | 6   | 2,5 | 2,5 | 5   | 38                                               | 85                                             | K0317.916                 |

## Spring plungers

with hexagon socket and flattened POM thrust pin, stainless steel



### Material:

Sleeve 1.4305.  
Thrust pin POM.  
Spring 1.4310.

### Version:

Bright.

### Sample order:

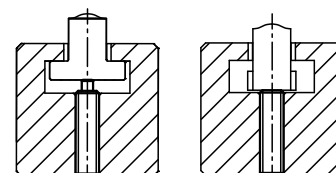
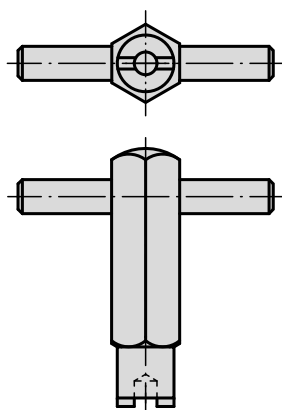
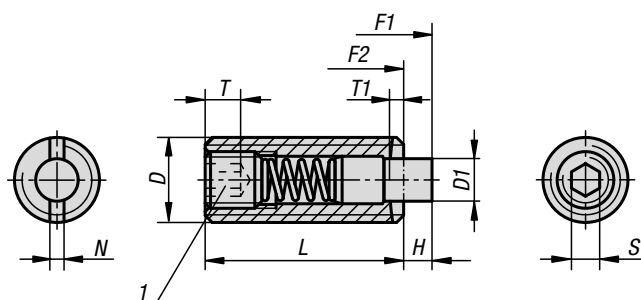
K1381.16

### Note:

These spring plungers are chiefly used as ejectors and spring stops in machine construction.  
The thrust pin is actuated in the axial direction.

### Drawing reference:

1) grub screw glued in



### KIPP Spring plungers with hexagon socket and flattened thrust pin, standard spring force

| Order No. | D   | D1  | H   | L  | T   | T1  | N   | S   | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N | Order No.<br>Assembly key |
|-----------|-----|-----|-----|----|-----|-----|-----|-----|--------------------------------------------------|------------------------------------------------|---------------------------|
| K1381.05  | M5  | 2,4 | 2,3 | 18 | 2   | 0,8 | 0,8 | 1,5 | 5                                                | 17                                             | K0317.905                 |
| K1381.06  | M6  | 2,7 | 2,5 | 20 | 2,5 | 1   | 1   | 2   | 6                                                | 17                                             | K0317.906                 |
| K1381.08  | M8  | 3,5 | 3   | 22 | 3   | 1,4 | 1,2 | 2,5 | 7                                                | 29                                             | K0317.908                 |
| K1381.10  | M10 | 4   | 3   | 22 | 3,5 | 1,4 | 1,6 | 3   | 8                                                | 31                                             | K0317.910                 |
| K1381.12  | M12 | 6   | 4   | 28 | 5   | 2   | 2   | 4   | 10                                               | 47                                             | K0317.912                 |
| K1381.16  | M16 | 7,5 | 5   | 32 | 6   | 2,5 | 2,5 | 5   | 38                                               | 85                                             | K0317.916                 |

# Spring plungers with thread lock



The most advanced effective way to lock a thread



## With the following crucial advantages:

### 1. Vibration resistant.

The integrated thread lock secures spring plungers efficiently and cost-effectively. No loosening or falling out by impacts, shock or vibration.

### 3. Secure in every position.

The thread lock requires neither pre-tensioning nor specific positioning. This is ideal for adjusting spring plungers.

### 4. Saves assembly time and stocking space.

The thread lock is integrated into the spring plunger. No additional parts required. No circlip, lock washer or locknut. This significantly reduces assembly and storage costs.

### 5. For repeated use.

When used for the first time, the thread lock will require a slightly higher torque. After the third or fourth time, the last torque value achieved remains almost constant.

### 2. Extremely high loosening torque.

The elastic nylon insert is squeezed like a wedge between the internal and external threads. The nylon locking system pushes the play between the threads to one side causing surface pressure on the thread flanks.

The resulting loosening torque is higher than that by most conventional mechanical methods.

### 6. Problem solver from M3 to M16.

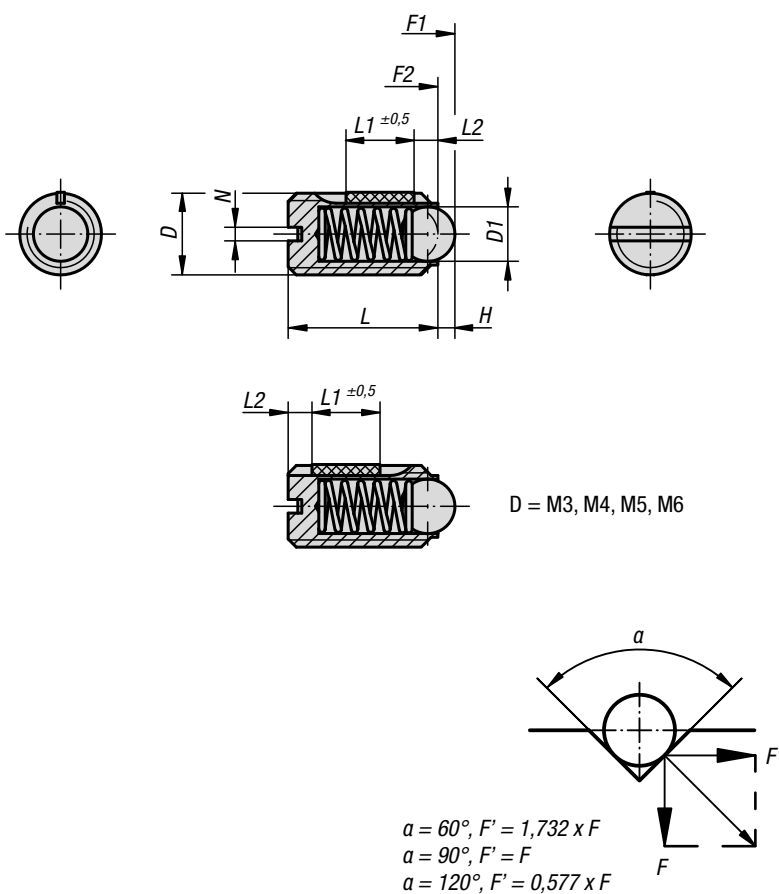
Whether light or heavy duty:  
Tell us your task! We will provide you with the suitable spring plungers with integrated thread lock.



# Spring plungers

with slot and ball, steel, with thread lock

**KIPPlock**



D = M3, M4, M5, M6



**Material:**

Sleeve steel grade 5.8.

Ball steel.

Spring grade D spring steel wire.

Thread lock nylon.

**Version:**

Black oxidised. Ball hardened.

**Sample order:**

K0321.12

**Drawing reference:**

L2 = approx. 2x thread pitch

## KIPP Spring plungers with slot and ball, standard spring force, with thread lock

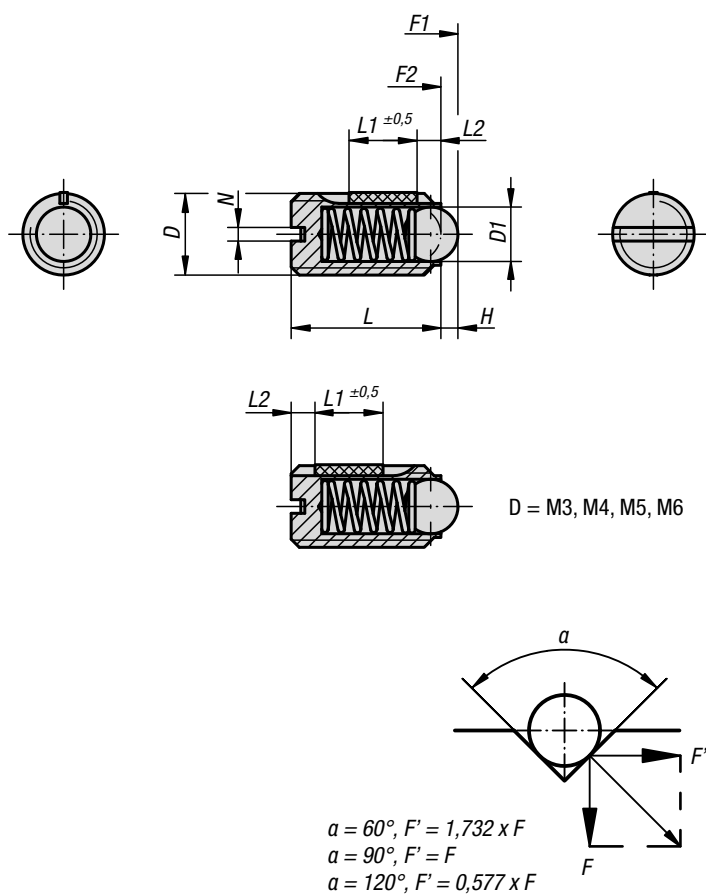
| Order No. | D   | D1  | H   | L  | L1 | N   | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N | Tightening<br>torque<br>approx. Nm | Loosening torque<br>approx. Nm |
|-----------|-----|-----|-----|----|----|-----|--------------------------------------------------|------------------------------------------------|------------------------------------|--------------------------------|
| K0321.03  | M3  | 1,5 | 0,4 | 7  | 4  | 0,4 | 1,5                                              | 3                                              | 0,1                                | 0,07                           |
| K0321.04  | M4  | 2,5 | 0,8 | 9  | 5  | 0,6 | 4                                                | 10                                             | 0,18                               | 0,12                           |
| K0321.05  | M5  | 3   | 0,9 | 12 | 6  | 0,8 | 6                                                | 11                                             | 0,12                               | 0,08                           |
| K0321.06  | M6  | 3,5 | 1   | 14 | 7  | 1   | 9                                                | 13                                             | 0,43                               | 0,21                           |
| K0321.08  | M8  | 5   | 1,5 | 16 | 8  | 1,2 | 15                                               | 30                                             | 1,09                               | 0,37                           |
| K0321.10  | M10 | 6   | 2   | 19 | 9  | 1,6 | 20                                               | 40                                             | 1,36                               | 0,62                           |
| K0321.12  | M12 | 8   | 2,5 | 22 | 10 | 2   | 30                                               | 55                                             | 2,03                               | 1,36                           |
| K0321.16  | M16 | 10  | 3,5 | 24 | 14 | 2,5 | 65                                               | 125                                            | 3,95                               | 2,95                           |

## KIPP Spring plungers with slot and ball, strong spring force, with thread lock

| Order No. | D   | D1  | H   | L  | L1 | N   | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N | Tightening<br>torque<br>approx. Nm | Loosening torque<br>approx. Nm |
|-----------|-----|-----|-----|----|----|-----|--------------------------------------------------|------------------------------------------------|------------------------------------|--------------------------------|
| K0321.203 | M3  | 1,5 | 0,4 | 7  | 4  | 0,4 | 5                                                | 7                                              | 0,1                                | 0,07                           |
| K0321.204 | M4  | 2,5 | 0,8 | 9  | 5  | 0,6 | 12                                               | 22                                             | 0,18                               | 0,12                           |
| K0321.205 | M5  | 3   | 0,9 | 12 | 6  | 0,8 | 19                                               | 30                                             | 0,12                               | 0,08                           |
| K0321.206 | M6  | 3,5 | 1   | 14 | 7  | 1   | 28                                               | 40                                             | 0,43                               | 0,21                           |
| K0321.208 | M8  | 5   | 1,5 | 16 | 8  | 1,2 | 47                                               | 73                                             | 1,09                               | 0,37                           |
| K0321.210 | M10 | 6   | 2   | 19 | 9  | 1,6 | 66                                               | 100                                            | 1,36                               | 0,62                           |
| K0321.212 | M12 | 8   | 2,5 | 22 | 10 | 2   | 66                                               | 120                                            | 2,03                               | 1,36                           |
| K0321.216 | M16 | 10  | 3,5 | 24 | 14 | 2,5 | 90                                               | 180                                            | 3,95                               | 2,95                           |

# Spring plungers

with slot and ball, stainless steel, with thread lock



**Material:**  
 Sleeve 1.4305.  
 Ball 1.4034.  
 Spring 1.4310.

Thread lock nylon.

**Version:**  
 Bright. Ball hardened.

**Sample order:**  
 K0322.12

**Drawing reference:**  
 L2 = approx. 2x thread pitch

## KIPP Spring plungers with slot and ball, standard spring force, with thread lock

| Order No. | D   | D1  | H   | L  | L1 | N   | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N | Tightening<br>torque<br>approx. Nm | Loosening torque<br>approx. Nm |
|-----------|-----|-----|-----|----|----|-----|--------------------------------------------------|------------------------------------------------|------------------------------------|--------------------------------|
| K0322.03  | M3  | 1,5 | 0,4 | 7  | 4  | 0,4 | 1,5                                              | 3                                              | 0,1                                | 0,07                           |
| K0322.04  | M4  | 2,5 | 0,8 | 9  | 5  | 0,6 | 4                                                | 10                                             | 0,18                               | 0,12                           |
| K0322.05  | M5  | 3   | 0,9 | 12 | 6  | 0,8 | 6                                                | 11                                             | 0,12                               | 0,08                           |
| K0322.06  | M6  | 3,5 | 1   | 14 | 7  | 1   | 9                                                | 13                                             | 0,43                               | 0,21                           |
| K0322.08  | M8  | 5   | 1,5 | 16 | 8  | 1,2 | 15                                               | 30                                             | 1,09                               | 0,37                           |
| K0322.10  | M10 | 6   | 2   | 19 | 9  | 1,6 | 20                                               | 35                                             | 1,36                               | 0,62                           |
| K0322.12  | M12 | 8   | 2,5 | 22 | 10 | 2   | 30                                               | 55                                             | 2,03                               | 1,36                           |
| K0322.16  | M16 | 10  | 3,5 | 24 | 14 | 2,5 | 65                                               | 125                                            | 3,95                               | 2,95                           |

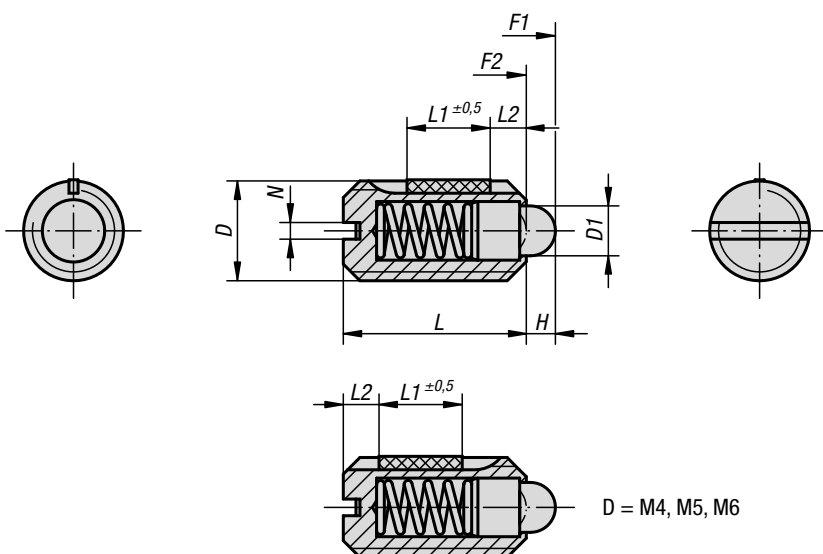
## KIPP Spring plungers with slot and ball, strong spring force, with thread lock

| Order No. | D   | D1  | H   | L  | L1 | N   | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N | Tightening<br>torque<br>approx. Nm | Loosening torque<br>approx. Nm |
|-----------|-----|-----|-----|----|----|-----|--------------------------------------------------|------------------------------------------------|------------------------------------|--------------------------------|
| K0322.203 | M3  | 1,5 | 0,4 | 7  | 4  | 0,4 | 5                                                | 7                                              | 0,1                                | 0,07                           |
| K0322.204 | M4  | 2,5 | 0,8 | 9  | 5  | 0,6 | 12                                               | 22                                             | 0,18                               | 0,12                           |
| K0322.205 | M5  | 3   | 0,9 | 12 | 6  | 0,8 | 19                                               | 30                                             | 0,12                               | 0,08                           |
| K0322.206 | M6  | 3,5 | 1   | 14 | 7  | 1   | 28                                               | 40                                             | 0,43                               | 0,21                           |
| K0322.208 | M8  | 5   | 1,5 | 16 | 8  | 1,2 | 47                                               | 73                                             | 1,09                               | 0,37                           |
| K0322.210 | M10 | 6   | 2   | 19 | 9  | 1,6 | 66                                               | 100                                            | 1,36                               | 0,62                           |
| K0322.212 | M12 | 8   | 2,5 | 22 | 10 | 2   | 66                                               | 120                                            | 2,03                               | 1,36                           |
| K0322.216 | M16 | 10  | 3,5 | 24 | 14 | 2,5 | 90                                               | 180                                            | 3,95                               | 2,95                           |

# Spring plungers

with slot and thrust pin, steel, with thread lock

**KIPPlock**



## Material:

Sleeve in steel grade 5.8;  
thrust pin in steel.  
Spring grade D spring steel wire.

Thread lock nylon.

## Version:

Black oxidised.  
Thrust pin hardened.

## Sample order:

K0323.10

## Drawing reference:

L2 = approx. 2x thread pitch

## KIPP Spring plungers with slot and thrust pin, standard spring force, with thread lock

| Order No. | D   | D1  | H   | L  | L1 | N   | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N | Tightening<br>torque<br>approx. Nm | Loosening torque<br>approx. Nm |
|-----------|-----|-----|-----|----|----|-----|--------------------------------------------------|------------------------------------------------|------------------------------------|--------------------------------|
| K0323.04  | M4  | 1,8 | 1,5 | 9  | 5  | 0,6 | 6                                                | 20                                             | 0,18                               | 0,12                           |
| K0323.05  | M5  | 2,4 | 2   | 12 | 6  | 0,8 | 6                                                | 20                                             | 0,12                               | 0,08                           |
| K0323.06  | M6  | 2,7 | 2   | 14 | 7  | 1   | 7                                                | 20                                             | 0,44                               | 0,21                           |
| K0323.08  | M8  | 4   | 2   | 16 | 8  | 1,2 | 15                                               | 30                                             | 1,1                                | 0,38                           |
| K0323.10  | M10 | 4,5 | 2,5 | 19 | 9  | 1,6 | 20                                               | 35                                             | 1,36                               | 0,62                           |
| K0323.12  | M12 | 6   | 3,5 | 22 | 10 | 2   | 30                                               | 55                                             | 2,11                               | 1,41                           |
| K0323.16  | M16 | 8,5 | 4,5 | 24 | 14 | 2,5 | 45                                               | 100                                            | 3,95                               | 3,05                           |

## KIPP Spring plungers with slot and thrust pin, light spring force, with thread lock

| Order No. | D   | D1  | H   | L  | L1 | N   | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N | Tightening<br>torque<br>approx. Nm | Loosening torque<br>approx. Nm |
|-----------|-----|-----|-----|----|----|-----|--------------------------------------------------|------------------------------------------------|------------------------------------|--------------------------------|
| K0323.104 | M4  | 1,8 | 1,5 | 9  | 5  | 0,6 | 3                                                | 10                                             | 0,18                               | 0,12                           |
| K0323.105 | M5  | 2,4 | 2   | 12 | 6  | 0,8 | 3                                                | 10                                             | 0,12                               | 0,08                           |
| K0323.106 | M6  | 2,7 | 2   | 14 | 7  | 1   | 4                                                | 10                                             | 0,44                               | 0,21                           |
| K0323.108 | M8  | 4   | 2   | 16 | 8  | 1,2 | 7                                                | 15                                             | 1,1                                | 0,38                           |
| K0323.110 | M10 | 4,5 | 2,5 | 19 | 9  | 1,6 | 9                                                | 16                                             | 1,36                               | 0,62                           |
| K0323.112 | M12 | 6   | 3,5 | 22 | 10 | 2   | 14                                               | 26                                             | 2,11                               | 1,41                           |
| K0323.116 | M16 | 8,5 | 4,5 | 24 | 14 | 2,5 | 22                                               | 50                                             | 3,95                               | 3,05                           |

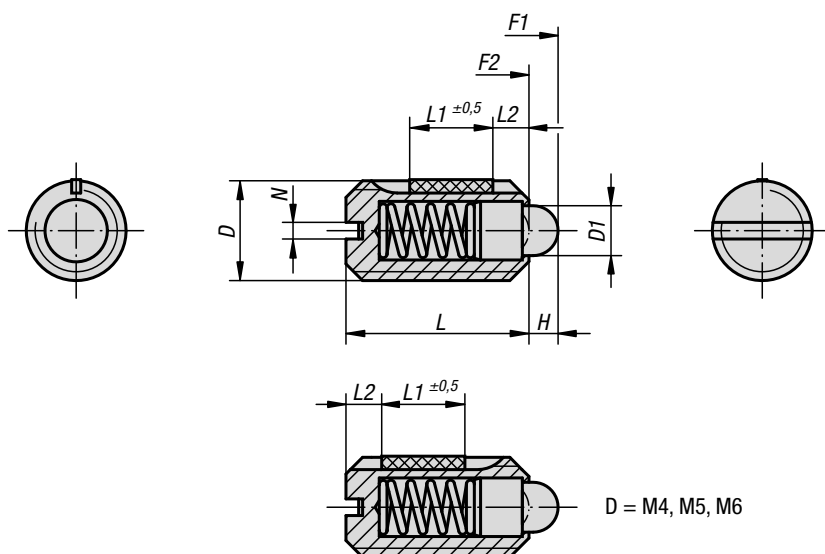
## KIPP Spring plungers with slot and thrust pin, heavy spring force, with thread lock

| Order No. | D   | D1  | H   | L  | L1 | N   | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N | Tightening<br>torque<br>approx. Nm | Loosening torque<br>approx. Nm |
|-----------|-----|-----|-----|----|----|-----|--------------------------------------------------|------------------------------------------------|------------------------------------|--------------------------------|
| K0323.205 | M5  | 2,4 | 2   | 12 | 6  | 0,8 | 9                                                | 25                                             | 0,12                               | 0,08                           |
| K0323.206 | M6  | 2,7 | 2   | 14 | 7  | 1   | 11                                               | 25                                             | 0,44                               | 0,21                           |
| K0323.208 | M8  | 4   | 2   | 16 | 8  | 1,2 | 22                                               | 43                                             | 1,1                                | 0,38                           |
| K0323.210 | M10 | 4,5 | 2,5 | 19 | 9  | 1,6 | 20                                               | 54                                             | 1,36                               | 0,62                           |
| K0323.212 | M12 | 6   | 3,5 | 22 | 10 | 2   | 36                                               | 94                                             | 2,11                               | 1,41                           |
| K0323.216 | M16 | 8,5 | 4,5 | 24 | 14 | 2,5 | 60                                               | 110                                            | 3,99                               | 3,05                           |



# Spring plungers

with slot and thrust pin, stainless steel, with thread lock



**Material:**  
Sleeve 1.4305.  
Ball 1.4034.  
Spring 1.4310.

Thread lock nylon.

**Version:**  
Bright.  
Thrust pin hardened.

**Sample order:**  
K0324.10

**Drawing reference:**  
L2 = approx. 2x thread pitch

## KIPP Spring plungers with slot and thrust pin, standard spring force, with thread lock

| Order No. | D   | D1  | H   | L  | L1 | N   | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N | Tightening<br>torque<br>approx. Nm | Loosening torque<br>approx. Nm |
|-----------|-----|-----|-----|----|----|-----|--------------------------------------------------|------------------------------------------------|------------------------------------|--------------------------------|
| K0324.04  | M4  | 1,8 | 1,5 | 9  | 5  | 0,6 | 6                                                | 20                                             | 0,18                               | 0,12                           |
| K0324.05  | M5  | 2,4 | 2   | 12 | 6  | 0,8 | 6                                                | 20                                             | 0,12                               | 0,08                           |
| K0324.06  | M6  | 2,7 | 2   | 14 | 7  | 1   | 7                                                | 20                                             | 0,44                               | 0,21                           |
| K0324.08  | M8  | 4   | 2   | 16 | 8  | 1,2 | 15                                               | 30                                             | 1,1                                | 0,38                           |
| K0324.10  | M10 | 4,5 | 2,5 | 19 | 9  | 1,6 | 20                                               | 35                                             | 1,36                               | 0,62                           |
| K0324.12  | M12 | 6   | 3,5 | 22 | 10 | 2   | 30                                               | 55                                             | 2,11                               | 1,41                           |
| K0324.16  | M16 | 8,5 | 4,5 | 24 | 14 | 2,5 | 45                                               | 100                                            | 3,95                               | 3,05                           |

## KIPP Spring plungers with slot and thrust pin, light spring force, with thread lock

| Order No. | D   | D1  | H   | L  | L1 | N   | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N | Tightening<br>torque<br>approx. Nm | Loosening torque<br>approx. Nm |
|-----------|-----|-----|-----|----|----|-----|--------------------------------------------------|------------------------------------------------|------------------------------------|--------------------------------|
| K0324.104 | M4  | 1,8 | 1,5 | 9  | 5  | 0,6 | 3                                                | 10                                             | 0,18                               | 0,12                           |
| K0324.105 | M5  | 2,4 | 2   | 12 | 6  | 0,8 | 3                                                | 10                                             | 0,12                               | 0,08                           |
| K0324.106 | M6  | 2,7 | 2   | 14 | 7  | 1   | 4                                                | 10                                             | 0,44                               | 0,21                           |
| K0324.108 | M8  | 4   | 2   | 16 | 8  | 1,2 | 7                                                | 15                                             | 1,1                                | 0,38                           |
| K0324.110 | M10 | 4,5 | 2,5 | 19 | 9  | 1,6 | 9                                                | 16                                             | 1,36                               | 0,62                           |
| K0324.112 | M12 | 6   | 3,5 | 22 | 10 | 2   | 14                                               | 26                                             | 2,11                               | 1,41                           |
| K0324.116 | M16 | 8,5 | 4,5 | 24 | 14 | 2,5 | 22                                               | 50                                             | 3,95                               | 3,05                           |

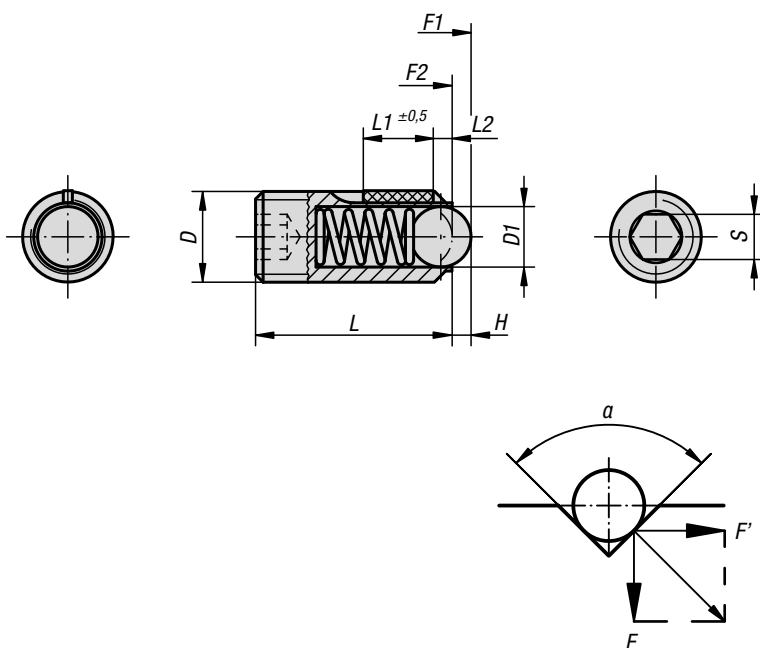
## KIPP Spring plungers with slot and thrust pin, heavy spring force, with thread lock

| Order No. | D   | D1  | H   | L  | L1 | N   | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N | Tightening<br>torque<br>approx. Nm | Loosening torque<br>approx. Nm |
|-----------|-----|-----|-----|----|----|-----|--------------------------------------------------|------------------------------------------------|------------------------------------|--------------------------------|
| K0324.205 | M5  | 2,4 | 2   | 12 | 6  | 0,8 | 9                                                | 25                                             | 0,12                               | 0,08                           |
| K0324.206 | M6  | 2,7 | 2   | 14 | 7  | 1   | 11                                               | 25                                             | 0,44                               | 0,21                           |
| K0324.208 | M8  | 4   | 2   | 16 | 8  | 1,2 | 22                                               | 43                                             | 1,1                                | 0,38                           |
| K0324.210 | M10 | 4,5 | 2,5 | 19 | 9  | 1,6 | 20                                               | 54                                             | 1,36                               | 0,62                           |
| K0324.212 | M12 | 6   | 3,5 | 22 | 10 | 2   | 36                                               | 94                                             | 2,11                               | 1,41                           |
| K0324.216 | M16 | 8,5 | 4,5 | 24 | 14 | 2,5 | 60                                               | 110                                            | 3,99                               | 3,05                           |

# Spring plungers

with hex socket and ball, steel, with thread lock

**KIPPlock**



$$a = 60^\circ, F' = 1,732 \times F$$

$$a = 90^\circ, F' = F$$

$$a = 120^\circ, F' = 0,577 \times F$$



**Material:**

Sleeve steel grade 5.8.

Ball steel.

Spring grade D spring steel wire.

Thread lock nylon.

**Version:**

Black oxidised. Ball hardened.

**Sample order:**

K0325.08

**Drawing reference:**

L2 = approx. 2x thread pitch

## KIPP Spring plungers with hex socket and ball, standard spring force, with thread lock

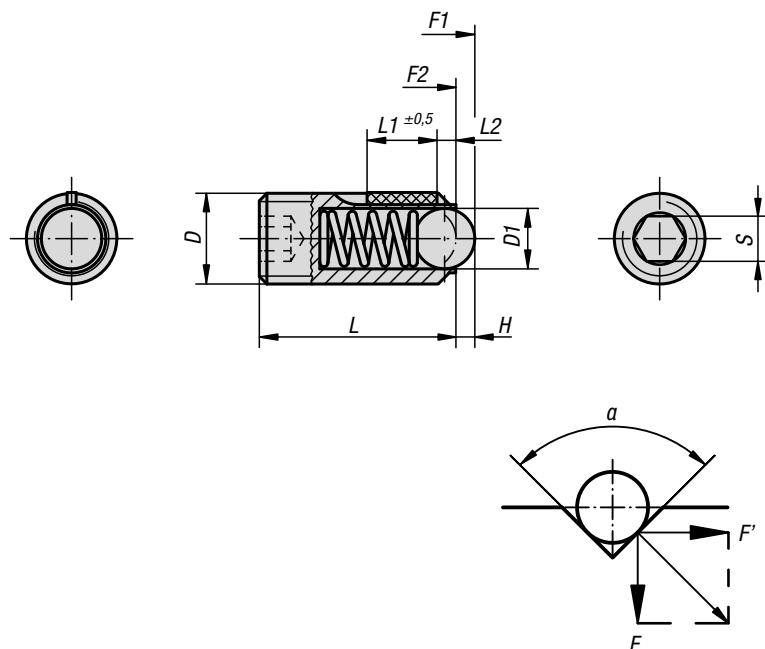
| Order No. | D   | D1  | H   | L  | L1 | S   | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N | Tightening<br>torque<br>approx. Nm | Loosening torque<br>approx. Nm |
|-----------|-----|-----|-----|----|----|-----|--------------------------------------------------|------------------------------------------------|------------------------------------|--------------------------------|
| K0325.03  | M3  | 1,5 | 0,4 | 9  | 4  | 1,5 | 1,5                                              | 3                                              | 0,1                                | 0,07                           |
| K0325.04  | M4  | 2,5 | 0,8 | 10 | 5  | 2   | 4                                                | 10                                             | 0,18                               | 0,12                           |
| K0325.05  | M5  | 3   | 0,9 | 14 | 6  | 2,5 | 6                                                | 11                                             | 0,12                               | 0,08                           |
| K0325.06  | M6  | 3,5 | 1   | 15 | 7  | 3   | 9                                                | 13                                             | 0,44                               | 0,21                           |
| K0325.08  | M8  | 5   | 1,5 | 18 | 8  | 4   | 15                                               | 30                                             | 1,1                                | 0,38                           |
| K0325.10  | M10 | 6   | 2   | 23 | 9  | 5   | 20                                               | 40                                             | 1,3                                | 0,6                            |
| K0325.12  | M12 | 8   | 2,5 | 26 | 10 | 6   | 30                                               | 55                                             | 2                                  | 1,3                            |
| K0325.16  | M16 | 10  | 3,5 | 33 | 14 | 8   | 65                                               | 125                                            | 3,9                                | 3                              |

## KIPP Spring plungers with hex socket and ball, heavy spring force, with thread lock

| Order No. | D   | D1  | H   | L  | L1 | S   | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N | Tightening<br>torque<br>approx. Nm | Loosening torque<br>approx. Nm |
|-----------|-----|-----|-----|----|----|-----|--------------------------------------------------|------------------------------------------------|------------------------------------|--------------------------------|
| K0325.203 | M3  | 1,5 | 0,4 | 9  | 4  | 1,5 | 5                                                | 7                                              | 0,1                                | 0,07                           |
| K0325.204 | M4  | 2,5 | 0,8 | 10 | 5  | 2   | 12                                               | 22                                             | 0,18                               | 0,12                           |
| K0325.205 | M5  | 3   | 0,9 | 14 | 6  | 2,5 | 19                                               | 30                                             | 0,12                               | 0,08                           |
| K0325.206 | M6  | 3,5 | 1   | 15 | 7  | 3   | 28                                               | 40                                             | 0,44                               | 0,21                           |
| K0325.208 | M8  | 5   | 1,5 | 18 | 8  | 4   | 47                                               | 73                                             | 1,1                                | 0,38                           |
| K0325.210 | M10 | 6   | 2   | 23 | 9  | 5   | 66                                               | 100                                            | 1,3                                | 0,6                            |
| K0325.212 | M12 | 8   | 2,5 | 26 | 10 | 6   | 66                                               | 120                                            | 2                                  | 1,3                            |
| K0325.216 | M16 | 10  | 3,5 | 33 | 14 | 8   | 90                                               | 180                                            | 3,9                                | 3                              |

# Spring plungers

with hex socket and ball, stainless steel, with thread lock



$$\begin{aligned} \alpha &= 60^\circ, F' = 1,732 \times F \\ \alpha &= 90^\circ, F' = F \\ \alpha &= 120^\circ, F' = 0,577 \times F \end{aligned}$$



## Material:

Sleeve 1.4305.

Ball 1.4034.

Spring 1.4310.

Thread lock nylon.

## Version:

Bright. Ball hardened.

## Sample order:

K0326.08

## Drawing reference:

L2 = approx. 2x thread pitch

## KIPP Spring plungers with hex socket and ball, standard spring force, with thread lock

| Order No. | D   | D1  | H   | L  | L1 | S   | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N | Tightening<br>torque<br>approx. Nm | Loosening torque<br>approx. Nm |
|-----------|-----|-----|-----|----|----|-----|--------------------------------------------------|------------------------------------------------|------------------------------------|--------------------------------|
| K0326.03  | M3  | 1,5 | 0,4 | 9  | 4  | 1,5 | 1,5                                              | 3                                              | 0,1                                | 0,07                           |
| K0326.04  | M4  | 2,5 | 0,8 | 10 | 5  | 2   | 4                                                | 10                                             | 0,18                               | 0,12                           |
| K0326.05  | M5  | 3   | 0,9 | 14 | 6  | 2,5 | 6                                                | 11                                             | 0,12                               | 0,08                           |
| K0326.06  | M6  | 3,5 | 1   | 15 | 7  | 3   | 9                                                | 13                                             | 0,44                               | 0,21                           |
| K0326.08  | M8  | 5   | 1,5 | 18 | 8  | 4   | 15                                               | 30                                             | 1,1                                | 0,38                           |
| K0326.10  | M10 | 6   | 2   | 23 | 9  | 5   | 20                                               | 35                                             | 1,3                                | 0,6                            |
| K0326.12  | M12 | 8   | 2,5 | 26 | 10 | 6   | 30                                               | 55                                             | 2                                  | 1,3                            |
| K0326.16  | M16 | 10  | 3,5 | 33 | 14 | 8   | 65                                               | 125                                            | 3,9                                | 3                              |

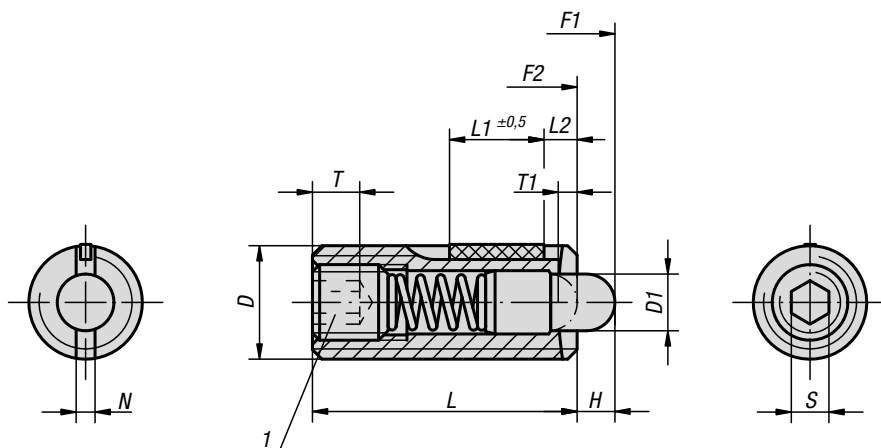
## KIPP Spring plungers with hex socket and ball, heavy spring force, with thread lock

| Order No. | D   | D1  | H   | L  | L1 | S   | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N | Tightening<br>torque<br>approx. Nm | Loosening torque<br>approx. Nm |
|-----------|-----|-----|-----|----|----|-----|--------------------------------------------------|------------------------------------------------|------------------------------------|--------------------------------|
| K0326.203 | M3  | 1,5 | 0,4 | 9  | 4  | 1,5 | 5                                                | 7                                              | 0,1                                | 0,07                           |
| K0326.204 | M4  | 2,5 | 0,8 | 10 | 5  | 2   | 12                                               | 22                                             | 0,18                               | 0,12                           |
| K0326.205 | M5  | 3   | 0,9 | 14 | 6  | 2,5 | 19                                               | 30                                             | 0,12                               | 0,08                           |
| K0326.206 | M6  | 3,5 | 1   | 15 | 7  | 3   | 28                                               | 40                                             | 0,44                               | 0,21                           |
| K0326.208 | M8  | 5   | 1,5 | 18 | 8  | 4   | 47                                               | 73                                             | 1,1                                | 0,38                           |
| K0326.210 | M10 | 6   | 2   | 23 | 9  | 5   | 66                                               | 100                                            | 1,3                                | 0,6                            |
| K0326.212 | M12 | 8   | 2,5 | 26 | 10 | 6   | 66                                               | 120                                            | 2                                  | 1,3                            |
| K0326.216 | M16 | 10  | 3,5 | 33 | 14 | 8   | 90                                               | 180                                            | 3,9                                | 3                              |

# Spring plungers

with hex socket and thrust pin, steel, with thread lock

KIPPlock



## Material:

Sleeve in steel grade 5.8;  
thrust pin in steel.  
Spring grade D spring steel wire.

Thread lock nylon.

## Version:

Black oxidised.  
Thrust pin hardened.

## Sample order:

K0327.12

## Drawing reference:

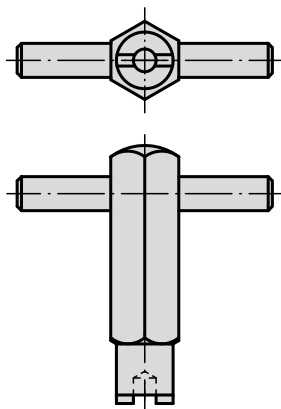
$L2 = \text{ca. two full threads}$

1) grub screw glued-in

# Spring plungers

with hex socket and thrust pin, steel, with thread lock

**KIPPl**ock



## KIPP Spring plungers with hex socket and thrust pin, standard spring force, with thread lock

| Order No. | D   | D1  | H   | L  | L1 | T   | T1  | N   | S   | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N | Tightening<br>torque<br>approx. Nm | Loosening torque<br>approx. Nm | Order No.<br>Assembly key |
|-----------|-----|-----|-----|----|----|-----|-----|-----|-----|--------------------------------------------------|------------------------------------------------|------------------------------------|--------------------------------|---------------------------|
| K0327.05  | M5  | 2,4 | 2,3 | 18 | 7  | 2   | 0,8 | 0,8 | 1,5 | 6                                                | 20                                             | 0,12                               | 0,08                           | K0317.905                 |
| K0327.06  | M6  | 2,7 | 2,5 | 20 | 7  | 2,5 | 1   | 1   | 2   | 7                                                | 20                                             | 0,45                               | 0,22                           | K0317.906                 |
| K0327.08  | M8  | 3,5 | 3   | 22 | 8  | 3   | 1,4 | 1,2 | 2,5 | 9                                                | 35                                             | 1,05                               | 0,37                           | K0317.908                 |
| K0327.10  | M10 | 4   | 3   | 22 | 9  | 3,5 | 1,4 | 1,6 | 3   | 9                                                | 35                                             | 1,3                                | 0,6                            | K0317.910                 |
| K0327.12  | M12 | 6   | 4   | 28 | 10 | 5   | 2   | 2   | 4   | 12                                               | 55                                             | 2                                  | 1,3                            | K0317.912                 |
| K0327.16  | M16 | 7,5 | 5   | 32 | 14 | 6   | 2,5 | 2,5 | 5   | 45                                               | 100                                            | 3,9                                | 3                              | K0317.916                 |

## KIPP Spring plungers with hex socket and thrust pin, light spring force, with thread lock

| Order No. | D   | D1  | H   | L  | L1 | T   | T1  | N   | S   | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N | Tightening<br>torque<br>approx. Nm | Loosening torque<br>approx. Nm | Order No.<br>Assembly key |
|-----------|-----|-----|-----|----|----|-----|-----|-----|-----|--------------------------------------------------|------------------------------------------------|------------------------------------|--------------------------------|---------------------------|
| K0327.105 | M5  | 2,4 | 2,3 | 18 | 7  | 2   | 0,8 | 0,8 | 1,5 | 3                                                | 10                                             | 0,12                               | 0,08                           | K0317.905                 |
| K0327.106 | M6  | 2,7 | 2,5 | 20 | 7  | 2,5 | 1   | 1   | 2   | 3                                                | 9                                              | 0,45                               | 0,22                           | K0317.906                 |
| K0327.108 | M8  | 3,5 | 3   | 22 | 8  | 3   | 1,4 | 1,2 | 2,5 | 4                                                | 16                                             | 1,05                               | 0,37                           | K0317.908                 |
| K0327.110 | M10 | 4   | 3   | 22 | 9  | 3,5 | 1,4 | 1,6 | 3   | 4                                                | 16                                             | 1,3                                | 0,6                            | K0317.910                 |
| K0327.112 | M12 | 6   | 4   | 28 | 10 | 5   | 2   | 2   | 4   | 5                                                | 27                                             | 2                                  | 1,3                            | K0317.912                 |
| K0327.116 | M16 | 7,5 | 5   | 32 | 14 | 6   | 2,5 | 2,5 | 5   | 20                                               | 45                                             | 3,9                                | 3                              | K0317.916                 |

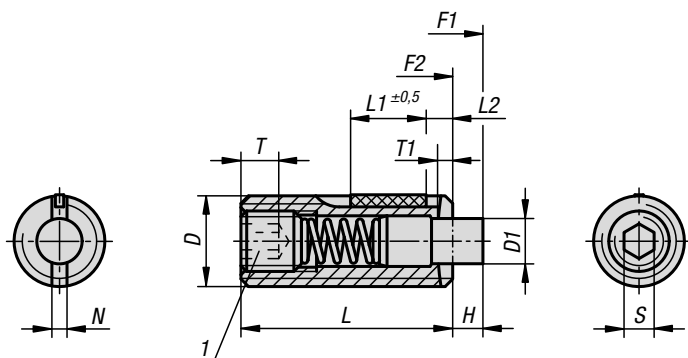
## KIPP Spring plungers with hex socket and thrust pin, heavy spring force, with thread lock

| Order No. | D   | D1  | H   | L  | L1 | T   | T1  | N   | S   | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N | Tightening<br>torque<br>approx. Nm | Loosening torque<br>approx. Nm | Order No.<br>Assembly key |
|-----------|-----|-----|-----|----|----|-----|-----|-----|-----|--------------------------------------------------|------------------------------------------------|------------------------------------|--------------------------------|---------------------------|
| K0327.205 | M5  | 2,4 | 2,3 | 18 | 7  | 2   | 0,8 | 0,8 | 1,5 | 11                                               | 29                                             | 0,12                               | 0,08                           | K0317.905                 |
| K0327.206 | M6  | 2,7 | 2,5 | 20 | 7  | 2,5 | 1   | 1   | 2   | 14                                               | 37                                             | 0,45                               | 0,22                           | K0317.906                 |
| K0327.208 | M8  | 3,5 | 3   | 22 | 8  | 3   | 1,4 | 1,2 | 2,5 | 22                                               | 65                                             | 1,05                               | 0,37                           | K0317.908                 |
| K0327.210 | M10 | 4   | 3   | 22 | 9  | 3,5 | 1,4 | 1,6 | 3   | 19                                               | 70                                             | 1,3                                | 0,6                            | K0317.910                 |
| K0327.212 | M12 | 6   | 4   | 28 | 10 | 5   | 2   | 2   | 4   | 25                                               | 85                                             | 2                                  | 1,3                            | K0317.912                 |
| K0327.216 | M16 | 7,5 | 5   | 32 | 14 | 6   | 2,5 | 2,5 | 5   | 60                                               | 150                                            | 3,9                                | 3                              | K0317.916                 |

## Spring plungers

with hex socket and flat thrust pin, steel, with thread lock

**KIPP**lock



### Material:

Sleeve in steel grade 5.8;  
thrust pin in steel.  
Spring grade D spring steel wire.

Thread lock nylon.

### Version:

Black oxidised.  
Thrust pin hardened.

### Sample order:

K1371.16

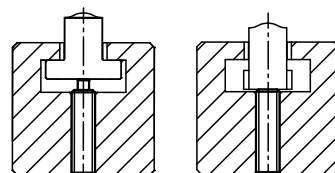
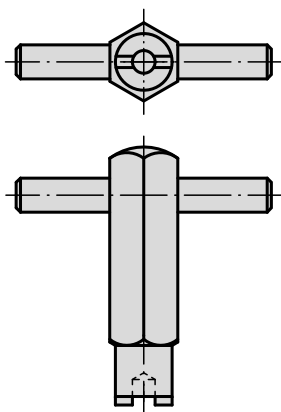
### Note:

These spring plungers are chiefly used as ejectors and spring stops in machine construction.  
The thrust pin is actuated in the axial direction.

### Drawing reference:

L2 = ca. two full threads

1) grub screw glued-in



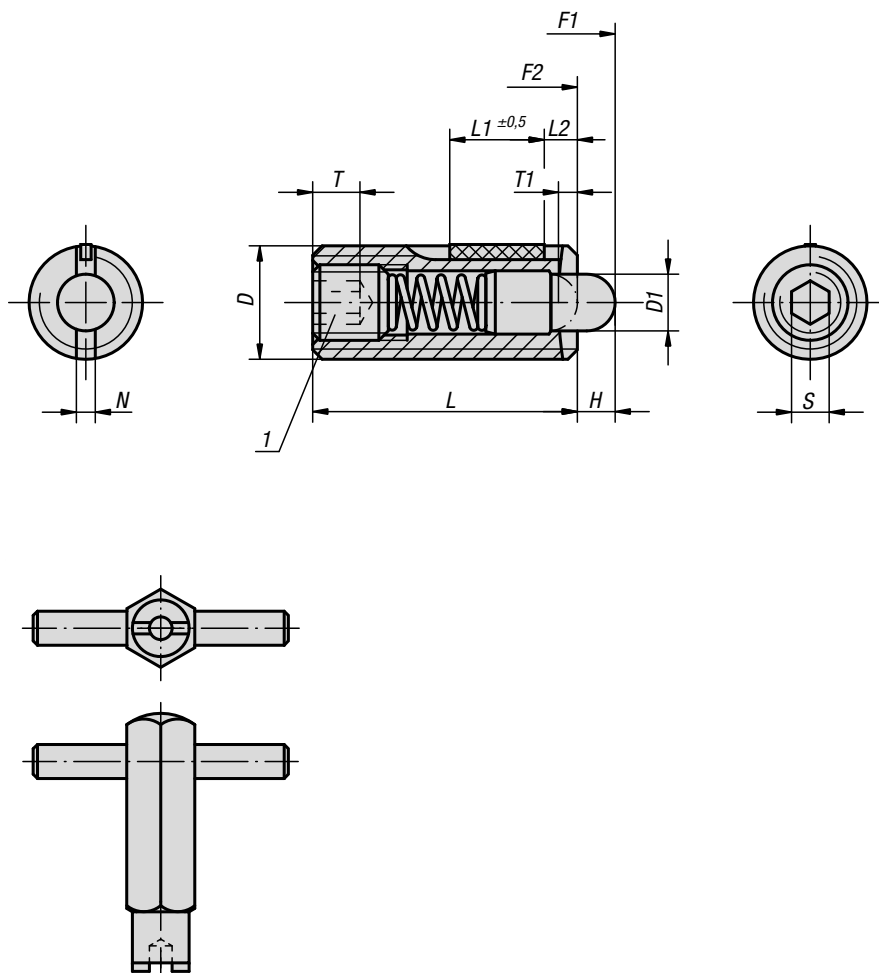
### KIPP Spring plungers with hex socket and flat thrust pin, standard spring force, with thread lock

| Order No. | D   | D1  | H   | L  | L1 | T   | T1  | N   | S   | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N | Tightening<br>torque<br>approx. Nm | Loosening torque<br>approx. Nm | Order No.<br>Assembly key |
|-----------|-----|-----|-----|----|----|-----|-----|-----|-----|--------------------------------------------------|------------------------------------------------|------------------------------------|--------------------------------|---------------------------|
| K1371.05  | M5  | 2,4 | 2,3 | 18 | 7  | 2   | 0,8 | 0,8 | 1,5 | 6                                                | 20                                             | 0,12                               | 0,08                           | K0317.905                 |
| K1371.06  | M6  | 2,7 | 2,5 | 20 | 7  | 2,5 | 1   | 1   | 2   | 7                                                | 20                                             | 0,45                               | 0,22                           | K0317.906                 |
| K1371.08  | M8  | 3,5 | 3   | 22 | 8  | 3   | 1,4 | 1,2 | 2,5 | 9                                                | 35                                             | 1,05                               | 0,37                           | K0317.908                 |
| K1371.10  | M10 | 4   | 3   | 22 | 9  | 3,5 | 1,4 | 1,6 | 3   | 9                                                | 35                                             | 1,3                                | 0,6                            | K0317.910                 |
| K1371.12  | M12 | 6   | 4   | 28 | 10 | 5   | 2   | 2   | 4   | 12                                               | 55                                             | 2                                  | 1,3                            | K0317.912                 |
| K1371.16  | M16 | 7,5 | 5   | 32 | 14 | 6   | 2,5 | 2,5 | 5   | 45                                               | 100                                            | 3,9                                | 3                              | K0317.916                 |

# Spring plungers

with hex socket and POM thrust pin, steel, with thread lock

**KIPPl**ock



## Material:

Sleeve steel grade 5.8.

Thrust pin POM.

Spring grade D spring steel wire.

Thread lock nylon.

## Version:

Black oxidised.

## Sample order:

K0328.12

## Drawing reference:

L2 = ca. two full threads

1) grub screw glued-in

## KIPP Spring plungers with hex socket and thrust pin, standard spring force, with thread lock

| Order No. | D   | D1  | H   | L  | L1 | T   | T1  | N   | S   | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N | Tightening<br>torque<br>approx. Nm | Loosening torque<br>approx. Nm | Order No.<br>Assembly key |
|-----------|-----|-----|-----|----|----|-----|-----|-----|-----|--------------------------------------------------|------------------------------------------------|------------------------------------|--------------------------------|---------------------------|
| K0328.05  | M5  | 2,4 | 2,3 | 18 | 7  | 2   | 0,8 | 0,8 | 1,5 | 6                                                | 20                                             | 0,12                               | 0,08                           | K0317.905                 |
| K0328.06  | M6  | 2,7 | 2,5 | 20 | 7  | 2,5 | 1   | 1   | 2   | 7                                                | 20                                             | 0,45                               | 0,22                           | K0317.906                 |
| K0328.08  | M8  | 3,5 | 3   | 22 | 8  | 3   | 1,4 | 1,2 | 2,5 | 9                                                | 35                                             | 1,05                               | 0,37                           | K0317.908                 |
| K0328.10  | M10 | 4   | 3   | 22 | 9  | 3,5 | 1,4 | 1,6 | 3   | 9                                                | 35                                             | 1,3                                | 0,6                            | K0317.910                 |
| K0328.12  | M12 | 6   | 4   | 28 | 10 | 5   | 2   | 2   | 4   | 12                                               | 55                                             | 2                                  | 1,3                            | K0317.912                 |
| K0328.16  | M16 | 7,5 | 5   | 32 | 14 | 6   | 2,5 | 2,5 | 5   | 45                                               | 100                                            | 3,9                                | 3                              | K0317.916                 |

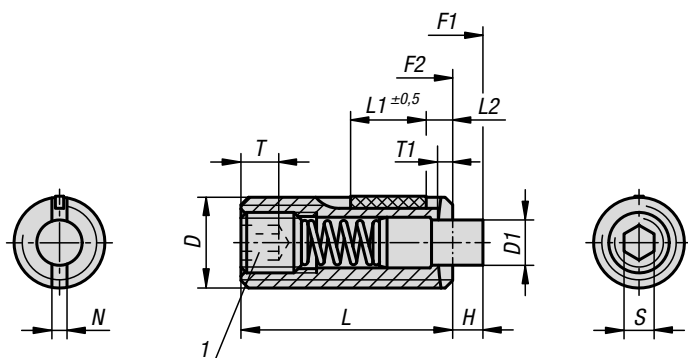
## KIPP Spring plungers with hex socket and thrust pin, light spring force, with thread lock

| Order No. | D   | D1  | H   | L  | L1 | T   | T1  | N   | S   | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N | Tightening<br>torque<br>approx. Nm | Loosening torque<br>approx. Nm | Order No.<br>Assembly key |
|-----------|-----|-----|-----|----|----|-----|-----|-----|-----|--------------------------------------------------|------------------------------------------------|------------------------------------|--------------------------------|---------------------------|
| K0328.105 | M5  | 2,4 | 2,3 | 18 | 7  | 2   | 0,8 | 0,8 | 1,5 | 3                                                | 10                                             | 0,12                               | 0,08                           | K0317.905                 |
| K0328.106 | M6  | 2,7 | 2,5 | 20 | 7  | 2,5 | 1   | 1   | 2   | 3                                                | 9                                              | 0,45                               | 0,22                           | K0317.906                 |
| K0328.108 | M8  | 3,5 | 3   | 22 | 8  | 3   | 1,4 | 1,2 | 2,5 | 4                                                | 16                                             | 1,05                               | 0,37                           | K0317.908                 |
| K0328.110 | M10 | 4   | 3   | 22 | 9  | 3,5 | 1,4 | 1,6 | 3   | 4                                                | 16                                             | 1,3                                | 0,6                            | K0317.910                 |
| K0328.112 | M12 | 6   | 4   | 28 | 10 | 5   | 2   | 2   | 4   | 5                                                | 27                                             | 2                                  | 1,3                            | K0317.912                 |
| K0328.116 | M16 | 7,5 | 5   | 32 | 14 | 6   | 2,5 | 2,5 | 5   | 20                                               | 45                                             | 3,9                                | 3                              | K0317.916                 |

## Spring plungers

with hex socket and flat POM thrust pin, steel, with thread lock

**KIPPlock**



### Material:

Sleeve steel grade 5.8.

Thrust pin POM.

Spring grade D spring steel wire.

Thread lock nylon.

### Version:

Black oxidised.

### Sample order:

K1373.16

### Note:

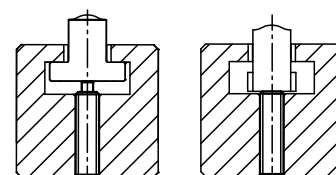
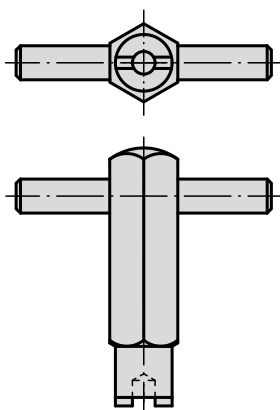
These spring plungers are chiefly used as ejectors and spring stops in machine construction.

The thrust pin is actuated in the axial direction.

### Drawing reference:

L2 = ca. two full threads

1) grub screw glued-in



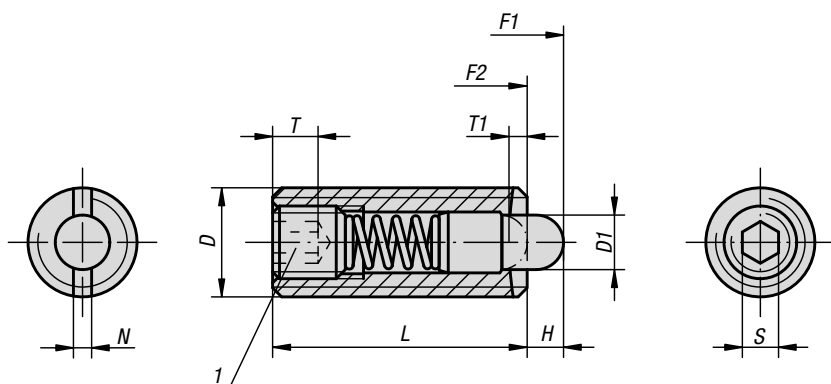
### KIPP Spring plungers with hex socket and flat thrust pin, standard spring force, with thread lock

| Order No. | D   | D1  | H   | L  | L1 | T   | T1  | N   | S   | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N | Tightening<br>torque<br>approx. Nm | Loosening torque<br>approx. Nm | Order No.<br>Assembly key |
|-----------|-----|-----|-----|----|----|-----|-----|-----|-----|--------------------------------------------------|------------------------------------------------|------------------------------------|--------------------------------|---------------------------|
| K1373.05  | M5  | 2,4 | 2,3 | 18 | 7  | 2   | 0,8 | 0,8 | 1,5 | 6                                                | 20                                             | 0,12                               | 0,08                           | K0317.905                 |
| K1373.06  | M6  | 2,7 | 2,5 | 20 | 7  | 2,5 | 1   | 1   | 2   | 7                                                | 20                                             | 0,45                               | 0,22                           | K0317.906                 |
| K1373.08  | M8  | 3,5 | 3   | 22 | 8  | 3   | 1,4 | 1,2 | 2,5 | 9                                                | 35                                             | 1,05                               | 0,37                           | K0317.908                 |
| K1373.10  | M10 | 4   | 3   | 22 | 9  | 3,5 | 1,4 | 1,6 | 3   | 9                                                | 35                                             | 1,3                                | 0,6                            | K0317.910                 |
| K1373.12  | M12 | 6   | 4   | 28 | 10 | 5   | 2   | 2   | 4   | 12                                               | 55                                             | 2                                  | 1,3                            | K0317.912                 |
| K1373.16  | M16 | 7,5 | 5   | 32 | 14 | 6   | 2,5 | 2,5 | 5   | 45                                               | 100                                            | 3,9                                | 3                              | K0317.916                 |



## Spring plungers

with hex socket and thrust pin, stainless steel, with thread lock



**Material:**  
Sleeve 1.4305.  
Thrust pin 1.4034.  
Spring 1.4310.

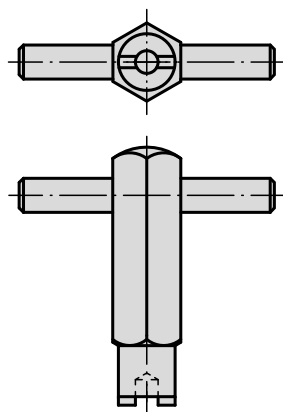
Thread lock nylon.

**Version:**  
Bright.  
Thrust pin hardened.

**Sample order:**  
K0329.12

**Drawing reference:**  
L2 = ca. two full threads

1) grub screw glued-in



### KIPP Spring plungers with hex socket and thrust pin, standard spring force, with thread lock

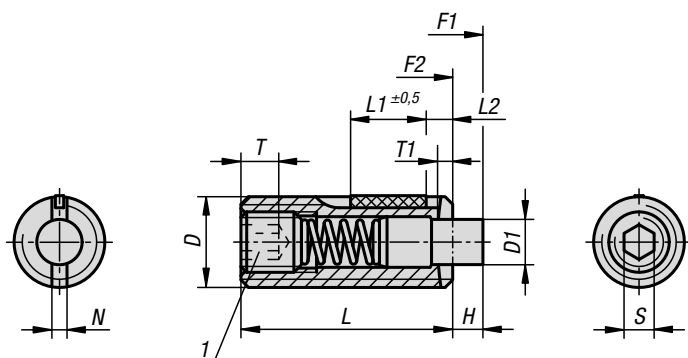
| Order No. | D   | D1  | H   | L  | L1 | T   | T1  | N   | S   | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N | Tightening<br>torque<br>approx. Nm | Loosening torque<br>approx. Nm | Order No.<br>Assembly key |
|-----------|-----|-----|-----|----|----|-----|-----|-----|-----|--------------------------------------------------|------------------------------------------------|------------------------------------|--------------------------------|---------------------------|
| K0329.05  | M5  | 2,4 | 2,3 | 18 | 7  | 2   | 0,8 | 0,8 | 1,5 | 5                                                | 17                                             | 0,12                               | 0,08                           | K0317.905                 |
| K0329.06  | M6  | 2,7 | 2,5 | 20 | 7  | 2,5 | 1   | 1   | 2   | 6                                                | 17                                             | 0,45                               | 0,22                           | K0317.906                 |
| K0329.08  | M8  | 3,5 | 3   | 22 | 8  | 3   | 1,4 | 1,2 | 2,5 | 7                                                | 29                                             | 1,05                               | 0,37                           | K0317.908                 |
| K0329.10  | M10 | 4   | 3   | 22 | 9  | 3,5 | 1,4 | 1,6 | 3   | 8                                                | 31                                             | 1,3                                | 0,6                            | K0317.910                 |
| K0329.12  | M12 | 6   | 4   | 28 | 10 | 5   | 2   | 2   | 4   | 10                                               | 47                                             | 2                                  | 1,3                            | K0317.912                 |
| K0329.16  | M16 | 7,5 | 5   | 32 | 14 | 6   | 2,5 | 2,5 | 5   | 38                                               | 85                                             | 3,9                                | 3                              | K0317.916                 |

### KIPP Spring plungers with hex socket and thrust pin, heavy spring force, with thread lock

| Order No. | D   | D1  | H   | L  | L1 | T   | T1  | N   | S   | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N | Tightening<br>torque<br>approx. Nm | Loosening torque<br>approx. Nm | Order No.<br>Assembly key |
|-----------|-----|-----|-----|----|----|-----|-----|-----|-----|--------------------------------------------------|------------------------------------------------|------------------------------------|--------------------------------|---------------------------|
| K0329.205 | M5  | 2,4 | 2,3 | 18 | 7  | 2   | 0,8 | 0,8 | 1,5 | 9                                                | 26                                             | 0,12                               | 0,08                           | K0317.905                 |
| K0329.206 | M6  | 2,7 | 2,5 | 20 | 7  | 2,5 | 1   | 1   | 2   | 11                                               | 35                                             | 0,45                               | 0,22                           | K0317.906                 |
| K0329.208 | M8  | 3,5 | 3   | 22 | 8  | 3   | 1,4 | 1,2 | 2,5 | 15                                               | 48                                             | 1,05                               | 0,37                           | K0317.908                 |
| K0329.210 | M10 | 4   | 3   | 22 | 9  | 3,5 | 1,4 | 1,6 | 3   | 15                                               | 58                                             | 1,3                                | 0,6                            | K0317.910                 |
| K0329.212 | M12 | 6   | 4   | 28 | 10 | 5   | 2   | 2   | 4   | 19                                               | 74                                             | 2                                  | 1,3                            | K0317.912                 |

## Spring plungers

with hex socket and flat thrust pin, stainless steel, with thread lock



### Material:

Sleeve 1.4305.  
Thrust pin 1.4034.  
Spring 1.4310.

Thread lock nylon.

### Version:

Bright.  
Thrust pin hardened.

### Sample order:

K1380.16

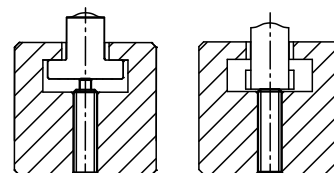
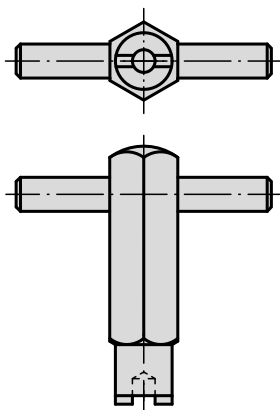
### Note:

These spring plungers are chiefly used as ejectors and spring stops in machine construction.  
The thrust pin is actuated in the axial direction.

### Drawing reference:

L2 = ca. two full threads

1) grub screw glued-in

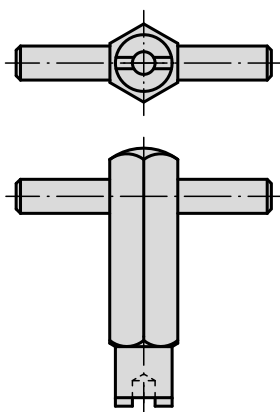
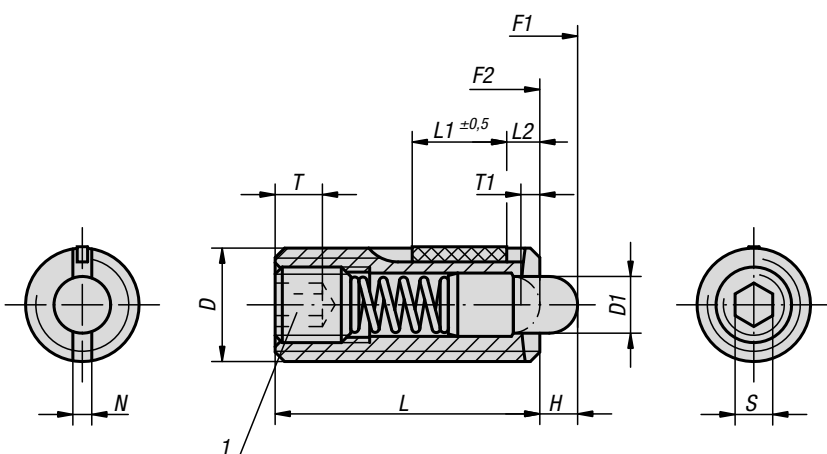


### KIPP Spring plungers with hex socket and flat thrust pin, standard spring force, with thread lock

| Order No. | D   | D1  | H   | L  | L1 | T   | T1  | N   | S   | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N | Tightening<br>torque<br>approx. Nm | Loosening torque<br>approx. Nm | Order No.<br>Assembly key |
|-----------|-----|-----|-----|----|----|-----|-----|-----|-----|--------------------------------------------------|------------------------------------------------|------------------------------------|--------------------------------|---------------------------|
| K1380.05  | M5  | 2,4 | 2,3 | 18 | 7  | 2   | 0,8 | 0,8 | 1,5 | 5                                                | 17                                             | 0,12                               | 0,08                           | K0317.905                 |
| K1380.06  | M6  | 2,7 | 2,5 | 20 | 7  | 2,5 | 1   | 1   | 2   | 6                                                | 17                                             | 0,45                               | 0,22                           | K0317.906                 |
| K1380.08  | M8  | 3,5 | 3   | 22 | 8  | 3   | 1,4 | 1,2 | 2,5 | 7                                                | 29                                             | 1,05                               | 0,37                           | K0317.908                 |
| K1380.10  | M10 | 4   | 3   | 22 | 9  | 3,5 | 1,4 | 1,6 | 3   | 8                                                | 31                                             | 1,3                                | 0,6                            | K0317.910                 |
| K1380.12  | M12 | 6   | 4   | 28 | 10 | 5   | 2   | 2   | 4   | 10                                               | 47                                             | 2                                  | 1,3                            | K0317.912                 |
| K1380.16  | M16 | 7,5 | 5   | 32 | 14 | 6   | 2,5 | 2,5 | 5   | 38                                               | 85                                             | 3,9                                | 3                              | K0317.916                 |

# Spring plungers

with hex socket and POM thrust pin, stainless steel, with thread lock



## Material:

Sleeve stainless steel 1.4305.

Thrust pin POM.

Spring stainless steel 1.4310.

Thread lock nylon.

## Version:

Bright.

## Sample order:

K0330.12

## Drawing reference:

L2 = ca. two full threads

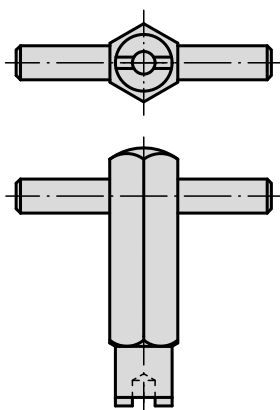
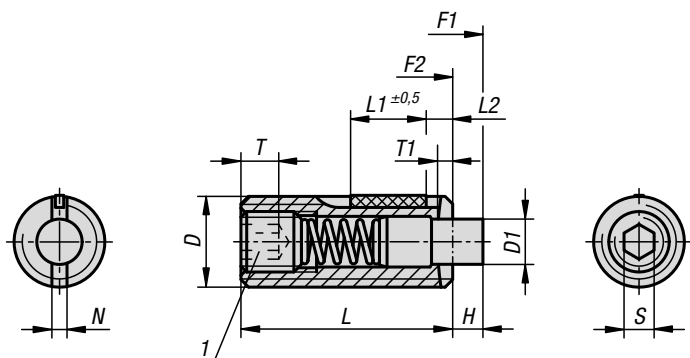
1) grub screw glued-in

## KIPP Spring plungers with hex socket and thrust pin, standard spring force, with thread lock

| Order No. | D   | D1  | H   | L  | L1 | T   | T1  | N   | S   | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N | Tightening<br>torque<br>approx. Nm | Loosening torque<br>approx. Nm | Order No.<br>Assembly key |
|-----------|-----|-----|-----|----|----|-----|-----|-----|-----|--------------------------------------------------|------------------------------------------------|------------------------------------|--------------------------------|---------------------------|
| K0330.05  | M5  | 2,4 | 2,3 | 18 | 7  | 2   | 0,8 | 0,8 | 1,5 | 5                                                | 17                                             | 0,12                               | 0,08                           | K0317.905                 |
| K0330.06  | M6  | 2,7 | 2,5 | 20 | 7  | 2,5 | 1   | 1   | 2   | 6                                                | 17                                             | 0,45                               | 0,22                           | K0317.906                 |
| K0330.08  | M8  | 3,5 | 3   | 22 | 8  | 3   | 1,4 | 1,2 | 2,5 | 7                                                | 29                                             | 1,05                               | 0,37                           | K0317.908                 |
| K0330.10  | M10 | 4   | 3   | 22 | 9  | 3,5 | 1,4 | 1,6 | 3   | 8                                                | 31                                             | 1,3                                | 0,6                            | K0317.910                 |
| K0330.12  | M12 | 6   | 4   | 28 | 10 | 5   | 2   | 2   | 4   | 10                                               | 47                                             | 2                                  | 1,3                            | K0317.912                 |
| K0330.16  | M16 | 7,5 | 5   | 32 | 14 | 6   | 2,5 | 2,5 | 5   | 38                                               | 85                                             | 3,9                                | 3                              | K0317.916                 |

## Spring plungers

with hex socket and flat POM thrust pin, stainless steel, with thread lock



### Material:

Sleeve stainless steel 1.4305.

Thrust pin POM.

Spring stainless steel 1.4310.

Thread lock nylon.

### Version:

Bright.

### Sample order:

K1382.16

### Note:

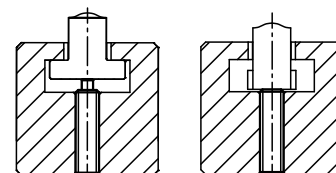
These spring plungers are chiefly used as ejectors and spring stops in machine construction.

The thrust pin is actuated in the axial direction.

### Drawing reference:

L2 = ca. two full threads

1) grub screw glued-in

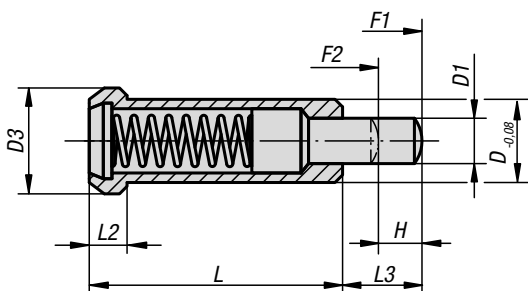


### KIPP Spring plungers with hex socket and flat thrust pin, standard spring force, with thread lock

| Order No. | D   | D1  | H   | L  | L1 | T   | T1  | N   | S   | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N | Tightening<br>torque<br>approx. Nm | Loosening torque<br>approx. Nm | Order No.<br>Assembly key |
|-----------|-----|-----|-----|----|----|-----|-----|-----|-----|--------------------------------------------------|------------------------------------------------|------------------------------------|--------------------------------|---------------------------|
| K1382.05  | M5  | 2,4 | 2,3 | 18 | 7  | 2   | 0,8 | 0,8 | 1,5 | 5                                                | 17                                             | 0,12                               | 0,08                           | K0317.905                 |
| K1382.06  | M6  | 2,7 | 2,5 | 20 | 7  | 2,5 | 1   | 1   | 2   | 6                                                | 17                                             | 0,45                               | 0,22                           | K0317.906                 |
| K1382.08  | M8  | 3,5 | 3   | 22 | 8  | 3   | 1,4 | 1,2 | 2,5 | 7                                                | 29                                             | 1,05                               | 0,37                           | K0317.908                 |
| K1382.10  | M10 | 4   | 3   | 22 | 9  | 3,5 | 1,4 | 1,6 | 3   | 8                                                | 31                                             | 1,3                                | 0,6                            | K0317.910                 |
| K1382.12  | M12 | 6   | 4   | 28 | 10 | 5   | 2   | 2   | 4   | 10                                               | 47                                             | 2                                  | 1,3                            | K0317.912                 |
| K1382.16  | M16 | 7,5 | 5   | 32 | 14 | 6   | 2,5 | 2,5 | 5   | 38                                               | 85                                             | 3,9                                | 3                              | K0317.916                 |

## Spring plungers

with head

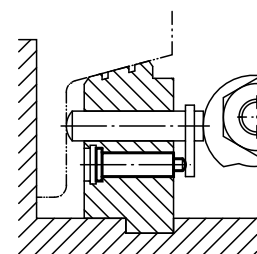


**Material:**  
Steel.

**Version:**  
Black oxidised.  
Thrust pin hardened.

**Sample order:**  
K0331.10

**Note:**  
These spring plungers are chiefly used as ejectors and spring stops in machine construction.



### KIPP Spring plungers with head

| Order No. | D  | D1   | D3 | H   | L  | L2  | L3 | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|-----------|----|------|----|-----|----|-----|----|--------------------------------------------------|------------------------------------------------|
| K0331.06  | 6  | 2,95 | 8  | 3,5 | 20 | 3,2 | 6  | 10                                               | 22                                             |
| K0331.08  | 8  | 3,95 | 10 | 4,5 | 24 | 3,2 | 8  | 30                                               | 90                                             |
| K0331.10  | 10 | 5,95 | 13 | 5,5 | 30 | 4   | 10 | 42                                               | 110                                            |
| K0331.12  | 12 | 7,95 | 16 | 6,5 | 36 | 5   | 12 | 50                                               | 130                                            |

## Locators

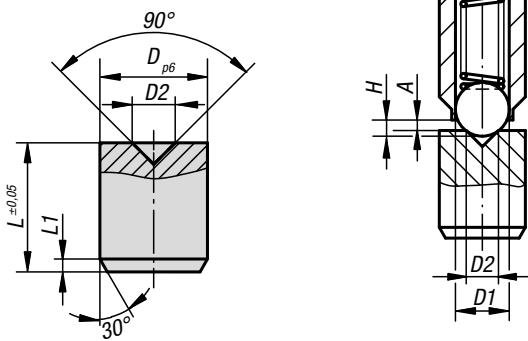


**Material:**  
Steel.

**Version:**  
Bright, hardened.

**Sample order:**  
K0332.05020

**Note:**  
If abrasion-resistant and exact locking is necessary, locators can be used together with spring plungers, especially with strong spring force.



$$A = H - \left( \frac{D1 + D2}{2} - \frac{\sqrt{2}}{2} \times D1 \right)$$

## KIPP Locators

| Order No.   | Suitable for<br>spring plungers<br>with ØD | D  | D1                                   | D2  | H                                    | L  | L1  |
|-------------|--------------------------------------------|----|--------------------------------------|-----|--------------------------------------|----|-----|
| K0332.04015 | - / M4                                     | 4  | see relevant products for dimensions | 1,5 | see relevant products for dimensions | 5  | 0,5 |
| K0332.05020 | Ø4 / M5                                    | 5  | see relevant products for dimensions | 2   | see relevant products for dimensions | 6  | 0,5 |
| K0332.06020 | Ø5 / M6                                    | 6  | see relevant products for dimensions | 2   | see relevant products for dimensions | 8  | 0,7 |
| K0332.08030 | Ø6 / M8                                    | 8  | see relevant products for dimensions | 3   | see relevant products for dimensions | 10 | 1   |
| K0332.10040 | Ø8 / M10                                   | 10 | see relevant products for dimensions | 4   | see relevant products for dimensions | 12 | 1,2 |
| K0332.12060 | Ø10 / M12                                  | 12 | see relevant products for dimensions | 6   | see relevant products for dimensions | 14 | 1,5 |
| K0332.16080 | Ø12 / M16                                  | 16 | see relevant products for dimensions | 8   | see relevant products for dimensions | 18 | 2   |

## Spring plungers

smooth version, stainless steel



### Material:

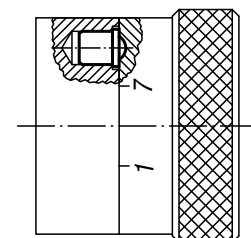
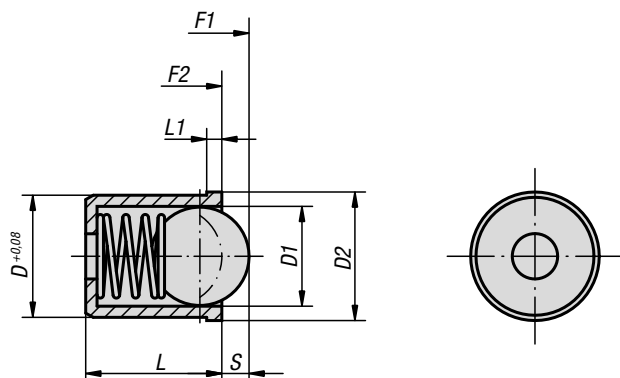
Sleeve and spring stainless steel.  
Ball stainless steel or POM.

### Version:

Sleeve bright.  
Steel ball hardened and bright.

### Sample order:

K0333.05

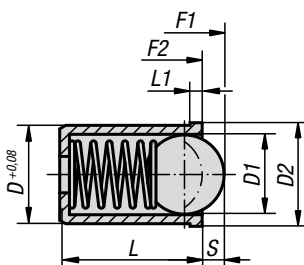


### KIPP Spring plungers smooth version, stainless steel

| Order No. | Component material | D  | D1  | D2  | L    | L1  | Travel S | Spring force initial pressure F1 approx. N | Spring force final pressure F2 approx. N |
|-----------|--------------------|----|-----|-----|------|-----|----------|--------------------------------------------|------------------------------------------|
| K0333.02  | stainless steel    | 2  | 1,5 | 2,5 | 3    | 0,6 | 0,4      | 1,2                                        | 2,5                                      |
| K0333.03  | stainless steel    | 3  | 2,5 | 3,5 | 4    | 0,8 | 0,65     | 1,7                                        | 3,4                                      |
| K0333.04  | stainless steel    | 4  | 3   | 4,6 | 5    | 1   | 0,8      | 3                                          | 7                                        |
| K0333.05  | stainless steel    | 5  | 4   | 5,6 | 6    | 1   | 1        | 4                                          | 7                                        |
| K0333.06  | stainless steel    | 6  | 5   | 6,5 | 7    | 1   | 1,5      | 6                                          | 12                                       |
| K0333.08  | stainless steel    | 8  | 6,5 | 8,5 | 9    | 1   | 1,8      | 6                                          | 12                                       |
| K0333.10  | stainless steel    | 10 | 8   | 12  | 13,5 | 2,5 | 2,7      | 10                                         | 20                                       |
| K0333.12  | stainless steel    | 12 | 10  | 14  | 16   | 2,5 | 3,5      | 15                                         | 25                                       |
| K0333.304 | POM                | 4  | 3   | 4,6 | 5    | 1   | 0,6      | 3                                          | 7                                        |
| K0333.305 | POM                | 5  | 4   | 5,6 | 6    | 1   | 0,8      | 4                                          | 7                                        |
| K0333.306 | POM                | 6  | 5   | 6,5 | 7    | 1   | 1,3      | 6                                          | 12                                       |
| K0333.308 | POM                | 8  | 6,5 | 8,5 | 9    | 1   | 1,6      | 6                                          | 12                                       |
| K0333.310 | POM                | 10 | 8   | 12  | 13,5 | 2,5 | 2,6      | 10                                         | 20                                       |
| K0333.312 | POM                | 12 | 10  | 14  | 16   | 2,5 | 3,3      | 15                                         | 25                                       |

# Spring plungers

smooth version, extended, stainless steel



## Material:

Sleeve and spring stainless steel.  
Ball stainless steel or POM.

## Version:

Sleeve bright.  
Steel ball hardened and bright.

## Sample order:

K0333.104

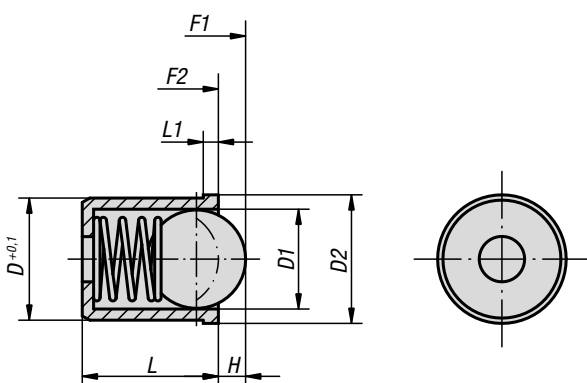
## KIPP Spring plungers smooth version, extended, stainless steel

| Order No. | Component material | D  | D1 | D2  | L  | L1  | Travel S | Spring force initial pressure F1 approx. N | Spring force final pressure F2 approx. N |
|-----------|--------------------|----|----|-----|----|-----|----------|--------------------------------------------|------------------------------------------|
| K0333.104 | stainless steel    | 4  | 3  | 4,6 | 9  | 1   | 0,8      | 12                                         | 22                                       |
| K0333.105 | stainless steel    | 5  | 4  | 5,6 | 12 | 1   | 1        | 19                                         | 30                                       |
| K0333.106 | stainless steel    | 6  | 5  | 6,5 | 14 | 1   | 1,5      | 22                                         | 40                                       |
| K0333.108 | stainless steel    | 8  | 6  | 8,5 | 16 | 1   | 1,8      | 42                                         | 73                                       |
| K0333.110 | stainless steel    | 10 | 8  | 12  | 22 | 2,5 | 2,7      | 54                                         | 100                                      |
| K0333.112 | stainless steel    | 12 | 10 | 14  | 24 | 2,5 | 3,5      | 54                                         | 122                                      |
| K0333.404 | POM                | 4  | 3  | 4,6 | 9  | 1   | 0,6      | 12                                         | 22                                       |
| K0333.405 | POM                | 5  | 4  | 5,6 | 12 | 1   | 0,8      | 19                                         | 30                                       |
| K0333.406 | POM                | 6  | 5  | 6,5 | 14 | 1   | 1,3      | 22                                         | 40                                       |
| K0333.408 | POM                | 8  | 6  | 8,5 | 16 | 1   | 1,6      | 42                                         | 73                                       |
| K0333.410 | POM                | 10 | 8  | 12  | 22 | 2,5 | 2,6      | 54                                         | 100                                      |
| K0333.412 | POM                | 12 | 10 | 14  | 24 | 2,5 | 3,3      | 54                                         | 122                                      |



# Spring plungers

smooth version, plastic



## Material:

Sleeve thermoplastic.  
Spring stainless steel.  
Ball stainless steel or POM.

## Version:

Sleeve black.  
Ball hardened, bright.

## Sample order:

K0334.05

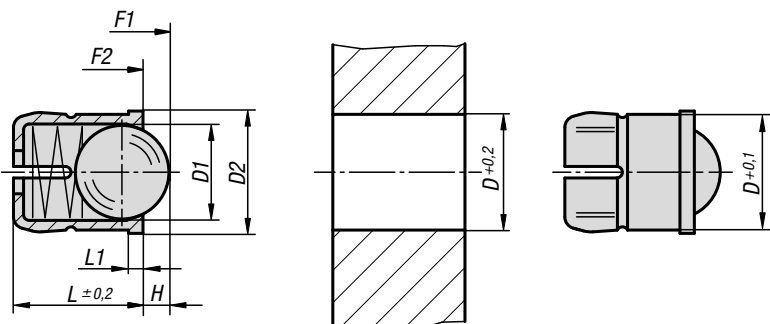


## KIPP Spring plungers smooth version, plastic

| Order No. | Component material | D  | D1  | D2  | H   | L    | L1  | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|-----------|--------------------|----|-----|-----|-----|------|-----|--------------------------------------------------|------------------------------------------------|
| K0334.04  | stainless steel    | 4  | 3   | 4,6 | 0,7 | 5    | 1   | 3                                                | 7                                              |
| K0334.05  | stainless steel    | 5  | 4   | 5,6 | 1   | 6    | 1   | 4                                                | 7                                              |
| K0334.06  | stainless steel    | 6  | 5   | 6,5 | 1,5 | 7    | 1   | 6                                                | 12                                             |
| K0334.08  | stainless steel    | 8  | 6,5 | 8,5 | 1,8 | 9    | 1   | 6                                                | 12                                             |
| K0334.10  | stainless steel    | 10 | 8   | 12  | 2,7 | 13,5 | 2,5 | 10                                               | 20                                             |
| K0334.12  | stainless steel    | 12 | 10  | 14  | 3,5 | 16   | 2,5 | 15                                               | 25                                             |
| K0334.204 | POM                | 4  | 3   | 4,6 | 0,7 | 5    | 1   | 3                                                | 7                                              |
| K0334.205 | POM                | 5  | 4   | 5,6 | 1   | 6    | 1   | 4                                                | 7                                              |
| K0334.206 | POM                | 6  | 5   | 6,5 | 1,5 | 7    | 1   | 6                                                | 12                                             |
| K0334.208 | POM                | 8  | 6,5 | 8,5 | 1,8 | 9    | 1   | 6                                                | 12                                             |
| K0334.210 | POM                | 10 | 8   | 12  | 2,7 | 13,5 | 2,5 | 10                                               | 20                                             |
| K0334.212 | POM                | 12 | 10  | 14  | 3,5 | 16   | 2,5 | 15                                               | 25                                             |

## Spring plungers

smooth version, self-clamping, plastic



### Material:

Sleeve thermoplastic.  
Spring stainless steel.  
Ball stainless steel or POM.

### Version:

Sleeve black.  
Ball hardened, bright.

### Sample order:

K1171.04

### Note:

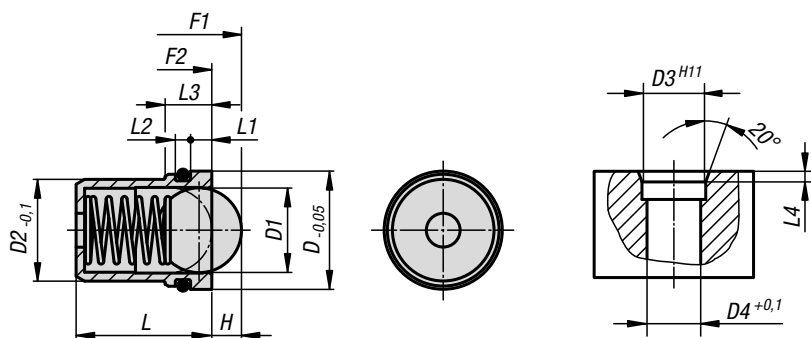
The self-locking function of the spring plunger enables simple assembly and secure overhead installation.

## KIPP Spring plungers, smooth version, self-locking, plastic

| Order No. | Component material | D  | D1  | D2  | L    | L1  | H   | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|-----------|--------------------|----|-----|-----|------|-----|-----|--------------------------------------------------|------------------------------------------------|
| K1171.04  | stainless steel    | 4  | 3   | 4,6 | 5    | 1   | 0,8 | 3                                                | 6,5                                            |
| K1171.05  | stainless steel    | 5  | 4   | 5,6 | 6    | 1   | 1   | 6                                                | 9,4                                            |
| K1171.06  | stainless steel    | 6  | 5   | 6,5 | 7    | 1   | 1,6 | 6,2                                              | 12,6                                           |
| K1171.08  | stainless steel    | 8  | 6,5 | 8,5 | 9    | 1   | 1,9 | 10                                               | 20,4                                           |
| K1171.10  | stainless steel    | 10 | 8   | 11  | 13,5 | 1,5 | 2,4 | 11,9                                             | 22,3                                           |
| K1171.204 | POM                | 4  | 3   | 4,6 | 5    | 1   | 0,8 | 3                                                | 6,5                                            |
| K1171.205 | POM                | 5  | 4   | 5,6 | 6    | 1   | 1   | 6                                                | 9,4                                            |
| K1171.206 | POM                | 6  | 5   | 6,5 | 7    | 1   | 1,6 | 6,2                                              | 12,6                                           |
| K1171.208 | POM                | 8  | 6,5 | 8,5 | 9    | 1   | 1,9 | 10                                               | 20,4                                           |
| K1171.210 | POM                | 10 | 8   | 11  | 13,5 | 1,5 | 2,4 | 11,9                                             | 22,3                                           |

## Spring plungers

with detent ring



### Material:

Sleeve, spring and ball stainless steel.  
O-ring NBR.

### Version:

Sleeve bright.  
Ball hardened, bright.  
O-ring black.

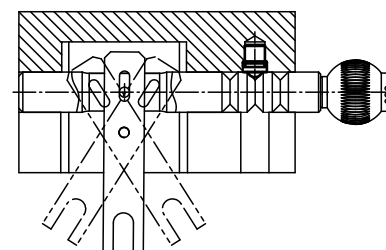
### Sample order:

K0582.05

### Note:

These spring plungers with O-ring are suitable for overhead installation or for installing in difficult to access positions.

They can be pressed into the location hole by hand or using simple assembly tools. The O-ring holds the plunger in place and prevents it falling out. Other components can be easily installed without the need for further assembly aids.

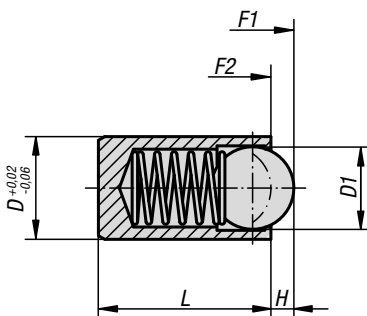


### KIPP Spring plungers with detent ring

| Order No. | D     | D1  | D2 | D3 | D4   | H   | L    | L1  | L2  | L3  | L4  | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|-----------|-------|-----|----|----|------|-----|------|-----|-----|-----|-----|--------------------------------------------------|------------------------------------------------|
| K0582.05  | 4,95  | 3   | 4  | 5  | 4,1  | 0,8 | 5    | 1   | 0,7 | 2,3 | 0,7 | 3                                                | 7                                              |
| K0582.06  | 5,95  | 4   | 5  | 6  | 5,1  | 1   | 6    | 1   | 0,7 | 2,3 | 0,7 | 4                                                | 7                                              |
| K0582.08  | 7,95  | 5   | 6  | 8  | 6,1  | 1,5 | 7    | 1,5 | 1,2 | 3,7 | 1   | 6                                                | 12                                             |
| K0582.10  | 9,95  | 6,5 | 8  | 10 | 8,1  | 1,8 | 9    | 2   | 1,2 | 4,2 | 1,5 | 6                                                | 12                                             |
| K0582.12  | 11,95 | 8   | 10 | 12 | 10,1 | 2,7 | 13,5 | 2,5 | 1,8 | 5,3 | 2   | 10                                               | 20                                             |
| K0582.14  | 13,95 | 10  | 12 | 14 | 12,1 | 3,5 | 16   | 2,5 | 1,8 | 5,5 | 2   | 15                                               | 25                                             |

# Spring plungers

smooth version without collar, stainless steel


**Material:**

Sleeve and spring stainless steel.  
Ball stainless steel or POM.

**Version:**

Ball hardened, bright.

**Sample order:**

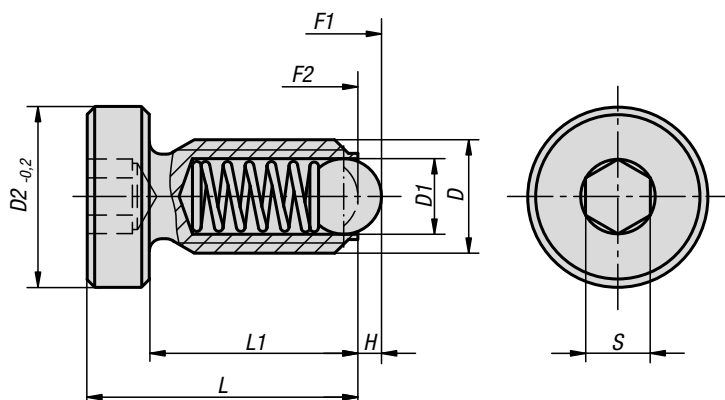
K0335.208

## KIPP Spring plungers smooth version, without collar, stainless steel

| Order No. | Component material | D  | D1 | H    | L  | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|-----------|--------------------|----|----|------|----|--------------------------------------------------|------------------------------------------------|
| K0335.203 | stainless steel    | 3  | 2  | 0,65 | 7  | 5                                                | 7                                              |
| K0335.204 | stainless steel    | 4  | 3  | 0,8  | 9  | 12                                               | 22                                             |
| K0335.205 | stainless steel    | 5  | 4  | 1    | 12 | 19                                               | 30                                             |
| K0335.206 | stainless steel    | 6  | 5  | 1,5  | 14 | 22                                               | 40                                             |
| K0335.208 | stainless steel    | 8  | 6  | 1,8  | 16 | 42                                               | 73                                             |
| K0335.210 | stainless steel    | 10 | 8  | 2,7  | 22 | 54                                               | 100                                            |
| K0335.212 | stainless steel    | 12 | 10 | 3,2  | 24 | 54                                               | 122                                            |
| K0335.304 | POM                | 4  | 3  | 0,6  | 9  | 12                                               | 22                                             |
| K0335.305 | POM                | 5  | 4  | 0,9  | 12 | 19                                               | 30                                             |
| K0335.306 | POM                | 6  | 5  | 1,3  | 14 | 22                                               | 40                                             |
| K0335.308 | POM                | 8  | 6  | 1,7  | 16 | 42                                               | 73                                             |
| K0335.310 | POM                | 10 | 8  | 2,6  | 22 | 54                                               | 100                                            |
| K0335.312 | POM                | 12 | 10 | 3,1  | 24 | 54                                               | 122                                            |

## Spring plungers

with head



### KIPP Spring plungers with head

| Order No.<br>steel | Order No.<br>stainless steel | D   | D1  | D2  | H   | L  | L1 | S   | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|--------------------|------------------------------|-----|-----|-----|-----|----|----|-----|--------------------------------------------------|------------------------------------------------|
| K0336.04           | K0336.041                    | M4  | 2,5 | 7   | 0,8 | 13 | 10 | 2   | 4                                                | 10                                             |
| K0336.05           | K0336.051                    | M5  | 3   | 8,5 | 0,9 | 17 | 13 | 2,5 | 6                                                | 11                                             |
| K0336.06           | K0336.061                    | M6  | 3,5 | 10  | 1   | 16 | 12 | 3   | 9                                                | 13                                             |
| K0336.08           | K0336.081                    | M8  | 5   | 13  | 1,5 | 21 | 16 | 4   | 15                                               | 30                                             |
| -                  | K0336.101                    | M10 | 6   | 16  | 2   | 26 | 20 | 5   | 20                                               | 35                                             |
| K0336.10           | -                            | M10 | 6   | 16  | 2   | 26 | 20 | 5   | 20                                               | 40                                             |
| K0336.12           | K0336.121                    | M12 | 8   | 18  | 2,5 | 32 | 25 | 6   | 30                                               | 55                                             |



#### Material:

Steel or stainless steel.

#### Version:

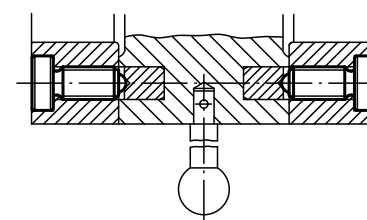
Steel black oxidised.

Stainless steel bright.

Ball steel or stainless steel, hardened, bright.

#### Sample order:

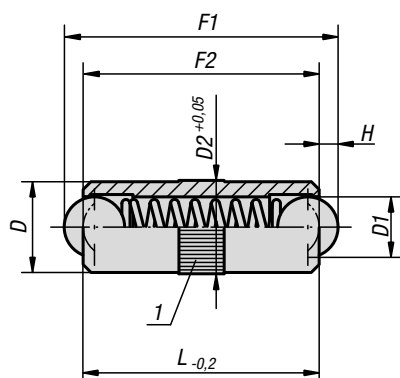
K0336.10



# K0337

## Spring plungers

smooth version, double-sided



### KIPP Spring plungers smooth version, double-sided

| Order No. | D   | D1  | D2    | L  | H    | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|-----------|-----|-----|-------|----|------|--------------------------------------------------|------------------------------------------------|
| K0337.025 | 2,5 | 2   | 2,55  | 6  | 0,65 | 1,5                                              | 2,8                                            |
| K0337.03  | 3   | 2,5 | 3,05  | 8  | 0,8  | 2,5                                              | 6                                              |
| K0337.04  | 4   | 3   | 4,05  | 10 | 0,9  | 3                                                | 7                                              |
| K0337.05  | 5   | 4   | 5,05  | 12 | 1,2  | 4                                                | 8                                              |
| K0337.06  | 6   | 5   | 6,05  | 16 | 1,6  | 6                                                | 10                                             |
| K0337.08  | 8   | 6   | 8,05  | 20 | 2    | 8                                                | 12                                             |
| K0337.10  | 10  | 8   | 10,05 | 24 | 2,9  | 10                                               | 16                                             |



#### Material:

Sleeve brass.

Ball and spring stainless steel.

#### Version:

Balls hardened, bright.

#### Sample order:

K0337.05

#### Drawing reference:

1) knurl

# Spring plungers

smooth version


**Material:**

Sleeve and spring stainless steel.  
Pin stainless steel or POM.

**Version:**

Pins, white POM, temperature-resistant to +50°C.

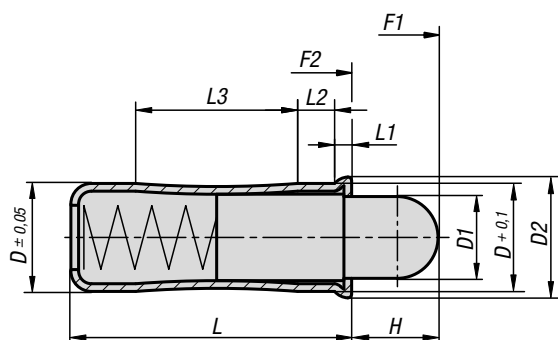
**Sample order:**

K1172.08

**Note:**

Smooth version to press-in.

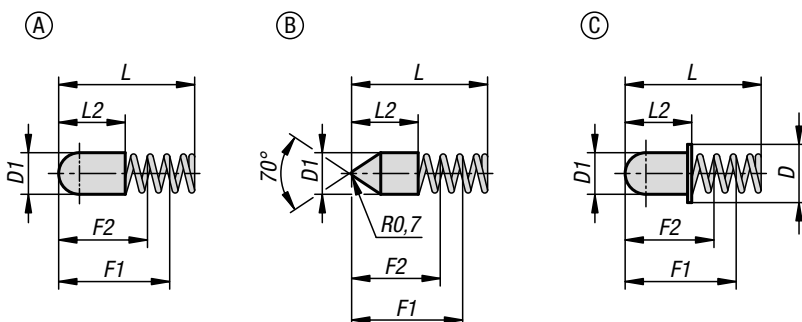
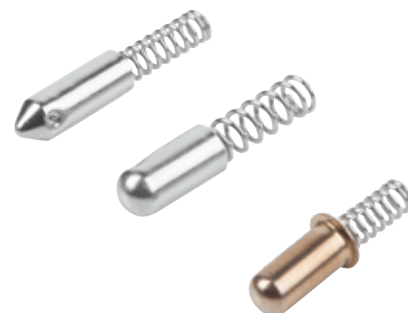
A <sup>H7</sup> tolerance is recommended for the receiving hole with diameter D.



## KIPP Spring plungers, smooth version

| Order No. | Component material | D  | D1  | D2  | L    | L1  | L2  | L3   | H   | Spring force initial pressure F1 approx. N | Spring force final pressure F2 approx. N |
|-----------|--------------------|----|-----|-----|------|-----|-----|------|-----|--------------------------------------------|------------------------------------------|
| K1172.04  | stainless steel    | 4  | 2,8 | 4,6 | 10,7 | 0,9 | 1,8 | 5,6  | 2,7 | 3                                          | 8,2                                      |
| K1172.05  | stainless steel    | 5  | 3,8 | 5,6 | 12   | 0,9 | 2,1 | 6    | 4   | 3,3                                        | 9                                        |
| K1172.06  | stainless steel    | 6  | 4,8 | 6,5 | 15   | 1   | 2,3 | 8,2  | 5,5 | 6,1                                        | 12                                       |
| K1172.08  | stainless steel    | 8  | 6,2 | 8,5 | 18   | 1,1 | 2,9 | 9,5  | 6,5 | 10,7                                       | 17                                       |
| K1172.10  | stainless steel    | 10 | 8   | 11  | 26   | 1,5 | 4,2 | 14,3 | 8   | 16,2                                       | 29                                       |
| K1172.204 | POM                | 4  | 2,8 | 4,6 | 10,7 | 0,9 | 1,8 | 5,6  | 2,7 | 3                                          | 8,2                                      |
| K1172.205 | POM                | 5  | 3,8 | 5,6 | 12   | 0,9 | 2,1 | 6    | 4   | 3,3                                        | 9                                        |
| K1172.206 | POM                | 6  | 4,8 | 6,5 | 15   | 1   | 2,3 | 8,2  | 5,5 | 6,1                                        | 12                                       |
| K1172.208 | POM                | 8  | 6,2 | 8,5 | 18   | 1,1 | 2,9 | 9,5  | 6,5 | 10,7                                       | 17                                       |
| K1172.210 | POM                | 10 | 8   | 11  | 26   | 1,5 | 4,2 | 14,3 | 8   | 16,2                                       | 29                                       |

## Spring sleeves



### Material:

Sleeve, steel or 1.4303 stainless steel.

Spring, 1.4310 stainless steel wire.

### Version:

Sleeve, steel nickel-plated, stainless steel bright.

Spring, bright.

### Sample order:

K1277.112216

### Note:

Spring sleeves are mainly used as indexing and positioning elements.

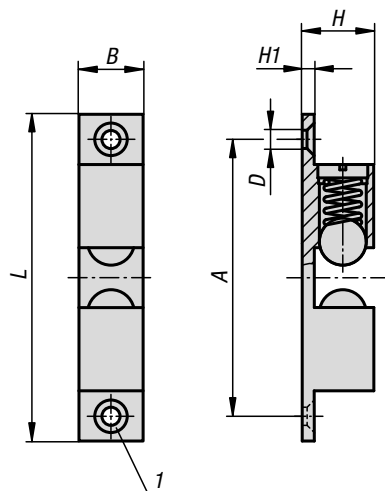
## KIPP Spring sleeves

| Order No.    | Main material   | Form | D   | D1  | L  | L2  | L by F1 | L by F2 | Spring force initial pressure F1 approx. N | Spring force final pressure F2 approx. N | Spring stiffness N/mm |
|--------------|-----------------|------|-----|-----|----|-----|---------|---------|--------------------------------------------|------------------------------------------|-----------------------|
| K1277.112216 | steel           | A    | -   | 2,2 | 16 | 7,8 | 12      | 10,5    | 2,2                                        | 3                                        | 0,53                  |
| K1277.112608 | steel           | A    | -   | 2,6 | 8  | 3,8 | 6,5     | 5,2     | 1,1                                        | 2                                        | 0,7                   |
| K1277.113012 | steel           | A    | -   | 3   | 12 | 6   | 9       | 8,7     | 6,2                                        | 6,8                                      | 2                     |
| K1277.113016 | steel           | A    | -   | 3   | 16 | 8,5 | 13      | 10,7    | 4,8                                        | 8,4                                      | 1,6                   |
| K1277.113412 | steel           | A    | -   | 3,4 | 12 | 6   | 9       | 7,8     | 5                                          | 7                                        | 1,69                  |
| K1277.113415 | steel           | A    | -   | 3,4 | 15 | 7,3 | 12      | 8,2     | 5,9                                        | 13,3                                     | 1,95                  |
| K1277.114014 | steel           | A    | -   | 4   | 14 | 8   | 12      | 9       | 5                                          | 12,3                                     | 2,45                  |
| K1277.115016 | steel           | A    | -   | 5   | 16 | 8   | 13      | 10,4    | 8                                          | 15                                       | 2,7                   |
| K1277.123016 | stainless steel | A    | -   | 3   | 16 | 8   | 13      | 10,6    | 4,8                                        | 8,6                                      | 1,6                   |
| K1277.213011 | steel           | B    | -   | 3   | 11 | 5   | 9       | 6,7     | 1,6                                        | 3,4                                      | 0,78                  |
| K1277.213016 | steel           | B    | -   | 3   | 16 | 8,5 | 13      | 10,7    | 4,8                                        | 8,4                                      | 1,6                   |
| K1277.323013 | stainless steel | C    | 4,1 | 3   | 13 | 7   | 10      | 8,9     | 5,3                                        | 7,2                                      | 1,75                  |

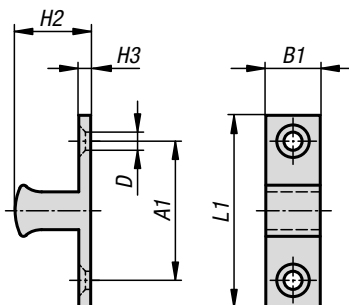
## Double ball catches



housing



latch bracket



### Material:

Housing and latch brass, die-cast zinc or stainless steel 1.4401.

Balls and springs stainless steel.

### Version:

Brass and die-cast zinc chromed.

Stainless steel abrasive blasted.

Balls and springs bright stainless steel.

### Sample order:

K0583.50

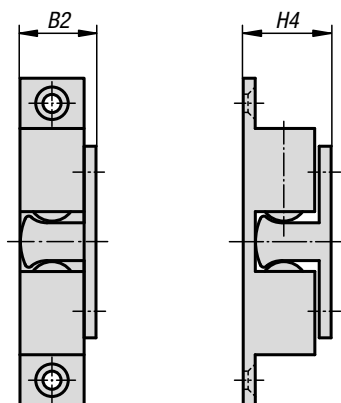
### Note:

Quick catch for various applications such as holding doors, hatches, screens etc. closed. The double ball catch consists of a housing and a latch bracket that engages between the two balls. The latch bracket can engage from the front or the side. The engagement pressure is adjustable.

### Drawing reference:

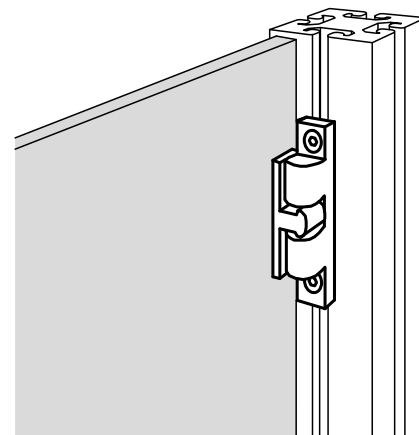
1) counterbore DIN 74-A

catch



from side

from front



## KIPP Double ball catches

| Order No. | Main material   | Surface finish body | A    | A1   | B   | B1   | B2   | D   | H    | H1  | H2   | H3  | H4   | L    | L1   | Clamping force ca. N | Spring strength |
|-----------|-----------------|---------------------|------|------|-----|------|------|-----|------|-----|------|-----|------|------|------|----------------------|-----------------|
| K0583.50  | brass           | chromed             | 39,8 | 19,8 | 8,8 | 7,6  | 10,8 | 3,8 | 10,6 | 2   | 11,2 | 2   | 13,2 | 49   | 28,8 | 35±5                 | standard        |
| K0583.60  | brass           | chromed             | 50   | 23,5 | 11  | 9    | 13,5 | 4,8 | 13,2 | 2,4 | 13,5 | 2,2 | 15,5 | 60   | 35   | 30±7                 | standard        |
| K0583.70  | brass           | chromed             | 58   | 30   | 13  | 12   | 15,2 | 4,8 | 15   | 2,4 | 15,7 | 2,2 | 18,1 | 68,4 | 40,2 | 25±5                 | standard        |
| K0583.322 | stainless steel | blasted             | 25   | 11   | 8   | 8    | 10   | 3,2 | 9    | 2   | 8,5  | 2   | 11,5 | 32   | 18   | 8                    | standard        |
| K0583.432 | stainless steel | blasted             | 35   | 16   | 8   | 7,5  | 10,5 | 3,2 | 10   | 2,5 | 11   | 2,5 | 13,5 | 43   | 25   | 13                   | standard        |
| K0583.502 | stainless steel | blasted             | 40   | 20   | 10  | 9    | 12,9 | 4,2 | 12,2 | 2,9 | 13,2 | 2,9 | 15,9 | 50   | 30   | 18                   | standard        |
| K0583.702 | stainless steel | blasted             | 60   | 30   | 13  | 10,5 | 17   | 4,2 | 17   | 4   | 19   | 4   | 23   | 70   | 42   | 38                   | standard        |
| K0583.430 | zinc            | chromed             | 35   | 16   | 8   | 7,5  | 10,5 | 3,2 | 10   | 2,5 | 11   | 2,5 | 13,5 | 43   | 25   | 13                   | standard        |
| K0583.500 | zinc            | chromed             | 40   | 20   | 10  | 9    | 12,9 | 4,2 | 12,2 | 2,9 | 13,2 | 2,9 | 15,9 | 50   | 30   | 18                   | standard        |
| K0583.700 | zinc            | chromed             | 60   | 30   | 13  | 10,5 | 17   | 4,2 | 17   | 4   | 19   | 4   | 23   | 70   | 42   | 38                   | standard        |



Ball catch

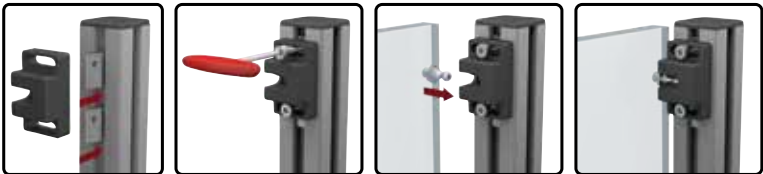
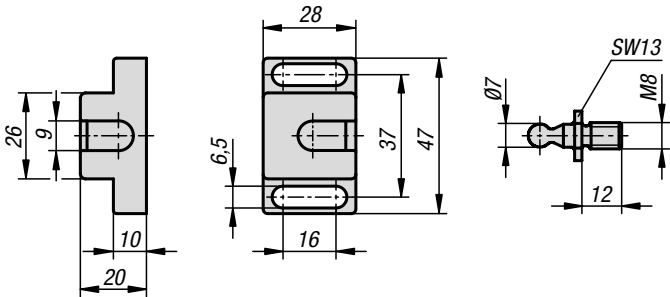


**Material:**  
Fibreglass reinforced polyamide.  
Ball pins, steel or stainless steel 1.4301.

**Version:**  
black.

**Sample order:**  
K1294.400

**Note:**  
Quick lock for swing and sliding doors. The elongated holes enable flexible positioning on aluminium profiles and panel elements.

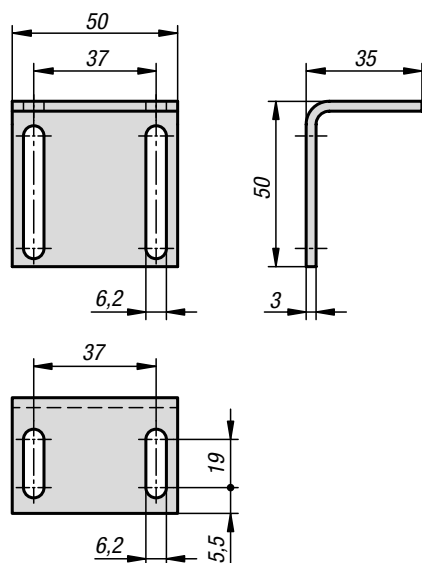


KIPP Ball catch

| Order No. | Component material | Retaining force F1 N |
|-----------|--------------------|----------------------|
| K1294.400 | steel              | 40                   |
| K1294.500 | stainless steel    | 40                   |
| K1294.401 | steel              | 50                   |
| K1294.501 | stainless steel    | 50                   |

## Angle brackets

for ball catch



**Material:**  
Steel.

**Version:**  
Electro zinc-plated.

**Sample order:**  
K1294.9503550

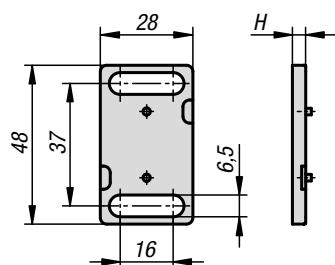
**Note:**  
These angle brackets enable the ball catch to be flexibly positioned.

### KIPP Angle brackets for ball catch

| Order No.     | Dimensions  |
|---------------|-------------|
| K1294.9503550 | see drawing |

## Riser plates

for ball catch



**Material:**  
Polyamide fibreglass reinforced.

**Version:**  
black.

**Sample order:**  
K1294.94

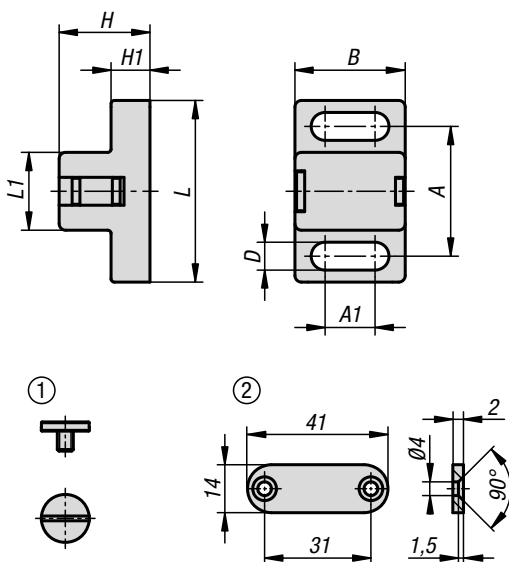
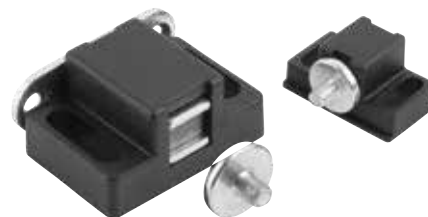
**Note:**  
These riser plates enable the height of the ball catch to be increased.

### KIPP Riser plates for ball catch

| Order No. | H |
|-----------|---|
| K1294.94  | 4 |



## Magnetic catches



### Material:

Polyamide fibreglass reinforced  
DIN 921 pan head screw, steel.  
Retaining plate, steel.

### Version:

Black.  
Pan head screw and retaining plate electro zinc-plated.

### Sample order:

K1295.17281

### Note:

Magnetic catch for swing and sliding doors. The elongated holes enable flexible positioning on aluminium profiles and panel elements.

### Drawing reference:

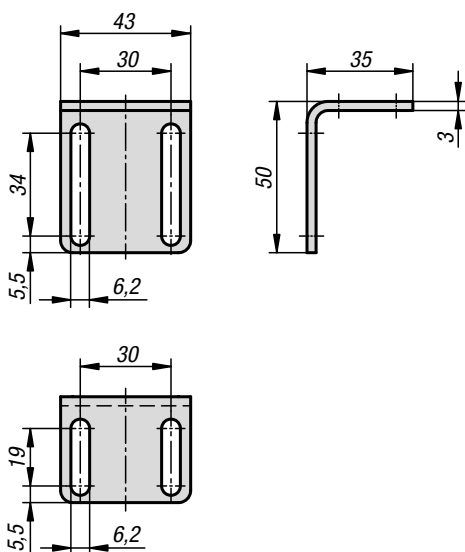
- 1) Pan head screw
- 2) Retaining plate



### KIPP Magnetic catches

| Order No.   | A  | A1   | B  | D   | H  | H1 | L  | L1 | Retaining force<br>F1 N | Retaining force<br>F2 N | Counterpart                                     |
|-------------|----|------|----|-----|----|----|----|----|-------------------------|-------------------------|-------------------------------------------------|
| K1295.17281 | 20 | 7,7  | 17 | 4,3 | 14 | 6  | 28 | 12 | 5                       | 3                       | M4x5 pan head screw                             |
| K1295.28401 | 30 | 13,5 | 28 | 6,3 | 20 | 10 | 40 | 19 | 20                      | 10                      | M5x6 pan head screw                             |
| K1295.28402 | 30 | 13,5 | 28 | 6,3 | 20 | 10 | 40 | 19 | 20                      | 10                      | M5x6 pan head screw and 14x41x2 retaining plate |

# Angle bracket for magnetic lock

**Material:**

Steel.

**Version:**

Electro zinc-plated.

**Sample order:**

K1295.9503543

**Note:**

These angle brackets enable the magnetic catch to be flexibly positioned.

## KIPP Angle bracket for magnetic lock

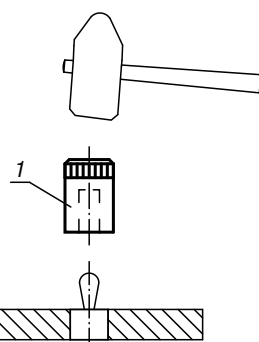
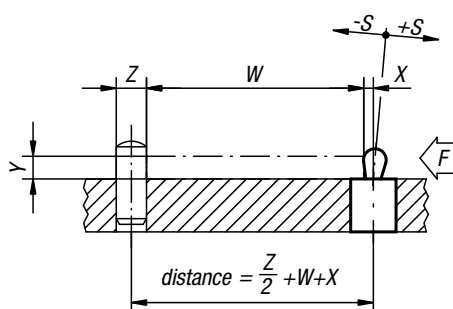
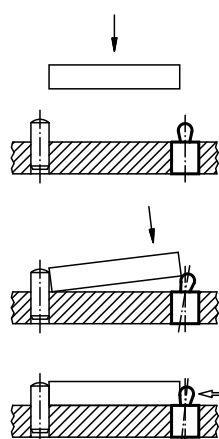
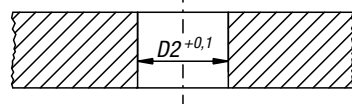
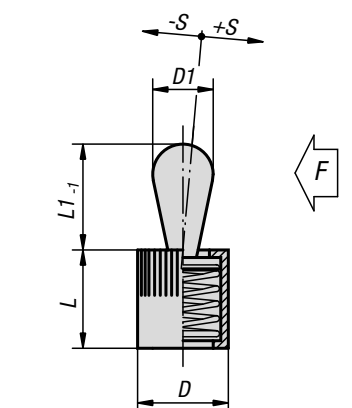
| Order No.     | Dimensions  |
|---------------|-------------|
| K1295.9503543 | see drawing |



A large rectangular area filled with a fine grid of light gray lines, intended for taking notes or drawing.



## Lateral spring plungers



**Material:**  
Sleeve aluminium.  
Spring steel.  
Thrust pin steel or POM.

**Version:**  
Steel thrust pin hardened and electro zinc-plated.  
Sleeve blue electro zinc-plated.

**Sample order:**  
K0368.72064

**Note:**  
Lateral spring plungers are for positioning, clamping, holding and securing workpieces and parts for engraving, labelling, drilling, reaming, tapping, honing, grinding, welding, soldering, assembling, mounting etc. Suitable eccentric adjustment bush see K0369. W and Z are customer specified.

**Drawing reference:**  
1) assembly tool

### KIPP Lateral spring plungers without seal, thrust pin and spring steel

| Order No.   | D  | D1 | L  | L1   | D2 | ±S  | F<br>ca. N | X if<br>Y = 1 | X if<br>Y = 2 | X if<br>Y = 3 | X if<br>Y = 4.5 | X if<br>Y = 6 | X if<br>Y = 8 | Order No.<br>assembly<br>tool |
|-------------|----|----|----|------|----|-----|------------|---------------|---------------|---------------|-----------------|---------------|---------------|-------------------------------|
| K0368.21034 | 6  | 3  | 7  | 4    | 6  | 0,5 | 10         | 0,8           | 1             | 1             | 1               | 1             | 1             | K0369.03                      |
| K0368.21036 | 6  | 3  | 7  | 4    | 6  | 0,5 | 20         | 0,8           | 1             | 1             | 1               | 1             | 1             | K0369.03                      |
| K0368.21038 | 6  | 3  | 7  | 4    | 6  | 0,5 | 40         | 0,8           | 1             | 1             | 1               | 1             | 1             | K0369.03                      |
| K0368.21054 | 10 | 5  | 11 | 6,7  | 10 | 0,8 | 20         | -             | 1,5           | 1,7           | 1,7             | 1,7           | 1,7           | K0369.05                      |
| K0368.21056 | 10 | 5  | 11 | 6,7  | 10 | 0,8 | 50         | -             | 1,5           | 1,7           | 1,7             | 1,7           | 1,7           | K0369.05                      |
| K0368.21058 | 10 | 5  | 11 | 6,7  | 10 | 0,8 | 100        | -             | 1,5           | 1,7           | 1,7             | 1,7           | 1,7           | K0369.05                      |
| K0368.21064 | 10 | 6  | 11 | 10,7 | 10 | 1   | 40         | -             | -             | -             | 1,7             | 1,9           | 1,9           | K0369.05                      |
| K0368.21066 | 10 | 6  | 11 | 10,7 | 10 | 1   | 75         | -             | -             | -             | 1,7             | 1,9           | 1,9           | K0369.05                      |
| K0368.21068 | 10 | 6  | 11 | 10,7 | 10 | 1   | 100        | -             | -             | -             | 1,7             | 1,9           | 1,9           | K0369.05                      |
| K0368.21084 | 12 | 8  | 13 | 13,9 | 12 | 1,3 | 50         | -             | -             | -             | -               | 2,5           | 2,7           | K0369.08                      |
| K0368.21086 | 12 | 8  | 13 | 13,9 | 12 | 1,3 | 100        | -             | -             | -             | -               | 2,5           | 2,7           | K0369.08                      |
| K0368.21088 | 12 | 8  | 13 | 13,9 | 12 | 1,3 | 150        | -             | -             | -             | -               | 2,5           | 2,7           | K0369.08                      |
| K0368.21104 | 16 | 10 | 17 | 16,7 | 16 | 1,6 | 100        | -             | -             | -             | -               | -             | 3,1           | K0369.10                      |
| K0368.21106 | 16 | 10 | 17 | 16,7 | 16 | 1,6 | 150        | -             | -             | -             | -               | -             | 3,1           | K0369.10                      |
| K0368.21108 | 16 | 10 | 17 | 16,7 | 16 | 1,6 | 200        | -             | -             | -             | -               | -             | 3,1           | K0369.10                      |



## KIPP Lateral spring plungers with seal, thrust pin and spring steel

| Order No.   | D  | D1 | L  | L1 | D2 | ±S  | F<br>ca.N | X if<br>Y = 1 | X if<br>Y = 2 | X if<br>Y = 3 | X if<br>Y = 4.5 | X if<br>Y = 6 | X if<br>Y = 8 | Order No.<br>assembly<br>tool |
|-------------|----|----|----|----|----|-----|-----------|---------------|---------------|---------------|-----------------|---------------|---------------|-------------------------------|
| K0368.22034 | 6  | 3  | 7  | 4  | 6  | 0,5 | 10        | 0,8           | 1             | 1             | 1               | 1             | 1             | K0369.03                      |
| K0368.22036 | 6  | 3  | 7  | 4  | 6  | 0,5 | 20        | 0,8           | 1             | 1             | 1               | 1             | 1             | K0369.03                      |
| K0368.22038 | 6  | 3  | 7  | 4  | 6  | 0,5 | 40        | 0,8           | 1             | 1             | 1               | 1             | 1             | K0369.03                      |
| K0368.22054 | 10 | 5  | 12 | 6  | 10 | 0,8 | 20        | -             | 1,5           | 1,7           | 1,7             | 1,7           | 1,7           | K0369.05                      |
| K0368.22056 | 10 | 5  | 12 | 6  | 10 | 0,8 | 50        | -             | 1,5           | 1,7           | 1,7             | 1,7           | 1,7           | K0369.05                      |
| K0368.22058 | 10 | 5  | 12 | 6  | 10 | 0,8 | 100       | -             | 1,5           | 1,7           | 1,7             | 1,7           | 1,7           | K0369.05                      |
| K0368.22064 | 10 | 6  | 12 | 10 | 10 | 1   | 40        | -             | -             | -             | 1,7             | 1,9           | 1,9           | K0369.05                      |
| K0368.22066 | 10 | 6  | 12 | 10 | 10 | 1   | 75        | -             | -             | -             | 1,7             | 1,9           | 1,9           | K0369.05                      |
| K0368.22068 | 10 | 6  | 12 | 10 | 10 | 1   | 100       | -             | -             | -             | 1,7             | 1,9           | 1,9           | K0369.05                      |
| K0368.22084 | 12 | 8  | 14 | 13 | 12 | 1,3 | 50        | -             | -             | -             | -               | 2,5           | 2,7           | K0369.08                      |
| K0368.22086 | 12 | 8  | 14 | 13 | 12 | 1,3 | 100       | -             | -             | -             | -               | 2,5           | 2,7           | K0369.08                      |
| K0368.22088 | 12 | 8  | 14 | 13 | 12 | 1,3 | 150       | -             | -             | -             | -               | 2,5           | 2,7           | K0369.08                      |
| K0368.22104 | 16 | 10 | 18 | 16 | 16 | 1,6 | 100       | -             | -             | -             | -               | -             | 3,1           | K0369.10                      |
| K0368.22106 | 16 | 10 | 18 | 16 | 16 | 1,6 | 150       | -             | -             | -             | -               | -             | 3,1           | K0369.10                      |
| K0368.22108 | 16 | 10 | 18 | 16 | 16 | 1,6 | 200       | -             | -             | -             | -               | -             | 3,1           | K0369.10                      |

## KIPP Lateral spring plungers without seal, thrust pin POM, spring steel

| Order No.   | D  | D1 | L  | L1   | D2 | ±S  | F<br>ca.N | X if<br>Y = 1 | X if<br>Y = 2 | X if<br>Y = 3 | X if<br>Y = 4.5 | X if<br>Y = 6 | X if<br>Y = 8 | Order No.<br>assembly<br>tool |
|-------------|----|----|----|------|----|-----|-----------|---------------|---------------|---------------|-----------------|---------------|---------------|-------------------------------|
| K0368.71034 | 6  | 3  | 7  | 4    | 6  | 0,5 | 10        | 0,8           | 1             | 1             | 1               | 1             | 1             | K0369.03                      |
| K0368.71054 | 10 | 5  | 11 | 6,7  | 10 | 0,8 | 20        | -             | 1,5           | 1,7           | 1,7             | 1,7           | 1,7           | K0369.05                      |
| K0368.71064 | 10 | 6  | 11 | 10,7 | 10 | 1   | 40        | -             | -             | -             | 1,7             | 1,9           | 1,9           | K0369.05                      |
| K0368.71084 | 12 | 8  | 13 | 13,9 | 12 | 1,3 | 50        | -             | -             | -             | -               | 2,5           | 2,7           | K0369.08                      |
| K0368.71104 | 16 | 10 | 17 | 16,7 | 16 | 1,6 | 100       | -             | -             | -             | -               | -             | 3,1           | K0369.10                      |

## KIPP Lateral spring plungers with seal, thrust pin POM, spring steel

| Order No.   | D  | D1 | L  | L1 | D2 | ±S  | F<br>ca.N | X if<br>Y = 1 | X if<br>Y = 2 | X if<br>Y = 3 | X if<br>Y = 4.5 | X if<br>Y = 6 | X if<br>Y = 8 | Order No.<br>assembly<br>tool |
|-------------|----|----|----|----|----|-----|-----------|---------------|---------------|---------------|-----------------|---------------|---------------|-------------------------------|
| K0368.72034 | 6  | 3  | 7  | 4  | 6  | 0,5 | 10        | 0,8           | 1             | 1             | 1               | 1             | 1             | K0369.03                      |
| K0368.72054 | 10 | 5  | 12 | 6  | 10 | 0,8 | 20        | -             | 1,5           | 1,7           | 1,7             | 1,7           | 1,7           | K0369.05                      |
| K0368.72064 | 10 | 6  | 12 | 10 | 10 | 1   | 40        | -             | -             | -             | 1,7             | 1,9           | 1,9           | K0369.05                      |
| K0368.72084 | 12 | 8  | 14 | 13 | 12 | 1,3 | 50        | -             | -             | -             | -               | 2,5           | 2,7           | K0369.08                      |
| K0368.72104 | 16 | 10 | 18 | 16 | 16 | 1,6 | 100       | -             | -             | -             | -               | -             | 3,1           | K0369.10                      |

# Eccentric bushes and assembly tools

for lateral spring plungers



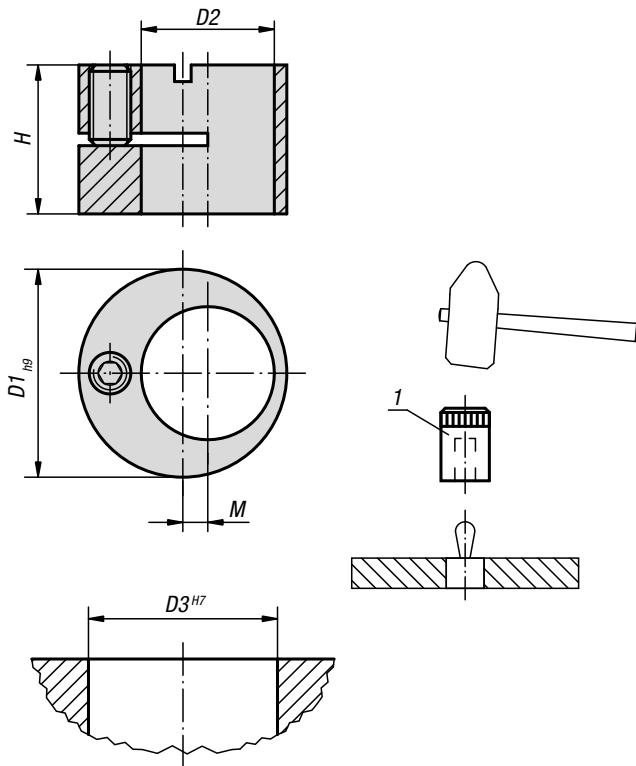
**Material:**  
Steel.

**Version:**  
Black oxidised.

**Sample order:**  
K0369.180

**Note:**  
Eccentric bushes enable lateral spring plungers to be precisely positioned with regard to the workpiece.

**Drawing reference:**  
1) assembly tool

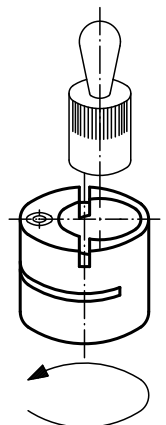


## KIPP Assembly tools

| Order No. | Suitable for lateral spring plungers with D = |
|-----------|-----------------------------------------------|
| K0369.03  | 6                                             |
| K0369.05  | 10                                            |
| K0369.08  | 12                                            |
| K0369.10  | 16                                            |

## KIPP Eccentric bushes for lateral spring plungers

| Order No. | D1 | D2 | D3 | H    | M | Suitable for lateral spring plungers with D = |
|-----------|----|----|----|------|---|-----------------------------------------------|
| K0369.120 | 12 | 6  | 12 | 9,9  | 2 | 6                                             |
| K0369.160 | 16 | 10 | 16 | 11,9 | 2 | 10                                            |
| K0369.180 | 18 | 12 | 18 | 13,9 | 2 | 12                                            |
| K0369.250 | 25 | 16 | 25 | 17,9 | 3 | 16                                            |







A large rectangular area filled with a fine grid of light gray lines, intended for handwritten notes or calculations.



## Lateral spring plungers

with plastic spring



### Material:

Sleeve and spring plastic  
Thrust pin steel, stainless steel or POM

### Version:

Thrust pin (steel) case-hardened and black oxidised.  
Thrust pin (stainless steel) bright  
Thrust pin (POM) white.

### Sample order:

K1733.100307

### Note:

Lateral spring plungers are used for positioning, holding and fastening workpieces in applications where there is increased presence of dirt.  
For example: painting and sandblasting.

Calculation dimension X:

$Y \geq L1 - D1/2$ , therefore  $X = D1/2 - S$

$Y < L1 - D1/2$ , therefore  $X = D1/2 - S - ((L1 - D1/2 - Y) * 0,123)$

Light spring force = blue spring

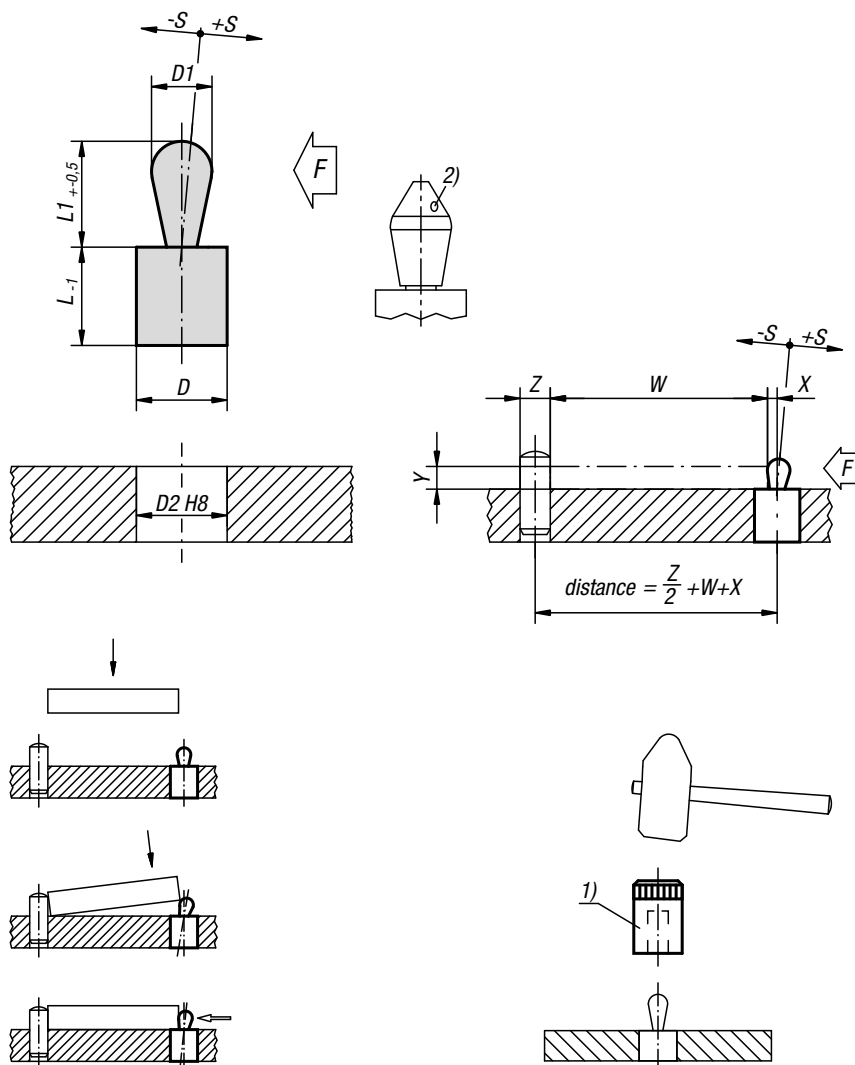
Standard spring force = red spring

Strong spring force = green spring

### Assembly:

The sleeve is pressed into the hole.

It is recommended to moisten the sleeve before assembly.



## KIPP Lateral spring plungers, steel thrust pins

| Order No.    | Version 1                | Version 2          | D  | D1 | D2   | L  | L1   | ±S  | F<br>ca.N | Order No.<br>assembly<br>tool |
|--------------|--------------------------|--------------------|----|----|------|----|------|-----|-----------|-------------------------------|
| K1733.100307 | light spring force       | different pin form | 6  | 3  | 5,9  | 7  | 3,7  | 0,4 | 10        | K1733.03                      |
| K1733.100409 | light spring force       | -                  | 8  | 4  | 7,9  | 9  | 5,2  | 0,6 | 15        | K1733.04                      |
| K1733.100509 | light spring force       | -                  | 10 | 5  | 9,9  | 9  | 7,3  | 0,8 | 30        | K1733.05                      |
| K1733.100609 | light spring force       | -                  | 10 | 6  | 9,9  | 9  | 10,3 | 1   | 20        | K1733.05                      |
| K1733.200307 | standard spring force    | different pin form | 6  | 3  | 5,9  | 7  | 3,7  | 0,4 | 20        | K1733.03                      |
| K1733.200409 | standard spring force    | -                  | 8  | 4  | 7,9  | 9  | 5,2  | 0,6 | 30        | K1733.04                      |
| K1733.200509 | standard spring force    | -                  | 10 | 5  | 9,9  | 9  | 7,3  | 0,8 | 60        | K1733.05                      |
| K1733.200609 | standard spring force    | -                  | 10 | 6  | 9,9  | 9  | 10,3 | 1   | 30        | K1733.05                      |
| K1733.200813 | standard spring force    | -                  | 12 | 8  | 11,9 | 13 | 13,3 | 1,2 | 50        | K1733.08                      |
| K1733.201016 | standard spring force    | -                  | 16 | 10 | 15,9 | 16 | 16,9 | 1,6 | 80        | K1733.10                      |
| K1733.300509 | intensified spring force | -                  | 10 | 5  | 9,9  | 9  | 7,3  | 0,8 | 90        | K1733.05                      |
| K1733.300609 | intensified spring force | -                  | 10 | 6  | 9,9  | 9  | 10,3 | 1   | 60        | K1733.05                      |
| K1733.300813 | intensified spring force | -                  | 12 | 8  | 11,9 | 13 | 13,3 | 1,2 | 100       | K1733.08                      |
| K1733.301016 | intensified spring force | -                  | 16 | 10 | 15,9 | 16 | 16,9 | 1,6 | 160       | K1733.10                      |

# Lateral spring plungers

with plastic spring

## Drawing reference:

- 1) Assembly tool
- 2) Some sizes have a different pin form

Y = workpiece height  
W = workpiece length  
X = coordinate dimension  
Z = stop diameter



## KIPP Lateral spring plungers, stainless steel thrust pins

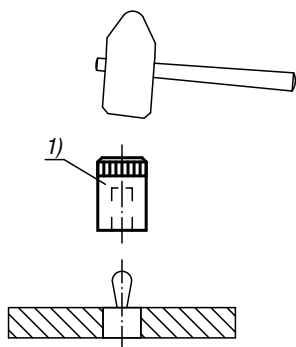
| Order No.    | Version 1                | Version 2          | D  | D1 | D2   | L  | L1   | ±S  | F<br>ca.N | Order No.<br>assembly<br>tool |
|--------------|--------------------------|--------------------|----|----|------|----|------|-----|-----------|-------------------------------|
| K1733.110307 | light spring force       | different pin form | 6  | 3  | 2,9  | 7  | 3,7  | 0,4 | 10        | K1733.03                      |
| K1733.110409 | light spring force       | -                  | 8  | 4  | 7,9  | 9  | 5,2  | 0,6 | 15        | K1733.04                      |
| K1733.110509 | light spring force       | -                  | 10 | 5  | 9,9  | 9  | 7,3  | 0,8 | 30        | K1733.05                      |
| K1733.110609 | light spring force       | -                  | 10 | 6  | 9,9  | 9  | 10,3 | 1   | 20        | K1733.05                      |
| K1733.210307 | standard spring force    | different pin form | 6  | 3  | 5,9  | 7  | 3,7  | 0,4 | 20        | K1733.03                      |
| K1733.210409 | standard spring force    | -                  | 8  | 4  | 7,9  | 9  | 5,2  | 0,6 | 30        | K1733.04                      |
| K1733.210509 | standard spring force    | -                  | 10 | 5  | 9,9  | 9  | 7,3  | 0,8 | 60        | K1733.05                      |
| K1733.210609 | standard spring force    | -                  | 10 | 6  | 9,9  | 9  | 10,3 | 1   | 30        | K1733.05                      |
| K1733.210813 | standard spring force    | -                  | 12 | 8  | 11,9 | 13 | 13,3 | 1,2 | 50        | K1733.08                      |
| K1733.211016 | standard spring force    | -                  | 16 | 10 | 15,9 | 16 | 16,9 | 1,6 | 80        | K1733.10                      |
| K1733.310509 | intensified spring force | -                  | 10 | 5  | 9,9  | 9  | 7,3  | 0,8 | 90        | K1733.05                      |
| K1733.310609 | intensified spring force | -                  | 10 | 6  | 9,9  | 9  | 10,3 | 1   | 60        | K1733.05                      |
| K1733.310813 | intensified spring force | -                  | 12 | 8  | 11,9 | 13 | 13,2 | 1,2 | 100       | K1733.08                      |
| K1733.311016 | intensified spring force | -                  | 16 | 10 | 15,9 | 16 | 16,6 | 1,6 | 160       | K1733.10                      |

## KIPP Lateral spring plungers, POM thrust pins

| Order No.    | Version 1                | Version 2          | D  | D1 | D2   | L  | L1   | ±S  | F<br>ca.N | Order No.<br>assembly<br>tool |
|--------------|--------------------------|--------------------|----|----|------|----|------|-----|-----------|-------------------------------|
| K1733.120307 | light spring force       | different pin form | 6  | 3  | 5,9  | 7  | 3,7  | 0,4 | 10        | K1733.03                      |
| K1733.120409 | light spring force       | -                  | 8  | 4  | 7,9  | 9  | 5,2  | 0,6 | 15        | K1733.04                      |
| K1733.120509 | light spring force       | -                  | 10 | 5  | 9,9  | 9  | 7,3  | 0,8 | 30        | K1733.05                      |
| K1733.120609 | light spring force       | -                  | 10 | 6  | 9,9  | 9  | 10,3 | 1   | 20        | K1733.05                      |
| K1733.220307 | standard spring force    | different pin form | 6  | 3  | 5,9  | 7  | 3,7  | 0,4 | 20        | K1733.03                      |
| K1733.220409 | standard spring force    | -                  | 8  | 4  | 7,9  | 9  | 5,2  | 0,6 | 30        | K1733.04                      |
| K1733.220509 | standard spring force    | -                  | 10 | 5  | 9,9  | 9  | 7,3  | 0,8 | 60        | K1733.05                      |
| K1733.220609 | standard spring force    | -                  | 10 | 6  | 9,9  | 9  | 10,3 | 1   | 30        | K1733.05                      |
| K1733.220813 | standard spring force    | -                  | 12 | 8  | 11,9 | 13 | 13,3 | 1,2 | 50        | K1733.08                      |
| K1733.221016 | standard spring force    | -                  | 16 | 10 | 15,9 | 16 | 16,9 | 1,6 | 80        | K1733.10                      |
| K1733.320509 | intensified spring force | -                  | 10 | 5  | 9,9  | 9  | 7,3  | 0,8 | 90        | K1733.05                      |
| K1733.320609 | intensified spring force | -                  | 10 | 6  | 9,9  | 9  | 10,3 | 1   | 60        | K1733.05                      |
| K1733.320813 | intensified spring force | -                  | 12 | 8  | 11,9 | 13 | 13,3 | 1,2 | 100       | K1733.08                      |
| K1733.321016 | intensified spring force | -                  | 16 | 10 | 15,9 | 16 | 16,9 | 1,6 | 160       | K1733.10                      |

# Assembly tool

for lateral spring plungers with plastic spring



**Material:**  
Steel.

**Version:**  
Black oxidised.

**Sample order:**  
K1733.03

**Note:**  
Lateral spring plungers with plastic pins can be fitted easily using the assembly tool.

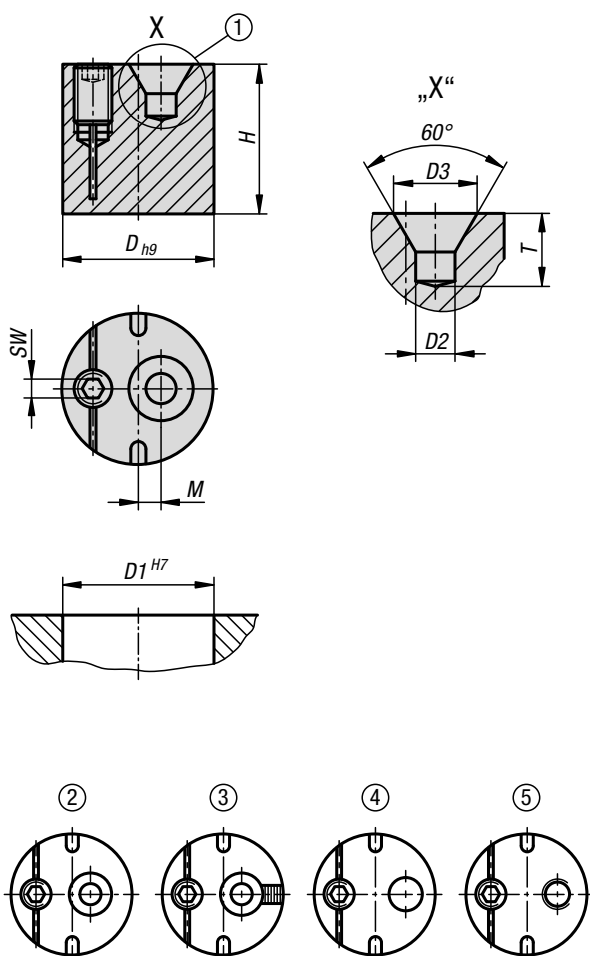
**Drawing reference:**  
1) assembly tool

## KIPP Assembly tool for lateral spring plungers with plastic spring

| Order No. | Suitable for<br>lateral spring plungers<br>with D = |
|-----------|-----------------------------------------------------|
| K1733.03  | 6                                                   |
| K1733.04  | 8                                                   |
| K1733.05  | 10                                                  |
| K1733.08  | 12                                                  |
| K1733.10  | 16                                                  |

## Eccentric bushes

with centre bore



### Material:

Stainless steel 1.4305.

### Version:

Bright.

### Sample order:

K1292.121

### Note:

For H7 holes. Turning the grub screw creates a surface pressure. Use a face pin spanner to turn the bush to the desired position and lock it in place with the grub screw.

### Application:

These eccentric bushes can be used as e.g. stops or tolerance compensators.

- 1) DIN 332-1 centre bore, Form A
- 2) Basic form with centring
- 3) With scale groove for visual stop
- 4) Through hole
- 5) Tapped hole

### Advantages:

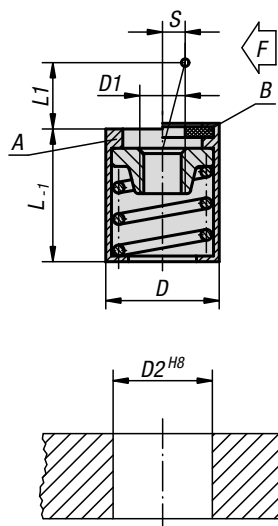
- Easy handling
- Grub screw clamping
- Minimal installation space
- Arbitrary mounting position
- Customised application
- Versatile use

## KIPP Eccentric bushes with centre bore

| Order No. | D  | D1 | D2  | D3   | H    | M    | SW  | T   | Tightening torque Nm |
|-----------|----|----|-----|------|------|------|-----|-----|----------------------|
| K1292.101 | 10 | 10 | 1   | 2,12 | 9,8  | 2,25 | 2   | 1,9 | 1,5                  |
| K1292.121 | 12 | 12 | 1,6 | 3,35 | 11,8 | 2    | 2   | 2,9 | 1,5                  |
| K1292.141 | 15 | 15 | 2,5 | 5,3  | 14,8 | 2,25 | 2,5 | 4,6 | 2                    |
| K1292.161 | 18 | 18 | 4   | 8,5  | 15,8 | 2,25 | 2,5 | 7,4 | 2                    |
| K1292.201 | 20 | 20 | 4   | 8,5  | 19,8 | 3    | 3   | 7,4 | 5                    |

## Lateral spring plungers

without thrust pin



### Material:

Sleeve aluminium.  
Receiving washer steel.  
Spring steel.

### Version:

Sleeve blue electro zinc-plated.  
Washer, hardened and burnished.

### Sample order:

K0370.31058

### Note:

The thrust pin can be made to suit the required circumstances and screwed into the tapped hole in the locating washer.

The required lateral thrust (F) can be achieved through the stroke (S) and length (L1).

Form B has a seal to keep swarf and dirt out.

### KIPP Lateral spring plungers without thrust pin, Form A, without seal

| Order No.   | Form | D  | D1 | D2 | L  | L1   | S   | F<br>ca.N |
|-------------|------|----|----|----|----|------|-----|-----------|
| K0370.31054 | A    | 10 | M4 | 10 | 12 | 4    | 1,6 | 20        |
| K0370.31056 | A    | 10 | M4 | 10 | 12 | 4    | 1,6 | 50        |
| K0370.31058 | A    | 10 | M4 | 10 | 12 | 4    | 1,6 | 100       |
| K0370.31064 | A    | 10 | M4 | 10 | 12 | 7,5  | 2   | 40        |
| K0370.31066 | A    | 10 | M4 | 10 | 12 | 7,5  | 2   | 75        |
| K0370.31068 | A    | 10 | M4 | 10 | 12 | 7,5  | 2   | 100       |
| K0370.31104 | A    | 16 | M6 | 16 | 18 | 11,5 | 3,2 | 100       |
| K0370.31106 | A    | 16 | M6 | 16 | 18 | 11,5 | 3,2 | 150       |
| K0370.31108 | A    | 16 | M6 | 16 | 18 | 11,5 | 3,2 | 200       |

### KIPP Lateral spring plungers without thrust pins, Form B, with seal

| Order No.   | Form | D  | D1 | D2 | L  | L1   | S   | F<br>ca.N |
|-------------|------|----|----|----|----|------|-----|-----------|
| K0370.32054 | B    | 10 | M4 | 10 | 12 | 4    | 1,6 | 20        |
| K0370.32056 | B    | 10 | M4 | 10 | 12 | 4    | 1,6 | 50        |
| K0370.32058 | B    | 10 | M4 | 10 | 12 | 4    | 1,6 | 100       |
| K0370.32064 | B    | 10 | M4 | 10 | 12 | 7,5  | 2   | 40        |
| K0370.32066 | B    | 10 | M4 | 10 | 12 | 7,5  | 2   | 75        |
| K0370.32068 | B    | 10 | M4 | 10 | 12 | 7,5  | 2   | 100       |
| K0370.32104 | B    | 16 | M6 | 16 | 18 | 11,5 | 3,2 | 100       |
| K0370.32106 | B    | 16 | M6 | 16 | 18 | 11,5 | 3,2 | 150       |
| K0370.32108 | B    | 16 | M6 | 16 | 18 | 11,5 | 3,2 | 200       |

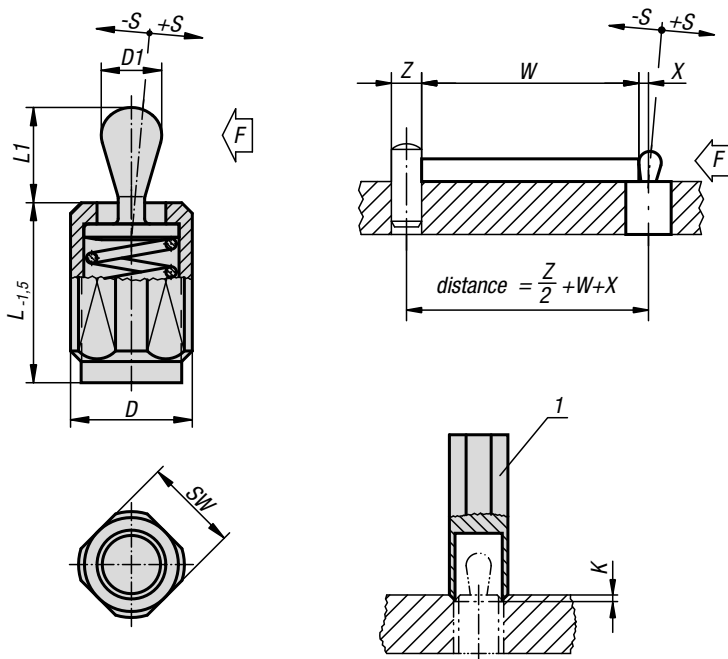


A large rectangular area filled with a fine grid of light gray lines, intended for taking notes or drawing.



## Lateral spring plungers

with threaded sleeve



### Material:

Steel.

### Version:

Thrust pin steel, hardened and electro zinc-plated.  
Sleeve blue electro zinc-plated.

### Sample order:

K0371.1020X12

### Note:

Lateral spring plungers with threaded sleeve can be individually adjusted to suit the the part being held. The threaded sleeve is also suitable for screwing into thin sheet metal as it can be fastened with one or two nuts. W and Z are customer specified.

### Drawing reference:

1) assembly tool

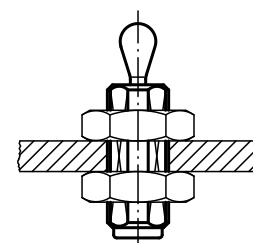
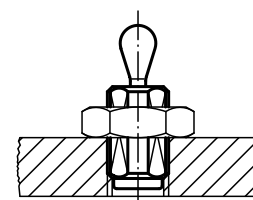
## KIPP Lateral spring plungers without seal

| Order No.     | D       | D1 | K       | L    | L1   | ±S  | SW | X   | F<br>ca.N | Order No.<br>assembly<br>tool |
|---------------|---------|----|---------|------|------|-----|----|-----|-----------|-------------------------------|
| K0371.1020X12 | M12     | 5  | 2x60°   | 11,5 | 6,7  | 0,8 | 10 | 1,6 | 20        | K0371.06                      |
| K0371.1020X20 | M12     | 5  | 2x60°   | 19   | 6,7  | 0,8 | 10 | 1,6 | 20        | K0371.06                      |
| K0371.1020X27 | M12     | 5  | 2x60°   | 26,5 | 6,7  | 0,8 | 10 | 1,6 | 20        | K0371.06                      |
| K0371.1050X12 | M12     | 5  | 2x60°   | 11,5 | 6,7  | 0,8 | 10 | 1,6 | 50        | K0371.06                      |
| K0371.1050X20 | M12     | 5  | 2x60°   | 19   | 6,7  | 0,8 | 10 | 1,6 | 50        | K0371.06                      |
| K0371.1050X27 | M12     | 5  | 2x60°   | 26,5 | 6,7  | 0,8 | 10 | 1,6 | 50        | K0371.06                      |
| K0371.1100X12 | M12     | 5  | 2x60°   | 11,5 | 6,7  | 0,8 | 10 | 1,6 | 100       | K0371.06                      |
| K0371.1100X20 | M12     | 5  | 2x60°   | 19   | 6,7  | 0,8 | 10 | 1,6 | 100       | K0371.06                      |
| K0371.1100X27 | M12     | 5  | 2x60°   | 26,5 | 6,7  | 0,8 | 10 | 1,6 | 100       | K0371.06                      |
| K0371.1040X12 | M12     | 6  | 2x60°   | 11,5 | 10,7 | 1   | 10 | 1,8 | 40        | K0371.06                      |
| K0371.1040X20 | M12     | 6  | 2x60°   | 19   | 10,7 | 1   | 10 | 1,8 | 40        | K0371.06                      |
| K0371.1040X27 | M12     | 6  | 2x60°   | 26,5 | 10,7 | 1   | 10 | 1,8 | 40        | K0371.06                      |
| K0371.1075X12 | M12     | 6  | 2x60°   | 11,5 | 10,7 | 1   | 10 | 1,8 | 75        | K0371.06                      |
| K0371.1075X20 | M12     | 6  | 2x60°   | 19   | 10,7 | 1   | 10 | 1,8 | 75        | K0371.06                      |
| K0371.1075X27 | M12     | 6  | 2x60°   | 26,5 | 10,7 | 1   | 10 | 1,8 | 75        | K0371.06                      |
| K0371.1150X12 | M12     | 6  | 2x60°   | 11,5 | 10,7 | 1   | 10 | 1,8 | 100       | K0371.06                      |
| K0371.1150X20 | M12     | 6  | 2x60°   | 19   | 10,7 | 1   | 10 | 1,8 | 100       | K0371.06                      |
| K0371.1150X27 | M12     | 6  | 2x60°   | 26,5 | 10,7 | 1   | 10 | 1,8 | 100       | K0371.06                      |
| K0371.1100X16 | M18X1,5 | 10 | 2,5x60° | 18   | 16,7 | 1,6 | 16 | 3,2 | 100       | K0371.10                      |
| K0371.1100X29 | M18X1,5 | 10 | 2,5x60° | 31,5 | 16,7 | 1,6 | 16 | 3,2 | 100       | K0371.10                      |
| K0371.1100X43 | M18X1,5 | 10 | 2,5x60° | 45   | 16,7 | 1,6 | 16 | 3,2 | 100       | K0371.10                      |
| K0371.1200X16 | M18X1,5 | 10 | 2,5x60° | 18   | 16,7 | 1,6 | 16 | 3,2 | 150       | K0371.10                      |
| K0371.1200X29 | M18X1,5 | 10 | 2,5x60° | 31,5 | 16,7 | 1,6 | 16 | 3,2 | 150       | K0371.10                      |
| K0371.1200X43 | M18X1,5 | 10 | 2,5x60° | 45   | 16,7 | 1,6 | 16 | 3,2 | 150       | K0371.10                      |
| K0371.1300X16 | M18X1,5 | 10 | 2,5x60° | 18   | 16,7 | 1,6 | 16 | 3,2 | 200       | K0371.10                      |
| K0371.1300X29 | M18X1,5 | 10 | 2,5x60° | 31,5 | 16,7 | 1,6 | 16 | 3,2 | 200       | K0371.10                      |
| K0371.1300X43 | M18X1,5 | 10 | 2,5x60° | 45   | 16,7 | 1,6 | 16 | 3,2 | 200       | K0371.10                      |



# Lateral spring plungers

with threaded sleeve



## KIPP Lateral spring plungers with seal

| Order No.     | D       | D1 | K       | L    | L1 | ±S  | SW | X   | F<br>ca. N | Order No.<br>assembly<br>tool |
|---------------|---------|----|---------|------|----|-----|----|-----|------------|-------------------------------|
| K0371.3020X12 | M12     | 5  | 2x60°   | 11,5 | 6  | 0,8 | 10 | 1,6 | 20         | K0371.06                      |
| K0371.3020X20 | M12     | 5  | 2x60°   | 19   | 6  | 0,8 | 10 | 1,6 | 20         | K0371.06                      |
| K0371.3020X27 | M12     | 5  | 2x60°   | 26,5 | 6  | 0,8 | 10 | 1,6 | 20         | K0371.06                      |
| K0371.3050X12 | M12     | 5  | 2x60°   | 11,5 | 6  | 0,8 | 10 | 1,6 | 50         | K0371.06                      |
| K0371.3050X20 | M12     | 5  | 2x60°   | 19   | 6  | 0,8 | 10 | 1,6 | 50         | K0371.06                      |
| K0371.3050X27 | M12     | 5  | 2x60°   | 26,5 | 6  | 0,8 | 10 | 1,6 | 50         | K0371.06                      |
| K0371.3100X12 | M12     | 5  | 2x60°   | 11,5 | 6  | 0,8 | 10 | 1,6 | 100        | K0371.06                      |
| K0371.3100X20 | M12     | 5  | 2x60°   | 19   | 6  | 0,8 | 10 | 1,6 | 100        | K0371.06                      |
| K0371.3100X27 | M12     | 5  | 2x60°   | 26,5 | 6  | 0,8 | 10 | 1,6 | 100        | K0371.06                      |
| K0371.3040X12 | M12     | 6  | 2x60°   | 11,5 | 10 | 1   | 10 | 1,8 | 40         | K0371.06                      |
| K0371.3040X20 | M12     | 6  | 2x60°   | 19   | 10 | 1   | 10 | 1,8 | 40         | K0371.06                      |
| K0371.3040X27 | M12     | 6  | 2x60°   | 26,5 | 10 | 1   | 10 | 1,8 | 40         | K0371.06                      |
| K0371.3075X12 | M12     | 6  | 2x60°   | 11,5 | 10 | 1   | 10 | 1,8 | 75         | K0371.06                      |
| K0371.3075X20 | M12     | 6  | 2x60°   | 19   | 10 | 1   | 10 | 1,8 | 75         | K0371.06                      |
| K0371.3075X27 | M12     | 6  | 2x60°   | 26,5 | 10 | 1   | 10 | 1,8 | 75         | K0371.06                      |
| K0371.3150X12 | M12     | 6  | 2x60°   | 11,5 | 10 | 1   | 10 | 1,8 | 100        | K0371.06                      |
| K0371.3150X20 | M12     | 6  | 2x60°   | 19   | 10 | 1   | 10 | 1,8 | 100        | K0371.06                      |
| K0371.3150X27 | M12     | 6  | 2x60°   | 26,5 | 10 | 1   | 10 | 1,8 | 100        | K0371.06                      |
| K0371.3100X16 | M18X1,5 | 10 | 2,5x60° | 18   | 16 | 1,6 | 16 | 3,2 | 100        | K0371.10                      |
| K0371.3100X29 | M18X1,5 | 10 | 2,5x60° | 31,5 | 16 | 1,6 | 16 | 3,2 | 100        | K0371.10                      |
| K0371.3100X43 | M18X1,5 | 10 | 2,5x60° | 45   | 16 | 1,6 | 16 | 3,2 | 100        | K0371.10                      |
| K0371.3200X16 | M18X1,5 | 10 | 2,5x60° | 18   | 16 | 1,6 | 16 | 3,2 | 150        | K0371.10                      |
| K0371.3200X29 | M18X1,5 | 10 | 2,5x60° | 31,5 | 16 | 1,6 | 16 | 3,2 | 150        | K0371.10                      |
| K0371.3200X43 | M18X1,5 | 10 | 2,5x60° | 45   | 16 | 1,6 | 16 | 3,2 | 150        | K0371.10                      |
| K0371.3300X16 | M18X1,5 | 10 | 2,5x60° | 18   | 16 | 1,6 | 16 | 3,2 | 200        | K0371.10                      |
| K0371.3300X29 | M18X1,5 | 10 | 2,5x60° | 31,5 | 16 | 1,6 | 16 | 3,2 | 200        | K0371.10                      |
| K0371.3300X43 | M18X1,5 | 10 | 2,5x60° | 45   | 16 | 1,6 | 16 | 3,2 | 200        | K0371.10                      |

## Lateral spring plungers

with threaded sleeve, without thrust pin



**Material:**  
Steel.

**Version:**  
Sleeve blue electro zinc-plated.  
Washer, hardened and burnished.

**Sample order:**  
K0372.1100X20

**Note:**  
The thrust pin can be made to suit the required circumstances and screwed into the tapped hole in the locating washer.  
The required lateral thrust (F) can be achieved through the stroke (S) and length (L1).  
Form B has a seal to keep swarf and dirt out.

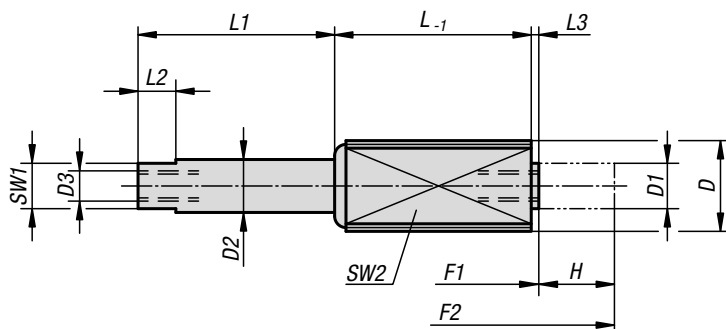
**Drawing reference:**  
Form A: without seal  
Form B: with seal

1) assembly tool

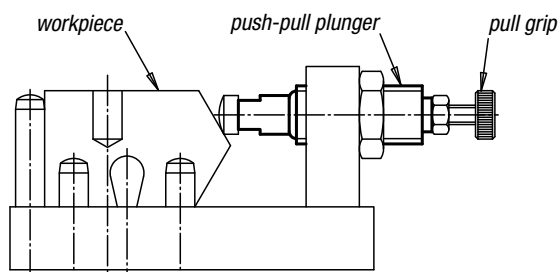
### KIPP Lateral spring plungers with threaded sleeve, without thrust pin

| Order No.<br>Form A | Order No.<br>Form B | L    | L1   | D       | D1 | ±S  | F<br>ca.N | SW | K       | Order No.<br>assembly<br>tool |
|---------------------|---------------------|------|------|---------|----|-----|-----------|----|---------|-------------------------------|
| K0372.1020X12       | K0372.2020X12       | 11,5 | 4    | M12     | M4 | 1,6 | 20        | 10 | 2x60°   | K0371.06                      |
| K0372.1020X20       | K0372.2020X20       | 19   | 4    | M12     | M4 | 1,6 | 20        | 10 | 2x60°   | K0371.06                      |
| K0372.1020X27       | K0372.2020X27       | 26,5 | 4    | M12     | M4 | 1,6 | 20        | 10 | 2x60°   | K0371.06                      |
| K0372.1040X12       | K0372.2040X12       | 11,5 | 7,5  | M12     | M4 | 2   | 40        | 10 | 2x60°   | K0371.06                      |
| K0372.1040X20       | K0372.2040X20       | 19   | 7,5  | M12     | M4 | 2   | 40        | 10 | 2x60°   | K0371.06                      |
| K0372.1040X27       | K0372.2040X27       | 26,5 | 7,5  | M12     | M4 | 2   | 40        | 10 | 2x60°   | K0371.06                      |
| K0372.1050X12       | K0372.2050X12       | 11,5 | 4    | M12     | M4 | 1,6 | 50        | 10 | 2x60°   | K0371.06                      |
| K0372.1050X20       | K0372.2050X20       | 19   | 4    | M12     | M4 | 1,6 | 50        | 10 | 2x60°   | K0371.06                      |
| K0372.1050X27       | K0372.2050X27       | 26,5 | 4    | M12     | M4 | 1,6 | 50        | 10 | 2x60°   | K0371.06                      |
| K0372.1075X12       | K0372.2075X12       | 11,5 | 7,5  | M12     | M4 | 2   | 75        | 10 | 2x60°   | K0371.06                      |
| K0372.1075X20       | K0372.2075X20       | 19   | 7,5  | M12     | M4 | 2   | 75        | 10 | 2x60°   | K0371.06                      |
| K0372.1075X27       | K0372.2075X27       | 26,5 | 7,5  | M12     | M4 | 2   | 75        | 10 | 2x60°   | K0371.06                      |
| K0372.1100X12       | K0372.2100X12       | 11,5 | 4    | M12     | M4 | 1,6 | 100       | 10 | 2x60°   | K0371.06                      |
| K0372.1100X20       | K0372.2100X20       | 19   | 4    | M12     | M4 | 1,6 | 100       | 10 | 2x60°   | K0371.06                      |
| K0372.1100X27       | K0372.2100X27       | 26,5 | 4    | M12     | M4 | 1,6 | 100       | 10 | 2x60°   | K0371.06                      |
| K0372.1150X12       | K0372.2150X12       | 11,5 | 7,5  | M12     | M4 | 2   | 100       | 10 | 2x60°   | K0371.06                      |
| K0372.1150X20       | K0372.2150X20       | 19   | 7,5  | M12     | M4 | 2   | 100       | 10 | 2x60°   | K0371.06                      |
| K0372.1150X27       | K0372.2150X27       | 26,5 | 7,5  | M12     | M4 | 2   | 100       | 10 | 2x60°   | K0371.06                      |
| K0372.1100X16       | K0372.2100X16       | 18   | 11,5 | M18X1,5 | M6 | 3,2 | 100       | 16 | 2,5x60° | K0371.10                      |
| K0372.1100X29       | K0372.2100X29       | 31,5 | 11,5 | M18X1,5 | M6 | 3,2 | 100       | 16 | 2,5x60° | K0371.10                      |
| K0372.1100X43       | K0372.2100X43       | 45   | 11,5 | M18X1,5 | M6 | 3,2 | 100       | 16 | 2,5x60° | K0371.10                      |
| K0372.1200X16       | K0372.2200X16       | 18   | 11,5 | M18X1,5 | M6 | 3,2 | 150       | 16 | 2,5x60° | K0371.10                      |
| K0372.1200X29       | K0372.2200X29       | 31,5 | 11,5 | M18X1,5 | M6 | 3,2 | 150       | 16 | 2,5x60° | K0371.10                      |
| K0372.1200X43       | K0372.2200X43       | 45   | 11,5 | M18X1,5 | M6 | 3,2 | 150       | 16 | 2,5x60° | K0371.10                      |
| K0372.1300X16       | K0372.2300X16       | 18   | 11,5 | M18X1,5 | M6 | 3,2 | 200       | 16 | 2,5x60° | K0371.10                      |
| K0372.1300X29       | K0372.2300X29       | 31,5 | 11,5 | M18X1,5 | M6 | 3,2 | 200       | 16 | 2,5x60° | K0371.10                      |
| K0372.1300X43       | K0372.2300X43       | 45   | 11,5 | M18X1,5 | M6 | 3,2 | 200       | 16 | 2,5x60° | K0371.10                      |

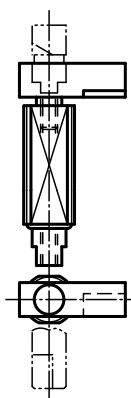
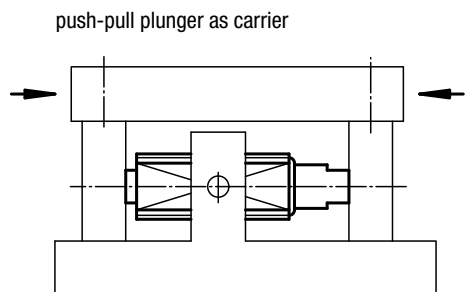
## Spring plungers push-pull



push-pull plunger



pull plunger as lock



**Material:**  
Steel.

**Version:**  
Sleeve blue electro zinc-plated.  
Spring pins black oxidised.

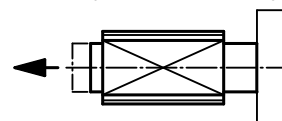
**Sample order:**  
K0373.1202004

**Note:**  
The tapped hole in both ends of the spring pin allow various inserts to be attached e.g. prisms, thrust pins, self-aligning pads, knobs, grips etc.

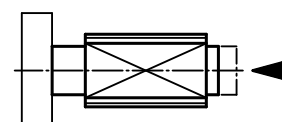
**Assembly:**  
LOCTITE threadlocker K0655.243.... is recommended for gluing the threaded sleeve in position.

**Application:**

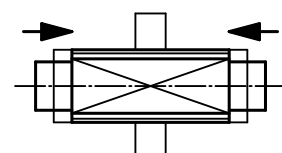
**As push plunger:**  
The spring force pushes the object.



**As pull plunger:**  
The spring force pulls the object.



**As push-pull plunger:**  
In this case the internal pin has a fixed position. The threaded sleeve acts as carrier. The spring force pushes or pulls the object in both directions.

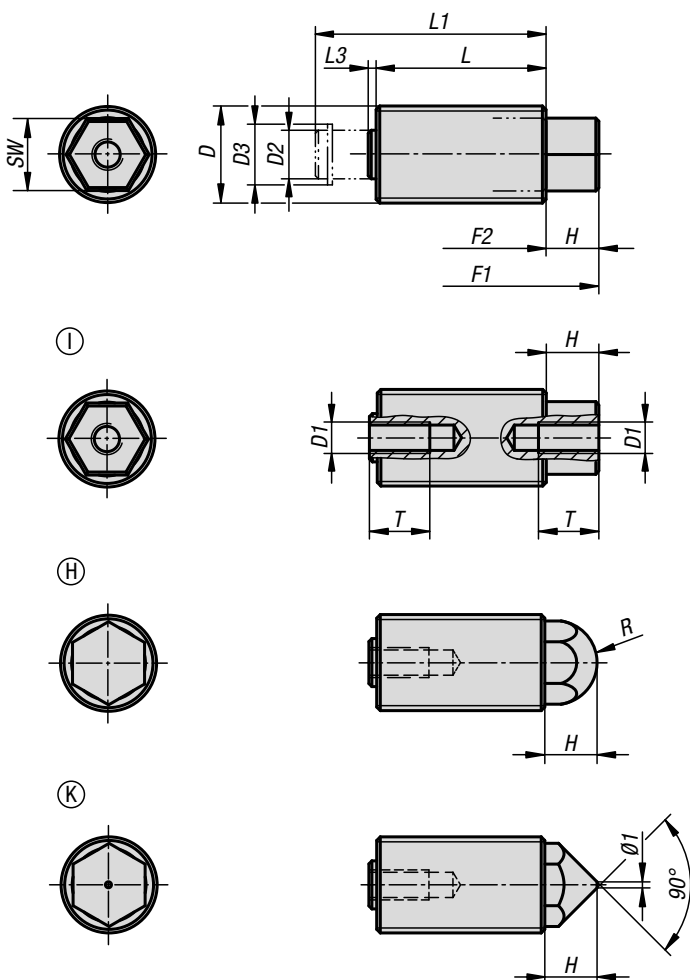


### KIPP Push-Pull spring plungers

| Order No.     | D       | D1 | D2 | D3    | H    | L    | L1   | L2 | L3  | SW1 | SW2 | Spring force square initial pressure F1 approx. N | Spring force square final pressure F2 approx. N |
|---------------|---------|----|----|-------|------|------|------|----|-----|-----|-----|---------------------------------------------------|-------------------------------------------------|
| K0373.1202004 | M12     | 6  | 7  | M4x8  | 3,5  | 11   | 4,5  | 5  | 1   | 6   | 10  | 5                                                 | 20                                              |
| K0373.1202006 | M12     | 6  | 7  | M4x8  | 6    | 18,5 | 7    | 5  | 1   | 6   | 10  | 5                                                 | 20                                              |
| K0373.1202010 | M12     | 6  | 7  | M4x8  | 10   | 26   | 11   | 5  | 1   | 6   | 10  | 5                                                 | 20                                              |
| K0373.1206003 | M12     | 6  | 7  | M4x8  | 3    | 11   | 4,5  | 5  | 1   | 6   | 10  | 12                                                | 40                                              |
| K0373.1206005 | M12     | 6  | 7  | M4x8  | 5    | 18,5 | 7    | 5  | 1   | 6   | 10  | 12                                                | 40                                              |
| K0373.1206008 | M12     | 6  | 7  | M4x8  | 8    | 26   | 11   | 5  | 1   | 6   | 10  | 12                                                | 40                                              |
| K0373.1212503 | M12     | 6  | 7  | M4x8  | 3    | 11   | 4,5  | 5  | 1   | 6   | 10  | 20                                                | 100                                             |
| K0373.1212505 | M12     | 6  | 7  | M4x8  | 5    | 18,5 | 7    | 5  | 1   | 6   | 10  | 20                                                | 100                                             |
| K0373.1212508 | M12     | 6  | 7  | M4x8  | 8    | 26   | 11   | 5  | 1   | 6   | 10  | 20                                                | 100                                             |
| K0373.1815004 | M18x1,5 | 10 | 11 | M6x12 | 4    | 17   | 6    | 6  | 2,5 | 9   | 16  | 50                                                | 150                                             |
| K0373.1815007 | M18x1,5 | 10 | 11 | M6x12 | 7    | 29,5 | 11,5 | 6  | 2,5 | 9   | 16  | 50                                                | 150                                             |
| K0373.1815013 | M18x1,5 | 10 | 11 | M6x12 | 12,5 | 45,5 | 16   | 6  | 2,5 | 9   | 16  | 50                                                | 150                                             |

## Spring plungers push-pull

with rotation lock



**Material:**  
Steel.

**Version:**  
Threaded sleeve trivalent blue passivated.  
Screw case hardened and black oxidised.  
Spring strength - standard or intensified.

**Sample order:**  
K0997.1112

**Note:**  
The push-pull spring plungers, also called two-way spring plungers are used to engage, position or clamp various components. The hexagonal tapped pin which cannot rotate can be used for traction or thrust.

### KIPP Push-Pull spring plungers with rotation lock

| Order No.  | Form | Spring strength | D       | D1 | D2  | D3   | F1<br>N | F2<br>N | H    | L  | L1   | L3   | R   | SW | T<br>min. |
|------------|------|-----------------|---------|----|-----|------|---------|---------|------|----|------|------|-----|----|-----------|
| K0977.1112 | I    | standard        | M12x1,5 | M4 | 5,5 | 6,78 | 16      | 38      | 6,12 | 20 | 27,5 | 1,38 | -   | 8  | 8         |
| K0977.1116 | I    | standard        | M16x1,5 | M5 | 8   | 10   | 25      | 71      | 8,7  | 28 | 38   | 1,3  | -   | 11 | 10        |
| K0977.1120 | I    | standard        | M20x1,5 | M6 | 10  | 12,2 | 40      | 140     | 10,3 | 34 | 47   | 2,7  | -   | 14 | 12        |
| K0977.1212 | I    | intensified     | M12x1,5 | M4 | 5,5 | 6,78 | 20      | 60      | 6,12 | 20 | 27,5 | 1,38 | -   | 8  | 8         |
| K0977.1216 | I    | intensified     | M16x1,5 | M5 | 8   | 10   | 35      | 103     | 8,7  | 28 | 38   | 1,3  | -   | 11 | 10        |
| K0977.1220 | I    | intensified     | M20x1,5 | M6 | 10  | 12,2 | 60      | 175     | 10,3 | 34 | 47   | 2,7  | -   | 14 | 12        |
| K0977.2112 | H    | standard        | M12x1,5 | M4 | 5,5 | 6,78 | 16      | 38      | 6,12 | 20 | 27,5 | 1,38 | 5,5 | 8  | 8         |
| K0977.2116 | H    | standard        | M16x1,5 | M5 | 8   | 10   | 25      | 71      | 8,7  | 28 | 38   | 1,3  | 7   | 11 | 10        |
| K0977.2120 | H    | standard        | M20x1,5 | M6 | 10  | 12,2 | 40      | 140     | 10,3 | 34 | 47   | 2,7  | 9   | 14 | 12        |
| K0977.2212 | H    | intensified     | M12x1,5 | M4 | 5,5 | 6,78 | 20      | 60      | 6,12 | 20 | 27,5 | 1,38 | 5,5 | 8  | 8         |
| K0977.2216 | H    | intensified     | M16x1,5 | M5 | 8   | 10   | 35      | 103     | 8,7  | 28 | 38   | 1,3  | 7   | 11 | 10        |
| K0977.2220 | H    | intensified     | M20x1,5 | M6 | 10  | 12,2 | 60      | 175     | 10,3 | 34 | 47   | 2,7  | 9   | 14 | 12        |
| K0977.3112 | K    | standard        | M12x1,5 | M4 | 5,5 | 6,78 | 16      | 38      | 6,12 | 20 | 27,5 | 1,38 | -   | 8  | 8         |
| K0977.3116 | K    | standard        | M16x1,5 | M5 | 8   | 10   | 25      | 71      | 8,7  | 28 | 38   | 1,3  | -   | 11 | 10        |
| K0977.3120 | K    | standard        | M20x1,5 | M6 | 10  | 12,2 | 40      | 140     | 10,3 | 34 | 47   | 2,7  | -   | 14 | 12        |
| K0977.3212 | K    | intensified     | M12x1,5 | M4 | 5,5 | 6,78 | 20      | 60      | 6,12 | 20 | 27,5 | 1,38 | -   | 8  | 8         |
| K0977.3216 | K    | intensified     | M16x1,5 | M5 | 8   | 10   | 35      | 103     | 8,7  | 28 | 38   | 1,3  | -   | 11 | 10        |
| K0977.3220 | K    | intensified     | M20x1,5 | M6 | 10  | 12,2 | 60      | 175     | 10,3 | 34 | 47   | 2,7  | -   | 14 | 12        |

## Lateral spring plungers



**Material:**  
Body mild steel.  
Ball steel or stainless steel hardened or POM.  
Spring stainless steel or plastic.

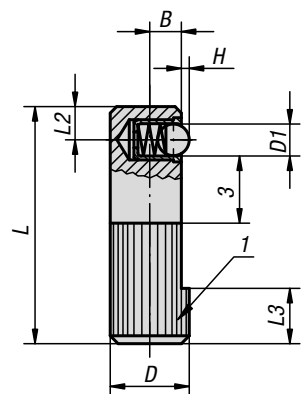
**Version:**  
Body black oxidised.  
Ball bright.

**Sample order:**  
K0374.410

**Note:**  
The lateral spring plunger must be pressed into the hole to at least depth L3. These plungers are for positioning and holding small parts in fixtures. If mechanical machining of the workpiece is to be carried out, other clamps may be necessary. When the fixture is not in use it should be ensured that plastic springs are not under stress.

Spring force refers to a mean value.

**Drawing reference:**  
1) knurl  
2) light holding

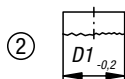
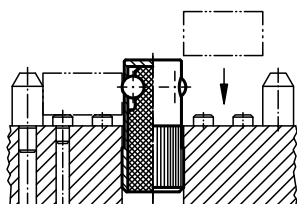
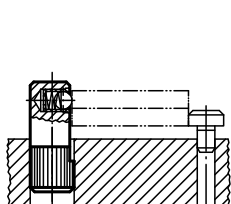
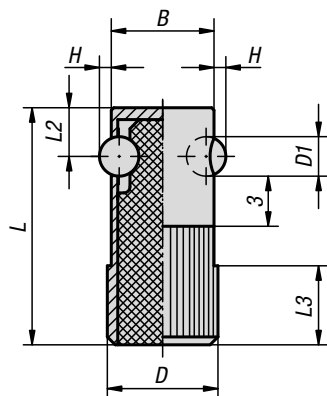
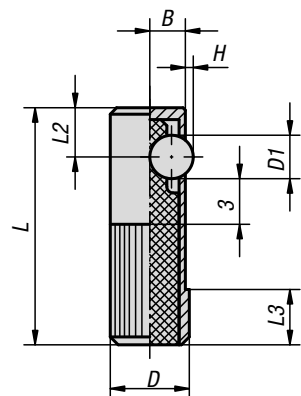


Form A  
stainless steel ball,  
one side

Form B  
POM ball,  
one side

Form C  
steel ball, one side  
plastic spring

Form D  
steel ball, both sides  
plastic spring



### KIPP Lateral spring plungers

| Order No. | Form | B   | D  | D1  | H   | L  | L2  | L3 | Receiving hole<br>H8 | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|-----------|------|-----|----|-----|-----|----|-----|----|----------------------|--------------------------------------------------|------------------------------------------------|
| K0374.008 | A    | 3,2 | 8  | 3   | 0,7 | 25 | 3,6 | 6  | 8                    | 2,5                                              | 6,5                                            |
| K0374.010 | A    | 4   | 10 | 4   | 1,0 | 30 | 4,2 | 7  | 10                   | 4,5                                              | 9                                              |
| K0374.012 | A    | 5   | 12 | 5   | 1,5 | 35 | 4,8 | 9  | 12                   | 6,5                                              | 13                                             |
| K0374.014 | A    | 5,4 | 14 | 6,5 | 1,8 | 40 | 5,8 | 10 | 14                   | 8                                                | 18                                             |
| K0374.108 | B    | 3,2 | 8  | 3   | 0,7 | 25 | 3,6 | 6  | 8                    | 2,5                                              | 6,5                                            |
| K0374.110 | B    | 4   | 10 | 4   | 1,0 | 30 | 4,2 | 7  | 10                   | 4,5                                              | 9                                              |
| K0374.112 | B    | 5   | 12 | 5   | 1,5 | 35 | 4,8 | 9  | 12                   | 6,5                                              | 13                                             |
| K0374.114 | B    | 5,4 | 14 | 6,5 | 1,8 | 40 | 5,8 | 10 | 14                   | 8                                                | 18                                             |
| K0374.410 | C    | 4,5 | 10 | 5,5 | 1   | 30 | 7   | 8  | 10                   | 60                                               | 170                                            |
| K0374.412 | C    | 5,5 | 12 | 6,5 | 1,5 | 35 | 8   | 9  | 12                   | 80                                               | 260                                            |
| K0374.414 | C    | 6,5 | 14 | 8   | 2   | 40 | 9   | 10 | 14                   | 120                                              | 480                                            |
| K0374.616 | D    | 15  | 16 | 5,5 | 1,5 | 35 | 7   | 11 | 16                   | 110                                              | 220                                            |
| K0374.618 | D    | 17  | 18 | 6,5 | 1,8 | 40 | 8   | 12 | 18                   | 120                                              | 330                                            |
| K0374.622 | D    | 21  | 22 | 8   | 2,5 | 45 | 9   | 15 | 22                   | 130                                              | 540                                            |

## Indexing plunger, stainless steel

with remote actuation



Indexing plungers are used where any change in locking position due to lateral forces should be prevented. Some examples of this are for length, height and position indexing in machine, furniture and special vehicle construction.

Indexing plungers with remote actuation are used where inaccessible assembly spaces are making it difficult to operate, or where remote actuation is required for ergonomic or safety reasons.

The indexing plunger is connected to the operator side by a Bowden cable. The combination of indexing plunger and actuating element forms a complete system which can be used for many types of application. Form D should be used for applications where the indexing pin should remain disengaged for an extended period and be prevented from springing back. As an alternative to the actuating element, the supplied screw nipple (Ø5 x 7 mm) can be used to integrate an individual actuating element into the system.

The Bowden cable is available in various lengths. To ensure an exact fit in the application concerned, the Bowden cable can be shortened as required during installation.

Corrosion protection is achieved by selecting a suitable material and surface treatment. The wire cable or cable sheath can be easily replaced if required.

### Material:

Indexing plunger:

Threaded sleeve stainless steel 1.4305.

Indexing pin stainless steel 1.4034.

Actuating element stainless steel 1.4305.

Mushroom grip thermoplastic.

Plastic cap thermoplastic.

Wire cable stainless steel 1.4401.

Traction sleeve steel wire with plastic sleeving inside and outside.

End sleeves, setscrews and screw nipples brass.

### Version:

Indexing pin, hardened, ground and bright.

Bowden cable casing, black.

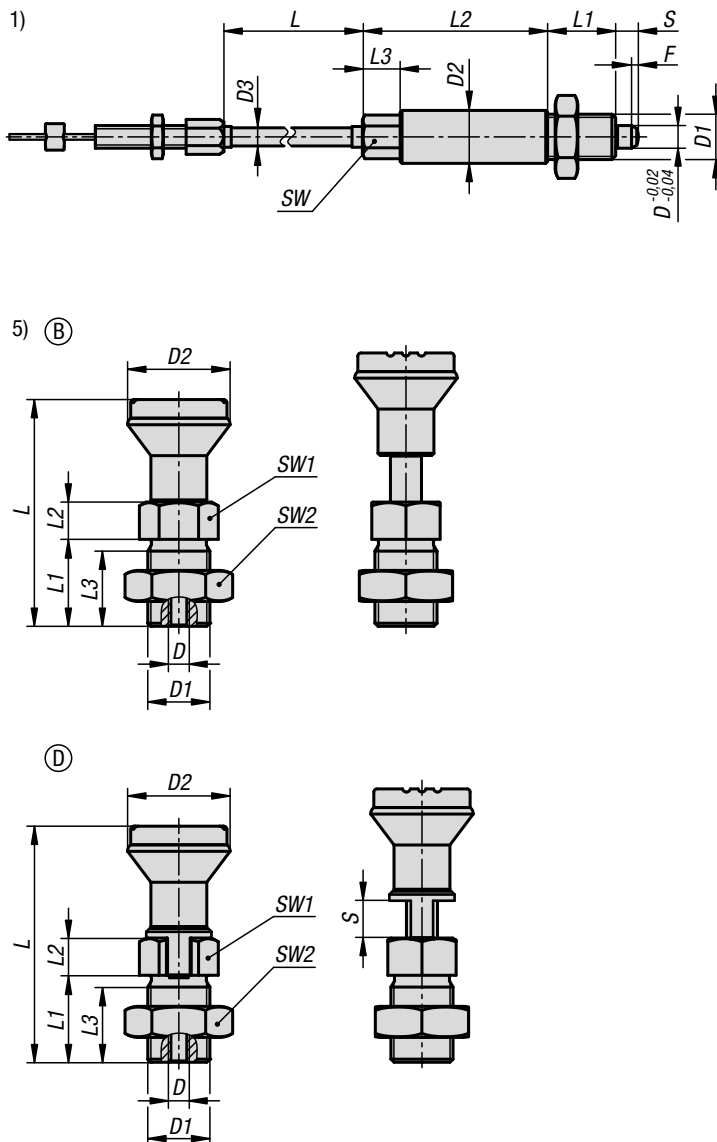
Mushroom grip, thermoplastic dark grey.

### Sample order:

K1502.02206X1000 (include length L)

### Note for ordering:

Indexing plungers with remote actuation and actuating element must be ordered separately.



# Indexing plunger, stainless steel

with remote actuation

## Note:

When installing the Bowden cables, the following points should be noted:

The length of the free end of the cable can change due to the layout angle, bending radius and load factors. So, after laying the Bowden cable, the length of the counter-bearing (casing) must be adjusted using the adjusting screw supplied. The adjusting screw is also used to set the pretension in the Bowden cable system.

When laying the cable, particular care must be taken to ensure that the bending radius is not below the minimum value, which in this case is  $R = 65 \text{ mm}$ . A radius which is too narrow can lead to increased wear and higher friction.

Also avoid letting the bending radius briefly go below the minimum value when installing, as this can cause damage to the casing. Also, the casing is designed only to support pressure forces. If pulled too sharply, the inner coil will be stretched and permanently damaged.

## On request:

Special versions.

## Supplied with:

Indexing plunger with remote actuation:

Indexing plunger with preassembled cable, casing, end sleeve, adjusting screw M6 x 34 mm and screw nipple Ø5 x 7 mm.

Actuating element:

Actuating element with plastic cover.

## Accessories:

Hexagon nuts K0700.

Mounting brackets K0638.

Spacer rings K0665.

Positioning bushes K1290.

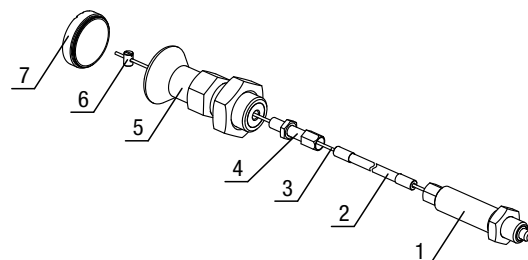
Actuating element K1502.12420.

## Drawing reference:

- 1) Indexing plunger
- 2) Bowden cable casing
- 3) Bowden cable
- 4) Adjusting screw
- 5) Actuating element
- 6) Screw nipple
- 7) Cover

Form B: non-lockout type, with locknut

Form D: lockout type, with locknut



## KIPP Indexing plunger, stainless steel with remote actuation

| Order No.    | D  | D1      | D2 | D3 | L              | L1 | L2 | L3 | Travel S | SW | Fx30° | Spring force initial pressure F1 approx. N | Spring force final pressure F2 approx. N |
|--------------|----|---------|----|----|----------------|----|----|----|----------|----|-------|--------------------------------------------|------------------------------------------|
| K1502.02206X | 6  | M12x1,5 | 14 | 5  | 1000/3000/5000 | 18 | 49 | 10 | 6        | 10 | 1,8   | 6                                          | 14                                       |
| K1502.02308X | 8  | M16x1,5 | 19 | 5  | 1000/3000/5000 | 23 | 59 | 10 | 8        | 13 | 2,3   | 15                                         | 35                                       |
| K1502.02410X | 10 | M20x1,5 | 23 | 5  | 1000/3000/5000 | 24 | 65 | 10 | 10       | 16 | 2,8   | 15                                         | 34                                       |
| K1502.02412X | 12 | M20x1,5 | 23 | 5  | 1000/3000/5000 | 26 | 65 | 10 | 12       | 16 | 2,8   | 15                                         | 39                                       |

## KIPP Actuating elements

| Order No.    | Form | Colour Cap            | D Internal thread | D1      | D2 | L  | L1 | L2 | L3 | SW1 | SW2 |
|--------------|------|-----------------------|-------------------|---------|----|----|----|----|----|-----|-----|
| K1502.12420  | B    | black grey RAL 7021   | M6                | M20x1,5 | 33 | 73 | 28 | 12 | 25 | 22  | 30  |
| K1502.124201 | B    | orange RAL 2004       | M6                | M20x1,5 | 33 | 73 | 28 | 12 | 25 | 22  | 30  |
| K1502.124202 | B    | signal green RAL6032  | M6                | M20x1,5 | 33 | 73 | 28 | 12 | 25 | 22  | 30  |
| K1502.124203 | B    | blue RAL5017          | M6                | M20x1,5 | 33 | 73 | 28 | 12 | 25 | 22  | 30  |
| K1502.124205 | B    | light grey RAL 7035   | M6                | M20x1,5 | 33 | 73 | 28 | 12 | 25 | 22  | 30  |
| K1502.124206 | B    | traffic red RAL 3020  | M6                | M20x1,5 | 33 | 73 | 28 | 12 | 25 | 22  | 30  |
| K1502.124207 | B    | colza yellow RAL 1021 | M6                | M20x1,5 | 33 | 73 | 28 | 12 | 25 | 22  | 30  |

| Order No. Travel S 6 | Order No. Travel S 8 | Order No. Travel S 10 | Order No. Travel S 12 | Form | Colour Cap            | D Internal thread | D1      | D2 | L  | L1 | L2 | L3 | SW1 | SW2 |
|----------------------|----------------------|-----------------------|-----------------------|------|-----------------------|-------------------|---------|----|----|----|----|----|-----|-----|
| K1502.1442006        | K1502.1442008        | K1502.1442010         | K1502.1442012         | D    | black grey RAL 7021   | M6                | M20x1,5 | 33 | 76 | 28 | 12 | 25 | 22  | 30  |
| K1502.14420106       | K1502.14420108       | K1502.14420110        | K1502.14420112        | D    | orange RAL 2004       | M6                | M20x1,5 | 33 | 76 | 28 | 12 | 25 | 22  | 30  |
| K1502.14420206       | K1502.14420208       | K1502.14420210        | K1502.14420212        | D    | signal green RAL6032  | M6                | M20x1,5 | 33 | 76 | 28 | 12 | 25 | 22  | 30  |
| K1502.14420306       | K1502.14420308       | K1502.14420310        | K1502.14420312        | D    | blue RAL5017          | M6                | M20x1,5 | 33 | 76 | 28 | 12 | 25 | 22  | 30  |
| K1502.14420506       | K1502.14420508       | K1502.14420510        | K1502.14420512        | D    | light grey RAL 7035   | M6                | M20x1,5 | 33 | 76 | 28 | 12 | 25 | 22  | 30  |
| K1502.14420606       | K1502.14420608       | K1502.14420610        | K1502.14420612        | D    | traffic red RAL 3020  | M6                | M20x1,5 | 33 | 76 | 28 | 12 | 25 | 22  | 30  |
| K1502.14420706       | K1502.14420708       | K1502.14420710        | K1502.14420712        | D    | colza yellow RAL 1021 | M6                | M20x1,5 | 33 | 76 | 28 | 12 | 25 | 22  | 30  |

# Indexing plungers steel or stainless steel

with status sensor, hardwired



Indexing plungers are used where it is necessary to prevent changes of position due to lateral forces. Some examples of this are for length, height and position locking in machines, equipment, furniture and special vehicle construction.

With indexing plungers with status sensor, the actuation status can be detected and evaluated electronically. The connection, e.g. to a machine control system, is hard wired via the connection cable of the integrated sensor.

## Material:

Steel version:

Grub screw and indexing pin steel.

Stainless steel version:

Indexing pin hardened:

Threaded sleeve 1.4305.

Indexing pin 1.4034.

Indexing pin not hardened:

Threaded sleeve 1.4305.

Indexing pin 1.4305.

Mushroom grip black grey thermoplastic.

## Version:

Steel version:

Threaded sleeve, black oxidised.

Indexing pin hardened, ground and black oxidised.

Stainless steel version:

Threaded sleeve, bright.

Indexing pin hardened, ground and bright.

Indexing pin not hardened, ground and bright.

## Sample order:

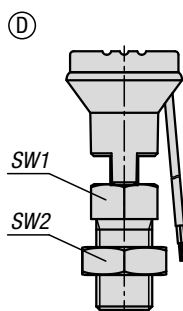
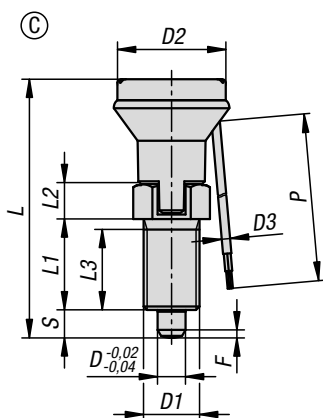
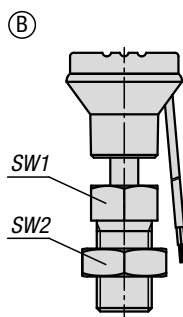
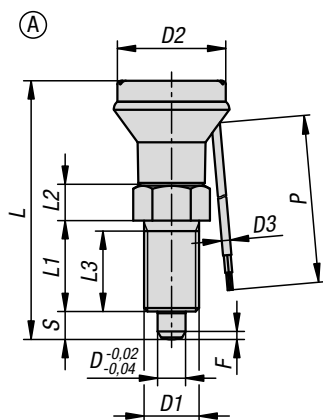
K1744.22061

## Note:

The status sensor switches when it engages after S - 1 mm travel.

## Application:

Indexing plungers with status sensor allow actuation-dependent process control. It is also possible to ensure that the indexing pin is in the desired actuation status.





# Indexing plungers steel or stainless steel

with status sensor, hardwired



## Technical data:

Inductive sensor:  
Output circuit: PNP NO  
Operating voltage: 6 - 30 V DC  
Operating current: <100 mA  
Contact gap: 1 mm  
Switch frequency: <4000 Hz  
Short-circuit proof: yes  
Reverse polarity protection: yes  
Rating: IP 67  
Connection type: 2 m PVC cable  
Temperature range: -10 °C - +70 °C  
Approvals: CE, c UL us, EAC



## Safety:

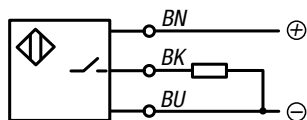
Indexing plungers with status sensor are not suitable for personnel safety functions.

## Drawing reference:

Form A: non-lockout type, without locknut  
Form B: non-lockout type, with locknut  
Form C: lockout type, without locknut  
Form D: lockout type, with locknut

P = cable length

BN = brown  
BK = black  
BU = blue



## KIPP Indexing plungers, steel, indexing pin hardened

| Order No.<br>Form A | Order No.<br>Form B | Order No.<br>Form C | Order No.<br>Form D | D  | D1      | D2 | D3  | L  | L1 | L2 | L3 | Travel<br>S | SW1 | SW2     | Fx30° | P    | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|---------------------|---------------------|---------------------|---------------------|----|---------|----|-----|----|----|----|----|-------------|-----|---------|-------|------|--------------------------------------------------|------------------------------------------------|
| K1744.11051         | K1744.21051         | K1744.31051         | K1744.41051         | 5  | M10x1   | 25 | 2,4 | 51 | 17 | 7  | 15 | 5           | 13  | -17/-17 | 1,3   | 2000 | 5                                                | 12                                             |
| K1744.12061         | K1744.22061         | K1744.32061         | K1744.42061         | 6  | M12x1,5 | 25 | 2,4 | 56 | 20 | 8  | 17 | 6           | 14  | -19/-19 | 1,8   | 2000 | 6                                                | 14                                             |
| K1744.13081         | K1744.23081         | K1744.33081         | K1744.43081         | 8  | M16x1,5 | 33 | 2,4 | 74 | 26 | 10 | 23 | 8           | 19  | -24/-24 | 2,3   | 2000 | 15                                               | 35                                             |
| K1744.14101         | K1744.24101         | K1744.34101         | K1744.44101         | 10 | M20x1,5 | 33 | 2,4 | 80 | 28 | 12 | 25 | 10          | 22  | -30/-30 | 2,8   | 2000 | 15                                               | 34                                             |
| K1744.14121         | K1744.24121         | K1744.34121         | K1744.44121         | 12 | M20x1,5 | 33 | 2,4 | 84 | 28 | 14 | 25 | 12          | 22  | -30/-30 | 2,8   | 2000 | 15                                               | 39                                             |

## KIPP Indexing plungers, stainless steel, indexing pin hardened

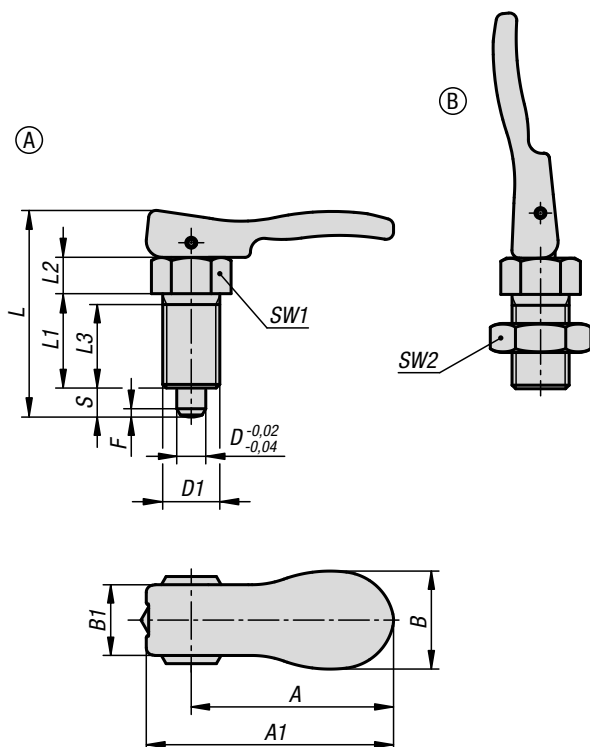
| Order No.<br>Form A | Order No.<br>Form B | Order No.<br>Form C | Order No.<br>Form D | D  | D1      | D2 | D3  | L  | L1 | L2 | L3 | Travel<br>S | SW1 | SW2     | Fx30° | P    | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|---------------------|---------------------|---------------------|---------------------|----|---------|----|-----|----|----|----|----|-------------|-----|---------|-------|------|--------------------------------------------------|------------------------------------------------|
| K1744.011051        | K1744.021051        | K1744.031051        | K1744.041051        | 5  | M10x1   | 25 | 2,4 | 51 | 17 | 7  | 15 | 5           | 13  | -17/-17 | 1,3   | 2000 | 5                                                | 12                                             |
| K1744.012061        | K1744.022061        | K1744.032061        | K1744.042061        | 6  | M12x1,5 | 25 | 2,4 | 56 | 20 | 8  | 17 | 6           | 14  | -19/-19 | 1,8   | 2000 | 6                                                | 14                                             |
| K1744.013081        | K1744.023081        | K1744.033081        | K1744.043081        | 8  | M16x1,5 | 33 | 2,4 | 74 | 26 | 10 | 23 | 8           | 19  | -24/-24 | 2,3   | 2000 | 15                                               | 35                                             |
| K1744.014101        | K1744.024101        | K1744.034101        | K1744.044101        | 10 | M20x1,5 | 33 | 2,4 | 80 | 28 | 12 | 25 | 10          | 22  | -30/-30 | 2,8   | 2000 | 15                                               | 34                                             |
| K1744.014121        | K1744.024121        | K1744.034121        | K1744.044121        | 12 | M20x1,5 | 33 | 2,4 | 84 | 28 | 14 | 25 | 12          | 22  | -30/-30 | 2,8   | 2000 | 15                                               | 39                                             |

## KIPP Indexing plungers, stainless steel, indexing pin not hardened

| Order No.<br>Form A | Order No.<br>Form B | Order No.<br>Form C | Order No.<br>Form D | D  | D1      | D2 | D3  | L  | L1 | L2 | L3 | Travel<br>S | SW1 | SW2     | Fx30° | P    | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|---------------------|---------------------|---------------------|---------------------|----|---------|----|-----|----|----|----|----|-------------|-----|---------|-------|------|--------------------------------------------------|------------------------------------------------|
| K1744.111051        | K1744.121051        | K1744.131051        | K1744.141051        | 5  | M10x1   | 25 | 2,4 | 51 | 17 | 7  | 15 | 5           | 13  | -17/-17 | 1,3   | 2000 | 5                                                | 12                                             |
| K1744.112061        | K1744.122061        | K1744.132061        | K1744.142061        | 6  | M12x1,5 | 25 | 2,4 | 56 | 20 | 8  | 17 | 6           | 14  | -19/-19 | 1,8   | 2000 | 6                                                | 14                                             |
| K1744.113081        | K1744.123081        | K1744.133081        | K1744.143081        | 8  | M16x1,5 | 33 | 2,4 | 74 | 26 | 10 | 23 | 8           | 19  | -24/-24 | 2,3   | 2000 | 15                                               | 35                                             |
| K1744.114101        | K1744.124101        | K1744.134101        | K1744.144101        | 10 | M20x1,5 | 33 | 2,4 | 80 | 28 | 12 | 25 | 10          | 22  | -30/-30 | 2,8   | 2000 | 15                                               | 34                                             |
| K1744.114121        | K1744.124121        | K1744.134121        | K1744.144121        | 12 | M20x1,5 | 33 | 2,4 | 84 | 28 | 14 | 25 | 12          | 22  | -30/-30 | 2,8   | 2000 | 15                                               | 39                                             |

# Indexing plunger with cam lever

steel or stainless steel



## Material:

Steel version:

Threaded sleeve 1.0718.

Indexing pin 1.0718.

Stainless steel version:

Threaded sleeve 1.4305.

Indexing pin 1.4305.

Handle fibreglass reinforced thermoplastic PPA (high temperature resistant).

## Version:

Steel version:

Threaded sleeve, black oxidised.

Indexing pin hardened, ground and black oxidised.

Stainless steel version:

Threaded sleeve, bright.

Indexing pin ground and left bright.

Grip black or traffic red RAL3020.

## Sample order:

K1584.8105

## Note:

Indexing plungers are used where it is necessary to prevent changes of position due to lateral forces. A new locking position can be set only after the plunger has been manually disengaged. With this indexing plunger a cam lever is used to retract the pin. The indexing plunger remains unlocked as long as the handle is positioned over the dead-centre of the cam.

The ergonomic cam lever enables light handling with low effort.

## Temperature range:

Permanent operating temperature acc. to IEC 216 max. 160°C.

Short-term operating temperature max. 250°C.

## Advantages:

Simple and quick operation.

Suitable for high temperature applications.

With integrated detent function.

## On request:

Special versions.

## Accessories:

Spacer rings K0665

Positioning bushes for indexing plunger K1290

Mounting brackets K0638

## Drawing reference:

Form A: without locknut

Form B: with locknut

## Indexing plunger with cam lever

steel or stainless steel



## KIPP Indexing plunger with cam lever, steel

| Order No.<br>black | Order No.<br>red | Form | A    | A1   | B    | B1   | D  | D1      | Travel<br>S | L    | L1 | L2 | L3 | SW1 | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|--------------------|------------------|------|------|------|------|------|----|---------|-------------|------|----|----|----|-----|-------|--------------------------------------------------|------------------------------------------------|
| K1584.8105         | K1584.8105154    | A    | 31,7 | 41,7 | 17,8 | 12,9 | 5  | M10x1   | 5           | 39   | 17 | 7  | 15 | 13  | 1,3   | 5                                                | 12                                             |
| K1584.8206         | K1584.8206154    | A    | 31,6 | 41,7 | 17,8 | 12,9 | 6  | M12x1,5 | 6           | 44   | 20 | 8  | 17 | 14  | 1,8   | 6                                                | 14                                             |
| K1584.8308         | K1584.8308154    | A    | 55,5 | 67,8 | 26,9 | 19,4 | 8  | M16x1,5 | 8           | 56,9 | 26 | 10 | 23 | 19  | 2,3   | 15                                               | 35                                             |
| K1584.8410         | K1584.8410154    | A    | 53,4 | 67,8 | 26,9 | 19,4 | 10 | M20x1,5 | 10          | 62,9 | 28 | 12 | 25 | 22  | 2,8   | 15                                               | 34                                             |
| K1584.9105         | K1584.9105154    | B    | 31,7 | 41,7 | 17,8 | 12,9 | 5  | M10x1   | 5           | 39   | 17 | 7  | 15 | 13  | 1,3   | 5                                                | 12                                             |
| K1584.9206         | K1584.9206154    | B    | 31,6 | 41,7 | 17,8 | 12,9 | 6  | M12x1,5 | 6           | 44   | 20 | 8  | 17 | 14  | 1,8   | 6                                                | 14                                             |
| K1584.9308         | K1584.9308154    | B    | 55,5 | 67,8 | 26,9 | 19,4 | 8  | M16x1,5 | 8           | 56,9 | 26 | 10 | 23 | 19  | 2,3   | 15                                               | 35                                             |
| K1584.9410         | K1584.9410154    | B    | 53,4 | 67,8 | 26,9 | 19,4 | 10 | M20x1,5 | 10          | 62,9 | 28 | 12 | 25 | 22  | 2,8   | 15                                               | 34                                             |

## KIPP Indexing plunger with cam lever, stainless steel

| Order No.<br>black | Order No.<br>red | Form | A    | A1   | B    | B1   | D  | D1      | Travel<br>S | L    | L1 | L2 | L3 | SW1 | SW2 | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|--------------------|------------------|------|------|------|------|------|----|---------|-------------|------|----|----|----|-----|-----|-------|--------------------------------------------------|------------------------------------------------|
| K1584.18105        | K1584.18105154   | A    | 31,7 | 41,7 | 17,8 | 12,9 | 5  | M10x1   | 5           | 39   | 17 | 7  | 15 | 13  | -   | 1,3   | 5                                                | 12                                             |
| K1584.18206        | K1584.18206154   | A    | 31,6 | 41,7 | 17,8 | 12,9 | 6  | M12x1,5 | 6           | 44   | 20 | 8  | 17 | 14  | -   | 1,8   | 6                                                | 14                                             |
| K1584.18308        | K1584.18308154   | A    | 55,5 | 67,8 | 26,9 | 19,4 | 8  | M16x1,5 | 8           | 56,9 | 26 | 10 | 23 | 19  | -   | 2,3   | 15                                               | 35                                             |
| K1584.18410        | K1584.18410154   | A    | 53,4 | 67,8 | 26,9 | 19,4 | 10 | M20x1,5 | 10          | 62,9 | 28 | 12 | 25 | 22  | -   | 2,8   | 15                                               | 34                                             |
| K1584.19105        | K1584.19105154   | B    | 31,7 | 41,7 | 17,8 | 12,9 | 5  | M10x1   | 5           | 39   | 17 | 7  | 15 | 13  | 17  | 1,3   | 5                                                | 12                                             |
| K1584.19206        | K1584.19206154   | B    | 31,6 | 41,7 | 17,8 | 12,9 | 6  | M12x1,5 | 6           | 44   | 20 | 8  | 17 | 14  | 19  | 1,8   | 6                                                | 14                                             |
| K1584.19308        | K1584.19308154   | B    | 55,5 | 67,8 | 26,9 | 19,4 | 8  | M16x1,5 | 8           | 56,9 | 26 | 10 | 23 | 19  | 24  | 2,3   | 15                                               | 35                                             |
| K1584.19410        | K1584.19410154   | B    | 53,4 | 67,8 | 26,9 | 19,4 | 10 | M20x1,5 | 10          | 62,9 | 28 | 12 | 25 | 22  | 30  | 2,8   | 15                                               | 34                                             |

## Indexing plunger

with status sensor



Indexing plungers are used where it is necessary to prevent changes of position due to lateral forces. Some examples of this are for length, height and position locking in machines, equipment, furniture and special vehicle construction.

For indexing plungers with status sensor, the actuation status can be detected and processed electronically.

The actuation status is transferred wirelessly by Bluetooth to a mobile terminal or the K1494 gateway. The combination of indexing plunger with status sensor and gateway allows the signal to be processed in a machine control system, for example.

Power to the indexing plunger is supplied from an integrated button cell which can be replaced when necessary.

### Material:

Steel version:  
Threaded sleeve and indexing pin free-cutting steel.

Stainless-steel version:  
Indexing pin hardened:  
Threaded sleeve 1.4305.  
Indexing pin 1.4034.

Indexing pin not hardened:  
Threaded sleeve 1.4305.  
Indexing pin 1.4305.

Mushroom knob and cover thermoplastic.

### Version:

Steel version:  
Threaded sleeve, black oxidised.  
Indexing pin hardened, ground and black oxidised.

Stainless-steel version:  
Threaded sleeve bright.  
Indexing pin hardened, ground and bright.  
Indexing pin not hardened, ground and bright.

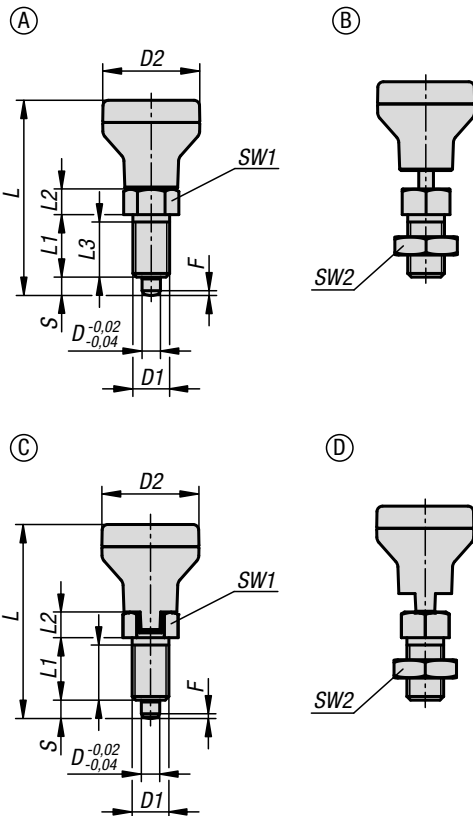
Mushroom knob dark grey.  
Cover translucent grey.

### Sample order:

K1495.1206

### Application:

Indexing plungers with status sensor allow actuation-dependent process control. It is also possible to ensure that the indexing pin is in the desired actuation status.



### Drawing reference:

Form A: non-lockout type, without locknut  
Form B: non-lockout type, with locknut  
Form C: lockout type, without locknut  
Form D: lockout type, with locknut

# Indexing plunger

with status sensor



## Advantages:

Wireless transfer of actuation status.  
Laborious cable connections no longer necessary.  
Intelligent battery management allows long running time  
No interfering edges.

## Accessories:

K1494 Gateway

## Technical data:

See technical information.

## Safety:

Indexing plungers with status sensor are not suitable for personnel safety functions.

## KIPP Indexing plungers, steel, indexing pin hardened

| Order No.<br>Form A | Order No.<br>Form B | Order No.<br>Form C | Order No.<br>Form D | D  | D1      | D2 | L  | L1 | L2 | L3 | SW1 | SW2     | Fx30° | Travel<br>S | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|---------------------|---------------------|---------------------|---------------------|----|---------|----|----|----|----|----|-----|---------|-------|-------------|--------------------------------------------------|------------------------------------------------|
| K1495.1105          | K1495.2105          | K1495.3105          | K1495.4105          | 5  | M10x1   | 35 | 57 | 17 | 7  | 15 | 13  | -17/-17 | 1,3   | 5           | 5                                                | 12                                             |
| K1495.1206          | K1495.2206          | K1495.3206          | K1495.4206          | 6  | M12x1,5 | 35 | 62 | 20 | 8  | 17 | 14  | -19/-19 | 1,8   | 6           | 6                                                | 14                                             |
| K1495.1308          | K1495.2308          | K1495.3308          | K1495.4308          | 8  | M16x1,5 | 35 | 76 | 26 | 10 | 23 | 19  | -24/-24 | 2,3   | 8           | 15                                               | 35                                             |
| K1495.1410          | K1495.2410          | K1495.3410          | K1495.4410          | 10 | M20x1,5 | 35 | 82 | 28 | 12 | 25 | 22  | -30/-30 | 2,8   | 10          | 15                                               | 34                                             |
| K1495.1412          | K1495.2412          | K1495.3412          | K1495.4412          | 12 | M20x1,5 | 35 | 86 | 28 | 14 | 25 | 22  | -30/-30 | 2,8   | 12          | 15                                               | 39                                             |

## KIPP Indexing plungers, stainless steel, indexing pin hardened

| Order No.<br>Form A | Order No.<br>Form B | Order No.<br>Form C | Order No.<br>Form D | D  | D1      | D2 | L  | L1 | L2 | L3 | SW1 | SW2     | Fx30° | Travel<br>S | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|---------------------|---------------------|---------------------|---------------------|----|---------|----|----|----|----|----|-----|---------|-------|-------------|--------------------------------------------------|------------------------------------------------|
| K1495.01105         | K1495.02105         | K1495.03105         | K1495.04105         | 5  | M10x1   | 35 | 57 | 17 | 7  | 15 | 13  | -17/-17 | 1,3   | 5           | 5                                                | 12                                             |
| K1495.01206         | K1495.02206         | K1495.03206         | K1495.04206         | 6  | M12x1,5 | 35 | 62 | 20 | 8  | 17 | 14  | -19/-19 | 1,8   | 6           | 6                                                | 14                                             |
| K1495.01308         | K1495.02308         | K1495.03308         | K1495.04308         | 8  | M16x1,5 | 35 | 76 | 26 | 10 | 23 | 19  | -24/-24 | 2,3   | 8           | 15                                               | 35                                             |
| K1495.01410         | K1495.02410         | K1495.03410         | K1495.04410         | 10 | M20x1,5 | 35 | 82 | 28 | 12 | 25 | 22  | -30/-30 | 2,8   | 10          | 15                                               | 34                                             |
| K1495.01412         | K1495.02412         | K1495.03412         | K1495.04412         | 12 | M20x1,5 | 35 | 86 | 28 | 14 | 25 | 22  | -30/-30 | 2,8   | 12          | 15                                               | 39                                             |

## KIPP Indexing plungers, stainless steel, indexing pin not hardened

| Order No.<br>Form A | Order No.<br>Form B | Order No.<br>Form C | Order No.<br>Form D | D  | D1      | D2 | L  | L1 | L2 | L3 | SW1 | SW2     | Fx30° | Travel<br>S | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|---------------------|---------------------|---------------------|---------------------|----|---------|----|----|----|----|----|-----|---------|-------|-------------|--------------------------------------------------|------------------------------------------------|
| K1495.11105         | K1495.12105         | K1495.13105         | K1495.14105         | 5  | M10x1   | 35 | 57 | 17 | 7  | 15 | 13  | -17/-17 | 1,3   | 5           | 5                                                | 12                                             |
| K1495.11206         | K1495.12206         | K1495.13206         | K1495.14206         | 6  | M12x1,5 | 35 | 62 | 20 | 8  | 17 | 14  | -19/-19 | 1,8   | 6           | 6                                                | 14                                             |
| K1495.11308         | K1495.12308         | K1495.13308         | K1495.14308         | 8  | M16x1,5 | 35 | 76 | 26 | 10 | 23 | 19  | -24/-24 | 2,3   | 8           | 15                                               | 35                                             |
| K1495.11410         | K1495.12410         | K1495.13410         | K1495.14410         | 10 | M20x1,5 | 35 | 82 | 28 | 12 | 25 | 22  | -30/-30 | 2,8   | 10          | 15                                               | 34                                             |
| K1495.11412         | K1495.12412         | K1495.13412         | K1495.14412         | 12 | M20x1,5 | 35 | 86 | 28 | 14 | 25 | 22  | -30/-30 | 2,8   | 12          | 15                                               | 39                                             |

# Technical note on indexing plungers with status sensor K1495

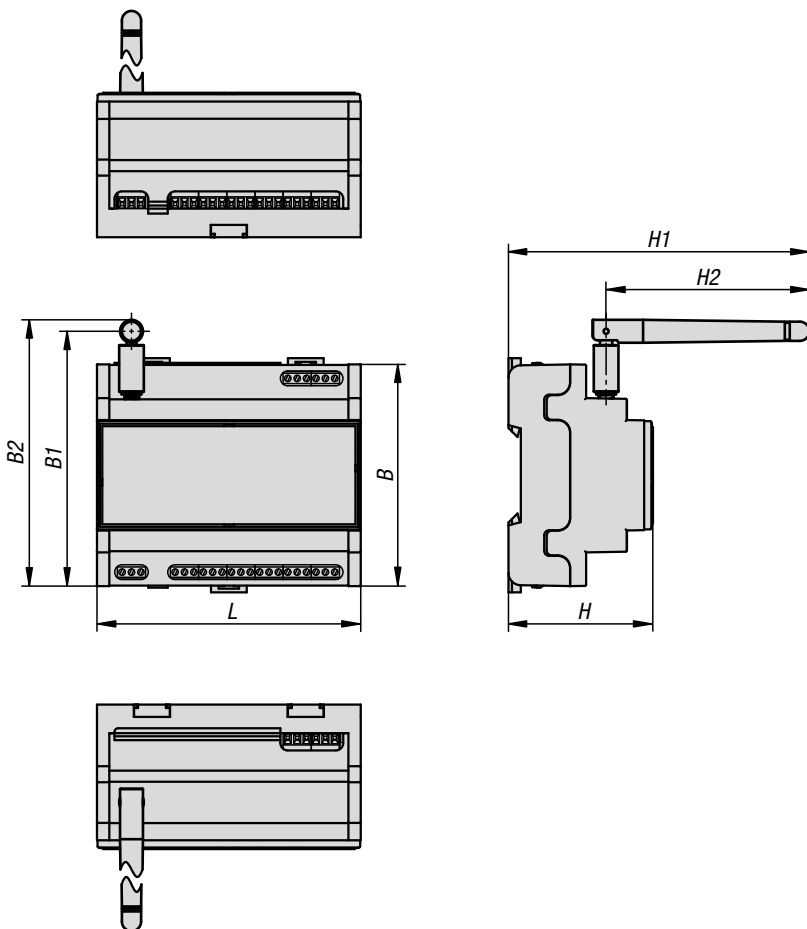


## Technical data:

| Power supply                |       |                                                                                        |
|-----------------------------|-------|----------------------------------------------------------------------------------------|
| Battery                     |       | VARTA CR2032 3V                                                                        |
| Battery life                |       | About 1 year                                                                           |
| Battery replacement         |       | through removable cover                                                                |
| Wireless transfer           |       |                                                                                        |
| Transfer protocol           |       | Bluetooth Low Energy                                                                   |
| Transmission frequency      | [GHz] | 2.4                                                                                    |
| Range                       | [m]   | about 10                                                                               |
| Transfer rate               | [1/s] | 10                                                                                     |
| Displays / control elements |       |                                                                                        |
| LED blue                    |       | Flashing quickly: pairing mode active<br>Flashing slowly: battery needs to be replaced |
| Environmental conditions    |       |                                                                                        |
| Application location        |       | For use indoors                                                                        |
| Altitude                    |       | up to 2000m                                                                            |
| Operating temperature       | [°C]  | 0 to 65                                                                                |
| Storage temperature         | [°C]  | -10 to 65                                                                              |
| Maximum relative humidity   | [%]   | 80 (without condensation)                                                              |
| Safety rating               |       | IP64 as defined in DIN EN 60529                                                        |
| Approvals / inspections     |       |                                                                                        |
| Radio licences              |       | Europe, USA, Canada                                                                    |
| Electrical safety           |       | EN 61010-1 / EN 61010-2-201                                                            |
| EMV                         |       | EN 301 489-1 / EN 301 489-17                                                           |
| Wireless                    |       | EN 300 328                                                                             |
| Vibration resistance        |       | EN 60068-2-6                                                                           |
| Shock resistance            |       | EN 60068-2-27                                                                          |

# Gateway

for indexing plunger with status sensor



The gateway forms the interface between the indexing plunger with status sensor and the machine control. It receives the wireless signal from the indexing plunger and supplies a binary output signal that can be read by the machine control.

The operating statuses of up to 6 indexing plungers can be transmitted in this way. A mobile terminal can be linked to the gateway for additional visualisation.

The integrated control panel with buttons and LEDs can be used to connect/disconnect the indexing plungers, and also monitor the wireless link, the actuation status, and the level of battery charge.

## Material:

Housing polycarbonate.

## Version:

Housing top part light grey.

Housing lower part anthracite grey.

## Sample order:

K1494.01

## Application:

The gateway is used to integrate indexing plungers with status sensors into machines and systems. With the link between gateway and machine control, the actuation statuses of the indexing plungers can be displayed, checked, and used for process control.

## Assembly:

On mounting rails as defined in IEC 60715.

## Advantages:

Actuation-dependent process control.  
Universal output signal.  
Simple installation.

## On request:

Further output signals, interfaces

## Accessories:

Indexing plunger with status sensor K1495

## Technical data:

See technical information.

## KIPP Gateway for indexing plunger with status sensor

| Order No. | Output signal | B  | B1    | B2  | H    | H1  | H2   | L   |
|-----------|---------------|----|-------|-----|------|-----|------|-----|
| K1494.01  | Relais        | 90 | 103,4 | 108 | 58,5 | 122 | 82,5 | 107 |

# Technical note on the gateway for indexing plunger with status sensor K1494



## Technical data:

| Power supply                   |       |                                                                                                                                                             |
|--------------------------------|-------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Operating voltage              | [V]   | 24 V DC                                                                                                                                                     |
| Nominal current                | [A]   | 0.3 (max. 0.32 / min. 0.27)                                                                                                                                 |
| Power consumption              | [W]   | 7.2                                                                                                                                                         |
| Overvoltage category           |       | I                                                                                                                                                           |
| Interfaces                     |       |                                                                                                                                                             |
| Signal inputs                  |       | 7x by wireless transfer<br>No. 1 to 6: for signal monitoring<br>UI: for monitoring by a mobile terminal                                                     |
| Signal outputs                 |       | 8x potential free changer contacts<br>2A 24V DC / 2A 250V AC<br>K1-K6: Signal request actuation status<br>K7: Radio link status<br>K8: Battery level status |
| Antenna connection             |       | R-SMA socket (for supplied antennae)                                                                                                                        |
| Connection terminals           |       | Screw terminals 0.2 mm <sup>2</sup> to 1.31 mm <sup>2</sup>                                                                                                 |
| Connected loads                |       | 24 - 16 AWG / 0.205 mm <sup>2</sup> to 1.31 mm <sup>2</sup>                                                                                                 |
| Insulation stripping length    | [mm]  | 5 to 6                                                                                                                                                      |
| Overvoltage category           |       | II                                                                                                                                                          |
| Intended load                  |       | AC and DC circuit, general loading                                                                                                                          |
| Wireless transfer              |       |                                                                                                                                                             |
| Transfer protocol              |       | Bluetooth Low Energy                                                                                                                                        |
| Transmission frequency         | [GHz] | 2.4                                                                                                                                                         |
| Range                          | [m]   | about 10                                                                                                                                                    |
| Transfer rate                  | [1/s] | 10                                                                                                                                                          |
| Displays / control elements    |       |                                                                                                                                                             |
| LED green (Power)              |       | Lit when the device is operating.                                                                                                                           |
| LED green (wireless reception) |       | Lit when the linked device is within range.                                                                                                                 |
| LED yellow (actuation status)  |       | Indicates the actuation status of the linked device.                                                                                                        |
| LED red (battery status)       |       | Lit when the battery needs to be replaced.                                                                                                                  |
| Switch                         |       | Allows a device to be connected or disconnected to/from the desired signal input on the gateway.                                                            |
| Assembly                       |       |                                                                                                                                                             |
| Fixation                       |       | on carrier rail as defined in IEC 60715                                                                                                                     |
| Environmental conditions       |       |                                                                                                                                                             |
| Application location           |       | For use indoors                                                                                                                                             |
| Altitude                       |       | up to 2000m                                                                                                                                                 |
| Operating temperature          | [°C]  | 0 to 65                                                                                                                                                     |
| Storage temperature            | [°C]  | -10 to 65                                                                                                                                                   |
| Maximum relative humidity      | [%]   | 80 (without condensation)                                                                                                                                   |
| Safety rating                  |       | IP20 acc. to DIN EN 60529                                                                                                                                   |
| Impact resistance              |       | IK06 acc. to DIN EN 62262                                                                                                                                   |
| Degree of contamination        |       | 2                                                                                                                                                           |



# Technical note on the gateway for indexing plunger with status sensor K1494

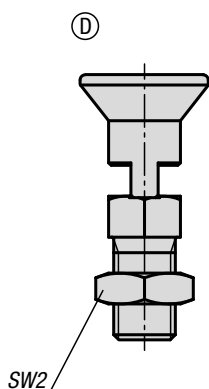
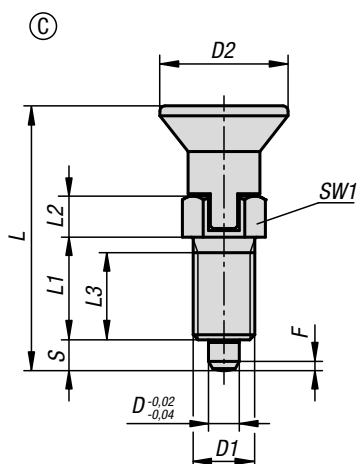
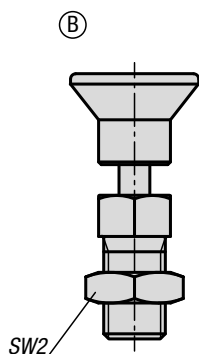
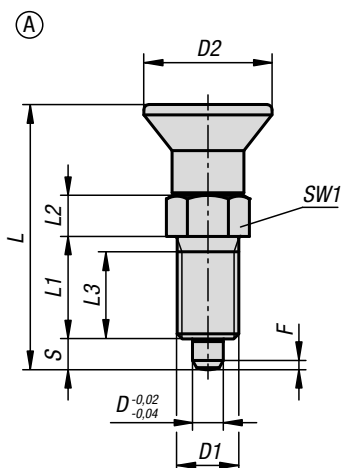


## Technical data:

| Approvals / inspections  |      |                                                                                                              |
|--------------------------|------|--------------------------------------------------------------------------------------------------------------|
| Radio licences           |      | Europe, USA, Canada                                                                                          |
| Electrical safety        |      | EN 61010-1 / EN 61010-2-201                                                                                  |
| EMV                      |      | EN 301 489-1 / EN 301 489-17                                                                                 |
| Wireless                 |      | EN 300 328                                                                                                   |
| Vibration resistance     |      | EN 60068-2-6                                                                                                 |
| Shock resistance         |      | EN 60068-2-27                                                                                                |
| Note                     |      |                                                                                                              |
| Interference suppression |      | Interference suppression is the responsibility of the user when inductive loads are switched on the outputs. |
| Radio licence            |      | The radio licence for the Gateway is valid only when the supplied antenna is used.                           |
| Mechanical data          |      |                                                                                                              |
| Weight                   | [kg] | 0.3                                                                                                          |



## Indexing plungers steel or stainless steel

**Drawing reference:**

Form A: non-lockout type, without locknut

Form B: non-lockout type, with locknut

Form C: lockout type, without locknut

Form D: lockout type, with locknut

Indexing plungers are used where it is necessary to prevent changes of position due to lateral forces. Some examples of this are for length, height and position indexing in machines, equipment, furniture and special vehicle construction.

A new indexed position can only be moved to after the pin has been manually retracted. Form C and D are recommended for applications where the indexing pin should remain disengaged for an extended period and be prevented from springing back.

The materials used enable diverse applications including those with the highest demands on corrosion resistance

**Material:**

Steel version:

Threaded sleeve and indexing pin free-cutting steel.

Spring 1.4310.

Stainless steel version A2:

Threaded sleeve 1.4305.

Hardened indexing pin 1.4034.

Not hardened indexing pin 1.4305.

Spring 1.4310.

Stainless steel version A4:

Threaded sleeve and indexing pin 1.4404.

Spring 1.4401 or 1.4571.

Mushroom grip thermoplastic, dark grey or traffic red RAL3020.

**Version:**

Steel version:

Threaded sleeve, black oxidised.

Indexing pin hardened, ground and black oxidised.

Stainless steel A2 version:

threaded sleeve bright.

Indexing pin hardened or not hardened, ground and bright.

Stainless steel A4 version:

threaded sleeve bright.

Indexing pin ground, chemically nickel-plated or bright.

**Sample order:**

K0338.04206

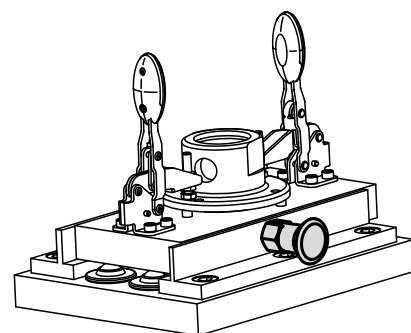
**On request:**

Special versions.

**Accessories:**

Spacer rings K0665

## Indexing plungers steel or stainless steel



## KIPP Indexing plungers, steel, indexing pin hardened

| Order No.<br>Form A | Order No.<br>Form B | Order No.<br>Form C | Order No.<br>Form D | Component<br>colour  | D  | D1      | D2 | L    | L1 | L2 | L3 | Travel<br>S | SW1 | SW2       | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|---------------------|---------------------|---------------------|---------------------|----------------------|----|---------|----|------|----|----|----|-------------|-----|-----------|-------|--------------------------------------------------|------------------------------------------------|
| K0338.1903          | K0338.2903          | K0338.3903          | K0338.4903          | black grey RAL 7021  | 3  | M6x0,75 | 14 | 31,5 | 12 | 5  | 10 | 3,5         | 8   | -/10°-/10 | 0,8   | 4,5                                              | 10                                             |
| K0338.1004          | K0338.2004          | K0338.3004          | K0338.4004          | black grey RAL 7021  | 4  | M8x1    | 18 | 38,5 | 15 | 6  | 13 | 4           | 10  | -/13°-/13 | 1     | 6                                                | 12                                             |
| K0338.1105          | K0338.2105          | K0338.3105          | K0338.4105          | black grey RAL 7021  | 5  | M10x1   | 21 | 43,5 | 17 | 7  | 15 | 5           | 13  | -/17°-/17 | 1,3   | 5                                                | 12                                             |
| K0338.1206          | K0338.2206          | K0338.3206          | K0338.4206          | black grey RAL 7021  | 6  | M12x1,5 | 25 | 51,7 | 20 | 8  | 17 | 6           | 14  | -/19°-/19 | 1,8   | 6                                                | 14                                             |
| K0338.1308          | K0338.2308          | K0338.3308          | K0338.4308          | black grey RAL 7021  | 8  | M16x1,5 | 33 | 68   | 26 | 10 | 23 | 8           | 19  | -/24°-/24 | 2,3   | 15                                               | 35                                             |
| K0338.1410          | K0338.2410          | K0338.3410          | K0338.4410          | black grey RAL 7021  | 10 | M20x1,5 | 33 | 74   | 28 | 12 | 25 | 10          | 22  | -/30°-/30 | 2,8   | 15                                               | 34                                             |
| K0338.1412          | K0338.2412          | K0338.3412          | K0338.4412          | black grey RAL 7021  | 12 | M20x1,5 | 33 | 78   | 28 | 14 | 25 | 12          | 22  | -/30°-/30 | 2,8   | 15                                               | 39                                             |
| K0338.1516          | K0338.2516          | K0338.3516          | K0338.4516          | black grey RAL 7021  | 16 | M24x2   | 40 | 96   | 32 | 18 | 28 | 16          | 27  | -/36°-/36 | 3,2   | 20                                               | 46                                             |
| K0338.190384        | K0338.290384        | K0338.390384        | K0338.490384        | traffic red RAL 3020 | 3  | M6x0,75 | 14 | 31,5 | 12 | 5  | 10 | 3,5         | 8   | -/10°-/10 | 0,8   | 4,5                                              | 10                                             |
| K0338.100484        | K0338.200484        | K0338.300484        | K0338.400484        | traffic red RAL 3020 | 4  | M8x1    | 18 | 38,5 | 15 | 6  | 13 | 4           | 10  | -/13°-/13 | 1     | 6                                                | 12                                             |
| K0338.110584        | K0338.210584        | K0338.310584        | K0338.410584        | traffic red RAL 3020 | 5  | M10x1   | 21 | 43,5 | 17 | 7  | 15 | 5           | 13  | -/17°-/17 | 1,3   | 5                                                | 12                                             |
| K0338.120684        | K0338.220684        | K0338.320684        | K0338.420684        | traffic red RAL 3020 | 6  | M12x1,5 | 25 | 51,7 | 20 | 8  | 17 | 6           | 14  | -/19°-/19 | 1,8   | 6                                                | 14                                             |
| K0338.130884        | K0338.230884        | K0338.330884        | K0338.430884        | traffic red RAL 3020 | 8  | M16x1,5 | 33 | 68   | 26 | 10 | 23 | 8           | 19  | -/24°-/24 | 2,3   | 15                                               | 35                                             |
| K0338.141084        | K0338.241084        | K0338.341084        | K0338.441084        | traffic red RAL 3020 | 10 | M20x1,5 | 33 | 74   | 28 | 12 | 25 | 10          | 22  | -/30°-/30 | 2,8   | 15                                               | 34                                             |
| K0338.141284        | K0338.241284        | K0338.341284        | K0338.441284        | traffic red RAL 3020 | 12 | M20x1,5 | 33 | 78   | 28 | 14 | 25 | 12          | 22  | -/30°-/30 | 2,8   | 15                                               | 39                                             |
| K0338.151684        | K0338.251684        | K0338.351684        | K0338.451684        | traffic red RAL 3020 | 16 | M24x2   | 40 | 96   | 32 | 18 | 28 | 16          | 27  | -/36°-/36 | 3,2   | 20                                               | 46                                             |

## Indexing plungers steel or stainless steel



## KIPP Indexing plungers, stainless steel A2, indexing pin hardened

| Order No.<br>Form A | Order No.<br>Form B | Order No.<br>Form C | Order No.<br>Form D | Component<br>colour  | D  | D1      | D2 | L    | L1 | L2 | L3 | Travel<br>S | SW1 | SW2     | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|---------------------|---------------------|---------------------|---------------------|----------------------|----|---------|----|------|----|----|----|-------------|-----|---------|-------|--------------------------------------------------|------------------------------------------------|
| K0338.01903         | K0338.02903         | K0338.03903         | K0338.04903         | black grey RAL 7021  | 3  | M6x0,75 | 14 | 31,5 | 12 | 5  | 10 | 3,5         | 8   | -10/-10 | 0,8   | 4,5                                              | 10                                             |
| K0338.01004         | K0338.02004         | K0338.03004         | K0338.04004         | black grey RAL 7021  | 4  | M8x1    | 18 | 38,5 | 15 | 6  | 13 | 4           | 10  | -13/-13 | 1     | 6                                                | 12                                             |
| K0338.01105         | K0338.02105         | K0338.03105         | K0338.04105         | black grey RAL 7021  | 5  | M10x1   | 21 | 43,5 | 17 | 7  | 15 | 5           | 13  | -17/-17 | 1,3   | 5                                                | 12                                             |
| K0338.01206         | K0338.02206         | K0338.03206         | K0338.04206         | black grey RAL 7021  | 6  | M12x1,5 | 25 | 51,7 | 20 | 8  | 17 | 6           | 14  | -19/-19 | 1,8   | 6                                                | 14                                             |
| K0338.01308         | K0338.02308         | K0338.03308         | K0338.04308         | black grey RAL 7021  | 8  | M16x1,5 | 33 | 68   | 26 | 10 | 23 | 8           | 19  | -24/-24 | 2,3   | 15                                               | 35                                             |
| K0338.01410         | K0338.02410         | K0338.03410         | K0338.04410         | black grey RAL 7021  | 10 | M20x1,5 | 33 | 74   | 28 | 12 | 25 | 10          | 22  | -30/-30 | 2,8   | 15                                               | 34                                             |
| K0338.01412         | K0338.02412         | K0338.03412         | K0338.04412         | black grey RAL 7021  | 12 | M20x1,5 | 33 | 78   | 28 | 14 | 25 | 12          | 22  | -30/-30 | 2,8   | 15                                               | 39                                             |
| K0338.01516         | K0338.02516         | K0338.03516         | K0338.04516         | black grey RAL 7021  | 16 | M24x2   | 40 | 96   | 32 | 18 | 28 | 16          | 27  | -36/-36 | 3,2   | 20                                               | 46                                             |
| K0338.0190384       | K0338.0290384       | K0338.0390384       | K0338.0490384       | traffic red RAL 3020 | 3  | M6x0,75 | 14 | 31,5 | 12 | 5  | 10 | 3,5         | 8   | -10/-10 | 0,8   | 4,5                                              | 10                                             |
| K0338.0100484       | K0338.0200484       | K0338.0300484       | K0338.0400484       | traffic red RAL 3020 | 4  | M8x1    | 18 | 38,5 | 15 | 6  | 13 | 4           | 10  | -13/-13 | 1     | 6                                                | 12                                             |
| K0338.0110584       | K0338.0210584       | K0338.0310584       | K0338.0410584       | traffic red RAL 3020 | 5  | M10x1   | 21 | 43,5 | 17 | 7  | 15 | 5           | 13  | -17/-17 | 1,3   | 5                                                | 12                                             |
| K0338.0120684       | K0338.0220684       | K0338.0320684       | K0338.0420684       | traffic red RAL 3020 | 6  | M12x1,5 | 25 | 51,7 | 20 | 8  | 17 | 6           | 14  | -19/-19 | 1,8   | 6                                                | 14                                             |
| K0338.0130884       | K0338.0230884       | K0338.0330884       | K0338.0430884       | traffic red RAL 3020 | 8  | M16x1,5 | 33 | 68   | 26 | 10 | 23 | 8           | 19  | -24/-24 | 2,3   | 15                                               | 35                                             |
| K0338.0141084       | K0338.0241084       | K0338.0341084       | K0338.0441084       | traffic red RAL 3020 | 10 | M20x1,5 | 33 | 74   | 28 | 12 | 25 | 10          | 22  | -30/-30 | 2,8   | 15                                               | 34                                             |
| K0338.0141284       | K0338.0241284       | K0338.0341284       | K0338.0441284       | traffic red RAL 3020 | 12 | M20x1,5 | 33 | 78   | 28 | 14 | 25 | 12          | 22  | -30/-30 | 2,8   | 15                                               | 39                                             |
| K0338.0151684       | K0338.0251684       | K0338.0351684       | K0338.0451684       | traffic red RAL 3020 | 16 | M24x2   | 40 | 96   | 32 | 18 | 28 | 16          | 27  | -36/-36 | 3,2   | 20                                               | 46                                             |

## KIPP Indexing plungers, stainless steel A2, indexing pin not hardened

| Order No.<br>Form A | Order No.<br>Form B | Order No.<br>Form C | Order No.<br>Form D | Component<br>colour  | D  | D1      | D2 | L    | L1 | L2 | L3 | Travel<br>S | SW1 | SW2     | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|---------------------|---------------------|---------------------|---------------------|----------------------|----|---------|----|------|----|----|----|-------------|-----|---------|-------|--------------------------------------------------|------------------------------------------------|
| K0338.11903         | K0338.12903         | K0338.13903         | K0338.14903         | black grey RAL 7021  | 3  | M6x0,75 | 14 | 31,5 | 12 | 5  | 10 | 3,5         | 8   | -10/-10 | 0,8   | 4,5                                              | 10                                             |
| K0338.11004         | K0338.12004         | K0338.13004         | K0338.14004         | black grey RAL 7021  | 4  | M8x1    | 18 | 38,5 | 15 | 6  | 13 | 4           | 10  | -13/-13 | 1     | 6                                                | 12                                             |
| K0338.11105         | K0338.12105         | K0338.13105         | K0338.14105         | black grey RAL 7021  | 5  | M10x1   | 21 | 43,5 | 17 | 7  | 15 | 5           | 13  | -17/-17 | 1,3   | 5                                                | 12                                             |
| K0338.11206         | K0338.12206         | K0338.13206         | K0338.14206         | black grey RAL 7021  | 6  | M12x1,5 | 25 | 51,7 | 20 | 8  | 17 | 6           | 14  | -19/-19 | 1,8   | 6                                                | 14                                             |
| K0338.11308         | K0338.12308         | K0338.13308         | K0338.14308         | black grey RAL 7021  | 8  | M16x1,5 | 33 | 68   | 26 | 10 | 23 | 8           | 19  | -24/-24 | 2,3   | 15                                               | 35                                             |
| K0338.11410         | K0338.12410         | K0338.13410         | K0338.14410         | black grey RAL 7021  | 10 | M20x1,5 | 33 | 74   | 28 | 12 | 25 | 10          | 22  | -30/-30 | 2,8   | 15                                               | 34                                             |
| K0338.11412         | K0338.12412         | K0338.13412         | K0338.14412         | black grey RAL 7021  | 12 | M20x1,5 | 33 | 78   | 28 | 14 | 25 | 12          | 22  | -30/-30 | 2,8   | 15                                               | 39                                             |
| K0338.11516         | K0338.12516         | K0338.13516         | K0338.14516         | black grey RAL 7021  | 16 | M24x2   | 40 | 96   | 32 | 18 | 28 | 16          | 27  | -36/-36 | 3,2   | 20                                               | 46                                             |
| K0338.1190384       | K0338.1290384       | K0338.1390384       | K0338.1490384       | traffic red RAL 3020 | 3  | M6x0,75 | 14 | 31,5 | 12 | 5  | 10 | 3,5         | 8   | -10/-10 | 0,8   | 4,5                                              | 10                                             |
| K0338.1100484       | K0338.1200484       | K0338.1300484       | K0338.1400484       | traffic red RAL 3020 | 4  | M8x1    | 18 | 38,5 | 15 | 6  | 13 | 4           | 10  | -13/-13 | 1     | 6                                                | 12                                             |
| K0338.1110584       | K0338.1210584       | K0338.1310584       | K0338.1410584       | traffic red RAL 3020 | 5  | M10x1   | 21 | 43,5 | 17 | 7  | 15 | 5           | 13  | -17/-17 | 1,3   | 5                                                | 12                                             |
| K0338.1120684       | K0338.1220684       | K0338.1320684       | K0338.1420684       | traffic red RAL 3020 | 6  | M12x1,5 | 25 | 51,7 | 20 | 8  | 17 | 6           | 14  | -19/-19 | 1,8   | 6                                                | 14                                             |
| K0338.1130884       | K0338.1230884       | K0338.1330884       | K0338.1430884       | traffic red RAL 3020 | 8  | M16x1,5 | 33 | 68   | 26 | 10 | 23 | 8           | 19  | -24/-24 | 2,3   | 15                                               | 35                                             |
| K0338.1141084       | K0338.1241084       | K0338.1341084       | K0338.1441084       | traffic red RAL 3020 | 10 | M20x1,5 | 33 | 74   | 28 | 12 | 25 | 10          | 22  | -30/-30 | 2,8   | 15                                               | 34                                             |
| K0338.1141284       | K0338.1241284       | K0338.1341284       | K0338.1441284       | traffic red RAL 3020 | 12 | M20x1,5 | 33 | 78   | 28 | 14 | 25 | 12          | 22  | -30/-30 | 2,8   | 15                                               | 39                                             |
| K0338.1151684       | K0338.1251684       | K0338.1351684       | K0338.1451684       | traffic red RAL 3020 | 16 | M24x2   | 40 | 96   | 32 | 18 | 28 | 16          | 27  | -36/-36 | 3,2   | 20                                               | 46                                             |

## Indexing plungers steel or stainless steel



## KIPP Indexing plungers, stainless steel A4, indexing pin hardened, nickel-plated

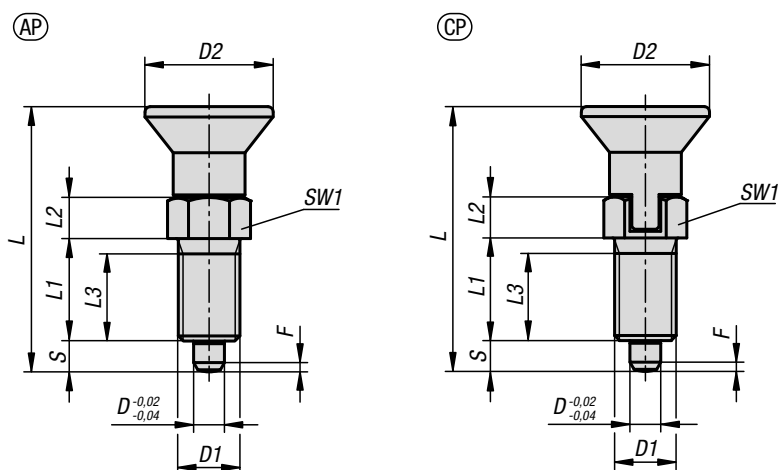
| Order No.<br>Form A | Order No.<br>Form B | Order No.<br>Form C | Order No.<br>Form D | Component<br>colour  | D  | D1      | D2 | L    | L1 | L2 | L3 | Travel<br>S | SW1 | SW2      | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|---------------------|---------------------|---------------------|---------------------|----------------------|----|---------|----|------|----|----|----|-------------|-----|----------|-------|--------------------------------------------------|------------------------------------------------|
| K0338.61903         | K0338.62903         | K0338.63903         | K0338.64903         | black grey RAL 7021  | 3  | M6x0,75 | 14 | 31,5 | 12 | 5  | 10 | 3,5         | 8   | -/10-/10 | 0,8   | 3                                                | 6,5                                            |
| K0338.61004         | K0338.62004         | K0338.63004         | K0338.64004         | black grey RAL 7021  | 4  | M8x1    | 18 | 38,5 | 15 | 6  | 13 | 4           | 10  | -/13-/13 | 1     | 7                                                | 15,5                                           |
| K0338.61105         | K0338.62105         | K0338.63105         | K0338.64105         | black grey RAL 7021  | 5  | M10x1   | 21 | 43,5 | 17 | 7  | 15 | 5           | 13  | -/17-/17 | 1,3   | 4                                                | 12,5                                           |
| K0338.61206         | K0338.62206         | K0338.63206         | K0338.64206         | black grey RAL 7021  | 6  | M12x1,5 | 25 | 51,7 | 20 | 8  | 17 | 6           | 14  | -/19-/19 | 1,8   | 7                                                | 14,5                                           |
| K0338.61308         | K0338.62308         | K0338.63308         | K0338.64308         | black grey RAL 7021  | 8  | M16x1,5 | 33 | 68   | 26 | 10 | 23 | 8           | 19  | -/24-/24 | 2,3   | 15                                               | 35                                             |
| K0338.61410         | K0338.62410         | K0338.63410         | K0338.64410         | black grey RAL 7021  | 10 | M20x1,5 | 33 | 74   | 28 | 12 | 25 | 10          | 22  | -/30-/30 | 2,8   | 15                                               | 30                                             |
| K0338.61412         | K0338.62412         | K0338.63412         | K0338.64412         | black grey RAL 7021  | 12 | M20x1,5 | 33 | 78   | 28 | 14 | 25 | 12          | 22  | -/30-/30 | 2,8   | 15                                               | 39                                             |
| K0338.61516         | K0338.62516         | K0338.63516         | K0338.64516         | black grey RAL 7021  | 16 | M24x2   | 40 | 96   | 32 | 18 | 28 | 16          | 27  | -/36-/36 | 3,2   | 20                                               | 40                                             |
| K0338.6190384       | K0338.6290384       | K0338.6390384       | K0338.6490384       | traffic red RAL 3020 | 3  | M6x0,75 | 14 | 31,5 | 12 | 5  | 10 | 3,5         | 8   | -/10-/10 | 0,8   | 3                                                | 6,5                                            |
| K0338.6100484       | K0338.6200484       | K0338.6300484       | K0338.6400484       | traffic red RAL 3020 | 4  | M8x1    | 18 | 38,5 | 15 | 6  | 13 | 4           | 10  | -/13-/13 | 1     | 7                                                | 15,5                                           |
| K0338.6110584       | K0338.6210584       | K0338.6310584       | K0338.6410584       | traffic red RAL 3020 | 5  | M10x1   | 21 | 43,5 | 17 | 7  | 15 | 5           | 13  | -/17-/17 | 1,3   | 4                                                | 12,5                                           |
| K0338.6120684       | K0338.6220684       | K0338.6320684       | K0338.6420684       | traffic red RAL 3020 | 6  | M12x1,5 | 25 | 51,7 | 20 | 8  | 17 | 6           | 14  | -/19-/19 | 1,8   | 7                                                | 14,5                                           |
| K0338.6130884       | K0338.6230884       | K0338.6330884       | K0338.6430884       | traffic red RAL 3020 | 8  | M16x1,5 | 33 | 68   | 26 | 10 | 23 | 8           | 19  | -/24-/24 | 2,3   | 15                                               | 35                                             |
| K0338.6141084       | K0338.6241084       | K0338.6341084       | K0338.6441084       | traffic red RAL 3020 | 10 | M20x1,5 | 33 | 74   | 28 | 12 | 25 | 10          | 22  | -/30-/30 | 2,8   | 15                                               | 30                                             |
| K0338.6141284       | K0338.6241284       | K0338.6341284       | K0338.6441284       | traffic red RAL 3020 | 12 | M20x1,5 | 33 | 78   | 28 | 14 | 25 | 12          | 22  | -/30-/30 | 2,8   | 15                                               | 39                                             |
| K0338.6151684       | K0338.6251684       | K0338.6351684       | K0338.6451684       | traffic red RAL 3020 | 16 | M24x2   | 40 | 96   | 32 | 18 | 28 | 16          | 27  | -/36-/36 | 3,2   | 20                                               | 40                                             |

## KIPP Indexing plungers, stainless steel A4, indexing pin hardened, bright

| Order No.<br>Form A | Order No.<br>Form B | Order No.<br>Form C | Order No.<br>Form D | Component<br>colour  | D  | D1      | D2 | L    | L1 | L2 | L3 | Travel<br>S | SW1 | SW2      | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|---------------------|---------------------|---------------------|---------------------|----------------------|----|---------|----|------|----|----|----|-------------|-----|----------|-------|--------------------------------------------------|------------------------------------------------|
| K0338.71903         | K0338.72903         | K0338.73903         | K0338.74903         | black grey RAL 7021  | 3  | M6x0,75 | 14 | 31,5 | 12 | 5  | 10 | 3,5         | 8   | -/10-/10 | 0,8   | 3                                                | 6,5                                            |
| K0338.71004         | K0338.72004         | K0338.73004         | K0338.74004         | black grey RAL 7021  | 4  | M8x1    | 18 | 38,5 | 15 | 6  | 13 | 4           | 10  | -/13-/13 | 1     | 7                                                | 15,5                                           |
| K0338.71105         | K0338.72105         | K0338.73105         | K0338.74105         | black grey RAL 7021  | 5  | M10x1   | 21 | 43,5 | 17 | 7  | 15 | 5           | 13  | -/17-/17 | 1,3   | 4                                                | 12,5                                           |
| K0338.71206         | K0338.72206         | K0338.73206         | K0338.74206         | black grey RAL 7021  | 6  | M12x1,5 | 25 | 51,7 | 20 | 8  | 17 | 6           | 14  | -/19-/19 | 1,8   | 7                                                | 14,5                                           |
| K0338.71308         | K0338.72308         | K0338.73308         | K0338.74308         | black grey RAL 7021  | 8  | M16x1,5 | 33 | 68   | 26 | 10 | 23 | 8           | 19  | -/24-/24 | 2,3   | 15                                               | 35                                             |
| K0338.71410         | K0338.72410         | K0338.73410         | K0338.74410         | black grey RAL 7021  | 10 | M20x1,5 | 33 | 74   | 28 | 12 | 25 | 10          | 22  | -/30-/30 | 2,8   | 15                                               | 30                                             |
| K0338.71412         | K0338.72412         | K0338.73412         | K0338.74412         | black grey RAL 7021  | 12 | M20x1,5 | 33 | 78   | 28 | 14 | 25 | 12          | 22  | -/30-/30 | 2,8   | 15                                               | 39                                             |
| K0338.71516         | K0338.72516         | K0338.73516         | K0338.74516         | black grey RAL 7021  | 16 | M24x2   | 40 | 96   | 32 | 18 | 28 | 16          | 27  | -/36-/36 | 3,2   | 20                                               | 40                                             |
| K0338.7190384       | K0338.7290384       | K0338.7390384       | K0338.7490384       | traffic red RAL 3020 | 3  | M6x0,75 | 14 | 31,5 | 12 | 5  | 10 | 3,5         | 8   | -/10-/10 | 0,8   | 3                                                | 6,5                                            |
| K0338.7100484       | K0338.7200484       | K0338.7300484       | K0338.7400484       | traffic red RAL 3020 | 4  | M8x1    | 18 | 38,5 | 15 | 6  | 13 | 4           | 10  | -/13-/13 | 1     | 7                                                | 15,5                                           |
| K0338.7110584       | K0338.7210584       | K0338.7310584       | K0338.7410584       | traffic red RAL 3020 | 5  | M10x1   | 21 | 43,5 | 17 | 7  | 15 | 5           | 13  | -/17-/17 | 1,3   | 4                                                | 12,5                                           |
| K0338.7120684       | K0338.7220684       | K0338.7320684       | K0338.7420684       | traffic red RAL 3020 | 6  | M12x1,5 | 25 | 51,7 | 20 | 8  | 17 | 6           | 14  | -/19-/19 | 1,8   | 7                                                | 14,5                                           |
| K0338.7130884       | K0338.7230884       | K0338.7330884       | K0338.7430884       | traffic red RAL 3020 | 8  | M16x1,5 | 33 | 68   | 26 | 10 | 23 | 8           | 19  | -/24-/24 | 2,3   | 15                                               | 35                                             |
| K0338.7141084       | K0338.7241084       | K0338.7341084       | K0338.7441084       | traffic red RAL 3020 | 10 | M20x1,5 | 33 | 74   | 28 | 12 | 25 | 10          | 22  | -/30-/30 | 2,8   | 15                                               | 30                                             |
| K0338.7141284       | K0338.7241284       | K0338.7341284       | K0338.7441284       | traffic red RAL 3020 | 12 | M20x1,5 | 33 | 78   | 28 | 14 | 25 | 12          | 22  | -/30-/30 | 2,8   | 15                                               | 39                                             |
| K0338.7151684       | K0338.7251684       | K0338.7351684       | K0338.7451684       | traffic red RAL 3020 | 16 | M24x2   | 40 | 96   | 32 | 18 | 28 | 16          | 27  | -/36-/36 | 3,2   | 20                                               | 40                                             |

## Indexing plungers

with thread lock



### Material:

Steel version:

Indexing pin hardened:

Threaded sleeve and indexing pin free-cutting steel

Stainless steel version:

Indexing pin hardened:

Threaded sleeve 1.4305

Indexing pin 1.4034.

Mushroom knob black grey thermoplastic.

Thread lock blue polyamide.

### Version:

Steel version:

indexing pin hardened, ground and black oxidised.

Stainless steel version:

indexing pin hardened, ground and bright.

### Sample order:

K1096.091206

### Note:

Indexing plungers are used to prevent any change in locking position due to lateral forces. A new locking position can only be set after the pin has been manually disengaged. Form CP is recommended for applications where the plunger remains disengaged over a long period and the pin should be prevented from springing back.

The thread lock enables the plunger to be screwed in to the exact depth required, no spacer ring is required. The thread lock is a gripping polyamide coating that is applied punctiform (spot).

### On request:

Special versions.

### Drawing reference:

Form AP: non-lockout type, without locknut

Form CP: lockout type, without locknut

## Indexing plungers

with thread lock



## KIPP Indexing plungers, with thread lock, steel, indexing pin hardened

| Order No.<br>Form AP | Order No.<br>Form CP | D  | D1      | D2 | L    | L1 | L2 | L3 | Travel<br>S | SW1 | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|----------------------|----------------------|----|---------|----|------|----|----|----|-------------|-----|-------|--------------------------------------------------|------------------------------------------------|
| K1096.91903          | K1096.93903          | 3  | M6x0,75 | 14 | 31,5 | 12 | 5  | 10 | 3,5         | 8   | 0,8   | 4,5                                              | 10                                             |
| K1096.91004          | K1096.93004          | 4  | M8x1    | 18 | 38,5 | 15 | 6  | 13 | 4           | 10  | 1     | 6                                                | 12                                             |
| K1096.91105          | K1096.93105          | 5  | M10x1   | 21 | 43,5 | 17 | 7  | 15 | 5           | 13  | 1,3   | 5                                                | 12                                             |
| K1096.91206          | K1096.93206          | 6  | M12x1,5 | 25 | 51,7 | 20 | 8  | 17 | 6           | 14  | 1,8   | 6                                                | 14                                             |
| K1096.91308          | K1096.93308          | 8  | M16x1,5 | 33 | 68   | 26 | 10 | 23 | 8           | 19  | 2,3   | 15                                               | 35                                             |
| K1096.91410          | K1096.93410          | 10 | M20x1,5 | 33 | 74   | 28 | 12 | 25 | 10          | 22  | 2,8   | 15                                               | 34                                             |
| K1096.91412          | K1096.93412          | 12 | M20x1,5 | 33 | 78   | 28 | 14 | 25 | 12          | 22  | 2,8   | 15                                               | 39                                             |
| K1096.91516          | K1096.93516          | 16 | M24x2   | 40 | 96   | 32 | 18 | 28 | 16          | 27  | 3,2   | 20                                               | 46                                             |

## KIPP Indexing plungers, with thread lock, stainless steel, indexing pin hardened

| Order No.<br>Form AP | Order No.<br>Form CP | D  | D1      | D2 | L    | L1 | L2 | L3 | Travel<br>S | SW1 | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|----------------------|----------------------|----|---------|----|------|----|----|----|-------------|-----|-------|--------------------------------------------------|------------------------------------------------|
| K1096.091903         | K1096.093903         | 3  | M6x0,75 | 14 | 31,5 | 12 | 5  | 10 | 3,5         | 8   | 0,8   | 4,5                                              | 10                                             |
| K1096.091004         | K1096.093004         | 4  | M8x1    | 18 | 38,5 | 15 | 6  | 13 | 4           | 10  | 1     | 6                                                | 12                                             |
| K1096.091105         | K1096.093105         | 5  | M10x1   | 21 | 43,5 | 17 | 7  | 15 | 5           | 13  | 1,3   | 5                                                | 12                                             |
| K1096.091206         | K1096.093206         | 6  | M12x1,5 | 25 | 51,7 | 20 | 8  | 17 | 6           | 14  | 1,8   | 6                                                | 14                                             |
| K1096.091308         | K1096.093308         | 8  | M16x1,5 | 33 | 68   | 26 | 10 | 23 | 8           | 19  | 2,3   | 15                                               | 35                                             |
| K1096.091410         | K1096.093410         | 10 | M20x1,5 | 33 | 74   | 28 | 12 | 25 | 10          | 22  | 2,8   | 15                                               | 34                                             |
| K1096.091412         | K1096.093412         | 12 | M20x1,5 | 33 | 78   | 28 | 14 | 25 | 12          | 22  | 2,8   | 15                                               | 39                                             |
| K1096.091516         | K1096.093516         | 16 | M24x2   | 40 | 96   | 32 | 18 | 28 | 16          | 27  | 3,2   | 20                                               | 46                                             |

## Indexing plungers

with locked mark



### Material:

Indexing pin steel.  
Threaded sleeve.  
Mushroom grip, dark grey thermoplastic.  
Lock mark aluminium.

### Version:

Indexing pin steel, hardened, ground and black oxidised.  
Threaded sleeve black oxidised.  
Lock mark red anodised.

### Sample order:

K1149.71105

### Note:

Indexing plungers are used to prevent any change in locking position due to lateral forces. A new locking position can only be set after the plunger has been manually disengaged.  
When the lock mark is visible the plunger is either completely disengaged or only partly in the index position.

### On request:

Special versions.

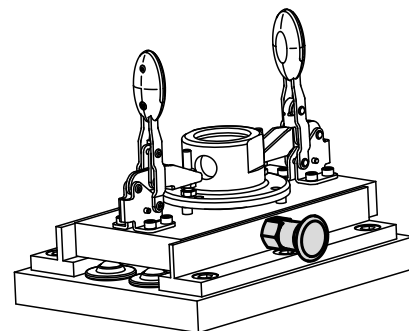
### Accessories:

Spacer rings K0665

### Drawing reference:

Form A: non-lockout type, without locknut  
Form B: non-lockout type, with locknut

1) marking ring



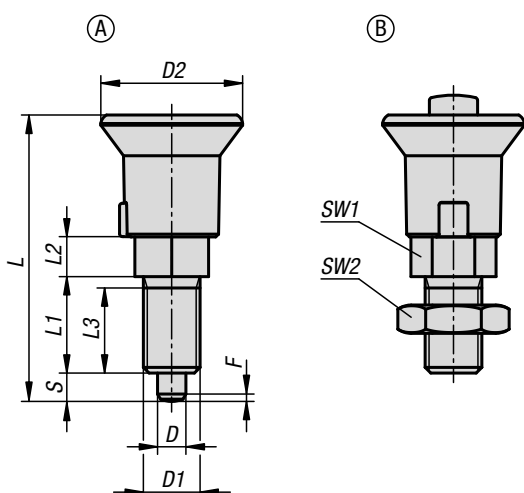
### KIPP Indexing plungers with locked mark

| Order No.<br>Form A | Order No.<br>Form B | D | D1      | D2 | L    | L1 | L2 | L3 | Travel<br>S | SW1 | SW2  | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|---------------------|---------------------|---|---------|----|------|----|----|----|-------------|-----|------|-------|--------------------------------------------------|------------------------------------------------|
| K1149.71105         | K1149.72105         | 5 | M10x1   | 21 | 43,5 | 17 | 7  | 15 | 5           | 13  | -/17 | 1,3   | 5                                                | 12                                             |
| K1149.71206         | K1149.72206         | 6 | M12x1,5 | 25 | 51,7 | 20 | 8  | 17 | 6           | 14  | -/19 | 1,8   | 6                                                | 14                                             |
| K1149.71308         | K1149.72308         | 8 | M16x1,5 | 33 | 68   | 26 | 10 | 23 | 8           | 19  | -/24 | 2,3   | 15                                               | 35                                             |



## Indexing plungers

with lock



### Material:

Steel version:  
threaded sleeve and indexing pin, steel.

Stainless steel version:  
indexing pin not hardened.  
Threaded sleeve and indexing pin 1.4305.

Mushroom grip, black grey thermoplastic.  
Release button, red thermoplastic.

### Version:

Steel version:  
threaded sleeve, black oxidised.  
Indexing pin hardened, ground and black oxidised.

Stainless steel version:  
threaded sleeve, bright.  
Indexing pin not hardened, ground and bright.

### Sample order:

K1213.11051

### Note:

Indexing plungers are used where any change in locking position due to lateral forces should be prevented.  
The locking mechanism is activated by pressing the push button.  
The red release button enables the indexed position to be changed.

### Drawing reference:

Form A: without locknut  
Form B: with locknut

## KIPP Indexing plunger with locking mechanism

| Order No.<br>Form A | Order No.<br>Form B | Main<br>material | Surface finish<br>body | D  | D1      | D2 | L    | L1 | L2 | L3 | Travel<br>S | SW1 | SW2  | Fx30° | return<br>force<br>N |
|---------------------|---------------------|------------------|------------------------|----|---------|----|------|----|----|----|-------------|-----|------|-------|----------------------|
| K1213.11051         | K1213.21051         | steel            | hardened               | 5  | M10x1   | 25 | 50,5 | 17 | 7  | 15 | 5           | 13  | -/17 | 1,3   | 8-12                 |
| K1213.12061         | K1213.22061         | steel            | hardened               | 6  | M12x1,5 | 25 | 55,5 | 20 | 8  | 17 | 6           | 14  | -/19 | 1,8   | 4-12                 |
| K1213.13081         | K1213.23081         | steel            | hardened               | 8  | M16x1,5 | 33 | 76   | 26 | 10 | 23 | 8           | 19  | -/24 | 2,3   | 10-20                |
| K1213.14101         | K1213.24101         | steel            | hardened               | 10 | M20x1,5 | 33 | 82   | 28 | 12 | 25 | 10          | 22  | -/30 | 2,8   | 3-23                 |
| K1213.111051        | K1213.121051        | stainless steel  | not hardened           | 5  | M10x1   | 25 | 50,5 | 17 | 7  | 15 | 5           | 13  | -/17 | 1,3   | 8-12                 |
| K1213.112061        | K1213.122061        | stainless steel  | not hardened           | 6  | M12x1,5 | 25 | 55,5 | 20 | 8  | 17 | 6           | 14  | -/19 | 1,8   | 4-12                 |
| K1213.113081        | K1213.123081        | stainless steel  | not hardened           | 8  | M16x1,5 | 33 | 76   | 26 | 10 | 23 | 8           | 19  | -/24 | 2,3   | 10-20                |
| K1213.114101        | K1213.124101        | stainless steel  | not hardened           | 10 | M20x1,5 | 33 | 82   | 28 | 12 | 25 | 10          | 22  | -/30 | 2,8   | 3-23                 |

# Indexing plungers

with extended indexing pin



## Material:

Steel version  
Indexing pin hardened:  
grade 5.8.

Stainless steel version  
Indexing pin hardened:  
Threaded sleeve 1.4305.  
Indexing pin 1.4034.

Indexing pin not hardened:  
Threaded sleeve 1.4305.  
Indexing pin 1.4305.

Mushroom knob black-grey thermoplastic.

## Version:

Steel version:  
Indexing pin hardened, ground, black oxidised.

Stainless steel version:  
Indexing pin hardened, ground and bright.  
Indexing pin not hardened, ground and bright.

**Sample order:**  
K0630.21903

## Note:

Indexing plungers are used to prevent any change in locking position due to lateral forces. A new locking position can only be set after the pin has been manually disengaged.

## On request:

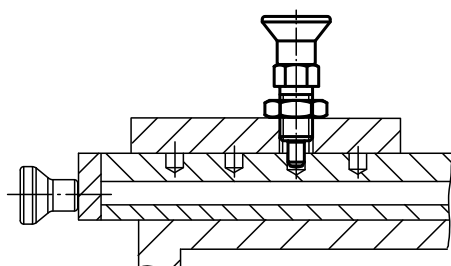
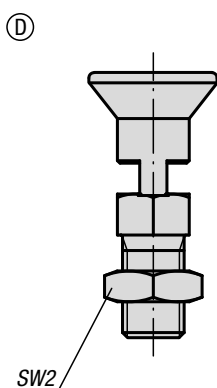
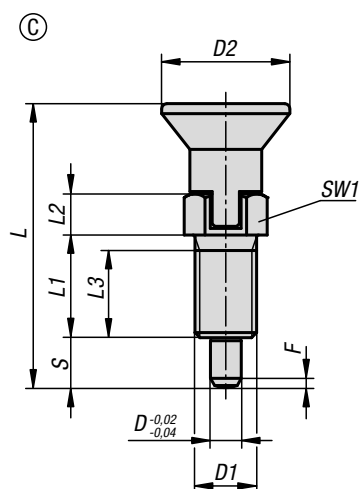
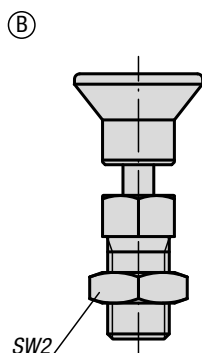
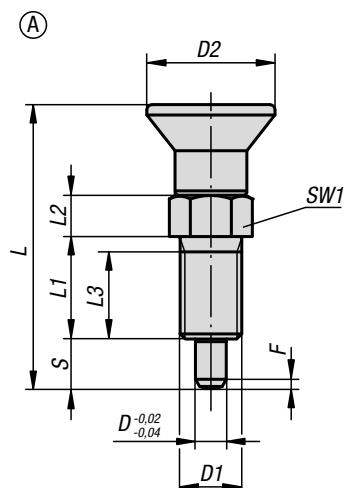
Special versions.

## Accessories:

Spacer rings K0665

## Drawing reference:

Form A: non-lockout type, without locknut  
Form B: non-lockout type, with locknut  
Form C: lockout type, without locknut  
Form D: lockout type, with locknut



**KIPP Indexing plungers with extended indexing pins, steel, indexing pins hardened**

| Order No.<br>Form A | Order No.<br>Form B | D  | D1      | D2 | L    | L1 | L2 | L3 | Travel<br>S | SW1 | SW2  | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|---------------------|---------------------|----|---------|----|------|----|----|----|-------------|-----|------|-------|--------------------------------------------------|------------------------------------------------|
| K0630.21903         | K0630.22903         | 3  | M6x0,75 | 14 | 33   | 12 | 5  | 10 | 5           | 8   | -/10 | 0,8   | 4,5                                              | 12                                             |
| K0630.21004         | K0630.22004         | 4  | M8x1    | 18 | 40,5 | 15 | 6  | 13 | 6           | 10  | -/13 | 1     | 6                                                | 15                                             |
| K0630.21105         | K0630.22105         | 5  | M10x1   | 21 | 46,5 | 17 | 7  | 15 | 8           | 13  | -/17 | 1,3   | 5                                                | 16                                             |
| K0630.21206         | K0630.22206         | 6  | M12x1,5 | 25 | 54,7 | 20 | 8  | 17 | 9           | 14  | -/19 | 1,8   | 6                                                | 18                                             |
| K0630.21308         | K0630.22308         | 8  | M16x1,5 | 33 | 72   | 26 | 10 | 23 | 12          | 19  | -/24 | 2,3   | 15                                               | 45                                             |
| K0630.21410         | K0630.22410         | 10 | M20x1,5 | 33 | 79   | 28 | 12 | 25 | 15          | 22  | -/30 | 2,8   | 15                                               | 43                                             |
| K0630.21412         | K0630.22412         | 12 | M20x1,5 | 33 | 84   | 28 | 14 | 25 | 18          | 22  | -/30 | 2,8   | 15                                               | 51                                             |
| K0630.21516         | K0630.22516         | 16 | M24x2   | 40 | 104  | 32 | 18 | 28 | 24          | 27  | -/36 | 3,2   | 20                                               | 60                                             |

| Order No.<br>Form C | Order No.<br>Form D | D | D1      | D2 | L    | L1 | L2 | L3 | Travel<br>S | SW1 | SW2  | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|---------------------|---------------------|---|---------|----|------|----|----|----|-------------|-----|------|-------|--------------------------------------------------|------------------------------------------------|
| K0630.23105         | K0630.24105         | 5 | M10x1   | 21 | 49,5 | 17 | 10 | 15 | 8           | 13  | -/17 | 1,3   | 5                                                | 16                                             |
| K0630.23206         | K0630.24206         | 6 | M12x1,5 | 25 | 57,7 | 20 | 11 | 17 | 9           | 14  | -/19 | 1,8   | 6                                                | 18                                             |
| K0630.23308         | K0630.24308         | 8 | M16x1,5 | 33 | 76   | 26 | 14 | 23 | 12          | 19  | -/24 | 2,3   | 15                                               | 45                                             |


**KIPP Indexing plungers with extended indexing pins, stainless steel, indexing pins hardened**

| Order No.<br>Form A | Order No.<br>Form B | D  | D1      | D2 | L    | L1 | L2 | L3 | Travel<br>S | SW1 | SW2  | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|---------------------|---------------------|----|---------|----|------|----|----|----|-------------|-----|------|-------|--------------------------------------------------|------------------------------------------------|
| K0630.201903        | K0630.202903        | 3  | M6x0,75 | 14 | 33   | 12 | 5  | 10 | 5           | 8   | -/10 | 0,8   | 4,5                                              | 12                                             |
| K0630.201004        | K0630.202004        | 4  | M8x1    | 18 | 40,5 | 15 | 6  | 13 | 6           | 10  | -/13 | 1     | 6                                                | 15                                             |
| K0630.201105        | K0630.202105        | 5  | M10x1   | 21 | 46,5 | 17 | 7  | 15 | 8           | 13  | -/17 | 1,3   | 5                                                | 16                                             |
| K0630.201206        | K0630.202206        | 6  | M12x1,5 | 25 | 54,7 | 20 | 8  | 17 | 9           | 14  | -/19 | 1,8   | 6                                                | 18                                             |
| K0630.201308        | K0630.202308        | 8  | M16x1,5 | 33 | 72   | 26 | 10 | 23 | 12          | 19  | -/24 | 2,3   | 15                                               | 45                                             |
| K0630.201410        | K0630.202410        | 10 | M20x1,5 | 33 | 79   | 28 | 12 | 25 | 15          | 22  | -/30 | 2,8   | 15                                               | 43                                             |
| K0630.201412        | K0630.202412        | 12 | M20x1,5 | 33 | 84   | 28 | 14 | 25 | 18          | 22  | -/30 | 2,8   | 15                                               | 51                                             |
| K0630.201516        | K0630.202516        | 16 | M24x2   | 40 | 104  | 32 | 18 | 28 | 24          | 27  | -/36 | 3,2   | 20                                               | 60                                             |

| Order No.<br>Form C | Order No.<br>Form D | D | D1      | D2 | L    | L1 | L2 | L3 | Travel<br>S | SW1 | SW2  | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|---------------------|---------------------|---|---------|----|------|----|----|----|-------------|-----|------|-------|--------------------------------------------------|------------------------------------------------|
| K0630.203105        | K0630.204105        | 5 | M10x1   | 21 | 49,5 | 17 | 10 | 15 | 8           | 13  | -/17 | 1,3   | 5                                                | 16                                             |
| K0630.203206        | K0630.204206        | 6 | M12x1,5 | 25 | 57,7 | 20 | 11 | 17 | 9           | 14  | -/19 | 1,8   | 6                                                | 18                                             |
| K0630.203308        | K0630.204308        | 8 | M16x1,5 | 33 | 76   | 26 | 14 | 23 | 12          | 19  | -/24 | 2,3   | 15                                               | 45                                             |

**KIPP Indexing plungers with extended indexing pins, stainless steel, indexing pins not hardened**

| Order No.<br>Form A | Order No.<br>Form B | D  | D1      | D2 | L    | L1 | L2 | L3 | Travel<br>S | SW1 | SW2  | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|---------------------|---------------------|----|---------|----|------|----|----|----|-------------|-----|------|-------|--------------------------------------------------|------------------------------------------------|
| K0630.211903        | K0630.212903        | 3  | M6x0,75 | 14 | 33   | 12 | 5  | 10 | 5           | 8   | -/10 | 0,8   | 4,5                                              | 12                                             |
| K0630.211004        | K0630.212004        | 4  | M8x1    | 18 | 40,5 | 15 | 6  | 13 | 6           | 10  | -/13 | 1     | 6                                                | 15                                             |
| K0630.211105        | K0630.212105        | 5  | M10x1   | 21 | 46,5 | 17 | 7  | 15 | 8           | 13  | -/17 | 1,3   | 5                                                | 16                                             |
| K0630.211206        | K0630.212206        | 6  | M12x1,5 | 25 | 54,7 | 20 | 8  | 17 | 9           | 14  | -/19 | 1,8   | 6                                                | 18                                             |
| K0630.211308        | K0630.212308        | 8  | M16x1,5 | 33 | 72   | 26 | 10 | 23 | 12          | 19  | -/24 | 2,3   | 15                                               | 45                                             |
| K0630.211410        | K0630.212410        | 10 | M20x1,5 | 33 | 79   | 28 | 12 | 25 | 15          | 22  | -/30 | 2,8   | 15                                               | 43                                             |
| K0630.211412        | K0630.212412        | 12 | M20x1,5 | 33 | 84   | 28 | 14 | 25 | 18          | 22  | -/30 | 2,8   | 15                                               | 51                                             |
| K0630.211516        | K0630.212516        | 16 | M24x2   | 40 | 104  | 32 | 18 | 28 | 24          | 27  | -/36 | 3,2   | 20                                               | 60                                             |

| Order No.<br>Form C | Order No.<br>Form D | D | D1      | D2 | L    | L1 | L2 | L3 | Travel<br>S | SW1 | SW2  | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|---------------------|---------------------|---|---------|----|------|----|----|----|-------------|-----|------|-------|--------------------------------------------------|------------------------------------------------|
| K0630.213105        | K0630.214105        | 5 | M10x1   | 21 | 49,5 | 17 | 10 | 15 | 8           | 13  | -/17 | 1,3   | 5                                                | 16                                             |
| K0630.213206        | K0630.214206        | 6 | M12x1,5 | 25 | 57,7 | 20 | 11 | 17 | 9           | 14  | -/19 | 1,8   | 6                                                | 18                                             |
| K0630.213308        | K0630.214308        | 8 | M16x1,5 | 33 | 76   | 26 | 14 | 23 | 12          | 19  | -/24 | 2,3   | 15                                               | 45                                             |

# Indexing plungers

short version



## Material:

Steel version  
Indexing pin hardened:  
grade 5.8

Stainless steel version  
Indexing pin not hardened:  
Threaded sleeve 1.4305.  
Indexing pin 1.4305.

Mushroom grip thermoplastic, black-grey or traffic red  
RAL 3020.

## Version:

Steel version:  
Indexing pin hardened, ground, black oxidised.

Stainless steel version:  
Indexing pin not hardened, ground, bright.

## Sample order:

K0631.16206

## Note:

Indexing plungers are used to prevent any change in position due to lateral forces. A new locking position can only be set after the pin has been manually disengaged. Form C or D is recommended for applications in which the pin is disengaged over extended periods and should be prevented from springing back.

## On request:

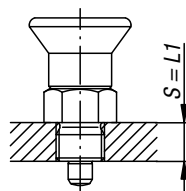
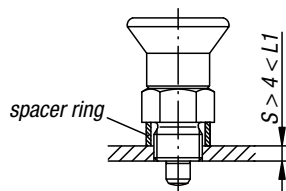
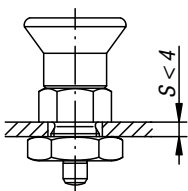
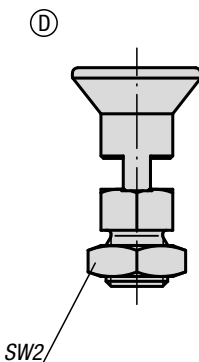
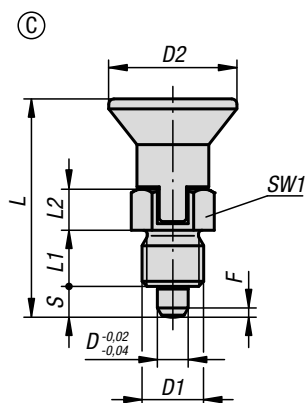
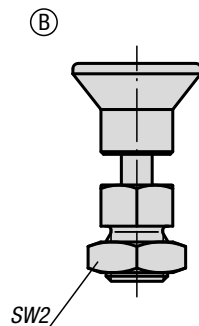
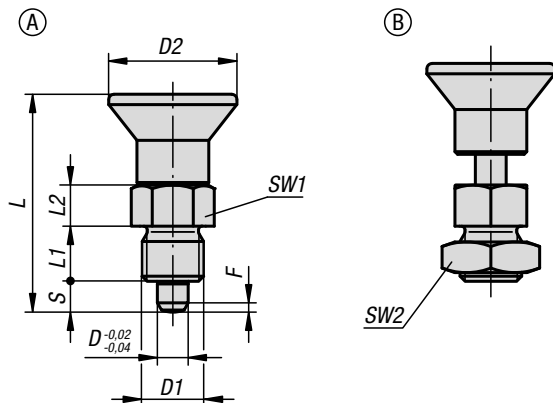
Special versions.

## Accessories:

Spacer rings K0665

## Drawing reference:

Form A: non-lockout type, without locknut  
Form B: non-lockout type, with locknut  
Form C: lockout type, without locknut  
Form D: lockout type, with locknut



## Indexing plungers

short version



## KIPP Indexing plungers, short version, steel, indexing pin hardened

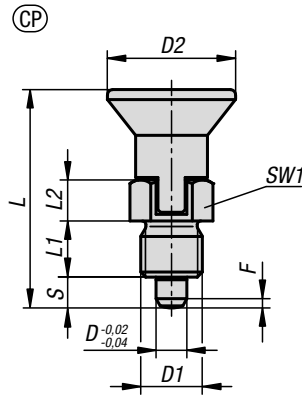
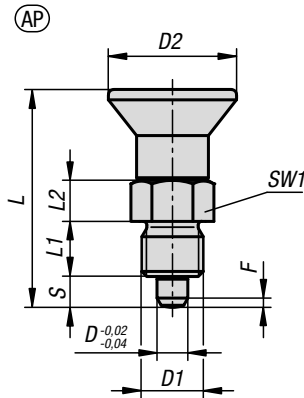
| Order No.<br>Form A | Order No.<br>Form B | Order No.<br>Form C | Order No.<br>Form D | Component<br>colour | D  | D1      | D2 | L    | L1 | L2 | Travel<br>S | SW1 | SW2       | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|---------------------|---------------------|---------------------|---------------------|---------------------|----|---------|----|------|----|----|-------------|-----|-----------|-------|--------------------------------------------------|------------------------------------------------|
| K0631.5903          | K0631.6903          | K0631.7903          | K0631.8903          | black grey RAL 7021 | 3  | M6x0,75 | 14 | 25,5 | 6  | 5  | 3,5         | 8   | -/10/-/10 | 0,8   | 4                                                | 10                                             |
| K0631.5004          | K0631.6004          | K0631.7004          | K0631.8004          | black grey RAL 7021 | 4  | M8x1    | 18 | 29,5 | 6  | 6  | 4           | 10  | -/13/-/13 | 1     | 4                                                | 12                                             |
| K0631.5105          | K0631.6105          | K0631.7105          | K0631.8105          | black grey RAL 7021 | 5  | M10x1   | 21 | 34,5 | 8  | 7  | 5           | 13  | -/17/-/17 | 1,3   | 5                                                | 12                                             |
| K0631.5206          | K0631.6206          | K0631.7206          | K0631.8206          | black grey RAL 7021 | 6  | M12x1,5 | 25 | 41,7 | 10 | 8  | 6           | 14  | -/19/-/19 | 1,8   | 6                                                | 14                                             |
| K0631.5308          | K0631.6308          | K0631.7308          | K0631.8308          | black grey RAL 7021 | 8  | M16x1,5 | 33 | 54   | 12 | 10 | 8           | 19  | -/24/-/24 | 2,3   | 14                                               | 28                                             |
| K0631.5410          | K0631.6410          | K0631.7410          | K0631.8410          | black grey RAL 7021 | 10 | M20x1,5 | 33 | 61   | 15 | 12 | 10          | 22  | -/30/-/30 | 2,8   | 15                                               | 32                                             |
| K0631.590384        | K0631.690384        | K0631.790384        | K0631.890384        | red RAL 3020        | 3  | M6x0,75 | 14 | 25,5 | 6  | 5  | 3,5         | 8   | -/10/-/10 | 0,8   | 4                                                | 10                                             |
| K0631.500484        | K0631.600484        | K0631.700484        | K0631.800484        | red RAL 3020        | 4  | M8x1    | 18 | 29,5 | 6  | 6  | 4           | 10  | -/13/-/13 | 1     | 4                                                | 12                                             |
| K0631.510584        | K0631.610584        | K0631.710584        | K0631.810584        | red RAL 3020        | 5  | M10x1   | 21 | 34,5 | 8  | 7  | 5           | 13  | -/17/-/17 | 1,3   | 5                                                | 12                                             |
| K0631.520684        | K0631.620684        | K0631.720684        | K0631.820684        | red RAL 3020        | 6  | M12x1,5 | 25 | 41,7 | 10 | 8  | 6           | 14  | -/19/-/19 | 1,8   | 6                                                | 14                                             |
| K0631.530884        | K0631.630884        | K0631.730884        | K0631.830884        | red RAL 3020        | 8  | M16x1,5 | 33 | 54   | 12 | 10 | 8           | 19  | -/24/-/24 | 2,3   | 14                                               | 28                                             |
| K0631.541084        | K0631.641084        | K0631.741084        | K0631.841084        | red RAL 3020        | 10 | M20x1,5 | 33 | 61   | 15 | 12 | 10          | 22  | -/30/-/30 | 2,8   | 15                                               | 32                                             |

## KIPP Indexing plungers, short version, stainless steel, indexing pin not hardened

| Order No.<br>Form A | Order No.<br>Form B | Order No.<br>Form C | Order No.<br>Form D | Component<br>colour | D  | D1      | D2 | L    | L1 | L2 | Travel<br>S | SW1 | SW2       | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|---------------------|---------------------|---------------------|---------------------|---------------------|----|---------|----|------|----|----|-------------|-----|-----------|-------|--------------------------------------------------|------------------------------------------------|
| K0631.15903         | K0631.16903         | K0631.17903         | K0631.18903         | black grey RAL 7021 | 3  | M6x0,75 | 14 | 25,5 | 6  | 5  | 3,5         | 8   | -/10/-/10 | 0,8   | 4                                                | 10                                             |
| K0631.15004         | K0631.16004         | K0631.17004         | K0631.18004         | black grey RAL 7021 | 4  | M8x1    | 18 | 29,5 | 6  | 6  | 4           | 10  | -/13/-/13 | 1     | 4                                                | 12                                             |
| K0631.15105         | K0631.16105         | K0631.17105         | K0631.18105         | black grey RAL 7021 | 5  | M10x1   | 21 | 34,5 | 8  | 7  | 5           | 13  | -/17/-/17 | 1,3   | 5                                                | 12                                             |
| K0631.15206         | K0631.16206         | K0631.17206         | K0631.18206         | black grey RAL 7021 | 6  | M12x1,5 | 25 | 41,7 | 10 | 8  | 6           | 14  | -/19/-/19 | 1,8   | 6                                                | 14                                             |
| K0631.15308         | K0631.16308         | K0631.17308         | K0631.18308         | black grey RAL 7021 | 8  | M16x1,5 | 33 | 54   | 12 | 10 | 8           | 19  | -/24/-/24 | 2,3   | 14                                               | 28                                             |
| K0631.15410         | K0631.16410         | K0631.17410         | K0631.18410         | black grey RAL 7021 | 10 | M20x1,5 | 33 | 61   | 15 | 12 | 10          | 22  | -/30/-/30 | 2,8   | 15                                               | 32                                             |
| K0631.1590384       | K0631.1690384       | K0631.1790384       | K0631.1890384       | red RAL 3020        | 3  | M6x0,75 | 14 | 25,5 | 6  | 5  | 3,5         | 8   | -/10/-/10 | 0,8   | 4                                                | 10                                             |
| K0631.1500484       | K0631.1600484       | K0631.1700484       | K0631.1800484       | red RAL 3020        | 4  | M8x1    | 18 | 29,5 | 6  | 6  | 4           | 10  | -/13/-/13 | 1     | 4                                                | 12                                             |
| K0631.1510584       | K0631.1610584       | K0631.1710584       | K0631.1810584       | red RAL 3020        | 5  | M10x1   | 21 | 34,5 | 8  | 7  | 5           | 13  | -/17/-/17 | 1,3   | 5                                                | 12                                             |
| K0631.1520684       | K0631.1620684       | K0631.1720684       | K0631.1820684       | red RAL 3020        | 6  | M12x1,5 | 25 | 41,7 | 10 | 8  | 6           | 14  | -/19/-/19 | 1,8   | 6                                                | 14                                             |
| K0631.1530884       | K0631.1630884       | K0631.1730884       | K0631.1830884       | red RAL 3020        | 8  | M16x1,5 | 33 | 54   | 12 | 10 | 8           | 19  | -/24/-/24 | 2,3   | 14                                               | 28                                             |
| K0631.1541084       | K0631.1641084       | K0631.1741084       | K0631.1841084       | red RAL 3020        | 10 | M20x1,5 | 33 | 61   | 15 | 12 | 10          | 22  | -/30/-/30 | 2,8   | 15                                               | 32                                             |

## Indexing plungers

short version, with thread lock



### Material:

Steel version:

Indexing pin hardened:

Threaded sleeve and indexing pin steel.

Stainless steel version:

Indexing pin not hardened:

Threaded sleeve and indexing pin 1.4305.

Mushroom knob black grey thermoplastic.

Thread lock blue polyamide.

### Version:

Steel version:

Indexing pin hardened, ground, black oxidised.

Stainless steel version:

Indexing pin not hardened, ground, bright.

### Sample order:

K1097.95903

### Note:

Indexing plungers are used to prevent any change in locking position due to lateral forces. A new locking position can only be set after the pin has been manually disengaged. Form CP is recommended for applications where the plunger remains disengaged over a long period and the pin should be prevented from springing back.

The thread lock enables the plunger to be screwed in to the exact depth required, no spacer ring is required. The thread lock is a gripping polyamide coating that is applied punctiform (spot).

### On request:

Special versions.

### Accessories:

Spacer rings K0665

### Drawing reference:

Form AP: non-lockout type, without locknut

Form CP: lockout type, without locknut

# Indexing plungers

short version, with thread lock



## KIPP Indexing plungers, short version, with thread lock, steel, indexing pin hardened

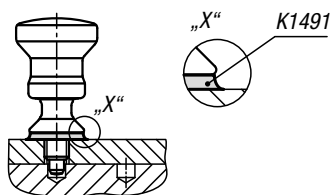
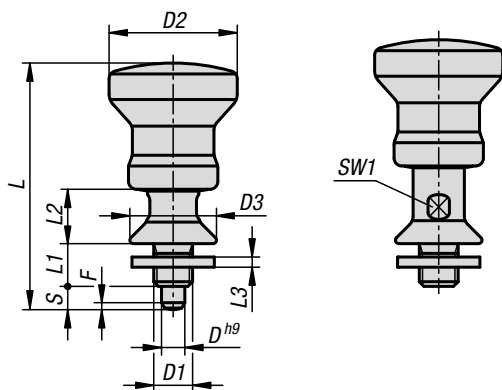
| Order No.<br>Form AP | Order No.<br>Form CP | D  | D1      | D2 | L    | L1 | L2 | Travel<br>S | SW1 | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|----------------------|----------------------|----|---------|----|------|----|----|-------------|-----|-------|--------------------------------------------------|------------------------------------------------|
| K1097.95903          | K1097.97903          | 3  | M6x0,75 | 14 | 25,5 | 6  | 5  | 3,5         | 8   | 0,8   | 4                                                | 10                                             |
| K1097.95004          | K1097.97004          | 4  | M8x1    | 18 | 29,5 | 6  | 6  | 4           | 10  | 1     | 4                                                | 12                                             |
| K1097.95105          | K1097.97105          | 5  | M10x1   | 21 | 34,5 | 8  | 7  | 5           | 13  | 1,3   | 5                                                | 12                                             |
| K1097.95206          | K1097.97206          | 6  | M12x1,5 | 25 | 41,7 | 10 | 8  | 6           | 14  | 1,8   | 6                                                | 14                                             |
| K1097.95308          | K1097.97308          | 8  | M16x1,5 | 33 | 54   | 12 | 10 | 8           | 19  | 2,3   | 14                                               | 28                                             |
| K1097.95410          | K1097.97410          | 10 | M20x1,5 | 33 | 61   | 15 | 12 | 10          | 22  | 2,8   | 15                                               | 32                                             |

## KIPP Indexing plungers, short version, with thread lock, stainless steel, indexing pin not hardened

| Order No.<br>Form AP | Order No.<br>Form CP | D  | D1      | D2 | L    | L1 | L2 | Travel<br>S | SW1 | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|----------------------|----------------------|----|---------|----|------|----|----|-------------|-----|-------|--------------------------------------------------|------------------------------------------------|
| K1097.195903         | K1097.197903         | 3  | M6x0,75 | 14 | 25,5 | 6  | 5  | 3,5         | 8   | 0,8   | 4                                                | 10                                             |
| K1097.195004         | K1097.197004         | 4  | M8x1    | 18 | 29,5 | 6  | 6  | 4           | 10  | 1     | 4                                                | 12                                             |
| K1097.195105         | K1097.197105         | 5  | M10x1   | 21 | 34,5 | 8  | 7  | 5           | 13  | 1,3   | 5                                                | 12                                             |
| K1097.195206         | K1097.197206         | 6  | M12x1,5 | 25 | 41,7 | 10 | 8  | 6           | 14  | 1,8   | 6                                                | 14                                             |
| K1097.195308         | K1097.197308         | 8  | M16x1,5 | 33 | 54   | 12 | 10 | 8           | 19  | 2,3   | 14                                               | 28                                             |
| K1097.195410         | K1097.197410         | 10 | M20x1,5 | 33 | 61   | 15 | 12 | 10          | 22  | 2,8   | 15                                               | 32                                             |

## Indexing plungers with collar

for Hygienic USIT® seal and shim washers



Indexing plungers are used where it is necessary to prevent changes of position due to lateral forces. A new locking position can be set only after the plunger has been manually retracted. Form C (with lockout slot) is recommended for applications where the indexing pin should remain disengaged for an extended period and be prevented from springing back.

This indexing plunger is suitable for the foodstuff sectors. It has a conical collar so that the fastening point can be hygienically sealed using the Hygienic USIT® sealing and shim washer. The surface finish is  $Ra < 0.8 \mu m$ , which prevents dirt particles from adhering and ensures easy cleaning.

### Material:

Steel parts stainless steel 1.4404.

Seal 70 EPDM 291 (black) or 75 Fluoroprene® XP (blue).

### Version:

Indexing pin hardened or not hardened, bright.

### Sample order:

K1698.1120801

### Temperature range:

70 EPDM 291: -40°C to 150°C. 75 Fluoroprene® XP: -15°C to 200°C.

### Advantages:

Hygienic conform design  
Stainless steel 1.4404  
Suitable for CIP/SIP cleaning  
Resistant to polar and nonpolar media as well as aromatic substances

### Supplied with:

Indexing plungers including Hygienic USIT® sealing and shim washers.

### Accessories:

Hygienic USIT® seal and shim washers K1491.



# Indexing plungers with collar

for Hygienic USIT® seal and shim washers



## KIPP Indexing plungers with collar, indexing pin hardened

| Order No.<br>Form A<br>without locking slot | Order No.<br>Form C<br>with locking slot | Component<br>colour | D | D1      | D2 | D3   | L    | L1 | L2 | L3  | Travel<br>S | SW1 | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|---------------------------------------------|------------------------------------------|---------------------|---|---------|----|------|------|----|----|-----|-------------|-----|-------|--------------------------------------------------|------------------------------------------------|
| K1698.0110601                               | K1698.0310601                            | black               | 6 | M10     | 33 | 22,3 | 63,5 | 11 | 14 | 1,5 | 6           | 12  | 1,8   | 40                                               | 45                                             |
| K1698.0110611                               | K1698.0310611                            | black               | 6 | M10x1   | 33 | 22,3 | 63,5 | 11 | 14 | 1,5 | 6           | 12  | 1,8   | 40                                               | 45                                             |
| K1698.0120801                               | K1698.0320801                            | black               | 8 | M12     | 33 | 26,6 | 69,5 | 13 | 16 | 1,5 | 8           | 12  | 2,3   | 40                                               | 62                                             |
| K1698.0120811                               | K1698.0320811                            | black               | 8 | M12x1,5 | 33 | 26,6 | 69,5 | 13 | 16 | 1,5 | 8           | 12  | 2,3   | 40                                               | 62                                             |
| K1698.0110602                               | K1698.0310602                            | blue                | 6 | M10     | 33 | 22,3 | 63,5 | 11 | 14 | 1,5 | 6           | 12  | 1,8   | 40                                               | 45                                             |
| K1698.0110612                               | K1698.0310612                            | blue                | 6 | M10x1   | 33 | 22,3 | 63,5 | 11 | 14 | 1,5 | 6           | 12  | 1,8   | 40                                               | 45                                             |
| K1698.0120802                               | K1698.0320802                            | blue                | 8 | M12     | 33 | 26,6 | 69,5 | 13 | 16 | 1,5 | 8           | 12  | 2,3   | 40                                               | 62                                             |
| K1698.0120812                               | K1698.0320812                            | blue                | 8 | M12x1,5 | 33 | 26,6 | 69,5 | 13 | 16 | 1,5 | 8           | 12  | 2,3   | 40                                               | 62                                             |

## KIPP Indexing plungers with collar, indexing pin not hardened

| Order No.<br>Form A<br>without locking slot | Order No.<br>Form C<br>with locking slot | Component<br>colour | D | D1      | D2 | D3   | L    | L1 | L2 | L3  | Travel<br>S | SW1 | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|---------------------------------------------|------------------------------------------|---------------------|---|---------|----|------|------|----|----|-----|-------------|-----|-------|--------------------------------------------------|------------------------------------------------|
| K1698.1110601                               | K1698.1310601                            | black               | 6 | M10     | 33 | 22,3 | 63,5 | 11 | 14 | 1,5 | 6           | 12  | 1,8   | 40                                               | 45                                             |
| K1698.1110611                               | K1698.1310611                            | black               | 6 | M10x1   | 33 | 22,3 | 63,5 | 11 | 14 | 1,5 | 6           | 12  | 1,8   | 40                                               | 45                                             |
| K1698.1120801                               | K1698.1320801                            | black               | 8 | M12     | 33 | 26,6 | 69,5 | 13 | 16 | 1,5 | 8           | 12  | 2,3   | 40                                               | 62                                             |
| K1698.1120811                               | K1698.1320811                            | black               | 8 | M12x1,5 | 33 | 26,6 | 69,5 | 13 | 16 | 1,5 | 8           | 12  | 2,3   | 40                                               | 62                                             |
| K1698.1110602                               | K1698.1310602                            | blue                | 6 | M10     | 33 | 22,3 | 63,5 | 11 | 14 | 1,5 | 6           | 12  | 1,8   | 40                                               | 45                                             |
| K1698.1110612                               | K1698.1310612                            | blue                | 6 | M10x1   | 33 | 22,3 | 63,5 | 11 | 14 | 1,5 | 6           | 12  | 1,8   | 40                                               | 45                                             |
| K1698.1120802                               | K1698.1320802                            | blue                | 8 | M12     | 33 | 26,6 | 69,5 | 13 | 16 | 1,5 | 8           | 12  | 2,3   | 40                                               | 62                                             |
| K1698.1120812                               | K1698.1320812                            | blue                | 8 | M12x1,5 | 33 | 26,6 | 69,5 | 13 | 16 | 1,5 | 8           | 12  | 2,3   | 40                                               | 62                                             |

## Indexing plungers stainless steel



Indexing plungers are used where it is necessary to prevent changes of position due to lateral forces. Some examples of this are for length, height and position indexing in machines, equipment, furniture and special vehicle construction.

A new indexed position can be only be moved to after the pin has been manually retracted. Form C and D are recommended for applications where the indexing pin should remain disengaged for an extended period and be prevented from springing back.

The materials used enable diverse applications including those with the highest demands on corrosion resistance

**Material:**

Indexing pin hardened:  
Threaded sleeve 1.4305.  
Indexing pin 1.4034.

Indexing pin not hardened:  
Threaded sleeve 1.4305.  
Indexing pin 1.4305.

Mushroom grip 1.4305, fine turned.

**Version:**

Bright.  
Indexing pin ground.

**Sample order:**

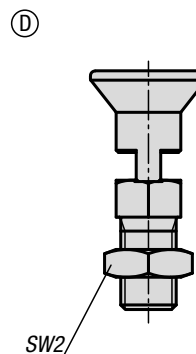
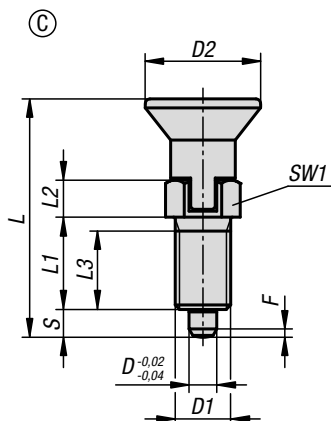
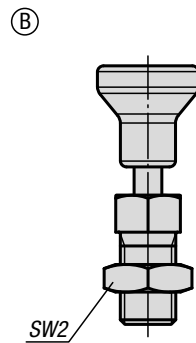
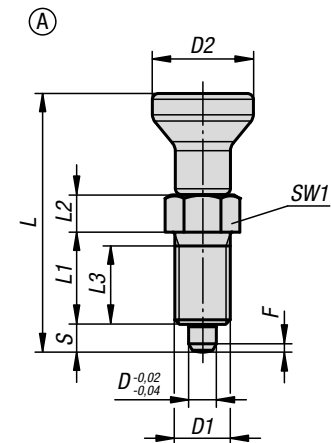
K0632.001004

**On request:**

Special versions.

**Accessories:**

Spacer rings K0665



## Indexing plungers stainless steel



## KIPP Indexing plungers, stainless steel A2, indexing pin hardened

| Order No.<br>Form A | Order No.<br>Form B | Order No.<br>Form C | Order No.<br>Form D | D  | D1      | D2 | L                   | L1 | L2 | L3 | Travel<br>S | SW1 | SW2       | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|---------------------|---------------------|---------------------|---------------------|----|---------|----|---------------------|----|----|----|-------------|-----|-----------|-------|--------------------------------------------------|------------------------------------------------|
| K0632.001903        | K0632.002903        | K0632.003903        | K0632.004903        | 3  | M6x0,75 | 14 | 34,5/34,5/31,5/31,5 | 12 | 5  | 10 | 3,5         | 8   | -/10/-/10 | 0,8   | 4,5                                              | 10                                             |
| K0632.001004        | K0632.002004        | K0632.003004        | K0632.004004        | 4  | M8x1    | 18 | 43/43/38,5/38,5     | 15 | 6  | 13 | 4           | 10  | -/13/-/13 | 1     | 6                                                | 12                                             |
| K0632.001105        | K0632.002105        | K0632.003105        | K0632.004105        | 5  | M10x1   | 21 | 50/50/43,5/43,5     | 17 | 7  | 15 | 5           | 13  | -/17/-/17 | 1,3   | 5                                                | 12                                             |
| K0632.001206        | K0632.002206        | K0632.003206        | K0632.004206        | 6  | M12x1,5 | 25 | 59/59/51,7/51,7     | 20 | 8  | 17 | 6           | 14  | -/19/-/19 | 1,8   | 6                                                | 14                                             |
| K0632.001308        | K0632.002308        | K0632.003308        | K0632.004308        | 8  | M16x1,5 | 33 | 77/77/68/68         | 26 | 10 | 23 | 8           | 19  | -/24/-/24 | 2,3   | 15                                               | 35                                             |
| K0632.001410        | K0632.002410        | K0632.003410        | K0632.004410        | 10 | M20x1,5 | 33 | 83/83/74/74         | 28 | 12 | 25 | 10          | 22  | -/30/-/30 | 2,8   | 15                                               | 34                                             |
| K0632.001412        | K0632.002412        | K0632.003412        | K0632.004412        | 12 | M20x1,5 | 33 | 87/87/78/78         | 28 | 14 | 25 | 12          | 22  | -/30/-/30 | 2,8   | 15                                               | 39                                             |
| K0632.001516        | K0632.002516        | K0632.003516        | K0632.004516        | 16 | M24x2   | 40 | 106/106/96/96       | 32 | 18 | 28 | 16          | 27  | -/36/-/36 | 3,2   | 20                                               | 46                                             |

## KIPP Indexing plungers, stainless steel A2, indexing pin not hardened

| Order No.<br>Form A | Order No.<br>Form B | Order No.<br>Form C | Order No.<br>Form D | D  | D1      | D2 | L                   | L1 | L2 | L3 | Travel<br>S | SW1 | SW2       | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|---------------------|---------------------|---------------------|---------------------|----|---------|----|---------------------|----|----|----|-------------|-----|-----------|-------|--------------------------------------------------|------------------------------------------------|
| K0632.111903        | K0632.112903        | K0632.113903        | K0632.114903        | 3  | M6x0,75 | 14 | 34,5/34,5/31,5/31,5 | 12 | 5  | 10 | 3,5         | 8   | -/10/-/10 | 0,8   | 4,5                                              | 10                                             |
| K0632.111004        | K0632.112004        | K0632.113004        | K0632.114004        | 4  | M8x1    | 18 | 43/43/38,5/38,5     | 15 | 6  | 13 | 4           | 10  | -/13/-/13 | 1     | 6                                                | 12                                             |
| K0632.111105        | K0632.112105        | K0632.113105        | K0632.114105        | 5  | M10x1   | 21 | 50/50/43,5/43,5     | 17 | 7  | 15 | 5           | 13  | -/17/-/17 | 1,3   | 5                                                | 12                                             |
| K0632.111206        | K0632.112206        | K0632.113206        | K0632.114206        | 6  | M12x1,5 | 25 | 59/59/51,7/51,7     | 20 | 8  | 17 | 6           | 14  | -/19/-/19 | 1,8   | 6                                                | 14                                             |
| K0632.111308        | K0632.112308        | K0632.113308        | K0632.114308        | 8  | M16x1,5 | 33 | 77/77/68/68         | 26 | 10 | 23 | 8           | 19  | -/24/-/24 | 2,3   | 15                                               | 35                                             |
| K0632.111410        | K0632.112410        | K0632.113410        | K0632.114410        | 10 | M20x1,5 | 33 | 83/83/74/74         | 28 | 12 | 25 | 10          | 22  | -/30/-/30 | 2,8   | 15                                               | 34                                             |
| K0632.111412        | K0632.112412        | K0632.113412        | K0632.114412        | 12 | M20x1,5 | 33 | 87/87/78/78         | 28 | 14 | 25 | 12          | 22  | -/30/-/30 | 2,8   | 15                                               | 39                                             |
| K0632.111516        | K0632.112516        | K0632.113516        | K0632.114516        | 16 | M24x2   | 40 | 106/106/96/96       | 32 | 18 | 28 | 16          | 27  | -/36/-/36 | 3,2   | 20                                               | 46                                             |

## Indexing plungers

for thin-walled parts



### Material:

Steel version  
Indexing pin hardened:  
grade 5.8

Stainless steel version  
Indexing pin not hardened:  
Threaded sleeve 1.4305.  
Indexing pin 1.4305.

Mushroom knob black-grey thermoplastic.

### Version:

Steel version:  
Indexing pin hardened, ground, black oxidised.

Stainless steel version:  
Indexing pin not hardened, ground, bright.

### Sample order:

K0735.31105 (indexing plunger)  
K0631.91416 (double-ended ring spanner)

### Note:

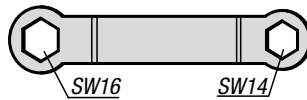
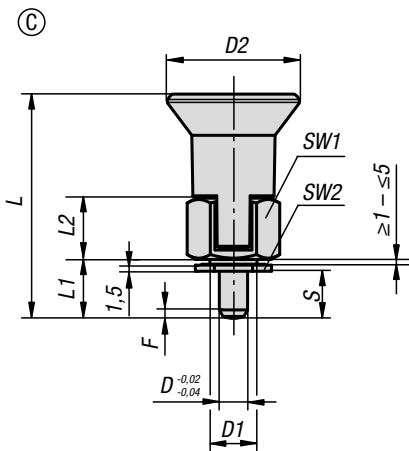
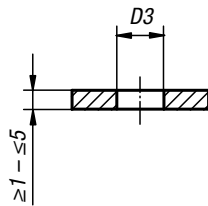
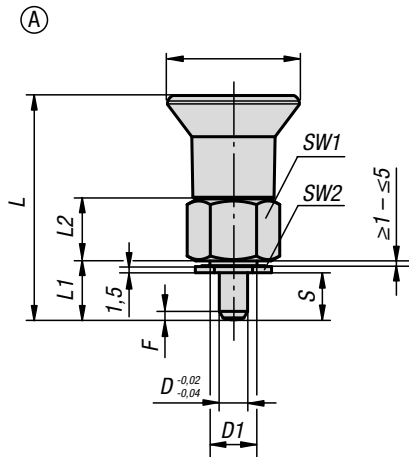
These indexing plungers have been specially designed for assembly in thin-walled parts. Indexing plungers are used where any change in locking position due to lateral forces should be prevented. A new locking position can be set only after the pin has been manually disengaged. Form C is recommended for applications where the locking pin should remain disengaged for an extended period and be prevented from springing back.

### Accessories:

A double-ended ring spanner can be supplied as an accessory to tighten the nut.

### Drawing reference:

Form A: non-lockout type  
Form C: lockout type



# Indexing plungers

for thin-walled parts



## KIPP Indexing plungers for thin-walled parts, steel, indexing pin hardened

| Order No.   | Form | D | D1    | D2 | D3 | L    | L1   | L2 | Travel<br>S | SW1 | SW2 | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N | Article number<br>double-ended<br>ring spanner |
|-------------|------|---|-------|----|----|------|------|----|-------------|-----|-----|-------|--------------------------------------------------|------------------------------------------------|------------------------------------------------|
| K0735.31105 | A    | 5 | M10x1 | 28 | 10 | 46,5 | 11,5 | 13 | 5-9         | 17  | 14  | 1,3   | 6                                                | 15                                             | K0631.91416                                    |
| K0735.31206 | A    | 6 | M10x1 | 28 | 10 | 47,5 | 12,5 | 13 | 6-10        | 17  | 14  | 1,8   | 7                                                | 19                                             | K0631.91416                                    |
| K0735.33105 | C    | 5 | M10x1 | 28 | 10 | 46,5 | 11,5 | 13 | 5-9         | 17  | 14  | 1,3   | 6                                                | 15                                             | K0631.91416                                    |
| K0735.33206 | C    | 6 | M10x1 | 28 | 10 | 47,5 | 12,5 | 13 | 6-10        | 17  | 14  | 1,8   | 7                                                | 19                                             | K0631.91416                                    |

## KIPP Indexing plungers for thin-walled parts, stainless steel, indexing pin not hardened

| Order No.    | Form | D | D1    | D2 | D3 | L    | L1   | L2 | Travel<br>S | SW1 | SW2 | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N | Article number<br>double-ended<br>ring spanner |
|--------------|------|---|-------|----|----|------|------|----|-------------|-----|-----|-------|--------------------------------------------------|------------------------------------------------|------------------------------------------------|
| K0735.311105 | A    | 5 | M10x1 | 28 | 10 | 46,5 | 11,5 | 13 | 5-9         | 17  | 14  | 1,3   | 6                                                | 15                                             | K0631.91416                                    |
| K0735.311206 | A    | 6 | M10x1 | 28 | 10 | 47,5 | 12,5 | 13 | 6-10        | 17  | 14  | 1,8   | 7                                                | 19                                             | K0631.91416                                    |
| K0735.313105 | C    | 5 | M10x1 | 28 | 10 | 46,5 | 11,5 | 13 | 5-9         | 17  | 14  | 1,3   | 6                                                | 15                                             | K0631.91416                                    |
| K0735.313206 | C    | 6 | M10x1 | 28 | 10 | 47,5 | 12,5 | 13 | 6-10        | 17  | 14  | 1,8   | 7                                                | 19                                             | K0631.91416                                    |

# Indexing plungers



## Material:

Steel version:  
Grub screw and indexing pin steel.

Stainless steel version:  
Indexing pin hardened:  
Threaded sleeve 1.4305.  
Indexing pin 1.4034.

Indexing pin not hardened:  
Threaded sleeve 1.4305.  
Indexing pin 1.4305.

Mushroom grip black grey thermoplastic.

## Version:

Steel version:  
Threaded sleeve, black oxidised.  
Indexing pin hardened, ground and black oxidised.

Stainless steel version:  
Threaded sleeve, bright.  
Indexing pin hardened, ground and bright.  
Indexing pin not hardened, ground and bright.

## Sample order:

K0339.04206

## Note:

Indexing plungers are used to prevent any change in locking position due to lateral forces. A new locking position can only be set after the pin has been manually disengaged. Form C or D is recommended for applications in which the pin is disengaged over extended periods and should be prevented from springing back.

## On request:

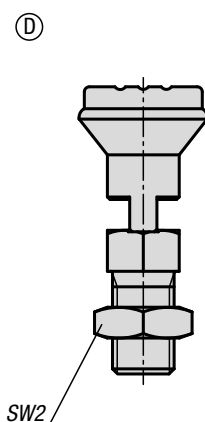
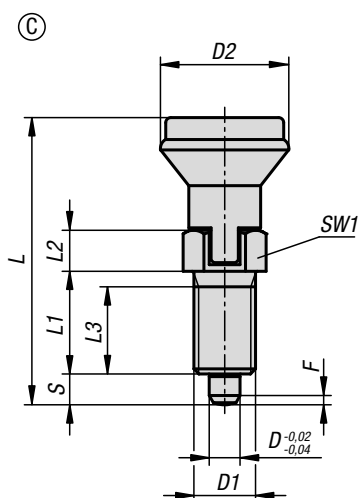
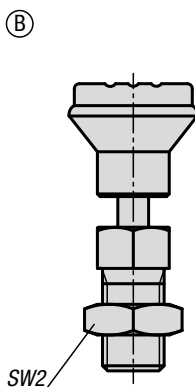
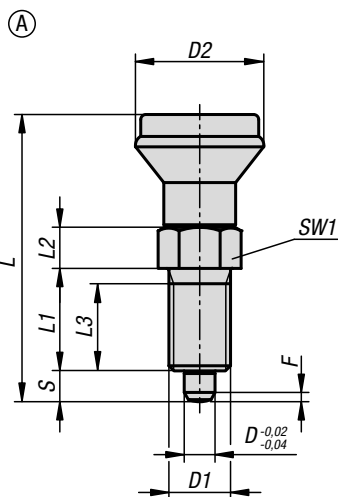
Special versions.

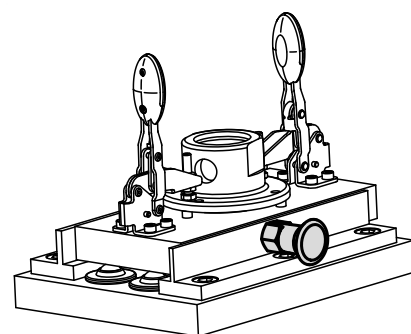
## Accessories:

Spacer rings K0665

## Drawing reference:

Form A: non-lockout type, without locknut  
Form B: non-lockout type, with locknut  
Form C: lockout type, without locknut  
Form D: lockout type, with locknut





### KIPP Indexing plungers, steel, indexing pin hardened

| Order No.<br>Form A | Order No.<br>Form B | Order No.<br>Form C | Order No.<br>Form D | D  | D1      | D2 | L  | L1 | L2 | L3 | Travel<br>S | SW1 | SW2      | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|---------------------|---------------------|---------------------|---------------------|----|---------|----|----|----|----|----|-------------|-----|----------|-------|--------------------------------------------------|------------------------------------------------|
| K0339.1105          | K0339.2105          | K0339.3105          | K0339.4105          | 5  | M10x1   | 21 | 47 | 17 | 7  | 15 | 5           | 13  | -/17-/17 | 1,3   | 5                                                | 12                                             |
| K0339.1206          | K0339.2206          | K0339.3206          | K0339.4206          | 6  | M12x1,5 | 25 | 56 | 20 | 8  | 17 | 6           | 14  | -/19-/19 | 1,8   | 6                                                | 14                                             |
| K0339.1308          | K0339.2308          | K0339.3308          | K0339.4308          | 8  | M16x1,5 | 33 | 74 | 26 | 10 | 23 | 8           | 19  | -/24-/24 | 2,3   | 15                                               | 35                                             |
| K0339.1410          | K0339.2410          | K0339.3410          | K0339.4410          | 10 | M20x1,5 | 33 | 80 | 28 | 12 | 25 | 10          | 22  | -/30-/30 | 2,8   | 15                                               | 34                                             |

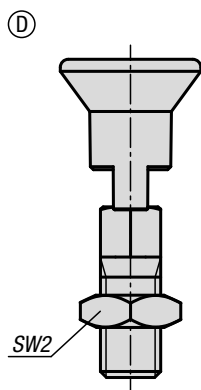
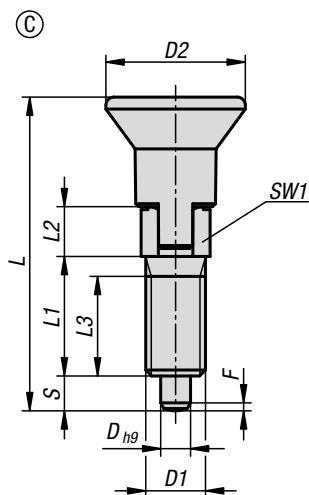
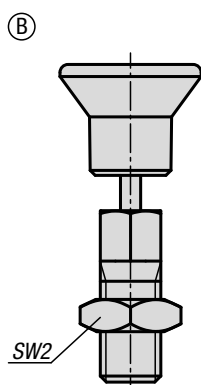
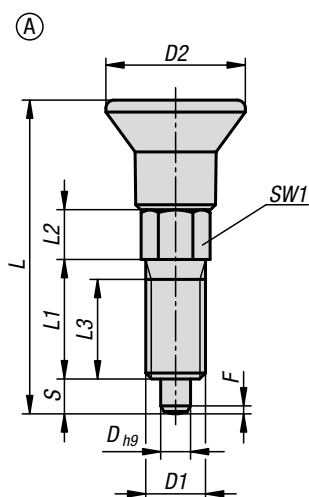
### KIPP Indexing plungers, stainless steel, indexing pin hardened

| Order No.<br>Form A | Order No.<br>Form B | Order No.<br>Form C | Order No.<br>Form D | D  | D1      | D2 | L  | L1 | L2 | L3 | Travel<br>S | SW1 | SW2      | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|---------------------|---------------------|---------------------|---------------------|----|---------|----|----|----|----|----|-------------|-----|----------|-------|--------------------------------------------------|------------------------------------------------|
| K0339.01105         | K0339.02105         | K0339.03105         | K0339.04105         | 5  | M10x1   | 21 | 47 | 17 | 7  | 15 | 5           | 13  | -/17-/17 | 1,3   | 5                                                | 12                                             |
| K0339.01206         | K0339.02206         | K0339.03206         | K0339.04206         | 6  | M12x1,5 | 25 | 56 | 20 | 8  | 17 | 6           | 14  | -/19-/19 | 1,8   | 6                                                | 14                                             |
| K0339.01308         | K0339.02308         | K0339.03308         | K0339.04308         | 8  | M16x1,5 | 33 | 74 | 26 | 10 | 23 | 8           | 19  | -/24-/24 | 2,3   | 15                                               | 35                                             |
| K0339.01410         | K0339.02410         | K0339.03410         | K0339.04410         | 10 | M20x1,5 | 33 | 80 | 28 | 12 | 25 | 10          | 22  | -/30-/30 | 2,8   | 15                                               | 34                                             |

### KIPP Indexing plungers, stainless steel, indexing pin not hardened

| Order No.<br>Form A | Order No.<br>Form B | Order No.<br>Form C | Order No.<br>Form D | D  | D1      | D2 | L  | L1 | L2 | L3 | Travel<br>S | SW1 | SW2      | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|---------------------|---------------------|---------------------|---------------------|----|---------|----|----|----|----|----|-------------|-----|----------|-------|--------------------------------------------------|------------------------------------------------|
| K0339.11105         | K0339.12105         | K0339.13105         | K0339.14105         | 5  | M10x1   | 21 | 47 | 17 | 7  | 15 | 5           | 13  | -/17-/17 | 1,3   | 5                                                | 12                                             |
| K0339.11206         | K0339.12206         | K0339.13206         | K0339.14206         | 6  | M12x1,5 | 25 | 56 | 20 | 8  | 17 | 6           | 14  | -/19-/19 | 1,8   | 6                                                | 14                                             |
| K0339.11308         | K0339.12308         | K0339.13308         | K0339.14308         | 8  | M16x1,5 | 33 | 74 | 26 | 10 | 23 | 8           | 19  | -/24-/24 | 2,3   | 15                                               | 35                                             |
| K0339.11410         | K0339.12410         | K0339.13410         | K0339.14410         | 10 | M20x1,5 | 33 | 80 | 28 | 12 | 25 | 10          | 22  | -/30-/30 | 2,8   | 15                                               | 34                                             |

## Indexing plungers ECO

**Material:**

Steel version:

Threaded sleeve 1.0718.

Indexing pin 1.4305.

Stainless steel version:

Threaded sleeve and indexing pin 1.4305.

Mushroom knob black grey thermoplastic.

**Version:**

Steel version:

Indexing pin hardened.

Threaded sleeve trivalent blue passivated.

Indexing pin bright.

Stainless steel version:

Indexing pin not hardened.

Steel parts bright.

**Sample order:**

K0747.01903060

**Note:**

Indexing plungers are used to prevent changes to the locking position due to lateral forces. Another locking position can be set only after the plunger has been manually released. Indexing plungers with regular thread and unpolished and unhardened indexing pins are a cost-effective alternative to existing indexing plungers. But their degree of precision is still sufficient for many applications. The smaller production tolerances also make these products less sensitive to the alignment errors that can occur when aligning indexing plungers with the hole in the counter piece. Pay attention to the max. tightening torque when assembling.

**On request:**

Special versions and fine thread.

**Drawing reference:**

Form A: non-lockout type, without locknut

Form B: non-lockout type, with locknut

Form C: lockout type, without locknut

Form D: lockout type, with locknut





## KIPP Indexing plungers ECO, steel, indexing pin not hardened

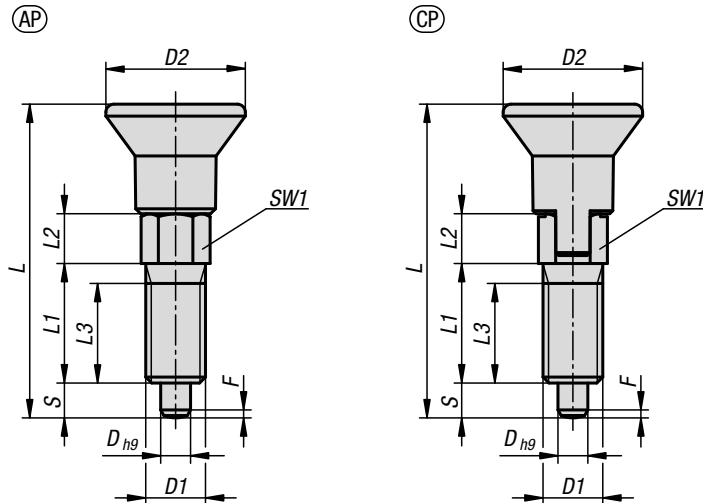
| Order No.<br>Form A | Order No.<br>Form B | Order No.<br>Form C | Order No.<br>Form D | D | D1  | D2 | L    | L1 | L2 | L3 | Travel<br>S | SW1 | SW2       | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N | Tightening<br>torque<br>max. Nm |
|---------------------|---------------------|---------------------|---------------------|---|-----|----|------|----|----|----|-------------|-----|-----------|-------|--------------------------------------------------|------------------------------------------------|---------------------------------|
| K0747.01903060      | K0747.02903060      | K0747.03903060      | K0747.04903060      | 3 | M6  | 14 | 31,5 | 12 | 5  | 10 | 3,5         | 6   | -/10/-/10 | 0,8   | 4                                                | 10                                             | 2                               |
| K0747.01004060      | K0747.02004060      | K0747.03004060      | K0747.04004060      | 4 | M6  | 14 | 36   | 15 | 6  | 13 | 4           | 6   | -/10/-/10 | 1     | 6                                                | 12                                             | 2                               |
| K0747.01105080      | K0747.02105080      | K0747.03105080      | K0747.04105080      | 5 | M8  | 14 | 40   | 17 | 7  | 15 | 5           | 8   | -/13/-/13 | 1,3   | 6                                                | 12                                             | 7                               |
| K0747.01206100      | K0747.02206100      | K0747.03206100      | K0747.04206100      | 6 | M10 | 18 | 47,5 | 20 | 8  | 17 | 6           | 10  | -/17/-/17 | 1,8   | 8                                                | 15                                             | 15                              |
| K0747.01308120      | K0747.02308120      | K0747.03308120      | K0747.04308120      | 8 | M12 | 25 | 61,7 | 26 | 10 | 23 | 8           | 12  | -/19/-/19 | 2,3   | 8                                                | 19                                             | 20                              |

## KIPP Indexing plungers ECO, stainless steel, indexing pin not hardened

| Order No.<br>Form A | Order No.<br>Form B | Order No.<br>Form C | Order No.<br>Form D | D | D1  | D2 | L    | L1 | L2 | L3 | Travel<br>S | SW1 | SW2       | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N | Tightening<br>torque<br>max. Nm |
|---------------------|---------------------|---------------------|---------------------|---|-----|----|------|----|----|----|-------------|-----|-----------|-------|--------------------------------------------------|------------------------------------------------|---------------------------------|
| K0747.11903060      | K0747.12903060      | K0747.13903060      | K0747.14903060      | 3 | M6  | 14 | 31,5 | 12 | 5  | 10 | 3,5         | 6   | -/10/-/10 | 0,8   | 4                                                | 10                                             | 2                               |
| K0747.11004060      | K0747.12004060      | K0747.13004060      | K0747.14004060      | 4 | M6  | 14 | 36   | 15 | 6  | 13 | 4           | 6   | -/10/-/10 | 1     | 6                                                | 12                                             | 2                               |
| K0747.11105080      | K0747.12105080      | K0747.13105080      | K0747.14105080      | 5 | M8  | 14 | 40   | 17 | 7  | 15 | 5           | 8   | -/13/-/13 | 1,3   | 6                                                | 12                                             | 7                               |
| K0747.11206100      | K0747.12206100      | K0747.13206100      | K0747.14206100      | 6 | M10 | 18 | 47,5 | 20 | 8  | 17 | 6           | 10  | -/17/-/17 | 1,8   | 8                                                | 15                                             | 15                              |
| K0747.11308120      | K0747.12308120      | K0747.13308120      | K0747.14308120      | 8 | M12 | 25 | 61,7 | 26 | 10 | 23 | 8           | 12  | -/19/-/19 | 2,3   | 8                                                | 19                                             | 20                              |

## Indexing plungers ECO

with thread lock



### Material:

Steel version:

Indexing pin not hardened:

Threaded sleeve 1.0718.

Indexing pin 1.4305.

Stainless steel version:

Indexing pin not hardened:

Threaded sleeve and indexing pin 1.4305.

Mushroom knob black grey thermoplastic.

Thread lock blue polyamide.

### Version:

Steel version:

Indexing pin hardened.

Threaded sleeve trivalent blue passivated.

Indexing pin bright.

Stainless steel version:

Indexing pin not hardened.

Steel parts bright.

### Sample order:

K1098.091903060

### Note:

Indexing plungers are used to prevent changes to the locking position due to lateral forces. A new locking position can be set only after the plunger has been manually released. Indexing plungers with regular thread and unpolished and unhardened indexing pins are a cost-effective alternative to existing indexing plungers. But their degree of precision is still sufficient for many applications. The smaller production tolerances also make these products less sensitive to the alignment errors that can occur when aligning indexing plungers with the hole in the counter piece. The thread lock allows the fitting depth to be coordinated exactly with the existing components, so that no fastening is required.

The thread lock is an adhesive coat which is applied at selected points (in spots). The tightening and unscrewing torques are guide values.

### On request:

Special versions and fine thread.

### Drawing reference:

Form AP: non-lockout type, without locknut

Form CP: lockout type, without locknut

## Indexing plungers ECO

with thread lock



## KIPP Indexing plungers ECO, with thread lock, steel, indexing pin not hardened

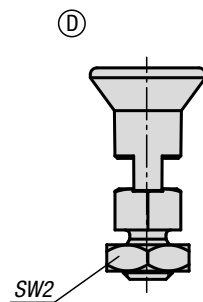
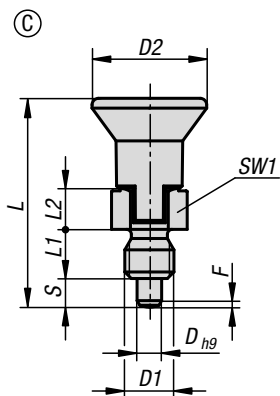
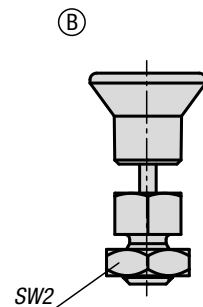
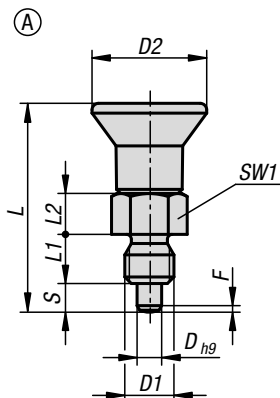
| Order No.<br>Form AP | Order No.<br>Form CP | D | D1  | D2 | L    | L1 | L2 | L3 | Travel<br>S | SW1 | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|----------------------|----------------------|---|-----|----|------|----|----|----|-------------|-----|-------|--------------------------------------------------|------------------------------------------------|
| K1098.091903060      | K1098.093903060      | 3 | M6  | 14 | 31,5 | 12 | 5  | 10 | 3,5         | 6   | 0,8   | 4                                                | 10                                             |
| K1098.091004060      | K1098.093004060      | 4 | M6  | 14 | 36   | 15 | 6  | 13 | 4           | 6   | 1     | 6                                                | 12                                             |
| K1098.091105080      | K1098.093105080      | 5 | M8  | 14 | 40   | 17 | 7  | 15 | 5           | 8   | 1,3   | 6                                                | 12                                             |
| K1098.091206100      | K1098.093206100      | 6 | M10 | 18 | 47,5 | 20 | 8  | 17 | 6           | 10  | 1,8   | 8                                                | 15                                             |
| K1098.091308120      | K1098.093308120      | 8 | M12 | 25 | 61,7 | 26 | 10 | 23 | 8           | 12  | 2,3   | 8                                                | 19                                             |

## KIPP Indexing plungers ECO, with thread lock, stainless steel, indexing pin not hardened

| Order No.<br>Form AP | Order No.<br>Form CP | D | D1  | D2 | L    | L1 | L2 | L3 | Travel<br>S | SW1 | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|----------------------|----------------------|---|-----|----|------|----|----|----|-------------|-----|-------|--------------------------------------------------|------------------------------------------------|
| K1098.191903060      | K1098.193903060      | 3 | M6  | 14 | 31,5 | 12 | 5  | 10 | 3,5         | 6   | 0,8   | 4                                                | 10                                             |
| K1098.191004060      | K1098.193004060      | 4 | M6  | 14 | 36   | 15 | 6  | 13 | 4           | 6   | 1     | 6                                                | 12                                             |
| K1098.191105080      | K1098.193105080      | 5 | M8  | 14 | 40   | 17 | 7  | 15 | 5           | 8   | 1,3   | 6                                                | 12                                             |
| K1098.191206100      | K1098.193206100      | 6 | M10 | 18 | 47,5 | 20 | 8  | 17 | 6           | 10  | 1,8   | 8                                                | 15                                             |
| K1098.191308120      | K1098.193308120      | 8 | M12 | 25 | 61,7 | 26 | 10 | 23 | 8           | 12  | 2,3   | 8                                                | 19                                             |

## Indexing plungers ECO

short version

**Material:**

Steel version:  
Indexing pin not hardened.  
Threaded sleeve 1.0718.  
Indexing pin 1.4305.

Stainless steel version:  
Indexing pin not hardened.  
Threaded sleeve and indexing pin 1.4305.

Mushroom knob black grey thermoplastic.

**Version:**

Steel version:  
Indexing pin hardened.  
Threaded sleeve trivalent blue passivated.  
Indexing pin bright.

Stainless steel version:  
Indexing pin not hardened.  
Steel parts bright.

**Sample order:**

K0748.01903060

**Note:**

Indexing plungers are used to prevent changes to the locking position due to lateral forces. Another locking position can be set only after the plunger has been manually released. Indexing plungers with regular thread and unpolished and unhardened indexing pins are a cost-effective alternative to existing indexing plungers. But their degree of precision is still sufficient for many applications. The smaller production tolerances also make these products less sensitive to the alignment errors that can occur when aligning indexing plungers with the hole in the counter piece. Pay attention to the max. tightening torque when assembling.

**On request:**

Special versions.

**Drawing reference:**

Form A: non-lockout type, without locknut  
Form B: non-lockout type, with locknut  
Form C: lockout type, without locknut  
Form D: lockout type, with locknut

## Indexing plungers ECO

short version



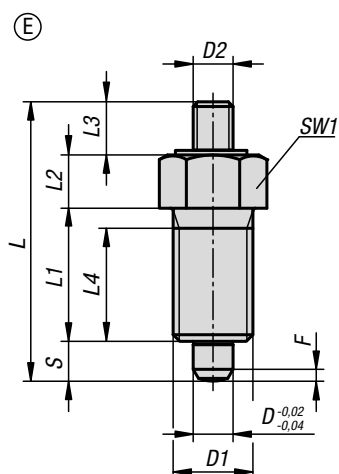
## KIPP Indexing plungers ECO, short version, steel, indexing pin not hardened

| Order No.<br>Form A | Order No.<br>Form B | Order No.<br>Form C | Order No.<br>Form D | D | D1  | D2 | L    | L1 | L2 | Travel<br>S | SW1 | SW2      | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N | Tightening<br>torque<br>max. Nm |
|---------------------|---------------------|---------------------|---------------------|---|-----|----|------|----|----|-------------|-----|----------|-------|--------------------------------------------------|------------------------------------------------|---------------------------------|
| K0748.01903060      | K0748.02903060      | K0748.03903060      | K0748.04903060      | 3 | M6  | 14 | 25,5 | 6  | 5  | 3,5         | 8   | -/10-/10 | 0,8   | 3,5                                              | 8                                              | 2                               |
| K0748.01004080      | K0748.02004080      | K0748.03004080      | K0748.04004080      | 4 | M8  | 18 | 29,5 | 6  | 6  | 4           | 10  | -/13-/13 | 1     | 3,5                                              | 9                                              | 2                               |
| K0748.01105100      | K0748.02105100      | K0748.03105100      | K0748.04105100      | 5 | M10 | 21 | 34,5 | 8  | 7  | 5           | 13  | -/17-/17 | 1,3   | 6                                                | 12                                             | 7                               |
| K0748.01206120      | K0748.02206120      | K0748.03206120      | K0748.04206120      | 6 | M12 | 25 | 41,7 | 10 | 8  | 6           | 14  | -/19-/19 | 1,8   | 6                                                | 12                                             | 15                              |
| K0748.01308160      | K0748.02308160      | K0748.03308160      | K0748.04308160      | 8 | M16 | 33 | 54   | 12 | 10 | 8           | 19  | -/24-/24 | 2,3   | 6                                                | 13                                             | 20                              |

## KIPP Indexing plungers ECO, short version, stainless steel, indexing pin not hardened

| Order No.<br>Form A | Order No.<br>Form B | Order No.<br>Form C | Order No.<br>Form D | D | D1  | D2 | L    | L1 | L2 | Travel<br>S | SW1 | SW2      | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N | Tightening<br>torque<br>max. Nm |
|---------------------|---------------------|---------------------|---------------------|---|-----|----|------|----|----|-------------|-----|----------|-------|--------------------------------------------------|------------------------------------------------|---------------------------------|
| K0748.11903060      | K0748.12903060      | K0748.13903060      | K0748.14903060      | 3 | M6  | 14 | 25,5 | 6  | 5  | 3,5         | 8   | -/10-/10 | 0,8   | 3,5                                              | 8                                              | 2                               |
| K0748.11004080      | K0748.12004080      | K0748.13004080      | K0748.14004080      | 4 | M8  | 18 | 29,5 | 6  | 6  | 4           | 10  | -/13-/13 | 1     | 3,5                                              | 9                                              | 2                               |
| K0748.11105100      | K0748.12105100      | K0748.13105100      | K0748.14105100      | 5 | M10 | 21 | 34,5 | 8  | 7  | 5           | 13  | -/17-/17 | 1,3   | 6                                                | 12                                             | 7                               |
| K0748.11206120      | K0748.12206120      | K0748.13206120      | K0748.14206120      | 6 | M12 | 25 | 41,7 | 10 | 8  | 6           | 14  | -/19-/19 | 1,8   | 6                                                | 12                                             | 15                              |
| K0748.11308160      | K0748.12308160      | K0748.13308160      | K0748.14308160      | 8 | M16 | 33 | 54   | 12 | 10 | 8           | 19  | -/24-/24 | 2,3   | 6                                                | 13                                             | 20                              |

## Indexing plungers



### Material:

Steel version  
Indexing pin hardened:  
grade 5.8.

Stainless steel version  
Indexing pin hardened:  
Threaded sleeve 1.4305.  
Indexing pin 1.4034.

Indexing pin not hardened:  
Threaded sleeve 1.4305.  
Indexing pin 1.4035.

### Version:

Steel version:  
Indexing pin hardened, ground, black oxidised.

Stainless steel version:  
Indexing pin hardened, ground and bright.  
Indexing pin not hardened, ground and bright.

### Sample order:

K0341.02308

### Note:

Indexing plungers are used to prevent any change in locking position due to lateral forces. A new locking position can only be set after the pin has been disengaged. Special grips can be fitted on the projecting threaded pin. This pin is also suitable for automatic actuation e.g. programme controlled pneumatic cylinder or by remote control using bowden cables.

### On request:

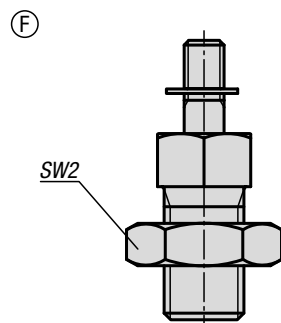
Special versions.

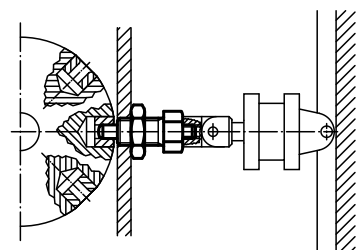
### Accessories:

Spacer rings K0665

### Drawing reference:

Form E: with threaded pin, without locknut  
Form F: with threaded pin, with locknut





## KIPP Indexing plungers, steel, indexing pin hardened

| Order No.<br>Form E | Order No.<br>Form F | D  | D1      | D2  | L  | L1 | L2 | L3  | L4 | Travel<br>S | SW1 | SW2    | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|---------------------|---------------------|----|---------|-----|----|----|----|-----|----|-------------|-----|--------|-------|--------------------------------------------------|------------------------------------------------|
| K0341.1903          | K0341.2903          | 3  | M6x0,75 | M2  | 24 | 12 | 5  | 3,5 | 10 | 3,5         | 8   | - / 10 | 0,8   | 4,5                                              | 10                                             |
| K0341.1004          | K0341.2004          | 4  | M8x1    | M3  | 32 | 15 | 6  | 7   | 13 | 4           | 10  | - / 13 | 1     | 6                                                | 12                                             |
| K0341.1105          | K0341.2105          | 5  | M10x1   | M4  | 37 | 17 | 7  | 8   | 15 | 5           | 13  | - / 17 | 1,3   | 5                                                | 12                                             |
| K0341.1206          | K0341.2206          | 6  | M12x1,5 | M6  | 42 | 20 | 8  | 8   | 17 | 6           | 14  | - / 19 | 1,8   | 6                                                | 14                                             |
| K0341.1308          | K0341.2308          | 8  | M16x1,5 | M8  | 56 | 26 | 10 | 12  | 23 | 8           | 19  | - / 24 | 2,3   | 15                                               | 35                                             |
| K0341.1410          | K0341.2410          | 10 | M20x1,5 | M8  | 62 | 28 | 12 | 12  | 25 | 10          | 22  | - / 30 | 2,8   | 15                                               | 34                                             |
| K0341.1412          | K0341.2412          | 12 | M20x1,5 | M8  | 66 | 28 | 14 | 12  | 25 | 12          | 22  | - / 30 | 2,8   | 15                                               | 39                                             |
| K0341.1516          | K0341.2516          | 16 | M24x2   | M10 | 80 | 32 | 18 | 14  | 28 | 16          | 27  | - / 36 | 3,2   | 20                                               | 46                                             |

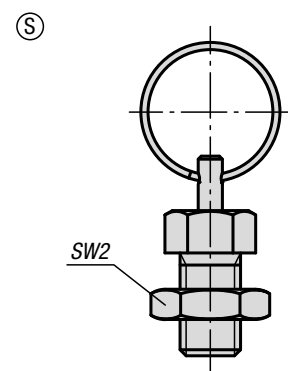
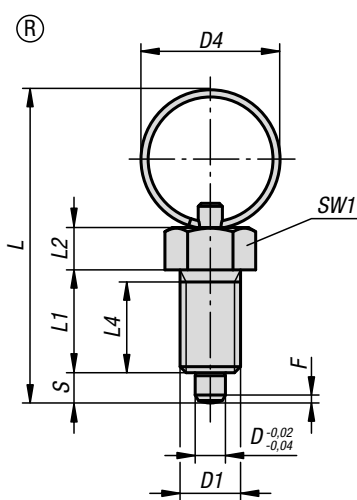
## KIPP Indexing plungers, stainless steel, indexing pin hardened

| Order No.<br>Form E | Order No.<br>Form F | D  | D1      | D2  | L  | L1 | L2 | L3  | L4 | Travel<br>S | SW1 | SW2    | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|---------------------|---------------------|----|---------|-----|----|----|----|-----|----|-------------|-----|--------|-------|--------------------------------------------------|------------------------------------------------|
| K0341.01903         | K0341.02903         | 3  | M6x0,75 | M2  | 24 | 12 | 5  | 3,5 | 10 | 3,5         | 8   | - / 10 | 0,8   | 4,5                                              | 10                                             |
| K0341.01004         | K0341.02004         | 4  | M8x1    | M3  | 32 | 15 | 6  | 7   | 13 | 4           | 10  | - / 13 | 1     | 6                                                | 12                                             |
| K0341.01105         | K0341.02105         | 5  | M10x1   | M4  | 37 | 17 | 7  | 8   | 15 | 5           | 13  | - / 17 | 1,3   | 5                                                | 12                                             |
| K0341.01206         | K0341.02206         | 6  | M12x1,5 | M6  | 42 | 20 | 8  | 8   | 17 | 6           | 14  | - / 19 | 1,8   | 6                                                | 14                                             |
| K0341.01308         | K0341.02308         | 8  | M16x1,5 | M8  | 56 | 26 | 10 | 12  | 23 | 8           | 19  | - / 24 | 2,3   | 15                                               | 35                                             |
| K0341.01410         | K0341.02410         | 10 | M20x1,5 | M8  | 62 | 28 | 12 | 12  | 25 | 10          | 22  | - / 30 | 2,8   | 15                                               | 34                                             |
| K0341.01412         | K0341.02412         | 12 | M20x1,5 | M8  | 66 | 28 | 14 | 12  | 25 | 12          | 22  | - / 30 | 2,8   | 15                                               | 39                                             |
| K0341.01516         | K0341.02516         | 16 | M24x2   | M10 | 80 | 32 | 18 | 14  | 28 | 16          | 27  | - / 36 | 3,2   | 20                                               | 46                                             |

## KIPP Indexing plungers, stainless steel, indexing pin not hardened

| Order No.<br>Form E | Order No.<br>Form F | D  | D1      | D2  | L  | L1 | L2 | L3  | L4 | Travel<br>S | SW1 | SW2    | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|---------------------|---------------------|----|---------|-----|----|----|----|-----|----|-------------|-----|--------|-------|--------------------------------------------------|------------------------------------------------|
| K0341.11903         | K0341.12903         | 3  | M6x0,75 | M2  | 24 | 12 | 5  | 3,5 | 10 | 3,5         | 8   | - / 10 | 0,8   | 4,5                                              | 10                                             |
| K0341.11004         | K0341.12004         | 4  | M8x1    | M3  | 32 | 15 | 6  | 7   | 13 | 4           | 10  | - / 13 | 1     | 6                                                | 12                                             |
| K0341.11105         | K0341.12105         | 5  | M10x1   | M4  | 37 | 17 | 7  | 8   | 15 | 5           | 13  | - / 17 | 1,3   | 5                                                | 12                                             |
| K0341.11206         | K0341.12206         | 6  | M12x1,5 | M6  | 42 | 20 | 8  | 8   | 17 | 6           | 14  | - / 19 | 1,8   | 6                                                | 14                                             |
| K0341.11308         | K0341.12308         | 8  | M16x1,5 | M8  | 56 | 26 | 10 | 12  | 23 | 8           | 19  | - / 24 | 2,3   | 15                                               | 35                                             |
| K0341.11410         | K0341.12410         | 10 | M20x1,5 | M8  | 62 | 28 | 12 | 12  | 25 | 10          | 22  | - / 30 | 2,8   | 15                                               | 34                                             |
| K0341.11412         | K0341.12412         | 12 | M20x1,5 | M8  | 66 | 28 | 14 | 12  | 25 | 12          | 22  | - / 30 | 2,8   | 15                                               | 39                                             |
| K0341.11516         | K0341.12516         | 16 | M24x2   | M10 | 80 | 32 | 18 | 14  | 28 | 16          | 27  | - / 36 | 3,2   | 20                                               | 46                                             |

# Indexing plungers



## Material:

Steel version  
Indexing pin hardened:  
grade 5.8.

Stainless steel version  
Indexing pin hardened:  
Threaded sleeve 1.4305.  
Indexing pin 1.4304.

Indexing pin not hardened:  
Threaded sleeve 1.4305.  
Indexing pin 1.4305.

Key ring 1.4310, bright.

## Version:

Steel version:  
Indexing pin hardened, ground, black oxidised.

Stainless steel version:  
Indexing pin hardened, ground and bright.  
Indexing pin not hardened, ground and bright.

## Sample order:

K0342.03308

## Note:

Indexing plungers are used to prevent any change in locking position due to lateral forces. A new locking position can only be set after the pin has been disengaged. The key ring is also suitable for automatic actuation of the indexing plunger by e.g. program-controlled pneumatic cylinder or by remote control using bowden cables.

## On request:

Special versions.

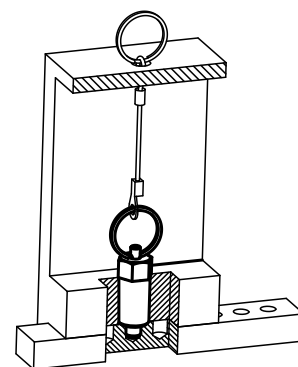
## Accessories:

Spacer rings K0665

## Drawing reference:

Form R: without locknut  
Form S: with locknut





### KIPP Indexing plungers, steel, indexing pin hardened

| Order No.<br>Form R | Order No.<br>Form S | D  | D1      | D4 | L  | L1 | L2 | L4 | Travel<br>S | SW1 | SW2    | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|---------------------|---------------------|----|---------|----|----|----|----|----|-------------|-----|--------|-------|--------------------------------------------------|------------------------------------------------|
| K0342.3004          | K0342.4004          | 4  | M8x1    | 15 | 40 | 15 | 6  | 13 | 4           | 10  | - / 13 | 1     | 6                                                | 12                                             |
| K0342.3105          | K0342.4105          | 5  | M10x1   | 23 | 52 | 17 | 7  | 15 | 5           | 13  | - / 17 | 1,3   | 5                                                | 12                                             |
| K0342.3206          | K0342.4206          | 6  | M12x1,5 | 23 | 57 | 20 | 8  | 17 | 6           | 14  | - / 19 | 1,8   | 6                                                | 14                                             |
| K0342.3308          | K0342.4308          | 8  | M16x1,5 | 28 | 72 | 26 | 10 | 23 | 8           | 19  | - / 24 | 2,3   | 15                                               | 35                                             |
| K0342.3410          | K0342.4410          | 10 | M20x1,5 | 28 | 78 | 28 | 12 | 25 | 10          | 22  | - / 30 | 2,8   | 15                                               | 34                                             |

### KIPP Indexing plungers, stainless steel, indexing pin hardened

| Order No.<br>Form R | Order No.<br>Form S | D  | D1      | D4 | L  | L1 | L2 | L4 | Travel<br>S | SW1 | SW2    | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|---------------------|---------------------|----|---------|----|----|----|----|----|-------------|-----|--------|-------|--------------------------------------------------|------------------------------------------------|
| K0342.03004         | K0342.04004         | 4  | M8x1    | 15 | 40 | 15 | 6  | 13 | 4           | 10  | - / 13 | 1     | 6                                                | 12                                             |
| K0342.03105         | K0342.04105         | 5  | M10x1   | 23 | 52 | 17 | 7  | 15 | 5           | 13  | - / 17 | 1,3   | 5                                                | 12                                             |
| K0342.03206         | K0342.04206         | 6  | M12x1,5 | 23 | 57 | 20 | 8  | 17 | 6           | 14  | - / 19 | 1,8   | 6                                                | 14                                             |
| K0342.03308         | K0342.04308         | 8  | M16x1,5 | 28 | 72 | 26 | 10 | 23 | 8           | 19  | - / 24 | 2,3   | 15                                               | 35                                             |
| K0342.03410         | K0342.04410         | 10 | M20x1,5 | 28 | 78 | 28 | 12 | 25 | 10          | 22  | - / 30 | 2,8   | 15                                               | 34                                             |

### KIPP Indexing plungers, stainless steel, indexing pin not hardened

| Order No.<br>Form R | Order No.<br>Form S | D  | D1      | D4 | L  | L1 | L2 | L4 | Travel<br>S | SW1 | SW2    | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|---------------------|---------------------|----|---------|----|----|----|----|----|-------------|-----|--------|-------|--------------------------------------------------|------------------------------------------------|
| K0342.13004         | K0342.14004         | 4  | M8x1    | 15 | 40 | 15 | 6  | 13 | 4           | 10  | - / 13 | 1     | 6                                                | 12                                             |
| K0342.13105         | K0342.14105         | 5  | M10x1   | 23 | 52 | 17 | 7  | 15 | 5           | 13  | - / 17 | 1,3   | 5                                                | 12                                             |
| K0342.13206         | K0342.14206         | 6  | M12x1,5 | 23 | 57 | 20 | 8  | 17 | 6           | 14  | - / 19 | 1,8   | 6                                                | 14                                             |
| K0342.13308         | K0342.14308         | 8  | M16x1,5 | 28 | 72 | 26 | 10 | 23 | 8           | 19  | - / 24 | 2,3   | 15                                               | 35                                             |
| K0342.13410         | K0342.14410         | 10 | M20x1,5 | 28 | 78 | 28 | 12 | 25 | 10          | 22  | - / 30 | 2,8   | 15                                               | 34                                             |

## Indexing plungers

without collar



### Material:

Steel version  
Indexing pin hardened:  
grade 5.8.

Stainless steel version  
Indexing pin hardened:  
Threaded sleeve 1.4305.  
Indexing pin 1.4034.

Indexing pin not hardened:  
Threaded sleeve 1.4305.  
Indexing pin 1.4305.

Mushroom knob black-grey thermoplastic.

### Version:

Steel version:  
Indexing pin hardened, ground, black oxidised.

Stainless steel version:  
Indexing pin hardened, ground and bright.  
Indexing pin not hardened, ground and bright.

### Sample order:

K0343.02206

### Note:

Indexing plungers are used to prevent any change in locking position due to lateral forces. A new locking position can only be set after the pin has been manually disengaged.

A washer is available to aid by screwing in the indexing plungers. The washer slides beneath the mushroom knob so that the carrier pins engage in the slot.

### On request:

Special versions.

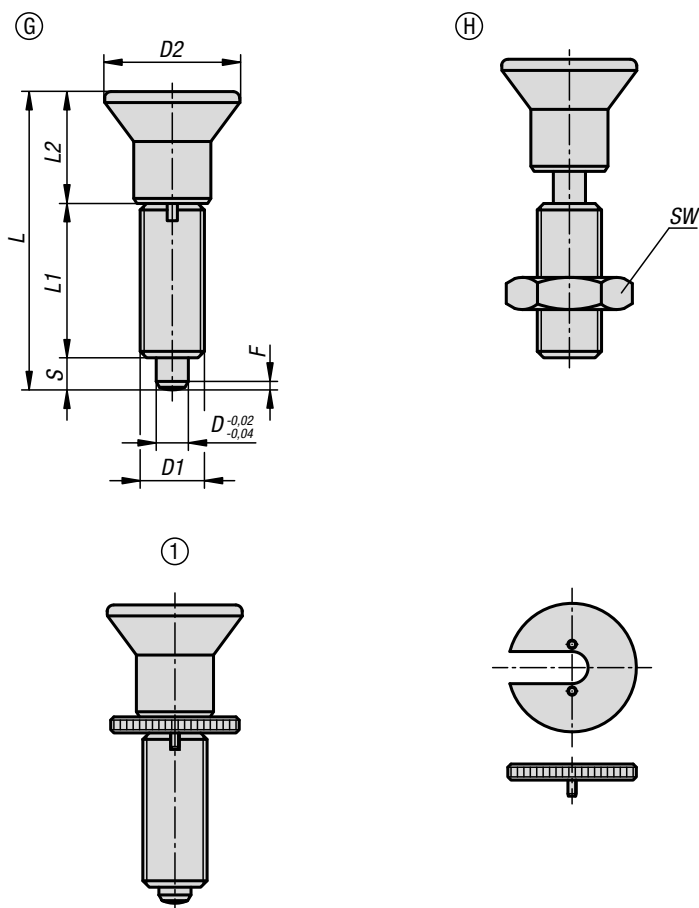
### Accessories:

Spacer rings K0665

### Drawing reference:

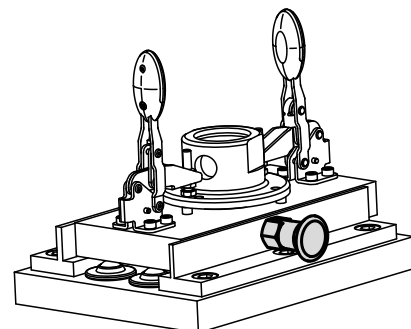
Form G: without locknut  
Form H: with locknut

1) Indexing plunger with screw-in washer



## Indexing plungers

without collar



## KIPP Indexing plungers without collar, steel, indexing pin hardened

| Order No.<br>Form G | Order No.<br>Form H | D  | D1      | D2 | L    | L1 | L2   | Travel<br>S | SW     | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N | Order No.<br>screw-in<br>washer |
|---------------------|---------------------|----|---------|----|------|----|------|-------------|--------|-------|--------------------------------------------------|------------------------------------------------|---------------------------------|
| K0343.1903          | K0343.2903          | 3  | M6x0,75 | 14 | 31,5 | 17 | 11   | 3,5         | - / 10 | 0,8   | 4,5                                              | 10                                             | K0344.99                        |
| K0343.1004          | K0343.2004          | 4  | M8x1    | 18 | 38,5 | 21 | 13,5 | 4           | - / 13 | 1,3   | 6                                                | 12                                             | K0344.90                        |
| K0343.1105          | K0343.2105          | 5  | M10x1   | 21 | 43,5 | 24 | 14,5 | 5           | - / 17 | 1,3   | 5                                                | 12                                             | K0344.91                        |
| K0343.1206          | K0343.2206          | 6  | M12x1,5 | 25 | 51,7 | 28 | 17,7 | 6           | - / 19 | 1,8   | 6                                                | 14                                             | K0344.92                        |
| K0343.1308          | K0343.2308          | 8  | M16x1,5 | 33 | 68   | 36 | 24   | 8           | - / 24 | 2,3   | 15                                               | 35                                             | K0344.93                        |
| K0343.1410          | K0343.2410          | 10 | M20x1,5 | 33 | 74   | 40 | 24   | 10          | - / 30 | 2,8   | 15                                               | 34                                             | K0344.94                        |
| K0343.1412          | K0343.2412          | 12 | M20x1,5 | 33 | 78   | 42 | 24   | 12          | - / 30 | 2,8   | 15                                               | 39                                             | K0344.94                        |
| K0343.1516          | K0343.2516          | 16 | M24x2   | 40 | 96   | 50 | 30   | 16          | - / 36 | 3,2   | 20                                               | 46                                             | K0344.95                        |

## KIPP Indexing plungers without collar, stainless steel, indexing pin hardened

| Order No.<br>Form G | Order No.<br>Form H | D  | D1      | D2 | L    | L1 | L2   | Travel<br>S | SW     | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N | Order No.<br>screw-in<br>washer |
|---------------------|---------------------|----|---------|----|------|----|------|-------------|--------|-------|--------------------------------------------------|------------------------------------------------|---------------------------------|
| K0343.01903         | K0343.02903         | 3  | M6x0,75 | 14 | 31,5 | 17 | 11   | 3,5         | - / 10 | 0,8   | 4,5                                              | 10                                             | K0344.99                        |
| K0343.01004         | K0343.02004         | 4  | M8x1    | 18 | 38,5 | 21 | 13,5 | 4           | - / 13 | 1,3   | 6                                                | 12                                             | K0344.90                        |
| K0343.01105         | K0343.02105         | 5  | M10x1   | 21 | 43,5 | 24 | 14,5 | 5           | - / 17 | 1,3   | 5                                                | 12                                             | K0344.91                        |
| K0343.01206         | K0343.02206         | 6  | M12x1,5 | 25 | 51,7 | 28 | 17,7 | 6           | - / 19 | 1,8   | 6                                                | 14                                             | K0344.92                        |
| K0343.01308         | K0343.02308         | 8  | M16x1,5 | 33 | 68   | 36 | 24   | 8           | - / 24 | 2,3   | 15                                               | 35                                             | K0344.93                        |
| K0343.01410         | K0343.02410         | 10 | M20x1,5 | 33 | 74   | 40 | 24   | 10          | - / 30 | 2,8   | 15                                               | 34                                             | K0344.94                        |
| K0343.01412         | K0343.02412         | 12 | M20x1,5 | 33 | 78   | 42 | 24   | 12          | - / 30 | 2,8   | 15                                               | 39                                             | K0344.94                        |
| K0343.01516         | K0343.02516         | 16 | M24x2   | 40 | 96   | 50 | 30   | 16          | - / 36 | 3,2   | 20                                               | 46                                             | K0344.95                        |

## KIPP Indexing plungers without collar, stainless steel, indexing pin not hardened

| Order No.<br>Form G | Order No.<br>Form H | D  | D1      | D2 | L    | L1 | L2   | Travel<br>S | SW     | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N | Order No.<br>screw-in<br>washer |
|---------------------|---------------------|----|---------|----|------|----|------|-------------|--------|-------|--------------------------------------------------|------------------------------------------------|---------------------------------|
| K0343.11903         | K0343.12903         | 3  | M6x0,75 | 14 | 31,5 | 17 | 11   | 3,5         | - / 10 | 0,8   | 4,5                                              | 10                                             | K0344.99                        |
| K0343.11004         | K0343.12004         | 4  | M8x1    | 18 | 38,5 | 21 | 13,5 | 4           | - / 13 | 1,3   | 6                                                | 12                                             | K0344.90                        |
| K0343.11105         | K0343.12105         | 5  | M10x1   | 21 | 43,5 | 24 | 14,5 | 5           | - / 17 | 1,3   | 5                                                | 12                                             | K0344.91                        |
| K0343.11206         | K0343.12206         | 6  | M12x1,5 | 25 | 51,7 | 28 | 17,7 | 6           | - / 19 | 1,8   | 6                                                | 14                                             | K0344.92                        |
| K0343.11308         | K0343.12308         | 8  | M16x1,5 | 33 | 68   | 36 | 24   | 8           | - / 24 | 2,3   | 15                                               | 35                                             | K0344.93                        |
| K0343.11410         | K0343.12410         | 10 | M20x1,5 | 33 | 74   | 40 | 24   | 10          | - / 30 | 2,8   | 15                                               | 34                                             | K0344.94                        |
| K0343.11412         | K0343.12412         | 12 | M20x1,5 | 33 | 78   | 42 | 24   | 12          | - / 30 | 2,8   | 15                                               | 39                                             | K0344.94                        |
| K0343.11516         | K0343.12516         | 16 | M24x2   | 40 | 96   | 50 | 30   | 16          | - / 36 | 3,2   | 20                                               | 46                                             | K0344.95                        |

# Indexing plungers

without collar with extended indexing pin



## Material:

Steel version  
Indexing pin hardened:  
grade 5.8.

Stainless steel version  
Indexing pin hardened:  
Threaded sleeve 1.4305.  
Indexing pin 1.4034.

Indexing pin not hardened:  
Threaded sleeve 1.4305.  
Indexing pin 1.4305.

Mushroom knob black-grey thermoplastic.

## Version:

Steel version:  
Indexing pin hardened, ground, black oxidised.

Stainless steel version:  
Indexing pin hardened, ground and bright.  
Indexing pin not hardened, ground and bright.

## Sample order:

K0633.21004

## Note:

Indexing plungers are used to prevent any change in locking position due to lateral forces. A new locking position can only be set after the pin has been manually disengaged.

A washer is available to aid by screwing in the indexing plungers. The washer slides beneath the mushroom knob so that the carrier pins engage in the slot.

## On request:

Special versions.

## Accessories:

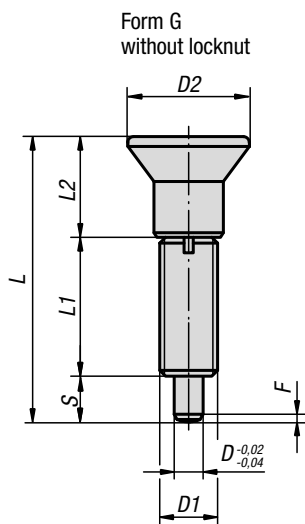
Spacer rings K0665

## Drawing reference:

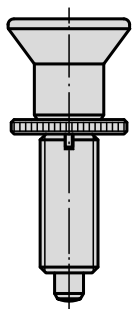
Form G: without locknut

Form H: with locknut

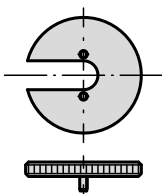
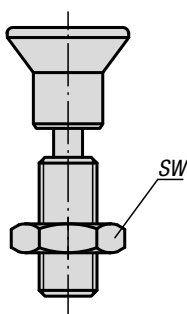
1) Indexing plunger with screw-in washer



Indexing plunger  
with screw-in washer

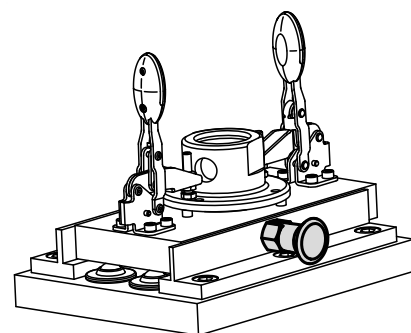


Form H  
with locknut



# Indexing plungers

without collar with extended indexing pin



## KIPP Indexing plungers without collar with extended indexing pin, steel, indexing pin hardened

| Order No.<br>Form G | Order No.<br>Form H | D  | D1      | D2 | L    | L1 | L2   | Travel<br>S | SW     | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N | Order No.<br>screw-in<br>washer |
|---------------------|---------------------|----|---------|----|------|----|------|-------------|--------|-------|--------------------------------------------------|------------------------------------------------|---------------------------------|
| K0633.21903         | K0633.22903         | 3  | M6x0,75 | 14 | 33   | 17 | 11   | 5           | - / 10 | 0,8   | 4,5                                              | 12                                             | K0344.99                        |
| K0633.21004         | K0633.22004         | 4  | M8x1    | 18 | 40,5 | 21 | 13,5 | 6           | - / 13 | 1     | 6                                                | 15                                             | K0344.90                        |
| K0633.21105         | K0633.22105         | 5  | M10x1   | 21 | 46,5 | 24 | 14,5 | 8           | - / 17 | 1,3   | 5                                                | 16                                             | K0344.91                        |
| K0633.21206         | K0633.22206         | 6  | M12x1,5 | 25 | 54,7 | 28 | 17,7 | 9           | - / 19 | 1,8   | 6                                                | 18                                             | K0344.92                        |
| K0633.21308         | K0633.22308         | 8  | M16x1,5 | 33 | 72   | 36 | 24   | 12          | - / 24 | 2,3   | 15                                               | 45                                             | K0344.93                        |
| K0633.21410         | K0633.22410         | 10 | M20x1,5 | 33 | 79   | 40 | 24   | 15          | - / 30 | 2,8   | 15                                               | 43                                             | K0344.94                        |
| K0633.21412         | K0633.22412         | 12 | M20x1,5 | 33 | 84   | 42 | 24   | 18          | - / 30 | 2,8   | 15                                               | 51                                             | K0344.94                        |
| K0633.21516         | K0633.22516         | 16 | M24x2   | 40 | 104  | 50 | 30   | 24          | - / 36 | 3,2   | 20                                               | 60                                             | K0344.95                        |

## KIPP Indexing plungers without collar with extended indexing pin, stainless steel, indexing pin hardened

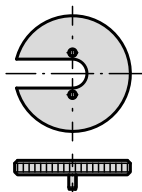
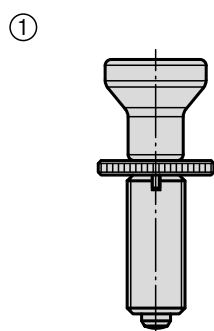
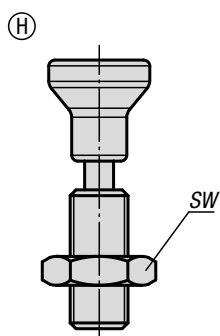
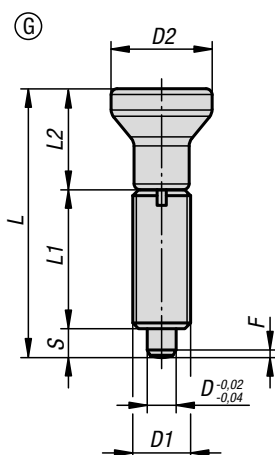
| Order No.<br>Form G | Order No.<br>Form H | D  | D1      | D2 | L    | L1 | L2   | Travel<br>S | SW     | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N | Order No.<br>screw-in<br>washer |
|---------------------|---------------------|----|---------|----|------|----|------|-------------|--------|-------|--------------------------------------------------|------------------------------------------------|---------------------------------|
| K0633.201903        | K0633.202903        | 3  | M6x0,75 | 14 | 33   | 17 | 11   | 5           | - / 10 | 0,8   | 4,5                                              | 12                                             | K0344.99                        |
| K0633.201004        | K0633.202004        | 4  | M8x1    | 18 | 40,5 | 21 | 13,5 | 6           | - / 13 | 1     | 6                                                | 15                                             | K0344.90                        |
| K0633.201105        | K0633.202105        | 5  | M10x1   | 21 | 46,5 | 24 | 14,5 | 8           | - / 17 | 1,3   | 5                                                | 16                                             | K0344.91                        |
| K0633.201206        | K0633.202206        | 6  | M12x1,5 | 25 | 54,7 | 28 | 17,7 | 9           | - / 19 | 1,8   | 6                                                | 18                                             | K0344.92                        |
| K0633.201308        | K0633.202308        | 8  | M16x1,5 | 33 | 72   | 36 | 24   | 12          | - / 24 | 2,3   | 15                                               | 45                                             | K0344.93                        |
| K0633.201410        | K0633.202410        | 10 | M20x1,5 | 33 | 79   | 40 | 24   | 15          | - / 30 | 2,8   | 15                                               | 43                                             | K0344.94                        |
| K0633.201412        | K0633.202412        | 12 | M20x1,5 | 33 | 84   | 42 | 24   | 18          | - / 30 | 2,8   | 15                                               | 51                                             | K0344.94                        |
| K0633.201516        | K0633.202516        | 16 | M24x2   | 40 | 104  | 50 | 30   | 24          | - / 36 | 3,2   | 20                                               | 60                                             | K0344.95                        |

## KIPP Indexing plungers without collar with extended indexing pin, stainless steel, indexing pin not hardened

| Order No.<br>Form G | Order No.<br>Form H | D  | D1      | D2 | L    | L1 | L2   | Travel<br>S | SW     | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N | Order No.<br>screw-in<br>washer |
|---------------------|---------------------|----|---------|----|------|----|------|-------------|--------|-------|--------------------------------------------------|------------------------------------------------|---------------------------------|
| K0633.211903        | K0633.212903        | 3  | M6x0,75 | 14 | 33   | 17 | 11   | 5           | - / 10 | 0,8   | 4,5                                              | 12                                             | K0344.99                        |
| K0633.211004        | K0633.212004        | 4  | M8x1    | 18 | 40,5 | 21 | 13,5 | 6           | - / 13 | 1     | 6                                                | 15                                             | K0344.90                        |
| K0633.211105        | K0633.212105        | 5  | M10x1   | 21 | 46,5 | 24 | 14,5 | 8           | - / 17 | 1,3   | 5                                                | 16                                             | K0344.91                        |
| K0633.211206        | K0633.212206        | 6  | M12x1,5 | 25 | 54,7 | 28 | 17,7 | 9           | - / 19 | 1,8   | 6                                                | 18                                             | K0344.92                        |
| K0633.211308        | K0633.212308        | 8  | M16x1,5 | 33 | 72   | 36 | 24   | 12          | - / 24 | 2,3   | 15                                               | 45                                             | K0344.93                        |
| K0633.211410        | K0633.212410        | 10 | M20x1,5 | 33 | 79   | 40 | 24   | 15          | - / 30 | 2,8   | 15                                               | 43                                             | K0344.94                        |
| K0633.211412        | K0633.212412        | 12 | M20x1,5 | 33 | 84   | 42 | 24   | 18          | - / 30 | 2,8   | 15                                               | 51                                             | K0344.94                        |
| K0633.211516        | K0633.212516        | 16 | M24x2   | 40 | 104  | 50 | 30   | 24          | - / 36 | 3,2   | 20                                               | 60                                             | K0344.95                        |

## Indexing plungers

stainless steel without collar



### Material:

Indexing pin hardened:  
Threaded sleeve 1.4305.  
Indexing pin 1.4034.

Indexing pin not hardened:  
Threaded sleeve 1.4305.  
Indexing pin 1.4305.

Mushroom grip 1.4305, fine turned.

### Version:

Bright.  
Indexing pin ground.

### Sample order:

K0634.001004

### Note:

Indexing plungers are used to prevent any change in locking position due to lateral forces. A new locking position can only be set after the pin has been manually disengaged.

A screw-in washer can be supplied to help screw the indexing plungers in. The washer slides beneath the disengaged mushroom knob so that the follower pins engage in the slot.

### On request:

Special versions.

### Accessories:

Spacer rings K0665

### Drawing reference:

Form G: without locknut

Form H: with locknut

1) Indexing plunger with screw-in washer

## Indexing plungers

stainless steel without collar



## KIPP Indexing plungers stainless steel without collar, indexing pin hardened

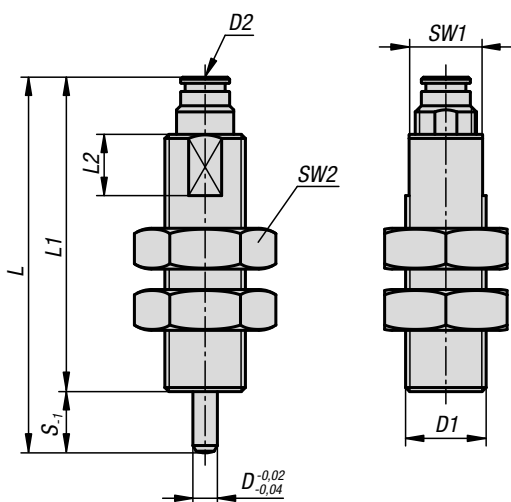
| Order No.<br>Form G | Order No.<br>Form H | D  | D1      | D2 | L    | L1 | L2 | Travel<br>S | SW   | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N | Order No.<br>screw-in<br>washer |
|---------------------|---------------------|----|---------|----|------|----|----|-------------|------|-------|--------------------------------------------------|------------------------------------------------|---------------------------------|
| K0634.001903        | K0634.002903        | 3  | M6x0,75 | 14 | 34,5 | 17 | 14 | 3,5         | -/10 | 0,8   | 4,5                                              | 10                                             | K0344.99                        |
| K0634.001004        | K0634.002004        | 4  | M8x1    | 18 | 43   | 21 | 18 | 4           | -/13 | 1     | 6                                                | 12                                             | K0344.90                        |
| K0634.001105        | K0634.002105        | 5  | M10x1   | 21 | 50   | 24 | 21 | 5           | -/17 | 1,3   | 5                                                | 12                                             | K0344.91                        |
| K0634.001206        | K0634.002206        | 6  | M12x1,5 | 25 | 59   | 28 | 25 | 6           | -/19 | 1,8   | 6                                                | 14                                             | K0344.92                        |
| K0634.001308        | K0634.002308        | 8  | M16x1,5 | 33 | 77   | 36 | 33 | 8           | -/24 | 2,3   | 15                                               | 35                                             | K0344.93                        |
| K0634.001410        | K0634.002410        | 10 | M20x1,5 | 33 | 83   | 40 | 33 | 10          | -/30 | 2,8   | 15                                               | 34                                             | K0344.94                        |
| K0634.001412        | K0634.002412        | 12 | M20x1,5 | 33 | 87   | 42 | 33 | 12          | -/30 | 2,8   | 15                                               | 39                                             | K0344.94                        |
| K0634.001516        | K0634.002516        | 16 | M24x2   | 40 | 106  | 50 | 40 | 16          | -/36 | 3,2   | 20                                               | 46                                             | K0344.95                        |

## KIPP Indexing plungers stainless steel without collar, indexing pin not hardened

| Order No.<br>Form G | Order No.<br>Form H | D  | D1      | D2 | L    | L1 | L2 | Travel<br>S | SW   | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N | Order No.<br>screw-in<br>washer |
|---------------------|---------------------|----|---------|----|------|----|----|-------------|------|-------|--------------------------------------------------|------------------------------------------------|---------------------------------|
| K0634.111903        | K0634.112903        | 3  | M6x0,75 | 14 | 34,5 | 17 | 14 | 3,5         | -/10 | 0,8   | 4,5                                              | 10                                             | K0344.99                        |
| K0634.111004        | K0634.112004        | 4  | M8x1    | 18 | 43   | 21 | 18 | 4           | -/13 | 1     | 6                                                | 12                                             | K0344.90                        |
| K0634.111105        | K0634.112105        | 5  | M10x1   | 21 | 50   | 24 | 21 | 5           | -/17 | 1,3   | 5                                                | 12                                             | K0344.91                        |
| K0634.111206        | K0634.112206        | 6  | M12x1,5 | 25 | 59   | 28 | 25 | 6           | -/19 | 1,8   | 6                                                | 14                                             | K0344.92                        |
| K0634.111308        | K0634.112308        | 8  | M16x1,5 | 33 | 77   | 36 | 33 | 8           | -/24 | 2,3   | 15                                               | 35                                             | K0344.93                        |
| K0634.111410        | K0634.112410        | 10 | M20x1,5 | 33 | 83   | 40 | 33 | 10          | -/30 | 2,8   | 15                                               | 34                                             | K0344.94                        |
| K0634.111412        | K0634.112412        | 12 | M20x1,5 | 33 | 87   | 42 | 33 | 12          | -/30 | 2,8   | 15                                               | 39                                             | K0344.94                        |
| K0634.111516        | K0634.112516        | 16 | M24x2   | 40 | 106  | 50 | 40 | 16          | -/36 | 3,2   | 20                                               | 46                                             | K0344.95                        |

## Indexing plungers

pneumatic



### Material:

Steel version:  
threaded sleeve and thrust pin, free-cutting steel.  
hexagon nuts, steel, grade 04.

Stainless steel version:  
threaded sleeve 1.4305  
thrust pin 1.4034  
hexagon nuts, A2 stainless steel.

### Version:

Steel version:  
threaded sleeve, black oxidised  
thrust pin hardened, black oxidised and ground  
hexagon nuts, black oxidised

Stainless steel version:  
threaded sleeve, bright  
thrust pin, hardened, ground and bright  
hexagon nuts, bright

### Sample order:

K1116.1206010

### Note:

The indexing plungers are operated by applying compressed air.  
The spring-loaded reset occurs by disconnecting the air supply.

### Pneumatic cylinder:

Single-acting piston rod cylinder.

#### Materials:

cylinder tube, nickel-plated brass,  
piston rod, stainless steel  
seals, NBR, PU.

#### Operating medium:

filtered and dried air, oiled or not oiled.

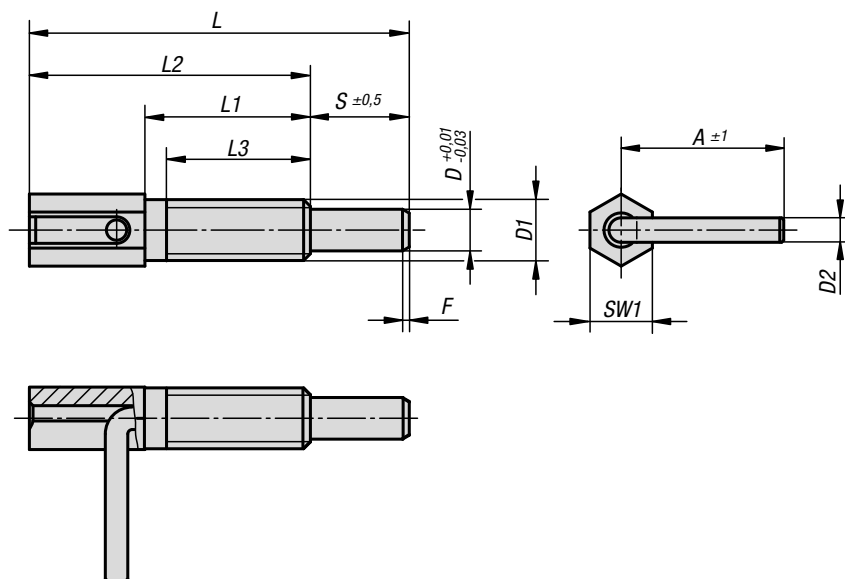
Application temperature: -20 °C to +80 °C.

## KIPP Indexing plungers, pneumatic

| Order No.<br>steel | Order No.<br>stainless steel | D | D1      | D2 | L  | L1 | L2 | Travel<br>S | SW1 | SW2 | Operating<br>pressure<br>bar | Piston force<br>at 6 bar<br>(N) | Spring<br>retraction force<br>ca. N |
|--------------------|------------------------------|---|---------|----|----|----|----|-------------|-----|-----|------------------------------|---------------------------------|-------------------------------------|
| K1116.1308010      | K1116.01308010               | 8 | M20x1,5 | M5 | 77 | 67 | 15 | 10          | 18  | 30  | 2 - 6                        | 39,6-35,3                       | 11,6-5,1                            |
| K1116.1206010      | K1116.01206010               | 6 | M20x1,5 | M5 | 80 | 70 | 15 | 10          | 18  | 30  | 2 - 6                        | 38,7-35,1                       | 9,9-6                               |
| K1116.1308015      | K1116.01308015               | 8 | M20x1,5 | M5 | 89 | 74 | 15 | 15          | 18  | 30  | 2 - 6                        | 39,6-33,1                       | 11,6-5,1                            |
| K1116.1206015      | K1116.01206015               | 6 | M20x1,5 | M5 | 92 | 77 | 15 | 15          | 18  | 30  | 2 - 6                        | 38,7-32,9                       | 11,8-6                              |



## Indexing plungers



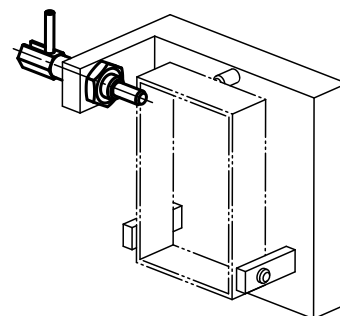
**Material:**  
Steel grade 5.8.

**Version:**  
Trivalent blue passivated.

**Sample order:**  
K0340.1206

**Note:**  
Indexing plungers are used to prevent any change in locking position due to lateral forces. A new locking position can only be set after the pin has been manually disengaged.

**On request:**  
Special versions.



### KIPP Indexing plungers

| Order No.  | A    | D  | D1  | D2  | L     | L1   | L2   | L3   | Travel S | SW1 | Fx30° | Spring force initial pressure F1 approx. N | Spring force final pressure F2 approx. N | Tightening torque max. Nm |
|------------|------|----|-----|-----|-------|------|------|------|----------|-----|-------|--------------------------------------------|------------------------------------------|---------------------------|
| K0340.1104 | 16   | 4  | M6  | 2,3 | 41,5  | 20   | 32   | 17   | 9,5      | 6   | 0,7   | 3                                          | 10                                       | 1,6                       |
| K0340.1905 | 19   | 5  | M8  | 3   | 54    | 27   | 42   | 24   | 12       | 8   | 0,9   | 3,5                                        | 13,5                                     | 4,5                       |
| K0340.1206 | 23,5 | 6  | M10 | 3,5 | 65    | 33,5 | 51   | 30   | 14       | 10  | 1,1   | 4                                          | 16                                       | 10                        |
| K0340.1308 | 31   | 8  | M12 | 4,7 | 73    | 31,8 | 54   | 28   | 19       | 12  | 1,3   | 4                                          | 22                                       | 13                        |
| K0340.1410 | 33   | 10 | M16 | 4,7 | 102,5 | 50,5 | 77,5 | 44,5 | 25       | 16  | 1,6   | 4                                          | 23                                       | 42                        |

# Indexing plungers

without collar



## Material:

Steel version

Indexing pin hardened:  
grade 5.8.

Stainless steel version

Indexing pin hardened:  
Threaded sleeve 1.4305.  
Indexing pin 1.4034.

Indexing pin not hardened:

Threaded sleeve 1.4305.  
Indexing pin 1.4035.

Mushroom knob black-grey thermoplastic.

## Version:

Steel version:

Indexing pin hardened, ground, black oxidised.

Stainless steel version:

Indexing pin hardened, ground and bright.

Indexing pin not hardened, ground and bright.

## Sample order:

K0344.02206

## Note:

Indexing plungers are used to prevent any change in locking position due to lateral forces. A new locking position can only be set after the pin has been manually disengaged.

A screw-in washer can be supplied to help screw in the indexing plungers. The washer is slid beneath the disengaged mushroom knob so that the carrier pins engage in the slot.

## On request:

Special versions.

## Accessories:

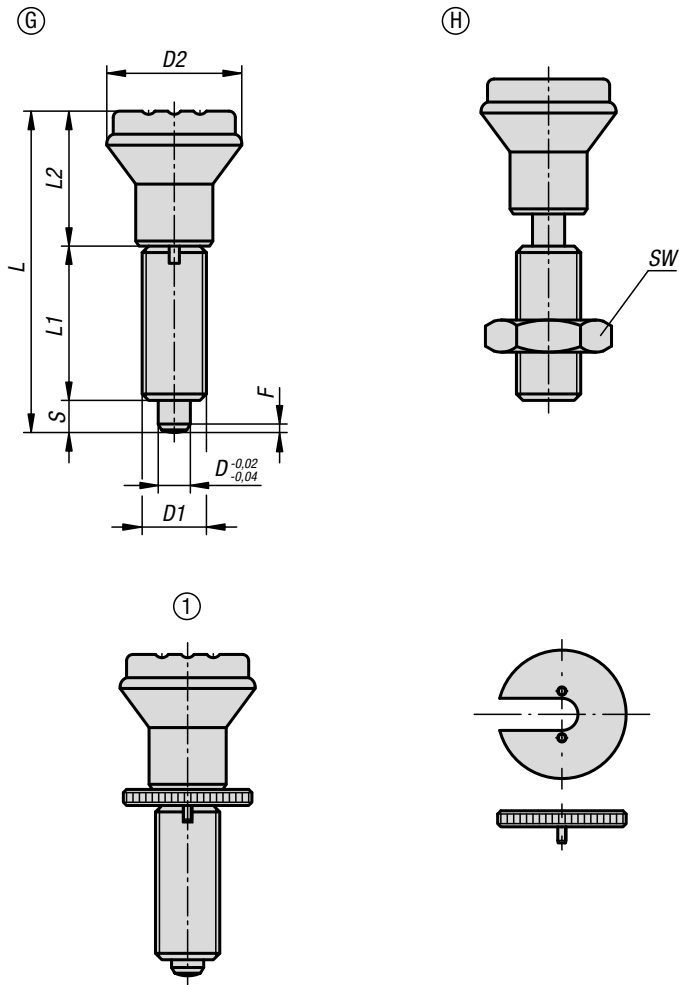
Spacer rings K0665

## Drawing reference:

Form G: without locknut

Form H: with locknut

1) Indexing plunger with screw-in washer



## Indexing plungers

without collar



## KIPP Indexing plungers without collar, steel, indexing pin hardened

| Order No.<br>Form G | Order No.<br>Form H | D  | D1      | D2 | L  | L1 | L2 | Travel<br>S | SW   | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N | Order No.<br>screw-in<br>washer |
|---------------------|---------------------|----|---------|----|----|----|----|-------------|------|-------|--------------------------------------------------|------------------------------------------------|---------------------------------|
| K0344.1105          | K0344.2105          | 5  | M10x1   | 21 | 47 | 24 | 18 | 5           | -/17 | 1,3   | 5                                                | 12                                             | K0344.91                        |
| K0344.1206          | K0344.2206          | 6  | M12x1,5 | 25 | 56 | 28 | 22 | 6           | -/19 | 1,8   | 6                                                | 14                                             | K0344.92                        |
| K0344.1308          | K0344.2308          | 8  | M16x1,5 | 33 | 74 | 36 | 30 | 8           | -/24 | 2,3   | 15                                               | 35                                             | K0344.93                        |
| K0344.1410          | K0344.2410          | 10 | M20x1,5 | 33 | 80 | 40 | 30 | 10          | -/30 | 2,8   | 15                                               | 34                                             | K0344.94                        |

## KIPP Indexing plungers without collar, stainless steel, indexing pin hardened

| Order No.<br>Form G | Order No.<br>Form H | D  | D1      | D2 | L  | L1 | L2 | Travel<br>S | SW   | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N | Order No.<br>screw-in<br>washer |
|---------------------|---------------------|----|---------|----|----|----|----|-------------|------|-------|--------------------------------------------------|------------------------------------------------|---------------------------------|
| K0344.01105         | K0344.02105         | 5  | M10x1   | 21 | 47 | 24 | 18 | 5           | -/17 | 1,3   | 5                                                | 12                                             | K0344.91                        |
| K0344.01206         | K0344.02206         | 6  | M12x1,5 | 25 | 56 | 28 | 22 | 6           | -/19 | 1,8   | 6                                                | 14                                             | K0344.92                        |
| K0344.01308         | K0344.02308         | 8  | M16x1,5 | 33 | 74 | 36 | 30 | 8           | -/24 | 2,3   | 15                                               | 35                                             | K0344.93                        |
| K0344.01410         | K0344.02410         | 10 | M20x1,5 | 33 | 80 | 40 | 30 | 10          | -/30 | 2,8   | 15                                               | 34                                             | K0344.94                        |

## KIPP Indexing plungers without collar, stainless steel, indexing pin not hardened

| Order No.<br>Form G | Order No.<br>Form H | D  | D1      | D2 | L  | L1 | L2 | Travel<br>S | SW   | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N | Order No.<br>screw-in<br>washer |
|---------------------|---------------------|----|---------|----|----|----|----|-------------|------|-------|--------------------------------------------------|------------------------------------------------|---------------------------------|
| K0344.11105         | K0344.12105         | 5  | M10x1   | 21 | 47 | 24 | 18 | 5           | -/17 | 1,3   | 5                                                | 12                                             | K0344.91                        |
| K0344.11206         | K0344.12206         | 6  | M12x1,5 | 25 | 56 | 28 | 22 | 6           | -/19 | 1,8   | 6                                                | 14                                             | K0344.92                        |
| K0344.11308         | K0344.12308         | 8  | M16x1,5 | 33 | 74 | 36 | 30 | 8           | -/24 | 2,3   | 15                                               | 35                                             | K0344.93                        |
| K0344.11410         | K0344.12410         | 10 | M20x1,5 | 33 | 80 | 40 | 30 | 10          | -/30 | 2,8   | 15                                               | 34                                             | K0344.94                        |

## Indexing plungers

without collar



### Material:

Steel version  
Indexing pin hardened:  
grade 5.8.

Stainless steel version  
Indexing pin hardened:  
Threaded sleeve 1.4305.  
Indexing pin 1.4034.

Indexing pin not hardened:  
Threaded sleeve 1.4305.  
Indexing pin 1.4035.

### Version:

Steel version:  
Indexing pin hardened, ground, black oxidised.

Stainless steel version:  
Indexing pin hardened, ground and bright.  
Indexing pin not hardened, ground and bright.

### Sample order:

K0345.01206

### Note:

Indexing plungers are used to prevent any change in locking position due to lateral forces. A new locking position can only be set after the pin has been disengaged.

Special grips can be fitted on the projecting threaded pin. This pin is also suitable for automatic actuation by e.g. program controlled pneumatic cylinder or by remote control using bowden cables.

A washer is available to aid screwing in the indexing plungers. The washer is placed on the threaded sleeve so that the carrier pins engage in the slot.

### On request:

Special versions.

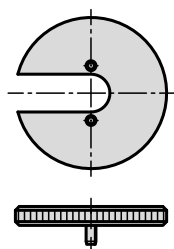
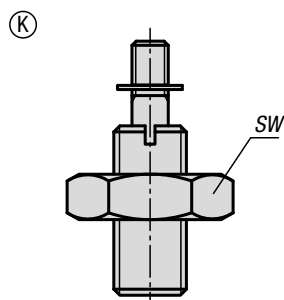
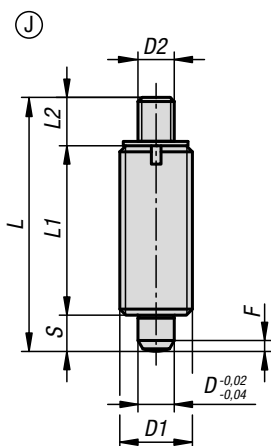
### Accessories:

Spacer rings K0665

### Drawing reference:

Form J: with threaded pin, without locknut

Form K: with threaded pin, with locknut



## Indexing plungers

without collar



## KIPP Indexing plungers without collar, steel, indexing pin hardened

| Order No.<br>Form J | Order No.<br>Form K | D  | D1      | D2  | L  | L1 | L2  | Travel<br>S | SW   | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N | Order No.<br>screw-in<br>washer |
|---------------------|---------------------|----|---------|-----|----|----|-----|-------------|------|-------|--------------------------------------------------|------------------------------------------------|---------------------------------|
| K0345.1903          | K0345.2903          | 3  | M6x0,75 | M2  | 24 | 17 | 3,5 | 3,5         | -/10 | 0,8   | 4,5                                              | 10                                             | K0344.99                        |
| K0345.1004          | K0345.2004          | 4  | M8x1    | M3  | 32 | 21 | 7   | 4           | -/13 | 1     | 6                                                | 12                                             | K0344.90                        |
| K0345.1105          | K0345.2105          | 5  | M10x1   | M4  | 37 | 24 | 8   | 5           | -/17 | 1,3   | 5                                                | 12                                             | K0344.91                        |
| K0345.1206          | K0345.2206          | 6  | M12x1,5 | M6  | 42 | 28 | 8   | 6           | -/19 | 1,8   | 6                                                | 14                                             | K0344.92                        |
| K0345.1308          | K0345.2308          | 8  | M16x1,5 | M8  | 56 | 36 | 12  | 8           | -/24 | 2,3   | 15                                               | 35                                             | K0344.93                        |
| K0345.1410          | K0345.2410          | 10 | M20x1,5 | M8  | 62 | 40 | 12  | 10          | -/30 | 2,8   | 15                                               | 34                                             | K0344.94                        |
| K0345.1412          | K0345.2412          | 12 | M20x1,5 | M8  | 66 | 42 | 12  | 12          | -/30 | 2,8   | 15                                               | 39                                             | K0344.94                        |
| K0345.1516          | K0345.2516          | 16 | M24x2   | M10 | 80 | 50 | 14  | 16          | -/36 | 3,2   | 20                                               | 46                                             | K0344.95                        |

## KIPP Indexing plungers without collar, stainless steel, indexing pin hardened

| Order No.<br>Form J | Order No.<br>Form K | D  | D1      | D2  | L  | L1 | L2  | Travel<br>S | SW   | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N | Order No.<br>screw-in<br>washer |
|---------------------|---------------------|----|---------|-----|----|----|-----|-------------|------|-------|--------------------------------------------------|------------------------------------------------|---------------------------------|
| K0345.01903         | K0345.02903         | 3  | M6x0,75 | M2  | 24 | 17 | 3,5 | 3,5         | -/10 | 0,8   | 4,5                                              | 10                                             | K0344.99                        |
| K0345.01004         | K0345.02004         | 4  | M8x1    | M3  | 32 | 21 | 7   | 4           | -/13 | 1     | 6                                                | 12                                             | K0344.90                        |
| K0345.01105         | K0345.02105         | 5  | M10x1   | M4  | 37 | 24 | 8   | 5           | -/17 | 1,3   | 5                                                | 12                                             | K0344.91                        |
| K0345.01206         | K0345.02206         | 6  | M12x1,5 | M6  | 42 | 28 | 8   | 6           | -/19 | 1,8   | 6                                                | 14                                             | K0344.92                        |
| K0345.01308         | K0345.02308         | 8  | M16x1,5 | M8  | 56 | 36 | 12  | 8           | -/24 | 2,3   | 15                                               | 35                                             | K0344.93                        |
| K0345.01410         | K0345.02410         | 10 | M20x1,5 | M8  | 62 | 40 | 12  | 10          | -/30 | 2,8   | 15                                               | 34                                             | K0344.94                        |
| K0345.01412         | K0345.02412         | 12 | M20x1,5 | M8  | 66 | 42 | 12  | 12          | -/30 | 2,8   | 15                                               | 39                                             | K0344.94                        |
| K0345.01516         | K0345.02516         | 16 | M24x2   | M10 | 80 | 50 | 14  | 16          | -/36 | 3,2   | 20                                               | 46                                             | K0344.95                        |

## KIPP Indexing plungers without collar, stainless steel, indexing pin not hardened

| Order No.<br>Form J | Order No.<br>Form K | D  | D1      | D2  | L  | L1 | L2  | Travel<br>S | SW   | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N | Order No.<br>screw-in<br>washer |
|---------------------|---------------------|----|---------|-----|----|----|-----|-------------|------|-------|--------------------------------------------------|------------------------------------------------|---------------------------------|
| K0345.11903         | K0345.12903         | 3  | M6x0,75 | M2  | 24 | 17 | 3,5 | 3,5         | -/10 | 0,8   | 4,5                                              | 10                                             | K0344.99                        |
| K0345.11004         | K0345.12004         | 4  | M8x1    | M3  | 32 | 21 | 7   | 4           | -/13 | 1     | 6                                                | 12                                             | K0344.90                        |
| K0345.11105         | K0345.12105         | 5  | M10x1   | M4  | 37 | 24 | 8   | 5           | -/17 | 1,3   | 5                                                | 12                                             | K0344.91                        |
| K0345.11206         | K0345.12206         | 6  | M12x1,5 | M6  | 42 | 28 | 8   | 6           | -/19 | 1,8   | 6                                                | 14                                             | K0344.92                        |
| K0345.11308         | K0345.12308         | 8  | M16x1,5 | M8  | 56 | 36 | 12  | 8           | -/24 | 2,3   | 15                                               | 35                                             | K0344.93                        |
| K0345.11410         | K0345.12410         | 10 | M20x1,5 | M8  | 62 | 40 | 12  | 10          | -/30 | 2,8   | 15                                               | 34                                             | K0344.94                        |
| K0345.11412         | K0345.12412         | 12 | M20x1,5 | M8  | 66 | 42 | 12  | 12          | -/30 | 2,8   | 15                                               | 39                                             | K0344.94                        |
| K0345.11516         | K0345.12516         | 16 | M24x2   | M10 | 80 | 50 | 14  | 16          | -/36 | 3,2   | 20                                               | 46                                             | K0344.95                        |

## Indexing plungers

without collar



### Material:

Steel version  
Indexing pin hardened:  
grade 5.8.

Stainless steel version  
Indexing pin hardened:  
Threaded sleeve 1.4305.  
Indexing pin 1.4034.

Indexing pin not hardened:  
Threaded sleeve 1.4305.  
Indexing pin 1.4305.

Key ring 1.4310, bright.

### Version:

Steel version:  
Indexing pin hardened, ground, black oxidised.

Stainless steel version:  
Indexing pin hardened, ground and bright.  
Indexing pin not hardened, ground and bright.

### Sample order:

K0635.03206

### Note:

Indexing plungers are used to prevent any change in locking position due to lateral forces. A new locking position can only be set after the pin has been disengaged.

The key ring is also suitable for actuation of the indexing plungers e.g. automatically (program-controlled) with the aid of a pneumatic cylinder or remote control with bowden cables.

A screw-in washer can be supplied to help screw in the indexing plungers. The washer is fitted onto the threaded sleeve so that the carrier pins engage in the slot.

### On request:

Special versions.

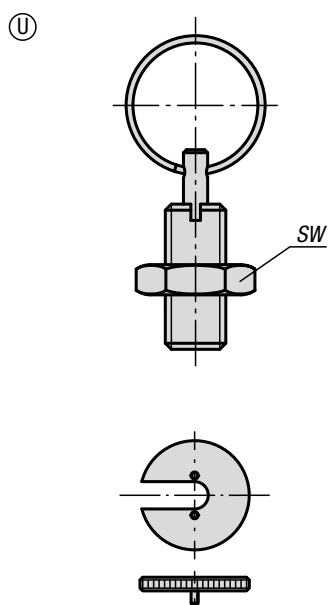
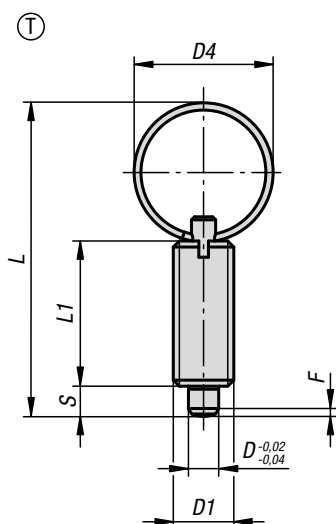
### Accessories:

Spacer rings K0665

### Drawing reference:

Form T: without locknut

Form U: with locknut



## Indexing plungers

without collar



## KIPP Indexing plungers without collar, steel, indexing pin hardened

| Order No.<br>Form T | Order No.<br>Form U | D  | D1      | D4 | L  | L1 | Travel<br>S | SW   | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N | Order No.<br>screw-in<br>washer |
|---------------------|---------------------|----|---------|----|----|----|-------------|------|-------|--------------------------------------------------|------------------------------------------------|---------------------------------|
| K0635.3004          | K0635.4004          | 4  | M8x1    | 15 | 40 | 21 | 4           | -/13 | 1     | 6                                                | 12                                             | K0344.90                        |
| K0635.3105          | K0635.4105          | 5  | M10x1   | 23 | 52 | 24 | 5           | -/17 | 1,3   | 5                                                | 12                                             | K0344.91                        |
| K0635.3206          | K0635.4206          | 6  | M12x1,5 | 23 | 57 | 28 | 6           | -/19 | 1,8   | 6                                                | 14                                             | K0344.92                        |
| K0635.3308          | K0635.4308          | 8  | M16x1,5 | 28 | 72 | 36 | 8           | -/24 | 2,3   | 15                                               | 35                                             | K0344.93                        |
| K0635.3410          | K0635.4410          | 10 | M20x1,5 | 28 | 78 | 40 | 10          | -/30 | 2,8   | 15                                               | 34                                             | K0344.94                        |

## KIPP Indexing plungers without collar, stainless steel, indexing pin hardened

| Order No.<br>Form T | Order No.<br>Form U | D  | D1      | D4 | L  | L1 | Travel<br>S | SW   | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N | Order No.<br>screw-in<br>washer |
|---------------------|---------------------|----|---------|----|----|----|-------------|------|-------|--------------------------------------------------|------------------------------------------------|---------------------------------|
| K0635.03004         | K0635.04004         | 4  | M8x1    | 15 | 40 | 21 | 4           | -/13 | 1     | 6                                                | 12                                             | K0344.90                        |
| K0635.03105         | K0635.04105         | 5  | M10x1   | 23 | 52 | 24 | 5           | -/17 | 1,3   | 5                                                | 12                                             | K0344.91                        |
| K0635.03206         | K0635.04206         | 6  | M12x1,5 | 23 | 57 | 28 | 6           | -/19 | 1,8   | 6                                                | 14                                             | K0344.92                        |
| K0635.03308         | K0635.04308         | 8  | M16x1,5 | 28 | 72 | 36 | 8           | -/24 | 2,3   | 15                                               | 35                                             | K0344.93                        |
| K0635.03410         | K0635.04410         | 10 | M20x1,5 | 28 | 78 | 40 | 10          | -/30 | 2,8   | 15                                               | 34                                             | K0344.94                        |

## KIPP Indexing plungers without collar, stainless steel, indexing pin not hardened

| Order No.<br>Form T | Order No.<br>Form U | D  | D1      | D4 | L  | L1 | Travel<br>S | SW   | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N | Order No.<br>screw-in<br>washer |
|---------------------|---------------------|----|---------|----|----|----|-------------|------|-------|--------------------------------------------------|------------------------------------------------|---------------------------------|
| K0635.13004         | K0635.14004         | 4  | M8x1    | 15 | 40 | 21 | 4           | -/13 | 1     | 6                                                | 12                                             | K0344.90                        |
| K0635.13105         | K0635.14105         | 5  | M10x1   | 23 | 52 | 24 | 5           | -/17 | 1,3   | 5                                                | 12                                             | K0344.91                        |
| K0635.13206         | K0635.14206         | 6  | M12x1,5 | 23 | 57 | 28 | 6           | -/19 | 1,8   | 6                                                | 14                                             | K0344.92                        |
| K0635.13308         | K0635.14308         | 8  | M16x1,5 | 28 | 72 | 36 | 8           | -/24 | 2,3   | 15                                               | 35                                             | K0344.93                        |
| K0635.13410         | K0635.14410         | 10 | M20x1,5 | 28 | 78 | 40 | 10          | -/30 | 2,8   | 15                                               | 34                                             | K0344.94                        |

# Indexing plungers

without collar



## Material:

Steel version:  
Indexing pin hardened:  
Sleeve 1.0403 weldable.  
Indexing pin grade 5.8.

Stainless steel version:  
Indexing pin hardened:  
Sleeve 1.4301 weldable.  
Indexing pin 1.4034.

Indexing pin not hardened:  
Sleeve 1.4301 weldable.  
Indexing pin 1.4305.

Mushroom knob black grey thermoplastic.

## Version:

Steel version:  
Indexing pin hardened, ground, black oxidised.

Stainless steel version:  
Indexing pin hardened, ground and bright.  
Indexing pin not hardened, ground and bright.

## Sample order:

K0346.01206

## Note:

Indexing plungers are used to prevent any change in locking position due to lateral forces. A new locking position can only be set after the pin has been manually disengaged.

Form M is recommended for applications where the indexing plungers should remain disengaged over an extended period and the pin prevented from springing back.

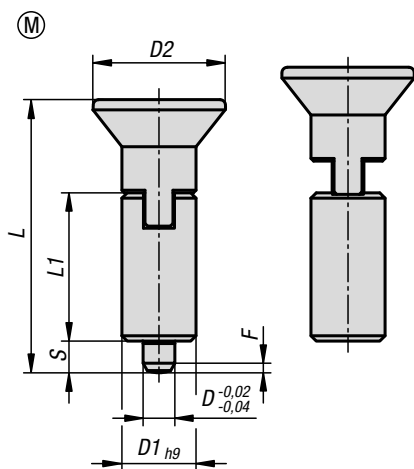
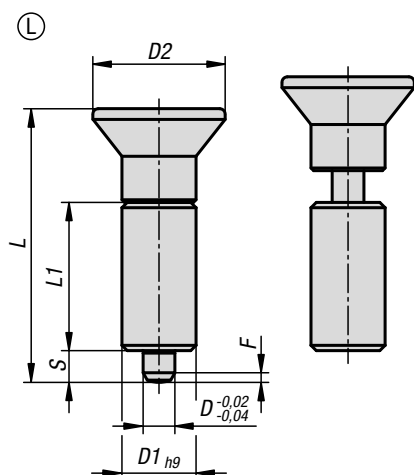
If the indexing plunger is welded on, the sleeve should be tack welded so that the spring is not thermally damaged due to high temperatures.

## On request:

Special versions.

## Drawing reference:

Form L: non-lockout type  
Form M: lockout type





## Indexing plungers

without collar



## KIPP Indexing plungers without collar, steel, indexing pin hardened

| Order No.<br>Form L | Order No.<br>Form M | D  | D1 | D2 | L    | L1 | Travel<br>S | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|---------------------|---------------------|----|----|----|------|----|-------------|-------|--------------------------------------------------|------------------------------------------------|
| K0346.1004          | K0346.2004          | 4  | 10 | 18 | 38,5 | 21 | 4           | 1     | 6                                                | 12                                             |
| K0346.1105          | K0346.2105          | 5  | 12 | 21 | 43,5 | 24 | 5           | 1,3   | 5                                                | 12                                             |
| K0346.1206          | K0346.2206          | 6  | 14 | 25 | 51,7 | 28 | 6           | 1,8   | 6                                                | 14                                             |
| K0346.1308          | K0346.2308          | 8  | 18 | 33 | 68   | 36 | 8           | 2,3   | 15                                               | 35                                             |
| K0346.1410          | K0346.2410          | 10 | 22 | 33 | 74   | 40 | 10          | 2,8   | 15                                               | 34                                             |

## KIPP Indexing plungers without collar, stainless steel, indexing pin hardened

| Order No.<br>Form L | Order No.<br>Form M | D  | D1 | D2 | L    | L1 | Travel<br>S | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|---------------------|---------------------|----|----|----|------|----|-------------|-------|--------------------------------------------------|------------------------------------------------|
| K0346.01004         | K0346.02004         | 4  | 10 | 18 | 38,5 | 21 | 4           | 1     | 6                                                | 12                                             |
| K0346.01105         | K0346.02105         | 5  | 12 | 21 | 43,5 | 24 | 5           | 1,3   | 5                                                | 12                                             |
| K0346.01206         | K0346.02206         | 6  | 14 | 25 | 51,7 | 28 | 6           | 1,8   | 6                                                | 14                                             |
| K0346.01308         | K0346.02308         | 8  | 18 | 33 | 68   | 36 | 8           | 2,3   | 15                                               | 35                                             |
| K0346.01410         | K0346.02410         | 10 | 22 | 33 | 74   | 40 | 10          | 2,8   | 15                                               | 34                                             |

## KIPP Indexing plungers without collar, stainless steel, indexing pin not hardened

| Order No.<br>Form L | Order No.<br>Form M | D  | D1 | D2 | L    | L1 | Travel<br>S | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|---------------------|---------------------|----|----|----|------|----|-------------|-------|--------------------------------------------------|------------------------------------------------|
| K0346.11004         | K0346.12004         | 4  | 10 | 18 | 38,5 | 21 | 4           | 1     | 6                                                | 12                                             |
| K0346.11105         | K0346.12105         | 5  | 12 | 21 | 43,5 | 24 | 5           | 1,3   | 5                                                | 12                                             |
| K0346.11206         | K0346.12206         | 6  | 14 | 25 | 51,7 | 28 | 6           | 1,8   | 6                                                | 14                                             |
| K0346.11308         | K0346.12308         | 8  | 18 | 33 | 68   | 36 | 8           | 2,3   | 15                                               | 35                                             |
| K0346.11410         | K0346.12410         | 10 | 22 | 33 | 74   | 40 | 10          | 2,8   | 15                                               | 34                                             |

# Indexing plungers

without collar



## Material:

Steel version:  
Indexing pin hardened:  
Sleeve 1.0403 weldable.  
Indexing pin grade 5.8.

Stainless steel version:  
Indexing pin hardened:  
Sleeve 1.4301 weldable.  
Indexing pin 1.4034.

Indexing pin not hardened:  
Sleeve 1.4301 weldable.  
Indexing pin 1.4305.

Mushroom knob black grey thermoplastic.

## Version:

Steel version:  
Indexing pin hardened, ground, black oxidised.

Stainless steel version:  
Indexing pin hardened, ground and bright.  
Indexing pin not hardened, ground and bright.

## Sample order:

K0347.02206

## Note:

Indexing plungers are used to prevent any change in locking position due to lateral forces. A new locking position can only be set after the pin has been manually disengaged.

Form M is recommended for applications where the indexing plungers should remain disengaged over an extended period and the pin prevented from springing back.

Special grips can be fitted on the projecting threaded pin of Form N. This pin is also suitable for actuating the indexing plunger e.g. automatically (program-controlled) with the aid of a pneumatic cylinder or remote controlled with Bowden cables.

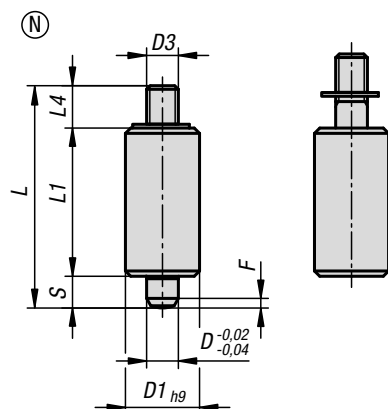
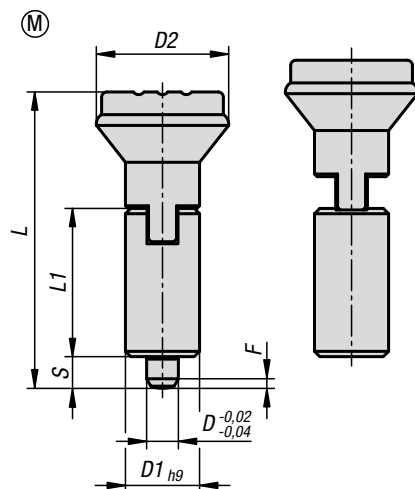
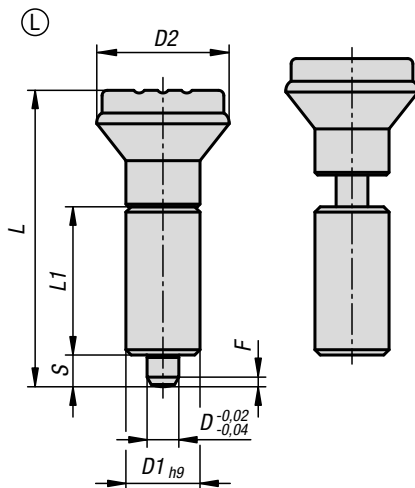
If the indexing plunger is welded on, the sleeve should be tack welded so that the spring is not thermally damaged due to high temperatures.

## On request:

Special versions.

## Drawing reference:

Form L: non-lockout type  
Form M: lockout type  
Form N: with threaded pin



## Indexing plungers

without collar



## KIPP Indexing plungers without collar, steel, indexing pin hardened

| Order No.<br>Form L | Order No.<br>Form M | Order No.<br>Form N | D  | D1 | D2      | D3     | L        | L1 | L4     | Travel<br>S | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|---------------------|---------------------|---------------------|----|----|---------|--------|----------|----|--------|-------------|-------|--------------------------------------------------|------------------------------------------------|
| K0347.1105          | K0347.2105          | K0347.3105          | 5  | 12 | 21/21/- | -/-/M4 | 47/47/37 | 24 | -/-/8  | 5           | 1,3   | 5                                                | 12                                             |
| K0347.1206          | K0347.2206          | K0347.3206          | 6  | 14 | 25/25/- | -/-/M6 | 56/56/43 | 28 | -/-/9  | 6           | 1,8   | 6                                                | 14                                             |
| K0347.1308          | K0347.2308          | K0347.3308          | 8  | 18 | 33/33/- | -/-/M8 | 74/74/56 | 36 | -/-/12 | 8           | 2,3   | 15                                               | 35                                             |
| K0347.1410          | K0347.2410          | K0347.3410          | 10 | 22 | 33/33/- | -/-/M8 | 80/80/62 | 40 | -/-/12 | 10          | 2,8   | 15                                               | 34                                             |

## KIPP Indexing plungers without collar, stainless steel, indexing pin hardened

| Order No.<br>Form L | Order No.<br>Form M | Order No.<br>Form N | D  | D1 | D2      | D3     | L        | L1 | L4     | Travel<br>S | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|---------------------|---------------------|---------------------|----|----|---------|--------|----------|----|--------|-------------|-------|--------------------------------------------------|------------------------------------------------|
| K0347.01105         | K0347.02105         | K0347.03105         | 5  | 12 | 21/21/- | -/-/M4 | 47/47/37 | 24 | -/-/8  | 5           | 1,3   | 5                                                | 12                                             |
| K0347.01206         | K0347.02206         | K0347.03206         | 6  | 14 | 25/25/- | -/-/M6 | 56/56/43 | 28 | -/-/9  | 6           | 1,8   | 6                                                | 14                                             |
| K0347.01308         | K0347.02308         | K0347.03308         | 8  | 18 | 33/33/- | -/-/M8 | 74/74/56 | 36 | -/-/12 | 8           | 2,3   | 15                                               | 35                                             |
| K0347.01410         | K0347.02410         | K0347.03410         | 10 | 22 | 33/33/- | -/-/M8 | 80/80/62 | 40 | -/-/12 | 10          | 2,8   | 15                                               | 34                                             |

## KIPP Indexing plungers without collar, stainless steel, indexing pin not hardened

| Order No.<br>Form L | Order No.<br>Form M | Order No.<br>Form N | D  | D1 | D2      | D3     | L        | L1 | L4     | Travel<br>S | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|---------------------|---------------------|---------------------|----|----|---------|--------|----------|----|--------|-------------|-------|--------------------------------------------------|------------------------------------------------|
| K0347.11105         | K0347.12105         | K0347.13105         | 5  | 12 | 21/21/- | -/-/M4 | 47/47/37 | 24 | -/-/8  | 5           | 1,3   | 5                                                | 12                                             |
| K0347.11206         | K0347.12206         | K0347.13206         | 6  | 14 | 25/25/- | -/-/M6 | 56/56/43 | 28 | -/-/9  | 6           | 1,8   | 6                                                | 14                                             |
| K0347.11308         | K0347.12308         | K0347.13308         | 8  | 18 | 33/33/- | -/-/M8 | 74/74/56 | 36 | -/-/12 | 8           | 2,3   | 15                                               | 35                                             |
| K0347.11410         | K0347.12410         | K0347.13410         | 10 | 22 | 33/33/- | -/-/M8 | 80/80/62 | 40 | -/-/12 | 10          | 2,8   | 15                                               | 34                                             |

# Indexing plungers

without collar



## Material:

Steel version:

Indexing pin hardened.

Sleeve 1.0403 weldable.

Indexing pin grade 5.8.

Stainless steel version:

Indexing pin hardened:

Sleeve 1.4301 weldable.

Indexing pin 1.4034.

Indexing pin not hardened:

Sleeve 1.4301 weldable.

Indexing pin 1.4305.

Key ring 1.4310, bright.

## Version:

Steel version:

Indexing pin hardened, ground, black oxidised.

Stainless steel version:

Indexing pin hardened, ground and bright.

Indexing pin not hardened, ground and bright.

## Sample order:

K0636.4206

## Note:

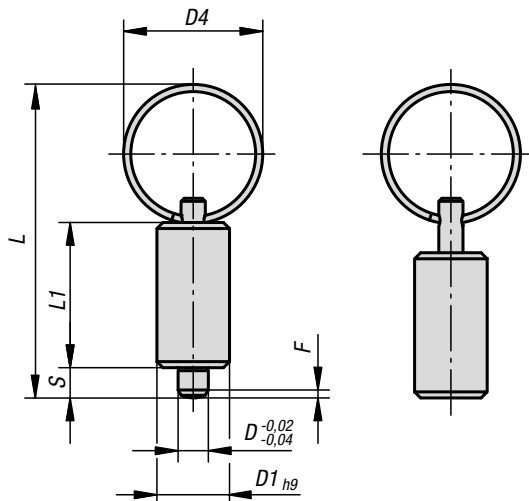
Indexing plungers are used to prevent any change in locking position due to lateral forces. A new locking position can only be set after the pin has been manually disengaged.

The key ring enables actuating the indexing plunger e.g. automatically (program-controlled) with the aid of a pneumatic cylinder or remote controlled with Bowden cables.

If the indexing plunger is welded on, the sleeve should be tack welded so that the spring is not thermally damaged due to high temperatures.

## On request:

Special versions.



## Indexing plungers

without collar



## KIPP Indexing plungers without collar, steel, indexing pin hardened

| Order No.  | Main material | Surface finish body | D  | D1 | D4 | L  | L1 | Travel S | Fx30° | Spring force initial pressure F1 approx. N | Spring force final pressure F2 approx. N |
|------------|---------------|---------------------|----|----|----|----|----|----------|-------|--------------------------------------------|------------------------------------------|
| K0636.4004 | steel         | hardened            | 4  | 10 | 15 | 40 | 21 | 4        | 1     | 6                                          | 12                                       |
| K0636.4105 | steel         | hardened            | 5  | 12 | 23 | 52 | 24 | 5        | 1,3   | 5                                          | 12                                       |
| K0636.4206 | steel         | hardened            | 6  | 14 | 23 | 57 | 28 | 6        | 1,8   | 6                                          | 14                                       |
| K0636.4308 | steel         | hardened            | 8  | 18 | 28 | 72 | 36 | 8        | 2,3   | 15                                         | 35                                       |
| K0636.4410 | steel         | hardened            | 10 | 22 | 28 | 78 | 40 | 10       | 2,8   | 15                                         | 34                                       |

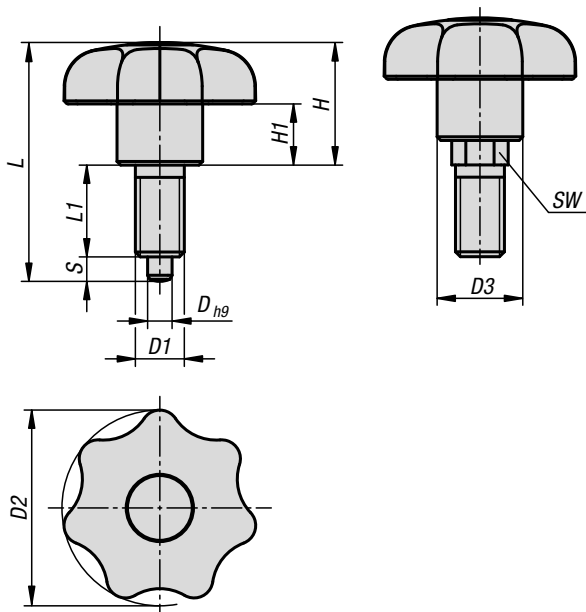
## KIPP Indexing plungers without collar, stainless steel, indexing pin hardened

| Order No.   | Main material   | Surface finish body | D  | D1 | D4 | L  | L1 | Travel S | Fx30° | Spring force initial pressure F1 approx. N | Spring force final pressure F2 approx. N |
|-------------|-----------------|---------------------|----|----|----|----|----|----------|-------|--------------------------------------------|------------------------------------------|
| K0636.04004 | stainless steel | hardened            | 4  | 10 | 15 | 40 | 21 | 4        | 1     | 6                                          | 12                                       |
| K0636.04105 | stainless steel | hardened            | 5  | 12 | 23 | 52 | 24 | 5        | 1,3   | 5                                          | 12                                       |
| K0636.04206 | stainless steel | hardened            | 6  | 14 | 23 | 57 | 28 | 6        | 1,8   | 6                                          | 14                                       |
| K0636.04308 | stainless steel | hardened            | 8  | 18 | 28 | 72 | 36 | 8        | 2,3   | 15                                         | 35                                       |
| K0636.04410 | stainless steel | hardened            | 10 | 22 | 28 | 78 | 40 | 10       | 2,8   | 15                                         | 34                                       |

## KIPP Indexing plungers without collar, stainless steel, indexing pin not hardened

| Order No.   | Main material   | Surface finish body | D  | D1 | D4 | L  | L1 | Travel S | Fx30° | Spring force initial pressure F1 approx. N | Spring force final pressure F2 approx. N |
|-------------|-----------------|---------------------|----|----|----|----|----|----------|-------|--------------------------------------------|------------------------------------------|
| K0636.14004 | stainless steel | not hardened        | 4  | 10 | 15 | 40 | 21 | 4        | 1     | 6                                          | 12                                       |
| K0636.14105 | stainless steel | not hardened        | 5  | 12 | 23 | 52 | 24 | 5        | 1,3   | 5                                          | 12                                       |
| K0636.14206 | stainless steel | not hardened        | 6  | 14 | 23 | 57 | 28 | 6        | 1,8   | 6                                          | 14                                       |
| K0636.14308 | stainless steel | not hardened        | 8  | 18 | 28 | 72 | 36 | 8        | 2,3   | 15                                         | 35                                       |
| K0636.14410 | stainless steel | not hardened        | 10 | 22 | 28 | 78 | 40 | 10       | 2,8   | 15                                         | 34                                       |

## Indexing and clamping grip



The indexing and clamping grips enable the positioning, securing and clamping of diverse positioning elements with just one product. Indexing is carried out using the indexing pin and the item is clamped using the end face of the sleeve.

### Material:

Star grip black grey thermoplastic.  
Threaded sleeve 1.0718.  
Indexing pin stainless steel 1.4305.

### Version:

Steel electro zinc-plated.  
Stainless steel bright.

### Sample order:

K1582.108040

### Advantages:

Indexing and clamping with one product.  
Ergonomic operation via star grip.

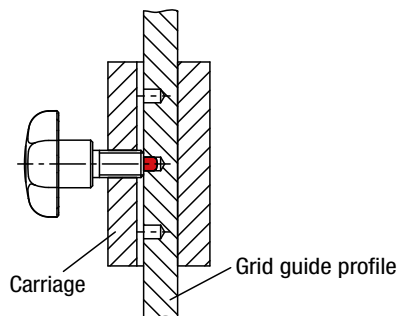
### On request:

Special versions.

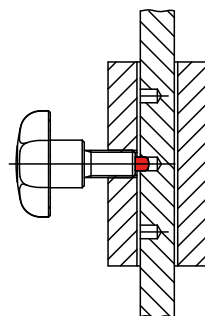
### Accessories:

Hexagon nuts thin DIN 439

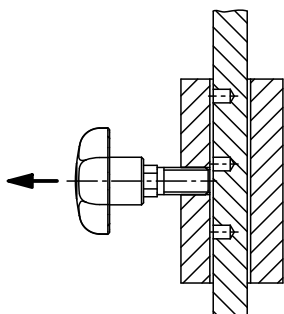
## Indexing and clamping grip



- Indexing pin engaged
- Grid guide profile clamped
- Locking slide system locked and clamped play-free with threaded sleeve



- Indexing pin engaged
- Lock released
- Locking slide system locked, but not play-free



- Indexing and clamping grip retracted
- Indexing pin disengaged
- Lock released
- Locking slide system can be moved

### KIPP Indexing and clamping grip

| Order No.    | D | D1      | D2 | D3 | H    | H1 | L    | L1 | Travel<br>S | SW |
|--------------|---|---------|----|----|------|----|------|----|-------------|----|
| K1582.108040 | 4 | M8      | 32 | 14 | 20   | 10 | 39   | 15 | 4           | 8  |
| K1582.210050 | 5 | M10     | 40 | 18 | 24,9 | 13 | 46,9 | 17 | 5           | 10 |
| K1582.312060 | 6 | M12     | 50 | 22 | 31,8 | 17 | 57,8 | 20 | 6           | 12 |
| K1582.416080 | 8 | M16     | 63 | 26 | 40   | 21 | 74   | 26 | 8           | 16 |
| K1582.108041 | 4 | M8x1    | 32 | 14 | 20   | 10 | 39   | 15 | 4           | 8  |
| K1582.210051 | 5 | M10x1   | 40 | 18 | 24,9 | 13 | 46,9 | 17 | 5           | 10 |
| K1582.312061 | 6 | M12x1,5 | 50 | 22 | 31,8 | 17 | 57,8 | 20 | 6           | 12 |
| K1582.416081 | 8 | M16x1,5 | 63 | 26 | 40   | 21 | 74   | 26 | 8           | 16 |

## Indexing and clamping grip

with optical locked indicator



The indexing and clamping grips enable the positioning, securing and clamping of diverse positioning elements with just one product. Indexing is carried out using the indexing pin and the item is clamped using the end face of the sleeve. A protruding signal button means that the indexing pin is not completely extended.

### Material:

Star grip black grey thermoplastic.  
Signal button red thermoplastic.  
Threaded sleeve 1.0718.  
Indexing pin stainless steel 1.4305.

### Version:

Steel electro zinc-plated.  
Stainless steel bright.

### Sample order:

K1583.108040

### Advantages:

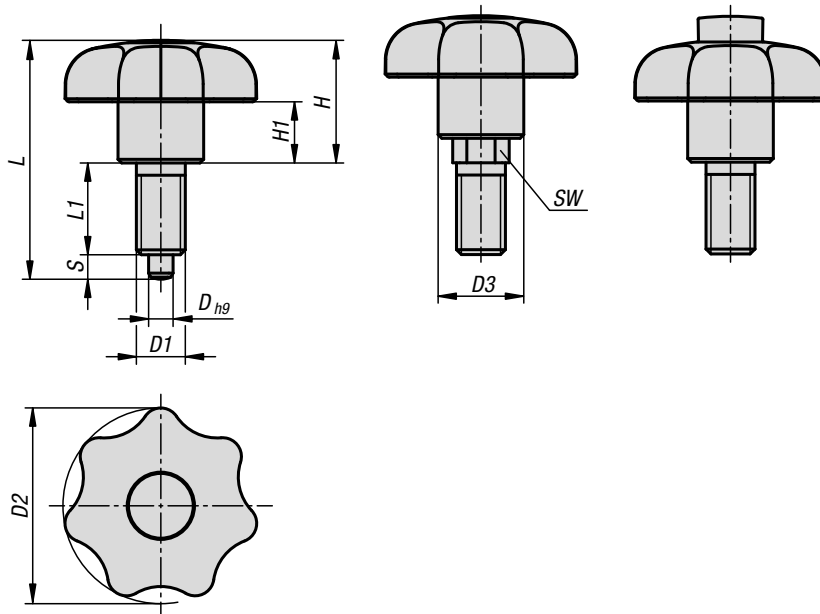
Optical indication of the engagement function.  
Indexing and clamping with one product.  
Ergonomic operation via star grip.

### On request:

Special versions.

### Accessories:

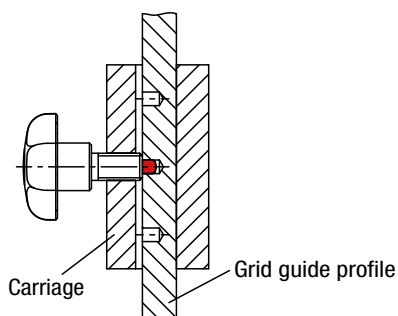
Hexagon nuts thin DIN 439



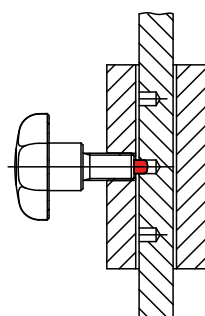


# Indexing and clamping grip

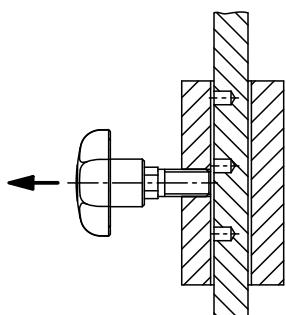
with optical locked indicator



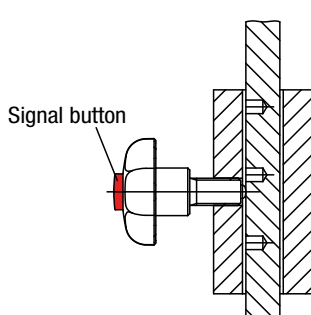
- Indexing pin engaged
- Grid guide profile clamped
- Locking slide system locked and clamped play-free with threaded sleeve



- Indexing pin engaged
- Lock released
- Locking slide system locked, but not play-free



- Indexing and clamping grip retracted
- Indexing pin disengaged
- Lock released
- Locking slide system can be moved



- Indexing and clamping grip not retracted
- Indexing pin disengaged
- Lock released
- Signal button protruding
- Locking slide system can be moved to the next notch

## KIPP Indexing and clamping grip with optical locked indicator

| Order No.    | D | D1      | D2 | D3 | H    | H1 | L    | L1 | Travel<br>S | SW |
|--------------|---|---------|----|----|------|----|------|----|-------------|----|
| K1583.108040 | 4 | M8      | 32 | 14 | 20   | 10 | 39   | 15 | 4           | 8  |
| K1583.210050 | 5 | M10     | 40 | 18 | 24,9 | 13 | 46,9 | 17 | 5           | 10 |
| K1583.312060 | 6 | M12     | 50 | 22 | 32   | 17 | 58   | 20 | 6           | 12 |
| K1583.416080 | 8 | M16     | 63 | 26 | 40,3 | 21 | 74,3 | 26 | 8           | 16 |
| K1583.108041 | 4 | M8x1    | 32 | 14 | 20   | 10 | 39   | 15 | 4           | 8  |
| K1583.210051 | 5 | M10x1   | 40 | 18 | 24,9 | 13 | 46,9 | 17 | 5           | 10 |
| K1583.312061 | 6 | M12x1,5 | 50 | 22 | 32   | 17 | 58   | 20 | 6           | 12 |
| K1583.416081 | 8 | M16x1,5 | 63 | 26 | 40,3 | 21 | 74,3 | 26 | 8           | 16 |

## Positioning bushes

for indexing plungers



### Material:

Steel or 1.4034 stainless steel.

### Version:

Steel hardened and black oxidised.

Stainless steel, hardened, bright.

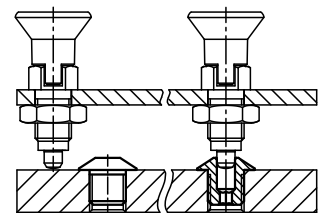
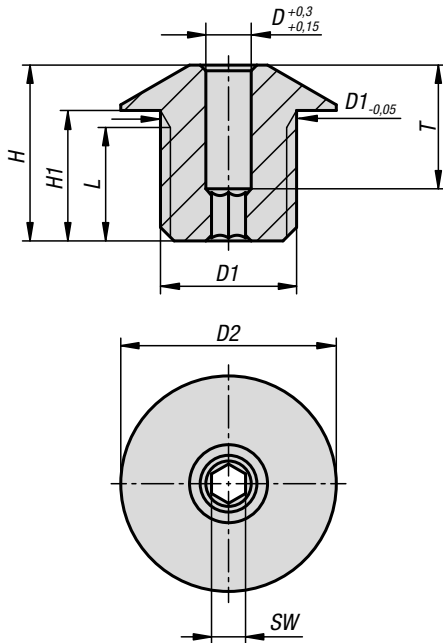
### Sample order:

K1290.04

### Note:

Positioning bushes suitable for indexing plunger.

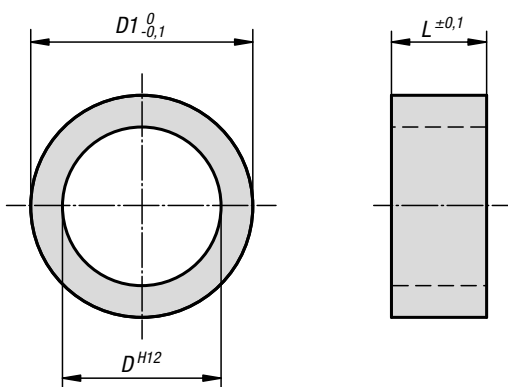
Matched with mounting brackets K0638.



## KIPP Positioning bushes for indexing plungers

| Order No. | Main material   | D  | D1      | D2 | H    | H1   | L  | SW | T  |
|-----------|-----------------|----|---------|----|------|------|----|----|----|
| K1290.04  | steel           | 4  | M12x1,5 | 19 | 15,5 | 11,5 | 10 | 3  | 11 |
| K1290.05  | steel           | 5  | M12x1,5 | 19 | 15,5 | 11,5 | 10 | 4  | 10 |
| K1290.06  | steel           | 6  | M12x1,5 | 19 | 15,5 | 11,5 | 10 | 4  | 10 |
| K1290.08  | steel           | 8  | M16x1,5 | 26 | 19,5 | 14,5 | 13 | 6  | 12 |
| K1290.10  | steel           | 10 | M16x1,5 | 26 | 19,5 | 14,5 | 13 | 6  | 12 |
| K1290.104 | stainless steel | 4  | M12x1,5 | 19 | 15,5 | 11,5 | 10 | 3  | 11 |
| K1290.105 | stainless steel | 5  | M12x1,5 | 19 | 15,5 | 11,5 | 10 | 4  | 10 |
| K1290.106 | stainless steel | 6  | M12x1,5 | 19 | 15,5 | 11,5 | 10 | 4  | 10 |
| K1290.108 | stainless steel | 8  | M16x1,5 | 26 | 19,5 | 14,5 | 13 | 6  | 12 |
| K1290.110 | stainless steel | 10 | M16x1,5 | 26 | 19,5 | 14,5 | 13 | 6  | 12 |

# Spacer rings stainless steel

**Material:**

1.4305 or 1.4404 stainless steel.

**Version:**

Bright.

**Sample order:**

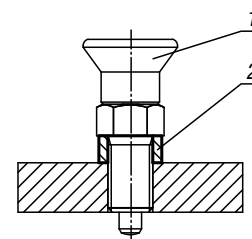
K0665.90811021

**Note:**

Spacer rings are used to adjust the indexing plunger thread length to suit the application wall thickness.

**Drawing reference:**

- 1) Indexing plunger
- 2) Spacer ring



## KIPP Spacer rings stainless steel

| Order No.<br>1.4305 | Order No.<br>1.4404 | D  | D1 | L  |
|---------------------|---------------------|----|----|----|
| K0665.90811021      | K0665.90811022      | 8  | 11 | 2  |
| K0665.90811031      | K0665.90811032      | 8  | 11 | 3  |
| K0665.90811041      | K0665.90811042      | 8  | 11 | 4  |
| K0665.90811061      | K0665.90811062      | 8  | 11 | 6  |
| K0665.90811081      | K0665.90811082      | 8  | 11 | 8  |
| K0665.91014021      | K0665.91014022      | 10 | 14 | 2  |
| K0665.91014031      | K0665.91014032      | 10 | 14 | 3  |
| K0665.91014041      | K0665.91014042      | 10 | 14 | 4  |
| K0665.91014061      | K0665.91014062      | 10 | 14 | 6  |
| K0665.91014081      | K0665.91014082      | 10 | 14 | 8  |
| K0665.91215021      | K0665.91215022      | 12 | 15 | 2  |
| K0665.91215041      | K0665.91215042      | 12 | 15 | 4  |
| K0665.91215051      | K0665.91215052      | 12 | 15 | 5  |
| K0665.91215061      | K0665.91215062      | 12 | 15 | 6  |
| K0665.91215081      | K0665.91215082      | 12 | 15 | 8  |
| K0665.91217021      | K0665.91217022      | 12 | 17 | 2  |
| K0665.91217041      | K0665.91217042      | 12 | 17 | 4  |
| K0665.91217051      | K0665.91217052      | 12 | 17 | 5  |
| K0665.91217061      | K0665.91217062      | 12 | 17 | 6  |
| K0665.91217081      | K0665.91217082      | 12 | 17 | 8  |
| K0665.91621041      | K0665.91621042      | 16 | 21 | 4  |
| K0665.91621051      | K0665.91621052      | 16 | 21 | 5  |
| K0665.91621061      | K0665.91621062      | 16 | 21 | 6  |
| K0665.91621081      | K0665.91621082      | 16 | 21 | 8  |
| K0665.91621101      | K0665.91621102      | 16 | 21 | 10 |

## Indexing plungers - Premium

with tapered pin



### Material:

Steel version:  
indexing pin hardened: grade 5.8

Stainless steel version:  
indexing pin hardened: threaded sleeve 1.4305,  
indexing pin 1.4305.

Mushroom knob black grey thermoplastic.

### Version:

Steel version:  
indexing pin hardened, ground and black oxidised.

Stainless steel version:  
indexing pin hardened, ground and bright.

### Sample order:

K0736.52206

### Note:

Premium indexing plungers are characterized by more stringent manufacturing requirements for the indexing plungers and the threaded sleeve. In addition, a centring locator that can be used to increase the positioning accuracy is provided on the threaded sleeve. These indexing plungers are used when it is necessary to prevent shifting of the locked position by transverse forces and greater positioning accuracy is required. A new locking position can only be set after the pin has been manually disengaged. When high lateral forces are to be expected, the centring locator should be used.

### Assembly:

When using the threaded sleeve centring, it is recommended the receiving reamed hole be machined before tapping.

The conical contact surface is aligned by the threaded sleeve and locking nut.

### On request:

Special versions and spacer rings.

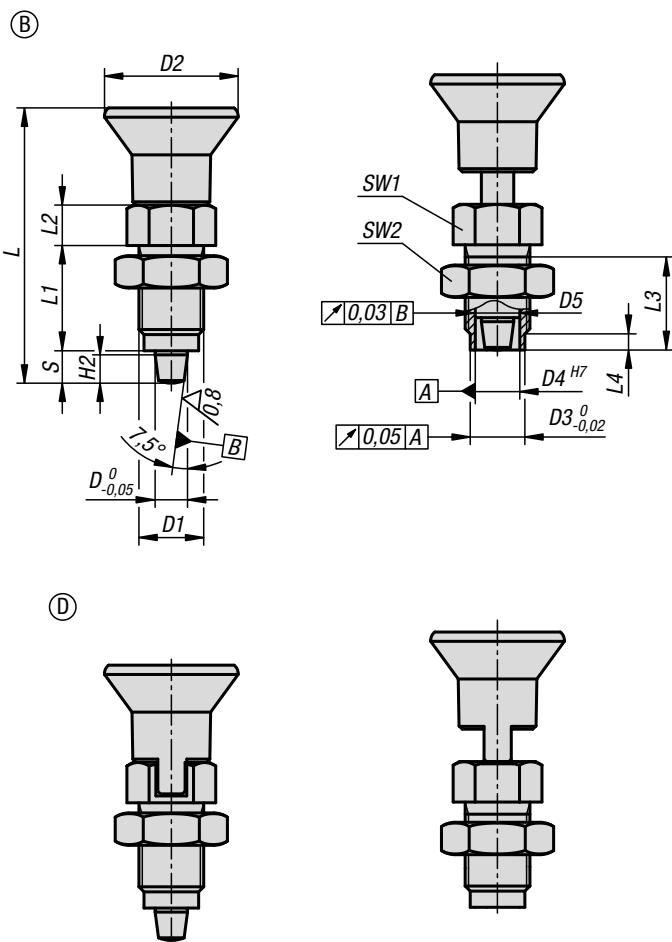
### Accessories:

Matching tapered bush K0736.

### Drawing reference:

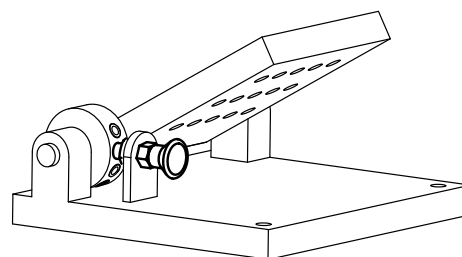
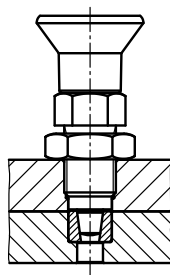
Form A: non-lockout type, without locknut

Form D: lockout type, with locknut



# Indexing plungers - Premium

with tapered pin



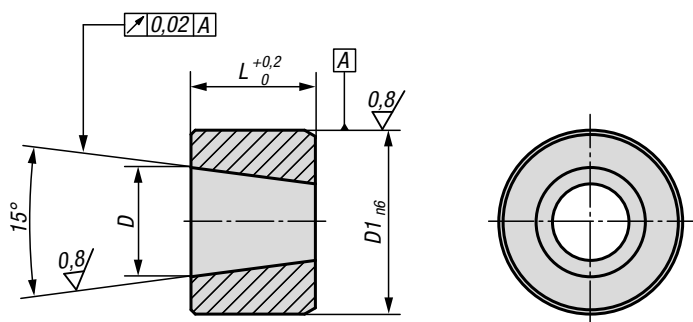
## KIPP Premium indexing plungers with tapered pin, steel, indexing pin hardened

| Order No.<br>Form B | Order No.<br>Form D | D  | D1      | D2 | D3   | D4  | D5              | L    | L1 | L2 | L3 | L4 | H2 | Travel<br>S | SW1 | SW2 | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|---------------------|---------------------|----|---------|----|------|-----|-----------------|------|----|----|----|----|----|-------------|-----|-----|--------------------------------------------------|------------------------------------------------|
| K0736.52105         | K0736.54105         | 5  | M10x1   | 21 | 8    | 6   | 6 -0,01/-0,02   | 43,5 | 17 | 7  | 15 | 3  | 4  | 5           | 13  | 17  | 5                                                | 12                                             |
| K0736.52206         | K0736.54206         | 6  | M12x1,5 | 25 | 10   | 8,5 | 8,5 -0,01/-0,03 | 51,7 | 20 | 8  | 17 | 3  | 5  | 6           | 14  | 19  | 6                                                | 14                                             |
| K0736.52308         | K0736.54308         | 8  | M16x1,5 | 33 | 13,5 | 11  | 11 -0,01/-0,03  | 68   | 26 | 10 | 23 | 4  | 7  | 8           | 19  | 24  | 15                                               | 35                                             |
| K0736.52410         | K0736.54410         | 10 | M20x1,5 | 33 | 17   | 11  | 11 -0,01/-0,03  | 74   | 28 | 12 | 25 | 4  | 9  | 10          | 22  | 30  | 15                                               | 34                                             |

## KIPP Premium indexing plungers with tapered pin, stainless steel, indexing pin hardened

| Order No.<br>Form B | Order No.<br>Form D | D  | D1      | D2 | D3   | D4  | D5              | L    | L1 | L2 | L3 | L4 | H2 | Travel<br>S | SW1 | SW2 | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|---------------------|---------------------|----|---------|----|------|-----|-----------------|------|----|----|----|----|----|-------------|-----|-----|--------------------------------------------------|------------------------------------------------|
| K0736.502105        | K0736.504105        | 5  | M10x1   | 21 | 8    | 6   | 6 -0,01/-0,02   | 43,5 | 17 | 7  | 15 | 3  | 4  | 5           | 13  | 17  | 5                                                | 12                                             |
| K0736.502206        | K0736.504206        | 6  | M12x1,5 | 25 | 10   | 8,5 | 8,5 -0,01/-0,03 | 51,7 | 20 | 8  | 17 | 3  | 5  | 6           | 14  | 19  | 6                                                | 14                                             |
| K0736.502308        | K0736.504308        | 8  | M16x1,5 | 33 | 13,5 | 11  | 11 -0,01/-0,03  | 68   | 26 | 10 | 23 | 4  | 7  | 8           | 19  | 24  | 15                                               | 35                                             |
| K0736.502410        | K0736.504410        | 10 | M20x1,5 | 33 | 17   | 11  | 11 -0,01/-0,03  | 74   | 28 | 12 | 25 | 4  | 9  | 10          | 22  | 30  | 15                                               | 34                                             |

## Bushes tapered

**Material:**

Steel or 1.4034 stainless steel.

**Version:**

Steel version:

black oxidised, hardened and ground.

Stainless steel version:

bright, hardened and ground.

**Sample order:**

K0736.9106

**Note:**

Matching bushes for premium indexing plungers with tapered pin K0736.

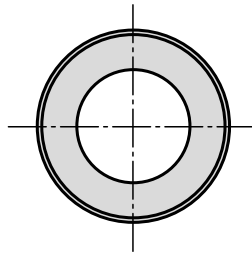
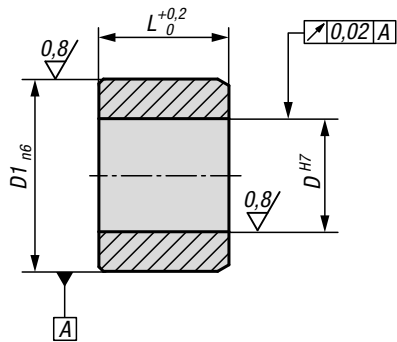
**Assembly:**

To increase the coaxial alignment accuracy, the holes for the bush and the premium indexing plunger can be machined simultaneously.

**KIPP Tapered bushes**

| Order No.   | Main material   | D  | D1   | L    |
|-------------|-----------------|----|------|------|
| K0736.9105  | steel           | 5  | 8    | 6    |
| K0736.9106  | steel           | 6  | 10   | 7    |
| K0736.9108  | steel           | 8  | 13,5 | 9,5  |
| K0736.9110  | steel           | 10 | 17   | 11,5 |
| K0736.91005 | stainless steel | 5  | 8    | 6    |
| K0736.91006 | stainless steel | 6  | 10   | 7    |
| K0736.91008 | stainless steel | 8  | 13,5 | 9,5  |
| K0736.91010 | stainless steel | 10 | 17   | 11,5 |

## Bushes cylindrical

**Material:**

Steel or 1.4034 stainless steel.

**Version:**

Steel version:

black oxidised, hardened and ground.

Stainless steel version:

bright, hardened and ground.

**Sample order:**

K0736.9005

**Note:**

Matching bushes for premium indexing plungers with cylindrical pin K0736.

**Assembly:**

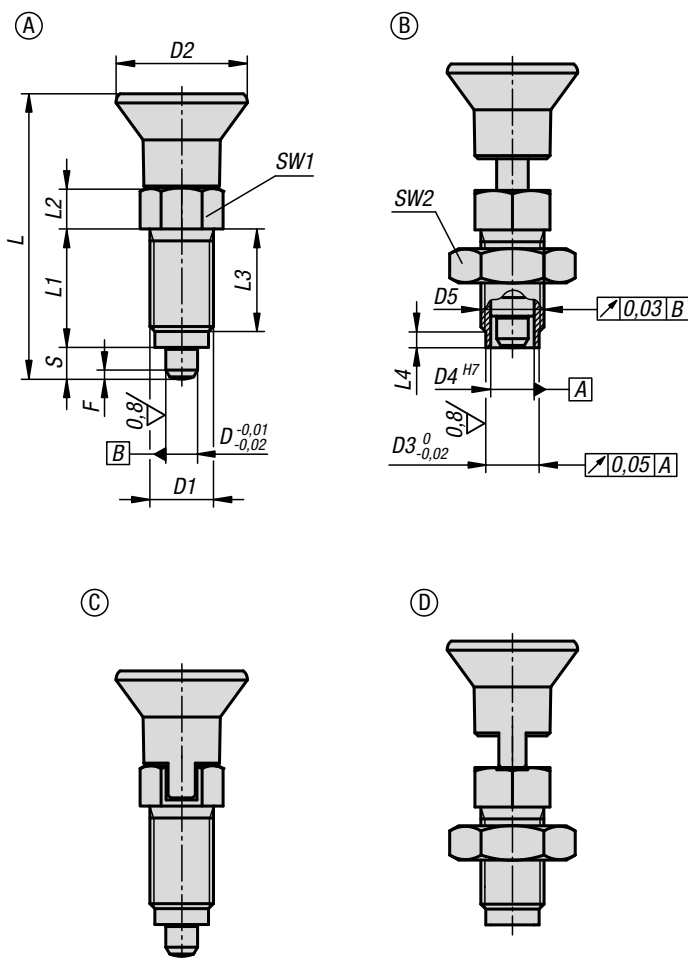
To increase the coaxial alignment accuracy, the hole for the bush and the premium indexing plunger can be machined simultaneously.

## KIPP Cylindrical bushes

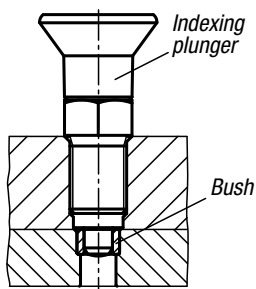
| Order No.   | Main material   | D  | D1   | L    |
|-------------|-----------------|----|------|------|
| K0736.9005  | steel           | 5  | 8    | 6    |
| K0736.9006  | steel           | 6  | 10   | 7    |
| K0736.9008  | steel           | 8  | 13,5 | 9,5  |
| K0736.9010  | steel           | 10 | 17   | 11,5 |
| K0736.90005 | stainless steel | 5  | 8    | 6    |
| K0736.90006 | stainless steel | 6  | 10   | 7    |
| K0736.90008 | stainless steel | 8  | 13,5 | 9,5  |
| K0736.90010 | stainless steel | 10 | 17   | 11,5 |

# Indexing plungers - Premium

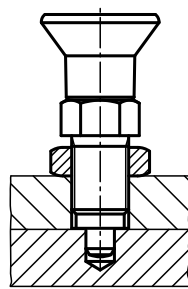
with cylindrical pin



Fixation  
with bush:



Fixation  
without bush:



## Material:

Steel version:  
indexing pin hardened: grade 5.8

Stainless steel version:  
indexing pin hardened: threaded sleeve 1.4305,  
indexing pin 1.4305.

Mushroom knob black grey thermoplastic.

## Version:

Steel version:  
indexing pin hardened, ground and black oxidised.

Stainless steel version:  
indexing pin hardened, ground and bright.

## Sample order:

K0736.41206

## Note:

Premium indexing plungers are characterized by more stringent manufacturing requirements for the indexing plungers and threaded sleeve. In addition, a centring locator that can be used to increase the positioning accuracy is provided on the threaded sleeve. These indexing plungers are used when it is necessary to prevent shifting of the locked position by transverse forces and greater positioning accuracy is required. A new locking position can only be set after the pin has been manually disengaged. When high lateral forces are to be expected, the centring locator should be used.

## Assembly:

When using the threaded sleeve centring, it is recommended the receiving reamed hole be machined before tapping.

## On request:

Special versions and spacer rings.

## Accessories:

Matching cylindrical bush K0736.  
Locknut K0700....

## Drawing reference:

Form A: non-lockout type, without locknut  
Form B: non-lockout type, with locknut  
Form C: lockout type, without locknut  
Form D: lockout type, with locknut



# Indexing plungers - Premium

with cylindrical pin



## KIPP Premium indexing plungers with cylindrical pin, steel, indexing pin hardened

| Order No.<br>Form A | Order No.<br>Form B | D  | D1      | D2 | D3   | D4  | D5              | L    | L1 | L2 | L3 | L4 | Travel<br>S | SW1 | SW2  | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|---------------------|---------------------|----|---------|----|------|-----|-----------------|------|----|----|----|----|-------------|-----|------|-------|--------------------------------------------------|------------------------------------------------|
| K0736.41105         | K0736.42105         | 5  | M10x1   | 21 | 8    | 6   | 6 -0,01/-0,02   | 43,5 | 17 | 7  | 15 | 3  | 5           | 13  | -/17 | 1,3   | 5                                                | 12                                             |
| K0736.41206         | K0736.42206         | 6  | M12x1,5 | 25 | 10   | 8,5 | 8,5 -0,01/-0,03 | 51,7 | 20 | 8  | 17 | 3  | 6           | 14  | -/19 | 1,8   | 6                                                | 14                                             |
| K0736.41308         | K0736.42308         | 8  | M16x1,5 | 33 | 13,5 | 11  | 11 -0,01/-0,03  | 68   | 26 | 10 | 23 | 4  | 8           | 19  | -/24 | 2,3   | 15                                               | 35                                             |
| K0736.41410         | K0736.42410         | 10 | M20x1,5 | 33 | 17   | 11  | 11 -0,01/-0,03  | 74   | 28 | 12 | 25 | 4  | 10          | 22  | -/30 | 2,8   | 15                                               | 34                                             |

| Order No.<br>Form C | Order No.<br>Form D | D  | D1      | D2 | D3   | D4  | D5              | L    | L1 | L2 | L3 | L4 | Travel<br>S | SW1 | SW2  | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|---------------------|---------------------|----|---------|----|------|-----|-----------------|------|----|----|----|----|-------------|-----|------|-------|--------------------------------------------------|------------------------------------------------|
| K0736.43105         | K0736.44105         | 5  | M10x1   | 21 | 8    | 6   | 6 -0,01/-0,02   | 43,5 | 17 | 7  | 15 | 3  | 5           | 13  | -/17 | 1,3   | 5                                                | 12                                             |
| K0736.43206         | K0736.44206         | 6  | M12x1,5 | 25 | 10   | 8,5 | 8,5 -0,01/-0,03 | 51,7 | 20 | 8  | 17 | 3  | 6           | 14  | -/19 | 1,8   | 6                                                | 14                                             |
| K0736.43308         | K0736.44308         | 8  | M16x1,5 | 33 | 13,5 | 11  | 11 -0,01/-0,03  | 68   | 26 | 10 | 23 | 4  | 8           | 19  | -/24 | 2,3   | 15                                               | 35                                             |
| K0736.43410         | K0736.44410         | 10 | M20x1,5 | 33 | 17   | 11  | 11 -0,01/-0,03  | 74   | 28 | 12 | 25 | 4  | 10          | 22  | -/30 | 2,8   | 15                                               | 34                                             |

## KIPP Premium indexing plungers with cylindrical pin, stainless steel, indexing pin hardened

| Order No.<br>Form A | Order No.<br>Form B | D  | D1      | D2 | D3   | D4  | D5              | L    | L1 | L2 | L3 | L4 | Travel<br>S | SW1 | SW2  | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|---------------------|---------------------|----|---------|----|------|-----|-----------------|------|----|----|----|----|-------------|-----|------|-------|--------------------------------------------------|------------------------------------------------|
| K0736.401105        | K0736.402105        | 5  | M10x1   | 21 | 8    | 6   | 6 -0,01/-0,02   | 43,5 | 17 | 7  | 15 | 3  | 5           | 13  | -/17 | 1,3   | 5                                                | 12                                             |
| K0736.401206        | K0736.402206        | 6  | M12x1,5 | 25 | 10   | 8,5 | 8,5 -0,01/-0,03 | 51,7 | 20 | 8  | 17 | 3  | 6           | 14  | -/19 | 1,8   | 6                                                | 14                                             |
| K0736.401308        | K0736.402308        | 8  | M16x1,5 | 33 | 13,5 | 11  | 11 -0,01/-0,03  | 68   | 26 | 10 | 23 | 4  | 8           | 19  | -/24 | 2,3   | 15                                               | 35                                             |
| K0736.401410        | K0736.402410        | 10 | M20x1,5 | 33 | 17   | 11  | 11 -0,01/-0,03  | 74   | 28 | 12 | 25 | 4  | 10          | 22  | -/30 | 2,8   | 15                                               | 34                                             |

| Order No.<br>Form C | Order No.<br>Form D | D  | D1      | D2 | D3   | D4  | D5              | L    | L1 | L2 | L3 | L4 | Travel<br>S | SW1 | SW2  | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|---------------------|---------------------|----|---------|----|------|-----|-----------------|------|----|----|----|----|-------------|-----|------|-------|--------------------------------------------------|------------------------------------------------|
| K0736.403105        | K0736.404105        | 5  | M10x1   | 21 | 8    | 6   | 6 -0,01/-0,02   | 43,5 | 17 | 7  | 15 | 3  | 5           | 13  | -/17 | 1,3   | 5                                                | 12                                             |
| K0736.403206        | K0736.404206        | 6  | M12x1,5 | 25 | 10   | 8,5 | 8,5 -0,01/-0,03 | 51,7 | 20 | 8  | 17 | 3  | 6           | 14  | -/19 | 1,8   | 6                                                | 14                                             |
| K0736.403308        | K0736.404308        | 8  | M16x1,5 | 33 | 13,5 | 11  | 11 -0,01/-0,03  | 68   | 26 | 10 | 23 | 4  | 8           | 19  | -/24 | 2,3   | 15                                               | 35                                             |
| K0736.403410        | K0736.404410        | 10 | M20x1,5 | 33 | 17   | 11  | 11 -0,01/-0,03  | 74   | 28 | 12 | 25 | 4  | 10          | 22  | -/30 | 2,8   | 15                                               | 34                                             |

## Indexing plungers

with rotation lock and lead-in chamfer



### Material:

Steel version:

indexing pin hardened: grade 5.8

Stainless steel version:

indexing pin hardened: threaded sleeve 1.4305,

indexing pin 1.4305.

Mushroom knob black grey thermoplastic.

### Version:

Steel version:

indexing pin hardened, ground and black oxidised.

Stainless steel version:

indexing pin hardened, ground and bright.

### Sample order:

K1300.12060

### Note:

Indexing plungers are used where any change in locking position due to lateral forces should be prevented. The rotation lock ensures that the position of the pin in relation to the sleeve cannot be changed. The point angle enables the pin to retract automatically through a lateral force from one side. Loosening the screw as far as the marking on the plunger enables the point angle to be rotated in 60° increments.

### Assembly:

The screw can be loosened using a hex. key.

### On request:

Special versions.

### Accessories:

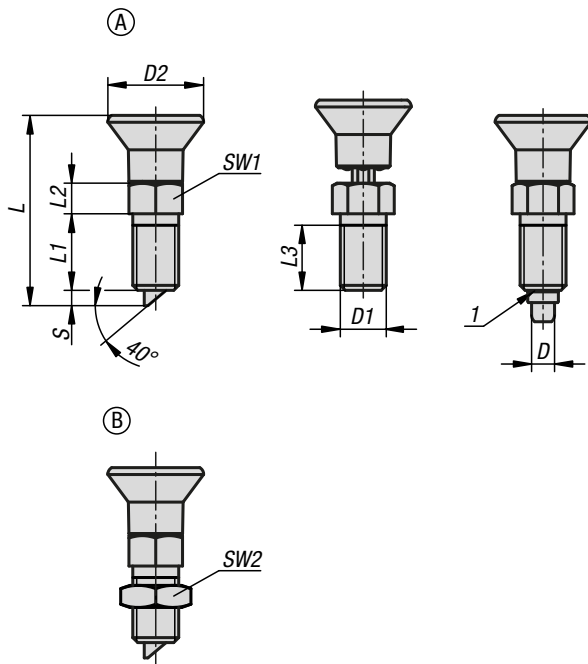
Spacer rings K0665

### Drawing reference:

Form A: without locknut

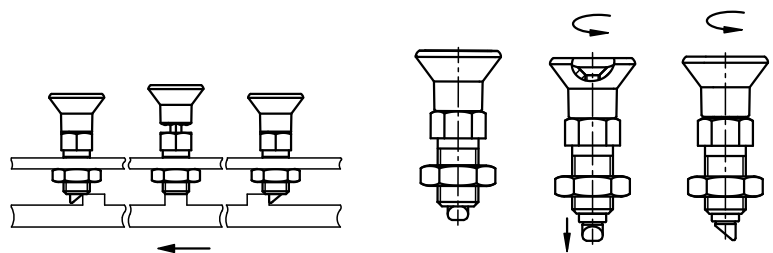
Form B: with locknut

1) marking ring



# Indexing plungers

with rotation lock and lead-in chamfer



## KIPP Indexing plunger with rotation lock and lead-in chamfer, steel, indexing pin hardened

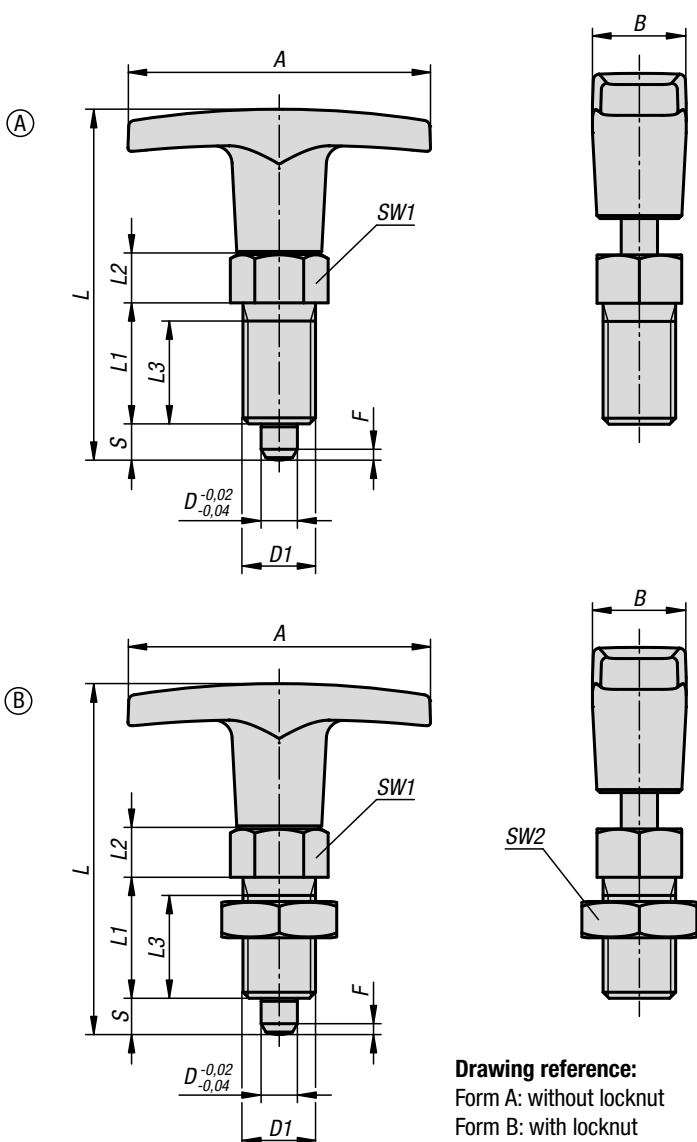
| Order No.<br>Form A | Order No.<br>Form B | D | D1      | D2 | L    | L1 | L2 | L3 | Travel<br>S | SW1 | SW2  | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|---------------------|---------------------|---|---------|----|------|----|----|----|-------------|-----|------|--------------------------------------------------|------------------------------------------------|
| K1300.12061         | K1300.22061         | 6 | M12x1,5 | 25 | 49,7 | 20 | 8  | 17 | 4           | 14  | -/19 | 8                                                | 14                                             |
| K1300.12060         | K1300.22060         | 6 | M12     | 25 | 49,7 | 20 | 8  | 17 | 4           | 14  | -/19 | 8                                                | 14                                             |
| K1300.13081         | K1300.23081         | 8 | M16x1,5 | 33 | 66   | 26 | 10 | 23 | 6           | 19  | -/24 | 20                                               | 35                                             |
| K1300.13080         | K1300.23080         | 8 | M16     | 33 | 66   | 26 | 10 | 23 | 6           | 19  | -/24 | 20                                               | 35                                             |

## KIPP Indexing plunger with rotation lock and lead-in chamfer, stainless steel, indexing pin hardened

| Order No.<br>Form A | Order No.<br>Form B | D | D1      | D2 | L    | L1 | L2 | L3 | Travel<br>S | SW1 | SW2  | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|---------------------|---------------------|---|---------|----|------|----|----|----|-------------|-----|------|--------------------------------------------------|------------------------------------------------|
| K1300.012061        | K1300.022061        | 6 | M12x1,5 | 25 | 49,7 | 20 | 8  | 17 | 4           | 14  | -/19 | 8                                                | 14                                             |
| K1300.012060        | K1300.022060        | 6 | M12     | 25 | 49,7 | 20 | 8  | 17 | 4           | 14  | -/19 | 8                                                | 14                                             |
| K1300.013081        | K1300.023081        | 8 | M16x1,5 | 33 | 66   | 26 | 10 | 23 | 6           | 19  | -/24 | 20                                               | 35                                             |
| K1300.013080        | K1300.023080        | 8 | M16     | 33 | 66   | 26 | 10 | 23 | 6           | 19  | -/24 | 20                                               | 35                                             |

## Indexing plungers

with T-grip



**Drawing reference:**  
Form A: without locknut  
Form B: with locknut

### Material:

Steel version:  
Indexing pin hardened:  
pin 1.0718  
threaded sleeve 1.0718.

Stainless steel version:  
Indexing pin hardened:  
pin 1.4305  
threaded sleeve 1.4305.

T-grip thermoplastic, black grey or traffic red RAL 3020.

### Version:

Steel version:  
indexing pin hardened, ground and black oxidised.  
Threaded sleeve black oxidised

Stainless steel version:  
indexing pin hardened, ground and bright.  
Threaded sleeve bright.

### Sample order:

K1124.5308

### Note:

Indexing plungers are used to prevent any change in locking position due to lateral forces. A new locking position can only be set after the pin has been manually disengaged. The ergonomic T-grip enables easy handling and low effort.

### On request:

Special versions.

### Accessories:

Spacer rings K0665

### KIPP Indexing plungers, steel, indexing pin hardened

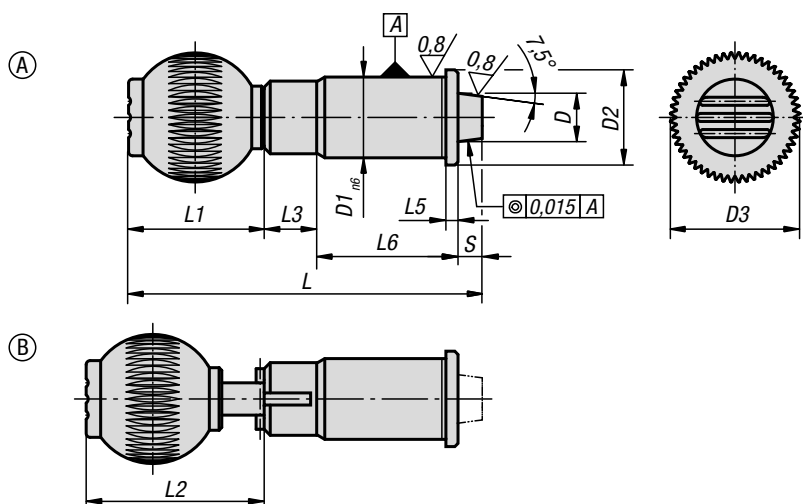
| Order No.<br>Form A | Order No.<br>Form B | Component<br>colour | A  | B    | D  | D1      | L  | L1 | L2 | L3 | Travel<br>S | SW1 | SW2  | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|---------------------|---------------------|---------------------|----|------|----|---------|----|----|----|----|-------------|-----|------|-------|--------------------------------------------------|------------------------------------------------|
| K1124.5206          | K1124.6206          | black grey RAL 7021 | 50 | 15,5 | 6  | M12x1,5 | 58 | 20 | 8  | 17 | 6           | 14  | -/19 | 1,8   | 6                                                | 14                                             |
| K1124.5308          | K1124.6308          | black grey RAL 7021 | 60 | 18   | 8  | M16x1,5 | 77 | 26 | 10 | 23 | 8           | 19  | -/24 | 2,3   | 15                                               | 35                                             |
| K1124.5410          | K1124.6410          | black grey RAL 7021 | 72 | 19   | 10 | M20x1,5 | 84 | 28 | 12 | 25 | 10          | 22  | -/30 | 2,8   | 15                                               | 34                                             |
| K1124.520684        | K1124.620684        | red                 | 50 | 15,5 | 6  | M12x1,5 | 58 | 20 | 8  | 17 | 6           | 14  | -/19 | 1,8   | 6                                                | 14                                             |
| K1124.530884        | K1124.630884        | red                 | 60 | 18   | 8  | M16x1,5 | 77 | 26 | 10 | 23 | 8           | 19  | -/24 | 2,3   | 15                                               | 35                                             |
| K1124.541084        | K1124.641084        | red                 | 72 | 19   | 10 | M20x1,5 | 84 | 28 | 12 | 25 | 10          | 22  | -/30 | 2,8   | 15                                               | 34                                             |

### KIPP Indexing plungers, stainless steel, indexing pin hardened

| Order No.<br>Form A | Order No.<br>Form B | Component<br>colour | A  | B    | D  | D1      | L  | L1 | L2 | L3 | Travel<br>S | SW1 | SW2  | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|---------------------|---------------------|---------------------|----|------|----|---------|----|----|----|----|-------------|-----|------|-------|--------------------------------------------------|------------------------------------------------|
| K1124.05206         | K1124.06206         | black grey RAL 7021 | 50 | 15,5 | 6  | M12x1,5 | 58 | 20 | 8  | 17 | 6           | 14  | -/19 | 1,8   | 6                                                | 14                                             |
| K1124.05308         | K1124.06308         | black grey RAL 7021 | 60 | 18   | 8  | M16x1,5 | 77 | 26 | 10 | 23 | 8           | 19  | -/24 | 2,3   | 15                                               | 35                                             |
| K1124.05410         | K1124.06410         | black grey RAL 7021 | 72 | 19   | 10 | M20x1,5 | 84 | 28 | 12 | 25 | 10          | 22  | -/30 | 2,8   | 15                                               | 34                                             |
| K1124.0520684       | K1124.0620684       | red                 | 50 | 15,5 | 6  | M12x1,5 | 58 | 20 | 8  | 17 | 6           | 14  | -/19 | 1,8   | 6                                                | 14                                             |
| K1124.0530884       | K1124.0630884       | red                 | 60 | 18   | 8  | M16x1,5 | 77 | 26 | 10 | 23 | 8           | 19  | -/24 | 2,3   | 15                                               | 35                                             |
| K1124.0541084       | K1124.0641084       | red                 | 72 | 19   | 10 | M20x1,5 | 84 | 28 | 12 | 25 | 10          | 22  | -/30 | 2,8   | 15                                               | 34                                             |

# Indexing plungers - Precision

with tapered pin



## Material:

Steel.

Grip ball thermoplastic.

## Version:

Hardened and ground.

Grip ball black grey.

## Sample order:

K0359.020

## Note:

The indexing plungers with bushes are a perfect combination for rapid positioning and fixating. The precise design of both the indexing plunger and the bush guarantees high repeat accuracy when assembling two elements.

For technical information see assembly and installation instructions.

## Drawing reference:

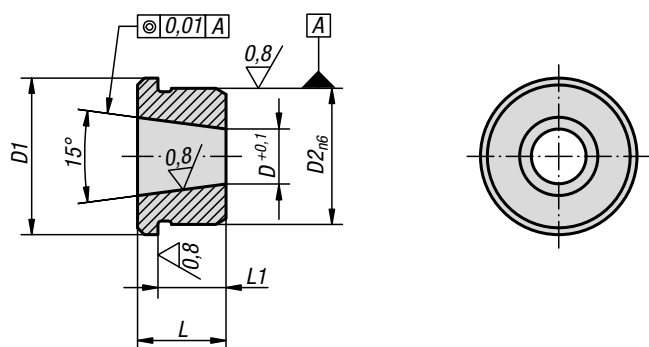
Form A: standard

Form B: lockable

## KIPP Precision indexing plungers with tapered pin

| Order No.<br>Form A<br>standard | Order No.<br>Form B<br>lockable | D  | D1 | D2 | D3 | L     | L1   | L2     | L3 | L5  | L6 | Travel<br>S | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N | Internal<br>thread<br>grip ball |
|---------------------------------|---------------------------------|----|----|----|----|-------|------|--------|----|-----|----|-------------|--------------------------------------------------|------------------------------------------------|---------------------------------|
| K0359.010                       | K0359.110                       | 10 | 16 | 19 | 25 | 75    | 25   | -/30,5 | 13 | 2,5 | 31 | 6           | 19                                               | 29                                             | M6                              |
| K0359.012                       | K0359.112                       | 12 | 20 | 23 | 32 | 87    | 33   | -/40,5 | 13 | 3   | 35 | 6           | 22                                               | 35                                             | M8                              |
| K0359.016                       | K0359.116                       | 16 | 25 | 28 | 40 | 102,5 | 41,5 | -/49   | 13 | 3   | 42 | 6           | 30                                               | 50                                             | M10                             |
| K0359.020                       | K0359.120                       | 20 | 30 | 33 | 40 | 110,5 | 41,5 | -/49   | 13 | 3   | 50 | 6           | 46                                               | 63                                             | M10                             |
| K0359.025                       | K0359.125                       | 25 | 38 | 42 | 50 | 130   | 51   | -/58,5 | 13 | 3   | 60 | 6           | 39                                               | 73                                             | M10                             |

## Bushes tapered



### Material:

Steel.

### Version:

Hardened and ground.

### Sample order:

K0360.20

### Note:

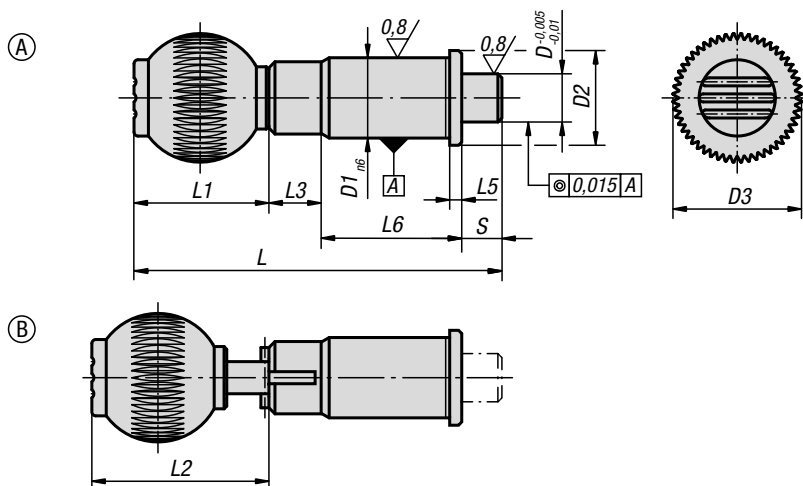
Bushes for precision indexing plungers K0359.

## KIPP Tapered bushes

| Order No. | D     | D1 | D2 | L  | L1  |
|-----------|-------|----|----|----|-----|
| K0360.10  | 7,1   | 19 | 16 | 11 | 8,5 |
| K0360.12  | 8,28  | 23 | 20 | 13 | 10  |
| K0360.16  | 11,52 | 28 | 25 | 17 | 14  |
| K0360.20  | 15,49 | 33 | 30 | 16 | 13  |
| K0360.25  | 19,7  | 42 | 38 | 19 | 16  |

## Indexing plungers - Precision

with cylindrical pin



### Material:

Steel.  
Grip ball thermoplastic.

### Version:

Hardened and ground.  
Grip ball black grey.

### Sample order:

K0361.020

### Note:

The indexing plungers with bushes are a perfect combination for rapid positioning and fixing. The precise design of both the indexing plungers and the bush guarantees high repeating accuracy when assembling two elements.

Technical Information see assembly and installation instructions.

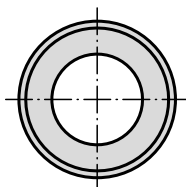
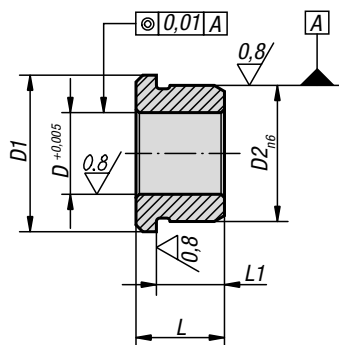
### Drawing reference:

Form A: standard  
Form B: lockable

## KIPP Precision indexing plungers with cylindrical pin

| Order No.<br>Form A<br>standard | Order No.<br>Form B<br>lockable | D  | D1 | D2 | D3 | L     | L1   | L2    | L3 | L5  | L6 | Travel<br>S | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N | Internal<br>thread<br>grip ball |
|---------------------------------|---------------------------------|----|----|----|----|-------|------|-------|----|-----|----|-------------|--------------------------------------------------|------------------------------------------------|---------------------------------|
| K0361.010                       | K0361.110                       | 10 | 16 | 19 | 25 | 79    | 25   | -36,5 | 13 | 2,5 | 31 | 10          | 15                                               | 30                                             | M6                              |
| K0361.012                       | K0361.112                       | 12 | 20 | 23 | 32 | 91    | 33   | -44,5 | 13 | 3   | 35 | 10          | 15                                               | 35                                             | M8                              |
| K0361.016                       | K0361.116                       | 16 | 25 | 28 | 40 | 106,5 | 41,5 | -53   | 13 | 3   | 42 | 10          | 20                                               | 50                                             | M10                             |
| K0361.020                       | K0361.120                       | 20 | 30 | 33 | 40 | 114,5 | 41,5 | -53   | 13 | 3   | 50 | 10          | 36                                               | 63                                             | M10                             |
| K0361.025                       | K0361.125                       | 25 | 38 | 42 | 50 | 134   | 51   | -62,5 | 13 | 3   | 60 | 10          | 20                                               | 73                                             | M10                             |

## Bushes cylindrical

**Material:**

Steel.

**Version:**

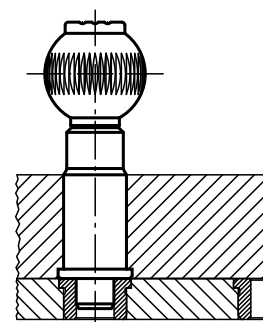
Hardened and ground.

**Sample order:**

K0362.20

**Note:**

Bushes for precision indexing plungers K0361.

**KIPP Cylindrical bushes**

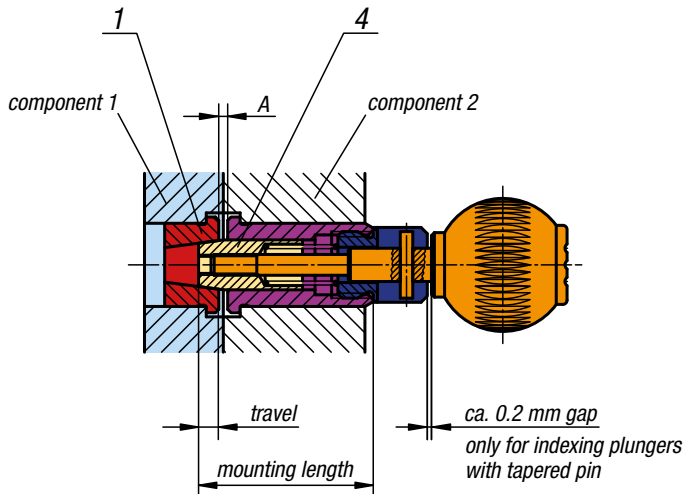
| Order No. | D  | D1 | D2 | L  | L1  |
|-----------|----|----|----|----|-----|
| K0362.10  | 10 | 19 | 16 | 11 | 8,5 |
| K0362.12  | 12 | 23 | 20 | 13 | 10  |
| K0362.16  | 16 | 28 | 25 | 17 | 14  |
| K0362.20  | 20 | 33 | 30 | 16 | 13  |
| K0362.25  | 25 | 42 | 38 | 19 | 16  |



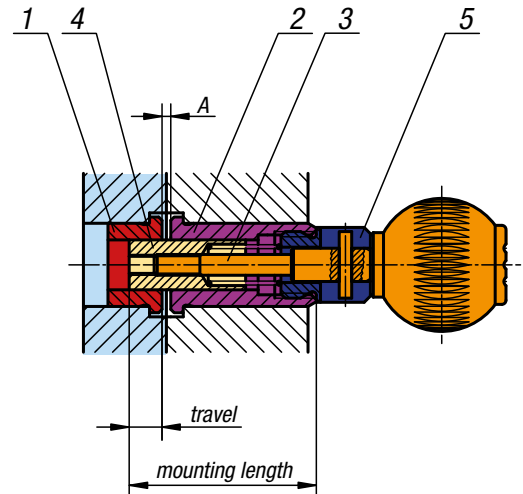
# Assembly and installation instructions for precision indexing plungers



## Precision indexing plungers with tapered indexing pin



## Precision indexing plungers with cylindrical indexing pin



### Assembly instructions:

1. Fit tapered or cylindrical bush (1) into "component 1".
2. Mount sleeve (2) into "component 2".
3. Determine mounting length (actual dimension). Mounting length =  $A + \text{travel} + \text{length of sleeve 2}$ . Models with tapered pin should have a 0.2 mm gap.
4. Glue screw (3) and centring pin (4) together with anaerobic adhesive. We recommend Loctite 638.
5. Screw centring pin with nut (4) and handle into the mounted sleeve (2). If necessary glue together with anaerobic adhesive.
6. Check whether the product is operational. Keep to the index travel length given in the catalogue.

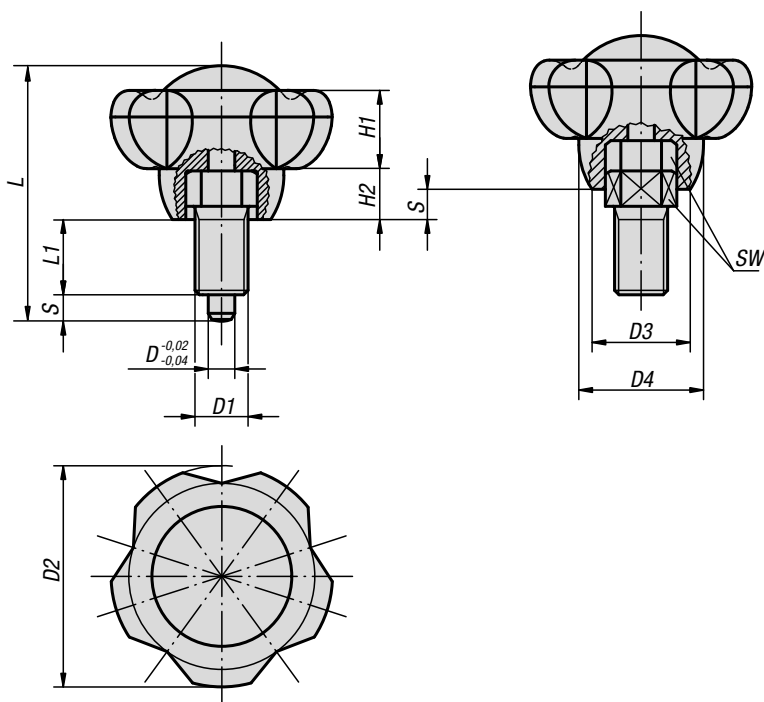
### Note:

The precision indexing plunger is only ready for operation after the stated adhesive hardening time. When gluing the components, ensure that no adhesive comes into contact with movable parts.



## Indexing plungers

with five lobe grip



### Material:

Thermoplastic.  
Indexing pin and screw steel 5.8.

### Version:

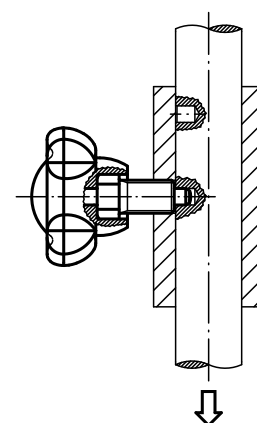
Lower grip black-grey.  
Indexing pin and screw black oxidised.  
Indexing pin hardened and ground.

### Sample order:

K0245.11056 (cap colour traffic red)

### Note:

Δ Add the desired cap colour here.  
No colour code is required for black grey caps.



### KIPP Indexing plungers with five lobe grip

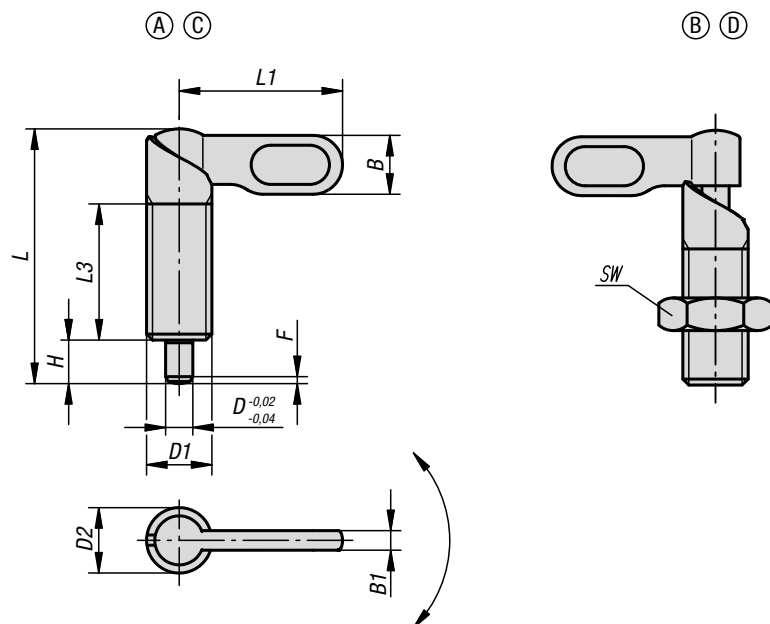
| Order No.   | D  | D1      | D2 | D3   | D4   | H1   | H2   | L    | L1 | Travel<br>S | SW |
|-------------|----|---------|----|------|------|------|------|------|----|-------------|----|
| K0245.1105Δ | 5  | M10x1   | 50 | 22,2 | 28,2 | 17,8 | 11,5 | 52,8 | 13 | 5           | 13 |
| K0245.1206Δ | 6  | M12x1,5 | 50 | 22,2 | 28,2 | 17,8 | 11,5 | 57,8 | 17 | 6           | 14 |
| K0245.1308Δ | 8  | M16x1,5 | 63 | 28   | 35,5 | 22,5 | 14,5 | 74   | 22 | 8           | 19 |
| K0245.1410Δ | 10 | M20x1,5 | 63 | 28   | 35,5 | 22,5 | 14,5 | 78   | 24 | 10          | 22 |



A large grid of graph paper for taking notes.



## Cam-action indexing plungers



**Material:**  
Steel grade 5.8.

**Version:**  
Black oxidised.  
Pin hardened and ground.

**Sample order:**  
K0348.040616

**Note:**  
Cam-action indexing plungers are used when the indexing pin should not project all the time. Turning the handle through 180° retracts the pin and a notch ensures that the handle remains in this position.

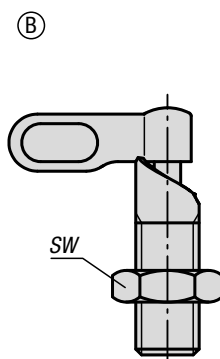
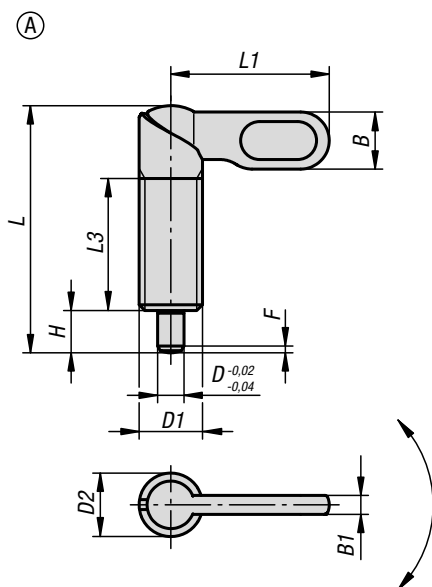
**Drawing reference:**  
Form A: grip uncoated without nut  
Form C: grip powder-coated without nut  
Form B: grip uncoated with nut  
Form D: grip powder-coated with nut

## KIPP Cam-action indexing plungers

| Order No.<br>Form A | Order No.<br>Form C | Order No.<br>Form B | Order No.<br>Form D | D  | D1      | D2 | L    | L1 | L3 | B    | B1  | H  | SW        | Fx30°<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N | Spring force |
|---------------------|---------------------|---------------------|---------------------|----|---------|----|------|----|----|------|-----|----|-----------|-------------------------------------------|------------------------------------------------|--------------|
| K0348.040410        | K0348.060410        | K0348.050410        | K0348.070410        | 4  | M10     | 10 | 38   | 25 | 20 | 9    | 3   | 6  | -/-/17/17 | 1                                         | 8                                              | 14           |
| K0348.040510        | K0348.060510        | K0348.050510        | K0348.070510        | 5  | M10     | 10 | 38   | 25 | 20 | 9    | 3   | 6  | -/-/17/17 | 1,3                                       | 8                                              | 14           |
| K0348.040610        | K0348.060610        | K0348.050610        | K0348.070610        | 6  | M10     | 10 | 38   | 25 | 20 | 9    | 3   | 6  | -/-/17/17 | 1,8                                       | 8                                              | 14           |
| K0348.0404101       | K0348.0604101       | K0348.0504101       | K0348.0704101       | 4  | M10x1   | 10 | 38   | 25 | 20 | 9    | 3   | 6  | -/-/17/17 | 1                                         | 8                                              | 14           |
| K0348.0405101       | K0348.0605101       | K0348.0505101       | K0348.0705101       | 5  | M10x1   | 10 | 38   | 25 | 20 | 9    | 3   | 6  | -/-/17/17 | 1,3                                       | 8                                              | 14           |
| K0348.0406101       | K0348.0606101       | K0348.0506101       | K0348.0706101       | 6  | M10x1   | 10 | 38   | 25 | 20 | 9    | 3   | 6  | -/-/17/17 | 1,8                                       | 8                                              | 14           |
| K0348.040512        | K0348.060512        | K0348.050512        | K0348.070512        | 5  | M12     | 12 | 46,8 | 30 | 25 | 10,8 | 3,6 | 8  | -/-/19/19 | 1,3                                       | 8                                              | 15           |
| K0348.040612        | K0348.060612        | K0348.050612        | K0348.070612        | 6  | M12     | 12 | 46,8 | 30 | 25 | 10,8 | 3,6 | 8  | -/-/19/19 | 1,8                                       | 8                                              | 15           |
| K0348.040812        | K0348.060812        | K0348.050812        | K0348.070812        | 8  | M12     | 12 | 46,8 | 30 | 25 | 10,8 | 3,6 | 8  | -/-/19/19 | 2,3                                       | 8                                              | 15           |
| K0348.0405121       | K0348.0605121       | K0348.0505121       | K0348.0705121       | 5  | M12x1,5 | 12 | 46,8 | 30 | 25 | 10,8 | 3,6 | 8  | -/-/19/19 | 1,3                                       | 8                                              | 15           |
| K0348.0406121       | K0348.0606121       | K0348.0506121       | K0348.0706121       | 6  | M12x1,5 | 12 | 46,8 | 30 | 25 | 10,8 | 3,6 | 8  | -/-/19/19 | 1,8                                       | 8                                              | 15           |
| K0348.0408121       | K0348.0608121       | K0348.0508121       | K0348.0708121       | 8  | M12x1,5 | 12 | 46,8 | 30 | 25 | 10,8 | 3,6 | 8  | -/-/19/19 | 2,3                                       | 8                                              | 15           |
| K0348.040616        | K0348.060616        | K0348.050616        | K0348.070616        | 6  | M16     | 16 | 60,4 | 40 | 32 | 14,4 | 4,8 | 10 | -/-/24/24 | 1,8                                       | 15                                             | 35           |
| K0348.040816        | K0348.060816        | K0348.050816        | K0348.070816        | 8  | M16     | 16 | 60,4 | 40 | 32 | 14,4 | 4,8 | 10 | -/-/24/24 | 2,3                                       | 15                                             | 35           |
| K0348.041016        | K0348.061016        | K0348.051016        | K0348.071016        | 10 | M16     | 16 | 60,4 | 40 | 32 | 14,4 | 4,8 | 10 | -/-/24/24 | 2,8                                       | 15                                             | 35           |
| K0348.0406161       | K0348.0606161       | K0348.0506161       | K0348.0706161       | 6  | M16x1,5 | 16 | 60,4 | 40 | 32 | 14,4 | 4,8 | 10 | -/-/24/24 | 1,8                                       | 15                                             | 35           |
| K0348.0408161       | K0348.0608161       | K0348.0508161       | K0348.0708161       | 8  | M16x1,5 | 16 | 60,4 | 40 | 32 | 14,4 | 4,8 | 10 | -/-/24/24 | 2,3                                       | 15                                             | 35           |
| K0348.0410161       | K0348.0610161       | K0348.0510161       | K0348.0710161       | 10 | M16x1,5 | 16 | 60,4 | 40 | 32 | 14,4 | 4,8 | 10 | -/-/24/24 | 2,8                                       | 15                                             | 35           |
| K0348.040820        | K0348.060820        | K0348.050820        | K0348.070820        | 8  | M20     | 20 | 70   | 50 | 35 | 18   | 6   | 12 | -/-/30/30 | 2,3                                       | 20                                             | 60           |
| K0348.041020        | K0348.061020        | K0348.051020        | K0348.071020        | 10 | M20     | 20 | 70   | 50 | 35 | 18   | 6   | 12 | -/-/30/30 | 2,8                                       | 20                                             | 60           |
| K0348.041220        | K0348.061220        | K0348.051220        | K0348.071220        | 12 | M20     | 20 | 70   | 50 | 35 | 18   | 6   | 12 | -/-/30/30 | 3                                         | 20                                             | 60           |
| K0348.0408201       | K0348.0608201       | K0348.0508201       | K0348.0708201       | 8  | M20x1,5 | 20 | 70   | 50 | 35 | 18   | 6   | 12 | -/-/30/30 | 2,3                                       | 20                                             | 60           |
| K0348.0410201       | K0348.0610201       | K0348.0510201       | K0348.0710201       | 10 | M20x1,5 | 20 | 70   | 50 | 35 | 18   | 6   | 12 | -/-/30/30 | 2,8                                       | 20                                             | 60           |
| K0348.0412201       | K0348.0612201       | K0348.0512201       | K0348.0712201       | 12 | M20x1,5 | 20 | 70   | 50 | 35 | 18   | 6   | 12 | -/-/30/30 | 3                                         | 20                                             | 60           |

# Cam-action indexing plungers

stainless steel



**Material:**  
Stainless steel 1.4305.

**Version:**  
Bright.  
Indexing pin ground, not hardened.

**Sample order:**  
K0637.1040616

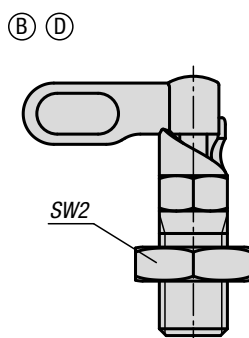
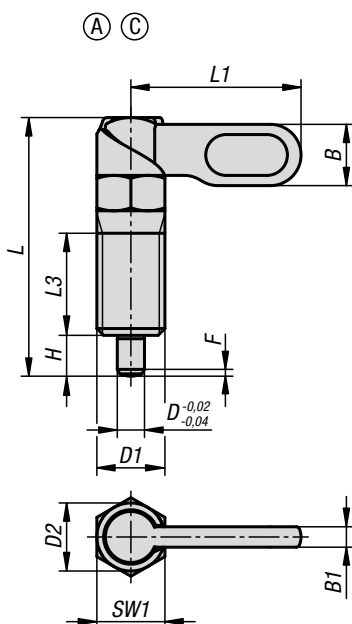
**Note:**  
Cam-action indexing plungers are used when the indexing pin should not project all the time. Turning the handle through 180° retracts the pin.  
A notch ensures that the handle remains in this position.

## KIPP Cam-action indexing plungers stainless steel

| Order No.<br>Form A | Order No.<br>Form B | D  | D1      | D2 | L    | L1 | L3 | B    | B1  | H  | SW   | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|---------------------|---------------------|----|---------|----|------|----|----|------|-----|----|------|-------|--------------------------------------------------|------------------------------------------------|
| K0637.1040410       | K0637.1050410       | 4  | M10     | 10 | 38   | 25 | 20 | 9    | 3   | 6  | -/17 | 1     | 8                                                | 14                                             |
| K0637.1040510       | K0637.1050510       | 5  | M10     | 10 | 38   | 25 | 20 | 9    | 3   | 6  | -/17 | 1,3   | 8                                                | 14                                             |
| K0637.1040610       | K0637.1050610       | 6  | M10     | 10 | 38   | 25 | 20 | 9    | 3   | 6  | -/17 | 1,8   | 8                                                | 14                                             |
| K0637.10404101      | K0637.10504101      | 4  | M10x1   | 10 | 38   | 25 | 20 | 9    | 3   | 6  | -/17 | 1     | 8                                                | 14                                             |
| K0637.10405101      | K0637.10505101      | 5  | M10x1   | 10 | 38   | 25 | 20 | 9    | 3   | 6  | -/17 | 1,3   | 8                                                | 14                                             |
| K0637.10406101      | K0637.10506101      | 6  | M10x1   | 10 | 38   | 25 | 20 | 9    | 3   | 6  | -/17 | 1,8   | 8                                                | 14                                             |
| K0637.1040512       | K0637.1050512       | 5  | M12     | 12 | 46,8 | 30 | 25 | 10,8 | 3,6 | 8  | -/19 | 1,3   | 8                                                | 15                                             |
| K0637.1040612       | K0637.1050612       | 6  | M12     | 12 | 46,8 | 30 | 25 | 10,8 | 3,6 | 8  | -/19 | 1,8   | 8                                                | 15                                             |
| K0637.1040812       | K0637.1050812       | 8  | M12     | 12 | 46,8 | 30 | 25 | 10,8 | 3,6 | 8  | -/19 | 2,3   | 8                                                | 15                                             |
| K0637.10405121      | K0637.10505121      | 5  | M12x1,5 | 12 | 46,8 | 30 | 25 | 10,8 | 3,6 | 8  | -/19 | 1,3   | 8                                                | 15                                             |
| K0637.10406121      | K0637.10506121      | 6  | M12x1,5 | 12 | 46,8 | 30 | 25 | 10,8 | 3,6 | 8  | -/19 | 1,8   | 8                                                | 15                                             |
| K0637.10408121      | K0637.10508121      | 8  | M12x1,5 | 12 | 46,8 | 30 | 25 | 10,8 | 3,6 | 8  | -/19 | 2,3   | 8                                                | 15                                             |
| K0637.1040616       | K0637.1050616       | 6  | M16     | 16 | 60,4 | 40 | 32 | 14,4 | 4,8 | 10 | -/24 | 1,8   | 15                                               | 35                                             |
| K0637.1040816       | K0637.1050816       | 8  | M16     | 16 | 60,4 | 40 | 32 | 14,4 | 4,8 | 10 | -/24 | 2,3   | 15                                               | 35                                             |
| K0637.1041016       | K0637.1051016       | 10 | M16     | 16 | 60,4 | 40 | 32 | 14,4 | 4,8 | 10 | -/24 | 2,8   | 15                                               | 35                                             |
| K0637.10406161      | K0637.10506161      | 6  | M16x1,5 | 16 | 60,4 | 40 | 32 | 14,4 | 4,8 | 10 | -/24 | 1,8   | 15                                               | 35                                             |
| K0637.10408161      | K0637.10508161      | 8  | M16x1,5 | 16 | 60,4 | 40 | 32 | 14,4 | 4,8 | 10 | -/24 | 2,3   | 15                                               | 35                                             |
| K0637.10410161      | K0637.10510161      | 10 | M16x1,5 | 16 | 60,4 | 40 | 32 | 14,4 | 4,8 | 10 | -/24 | 2,8   | 15                                               | 35                                             |
| K0637.1040820       | K0637.1050820       | 8  | M20     | 20 | 70   | 50 | 35 | 18   | 6   | 12 | -/30 | 2,3   | 20                                               | 60                                             |
| K0637.1041020       | K0637.1051020       | 10 | M20     | 20 | 70   | 50 | 35 | 18   | 6   | 12 | -/30 | 2,8   | 20                                               | 60                                             |
| K0637.1041220       | K0637.1051220       | 12 | M20     | 20 | 70   | 50 | 35 | 18   | 6   | 12 | -/30 | 3     | 20                                               | 60                                             |
| K0637.10408201      | K0637.10508201      | 8  | M20x1,5 | 20 | 70   | 50 | 35 | 18   | 6   | 12 | -/30 | 2,3   | 20                                               | 60                                             |
| K0637.10410201      | K0637.10510201      | 10 | M20x1,5 | 20 | 70   | 50 | 35 | 18   | 6   | 12 | -/30 | 2,8   | 20                                               | 60                                             |
| K0637.10412201      | K0637.10512201      | 12 | M20x1,5 | 20 | 70   | 50 | 35 | 18   | 6   | 12 | -/30 | 3     | 20                                               | 60                                             |

# Cam-action indexing plungers

with stop



## Drawing reference:

Form A: grip uncoated without nut  
Form C: grip powder-coated without nut  
Form B: grip uncoated with nut  
Form D: grip powder-coated with nut



## Material:

Steel grade 5.8.

## Version:

Black oxidised.

Pin hardened and ground.

## Sample order:

K1284.1040616

## Note:

Cam-action indexing plungers are used when the indexing pin should not project all the time. Turning the handle through 180° retracts the pin.

A notch ensures that the handle remains in this position.

A stop prevents the handle being rotated through more than 180° ensuring that the pin remains retracted.

Selecting which side the stop is on defines the rotation direction of the plunger.

## KIPP Cam action indexing plunger with stop

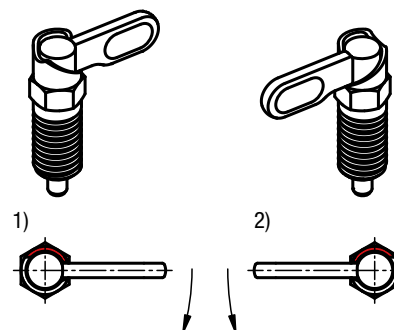
| Order No.<br>Form A | Order No.<br>Form C | Version 2 | D  | D1      | D2 | L    | L1 | L3 | B    | B1  | H  | SW1 | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|---------------------|---------------------|-----------|----|---------|----|------|----|----|------|-----|----|-----|-------|--------------------------------------------------|------------------------------------------------|
| K1284.1040410       | K1284.1060410       | left      | 4  | M10     | 10 | 38   | 25 | 15 | 9    | 3   | 6  | 10  | 1     | 8                                                | 14                                             |
| K1284.1040510       | K1284.1060510       | left      | 5  | M10     | 10 | 38   | 25 | 15 | 9    | 3   | 6  | 10  | 1,3   | 8                                                | 14                                             |
| K1284.1040610       | K1284.1060610       | left      | 6  | M10     | 10 | 38   | 25 | 15 | 9    | 3   | 6  | 10  | 1,8   | 8                                                | 14                                             |
| K1284.1040512       | K1284.1060512       | left      | 5  | M12     | 12 | 47,8 | 30 | 19 | 10,8 | 3,6 | 8  | 12  | 1,3   | 8                                                | 15                                             |
| K1284.1040612       | K1284.1060612       | left      | 6  | M12     | 12 | 47,8 | 30 | 19 | 10,8 | 3,6 | 8  | 12  | 1,8   | 8                                                | 15                                             |
| K1284.1040812       | K1284.1060812       | left      | 8  | M12     | 12 | 47,8 | 30 | 19 | 10,8 | 3,6 | 8  | 12  | 2,3   | 8                                                | 15                                             |
| K1284.1040616       | K1284.1060616       | left      | 6  | M16     | 16 | 60,4 | 40 | 26 | 14,4 | 4,8 | 10 | 16  | 1,8   | 15                                               | 35                                             |
| K1284.1040816       | K1284.1060816       | left      | 8  | M16     | 16 | 60,4 | 40 | 26 | 14,4 | 4,8 | 10 | 16  | 2,3   | 15                                               | 35                                             |
| K1284.1041016       | K1284.1061016       | left      | 10 | M16     | 16 | 60,4 | 40 | 26 | 14,4 | 4,8 | 10 | 16  | 2,8   | 15                                               | 35                                             |
| K1284.10408201      | K1284.10608201      | left      | 8  | M20x1,5 | 20 | 70   | 50 | 30 | 18   | 6   | 12 | 20  | 2,3   | 20                                               | 60                                             |
| K1284.10410201      | K1284.10610201      | left      | 10 | M20x1,5 | 20 | 70   | 50 | 30 | 18   | 6   | 12 | 20  | 2,8   | 20                                               | 60                                             |
| K1284.10412201      | K1284.10612201      | left      | 12 | M20x1,5 | 20 | 70   | 50 | 30 | 18   | 6   | 12 | 20  | 3     | 20                                               | 60                                             |
| K1284.2040410       | K1284.2060410       | right     | 4  | M10     | 10 | 38   | 25 | 15 | 9    | 3   | 6  | 10  | 1     | 8                                                | 14                                             |
| K1284.2040510       | K1284.2060510       | right     | 5  | M10     | 10 | 38   | 25 | 15 | 9    | 3   | 6  | 10  | 1,3   | 8                                                | 14                                             |
| K1284.2040610       | K1284.2060610       | right     | 6  | M10     | 10 | 38   | 25 | 15 | 9    | 3   | 6  | 10  | 1,8   | 8                                                | 14                                             |
| K1284.2040512       | K1284.2060512       | right     | 5  | M12     | 12 | 47,8 | 30 | 19 | 10,8 | 3,6 | 8  | 12  | 1,3   | 8                                                | 15                                             |
| K1284.2040612       | K1284.2060612       | right     | 6  | M12     | 12 | 47,8 | 30 | 19 | 10,8 | 3,6 | 8  | 12  | 1,8   | 8                                                | 15                                             |
| K1284.2040812       | K1284.2060812       | right     | 8  | M12     | 12 | 47,8 | 30 | 19 | 10,8 | 3,6 | 8  | 12  | 2,3   | 8                                                | 15                                             |
| K1284.2040616       | K1284.2060616       | right     | 6  | M16     | 16 | 60,4 | 40 | 26 | 14,4 | 4,8 | 10 | 16  | 1,8   | 15                                               | 35                                             |
| K1284.2040816       | K1284.2060816       | right     | 8  | M16     | 16 | 60,4 | 40 | 26 | 14,4 | 4,8 | 10 | 16  | 2,3   | 15                                               | 35                                             |
| K1284.2041016       | K1284.2061016       | right     | 10 | M16     | 16 | 60,4 | 40 | 26 | 14,4 | 4,8 | 10 | 16  | 2,8   | 15                                               | 35                                             |
| K1284.20408201      | K1284.20608201      | right     | 8  | M20x1,5 | 20 | 70   | 50 | 30 | 18   | 6   | 12 | 20  | 2,3   | 20                                               | 60                                             |
| K1284.20410201      | K1284.20610201      | right     | 10 | M20x1,5 | 20 | 70   | 50 | 30 | 18   | 6   | 12 | 20  | 2,8   | 20                                               | 60                                             |
| K1284.20412201      | K1284.20612201      | right     | 12 | M20x1,5 | 20 | 70   | 50 | 30 | 18   | 6   | 12 | 20  | 3     | 20                                               | 60                                             |

# Cam-action indexing plungers

with stop



1) stop left  
2) stop right



| Order No.<br>Form B | Order No.<br>Form D | Version 2 | D  | D1      | D2 | L    | L1 | L3 | B    | B1  | H  | SW1 | SW2 | Fx30° | Spring force<br>initial pressure | Spring force<br>refinal pressure |
|---------------------|---------------------|-----------|----|---------|----|------|----|----|------|-----|----|-----|-----|-------|----------------------------------|----------------------------------|
|                     |                     |           |    |         |    |      |    |    |      |     |    |     |     |       | F1 approx. N                     | F2 approx. N                     |
| K1284.1050410       | K1284.1070410       | left      | 4  | M10     | 10 | 38   | 25 | 15 | 9    | 3   | 6  | 10  | 17  | 1     | 8                                | 14                               |
| K1284.1050510       | K1284.1070510       | left      | 5  | M10     | 10 | 38   | 25 | 15 | 9    | 3   | 6  | 10  | 17  | 1,3   | 8                                | 14                               |
| K1284.1050610       | K1284.1070610       | left      | 6  | M10     | 10 | 38   | 25 | 15 | 9    | 3   | 6  | 10  | 17  | 1,8   | 8                                | 14                               |
| K1284.1050512       | K1284.1070512       | left      | 5  | M12     | 12 | 47,8 | 30 | 19 | 10,8 | 3,6 | 8  | 12  | 19  | 1,3   | 8                                | 15                               |
| K1284.1050612       | K1284.1070612       | left      | 6  | M12     | 12 | 47,8 | 30 | 19 | 10,8 | 3,6 | 8  | 12  | 19  | 1,8   | 8                                | 15                               |
| K1284.1050812       | K1284.1070812       | left      | 8  | M12     | 12 | 47,8 | 30 | 19 | 10,8 | 3,6 | 8  | 12  | 19  | 2,3   | 8                                | 15                               |
| K1284.1050616       | K1284.1070616       | left      | 6  | M16     | 16 | 60,4 | 40 | 26 | 14,4 | 4,8 | 10 | 16  | 24  | 1,8   | 15                               | 35                               |
| K1284.1050816       | K1284.1070816       | left      | 8  | M16     | 16 | 60,4 | 40 | 26 | 14,4 | 4,8 | 10 | 16  | 24  | 2,3   | 15                               | 35                               |
| K1284.1051016       | K1284.1071016       | left      | 10 | M16     | 16 | 60,4 | 40 | 26 | 14,4 | 4,8 | 10 | 16  | 24  | 2,8   | 15                               | 35                               |
| K1284.10508201      | K1284.10708201      | left      | 8  | M20x1,5 | 20 | 70   | 50 | 30 | 18   | 6   | 12 | 20  | 30  | 2,3   | 20                               | 60                               |
| K1284.10510201      | K1284.10710201      | left      | 10 | M20x1,5 | 20 | 70   | 50 | 30 | 18   | 6   | 12 | 20  | 30  | 2,8   | 20                               | 60                               |
| K1284.10512201      | K1284.10712201      | left      | 12 | M20x1,5 | 20 | 70   | 50 | 30 | 18   | 6   | 12 | 20  | 30  | 3     | 20                               | 60                               |
| K1284.2050410       | K1284.2070410       | right     | 4  | M10     | 10 | 38   | 25 | 15 | 9    | 3   | 6  | 10  | 17  | 1     | 8                                | 14                               |
| K1284.2050510       | K1284.2070510       | right     | 5  | M10     | 10 | 38   | 25 | 15 | 9    | 3   | 6  | 10  | 17  | 1,3   | 8                                | 14                               |
| K1284.2050610       | K1284.2070610       | right     | 6  | M10     | 10 | 38   | 25 | 15 | 9    | 3   | 6  | 10  | 17  | 1,8   | 8                                | 14                               |
| K1284.2050512       | K1284.2070512       | right     | 5  | M12     | 12 | 47,8 | 30 | 19 | 10,8 | 3,6 | 8  | 12  | 19  | 1,3   | 8                                | 15                               |
| K1284.2050612       | K1284.2070612       | right     | 6  | M12     | 12 | 47,8 | 30 | 19 | 10,8 | 3,6 | 8  | 12  | 19  | 1,8   | 8                                | 15                               |
| K1284.2050812       | K1284.2070812       | right     | 8  | M12     | 12 | 47,8 | 30 | 19 | 10,8 | 3,6 | 8  | 12  | 19  | 2,3   | 8                                | 15                               |
| K1284.2050616       | K1284.2070616       | right     | 6  | M16     | 16 | 60,4 | 40 | 26 | 14,4 | 4,8 | 10 | 16  | 24  | 1,8   | 15                               | 35                               |
| K1284.2050816       | K1284.2070816       | right     | 8  | M16     | 16 | 60,4 | 40 | 26 | 14,4 | 4,8 | 10 | 16  | 24  | 2,3   | 15                               | 35                               |
| K1284.2051016       | K1284.2071016       | right     | 10 | M16     | 16 | 60,4 | 40 | 26 | 14,4 | 4,8 | 10 | 16  | 24  | 2,8   | 15                               | 35                               |
| K1284.20508201      | K1284.20708201      | right     | 8  | M20x1,5 | 20 | 70   | 50 | 30 | 18   | 6   | 12 | 20  | 30  | 2,3   | 20                               | 60                               |
| K1284.20510201      | K1284.20710201      | right     | 10 | M20x1,5 | 20 | 70   | 50 | 30 | 18   | 6   | 12 | 20  | 30  | 2,8   | 20                               | 60                               |
| K1284.20512201      | K1284.20712201      | right     | 12 | M20x1,5 | 20 | 70   | 50 | 30 | 18   | 6   | 12 | 20  | 30  | 3     | 20                               | 60                               |

## Cam-action indexing plungers

with stop, stainless steel



### Material:

Stainless steel 1.4305.

### Version:

Bright.

Indexing pin ground, not hardened.

### Sample order:

K1285.1040616

### Note:

Cam-action indexing plungers are used when the indexing pin should not project all the time. Turning the handle through 180° retracts the pin.

A notch ensures that the handle remains in this position.

A stop prevents the handle being rotated through more than 180° ensuring that the pin remains retracted.

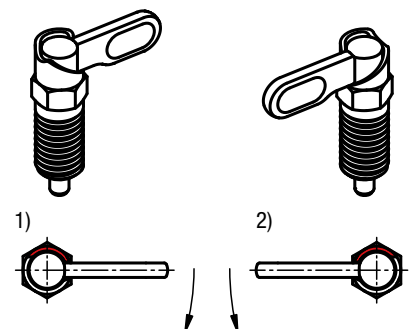
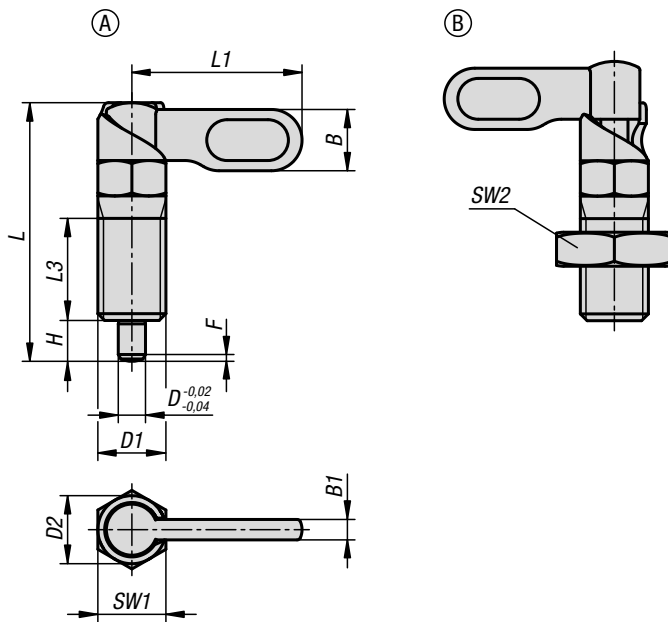
Selecting which side the stop is on defines the rotation direction of the plunger.

### Drawing reference:

Form A: grip uncoated without nut

Form B: grip uncoated with nut

- 1) stop left
- 2) stop right





# Cam-action indexing plungers

with stop, stainless steel



## KIPP Cam action indexing plunger, stainless steel, with stop

| Order No.<br>Form A | Order No.<br>Form B | Version 2 | D  | D1      | D2 | L    | L1 | L3 | B    | B1  | H  | SW1 | SW2  | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|---------------------|---------------------|-----------|----|---------|----|------|----|----|------|-----|----|-----|------|-------|--------------------------------------------------|------------------------------------------------|
| K1285.1040410       | K1285.1050410       | left      | 4  | M10     | 10 | 38   | 25 | 15 | 9    | 3   | 6  | 10  | -/17 | 1     | 8                                                | 14                                             |
| K1285.1040510       | K1285.1050510       | left      | 5  | M10     | 10 | 38   | 25 | 15 | 9    | 3   | 6  | 10  | -/17 | 1,3   | 8                                                | 14                                             |
| K1285.1040610       | K1285.1050610       | left      | 6  | M10     | 10 | 38   | 25 | 15 | 9    | 3   | 6  | 10  | -/17 | 1,8   | 8                                                | 14                                             |
| K1285.1040512       | K1285.1050512       | left      | 5  | M12     | 12 | 47,8 | 30 | 19 | 10,8 | 3,6 | 8  | 12  | -/19 | 1,3   | 8                                                | 15                                             |
| K1285.1040612       | K1285.1050612       | left      | 6  | M12     | 12 | 47,8 | 30 | 19 | 10,8 | 3,6 | 8  | 12  | -/19 | 1,8   | 8                                                | 15                                             |
| K1285.1040812       | K1285.1050812       | left      | 8  | M12     | 12 | 47,8 | 30 | 19 | 10,8 | 3,6 | 8  | 12  | -/19 | 2,3   | 8                                                | 15                                             |
| K1285.1040616       | K1285.1050616       | left      | 6  | M16     | 16 | 60,4 | 40 | 26 | 14,4 | 4,8 | 10 | 16  | -/24 | 1,8   | 15                                               | 35                                             |
| K1285.1040816       | K1285.1050816       | left      | 8  | M16     | 16 | 60,4 | 40 | 26 | 14,4 | 4,8 | 10 | 16  | -/24 | 2,3   | 15                                               | 35                                             |
| K1285.1041016       | K1285.1051016       | left      | 10 | M16     | 16 | 60,4 | 40 | 26 | 14,4 | 4,8 | 10 | 16  | -/24 | 2,8   | 15                                               | 35                                             |
| K1285.10408201      | K1285.10508201      | left      | 8  | M20x1,5 | 20 | 70   | 50 | 30 | 18   | 6   | 12 | 20  | -/30 | 2,3   | 20                                               | 60                                             |
| K1285.10410201      | K1285.10510201      | left      | 10 | M20x1,5 | 20 | 70   | 50 | 30 | 18   | 6   | 12 | 20  | -/30 | 2,8   | 20                                               | 60                                             |
| K1285.10412201      | K1285.10512201      | left      | 12 | M20x1,5 | 20 | 70   | 50 | 30 | 18   | 6   | 12 | 20  | -/30 | 3     | 20                                               | 60                                             |
| K1285.2040410       | K1285.2050410       | right     | 4  | M10     | 10 | 38   | 25 | 15 | 9    | 3   | 6  | 10  | -/17 | 1     | 8                                                | 14                                             |
| K1285.2040510       | K1285.2050510       | right     | 5  | M10     | 10 | 38   | 25 | 15 | 9    | 3   | 6  | 10  | -/17 | 1,3   | 8                                                | 14                                             |
| K1285.2040610       | K1285.2050610       | right     | 6  | M10     | 10 | 38   | 25 | 15 | 9    | 3   | 6  | 10  | -/17 | 1,8   | 8                                                | 14                                             |
| K1285.2040512       | K1285.2050512       | right     | 5  | M12     | 12 | 47,8 | 30 | 19 | 10,8 | 3,6 | 8  | 12  | -/19 | 1,3   | 8                                                | 15                                             |
| K1285.2040612       | K1285.2050612       | right     | 6  | M12     | 12 | 47,8 | 30 | 19 | 10,8 | 3,6 | 8  | 12  | -/19 | 1,8   | 8                                                | 15                                             |
| K1285.2040812       | K1285.2050812       | right     | 8  | M12     | 12 | 47,8 | 30 | 19 | 10,8 | 3,6 | 8  | 12  | -/19 | 2,3   | 8                                                | 15                                             |
| K1285.2040616       | K1285.2050616       | right     | 6  | M16     | 16 | 60,4 | 40 | 26 | 14,4 | 4,8 | 10 | 16  | -/24 | 1,8   | 15                                               | 35                                             |
| K1285.2040816       | K1285.2050816       | right     | 8  | M16     | 16 | 60,4 | 40 | 26 | 14,4 | 4,8 | 10 | 16  | -/24 | 2,3   | 15                                               | 35                                             |
| K1285.2041016       | K1285.2051016       | right     | 10 | M16     | 16 | 60,4 | 40 | 26 | 14,4 | 4,8 | 10 | 16  | -/24 | 2,8   | 15                                               | 35                                             |
| K1285.20408201      | K1285.20508201      | right     | 8  | M20x1,5 | 20 | 70   | 50 | 30 | 18   | 6   | 12 | 20  | -/30 | 2,3   | 20                                               | 60                                             |
| K1285.20410201      | K1285.20510201      | right     | 10 | M20x1,5 | 20 | 70   | 50 | 30 | 18   | 6   | 12 | 20  | -/30 | 2,8   | 20                                               | 60                                             |
| K1285.20412201      | K1285.20512201      | right     | 12 | M20x1,5 | 20 | 70   | 50 | 30 | 18   | 6   | 12 | 20  | -/30 | 3     | 20                                               | 60                                             |

## Mounting brackets

aluminium



### Material:

Aluminium 3.2163.

### Version:

Black.

### Sample order:

K0638.308

### Note:

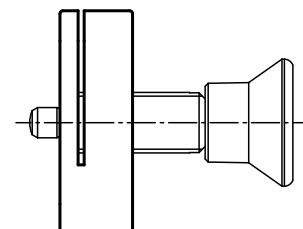
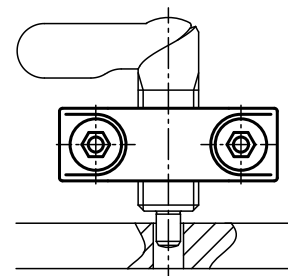
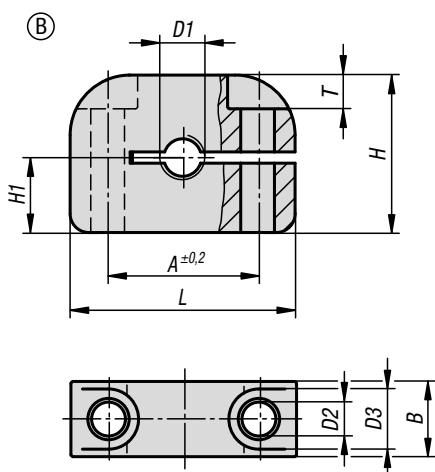
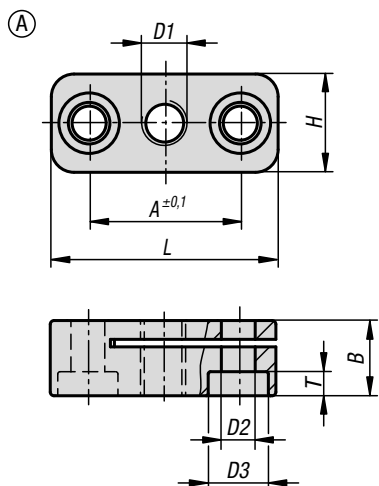
These mounting brackets are an assembly aid for cam-action and other indexing plungers and expand the application field. They can also be used with other elements that have a suitable thread.

Fastened using DIN 912 / ISO 4762 cap screws.

### Drawing reference:

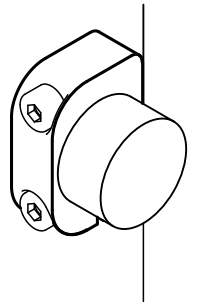
Form A: fastening holes parallel to thread

Form B: fastening holes perpendicular to thread



# Mounting brackets

aluminium



## KIPP Mounting bracket aluminium

| Order No.  | Form | D1      | D2  | D3 | A  | B  | H  | H1 | L  | T   |
|------------|------|---------|-----|----|----|----|----|----|----|-----|
| K0638.306  | A    | M6      | 4,5 | 8  | 20 | 10 | 13 | -  | 30 | 3,2 |
| K0638.3061 | A    | M6x0,75 | 4,5 | 8  | 20 | 10 | 13 | -  | 30 | 3,2 |
| K0638.308  | A    | M8      | 4,5 | 8  | 20 | 10 | 13 | -  | 30 | 3,2 |
| K0638.3081 | A    | M8x1    | 4,5 | 8  | 20 | 10 | 13 | -  | 30 | 3,2 |
| K0638.310  | A    | M10     | 5,5 | 10 | 24 | 12 | 18 | -  | 37 | 3,9 |
| K0638.3101 | A    | M10x1   | 5,5 | 10 | 24 | 12 | 18 | -  | 37 | 3,9 |
| K0638.312  | A    | M12     | 5,5 | 10 | 24 | 12 | 18 | -  | 37 | 3,9 |
| K0638.3121 | A    | M12x1,5 | 5,5 | 10 | 24 | 12 | 18 | -  | 37 | 3,9 |
| K0638.316  | A    | M16     | 5,5 | 10 | 32 | 15 | 25 | -  | 46 | 3,9 |
| K0638.3161 | A    | M16x1,5 | 5,5 | 10 | 32 | 15 | 25 | -  | 46 | 3,9 |
| K0638.320  | A    | M20     | 5,5 | 10 | 32 | 15 | 25 | -  | 46 | 3,9 |
| K0638.3201 | A    | M20x1,5 | 5,5 | 10 | 32 | 15 | 25 | -  | 46 | 3,9 |
| K0638.406  | B    | M6      | 4,5 | 8  | 20 | 10 | 21 | 10 | 30 | 4,5 |
| K0638.4061 | B    | M6x0,75 | 4,5 | 8  | 20 | 10 | 21 | 10 | 30 | 4,5 |
| K0638.408  | B    | M8      | 4,5 | 8  | 20 | 10 | 21 | 10 | 30 | 4,5 |
| K0638.4081 | B    | M8x1    | 4,5 | 8  | 20 | 10 | 21 | 10 | 30 | 4,5 |
| K0638.410  | B    | M10     | 5,5 | 10 | 24 | 12 | 26 | 13 | 36 | 5,5 |
| K0638.4101 | B    | M10x1   | 5,5 | 10 | 24 | 12 | 26 | 13 | 36 | 5,5 |
| K0638.412  | B    | M12     | 5,5 | 10 | 24 | 12 | 26 | 13 | 36 | 5,5 |
| K0638.4121 | B    | M12x1,5 | 5,5 | 10 | 24 | 12 | 26 | 13 | 36 | 5,5 |
| K0638.416  | B    | M16     | 5,5 | 10 | 32 | 15 | 29 | 17 | 46 | 5,5 |
| K0638.4161 | B    | M16x1,5 | 5,5 | 10 | 32 | 15 | 29 | 17 | 46 | 5,5 |
| K0638.420  | B    | M20     | 5,5 | 10 | 32 | 15 | 29 | 17 | 46 | 5,5 |
| K0638.4201 | B    | M20x1,5 | 5,5 | 10 | 32 | 15 | 29 | 17 | 46 | 5,5 |

# Mounting brackets



**Material:**  
Steel.

**Version:**  
Black oxidised.

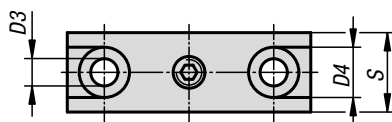
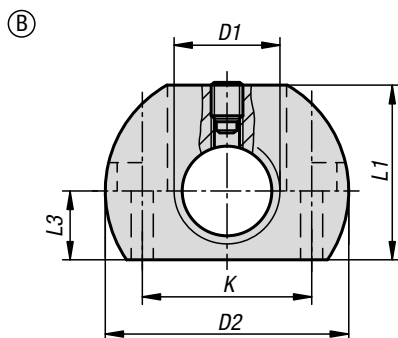
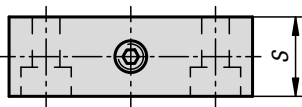
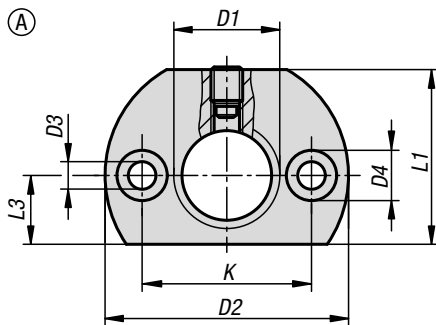
**Sample order:**  
K0638.116

**Note:**

These mounting brackets are assembly aids for cam-action indexing plungers and extend their application field. They can also be used with other indexing plungers or other elements that have a suitable thread. Fastened using cap screws.

**Drawing reference:**

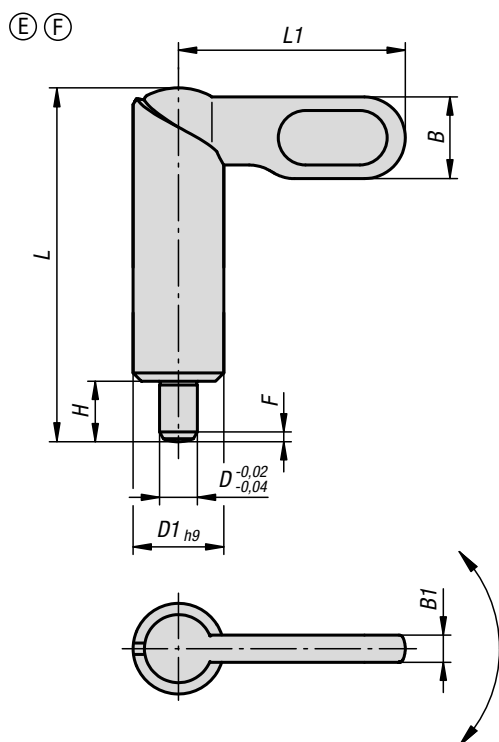
Form A: fastening holes parallel to indexing plunger  
Form B: fastening holes perpendicular to indexing plunger



## KIPP Mounting brackets

| Order No.  | Form | D1      | D2 | D3  | D4 | K  | L1 | L3 | S  |
|------------|------|---------|----|-----|----|----|----|----|----|
| K0638.112  | A    | M12     | 36 | 5,5 | 10 | 24 | 25 | 10 | 12 |
| K0638.1121 | A    | M12x1,5 | 36 | 5,5 | 10 | 24 | 25 | 10 | 12 |
| K0638.116  | A    | M16     | 46 | 5,5 | 10 | 32 | 33 | 13 | 15 |
| K0638.1161 | A    | M16x1,5 | 46 | 5,5 | 10 | 32 | 33 | 13 | 15 |
| K0638.120  | A    | M20     | 46 | 5,5 | 10 | 32 | 33 | 13 | 15 |
| K0638.1201 | A    | M20x1,5 | 46 | 5,5 | 10 | 32 | 33 | 13 | 15 |
| K0638.212  | B    | M12     | 36 | 5,5 | 10 | 24 | 25 | 10 | 12 |
| K0638.2121 | B    | M12x1,5 | 36 | 5,5 | 10 | 24 | 25 | 10 | 12 |
| K0638.216  | B    | M16     | 46 | 5,5 | 10 | 32 | 33 | 13 | 15 |
| K0638.2161 | B    | M16x1,5 | 46 | 5,5 | 10 | 32 | 33 | 13 | 15 |
| K0638.220  | B    | M20     | 46 | 5,5 | 10 | 32 | 33 | 13 | 15 |
| K0638.2201 | B    | M20x1,5 | 46 | 5,5 | 10 | 32 | 33 | 13 | 15 |

## Cam-action indexing plungers

**Material:**

Handle 1.0503.

Pin steel grade 5.8.

Sleeve 1.0403.

**Version:**

Black oxidised.

Pin hardened and ground.

**Sample order:**

K0639.091220

**Note:**

Cam-action indexing plungers are used when the indexing pin should not project all the time. Turning the handle through 180° retracts the pin.

A notch ensures that the handle remains in this position.

**Drawing reference:**

Form E: grip uncoated, smooth sleeve

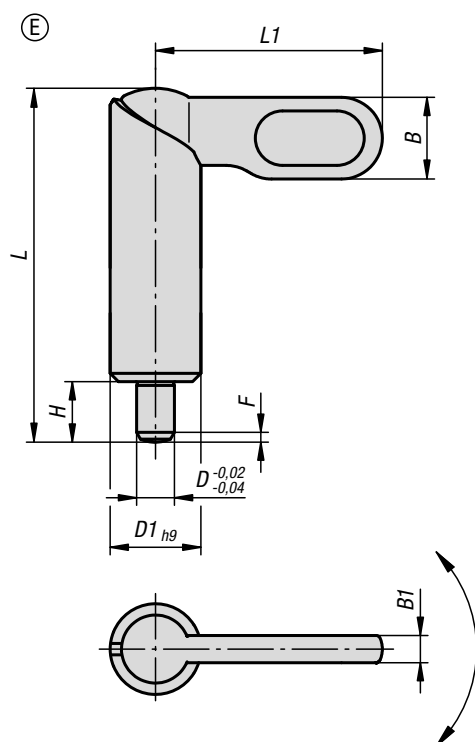
Form F: grip powder-coated, smooth sleeve

## KIPP Cam-action indexing plungers

| Order No.<br>Form E | Order No.<br>Form F | D  | D1 | L    | L1 | B    | B1  | H  | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|---------------------|---------------------|----|----|------|----|------|-----|----|-------|--------------------------------------------------|------------------------------------------------|
| K0639.080410        | K0639.090410        | 4  | 10 | 38   | 25 | 9    | 3   | 6  | 1     | 8                                                | 14                                             |
| K0639.080510        | K0639.090510        | 5  | 10 | 38   | 25 | 9    | 3   | 6  | 1,3   | 8                                                | 14                                             |
| K0639.080610        | K0639.090610        | 6  | 10 | 38   | 25 | 9    | 3   | 6  | 1,8   | 8                                                | 14                                             |
| K0639.080512        | K0639.090512        | 5  | 12 | 46,8 | 30 | 10,8 | 3,6 | 8  | 1,3   | 8                                                | 15                                             |
| K0639.080612        | K0639.090612        | 6  | 12 | 46,8 | 30 | 10,8 | 3,6 | 8  | 1,8   | 8                                                | 15                                             |
| K0639.080812        | K0639.090812        | 8  | 12 | 46,8 | 30 | 10,8 | 3,6 | 8  | 2,3   | 8                                                | 15                                             |
| K0639.080616        | K0639.090616        | 6  | 16 | 60,4 | 40 | 14,4 | 4,8 | 10 | 1,8   | 15                                               | 35                                             |
| K0639.080816        | K0639.090816        | 8  | 16 | 60,4 | 40 | 14,4 | 4,8 | 10 | 2,3   | 15                                               | 35                                             |
| K0639.081016        | K0639.091016        | 10 | 16 | 60,4 | 40 | 14,4 | 4,8 | 10 | 2,8   | 15                                               | 35                                             |
| K0639.080820        | K0639.090820        | 8  | 20 | 70   | 50 | 18   | 6   | 12 | 2,3   | 20                                               | 60                                             |
| K0639.081020        | K0639.091020        | 10 | 20 | 70   | 50 | 18   | 6   | 12 | 2,8   | 20                                               | 60                                             |
| K0639.081220        | K0639.091220        | 12 | 20 | 70   | 50 | 18   | 6   | 12 | 3     | 20                                               | 60                                             |

## Cam-action indexing plungers

stainless steel

**Material:**

Handle stainless steel 1.4308.

Indexing pin stainless steel 1.4305.

Sleeve stainless steel 1.4301.

**Version:**

Bright.

Indexing pin ground, not hardened.

**Sample order:**

K0640.1081220

**Note:**

Cam-action indexing plungers are used when the indexing pin should not project all the time. Turning the handle through 180° retracts the pin.

A notch ensures that the handle remains in this position.

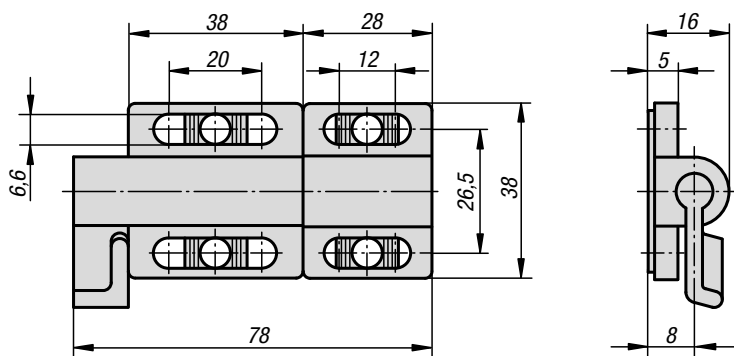
**Drawing reference:**

Form E: grip uncoated, smooth sleeve

## KIPP Cam-action indexing plungers stainless steel

| Order No.     | Form | D  | D1 | L    | L1 | B    | B1  | H  | Fx30° | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|---------------|------|----|----|------|----|------|-----|----|-------|--------------------------------------------------|------------------------------------------------|
| K0640.1080410 | E    | 4  | 10 | 38   | 25 | 9    | 3   | 6  | 1     | 8                                                | 14                                             |
| K0640.1080510 | E    | 5  | 10 | 38   | 25 | 9    | 3   | 6  | 1,3   | 8                                                | 14                                             |
| K0640.1080610 | E    | 6  | 10 | 38   | 25 | 9    | 3   | 6  | 1,8   | 8                                                | 14                                             |
| K0640.1080512 | E    | 5  | 12 | 46,8 | 30 | 10,8 | 3,6 | 8  | 1,3   | 8                                                | 15                                             |
| K0640.1080612 | E    | 6  | 12 | 46,8 | 30 | 10,8 | 3,6 | 8  | 1,8   | 8                                                | 15                                             |
| K0640.1080812 | E    | 8  | 12 | 46,8 | 30 | 10,8 | 3,6 | 8  | 2,3   | 8                                                | 15                                             |
| K0640.1080616 | E    | 6  | 16 | 60,4 | 40 | 14,4 | 4,8 | 10 | 1,8   | 15                                               | 35                                             |
| K0640.1080816 | E    | 8  | 16 | 60,4 | 40 | 14,4 | 4,8 | 10 | 2,3   | 15                                               | 35                                             |
| K0640.1081016 | E    | 10 | 16 | 60,4 | 40 | 14,4 | 4,8 | 10 | 2,8   | 15                                               | 35                                             |
| K0640.1080820 | E    | 8  | 20 | 70   | 50 | 18   | 6   | 12 | 2,3   | 20                                               | 60                                             |
| K0640.1081020 | E    | 10 | 20 | 70   | 50 | 18   | 6   | 12 | 2,8   | 20                                               | 60                                             |
| K0640.1081220 | E    | 12 | 20 | 70   | 50 | 18   | 6   | 12 | 3     | 20                                               | 60                                             |

## Barrel slide bolts



### Material:

Housing die-cast zinc.  
Grip, underlay and slot tabs thermoplastic PA.  
Bolt stainless steel.

### Version:

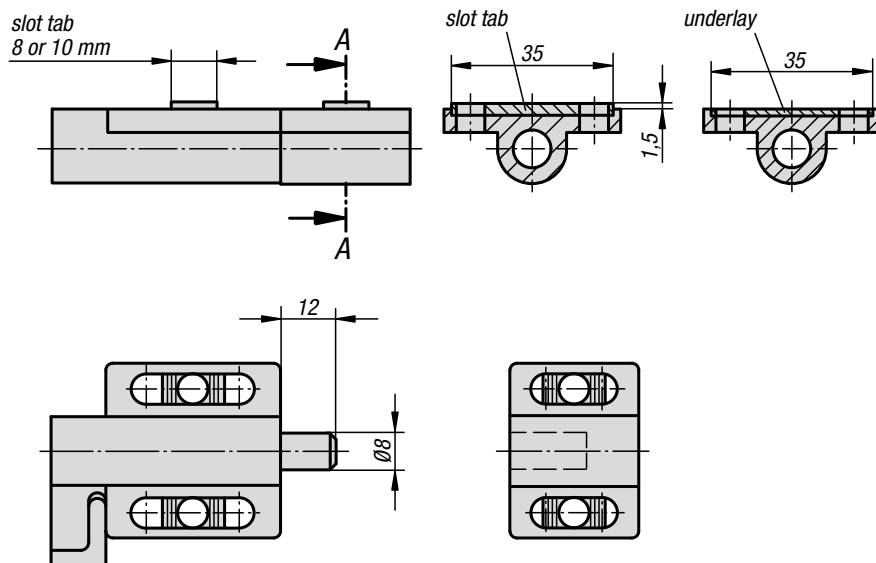
Housing painted silver.  
Grip, underlay and slot tabs black.  
Bolt bright.

### Sample order:

K0349.38038028

### Note:

Spring loaded bolt.  
Supplied with:  
- 2 underlays for mounting on level surfaces.  
- 2 of each tabs for mounting on profiles with 8 or 10 mm slots.

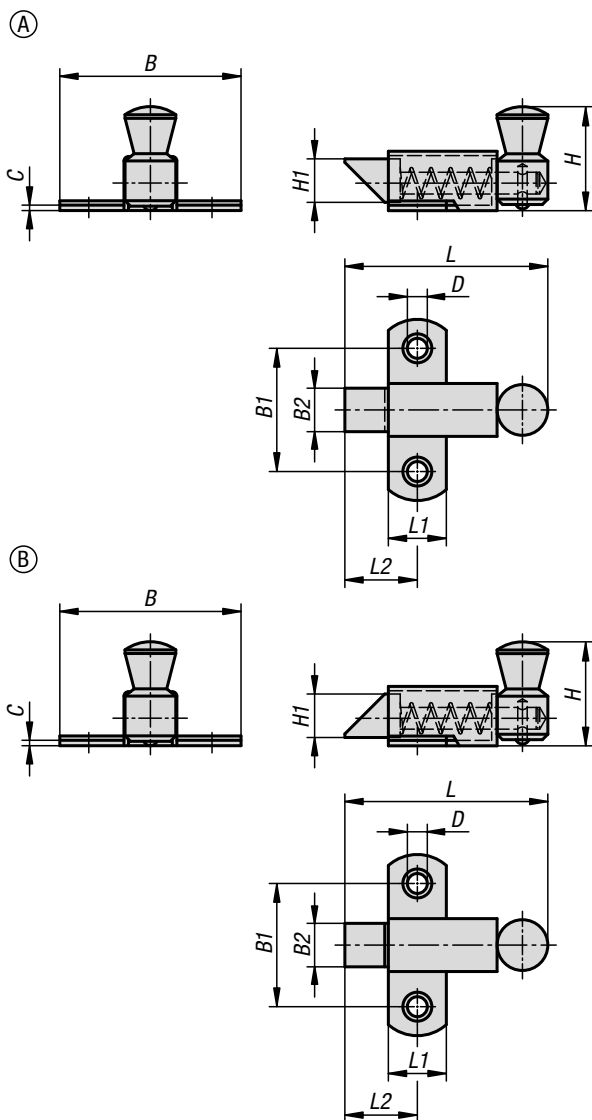


### KIPP Barrel slide bolts

| Order No.      | Spring force<br>initial pressure<br>F1 approx. N | Spring force<br>final pressure<br>F2 approx. N |
|----------------|--------------------------------------------------|------------------------------------------------|
| K0349.38038028 | 5                                                | 15                                             |

## Barrel locks with return spring steel or brass

bevel up or down



### Material:

Steel or brass.

### Version:

Steel zinc-plated.  
Brass chromed.

### Sample order:

K1668.056500

### Note:

Barrel locks with return spring can be easily screwed onto doors, hatches and hoods. These locks are available in two different variants: bevelled upward or bevelled downward. The bevelled surface allows the application to be closed or opened without actuating the grip. The integrated return spring always brings the grip back to its original position.

### Method of operation:

When the grip is pushed, the barrel moves into the open position and the door can be opened. When the door is pushed to, it is locked automatically by the bevel.

### Accessories:

Locking plate steel or brass K1669.

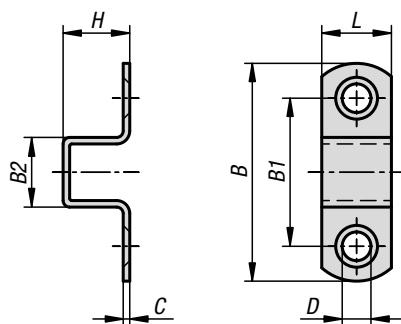
## KIPP Barrel locks with return spring steel or brass

| Order No.<br>steel | Order No.<br>brass | Form | Form-Type  | B  | B1 | B2 | C   | D   | H    | H1 | L    | L1 | L2   |
|--------------------|--------------------|------|------------|----|----|----|-----|-----|------|----|------|----|------|
| K1668.036350       | K1668.036351       | A    | bevel up   | 35 | 23 | 8  | 1,2 | 3,5 | 19   | 8  | 36,5 | 11 | 13,5 |
| K1668.056500       | K1668.056501       | A    | bevel up   | 50 | 34 | 12 | 1,5 | 4,8 | 29,5 | 12 | 56   | 16 | 19   |
| K1668.073700       | K1668.073701       | A    | bevel up   | 70 | 45 | 16 | 2   | 7   | 38   | 16 | 73   | 22 | 28   |
| K1668.136350       | K1668.136351       | B    | bevel down | 35 | 23 | 8  | 1,2 | 3,5 | 19   | 8  | 36,5 | 11 | 13,5 |
| K1668.156500       | K1668.156501       | B    | bevel down | 50 | 34 | 12 | 1,5 | 4,8 | 29,5 | 12 | 56   | 16 | 19   |
| K1668.173700       | K1668.173701       | B    | bevel down | 70 | 45 | 16 | 2   | 7   | 38   | 16 | 73   | 22 | 28   |



## Catch plates steel or brass

for barrel locks with return spring



### Material:

Steel or brass.

### Version:

Steel zinc-plated.  
Brass chromed.

### Sample order:

K1669.16500

### Note:

The catch plates can be simply screwed onto the application.

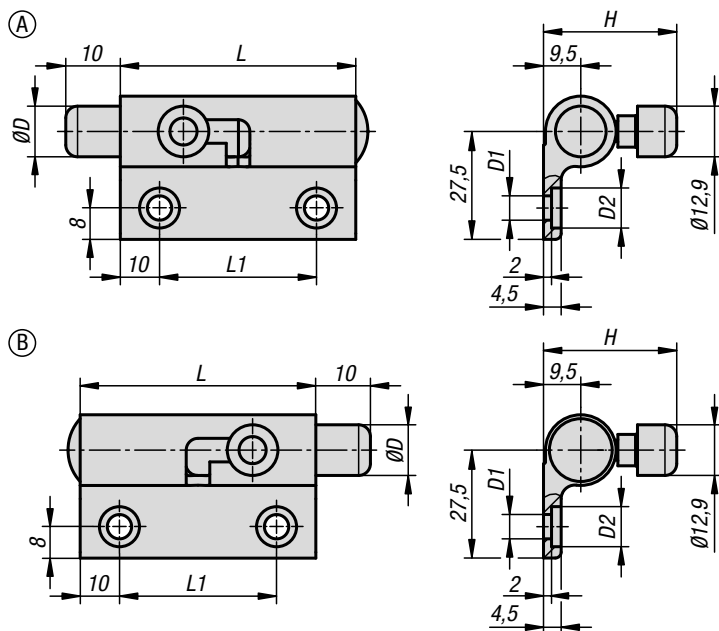


## KIPP Catch plates steel or brass, for lock grip with return spring

| Order No.<br>steel | Order No.<br>brass | B    | B1   | B2   | C   | D   | H    | L  |
|--------------------|--------------------|------|------|------|-----|-----|------|----|
| K1669.11350        | K1669.11351        | 35   | 23   | 11,5 | 1,2 | 3,5 | 11,5 | 11 |
| K1669.16500        | K1669.16501        | 50   | 34   | 16   | 1,5 | 4,8 | 16   | 16 |
| K1669.22680        | K1669.22651        | 68,5 | 43,5 | 21   | 2   | 7   | 21   | 22 |

## Barrel locks with return spring aluminium

grip to left or right



### Material:

Barrel lock aluminium.  
Spring stainless steel.

### Sample order:

K1691.04036

### Note:

Barrel locks with return spring can be easily screwed onto doors, hatches and hoods. These locks are available in two different variants for left-opening and right-opening doors. The barrel can be latched in the open position. The integrated return spring always brings the grip back to its original position.

### Method of operation:

When the grip is pushed, the barrel moves into the open position and the door can be opened. If the barrel is not latched in open position, it returns automatically to its original position. The door can be closed only if the grip is held in the open position.

### Accessories:

Locking plate aluminium K1692.

## KIPP Barrel locks with return spring aluminium

| Order No.   | Form | Form-Type | B    | D    | D1  | D2   | H  | L  | L1 |
|-------------|------|-----------|------|------|-----|------|----|----|----|
| K1691.04036 | A    | left      | 36,5 | 12,9 | 6,2 | 10,2 | 34 | 60 | 40 |
| K1691.14036 | B    | right     | 36,5 | 12,9 | 6,2 | 10,2 | 34 | 60 | 40 |

Catch plates aluminium

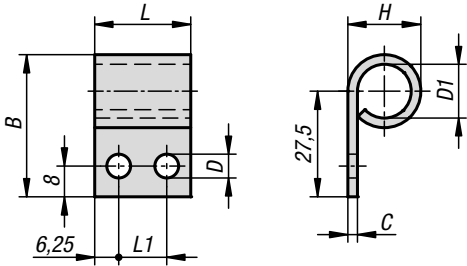
for barrel locks with return spring



**Material:**  
Aluminium.

**Sample order:**  
K1692.2537

**Note:**  
The catch plates can be simply screwed onto the application.



KIPP Catch plate aluminium, for barrel locks with return spring

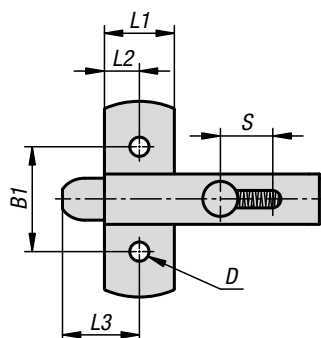
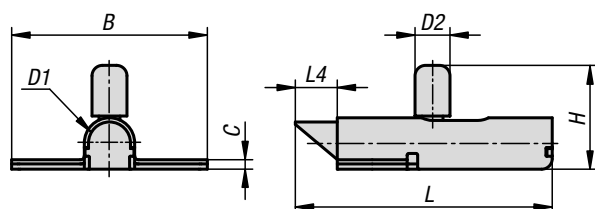
| Order No.  | B  | C   | D   | D1 | H  | L  | L1   |
|------------|----|-----|-----|----|----|----|------|
| K1692.2537 | 37 | 2,5 | 6,2 | 14 | 19 | 25 | 12,5 |

## Barrel locks with return spring stainless steel

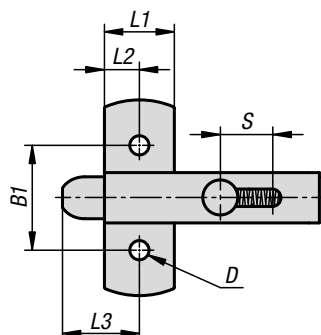
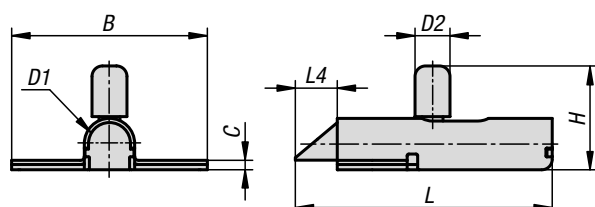
lock grip upward or downward



(A)



(B)



### Material:

Stainless steel

### Sample order:

K1693.07356

### Note:

Barrel locks with return spring can be easily screwed onto doors, hatches and hoods. These locks are available in two different variants: bevelled upward or bevelled downward. The bevelled surface allows the application to be closed or opened without actuating the grip. The integrated return spring always brings the grip back to its original position.

### Method of operation:

When the grip is pushed, the barrel moves into the open position and the door can be opened. When the door is pushed to, it is locked automatically by the bevel.

### KIPP Barrel locks with return spring stainless steel

| Order No.   | Form | Form-Type  | B  | B1 | C   | D   | D1 | D2 | H    | Travel<br>S | L    | L1 | L2 | L3 | L4 |
|-------------|------|------------|----|----|-----|-----|----|----|------|-------------|------|----|----|----|----|
| K1693.07356 | A    | bevel up   | 56 | 30 | 2,7 | 5,5 | 12 | 10 | 29,7 | 13          | 73,5 | 20 | 10 | 22 | 12 |
| K1693.17356 | B    | bevel down | 56 | 30 | 2,7 | 5,5 | 12 | 10 | 29,7 | 13          | 73,5 | 20 | 10 | 22 | 12 |



A large rectangular area filled with a fine grid of light gray lines, intended for taking notes or drawing.



# Ball lock pins



## Material:

Grip and push button thermoplastic.  
Metal parts stainless steel.

## Version:

Grip black.  
Push button traffic red.  
Steel parts bright.

## Sample order:

K0363.3806050  
(include length L e.g. 050 for L = 50 mm.)

## Note:

Ball lock pins are used for easy fastening or joining of components or workpieces.  
The two balls are disengaged by pressing the push button and the pin can be slipped into holes in the workpieces.  
Release the button to lock the balls and secure the connection.  
Form A is suitable for applications where high demands and precision are required.

Shear force double shear (F) =  $S \cdot \tau \cdot aB$  max.

The values given for the shear force are the theoretical breaking load.

These are non-binding reference values without consideration of safety factors and exclude any liability.  
The values given are for information purposes only and do not constitute a legally binding assurance of properties.

The load values have been calculated in accordance with DIN 50141. Each user must determine individually whether the ball lock pin is suitable for the respective application.

Different materials in which the ball lock pins are used, weather conditions and wear can influence the determined values.

## Features:

Form A:

Pin ground, metal collar, high axial pull-out force

Form B:

Pin h9, plastic collar, low axial pull-out force

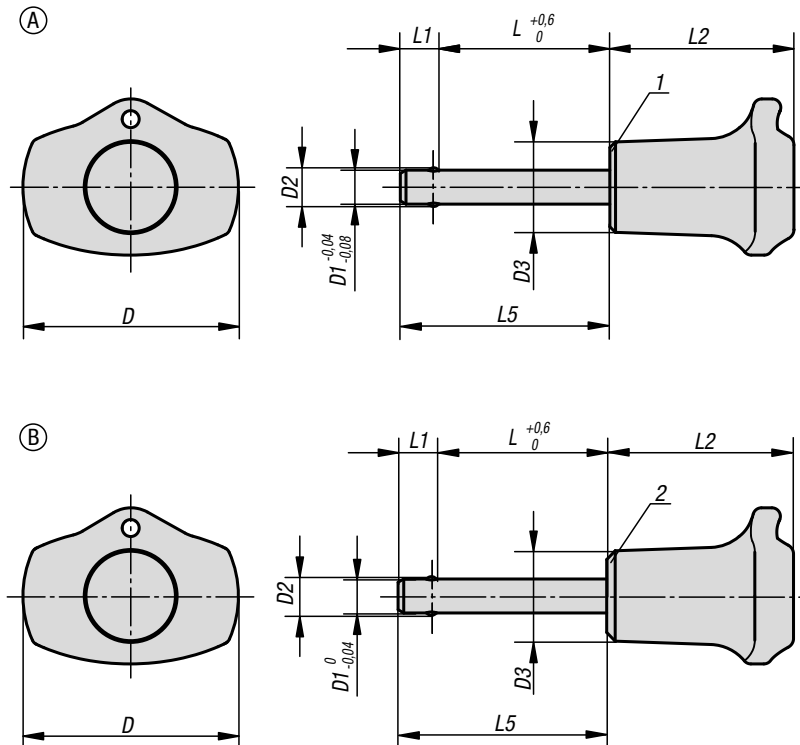
## Accessories:

Bushes for ball lock pins K0724

Safety spiral cable K0367

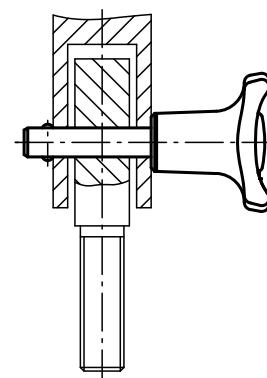
Retaining cable with loop K0367

Key ring K0367



## Drawing reference:

- 1) Metal collar
- 2) Plastic collar



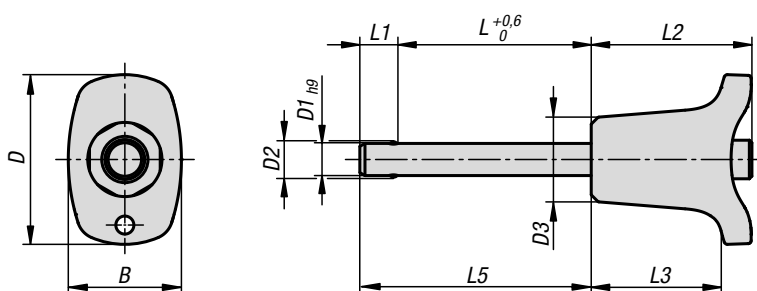
## KIPP Ball lock pins, Form A, metal collar

| Order No.     | D  | D1 | D2   | D3 | L                          | L1 | L2   | L5                         | Receiving hole<br>H11 | Shearing force<br>double shear<br>max.kN |
|---------------|----|----|------|----|----------------------------|----|------|----------------------------|-----------------------|------------------------------------------|
| K0363.3805*** | 38 | 5  | 5,5  | 16 | 10/15/20/25/30             | 6  | 32,5 | 16/21/26/31/36             | 5                     | 15                                       |
| K0363.3806*** | 38 | 6  | 6,85 | 16 | 10/15/20/25/30/35/40/45/50 | 7  | 32,5 | 17/22/27/32/37/42/47/52/57 | 6                     | 22                                       |
| K0363.3808*** | 38 | 8  | 9,5  | 16 | 20/25/30/35/40/45/50       | 8  | 32,5 | 28/33/38/43/48/53/58       | 8                     | 38                                       |
| K0363.4710*** | 47 | 10 | 12   | 23 | 20/25/30/35/40/45/50/60    | 9  | 40   | 29/34/39/44/49/54/59/69    | 10                    | 60                                       |
| K0363.4712*** | 47 | 12 | 14,5 | 23 | 25/30/35/40/45/50/60/70/80 | 10 | 40   | 35/40/45/50/55/60/70/80/90 | 12                    | 86                                       |
| K0363.4716*** | 47 | 16 | 19   | 23 | 30/35/40/45/50/60/70/80    | 13 | 40   | 43/48/53/58/63/73/83/93    | 16                    | 153                                      |

## KIPP Ball lock pins, Form B, plastic collar

| Order No.      | D  | D1 | D2   | D3 | L           | L1  | L2 | L5                  | Receiving hole<br>H11 | Shearing force<br>double shear<br>max.kN |
|----------------|----|----|------|----|-------------|-----|----|---------------------|-----------------------|------------------------------------------|
| K0363.13805*** | 38 | 5  | 5,5  | 16 | 15/20/25/30 | 5,9 | 33 | 20,9/25,9/30,9/35,9 | 5                     | 15                                       |
| K0363.13806*** | 38 | 6  | 6,85 | 16 | 30/40/50    | 6,8 | 33 | 36,8/46,8/56,8      | 6                     | 22                                       |
| K0363.13808*** | 38 | 8  | 9,5  | 16 | 30/40/50    | 7,8 | 33 | 37,8/47,8/57,8      | 8                     | 38                                       |

# Ball lock pins



## Material:

Grip thermoplastic.  
Push button 1.4305 stainless steel.  
Pin 1.4305 stainless steel.  
Balls 1.4125 stainless steel.  
Spring 1.4310 stainless steel wire.

## Version:

Grip black grey or traffic red RAL 3020.  
Stainless steel bright.

## Sample order:

K0792.002606050  
(include length L e.g. 050 for L = 50 mm.)

## Note:

Ball lock pins are used for easy fastening or joining of components or workpieces.  
The two balls are disengaged by pressing the push button and the pin can be slipped into holes in the workpieces. When the push button is released, the balls lock the connection securely. If required, the ball lock pins can be fitted with a retaining cable.

Shear force double shear ( $F$ ) =  $S \cdot \tau$  aB max.

The values given for the shear force are the theoretical breaking load.  
These are non-binding reference values without consideration of safety factors and exclude any liability.  
The values given are for information purposes only and do not constitute a legally binding assurance of properties.

The load values have been calculated in accordance with DIN 50141. Each user must determine individually whether the ball lock pin is suitable for the respective application.

Different materials in which the ball lock pins are used, weather conditions and wear can influence the determined values.

## Accessories:

Bushes for ball lock pins K0724  
Safety spiral cable K0367  
Retaining cable with loop K0367  
Key ring K0367





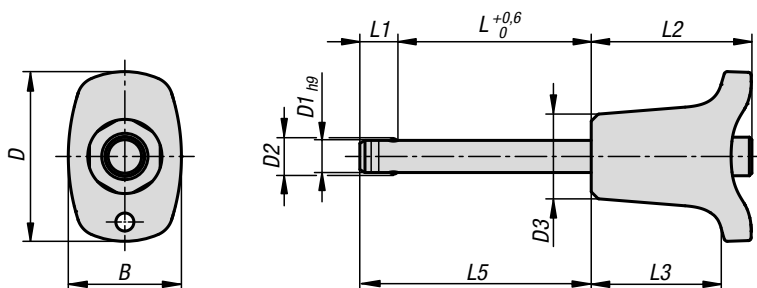
## KIPP Ball lock pins

| Order No.<br>black | B    | D    | D1 | D2   | D3   | L                          | L1   | L2   | L3   | L5                                           | Receiving<br>hole<br>H11 | Shearing force<br>double shear<br>max.kN |
|--------------------|------|------|----|------|------|----------------------------|------|------|------|----------------------------------------------|--------------------------|------------------------------------------|
| K0792.002605***    | 17,6 | 26,4 | 5  | 5,5  | 13,2 | 10/15/20/25/30             | 5,9  | 25   | 20,2 | 15,9/20,9/25,9/30,9/35,9                     | 5                        | 15                                       |
| K0792.002606***    | 17,6 | 26,4 | 6  | 6,85 | 13,2 | 10/15/20/25/30/35/40/45/50 | 6,8  | 25   | 20,2 | 16,8/21,8/26,8/31,8/36,8/41,8/46,8/51,8/56,8 | 6                        | 22                                       |
| K0792.003308***    | 23   | 33,2 | 8  | 9,5  | 17,3 | 20/25/30/35/40/45/50       | 7,8  | 33   | 26,1 | 27,8/32,8/37,8/42,8/47,8/52,8/57,8           | 8                        | 38                                       |
| K0792.003310***    | 23   | 33,2 | 10 | 12   | 17,3 | 20/25/30/35/40/45/50/60    | 8,9  | 33   | 26,1 | 28,9/33,9/38,9/43,9/48,9/53,9/58,9/68,9      | 10                       | 60                                       |
| K0792.004612***    | 33   | 45,9 | 12 | 14,5 | 26,3 | 25/30/35/40/45/50/60/70/80 | 9,9  | 39,5 | 31,3 | 34,9/39,9/44,9/49,9/54,9/59,9/69,9/79,9/89,9 | 12                       | 86                                       |
| K0792.004616***    | 33   | 45,9 | 16 | 19   | 26,3 | 30/35/40/45/50/60/70/80    | 13,1 | 39,5 | 31,3 | 43,1/48,1/53,1/58,1/63,1/73,1/83,1/93,1      | 16                       | 153                                      |

| Order No.<br>red RAL 3020 | B    | D    | D1 | D2   | D3   | L                          | L1   | L2   | L3   | L5                                           | Receiving<br>hole<br>H11 | Shearing force<br>double shear<br>max.kN |
|---------------------------|------|------|----|------|------|----------------------------|------|------|------|----------------------------------------------|--------------------------|------------------------------------------|
| K0792.00842605***         | 17,6 | 26,4 | 5  | 5,5  | 13,2 | 10/15/20/25/30             | 5,9  | 25   | 20,2 | 15,9/20,9/25,9/30,9/35,9                     | 5                        | 15                                       |
| K0792.00842606***         | 17,6 | 26,4 | 6  | 6,85 | 13,2 | 10/15/20/25/30/35/40/45/50 | 6,8  | 25   | 20,2 | 16,8/21,8/26,8/31,8/36,8/41,8/46,8/51,8/56,8 | 6                        | 22                                       |
| K0792.00843308***         | 23   | 33,2 | 8  | 9,5  | 17,3 | 20/25/30/35/40/45/50       | 7,8  | 33   | 26,1 | 27,8/32,8/37,8/42,8/47,8/52,8/57,8           | 8                        | 38                                       |
| K0792.00843310***         | 23   | 33,2 | 10 | 12   | 17,3 | 20/25/30/35/40/45/50/60    | 8,9  | 33   | 26,1 | 28,9/33,9/38,9/43,9/48,9/53,9/58,9/68,9      | 10                       | 60                                       |
| K0792.00844612***         | 33   | 45,9 | 12 | 14,5 | 26,3 | 25/30/35/40/45/50/60/70/80 | 9,9  | 39,5 | 31,3 | 34,9/39,9/44,9/49,9/54,9/59,9/69,9/79,9/89,9 | 12                       | 86                                       |
| K0792.00844616***         | 33   | 45,9 | 16 | 19   | 26,3 | 30/35/40/45/50/60/70/80    | 13,1 | 39,5 | 31,3 | 43,1/48,1/53,1/58,1/63,1/73,1/83,1/93,1      | 16                       | 153                                      |

## Ball lock pins

with high shear strength



### Material:

Grip thermoplastic.  
Push button 1.4305 stainless steel.  
Pin 1.4542 stainless steel.  
Balls 1.4125 stainless steel.  
Spring 1.4310 stainless steel wire.

### Version:

Grip black grey or traffic red RAL 3020.  
Stainless steel bright.

### Sample order:

K0792.012606050  
(include length L e.g. 050 for L = 50 mm.)

### Note:

Ball lock pins are used for easy fastening or joining of components.  
The two balls are disengaged by pressing the push button and the pin can be slipped into holes in the workpieces. When the push button is released, the balls lock the connection securely.

Shear force double shear (F) = S · τ aB max.

The values given for the shear force are the theoretical breaking load.  
These are non-binding reference values without consideration of safety factors and exclude any liability.  
The values given are for information purposes only and do not constitute a legally binding assurance of properties.

The load values have been calculated in accordance with DIN 50141. Each user must determine individually whether the ball lock pin is suitable for the respective application.

Different materials in which the ball lock pins are used, weather conditions and wear can influence the determined values.

Ball lock pins with high shear strength are identified by a groove marking on the pin.

### Advantages:

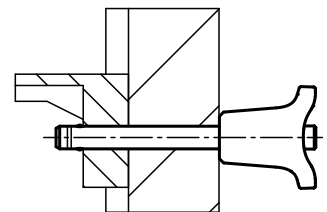
Higher loading in comparison to standard ball lock pins.  
The pins made from 1.4542 stainless steel is hardened, has a higher shear resistance and is extremely durable.

### Accessories:

Bushes for ball lock pins K0724  
Safety spiral cable K0367  
Retaining cable with loop K0367  
Key ring K0367

# Ball lock pins

with high shear strength



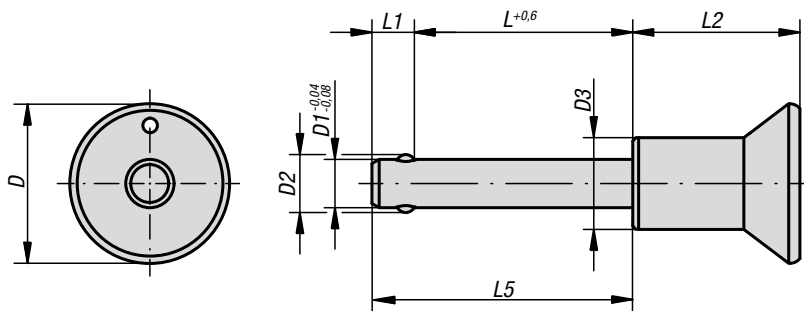
## KIPP Ball lock pins with high shear strength

| Order No.<br>black | B    | D    | D1 | D2   | D3   | L                          | L1   | L2   | L3   | L5                                           | Receiving<br>hole<br>H11 | Shearing force<br>double shear<br>max.kN |
|--------------------|------|------|----|------|------|----------------------------|------|------|------|----------------------------------------------|--------------------------|------------------------------------------|
| K0792.012605***    | 17,6 | 26,4 | 5  | 5,5  | 13,2 | 10/15/20/25/30             | 5,9  | 25   | 20,2 | 15,9/20,9/25,9/30,9/35,9                     | 5                        | 24                                       |
| K0792.012606***    | 17,6 | 26,4 | 6  | 6,85 | 13,2 | 10/15/20/25/30/35/40/45/50 | 6,8  | 25   | 20,2 | 16,8/21,8/26,8/31,8/36,8/41,8/46,8/51,8/56,8 | 6                        | 35                                       |
| K0792.013308***    | 23   | 33,2 | 8  | 9,5  | 17,3 | 20/25/30/35/40/45/50       | 7,8  | 33   | 26,1 | 27,8/32,8/37,8/42,8/47,8/52,8/57,8           | 8                        | 63                                       |
| K0792.013310***    | 23   | 33,2 | 10 | 12   | 17,3 | 20/25/30/35/40/45/50/60    | 8,9  | 33   | 26,1 | 28,9/33,9/38,9/43,9/48,9/53,9/58,9/68,9      | 10                       | 100                                      |
| K0792.014612***    | 33   | 45,9 | 12 | 14,5 | 26,3 | 25/30/35/40/45/50/60/70/80 | 9,9  | 39,5 | 31,3 | 34,9/39,9/44,9/49,9/54,9/59,9/69,9/79,9/89,9 | 12                       | 144                                      |
| K0792.014616***    | 33   | 45,9 | 16 | 19   | 26,3 | 30/35/40/45/50/60/70/80    | 13,1 | 39,5 | 31,3 | 43,1/48,1/53,1/58,1/63,1/73,1/83,1/93,1      | 16                       | 257                                      |

| Order No.<br>red RAL 3020 | B    | D    | D1 | D2   | D3   | L                          | L1   | L2   | L3   | L5                                           | Receiving<br>hole<br>H11 | Shearing force<br>double shear<br>max.kN |
|---------------------------|------|------|----|------|------|----------------------------|------|------|------|----------------------------------------------|--------------------------|------------------------------------------|
| K0792.01842605***         | 17,6 | 26,4 | 5  | 5,5  | 13,2 | 10/15/20/25/30             | 5,9  | 25   | 20,2 | 15,9/20,9/25,9/30,9/35,9                     | 5                        | 24                                       |
| K0792.01842606***         | 17,6 | 26,4 | 6  | 6,85 | 13,2 | 10/15/20/25/30/35/40/45/50 | 6,8  | 25   | 20,2 | 16,8/21,8/26,8/31,8/36,8/41,8/46,8/51,8/56,8 | 6                        | 35                                       |
| K0792.01843308***         | 23   | 33,2 | 8  | 9,5  | 17,3 | 20/25/30/35/40/45/50       | 7,8  | 33   | 26,1 | 27,8/32,8/37,8/42,8/47,8/52,8/57,8           | 8                        | 63                                       |
| K0792.01843310***         | 23   | 33,2 | 10 | 12   | 17,3 | 20/25/30/35/40/45/50/60    | 8,9  | 33   | 26,1 | 28,9/33,9/38,9/43,9/48,9/53,9/58,9/68,9      | 10                       | 100                                      |
| K0792.01844612***         | 33   | 45,9 | 12 | 14,5 | 26,3 | 25/30/35/40/45/50/60/70/80 | 9,9  | 39,5 | 31,3 | 34,9/39,9/44,9/49,9/54,9/59,9/69,9/79,9/89,9 | 12                       | 144                                      |
| K0792.01844616***         | 33   | 45,9 | 16 | 19   | 26,3 | 30/35/40/45/50/60/70/80    | 13,1 | 39,5 | 31,3 | 43,1/48,1/53,1/58,1/63,1/73,1/83,1/93,1      | 16                       | 257                                      |

# Ball lock pins

stainless steel



## Material:

Metal parts stainless steel.

## Version:

Bright.

## Sample order:

K0364.3110030

(include length L e.g. 030 for L = 30 mm)

## Note:

Ball lock pins are used for easy fastening or joining of components or workpieces.

The two balls are disengaged by pressing the push button and the pin can be slipped into holes in the workpieces. Release the button to lock the balls and secure the connection.

Corrosion resistant. Option for connecting retaining cable.

Shear force double shear (F) = S · τ aB max.

The values given for the shear force are the theoretical breaking load.

These are non-binding reference values without consideration of safety factors and exclude any liability. The values given are for information purposes only and do not constitute a legally binding assurance of properties.

The load values have been calculated in accordance with DIN 50141. Each user must determine individually whether the ball lock pin is suitable for the respective application.

Different materials in which the ball lock pins are used, weather conditions and wear can influence the determined values.

## Accessories:

Bushes for ball lock pins K0724

Safety spiral cable K0367

Retaining cable with loop K0367

Key ring K0367

## KIPP Ball lock pins, stainless steel

| Order No.     | D  | D1 | D2   | D3 | L                          | L1   | L2   | L5                                      | Receiving hole H11 | Shearing force double shear max.kN |
|---------------|----|----|------|----|----------------------------|------|------|-----------------------------------------|--------------------|------------------------------------|
| K0364.2305*** | 25 | 5  | 5,5  | 14 | 10/15/20/25/30             | 6    | 26,5 | 16/21/26/31/36                          | 5                  | 15                                 |
| K0364.2306*** | 25 | 6  | 6,85 | 14 | 10/15/20/25/30/35/40/45/50 | 7    | 26,5 | 17/22/27/32/37/42/47/52/57              | 6                  | 22                                 |
| K0364.2308*** | 25 | 8  | 9,5  | 14 | 20/25/30/35/40/45/50       | 8    | 26,5 | 28/33/38/43/48/53/58                    | 8                  | 38                                 |
| K0364.3110*** | 33 | 10 | 12   | 19 | 20/25/30/35/40/45/50/60    | 9    | 34,6 | 29/34/39/44/49/54/59/69                 | 10                 | 60                                 |
| K0364.3112*** | 33 | 12 | 14,5 | 19 | 25/30/35/40/45/50/60/70/80 | 10   | 34,6 | 35/40/45/50/55/60/70/80/90              | 12                 | 86                                 |
| K0364.3116*** | 33 | 16 | 19   | 20 | 30/35/40/45/50/60/70/80    | 13,3 | 34,6 | 43,3/48,3/53,3/58,3/63,3/73,3/83,3/93,3 | 16                 | 153                                |

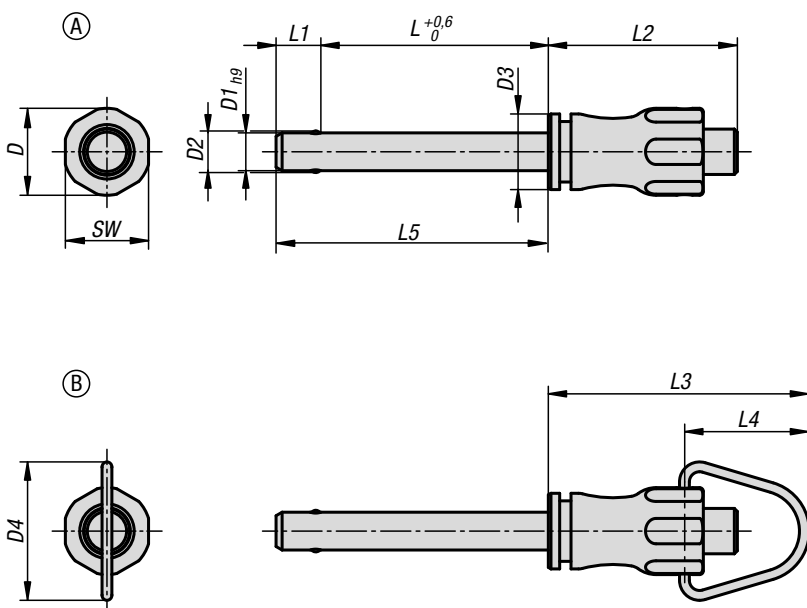


A large rectangular area filled with a fine grid of light gray lines, intended for taking notes or drawing.



## Ball lock pins

stainless steel



### Material:

Grip and push button 1.4305 stainless steel.

Pin 1.4305 stainless steel.

Balls 1.4125 stainless steel.

Spring and hanger 1.4310 stainless steel wire.

### Version:

Bright.

### Sample order:

K0790.001508050

(include length L e.g. 050 for L = 50 mm)

### Note:

Ball lock pins are used for easy fastening or joining of components.

The two balls are disengaged by pressing the push button and the pin can be slipped into holes in the workpieces. When the push button is released, the balls lock the connection securely.

Shear force double shear ( $F$ ) =  $S \cdot \tau$  aB max.

The values given for the shear force are the theoretical breaking load.

These are non-binding reference values without consideration of safety factors and exclude any liability. The values given are for information purposes only and do not constitute a legally binding assurance of properties.

The load values have been calculated in accordance with DIN 50141. Each user must determine individually whether the ball lock pin is suitable for the respective application.

Different materials in which the ball lock pins are used, weather conditions and wear can influence the determined values.

### Accessories:

Bushes for ball lock pins K0724

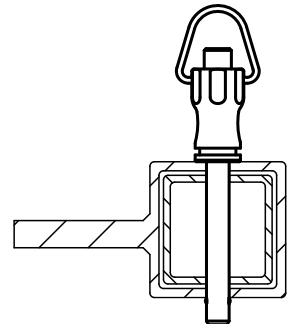
Safety spiral cable K0367

Retaining cable with loop K0367

Key ring K0367

## Ball lock pins

stainless steel



## KIPP Ball lock pins, in stainless steel, Form A

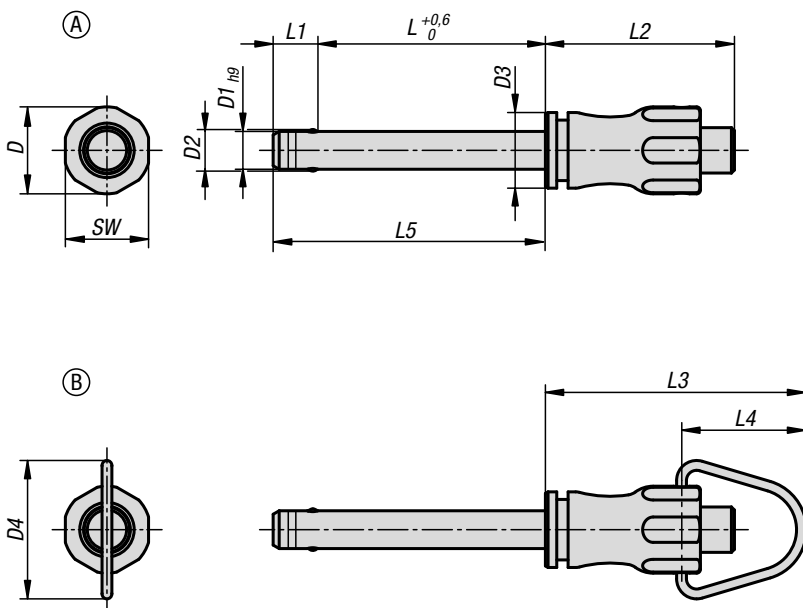
| Order No.<br>Form A | D    | D1 | D2   | D3   | L                          | L1   | L2   | L5                                           | SW | Receiving<br>hole<br>H11 | Shearing force<br>double shear<br>max.kN |
|---------------------|------|----|------|------|----------------------------|------|------|----------------------------------------------|----|--------------------------|------------------------------------------|
| K0790.001205***     | 11,5 | 5  | 5,5  | 10   | 10/15/20/25/30             | 5,9  | 25   | 15,9/20,9/25,9/30,9/35,9                     | 11 | 5                        | 15                                       |
| K0790.001206***     | 11,5 | 6  | 6,85 | 10   | 10/15/20/25/30/35/40/45/50 | 6,8  | 25   | 16,8/21,8/26,8/31,8/36,8/41,8/46,8/51,8/56,8 | 11 | 6                        | 22                                       |
| K0790.001508***     | 15,5 | 8  | 9,5  | 13,5 | 20/25/30/35/40/45/50       | 7,8  | 33   | 27,8/32,8/37,8/42,8/47,8/52,8/57,8           | 15 | 8                        | 38                                       |
| K0790.001510***     | 15,5 | 10 | 12   | 13,5 | 20/25/30/35/40/45/50/60    | 8,9  | 33   | 28,9/33,9/38,9/43,9/48,9/53,9/58,9/68,9      | 15 | 10                       | 60                                       |
| K0790.002112***     | 22   | 12 | 14,5 | 20   | 25/30/35/40/45/50/60/70/80 | 9,9  | 39,5 | 34,9/39,9/44,9/49,9/54,9/59,9/69,9/79,9/89,9 | 21 | 12                       | 86                                       |
| K0790.002116***     | 22   | 16 | 19   | 20   | 30/35/40/45/50/60/70/80    | 13,1 | 39,5 | 43,1/48,1/53,1/58,1/63,1/73,1/83,1/93,1      | 21 | 16                       | 153                                      |

## KIPP Ball lock pins, stainless steel, Form B

| Order No.<br>Form B | D    | D1 | D2   | D3   | D4   | L                          | L1   | L2   | L3   | L4   | L5                                           | SW | Receiving<br>hole<br>H11 | Shearing force<br>double shear<br>max.kN |
|---------------------|------|----|------|------|------|----------------------------|------|------|------|------|----------------------------------------------|----|--------------------------|------------------------------------------|
| K0790.101205***     | 11,5 | 5  | 5,5  | 10   | 18,3 | 10/15/20/25/30             | 5,9  | 25   | 34,6 | 16,6 | 15,9/20,9/25,9/30,9/35,9                     | 11 | 5                        | 15                                       |
| K0790.101206***     | 11,5 | 6  | 6,85 | 10   | 18,3 | 10/15/20/25/30/35/40/45/50 | 6,8  | 25   | 34,6 | 16,6 | 16,8/21,8/26,8/31,8/36,8/41,8/46,8/51,8/56,8 | 11 | 6                        | 22                                       |
| K0790.101508***     | 15,5 | 8  | 9,5  | 13,5 | 24   | 20/25/30/35/40/45/50       | 7,8  | 33   | 46,7 | 22,7 | 27,8/32,8/37,8/42,8/47,8/52,8/57,8           | 15 | 8                        | 38                                       |
| K0790.101510***     | 15,5 | 10 | 12   | 13,5 | 24   | 20/25/30/35/40/45/50/60    | 8,9  | 33   | 46,7 | 22,7 | 28,9/33,9/38,9/43,9/48,9/53,9/58,9/68,9      | 15 | 10                       | 60                                       |
| K0790.102112***     | 22   | 12 | 14,5 | 20   | 33   | 25/30/35/40/45/50/60/70/80 | 9,9  | 39,5 | 59,3 | 30,3 | 34,9/39,9/44,9/49,9/54,9/59,9/69,9/79,9/89,9 | 21 | 12                       | 86                                       |
| K0790.102116***     | 22   | 16 | 19   | 20   | 33   | 30/35/40/45/50/60/70/80    | 13,1 | 39,5 | 59,3 | 30,3 | 43,1/48,1/53,1/58,1/63,1/73,1/83,1/93,1      | 21 | 16                       | 153                                      |

# Ball lock pins, stainless steel

with high shear strength



## Material:

Grip and push button 1.4305 stainless steel.

Pin 1.4542 stainless steel.

Balls 1.4125 stainless steel.

Spring and hanger 1.4310 stainless steel wire.

## Version:

Bright.

## Sample order:

K0790.011508050

(include length L e.g. 050 for L = 50 mm)

## Note:

Ball lock pins are used for easy fastening or joining of components.

The two balls are disengaged by pressing the push button and the pin can be slipped into holes in the workpieces. When the push button is released, the balls lock the connection securely.

Shear force double shear ( $F$ ) =  $S \cdot \tau$  aB max.

The values given for the shear force are the theoretical breaking load.

These are non-binding reference values without consideration of safety factors and exclude any liability. The values given are for information purposes only and do not constitute a legally binding assurance of properties.

The load values have been calculated in accordance with DIN 50141. Each user must determine individually whether the ball lock pin is suitable for the respective application.

Different materials in which the ball lock pins are used, weather conditions and wear can influence the determined values.

Ball lock pins with high shear strength are identified by a groove marking on the pin.

## Advantages:

Higher loading in comparison to standard ball lock pins.

The pins made from 1.4542 stainless steel is hardened, has a higher shear resistance and is extremely durable.

## Accessories:

Adapter bushes for ball lock pins K0724.

For Form B:

Safety spiral cable K0367

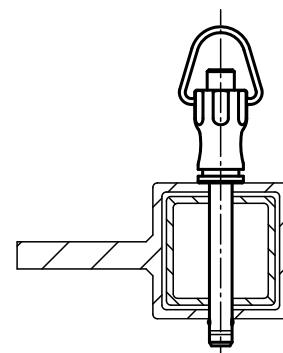
Retaining cable with eyelet K0367

Key ring K0367



# Ball lock pins, stainless steel

with high shear strength



## KIPP Ball lock pins, stainless steel, with high shear strength, Form A

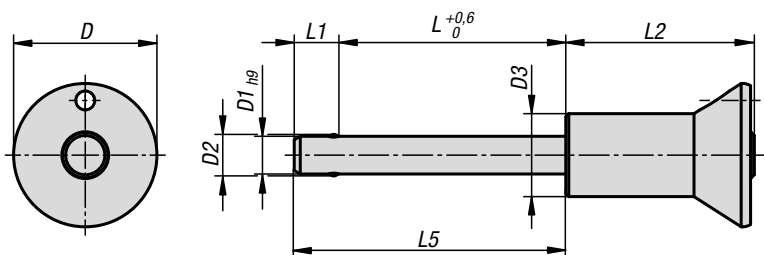
| Order No.<br>Form A | D    | D1 | D2   | D3   | L                          | L1   | L2   | L5                                           | SW | Receiving<br>hole<br>H11 | Shearing force<br>double shear<br>max.kN |
|---------------------|------|----|------|------|----------------------------|------|------|----------------------------------------------|----|--------------------------|------------------------------------------|
| K0790.011205***     | 11,5 | 5  | 5,5  | 10   | 10/15/20/25/30             | 5,9  | 25   | 15,9/20,9/25,9/30,9/35,9                     | 11 | 5                        | 24                                       |
| K0790.011206***     | 11,5 | 6  | 6,85 | 10   | 10/15/20/25/30/35/40/45/50 | 6,8  | 25   | 16,8/21,8/26,8/31,8/36,8/41,8/46,8/51,8/56,8 | 11 | 6                        | 35                                       |
| K0790.011508***     | 15,5 | 8  | 9,5  | 13,5 | 20/25/30/35/40/45/50       | 7,8  | 33   | 27,8/32,8/37,8/42,8/47,8/52,8/57,8           | 15 | 8                        | 63                                       |
| K0790.011510***     | 15,5 | 10 | 12   | 13,5 | 20/25/30/35/40/45/50/60    | 8,9  | 33   | 28,9/33,9/38,9/43,9/48,9/53,9/58,9/68,9      | 15 | 10                       | 100                                      |
| K0790.012112***     | 22   | 12 | 14,5 | 20   | 25/30/35/40/45/50/60/70/80 | 9,9  | 39,5 | 34,9/39,9/44,9/49,9/54,9/59,9/69,9/79,9/89,9 | 21 | 12                       | 144                                      |
| K0790.012116***     | 22   | 16 | 19   | 20   | 30/35/40/45/50/60/70/80    | 13,1 | 39,5 | 43,1/48,1/53,1/58,1/63,1/73,1/83,1/93,1      | 21 | 16                       | 257                                      |

## KIPP Ball lock pins, stainless steel, with high shear strength, Form B

| Order No.<br>Form B | D    | D1 | D2   | D3   | D4   | L                          | L1   | L2   | L3   | L4   | L5                                           | SW | Receiving<br>hole<br>H11 | Shearing force<br>double shear<br>max.kN |
|---------------------|------|----|------|------|------|----------------------------|------|------|------|------|----------------------------------------------|----|--------------------------|------------------------------------------|
| K0790.111205***     | 11,5 | 5  | 5,5  | 10   | 18,3 | 10/15/20/25/30             | 5,9  | 25   | 34,6 | 16,6 | 15,9/20,9/25,9/30,9/35,9                     | 11 | 5                        | 24                                       |
| K0790.111206***     | 11,5 | 6  | 6,85 | 10   | 18,3 | 10/15/20/25/30/35/40/45/50 | 6,8  | 25   | 34,6 | 16,6 | 16,8/21,8/26,8/31,8/36,8/41,8/46,8/51,8/56,8 | 11 | 6                        | 35                                       |
| K0790.111508***     | 15,5 | 8  | 9,5  | 13,5 | 24   | 20/25/30/35/40/45/50       | 7,8  | 33   | 46,7 | 22,7 | 27,8/32,8/37,8/42,8/47,8/52,8/57,8           | 15 | 8                        | 63                                       |
| K0790.111510***     | 15,5 | 10 | 12   | 13,5 | 24   | 20/25/30/35/40/45/50/60    | 8,9  | 33   | 46,7 | 22,7 | 28,9/33,9/38,9/43,9/48,9/53,9/58,9/68,9      | 15 | 10                       | 100                                      |
| K0790.112112***     | 22   | 12 | 14,5 | 20   | 33   | 25/30/35/40/45/50/60/70/80 | 9,9  | 39,5 | 59,3 | 30,3 | 34,9/39,9/44,9/49,9/54,9/59,9/69,9/79,9/89,9 | 21 | 12                       | 144                                      |
| K0790.112116***     | 22   | 16 | 19   | 20   | 33   | 30/35/40/45/50/60/70/80    | 13,1 | 39,5 | 59,3 | 30,3 | 43,1/48,1/53,1/58,1/63,1/73,1/83,1/93,1      | 21 | 16                       | 257                                      |

## Ball lock pins with mushroom grip

stainless steel



### Material:

Mushroom knob and push button stainless steel 1.4305.  
Pin stainless steel 1.4305.  
Balls stainless steel 1.4125.  
Compression spring stainless steel 1.4310.

### Version:

Bright.

### Sample order:

K0791.02510050  
(include length L e.g. 050 for L = 50 mm)

### Note:

Ball lock pins are used for easy fastening or joining of components.

The two balls are disengaged by pressing the push button and the pin can be slipped into holes in the workpieces. When the push button is released, the balls lock the connection securely.

Shear force double shear ( $F$ ) =  $S \cdot \tau \cdot aB \text{ max.}$

The values given for the shear force are the theoretical breaking load.

These are non-binding reference values without consideration of safety factors and exclude any liability. The values given are for information purposes only and do not constitute a legally binding assurance of properties.

The load values have been calculated in accordance with DIN 50141. Each user must determine individually whether the ball lock pin is suitable for the respective application.

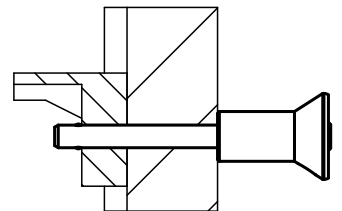
Different materials in which the ball lock pins are used, weather conditions and wear can influence the determined values.

### Accessories:

Bushes for ball lock pins K0724  
Safety spiral cable K0367  
Retaining cable with loop K0367  
Key ring K0367

# Ball lock pins with mushroom grip

stainless steel

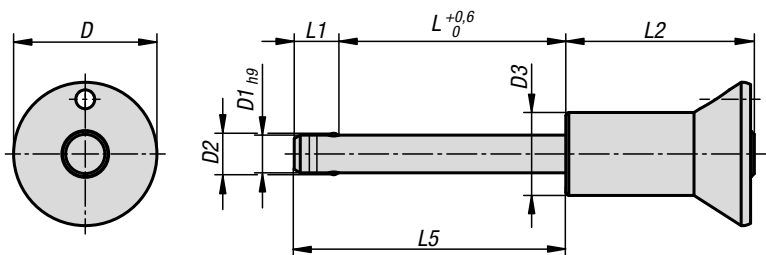


## KIPP Ball lock pins with mushroom grip, stainless steel

| Order No.      | D  | D1 | D2   | D3 | L                          | L1   | L2   | L5                                           | Receiving hole H11 | Shearing force double shear max.kN |
|----------------|----|----|------|----|----------------------------|------|------|----------------------------------------------|--------------------|------------------------------------|
| K0791.01905*** | 19 | 5  | 5,5  | 11 | 10/15/20/25/30             | 5,9  | 25   | 15,9/20,9/25,9/30,9/35,9                     | 5                  | 15                                 |
| K0791.01906*** | 19 | 6  | 6,85 | 11 | 10/15/20/25/30/35/40/45/50 | 6,8  | 25   | 16,8/21,8/26,8/31,8/36,8/41,8/46,8/51,8/56,8 | 6                  | 22                                 |
| K0791.02508*** | 25 | 8  | 9,5  | 14 | 20/25/30/35/40/45/50       | 7,8  | 33   | 27,8/32,8/37,8/42,8/47,8/52,8/57,8           | 8                  | 38                                 |
| K0791.02510*** | 25 | 10 | 12   | 14 | 20/25/30/35/40/45/50/60    | 8,9  | 33   | 28,9/33,9/38,9/43,9/48,9/53,9/58,9/68,9      | 10                 | 60                                 |
| K0791.03512*** | 35 | 12 | 14,5 | 22 | 25/30/35/40/45/50/60/70/80 | 9,9  | 39,5 | 34,9/39,9/44,9/49,9/54,9/59,9/69,9/79,9/89,9 | 12                 | 86                                 |
| K0791.03516*** | 35 | 16 | 19   | 22 | 30/35/40/45/50/60/70/80    | 13,1 | 39,5 | 43,1/48,1/53,1/58,1/63,1/73,1/83,1/93,1      | 16                 | 153                                |

## Ball lock pins with mushroom grip

stainless steel, with high shear strength



### Material:

Mushroom knob and push button stainless steel 1.4305.  
Pin stainless steel 1.4542.  
Balls stainless steel 1.4125.  
Compression spring stainless steel 1.4310.

### Version:

Bright.

### Sample order:

K0791.12510050  
(include length L e.g. 050 for L = 50 mm)

### Note:

Ball lock pins are used for easy fastening or joining of components.

The two balls are disengaged by pressing the push button and the pin can be slipped into holes in the workpieces. When the push button is released, the balls lock the connection securely.

Shear force double shear ( $F$ ) =  $S \cdot \tau$  aB max.

The values given for the shear force are the theoretical breaking load.

These are non-binding reference values without consideration of safety factors and exclude any liability. The values given are for information purposes only and do not constitute a legally binding assurance of properties.

The load values have been calculated in accordance with DIN 50141. Each user must determine individually whether the ball lock pin is suitable for the respective application.

Different materials in which the ball lock pins are used, weather conditions and wear can influence the determined values.

Ball lock pins with high shear strength are identified by a groove marking on the pin.

### Advantages:

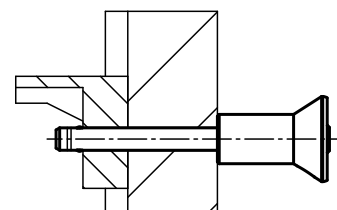
Higher loading in comparison to standard ball lock pins. The pins made from 1.4542 stainless steel is hardened, has a higher shear resistance and is extremely durable.

### Accessories:

Bushes for ball lock pins K0724  
Safety spiral cable K0367  
Retaining cable with loop K0367  
Key ring K0367

# Ball lock pins with mushroom grip

stainless steel, with high shear strength

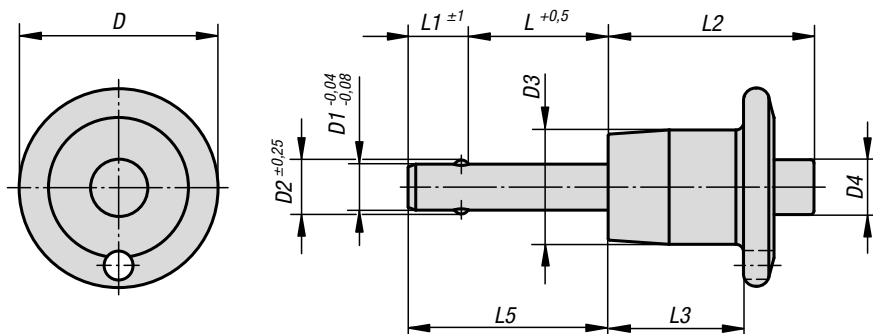


## KIPP Ball lock pins with mushroom grip, stainless steel, with high shear strength

| Order No.      | D  | D1 | D2   | D3 | L                          | L1   | L2   | L5                                           | Receiving hole H11 | Shearing force double shear max.kN |
|----------------|----|----|------|----|----------------------------|------|------|----------------------------------------------|--------------------|------------------------------------|
| K0791.11905*** | 19 | 5  | 5,5  | 11 | 10/15/20/25/30             | 5,9  | 25   | 15,9/20,9/25,9/30,9/35,9                     | 5                  | 24                                 |
| K0791.11906*** | 19 | 6  | 6,85 | 11 | 10/15/20/25/30/35/40/45/50 | 6,8  | 25   | 16,8/21,8/26,8/31,8/36,8/41,8/46,8/51,8/56,8 | 6                  | 35                                 |
| K0791.12508*** | 25 | 8  | 9,5  | 14 | 20/25/30/35/40/45/50       | 7,8  | 33   | 27,8/32,8/37,8/42,8/47,8/52,8/57,8           | 8                  | 63                                 |
| K0791.12510*** | 25 | 10 | 12   | 14 | 20/25/30/35/40/45/50/60    | 8,9  | 33   | 28,9/33,9/38,9/43,9/48,9/53,9/58,9/68,9      | 10                 | 100                                |
| K0791.13512*** | 35 | 12 | 14,5 | 22 | 25/30/35/40/45/50/60/70/80 | 9,9  | 39,5 | 34,9/39,9/44,9/49,9/54,9/59,9/69,9/79,9/89,9 | 12                 | 144                                |
| K0791.13516*** | 35 | 16 | 19   | 22 | 30/35/40/45/50/60/70/80    | 13,1 | 39,5 | 43,1/48,1/53,1/58,1/63,1/73,1/83,1/93,1      | 16                 | 257                                |

## Ball lock pins with mushroom grip

stainless steel



### Material:

Pin stainless steel 1.4542.  
Mushroom knob and push button stainless steel 1.4305.  
Balls stainless steel 1.4125.  
Compression spring stainless steel.

### Version:

All stainless steel parts passivated.  
Pin hardened to min. 40 HRC.  
Balls hardened to 58 +4 HRC.

### Sample order:

K0641.02105030  
(include length L e.g. 030 for L = 30 mm.)

### Note:

Ball lock pins are used for easy fastening or joining of components or workpieces.  
The two balls are disengaged by pressing the push button and the pin can be slipped into holes in the workpieces. When the push button is released, the balls lock the connection securely. If required, the ball lock pins can be fitted with a retaining cable.

Shear force double shear ( $F$ ) =  $S \cdot \tau \cdot aB \max$ .

The values given for the shear force are the theoretical breaking load.

These are non-binding reference values without consideration of safety factors and exclude any liability.  
The values given are for information purposes only and do not constitute a legally binding assurance of properties.

The load values have been calculated in accordance with DIN 50141. Each user must determine individually whether the ball lock pin is suitable for the respective application.

Different materials in which the ball lock pins are used, weather conditions and wear can influence the determined values.

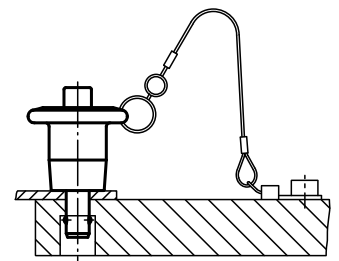
The ball lock pins with pin diameters 5 and 6 mm have a collar between the pin and grip.

### Accessories:

Bushes for ball lock pins K0724  
Safety spiral cable K0367  
Retaining cable with loop K0367  
Key ring K0367

# Ball lock pins with mushroom grip

stainless steel



## KIPP Ball lock pins with mushroom grip, stainless steel

| Order No.      | D    | D1 | D2    | D3   | D4   | L                                    | L1 | L2   | L3   | L5                                   | Receiving hole H11 | Shearing force double shear max.kN |
|----------------|------|----|-------|------|------|--------------------------------------|----|------|------|--------------------------------------|--------------------|------------------------------------|
| K0641.02105*** | 20,6 | 5  | 5,54  | 11,9 | 5,8  | 10/15/20/25/30/35/40/50/60/70        | 6  | 23,4 | 16   | 16/21/26/31/36/41/46/56/66/76        | 5                  | 24,4                               |
| K0641.02106*** | 20,6 | 6  | 6,99  | 11,9 | 5,8  | 10/15/20/25/30/35/40/50/60/70/80     | 7  | 23,4 | 16   | 17/22/27/32/37/42/47/57/67/77/87     | 6                  | 35,64                              |
| K0641.02108*** | 20,6 | 8  | 9,42  | 11,9 | 5,8  | 10/15/20/25/30/35/40/50/60/70/80     | 8  | 23,4 | 16   | 18/23/28/33/38/43/48/58/68/78/88     | 8                  | 63,8                               |
| K0641.02510*** | 25,4 | 10 | 11,86 | 14,2 | 7,4  | 15/20/25/30/35/40/50/60/70/80/90/100 | 9  | 25,7 | 17,8 | 24/29/34/39/44/49/59/69/79/89/99/109 | 10                 | 100,1                              |
| K0641.03512*** | 34,7 | 12 | 14,45 | 18,3 | 10,7 | 20/25/30/35/40/50/60/70/80/90/100    | 10 | 32,3 | 21,6 | 30/35/40/45/50/60/70/80/90/100/110   | 12                 | 144,06                             |

## Ball lock pins with mushroom grip

stainless steel, with high shear strength, adjustable



### Material:

Mushroom grip, locknut, adjusting nut and push button, 1.4305 stainless steel.

Pin, 1.4542 stainless steel.

Balls, 1.4125 stainless steel.

Compression spring, 1.4310 stainless steel.

### Version:

Bright.

### Sample order:

K1299.12510050

### Note:

Ball lock pins are used for easy fastening or joining of components.

The two balls are disengaged by pressing the push button and the pin can be slipped into holes in the workpieces. When the push button is released, the balls lock the connection securely.

Shear force double shear ( $F$ ) =  $S \cdot \tau \cdot aB$  max.

The values given for the shear force are the theoretical breaking load.

These are non-binding reference values without consideration of safety factors and exclude any liability. The values given are for information purposes only and do not constitute a legally binding assurance of properties.

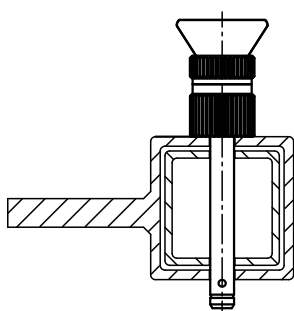
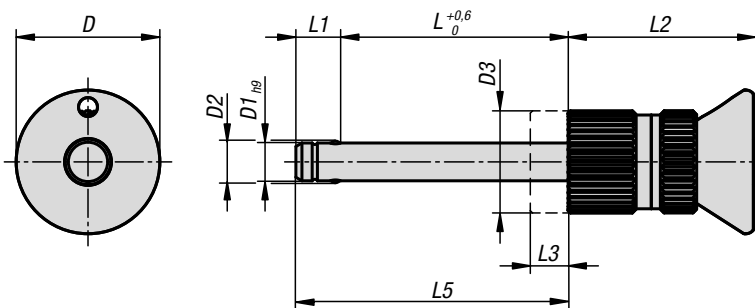
The load values have been calculated in accordance with DIN 50141. Each user must determine individually whether the ball lock pin is suitable for the respective application.

Different materials in which the ball lock pins are used, weather conditions and wear can influence the determined values.

Ball lock pins with high shear strength are identified by a groove marking on the pin.

### Advantages:

- Higher loading in comparison to standard ball lock pins.
- The length range is infinitely adjustable using the locknut and adjustment nut. This enables play-free positioning on the workpiece.
- The pins made from 1.4542 stainless steel are hardened, have a higher shear resistance and are extremely durable.





# Ball lock pins with mushroom grip

stainless steel, with high shear strength, adjustable



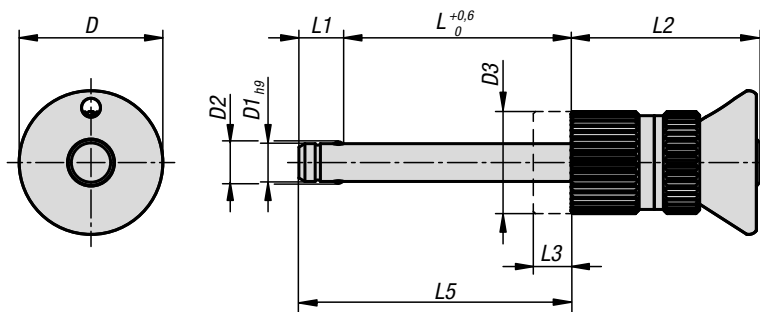
## KIPP Ball lock pins with mushroom grip, stainless steel, with high shear strength, adjustable

| Order No.      | D  | D1 | D2   | D3   | L     | L1   | L2   | L3 | L5        | Receiving hole H11 | Shearing force double shear max.kN |
|----------------|----|----|------|------|-------|------|------|----|-----------|--------------------|------------------------------------|
| K1299.11905010 | 19 | 5  | 5,5  | 13,5 | 2-10  | 5,9  | 25   | 8  | 7,9-15,9  | 5                  | 24                                 |
| K1299.11905015 | 19 | 5  | 5,5  | 13,5 | 7-15  | 5,9  | 25   | 8  | 12,9-20,9 | 5                  | 24                                 |
| K1299.11905020 | 19 | 5  | 5,5  | 13,5 | 12-20 | 5,9  | 25   | 8  | 17,9-25,9 | 5                  | 24                                 |
| K1299.11905025 | 19 | 5  | 5,5  | 13,5 | 17-25 | 5,9  | 25   | 8  | 22,9-30,9 | 5                  | 24                                 |
| K1299.11905030 | 19 | 5  | 5,5  | 13,5 | 22-30 | 5,9  | 25   | 8  | 27,9-35,9 | 5                  | 24                                 |
| K1299.11906010 | 19 | 6  | 6,85 | 13,5 | 2-10  | 6,8  | 25   | 8  | 8,8-16,8  | 6                  | 35                                 |
| K1299.11906015 | 19 | 6  | 6,85 | 13,5 | 7-15  | 6,8  | 25   | 8  | 13,8-21,8 | 6                  | 35                                 |
| K1299.11906020 | 19 | 6  | 6,85 | 13,5 | 12-20 | 6,8  | 25   | 8  | 18,8-26,8 | 6                  | 35                                 |
| K1299.11906025 | 19 | 6  | 6,85 | 13,5 | 17-25 | 6,8  | 25   | 8  | 23,8-31,8 | 6                  | 35                                 |
| K1299.11906030 | 19 | 6  | 6,85 | 13,5 | 22-30 | 6,8  | 25   | 8  | 28,8-36,8 | 6                  | 35                                 |
| K1299.11906035 | 19 | 6  | 6,85 | 13,5 | 27-35 | 6,8  | 25   | 8  | 33,8-41,8 | 6                  | 35                                 |
| K1299.11906040 | 19 | 6  | 6,85 | 13,5 | 32-40 | 6,8  | 25   | 8  | 38,8-46,8 | 6                  | 35                                 |
| K1299.11906045 | 19 | 6  | 6,85 | 13,5 | 37-45 | 6,8  | 25   | 8  | 43,8-51,8 | 6                  | 35                                 |
| K1299.11906050 | 19 | 6  | 6,85 | 13,5 | 42-50 | 6,8  | 25   | 8  | 48,8-56,8 | 6                  | 35                                 |
| K1299.12508020 | 25 | 8  | 9,5  | 17   | 10-20 | 7,8  | 33   | 10 | 17,8-27,8 | 8                  | 63                                 |
| K1299.12508025 | 25 | 8  | 9,5  | 17   | 15-25 | 7,8  | 33   | 10 | 22,8-32,8 | 8                  | 63                                 |
| K1299.12508030 | 25 | 8  | 9,5  | 17   | 20-30 | 7,8  | 33   | 10 | 27,8-37,8 | 8                  | 63                                 |
| K1299.12508035 | 25 | 8  | 9,5  | 17   | 25-35 | 7,8  | 33   | 10 | 32,8-42,8 | 8                  | 63                                 |
| K1299.12508040 | 25 | 8  | 9,5  | 17   | 30-40 | 7,8  | 33   | 10 | 37,8-47,8 | 8                  | 63                                 |
| K1299.12508045 | 25 | 8  | 9,5  | 17   | 35-45 | 7,8  | 33   | 10 | 42,8-52,8 | 8                  | 63                                 |
| K1299.12508050 | 25 | 8  | 9,5  | 17   | 40-50 | 7,8  | 33   | 10 | 47,8-57,8 | 8                  | 63                                 |
| K1299.12510020 | 25 | 10 | 12   | 17   | 10-20 | 8,9  | 33   | 10 | 18,9-28,9 | 10                 | 100                                |
| K1299.12510025 | 25 | 10 | 12   | 17   | 15-25 | 8,9  | 33   | 10 | 23,9-33,9 | 10                 | 100                                |
| K1299.12510030 | 25 | 10 | 12   | 17   | 20-30 | 8,9  | 33   | 10 | 28,9-38,9 | 10                 | 100                                |
| K1299.12510035 | 25 | 10 | 12   | 17   | 25-35 | 8,9  | 33   | 10 | 33,9-43,9 | 10                 | 100                                |
| K1299.12510040 | 25 | 10 | 12   | 17   | 30-40 | 8,9  | 33   | 10 | 38,9-48,9 | 10                 | 100                                |
| K1299.12510045 | 25 | 10 | 12   | 17   | 35-45 | 8,9  | 33   | 10 | 43,9-53,9 | 10                 | 100                                |
| K1299.12510050 | 25 | 10 | 12   | 17   | 40-50 | 8,9  | 33   | 10 | 48,9-58,9 | 10                 | 100                                |
| K1299.12510060 | 25 | 10 | 12   | 17   | 50-60 | 8,9  | 33   | 10 | 58,9-68,9 | 10                 | 100                                |
| K1299.13512025 | 35 | 12 | 14,5 | 26   | 13-25 | 9,9  | 39,5 | 12 | 22,9-34,9 | 12                 | 144                                |
| K1299.13512030 | 35 | 12 | 14,5 | 26   | 18-30 | 9,9  | 39,5 | 12 | 27,9-39,9 | 12                 | 144                                |
| K1299.13512035 | 35 | 12 | 14,5 | 26   | 13-35 | 9,9  | 39,5 | 12 | 22,9-44,9 | 12                 | 144                                |
| K1299.13512040 | 35 | 12 | 14,5 | 26   | 28-30 | 9,9  | 39,5 | 12 | 37,9-39,9 | 12                 | 144                                |
| K1299.13512045 | 35 | 12 | 14,5 | 26   | 33-45 | 9,9  | 39,5 | 12 | 42,9-54,9 | 12                 | 144                                |
| K1299.13512050 | 35 | 12 | 14,5 | 26   | 38-50 | 9,9  | 39,5 | 12 | 47,9-59,9 | 12                 | 144                                |
| K1299.13512060 | 35 | 12 | 14,5 | 26   | 48-60 | 9,9  | 39,5 | 12 | 57,9-69,9 | 12                 | 144                                |
| K1299.13512070 | 35 | 12 | 14,5 | 26   | 58-70 | 9,9  | 39,5 | 12 | 67,9-79,9 | 12                 | 144                                |
| K1299.13512080 | 35 | 12 | 14,5 | 26   | 68-80 | 9,9  | 39,5 | 12 | 77,9-89,9 | 12                 | 144                                |
| K1299.13516030 | 35 | 16 | 19   | 26   | 18-30 | 13,1 | 39,5 | 12 | 31,1-43,1 | 16                 | 257                                |
| K1299.13516035 | 35 | 16 | 19   | 26   | 23-35 | 13,1 | 39,5 | 12 | 36,1-48,1 | 16                 | 257                                |
| K1299.13516040 | 35 | 16 | 19   | 26   | 28-40 | 13,1 | 39,5 | 12 | 41,1-53,1 | 16                 | 257                                |
| K1299.13516045 | 35 | 16 | 19   | 26   | 33-45 | 13,1 | 39,5 | 12 | 46,1-58,1 | 16                 | 257                                |
| K1299.13516050 | 35 | 16 | 19   | 26   | 38-50 | 13,1 | 39,5 | 12 | 51,1-63,1 | 16                 | 257                                |
| K1299.13516060 | 35 | 16 | 19   | 26   | 48-60 | 13,1 | 39,5 | 12 | 61,1-73,1 | 16                 | 257                                |
| K1299.13516070 | 35 | 16 | 19   | 26   | 58-70 | 13,1 | 39,5 | 12 | 71,1-83,1 | 16                 | 257                                |
| K1299.13516080 | 35 | 16 | 19   | 26   | 68-80 | 13,1 | 39,5 | 12 | 81,1-93,1 | 16                 | 257                                |



## Ball lock pins with mushroom grip

stainless steel, adjustable



### Material:

Mushroom grip, locknut, adjusting nut and push button, 1.4305 stainless steel.

Pin, 1.4305 stainless steel.

Balls, 1.4125 stainless steel.

Compression spring, 1.4310 stainless steel.

### Version:

Bright.

### Sample order:

K1299.02510050

### Note:

Ball lock pins are used for easy fastening or joining of components or workpieces.

The two balls are disengaged by pressing the push button and the pin can be slipped into holes in the workpieces. When the push button is released, the balls lock the connection securely.

The length range is infinitely adjustable using the locknut and adjusting nut. This enables play-free positioning on the workpiece.

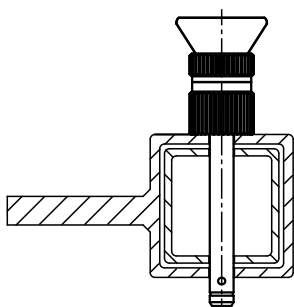
Shear force double shear ( $F$ ) =  $S \cdot \tau \cdot aB$  max.

The values given for the shear force are the theoretical breaking load.

These are non-binding reference values without consideration of safety factors and exclude any liability. The values given are for information purposes only and do not constitute a legally binding assurance of properties.

The load values have been calculated in accordance with DIN 50141. Each user must determine individually whether the ball lock pin is suitable for the respective application.

Different materials in which the ball lock pins are used, weather conditions and wear can influence the determined values.



# Ball lock pins with mushroom grip

stainless steel, adjustable



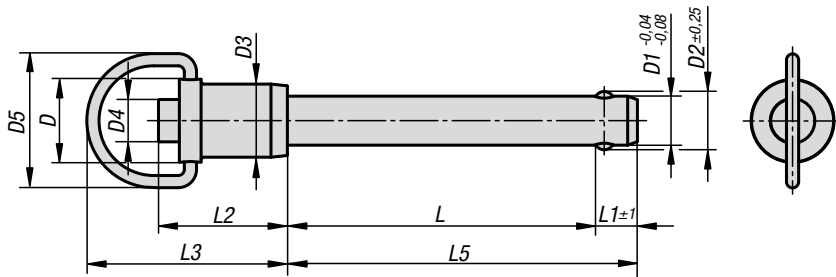
## KIPP Ball lock pins with mushroom grip, stainless steel, adjustable

| Order No.      | D  | D1 | D2   | D3   | L     | L1   | L2   | L3 | L5        | Receiving hole H11 | Shearing force double shear max.kN |
|----------------|----|----|------|------|-------|------|------|----|-----------|--------------------|------------------------------------|
| K1299.01905010 | 19 | 5  | 5,5  | 13,5 | 2-10  | 5,9  | 25   | 8  | 7,9-15,9  | 5                  | 15                                 |
| K1299.01905015 | 19 | 5  | 5,5  | 13,5 | 7-15  | 5,9  | 25   | 8  | 12,9-20,9 | 5                  | 15                                 |
| K1299.01905020 | 19 | 5  | 5,5  | 13,5 | 12-20 | 5,9  | 25   | 8  | 17,9-25,9 | 5                  | 15                                 |
| K1299.01905025 | 19 | 5  | 5,5  | 13,5 | 17-25 | 5,9  | 25   | 8  | 22,9-30,9 | 5                  | 15                                 |
| K1299.01905030 | 19 | 5  | 5,5  | 13,5 | 22-30 | 5,9  | 25   | 8  | 27,9-35,9 | 5                  | 15                                 |
| K1299.01906010 | 19 | 6  | 6,85 | 13,5 | 2-10  | 6,8  | 25   | 8  | 8,8-16,8  | 6                  | 22                                 |
| K1299.01906015 | 19 | 6  | 6,85 | 13,5 | 7-15  | 6,8  | 25   | 8  | 13,8-21,8 | 6                  | 22                                 |
| K1299.01906020 | 19 | 6  | 6,85 | 13,5 | 12-20 | 6,8  | 25   | 8  | 18,8-26,8 | 6                  | 22                                 |
| K1299.01906025 | 19 | 6  | 6,85 | 13,5 | 17-25 | 6,8  | 25   | 8  | 23,8-31,8 | 6                  | 22                                 |
| K1299.01906030 | 19 | 6  | 6,85 | 13,5 | 22-30 | 6,8  | 25   | 8  | 28,8-36,8 | 6                  | 22                                 |
| K1299.01906035 | 19 | 6  | 6,85 | 13,5 | 27-35 | 6,8  | 25   | 8  | 33,8-41,8 | 6                  | 22                                 |
| K1299.01906040 | 19 | 6  | 6,85 | 13,5 | 32-40 | 6,8  | 25   | 8  | 38,8-46,8 | 6                  | 22                                 |
| K1299.01906045 | 19 | 6  | 6,85 | 13,5 | 37-45 | 6,8  | 25   | 8  | 43,8-51,8 | 6                  | 22                                 |
| K1299.01906050 | 19 | 6  | 6,85 | 13,5 | 42-50 | 6,8  | 25   | 8  | 48,8-56,8 | 6                  | 22                                 |
| K1299.02508020 | 25 | 8  | 9,5  | 17   | 10-20 | 7,8  | 33   | 10 | 17,8-27,8 | 8                  | 38                                 |
| K1299.02508025 | 25 | 8  | 9,5  | 17   | 15-25 | 7,8  | 33   | 10 | 22,8-32,8 | 8                  | 38                                 |
| K1299.02508030 | 25 | 8  | 9,5  | 17   | 20-30 | 7,8  | 33   | 10 | 27,8-37,8 | 8                  | 38                                 |
| K1299.02508035 | 25 | 8  | 9,5  | 17   | 25-35 | 7,8  | 33   | 10 | 32,8-42,8 | 8                  | 38                                 |
| K1299.02508040 | 25 | 8  | 9,5  | 17   | 30-40 | 7,8  | 33   | 10 | 37,8-47,8 | 8                  | 38                                 |
| K1299.02508045 | 25 | 8  | 9,5  | 17   | 35-45 | 7,8  | 33   | 10 | 42,8-52,8 | 8                  | 38                                 |
| K1299.02508050 | 25 | 8  | 9,5  | 17   | 40-50 | 7,8  | 33   | 10 | 47,8-57,8 | 8                  | 38                                 |
| K1299.02510020 | 25 | 10 | 12   | 17   | 10-20 | 8,9  | 33   | 10 | 18,9-28,9 | 10                 | 60                                 |
| K1299.02510025 | 25 | 10 | 12   | 17   | 15-25 | 8,9  | 33   | 10 | 23,9-33,9 | 10                 | 60                                 |
| K1299.02510030 | 25 | 10 | 12   | 17   | 20-30 | 8,9  | 33   | 10 | 28,9-38,9 | 10                 | 60                                 |
| K1299.02510035 | 25 | 10 | 12   | 17   | 25-35 | 8,9  | 33   | 10 | 33,9-43,9 | 10                 | 60                                 |
| K1299.02510040 | 25 | 10 | 12   | 17   | 30-40 | 8,9  | 33   | 10 | 38,9-48,9 | 10                 | 60                                 |
| K1299.02510045 | 25 | 10 | 12   | 17   | 35-45 | 8,9  | 33   | 10 | 43,9-53,9 | 10                 | 60                                 |
| K1299.02510050 | 25 | 10 | 12   | 17   | 40-50 | 8,9  | 33   | 10 | 48,9-58,9 | 10                 | 60                                 |
| K1299.02510060 | 25 | 10 | 12   | 17   | 50-60 | 8,9  | 33   | 10 | 58,9-68,9 | 10                 | 60                                 |
| K1299.03512025 | 35 | 12 | 14,5 | 26   | 13-25 | 9,9  | 39,5 | 12 | 22,9-34,9 | 12                 | 86                                 |
| K1299.03512030 | 35 | 12 | 14,5 | 26   | 18-30 | 9,9  | 39,5 | 12 | 27,9-39,9 | 12                 | 86                                 |
| K1299.03512035 | 35 | 12 | 14,5 | 26   | 23-35 | 9,9  | 39,5 | 12 | 32,9-44,9 | 12                 | 86                                 |
| K1299.03512040 | 35 | 12 | 14,5 | 26   | 28-40 | 9,9  | 39,5 | 12 | 37,9-49,9 | 12                 | 86                                 |
| K1299.03512045 | 35 | 12 | 14,5 | 26   | 33-45 | 9,9  | 39,5 | 12 | 42,9-54,9 | 12                 | 86                                 |
| K1299.03512050 | 35 | 12 | 14,5 | 26   | 38-50 | 9,9  | 39,5 | 12 | 47,9-59,9 | 12                 | 86                                 |
| K1299.03512060 | 35 | 12 | 14,5 | 26   | 48-60 | 9,9  | 39,5 | 12 | 57,9-69,9 | 12                 | 86                                 |
| K1299.03512070 | 35 | 12 | 14,5 | 26   | 58-70 | 9,9  | 39,5 | 12 | 67,9-79,9 | 12                 | 86                                 |
| K1299.03512080 | 35 | 12 | 14,5 | 26   | 68-80 | 9,9  | 39,5 | 12 | 77,9-89,9 | 12                 | 86                                 |
| K1299.03516030 | 35 | 16 | 19   | 26   | 18-30 | 13,1 | 39,5 | 12 | 31,1-43,1 | 16                 | 153                                |
| K1299.03516035 | 35 | 16 | 19   | 26   | 23-35 | 13,1 | 39,5 | 12 | 36,1-48,1 | 16                 | 153                                |
| K1299.03516040 | 35 | 16 | 19   | 26   | 28-40 | 13,1 | 39,5 | 12 | 41,1-53,1 | 16                 | 153                                |
| K1299.03516045 | 35 | 16 | 19   | 26   | 33-45 | 13,1 | 39,5 | 12 | 46,1-58,1 | 16                 | 153                                |
| K1299.03516050 | 35 | 16 | 19   | 26   | 38-50 | 13,1 | 39,5 | 12 | 51,1-63,1 | 16                 | 153                                |
| K1299.03516060 | 35 | 16 | 19   | 26   | 48-60 | 13,1 | 39,5 | 12 | 61,1-73,1 | 16                 | 153                                |
| K1299.03516070 | 35 | 16 | 19   | 26   | 58-70 | 13,1 | 39,5 | 12 | 71,1-83,1 | 16                 | 153                                |
| K1299.03516080 | 35 | 16 | 19   | 26   | 68-80 | 13,1 | 39,5 | 12 | 81,1-93,1 | 16                 | 153                                |



## Ball lock pins with grip ring

stainless steel



### Material:

Pin stainless steel 1.4542.  
Head and push button stainless steel 1.4305.  
Balls stainless steel 1.4125.  
Spring stainless steel.  
Grip ring and key ring stainless steel.

### Version:

All stainless steel parts passivated.  
Pin, hardened to min. 40 HRC.  
Balls hardened to 58 +4 HRC.

### Sample order:

K0746.01505030  
(Include length L e.g. 030 for L = 30 mm)

### Note:

Ball lock pins are used for easy fastening or joining of components or workpieces.  
The two balls are disengaged by pressing the push button and the pin can be slipped into holes in the workpieces. Release the button to lock the balls and secure the connection. If required, the ball lock pins can be fitted with a retaining cable.

The hardened, high-tensile stainless steel pin permits extreme loads with low wear. Thanks to the high corrosion and acid resistance, they are mainly used in the foodstuff industry, in the chemical and petrochemical industry and as constructional elements in the aerospace industry.

Shear force double shear ( $F$ ) =  $S \cdot \tau \cdot aB$  max.

The values given for the shear force are the theoretical breaking load.

These are non-binding reference values without consideration of safety factors and exclude any liability. The values given are for information purposes only and do not constitute a legally binding assurance of properties.

The load values have been calculated in accordance with DIN 50141. Each user must determine individually whether the ball lock pin is suitable for the respective application.

Different materials in which the ball lock pins are used, weather conditions and wear can influence the determined values.

### Accessories:

Safety spiral cable K0367.10200  
Retaining cable with loop K0367. ....  
Key ring K0367.15/19/23  
Bushing for ball lock pins K0724....

# Ball lock pins with grip ring

stainless steel

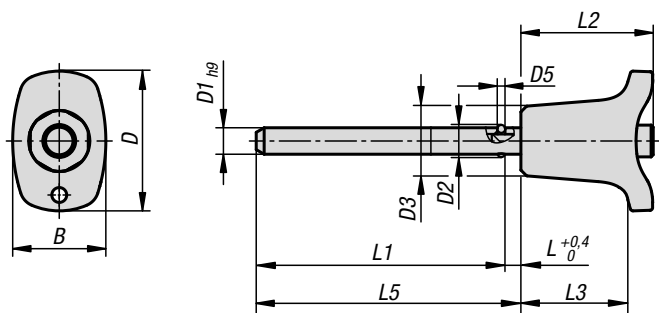


## KIPP Ball lock pins with grip ring, stainless steel

| Order No.             | D    | D1 | D2    | D3   | D4   | D5   | L                                          | L1 | L2   | L3   | L5 | Receiving hole H11 | Shearing force double shear max.kN |
|-----------------------|------|----|-------|------|------|------|--------------------------------------------|----|------|------|----|--------------------|------------------------------------|
| <b>K0746.01505***</b> | 15   | 5  | 5,54  | 11,9 | 5,8  | 29,5 | 10/15/20/25/30/35/40/45/50/60/70/80/90/100 | 6  | 23,4 | 36,8 | 16 | 5                  | 24,4                               |
| <b>K0746.01506***</b> | 15   | 6  | 6,99  | 11,9 | 5,8  | 29,5 | 10/15/20/25/30/35/40/45/50/60/70/80/90/100 | 7  | 23,4 | 36,8 | 17 | 6                  | 35,64                              |
| <b>K0746.01508***</b> | 15   | 8  | 9,42  | 11,9 | 5,8  | 29,5 | 10/15/20/25/30/35/40/45/50/60/70/80/90/100 | 8  | 23,4 | 36,8 | 18 | 8                  | 63,8                               |
| <b>K0746.01710***</b> | 16,5 | 10 | 11,86 | 14,2 | 7,4  | 29,5 | 15/20/25/30/35/40/45/50/60/70/80/90/100    | 9  | 25,7 | 38,6 | 24 | 10                 | 100,1                              |
| <b>K0746.02112***</b> | 20,6 | 12 | 14,45 | 18,3 | 10,7 | 36,3 | 20/25/30/35/40/45/50/60/70/80/90/100       | 10 | 32,3 | 47,8 | 30 | 12                 | 144,06                             |
| <b>K0746.02716***</b> | 26,9 | 16 | 19    | 23,9 | 13,7 | 43,7 | 25/30/35/40/45/50/60/70/80/90/100          | 14 | 41,9 | 65,3 | 39 | 16                 | 257,18                             |

## Ball lock pins

stainless steel, with headend lock



### Material:

Grip thermoplastic.  
Push button 1.4305 stainless steel.  
Pin 1.4305 stainless steel.  
Balls 1.4125 stainless steel.  
Spring 1.4310 stainless steel wire.

### Version:

Grip black grey.  
Stainless steel bright.

### Sample order:

K1415.002605050  
(include length L5, e.g. 050 for L5 = 50 mm)

### Note:

Ball lock pins are used for easy fastening or joining of components.  
The two balls are disengaged by pressing the push button and the pin can be slipped into holes in the workpieces. When the push button is released, the balls lock the connection securely.

Shear force double shear ( $F$ ) =  $S \cdot \tau$  aB max.

The values given for the shear force are the theoretical breaking load.  
These are non-binding reference values without consideration of safety factors and exclude any liability.  
The values given are for information purposes only and do not constitute a legally binding assurance of properties.

The load values have been calculated in accordance with DIN 50141. Each user must determine individually whether the ball lock pin is suitable for the respective application.

Different materials in which the ball lock pins are used, weather conditions and wear can influence the determined values.

### Advantages:

Wide connections possible.  
The pin length does not need to be coordinated with the component width.

### On request:

Other pin lengths.

### Accessories:

Adapter bushes for ball lock pins with head lock K1416.  
Safety spiral cable K0367  
Retaining cable with eyelet K0367  
Key ring K0367

# Ball lock pins

stainless steel, with headend lock

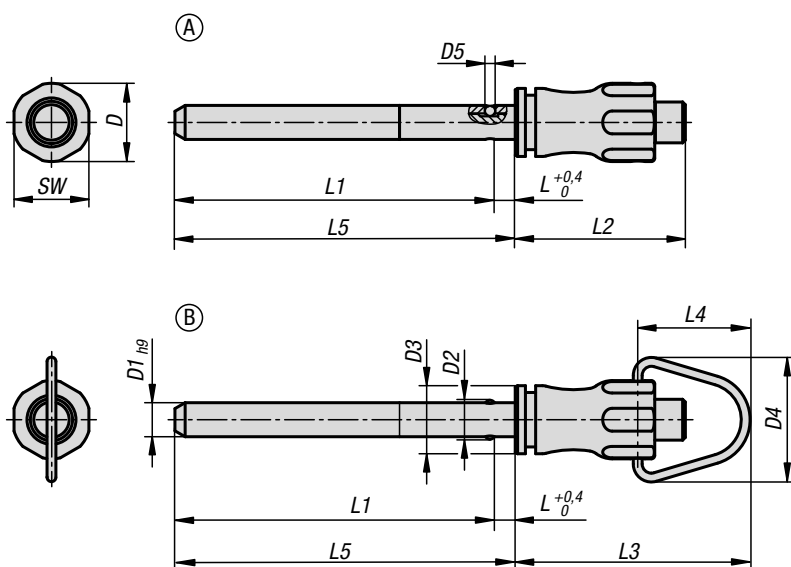


## KIPP Ball lock pins stainless steel, with head-end lock

| Order No.       | B    | D    | D1 | D2   | D3   | D5  | L   | L1                | L2   | L3   | L5          | Receiving hole H11 | Shearing force double shear max.kN |
|-----------------|------|------|----|------|------|-----|-----|-------------------|------|------|-------------|--------------------|------------------------------------|
| K1415.002605*** | 17,6 | 26,4 | 5  | 5,5  | 13,2 | 1,5 | 3   | 47/97/147         | 25   | 20,2 | 50/100/150  | 5                  | 10                                 |
| K1415.002606*** | 17,6 | 26,4 | 6  | 6,85 | 13,2 | 2   | 3   | 47/97/147         | 25   | 20,2 | 50/100/150  | 6                  | 14                                 |
| K1415.003308*** | 23   | 33,2 | 8  | 9,5  | 17,3 | 3   | 3,5 | 96,5/146,5/196,5  | 33   | 26,1 | 100/150/200 | 8                  | 26                                 |
| K1415.003310*** | 23   | 33,2 | 10 | 12   | 17,3 | 4   | 3,5 | 96,5/146,5/196,5  | 33   | 26,1 | 100/150/200 | 10                 | 40                                 |
| K1415.004612*** | 33   | 45,9 | 12 | 14,5 | 26,3 | 4,5 | 3,5 | 146,5/196,5/246,5 | 39,5 | 31,3 | 150/200/250 | 12                 | 57                                 |
| K1415.004616*** | 33   | 45,9 | 16 | 19   | 26,3 | 6,5 | 4   | 146/196/246       | 39,5 | 31,3 | 150/200/250 | 16                 | 100                                |

## Ball lock pins

stainless steel, with headend lock



### Material:

Grip and push button 1.4305 stainless steel.

Pin 1.4305 stainless steel.

Balls 1.4125 stainless steel.

Spring and hanger 1.4310 stainless steel wire.

### Version:

Bright.

### Sample order:

K1414.001205050

(include length L5, e.g. 050 for L5 = 50 mm)

### Note:

Ball lock pins are used for easy fastening or joining of components.

The two balls are disengaged by pressing the push button and the pin can be slipped into holes in the workpieces. When the push button is released, the balls lock the connection securely.

Shear force double shear ( $F$ ) =  $S \cdot \tau \cdot aB$  max.

The values given for the shear force are the theoretical breaking load.

These are non-binding reference values without consideration of safety factors and exclude any liability. The values given are for information purposes only and do not constitute a legally binding assurance of properties.

The load values have been calculated in accordance with DIN 50141. Each user must determine individually whether the ball lock pin is suitable for the respective application.

Different materials in which the ball lock pins are used, weather conditions and wear can influence the determined values.

### Advantages:

Wide connections possible.

The pin length does not need to be coordinated with the component width.

### On request:

Other pin lengths.

### Accessories:

Adapter bushes for ball lock pins with head lock K1416.

For Form B:

Safety spiral cable K0367

Retaining cable with eyelet K0367

Key ring K0367



# Ball lock pins

stainless steel, with headend lock



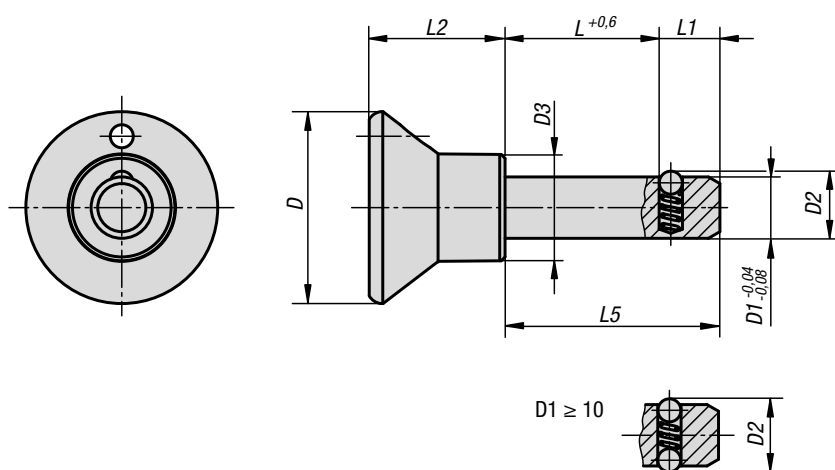
## KIPP Ball lock pins stainless steel, with head-end lock, Form A

| Order No.          | Form | D    | D1 | D2   | D3   | D5  | L   | L1                | L2   | L5          | SW | Receiving hole H11 | Shearing force double shear max.kN |
|--------------------|------|------|----|------|------|-----|-----|-------------------|------|-------------|----|--------------------|------------------------------------|
| K1414.001205050*** | A    | 11,5 | 5  | 5,5  | 10   | 1,5 | 3   | 47/97/147         | 25   | 50/100/150  | 11 | 5                  | 10                                 |
| K1414.001206050*** | A    | 11,5 | 6  | 6,85 | 10   | 2   | 3   | 47/97/147         | 25   | 50/100/150  | 11 | 6                  | 14                                 |
| K1414.001508100*** | A    | 15,5 | 8  | 9,5  | 13,5 | 3   | 3,5 | 96,5/146,5/196,5  | 33   | 100/150/200 | 15 | 8                  | 26                                 |
| K1414.001510100*** | A    | 15,5 | 10 | 12   | 13,5 | 4   | 3,5 | 96,5/146,5/196,5  | 33   | 100/150/200 | 15 | 10                 | 40                                 |
| K1414.002112150*** | A    | 22   | 12 | 14,5 | 20   | 4,5 | 3,5 | 146,5/196,5/246,5 | 39,5 | 150/200/250 | 21 | 12                 | 57                                 |
| K1414.002116150*** | A    | 22   | 16 | 19   | 20   | 6,5 | 4   | 146/196/246       | 39,5 | 150/200/250 | 21 | 16                 | 100                                |

## KIPP Ball lock pins, stainless steel, with head-end lock, Form B

| Order No.          | Form | D    | D1 | D2   | D3   | D4   | D5  | L   | L1                | L2   | L3   | L4   | L5          | SW | Receiving hole H11 | Shearing force double shear max.kN |
|--------------------|------|------|----|------|------|------|-----|-----|-------------------|------|------|------|-------------|----|--------------------|------------------------------------|
| K1414.101205050*** | B    | 11,5 | 5  | 5,5  | 10   | 18,3 | 1,5 | 3   | 47/97/147         | 25   | 34,6 | 16,6 | 50/100/150  | 11 | 5                  | 10                                 |
| K1414.101206050*** | B    | 11,5 | 6  | 6,85 | 10   | 18,3 | 2   | 3   | 47/97/147         | 25   | 34,6 | 16,6 | 50/100/150  | 11 | 6                  | 14                                 |
| K1414.101508100*** | B    | 15,5 | 8  | 9,5  | 13,5 | 24   | 3   | 3,5 | 96,5/146,5/196,5  | 33   | 46,7 | 22,7 | 100/150/200 | 15 | 8                  | 26                                 |
| K1414.101510100*** | B    | 15,5 | 10 | 12   | 13,5 | 24   | 4   | 3,5 | 96,5/146,5/196,5  | 33   | 46,7 | 22,7 | 100/150/200 | 15 | 10                 | 40                                 |
| K1414.102112150*** | B    | 22   | 12 | 14,5 | 20   | 33   | 4,5 | 3,5 | 146,5/196,5/246,5 | 39,5 | 59,3 | 30,3 | 150/200/250 | 21 | 12                 | 57                                 |
| K1414.102116150*** | B    | 22   | 16 | 19   | 20   | 33   | 6,5 | 4   | 146/196/246       | 39,5 | 59,3 | 30,3 | 150/200/250 | 21 | 16                 | 100                                |

## Locking pins



### Material:

Grip thermoplastic.  
Steel parts stainless steel.

### Version:

Grip black.  
Stainless steel bright.

### Sample order:

K0365.2508020  
(include length L e.g. 020 for L = 20 mm)

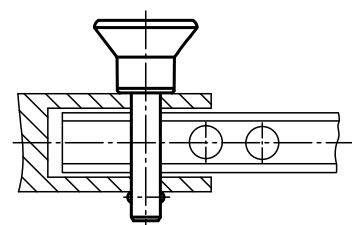
### Note:

Locking pins are used for quick and easy fixating and joining of parts and workpieces.

Shearing force double-shear (F) = S · τ aB max.

### Accessories:

Bushes for ball lock pins K0724  
Safety spiral cable K0367  
Retaining cable with loop K0367  
Key ring K0367

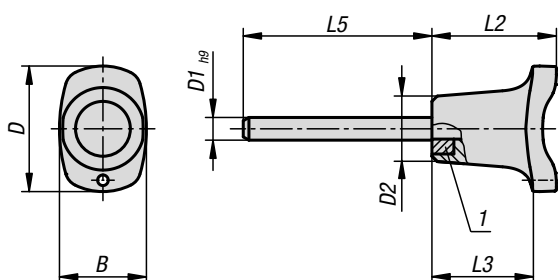


## KIPP Locking pins

| Order No.     | D  | D1 | D2   | D3 | L                    | L1 | L2   | L5                   | Receiving hole H11 | Shearing force double shear max.kN |
|---------------|----|----|------|----|----------------------|----|------|----------------------|--------------------|------------------------------------|
| K0365.2506*** | 25 | 6  | 6,5  | 14 | 10/15/20/25/30/40/50 | 7  | 17,7 | 17/22/27/32/37/47/57 | 6                  | 22                                 |
| K0365.2508*** | 25 | 8  | 8,75 | 14 | 15/20/25/30/40/50    | 8  | 17,7 | 23/28/33/38/48/58    | 8                  | 38                                 |
| K0365.3310*** | 33 | 10 | 12   | 19 | 15/20/25/30/40/50    | 9  | 24   | 24/29/34/39/49/59    | 10                 | 60                                 |
| K0365.3312*** | 33 | 12 | 14,5 | 19 | 20/30/40/50          | 10 | 24   | 30/40/50/60          | 12                 | 86                                 |

## Locking pins

with magnetic axial lock



### Material:

Grip thermoplastic.  
Steel parts 1.4305 stainless steel.  
Magnet NdFeB.

### Version:

Grip black.  
Stainless steel bright.

### Sample order:

K1216.3306030  
(include length L e.g. 030 for L = 30 mm.)

### Note:

The locking pins with magnetic axial lock are used for fast and easy fixating and joining of parts and workpieces.

Magnets integrated into the grip ensure axial positioning and hold the locking pin in the inserted position.

Smooth surfaces and a perpendicular insertion bore have a positive effect on the retaining forces.

Optional retainer systems can be used to make the locking pins captive.

Shear force double-shear (F) = S · τ aB max.

### On request:

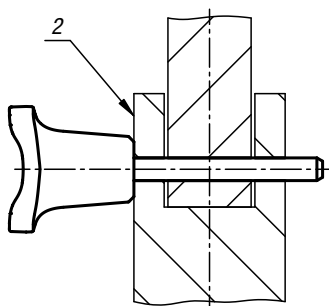
Other pin lengths.

### Accessories:

Safety spiral cable K0367....  
Retaining cable with loop K0367....  
Key ring K0367....  
Ball chains K1125....

### Drawing reference:

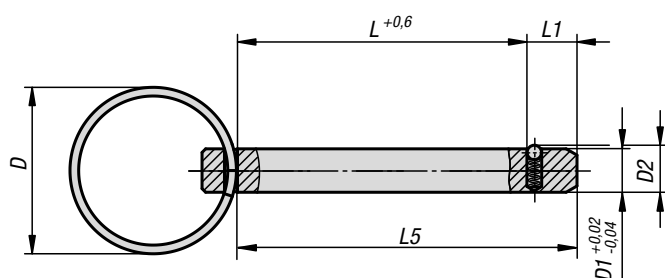
1) Magnet  
2) Steel part/workpiece



## KIPP Locking pin with magnetic axial lock

| Order No.     | B  | D    | D1 | D2   | L2   | L3   | L5                   | Receiving hole | Shearing force double shear max.kN | Clamping force ca. N |
|---------------|----|------|----|------|------|------|----------------------|----------------|------------------------------------|----------------------|
| K1216.3306*** | 23 | 33,2 | 6  | 17,3 | 33   | 26,1 | 15/30/40/50/60/70/80 | 6              | 22                                 | 43                   |
| K1216.3308*** | 23 | 33,2 | 8  | 17,3 | 33   | 26,1 | 15/30/40/50/60/70/80 | 8              | 38                                 | 43                   |
| K1216.4610*** | 33 | 45,9 | 10 | 26,3 | 39,5 | 31,3 | 15/30/40/50/60/70/80 | 10             | 60                                 | 74                   |
| K1216.4612*** | 33 | 45,9 | 12 | 26,3 | 39,5 | 31,3 | 30/40/50/60/70/80    | 12             | 86                                 | 74                   |

## Locking pins with key ring



### Material:

Pin steel.

Key ring stainless steel.

### Version:

Pins electro zinc-plated.

Key ring bright.

### Sample order:

K0365.102306020

### Note:

Locking pins are used for quick and easy fixating and joining of parts and workpieces.

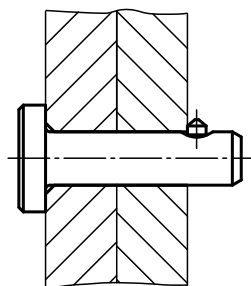
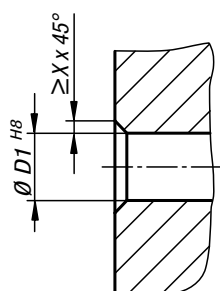
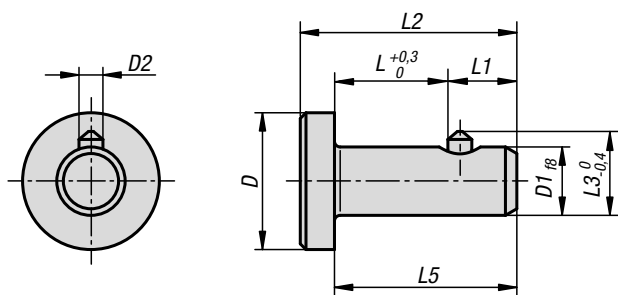
Shearing force double shear (F) =  $S \cdot \tau \cdot aB$  max.

The locking pins with key ring represent a cost-effective alternative to other locking pins.

## KIPP Locking pins with key ring

| Order No.       | D  | D1 | D2  | L  | L1 | L5 | Shearing force<br>double shear<br>max.kN |
|-----------------|----|----|-----|----|----|----|------------------------------------------|
| K0365.102306015 | 23 | 6  | 6,5 | 15 | 7  | 22 | 22                                       |
| K0365.102306020 | 23 | 6  | 6,5 | 20 | 7  | 27 | 22                                       |
| K0365.102306030 | 23 | 6  | 6,5 | 30 | 7  | 37 | 22                                       |
| K0365.102306040 | 23 | 6  | 6,5 | 40 | 7  | 47 | 22                                       |
| K0365.102808030 | 28 | 8  | 8,8 | 30 | 8  | 38 | 38                                       |
| K0365.102808040 | 28 | 8  | 8,8 | 40 | 8  | 48 | 38                                       |
| K0365.102808050 | 28 | 8  | 8,8 | 50 | 8  | 58 | 38                                       |

# Locking pins with axial lock



**Material:**  
Steel.

**Version:**  
Electro zinc-plated.

**Sample order:**  
K0772.1206016

**Note:**  
Locking pins are used for quick and easy fixating and joining of parts and workpieces.

Shearing force double-shear (F) = S · τ aB max.

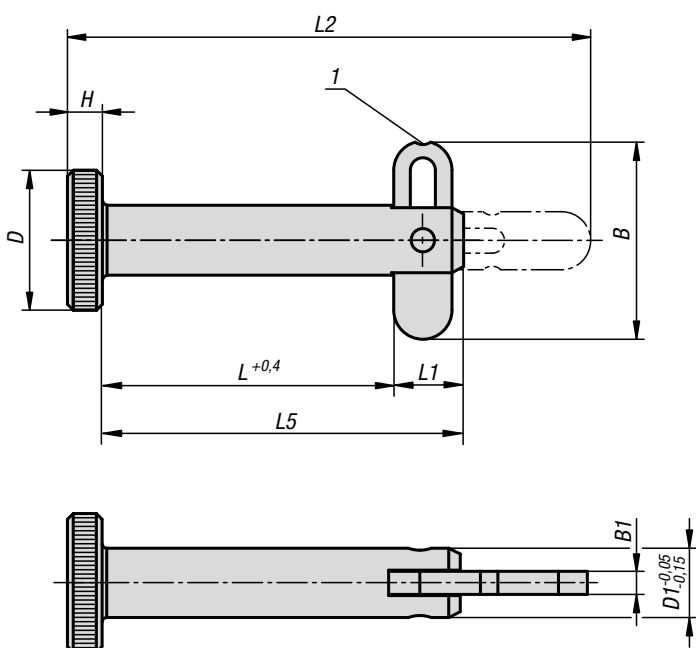
**Assembly:**  
Observe the assembly aid dimension X in the workpiece.

**Drawing reference:**  
Chamfer for counterpart Xmin. x 45°

## KIPP Locking pins with axial lock

| Order No.     | D  | D1 | D2  | L  | L1 | L2 | L3   | L5 | X   | Shearing force double shear max.kN |
|---------------|----|----|-----|----|----|----|------|----|-----|------------------------------------|
| K0772.1206010 | 12 | 6  | 2,1 | 10 | 6  | 19 | 7,4  | 16 | 1,1 | 12                                 |
| K0772.1206012 | 12 | 6  | 2,1 | 12 | 6  | 21 | 7,4  | 18 | 1,1 | 12                                 |
| K0772.1206016 | 12 | 6  | 2,1 | 16 | 6  | 25 | 7,4  | 22 | 1,1 | 12                                 |
| K0772.1206020 | 12 | 6  | 2,1 | 20 | 6  | 29 | 7,4  | 26 | 1,1 | 12                                 |
| K0772.1608012 | 16 | 8  | 2,1 | 12 | 6  | 22 | 9,4  | 18 | 1,1 | 22                                 |
| K0772.1608016 | 16 | 8  | 2,1 | 16 | 6  | 26 | 9,4  | 22 | 1,1 | 22                                 |
| K0772.1608020 | 16 | 8  | 2,1 | 20 | 6  | 30 | 9,4  | 26 | 1,1 | 22                                 |
| K0772.1608025 | 16 | 8  | 2,1 | 25 | 6  | 35 | 9,4  | 31 | 1,1 | 22                                 |
| K0772.2010012 | 20 | 10 | 2,8 | 12 | 8  | 24 | 11,8 | 20 | 1,2 | 35                                 |
| K0772.2010016 | 20 | 10 | 2,8 | 16 | 8  | 28 | 11,8 | 24 | 1,2 | 35                                 |
| K0772.2010020 | 20 | 10 | 2,8 | 20 | 8  | 32 | 11,8 | 28 | 1,2 | 35                                 |
| K0772.2010025 | 20 | 10 | 2,8 | 25 | 8  | 37 | 11,8 | 33 | 1,2 | 35                                 |
| K0772.2412016 | 24 | 12 | 2,8 | 16 | 8  | 29 | 13,8 | 24 | 1,2 | 51                                 |
| K0772.2412020 | 24 | 12 | 2,8 | 20 | 8  | 33 | 13,8 | 28 | 1,2 | 51                                 |
| K0772.2412025 | 24 | 12 | 2,8 | 25 | 8  | 38 | 13,8 | 33 | 1,2 | 51                                 |
| K0772.2412030 | 24 | 12 | 2,8 | 30 | 8  | 43 | 13,8 | 38 | 1,2 | 51                                 |

## Locking pins with folding latch



### Material:

Steel electro zinc-plated.

### Sample order:

K0776.06025

### Note:

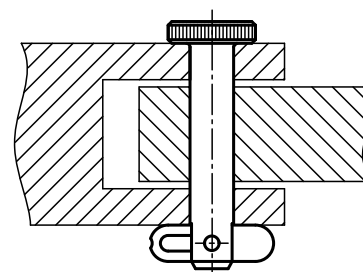
Locking pins with folding latch are not only used for fast and easy fixing but also for permanent joining of movable parts and workpieces.

The wide folding latch lets you secure the parts to be joined over a large cross section. It can also work under pressure in the axial direction.

Indexing slots in the folding latch allow definite "Closed" and "Open" positions.

### Drawing reference:

1) locking slot



### KIPP Locking pins with folding latch

| Order No.   | B    | B1 | D  | D1 | H | L  | L1 | L2 | L5 | Receiving hole H11 | Shearing force double shear max.kN | Extraction force F N |
|-------------|------|----|----|----|---|----|----|----|----|--------------------|------------------------------------|----------------------|
| K0776.06025 | 16,9 | 2  | 12 | 6  | 3 | 25 | 6  | 45 | 31 | 6                  | 12                                 | 190                  |
| K0776.06040 | 16,9 | 2  | 12 | 6  | 3 | 40 | 6  | 60 | 46 | 6                  | 12                                 | 190                  |
| K0776.06050 | 16,9 | 2  | 12 | 6  | 3 | 50 | 6  | 70 | 56 | 6                  | 12                                 | 190                  |
| K0776.08025 | 16,9 | 2  | 16 | 8  | 4 | 25 | 6  | 46 | 31 | 8                  | 21                                 | 270                  |
| K0776.08040 | 16,9 | 2  | 16 | 8  | 4 | 40 | 6  | 61 | 46 | 8                  | 21                                 | 270                  |
| K0776.08050 | 16,9 | 2  | 16 | 8  | 4 | 50 | 6  | 71 | 56 | 8                  | 21                                 | 270                  |

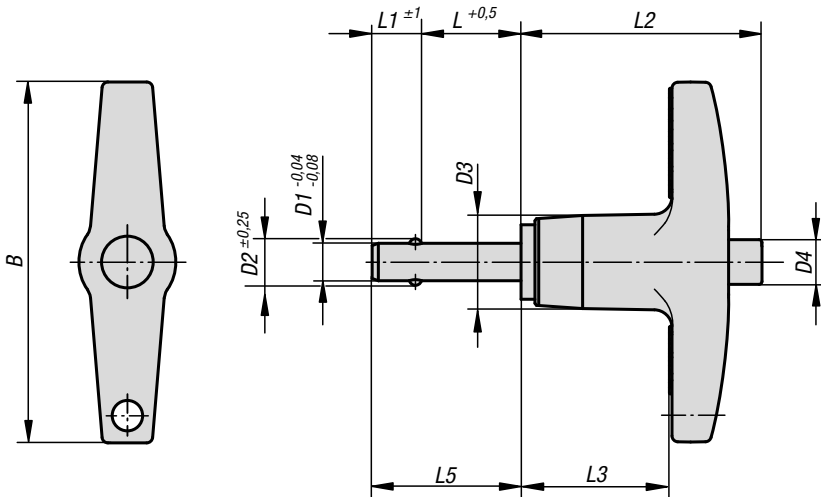


A large rectangular area filled with a fine grid of light gray lines, intended for taking notes or drawing.



# Ball lock pins

with T-grip



## Material:

Pin 1.4542 stainless steel.  
Grip die-cast aluminium EN-AC 46000.  
Push button aluminium EN-AW 2024 T4.  
Balls 1.4125 stainless steel.  
Spring stainless steel wire.

## Version:

All stainless steel parts passivated.  
Pin hardened to min. 40 HRC.  
Grip black anodised.  
Push button blue anodised.  
Balls hardened to 58 +4 HRC.

## Sample order:

K0366.24605030  
(include length L e.g. 030 for L = 30 mm.)

## Note:

Ball lock pins are used for easy fastening or joining of components or workpieces.  
The two balls are disengaged by pressing the push button and the pin can be slipped into holes in the workpieces.  
Release the button to lock the balls and secure the connection. If required, the ball lock pins can be fitted with a retaining cable.

The hardened, high-tensile stainless steel pin permits extreme loads with low wear.

Shear force double shear (F) = S · τ aB max.

The values given for the shear force are the theoretical breaking load.

These are non-binding reference values without consideration of safety factors and exclude any liability.  
The values given are for information purposes only and do not constitute a legally binding assurance of properties.

The load values have been calculated in accordance with DIN 50141. Each user must determine individually whether the ball lock pin is suitable for the respective application.

Different materials in which the ball lock pins are used, weather conditions and wear can influence the determined values.

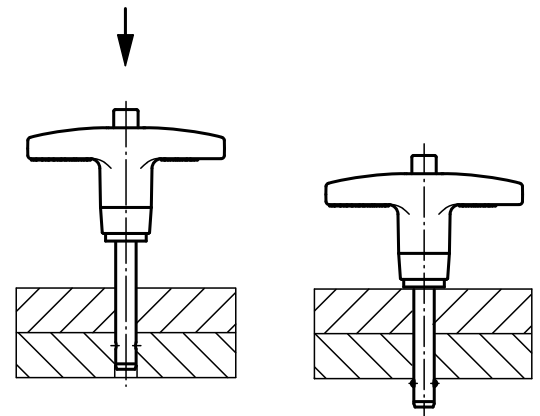
## Accessories:

Bushes for ball lock pins K0724  
Safety spiral cable K0367  
Retaining cable with loop K0367  
Key ring K0367



# Ball lock pins

with T-grip

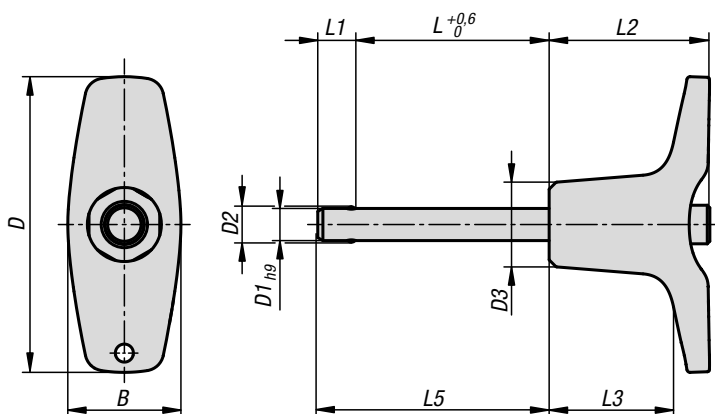


## KIPP Ball lock pins with T-grip

| Order No.      | B    | D1 | D2    | D3   | D4   | L                                    | L1 | L2   | L3   | L5                                   | Receiving hole H11 | Shearing force double shear max.kN |
|----------------|------|----|-------|------|------|--------------------------------------|----|------|------|--------------------------------------|--------------------|------------------------------------|
| K0366.24605*** | 46   | 5  | 5,54  | 11,9 | 5,8  | 10/15/20/25/30/35/40/50/60/70        | 6  | 30,7 | 19,3 | 16/21/26/31/36/41/46/56/66/76        | 5                  | 24,4                               |
| K0366.24606*** | 46   | 6  | 6,99  | 11,9 | 5,8  | 10/15/20/25/30/35/40/50/60/70/80     | 7  | 30,7 | 19,3 | 17/22/27/32/37/42/47/57/67/77/87     | 6                  | 35,64                              |
| K0366.24608*** | 46   | 8  | 9,42  | 11,9 | 5,8  | 10/15/20/25/30/35/40/50/60/70/80     | 8  | 30,7 | 19,3 | 18/23/28/33/38/43/48/58/68/78/88     | 8                  | 63,8                               |
| K0366.25110*** | 50,8 | 10 | 11,86 | 14,2 | 7,4  | 15/20/25/30/35/40/50/60/70/80/90/100 | 9  | 34,8 | 22,1 | 24/29/34/39/44/49/59/69/79/89/99/109 | 10                 | 100,1                              |
| K0366.25812*** | 57,2 | 12 | 14,45 | 18,3 | 10,7 | 20/25/30/35/40/50/60/70/80/90/100    | 10 | 40,6 | 25,4 | 30/35/40/45/50/60/70/80/90/100/110   | 12                 | 144,06                             |
| K0366.27816*** | 78   | 16 | 19    | 23,9 | 13,7 | 25/30/35/40/50/60/70/80/90/100       | 14 | 45   | 28,2 | 39/44/49/54/64/74/84/94/104/114      | 16                 | 257,18                             |

# Ball lock pins

with T-grip



## Material:

Grip thermoplastic.  
Push button 1.4305 stainless steel.  
Pin 1.4305 stainless steel.  
Balls 1.4125 stainless steel.  
Spring 1.4310 stainless steel wire.

## Version:

Grip black grey or traffic red RAL 3020.  
Stainless steel bright.

## Sample order:

K0792.204606050  
(include length L e.g. 050 for L = 50 mm.)

## Note:

Ball lock pins are used for easy fastening or joining of components or workpieces.

The two balls are disengaged by pressing the push button and the pin can be slipped into holes in the workpieces. When the push button is released, the balls lock the connection securely. If required, the ball lock pins can be fitted with a retaining cable.

Shear force double shear (F) =  $S \cdot \tau \cdot aB \text{ max.}$

The values given for the shear force are the theoretical breaking load.

These are non-binding reference values without consideration of safety factors and exclude any liability. The values given are for information purposes only and do not constitute a legally binding assurance of properties.

The load values have been calculated in accordance with DIN 50141. Each user must determine individually whether the ball lock pin is suitable for the respective application.

Different materials in which the ball lock pins are used, weather conditions and wear can influence the determined values.

## Accessories:

Bushes for ball lock pins K0724  
Safety spiral cable K0367  
Retaining cable with loop K0367  
Key ring K0367

# Ball lock pins

with T-grip



## KIPP Ball lock pins with T-grip

| Order No.<br>black | B    | D    | D1 | D2   | D3   | L                          | L1   | L2   | L3   | L5                                           | Receiving<br>hole<br>H11 | Shearing force<br>double shear<br>max.kN |
|--------------------|------|------|----|------|------|----------------------------|------|------|------|----------------------------------------------|--------------------------|------------------------------------------|
| K0792.204605***    | 17,6 | 46   | 5  | 5,5  | 13,2 | 10/15/20/25/30             | 5,9  | 25   | 19,4 | 15,9/20,9/25,9/30,9/35,9                     | 5                        | 15                                       |
| K0792.204606***    | 17,6 | 46   | 6  | 6,85 | 13,2 | 10/15/20/25/30/35/40/45/50 | 6,8  | 25   | 19,4 | 16,8/21,8/26,8/31,8/36,8/41,8/46,8/51,8/56,8 | 6                        | 22                                       |
| K0792.206308***    | 23   | 62,9 | 8  | 9,5  | 17,3 | 20/25/30/35/40/45/50       | 7,8  | 33   | 24,4 | 27,8/32,8/37,8/42,8/47,8/52,8/57,8           | 8                        | 38                                       |
| K0792.206310***    | 23   | 62,9 | 10 | 12   | 17,3 | 20/25/30/35/40/45/50/60    | 8,9  | 33   | 24,4 | 28,9/33,9/38,9/43,9/48,9/53,9/58,9/68,9      | 10                       | 60                                       |
| K0792.208212***    | 33   | 81,8 | 12 | 14,5 | 26,3 | 25/30/35/40/45/50/60/70/80 | 9,9  | 39,5 | 28,8 | 34,9/39,9/44,9/49,9/54,9/59,9/69,9/79,9/89,9 | 12                       | 86                                       |
| K0792.208216***    | 33   | 81,8 | 16 | 19   | 26,3 | 30/35/40/45/50/60/70/80    | 13,1 | 39,5 | 28,8 | 43,1/48,1/53,1/58,1/63,1/73,1/83,1/93,1      | 16                       | 153                                      |

| Order No.<br>red RAL 3020 | B    | D    | D1 | D2   | D3   | L                          | L1   | L2   | L3   | L5                                           | Receiving<br>hole<br>H11 | Shearing force<br>double shear<br>max.kN |
|---------------------------|------|------|----|------|------|----------------------------|------|------|------|----------------------------------------------|--------------------------|------------------------------------------|
| K0792.20844605***         | 17,6 | 46   | 5  | 5,5  | 13,2 | 10/15/20/25/30             | 5,9  | 25   | 19,4 | 15,9/20,9/25,9/30,9/35,9                     | 5                        | 15                                       |
| K0792.20844606***         | 17,6 | 46   | 6  | 6,85 | 13,2 | 10/15/20/25/30/35/40/45/50 | 6,8  | 25   | 19,4 | 16,8/21,8/26,8/31,8/36,8/41,8/46,8/51,8/56,8 | 6                        | 22                                       |
| K0792.20846308***         | 23   | 62,9 | 8  | 9,5  | 17,3 | 20/25/30/35/40/45/50       | 7,8  | 33   | 24,4 | 27,8/32,8/37,8/42,8/47,8/52,8/57,8           | 8                        | 38                                       |
| K0792.20846310***         | 23   | 62,9 | 10 | 12   | 17,3 | 20/25/30/35/40/45/50/60    | 8,9  | 33   | 24,4 | 28,9/33,9/38,9/44,9/48,9/54,9/58,9/68,9      | 10                       | 60                                       |
| K0792.20848212***         | 33   | 81,8 | 12 | 14,5 | 26,3 | 25/30/35/40/45/50/60/70/80 | 9,9  | 39,5 | 28,8 | 34,9/39,9/44,9/49,9/54,9/59,9/69,9/79,9/89,9 | 12                       | 86                                       |
| K0792.20848216***         | 33   | 81,8 | 16 | 19   | 26,3 | 30/35/40/45/50/60/70/80    | 13,1 | 39,5 | 28,8 | 43,1/48,1/53,1/58,1/63,1/73,1/83,1/93,1      | 16                       | 153                                      |

## Ball lock pins with T-grip

with high shear strength



### Material:

Grip thermoplastic.  
Push button 1.4305 stainless steel.  
Pin 1.4542 stainless steel.  
Balls 1.4125 stainless steel.  
Spring 1.4310 stainless steel wire.

### Version:

Grip black grey or traffic red RAL 3020.  
Stainless steel bright.

### Sample order:

K0792.214606050  
(include length L e.g. 050 for L = 50 mm.)

### Note:

Ball lock pins are used for easy fastening or joining of components.  
The two balls are disengaged by pressing the push button and the pin can be slipped into holes in the workpieces. When the push button is released, the balls lock the connection securely.

Shear force double shear ( $F$ ) =  $S \cdot \tau$  aB max.

The values given for the shear force are the theoretical breaking load.

These are non-binding reference values without consideration of safety factors and exclude any liability. The values given are for information purposes only and do not constitute a legally binding assurance of properties.

The load values have been calculated in accordance with DIN 50141. Each user must determine individually whether the ball lock pin is suitable for the respective application.

Different materials in which the ball lock pins are used, weather conditions and wear can influence the determined values.

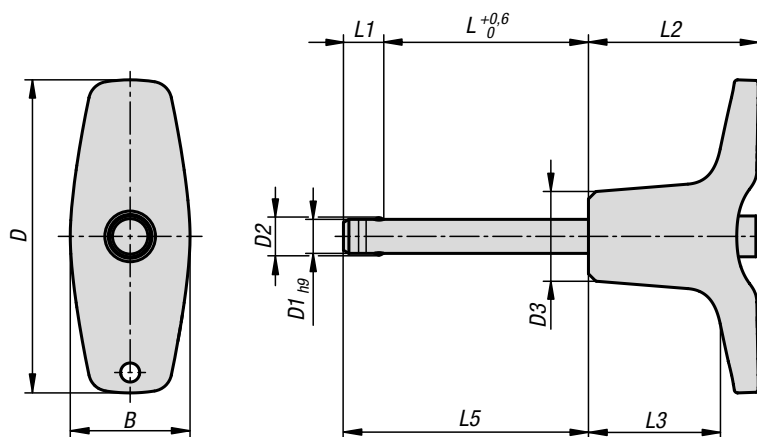
Ball lock pins with high shear strength are identified by a groove marking on the pin.

### Advantages:

Higher loading in comparison to standard ball lock pins. The pins made from 1.4542 stainless steel is hardened, has a higher shear resistance and is extremely durable.

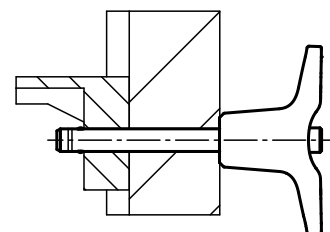
### Accessories:

Bushes for ball lock pins K0724  
Safety spiral cable K0367  
Retaining cable with loop K0367  
Key ring K0367



# Ball lock pins with T-grip

with high shear strength



## KIPP Ball lock pins with T-grip with high shear strength

| Order No.<br>black | B    | D    | D1 | D2   | D3   | L                          | L1   | L2   | L3   | L5                                           | Receiving<br>hole<br>H11 | Shearing force<br>double shear<br>max.kN |
|--------------------|------|------|----|------|------|----------------------------|------|------|------|----------------------------------------------|--------------------------|------------------------------------------|
| K0792.214605***    | 17,6 | 46   | 5  | 5,5  | 13,2 | 10/15/20/25/30             | 5,9  | 25   | 19,4 | 15,9/20,9/25,9/30,9/35,9                     | 5                        | 24                                       |
| K0792.214606***    | 17,6 | 46   | 6  | 6,85 | 13,2 | 10/15/20/25/30/35/40/45/50 | 6,8  | 25   | 19,4 | 16,8/21,8/26,8/31,8/36,8/41,8/46,8/51,8/56,8 | 6                        | 35                                       |
| K0792.216308***    | 23   | 62,9 | 8  | 9,5  | 17,3 | 20/25/30/35/40/45/50       | 7,8  | 33   | 24,4 | 27,8/32,8/37,8/42,8/47,8/52,8/57,8           | 8                        | 63                                       |
| K0792.216310***    | 23   | 62,9 | 10 | 12   | 17,3 | 20/25/30/35/40/45/50/60    | 8,9  | 33   | 24,4 | 28,9/33,9/38,9/43,9/48,9/53,9/58,9/68,9      | 10                       | 100                                      |
| K0792.218212***    | 33   | 81,8 | 12 | 14,5 | 26,3 | 25/30/35/40/45/50/60/70/80 | 9,9  | 39,5 | 28,8 | 34,9/39,9/44,9/49,9/54,9/59,9/69,9/79,9/89,9 | 12                       | 144                                      |
| K0792.218216***    | 33   | 81,8 | 16 | 19   | 26,3 | 30/35/40/45/50/60/70/80    | 13,1 | 39,5 | 28,8 | 43,1/48,1/53,1/58,1/63,1/73,1/83,1/93,1      | 16                       | 257                                      |

| Order No.<br>red RAL 3020 | B    | D    | D1 | D2   | D3   | L                          | L1   | L2   | L3   | L5                                           | Receiving<br>hole<br>H11 | Shearing force<br>double shear<br>max.kN |
|---------------------------|------|------|----|------|------|----------------------------|------|------|------|----------------------------------------------|--------------------------|------------------------------------------|
| K0792.21844605***         | 17,6 | 46   | 5  | 5,5  | 13,2 | 10/15/20/25/30             | 5,9  | 25   | 19,4 | 15,9/20,9/25,9/30,9/35,9                     | 5                        | 24                                       |
| K0792.21844606***         | 17,6 | 46   | 6  | 6,85 | 13,2 | 10/15/20/25/30/35/40/45/50 | 6,8  | 25   | 19,4 | 16,8/21,8/26,8/31,8/36,8/41,8/46,8/51,8/56,8 | 6                        | 35                                       |
| K0792.21846308***         | 23   | 62,9 | 8  | 9,5  | 17,3 | 20/25/30/35/40/45/50       | 7,8  | 33   | 24,4 | 27,8/32,8/37,8/42,8/47,8/52,8/57,8           | 8                        | 63                                       |
| K0792.21846310***         | 23   | 62,9 | 10 | 12   | 17,3 | 20/25/30/35/40/45/50/60    | 8,9  | 33   | 24,4 | 28,9/33,9/38,9/43,9/48,9/53,9/58,9/68,9      | 10                       | 100                                      |
| K0792.21848212***         | 33   | 81,8 | 12 | 14,5 | 26,3 | 25/30/35/40/45/50/60/70/80 | 9,9  | 39,5 | 28,8 | 34,9/39,9/44,9/49,9/54,9/59,9/69,9/79,9/89,9 | 12                       | 144                                      |
| K0792.21848216***         | 33   | 81,8 | 16 | 19   | 26,3 | 30/35/40/45/50/60/70/80    | 13,1 | 39,5 | 28,8 | 43,1/48,1/53,1/58,1/63,1/73,1/83,1/93,1      | 16                       | 257                                      |

# Ball lock pins

with T-grip


**Material:**

Grip die-cast zinc.  
Steel parts 1.4305 stainless steel.

**Version:**

Grip black.  
Stainless steel bright.

**Sample order:**

K0793.204606050  
(include length L e.g. 050 for L = 50 mm.)

**Note:**

Ball lock pins are used for easy fastening or joining of components or workpieces.

The two balls are disengaged by pressing the push button and the pin can be slipped into holes in the workpieces. When the push button is released, the balls lock the connection securely. If required, the ball lock pins can be fitted with a retaining cable.

Shear force double shear ( $F$ ) =  $S \cdot \tau \cdot aB$  max.

The values given for the shear force are the theoretical breaking load.

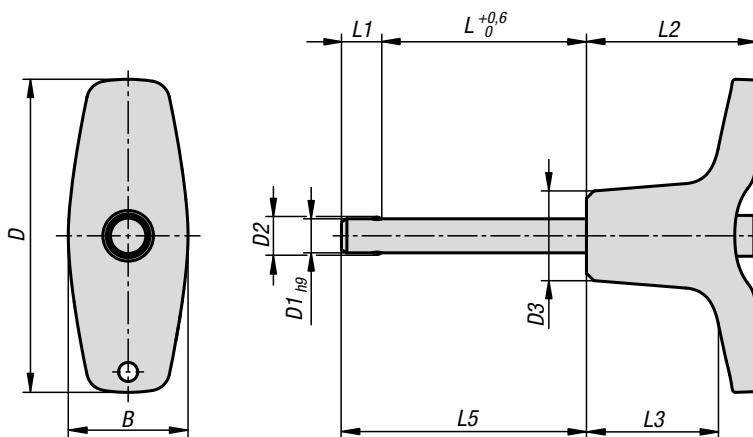
These are non-binding reference values without consideration of safety factors and exclude any liability. The values given are for information purposes only and do not constitute a legally binding assurance of properties.

The load values have been calculated in accordance with DIN 50141. Each user must determine individually whether the ball lock pin is suitable for the respective application.

Different materials in which the ball lock pins are used, weather conditions and wear can influence the determined values.

**Accessories:**

Bushes for ball lock pins K0724  
Safety spiral cable K0367  
Retaining cable with loop K0367  
Key ring K0367



## KIPP Ball lock pins with T-grip

| Order No.       | B    | D    | D1 | D2   | D3   | L                          | L1   | L2   | L3   | L5                                                     | Receiving hole H11 | Shearing force double shear max.kN |
|-----------------|------|------|----|------|------|----------------------------|------|------|------|--------------------------------------------------------|--------------------|------------------------------------|
| K0793.204605*** | 17,6 | 46   | 5  | 5,5  | 13,2 | 10/15/20/25/30             | 5,9  | 25   | 19,4 | 15,9/20,9/25,9/30,9/35,9                               | 5                  | 15                                 |
| K0793.204606*** | 17,6 | 46   | 6  | 6,85 | 13,2 | 10/15/20/25/30/35/40/45/50 | 6,8  | 25   | 19,4 | 16,8/21,8/26,8/31,8/36,8/41,8/46,8/51,8/56,8           | 6                  | 22                                 |
| K0793.206308*** | 23   | 62,9 | 8  | 9,5  | 17,3 | 20/25/30/35/40/45/50       | 7,8  | 33   | 24,4 | 27,8/32,8/37,8/42,8/47,8/52,8/57,8                     | 8                  | 38                                 |
| K0793.206310*** | 23   | 62,9 | 10 | 12   | 17,3 | 20/25/30/35/40/45/50/60    | 8,9  | 33   | 24,4 | 28,9/33,9/38,9/43,9/48,9/53,9/58,9/63,9                | 10                 | 60                                 |
| K0793.208212*** | 33   | 81,8 | 12 | 14,5 | 26,3 | 25/30/35/40/45/50/60/70/80 | 9,9  | 39,5 | 28,8 | 34,9/39,9/44,9/49,9/54,9/59,9/64,9/69,9/74,9/79,9/84,9 | 12                 | 86                                 |
| K0793.208216*** | 33   | 81,8 | 16 | 19   | 26,3 | 30/35/40/45/50/60/70/80    | 13,1 | 39,5 | 28,8 | 43,1/48,1/53,1/58,1/63,1/68,1/73,1/78,1/83,1/88,1/93,1 | 16                 | 153                                |

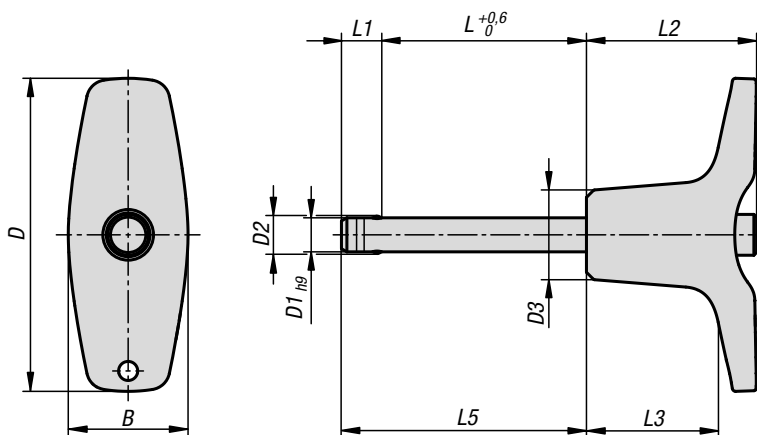


A large rectangular area filled with a fine grid of light gray lines, intended for taking notes or drawing.



## Ball lock pins with T-grip

with high shear strength



### Material:

Grip die-cast zinc.  
Push button 1.4305 stainless steel.  
Pin stainless steel 1.4542.  
Balls 1.4125 stainless steel.  
Spring 1.4310 stainless steel.

### Version:

Grip black.  
Stainless steel bright.

### Sample order:

K0793.214606050  
(include length L e.g. 050 for L = 50 mm.)

### Note:

Ball lock pins are used for easy fastening or joining of components.

The two balls are disengaged by pressing the push button and the pin can be slipped into holes in the workpieces. When the push button is released, the balls lock the connection securely.

Shear force double shear ( $F$ ) =  $S \cdot \tau \cdot aB$  max.

The values given for the shear force are the theoretical breaking load.

These are non-binding reference values without consideration of safety factors and exclude any liability. The values given are for information purposes only and do not constitute a legally binding assurance of properties.

The load values have been calculated in accordance with DIN 50141. Each user must determine individually whether the ball lock pin is suitable for the respective application.

Different materials in which the ball lock pins are used, weather conditions and wear can influence the determined values.

Ball lock pins with high shear strength are identified by a groove marking on the pin.

### Advantages:

Higher loading in comparison to standard ball lock pins.

The pins made from 1.4542 stainless steel is hardened, has a higher shear resistance and is extremely durable.

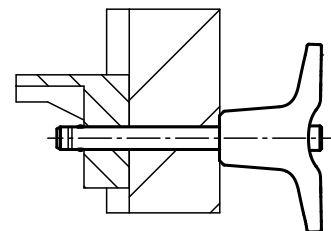
### Accessories:

Bushes for ball lock pins K0724  
Safety spiral cable K0367  
Retaining cable with loop K0367  
Key ring K0367



# Ball lock pins with T-grip

with high shear strength

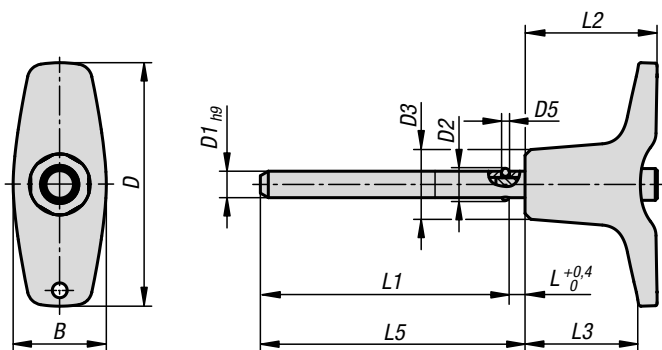


## KIPP Ball lock pins with T-grip with high shear strength

| Order No.       | B    | D    | D1 | D2   | D3   | L                          | L1   | L2   | L3   | L5                                           | Receiving hole H11 | Shearing force double shear max.kN |
|-----------------|------|------|----|------|------|----------------------------|------|------|------|----------------------------------------------|--------------------|------------------------------------|
| K0793.214605*** | 17,6 | 46   | 5  | 5,5  | 13,2 | 10/15/20/25/30             | 5,9  | 25   | 19,4 | 15,9/20,9/25,9/30,9/35,9                     | 5                  | 24                                 |
| K0793.214606*** | 17,6 | 46   | 6  | 6,85 | 13,2 | 10/15/20/25/30/35/40/45/50 | 6,8  | 25   | 19,4 | 16,8/21,8/26,8/31,8/36,8/41,8/46,8/51,8/56,8 | 6                  | 35                                 |
| K0793.216308*** | 23   | 62,9 | 8  | 9,5  | 17,3 | 20/25/30/35/40/45/50       | 7,8  | 33   | 24,4 | 27,8/32,8/37,8/42,8/47,8/52,8/57,8           | 8                  | 63                                 |
| K0793.216310*** | 23   | 62,9 | 10 | 12   | 17,3 | 20/25/30/35/40/45/50/60    | 8,9  | 33   | 24,4 | 28,9/33,9/38,9/43,9/48,9/53,9/58,9/68,9      | 10                 | 100                                |
| K0793.218212*** | 33   | 81,8 | 12 | 14,5 | 26,3 | 25/30/35/40/45/50/60/70/80 | 9,9  | 39,5 | 28,8 | 34,9/39,9/44,9/49,9/54,9/59,9/69,9/79,9/89,9 | 12                 | 144                                |
| K0793.218216*** | 33   | 81,8 | 16 | 19   | 26,3 | 30/35/40/45/50/60/70/80    | 13,1 | 39,5 | 28,8 | 43,1/48,1/53,1/58,1/63,1/73,1/83,1/93,1      | 16                 | 257                                |

## Ball lock pins with T-grip

stainless steel, with head-end lock



### Material:

Grip thermoplastic.  
Push button 1.4305 stainless steel.  
Pin 1.4305 stainless steel.  
Balls 1.4125 stainless steel.  
Spring 1.4310 stainless steel wire.

### Version:

Grip black grey.  
Stainless steel bright.

### Sample order:

K1415.204605050  
(include length L e.g. 050 for L = 50 mm)

### Note:

Ball lock pins are used for easy fastening or joining of components.  
The two balls are disengaged by pressing the push button and the pin can be slipped into holes in the workpieces.  
When the push button is released, the balls lock the connection securely.

Shear force double shear ( $F$ ) =  $S \cdot \tau \cdot aB$  max.

The values given for the shear force are the theoretical breaking load.  
These are non-binding reference values without consideration of safety factors and exclude any liability.  
The values given are for information purposes only and do not constitute a legally binding assurance of properties.

The load values have been calculated in accordance with DIN 50141. Each user must determine individually whether the ball lock pin is suitable for the respective application.

Different materials in which the ball lock pins are used, weather conditions and wear can influence the determined values.

### Advantages:

Wide connections possible.  
The pin length does not need to be coordinated with the component width.

### On request:

Other pin lengths.

### Accessories:

Adapter bushes for ball lock pins with head lock K1416.  
Safety spiral cable K0367  
Retaining cable with eyelet K0367  
Key ring K0367

# Ball lock pins with T-grip

stainless steel, with head-end lock

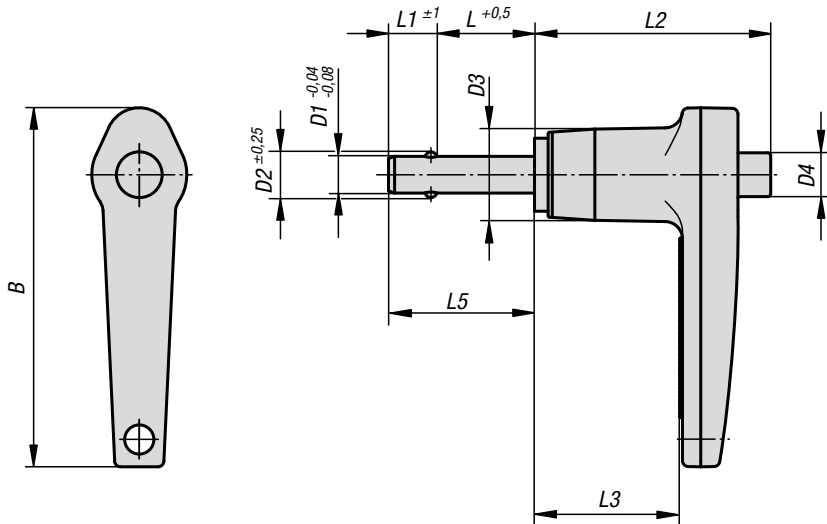


## KIPP Ball lock pins with T-grip stainless steel, with head-end lock

| Order No.       | B    | D    | D1 | D2   | D3   | D5  | L   | L1                | L2   | L3   | L5          | Receiver hole H11 | Shearing force double shear max.kN |
|-----------------|------|------|----|------|------|-----|-----|-------------------|------|------|-------------|-------------------|------------------------------------|
| K1415.204605*** | 17,6 | 46   | 5  | 5,5  | 13,2 | 1,5 | 3   | 47/97/147         | 25   | 19,4 | 50/100/150  | 5                 | 10                                 |
| K1415.204606*** | 17,6 | 46   | 6  | 6,85 | 13,2 | 2   | 3   | 47/97/147         | 25   | 19,4 | 50/100/150  | 6                 | 14                                 |
| K1415.206308*** | 23   | 62,9 | 8  | 9,5  | 17,3 | 3   | 3,5 | 96,5/146,5/196,5  | 33   | 24,4 | 100/150/200 | 8                 | 26                                 |
| K1415.206310*** | 23   | 62,9 | 10 | 12   | 17,3 | 4   | 3,5 | 96,5/146,5/196,5  | 33   | 24,4 | 100/150/200 | 10                | 40                                 |
| K1415.208212*** | 33   | 81,8 | 12 | 14,5 | 26,3 | 4,5 | 3,5 | 146,5/196,5/246,5 | 39,5 | 28,8 | 150/200/250 | 12                | 57                                 |
| K1415.208216*** | 33   | 81,8 | 16 | 19   | 26,3 | 6,5 | 4   | 146/196/246       | 39,5 | 28,8 | 150/200/250 | 16                | 100                                |

# Ball lock pins

with L-grip



## Material:

Pin 1.4542 stainless steel.  
Grip die-cast aluminium EN-AC 46000.  
Push button aluminium EN-AW 2024 T4.  
Balls 1.4125 stainless steel.  
Spring stainless steel wire.

## Version:

All stainless steel parts passivated.  
Pin hardened to min. 40 HRC.  
Grip black anodised.  
Push button blue anodised.  
Balls hardened to 58 +4 HRC.

## Sample order:

K0642.14405030  
(include length L e.g. 030 for L = 30 mm)

## Note:

Ball lock pins are used for easy fastening or joining of components or workpieces.  
The two balls are disengaged by pressing the push button and the pin can be slipped into holes in the workpieces. Release the button to lock the balls and secure the connection. If required, the ball lock pins can be fitted with a retaining cable.

The hardened, high-tensile stainless steel pin permits extreme loads with low wear.

Shear force double shear (F) = S · τ aB max.

The values given for the shear force are the theoretical breaking load.

These are non-binding reference values without consideration of safety factors and exclude any liability.  
The values given are for information purposes only and do not constitute a legally binding assurance of properties.

The load values have been calculated in accordance with DIN 50141. Each user must determine individually whether the ball lock pin is suitable for the respective application.

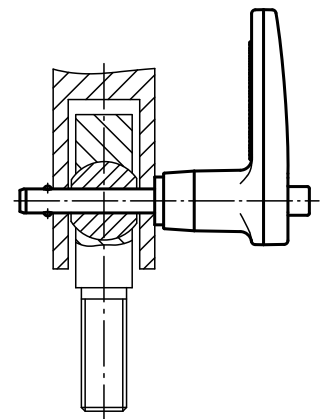
Different materials in which the ball lock pins are used, weather conditions and wear can influence the determined values.

## Accessories:

Safety spiral cable K0367.10200  
Retaining cable with loop K0367. ....  
Key ring K0367.15/19/23  
Bushing for ball lock pins K0724....

# Ball lock pins

with L-grip

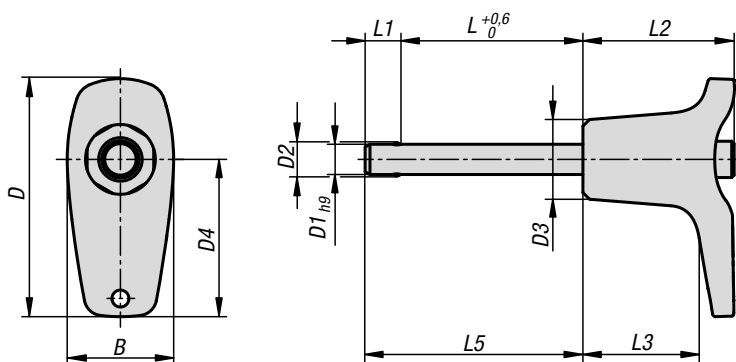


## KIPP Ball lock pins with L-grip

| Order No.      | B    | D1 | D2    | D3   | D4   | L                                    | L1 | L2   | L3   | L5                                   | Receiving hole H11 | Shearing force double shear max.kN |
|----------------|------|----|-------|------|------|--------------------------------------|----|------|------|--------------------------------------|--------------------|------------------------------------|
| K0642.14405*** | 46,7 | 5  | 5,54  | 11,9 | 5,8  | 10/15/20/25/30/35/40/50/60/70        | 6  | 30,7 | 19,3 | 16/21/26/31/36/41/46/56/66/76        | 5                  | 24,4                               |
| K0642.14406*** | 46,7 | 6  | 6,99  | 11,9 | 5,8  | 10/15/20/25/30/35/40/50/60/70/80     | 7  | 30,7 | 19,3 | 17/22/27/32/37/42/47/57/67/77/87     | 6                  | 35,64                              |
| K0642.14408*** | 46,7 | 8  | 9,42  | 11,9 | 5,8  | 10/15/20/25/30/35/40/50/60/70/80     | 8  | 30,7 | 19,3 | 18/23/28/33/38/43/48/58/68/78/88     | 8                  | 63,8                               |
| K0642.15110*** | 54,1 | 10 | 11,86 | 14,2 | 7,4  | 15/20/25/30/35/40/50/60/70/80/90/100 | 9  | 34,8 | 22,1 | 24/29/34/39/44/49/59/69/79/89/99/109 | 10                 | 100,1                              |
| K0642.15712*** | 60,2 | 12 | 14,45 | 18,3 | 10,7 | 20/25/30/35/40/50/60/70/80/90/100    | 10 | 40,6 | 25,4 | 30/35/40/45/50/60/70/80/90/100/110   | 12                 | 144,06                             |
| K0642.16816*** | 68,3 | 16 | 19    | 23,9 | 13,7 | 25/30/35/40/50/60/70/80/90/100       | 14 | 45   | 28,2 | 39/44/49/54/64/74/84/94/104/114      | 16                 | 257,18                             |

## Ball lock pins

with L-grip



### Material:

Grip thermoplastic.  
Push button 1.4305 stainless steel.  
Pin 1.4305 stainless steel.  
Balls 1.4125 stainless steel.  
Spring 1.4310 stainless steel wire.

### Version:

Grip black grey or traffic red RAL 3020.  
Stainless steel bright.

### Sample order:

K0792.102606050  
(include length L e.g. 050 for L = 50 mm.)

### Note:

Ball lock pins are used for easy fastening or joining of components or workpieces.

The two balls are disengaged by pressing the push button and the pin can be slipped into holes in the workpieces. When the push button is released, the balls lock the connection securely. If required, the ball lock pins can be fitted with a retaining cable.

Shear force double shear (F) = S · τ · aB max.

The values given for the shear force are the theoretical breaking load.

These are non-binding reference values without consideration of safety factors and exclude any liability. The values given are for information purposes only and do not constitute a legally binding assurance of properties.

The load values have been calculated in accordance with DIN 50141. Each user must determine individually whether the ball lock pin is suitable for the respective application.

Different materials in which the ball lock pins are used, weather conditions and wear can influence the determined values.

### Accessories:

Bushes for ball lock pins K0724  
Safety spiral cable K0367  
Retaining cable with loop K0367  
Key ring K0367

# Ball lock pins

with L-grip



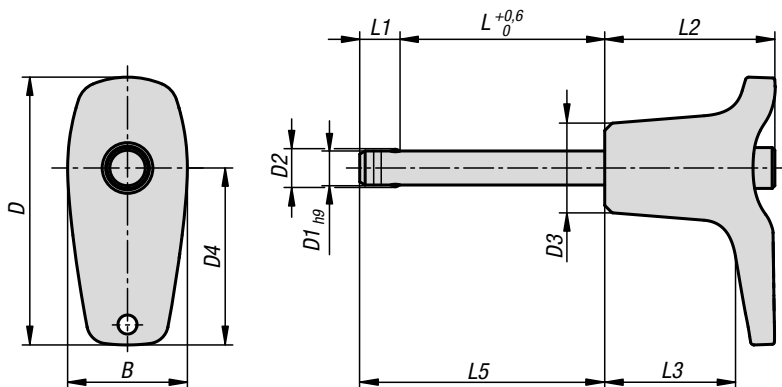
## KIPP Ball lock pins with L-grip

| Order No.<br>black | B    | D    | D1 | D2   | D3   | D4   | L                          | L1   | L2   | L3   | L5                                           | Receiving<br>hole<br>H11 | Shearing force<br>double shear<br>max.kN |
|--------------------|------|------|----|------|------|------|----------------------------|------|------|------|----------------------------------------------|--------------------------|------------------------------------------|
| K0792.102605***    | 17,6 | 39,3 | 5  | 5,5  | 13,2 | 26   | 10/15/20/25/30             | 5,9  | 25   | 19,2 | 15,9/20,9/25,9/30,9/35,9                     | 5                        | 15                                       |
| K0792.102606***    | 17,6 | 39,3 | 6  | 6,85 | 13,2 | 26   | 10/15/20/25/30/35/40/45/50 | 6,8  | 25   | 19,2 | 16,8/21,8/26,8/31,8/36,8/41,8/46,8/51,8/56,8 | 6                        | 22                                       |
| K0792.103508***    | 23   | 52,2 | 8  | 9,5  | 17,3 | 35,4 | 20/25/30/35/40/45/50       | 7,8  | 33   | 24,2 | 27,8/32,8/37,8/42,8/47,8/52,8/57,8           | 8                        | 38                                       |
| K0792.103510***    | 23   | 52,2 | 10 | 12   | 17,3 | 35,4 | 20/25/30/35/40/45/50/60    | 8,9  | 33   | 24,2 | 28,9/33,9/38,9/43,9/48,9/53,9/58,9/68,9      | 10                       | 60                                       |
| K0792.104712***    | 33   | 70,2 | 12 | 14,5 | 26,3 | 47   | 25/30/35/40/45/50/60/70/80 | 9,9  | 39,5 | 28,4 | 34,9/39,9/44,9/49,9/54,9/59,9/69,9/79,9/89,9 | 12                       | 86                                       |
| K0792.104716***    | 33   | 70,2 | 16 | 19   | 26,3 | 47   | 30/35/40/45/50/60/70/80    | 13,1 | 39,5 | 28,4 | 43,1/48,1/53,1/58,1/63,1/73,1/83,1/93,1      | 16                       | 153                                      |

| Order No.<br>red RAL 3020 | B    | D    | D1 | D2   | D3   | D4   | L                          | L1   | L2   | L3   | L5                                           | Receiving<br>hole<br>H11 | Shearing force<br>double shear<br>max.kN |
|---------------------------|------|------|----|------|------|------|----------------------------|------|------|------|----------------------------------------------|--------------------------|------------------------------------------|
| K0792.10842605***         | 17,6 | 39,3 | 5  | 5,5  | 13,2 | 26   | 10/15/20/25/30             | 5,9  | 25   | 19,2 | 15,9/20,9/25,9/30,9/35,9                     | 5                        | 15                                       |
| K0792.10842606***         | 17,6 | 39,3 | 6  | 6,85 | 13,2 | 26   | 10/15/20/25/30/35/40/45/50 | 6,8  | 25   | 19,2 | 16,8/21,8/26,8/31,8/36,8/41,8/46,8/51,8/56,8 | 6                        | 22                                       |
| K0792.10843508***         | 23   | 52,2 | 8  | 9,5  | 17,3 | 35,4 | 20/25/30/35/40/45/50       | 7,8  | 33   | 24,2 | 27,8/32,8/37,8/42,8/47,8/52,8/57,8           | 8                        | 38                                       |
| K0792.10843510***         | 23   | 52,2 | 10 | 12   | 17,3 | 35,4 | 20/25/30/35/40/45/50/60    | 8,9  | 33   | 24,2 | 28,9/33,9/38,9/43,9/48,9/53,9/58,9/68,9      | 10                       | 60                                       |
| K0792.10844712***         | 33   | 70,2 | 12 | 14,5 | 26,3 | 47   | 25/30/35/40/45/50/60/70/80 | 9,9  | 39,5 | 28,4 | 34,9/39,9/44,9/49,9/54,9/59,9/69,9/79,9/89,9 | 12                       | 86                                       |
| K0792.10844716***         | 33   | 70,2 | 16 | 19   | 26,3 | 47   | 30/35/40/45/50/60/70/80    | 13,1 | 39,5 | 28,4 | 43,1/48,1/53,1/58,1/63,1/73,1/83,1/93,1      | 16                       | 153                                      |

# Ball lock pins with L-grip

with high shear strength



## Material:

Grip thermoplastic.  
Push button 1.4305 stainless steel.  
Pin 1.4542 stainless steel.  
Balls 1.4125 stainless steel.  
Spring 1.4310 stainless steel wire.

## Version:

Grip black grey or traffic red RAL 3020.  
Stainless steel bright.

## Sample order:

K0792.112606050  
(include length L e.g. 050 for L = 50 mm.)

## Note:

Ball lock pins are used for easy fastening or joining of components.

The two balls are disengaged by pressing the push button and the pin can be slipped into holes in the workpieces. When the push button is released, the balls lock the connection securely.

Shear force double shear (F) =  $S \cdot \tau$  aB max.

The values given for the shear force are the theoretical breaking load.

These are non-binding reference values without consideration of safety factors and exclude any liability. The values given are for information purposes only and do not constitute a legally binding assurance of properties.

The load values have been calculated in accordance with DIN 50141. Each user must determine individually whether the ball lock pin is suitable for the respective application.

Different materials in which the ball lock pins are used, weather conditions and wear can influence the determined values.

Ball lock pins with high shear strength are identified by a groove marking on the pin.

## Advantages:

Higher loading in comparison to standard ball lock pins.

The pins made from 1.4542 stainless steel is hardened, has a higher shear resistance and is extremely durable.

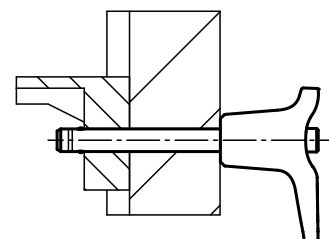
## Accessories:

Bushes for ball lock pins K0724  
Safety spiral cable K0367  
Retaining cable with loop K0367  
Key ring K0367



# Ball lock pins with L-grip

with high shear strength



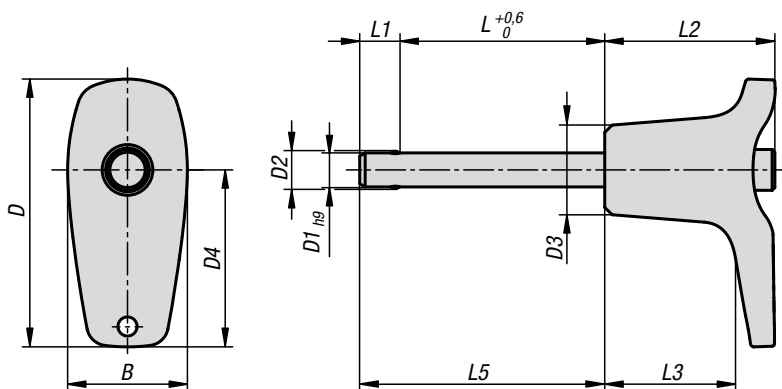
## KIPP Ball lock pins with L-grip with high shear strength

| Order No.<br>black | B    | D    | D1 | D2   | D3   | D4   | L                          | L1   | L2   | L3   | L5                                           | Receiving<br>hole<br>H11 | Shearing force<br>double shear<br>max.kN |
|--------------------|------|------|----|------|------|------|----------------------------|------|------|------|----------------------------------------------|--------------------------|------------------------------------------|
| K0792.112605***    | 17,6 | 39,3 | 5  | 5,5  | 13,2 | 26   | 10/15/20/25/30             | 5,9  | 25   | 19,2 | 15,9/20,9/25,9/30,9/35,9                     | 5                        | 24                                       |
| K0792.112606***    | 17,6 | 39,3 | 6  | 6,85 | 13,2 | 26   | 10/15/20/25/30/35/40/45/50 | 6,8  | 25   | 19,2 | 16,8/21,8/26,8/31,8/36,8/41,8/46,8/51,8/56,8 | 6                        | 35                                       |
| K0792.113508***    | 23   | 52,2 | 8  | 9,5  | 17,3 | 35,4 | 20/25/30/35/40/45/50       | 7,8  | 33   | 24,2 | 27,8/32,8/37,8/42,8/47,8/52,8/57,8           | 8                        | 63                                       |
| K0792.113510***    | 23   | 52,2 | 10 | 12   | 17,3 | 35,4 | 20/25/30/35/40/45/50/60    | 8,9  | 33   | 24,2 | 28,9/33,9/38,9/43,9/48,9/53,9/58,9/68,9      | 10                       | 100                                      |
| K0792.114712***    | 33   | 70,2 | 12 | 14,5 | 26,3 | 47   | 25/30/35/40/45/50/60/70/80 | 9,9  | 39,5 | 28,4 | 34,9/39,9/44,9/49,9/54,9/59,9/69,9/79,9/89,9 | 12                       | 144                                      |
| K0792.114716***    | 33   | 70,2 | 16 | 19   | 26,3 | 47   | 30/35/40/45/50/60/70/80    | 13,1 | 39,5 | 28,4 | 43,1/48,1/53,1/58,1/63,1/73,1/83,1/93,1      | 16                       | 257                                      |

| Order No.<br>red RAL 3020 | B    | D    | D1 | D2   | D3   | D4   | L                          | L1   | L2   | L3   | L5                                           | Receiving<br>hole<br>H11 | Shearing force<br>double shear<br>max.kN |
|---------------------------|------|------|----|------|------|------|----------------------------|------|------|------|----------------------------------------------|--------------------------|------------------------------------------|
| K0792.11842605***         | 17,6 | 39,3 | 5  | 5,5  | 13,2 | 26   | 10/15/20/25/30             | 5,9  | 25   | 19,2 | 15,9/20,9/25,9/30,9/35,9                     | 5                        | 24                                       |
| K0792.11842606***         | 17,6 | 39,3 | 6  | 6,85 | 13,2 | 26   | 10/15/20/25/30/35/40/45/50 | 6,8  | 25   | 19,2 | 16,8/21,8/26,8/31,8/36,8/41,8/46,8/51,8/56,8 | 6                        | 35                                       |
| K0792.11843508***         | 23   | 52,2 | 8  | 9,5  | 17,3 | 35,4 | 20/25/30/35/40/45/50       | 7,8  | 33   | 24,2 | 27,8/32,8/37,8/42,8/47,8/52,8/57,8           | 8                        | 63                                       |
| K0792.11843510***         | 23   | 52,2 | 10 | 12   | 17,3 | 35,4 | 20/25/30/35/40/45/50/60    | 8,9  | 33   | 24,2 | 28,9/33,9/38,9/43,9/48,9/53,9/58,9/68,9      | 10                       | 100                                      |
| K0792.11844712***         | 33   | 70,2 | 12 | 14,5 | 26,3 | 47   | 25/30/35/40/45/50/60/70/80 | 9,9  | 39,5 | 28,4 | 34,9/39,9/44,9/49,9/54,9/59,9/69,9/79,9/89,9 | 12                       | 144                                      |
| K0792.11844716***         | 33   | 70,2 | 16 | 19   | 26,3 | 47   | 30/35/40/45/50/60/70/80    | 13,1 | 39,5 | 28,4 | 43,1/48,1/53,1/58,1/63,1/73,1/83,1/93,1      | 16                       | 257                                      |

## Ball lock pins

with L-grip



### Material:

Grip die-cast zinc.  
Steel parts 1.4305 stainless steel.

### Version:

Grip black.  
Stainless steel bright.

### Sample order:

K0793.102606050  
(include length L e.g. 050 for L = 50 mm.)

### Note:

Ball lock pins are used for easy fastening or joining of components or workpieces. The two balls are disengaged by pressing the push button and the pin can be slipped into holes in the workpieces. When the push button is released, the balls lock the connection securely. If required, the ball lock pins can be fitted with a retaining cable.

Shear force double shear (F) = S · τ aB max.

The values given for the shear force are the theoretical breaking load.

These are non-binding reference values without consideration of safety factors and exclude any liability. The values given are for information purposes only and do not constitute a legally binding assurance of properties.

The load values have been calculated in accordance with DIN 50141. Each user must determine individually whether the ball lock pin is suitable for the respective application.

Different materials in which the ball lock pins are used, weather conditions and wear can influence the determined values.

### Accessories:

Bushes for ball lock pins K0724

Safety spiral cable K0367

Retaining cable with loop K0367

Key ring K0367

## KIPP Ball lock pins with L-grip

| Order No.       | B    | D    | D1 | D2   | D3   | D4   | L                          | L1   | L2   | L3   | L5                                           | Receiving hole H11 | Shearing force double shear max.kN |
|-----------------|------|------|----|------|------|------|----------------------------|------|------|------|----------------------------------------------|--------------------|------------------------------------|
| K0793.102605*** | 17,6 | 39,3 | 5  | 5,5  | 13,2 | 26   | 10/15/20/25/30             | 5,9  | 25   | 19,2 | 15,9/20,9/25,9/30,9/35,9                     | 5                  | 15                                 |
| K0793.102606*** | 17,6 | 39,3 | 6  | 6,85 | 13,2 | 26   | 10/15/20/25/30/35/40/45/50 | 6,8  | 25   | 19,2 | 16,8/21,8/26,8/31,8/36,8/41,8/46,8/51,8/56,8 | 6                  | 22                                 |
| K0793.103508*** | 23   | 52,2 | 8  | 9,5  | 17,3 | 35,4 | 20/25/30/35/40/45/50       | 7,8  | 33   | 24,2 | 27,8/32,8/37,8/42,8/47,8/52,8/57,8           | 8                  | 38                                 |
| K0793.103510*** | 23   | 52,2 | 10 | 12   | 17,3 | 35,4 | 20/25/30/35/40/45/50/60    | 8,9  | 33   | 24,2 | 28,9/33,9/38,9/43,9/48,9/53,9/58,9/68,9      | 10                 | 60                                 |
| K0793.104712*** | 33   | 70,2 | 12 | 14,5 | 26,3 | 47   | 25/30/35/40/45/50/60/70/80 | 9,9  | 39,5 | 28,4 | 34,9/39,9/44,9/49,9/54,9/59,9/69,9/79,9/89,9 | 12                 | 86                                 |
| K0793.104716*** | 33   | 70,2 | 16 | 19   | 26,3 | 47   | 30/35/40/45/50/60/70/80    | 13,1 | 39,5 | 28,4 | 43,1/48,1/53,1/58,1/63,1/73,1/83,1/93,1      | 16                 | 153                                |

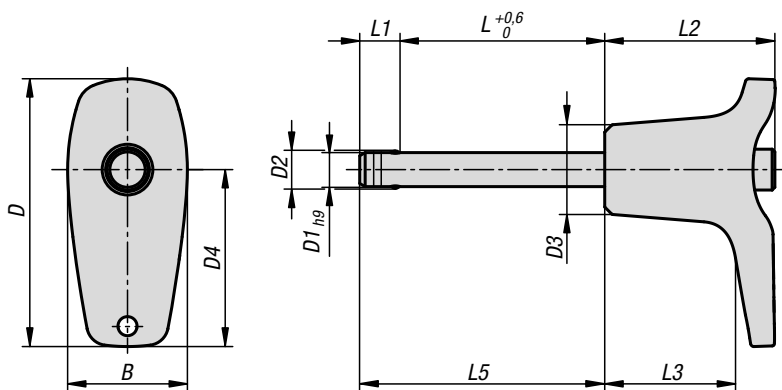


A large rectangular area filled with a fine grid of light gray lines, intended for taking notes or drawing.



## Ball lock pins with L-grip

with high shear strength



### Material:

Grip die-cast zinc.  
Push button 1.4305 stainless steel.  
Pin stainless steel 1.4542.  
Balls 1.4125 stainless steel.  
Spring 1.4310 stainless steel.

### Version:

Grip black.  
Stainless steel bright.

### Sample order:

K0793.112606050  
(include length L e.g. 050 for L = 50 mm.)

### Note:

Ball lock pins are used for easy fastening or joining of components.

The two balls are disengaged by pressing the push button and the pin can be slipped into holes in the workpieces. When the push button is released, the balls lock the connection securely.

Shear force double shear (F) = S · τ aB max.

The values given for the shear force are the theoretical breaking load.

These are non-binding reference values without consideration of safety factors and exclude any liability. The values given are for information purposes only and do not constitute a legally binding assurance of properties.

The load values have been calculated in accordance with DIN 50141. Each user must determine individually whether the ball lock pin is suitable for the respective application.

Different materials in which the ball lock pins are used, weather conditions and wear can influence the determined values.

Ball lock pins with high shear strength are identified by a groove marking on the pin.

### Advantages:

Higher loading in comparison to standard ball lock pins.

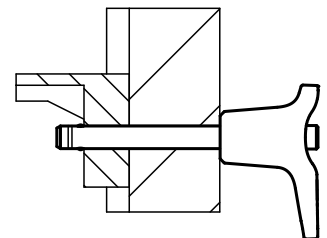
The pins made from 1.4542 stainless steel is hardened, has a higher shear resistance and is extremely durable.

### Accessories:

Bushes for ball lock pins K0724  
Safety spiral cable K0367  
Retaining cable with loop K0367  
Key ring K0367

# Ball lock pins with L-grip

with high shear strength

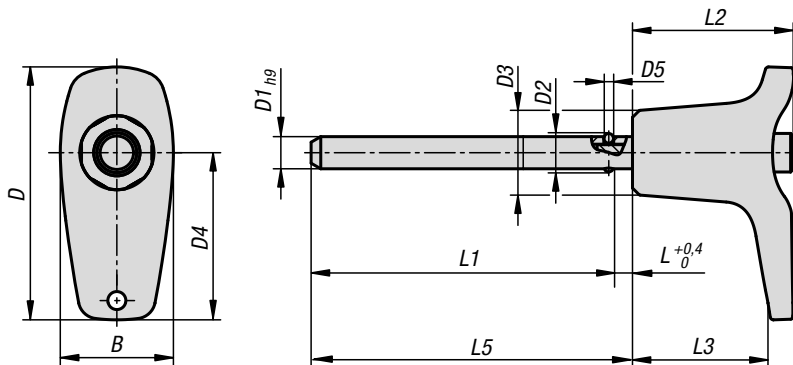


## KIPP Ball lock pins with L-grip with high shear strength

| Order No.       | B    | D    | D1 | D2   | D3   | D4   | L                          | L1   | L2   | L3   | L5                                           | Receiving hole H11 | Shearing force double shear max.kN |
|-----------------|------|------|----|------|------|------|----------------------------|------|------|------|----------------------------------------------|--------------------|------------------------------------|
| K0793.112605*** | 17,6 | 39,3 | 5  | 5,5  | 13,2 | 26   | 10/15/20/25/30             | 5,9  | 25   | 19,2 | 15,9/20,9/25,9/30,9/35,9                     | 5                  | 24                                 |
| K0793.112606*** | 17,6 | 39,3 | 6  | 6,85 | 13,2 | 26   | 10/15/20/25/30/35/40/45/50 | 6,8  | 25   | 19,2 | 16,8/21,8/26,8/31,8/36,8/41,8/46,8/51,8/56,8 | 6                  | 35                                 |
| K0793.113508*** | 23   | 52,2 | 8  | 9,5  | 17,3 | 35,4 | 20/25/30/35/40/45/50       | 7,8  | 33   | 24,2 | 27,8/32,8/37,8/42,8/47,8/52,8/57,8           | 8                  | 63                                 |
| K0793.113510*** | 23   | 52,2 | 10 | 12   | 17,3 | 35,4 | 20/25/30/35/40/45/50/60    | 8,9  | 33   | 24,2 | 28,9/33,9/38,9/43,9/48,9/53,9/58,9/68,9      | 10                 | 100                                |
| K0793.114712*** | 33   | 70,2 | 12 | 14,5 | 26,3 | 47   | 25/30/35/40/45/50/60/70/80 | 9,9  | 39,5 | 28,4 | 34,9/39,9/44,9/49,9/54,9/59,9/69,9/79,9/89,9 | 12                 | 144                                |
| K0793.114716*** | 33   | 70,2 | 16 | 19   | 26,3 | 47   | 30/35/40/45/50/60/70/80    | 13,1 | 39,5 | 28,4 | 43,1/48,1/53,1/58,1/63,1/73,1/83,1/93,1      | 16                 | 257                                |

## Ball lock pins with L-grip

stainless steel, with head-end lock



### Material:

Grip thermoplastic.  
Push button 1.4305 stainless steel.  
Pin 1.4305 stainless steel.  
Balls 1.4125 stainless steel.  
Spring 1.4310 stainless steel wire.

### Version:

Grip black grey.  
Stainless steel bright.

### Sample order:

K1415.102605050  
(include length L e.g. 050 for L = 50 mm)

### Note:

Ball lock pins are used for easy fastening or joining of components.

The two balls are disengaged by pressing the push button and the pin can be slipped into holes in the workpieces. When the push button is released, the balls lock the connection securely.

Shear force double shear (F) =  $S \cdot \tau$  aB max.

The values given for the shear force are the theoretical breaking load.

These are non-binding reference values without consideration of safety factors and exclude any liability. The values given are for information purposes only and do not constitute a legally binding assurance of properties.

The load values have been calculated in accordance with DIN 50141. Each user must determine individually whether the ball lock pin is suitable for the respective application.

Different materials in which the ball lock pins are used, weather conditions and wear can influence the determined values.

### Advantages:

Wide connections possible.

The pin length does not need to be coordinated with the component width.

### On request:

Other pin lengths.

### Accessories:

Adapter bushes for ball lock pins with head lock K1416.

Safety spiral cable K0367

Retaining cable with eyelet K0367

Key ring K0367

# Ball lock pins with L-grip

stainless steel, with head-end lock



## KIPP Ball lock pins stainless steel with L-grip, with head-end lock

| Order No.       | B    | D    | D1 | D2   | D3   | D4   | D5  | L   | L1                | L2   | L3   | L5          | Receiving hole<br>H11 | Shearing force<br>double shear<br>max.kN |
|-----------------|------|------|----|------|------|------|-----|-----|-------------------|------|------|-------------|-----------------------|------------------------------------------|
| K1415.102605*** | 17,6 | 39,3 | 5  | 5,5  | 13,2 | 26   | 1,5 | 3   | 47/97/147         | 25   | 19,2 | 50/100/150  | 5                     | 10                                       |
| K1415.102606*** | 17,6 | 39,3 | 6  | 6,85 | 13,2 | 26   | 2   | 3   | 47/97/147         | 25   | 19,2 | 50/100/150  | 6                     | 14                                       |
| K1415.103508*** | 23   | 52,2 | 8  | 9,5  | 17,3 | 35,4 | 3   | 3,5 | 96,5/146,5/196,5  | 33   | 24,2 | 100/150/200 | 8                     | 26                                       |
| K1415.103510*** | 23   | 52,2 | 10 | 12   | 17,3 | 35,4 | 4   | 3,5 | 96,5/146,5/196,5  | 33   | 24,2 | 100/150/200 | 10                    | 40                                       |
| K1415.104712*** | 33   | 70,2 | 12 | 14,5 | 26,3 | 47   | 4,5 | 3,5 | 146,5/196,5/246,5 | 39,5 | 28,4 | 150/200/250 | 12                    | 57                                       |
| K1415.104716*** | 33   | 70,2 | 16 | 19   | 26,3 | 47   | 6,5 | 4   | 146/196/246       | 39,5 | 28,4 | 150/200/250 | 16                    | 100                                      |

# Technical information for ball lock pins K1063, K1064 and locating bushes K1065



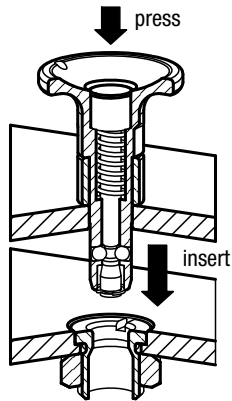
## Note:

These are designed to quickly clamp 2 plates.

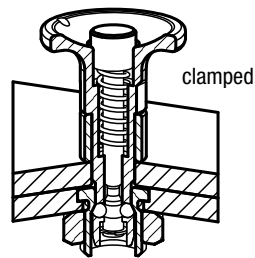
The system can be used for changing mechanisms in assembly applications or for making other manual adjustments, such as conversions in automatic systems.

Repeat accuracy of  $\pm 0.25$  for screwed-in and pushed-in version.

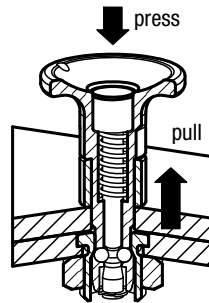
The repeat accuracy can be increased with the aid of additional locating pins.



With the knob pressed down, insert the ball lock pin into the locating bush.



Release the knob to clamp the plates.

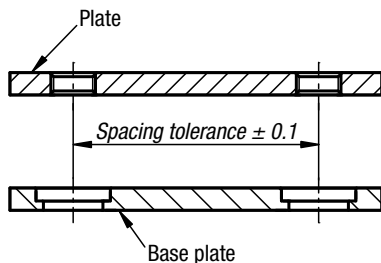


To remove, press the knob down and pull the ball lock pin out of the bush.

## Assembly:

The mounting situation is customer specific. Plates of different thicknesses can be joined. The different mounting options form A to D are described on the product pages.

## Recommended tolerances when using 2 items

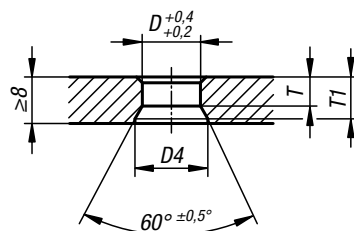


## Application without locating bush

Installation dimensions

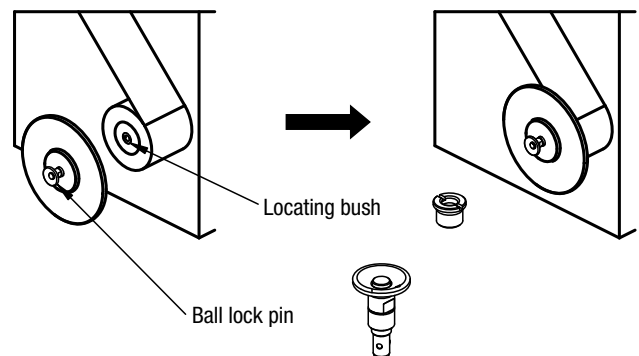
## Attention:

The specified pullout forces only apply in conjunction with locating bush K1065.



## Application example:

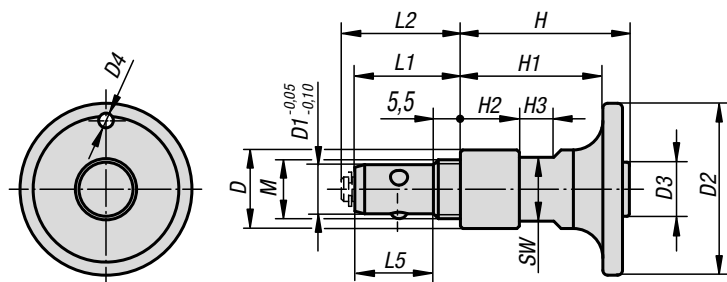
Quick installation and removal of flange plates for paper rolls.



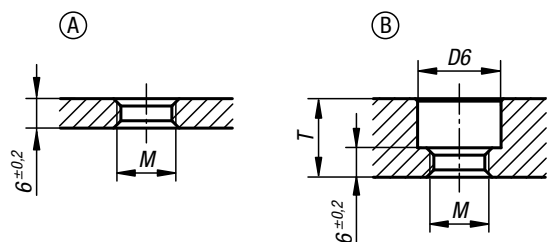
| For ball lock pin<br>D = | D  | D4<br>min. | T   | T1   |
|--------------------------|----|------------|-----|------|
| 6                        | 6  | 8          | 4,9 | ~6,6 |
| 10                       | 10 | 12,5       | 5   | ~7,2 |



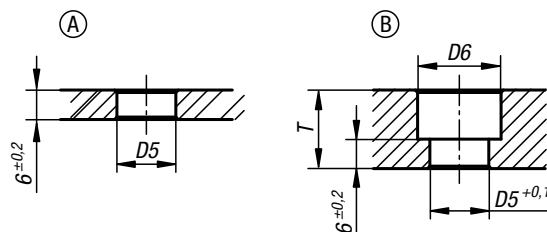
## Ball lock pins



Screw-in ball lock pin



Push-in ball lock pin



### Material:

Housing and push button steel.  
Ball, spring and snap ring stainless steel.  
O-ring FKM.

### Version:

Housing nickel-plated.  
Knob tempered and nickel-plated.  
Ball tempered.

### Sample order:

K1063.621

### Note:

Installation dimensions for Form A for plate thickness 6 mm.

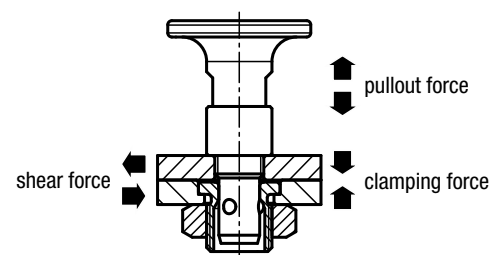
Installation dimensions for Form B for plate thickness 6 to 16 mm.

### Attention:

The specified pullout forces only apply in conjunction with locating bush K1065.

### Accessories:

Locating bush K1065.



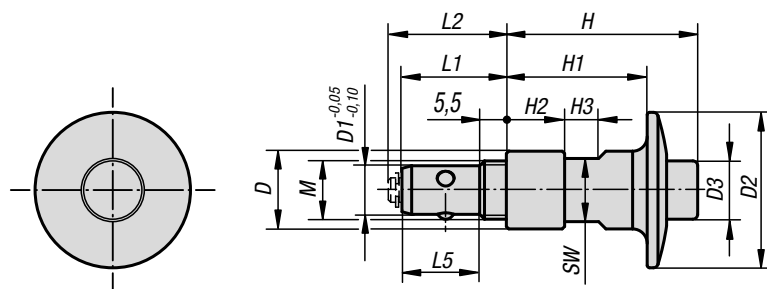
### KIPP Ball lock pin

| Order No.  | D  | D1 | D2 | D3 | D4 | M       | L1   | L2   | L5   | H    | H1 | H2 | H3  | SW | D5 | D6 | T max. |
|------------|----|----|----|----|----|---------|------|------|------|------|----|----|-----|----|----|----|--------|
| K1063.621  | 12 | 6  | 25 | 8  | -  | M8      | 19   | 21   | 13,5 | 22,2 | 18 | 6  | 5,5 | 10 | 8  | 13 | 10     |
| K1063.1024 | 16 | 10 | 35 | 11 | 3  | M12x1,5 | 21,5 | 23,5 | 16   | 34,4 | 29 | 12 | 7   | 13 | 12 | 17 | 16     |

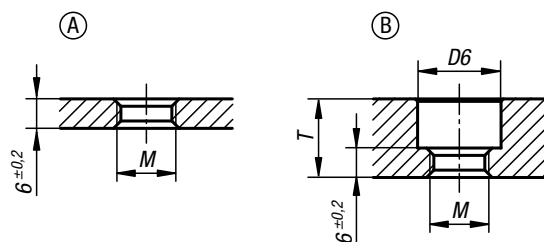
### KIPP Ball lock pin, technical information

| Order No.  | Clamping force N | Shearing force kN | Pullout force kN | Temperature resistance |
|------------|------------------|-------------------|------------------|------------------------|
| K1063.621  | 30               | 3                 | 0,5              | ≤180 °C                |
| K1063.1024 | 50               | 9                 | 1,5              | ≤180 °C                |

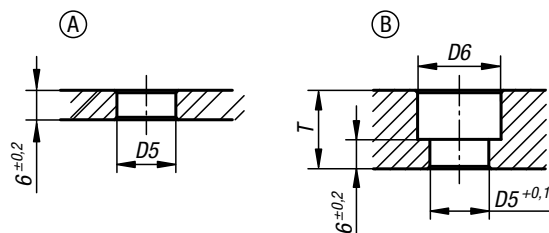
## Ball lock pins stainless steel



Screw-in ball lock pin



Push-in ball lock pin



### Material:

Housing and push button stainless steel.  
Ball, spring and snap ring stainless steel.  
O-ring FKM.

### Version:

Housing bright.  
Push button bright.  
Ball tempered.

### Sample order:

K1063.6211

### Note:

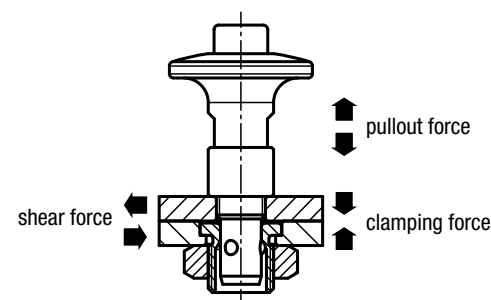
Installation dimensions for Form A for plate thickness 6 mm.  
Installation dimensions for Form B for plate thickness 6 to 16 mm.

### Attention:

The specified pullout forces only apply in conjunction with locating bush K1065.

### Accessories:

Locating bush K1065.



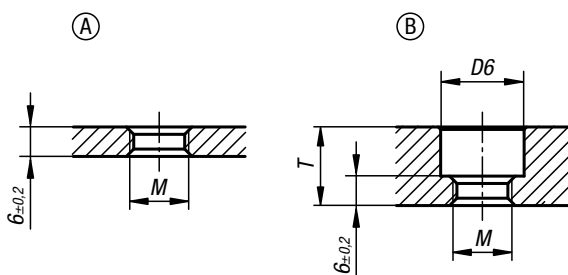
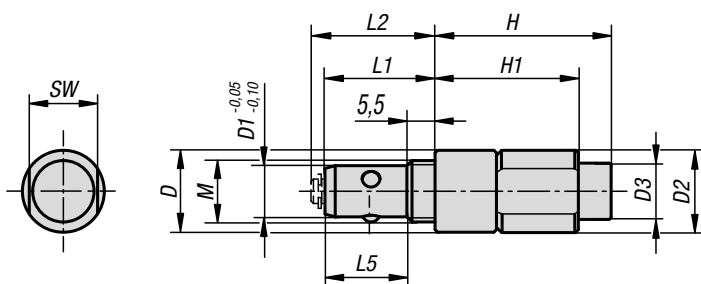
## KIPP Ball lock pin stainless steel

| Order No.   | D  | D1 | D2 | D3 | M       | L1   | L2   | L5   | H    | H1 | H2 | H3  | SW | D5 | D6 | T max. |
|-------------|----|----|----|----|---------|------|------|------|------|----|----|-----|----|----|----|--------|
| K1063.6211  | 12 | 6  | 23 | 8  | M8      | 19   | 21   | 13,5 | 25,8 | 18 | 6  | 5,5 | 10 | 8  | 13 | 10     |
| K1063.10241 | 16 | 10 | 32 | 12 | M12x1,5 | 21,5 | 23,5 | 16   | 39,4 | 29 | 12 | 7   | 13 | 12 | 17 | 16     |

## KIPP Ball lock pin stainless steel, technical information

| Order No.   | Clamping force N | Shearing force kN | Pullout force kN | Temperature resistance |
|-------------|------------------|-------------------|------------------|------------------------|
| K1063.6211  | 30               | 3                 | 0,5              | ≤180 °C                |
| K1063.10241 | 50               | 9                 | 1,5              | ≤180 °C                |

# Ball lock pins without head



## Material:

Housing and push button steel or stainless steel.  
Ball, spring and snap ring stainless steel.  
O-ring FKM.

## Version:

Housing nickel-plated or bright.  
Knob tempered and nickel-plated.  
Ball tempered.

## Sample order:

K1063.10242

## Note:

Installation dimensions for Form A for plate thickness 6 mm.

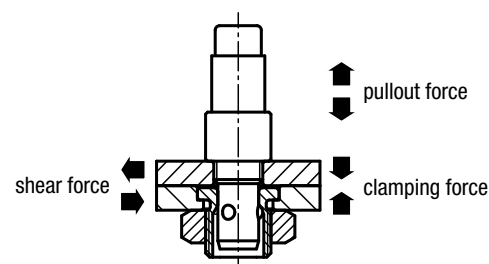
Installation dimensions for Form B for plate thickness 6 to 16 mm.

## Attention:

The specified pullout forces only apply in conjunction with locating bush K1065.

## Accessories:

Locating bush K1065.



## KIPP Ball lock pin without head

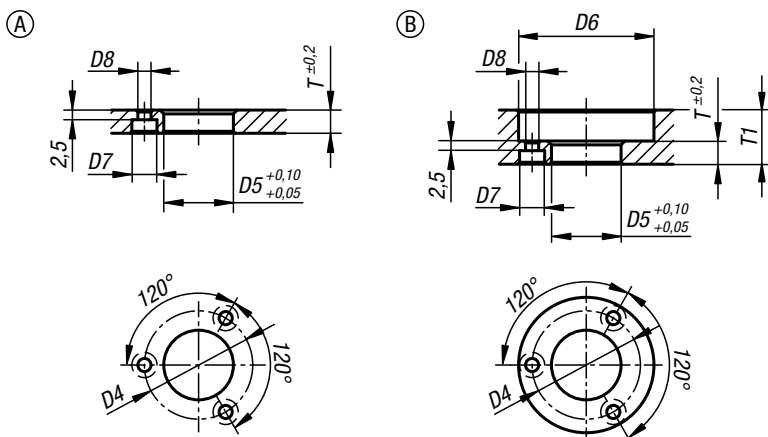
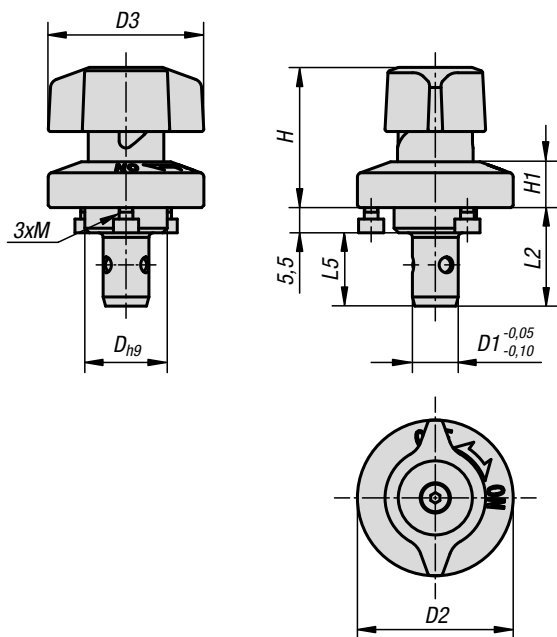
| Order No.    | Main material   | D  | D1 | D2 | D3 | M       | L2   | L1   | L5   | H    | H1   | SW | D6 | T max. |
|--------------|-----------------|----|----|----|----|---------|------|------|------|------|------|----|----|--------|
| K1063.6212   | steel           | 12 | 6  | 12 | 8  | M8x1,25 | 21   | 19   | 13,5 | 22   | 17,5 | 10 | 13 | 10     |
| K1063.10242  | steel           | 16 | 10 | 16 | 11 | M12x1,5 | 23,5 | 21,5 | 16   | 34,4 | 28   | 13 | 17 | 16     |
| K1063.16212  | stainless steel | 12 | 6  | 12 | 8  | M8x1,25 | 21   | 19   | 13,5 | 22   | 17,5 | 10 | 13 | 10     |
| K1063.110242 | stainless steel | 16 | 10 | 16 | 11 | M12x1,5 | 23,5 | 21,5 | 16   | 34,4 | 28   | 13 | 17 | 16     |

## KIPP Ball lock pin without head, technical information

| Order No.    | Clamping force N | Shearing force kN | Pullout force kN | Temperature resistance |
|--------------|------------------|-------------------|------------------|------------------------|
| K1063.6212   | 30               | 3                 | 0,5              | ≤180 °C                |
| K1063.10242  | 50               | 9                 | 1,5              | ≤180 °C                |
| K1063.16212  | 30               | 3                 | 0,5              | ≤180 °C                |
| K1063.110242 | 50               | 9                 | 1,5              | ≤180 °C                |

## Ball lock pins

with twist knob



### Material:

Housing stainless steel.  
Pin steel or stainless steel.  
Knob PA thermoplastic (polyamide) or stainless steel.  
Ball and spring stainless steel.

### Version:

Housing bright. Steel pin tempered and nickel plated.  
Stainless steel pin tempered. Twist knob fibreglass reinforced, black or bright. Ball tempered.

### Sample order:

K1064.620

### Note:

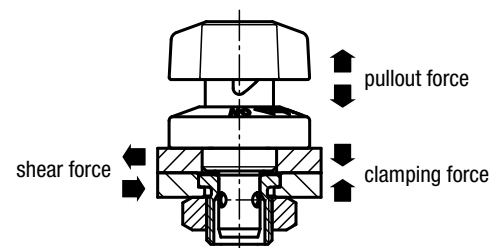
Installation dimensions for Form A  
for plate thickness 6 or 12 mm.  
Installation dimensions for Form B  
for plate thickness up to 20 mm.  
Includes M2 or M3 mounting screws.

### Attention:

The specified pullout forces only apply in conjunction  
with locating bush K1065.

### Accessories:

Locating bush K1065.



## KIPP Ball lock pin with twist knob

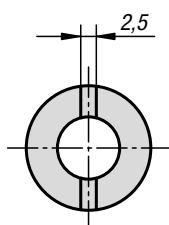
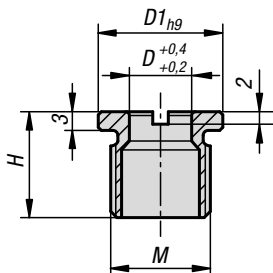
| Order No.   | Component material | Version 2           | D  | D1 | D2 | D3 | D4 | H    | H1  | L2   | L5 | M    | D5 | D6 | D7  | D8  | T  | T1    |
|-------------|--------------------|---------------------|----|----|----|----|----|------|-----|------|----|------|----|----|-----|-----|----|-------|
| K1064.620   | polyamide          | pins steel          | 14 | 6  | 25 | 25 | 21 | 24,5 | 6,5 | 19,5 | 14 | M2x3 | 14 | 26 | 4,4 | 2,4 | 6  | 6-10  |
| K1064.1022  | polyamide          | pins steel          | 18 | 10 | 34 | 34 | 28 | 31   | 10  | 21,5 | 16 | M3x4 | 18 | 35 | 6,5 | 3,4 | 6  | 6-14  |
| K1064.1028  | polyamide          | pins steel          | 18 | 10 | 34 | 34 | 28 | 31   | 10  | 27,5 | 22 | M3x4 | 18 | 35 | 6,5 | 3,4 | 12 | 12-20 |
| K1064.1620  | stainless steel    | pin stainless steel | 14 | 6  | 25 | 25 | 21 | 24,5 | 6,5 | 19,5 | 14 | M2x3 | 14 | 26 | 4,4 | 2,4 | 6  | 6-10  |
| K1064.11022 | stainless steel    | pin stainless steel | 18 | 10 | 34 | 34 | 28 | 31   | 10  | 21,5 | 16 | M3x4 | 18 | 35 | 6,5 | 3,4 | 6  | 6-14  |
| K1064.11028 | stainless steel    | pin stainless steel | 18 | 10 | 34 | 34 | 28 | 31   | 10  | 27,5 | 22 | M3x4 | 18 | 35 | 6,5 | 3,4 | 12 | 12-20 |

## KIPP Ball lock pins with twist knob, technical information

| Order No.   | Component material | Version 2           | Clamping force N | Shearing force kN | Pullout force F kN | Temperature resistance |
|-------------|--------------------|---------------------|------------------|-------------------|--------------------|------------------------|
| K1064.620   | polyamide          | pins steel          | 30               | 3                 | 0,5                | ≤130 °C                |
| K1064.1022  | polyamide          | pins steel          | 50               | 9                 | 1,5                | ≤130 °C                |
| K1064.1028  | polyamide          | pins steel          | 50               | 9                 | 1,5                | ≤130 °C                |
| K1064.1620  | stainless steel    | pin stainless steel | 30               | 3                 | 0,5                | ≤130 °C                |
| K1064.11022 | stainless steel    | pin stainless steel | 50               | 9                 | 1,5                | ≤130 °C                |
| K1064.11028 | stainless steel    | pin stainless steel | 50               | 9                 | 1,5                | ≤130 °C                |

## Locating bushes

for ball lock pin



### Material:

Steel or stainless steel.

### Version:

Steel nickel-plated.

Stainless steel bright.

### Sample order:

K1065.61

### Note:

Mounting dimensions for Form A:

Mounting with nut, max. plate thickness 10 mm.

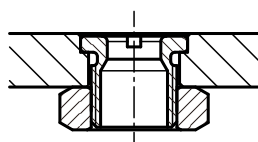
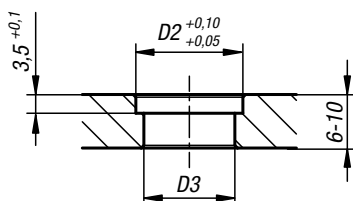
Mounting dimensions for Form B:

Screwed in, for plate thicknesses over 10 mm or in a blind hole.

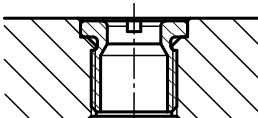
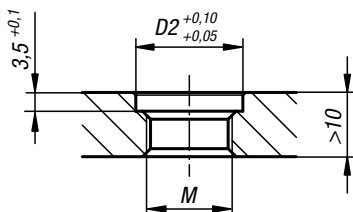
### On request:

Suitable nuts (K0070) and assembly tool (K0317).

(A)



(B)



## KIPP Locating bushes for ball lock pin

| Order No. | Material        | D  | D1 | M       | H  | D2 | D3 |
|-----------|-----------------|----|----|---------|----|----|----|
| K1065.6   | steel           | 6  | 16 | M12x1,5 | 15 | 16 | 13 |
| K1065.10  | steel           | 10 | 20 | M16x1,5 | 17 | 20 | 17 |
| K1065.61  | stainless steel | 6  | 16 | M12x1,5 | 15 | 16 | 13 |
| K1065.101 | stainless steel | 10 | 20 | M16x1,5 | 17 | 20 | 17 |

# Technical information for ball lock bushes K1066 and K1067



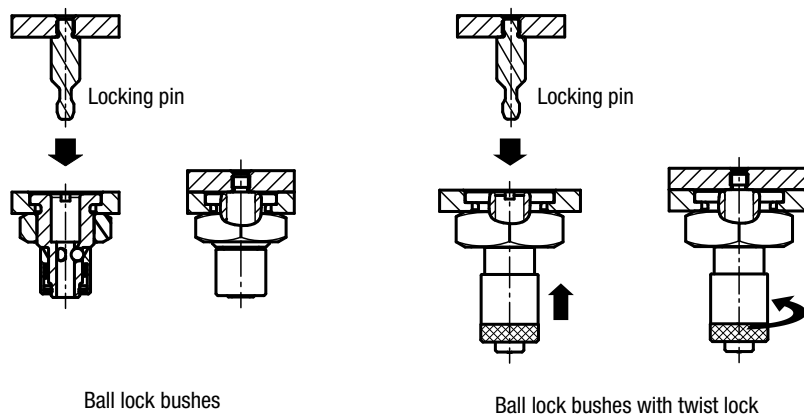
## Note:

These are used to hold panels or thin plates. The locking pin locks mechanically in the bush with 3 balls. The ball lock bush with rotary lock only releases the locking pin when the bush is manually rotated.

The repeat accuracy of  $\pm 0.25$  mm can be increased with the aid of additional locating pins.

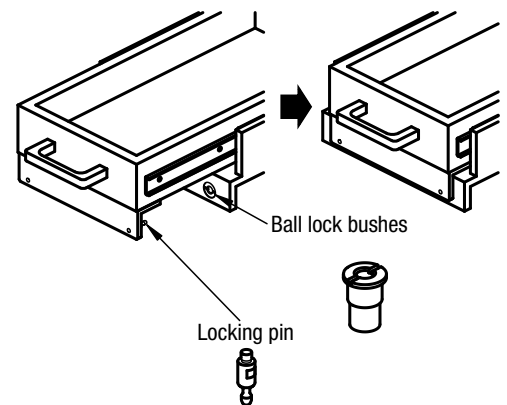
## Application:

Ball lock bushes and ball lock bushes with rotary lock.



## Application example:

End fixating of a sliding unit.



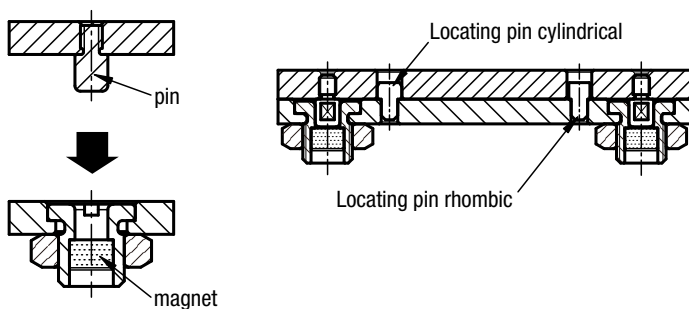
# Technical information for magnetic bushes K1068 and K1069

## Note:

These are used to hold panels or thin plates. The pin is held in the bush housing by a magnet.

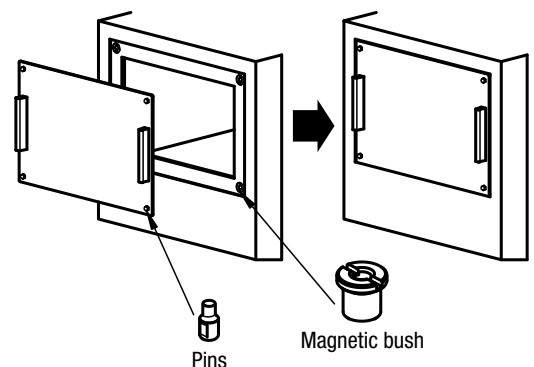
The repeat accuracy of  $\pm 0.25$  mm can be increased with the aid of additional locating pins.

## Application:

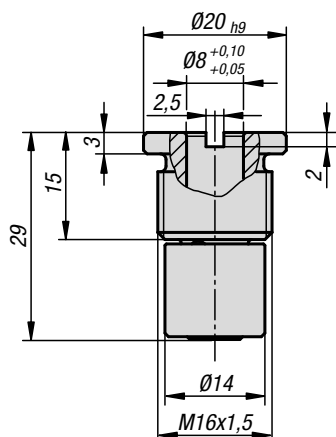


## Application example:

Quick installation or removal of hatches



## Ball lock bushes



### Material:

Housing steel.  
Balls and springs stainless steel.

### Version:

Housing nickel-plated.  
Balls tempered.

### Sample order:

K1066.7

### Note:

The 3 balls inside the bushing hold the locking pin with the specified retaining force.

Installation option 1: min. plate thickness 6 mm.

Installation option 2: max. plate thickness 10 mm.

Installation option 3: plate thickness > 10 mm.

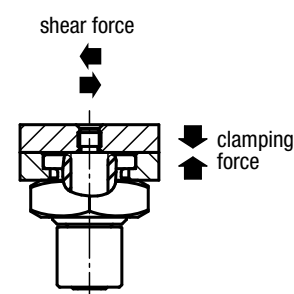
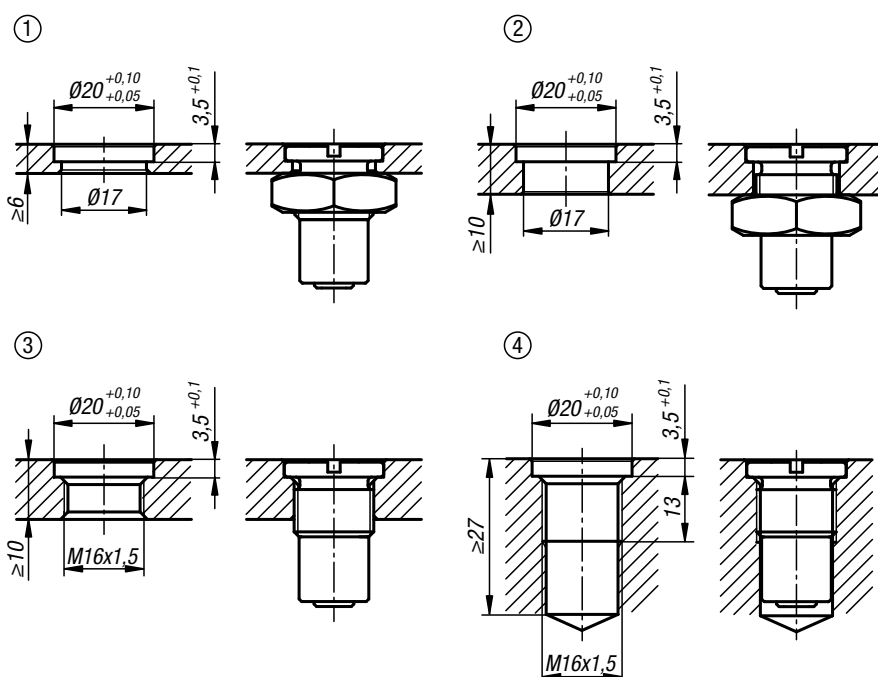
Installation option 4: blind hole.

### On request:

Suitable nuts.

### Accessories:

Locking pin K1067.

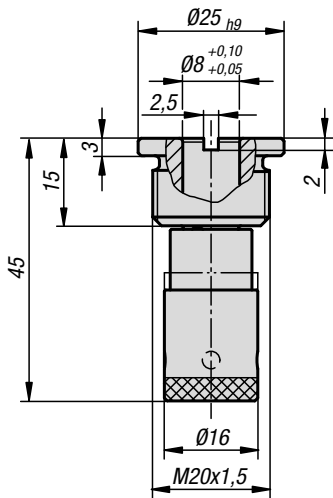


### KIPP Ball lock bushes

| Order No. | Clamping force<br>N | Shearing force<br>kN | Temperature<br>resistance |
|-----------|---------------------|----------------------|---------------------------|
| K1066.7   | 7                   | 1,8                  | ≤180 °C                   |
| K1066.15  | 15                  | 1,8                  | ≤180 °C                   |

## Ball lock bushes

with twist lock



### Material:

Housing and locking elements steel.  
Balls and springs stainless steel.

### Version:

Housing and locking element nickel-plated.  
Balls tempered.

### Sample order:

K1066.71

### Note:

The 3 balls inside the bushing hold the locking pin with the specified retaining force.

The element is secured or released by twisting the bottom part of the bush.

Installation option 1: min. plate thickness 6 mm.

Installation option 2: max. plate thickness 10 mm.

Installation option 3: plate thickness > 10 mm.

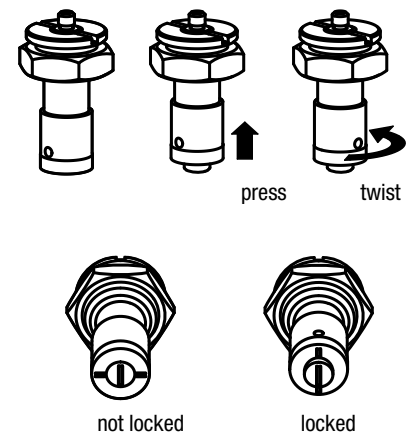
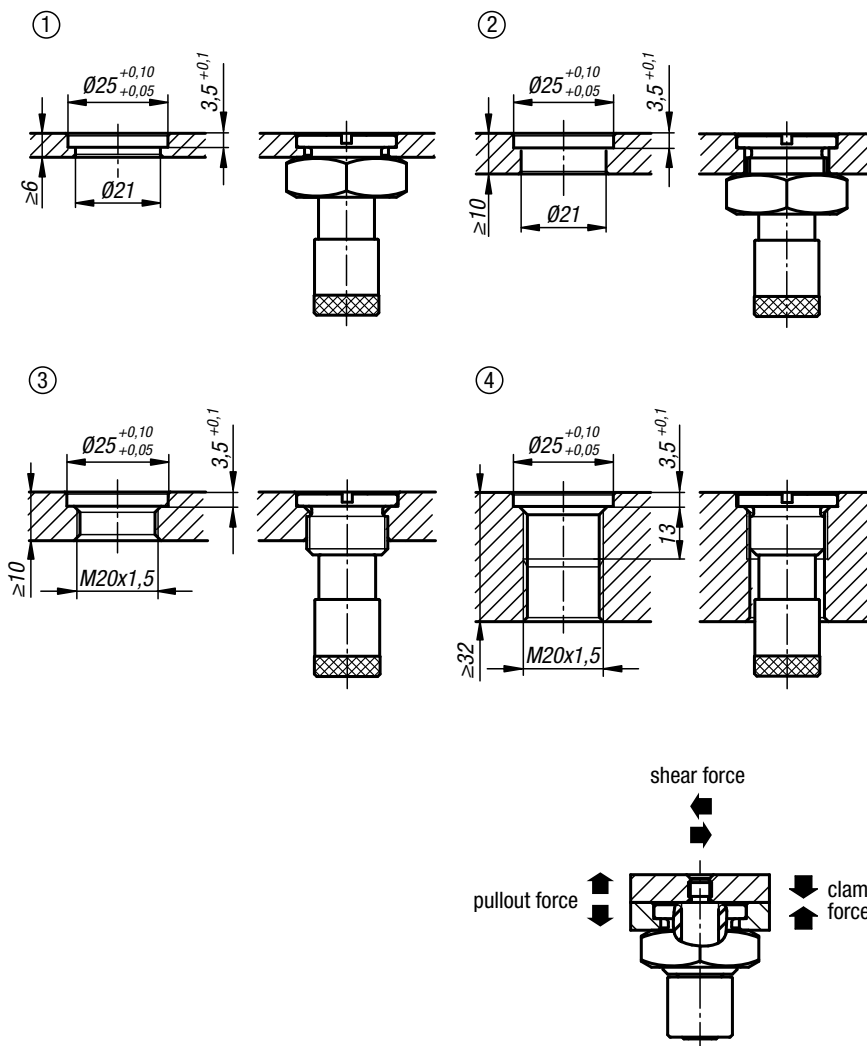
Installation option 4: blind hole.

### On request:

Suitable nuts.

### Accessories:

Locking pin K1067.



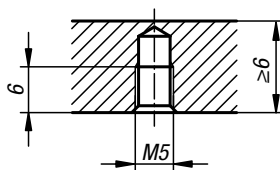
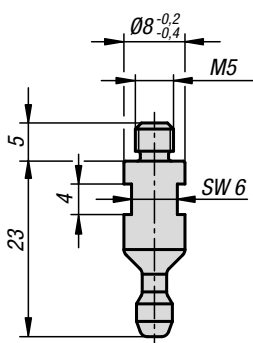
### KIPP Ball lock bushes with twist lock

| Order No. | Clamping force<br>N | Shearing force<br>kN | Pullout force F<br>kN | Temperature<br>resistance |
|-----------|---------------------|----------------------|-----------------------|---------------------------|
| K1066.71  | 7                   | 1,8                  | 1,8                   | ≤180 °C                   |
| K1066.151 | 15                  | 1,8                  | 1,8                   | ≤180 °C                   |



# Locking pin

for ball lock bushes


**Material:**

Steel.

**Version:**

Bright.

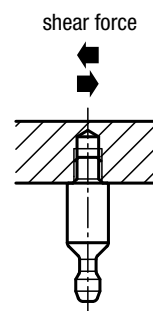
**Sample order:**

K1067.8

**Note:**

Repeat accuracy  $\pm 0.25$ .

The repeat accuracy can be increased with the aid of locating pins.



## KIPP Locking pin for ball lock bushes

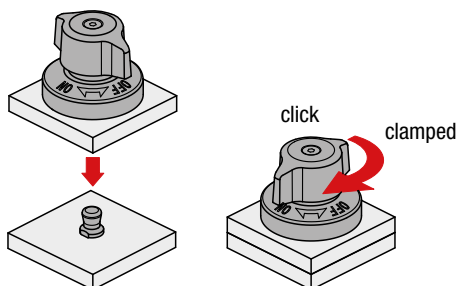
| Order No. | Shearing force<br>kN | Temperature<br>resistance |
|-----------|----------------------|---------------------------|
| K1067.8   | 1,8                  | $\leq 180$ °C             |

# Technical Information

## Quarter-turn latches K1561 and clamping pins K1564



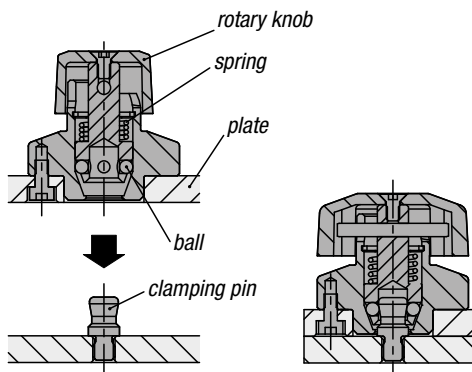
### 1. Application:



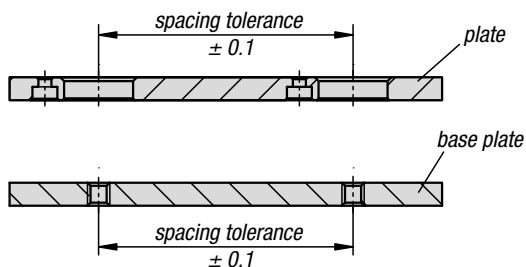
Check that the rotary knob is in the "OFF" position.  
Set the quarter-turn latch over the clamping pin and turn the rotary knob to the "ON" position.  
When fully clamped, a click sound is heard.

### 2. Function:

Four balls hold the clamping pin and clamp the plates together.

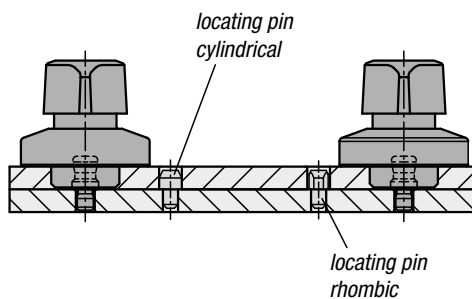


### Production tolerances:



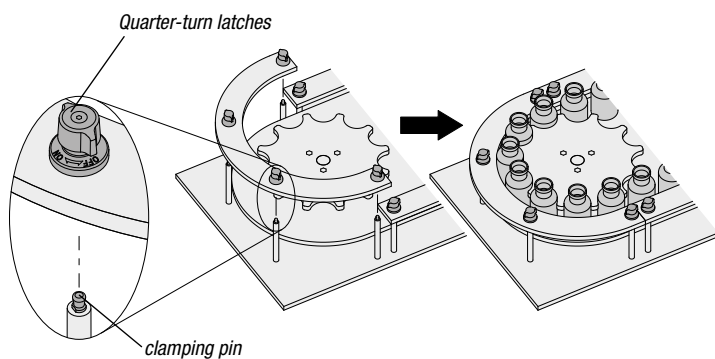
### Repeat accuracy:

A higher repeat accuracy can be achieved with the aid of additional locating pins (not supplied).

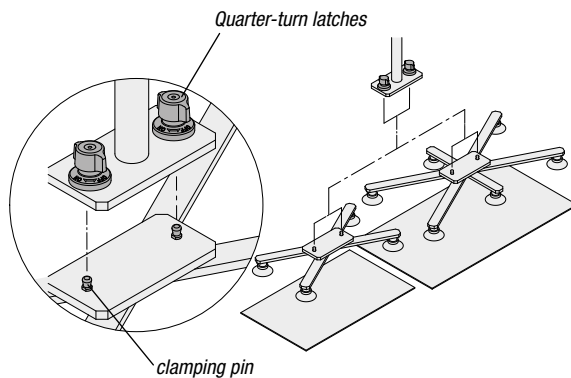


### Application examples:

#### Replacement of the plates

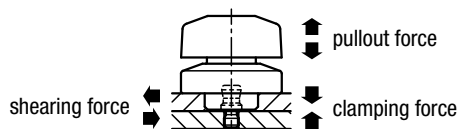
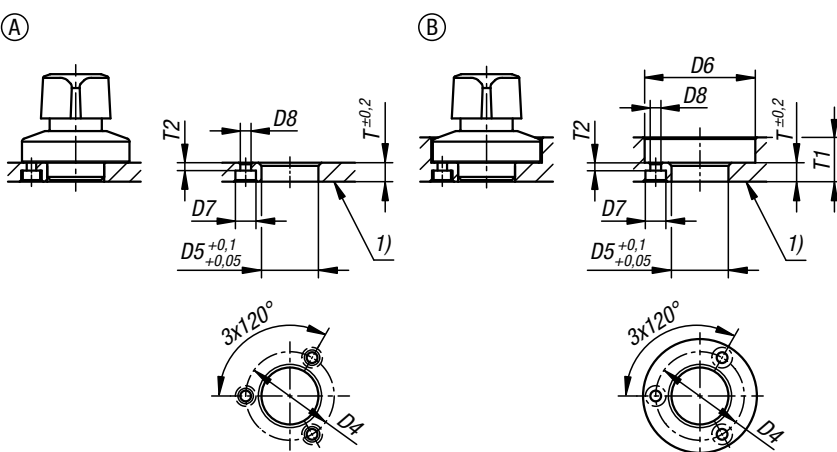
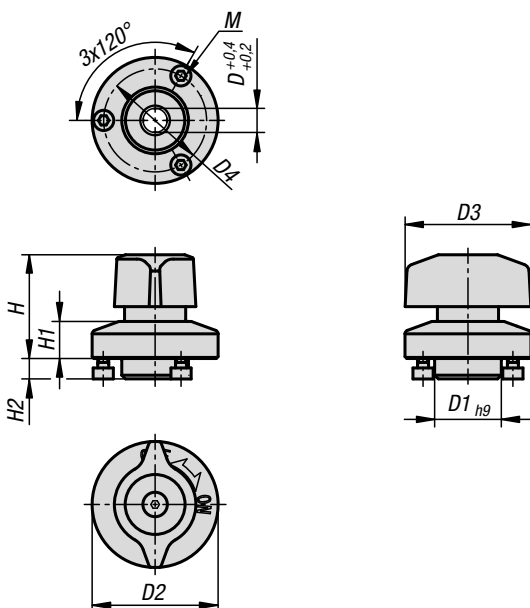


#### Lifting the suction pads



# Quarter-turn latches, stainless steel

rotary knob plastic or stainless steel



Quarter-turn latches are used for replacing and locking fixtures or hatches quickly and easily. Toolless clamping shortens setup times.

## Material:

Housing stainless steel.

Rotary knob thermoplastic PA (polyamide) or stainless steel.

## Version:

Housing bright.

Rotary knob PA fibreglass reinforced, black.

Knob stainless steel, bright.

## Sample order:

K1561.14

## Note:

Stainless steel fastening screws M2 or M3 are included.

Form A mounting option for plate thickness 6 mm.

Form B mounting option for plate thickness > 6 to 14 mm.

## Method of operation:

Check that the rotary knob is in the „OFF“ position. Set the lift and turn latch over the clamping pin and turn the rotary knob to the „ON“ position. When fully clamped, a click sound is heard.

## Accessories:

Clamping pins K1564.

## Drawing reference:

1) plate

## KIPP Quarter-turn latches, stainless steel, rotary knob plastic or stainless steel

| Order No.<br>polyamide | Order No.<br>stainless steel | D | D1 | D2 | D3 | D4 | H  | H1  | H2  | M    | D5 | D6 | D7  | D8  | T | T1   | T2  |
|------------------------|------------------------------|---|----|----|----|----|----|-----|-----|------|----|----|-----|-----|---|------|-----|
| K1561.14               | K1561.114                    | 6 | 14 | 25 | 25 | 21 | 23 | 6,5 | 5,5 | M2x3 | 14 | 26 | 4,4 | 2,4 | 6 | 6-10 | 2,5 |
| K1561.18               | K1561.118                    | 8 | 18 | 34 | 34 | 28 | 28 | 10  | 5,5 | M3x4 | 18 | 35 | 6,5 | 3,4 | 6 | 6-14 | 2,5 |

## KIPP Lift and turn latches, technical information

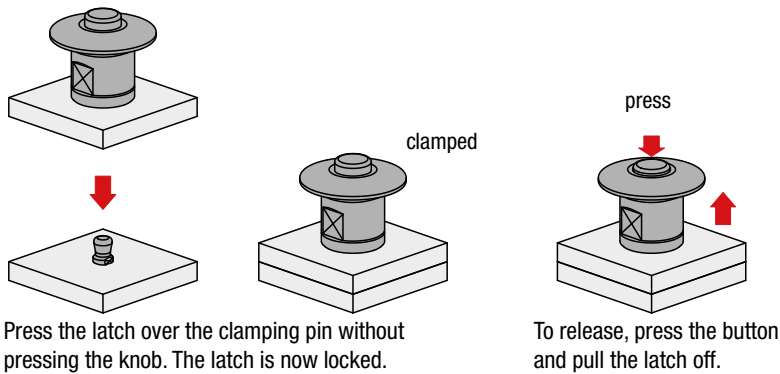
| Order No.<br>polyamide | Order No.<br>stainless steel | D | Clamping force<br>N | Shearing force<br>kN | Pullout force<br>kN | Temperature<br>resistance |
|------------------------|------------------------------|---|---------------------|----------------------|---------------------|---------------------------|
| K1561.14               | K1561.114                    | 6 | 7                   | 1,1                  | 0,25                | ≤130 °C / ≤200 °C         |
| K1561.18               | K1561.118                    | 8 | 9                   | 1,8                  | 0,4                 | ≤130 °C / ≤200 °C         |

# Technical Information

## Push button latches K1562 and clamping pins K1564

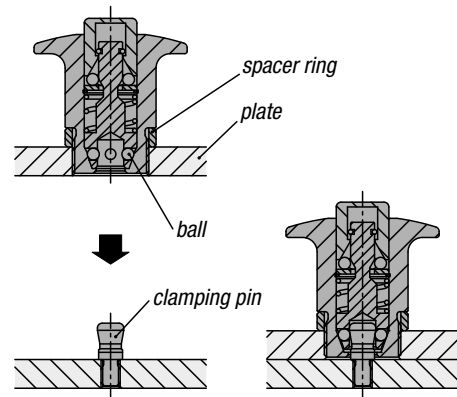


### 1. Application:

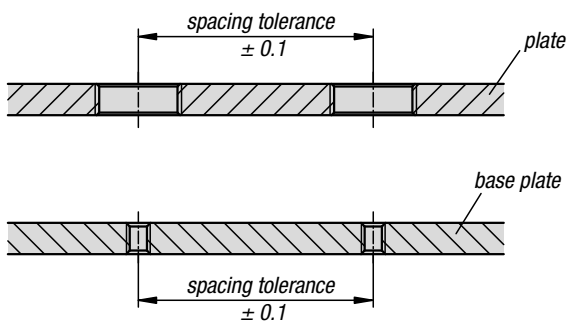


### 2. Function:

Four balls hold the clamping pin and clamp the plates together.

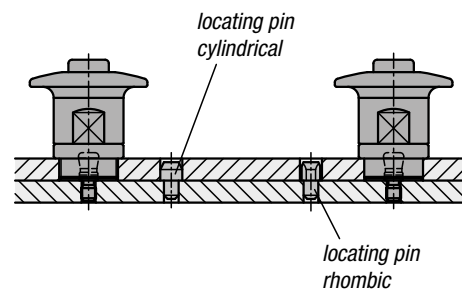


### Production tolerances:



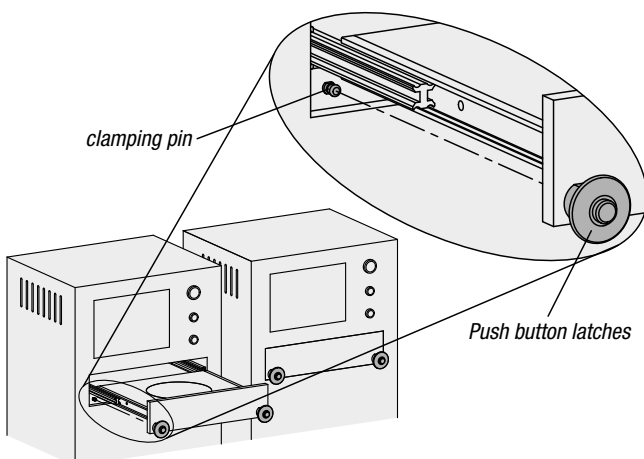
### Repeat accuracy:

A higher repeat accuracy can be achieved with the aid of additional locating pins (not supplied).

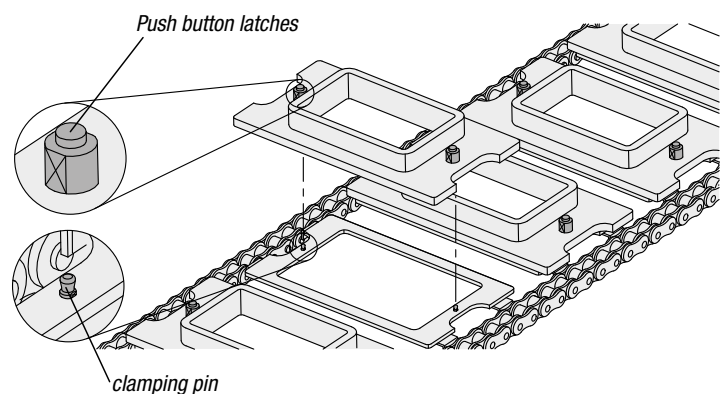


### Application examples:

#### Securing a drawer



#### Moving the fixture



## Push button latches stainless steel



Push button latches are used for replacing and locking fixtures or hatches quickly and easily. Toolless clamping shortens setup times.

### Material:

Housing and push button stainless steel.

### Version:

Housing and push button bright.

### Sample order:

K1562.11

### Note:

Form A for plate thickness 3 to 10 mm.

Form B for plate thickness 3 to 27 mm.

### Method of operation:

Press the latch over the clamping pin without pressing the knob. The latch is now locked.

To release, press the button and pull the latch off.

### Application:

Mounting option A in combination with spacer rings, for plate thickness 3 to 10 mm.

Mounting option B for plate thickness 10 to 27 mm.

### Attention:

The specified pull-out forces apply only in combination with clamping pin K1564.

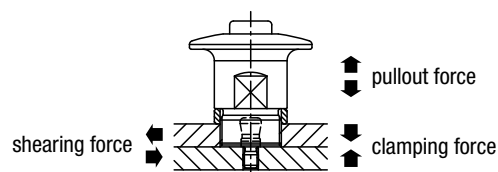
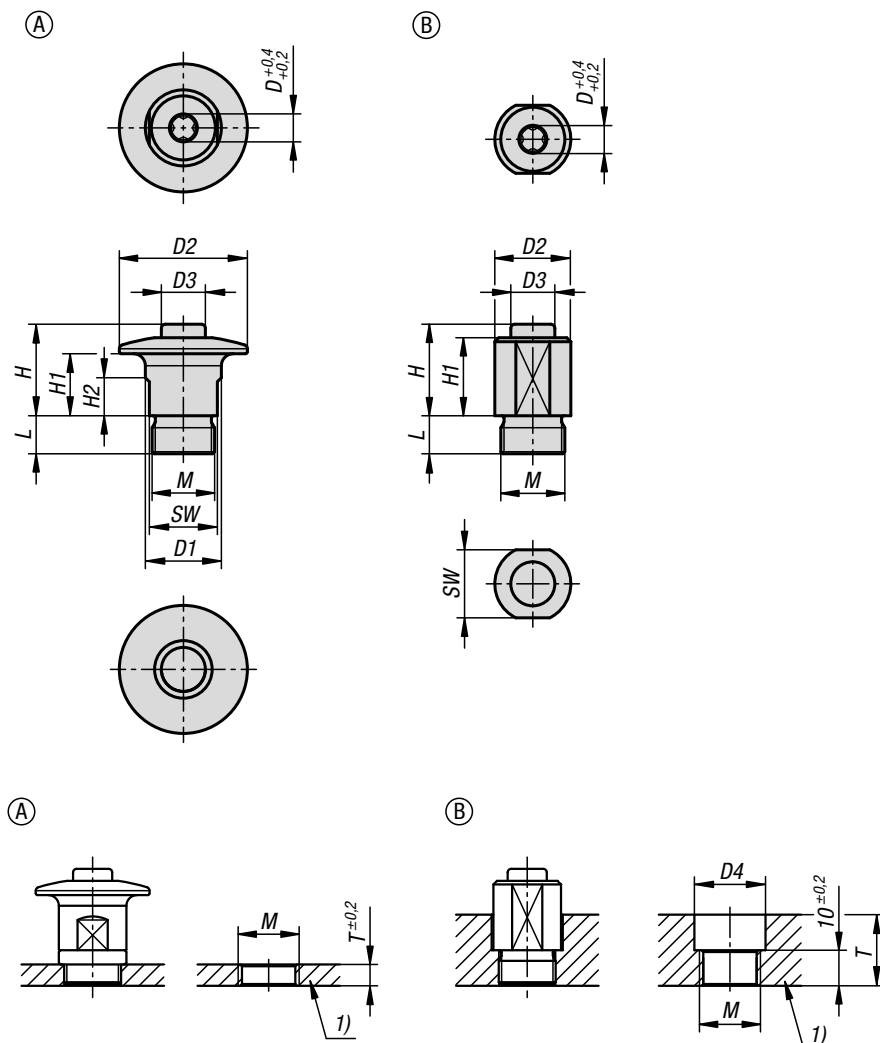
### Accessories:

Spacer rings K1563.

Clamping pins K1564.

### Drawing reference:

1) plate

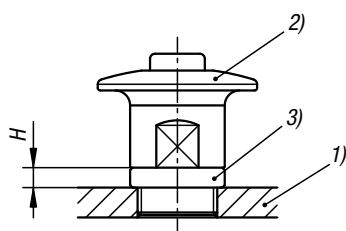
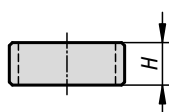
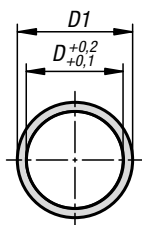


### KIPP Push button latches stainless steel

| Order No. | Form | Version 1    | D | D1 | D2 | D3 | D4 | H  | H1   | H2  | L   | M     | SW | T     | Clamping force N | Shearing force kN | Pullout force F kN | Temperature resistance |
|-----------|------|--------------|---|----|----|----|----|----|------|-----|-----|-------|----|-------|------------------|-------------------|--------------------|------------------------|
| K1562.11  | A    | with head    | 6 | 19 | 32 | 11 | -  | 23 | 15,5 | 8,5 | 9,5 | M16X1 | 17 | 3     | 6                | 1,1               | 0,25               | ≤180 °C                |
| K1562.12  | B    | without head | 6 | -  | 19 | 11 | 20 | 23 | 19,5 | -   | 9,5 | M16X1 | 17 | 10-27 | 6                | 1,1               | 0,25               | ≤180 °C                |

# Spacer rings stainless steel

for push button latches



In combination with push button latches, the plate thickness can be varied from 3 to 10 mm. See assembly drawing.

**Material:**

Stainless steel

**Version:**

Bright.

**Sample order:**

K1563.14

**Accessories:**

Push button latches K1562.

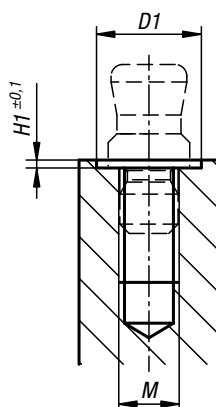
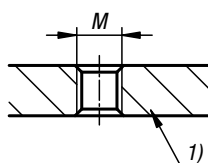
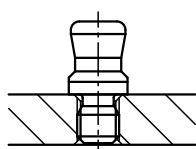
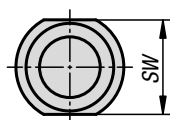
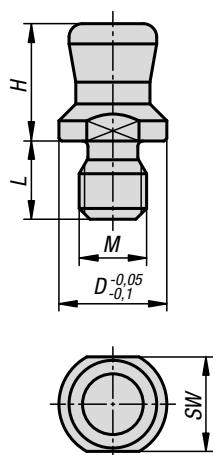
**Drawing reference:**

- 1) Plate
- 2) Push button latch
- 3) Spacer ring

## KIPP Spacer rings stainless steel for push button latches

| Order No. | D  | D1 | H |
|-----------|----|----|---|
| K1563.14  | 16 | 19 | 4 |
| K1563.15  | 16 | 19 | 5 |
| K1563.16  | 16 | 19 | 6 |
| K1563.17  | 16 | 19 | 7 |

## Clamping pin stainless steel

**Material:**

Stainless steel

**Version:**

Hardened.

**Sample order:**

K1564.16

**Note:**

Colour may differ from image due to curing process.

**Method of operation:**Screw the clamping pin into the thread and tighten.  
See assembly drawing.**Accessories:**

Quarter-turn latches K1561.

Push button latches K1562.

Locating fixture round K1740.

Locating fixture flange K1741.

**Drawing reference:**

1) plate

## KIPP Clamping pin stainless steel

| Order No. | D | D1 | H   | H1  | L   | M       | SW |
|-----------|---|----|-----|-----|-----|---------|----|
| K1564.16  | 6 | 7  | 7,6 | 0,5 | 5,8 | M04X0,7 | 5  |
| K1564.18  | 8 | 9  | 8,7 | 0,5 | 5,8 | M05X0,8 | 7  |

# Technical Information

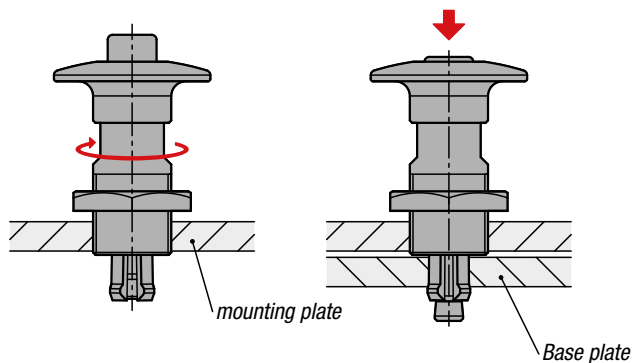
## Locking pin K1565



### Note:

These are designed to quickly clamp 2 plates.

The system can be used for changing mechanisms in assembly applications or for making other manual adjustments, such as conversions in automatic systems.



Screw the locking pin into the mounting plate until the thread can be seen on the other side.

Press the knob and pass the clamping pin through the hole in the premachined baseplate.

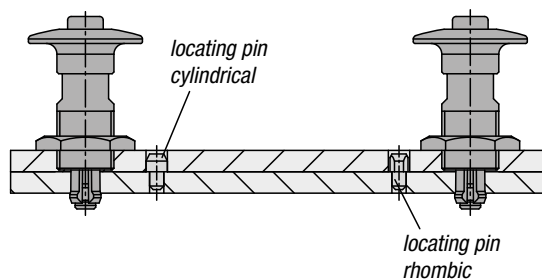
Screw the locking pin in the reverse direction till both plates come together, then secure with the locknut.

### Assembly:

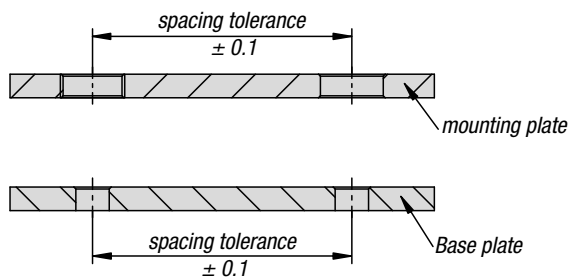
The mounting situation is customer specific. Plates of different thicknesses can be joined.

### Repeat accuracy:

A higher repeat accuracy can be achieved with the aid of additional locating pins (not supplied).



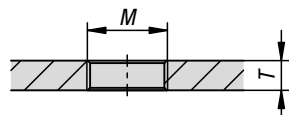
### Recommended tolerances when using 2 items



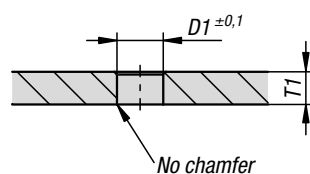
### Attention:

Use a hard material such as stainless steel for the baseplate.

### Mounting hole in the mounting plate

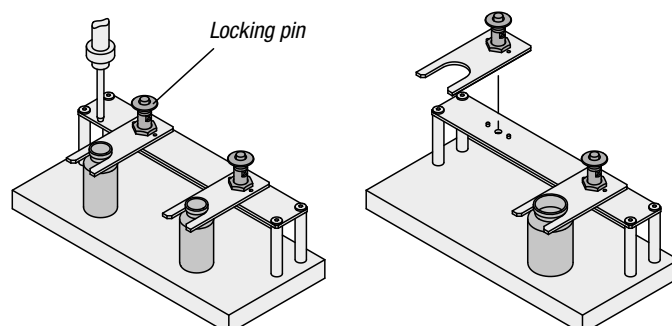


### Mounting hole in the base plate



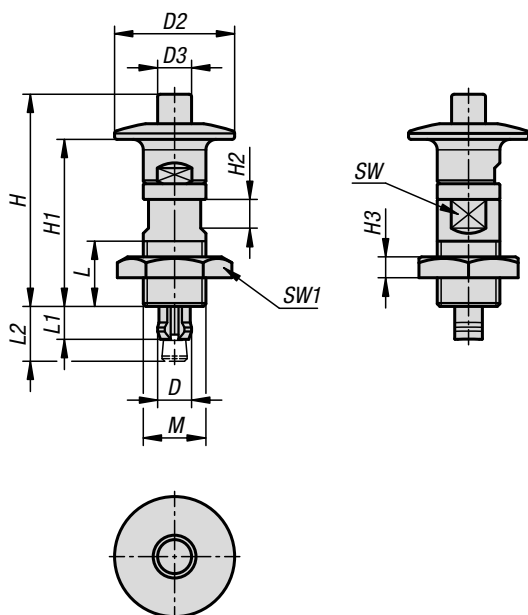
### Application example:

#### Changing retainer plates





## Locking pin stainless steel



With the locking pin, two separate plates can be joined quickly and easily with no counterpiece.

### Material:

Housing and push button stainless steel.

### Version:

Housing and push button bright.

### Sample order:

K1565.173

### Note:

Mounting option for plate thickness 3 - 12 mm.  
Use a hard material such as stainless steel for the baseplate.

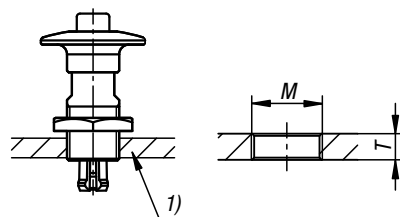
### Method of operation:

Screw the locking pin into the mounting plate until the thread can be seen on the other side.  
Press the knob and pass the clamping pin through the hole in the premachined baseplate.  
Screw the locking pin in the reverse direction till both plates come together, then secure with the locknut.

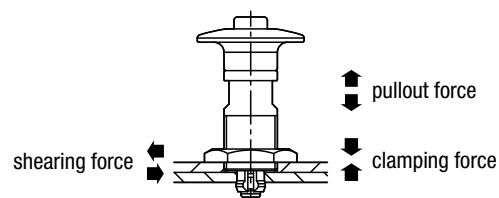
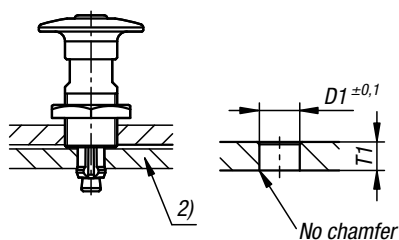
### Drawing reference:

- 1) Mounting plate
- 2) Base plate

Mounting hole in the mounting plate



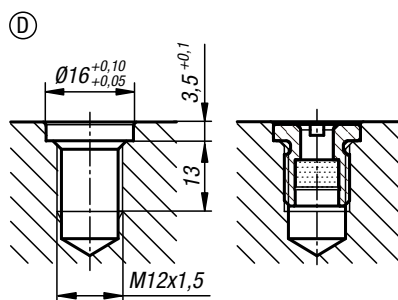
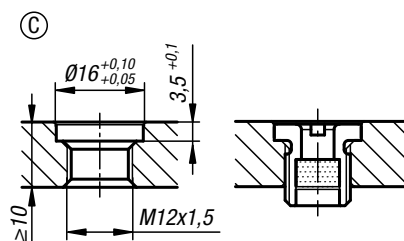
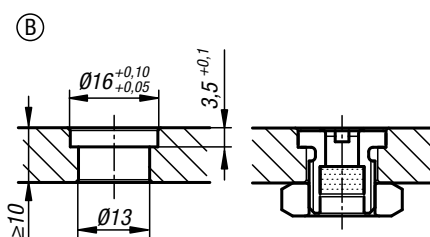
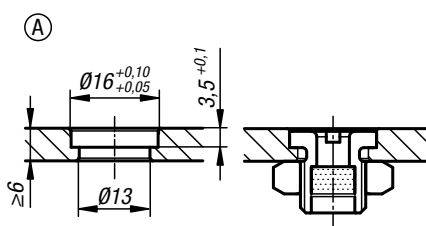
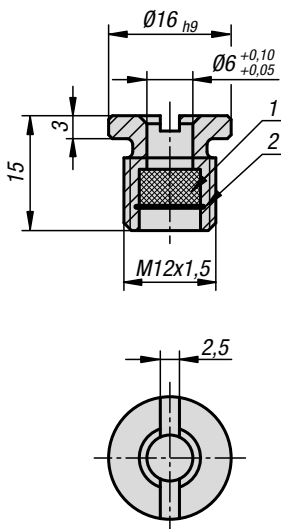
Mounting hole in the base plate



## KIPP Locking pin stainless steel

| Order No. | D   | D1  | D2 | D3  | H  | H1   | H2  | H3 | L    | L1  | L2   | M     | SW | SW1 | T    | T1 | Temperature resistance | Shearing force kN | Pullout force F kN | Clamping force N |
|-----------|-----|-----|----|-----|----|------|-----|----|------|-----|------|-------|----|-----|------|----|------------------------|-------------------|--------------------|------------------|
| K1565.173 | 6,5 | 6,5 | 23 | 6,5 | 40 | 32   | 5,5 | 4  | 12,5 | 6,5 | 10,5 | M12x1 | 10 | 19  | 3-8  | 3  | ≤180 °C                | 0,2               | 0,15               | 3                |
| K1565.176 | 6,5 | 6,5 | 23 | 6,5 | 37 | 29   | 5,5 | 4  | 12,5 | 9,5 | 13,5 | M12x1 | 10 | 19  | 3-8  | 6  | ≤180 °C                | 0,2               | 0,15               | 3                |
| K1565.193 | 8,5 | 8,5 | 32 | 10  | 51 | 41,5 | 7   | 4  | 16,5 | 6,5 | 11   | M16X1 | 14 | 24  | 3-12 | 3  | ≤180 °C                | 0,4               | 0,3                | 6                |
| K1565.196 | 8,5 | 8,5 | 32 | 10  | 48 | 38,5 | 7   | 4  | 16,5 | 9,5 | 14   | M16X1 | 14 | 24  | 3-12 | 6  | ≤180 °C                | 0,4               | 0,3                | 6                |

## Magnetic bushes

**Material:**

Housing stainless steel.  
Magnet neodymium.

**Version:**

Housing bright.

**Sample order:**

K1068.6

**Note:**

A magnet in the bush attracts the pin (K1069) and holds it with the specified retaining force.  
Repeat accuracy  $\pm 0.25$ . The repeat accuracy can be increased with the aid of additional locating pins.

Installation dimensions for Form A:  
min. plate thickness 6 mm.

Installation dimensions for Form B:  
max. plate thickness 10 mm.

Installation dimensions for Form C:  
plate thickness  $> 10$  mm.

Installation dimensions for Form D:  
blind hole.

**On request:**

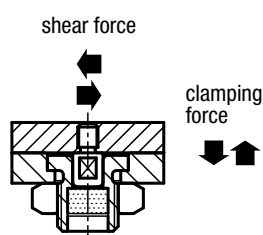
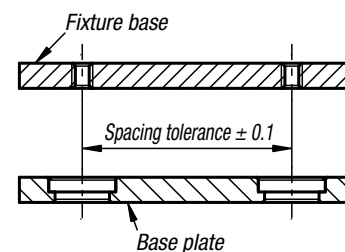
Suitable nuts.

**Accessories:**

Pin K1069

**Drawing reference:**

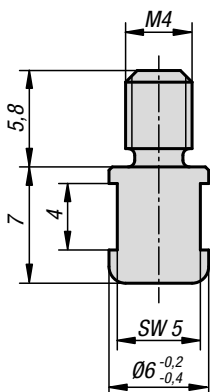
- 1) magnet
- 2) circlip

**Recommended installation tolerances:****KIPP Magnetic bushes**

| Order No. | Clamping force<br>N | Shearing force<br>kN | Temperature<br>resistance |
|-----------|---------------------|----------------------|---------------------------|
| K1068.6   | 7                   | 0,8                  | $\leq 80$ °C              |

## Pin

for magnetic bush

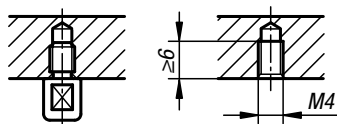
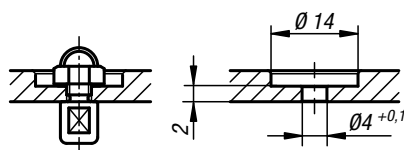
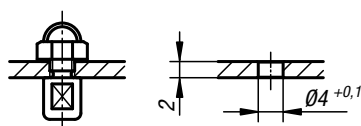


**Material:**  
Steel.

**Version:**  
Bright.

**Sample order:**  
K1069.6

**Note:**  
Accessory to K1068.  
The pin is attracted to the magnetic bush K1068.  
Mounting option with nut (not included) or by screwing directly into the workpiece.



## KIPP Pin for magnetic bush

| Order No. | Shear force<br>kN |
|-----------|-------------------|
| K1069.6   | 0,9               |



## Retaining cables

**Material:**

Cable stainless steel.  
Crimp and end terminal aluminium.

**Version:**

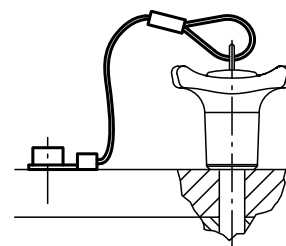
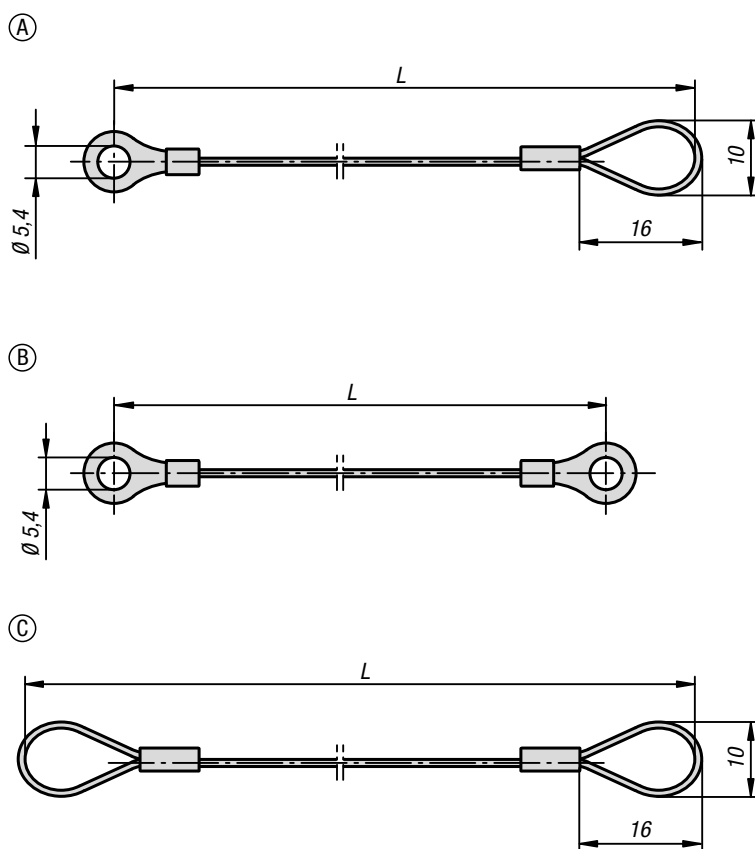
Cable plastic coated.

**Sample order:**

K0367.0200

**Note:**

With the retaining cable and key ring (K0367) the ball lock pins (K0363, K0364, K0641, K0366, K0642, K0790, K0791) can be secured so that they cannot be lost. An M5 screw is used to secure the retaining cable. Application temperature: +80 °C.



## KIPP Retaining cables

| Order No.  | Form | L   |
|------------|------|-----|
| K0367.0150 | A    | 150 |
| K0367.0200 | A    | 200 |
| K0367.0300 | A    | 300 |
| K0367.0500 | A    | 500 |
| K0367.1150 | B    | 150 |
| K0367.1200 | B    | 200 |
| K0367.1300 | B    | 300 |
| K0367.1500 | B    | 500 |
| K0367.2150 | C    | 150 |
| K0367.2200 | C    | 200 |
| K0367.2300 | C    | 300 |
| K0367.2500 | C    | 500 |

## Ball chains

**Material:**

A: Chain stainless steel.

B: Chain stainless steel, key ring stainless steel.

**Sample order:**

K1125.115X160 (include length L)

**Note:**

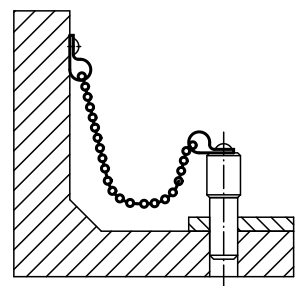
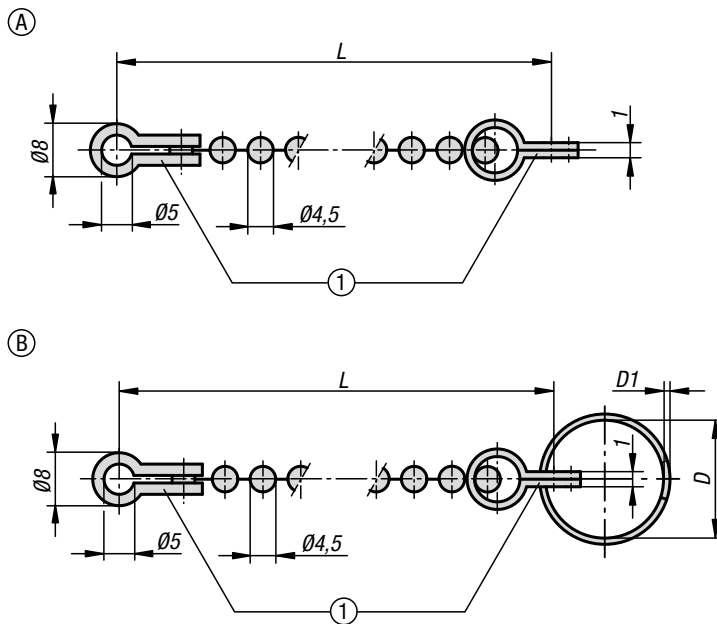
If no length is specified 1000 mm will be supplied.

**Drawing reference:**

1) same parts

Form A: ball chain, single

Form B: ball chain with key ring

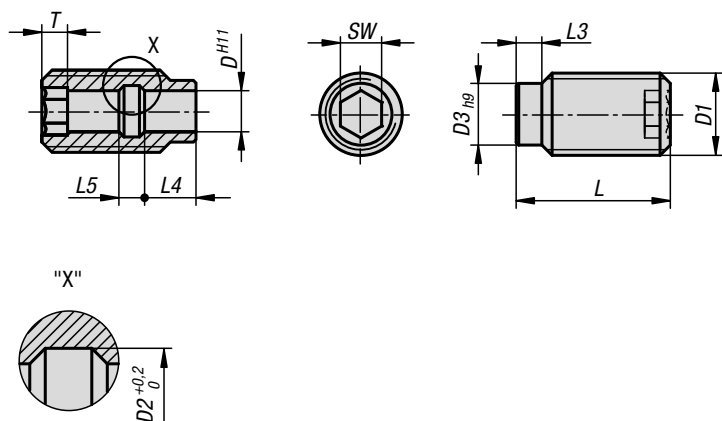
**KIPP Form A, ball chain single**

| Order No. | Form | Version 1 | Main material   | L                |
|-----------|------|-----------|-----------------|------------------|
| K1125.01X | A    | single    | stainless steel | 160/320/500/1000 |

**KIPP Form B, ball chain with keyring**

| Order No.  | Form | Version 1     | Main material   | L                | D  | D1  |
|------------|------|---------------|-----------------|------------------|----|-----|
| K1125.115X | B    | with key ring | stainless steel | 160/320/500/1000 | 15 | 1   |
| K1125.119X | B    | with key ring | stainless steel | 160/320/500/1000 | 19 | 1   |
| K1125.123X | B    | with key ring | stainless steel | 160/320/500/1000 | 23 | 1,2 |
| K1125.128X | B    | with key ring | stainless steel | 160/320/500/1000 | 28 | 1,7 |

## Bushing for ball lock pins



**Material:**  
Stainless steel 1.4305.

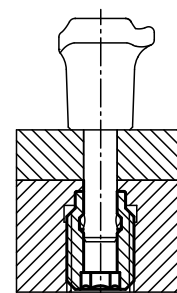
**Version:**  
Steel parts bright.

**Sample order:**  
K0724.11224

**Note:**  
These bushes are ideal for easy and quick positioning of ball lock pins and locking pins.

**Advantages:**

- centred by the centring collar.
- easy and reliable installation.
- can be screwed into various materials.
- usable both sides

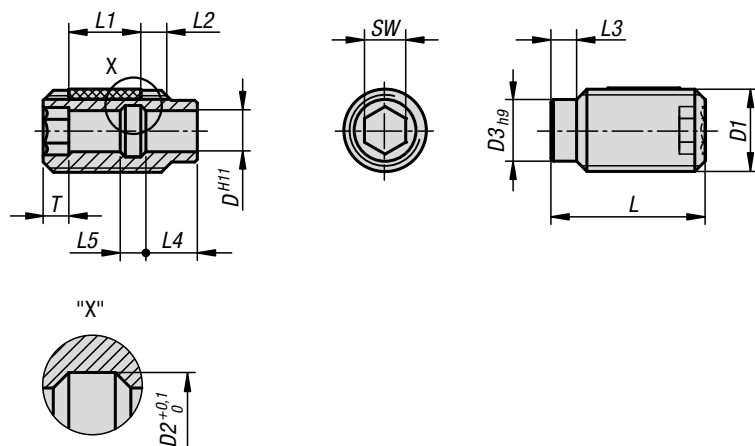


### KIPP Bushing for ball lock pins

| Order No.   | D  | D1  | D2  | D3 | L  | L3 | L4 | L5 | SW | T |
|-------------|----|-----|-----|----|----|----|----|----|----|---|
| K0724.10512 | 5  | M12 | 6   | 9  | 25 | 4  | 7  | 3  | 5  | 4 |
| K0724.10616 | 6  | M16 | 7,5 | 12 | 30 | 5  | 10 | 5  | 6  | 5 |
| K0724.10816 | 8  | M16 | 10  | 12 | 30 | 5  | 10 | 5  | 8  | 5 |
| K0724.11024 | 10 | M24 | 13  | 18 | 35 | 6  | 8  | 7  | 10 | 6 |
| K0724.11224 | 12 | M24 | 15  | 18 | 35 | 6  | 8  | 7  | 12 | 6 |
| K0724.11630 | 16 | M30 | 20  | 24 | 40 | 8  | 11 | 9  | 16 | 7 |

## Locating bushes for ball lock pins,

with thread lock



### Material:

Stainless steel 1.4305.

Thread lock nylon.

### Version:

Steel parts bright.

### Sample order:

K0724.112241

### Note:

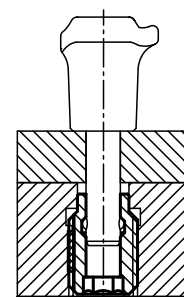
These bushes are ideal for easy and quick positioning of ball lock pins and locking pins.

### Advantages:

- The locating bush is centred by the centring collar.
- Easy and reliable screwing in.
- Can be screwed into various materials.
- Usable on both sides.
- The thread lock enables the installation depth to be matched exactly to the existing components, so no hammering is necessary.

### Drawing reference:

L2 = approx. 2x thread pitch



## KIPP Locating bushes for ball lock pins, with thread lock

| Order No.    | D  | D1  | D2  | D3 | L  | L1 | L3 | L4 | L5 | SW | T |
|--------------|----|-----|-----|----|----|----|----|----|----|----|---|
| K0724.105121 | 5  | M12 | 6   | 9  | 25 | 10 | 4  | 7  | 3  | 5  | 4 |
| K0724.106161 | 6  | M16 | 7,5 | 12 | 30 | 14 | 5  | 10 | 5  | 6  | 5 |
| K0724.108161 | 8  | M16 | 10  | 12 | 30 | 14 | 5  | 10 | 5  | 8  | 5 |
| K0724.110241 | 10 | M24 | 13  | 18 | 35 | 14 | 6  | 8  | 7  | 10 | 6 |
| K0724.112241 | 12 | M24 | 15  | 18 | 35 | 14 | 6  | 8  | 7  | 12 | 6 |
| K0724.116301 | 16 | M30 | 20  | 24 | 40 | 14 | 8  | 11 | 9  | 16 | 7 |



## Locating bushes with collar, stainless steel

for ball lock pins



### Material:

Stainless steel 1.4305.

### Version:

Bright.

### Sample order:

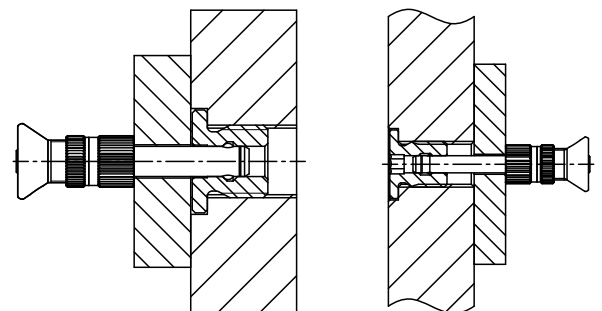
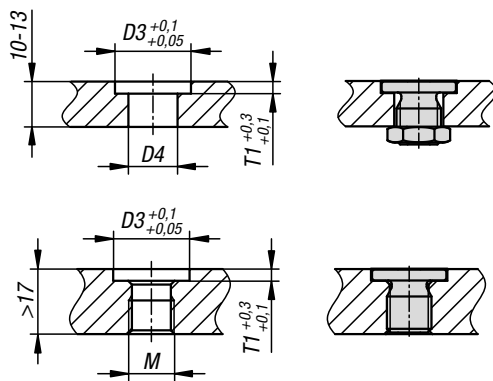
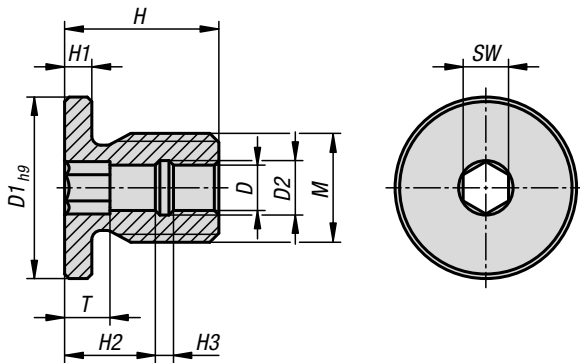
K1462.10512

### Note:

Locating bushes for ball lock pins are ideal for easy and quick positioning of ball lock pins and locking pins. The collar serves as a stop at one end. With hex socket to help screw in.

### Advantages:

- The collar guarantees a defined screw-in depth.
- Easy and reliable screwing in.
- Can be screwed into various materials.
- Can be used from both sides.

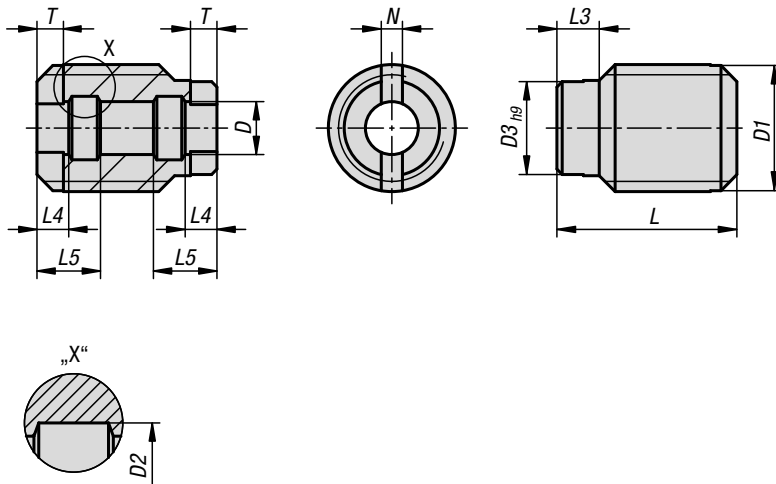


### KIPP Locating bushes with collar, stainless steel, for ball lock pins

| Order No.   | D  | D1 | D2  | D3 | D4   | H  | H1 | H2 | H3 | M   | SW | T | T1 |
|-------------|----|----|-----|----|------|----|----|----|----|-----|----|---|----|
| K1462.10512 | 5  | 20 | 6   | 20 | 13,5 | 17 | 3  | 10 | 2  | M12 | 5  | 5 | 3  |
| K1462.10616 | 6  | 24 | 7,5 | 24 | 17,5 | 20 | 3  | 10 | 5  | M16 | 6  | 5 | 3  |
| K1462.10816 | 8  | 24 | 10  | 24 | 17,5 | 20 | 3  | 10 | 5  | M16 | 8  | 5 | 3  |
| K1462.11024 | 10 | 34 | 13  | 34 | 25   | 25 | 5  | 10 | 5  | M24 | 10 | 5 | 5  |
| K1462.11224 | 12 | 34 | 15  | 34 | 25   | 25 | 5  | 10 | 5  | M24 | 12 | 5 | 5  |
| K1462.11630 | 16 | 40 | 20  | 40 | 31   | 28 | 5  | 10 | 8  | M30 | 16 | 5 | 5  |

## Locating bushes stainless steel

for ball lock pins



### Material:

Stainless steel 1.4305.

### Version:

Bright.

### Sample order:

K1416.10512

### Note:

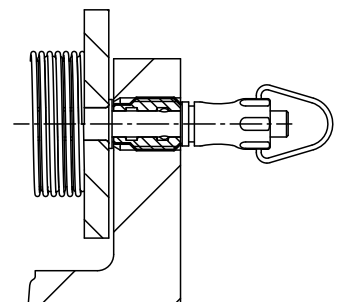
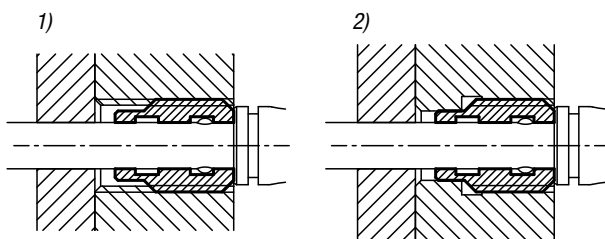
The locating bushes are ideal for easy and quick positioning of ball lock pins with head-end lock.

### Advantages:

The adapter bushes can be used from both sides. Additional centring of the adapter bush is provided by the centring collar (D3).

### Drawing reference:

- 1) without centring
- 2) with centring



### KIPP Locating bushes stainless steel for ball lock pins

| Order No.   | D  | D1      | D2  | D3 | L    | L3 | L4  | L5   | N   | T   |
|-------------|----|---------|-----|----|------|----|-----|------|-----|-----|
| K1416.10512 | 5  | M12     | 6   | 9  | 17   | 4  | 3   | 6    | 2   | 2,5 |
| K1416.10616 | 6  | M16     | 7,5 | 12 | 18   | 5  | 3   | 7    | 2   | 2,5 |
| K1416.10816 | 8  | M16     | 10  | 12 | 20,5 | 5  | 3,5 | 8,5  | 2   | 2,5 |
| K1416.11024 | 10 | M24x1,5 | 13  | 18 | 21,5 | 5  | 3,5 | 9    | 2,5 | 2,5 |
| K1416.11224 | 12 | M30x1,5 | 15  | 24 | 22,5 | 5  | 3,5 | 9,5  | 2,5 | 2,5 |
| K1416.11630 | 16 | M30x1,5 | 20  | 24 | 27   | 5  | 4,1 | 11,1 | 2,5 | 3   |



A large grid of graph paper for taking notes.

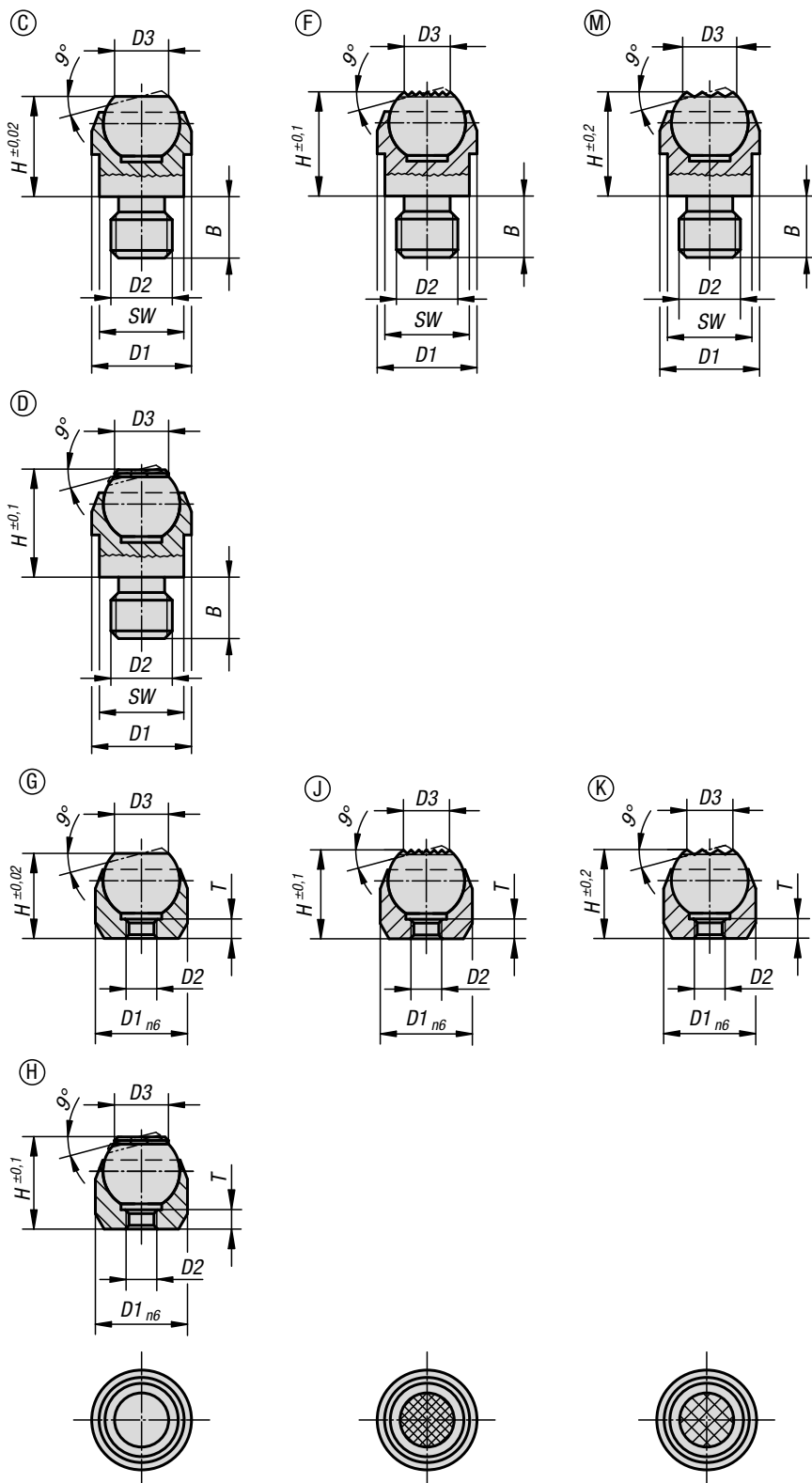




## Support elements, locating elements, stop elements



# Self-aligning pads



## Material:

Body carbon steel.  
Ball, ball bearing steel 1.2067.  
Form D: Ball with POM insert.  
Form H: Ball with POM insert.  
Form K: Ball with carbide insert.  
Form M has a carbide ball.

## Version:

Body tempered and phosphated.  
Ball hardened.  
Form M ball nickel plated.

## Sample order:

K0282.120

## Note:

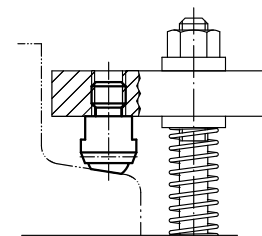
Self-aligning pads serve as stops, supports and thrust pads in fixture constructions.

Ball secured against rotation.

\* Valid only if the minimum bore depth is observed.

## Drawing reference:

Form C: with male thread, flattened ball, smooth.  
Form D: with male thread, flattened ball, with POM insert.  
Form F: with male thread, flattened ball, diamond grip.  
Form M: with male thread, flattened ball, with carbide insert.  
Form G: press fit, flattened ball, smooth.  
Form H: press fit, flattened ball, with POM insert.  
Form J: press fit, flattened ball, diamond grip.  
Form K: press fit, flattened ball, with carbide insert.



## KIPP Form C, with male thread, flattened ball, plain

| Order No. | Form | B  | D1 | D2  | D3   | H  | Ball-Ø | SW | Load rating<br>max. kN<br>(static load only) |
|-----------|------|----|----|-----|------|----|--------|----|----------------------------------------------|
| K0282.108 | C    | 8  | 13 | M8  | 7,2  | 13 | 10     | 11 | 10                                           |
| K0282.110 | C    | 10 | 20 | M10 | 10,5 | 18 | 16     | 17 | 25                                           |
| K0282.112 | C    | 12 | 20 | M12 | 10,5 | 18 | 16     | 17 | 25                                           |
| K0282.116 | C    | 16 | 30 | M16 | 20   | 27 | 25     | 27 | 90                                           |
| K0282.120 | C    | 20 | 50 | M20 | 34,5 | 35 | 40     | 41 | 165                                          |

## Self-aligning pads



## KIPP Form D, with male thread, flattened ball, with POM insert

| Order No. | Form | B  | D1 | D2  | D3   | H  | Ball-Ø | SW | Load rating<br>max. kN<br>(static load only) |
|-----------|------|----|----|-----|------|----|--------|----|----------------------------------------------|
| K0282.208 | D    | 8  | 13 | M8  | 7,9  | 13 | 10     | 11 | 10                                           |
| K0282.210 | D    | 10 | 20 | M10 | 12,7 | 18 | 16     | 17 | 25                                           |
| K0282.212 | D    | 12 | 20 | M12 | 12,7 | 18 | 16     | 17 | 25                                           |

## KIPP Form F, male thread, flattened ball, diamond grip

| Order No. | Form | B  | D1 | D2  | D3   | H  | Ball-Ø | SW | Load rating<br>max. kN<br>(static load only) |
|-----------|------|----|----|-----|------|----|--------|----|----------------------------------------------|
| K0282.308 | F    | 8  | 13 | M8  | 7,2  | 13 | 10     | 11 | 10                                           |
| K0282.310 | F    | 10 | 20 | M10 | 10,5 | 18 | 16     | 17 | 25                                           |
| K0282.312 | F    | 12 | 20 | M12 | 10,5 | 18 | 16     | 17 | 25                                           |
| K0282.316 | F    | 16 | 30 | M16 | 20   | 27 | 25     | 27 | 90                                           |
| K0282.320 | F    | 20 | 50 | M20 | 34,5 | 35 | 40     | 41 | 165                                          |

## KIPP Form M, male thread, flattened ball, with carbide insert

| Order No. | Form | B  | D1 | D2  | D3  | H    | Ball-Ø | SW | Load rating<br>max. kN<br>(static load only) |
|-----------|------|----|----|-----|-----|------|--------|----|----------------------------------------------|
| K0282.908 | M    | 8  | 13 | M8  | 7,7 | 13,3 | 10     | 11 | 10                                           |
| K0282.910 | M    | 10 | 20 | M10 | 12  | 18   | 16     | 17 | 25                                           |
| K0282.912 | M    | 12 | 20 | M12 | 12  | 18   | 16     | 17 | 25                                           |

## KIPP Form G, press fit, flattened ball, flat face

| Order No. | Form | D1 | D2 | D3   | H  | T   | Ball-Ø | Receiving<br>hole | Load rating<br>max. kN<br>(static load only) |
|-----------|------|----|----|------|----|-----|--------|-------------------|----------------------------------------------|
| K0282.403 | G    | 12 | M3 | 7,2  | 11 | 3,5 | 10     | Ø 12 H7X6 min.    | 10*                                          |
| K0282.404 | G    | 18 | M4 | 10,5 | 17 | 4,4 | 16     | Ø 18 H7X8 min.    | 25*                                          |
| K0282.405 | G    | 28 | M5 | 20   | 25 | 6,3 | 25     | Ø 28 H7X13 min.   | 90*                                          |

## KIPP Form H, press fit, flattened ball, with POM insert

| Order No. | Form | D1 | D2 | D3    | H  | T | Ball-Ø | Receiving<br>hole | Load rating<br>max. kN<br>(static load only) |
|-----------|------|----|----|-------|----|---|--------|-------------------|----------------------------------------------|
| K0282.503 | H    | 12 | M3 | 7,9   | 11 | 3 | 10     | Ø 12 H7X6 min.    | 10*                                          |
| K0282.504 | H    | 18 | M4 | 12,7  | 17 | 4 | 16     | Ø 18 H7X8 min.    | 25*                                          |
| K0282.505 | H    | 28 | M5 | 19,05 | 25 | 6 | 25     | Ø 28 H7X13 min.   | 90*                                          |

## KIPP Form J, press fit, flattened ball, diamond grip

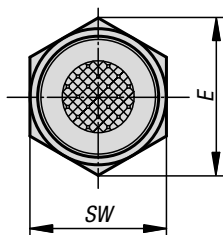
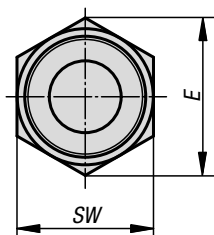
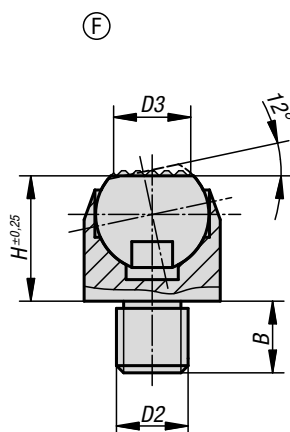
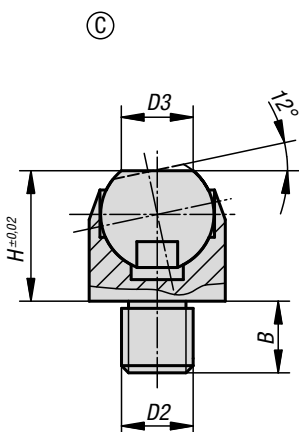
| Order No. | Form | D1 | D2 | D3   | H  | T   | Ball-Ø | Receiving<br>hole | Load rating<br>max. kN<br>(static load only) |
|-----------|------|----|----|------|----|-----|--------|-------------------|----------------------------------------------|
| K0282.603 | J    | 12 | M3 | 7,2  | 11 | 3,5 | 10     | Ø 12 H7X6 min.    | 10*                                          |
| K0282.604 | J    | 18 | M4 | 10,5 | 17 | 4,4 | 16     | Ø 18 H7X8 min.    | 25*                                          |
| K0282.605 | J    | 28 | M5 | 20   | 25 | 6,3 | 25     | Ø 28 H7X13 min.   | 90*                                          |

## KIPP Form K, press fit, flattened ball, with carbide insert

| Order No. | Form | D1 | D2 | D3    | H  | T | Ball-Ø | Receiving<br>hole | Load rating<br>max. kN<br>(static load only) |
|-----------|------|----|----|-------|----|---|--------|-------------------|----------------------------------------------|
| K0282.804 | K    | 18 | M4 | 12,7  | 17 | 4 | 16     | Ø 18 H7X8 min.    | 25*                                          |
| K0282.803 | K    | 12 | M3 | 7,9   | 11 | 3 | 10     | Ø 12 H7X6 min.    | 10*                                          |
| K0282.805 | K    | 28 | M5 | 19,05 | 25 | 6 | 25     | Ø 28 H7X13 min.   | 90*                                          |

## Self-aligning pads

swivel angle 12°



### Material:

Body carbon steel.

Ball, ball-bearing steel 1.3505.

### Version:

Body tempered.

Ball hardened (50 - 55 HRC).

### Sample order:

K0302.106

### Note:

Self-aligning pads serve as stops, supports and thrust pads in fixture construction. They can also be installed in existing clamping devices, e.g. arness clamps.

Ball is secured against rotation.

### Drawing reference:

Form C: male thread, smooth flattened ball

Form F: male thread, serrated flattened ball

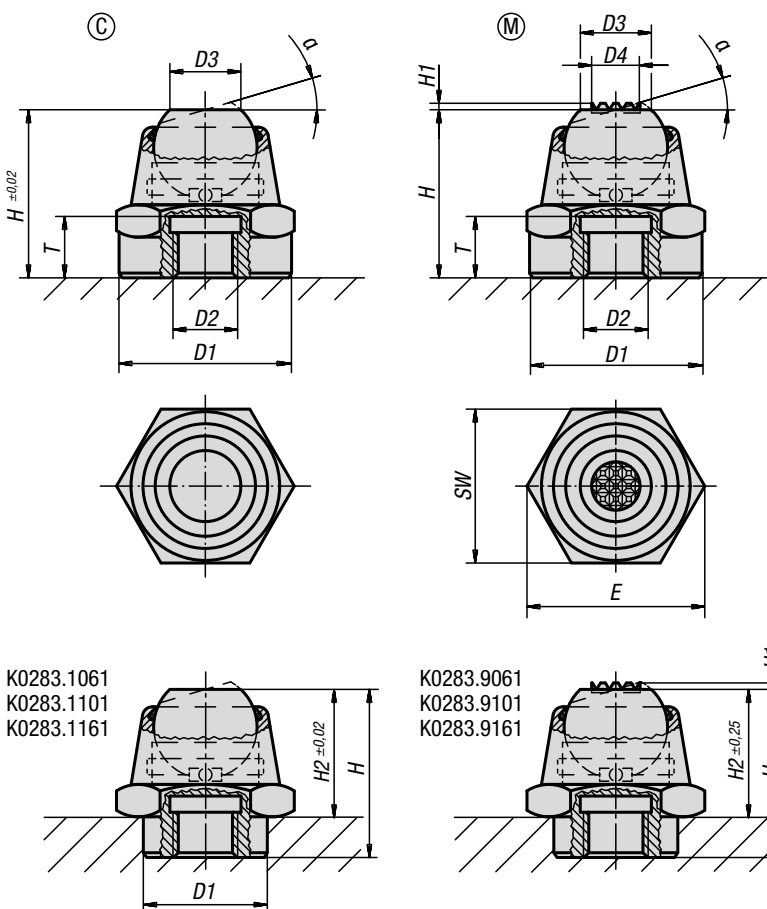
## KIPP Self-aligning pads swivel angle 12°

| Order No.<br>Form C | Order No.<br>Form F | B  | D2  | D3  | H  | E    | SW | Ball-Ø | Load rating<br>max. kN<br>(static load only) |
|---------------------|---------------------|----|-----|-----|----|------|----|--------|----------------------------------------------|
| K0302.106           | K0302.306           | 7  | M6  | 6,7 | 13 | 14,5 | 13 | 10     | 10                                           |
| K0302.108           | K0302.308           | 8  | M8  | 6,7 | 13 | 14,5 | 13 | 10     | 10                                           |
| K0302.110           | K0302.310           | 10 | M10 | 10  | 18 | 21,9 | 19 | 16     | 25                                           |
| K0302.112           | K0302.312           | 12 | M12 | 10  | 18 | 21,9 | 19 | 16     | 25                                           |
| K0302.116           | K0302.316           | 16 | M16 | 20  | 27 | 33   | 30 | 24     | 90                                           |
| K0302.120           | K0302.320           | 20 | M20 | 20  | 27 | 33   | 30 | 24     | 90                                           |



## Self-aligning pads

swivel angle 14° and 20°



### Material:

Body steel.  
Ball rust and acid resistant steel.  
Form M with carbide insert.

### Version:

Body black oxidised.  
Ball bright.

### Sample order:

K0283.108

### Note:

Self-aligning pads are used to support and clamp unmachined and machined workpieces. They also serve as stops, supports and thrust pads in fixture and toolmaking.  
Grub screws or threaded studs can be screwed and glued into thread D2 making a self-aligning pad with external thread.

Ball secured against rotation.

### Advantages:

- Self-aligning pads can be swiveled.
- High load forces can be absorbed.
- The built-in o-ring keeps dirt and foreign particles out, which in turn guarantees reliable operation.

### KIPP Form C, flattened ball, flat face

| Order No.  | Form | $\alpha$ | D1 | D2  | D3 | H    | H2   | T  | E    | SW | Ball-Ø | Load rating<br>max. kN<br>(static load only) |
|------------|------|----------|----|-----|----|------|------|----|------|----|--------|----------------------------------------------|
| K0283.1061 | C    | 14°      | 12 | M6  | 7  | 17,5 | 12,5 | 6  | 19,6 | 17 | 10     | 14                                           |
| K0283.106  | C    | 14°      | 16 | M6  | 7  | 17,5 | -    | 6  | 19,6 | 17 | 10     | 14                                           |
| K0283.108  | C    | 20°      | 22 | M8  | 11 | 26   | -    | 9  | 27,7 | 24 | 16     | 34                                           |
| K0283.1101 | C    | 20°      | 18 | M10 | 11 | 26   | 20   | 9  | 27,7 | 24 | 16     | 34                                           |
| K0283.110  | C    | 20°      | 22 | M10 | 11 | 26   | -    | 9  | 27,7 | 24 | 16     | 34                                           |
| K0283.112  | C    | 20°      | 22 | M12 | 11 | 26   | -    | 9  | 27,7 | 24 | 16     | 34                                           |
| K0283.1161 | C    | 20°      | 26 | M16 | 18 | 40   | 30   | 15 | 41,6 | 36 | 25     | 90                                           |
| K0283.116  | C    | 20°      | 34 | M16 | 18 | 40   | -    | 15 | 41,6 | 36 | 25     | 90                                           |
| K0283.120  | C    | 20°      | 34 | M20 | 18 | 40   | -    | 15 | 41,6 | 36 | 25     | 90                                           |

### KIPP Form M, flattened ball, carbide steel diamond grip

| Order No.  | Form | $\alpha$ | D1 | D2  | D3 | D4  | H    | H1  | H2   | E    | T  | Ball-Ø | SW | Load rating<br>max. kN<br>(static load only) |
|------------|------|----------|----|-----|----|-----|------|-----|------|------|----|--------|----|----------------------------------------------|
| K0283.9061 | M    | 14°      | 12 | M6  | 7  | 5   | 17,5 | 0,6 | 12,5 | 19,6 | 6  | 10     | 17 | 14                                           |
| K0283.906  | M    | 14°      | 16 | M6  | 7  | 5   | 17,5 | 0,6 | -    | 19,6 | 6  | 10     | 17 | 14                                           |
| K0283.908  | M    | 20°      | 22 | M8  | 11 | 7,5 | 26   | 0,8 | -    | 27,7 | 9  | 16     | 24 | 34                                           |
| K0283.9101 | M    | 20°      | 18 | M10 | 11 | 7,5 | 26   | 0,8 | 20   | 27,7 | 9  | 16     | 24 | 34                                           |
| K0283.910  | M    | 20°      | 22 | M10 | 11 | 7,5 | 26   | 0,8 | -    | 27,7 | 9  | 16     | 24 | 34                                           |
| K0283.912  | M    | 20°      | 22 | M12 | 11 | 7,5 | 26   | 0,8 | -    | 27,7 | 9  | 16     | 24 | 34                                           |
| K0283.9161 | M    | 20°      | 26 | M16 | 18 | 13  | 40   | 0,9 | 30   | 41,6 | 15 | 25     | 36 | 90                                           |
| K0283.916  | M    | 20°      | 34 | M16 | 18 | 13  | 40   | 0,9 | -    | 41,6 | 15 | 25     | 36 | 90                                           |
| K0283.920  | M    | 20°      | 34 | M20 | 18 | 13  | 40   | 0,9 | -    | 41,6 | 15 | 25     | 36 | 90                                           |

# Self-aligning pads

with o-ring



## Material:

Body carbon steel.

Ball:

Form C, F tool steel.

Form K POM.

Form O stainless steel diamond impregnated.

Form P stainless steel with polyurethane face.

## Version:

Body tempered, black oxidised.

Ball:

Form C, F hardened, black oxidised.

Form K POM ball, white.

Form O surface comparable to 100 grade abrasive grit.

Form P polyurethane, hardness 60 Shore.

## Sample order:

K0284.704X012

## Note:

Self-aligning pads are used to support and clamp unmachined and machined workpieces.

They also serve as stops, supports and thrust pads in fixtures and toolmaking.

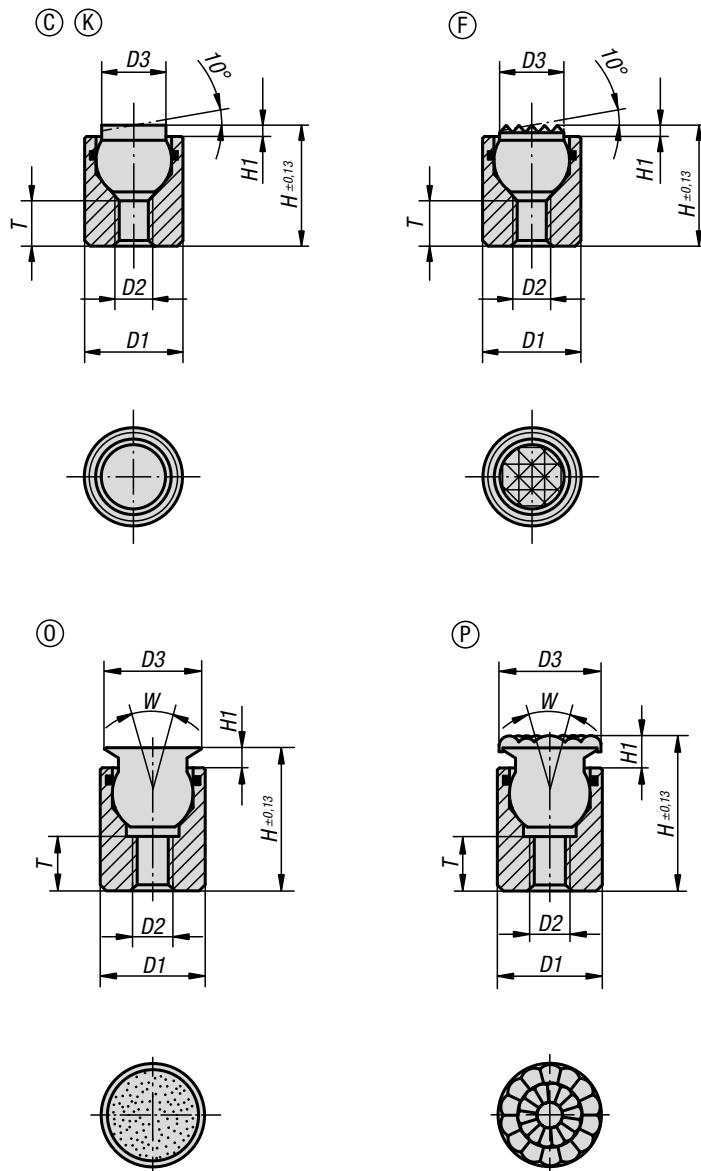
Ball secured against rotation.

Form O: The abrasive diamond surface is fused firmly to the ball. It is ideally suited to supporting smooth or slippery applications with a minimum of clamping pressure. This allows the diamond particles to get a firm grip on a very small area with minimum damage to the surface. The diamond surface offers excellent wear resistance.

Form P: The polyurethane surface is permanently vulcanised on the ball. It is abrasion-resistant and does not discolour. Offers optimum protection against damage to delicate surfaces. The pearl-like surface gives a firm grip and allows air to escape so as to prevent any suction effect between the contact surface and the self-aligning pads.

## Advantages:

The built-in O-ring holds the ball in place and keeps dirt and foreign particles out ensuring smooth and even movement.



## Self-aligning pads

with o-ring



## KIPP Form C, flattened steel ball, smooth

| Order No.     | Form | D1 | D2 | D3  | H  | H1  | T   | Ball-Ø | Load rating<br>max. kN<br>(static load only) |
|---------------|------|----|----|-----|----|-----|-----|--------|----------------------------------------------|
| K0284.104X012 | C    | 10 | M4 | 6   | 12 | 1,5 | 4,5 | 7      | 12                                           |
| K0284.104X025 | C    | 10 | M4 | 6   | 25 | 1,5 | 12  | 7      | 12                                           |
| K0284.105X016 | C    | 13 | M5 | 8,5 | 16 | 1,5 | 5   | 10     | 20                                           |
| K0284.105X025 | C    | 13 | M5 | 8,5 | 25 | 1,5 | 12  | 10     | 20                                           |

## KIPP Form F, flattened steel ball, diamond grip

| Order No.     | Form | D1 | D2 | D3  | H  | H1  | T   | Ball-Ø | Load rating<br>max. kN<br>(static load only) |
|---------------|------|----|----|-----|----|-----|-----|--------|----------------------------------------------|
| K0284.304X012 | F    | 10 | M4 | 6   | 12 | 1,5 | 4,5 | 7      | 12                                           |
| K0284.304X025 | F    | 10 | M4 | 6   | 25 | 1,5 | 12  | 7      | 12                                           |
| K0284.305X016 | F    | 13 | M5 | 8,5 | 16 | 1,5 | 5   | 10     | 20                                           |
| K0284.305X025 | F    | 13 | M5 | 8,5 | 25 | 1,5 | 12  | 10     | 20                                           |

## KIPP Form K, flattened POM ball, smooth

| Order No.     | Form | D1 | D2 | D3  | H  | H1  | T   | Ball-Ø | Load rating<br>max. kN<br>(static load only) |
|---------------|------|----|----|-----|----|-----|-----|--------|----------------------------------------------|
| K0284.704X012 | K    | 10 | M4 | 6   | 12 | 1,5 | 4,5 | 7      | 2                                            |
| K0284.704X025 | K    | 10 | M4 | 6   | 25 | 1,5 | 12  | 7      | 2                                            |
| K0284.705X016 | K    | 13 | M5 | 8,5 | 16 | 1,5 | 5   | 10     | 4                                            |
| K0284.705X025 | K    | 13 | M5 | 8,5 | 25 | 1,5 | 12  | 10     | 4                                            |

## KIPP Form O, stainless-steel ball, diamond impregnated

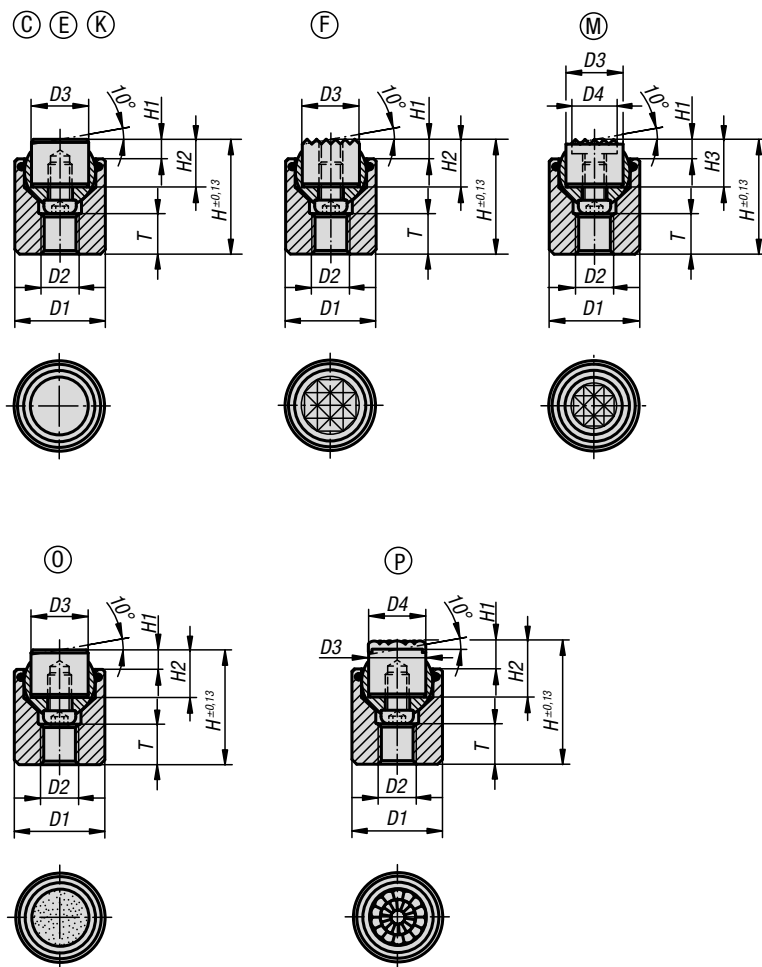
| Order No.     | Form | D1 | D2  | D3 | H    | H1 | T   | W  | Ball-Ø | Load rating<br>max. kN<br>(static load only) |
|---------------|------|----|-----|----|------|----|-----|----|--------|----------------------------------------------|
| K0284.504X012 | O    | 10 | M4  | 8  | 12,5 | 2  | 3,5 | 28 | 7      | 11,5                                         |
| K0284.504X025 | O    | 10 | M4  | 8  | 25,5 | 2  | 9   | 28 | 7      | 11,5                                         |
| K0284.505X017 | O    | 13 | M5  | 11 | 17,5 | 3  | 6,5 | 28 | 10     | 19,8                                         |
| K0284.505X026 | O    | 13 | M5  | 11 | 26,5 | 3  | 9   | 28 | 10     | 19,8                                         |
| K0284.506X021 | O    | 17 | M6  | 14 | 21   | 3  | 7,5 | 28 | 13     | 27,4                                         |
| K0284.508X024 | O    | 19 | M8  | 19 | 24   | 4  | 8,5 | 24 | 15     | 38,6                                         |
| K0284.510X028 | O    | 24 | M10 | 21 | 28   | 4  | 9   | 24 | 20     | 58,3                                         |

## KIPP Form P, stainless-steel ball with polyurethane face

| Order No.     | Form | D1 | D2  | D3 | H    | H1 | W  | T   | Ball-Ø |
|---------------|------|----|-----|----|------|----|----|-----|--------|
| K0284.604X014 | P    | 10 | M4  | 10 | 14,5 | 4  | 28 | 3,5 | 7      |
| K0284.604X027 | P    | 10 | M4  | 10 | 27,5 | 4  | 28 | 9   | 7      |
| K0284.605X019 | P    | 13 | M5  | 13 | 19,5 | 5  | 28 | 6,5 | 10     |
| K0284.605X028 | P    | 13 | M5  | 13 | 28,5 | 5  | 28 | 9   | 10     |
| K0284.606X023 | P    | 17 | M6  | 16 | 23   | 5  | 28 | 7,5 | 13     |
| K0284.608X026 | P    | 19 | M8  | 21 | 26   | 6  | 24 | 8,5 | 15     |
| K0284.610X030 | P    | 24 | M10 | 23 | 30   | 6  | 24 | 9   | 20     |

# Self-aligning pads

with o-ring and exchangeable inserts



## Material:

Body carbon steel.

Ball rust and acid resistant steel.

Inserts:

Form C, F, M tool steel

Form K POM

Form E stainless steel.

Form O stainless steel diamond impregnated.

Form P stainless steel with polyurethane surface.

## Version:

Body tempered, black oxidised.

Ball hardened, bright.

Inserts:

Form C, F hardened, black oxidised.

Form M with carbide serrations, black oxidised.

Form K white.

Form E hardened, bright.

Form O diamond impregnated surface comparable to 100 grade abrasive grit.

Form P polyurethane surface, hardness 60 Shore.

## Sample order:

K0285.736X036

## Note:

Self-aligning pads are used to support and clamp unmachined and machined workpieces.

In addition, they serve as stops, supports and thrust pads in fixtures and toolmaking.

The ball can be removed from the housing by applying light pressure to the socket head screw.

Ball secured against rotation.

## Advantages:

Highly cost-effective as inserts can be exchanged.

The built-in O-ring holds the ball in place and keeps dirt and foreign particles out, ensuring uniform movement.

## KIPP Self-aligning pads with o-ring and exchangeable inserts

| Order No.     | Form | D1 | D2  | D3 | H  | H1 | H2 | T  | Ball-Ø | Load rating<br>max. kN<br>(static load only) | Order No.<br>steel insert |
|---------------|------|----|-----|----|----|----|----|----|--------|----------------------------------------------|---------------------------|
| K0285.117X022 | C    | 17 | M6  | 10 | 22 | 4  | 10 | 7  | 13     | 28                                           | K0385.10108               |
| K0285.119X024 | C    | 19 | M8  | 12 | 24 | 4  | 10 | 8  | 15     | 39                                           | K0385.12108               |
| K0285.124X028 | C    | 24 | M10 | 16 | 28 | 4  | 10 | 8  | 20     | 58                                           | K0385.16108               |
| K0285.130X030 | C    | 30 | M12 | 20 | 30 | 4  | 10 | 9  | 23     | 95                                           | K0385.20108               |
| K0285.136X036 | C    | 36 | M12 | 25 | 36 | 4  | 10 | 11 | 28     | 136                                          | K0385.25108               |

| Order No.     | Form | D1 | D2  | D3 | H  | H1 | H2 | T  | Ball-Ø | Load rating<br>max. kN<br>(static load only) | Order No.<br>stainless steel<br>insert |
|---------------|------|----|-----|----|----|----|----|----|--------|----------------------------------------------|----------------------------------------|
| K0285.217X022 | E    | 17 | M6  | 10 | 22 | 4  | 10 | 7  | 13     | 28                                           | K0385.10102                            |
| K0285.219X024 | E    | 19 | M8  | 12 | 24 | 4  | 10 | 8  | 15     | 39                                           | K0385.12102                            |
| K0285.224X028 | E    | 24 | M10 | 16 | 28 | 4  | 10 | 8  | 20     | 58                                           | K0385.16102                            |
| K0285.230X030 | E    | 30 | M12 | 20 | 30 | 4  | 10 | 9  | 23     | 95                                           | K0385.20102                            |
| K0285.236X036 | E    | 36 | M12 | 25 | 36 | 4  | 10 | 11 | 28     | 136                                          | K0385.25102                            |

| Order No.     | Form | D1 | D2  | D3 | H  | H1 | H2 | T  | Ball-Ø | Load rating<br>max. kN<br>(static load only) | Order No.<br>gripper |
|---------------|------|----|-----|----|----|----|----|----|--------|----------------------------------------------|----------------------|
| K0285.317X022 | F    | 17 | M6  | 10 | 22 | 4  | 10 | 7  | 13     | 28                                           | K0385.10110          |
| K0285.319X024 | F    | 19 | M8  | 12 | 24 | 4  | 10 | 8  | 15     | 39                                           | K0385.12110          |
| K0285.324X028 | F    | 24 | M10 | 16 | 28 | 4  | 10 | 8  | 20     | 58                                           | K0385.16110          |
| K0285.330X030 | F    | 30 | M12 | 20 | 30 | 4  | 10 | 9  | 23     | 95                                           | K0385.20110          |
| K0285.336X036 | F    | 36 | M12 | 25 | 36 | 4  | 10 | 11 | 28     | 136                                          | K0385.25110          |



| Order No.     | Form | D1 | D2  | D3 | H  | H1 | H2 | T  | Ball-Ø | Load rating<br>max. kN<br>(static load only) | Order No.<br>POM insert |
|---------------|------|----|-----|----|----|----|----|----|--------|----------------------------------------------|-------------------------|
| K0285.717X022 | K    | 17 | M6  | 10 | 22 | 4  | 10 | 7  | 13     | 4                                            | K0385.10109             |
| K0285.719X024 | K    | 19 | M8  | 12 | 24 | 4  | 10 | 8  | 15     | 7                                            | K0385.12109             |
| K0285.724X028 | K    | 24 | M10 | 16 | 28 | 4  | 10 | 8  | 20     | 14                                           | K0385.16109             |
| K0285.730X030 | K    | 30 | M12 | 20 | 30 | 4  | 10 | 9  | 23     | 27                                           | K0385.20109             |
| K0285.736X036 | K    | 36 | M12 | 25 | 36 | 4  | 10 | 11 | 28     | 47                                           | K0385.25109             |

| Order No.     | Form | D1 | D2  | D3 | D4   | H  | H1 | H2 | T  | Ball-Ø | Load rating<br>max. kN<br>(static load only) | Order No.<br>gripper |
|---------------|------|----|-----|----|------|----|----|----|----|--------|----------------------------------------------|----------------------|
| K0285.917X022 | M    | 17 | M6  | 10 | 7,9  | 22 | 4  | 10 | 7  | 13     | 28                                           | K0385.10107          |
| K0285.919X024 | M    | 19 | M8  | 12 | 9,5  | 24 | 4  | 10 | 8  | 15     | 39                                           | K0385.12107          |
| K0285.924X028 | M    | 24 | M10 | 16 | 12,7 | 28 | 4  | 10 | 8  | 20     | 58                                           | K0385.16107          |
| K0285.930X030 | M    | 30 | M12 | 20 | 15,9 | 30 | 4  | 10 | 9  | 23     | 95                                           | K0385.20107          |
| K0285.936X036 | M    | 36 | M12 | 25 | 19   | 36 | 4  | 10 | 11 | 28     | 136                                          | K0385.25107          |

| Order No.     | Form | D1 | D2  | D3 | H  | H1 | H2 | T  | Ball-Ø | Load rating<br>max. kN<br>(static load only) | Order No.<br>stainless steel insert,<br>diamond surface |
|---------------|------|----|-----|----|----|----|----|----|--------|----------------------------------------------|---------------------------------------------------------|
| K0285.517X022 | O    | 17 | M6  | 10 | 22 | 4  | 10 | 7  | 13     | 28                                           | K0385.10105                                             |
| K0285.519X024 | O    | 19 | M8  | 12 | 24 | 4  | 10 | 8  | 15     | 39                                           | K0385.12105                                             |
| K0285.524X028 | O    | 24 | M10 | 16 | 28 | 4  | 10 | 8  | 20     | 58                                           | K0385.16105                                             |
| K0285.530X030 | O    | 30 | M12 | 20 | 30 | 4  | 10 | 9  | 23     | 95                                           | K0385.20105                                             |
| K0285.536X036 | O    | 36 | M12 | 25 | 36 | 4  | 10 | 11 | 28     | 136                                          | K0385.25105                                             |

| Order No.     | Form | D1 | D2  | D3 | D4 | H  | H1 | H2 | T  | Ball-Ø | Order No.<br>stainless steel insert,<br>polyurethane surface |
|---------------|------|----|-----|----|----|----|----|----|----|--------|--------------------------------------------------------------|
| K0285.617X024 | P    | 17 | M6  | 10 | 10 | 24 | 6  | 12 | 7  | 13     | K0385.10126                                                  |
| K0285.619X026 | P    | 19 | M8  | 12 | 13 | 26 | 6  | 12 | 8  | 15     | K0385.12126                                                  |
| K0285.624X030 | P    | 24 | M10 | 16 | 16 | 30 | 6  | 12 | 8  | 20     | K0385.16126                                                  |
| K0285.630X032 | P    | 30 | M12 | 20 | 21 | 32 | 6  | 12 | 9  | 23     | K0385.20126                                                  |
| K0285.636X038 | P    | 36 | M12 | 25 | 27 | 38 | 6  | 12 | 11 | 28     | K0385.25126                                                  |

# Self-aligning pads

self-righting



## Material:

Form C and F:

Ball steel, ball seat high-carbon steel.

Form G and J:

Ball high-carbon steel, ball seat steel.

## Version:

Form C and F:

Ball hardened and black oxidised, ball seat phosphated.

Form G and J:

Ball phosphated, ball seat hardened and black oxidised.

## Sample order:

K1164.106

## Note:

The self-aligning pads serve as stops, rests and thrust pads in fixture construction.

The seating face returns to the start position when the load is removed.

Ball secured against rotation.

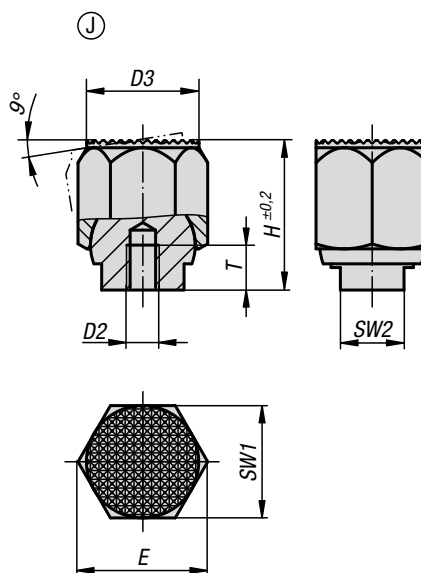
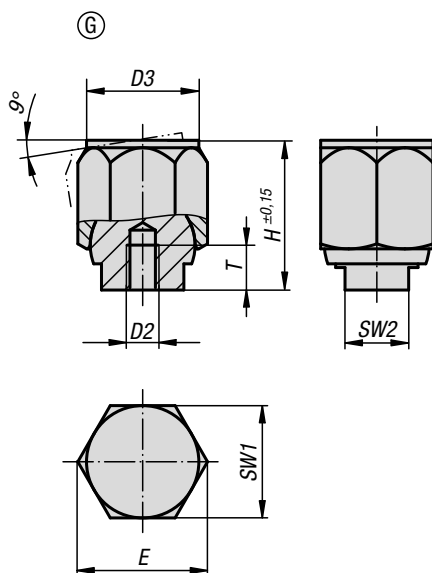
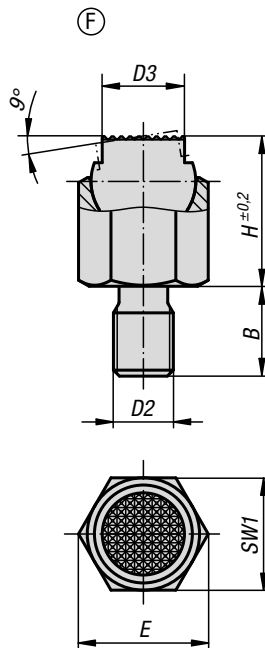
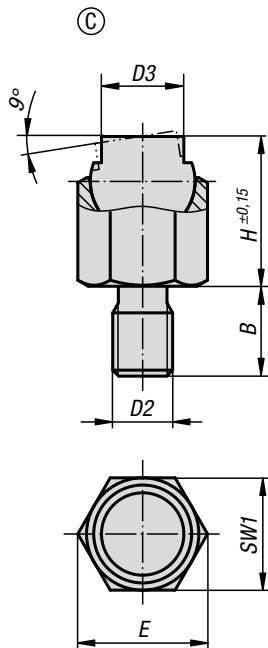
## Drawing reference:

Form C: male thread, flattened ball, smooth

Form F: male thread, flattened ball, diamond grip

Form G: press fit, flattened ball, smooth

Form J: press fit, flattened ball, diamond grip



## Self-aligning pads

self-righting



## KIPP Self-aligning pads, self-righting

| Order No. | Form | B  | D2  | D3  | H  | E    | SW1 | Ball-Ø | Load rating<br>max. kN<br>(static load only) |
|-----------|------|----|-----|-----|----|------|-----|--------|----------------------------------------------|
| K1164.106 | C    | 9  | M6  | 7   | 13 | 11,5 | 10  | 9      | 8                                            |
| K1164.108 | C    | 12 | M8  | 9,5 | 18 | 15   | 13  | 12     | 16                                           |
| K1164.110 | C    | 15 | M10 | 14  | 25 | 21,9 | 19  | 17     | 32                                           |
| K1164.112 | C    | 18 | M12 | 20  | 36 | 31,2 | 27  | 25     | 64                                           |
| K1164.116 | C    | 24 | M16 | 22  | 40 | 34,6 | 30  | 28     | 90                                           |

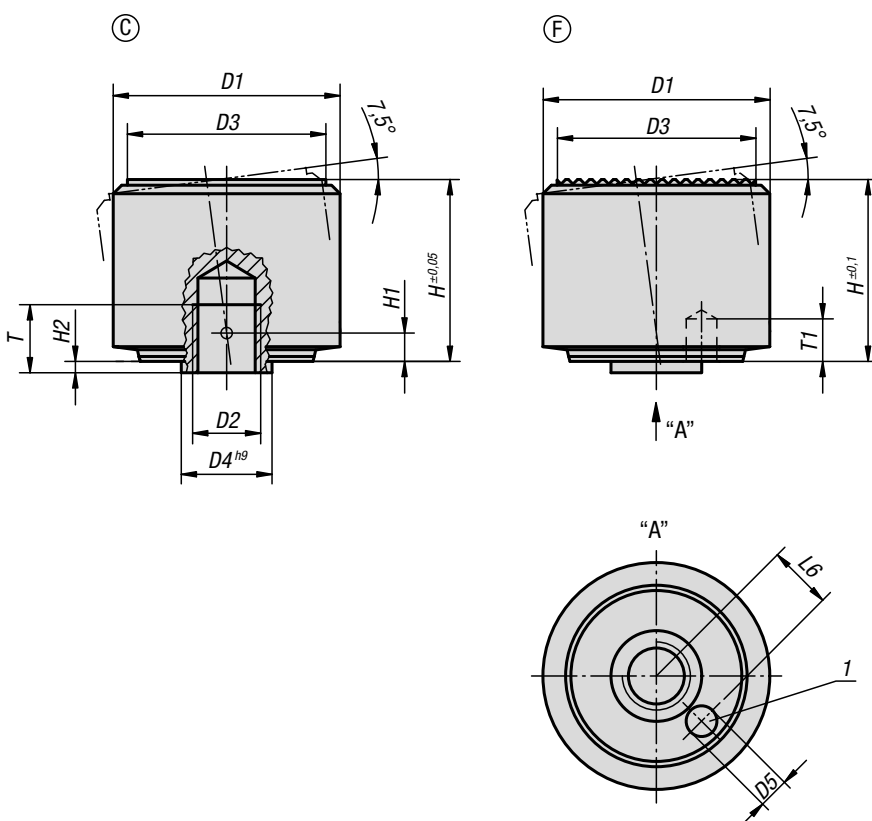
| Order No. | Form | B  | D2  | D3  | H  | E    | SW1 | Ball-Ø | Load rating<br>max. kN<br>(static load only) |
|-----------|------|----|-----|-----|----|------|-----|--------|----------------------------------------------|
| K1164.306 | F    | 9  | M6  | 7   | 13 | 11,5 | 10  | 9      | 8                                            |
| K1164.308 | F    | 12 | M8  | 9,5 | 18 | 15   | 13  | 12     | 16                                           |
| K1164.310 | F    | 15 | M10 | 14  | 25 | 21,9 | 19  | 17     | 32                                           |
| K1164.312 | F    | 18 | M12 | 20  | 36 | 31,2 | 27  | 25     | 64                                           |
| K1164.316 | F    | 24 | M16 | 22  | 40 | 34,6 | 30  | 28     | 90                                           |

| Order No. | Form | D2 | D3 | H  | E    | T  | SW1 | SW2 | Ball-Ø | Load rating<br>max. kN<br>(static load only) |
|-----------|------|----|----|----|------|----|-----|-----|--------|----------------------------------------------|
| K1164.403 | G    | M3 | 9  | 13 | 11,5 | 5  | 10  | 6   | 9      | 8                                            |
| K1164.404 | G    | M4 | 12 | 18 | 15   | 6  | 13  | 8   | 12     | 16                                           |
| K1164.405 | G    | M5 | 18 | 25 | 21,9 | 8  | 19  | 10  | 17     | 32                                           |
| K1164.406 | G    | M6 | 26 | 36 | 31,2 | 10 | 27  | 16  | 25     | 64                                           |
| K1164.408 | G    | M8 | 30 | 40 | 34,6 | 12 | 30  | 17  | 28     | 90                                           |

| Order No. | Form | D2 | D3 | H  | E    | T  | SW1 | SW2 | Ball-Ø | Load rating<br>max. kN<br>(static load only) |
|-----------|------|----|----|----|------|----|-----|-----|--------|----------------------------------------------|
| K1164.603 | J    | M3 | 9  | 13 | 11,5 | 5  | 10  | 6   | 9      | 8                                            |
| K1164.604 | J    | M4 | 12 | 18 | 15   | 6  | 13  | 8   | 12     | 16                                           |
| K1164.605 | J    | M5 | 18 | 25 | 21,9 | 8  | 19  | 10  | 17     | 32                                           |
| K1164.606 | J    | M6 | 26 | 36 | 31,2 | 10 | 27  | 16  | 25     | 64                                           |
| K1164.608 | J    | M8 | 30 | 40 | 34,6 | 12 | 30  | 17  | 28     | 90                                           |

## Self-aligning pads

self-righting



**Material:**  
Carbon steel.

**Version:**  
Hardened, black oxidised.

**Sample order:**  
K0286.105

**Note:**  
Self-aligning pads are used to support and clamp unmachined and machined workpieces. They also serve as stops, supports and thrust pads in fixtures and toolmaking.

**Advantages:**

- The built-in O-ring prevents dirt and foreign particles from entering.
- The clamping surface swivels back automatically after clamping.
- High load rating and small size.

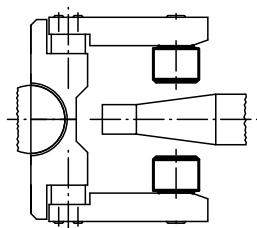
**Drawing reference:**  
Form C: smooth face  
Form F: serrated face

1. bring gripper into position

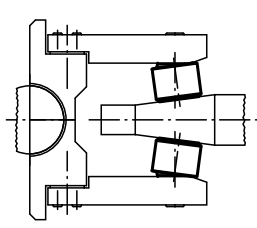
2. grip workpiece

3. open gripper

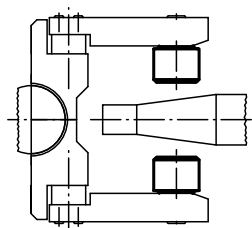
1) Hole for pin as a rotation lock



zero-point position of self-aligning pads



self-aligning pads adapt to workpiece contour



self-aligning pads swivel back automatically

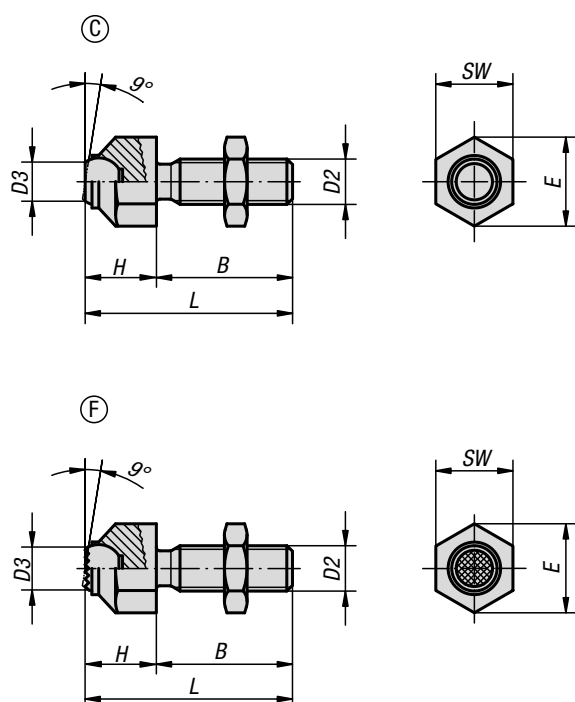
### KIPP Self-aligning pads self-righting

| Order No. | Form | D1 | D2  | D3 | D4 | D5  | H    | H1  | H2  | T  | T1 | L6   | Load rating<br>max. kN<br>(static load only) |
|-----------|------|----|-----|----|----|-----|------|-----|-----|----|----|------|----------------------------------------------|
| K0286.105 | C    | 18 | M5  | 15 | 7  | 1,8 | 14   | 2,1 | 0,8 | 5  | 3  | 4,6  | 30                                           |
| K0286.106 | C    | 22 | M6  | 18 | 8  | 2,8 | 16,5 | 2,5 | 1   | 6  | 4  | 5,6  | 50                                           |
| K0286.108 | C    | 28 | M8  | 23 | 11 | 3,3 | 21,5 | 3,4 | 1,3 | 8  | 5  | 7,5  | 90                                           |
| K0286.110 | C    | 34 | M10 | 29 | 13 | 4,4 | 27   | 4,2 | 1,6 | 10 | 6  | 9,2  | 140                                          |
| K0286.112 | C    | 40 | M12 | 35 | 16 | 5,4 | 32   | 5   | 2   | 12 | 8  | 11,3 | 220                                          |
| K0286.305 | F    | 18 | M5  | 15 | 7  | 1,8 | 14   | 2,1 | 0,8 | 5  | 3  | 4,6  | 30                                           |
| K0286.306 | F    | 22 | M6  | 18 | 8  | 2,8 | 16,5 | 2,5 | 1   | 6  | 4  | 5,6  | 50                                           |
| K0286.308 | F    | 28 | M8  | 23 | 11 | 3,3 | 21,5 | 3,4 | 1,3 | 8  | 5  | 7,5  | 90                                           |
| K0286.310 | F    | 34 | M10 | 29 | 13 | 4,4 | 27   | 4,2 | 1,6 | 10 | 6  | 9,2  | 140                                          |
| K0286.312 | F    | 40 | M12 | 35 | 16 | 5,4 | 32   | 5   | 2   | 12 | 8  | 11,3 | 220                                          |



## Self-aligning pads

with locknut



### Material:

Steel or stainless steel.

### Version:

Steel version:

Housing tempered and manganese phosphated.

Nut black oxidised.

Stainless steel version:

Housing tempered and electropolished.

Nut bright.

### Sample order:

K0287.316

### Note:

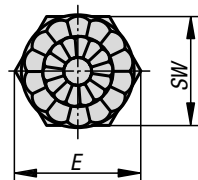
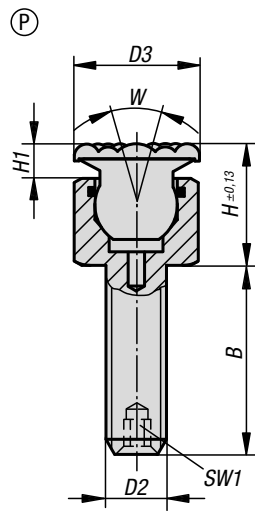
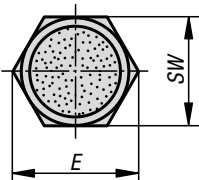
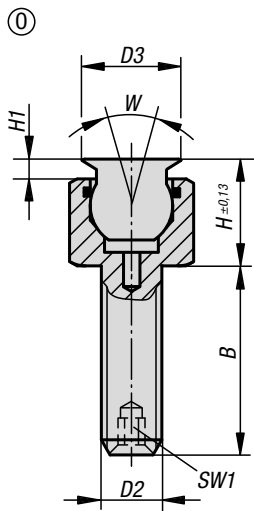
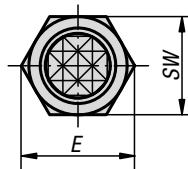
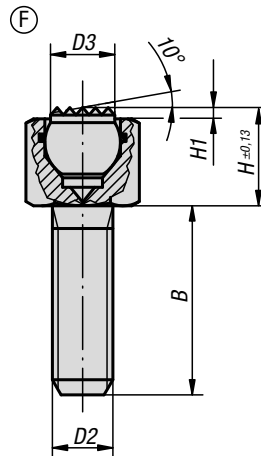
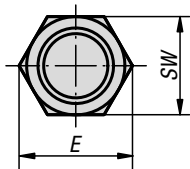
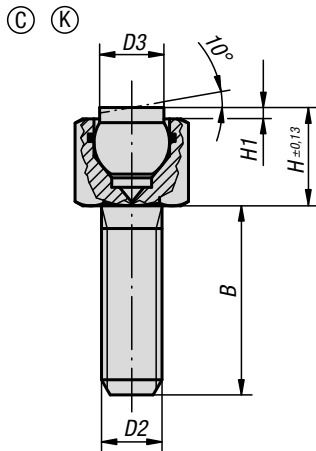
Ball secured against rotation.

## KIPP Self-aligning pads adjustable

| Order No.  | Form | Main material   | B  | D2  | D3   | H    | L    | E    | SW | Ball-Ø | Load rating<br>max. kN<br>(static load only) |
|------------|------|-----------------|----|-----|------|------|------|------|----|--------|----------------------------------------------|
| K0287.308  | F    | steel           | 25 | M8  | 5,8  | 11,6 | 36,6 | 14,5 | 13 | 8,5    | 8                                            |
| K0287.310  | F    | steel           | 30 | M10 | 8,6  | 15,7 | 45,7 | 19   | 17 | 12     | 8                                            |
| K0287.312  | F    | steel           | 35 | M12 | 8,6  | 15,7 | 50,7 | 19   | 17 | 12     | 15                                           |
| K0287.316  | F    | steel           | 40 | M16 | 10,5 | 20,7 | 60,7 | 27   | 24 | 16     | 25                                           |
| K0287.320  | F    | steel           | 50 | M20 | 20   | 27,3 | 77,3 | 33   | 30 | 25     | 90                                           |
| K0287.3081 | F    | stainless steel | 25 | M8  | 5,8  | 11,6 | 36,6 | 14,5 | 13 | 8,5    | 8                                            |
| K0287.3101 | F    | stainless steel | 30 | M10 | 8,6  | 15,7 | 45,7 | 19   | 17 | 12     | 8                                            |
| K0287.3121 | F    | stainless steel | 35 | M12 | 8,6  | 15,7 | 50,7 | 19   | 17 | 12     | 15                                           |
| K0287.3161 | F    | stainless steel | 40 | M16 | 10,5 | 20,7 | 60,7 | 27   | 24 | 16     | 25                                           |
| K0287.3201 | F    | stainless steel | 50 | M20 | 20   | 27,3 | 77,3 | 33   | 30 | 25     | 90                                           |

# Self-aligning pads

male thread, with O-ring



## Material:

Body carbon steel.

Ball:

Form C, F, tool steel.

Form K POM.

Form O stainless steel diamond impregnated.

Form P stainless steel with polyurethane surface.

## Version:

Body tempered, black oxidised.

Ball:

Form C, F hardened, black oxidised.

Form K POM ball, white.

Form O surface comparable to 100 grade abrasive grit.

Form P polyurethane, hardness 60 Shore.

## Sample order:

K0288.506X012

(include length B)

## Note:

Self-aligning pads are used to support and clamp unmachined and machined workpieces. They also serve as stops, supports and thrust pads in fixtures and toolmaking.

Ball secured against rotation.

Form O: The abrasive diamond surface is bonded firmly to the ball. It is ideally suited to supporting smooth or slippery applications with a minimum of clamping pressure. This allows the diamond particles to get a firm grip on a very small area with minimum damage to the surface.

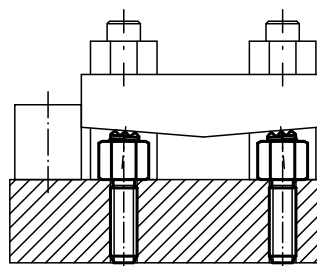
The diamond surface offers excellent wear resistance.

Form P: The polyurethane surface is vulcanised firmly to the ball. It is abrasion-resistant and does not discolour.

It offers optimum protection against damage to delicate surfaces. The pearl-like surface gives a firm grip and allows air to escape so as to prevent any suction effect between the contact surface and the self-aligning pads.

## Advantages:

The built-in O-ring holds the ball in place and keeps dirt and foreign particles out, ensuring uniform movement.



# Self-aligning pads

male thread, with O-ring



## KIPP Form C, flattened steel ball, smooth

| Order No.     | Form | B  | D2 | D3  | H   | H1  | E    | SW | Ball-Ø | Load rating<br>max. kN<br>(static load only) |
|---------------|------|----|----|-----|-----|-----|------|----|--------|----------------------------------------------|
| K0288.106X012 | C    | 12 | M6 | 6   | 9,5 | 1,5 | 11,5 | 10 | 7      | 9                                            |
| K0288.106X025 | C    | 25 | M6 | 6   | 9,5 | 1,5 | 11,5 | 10 | 7      | 9                                            |
| K0288.106X040 | C    | 40 | M6 | 6   | 9,5 | 1,5 | 11,5 | 10 | 7      | 9                                            |
| K0288.108X012 | C    | 12 | M8 | 8,5 | 13  | 1,5 | 15   | 13 | 10     | 15                                           |
| K0288.108X025 | C    | 25 | M8 | 8,5 | 13  | 1,5 | 15   | 13 | 10     | 15                                           |
| K0288.108X040 | C    | 40 | M8 | 8,5 | 13  | 1,5 | 15   | 13 | 10     | 15                                           |

## KIPP Form F, flattened steel ball, diamond grip

| Order No.     | Form | B  | D2 | D3  | H   | H1  | E    | SW | Ball-Ø | Load rating<br>max. kN<br>(static load only) |
|---------------|------|----|----|-----|-----|-----|------|----|--------|----------------------------------------------|
| K0288.306X012 | F    | 12 | M6 | 6   | 9,5 | 1,5 | 11,5 | 10 | 7      | 9                                            |
| K0288.306X025 | F    | 25 | M6 | 6   | 9,5 | 1,5 | 11,5 | 10 | 7      | 9                                            |
| K0288.306X040 | F    | 40 | M6 | 6   | 9,5 | 1,5 | 11,5 | 10 | 7      | 9                                            |
| K0288.308X012 | F    | 12 | M8 | 8,5 | 13  | 1,5 | 15   | 13 | 10     | 15                                           |
| K0288.308X025 | F    | 25 | M8 | 8,5 | 13  | 1,5 | 15   | 13 | 10     | 15                                           |
| K0288.308X040 | F    | 40 | M8 | 8,5 | 13  | 1,5 | 15   | 13 | 10     | 15                                           |

## KIPP Form K, flattened POM ball, smooth

| Order No.     | Form | B  | D2 | D3  | H   | H1  | E    | SW | Ball-Ø | Load rating<br>max. kN<br>(static load only) |
|---------------|------|----|----|-----|-----|-----|------|----|--------|----------------------------------------------|
| K0288.706X012 | K    | 12 | M6 | 6   | 9,5 | 1,5 | 11,5 | 10 | 7      | 2                                            |
| K0288.706X025 | K    | 25 | M6 | 6   | 9,5 | 1,5 | 11,5 | 10 | 7      | 2                                            |
| K0288.706X040 | K    | 40 | M6 | 6   | 9,5 | 1,5 | 11,5 | 10 | 7      | 2                                            |
| K0288.708X012 | K    | 12 | M8 | 8,5 | 13  | 1,5 | 15   | 13 | 10     | 4                                            |
| K0288.708X025 | K    | 25 | M8 | 8,5 | 13  | 1,5 | 15   | 13 | 10     | 4                                            |
| K0288.708X040 | K    | 40 | M8 | 8,5 | 13  | 1,5 | 15   | 13 | 10     | 4                                            |

## KIPP Form O, stainless-steel ball, diamond impregnated

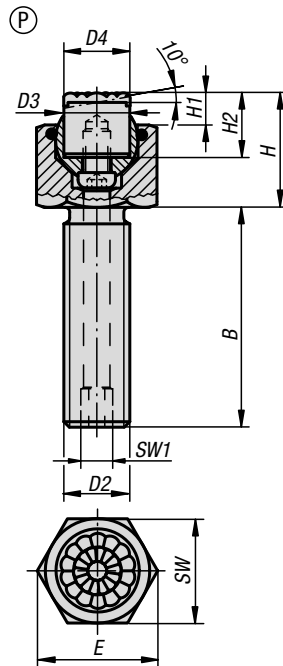
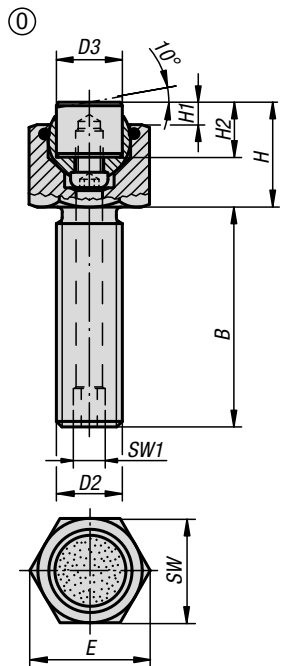
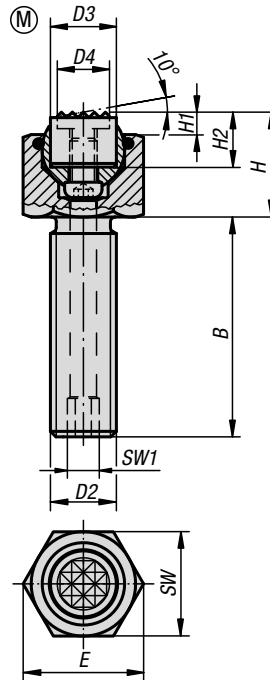
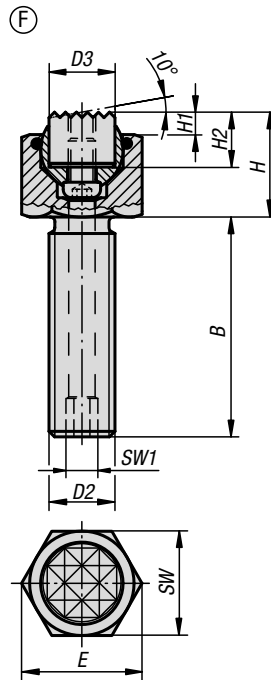
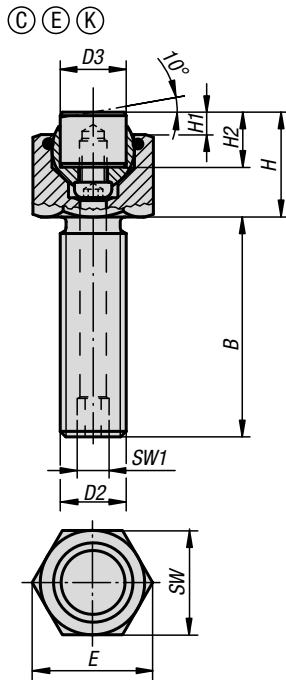
| Order No.  | Form | B        | D2  | D3 | H    | H1 | E    | SW | SW1 | W  | Ball-Ø | Load rating<br>max. kN<br>(static load only) |
|------------|------|----------|-----|----|------|----|------|----|-----|----|--------|----------------------------------------------|
| K0288.506X | O    | 12/25/40 | M6  | 8  | 10   | 2  | 11,5 | 10 | -   | 28 | 7      | 9,2                                          |
| K0288.508X | O    | 12/25/40 | M8  | 11 | 14,5 | 3  | 15   | 13 | -   | 28 | 10     | 15,5                                         |
| K0288.510X | O    | 15/30/50 | M10 | 14 | 16   | 3  | 19,6 | 17 | 3   | 28 | 13     | 18,8                                         |
| K0288.512X | O    | 20/40/60 | M12 | 19 | 19   | 4  | 21,9 | 19 | 5   | 24 | 15     | 29,8                                         |
| K0288.516X | O    | 25/50/80 | M16 | 21 | 23   | 4  | 27,7 | 24 | 6   | 24 | 20     | 50,3                                         |

## KIPP Form P, stainless-steel ball with polyurethane face

| Order No.  | Form | B        | D2  | D3 | H    | H1 | E    | SW | SW1 | W  | Ball-Ø |
|------------|------|----------|-----|----|------|----|------|----|-----|----|--------|
| K0288.606X | P    | 12/25/40 | M6  | 10 | 12   | 4  | 11,5 | 10 | -   | 28 | 7      |
| K0288.608X | P    | 12/25/40 | M8  | 13 | 16,5 | 5  | 15   | 13 | -   | 28 | 10     |
| K0288.610X | P    | 15/30/50 | M10 | 16 | 18   | 5  | 19,6 | 17 | 3   | 28 | 13     |
| K0288.612X | P    | 20/40/60 | M12 | 21 | 21   | 6  | 21,9 | 19 | 5   | 24 | 15     |
| K0288.616X | P    | 25/50/80 | M16 | 23 | 25   | 6  | 27,7 | 24 | 6   | 24 | 20     |

# Self-aligning pads

adjustable, with O-ring and exchangeable inserts



## Material:

Body carbon steel.

Ball rust and acid resistant steel.

Inserts:

Form C, F, M tool steel

Form K POM

Form E stainless steel.

Form O stainless steel diamond impregnated.

Form P stainless steel with polyurethane surface.

## Version:

Body tempered, black oxidised.

Ball hardened, bright.

Inserts:

Form C, F hardened, black oxidised.

Form M with carbide serrations, black oxidised.

Form K white.

Form E hardened, bright.

Form O diamond impregnated surface comparable to 100 grade abrasive grit.

Form P polyurethane surface, hardness 60 Shore.

## Sample order:

K0289.124X100

## Note:

Self-aligning pads are used to support and clamp unmachined and machined workpieces.

They also serve as stops, supports and thrust pads in fixtures and toolmaking.

The ball can be removed from the housing by applying light pressure to the socket head screw.

Ball secured against rotation.

## Advantages:

Highly cost-effective as inserts can be exchanged.

The built-in O-ring holds the ball in place and keeps dirt and foreign particles out, ensuring uniform movement.

## Self-aligning pads

adjustable, with O-ring and exchangeable inserts



| Order No.     | Form | B   | D2  | D3 | H  | H1 | H2 | E    | SW | SW1 | Ball-Ø | Load rating<br>max. kN<br>(static load only) | Order No.<br>steel insert |
|---------------|------|-----|-----|----|----|----|----|------|----|-----|--------|----------------------------------------------|---------------------------|
| K0289.110X015 | C    | 15  | M10 | 10 | 17 | 4  | 10 | 19,6 | 17 | 3   | 13     | 19                                           | K0385.10108               |
| K0289.110X030 | C    | 30  | M10 | 10 | 17 | 4  | 10 | 19,6 | 17 | 3   | 13     | 19                                           | K0385.10108               |
| K0289.110X050 | C    | 50  | M10 | 10 | 17 | 4  | 10 | 19,6 | 17 | 3   | 13     | 19                                           | K0385.10108               |
| K0289.112X020 | C    | 20  | M12 | 12 | 19 | 4  | 10 | 21,9 | 19 | 5   | 15     | 30                                           | K0385.12108               |
| K0289.112X040 | C    | 40  | M12 | 12 | 19 | 4  | 10 | 21,9 | 19 | 5   | 15     | 30                                           | K0385.12108               |
| K0289.112X060 | C    | 60  | M12 | 12 | 19 | 4  | 10 | 21,9 | 19 | 5   | 15     | 30                                           | K0385.12108               |
| K0289.116X025 | C    | 25  | M16 | 16 | 23 | 4  | 10 | 27,7 | 24 | 6   | 20     | 50                                           | K0385.16108               |
| K0289.116X050 | C    | 50  | M16 | 16 | 23 | 4  | 10 | 27,7 | 24 | 6   | 20     | 50                                           | K0385.16108               |
| K0289.116X080 | C    | 80  | M16 | 16 | 23 | 4  | 10 | 27,7 | 24 | 6   | 20     | 50                                           | K0385.16108               |
| K0289.120X030 | C    | 30  | M20 | 20 | 24 | 4  | 10 | 34,6 | 30 | 8   | 23     | 85                                           | K0385.20108               |
| K0289.120X060 | C    | 60  | M20 | 20 | 24 | 4  | 10 | 34,6 | 30 | 8   | 23     | 85                                           | K0385.20108               |
| K0289.120X100 | C    | 100 | M20 | 20 | 24 | 4  | 10 | 34,6 | 30 | 8   | 23     | 85                                           | K0385.20108               |
| K0289.124X040 | C    | 40  | M24 | 25 | 30 | 4  | 10 | 41,6 | 36 | 10  | 28     | 121                                          | K0385.25108               |
| K0289.124X100 | C    | 100 | M24 | 25 | 30 | 4  | 10 | 41,6 | 36 | 10  | 28     | 121                                          | K0385.25108               |



| Order No.     | Form | B   | D2  | D3 | H  | H1 | H2 | E    | SW | SW1 | Ball-Ø | Load rating<br>max. kN<br>(static load only) | Order No.<br>stainless steel<br>insert |
|---------------|------|-----|-----|----|----|----|----|------|----|-----|--------|----------------------------------------------|----------------------------------------|
| K0289.210X015 | E    | 15  | M10 | 10 | 17 | 4  | 10 | 19,6 | 17 | 3   | 13     | 19                                           | K0385.10102                            |
| K0289.210X030 | E    | 30  | M10 | 10 | 17 | 4  | 10 | 19,6 | 17 | 3   | 13     | 19                                           | K0385.10102                            |
| K0289.210X050 | E    | 50  | M10 | 10 | 17 | 4  | 10 | 19,6 | 17 | 3   | 13     | 19                                           | K0385.10102                            |
| K0289.212X020 | E    | 20  | M12 | 12 | 19 | 4  | 10 | 21,9 | 19 | 5   | 15     | 30                                           | K0385.12102                            |
| K0289.212X040 | E    | 40  | M12 | 12 | 19 | 4  | 10 | 21,9 | 19 | 5   | 15     | 30                                           | K0385.12102                            |
| K0289.212X060 | E    | 60  | M12 | 12 | 19 | 4  | 10 | 21,9 | 19 | 5   | 15     | 30                                           | K0385.12102                            |
| K0289.216X025 | E    | 25  | M16 | 16 | 23 | 4  | 10 | 27,7 | 24 | 6   | 20     | 50                                           | K0385.16102                            |
| K0289.216X050 | E    | 50  | M16 | 16 | 23 | 4  | 10 | 27,7 | 24 | 6   | 20     | 50                                           | K0385.16102                            |
| K0289.216X080 | E    | 80  | M16 | 16 | 23 | 4  | 10 | 27,7 | 24 | 6   | 20     | 50                                           | K0385.16102                            |
| K0289.220X030 | E    | 30  | M20 | 20 | 24 | 4  | 10 | 34,6 | 30 | 8   | 23     | 85                                           | K0385.20102                            |
| K0289.220X060 | E    | 60  | M20 | 20 | 24 | 4  | 10 | 34,6 | 30 | 8   | 23     | 85                                           | K0385.20102                            |
| K0289.220X100 | E    | 100 | M20 | 20 | 24 | 4  | 10 | 34,6 | 30 | 8   | 23     | 85                                           | K0385.20102                            |
| K0289.224X040 | E    | 40  | M24 | 25 | 30 | 4  | 10 | 41,6 | 36 | 10  | 28     | 121                                          | K0385.25102                            |
| K0289.224X100 | E    | 100 | M24 | 25 | 30 | 4  | 10 | 41,6 | 36 | 10  | 28     | 121                                          | K0385.25102                            |

| Order No.     | Form | B   | D2  | D3 | H  | H1 | H2 | E    | SW | SW1 | Ball-Ø | Load rating<br>max. kN<br>(static load only) | Order No.<br>gripper |
|---------------|------|-----|-----|----|----|----|----|------|----|-----|--------|----------------------------------------------|----------------------|
| K0289.310X015 | F    | 15  | M10 | 10 | 17 | 4  | 10 | 19,6 | 17 | 3   | 13     | 19                                           | K0385.1010           |
| K0289.310X030 | F    | 30  | M10 | 10 | 17 | 4  | 10 | 19,6 | 17 | 3   | 13     | 19                                           | K0385.1010           |
| K0289.310X050 | F    | 50  | M10 | 10 | 17 | 4  | 10 | 19,6 | 17 | 3   | 13     | 19                                           | K0385.1010           |
| K0289.312X020 | F    | 20  | M12 | 12 | 19 | 4  | 10 | 21,9 | 19 | 5   | 15     | 30                                           | K0385.1210           |
| K0289.312X040 | F    | 40  | M12 | 12 | 19 | 4  | 10 | 21,9 | 19 | 5   | 15     | 30                                           | K0385.1210           |
| K0289.312X060 | F    | 60  | M12 | 12 | 19 | 4  | 10 | 21,9 | 19 | 5   | 15     | 30                                           | K0385.1210           |
| K0289.316X025 | F    | 25  | M16 | 16 | 23 | 4  | 10 | 27,7 | 24 | 6   | 20     | 50                                           | K0385.1610           |
| K0289.316X050 | F    | 50  | M16 | 16 | 23 | 4  | 10 | 27,7 | 24 | 6   | 20     | 50                                           | K0385.1610           |
| K0289.316X080 | F    | 80  | M16 | 16 | 23 | 4  | 10 | 27,7 | 24 | 6   | 20     | 50                                           | K0385.1610           |
| K0289.320X030 | F    | 30  | M20 | 20 | 24 | 4  | 10 | 34,6 | 30 | 8   | 23     | 85                                           | K0385.2010           |
| K0289.320X060 | F    | 60  | M20 | 20 | 24 | 4  | 10 | 34,6 | 30 | 8   | 23     | 85                                           | K0385.2010           |
| K0289.320X100 | F    | 100 | M20 | 20 | 24 | 4  | 10 | 34,6 | 30 | 8   | 23     | 85                                           | K0385.2010           |
| K0289.324X040 | F    | 40  | M24 | 25 | 30 | 4  | 10 | 41,6 | 36 | 10  | 28     | 121                                          | K0385.2510           |
| K0289.324X100 | F    | 100 | M24 | 25 | 30 | 4  | 10 | 41,6 | 36 | 10  | 28     | 121                                          | K0385.2510           |

# Self-aligning pads

adjustable, with O-ring and exchangeable inserts



| Order No.     | Form | B   | D2  | D3 | H  | H1 | H2 | E    | SW | SW1 | Ball-Ø | Load rating<br>max. kN<br>(static load only) | Order No.<br>POM insert |
|---------------|------|-----|-----|----|----|----|----|------|----|-----|--------|----------------------------------------------|-------------------------|
| K0289.710X015 | K    | 15  | M10 | 10 | 17 | 4  | 10 | 19,6 | 17 | 3   | 13     | 4                                            | K0385.10109             |
| K0289.710X030 | K    | 30  | M10 | 10 | 17 | 4  | 10 | 19,6 | 17 | 3   | 13     | 4                                            | K0385.10109             |
| K0289.710X050 | K    | 50  | M10 | 10 | 17 | 4  | 10 | 19,6 | 17 | 3   | 13     | 4                                            | K0385.10109             |
| K0289.712X020 | K    | 20  | M12 | 12 | 19 | 4  | 10 | 21,9 | 19 | 5   | 15     | 7                                            | K0385.12109             |
| K0289.712X040 | K    | 40  | M12 | 12 | 19 | 4  | 10 | 21,9 | 19 | 5   | 15     | 7                                            | K0385.12109             |
| K0289.712X060 | K    | 60  | M12 | 12 | 19 | 4  | 10 | 21,9 | 19 | 5   | 15     | 7                                            | K0385.12109             |
| K0289.716X025 | K    | 25  | M16 | 16 | 23 | 4  | 10 | 27,7 | 24 | 6   | 20     | 14                                           | K0385.16109             |
| K0289.716X050 | K    | 50  | M16 | 16 | 23 | 4  | 10 | 27,7 | 24 | 6   | 20     | 14                                           | K0385.16109             |
| K0289.716X080 | K    | 80  | M16 | 16 | 23 | 4  | 10 | 27,7 | 24 | 6   | 20     | 14                                           | K0385.16109             |
| K0289.720X030 | K    | 30  | M20 | 20 | 24 | 4  | 10 | 34,6 | 30 | 8   | 23     | 27                                           | K0385.20109             |
| K0289.720X060 | K    | 60  | M20 | 20 | 24 | 4  | 10 | 34,6 | 30 | 8   | 23     | 27                                           | K0385.20109             |
| K0289.720X100 | K    | 100 | M20 | 20 | 24 | 4  | 10 | 34,6 | 30 | 8   | 23     | 27                                           | K0385.20109             |
| K0289.724X040 | K    | 40  | M24 | 25 | 30 | 4  | 10 | 41,6 | 36 | 10  | 28     | 47                                           | K0385.25109             |
| K0289.724X100 | K    | 100 | M24 | 25 | 30 | 4  | 10 | 41,6 | 36 | 10  | 28     | 47                                           | K0385.25109             |

| Order No.     | Form | B   | D2  | D3 | D4   | H  | H1 | H2 | E    | SW | SW1 | Ball-Ø | Load rating<br>max. kN<br>(static load only) | Order No.<br>gripper |
|---------------|------|-----|-----|----|------|----|----|----|------|----|-----|--------|----------------------------------------------|----------------------|
| K0289.910X015 | M    | 15  | M10 | 10 | 7,9  | 17 | 4  | 10 | 19,6 | 17 | 3   | 13     | 19                                           | K0385.10107          |
| K0289.910X030 | M    | 30  | M10 | 10 | 7,9  | 17 | 4  | 10 | 19,6 | 17 | 3   | 13     | 19                                           | K0385.10107          |
| K0289.910X050 | M    | 50  | M10 | 10 | 7,9  | 17 | 4  | 10 | 19,6 | 17 | 3   | 13     | 19                                           | K0385.10107          |
| K0289.912X020 | M    | 20  | M12 | 12 | 9,5  | 19 | 4  | 10 | 21,9 | 19 | 5   | 15     | 30                                           | K0385.12107          |
| K0289.912X040 | M    | 40  | M12 | 12 | 9,5  | 19 | 4  | 10 | 21,9 | 19 | 5   | 15     | 30                                           | K0385.12107          |
| K0289.912X060 | M    | 60  | M12 | 12 | 9,5  | 19 | 4  | 10 | 21,9 | 19 | 5   | 15     | 30                                           | K0385.12107          |
| K0289.916X025 | M    | 25  | M16 | 16 | 12,7 | 23 | 4  | 10 | 27,7 | 24 | 6   | 20     | 50                                           | K0385.16107          |
| K0289.916X050 | M    | 50  | M16 | 16 | 12,7 | 23 | 4  | 10 | 27,7 | 24 | 6   | 20     | 50                                           | K0385.16107          |
| K0289.916X080 | M    | 80  | M16 | 16 | 12,7 | 23 | 4  | 10 | 27,7 | 24 | 6   | 20     | 50                                           | K0385.16107          |
| K0289.920X030 | M    | 30  | M20 | 20 | 15,9 | 24 | 4  | 10 | 34,6 | 30 | 8   | 23     | 85                                           | K0385.20107          |
| K0289.920X060 | M    | 60  | M20 | 20 | 15,9 | 24 | 4  | 10 | 34,6 | 30 | 8   | 23     | 85                                           | K0385.20107          |
| K0289.920X100 | M    | 100 | M20 | 20 | 15,9 | 24 | 4  | 10 | 34,6 | 30 | 8   | 23     | 85                                           | K0385.20107          |
| K0289.924X040 | M    | 40  | M24 | 25 | 19   | 30 | 4  | 10 | 41,6 | 36 | 10  | 28     | 121                                          | K0385.25107          |
| K0289.924X100 | M    | 100 | M24 | 25 | 19   | 30 | 4  | 10 | 41,6 | 36 | 10  | 28     | 121                                          | K0385.25107          |

# Self-aligning pads

adjustable, with O-ring and exchangeable inserts



| Order No.     | Form | B   | D2  | D3 | H  | H1 | H2 | E    | SW | SW1 | Ball-Ø | Load rating<br>max. kN<br>(static load only) | Order No.<br>stainless steel insert,<br>diamond surface |
|---------------|------|-----|-----|----|----|----|----|------|----|-----|--------|----------------------------------------------|---------------------------------------------------------|
| K0289.510X015 | O    | 15  | M10 | 10 | 17 | 4  | 10 | 19,6 | 17 | 3   | 13     | 19                                           | K0385.10105                                             |
| K0289.510X030 | O    | 30  | M10 | 10 | 17 | 4  | 10 | 19,6 | 17 | 3   | 13     | 19                                           | K0385.10105                                             |
| K0289.510X050 | O    | 50  | M10 | 10 | 17 | 4  | 10 | 19,6 | 17 | 3   | 13     | 19                                           | K0385.10105                                             |
| K0289.512X020 | O    | 20  | M12 | 12 | 19 | 4  | 10 | 21,9 | 19 | 5   | 15     | 30                                           | K0385.12105                                             |
| K0289.512X040 | O    | 40  | M12 | 12 | 19 | 4  | 10 | 21,9 | 19 | 5   | 15     | 30                                           | K0385.12105                                             |
| K0289.512X060 | O    | 60  | M12 | 12 | 19 | 4  | 10 | 21,9 | 19 | 5   | 15     | 30                                           | K0385.12105                                             |
| K0289.516X025 | O    | 25  | M16 | 16 | 23 | 4  | 10 | 27,7 | 24 | 6   | 20     | 50                                           | K0385.16105                                             |
| K0289.516X050 | O    | 50  | M16 | 16 | 23 | 4  | 10 | 27,7 | 24 | 6   | 20     | 50                                           | K0385.16105                                             |
| K0289.516X080 | O    | 80  | M16 | 16 | 23 | 4  | 10 | 27,7 | 24 | 6   | 20     | 50                                           | K0385.16105                                             |
| K0289.520X030 | O    | 30  | M20 | 20 | 24 | 4  | 10 | 34,6 | 30 | 8   | 23     | 85                                           | K0385.20105                                             |
| K0289.520X060 | O    | 60  | M20 | 20 | 24 | 4  | 10 | 34,6 | 30 | 8   | 23     | 85                                           | K0385.20105                                             |
| K0289.520X100 | O    | 100 | M20 | 20 | 24 | 4  | 10 | 34,6 | 30 | 8   | 23     | 85                                           | K0385.20105                                             |
| K0289.524X040 | O    | 40  | M24 | 25 | 30 | 4  | 10 | 41,6 | 36 | 10  | 28     | 121                                          | K0385.25105                                             |
| K0289.524X100 | O    | 100 | M24 | 25 | 30 | 4  | 10 | 41,6 | 36 | 10  | 28     | 121                                          | K0385.25105                                             |

| Order No.     | Form | B   | D2  | D3 | D4 | H  | H1 | H2 | E    | SW | SW1 | Ball-Ø | Order No.<br>stainless steel insert,<br>polyurethane surface |
|---------------|------|-----|-----|----|----|----|----|----|------|----|-----|--------|--------------------------------------------------------------|
| K0289.610X015 | P    | 15  | M10 | 10 | 10 | 19 | 6  | 12 | 19,6 | 17 | 3   | 13     | K0385.10126                                                  |
| K0289.610X030 | P    | 30  | M10 | 10 | 10 | 19 | 6  | 12 | 19,6 | 17 | 3   | 13     | K0385.10126                                                  |
| K0289.610X050 | P    | 50  | M10 | 10 | 10 | 19 | 6  | 12 | 19,6 | 17 | 3   | 13     | K0385.10126                                                  |
| K0289.612X020 | P    | 20  | M12 | 12 | 13 | 21 | 6  | 12 | 21,9 | 19 | 5   | 15     | K0385.12126                                                  |
| K0289.612X040 | P    | 40  | M12 | 12 | 13 | 21 | 6  | 12 | 21,9 | 19 | 5   | 15     | K0385.12126                                                  |
| K0289.612X060 | P    | 60  | M12 | 12 | 13 | 21 | 6  | 12 | 21,9 | 19 | 5   | 15     | K0385.12126                                                  |
| K0289.616X025 | P    | 25  | M16 | 16 | 16 | 25 | 6  | 12 | 27,7 | 24 | 6   | 20     | K0385.16126                                                  |
| K0289.616X050 | P    | 50  | M16 | 16 | 16 | 25 | 6  | 12 | 27,7 | 24 | 6   | 20     | K0385.16126                                                  |
| K0289.616X080 | P    | 80  | M16 | 16 | 16 | 25 | 6  | 12 | 27,7 | 24 | 6   | 20     | K0385.16126                                                  |
| K0289.620X030 | P    | 30  | M20 | 20 | 21 | 26 | 6  | 12 | 34,6 | 30 | 8   | 23     | K0385.20126                                                  |
| K0289.620X060 | P    | 60  | M20 | 20 | 21 | 26 | 6  | 12 | 34,6 | 30 | 8   | 23     | K0385.20126                                                  |
| K0289.620X100 | P    | 100 | M20 | 20 | 21 | 26 | 6  | 12 | 34,6 | 30 | 8   | 23     | K0385.20126                                                  |
| K0289.624X040 | P    | 40  | M24 | 25 | 27 | 32 | 6  | 12 | 41,6 | 36 | 10  | 28     | K0385.25126                                                  |
| K0289.624X100 | P    | 100 | M24 | 25 | 27 | 32 | 6  | 12 | 41,6 | 36 | 10  | 28     | K0385.25126                                                  |

# Self-aligning pads

adjustable, with O-ring and hexagon socket



## Material:

Body carbon steel.

Ball:

Form C, F, tool steel.

Form K POM.

Form O stainless steel diamond impregnated.

Form P stainless steel with polyurethane surface.

## Version:

Body tempered, black oxidised.

Ball:

Form C, F hardened, black oxidised.

Form K POM ball, white.

Form O surface comparable to 100 grade abrasive grit.

Form P polyurethane, hardness 60 Shore.

## Sample order:

K0290.510X025

(include length B)

## Note:

Self-aligning pads are used to support and clamp unmachined and machined workpieces.

They also serve as stops, supports and thrust pads in fixtures and toolmaking.

Ball secured against rotation.

Form O: The abrasive diamond surface is bonded firmly to the ball. It is ideally suited to supporting smooth or slippery applications with a minimum of clamping pressure. This allows the diamond particles to get a firm grip on a very small area with minimum damage to the surface.

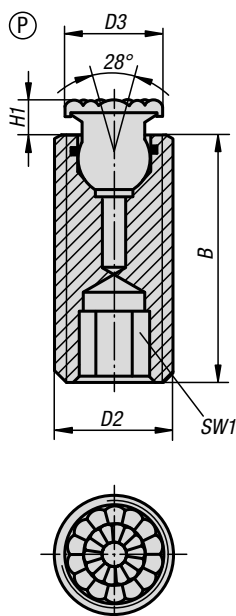
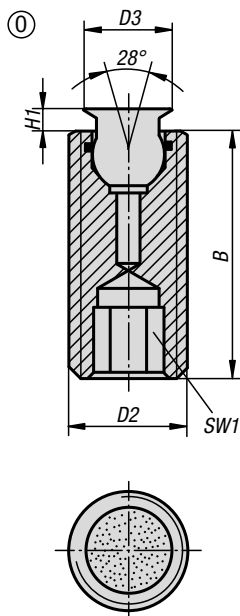
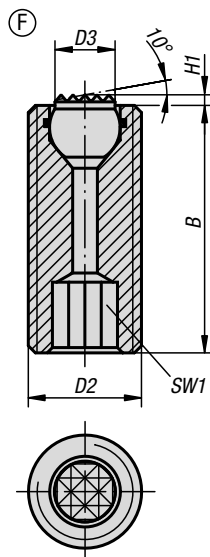
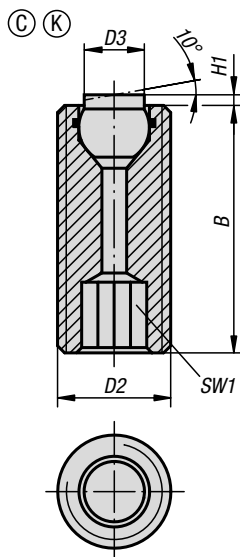
The diamond surface offers excellent wear resistance.

Form P: The polyurethane surface is vulcanised firmly to the ball. It is abrasion-resistant and does not discolour. Offers optimum protection against damage to delicate surfaces. The pearl-like surface gives a firm grip and allows air to escape so as to prevent any suction effect between the contact surface and the toggle locator.

## Advantages:

The built-in O-ring holds the ball in place and keeps dirt and foreign particles out, ensuring uniform movement.

The hexagon socket allows easy adjustment and positioning in through holes.





# Self-aligning pads

adjustable, with O-ring and hexagon socket

## KIPP Form C, flattened steel ball, smooth

| Order No.     | Form | B  | D2  | D3  | H1  | SW1 | Ball-Ø | Load rating<br>max. kN<br>(static load only) |
|---------------|------|----|-----|-----|-----|-----|--------|----------------------------------------------|
| K0290.112X025 | C    | 25 | M12 | 6   | 1,5 | 6   | 7      | 15                                           |
| K0290.112X035 | C    | 35 | M12 | 6   | 1,5 | 6   | 7      | 15                                           |
| K0290.112X050 | C    | 50 | M12 | 6   | 1,5 | 6   | 7      | 15                                           |
| K0290.116X025 | C    | 25 | M16 | 8,5 | 1,5 | 8   | 10     | 23                                           |
| K0290.116X035 | C    | 35 | M16 | 8,5 | 1,5 | 8   | 10     | 23                                           |
| K0290.116X050 | C    | 50 | M16 | 8,5 | 1,5 | 8   | 10     | 23                                           |

## KIPP Form F, flattened steel ball, diamond grip

| Order No.     | Form | B  | D2  | D3  | H1  | SW1 | Ball-Ø | Load rating<br>max. kN<br>(static load only) |
|---------------|------|----|-----|-----|-----|-----|--------|----------------------------------------------|
| K0290.312X025 | F    | 25 | M12 | 6   | 1,5 | 6   | 7      | 15                                           |
| K0290.312X035 | F    | 35 | M12 | 6   | 1,5 | 6   | 7      | 15                                           |
| K0290.312X050 | F    | 50 | M12 | 6   | 1,5 | 6   | 7      | 15                                           |
| K0290.316X025 | F    | 25 | M16 | 8,5 | 1,5 | 8   | 10     | 23                                           |
| K0290.316X035 | F    | 35 | M16 | 8,5 | 1,5 | 8   | 10     | 23                                           |
| K0290.316X050 | F    | 50 | M16 | 8,5 | 1,5 | 8   | 10     | 23                                           |

## KIPP Form K, flattened POM ball, smooth

| Order No.     | Form | B  | D2  | D3  | H1  | SW1 | Ball-Ø | Load rating<br>max. kN<br>(static load only) |
|---------------|------|----|-----|-----|-----|-----|--------|----------------------------------------------|
| K0290.712X025 | K    | 25 | M12 | 6   | 1,5 | 6   | 7      | 2                                            |
| K0290.712X035 | K    | 35 | M12 | 6   | 1,5 | 6   | 7      | 2                                            |
| K0290.712X050 | K    | 50 | M12 | 6   | 1,5 | 6   | 7      | 2                                            |
| K0290.716X025 | K    | 25 | M16 | 8,5 | 1,5 | 8   | 10     | 4                                            |
| K0290.716X035 | K    | 35 | M16 | 8,5 | 1,5 | 8   | 10     | 4                                            |
| K0290.716X050 | K    | 50 | M16 | 8,5 | 1,5 | 8   | 10     | 4                                            |

## KIPP Form O, stainless-steel ball, diamond impregnated

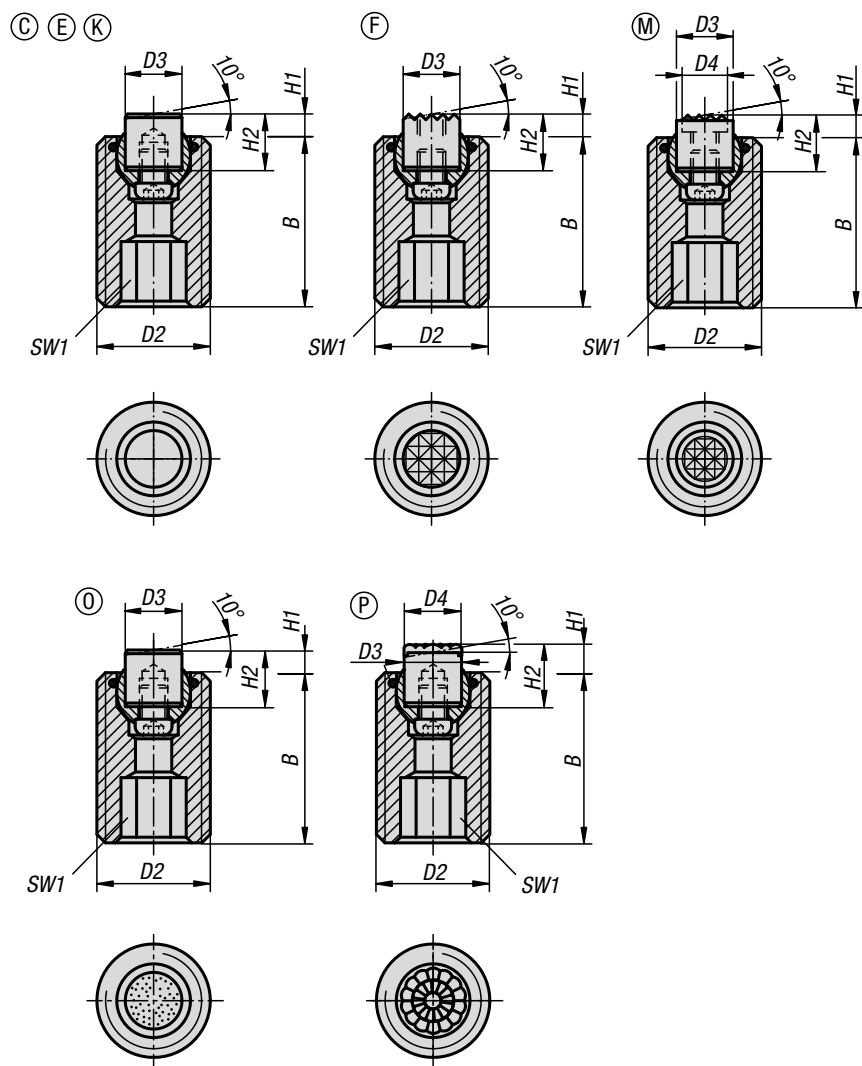
| Order No.  | Form | B        | D2  | D3 | H1  | SW1 | Ball-Ø | Load rating<br>max. kN<br>(static load only) |
|------------|------|----------|-----|----|-----|-----|--------|----------------------------------------------|
| K0290.510X | O    | 25/35/50 | M10 | 6  | 1,5 | 5   | 5      | -                                            |
| K0290.512X | O    | 25/35/50 | M12 | 8  | 2   | 6   | 7      | 15,4                                         |
| K0290.516X | O    | 25/35/50 | M16 | 11 | 3   | 8   | 10     | 23,3                                         |
| K0290.520X | O    | 30/50/70 | M20 | 14 | 3   | 10  | 13     | 37,7                                         |

## KIPP Form P, stainless-steel ball with polyurethane face

| Order No.  | Form | B        | D2  | D3 | H1  | SW1 | Ball-Ø |
|------------|------|----------|-----|----|-----|-----|--------|
| K0290.610X | P    | 25/35/50 | M10 | 8  | 3,5 | 5   | 5      |
| K0290.612X | P    | 25/35/50 | M12 | 10 | 4   | 6   | 7      |
| K0290.616X | P    | 25/35/50 | M16 | 13 | 5   | 8   | 10     |
| K0290.620X | P    | 30/50/70 | M20 | 16 | 5   | 10  | 13     |

# Self-aligning pads

adjustable, with O-ring, exchangeable inserts and hexagon socket



## Material:

Body carbon steel.

Ball rust and acid resistant steel.

Inserts:

Form C, F, M tool steel

Form K POM

Form E stainless steel.

Form O stainless steel diamond impregnated.

Form P stainless steel with polyurethane surface.

## Version:

Body tempered, black oxidised.

Ball hardened, bright.

Inserts:

Form C, F hardened, black oxidised.

Form M with carbide serrations, black oxidised.

Form K white.

Form E hardened, bright.

Form O diamond impregnated surface comparable to 100 grade abrasive grit.

Form P polyurethane surface, hardness 60 Shore.

## Sample order:

K0291.720X070

## Note:

Self-aligning pads are used to support and clamp unmachined and machined workpieces.

They also serve as stops, supports and thrust pads in fixtures and toolmaking.

The ball can be removed from the housing by applying light pressure to the socket head screw.

Ball secured against rotation.

## Advantages:

Highly cost-effective as inserts can be exchanged.

The built-in O-ring holds the ball in place and keeps dirt and foreign particles out, ensuring uniform movement.

## KIPP Form C, flattened steel insert, smooth

| Order No.     | Form | B  | D2  | D3 | H1 | H2 | SW1 | Ball-Ø | Load rating<br>max. kN<br>(static load only) | Order No.<br>steel insert |
|---------------|------|----|-----|----|----|----|-----|--------|----------------------------------------------|---------------------------|
| K0291.120X030 | C    | 30 | M20 | 10 | 4  | 10 | 10  | 13     | 37                                           | K0385.10108               |
| K0291.120X050 | C    | 50 | M20 | 10 | 4  | 10 | 10  | 13     | 37                                           | K0385.10108               |
| K0291.120X070 | C    | 70 | M20 | 10 | 4  | 10 | 10  | 13     | 37                                           | K0385.10108               |
| K0291.124X040 | C    | 40 | M24 | 12 | 4  | 10 | 10  | 15     | 55                                           | K0385.12108               |
| K0291.124X080 | C    | 80 | M24 | 12 | 4  | 10 | 10  | 15     | 55                                           | K0385.12108               |

### KIPP Form E, flattened stainless steel insert, smooth

| Order No.     | Form | B  | D2  | D3 | H1 | H2 | SW1 | Ball-Ø | Load rating<br>max. kN<br>(static load only) | Order No.<br>stainless steel<br>insert |
|---------------|------|----|-----|----|----|----|-----|--------|----------------------------------------------|----------------------------------------|
| K0291.220X030 | E    | 30 | M20 | 10 | 4  | 10 | 10  | 13     | 37                                           | K0385.10102                            |
| K0291.220X050 | E    | 50 | M20 | 10 | 4  | 10 | 10  | 13     | 37                                           | K0385.10102                            |
| K0291.220X070 | E    | 70 | M20 | 10 | 4  | 10 | 10  | 13     | 37                                           | K0385.10102                            |
| K0291.224X040 | E    | 40 | M24 | 12 | 4  | 10 | 10  | 15     | 55                                           | K0385.12102                            |
| K0291.224X080 | E    | 80 | M24 | 12 | 4  | 10 | 10  | 15     | 55                                           | K0385.12102                            |

### KIPP Form F, flattened, diamond grip

| Order No.     | Form | B  | D2  | D3 | H1 | H2 | SW1 | Ball-Ø | Load rating<br>max. kN<br>(static load only) | Order No.<br>gripper |
|---------------|------|----|-----|----|----|----|-----|--------|----------------------------------------------|----------------------|
| K0291.320X030 | F    | 30 | M20 | 10 | 4  | 10 | 10  | 13     | 37                                           | K0385.1010           |
| K0291.320X050 | F    | 50 | M20 | 10 | 4  | 10 | 10  | 13     | 37                                           | K0385.1010           |
| K0291.320X070 | F    | 70 | M20 | 10 | 4  | 10 | 10  | 13     | 37                                           | K0385.1010           |
| K0291.324X040 | F    | 40 | M24 | 12 | 4  | 10 | 10  | 15     | 55                                           | K0385.1210           |
| K0291.324X080 | F    | 80 | M24 | 12 | 4  | 10 | 10  | 15     | 55                                           | K0385.1210           |

### KIPP Form K, flattened POM insert, smooth

| Order No.     | Form | B  | D2  | D3 | H1 | H2 | SW1 | Ball-Ø | Load rating<br>max. kN<br>(static load only) | Order No.<br>POM insert |
|---------------|------|----|-----|----|----|----|-----|--------|----------------------------------------------|-------------------------|
| K0291.720X030 | K    | 30 | M20 | 10 | 4  | 10 | 10  | 13     | 4                                            | K0385.10109             |
| K0291.720X050 | K    | 50 | M20 | 10 | 4  | 10 | 10  | 13     | 4                                            | K0385.10109             |
| K0291.720X070 | K    | 70 | M20 | 10 | 4  | 10 | 10  | 13     | 4                                            | K0385.10109             |
| K0291.724X040 | K    | 40 | M24 | 12 | 4  | 10 | 10  | 15     | 7                                            | K0385.12109             |
| K0291.724X080 | K    | 80 | M24 | 12 | 4  | 10 | 10  | 15     | 7                                            | K0385.12109             |

### KIPP Form M, flattened, with carbide serrations

| Order No.     | Form | B  | D2  | D3 | D4  | H1 | H2 | SW1 | Ball-Ø | Load rating<br>max. kN<br>(static load only) | Order No.<br>gripper |
|---------------|------|----|-----|----|-----|----|----|-----|--------|----------------------------------------------|----------------------|
| K0291.920X030 | M    | 30 | M20 | 10 | 7,9 | 4  | 10 | 10  | 13     | 37                                           | K0385.10107          |
| K0291.920X050 | M    | 50 | M20 | 10 | 7,9 | 4  | 10 | 10  | 13     | 37                                           | K0385.10107          |
| K0291.920X070 | M    | 70 | M20 | 10 | 7,9 | 4  | 10 | 10  | 13     | 37                                           | K0385.10107          |
| K0291.924X040 | M    | 40 | M24 | 12 | 9,5 | 4  | 10 | 10  | 15     | 55                                           | K0385.12107          |
| K0291.924X080 | M    | 80 | M24 | 12 | 9,5 | 4  | 10 | 10  | 15     | 55                                           | K0385.12107          |

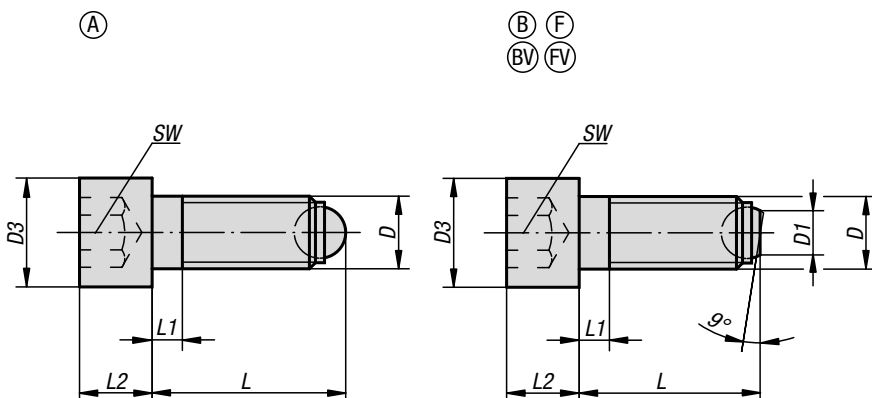
### KIPP Form O, stainless-steel insert, diamond impregnated

| Order No.     | Form | B  | D2  | D3 | H1 | H2 | SW1 | Ball-Ø | Load rating<br>max. kN<br>(static load only) | Order No.<br>stainless steel insert,<br>diamond surface |
|---------------|------|----|-----|----|----|----|-----|--------|----------------------------------------------|---------------------------------------------------------|
| K0291.520X030 | O    | 30 | M20 | 10 | 4  | 10 | 10  | 13     | 37                                           | K0385.10105                                             |
| K0291.520X050 | O    | 50 | M20 | 10 | 4  | 10 | 10  | 13     | 37                                           | K0385.10105                                             |
| K0291.520X070 | O    | 70 | M20 | 10 | 4  | 10 | 10  | 13     | 37                                           | K0385.10105                                             |
| K0291.524X040 | O    | 40 | M24 | 12 | 4  | 10 | 10  | 15     | 55                                           | K0385.12105                                             |
| K0291.524X080 | O    | 80 | M24 | 12 | 4  | 10 | 10  | 15     | 55                                           | K0385.12105                                             |

### KIPP Form P, stainless-steel insert with polyurethane face

| Order No.     | Form | B  | D2  | D3 | D4 | H1 | H2 | SW1 | Ball-Ø | Load rating<br>max. kN<br>(static load only) | Order No.<br>stainless steel insert,<br>polyurethane surface |
|---------------|------|----|-----|----|----|----|----|-----|--------|----------------------------------------------|--------------------------------------------------------------|
| K0291.620X030 | P    | 30 | M20 | 10 | 10 | 6  | 12 | 10  | 13     | 37                                           | K0385.10126                                                  |
| K0291.620X050 | P    | 50 | M20 | 10 | 10 | 6  | 12 | 10  | 13     | 37                                           | K0385.10126                                                  |
| K0291.620X070 | P    | 70 | M20 | 10 | 10 | 6  | 12 | 10  | 13     | 37                                           | K0385.10126                                                  |
| K0291.624X040 | P    | 40 | M24 | 12 | 13 | 6  | 12 | 10  | 15     | 55                                           | K0385.12126                                                  |
| K0291.624X080 | P    | 80 | M24 | 12 | 13 | 6  | 12 | 10  | 15     | 55                                           | K0385.12126                                                  |

## Ball-end thrust screws with head



### Material:

Screw carbon steel.  
Ball ball-bearing steel.

### Version:

Screw grade min. 10.9, black.  
Ball hardened, bright.

### Sample order:

K0380.10820

### Note:

Form A with full ball is used when a clean, polished contact surface is required. Surfaces which are not flat and parallel can be firmly clamped or supported with Form B with flattened ball, the movable ball can adapt itself up to 9°.

### Drawing reference:

Form A: full ball

Form B: flattened ball

Form BV: flattened ball, rotation lock

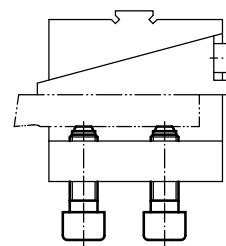
Form F: serrated flattened ball

Form FV: serrated flattened ball, rotation lock

## KIPP Ball-end thrust screws with head

| Order No.    | Form | D   | D3  | L     | L1  | L2 | Ball-Ø | SW | Load rating<br>max. kN<br>(static load only) |
|--------------|------|-----|-----|-------|-----|----|--------|----|----------------------------------------------|
| K0380.10410  | A    | M4  | 7   | 9,9   | 2,1 | 4  | 2,5    | 3  | 3,5                                          |
| K0380.10416  | A    | M4  | 7   | 15,9  | 2,1 | 4  | 2,5    | 3  | 3,5                                          |
| K0380.10420  | A    | M4  | 7   | 19,9  | 2,1 | 4  | 2,5    | 3  | 3,5                                          |
| K0380.10512  | A    | M5  | 8,5 | 12,1  | 2,4 | 5  | 3      | 4  | 4,5                                          |
| K0380.10516  | A    | M5  | 8,5 | 16,1  | 2,4 | 5  | 3      | 4  | 4,5                                          |
| K0380.10520  | A    | M5  | 8,5 | 20,1  | 2,4 | 5  | 3      | 4  | 4,5                                          |
| K0380.10620  | A    | M6  | 10  | 20,8  | 3   | 6  | 4      | 5  | 9                                            |
| K0380.10630  | A    | M6  | 10  | 30,8  | 3   | 6  | 4      | 5  | 9                                            |
| K0380.10640  | A    | M6  | 10  | 40,8  | 16  | 6  | 4      | 5  | 9                                            |
| K0380.10820  | A    | M8  | 13  | 21,2  | 3,5 | 8  | 5,5    | 6  | 15                                           |
| K0380.10835  | A    | M8  | 13  | 36,2  | 3,5 | 8  | 5,5    | 6  | 15                                           |
| K0380.10850  | A    | M8  | 13  | 51,2  | 22  | 8  | 5,5    | 6  | 15                                           |
| K0380.11025  | A    | M10 | 16  | 26,7  | 4,5 | 10 | 7      | 8  | 20                                           |
| K0380.11040  | A    | M10 | 16  | 41,7  | 4,5 | 10 | 7      | 8  | 20                                           |
| K0380.11060  | A    | M10 | 16  | 61,7  | 28  | 10 | 7      | 8  | 20                                           |
| K0380.11230  | A    | M12 | 18  | 32    | 5   | 12 | 8,5    | 10 | 30                                           |
| K0380.11250  | A    | M12 | 18  | 52    | 5   | 12 | 8,5    | 10 | 30                                           |
| K0380.11280  | A    | M12 | 18  | 82    | 44  | 12 | 8,5    | 10 | 30                                           |
| K0380.11640  | A    | M16 | 24  | 43,3  | 6   | 16 | 12     | 14 | 60                                           |
| K0380.11660  | A    | M16 | 24  | 63,3  | 6   | 16 | 12     | 14 | 60                                           |
| K0380.11680  | A    | M16 | 24  | 83,3  | 36  | 16 | 12     | 14 | 60                                           |
| K0380.120100 | A    | M20 | 30  | 104,2 | 48  | 20 | 15     | 17 | 90                                           |
| K0380.12050  | A    | M20 | 30  | 54,2  | 7,5 | 20 | 15     | 17 | 90                                           |
| K0380.12080  | A    | M20 | 30  | 84,2  | 28  | 20 | 15     | 17 | 90                                           |
| K0380.124120 | A    | M24 | 36  | 124,7 | 60  | 24 | 18     | 19 | 120                                          |
| K0380.12460  | A    | M24 | 36  | 64,7  | 9   | 24 | 18     | 19 | 120                                          |
| K0380.12490  | A    | M24 | 36  | 94,7  | 30  | 24 | 18     | 19 | 120                                          |

## Ball-end thrust screws with head

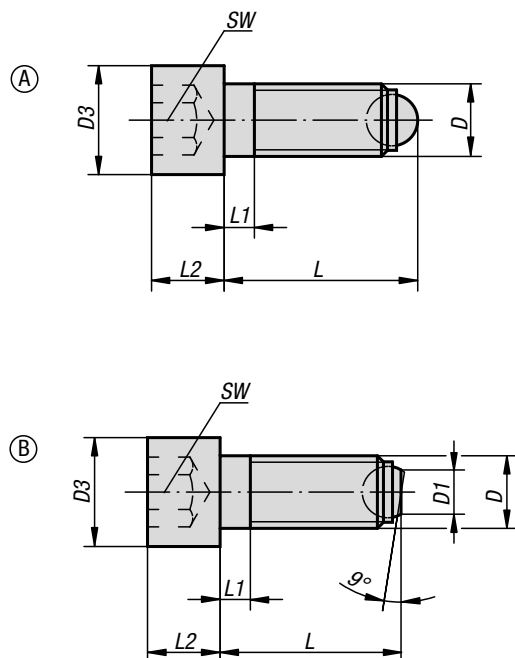


| Order No.<br>Form B | Order No.<br>Form F | D   | D1   | D3  | L    | L1  | L2 | Ball-Ø | SW | Load rating<br>max. kN<br>(static load only) |
|---------------------|---------------------|-----|------|-----|------|-----|----|--------|----|----------------------------------------------|
| K0380.20410         | -                   | M4  | 1,4  | 7   | 11,7 | 2,1 | 4  | 2,5    | 3  | 3,5                                          |
| K0380.20416         | -                   | M4  | 1,4  | 7   | 15,7 | 2,1 | 4  | 2,5    | 3  | 3,5                                          |
| K0380.20420         | -                   | M4  | 1,4  | 7   | 19,7 | 2,1 | 4  | 2,5    | 3  | 3,5                                          |
| K0380.20512         | -                   | M5  | 2    | 8,5 | 11,7 | 2,4 | 5  | 3      | 4  | 4,5                                          |
| K0380.20516         | -                   | M5  | 2    | 8,5 | 15,7 | 2,4 | 5  | 3      | 4  | 4,5                                          |
| K0380.20520         | -                   | M5  | 2    | 8,5 | 19,7 | 2,4 | 5  | 3      | 4  | 4,5                                          |
| K0380.20620         | -                   | M6  | 3,2  | 10  | 20   | 3   | 6  | 4      | 5  | 9                                            |
| K0380.20630         | -                   | M6  | 3,2  | 10  | 30   | 3   | 6  | 4      | 5  | 9                                            |
| K0380.20640         | -                   | M6  | 3,2  | 10  | 40   | 16  | 6  | 4      | 5  | 9                                            |
| K0380.20820         | -                   | M8  | 4,5  | 13  | 20   | 3,5 | 8  | 5,5    | 6  | 15                                           |
| K0380.20835         | -                   | M8  | 4,5  | 13  | 35   | 3,5 | 8  | 5,5    | 6  | 15                                           |
| K0380.20850         | -                   | M8  | 4,5  | 13  | 50   | 22  | 8  | 5,5    | 6  | 15                                           |
| K0380.21025         | K0380.31025         | M10 | 6    | 16  | 25   | 4,5 | 10 | 7      | 8  | 20                                           |
| K0380.21040         | K0380.31040         | M10 | 6    | 16  | 40   | 4,5 | 10 | 7      | 8  | 20                                           |
| K0380.21060         | K0380.31060         | M10 | 6    | 16  | 60   | 28  | 10 | 7      | 8  | 20                                           |
| K0380.21230         | K0380.31230         | M12 | 7,2  | 18  | 30   | 5   | 12 | 8,5    | 10 | 30                                           |
| K0380.21250         | K0380.31250         | M12 | 7,2  | 18  | 50   | 5   | 12 | 8,5    | 10 | 30                                           |
| K0380.21280         | K0380.31280         | M12 | 7,2  | 18  | 80   | 44  | 12 | 8,5    | 10 | 30                                           |
| K0380.21640         | K0380.31640         | M16 | 10,7 | 24  | 40   | 6   | 16 | 12     | 14 | 60                                           |
| K0380.21660         | K0380.31660         | M16 | 10,7 | 24  | 60   | 6   | 16 | 12     | 14 | 60                                           |
| K0380.21680         | K0380.31680         | M16 | 10,7 | 24  | 80   | 36  | 16 | 12     | 14 | 60                                           |
| K0380.220100        | -                   | M20 | 13,5 | 30  | 100  | 48  | 20 | 15     | 17 | 90                                           |
| K0380.22050         | -                   | M20 | 13,5 | 30  | 50   | 7,5 | 20 | 15     | 17 | 90                                           |
| K0380.22080         | -                   | M20 | 13,5 | 30  | 80   | 28  | 20 | 15     | 17 | 90                                           |
| K0380.224120        | -                   | M24 | 15,8 | 36  | 120  | 60  | 24 | 18     | 19 | 120                                          |
| K0380.22460         | -                   | M24 | 15,8 | 36  | 60   | 9   | 24 | 18     | 19 | 120                                          |
| K0380.22490         | -                   | M24 | 15,8 | 36  | 90   | 30  | 24 | 18     | 19 | 120                                          |

| Order No.<br>Form BV | Order No.<br>Form FV | D   | D1   | D3 | L  | L1  | L2 | Ball-Ø | SW | Load rating<br>max. kN<br>(static load only) |
|----------------------|----------------------|-----|------|----|----|-----|----|--------|----|----------------------------------------------|
| K0380.40820          | -                    | M8  | 4,5  | 13 | 20 | 3,5 | 8  | 5,5    | 6  | 9                                            |
| K0380.40835          | -                    | M8  | 4,5  | 13 | 35 | 3,5 | 8  | 5,5    | 6  | 9                                            |
| K0380.40850          | -                    | M8  | 4,5  | 13 | 50 | 22  | 8  | 5,5    | 6  | 9                                            |
| K0380.41025          | K0380.51025          | M10 | 6    | 16 | 25 | 4,5 | 10 | 7      | 8  | 12                                           |
| K0380.41040          | K0380.51040          | M10 | 6    | 16 | 40 | 4,5 | 10 | 7      | 8  | 12                                           |
| K0380.41060          | K0380.51060          | M10 | 6    | 16 | 60 | 28  | 10 | 7      | 8  | 12                                           |
| K0380.41230          | K0380.51230          | M12 | 7,2  | 18 | 30 | 5   | 12 | 8,5    | 10 | 18                                           |
| K0380.41250          | K0380.51250          | M12 | 7,2  | 18 | 50 | 5   | 12 | 8,5    | 10 | 18                                           |
| K0380.41280          | K0380.51280          | M12 | 7,2  | 18 | 80 | 44  | 12 | 8,5    | 10 | 18                                           |
| K0380.41640          | K0380.51640          | M16 | 10,7 | 24 | 40 | 6   | 16 | 12     | 14 | 36                                           |
| K0380.41660          | K0380.51660          | M16 | 10,7 | 24 | 60 | 6   | 16 | 12     | 14 | 36                                           |
| K0380.41680          | K0380.51680          | M16 | 10,7 | 24 | 80 | 36  | 16 | 12     | 14 | 36                                           |

# Ball-end thrust screws with head

stainless steel



**Material:**  
Stainless steel

**Version:**  
Bright.

**Sample order:**  
K0381.11230

**Note:**  
Form A with full ball is used when a clean, polished contact surface is required. Surfaces which are not flat and parallel can be firmly clamped or supported with Form B with flattened ball, the movable ball can adapt itself up to 9°.

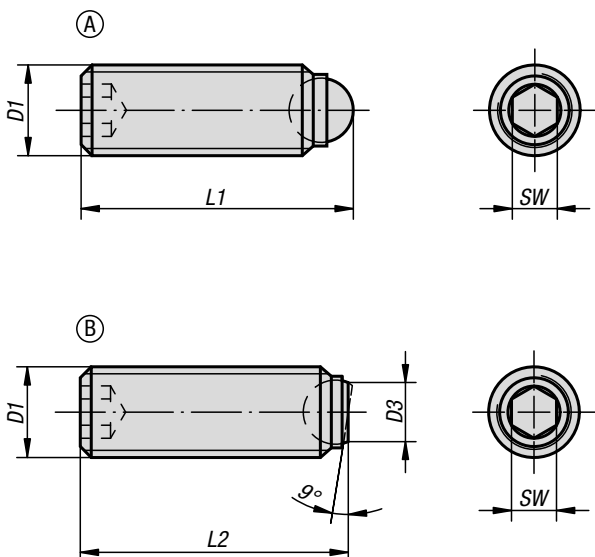
**Drawing reference:**  
Form A: with full ball  
Form B: with flattened ball

## KIPP Ball-end thrust screws with head, stainless steel

| Order No.<br>Form A | Order No.<br>Form B | D   | D1    | D3  | L         | L1  | L2 | Ball-Ø | SW |
|---------------------|---------------------|-----|-------|-----|-----------|-----|----|--------|----|
| K0381.10410         | K0381.20410         | M4  | -1,4  | 7   | 9,9/9,7   | 2,1 | 4  | 2,5    | 3  |
| K0381.10416         | K0381.20416         | M4  | -1,4  | 7   | 15,9/15,7 | 2,1 | 4  | 2,5    | 3  |
| K0381.10420         | K0381.20420         | M4  | -1,4  | 7   | 19,9/19,7 | 2,1 | 4  | 2,5    | 3  |
| K0381.10512         | K0381.20512         | M5  | -2    | 8,5 | 12,1/11,7 | 2,4 | 5  | 3      | 4  |
| K0381.10516         | K0381.20516         | M5  | -2    | 8,5 | 16,1/15,7 | 2,4 | 5  | 3      | 4  |
| K0381.10520         | K0381.20520         | M5  | -2    | 8,5 | 20,1/19,7 | 2,4 | 5  | 3      | 4  |
| K0381.10620         | K0381.20620         | M6  | -3,2  | 10  | 20,8/20   | 3   | 6  | 4      | 5  |
| K0381.10630         | K0381.20630         | M6  | -3,2  | 10  | 30,8/30   | 3   | 6  | 4      | 5  |
| K0381.10640         | K0381.20640         | M6  | -3,2  | 10  | 40,8/40   | 16  | 6  | 4      | 5  |
| K0381.10820         | K0381.20820         | M8  | -4,5  | 13  | 21,2/20   | 3,5 | 8  | 5,5    | 6  |
| K0381.10835         | K0381.20835         | M8  | -4,5  | 13  | 36,2/35   | 3,5 | 8  | 5,5    | 6  |
| K0381.10850         | K0381.20850         | M8  | -4,5  | 13  | 51,2/50   | 22  | 8  | 5,5    | 6  |
| K0381.11025         | K0381.21025         | M10 | -6    | 16  | 26,7/25   | 4,5 | 10 | 7      | 8  |
| K0381.11040         | K0381.21040         | M10 | -6    | 16  | 41,7/40   | 4,5 | 10 | 7      | 8  |
| K0381.11060         | K0381.21060         | M10 | -6    | 16  | 61,7/60   | 28  | 10 | 7      | 8  |
| K0381.11230         | K0381.21230         | M12 | -7,2  | 18  | 32/30     | 5   | 12 | 8,5    | 10 |
| K0381.11250         | K0381.21250         | M12 | -7,2  | 18  | 52/50     | 5   | 12 | 8,5    | 10 |
| K0381.11280         | K0381.21280         | M12 | -7,2  | 18  | 82/80     | 44  | 12 | 8,5    | 10 |
| K0381.11640         | K0381.21640         | M16 | -10,7 | 24  | 43,3/40   | 6   | 16 | 12     | 14 |
| K0381.11660         | K0381.21660         | M16 | -10,7 | 24  | 63,3/60   | 6   | 16 | 12     | 14 |
| K0381.11680         | K0381.21680         | M16 | -10,7 | 24  | 83,3/80   | 36  | 16 | 12     | 14 |

## Ball-end thrust screws without head

with fine thread



### Material:

Screw high-carbon steel, grade 10.9.  
Ball, ball-bearing steel.

### Version:

Screw black.  
Ball hardened and bright.

### Sample order:

K0382.11025

### Note:

Form A with full ball is used when a clean, polished pressure surface is required. Surfaces which are not plane and parallel can be firmly clamped or supported with Form B with flattened ball because the movable ball can adapt itself up to 9°.

Fine thread enables extremely sensitive alignment of the ball-end thrust screws.

### Drawing reference:

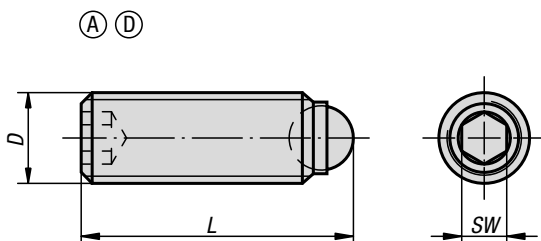
Form A: with full ball  
Form B: with flattened ball

## KIPP Ball-end thrust screws without head with fine thread

| Order No.<br>Form A | Order No.<br>Form B | D1      | D3     | L1     | L2     | Ball Ø | SW | Load rating<br>max. kN<br>(static load only) |
|---------------------|---------------------|---------|--------|--------|--------|--------|----|----------------------------------------------|
| K0382.10810         | K0382.20810         | M8x1    | -/4,1  | 11,2/- | -/10,3 | 5,5    | 4  | 10                                           |
| K0382.10820         | K0382.20820         | M8x1    | -/4,1  | 21,2/- | -/20,3 | 5,5    | 4  | 15                                           |
| K0382.11012         | K0382.21012         | M10x1   | -/5,6  | 13,7/- | -/12,3 | 7      | 5  | 20                                           |
| K0382.11025         | K0382.21025         | M10x1   | -/5,6  | 26,7/- | -/25,3 | 7      | 5  | 20                                           |
| K0382.11216         | K0382.21216         | M12x1,5 | -/7    | 18/-   | -/16,2 | 8,5    | 6  | 30                                           |
| K0382.11230         | K0382.21230         | M12x1,5 | -/7    | 32/-   | -/30,2 | 8,5    | 6  | 30                                           |
| K0382.11620         | K0382.21620         | M16x1,5 | -/10,7 | 23,3/- | -/20   | 12     | 8  | 60                                           |
| K0382.11635         | K0382.21635         | M16x1,5 | -/10,7 | 38,3/- | -/35   | 12     | 8  | 60                                           |
| K0382.12030         | K0382.22030         | M20x1,5 | -/13,5 | 34,2/- | -/30   | 15     | 10 | 90                                           |
| K0382.12040         | K0382.22040         | M20x1,5 | -/13,5 | 44,2/- | -/40   | 15     | 10 | 90                                           |

## Ball-end thrust screws without head

with full ball



### Material:

Screw, high-carbon steel, grade 10.9  
Ball, ball-bearing steel or POM.

### Version:

Screw black.  
Ball hardened bright or POM.

### Sample order:

K0383.10810

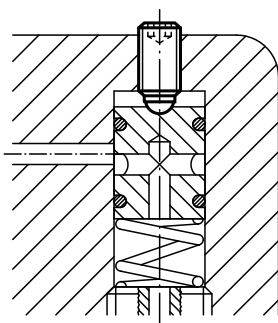
### Note:

Ball-end thrust screws with full ball are used when a clean, polished contact surface is required.  
Longer versions have been specially designed to be glued in, allowing mechanical connecting elements with external thread to be made cost-effectively for small and medium-sized series.

### Drawing reference:

Form A: steel ball

Form D: POM ball



## KIPP Ball-end thrust screws without head with full ball

| Order No.<br>Form A | Order No.<br>Form D | D  | L    | Ball-Ø | SW  | Load rating<br>max. kN<br>(static load only) |
|---------------------|---------------------|----|------|--------|-----|----------------------------------------------|
| K0383.1046          | K0383.3046          | M4 | 6    | 2,5    | 2   | 3,5/0,3                                      |
| K0383.1048          | K0383.3048          | M4 | 8    | 2,5    | 2   | 3,5/0,3                                      |
| K0383.10410         | K0383.30410         | M4 | 10   | 2,5    | 2   | 3,5/0,3                                      |
| K0383.10412         | K0383.30412         | M4 | 12   | 2,5    | 2   | 3,5/0,3                                      |
| K0383.10416         | K0383.30416         | M4 | 16   | 2,5    | 2   | 3,5/0,3                                      |
| K0383.1058          | K0383.3058          | M5 | 8    | 3      | 2,5 | 4,5/0,5                                      |
| K0383.10510         | K0383.30510         | M5 | 10   | 3      | 2,5 | 4,5/0,5                                      |
| K0383.10512         | K0383.30512         | M5 | 12   | 3      | 2,5 | 4,5/0,5                                      |
| K0383.10516         | K0383.30516         | M5 | 16   | 3      | 2,5 | 4,5/0,5                                      |
| K0383.10520         | K0383.30520         | M5 | 20   | 3      | 2,5 | 4,5/0,5                                      |
| K0383.10525         | K0383.30525         | M5 | 25   | 3      | 2,5 | 4,5/0,5                                      |
| K0383.10610         | K0383.30610         | M6 | 10,8 | 4      | 3   | 9/0,9                                        |
| K0383.10612         | K0383.30612         | M6 | 12,8 | 4      | 3   | 9/0,9                                        |
| K0383.10616         | K0383.30616         | M6 | 16,8 | 4      | 3   | 9/0,9                                        |
| K0383.10620         | K0383.30620         | M6 | 20,8 | 4      | 3   | 9/0,9                                        |
| K0383.10625         | K0383.30625         | M6 | 25,8 | 4      | 3   | 9/0,9                                        |
| K0383.10650         | -                   | M6 | 50,8 | 4      | 3   | 9/0,9                                        |
| K0383.10660         | -                   | M6 | 60,8 | 4      | 3   | 9/0,9                                        |
| K0383.10680         | -                   | M6 | 80,8 | 4      | 3   | 9/0,9                                        |



# Ball-end thrust screws without head

with full ball



## KIPP Ball-end thrust screws without head with full ball

| Order No.<br>Form A | Order No.<br>Form D | D   | L    | Ball-Ø | SW | Load rating<br>max. kN<br>(static load only) |
|---------------------|---------------------|-----|------|--------|----|----------------------------------------------|
| K0383.10810         | K0383.30810         | M8  | 11,2 | 5,5    | 4  | 10/15/1,5                                    |
| K0383.10812         | K0383.30812         | M8  | 13,2 | 5,5    | 4  | 10/15/1,5                                    |
| K0383.10816         | K0383.30816         | M8  | 17,2 | 5,5    | 4  | 10/15/1,5                                    |
| K0383.10820         | K0383.30820         | M8  | 21,2 | 5,5    | 4  | 10/15/1,5                                    |
| K0383.10825         | K0383.30825         | M8  | 26,2 | 5,5    | 4  | 10/15/1,5                                    |
| K0383.10830         | K0383.30830         | M8  | 31,2 | 5,5    | 4  | 10/15/1,5                                    |
| K0383.10850         | -                   | M8  | 51,2 | 5,5    | 4  | 10/15/1,5                                    |
| K0383.10860         | -                   | M8  | 61,2 | 5,5    | 4  | 10/15/1,5                                    |
| K0383.10880         | -                   | M8  | 81,2 | 5,5    | 4  | 10/15/1,5                                    |
| K0383.11012         | K0383.31012         | M10 | 13,7 | 7      | 5  | 20/2                                         |
| K0383.11016         | K0383.31016         | M10 | 17,7 | 7      | 5  | 20/2                                         |
| K0383.11020         | K0383.31020         | M10 | 21,7 | 7      | 5  | 20/2                                         |
| K0383.11025         | K0383.31025         | M10 | 26,7 | 7      | 5  | 20/2                                         |
| K0383.11035         | K0383.31035         | M10 | 36,7 | 7      | 5  | 20/2                                         |
| K0383.11216         | K0383.31216         | M12 | 18   | 8,5    | 6  | 30/3                                         |
| K0383.11220         | K0383.31220         | M12 | 22   | 8,5    | 6  | 30/3                                         |
| K0383.11225         | -                   | M12 | 27   | 8,5    | 6  | 30/3                                         |
| K0383.11230         | K0383.31230         | M12 | 32   | 8,5    | 6  | 30/3                                         |
| K0383.11232         | -                   | M12 | 34   | 8,5    | 6  | 30/3                                         |
| K0383.11240         | K0383.31240         | M12 | 42   | 8,5    | 6  | 30/3                                         |
| K0383.11620         | -                   | M16 | 23,3 | 12     | 8  | 60                                           |
| K0383.11625         | -                   | M16 | 28,3 | 12     | 8  | 60                                           |
| K0383.11635         | -                   | M16 | 38,3 | 12     | 8  | 60                                           |
| K0383.11650         | -                   | M16 | 53,3 | 12     | 8  | 60                                           |
| K0383.12030         | -                   | M20 | 34,2 | 15     | 10 | 90                                           |
| K0383.12040         | -                   | M20 | 44,2 | 15     | 10 | 90                                           |
| K0383.12060         | -                   | M20 | 64,2 | 15     | 10 | 90                                           |
| K0383.12435         | -                   | M24 | 39,7 | 18     | 12 | 120                                          |
| K0383.12450         | -                   | M24 | 54,7 | 18     | 12 | 120                                          |
| K0383.12480         | -                   | M24 | 84,7 | 18     | 12 | 120                                          |

## Ball-end thrust screws without head

stainless steel with full ball



### Material:

Screw stainless steel.

Ball stainless steel, POM or ceramic  $\text{Si}_3\text{N}_4$ .

### Version:

Stainless steel bright.

### Sample order:

K0384.1046

### Note:

Ball-end thrust screws with full ball are used when a clean, polished contact surface is required. Longer versions have been designed especially to be glued in, allowing mechanical connecting elements with external threads to be made cost-effectively for small and medium-sized runs. Silicon nitride ( $\text{Si}_3\text{N}_4$ ) is characterised by a combination of excellent properties, these include high resilience and strength, excellent wear resistance and good chemical resistance.

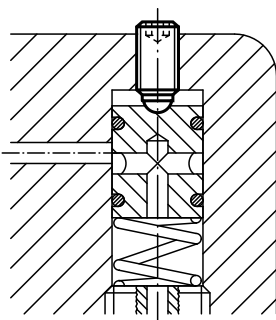
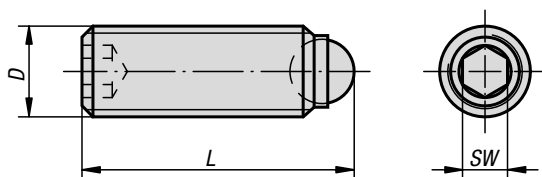
### Drawing reference:

Form A: stainless steel ball

Form D: POM ball

Form E: ceramic ball

Ⓐ Ⓓ Ⓔ



# Ball-end thrust screws without head

stainless steel with full ball



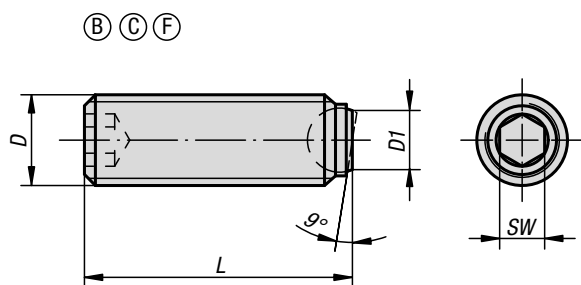
## KIPP Ball-end thrust screws without head, stainless steel, with full ball

| Order No.<br>Form A | Order No.<br>Form D | Order No.<br>Form E | D   | L    | Ball-Ø | SW  | Load rating<br>max. kN<br>(static load only) |
|---------------------|---------------------|---------------------|-----|------|--------|-----|----------------------------------------------|
| K0384.10412         | K0384.30412         | -                   | M4  | 12   | 2,5    | 2   | -/0,3                                        |
| K0384.10416         | K0384.30416         | -                   | M4  | 16   | 2,5    | 2   | -/0,3                                        |
| K0384.1046          | K0384.3046          | -                   | M4  | 6    | 2,5    | 2   | -/0,3                                        |
| K0384.1048          | K0384.3048          | -                   | M4  | 8    | 2,5    | 2   | -/0,3                                        |
| K0384.10510         | K0384.30510         | -                   | M5  | 10   | 3      | 2,5 | -/0,5/4,5                                    |
| K0384.10512         | K0384.30512         | K0384.80512         | M5  | 12   | 3      | 2,5 | -/0,5/4,5                                    |
| K0384.10516         | K0384.30516         | -                   | M5  | 16   | 3      | 2,5 | -/0,5/4,5                                    |
| K0384.10520         | K0384.30520         | K0384.80520         | M5  | 20   | 3      | 2,5 | -/0,5/4,5                                    |
| K0384.10525         | K0384.30525         | -                   | M5  | 25   | 3      | 2,5 | -/0,5/4,5                                    |
| K0384.1058          | K0384.3058          | K0384.8058          | M5  | 8    | 3      | 2,5 | -/0,5/4,5                                    |
| K0384.10610         | K0384.30610         | K0384.80610         | M6  | 10,8 | 4      | 3   | -/0,9/9                                      |
| K0384.10612         | K0384.30612         | -                   | M6  | 12,8 | 4      | 3   | -/0,9/9                                      |
| K0384.10616         | K0384.30616         | K0384.80616         | M6  | 16,8 | 4      | 3   | -/0,9/9                                      |
| K0384.10620         | K0384.30620         | K0384.80620         | M6  | 20,8 | 4      | 3   | -/0,9/9                                      |
| K0384.10625         | K0384.30625         | K0384.80625         | M6  | 25,8 | 4      | 3   | -/0,9/9                                      |
| K0384.10650         | -                   | -                   | M6  | 50,8 | 4      | 3   | -/0,9/9                                      |
| K0384.10660         | -                   | -                   | M6  | 60,8 | 4      | 3   | -/0,9/9                                      |
| K0384.10680         | -                   | -                   | M6  | 80,8 | 4      | 3   | -/0,9/9                                      |
| K0384.10810         | K0384.30810         | K0384.80810         | M8  | 11,2 | 5,5    | 4   | -/1,5/10/15                                  |
| K0384.10812         | K0384.30812         | K0384.80812         | M8  | 13,2 | 5,5    | 4   | -/1,5/10/15                                  |
| K0384.10816         | K0384.30816         | -                   | M8  | 17,2 | 5,5    | 4   | -/1,5/10/15                                  |
| K0384.10820         | K0384.30820         | K0384.80820         | M8  | 21,2 | 5,5    | 4   | -/1,5/10/15                                  |
| K0384.10825         | K0384.30825         | K0384.80825         | M8  | 26,2 | 5,5    | 4   | -/1,5/10/15                                  |
| K0384.10830         | K0384.30830         | K0384.80830         | M8  | 31,2 | 5,5    | 4   | -/1,5/10/15                                  |
| K0384.10850         | -                   | -                   | M8  | 51,2 | 5,5    | 4   | -/1,5/10/15                                  |
| K0384.10860         | -                   | -                   | M8  | 61,2 | 5,5    | 4   | -/1,5/10/15                                  |
| K0384.10880         | -                   | -                   | M8  | 81,2 | 5,5    | 4   | -/1,5/10/15                                  |
| K0384.11012         | -                   | K0384.81012         | M10 | 13,7 | 7      | 5   | -/20                                         |
| K0384.11016         | -                   | K0384.81016         | M10 | 17,7 | 7      | 5   | -/20                                         |
| K0384.11020         | -                   | K0384.81020         | M10 | 21,7 | 7      | 5   | -/20                                         |
| K0384.11025         | -                   | K0384.81025         | M10 | 26,7 | 7      | 5   | -/20                                         |
| K0384.11035         | -                   | K0384.81035         | M10 | 36,7 | 7      | 5   | -/20                                         |
| K0384.11216         | -                   | K0384.81216         | M12 | 18   | 8,5    | 6   | -/30                                         |
| K0384.11220         | -                   | K0384.81220         | M12 | 22   | 8,5    | 6   | -/30                                         |
| K0384.11225         | -                   | -                   | M12 | 27   | 8,5    | 6   | -/30                                         |
| K0384.11230         | -                   | K0384.81230         | M12 | 32   | 8,5    | 6   | -/30                                         |
| K0384.11232         | -                   | -                   | M12 | 34   | 8,5    | 6   | -/30                                         |
| K0384.11240         | -                   | K0384.81240         | M12 | 42   | 8,5    | 6   | -/30                                         |
| K0384.11620         | -                   | -                   | M16 | 23,3 | 12     | 8   | -                                            |
| K0384.11625         | -                   | -                   | M16 | 28,3 | 12     | 8   | -                                            |
| K0384.11635         | -                   | -                   | M16 | 38,3 | 12     | 8   | -                                            |
| K0384.10410         | K0384.30410         | -                   | M4  | 10   | 2,5    | 2   | -/0,3                                        |
| K0384.11650         | -                   | -                   | M16 | 53,3 | 12     | 8   | -                                            |



## Ball-end thrust screws without head

with flattened ball



### Material:

Screw carbon steel, grade 10.9  
Ball, ball-bearing steel or POM.

### Version:

Screw black.  
Ball hardened bright or POM.

### Sample order:

K0383.41012

### Note:

Surfaces which are not flat and parallel can be firmly clamped or supported with Form B, C or F with flattened ball, the movable ball can adapt itself up to 9°. Longer versions have been specially designed to glue in, allowing mechanical connecting elements with external thread to be made cost-effectively for small and medium-sized series.

### Drawing reference:

Form B: steel ball  
Form C: POM ball  
Form F: steel ball diamond grip

## KIPP Ball-end thrust screws without head with flattened POM ball

| Order No.   | Form | D  | D1  | L    | Ball-Ø | SW  | Load rating<br>max. kN<br>(static load only) |
|-------------|------|----|-----|------|--------|-----|----------------------------------------------|
| K0383.70412 | C    | M4 | 1,8 | 11,9 | 2,5    | 2   | 0,3                                          |
| K0383.70416 | C    | M4 | 1,8 | 15,9 | 2,5    | 2   | 0,3                                          |
| K0383.7046  | C    | M4 | 1,8 | 5,9  | 2,5    | 2   | 0,3                                          |
| K0383.7048  | C    | M4 | 1,8 | 7,9  | 2,5    | 2   | 0,3                                          |
| K0383.70410 | C    | M4 | 1,8 | 9,9  | 2,5    | 2   | 0,3                                          |
| K0383.70516 | C    | M5 | 2,1 | 15,8 | 3      | 2,5 | 0,5                                          |
| K0383.70520 | C    | M5 | 2,1 | 19,8 | 3      | 2,5 | 0,5                                          |
| K0383.70525 | C    | M5 | 2,1 | 24,8 | 3      | 2,5 | 0,5                                          |
| K0383.7058  | C    | M5 | 2,1 | 7,8  | 3      | 2,5 | 0,5                                          |
| K0383.70512 | C    | M5 | 2,1 | 11,8 | 3      | 2,5 | 0,5                                          |
| K0383.70510 | C    | M5 | 2,1 | 9,8  | 3      | 2,5 | 0,5                                          |
| K0383.70610 | C    | M6 | 3   | 10,3 | 4      | 3   | 0,9                                          |
| K0383.70612 | C    | M6 | 3   | 12,3 | 4      | 3   | 0,9                                          |
| K0383.70616 | C    | M6 | 3   | 16,3 | 4      | 3   | 0,9                                          |
| K0383.70620 | C    | M6 | 3   | 20,3 | 4      | 3   | 0,9                                          |
| K0383.70625 | C    | M6 | 3   | 25,3 | 4      | 3   | 0,9                                          |
| K0383.70810 | C    | M8 | 4,2 | 10,4 | 5,5    | 4   | 1,5                                          |
| K0383.70830 | C    | M8 | 4,2 | 30,4 | 5,5    | 4   | 1,5                                          |
| K0383.70812 | C    | M8 | 4,2 | 12,4 | 5,5    | 4   | 1,5                                          |
| K0383.70816 | C    | M8 | 4,2 | 16,4 | 5,5    | 4   | 1,5                                          |
| K0383.70820 | C    | M8 | 4,2 | 20,4 | 5,5    | 4   | 1,5                                          |
| K0383.70825 | C    | M8 | 4,2 | 25,4 | 5,5    | 4   | 1,5                                          |

## KIPP Ball-end thrust screws without head with flattened serrated steel ball

| Order No.   | Form | D   | D1   | L  | Ball-Ø | SW | Load rating<br>max. kN<br>(static load only) |
|-------------|------|-----|------|----|--------|----|----------------------------------------------|
| K0383.41012 | F    | M10 | 6    | 12 | 7      | 5  | 20                                           |
| K0383.41016 | F    | M10 | 6    | 16 | 7      | 5  | 20                                           |
| K0383.41025 | F    | M10 | 6    | 25 | 7      | 5  | 20                                           |
| K0383.41035 | F    | M10 | 6    | 35 | 7      | 5  | 20                                           |
| K0383.41216 | F    | M12 | 7,2  | 16 | 8,5    | 6  | 30                                           |
| K0383.41220 | F    | M12 | 7,2  | 20 | 8,5    | 6  | 30                                           |
| K0383.41240 | F    | M12 | 7,2  | 40 | 8,5    | 6  | 30                                           |
| K0383.41230 | F    | M12 | 7,2  | 30 | 8,5    | 6  | 30                                           |
| K0383.41620 | F    | M16 | 10,7 | 20 | 12     | 8  | 60                                           |
| K0383.41625 | F    | M16 | 10,7 | 25 | 12     | 8  | 60                                           |
| K0383.41635 | F    | M16 | 10,7 | 35 | 12     | 8  | 60                                           |
| K0383.41650 | F    | M16 | 10,7 | 50 | 12     | 8  | 60                                           |

# Ball-end thrust screws without head

with flattened ball



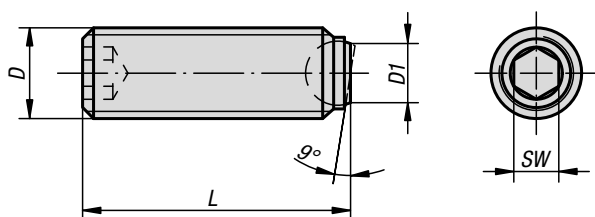
## KIPP Ball-end thrust screws without head with flattened steel ball

| Order No.   | Form | D   | D1   | L    | Ball-Ø | SW  | Load rating<br>max. kN<br>(static load only) |
|-------------|------|-----|------|------|--------|-----|----------------------------------------------|
| K0383.20412 | B    | M4  | 1,4  | 11,8 | 2,5    | 2   | 3,5                                          |
| K0383.20416 | B    | M4  | 1,4  | 15,8 | 2,5    | 2   | 3,5                                          |
| K0383.2046  | B    | M4  | 1,4  | 5,8  | 2,5    | 2   | 3,5                                          |
| K0383.2048  | B    | M4  | 1,4  | 7,8  | 2,5    | 2   | 3,5                                          |
| K0383.20410 | B    | M4  | 1,4  | 9,8  | 2,5    | 2   | 3,5                                          |
| K0383.20516 | B    | M5  | 2    | 15,6 | 3      | 2,5 | 4,5                                          |
| K0383.20520 | B    | M5  | 2    | 19,6 | 3      | 2,5 | 4,5                                          |
| K0383.20525 | B    | M5  | 2    | 24,6 | 3      | 2,5 | 4,5                                          |
| K0383.20512 | B    | M5  | 2    | 11,6 | 3      | 2,5 | 4,5                                          |
| K0383.2058  | B    | M5  | 2    | 7,6  | 3      | 2,5 | 4,5                                          |
| K0383.20510 | B    | M5  | 2    | 9,6  | 3      | 2,5 | 4,5                                          |
| K0383.20612 | B    | M6  | 3    | 12,1 | 4      | 3   | 9                                            |
| K0383.20616 | B    | M6  | 3    | 16,1 | 4      | 3   | 9                                            |
| K0383.20610 | B    | M6  | 3    | 10,1 | 4      | 3   | 9                                            |
| K0383.20620 | B    | M6  | 3    | 20,1 | 4      | 3   | 9                                            |
| K0383.20680 | B    | M6  | 3    | 80,1 | 4      | 3   | 9                                            |
| K0383.20625 | B    | M6  | 3    | 25,1 | 4      | 3   | 9                                            |
| K0383.20650 | B    | M6  | 3    | 50,1 | 4      | 3   | 9                                            |
| K0383.20660 | B    | M6  | 3    | 60,1 | 4      | 3   | 9                                            |
| K0383.20812 | B    | M8  | 4,1  | 12,3 | 5,5    | 4   | 10                                           |
| K0383.20816 | B    | M8  | 4,1  | 16,3 | 5,5    | 4   | 15                                           |
| K0383.20820 | B    | M8  | 4,1  | 20,3 | 5,5    | 4   | 15                                           |
| K0383.20810 | B    | M8  | 4,1  | 10,3 | 5,5    | 4   | 10                                           |
| K0383.20825 | B    | M8  | 4,1  | 25,3 | 5,5    | 4   | 15                                           |
| K0383.20880 | B    | M8  | 4,1  | 80,3 | 5,5    | 4   | 15                                           |
| K0383.20830 | B    | M8  | 4,1  | 30,3 | 5,5    | 4   | 15                                           |
| K0383.20850 | B    | M8  | 4,1  | 50,3 | 5,5    | 4   | 15                                           |
| K0383.20860 | B    | M8  | 4,1  | 60,3 | 5,5    | 4   | 15                                           |
| K0383.21016 | B    | M10 | 5,6  | 16,3 | 7      | 5   | 20                                           |
| K0383.21020 | B    | M10 | 5,6  | 20,3 | 7      | 5   | 20                                           |
| K0383.21025 | B    | M10 | 5,6  | 25,3 | 7      | 5   | 20                                           |
| K0383.21012 | B    | M10 | 5,6  | 12,3 | 7      | 5   | 20                                           |
| K0383.21035 | B    | M10 | 5,6  | 35,3 | 7      | 5   | 20                                           |
| K0383.21216 | B    | M12 | 7    | 16,2 | 8,5    | 6   | 30                                           |
| K0383.21220 | B    | M12 | 7    | 20,2 | 8,5    | 6   | 30                                           |
| K0383.21230 | B    | M12 | 7    | 30,2 | 8,5    | 6   | 30                                           |
| K0383.21240 | B    | M12 | 7    | 40,2 | 8,5    | 6   | 30                                           |
| K0383.21620 | B    | M16 | 10,7 | 20   | 12     | 8   | 60                                           |
| K0383.21650 | B    | M16 | 10,7 | 50   | 12     | 8   | 60                                           |
| K0383.21625 | B    | M16 | 10,7 | 25   | 12     | 8   | 60                                           |
| K0383.21635 | B    | M16 | 10,7 | 35   | 12     | 8   | 60                                           |
| K0383.22040 | B    | M20 | 13,5 | 40   | 15     | 10  | 90                                           |
| K0383.22030 | B    | M20 | 13,5 | 30   | 15     | 10  | 90                                           |
| K0383.22060 | B    | M20 | 13,5 | 60   | 15     | 10  | 90                                           |
| K0383.22450 | B    | M24 | 15,8 | 50   | 18     | 12  | 120                                          |
| K0383.22435 | B    | M24 | 15,8 | 35   | 18     | 12  | 120                                          |
| K0383.22480 | B    | M24 | 15,8 | 80   | 18     | 12  | 120                                          |



# Ball-end thrust screws without head

stainless steel with flattened ball



## KIPP Ball-end thrust screws without head, stainless steel with flattened ball

| Order No.   | Form | D   | D1   | L    | Ball-Ø | SW  |
|-------------|------|-----|------|------|--------|-----|
| K0384.2046  | B    | M4  | 1,4  | 5,8  | 2,5    | 2   |
| K0384.2048  | B    | M4  | 1,4  | 7,8  | 2,5    | 2   |
| K0384.20410 | B    | M4  | 1,4  | 9,8  | 2,5    | 2   |
| K0384.20412 | B    | M4  | 1,4  | 11,8 | 2,5    | 2   |
| K0384.20416 | B    | M4  | 1,4  | 15,8 | 2,5    | 2   |
| K0384.2058  | B    | M5  | 2    | 7,6  | 3      | 2,5 |
| K0384.20510 | B    | M5  | 2    | 9,6  | 3      | 2,5 |
| K0384.20512 | B    | M5  | 2    | 11,6 | 3      | 2,5 |
| K0384.20516 | B    | M5  | 2    | 15,6 | 3      | 2,5 |
| K0384.20520 | B    | M5  | 2    | 19,6 | 3      | 2,5 |
| K0384.20525 | B    | M5  | 2    | 24,6 | 3      | 2,5 |
| K0384.20610 | B    | M6  | 3    | 10,1 | 4      | 3   |
| K0384.20612 | B    | M6  | 3    | 12,1 | 4      | 3   |
| K0384.20616 | B    | M6  | 3    | 16,1 | 4      | 3   |
| K0384.20620 | B    | M6  | 3    | 20,1 | 4      | 3   |
| K0384.20625 | B    | M6  | 3    | 25,1 | 4      | 3   |
| K0384.20650 | B    | M6  | 3    | 50,1 | 4      | 3   |
| K0384.20660 | B    | M6  | 3    | 60,1 | 4      | 3   |
| K0384.20680 | B    | M6  | 3    | 80,1 | 4      | 3   |
| K0384.20810 | B    | M8  | 4,1  | 10,3 | 5,5    | 4   |
| K0384.20812 | B    | M8  | 4,1  | 12,3 | 5,5    | 4   |
| K0384.20816 | B    | M8  | 4,1  | 16,3 | 5,5    | 4   |
| K0384.20820 | B    | M8  | 4,1  | 20,3 | 5,5    | 4   |
| K0384.20825 | B    | M8  | 4,1  | 25,3 | 5,5    | 4   |
| K0384.20830 | B    | M8  | 4,1  | 30,3 | 5,5    | 4   |
| K0384.20850 | B    | M8  | 4,1  | 50,3 | 5,5    | 4   |
| K0384.20860 | B    | M8  | 4,1  | 60,3 | 5,5    | 4   |
| K0384.20880 | B    | M8  | 4,1  | 80,3 | 5,5    | 4   |
| K0384.21012 | B    | M10 | 5,6  | 12,3 | 7      | 5   |
| K0384.21016 | B    | M10 | 5,6  | 16,3 | 7      | 5   |
| K0384.21020 | B    | M10 | 5,6  | 20,3 | 7      | 5   |
| K0384.21025 | B    | M10 | 5,6  | 25,3 | 7      | 5   |
| K0384.21035 | B    | M10 | 5,6  | 35,3 | 7      | 5   |
| K0384.21216 | B    | M12 | 7    | 16,2 | 8,5    | 6   |
| K0384.21220 | B    | M12 | 7    | 20,2 | 8,5    | 6   |
| K0384.21230 | B    | M12 | 7    | 30,2 | 8,5    | 6   |
| K0384.21240 | B    | M12 | 7    | 40,2 | 8,5    | 6   |
| K0384.21620 | B    | M16 | 10,7 | 20   | 12     | 8   |
| K0384.21625 | B    | M16 | 10,7 | 25   | 12     | 8   |
| K0384.21635 | B    | M16 | 10,7 | 35   | 12     | 8   |
| K0384.21650 | B    | M16 | 10,7 | 50   | 12     | 8   |

### Material:

Screw and ball stainless steel.

### Version:

Stainless steel bright.

### Sample order:

K0384.2046

### Note:

Surfaces which are not flat and parallel can be firmly clamped or supported with a flattened ball, the movable ball can adapt itself up to 9°.

Longer versions have been designed especially to be glued in. This enables mechanical connecting elements with male thread to be made cost-effectively for small and medium-sized series.

## Ball-end thrust screws without head

with flattened ball and rotation lock



### Material:

Screw, high-carbon steel, grade 10.9  
Ball, ball-bearing steel.

### Version:

Screw black.  
Ball hardened, bright.

### Sample order:

K0383.50820

### Note:

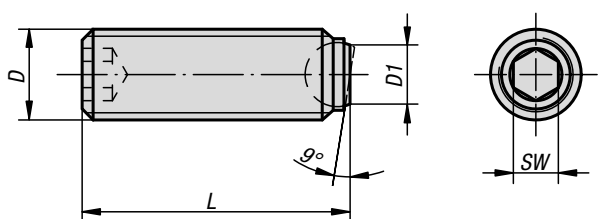
Surfaces which are not flat and parallel can be firmly clamped or supported with a flattened ball, the movable ball can adapt itself up to 9°. Longer versions have been designed especially to be glued in. This enables mechanical connecting elements with male thread to be made cost-effectively for small and medium-sized series.

### Drawing reference:

Form BV: flattened ball non-rotating

Form FV: flattened ball diamond grip non-rotating

(BV) (FV)

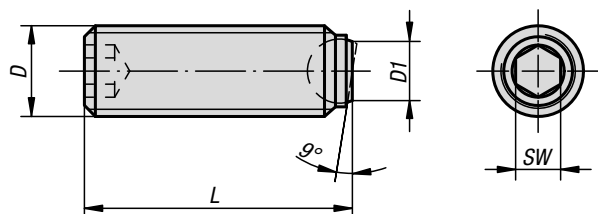


### KIPP Ball-end thrust screws without head, with flattened ball and rotation lock

| Order No.<br>Form BV | Order No.<br>Form FV | D   | D1   | L    | Ball-Ø | SW | Load rating<br>max. kN<br>(static load only) |
|----------------------|----------------------|-----|------|------|--------|----|----------------------------------------------|
| K0383.50616          | -                    | M6  | 3    | 16,1 | 4      | 3  | 6                                            |
| K0383.50620          | -                    | M6  | 3    | 20,1 | 4      | 3  | 6                                            |
| K0383.50612          | -                    | M6  | 3    | 12,1 | 4      | 3  | 6                                            |
| K0383.50625          | -                    | M6  | 3    | 25,1 | 4      | 3  | 6                                            |
| K0383.50816          | K0383.60816          | M8  | 4,1  | 16,3 | 5,5    | 4  | 9                                            |
| K0383.50820          | K0383.60820          | M8  | 4,1  | 20,3 | 5,5    | 4  | 9                                            |
| K0383.50825          | K0383.60825          | M8  | 4,1  | 25,3 | 5,5    | 4  | 9                                            |
| K0383.50830          | K0383.60830          | M8  | 4,1  | 30,3 | 5,5    | 4  | 9                                            |
| K0383.51025          | K0383.61025          | M10 | 5,6  | 25,3 | 7      | 5  | 12                                           |
| K0383.51020          | K0383.61020          | M10 | 5,6  | 20,3 | 7      | 5  | 12                                           |
| K0383.51035          | K0383.61035          | M10 | 5,6  | 35,3 | 7      | 5  | 12                                           |
| K0383.51040          | K0383.61040          | M10 | 5,6  | 40,2 | 7      | 5  | 12                                           |
| K0383.51230          | K0383.61230          | M12 | 7    | 30,2 | 8,5    | 6  | 18                                           |
| K0383.51220          | K0383.61220          | M12 | 7    | 20,2 | 8,5    | 6  | 18                                           |
| K0383.51240          | K0383.61240          | M12 | 7    | 40,2 | 8,5    | 6  | 18                                           |
| K0383.51250          | K0383.61250          | M12 | 7    | 50   | 8,5    | 6  | 18                                           |
| K0383.51635          | K0383.61635          | M16 | 10,7 | 35   | 12     | 8  | 36                                           |
| K0383.51650          | K0383.61650          | M16 | 10,7 | 50   | 12     | 8  | 36                                           |
| K0383.52030          | K0383.62030          | M20 | 13,5 | 30   | 15     | 10 | 60                                           |
| K0383.52040          | K0383.62040          | M20 | 13,5 | 40   | 15     | 10 | 60                                           |
| K0383.52050          | K0383.62050          | M20 | 13,5 | 50   | 15     | 10 | 60                                           |
| K0383.52060          | K0383.62060          | M20 | 13,5 | 60   | 15     | 10 | 60                                           |
| K0383.52435          | K0383.62435          | M24 | 15,8 | 35   | 18     | 12 | 80                                           |
| K0383.52480          | K0383.62480          | M24 | 15,8 | 80   | 18     | 12 | 80                                           |
| K0383.52450          | K0383.62450          | M24 | 15,8 | 50   | 18     | 12 | 80                                           |

# Ball-end thrust screws without head

stainless steel with flattened ball and rotation lock


**Material:**

Screw and ball stainless steel.

**Version:**

Stainless steel bright.

**Sample order:**

K0384.50612

**Note:**

Surfaces which are not flat and parallel can be firmly clamped or supported with a flattened ball, the movable ball can adapt itself up to 9°.

Longer versions have been designed especially to be glued in. This enables mechanical connecting elements with male thread to be made cost-effectively for small and medium-sized series. Surfaces which are not flat and parallel can be firmly clamped or supported with a flattened ball, the movable ball can adapt itself up to 9°.

Longer versions have been designed especially to be glued in. This enables mechanical connecting elements with male thread to be made cost-effectively for small and medium-sized series.

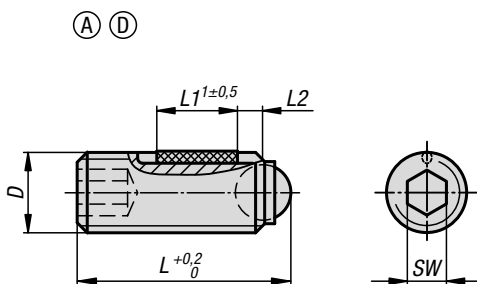
## KIPP Ball-end thrust screws without head stainless steel with flattened ball and rotation lock

| Order No.   | Form | D   | D1   | L    | Ball-Ø | SW |
|-------------|------|-----|------|------|--------|----|
| K0384.50612 | BV   | M6  | 3    | 12,1 | 4      | 3  |
| K0384.50616 | BV   | M6  | 3    | 16,1 | 4      | 3  |
| K0384.50620 | BV   | M6  | 3    | 20,1 | 4      | 3  |
| K0384.50625 | BV   | M6  | 3    | 25,1 | 4      | 3  |
| K0384.50816 | BV   | M8  | 4,1  | 16,3 | 5,5    | 4  |
| K0384.50820 | BV   | M8  | 4,1  | 20,3 | 5,5    | 4  |
| K0384.50825 | BV   | M8  | 4,1  | 25,3 | 5,5    | 4  |
| K0384.50830 | BV   | M8  | 4,1  | 30,3 | 5,5    | 4  |
| K0384.51020 | BV   | M10 | 5,6  | 20,3 | 7      | 5  |
| K0384.51025 | BV   | M10 | 5,6  | 25,3 | 7      | 5  |
| K0384.51035 | BV   | M10 | 5,6  | 35,3 | 7      | 5  |
| K0384.51040 | BV   | M10 | 5,6  | 40,2 | 7      | 5  |
| K0384.51220 | BV   | M12 | 7    | 20,2 | 8,5    | 6  |
| K0384.51230 | BV   | M12 | 7    | 30,2 | 8,5    | 6  |
| K0384.51240 | BV   | M12 | 7    | 40,2 | 8,5    | 6  |
| K0384.51250 | BV   | M12 | 7    | 50   | 8,5    | 6  |
| K0384.51635 | BV   | M16 | 10,7 | 35   | 12     | 8  |
| K0384.51650 | BV   | M16 | 10,7 | 50   | 12     | 8  |



# Ball-end thrust screws without head

with full ball, with thread lock



## Drawing reference:

Form A: steel ball

Form D: POM ball

L2 = approx. 2x pitch

## Material:

Screw carbon steel, grade 10.9

Ball, ball-bearing steel or POM.

Thread lock nylon.

## Version:

Screw black.

Ball hardened, bright.

## Sample order:

K0666.1046

## Note:

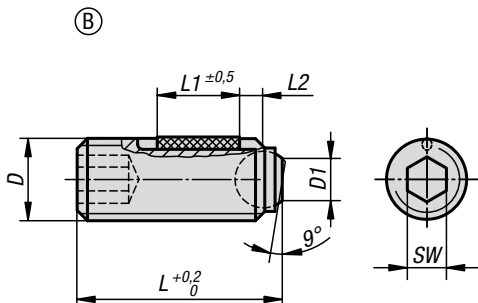
Ball-end thrust screws with full ball are used when a clean, polished contact surface is required.

## KIPP Ball-end thrust screws without head, steel, with full ball, with thread lock

| Order No.<br>Form A | Order No.<br>Form D | D   | L    | L1  | Ball-Ø | SW  | Load rating<br>max. kN<br>(static load only) |
|---------------------|---------------------|-----|------|-----|--------|-----|----------------------------------------------|
| K0666.1046          | K0666.3046          | M4  | 6    | 2,5 | 2,5    | 2   | 3,5/0,3                                      |
| K0666.10410         | K0666.30410         | M4  | 10   | 3,5 | 2,5    | 2   | 3,5/0,3                                      |
| K0666.10416         | K0666.30416         | M4  | 16   | 5   | 2,5    | 2   | 3,5/0,3                                      |
| K0666.1058          | K0666.3058          | M5  | 8    | 3,5 | 3      | 2,5 | 4,5/0,5                                      |
| K0666.10512         | K0666.30512         | M5  | 12   | 5   | 3      | 2,5 | 4,5/0,5                                      |
| K0666.10520         | K0666.30520         | M5  | 20   | 6   | 3      | 2,5 | 4,5/0,5                                      |
| K0666.10610         | K0666.30610         | M6  | 10,8 | 3,5 | 4      | 3   | 9/0,9                                        |
| K0666.10616         | K0666.30616         | M6  | 16,8 | 7   | 4      | 3   | 9/0,9                                        |
| K0666.10620         | K0666.30620         | M6  | 20,8 | 7   | 4      | 3   | 9/0,9                                        |
| K0666.10625         | K0666.30625         | M6  | 25,8 | 7   | 4      | 3   | 9/0,9                                        |
| K0666.10650         | -                   | M6  | 50,8 | 7   | 4      | 3   | 9                                            |
| K0666.10660         | -                   | M6  | 60,8 | 7   | 4      | 3   | 9                                            |
| K0666.10810         | K0666.30810         | M8  | 11,2 | 3,5 | 5,5    | 4   | 10/1,5                                       |
| K0666.10812         | K0666.30812         | M8  | 13,2 | 5   | 5,5    | 4   | 10/1,5                                       |
| K0666.10820         | K0666.30820         | M8  | 21,2 | 8   | 5,5    | 4   | 15/1,5                                       |
| K0666.10825         | K0666.30825         | M8  | 26,2 | 8   | 5,5    | 4   | 15/1,5                                       |
| K0666.10830         | K0666.30830         | M8  | 31,2 | 8   | 5,5    | 4   | 15/1,5                                       |
| K0666.10850         | -                   | M8  | 51,2 | 8   | 5,5    | 4   | 15                                           |
| K0666.10860         | -                   | M8  | 61,2 | 8   | 5,5    | 4   | 15                                           |
| K0666.10880         | -                   | M8  | 81,2 | 8   | 5,5    | 4   | 15                                           |
| K0666.11012         | K0666.31012         | M10 | 13,7 | 5   | 7      | 5   | 20/2                                         |
| K0666.11016         | K0666.31016         | M10 | 17,7 | 9   | 7      | 5   | 20/2                                         |
| K0666.11020         | K0666.31020         | M10 | 21,7 | 9   | 7      | 5   | 20/2                                         |
| K0666.11025         | K0666.31025         | M10 | 26,7 | 9   | 7      | 5   | 20/2                                         |
| K0666.11035         | K0666.31035         | M10 | 36,7 | 9   | 7      | 5   | 20/2                                         |
| K0666.11216         | K0666.31216         | M12 | 18   | 8   | 8,5    | 6   | 30/3                                         |
| K0666.11220         | K0666.31220         | M12 | 22   | 10  | 8,5    | 6   | 30/3                                         |
| K0666.11230         | K0666.31230         | M12 | 32   | 10  | 8,5    | 6   | 30/3                                         |
| K0666.11240         | K0666.31240         | M12 | 42   | 10  | 8,5    | 6   | 30/3                                         |
| K0666.11620         | -                   | M16 | 23,3 | 10  | 12     | 8   | 60                                           |
| K0666.11625         | -                   | M16 | 28,3 | 14  | 12     | 8   | 60                                           |
| K0666.11635         | -                   | M16 | 38,3 | 14  | 12     | 8   | 60                                           |
| K0666.11650         | -                   | M16 | 53,3 | 14  | 12     | 8   | 60                                           |

# Ball-end thrust screws without head

with flattened ball, with thread lock



## Material:

Screw carbon steel, grade 10.9

Ball, ball-bearing steel.

Thread lock nylon.

## Version:

Screw black.

Ball hardened, bright.

## Sample order:

K0666.20610

## Note:

Surfaces which are not flat and parallel can be firmly clamped or supported with a flattened ball, the movable ball can adapt itself up to 9°.

## Drawing reference:

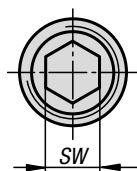
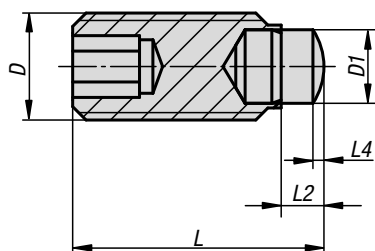
Form B: with flattened ball

L2 = approx. 2x pitch

## KIPP Ball-end thrust screws without head, with flattened ball, steel, with thread lock

| Order No.<br>Form B | D   | D1   | L    | L1  | Ball-Ø | SW | Load rating<br>max. kN<br>(static load only) |
|---------------------|-----|------|------|-----|--------|----|----------------------------------------------|
| K0666.20610         | M6  | 3    | 10,1 | 3,5 | 4      | 3  | 9                                            |
| K0666.20616         | M6  | 3    | 16,1 | 7   | 4      | 3  | 9                                            |
| K0666.20620         | M6  | 3    | 20,1 | 7   | 4      | 3  | 9                                            |
| K0666.20625         | M6  | 3    | 25,1 | 7   | 4      | 3  | 9                                            |
| K0666.20650         | M6  | 3    | 50,1 | 7   | 4      | 3  | 9                                            |
| K0666.20660         | M6  | 3    | 60,1 | 7   | 4      | 3  | 9                                            |
| K0666.20810         | M8  | 4,1  | 10,3 | 3,5 | 5,5    | 4  | 10                                           |
| K0666.20812         | M8  | 4,1  | 12,3 | 5   | 5,5    | 4  | 10                                           |
| K0666.20820         | M8  | 4,1  | 20,3 | 8   | 5,5    | 4  | 15                                           |
| K0666.20825         | M8  | 4,1  | 25,3 | 8   | 5,5    | 4  | 15                                           |
| K0666.20830         | M8  | 4,1  | 30,3 | 8   | 5,5    | 4  | 15                                           |
| K0666.20850         | M8  | 4,1  | 50,3 | 8   | 5,5    | 4  | 15                                           |
| K0666.20860         | M8  | 4,1  | 60,3 | 8   | 5,5    | 4  | 15                                           |
| K0666.20880         | M8  | 4,1  | 80,3 | 8   | 5,5    | 4  | 15                                           |
| K0666.21012         | M10 | 5,6  | 12,3 | 5   | 7      | 5  | 20                                           |
| K0666.21016         | M10 | 5,6  | 16,3 | 9   | 7      | 5  | 20                                           |
| K0666.21020         | M10 | 5,6  | 20,3 | 9   | 7      | 5  | 20                                           |
| K0666.21025         | M10 | 5,6  | 25,3 | 9   | 7      | 5  | 20                                           |
| K0666.21035         | M10 | 5,6  | 35,3 | 9   | 7      | 5  | 20                                           |
| K0666.21216         | M12 | 7    | 16,2 | 8   | 8,5    | 6  | 30                                           |
| K0666.21220         | M12 | 7    | 20,2 | 10  | 8,5    | 6  | 30                                           |
| K0666.21230         | M12 | 7    | 30,2 | 10  | 8,5    | 6  | 30                                           |
| K0666.21240         | M12 | 7    | 40,2 | 10  | 8,5    | 6  | 30                                           |
| K0666.21620         | M16 | 10,7 | 20   | 10  | 12     | 8  | 60                                           |
| K0666.21625         | M16 | 10,7 | 25   | 14  | 12     | 8  | 60                                           |
| K0666.21635         | M16 | 10,7 | 35   | 14  | 12     | 8  | 60                                           |
| K0666.21650         | M16 | 10,7 | 50   | 14  | 12     | 8  | 60                                           |

# Thrust screws with rounded half-dog point


**Material:**

Screw steel grade 10.9.

Pin tool steel.

**Version:**

Pin, hardened.

Screw and pin black oxidised.

**Sample order:**

K0403.05X09

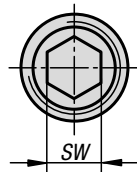
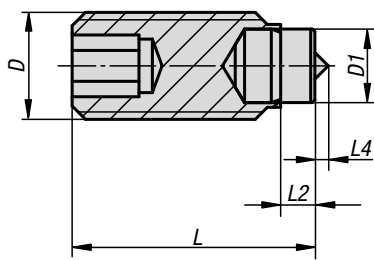
**Note:**

These rounded half-dog point thrust screws are used when a punctiform thrust or support point are required.

## KIPP Thrust screws with rounded half-dog point

| Order No.   | D   | D1  | L    | L2  | L4  | SW  | Load rating<br>max. kN<br>(static load only) |
|-------------|-----|-----|------|-----|-----|-----|----------------------------------------------|
| K0403.05X09 | M5  | 3   | 9    | 1,8 | 0,5 | 2,5 | 4,5                                          |
| K0403.05X13 | M5  | 3   | 13   | 1,8 | 0,5 | 2,5 | 4,5                                          |
| K0403.05X17 | M5  | 3   | 17   | 1,8 | 0,5 | 2,5 | 4,5                                          |
| K0403.05X21 | M5  | 3   | 21   | 1,8 | 0,5 | 2,5 | 4,5                                          |
| K0403.06X14 | M6  | 4   | 14,3 | 2,7 | 0,8 | 3   | 9                                            |
| K0403.06X18 | M6  | 4   | 18,3 | 2,7 | 0,8 | 3   | 9                                            |
| K0403.06X22 | M6  | 4   | 22,3 | 2,7 | 0,8 | 3   | 9                                            |
| K0403.06X27 | M6  | 4   | 27,3 | 2,7 | 0,8 | 3   | 9                                            |
| K0403.08X15 | M8  | 5,5 | 14,8 | 3,2 | 0,8 | 4   | 15                                           |
| K0403.08X19 | M8  | 5,5 | 18,8 | 3,2 | 0,8 | 4   | 15                                           |
| K0403.08X23 | M8  | 5,5 | 22,8 | 3,2 | 0,8 | 4   | 15                                           |
| K0403.08X28 | M8  | 5,5 | 27,8 | 3,2 | 0,8 | 4   | 15                                           |
| K0403.08X35 | M8  | 5,5 | 34,8 | 3,2 | 0,8 | 4   | 15                                           |
| K0403.10X19 | M10 | 7   | 18,9 | 3,5 | 1,1 | 5   | 20                                           |
| K0403.10X23 | M10 | 7   | 22,9 | 3,5 | 1,1 | 5   | 20                                           |
| K0403.10X28 | M10 | 7   | 27,9 | 3,5 | 1,1 | 5   | 20                                           |
| K0403.10X35 | M10 | 7   | 34,9 | 3,5 | 1,1 | 5   | 20                                           |
| K0403.10X43 | M10 | 7   | 42,9 | 3,5 | 1,1 | 5   | 20                                           |

# Thrust screws with point

**Material:**

Screw steel grade 10.9.

Pin tool steel.

**Version:**

Pin, hardened.

Screw and pin black oxidised.

**Sample order:**

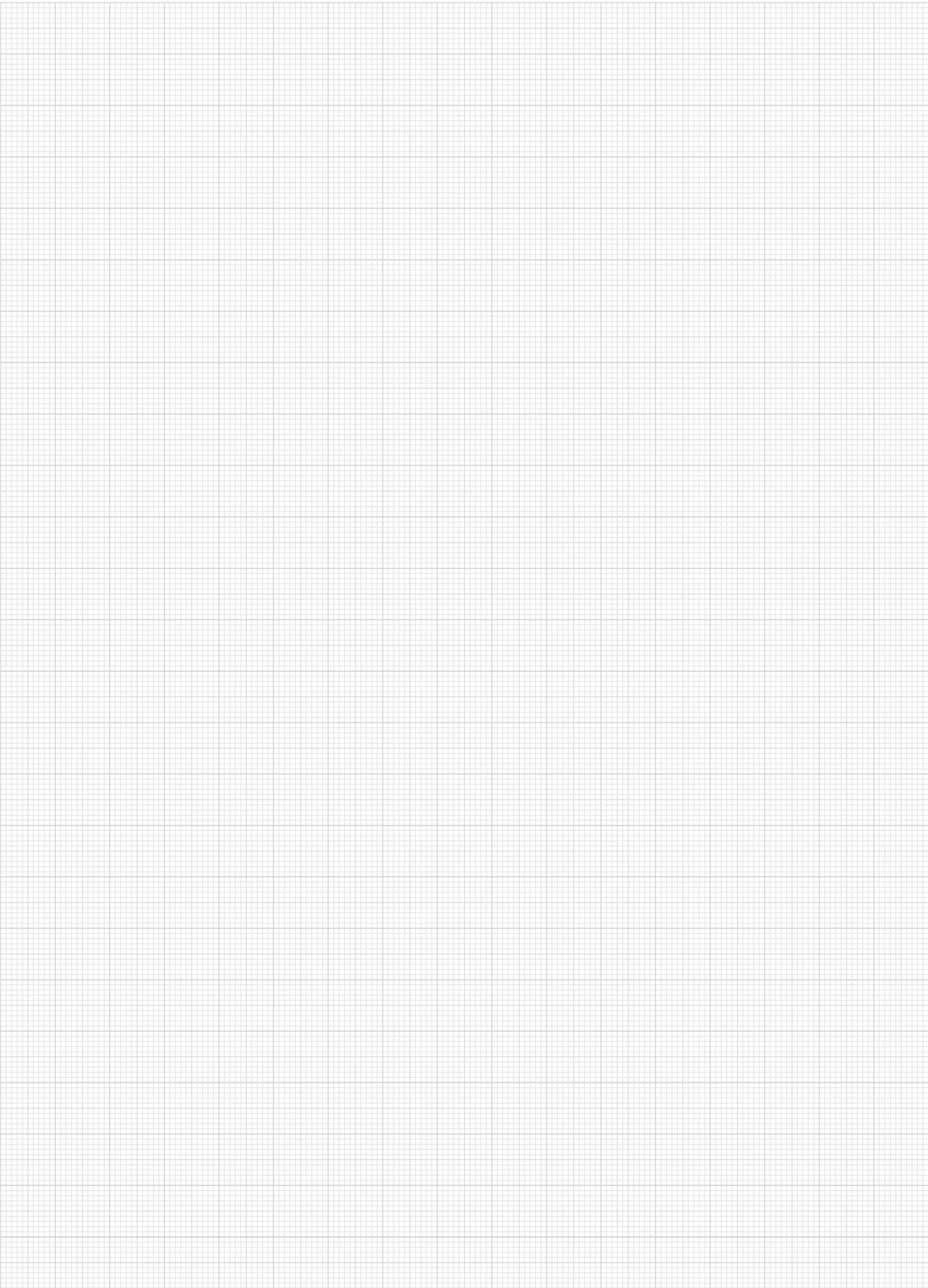
K0272.05X09

**Note:**

These thrust screws with point are used when additional positive fixation is required.

## KIPP Thrust screws with point

| Order No.   | D   | D1  | L    | L2  | L4  | SW  | Load rating<br>max. kN<br>(static load only) |
|-------------|-----|-----|------|-----|-----|-----|----------------------------------------------|
| K0272.05X09 | M5  | 3   | 8,5  | 1,3 | 0,5 | 2,5 | 4,5                                          |
| K0272.05X13 | M5  | 3   | 12,5 | 1,3 | 0,5 | 2,5 | 4,5                                          |
| K0272.05X17 | M5  | 3   | 16,5 | 1,3 | 0,5 | 2,5 | 4,5                                          |
| K0272.05X21 | M5  | 3   | 20,5 | 1,3 | 0,5 | 2,5 | 4,5                                          |
| K0272.06X14 | M6  | 4   | 13,5 | 1,9 | 0,8 | 3   | 9                                            |
| K0272.06X18 | M6  | 4   | 17,5 | 1,9 | 0,8 | 3   | 9                                            |
| K0272.06X22 | M6  | 4   | 21,5 | 1,9 | 0,8 | 3   | 9                                            |
| K0272.06X27 | M6  | 4   | 26,5 | 1,9 | 0,8 | 3   | 9                                            |
| K0272.08X14 | M8  | 5,5 | 14   | 2,4 | 1   | 4   | 15                                           |
| K0272.08X18 | M8  | 5,5 | 18   | 2,4 | 1   | 4   | 15                                           |
| K0272.08X22 | M8  | 5,5 | 22   | 2,4 | 1   | 4   | 15                                           |
| K0272.08X27 | M8  | 5,5 | 27   | 2,4 | 1   | 4   | 15                                           |
| K0272.08X34 | M8  | 5,5 | 34   | 2,4 | 1   | 4   | 15                                           |
| K0272.10X18 | M10 | 7   | 18   | 2,6 | 1,5 | 5   | 20                                           |
| K0272.10X22 | M10 | 7   | 22   | 2,6 | 1,5 | 5   | 20                                           |
| K0272.10X27 | M10 | 7   | 27   | 2,6 | 1,5 | 5   | 20                                           |
| K0272.10X34 | M10 | 7   | 34   | 2,6 | 1,5 | 5   | 20                                           |
| K0272.10X42 | M10 | 7   | 42   | 2,6 | 1,5 | 5   | 20                                           |

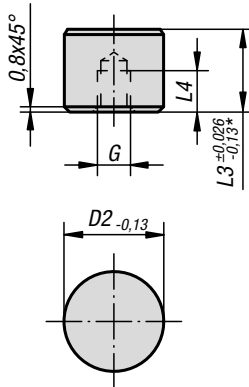


# Grippers and inserts

round

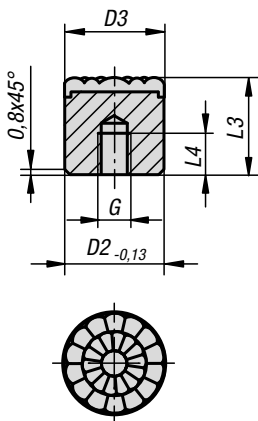


Form C, E, K

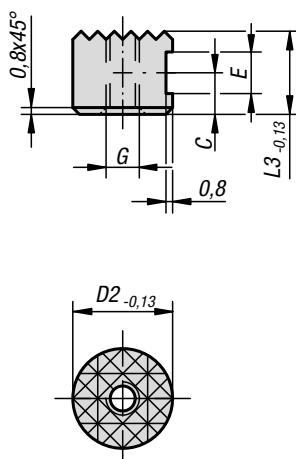


\* Applies to Form K

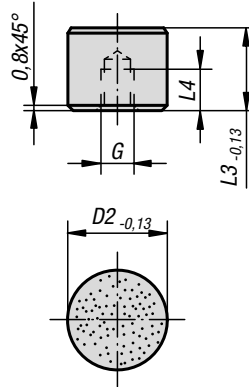
Form P  
stainless steel insert,  
PUR surface



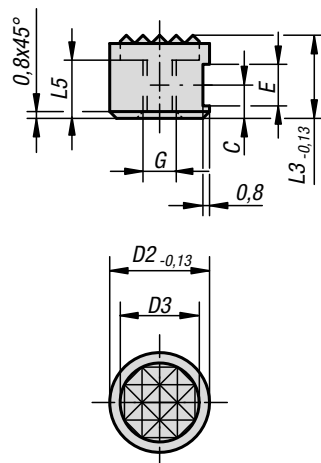
Form F  
diamond grip insert



Form O  
stainless steel insert  
diamond impregnated



Form M  
carbide steel  
diamond grip insert



## Material:

Form C, F, M tool steel

Form E, O, P stainless steel

Form K POM

## Version:

Form C hardened and black oxidised.

Form E hardened, bright.

Form K white.

Form O with diamond impregnated surface comparable to 100 grade abrasive grit.

Form P with polyurethane surface, hardness Shore 60.

Form F, hardened and black oxidised.

Form M with carbide serrations, black oxidised.

## Sample order:

K0385.2510

## Note:

Grippers and inserts are ideal for use in clamping arms, gripping systems, clamping fixtures, clamping jaws and self-aligning pads. The use of grippers allows the transfer of very high torque values and above average grip, even with hard materials and surface irregularities.

Form O: The abrasive diamond surface is bonded firmly to the base. It is ideally suited to supporting smooth or slippery applications with a minimum of clamping pressure. This allows the diamond particles to get a firm grip on a very small area with minimum damage to the surface.

The diamond surface offers excellent wear resistance.

Form P: The polyurethane surface is vulcanised firmly to the ball. It is abrasion-resistant and does not discolour. It offers optimum protection against damage to delicate surfaces. The pearl-like surface gives a firm grip and allows air to escape so as to prevent any suction effect between the contact surface and the self-aligning pads.

Grippers and inserts can be fitted in the following self-aligning pads:

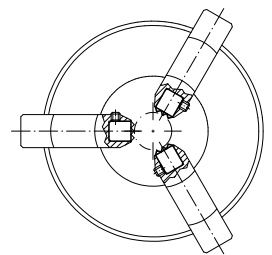
Order No. K0285.117X022 up to K0285.936X036

Order No. K0289.110X015 up to K0289.924X100

Order No. K0291.120X030 up to K0291.924X080

# Grippers and inserts

round



## KIPP Round inserts Form C, E, K, O

| Order No.<br>Form C | Order No.<br>Form E | Order No.<br>Form K | Order No.<br>Form O | D2 | L3 | L4  | G  |
|---------------------|---------------------|---------------------|---------------------|----|----|-----|----|
| K0385.10108         | K0385.10102         | K0385.10109         | K0385.10105         | 10 | 10 | 5   | M5 |
| K0385.10128         | K0385.10122         | K0385.10129         | K0385.10125         | 10 | 12 | 6,4 | M5 |
| K0385.12108         | K0385.12102         | K0385.12109         | K0385.12105         | 12 | 10 | 5   | M5 |
| K0385.12128         | K0385.12122         | K0385.12129         | K0385.12125         | 12 | 12 | 6,4 | M5 |
| K0385.16108         | K0385.16102         | K0385.16109         | K0385.16105         | 16 | 10 | 5   | M6 |
| K0385.16128         | K0385.16122         | K0385.16129         | K0385.16125         | 16 | 12 | 6,4 | M6 |
| K0385.20108         | K0385.20102         | K0385.20109         | K0385.20105         | 20 | 10 | 5   | M6 |
| K0385.20128         | K0385.20122         | K0385.20129         | K0385.20125         | 20 | 12 | 6,4 | M6 |
| K0385.25108         | K0385.25102         | K0385.25109         | K0385.25105         | 25 | 10 | 5   | M6 |
| K0385.25128         | K0385.25122         | K0385.25129         | K0385.25125         | 25 | 12 | 6,4 | M6 |

## KIPP Round inserts Form P

| Order No.   | Form | D2 | D3 | L3 | L4 | G  |
|-------------|------|----|----|----|----|----|
| K0385.08126 | P    | 8  | 8  | 12 | 6  | M4 |
| K0385.10126 | P    | 10 | 10 | 12 | 6  | M5 |
| K0385.12126 | P    | 12 | 13 | 12 | 6  | M5 |
| K0385.16126 | P    | 16 | 16 | 12 | 6  | M6 |
| K0385.20126 | P    | 20 | 21 | 12 | 6  | M6 |
| K0385.25126 | P    | 25 | 27 | 12 | 6  | M6 |

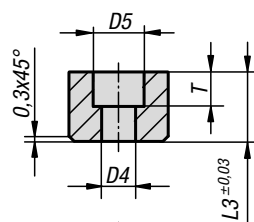
## KIPP Grippers Form F, M

| Order No.<br>Form F | Order No.<br>Form M | D2 | D3    | L3 | L5 | C   | E    | G  |
|---------------------|---------------------|----|-------|----|----|-----|------|----|
| K0385.1010          | K0385.10107         | 10 | -7,9  | 10 | -6 | 4,5 | 4,75 | M5 |
| K0385.1210          | K0385.12107         | 12 | -9,5  | 10 | -6 | 4,5 | 4,75 | M5 |
| K0385.1212          | K0385.12127         | 12 | -9,5  | 12 | -7 | 6   | 4,75 | M5 |
| K0385.1610          | K0385.16107         | 16 | -12,7 | 10 | -6 | 4,5 | 4,75 | M6 |
| K0385.2010          | K0385.20107         | 20 | -15,9 | 10 | -6 | 4,5 | 4,75 | M6 |
| K0385.2510          | K0385.25107         | 25 | -19   | 10 | -6 | 4,5 | 4,75 | M6 |

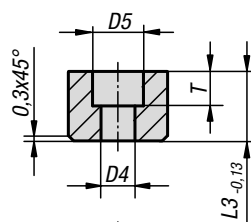
## Grippers and inserts

round, with counterbore

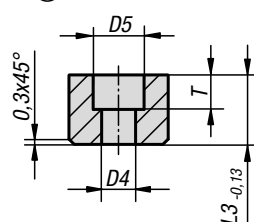
(C, E)



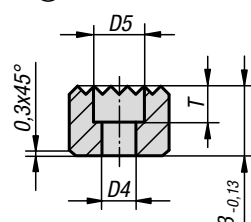
(K)



(O)



(F)



### Material:

Form C, F tool steel  
Form E, O stainless steel  
Form K POM

### Version:

Form C, F hardened and black oxidised.  
Form E, hardened, bright.  
Form K white.  
Form O with diamond impregnated surface comparable to 100 grade abrasive grit.

### Sample order:

K0385.110108

### Note:

Grippers and inserts are ideal for use in clamping arms, gripping systems, clamping fixtures, clamping jaws and self-aligning pads. The use of grippers allows the transfer of very high torque values and above average grip, even with hard materials and surface irregularities.

Form O: The abrasive diamond surface is bonded firmly to the base. It is ideally suited to supporting smooth or slippery applications with a minimum of clamping pressure. This allows the diamond particles to get a firm grip on a very small area with minimum damage to the surface. The diamond surface offers excellent wear resistance.

### KIPP Round inserts

| Order No.<br>Form C | Order No.<br>Form O | Order No.<br>Form K | Order No.<br>Form E | D2 | D4  | D5 | L3 | T   |
|---------------------|---------------------|---------------------|---------------------|----|-----|----|----|-----|
| K0385.110108        | K0385.110105        | K0385.110109        | K0385.110102        | 10 | 3,4 | 6  | 10 | 5   |
| K0385.110128        | K0385.110125        | K0385.110129        | K0385.110122        | 10 | 3,4 | 6  | 12 | 5   |
| -                   | K0385.112105        | -                   | -                   | 12 | 4,5 | 8  | 10 | 5,6 |
| -                   | K0385.112125        | -                   | -                   | 12 | 4,5 | 8  | 12 | 5,6 |
| K0385.112108        | -                   | K0385.112109        | K0385.112102        | 12 | 4,5 | 9  | 10 | 5,6 |
| K0385.112128        | -                   | K0385.112129        | K0385.112122        | 12 | 4,5 | 9  | 12 | 5,6 |
| K0385.116108        | K0385.116105        | K0385.116109        | K0385.116102        | 16 | 5,5 | 11 | 10 | 6,6 |
| K0385.116128        | K0385.116125        | K0385.116129        | K0385.116122        | 16 | 5,5 | 11 | 12 | 6,6 |
| K0385.120108        | K0385.120105        | K0385.120109        | K0385.120102        | 20 | 6,6 | 11 | 10 | 7,6 |
| K0385.120128        | K0385.120125        | K0385.120129        | K0385.120122        | 20 | 6,6 | 11 | 12 | 7,6 |
| K0385.125108        | K0385.125105        | K0385.125109        | K0385.125102        | 25 | 6,6 | 11 | 10 | 7,6 |
| K0385.125128        | K0385.125125        | K0385.125129        | K0385.125122        | 25 | 6,6 | 11 | 12 | 7,6 |

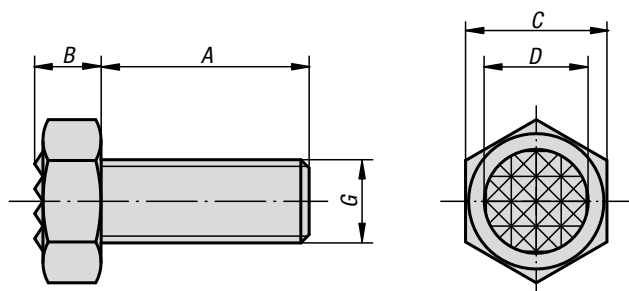
### KIPP Round grippers

| Order No.<br>Form F | D2 | D4  | D5 | L3 | T   |
|---------------------|----|-----|----|----|-----|
| K0385.11210         | 12 | 4,5 | 8  | 10 | 5,6 |
| K0385.11212         | 12 | 4,5 | 8  | 12 | 5,6 |
| K0385.11610         | 16 | 4,5 | 8  | 10 | 5,6 |
| K0385.11612         | 16 | 4,5 | 8  | 12 | 5,6 |
| K0385.12010         | 20 | 5,5 | 10 | 10 | 6,6 |
| K0385.12012         | 20 | 5,5 | 10 | 12 | 6,6 |
| K0385.12510         | 25 | 6,6 | 11 | 10 | 7,6 |
| K0385.12512         | 25 | 6,6 | 11 | 12 | 7,6 |



# Gripper screws

hexagonal


**Material:**

Hex head screw, grade 10.9.  
Serrations carbide, hardness 72-74 HRC.

**Version:**

Black oxidised.

**Sample order:**

K0386.1710

**Note:**

The serrated carbide tips are soldered in.

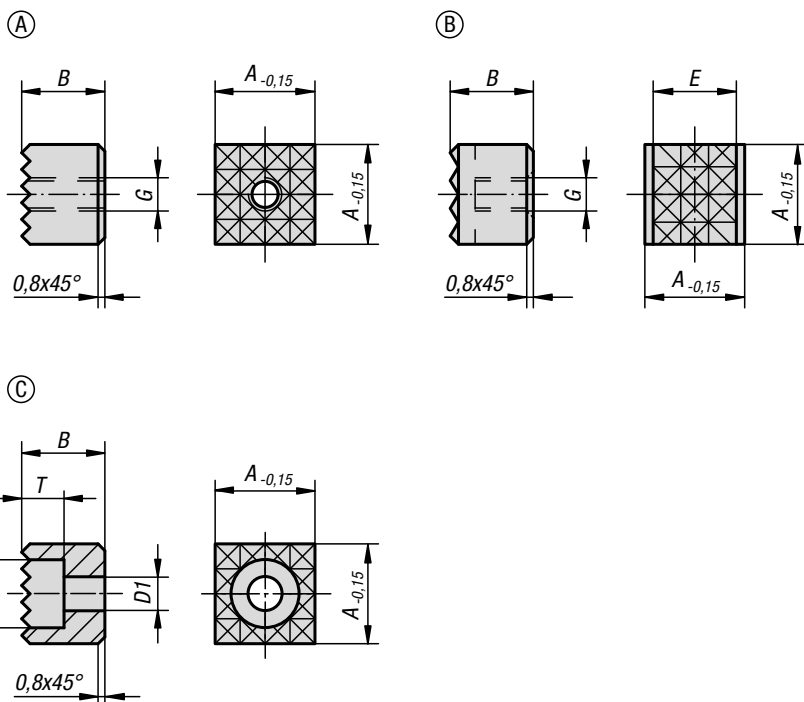


## KIPP Gripper screws, hexagonal

| Order No.   | A  | B    | C  | D    | G   | Serration  |
|-------------|----|------|----|------|-----|------------|
| K0386.1006  | 25 | 5    | 10 | 7,9  | M6  | extra fine |
| K0386.1308  | 25 | 6,4  | 13 | 9,5  | M8  | fine       |
| K0386.1710  | 25 | 8,3  | 17 | 12,7 | M10 | fine       |
| K0386.17102 | 40 | 8,3  | 17 | 12,7 | M10 | fine       |
| K0386.1912  | 25 | 8,7  | 19 | 15,9 | M12 | fine       |
| K0386.19122 | 40 | 8,7  | 19 | 15,9 | M12 | fine       |
| K0386.2416  | 35 | 11   | 24 | 19   | M16 | fine       |
| K0386.24162 | 50 | 11   | 24 | 19   | M16 | fine       |
| K0386.3020  | 40 | 13,7 | 30 | 25,4 | M20 | extra fine |
| K0386.30202 | 60 | 13,7 | 30 | 25,4 | M20 | extra fine |

# Gripper pads

square

**Material:**

Hardened tool steel or carbide.

**Version:**

Black oxidised.

**Sample order:**

K0387.2506

**Note:**

Grippers and inserts are ideal for use in clamping arms, gripping systems, clamping fixtures, clamping jaws and self-aligning pads.

Grippers transfer very high torque values, even with hard materials and surface irregularities. Grippers guarantee above average holding forces at high cutting forces.

The serrated carbide tips are soldered in.

**Drawing reference:**

Form A: tool steel

Form B: tool steel, carbide diamond grip

Form C: tool steel

## KIPP Gripper pads, square

| Order No.     | Form | A  | B  | D1  | D2 | E    | G  | T   | Serration  |
|---------------|------|----|----|-----|----|------|----|-----|------------|
| K0387.1005    | A    | 10 | 10 | -   | -  | -    | M5 | -   | extra fine |
| K0387.101205  | A    | 10 | 12 | -   | -  | -    | M5 | -   | extra fine |
| K0387.1205    | A    | 12 | 10 | -   | -  | -    | M5 | -   | fine       |
| K0387.121205  | A    | 12 | 12 | -   | -  | -    | M5 | -   | fine       |
| K0387.1606    | A    | 16 | 10 | -   | -  | -    | M6 | -   | fine       |
| K0387.161206  | A    | 16 | 12 | -   | -  | -    | M6 | -   | fine       |
| K0387.2005    | A    | 20 | 10 | -   | -  | -    | M5 | -   | fine       |
| K0387.201205  | A    | 20 | 12 | -   | -  | -    | M5 | -   | fine       |
| K0387.2506    | A    | 25 | 10 | -   | -  | -    | M6 | -   | fine       |
| K0387.251206  | A    | 25 | 12 | -   | -  | -    | M6 | -   | fine       |
| K0387.12057   | B    | 12 | 10 | -   | -  | 10,3 | M5 | -   | fine       |
| K0387.1210048 | C    | 12 | 10 | 4,5 | 8  | -    | -  | 5,6 | fine       |
| K0387.1212048 | C    | 12 | 12 | 4,5 | 8  | -    | -  | 5,6 | fine       |
| K0387.1610048 | C    | 16 | 10 | 4,5 | 8  | -    | -  | 5,6 | fine       |
| K0387.1612048 | C    | 16 | 12 | 4,5 | 8  | -    | -  | 5,6 | fine       |
| K0387.2010058 | C    | 20 | 10 | 5,5 | 10 | -    | -  | 6,6 | fine       |
| K0387.2012058 | C    | 20 | 12 | 5,5 | 10 | -    | -  | 6,6 | fine       |
| K0387.2510068 | C    | 25 | 10 | 6,6 | 11 | -    | -  | 7,6 | fine       |
| K0387.2512068 | C    | 25 | 12 | 6,6 | 11 | -    | -  | 7,6 | fine       |

## Gripper studs



**Material:**  
Hardened tool steel or carbide.

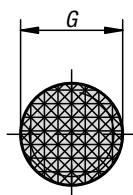
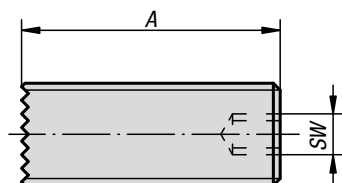
**Version:**  
Black oxidised.

**Sample order:**  
K0388.5012

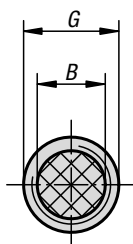
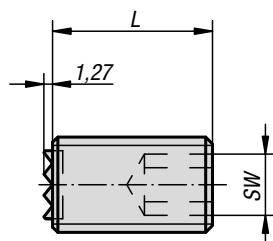
**Note:**  
The full thread on the grippers allows exact adjustment to the clamping application.  
The carbide tips are soldered in.

**Drawing reference:**  
Form A: tool steel  
Form B: tool steel, carbide diamond grip  
Form C: 4-point carbide insert

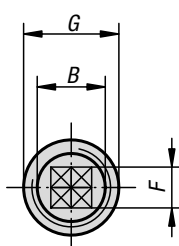
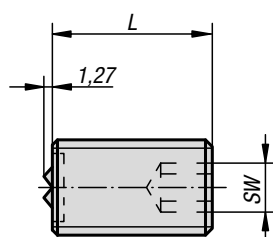
(A)



(B)



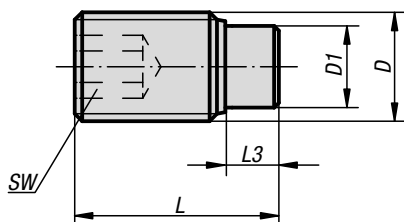
(C)



### KIPP Gripper studs

| Order No.   | Form | A  | L  | B    | G   | F   | SW |
|-------------|------|----|----|------|-----|-----|----|
| K0388.4010  | A    | 40 | -  | -    | M10 | -   | 3  |
| K0388.4012  | A    | 40 | -  | -    | M12 | -   | 5  |
| K0388.4016  | A    | 40 | -  | -    | M16 | -   | 6  |
| K0388.4020  | A    | 40 | -  | -    | M20 | -   | 8  |
| K0388.2510  | B    | -  | 25 | 6,4  | M10 | -   | 5  |
| K0388.5010  | B    | -  | 50 | 6,4  | M10 | -   | 5  |
| K0388.2512  | B    | -  | 25 | 7,9  | M12 | -   | 6  |
| K0388.5012  | B    | -  | 50 | 7,9  | M12 | -   | 6  |
| K0388.2516  | B    | -  | 25 | 11,2 | M16 | -   | 8  |
| K0388.5016  | B    | -  | 50 | 11,2 | M16 | -   | 8  |
| K0388.2520  | B    | -  | 25 | 12,7 | M20 | -   | 10 |
| K0388.5020  | B    | -  | 50 | 12,7 | M20 | -   | 10 |
| K0388.25124 | C    | -  | 25 | 7,9  | M12 | 6,5 | 6  |
| K0388.50124 | C    | -  | 50 | 7,9  | M12 | 6,5 | 6  |
| K0388.25164 | C    | -  | 25 | 11,2 | M16 | 8   | 8  |
| K0388.50164 | C    | -  | 50 | 11,2 | M16 | 8   | 8  |
| K0388.25204 | C    | -  | 25 | 12,7 | M20 | 8   | 10 |
| K0388.50204 | C    | -  | 50 | 12,7 | M20 | 8   | 10 |

## Thrust screws

**Material:**

Screw grade 10.9.  
Thrust pin brass or polyacetal.

**Version:**

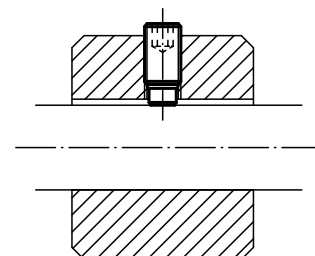
Screw black oxidised.

**Sample order:**

K0389.04X105 (include length L.)

**Note:**

Thrust screws are ideal for clamping or exerting pressure on threaded spindles, axles, shafts and treated surfaces without marring.

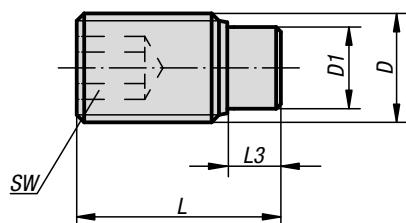
**KIPP Thrust screws**

| Order No. | Component material | D   | D1  | L                                  | L3  | SW  |
|-----------|--------------------|-----|-----|------------------------------------|-----|-----|
| K0389.04X | brass              | M4  | 2,5 | 6,5/10,5/16,5/30,5/40,5            | 1,2 | 2   |
| K0389.05X | brass              | M5  | 3   | 12,5/20,5/30,5/40,5/8,5            | 1,3 | 2,5 |
| K0389.06X | brass              | M6  | 4   | 11,5/17,5/26,5/41,5/51,5/61,5      | 1,9 | 3   |
| K0389.08X | brass              | M8  | 5,5 | 12/22/32/52/62/82                  | 2,4 | 4   |
| K0389.10X | brass              | M10 | 7   | 14/18/27/37/52/62/82               | 2,6 | 5   |
| K0389.12X | brass              | M12 | 8,5 | 18,5/22,5/32,5/42,5/52,5/62,5/82,5 | 3,3 | 6   |

| Order No.  | Component material | D   | D1  | L                                       | L3  | SW  |
|------------|--------------------|-----|-----|-----------------------------------------|-----|-----|
| K0389.104X | POM                | M4  | 2   | 11/13/17/31/41/7/9                      | 1,7 | 2   |
| K0389.105X | POM                | M5  | 3   | 11/13/17/21/31/41/9                     | 1,8 | 2,5 |
| K0389.106X | POM                | M6  | 3,5 | 11,3/13,3/17,3/21,3/26,3/41,3/51,3/61,3 | 1,7 | 3   |
| K0389.108X | POM                | M8  | 5   | 13,6/17,6/21,6/26,6/33,6/51,6/61,6/81,6 | 2   | 4   |
| K0389.110X | POM                | M10 | 6,5 | 17,9/21,9/26,9/33,9/41,9/51,9/61,9/81,9 | 2,5 | 5   |
| K0389.112X | POM                | M12 | 8   | 22,1/27,1/34,1/42,1/52,1/62,1/82,1      | 2,9 | 6   |

# Thrust screws

stainless steel



## Material:

Screw stainless steel.  
Pin brass or polyacetal.

## Version:

Screw bright.

## Sample order:

K0667.041X105 (include length L.)

## Note:

Thrust screws are ideal for clamping or exerting pressure on threaded spindles, axles, shafts and treated surfaces without marring.

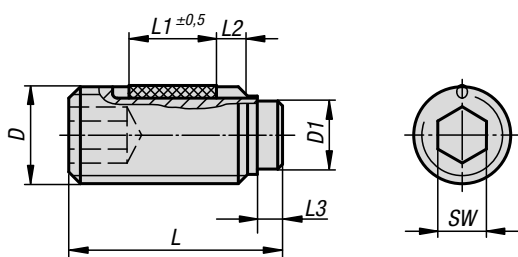
## KIPP Thrust screws, stainless steel

| Order No.  | Component material | D   | D1  | L                                       | L3  | SW  |
|------------|--------------------|-----|-----|-----------------------------------------|-----|-----|
| K0667.041X | brass              | M4  | 2,5 | 6,5/10,5/16,5/30,5/40,5                 | 1,2 | 2   |
| K0667.051X | brass              | M5  | 3   | 8,5/12,5/20,5/30,5/40,5                 | 1,3 | 2,5 |
| K0667.061X | brass              | M6  | 4   | 11,5/13,5/17,5/21,5/26,5/41,5/51,5/61,5 | 1,9 | 3   |
| K0667.081X | brass              | M8  | 5,5 | 12/22/32/52/62/82                       | 2,4 | 4   |
| K0667.101X | brass              | M10 | 7   | 14/18/27/37                             | 2,6 | 5   |
| K0667.121X | brass              | M12 | 8,5 | 22,5/32,5/42,5                          | 3,3 | 6   |

| Order No.   | Component material | D   | D1  | L                                       | L3  | SW  |
|-------------|--------------------|-----|-----|-----------------------------------------|-----|-----|
| K0667.1041X | POM                | M4  | 2   | 7/9/11/13/17/31/41                      | 1,7 | 2   |
| K0667.1051X | POM                | M5  | 3   | 9/11/13/17/21/31/41                     | 1,8 | 2,5 |
| K0667.1061X | POM                | M6  | 3,5 | 11,3/13,3/17,3/21,3/26,3/41,3/51,3/61,3 | 1,7 | 3   |
| K0667.1081X | POM                | M8  | 5   | 13,6/17,6/21,6/26,6/33,6/51,6/61,6/81,6 | 2   | 4   |
| K0667.1101X | POM                | M10 | 6,5 | 17,9/21,9/26,9/36,9                     | 2,5 | 5   |
| K0667.1121X | POM                | M12 | 8   | 22,1/32,1/42,1                          | 2,9 | 6   |

# Thrust screw

with thread lock



## Material:

Screw grade 10.9.  
Pin brass or POM.  
Thread lock nylon.

## Version:

Screw black oxidised.

## Sample order:

K0668.204X65 (include length L)

## Note:

Thrust screws are ideal for clamping or exerting pressure on threaded spindles, axles, shafts and treated surfaces without marring.

## Drawing reference:

L2 = approx. 2x thread pitch

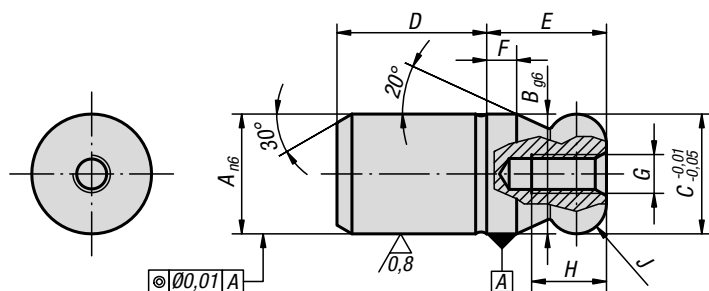
## KIPP Thrust screw with thread lock

| Order No.  | Component material | D   | D1  | L                                  | L1                  | L3  | SW  |
|------------|--------------------|-----|-----|------------------------------------|---------------------|-----|-----|
| K0668.204X | brass              | M4  | 2,5 | 6,5/10,5/16,5/30,5/40,5            | 2,5/3,5/5/5/5       | 1,2 | 2   |
| K0668.205X | brass              | M5  | 3   | 8,5/12,5/20,5/30,5/40,5            | 3,5/5/6/6/6         | 1,3 | 2,5 |
| K0668.206X | brass              | M6  | 4   | 11,5/17,5/26,5/41,5/51,5/61,5      | 3,5/7/7/7/7/7       | 1,9 | 3   |
| K0668.208X | brass              | M8  | 5,5 | 12/22/32/52/62/82                  | 3,5/8/8/8/8/8       | 2,4 | 4   |
| K0668.210X | brass              | M10 | 7   | 14/18/27/37/52/62/82               | 5/9/9/9/9/9/9       | 2,6 | 5   |
| K0668.212X | brass              | M12 | 8,5 | 18,5/22,5/32,5/42,5/52,5/62,5/82,5 | 8/10/10/10/10/10/10 | 3,3 | 6   |

| Order No.  | Component material | D   | D1  | L                                       | L1                   | L3  | SW  |
|------------|--------------------|-----|-----|-----------------------------------------|----------------------|-----|-----|
| K0668.304X | POM                | M4  | 2   | 7/9/11/13/17/31/41                      | 2,5/3,5/3,5/5/5/5/5  | 1,7 | 2   |
| K0668.305X | POM                | M5  | 3   | 9/11/13/17/21/31/41                     | 3,5/3,5/5/6/6/6/6    | 1,8 | 2,5 |
| K0668.306X | POM                | M6  | 3,5 | 11,3/13,3/17,3/21,3/26,3/41,3/51,3/61,3 | 3,5/5/7/7/7/7/7/7    | 1,7 | 3   |
| K0668.308X | POM                | M8  | 5   | 13,6/17,6/21,6/26,6/33,6/51,6/61,6/81,6 | 5/8/8/8/8/8/8/8      | 2   | 4   |
| K0668.310X | POM                | M10 | 6,5 | 17,9/21,9/26,9/33,9/41,9/51,9/61,9/81,9 | 9/9/9/9/9/9/9/9      | 2,5 | 5   |
| K0668.312X | POM                | M12 | 8   | 22,1/27,1/34,1/42,1/52,1/62,1/82,1      | 10/10/10/10/10/10/10 | 2,9 | 6   |

## Locating pins

with ball-end Form A



### Material:

Tool steel or 1.4305 stainless steel.

### Version:

Steel hardened and ground.

Stainless steel ground and kolsterised.

### Sample order:

K0350.12

### Note:

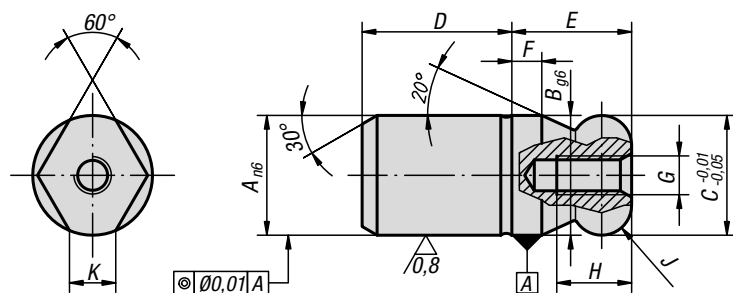
Ball end locating pins are specially designed to ease the locating process. The tendency to jam, caused by the locating hole not being at right angles to the pin or by the pushing force not being parallel to the pin axis, is minimized by the ball-end form (see illustration 1 for K0351 Form B)

## KIPP Locating pins with ball-end Form A

| Order No.<br>tool steel | Order No.<br>stainless steel | A  | B  | C  | D  | E  | F   | G    | H   | J     |
|-------------------------|------------------------------|----|----|----|----|----|-----|------|-----|-------|
| K0350.05                | K0350.505                    | 5  | 5  | 5  | 6  | 5  | 2   | M2,5 | 4,5 | R 1   |
| K0350.06                | K0350.506                    | 6  | 6  | 6  | 8  | 6  | 2   | M3   | 5   | R 1   |
| K0350.08                | K0350.508                    | 8  | 8  | 8  | 10 | 8  | 2   | M3   | 6   | R 2   |
| K0350.10                | K0350.510                    | 10 | 10 | 10 | 13 | 10 | 2,5 | M3   | 6   | R 2,5 |
| K0350.12                | K0350.512                    | 12 | 12 | 12 | 15 | 12 | 3   | M4   | 8   | R 3   |
| K0350.14                | K0350.514                    | 14 | 14 | 14 | 17 | 14 | 3,5 | M4   | 8   | R 3,5 |
| K0350.16                | K0350.516                    | 16 | 16 | 16 | 20 | 16 | 4   | M5   | 10  | R 4   |
| K0350.20                | K0350.520                    | 20 | 20 | 20 | 25 | 20 | 5   | M5   | 10  | R 5   |
| K0350.25                | -                            | 25 | 25 | 25 | 25 | 25 | 6   | M5   | 10  | R 6   |
| K0350.30                | -                            | 30 | 30 | 30 | 30 | 30 | 8   | M6   | 12  | R 8   |
| K0350.40                | -                            | 40 | 40 | 40 | 40 | 40 | 10  | M6   | 12  | R 10  |
| K0350.50                | -                            | 50 | 50 | 50 | 50 | 50 | 12  | M6   | 12  | R 12  |

## Locating pins

with flattened ball-end Form C



### Material:

Tool steel or 1.4305 stainless steel.

### Version:

Steel hardened and ground.  
Stainless steel ground and kolsterised.

### Sample order:

K0350.162

### Note:

Ball end locating pins are specially designed to ease the locating process. The tendency to jam, caused by the locating hole not being at right angles to the pin or by the pushing force not being parallel to the pin axis, is minimized by the ball-end form (see illustration 1 for K0351 Form B)

## KIPP Locating pins with flattened ball-end Form C

| Order No.<br>tool steel | Order No.<br>stainless steel | A  | B  | C  | D  | E  | F   | G    | H   | J     | K    |
|-------------------------|------------------------------|----|----|----|----|----|-----|------|-----|-------|------|
| K0350.052               | K0350.5052                   | 5  | 5  | 5  | 6  | 5  | 2   | M2,5 | 4,5 | R 1   | 1,5  |
| K0350.062               | K0350.5062                   | 6  | 6  | 6  | 8  | 6  | 2   | M3   | 5   | R 1   | 1,8  |
| K0350.082               | K0350.5082                   | 8  | 8  | 8  | 10 | 8  | 2   | M3   | 6   | R 2   | 1,9  |
| K0350.102               | K0350.5102                   | 10 | 10 | 10 | 13 | 10 | 2,5 | M3   | 6   | R 2,5 | 2,5  |
| K0350.122               | K0350.5122                   | 12 | 12 | 12 | 15 | 12 | 3   | M4   | 8   | R 3   | 2,5  |
| K0350.142               | K0350.5142                   | 14 | 14 | 14 | 17 | 14 | 3,5 | M4   | 8   | R 3,5 | 3,9  |
| K0350.162               | K0350.5162                   | 16 | 16 | 16 | 20 | 16 | 4   | M5   | 10  | R 4   | 4,3  |
| K0350.202               | K0350.5202                   | 20 | 20 | 20 | 25 | 20 | 5   | M5   | 10  | R 5   | 5    |
| K0350.252               | -                            | 25 | 25 | 25 | 25 | 25 | 6   | M5   | 10  | R 6   | 5,6  |
| K0350.302               | -                            | 30 | 30 | 30 | 30 | 30 | 8   | M6   | 12  | R 8   | 8,8  |
| K0350.402               | -                            | 40 | 40 | 40 | 40 | 40 | 10  | M6   | 12  | R 10  | 12,8 |
| K0350.502               | -                            | 50 | 50 | 50 | 50 | 50 | 12  | M6   | 12  | R 12  | 16,7 |



## Locating pins

with ball-end Form B



### Material:

Tool steel or 1.4305 stainless steel.

### Version:

Steel hardened and ground.

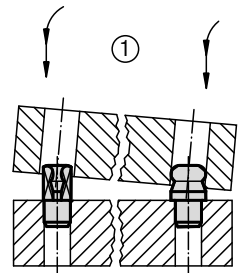
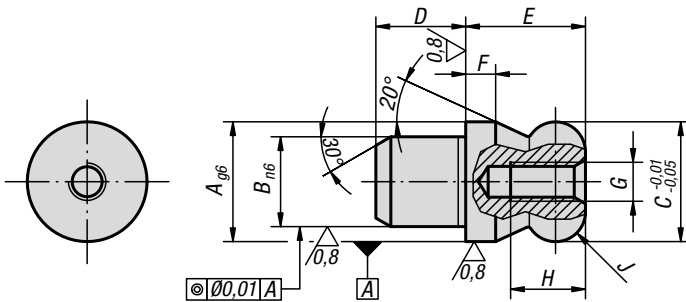
Stainless steel ground and kolsterised.

### Sample order:

K0351.20

### Note:

Ball end locating pins are specially designed to ease the locating process. The tendency to jam, caused by the locating hole not being at right angles to the pin or by the pushing force not being parallel to the pin axis, is minimized by the ball-end form (see illustration).



### KIPP Locating pins with ball-end Form B

| Order No.<br>tool steel | Order No.<br>stainless steel | A  | B  | C  | D  | E  | F   | G    | H   | J     |
|-------------------------|------------------------------|----|----|----|----|----|-----|------|-----|-------|
| K0351.06                | K0351.506                    | 6  | 4  | 6  | 4  | 6  | 2   | M2,5 | 4,5 | R 1   |
| K0351.08                | K0351.508                    | 8  | 6  | 8  | 6  | 8  | 2   | M3   | 6   | R 2   |
| K0351.10                | K0351.510                    | 10 | 7  | 10 | 7  | 10 | 2,5 | M3   | 6   | R 2,5 |
| K0351.12                | K0351.512                    | 12 | 8  | 12 | 8  | 12 | 3   | M4   | 8   | R 3   |
| K0351.14                | K0351.514                    | 14 | 10 | 14 | 10 | 14 | 3,5 | M4   | 8   | R 3,5 |
| K0351.16                | K0351.516                    | 16 | 12 | 16 | 12 | 16 | 4   | M5   | 10  | R 4   |
| K0351.20                | K0351.520                    | 20 | 14 | 20 | 14 | 20 | 5   | M5   | 10  | R 5   |
| K0351.22                | -                            | 22 | 16 | 22 | 16 | 22 | 5,5 | M5   | 10  | R 5,5 |
| K0351.25                | -                            | 25 | 18 | 25 | 18 | 25 | 6   | M5   | 10  | R 6   |

## Locating pins

with flattened ball-end Form D



### Material:

Tool steel or 1.4305 stainless steel.

### Version:

Steel hardened and ground.

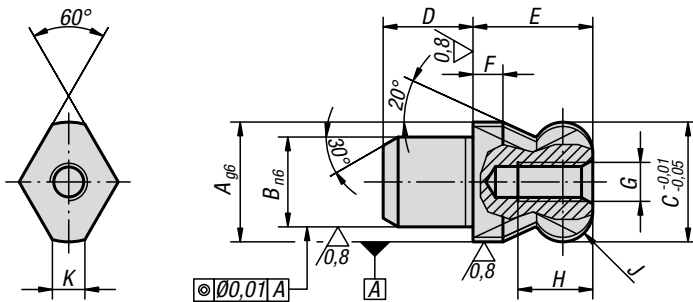
Stainless steel ground and kolsterised.

### Sample order:

K0351.162

### Note:

Ball end locating pins are specially designed to ease the locating process. The tendency to jam, caused by the locating hole not being at right angles to the pin or by the pushing force not being parallel to the pin axis, is minimized by the ball-end form (see illustration 1 for K0351 Form B)

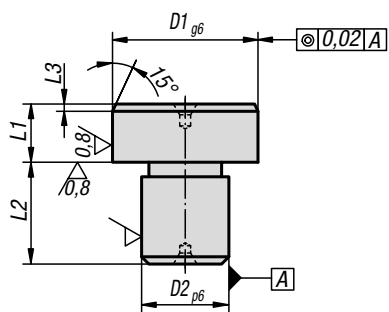


## KIPP Locating pins with flattened ball-end Form D

| Order No.<br>tool steel | Order No.<br>stainless steel | A  | B  | C  | D  | E  | F   | G    | H   | J     | K    |
|-------------------------|------------------------------|----|----|----|----|----|-----|------|-----|-------|------|
| K0351.062               | K0351.5062                   | 6  | 4  | 6  | 4  | 6  | 2   | M2,5 | 4,5 | R 1   | 1,7  |
| K0351.082               | K0351.5082                   | 8  | 6  | 8  | 6  | 8  | 2   | M3   | 6   | R 2   | 2    |
| K0351.102               | K0351.5102                   | 10 | 7  | 10 | 7  | 10 | 2,5 | M3   | 6   | R 2,5 | 2,5  |
| K0351.122               | K0351.5122                   | 12 | 8  | 12 | 8  | 12 | 3   | M4   | 8   | R 3   | 2,5  |
| K0351.142               | K0351.5142                   | 14 | 10 | 14 | 10 | 14 | 3,5 | M4   | 8   | R 3,5 | 3,76 |
| K0351.162               | K0351.5162                   | 16 | 12 | 16 | 12 | 16 | 4   | M5   | 10  | R 4   | 4,3  |
| K0351.202               | K0351.5202                   | 20 | 14 | 20 | 14 | 20 | 5   | M5   | 10  | R 5   | 5    |
| K0351.222               | -                            | 22 | 16 | 22 | 16 | 22 | 5,5 | M5   | 10  | R 5,5 | 5    |
| K0351.252               | -                            | 25 | 18 | 25 | 18 | 25 | 6   | M5   | 10  | R 6   | 5,6  |

## Positioning pins

cylindrical, ground



**Material:**  
Tool steel.

**Version:**  
Hardened and ground.

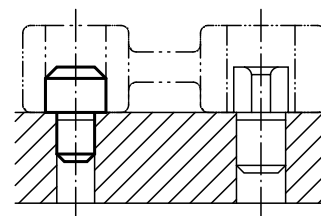
**Sample order:**  
K0352.08

**Note:**  
Top face with centrebore.



### KIPP Cylindrical positioning pins, ground

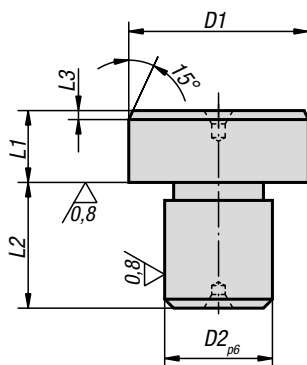
| Order No. | D1 | D2 | L1 | L2 | L3 |
|-----------|----|----|----|----|----|
| K0352.05  | 8  | 5  | 8  | 8  | 2  |
| K0352.07  | 10 | 7  | 8  | 8  | 2  |
| K0352.08  | 12 | 8  | 8  | 10 | 2  |
| K0352.081 | 14 | 8  | 8  | 10 | 3  |
| K0352.09  | 16 | 9  | 8  | 12 | 3  |
| K0352.12  | 18 | 12 | 8  | 12 | 3  |
| K0352.121 | 20 | 12 | 8  | 14 | 3  |
| K0352.14  | 22 | 14 | 8  | 14 | 3  |
| K0352.16  | 25 | 16 | 8  | 16 | 3  |



# K0353

## Positioning pins cylindrical

not ground



**Material:**  
Tool steel.

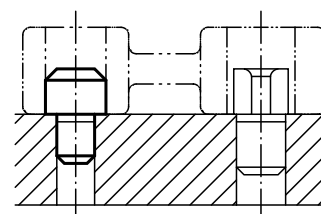
**Version:**  
Hardened.

**Sample order:**  
K0353.05

**Note:**  
Top face with centrebore.

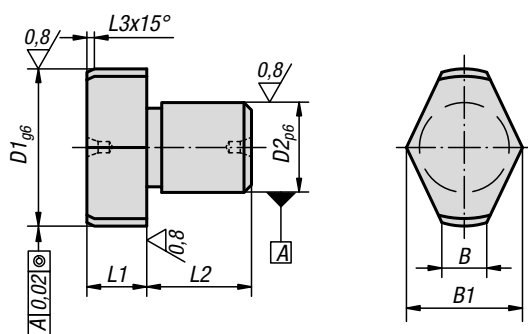
### KIPP Cylindrical positioning pins, not ground

| Order No. | D1   | D2 | L1 | L2 | L3 |
|-----------|------|----|----|----|----|
| K0353.05  | 8,5  | 5  | 8  | 8  | 2  |
| K0353.07  | 10,5 | 7  | 8  | 8  | 2  |
| K0353.08  | 12,5 | 8  | 8  | 10 | 2  |
| K0353.081 | 14,5 | 8  | 8  | 10 | 3  |
| K0353.09  | 16,5 | 9  | 8  | 12 | 3  |
| K0353.12  | 18,5 | 12 | 8  | 12 | 3  |
| K0353.121 | 20,5 | 12 | 8  | 14 | 3  |
| K0353.14  | 22,5 | 14 | 8  | 14 | 3  |
| K0353.16  | 25,5 | 16 | 8  | 16 | 3  |



## Positioning pins

free-milled, ground



**Material:**

Tool steel.

**Version:**

Hardened and ground.

**Sample order:**

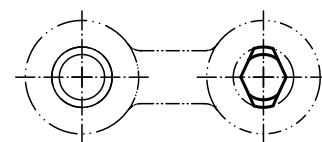
K0354.08

**Note:**

Top face with centrebore.

### KIPP Positioning pins, free-milled, ground

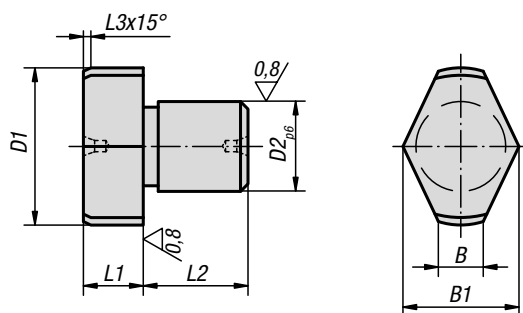
| Order No. | D1 | D2 | L1 | L2 | L3 | B   | B1   |
|-----------|----|----|----|----|----|-----|------|
| K0354.05  | 8  | 5  | 8  | 8  | 2  | 2   | 6,6  |
| K0354.07  | 10 | 7  | 8  | 8  | 2  | 3   | 8,6  |
| K0354.08  | 12 | 8  | 8  | 10 | 2  | 3   | 9,8  |
| K0354.081 | 14 | 8  | 8  | 10 | 3  | 3,5 | 11,2 |
| K0354.09  | 16 | 9  | 8  | 12 | 3  | 4   | 13,2 |
| K0354.12  | 18 | 12 | 8  | 12 | 3  | 4,5 | 14,7 |
| K0354.121 | 20 | 12 | 8  | 14 | 3  | 5   | 16,6 |
| K0354.14  | 22 | 14 | 8  | 14 | 3  | 5,6 | 18   |
| K0354.16  | 25 | 16 | 8  | 16 | 3  | 6   | 19,8 |



# K0355

## Positioning pins free-milled

not ground



**Material:**

Tool steel.

**Version:**

Hardened.

**Sample order:**

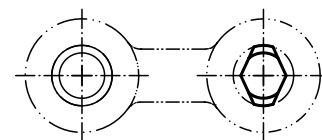
K0355.05

**Note:**

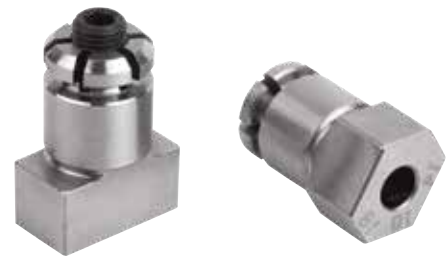
Top face with centrebore.

### KIPP Positioning pins, free-milled, not ground

| Order No. | D1   | D2 | L1 | L2 | L3 | B   | B1   |
|-----------|------|----|----|----|----|-----|------|
| K0355.05  | 8,5  | 5  | 8  | 8  | 2  | 2   | 6,6  |
| K0355.07  | 10,5 | 7  | 8  | 8  | 2  | 3   | 8,6  |
| K0355.08  | 12,5 | 8  | 8  | 10 | 2  | 3   | 9,8  |
| K0355.081 | 14,5 | 8  | 8  | 10 | 3  | 3,5 | 11,2 |
| K0355.09  | 16,5 | 9  | 8  | 12 | 3  | 4   | 13,2 |
| K0355.12  | 18,5 | 12 | 8  | 12 | 3  | 4,5 | 14,7 |
| K0355.121 | 20,5 | 12 | 8  | 14 | 3  | 5   | 16,6 |
| K0355.14  | 22,5 | 14 | 8  | 14 | 3  | 5,6 | 18   |
| K0355.16  | 25,5 | 16 | 8  | 16 | 3  | 6   | 19,8 |



## Locating pins expanding



**Material:**  
Carbon steel.

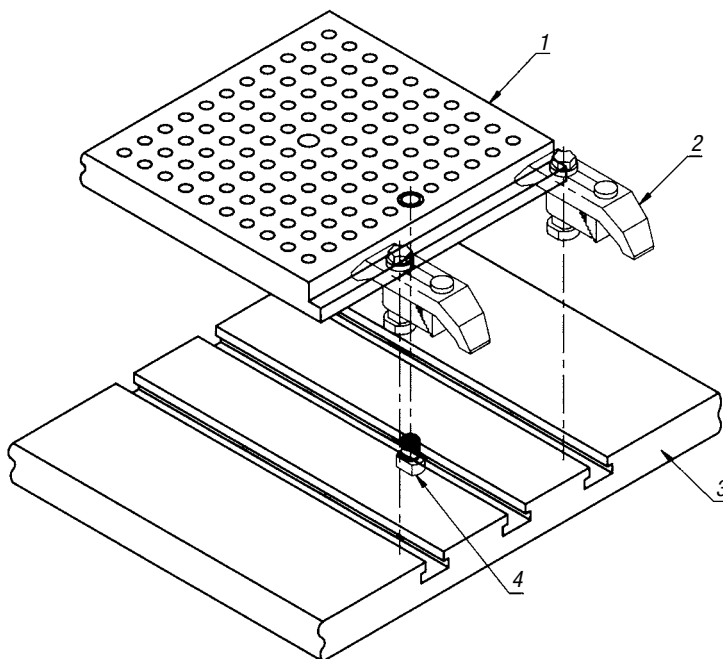
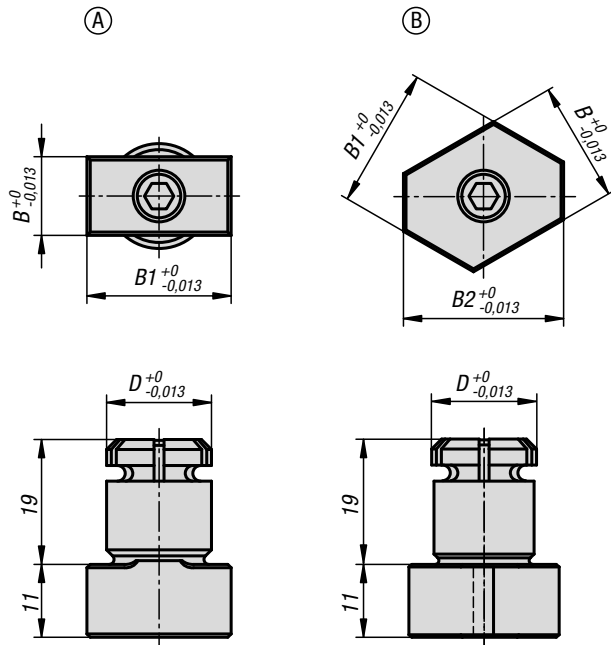
**Version:**  
Tempered and black oxidised.  
Locating diameter and guide faces ground.

**Sample order:**  
K0356.1610

**Note:**  
These expanding locating pins enable e.g. tooling plates to be positioned in the T-slots of machine tables (see illustration).  
The plates to be positioned must have two holes matching the expanding pin diameter.  
The expansion screw has a broached through hexagonal hole allowing the pin to be tightened or loosened from two sides.

**Drawing reference:**

- 1) tooling plate
- 2) clamp straps
- 3) machine table
- 4) expanding locating pin



### KIPP Locating pins, expanding

| Order No.  | Form | D  | B  | B1 | B2 | Recommended<br>Ø |
|------------|------|----|----|----|----|------------------|
| K0356.1610 | A    | 16 | 10 | 20 | -  | 16,01 ±0,01      |
| K0356.1612 | A    | 16 | 12 | 22 | -  | 16,01 ±0,01      |
| K0356.1614 | B    | 16 | 14 | 16 | 18 | 16,01 ±0,01      |
| K0356.2024 | B    | 20 | 24 | 28 | 32 | 20,01 ±0,01      |

## Rest pads

**Material:**

Tool steel.

**Version:**

Hardened and ground.

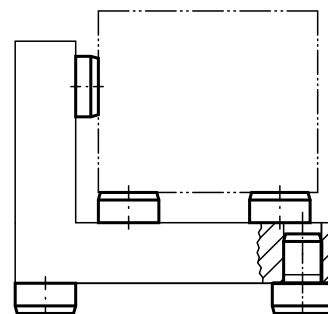
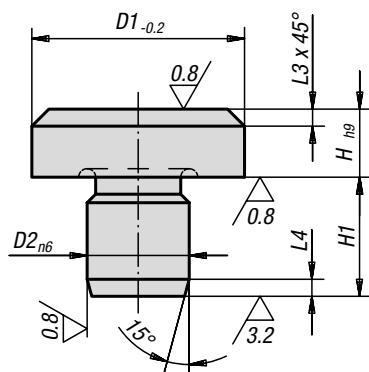
Top face without centerbore.

**Sample order:**

K0292.041

**Note:**

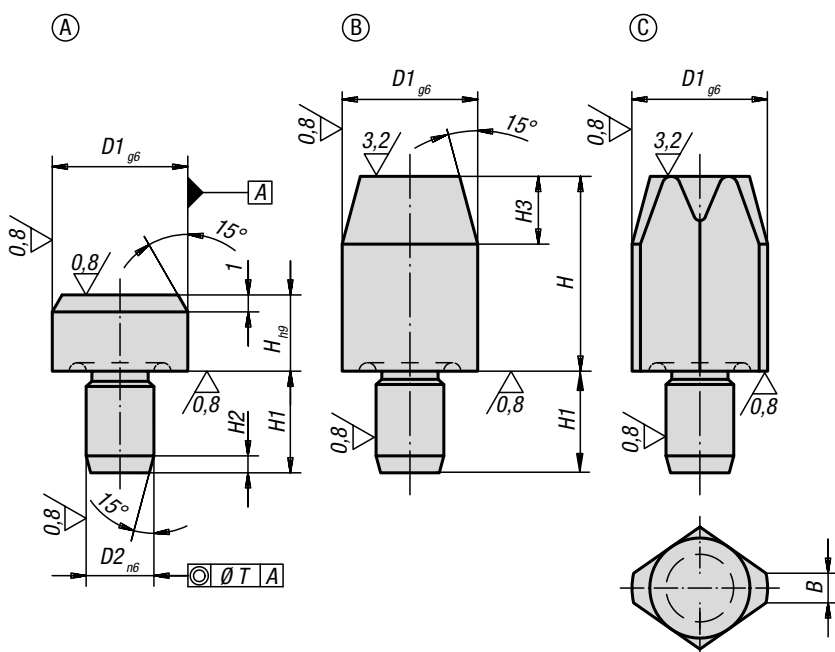
If more than one rest pad is used, the support height can be reground. Rest pads can also be used as feet for jigs and fixtures.

**KIPP Rest pads**

| Order No. | D1 | D2 | H   | H1  | L3  | L4  |
|-----------|----|----|-----|-----|-----|-----|
| K0292.041 | 6  | 4  | 2,5 | 6,5 | 0,7 | 1,2 |
| K0292.042 | 6  | 4  | 4,5 | 8,5 | 0,7 | 1,2 |
| K0292.04  | 6  | 4  | 5   | 6   | 0,7 | 1,2 |
| K0292.061 | 10 | 6  | 4,5 | 8,5 | 0,9 | 1,5 |
| K0292.06  | 10 | 6  | 8   | 8,5 | 0,9 | 1,5 |
| K0292.08  | 16 | 8  | 5   | 10  | 2   | 2   |
| K0292.081 | 16 | 8  | 13  | 10  | 2   | 2   |
| K0292.10  | 20 | 10 | 6   | 12  | 2   | 2   |
| K0292.101 | 20 | 10 | 12  | 12  | 2   | 2   |
| K0292.12  | 25 | 12 | 8   | 14  | 2   | 2   |
| K0292.122 | 25 | 12 | 20  | 14  | 2   | 2   |
| K0292.123 | 25 | 12 | 30  | 14  | 2   | 2   |
| K0292.16  | 30 | 16 | 25  | 20  | 2,5 | 2,5 |
| K0292.164 | 30 | 16 | 40  | 20  | 2,5 | 2,5 |
| K0292.165 | 30 | 16 | 50  | 20  | 2,5 | 2,5 |
| K0292.166 | 30 | 16 | 65  | 20  | 2,5 | 2,5 |
| K0292.20  | 30 | 20 | 80  | 20  | 2,5 | 2,5 |
| K0292.201 | 30 | 20 | 100 | 20  | 2,5 | 2,5 |
| K0292.202 | 40 | 20 | 13  | 20  | 3,2 | 3,2 |
| K0292.203 | 40 | 20 | 32  | 20  | 3,2 | 3,2 |

## Locating pins and rest pads

DIN 6321 (Issue 1973)



**Material:**  
Tool steel.

**Version:**  
Hardened and ground.

**Sample order:**  
K0293.212

**Note:**  
Rest pads Form A are supports for workpieces and fixtures.  
Locating pins Form B are for positioning workpieces and fixture components in reamed holes.  
The flattened Form C can be used to bridge tolerances in hole spacing or to secure the part to be positioned in one direction only.  
Form A and B can also be used as hardened stops and as fixture feet.  
For similar pins see K0352, K0353, K0354 and K0355.

**Drawing reference:**  
Form A: Rest pad  
Form B: Cylindrical locating pin  
Form C: Flattened locating pin

For other dimensions see Form A.

### KIPP Rest pads, Form A

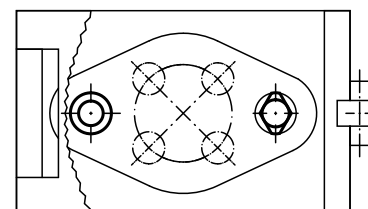
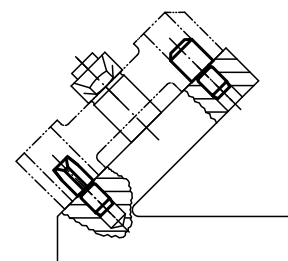
| Order No.<br>without centre bore | D1 | D2 | H  | H1 | H2  | T    |
|----------------------------------|----|----|----|----|-----|------|
| K0293.106                        | 6  | 4  | 5  | 6  | 1,2 | 0,02 |
| K0293.110                        | 10 | 6  | 6  | 9  | 1,6 | 0,02 |
| K0293.116                        | 16 | 8  | 8  | 12 | 2   | 0,04 |
| K0293.125                        | 25 | 12 | 10 | 18 | 2,5 | 0,04 |

### KIPP Locating pin cylindrical, Form B

| Order No.<br>short | Order No.<br>long | D1 | D2 | H     | H1 | H2  | H3 | T    |
|--------------------|-------------------|----|----|-------|----|-----|----|------|
| K0293.206          | K0293.306         | 6  | 4  | 7/12  | 6  | 1,2 | 4  | 0,02 |
| K0293.208          | K0293.308         | 8  | 6  | 10/16 | 9  | 1,6 | 6  | 0,02 |
| K0293.210          | K0293.310         | 10 | 6  | 10/18 | 9  | 1,6 | 6  | 0,02 |
| K0293.212          | K0293.312         | 12 | 6  | 10/18 | 9  | 1,6 | 6  | 0,02 |
| K0293.216          | K0293.316         | 16 | 8  | 13/22 | 12 | 2   | 8  | 0,04 |
| K0293.220          | K0293.320         | 20 | 12 | 15/25 | 18 | 2   | 9  | 0,04 |
| K0293.225          | K0293.325         | 25 | 12 | 15/25 | 18 | 2,5 | 9  | 0,04 |

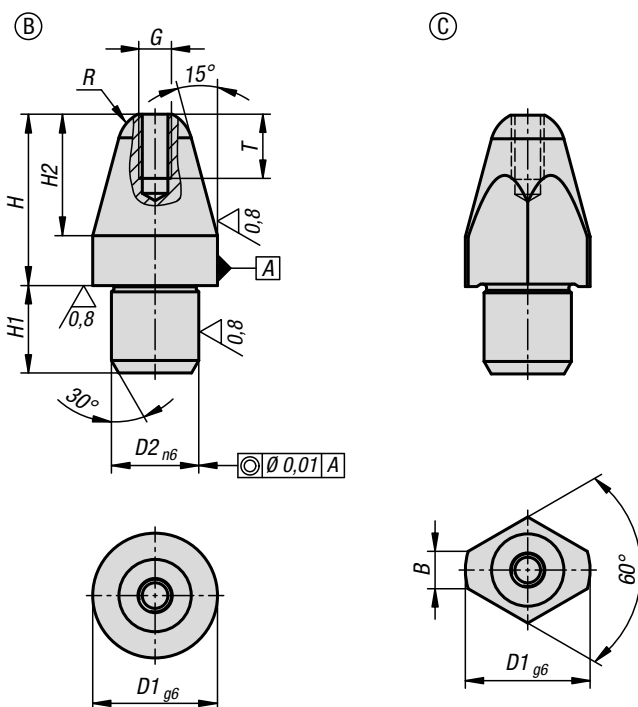
### KIPP Locating pin rhombic, Form C

| Order No.<br>short | Order No.<br>long | B   | D1 | D2 | H     | H1 | H2  | H3 | T    |
|--------------------|-------------------|-----|----|----|-------|----|-----|----|------|
| K0293.406          | K0293.506         | 1   | 6  | 4  | 7/12  | 6  | 1,2 | 4  | 0,02 |
| K0293.408          | K0293.508         | 1,6 | 8  | 6  | 10/16 | 9  | 1,6 | 6  | 0,02 |
| K0293.410          | K0293.510         | 2,5 | 10 | 6  | 10/18 | 9  | 1,6 | 6  | 0,02 |
| K0293.412          | K0293.512         | 2,5 | 12 | 6  | 10/18 | 9  | 1,6 | 6  | 0,02 |
| K0293.416          | K0293.516         | 3,5 | 16 | 8  | 13/22 | 12 | 2   | 8  | 0,04 |
| K0293.420          | K0293.520         | 5   | 20 | 12 | 15/25 | 18 | 2   | 9  | 0,04 |
| K0293.425          | K0293.525         | 5   | 25 | 12 | 15/25 | 18 | 2,5 | 9  | 0,04 |



## Locating pins

with internal thread



### Material:

Steel.

### Version:

Hardened and ground (HRC 60 ±2).

### Sample order:

K1094.208

### Note:

The locating pins are designed to make the joining process easier. Used in combination with hardened locating bushes K1095, they enable exact, low-wear, and fast changes of the workpiece.

Versions D1 = 5 and D1 = 6 do not have an internal thread.

### Drawing reference:

Form B: cylindrical pin

Form C: rhomboid pin

### KIPP Locating pins, short

| Order No.<br>Form B | Order No.<br>Form C | Version 1 | D1 | D2 | G    | H    | H1 | H2   | R    | B     | T  |
|---------------------|---------------------|-----------|----|----|------|------|----|------|------|-------|----|
| K1094.205           | K1094.405           | short     | 5  | 3  | -    | 8    | 3  | 5    | 1,50 | -/-   | -  |
| K1094.206           | K1094.406           | short     | 6  | 4  | -    | 10   | 4  | 6    | 1,80 | -/-   | -  |
| K1094.208           | K1094.408           | short     | 8  | 6  | M2,5 | 11,4 | 6  | 7,4  | 2,5  | -/2,5 | 5  |
| K1094.210           | K1094.410           | short     | 10 | 7  | M2,5 | 13,7 | 7  | 9,7  | 3    | -/3,0 | 5  |
| K1094.212           | K1094.412           | short     | 12 | 8  | M3   | 16   | 8  | 12   | 3,5  | -/3,5 | 6  |
| K1094.216           | K1094.416           | short     | 16 | 12 | M4   | 20   | 12 | 15   | 5    | -/5   | 8  |
| K1094.220           | K1094.420           | short     | 20 | 14 | M5   | 25,5 | 14 | 19,5 | 6    | -/6   | 10 |

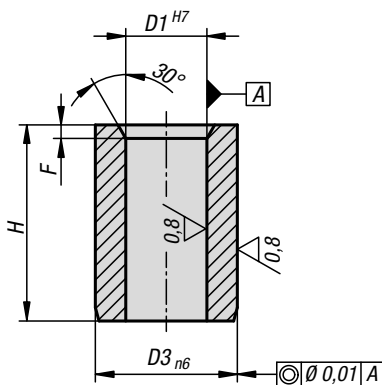
### KIPP Locating pins, long

| Order No.<br>Form B | Order No.<br>Form C | Version 1 | D1 | D2 | G    | H    | H1 | H2   | R    | B     | T  |
|---------------------|---------------------|-----------|----|----|------|------|----|------|------|-------|----|
| K1094.305           | K1094.505           | long      | 5  | 3  | -    | 10   | 3  | 5    | 1,50 | -/-   | -  |
| K1094.306           | K1094.506           | long      | 6  | 4  | -    | 12   | 4  | 6    | 1,80 | -/-   | -  |
| K1094.308           | K1094.508           | long      | 8  | 6  | M2,5 | 17,4 | 6  | 7,4  | 2,5  | -/2,5 | 5  |
| K1094.310           | K1094.510           | long      | 10 | 7  | M2,5 | 21,7 | 7  | 9,7  | 3    | -/3,0 | 5  |
| K1094.312           | K1094.512           | long      | 12 | 8  | M3   | 24   | 8  | 12   | 3,5  | -/3,5 | 6  |
| K1094.316           | K1094.516           | long      | 16 | 12 | M4   | 29   | 12 | 15   | 5    | -/5   | 8  |
| K1094.320           | K1094.520           | long      | 20 | 14 | M5   | 35,5 | 14 | 19,5 | 6    | -/6   | 10 |



## Locating bushes

for locating pins



### Material:

Steel.

### Version:

Hardened and ground (HRC 60 ±2).

### Sample order:

K1095.0812



## KIPP Locating bushes for locating pins

| Order No.  | Version 1 | D1 | D3 | F   | H  |
|------------|-----------|----|----|-----|----|
| K1095.0508 | short     | 5  | 8  | 1   | 8  |
| K1095.0610 | short     | 6  | 10 | 1   | 10 |
| K1095.0812 | short     | 8  | 12 | 1,2 | 12 |
| K1095.1014 | short     | 10 | 15 | 1,5 | 14 |
| K1095.1216 | short     | 12 | 18 | 1,5 | 16 |
| K1095.1620 | short     | 16 | 26 | 1,5 | 20 |
| K1095.2026 | short     | 20 | 30 | 2,5 | 26 |
| K1095.0510 | long      | 5  | 8  | 1   | 10 |
| K1095.0612 | long      | 6  | 10 | 1   | 12 |
| K1095.0818 | long      | 8  | 12 | 1,2 | 18 |
| K1095.1022 | long      | 10 | 15 | 1,5 | 22 |
| K1095.1224 | long      | 12 | 18 | 1,5 | 24 |
| K1095.1630 | long      | 16 | 26 | 1,5 | 30 |
| K1095.2036 | long      | 20 | 30 | 2,5 | 36 |

## Positioning feet



**Material:**  
Steel.

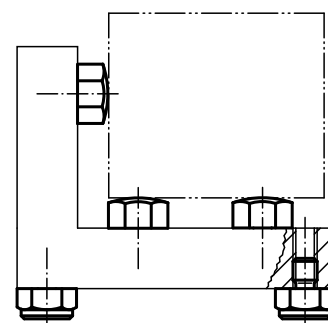
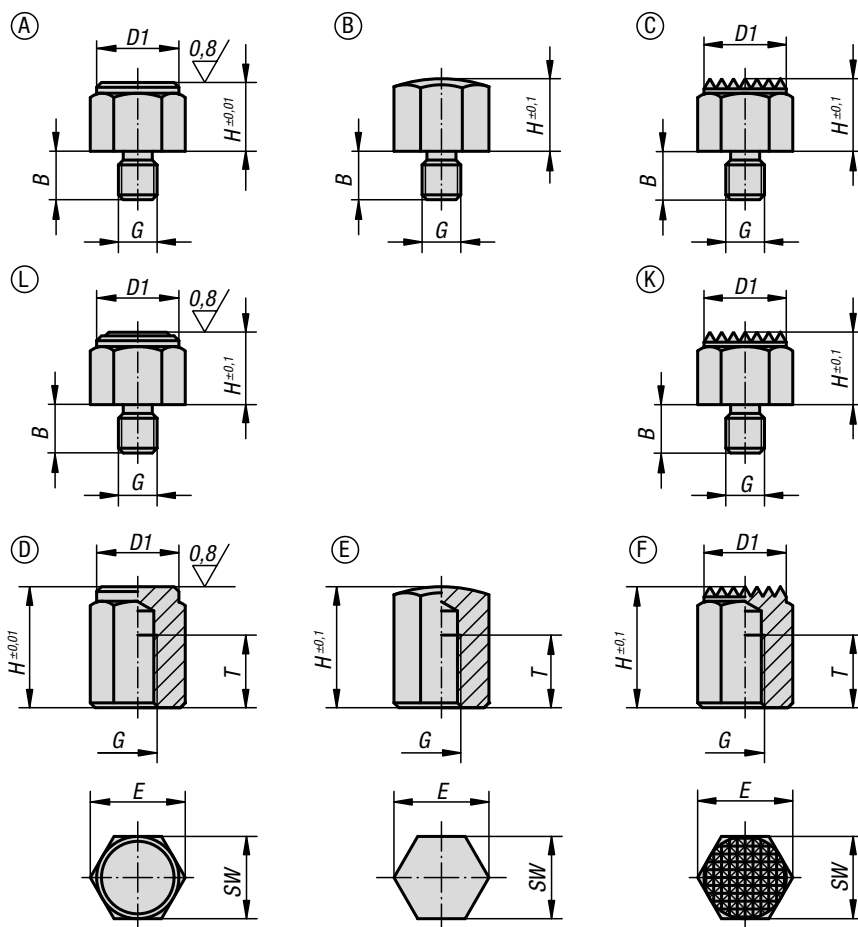
**Version:**  
Case-hardened and black oxidised.

**Sample order:**  
K0298.215

**Note:**  
Positioning feet are used as supports, stops and thrust pads for fixtures and general machine and appliance construction.

**Drawing reference:**

Form A: External thread and flat face  
Form B: External thread and convex face  
Form C: External thread and serrated face  
Form K: External thread and carbide serrated face  
Form L: External thread and POM insert  
Form D: External thread and flat face  
Form E: External thread and convex face  
Form F: External thread and serrated face



### KIPP Form A, with external thread and flat face

| Order No.  | Form | B  | D1 | G   | H  | E    | SW | Tightening torque max. Nm |
|------------|------|----|----|-----|----|------|----|---------------------------|
| K0298.108  | A    | 8  | 13 | M6  | 8  | 14,4 | 13 | 8,5                       |
| K0298.1104 | A    | 10 | 13 | M6  | 10 | 14,4 | 13 | 8,5                       |
| K0298.1081 | A    | 10 | 17 | M8  | 8  | 19,4 | 17 | 18                        |
| K0298.1101 | A    | 10 | 17 | M8  | 10 | 19,4 | 17 | 18                        |
| K0298.1103 | A    | 12 | 19 | M10 | 10 | 21,1 | 19 | 32                        |
| K0298.1152 | A    | 12 | 19 | M10 | 15 | 21,1 | 19 | 32                        |
| K0298.110  | A    | 14 | 22 | M12 | 10 | 25,2 | 22 | 60                        |
| K0298.115  | A    | 14 | 22 | M12 | 15 | 25,2 | 22 | 60                        |
| K0298.1151 | A    | 19 | 30 | M16 | 15 | 33   | 30 | 140                       |
| K0298.1201 | A    | 19 | 30 | M16 | 20 | 33   | 30 | 140                       |

## KIPP Form B, with external thread and convex face

| Order No.  | Form | B  | G   | H  | E    | SW | Tightening torque max. Nm |
|------------|------|----|-----|----|------|----|---------------------------|
| K0298.208  | B    | 8  | M6  | 8  | 14,4 | 13 | 8,5                       |
| K0298.2104 | B    | 10 | M6  | 10 | 14,4 | 13 | 8,5                       |
| K0298.2081 | B    | 10 | M8  | 8  | 19,4 | 17 | 18                        |
| K0298.2101 | B    | 10 | M8  | 10 | 19,4 | 17 | 18                        |
| K0298.2103 | B    | 12 | M10 | 10 | 21,1 | 19 | 32                        |
| K0298.2152 | B    | 12 | M10 | 15 | 21,1 | 19 | 32                        |
| K0298.210  | B    | 14 | M12 | 10 | 25,2 | 22 | 60                        |
| K0298.215  | B    | 14 | M12 | 15 | 25,2 | 22 | 60                        |
| K0298.2151 | B    | 19 | M16 | 15 | 33   | 30 | 140                       |
| K0298.2201 | B    | 19 | M16 | 20 | 33   | 30 | 140                       |

## KIPP Form C, with external thread and serrated surface

| Order No.  | Form | B  | D1 | G   | H  | E    | SW | Tightening torque max. Nm |
|------------|------|----|----|-----|----|------|----|---------------------------|
| K0298.308  | C    | 8  | 13 | M6  | 8  | 14,4 | 13 | 8,5                       |
| K0298.3102 | C    | 10 | 13 | M6  | 10 | 14,4 | 13 | 8,5                       |
| K0298.3081 | C    | 10 | 17 | M8  | 8  | 19,4 | 17 | 18                        |
| K0298.3101 | C    | 10 | 17 | M8  | 10 | 19,4 | 17 | 18                        |
| K0298.3103 | C    | 12 | 19 | M10 | 10 | 21,1 | 19 | 32                        |
| K0298.3152 | C    | 12 | 19 | M10 | 15 | 21,1 | 19 | 32                        |
| K0298.310  | C    | 14 | 22 | M12 | 10 | 25,2 | 22 | 60                        |
| K0298.315  | C    | 14 | 22 | M12 | 15 | 25,2 | 22 | 60                        |
| K0298.3151 | C    | 19 | 30 | M16 | 15 | 33   | 30 | 140                       |
| K0298.3201 | C    | 19 | 30 | M16 | 20 | 33   | 30 | 140                       |

## KIPP Form K, with external thread and carbide serrations

| Order No.  | Form | B  | D1 | G   | H  | E    | SW | Tightening torque max. Nm |
|------------|------|----|----|-----|----|------|----|---------------------------|
| K0298.7101 | K    | 10 | 17 | M8  | 10 | 19,4 | 17 | 18                        |
| K0298.710  | K    | 14 | 22 | M12 | 10 | 25,2 | 22 | 60                        |
| K0298.715  | K    | 14 | 22 | M12 | 15 | 25,2 | 22 | 60                        |
| K0298.7151 | K    | 19 | 30 | M16 | 15 | 33   | 30 | 140                       |
| K0298.7201 | K    | 19 | 30 | M16 | 20 | 33   | 30 | 140                       |

## KIPP Form L, with external thread and POM insert

| Order No.  | Form | B  | D1 | G   | H  | E    | SW | Tightening torque max. Nm |
|------------|------|----|----|-----|----|------|----|---------------------------|
| K0298.8101 | L    | 10 | 17 | M8  | 10 | 19,4 | 17 | 18                        |
| K0298.810  | L    | 14 | 22 | M12 | 10 | 25,2 | 22 | 60                        |
| K0298.815  | L    | 14 | 22 | M12 | 15 | 25,2 | 22 | 60                        |
| K0298.8151 | L    | 19 | 30 | M16 | 15 | 33   | 30 | 140                       |
| K0298.8201 | L    | 19 | 30 | M16 | 20 | 33   | 30 | 140                       |

## Positioning feet

KIPP Form D, with internal thread and flat face



| Order No.  | Form | D1 | G   | H  | T  | E    | SW |
|------------|------|----|-----|----|----|------|----|
| K0298.410  | D    | 13 | M6  | 10 | 6  | 14,4 | 13 |
| K0298.4151 | D    | 13 | M6  | 15 | 10 | 14,4 | 13 |
| K0298.4101 | D    | 17 | M8  | 10 | 6  | 19,4 | 17 |
| K0298.415  | D    | 17 | M8  | 15 | 6  | 19,4 | 17 |
| K0298.4251 | D    | 17 | M8  | 25 | 16 | 19,4 | 17 |
| K0298.4201 | D    | 19 | M10 | 20 | 10 | 21,1 | 19 |
| K0298.4401 | D    | 19 | M10 | 40 | 15 | 21,1 | 19 |
| K0298.420  | D    | 22 | M12 | 20 | 10 | 25,2 | 22 |
| K0298.425  | D    | 22 | M12 | 25 | 15 | 25,2 | 22 |
| K0298.430  | D    | 22 | M12 | 30 | 20 | 25,2 | 22 |
| K0298.440  | D    | 22 | M12 | 40 | 25 | 25,2 | 22 |
| K0298.450  | D    | 22 | M12 | 50 | 25 | 25,2 | 22 |
| K0298.4301 | D    | 30 | M16 | 30 | 20 | 33   | 30 |
| K0298.4501 | D    | 30 | M16 | 50 | 25 | 33   | 30 |

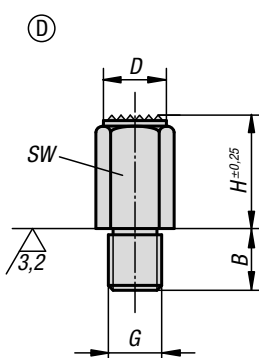
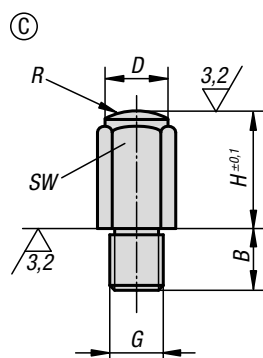
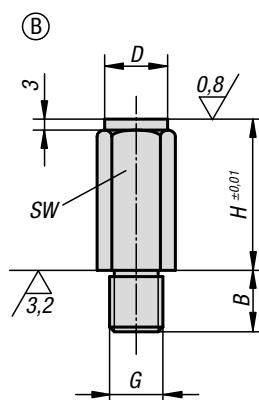
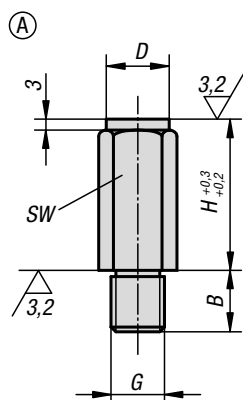
## KIPP Form E with internal thread and spherical face

| Order No.  | Form | G   | H  | T  | E    | SW |
|------------|------|-----|----|----|------|----|
| K0298.510  | E    | M6  | 10 | 6  | 14,4 | 13 |
| K0298.5151 | E    | M6  | 15 | 10 | 14,4 | 13 |
| K0298.5101 | E    | M8  | 10 | 6  | 19,4 | 17 |
| K0298.515  | E    | M8  | 15 | 6  | 19,4 | 17 |
| K0298.5251 | E    | M8  | 25 | 16 | 19,4 | 17 |
| K0298.5201 | E    | M10 | 20 | 10 | 21,1 | 19 |
| K0298.5401 | E    | M10 | 40 | 15 | 21,1 | 19 |
| K0298.520  | E    | M12 | 20 | 10 | 25,2 | 22 |
| K0298.525  | E    | M12 | 25 | 15 | 25,2 | 22 |
| K0298.530  | E    | M12 | 30 | 20 | 25,2 | 22 |
| K0298.540  | E    | M12 | 40 | 25 | 25,2 | 22 |
| K0298.550  | E    | M12 | 50 | 25 | 25,2 | 22 |
| K0298.5301 | E    | M16 | 30 | 20 | 33   | 30 |
| K0298.5501 | E    | M16 | 50 | 25 | 33   | 30 |

## KIPP Form F, with internal thread and serrated face

| Order No.  | Form | D1 | G   | H  | T  | E    | SW |
|------------|------|----|-----|----|----|------|----|
| K0298.610  | F    | 13 | M6  | 10 | 6  | 14,4 | 13 |
| K0298.6151 | F    | 13 | M6  | 15 | 10 | 14,4 | 13 |
| K0298.6101 | F    | 17 | M8  | 10 | 6  | 19,4 | 17 |
| K0298.615  | F    | 17 | M8  | 15 | 6  | 19,4 | 17 |
| K0298.6251 | F    | 17 | M8  | 25 | 16 | 19,4 | 17 |
| K0298.6201 | F    | 19 | M10 | 20 | 10 | 21,1 | 19 |
| K0298.6401 | F    | 19 | M10 | 40 | 15 | 21,1 | 19 |
| K0298.620  | F    | 22 | M12 | 20 | 10 | 25,2 | 22 |
| K0298.625  | F    | 22 | M12 | 25 | 15 | 25,2 | 22 |
| K0298.630  | F    | 22 | M12 | 30 | 20 | 25,2 | 22 |
| K0298.640  | F    | 22 | M12 | 40 | 25 | 25,2 | 22 |
| K0298.650  | F    | 22 | M12 | 50 | 25 | 25,2 | 22 |
| K0298.6301 | F    | 30 | M16 | 30 | 20 | 33   | 30 |
| K0298.6501 | F    | 30 | M16 | 50 | 25 | 33   | 30 |

## Positioning feet

**Material:**

Body high carbon steel.

**Version:**Body tempered and black oxidised.  
Contact faces case-hardened.**Sample order:**

K0299.106010

**Note:**

These positioning feet are used as supports for rough and machined parts. They can also be used as stops and thrust pads in fixtures and toolmaking.

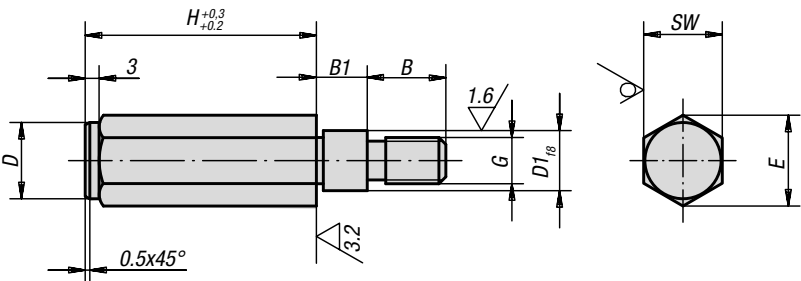
**Drawing reference:**Form A: Flat face hardened  
Form B: Flat face hardened and ground  
Form C: Spherical face hardened  
Form D: Serrated face tempered

## KIPP Positioning feet

| Order No.<br>Form A | Order No.<br>Form B | Order No.<br>Form C | Order No.<br>Form D | B  | D  | G   | H  | R        | SW |
|---------------------|---------------------|---------------------|---------------------|----|----|-----|----|----------|----|
| K0299.106010        | K0299.206010        | K0299.306010        | K0299.406010        | 11 | 10 | M6  | 10 | -/-/15/- | 10 |
| K0299.106020        | K0299.206020        | K0299.306020        | K0299.406020        | 11 | 10 | M6  | 20 | -/-/15/- | 10 |
| K0299.108010        | K0299.208010        | K0299.308010        | -                   | 13 | 13 | M8  | 10 | -/-/20   | 13 |
| K0299.108015        | K0299.208015        | K0299.308015        | K0299.408015        | 13 | 13 | M8  | 15 | -/-/20/- | 13 |
| K0299.108030        | K0299.208030        | K0299.308030        | K0299.408030        | 13 | 13 | M8  | 30 | -/-/20/- | 13 |
| K0299.110010        | K0299.210010        | K0299.310010        | -                   | 16 | 17 | M10 | 10 | -/-/30   | 17 |
| K0299.110020        | K0299.210020        | K0299.310020        | K0299.410020        | 16 | 17 | M10 | 20 | -/-/30/- | 17 |
| K0299.110040        | K0299.210040        | K0299.310040        | K0299.410040        | 16 | 17 | M10 | 40 | -/-/30/- | 17 |
| K0299.112010        | K0299.212010        | K0299.312010        | -                   | 20 | 19 | M12 | 10 | -/-/40   | 19 |
| K0299.112025        | K0299.212025        | K0299.312025        | K0299.412025        | 20 | 19 | M12 | 25 | -/-/35/- | 19 |
| K0299.112050        | K0299.212050        | K0299.312050        | K0299.412050        | 20 | 19 | M12 | 50 | -/-/35/- | 19 |
| K0299.116015        | K0299.216015        | K0299.316015        | -                   | 24 | 27 | M16 | 15 | -/-/50   | 27 |
| K0299.116030        | K0299.216030        | K0299.316030        | K0299.416030        | 24 | 27 | M16 | 30 | -/-/50/- | 27 |
| K0299.116060        | K0299.216060        | K0299.316060        | K0299.416060        | 24 | 27 | M16 | 60 | -/-/50/- | 27 |
| K0299.120040        | K0299.220040        | K0299.320040        | K0299.420040        | 29 | 32 | M20 | 40 | -/-/60/- | 32 |
| K0299.120080        | K0299.220080        | K0299.320080        | K0299.420080        | 29 | 32 | M20 | 80 | -/-/60/- | 32 |

Fixture feet

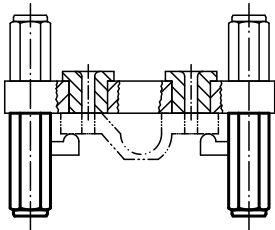
with external thread



**Material:**  
Carbon steel 1.1181.

**Version:**  
Black oxidised.

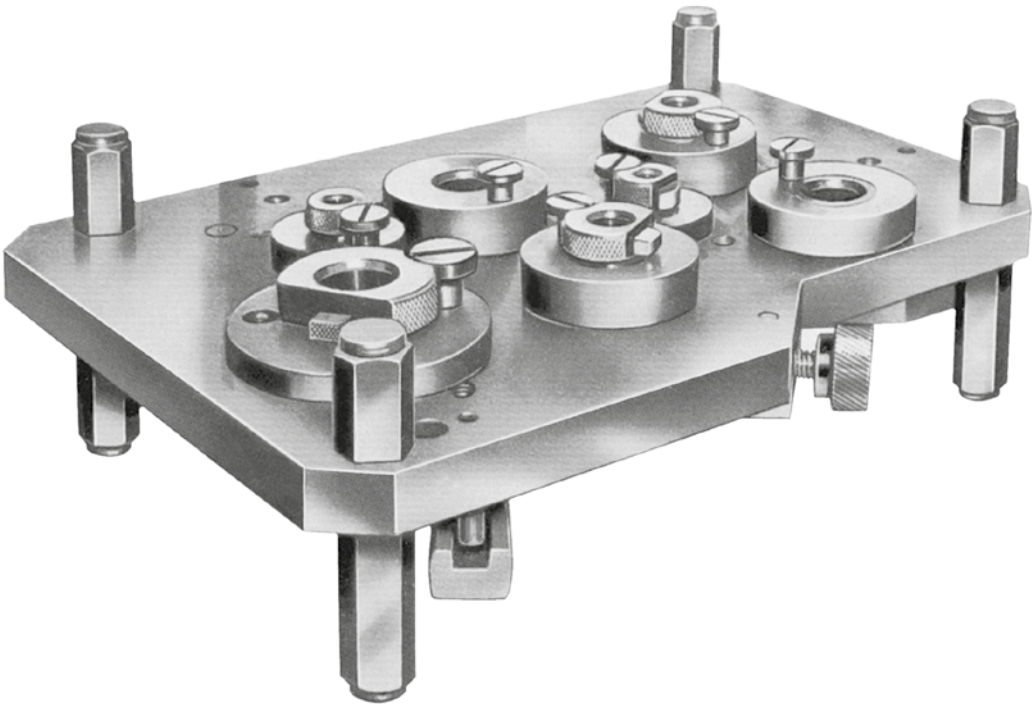
**Sample order:**  
K0300.10X75 (include height H.)



KIPP Fixture feet with external thread

| Order No. | B  | B1 | D    | D1 | G   | H             | E    | SW |
|-----------|----|----|------|----|-----|---------------|------|----|
| K0300.10X | 17 | 11 | 16,5 | 11 | M10 | 50/75/100     | 19,5 | 17 |
| K0300.12X | 17 | 18 | 18,5 | 13 | M12 | 50/75/100/125 | 21,5 | 19 |

Application of a drilling jig



## Fixture feet

with internal thread



### Material:

Body high carbon steel.

### Version:

Body tempered and black oxidised.  
Contact faces case-hardened.

### Sample order:

K0301.106X20

### Note:

Fixture feet with internal thread are used as supports for fixtures or rough or machined workpieces. They can also be used as stops or thrust pads in fixtures and toolmaking.

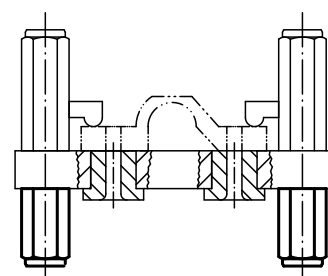
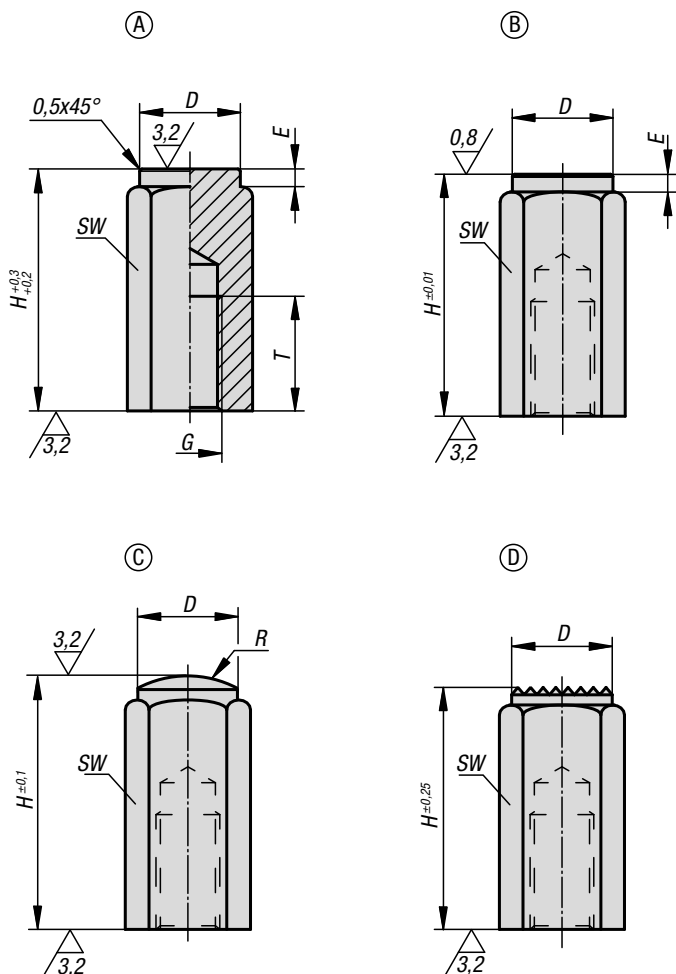
### Drawing reference:

Form A: hardened face

Form B: face hardened and ground

Form C: hardened spherical surface

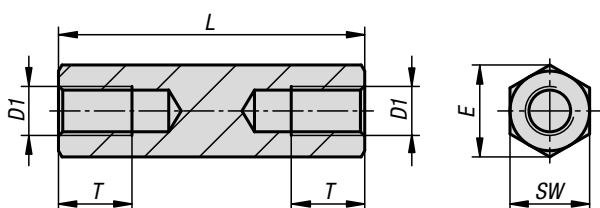
Form D: tempered serrated surface



### KIPP Fixture feet with internal thread

| Order No.<br>Form A | Order No.<br>Form B | Order No.<br>Form C | Order No.<br>Form D | D    | E       | G   | H   | R        | T  | SW |
|---------------------|---------------------|---------------------|---------------------|------|---------|-----|-----|----------|----|----|
| K0301.106X20        | K0301.206X20        | K0301.306X20        | K0301.406X20        | 9,5  | 2/2/-/- | M6  | 20  | -/-/15/- | 12 | 10 |
| K0301.106X40        | K0301.206X40        | K0301.306X40        | K0301.406X40        | 9,5  | 2/2/-/- | M6  | 40  | -/-/15/- | 12 | 10 |
| K0301.110X32        | K0301.210X32        | K0301.310X32        | K0301.410X32        | 16,5 | 3/3/-/- | M10 | 32  | -/-/30/- | 18 | 17 |
| K0301.110X63        | K0301.210X63        | K0301.310X63        | K0301.410X63        | 16,5 | 3/3/-/- | M10 | 63  | -/-/30/- | 18 | 17 |
| K0301.112X32        | K0301.212X32        | K0301.312X32        | K0301.412X32        | 18,5 | 3/3/-/- | M12 | 32  | -/-/35/- | 18 | 19 |
| K0301.112X63        | K0301.212X63        | K0301.312X63        | K0301.412X63        | 18,5 | 3/3/-/- | M12 | 63  | -/-/35/- | 18 | 19 |
| K0301.116X50        | K0301.216X50        | K0301.316X50        | K0301.416X50        | 23   | 4/4/-/- | M16 | 50  | -/-/40/- | 24 | 24 |
| K0301.116X100       | K0301.216X100       | K0301.316X100       | K0301.416X100       | 23   | 4/4/-/- | M16 | 100 | -/-/40/- | 24 | 24 |

## Extension pieces



### Material:

Steel.

### Version:

Trivalent blue passivated.

### Sample order:

K1302.205025

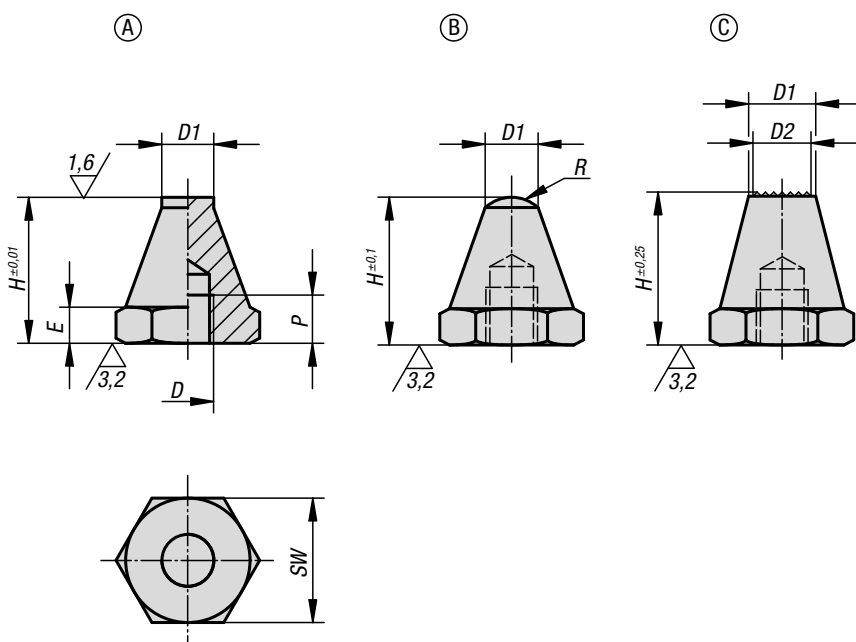
(include length L e.g. 025 for L = 25 mm.)

## KIPP Extension pieces

| Order No.    | D1  | E    | L                  | SW | T  |
|--------------|-----|------|--------------------|----|----|
| K1302.205*** | M5  | 9,2  | 25/30/35           | 8  | 8  |
| K1302.206*** | M6  | 11,5 | 30/35/40/50/60     | 10 | 9  |
| K1302.208*** | M8  | 15   | 30/35/40/50/60/90  | 13 | 12 |
| K1302.210*** | M10 | 18,5 | 40/45/55/65/95/115 | 16 | 15 |
| K1302.212*** | M12 | 20,8 | 40/45/55/65/95/115 | 18 | 18 |



## Rest pads



### Material:

Body high carbon steel.

### Version:

Body tempered and black oxidised.

### Sample order:

K0294.106012

### Note:

Rest pads are for supporting machined and non-machined parts. They can also be used as stops and thrust pads in fixtures and toolmaking. Studs or grub screws can be screwed and glued into the tapped hole D to make a rest pad with external thread.

### Drawing reference:

Form A: flat face

Form B: ball end

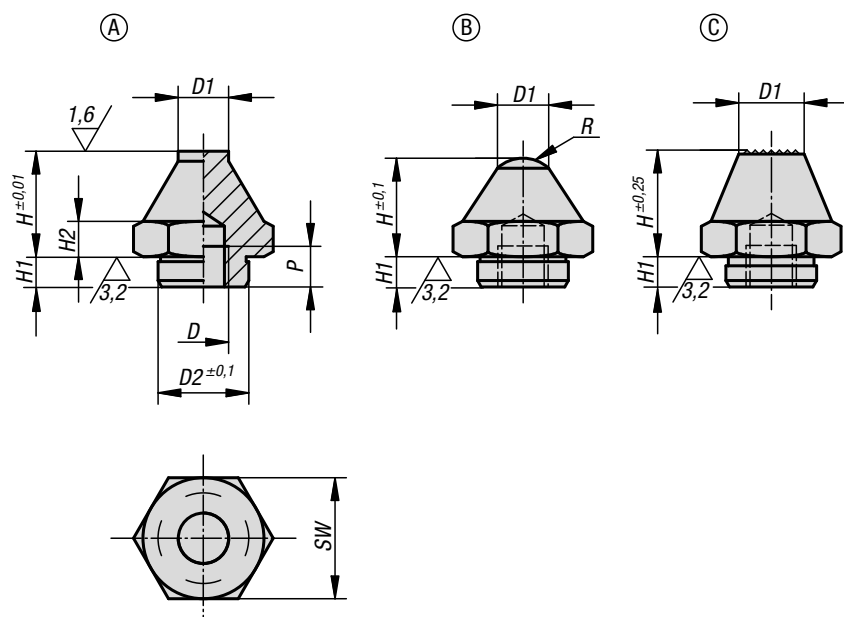
Form C: diamond grip

## KIPP Rest pads

| Order No.<br>Form A | Order No.<br>Form B | Order No.<br>Form C | D   | D1 | D2      | E | H    | P  | R         | SW |
|---------------------|---------------------|---------------------|-----|----|---------|---|------|----|-----------|----|
| K0294.106012        | K0294.206012        | K0294.306012        | M6  | 6  | -/-/5   | 3 | 12,5 | 4  | -/5/-     | 11 |
| K0294.106025        | K0294.206025        | K0294.306025        | M6  | 6  | -/-/5   | 3 | 25   | 7  | -/5/-     | 11 |
| K0294.108015        | K0294.208015        | K0294.308015        | M8  | 8  | -/-/6   | 4 | 15   | 6  | -/8,5/-   | 13 |
| K0294.108030        | K0294.208030        | K0294.308030        | M8  | 8  | -/-/6   | 4 | 30   | 9  | -/8,5/-   | 13 |
| K0294.110020        | K0294.210020        | K0294.310020        | M10 | 10 | -/-/8   | 5 | 20   | 9  | -/9/-     | 17 |
| K0294.110040        | K0294.210040        | K0294.310040        | M10 | 10 | -/-/8   | 5 | 40   | 13 | -/9/-     | 17 |
| K0294.112025        | K0294.212025        | K0294.312025        | M12 | 12 | -/-/9,5 | 6 | 25   | 11 | -/12,75/- | 19 |
| K0294.112050        | K0294.212050        | K0294.312050        | M12 | 12 | -/-/9,5 | 6 | 50   | 16 | -/12,75/- | 19 |
| K0294.116030        | K0294.216030        | K0294.316030        | M16 | 16 | -/-/13  | 8 | 30   | 12 | -/17/-    | 24 |
| K0294.116060        | K0294.216060        | K0294.316060        | M16 | 16 | -/-/13  | 8 | 60   | 20 | -/17/-    | 24 |

## Rest pads

with positioning pin



### Material:

Body high carbon steel.

### Version:

Body tempered and black oxidised.  
Contact faces case-hardened.

### Sample order:

K0295.106012

### Note:

Rest pads are for supporting machined and unmachined parts. They can also be used as stops and thrust pads in fixtures and toolmaking. Studs or grub screws can be screwed and glued into the tapped hole D to make a support with external thread.

### Drawing reference:

Form A: flat face

Form B: ball end

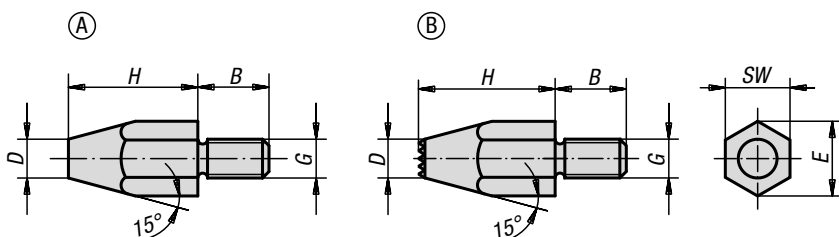
Form C: diamond grip

## KIPP Rest pads with positioning pin

| Order No.    | Form | D   | D1 | D2   | H    | H1 | H2 | P  | R   | SW |
|--------------|------|-----|----|------|------|----|----|----|-----|----|
| K0295.106012 | A    | M6  | 7  | 11,9 | 12,5 | 4  | 4  | 6  | -   | 17 |
| K0295.106025 | A    | M6  | 7  | 11,9 | 25   | 4  | 4  | 6  | -   | 17 |
| K0295.110020 | A    | M10 | 10 | 17,8 | 20   | 5  | 7  | 10 | -   | 24 |
| K0295.110040 | A    | M10 | 10 | 17,8 | 40   | 6  | 7  | 10 | -   | 24 |
| K0295.116030 | A    | M16 | 20 | 25,8 | 30   | 10 | 13 | 16 | -   | 41 |
| K0295.116060 | A    | M16 | 20 | 25,8 | 60   | 10 | 13 | 16 | -   | 41 |
| K0295.206012 | B    | M6  | 7  | 11,9 | 12,5 | 4  | 4  | 6  | 6   | 17 |
| K0295.206025 | B    | M6  | 7  | 11,9 | 25   | 4  | 4  | 6  | 6   | 17 |
| K0295.210020 | B    | M10 | 10 | 17,8 | 20   | 5  | 7  | 10 | 7,5 | 24 |
| K0295.210040 | B    | M10 | 10 | 17,8 | 40   | 6  | 7  | 10 | 7,5 | 24 |
| K0295.216030 | B    | M16 | 20 | 25,8 | 30   | 10 | 13 | 16 | 26  | 41 |
| K0295.216060 | B    | M16 | 20 | 25,8 | 60   | 10 | 13 | 16 | 26  | 41 |
| K0295.310020 | C    | M10 | 10 | 17,8 | 20   | 5  | 7  | 10 | -   | 24 |
| K0295.310040 | C    | M10 | 10 | 17,8 | 40   | 6  | 7  | 10 | -   | 24 |
| K0295.316030 | C    | M16 | 20 | 25,8 | 30   | 10 | 13 | 16 | -   | 41 |
| K0295.316060 | C    | M16 | 20 | 25,8 | 60   | 10 | 13 | 16 | -   | 41 |

## Feet

with threaded pin, DIN 6320 (edition 1971)



### Material:

Carbon steel 1.1172.

### Version:

Black oxidised.

### Sample order:

K0296.10

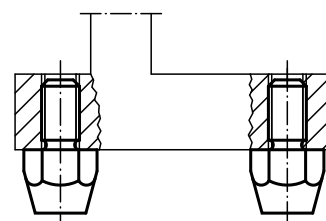
### Note:

The rest pads K0292 and K0293 can also be used as feet.

### Drawing reference:

Form A: Smooth face

Form B: Carbide tips

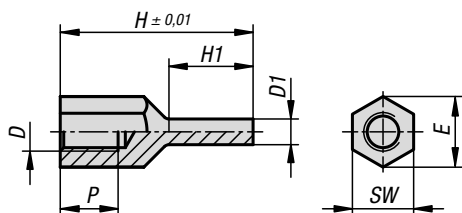


## KIPP Feet with threaded pin, DIN 6320 (edition 1971)

| Order No. | Form | D    | G   | H  | B  | E    | SW |
|-----------|------|------|-----|----|----|------|----|
| K0296.06  | A    | 8    | M6  | 10 | 11 | 11,5 | 10 |
| K0296.061 | A    | 6    | M6  | 20 | 11 | 11,5 | 10 |
| K0296.08  | A    | 10   | M8  | 15 | 13 | 15   | 13 |
| K0296.081 | A    | 9    | M8  | 30 | 13 | 15   | 13 |
| K0296.10  | A    | 13   | M10 | 20 | 16 | 19,6 | 17 |
| K0296.101 | A    | 13   | M10 | 40 | 16 | 19,6 | 17 |
| K0296.12  | A    | 15   | M12 | 25 | 20 | 21,9 | 19 |
| K0296.121 | A    | 15   | M12 | 50 | 20 | 21,9 | 19 |
| K0296.083 | B    | 11,5 | M8  | 15 | 13 | 15   | 13 |
| K0296.123 | B    | 15   | M12 | 25 | 20 | 21,9 | 19 |

# Rest pads

pin form, internal thread


**Material:**

Carbon steel.

**Version:**

Tempered, black oxidised.

Seating face inductively hardened and ground.

**Sample order:**

K1105.2060420

**Note:**

The rest pads can be used both as a stable and precise support and as a stop.

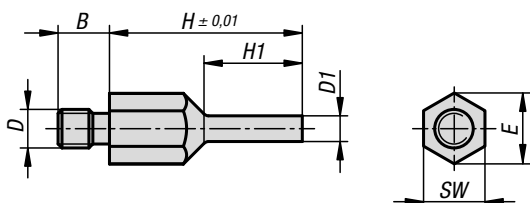
The pin form of the rest pad also allows it to be used with components with constricted support points.

## KIPP Rest pads, pin form with internal thread

| Order No.     | D   | D1 | E    | H  | H1   | P  | SW |
|---------------|-----|----|------|----|------|----|----|
| K1105.2060420 | M6  | 4  | 11   | 20 | 8,5  | 6  | 10 |
| K1105.2060430 | M6  | 4  | 11   | 30 | 13,5 | 9  | 10 |
| K1105.2080430 | M8  | 4  | 14,4 | 30 | 13   | 10 | 13 |
| K1105.2080440 | M8  | 4  | 14,4 | 40 | 18   | 14 | 13 |
| K1105.2080630 | M8  | 6  | 14,4 | 30 | 13   | 10 | 13 |
| K1105.2080640 | M8  | 6  | 14,4 | 40 | 18   | 14 | 13 |
| K1105.2100630 | M10 | 6  | 19   | 30 | 12   | 10 | 17 |
| K1105.2100650 | M10 | 6  | 19   | 50 | 25   | 15 | 17 |
| K1105.2100830 | M10 | 8  | 19   | 30 | 12   | 10 | 17 |
| K1105.2100850 | M10 | 8  | 19   | 50 | 25   | 15 | 17 |
| K1105.2120640 | M12 | 6  | 21,2 | 40 | 18   | 12 | 19 |
| K1105.2120660 | M12 | 6  | 21,2 | 60 | 28   | 18 | 19 |
| K1105.2120840 | M12 | 8  | 21,2 | 40 | 18   | 12 | 19 |
| K1105.2120860 | M12 | 8  | 21,2 | 60 | 28   | 18 | 19 |

# Rest pads

pin form, external thread



## Material:

Carbon steel.

## Version:

Tempered, black oxidised.

Seating face inductively hardened and ground.

## Sample order:

K1105.1060420

## Note:

The rest pads can be used both as a stable and precise support and as a stop.

The pin form of the rest pad also allows it to be used with components with constricted support points.

## KIPP Rest pads, pin form with external thread

| Order No.     | B  | D   | D1 | E    | H  | H1 | SW |
|---------------|----|-----|----|------|----|----|----|
| K1105.1060420 | 8  | M6  | 4  | 11   | 20 | 10 | 10 |
| K1105.1060430 | 8  | M6  | 4  | 11   | 30 | 15 | 10 |
| K1105.1080430 | 10 | M8  | 4  | 14,4 | 30 | 15 | 13 |
| K1105.1080440 | 10 | M8  | 4  | 14,4 | 40 | 20 | 13 |
| K1105.1080630 | 10 | M8  | 6  | 14,4 | 30 | 15 | 13 |
| K1105.1080640 | 10 | M8  | 6  | 14,4 | 40 | 20 | 13 |
| K1105.1100630 | 14 | M10 | 6  | 19   | 30 | 15 | 17 |
| K1105.1100650 | 14 | M10 | 6  | 19   | 50 | 25 | 17 |
| K1105.1100830 | 14 | M10 | 8  | 19   | 30 | 15 | 17 |
| K1105.1100850 | 14 | M10 | 8  | 19   | 50 | 25 | 17 |
| K1105.1120640 | 14 | M12 | 6  | 21,2 | 40 | 20 | 19 |
| K1105.1120660 | 14 | M12 | 6  | 21,2 | 60 | 30 | 19 |
| K1105.1120840 | 14 | M12 | 8  | 21,2 | 40 | 20 | 19 |
| K1105.1120860 | 14 | M12 | 8  | 21,2 | 60 | 30 | 19 |

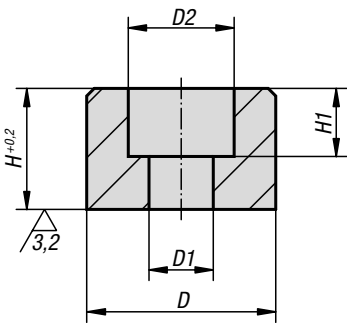
Locating feet



**Material:**  
Steel.

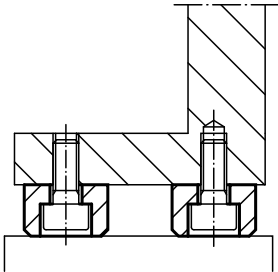
**Version:**  
Hardened, black oxidised.

**Sample order:**  
K0303.08



KIPP Locating feet

| Order No. | D  | D1   | D2 | H  | H1  |
|-----------|----|------|----|----|-----|
| K0303.05  | 16 | 5,5  | 10 | 10 | 5,7 |
| K0303.06  | 20 | 6,6  | 11 | 12 | 7   |
| K0303.08  | 25 | 9    | 15 | 16 | 9   |
| K0303.10  | 32 | 11   | 18 | 20 | 11  |
| K0303.12  | 36 | 13,5 | 20 | 25 | 13  |



Notes

## Support bolts



**Material:**  
Carbon steel, tempered.

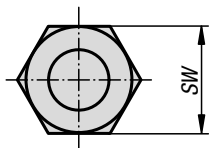
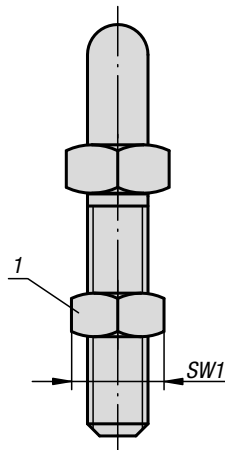
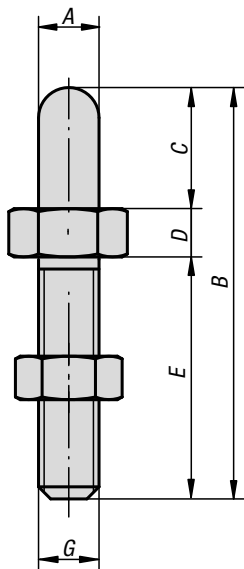
**Version:**  
Black oxidised.

**Sample order:**  
K0297.16016

**Note:**  
The rounded nose also allows support bolts to be used as positioning elements for workpieces with matching holes.

The versions K0297.20020 and K0297-20040 have an octagonal collar.

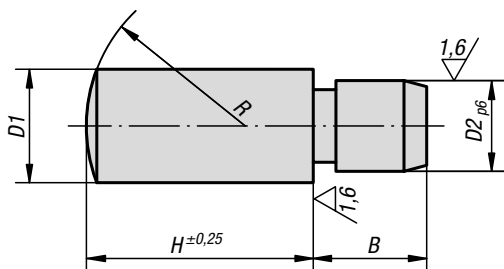
**Drawing reference:**  
1) locknut



## KIPP Support bolts

| Order No.   | A  | B   | C  | D  | E  | G   | SW | SW1 |
|-------------|----|-----|----|----|----|-----|----|-----|
| K0297.06006 | 6  | 37  | 6  | 6  | 25 | M6  | 13 | 10  |
| K0297.06012 | 6  | 43  | 12 | 6  | 25 | M6  | 13 | 10  |
| K0297.08008 | 8  | 45  | 8  | 7  | 30 | M8  | 13 | 13  |
| K0297.08016 | 8  | 53  | 16 | 7  | 30 | M8  | 13 | 13  |
| K0297.10010 | 10 | 58  | 10 | 8  | 40 | M10 | 17 | 17  |
| K0297.10020 | 10 | 68  | 20 | 8  | 40 | M10 | 17 | 17  |
| K0297.12012 | 12 | 72  | 12 | 10 | 50 | M12 | 19 | 19  |
| K0297.12024 | 12 | 84  | 24 | 10 | 50 | M12 | 19 | 19  |
| K0297.16016 | 16 | 89  | 16 | 13 | 60 | M16 | 24 | 24  |
| K0297.16032 | 16 | 105 | 32 | 13 | 60 | M16 | 24 | 24  |
| K0297.20020 | 20 | 115 | 20 | 15 | 80 | M20 | 36 | 30  |
| K0297.20040 | 20 | 135 | 40 | 15 | 80 | M20 | 36 | 30  |

## Rest pads



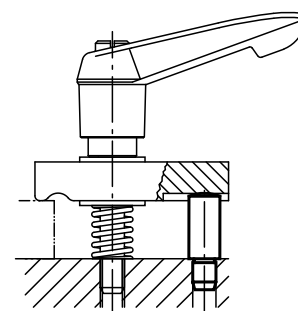
**Material:**  
Steel 1.0301.

**Version:**  
Case-hardened, black oxidised and ground.

**Sample order:**  
K0305.05X8 (include length H)

### KIPP Rest pads

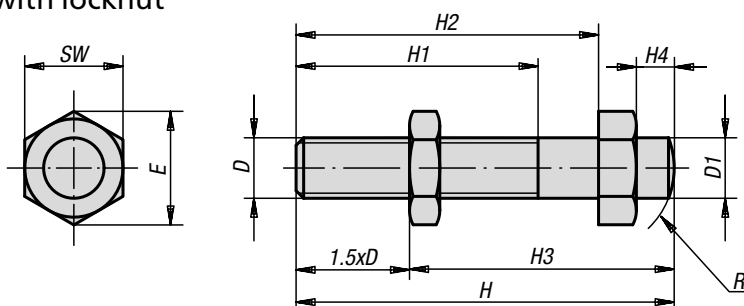
| Order No. | H           | B  | D1 | D2 | R  |
|-----------|-------------|----|----|----|----|
| K0305.05X | 8/10/12/16  | 5  | 5  | 4  | 7  |
| K0305.06X | 10/12/16/20 | 6  | 6  | 5  | 8  |
| K0305.08X | 12/16/20/25 | 8  | 8  | 6  | 11 |
| K0305.10X | 16/20/25/32 | 10 | 10 | 8  | 14 |
| K0305.12X | 20/25/32/40 | 12 | 12 | 10 | 16 |
| K0305.14X | 20/25/32/40 | 14 | 14 | 12 | 20 |
| K0305.16X | 25/32/40/50 | 16 | 16 | 14 | 25 |
| K0305.20X | 25/32/40/50 | 20 | 20 | 16 | 28 |



# K0306

## Rest pads adjustable

with locknut



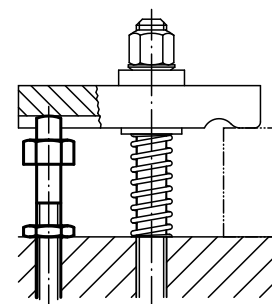
**Material:**  
Carbon steel 1.1181.

**Version:**  
Surface hardened, black oxidised.

**Sample order:**  
K0306.05

### KIPP Rest pads adjustable with locknut

| Order No. | D   | D1 | H   | H1 | H2  | H3 min. | H3 max. | H4 | E    | SW | R  | F ca.N |
|-----------|-----|----|-----|----|-----|---------|---------|----|------|----|----|--------|
| K0306.05  | M5  | 5  | 50  | 32 | 40  | 20,5    | 42,5    | 5  | 11,5 | 10 | 7  | 1000   |
| K0306.06  | M6  | 6  | 50  | 32 | 40  | 21      | 41      | 5  | 11,5 | 10 | 8  | 1430   |
| K0306.08  | M8  | 8  | 50  | 32 | 40  | 22      | 38      | 5  | 15   | 13 | 11 | 2620   |
| K0306.10  | M10 | 10 | 52  | 32 | 40  | 25      | 37      | 5  | 19,6 | 17 | 14 | 4180   |
| K0306.101 | M10 | 10 | 70  | 32 | 56  | 42      | 55      | 6  | 19,6 | 17 | 14 | 4180   |
| K0306.12  | M12 | 12 | 70  | 40 | 56  | 36      | 52      | 6  | 21,9 | 19 | 16 | 6100   |
| K0306.121 | M12 | 12 | 95  | 50 | 80  | 51      | 77      | 6  | 21,9 | 19 | 16 | 6100   |
| K0306.14  | M14 | 14 | 100 | 63 | 80  | 44      | 79      | 8  | 25,4 | 22 | 20 | 8320   |
| K0306.16  | M16 | 16 | 100 | 63 | 80  | 45      | 76      | 8  | 27,7 | 24 | 25 | 11520  |
| K0306.161 | M16 | 16 | 120 | 63 | 100 | 65      | 96      | 8  | 27,7 | 24 | 25 | 11520  |
| K0306.20  | M20 | 20 | 110 | 70 | 88  | 50      | 90      | 10 | 34,6 | 30 | 28 | 18000  |





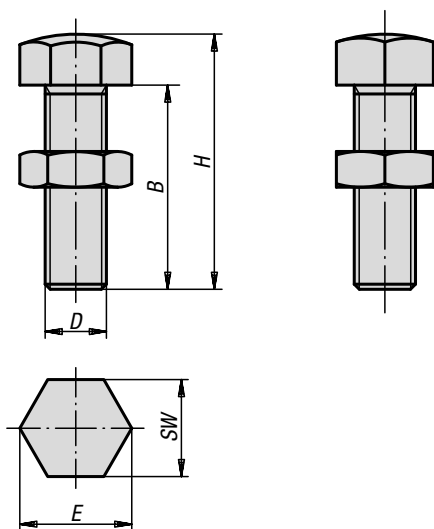
## Rest pads

**Material:**

Carbon steel or brass

**Version:**High-carbon steel tempered and black oxidised.  
Brass bright.**Sample order:**

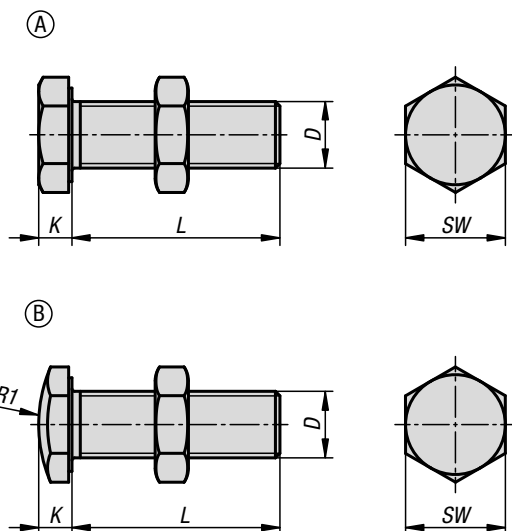
K0307.16055



## KIPP Rest pads

| Order No.   | Main material     | B  | D   | E    | H  | SW |
|-------------|-------------------|----|-----|------|----|----|
| K0307.06030 | high carbon steel | 25 | M6  | 11,5 | 30 | 10 |
| K0307.06040 | high carbon steel | 35 | M6  | 11,5 | 40 | 10 |
| K0307.06050 | high carbon steel | 45 | M6  | 11,5 | 50 | 10 |
| K0307.08036 | high carbon steel | 30 | M8  | 15   | 36 | 13 |
| K0307.08046 | high carbon steel | 40 | M8  | 15   | 46 | 13 |
| K0307.08056 | high carbon steel | 50 | M8  | 15   | 56 | 13 |
| K0307.10042 | high carbon steel | 35 | M10 | 19,6 | 42 | 17 |
| K0307.10048 | high carbon steel | 40 | M10 | 19,6 | 48 | 17 |
| K0307.10058 | high carbon steel | 50 | M10 | 19,6 | 58 | 17 |
| K0307.10068 | high carbon steel | 60 | M10 | 19,6 | 68 | 17 |
| K0307.12048 | high carbon steel | 42 | M12 | 21,9 | 50 | 19 |
| K0307.12070 | high carbon steel | 60 | M12 | 21,9 | 70 | 19 |
| K0307.12080 | high carbon steel | 70 | M12 | 21,9 | 80 | 19 |
| K0307.16055 | high carbon steel | 45 | M16 | 27,7 | 55 | 24 |
| K0307.16075 | high carbon steel | 65 | M16 | 27,7 | 75 | 24 |
| K0307.16085 | high carbon steel | 75 | M16 | 27,7 | 85 | 24 |
| K0307.12148 | brass             | 42 | M12 | 21,9 | 50 | 19 |
| K0307.16155 | brass             | 45 | M16 | 27,7 | 55 | 24 |

## Stop screws



### Material:

Steel grade 10.9  
(M3 8.8)

### Version:

Stop screw black oxidised.  
Nut electro zinc-plated.

### Sample order:

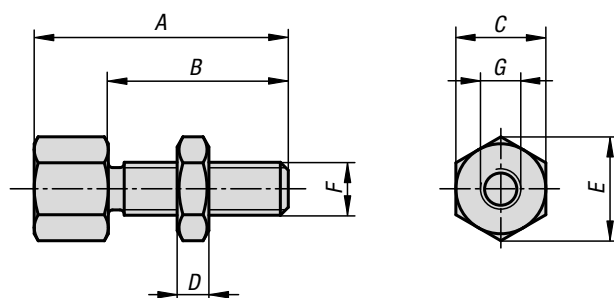
K1200.10820  
(include length L e.g. 20 for L = 20 mm)

### Note:

Size M3 stop screw only available in grade 8.8.

## KIPP Stop screws

| Order No.   | Form | D   | L                                      | K   | SW  | SR1 |
|-------------|------|-----|----------------------------------------|-----|-----|-----|
| K1200.103** | A    | M3  | 16/25                                  | 2   | 5,5 | -   |
| K1200.104** | A    | M4  | 16/25/35                               | 2,5 | 7   | -   |
| K1200.105** | A    | M5  | 16/25/35                               | 3,5 | 8   | -   |
| K1200.106** | A    | M6  | 25/35/40                               | 3,8 | 10  | -   |
| K1200.108** | A    | M8  | 12/16/20/25/30/35/40/45/50/55/65/70/85 | 5   | 13  | -   |
| K1200.110** | A    | M10 | 35/40/50/60                            | 6   | 17  | -   |
| K1200.112** | A    | M12 | 40/60/70                               | 7   | 19  | -   |
| K1200.116** | A    | M16 | 50/60/70                               | 9,5 | 24  | -   |
| K1200.203** | B    | M3  | 16/25                                  | 2   | 5,5 | 10  |
| K1200.204** | B    | M4  | 16/25/35                               | 2,5 | 7   | 10  |
| K1200.205** | B    | M5  | 16/25/35                               | 3,5 | 8   | 12  |
| K1200.206** | B    | M6  | 25/35/40                               | 3,8 | 10  | 15  |
| K1200.208** | B    | M8  | 12/16/20/25/30/35/40/45/50/55/65/70/85 | 5   | 13  | 20  |
| K1200.210** | B    | M10 | 35/40/50/60                            | 6   | 17  | 30  |
| K1200.212** | B    | M12 | 40/60/70                               | 7   | 19  | 30  |
| K1200.216** | B    | M16 | 50/60/70                               | 9,5 | 24  | 35  |



**Material:**  
Carbon steel.

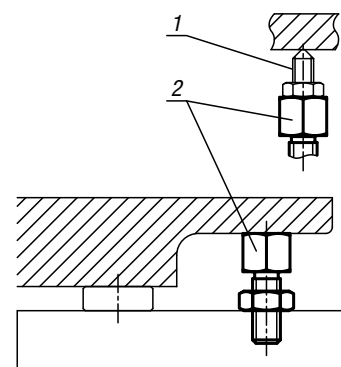
**Version:**  
Black oxidised.

**Sample order:**  
K0308.0803006

**Note:**  
Various rests can be mounted on this jack screw.

**Drawing reference:**

- 1) screw rest
- 2) jack screw

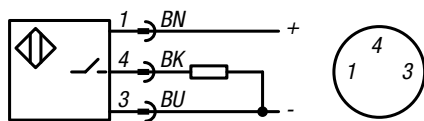
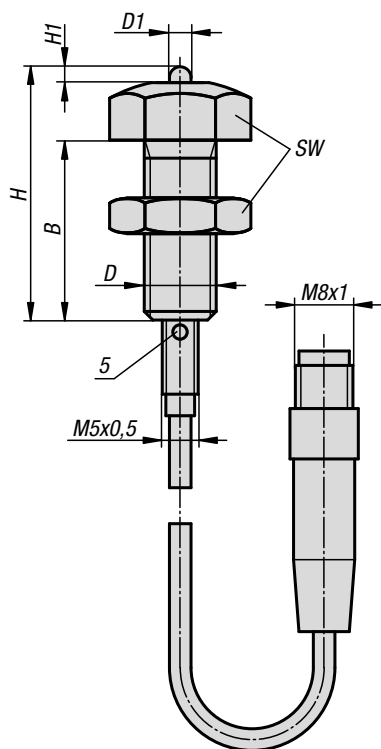


### KIPP Jack screws

| Order No.     | A  | B  | C  | D  | E    | F   | G        |
|---------------|----|----|----|----|------|-----|----------|
| K0308.0803006 | 30 | 20 | 13 | 5  | 14,4 | M8  | M6 x 6   |
| K0308.0804006 | 40 | 30 | 13 | 5  | 14,4 | M8  | M6 x 6   |
| K0308.1003808 | 38 | 24 | 17 | 6  | 18,9 | M10 | M8 x 8   |
| K0308.1004808 | 48 | 34 | 17 | 6  | 18,9 | M10 | M8 x 8   |
| K0308.1205110 | 51 | 33 | 22 | 7  | 24,5 | M12 | M10 x 10 |
| K0308.1206610 | 66 | 48 | 22 | 7  | 24,5 | M12 | M10 x 10 |
| K0308.1606212 | 62 | 40 | 27 | 10 | 30,1 | M16 | M12 x 12 |
| K0308.1607712 | 77 | 55 | 27 | 10 | 30,1 | M16 | M12 x 12 |

# Stops

adjustable, with end position feedback



## Material:

Screw and plunger stainless steel 1.4301.

Guide bush stainless steel 1.4112.

Sensor housing stainless steel.

## Version:

Screw and plunger, bright.

Guide bushing, bright.

Sensor housing, bright.

Inductive sensor:

Relay (NO)

Operating voltage 10 - 30 V DC

Operating current 100 mA

Switching distance 0.8 mm

Protection class: IP 67

Connection type: 0.3 m PUR cable with connector plug

Temperature range: -25°C - +70°C

Approval: CE, c-UL-us

## Sample order:

K0581.080352

## Note:

The ensured sensing distance is achieved if the plunger is actuated flush up to the stop surface of the guide bush. The sensor is supplied unassembled.

Installation recommendation: glue in with Loctite 638.

Caution: screw sensor in until it comes to a stop.

## Safety:

End position feedback stops are not suitable for personal protection.

## Drawing reference:

5) LED-indicator

BN = brown

BK = black

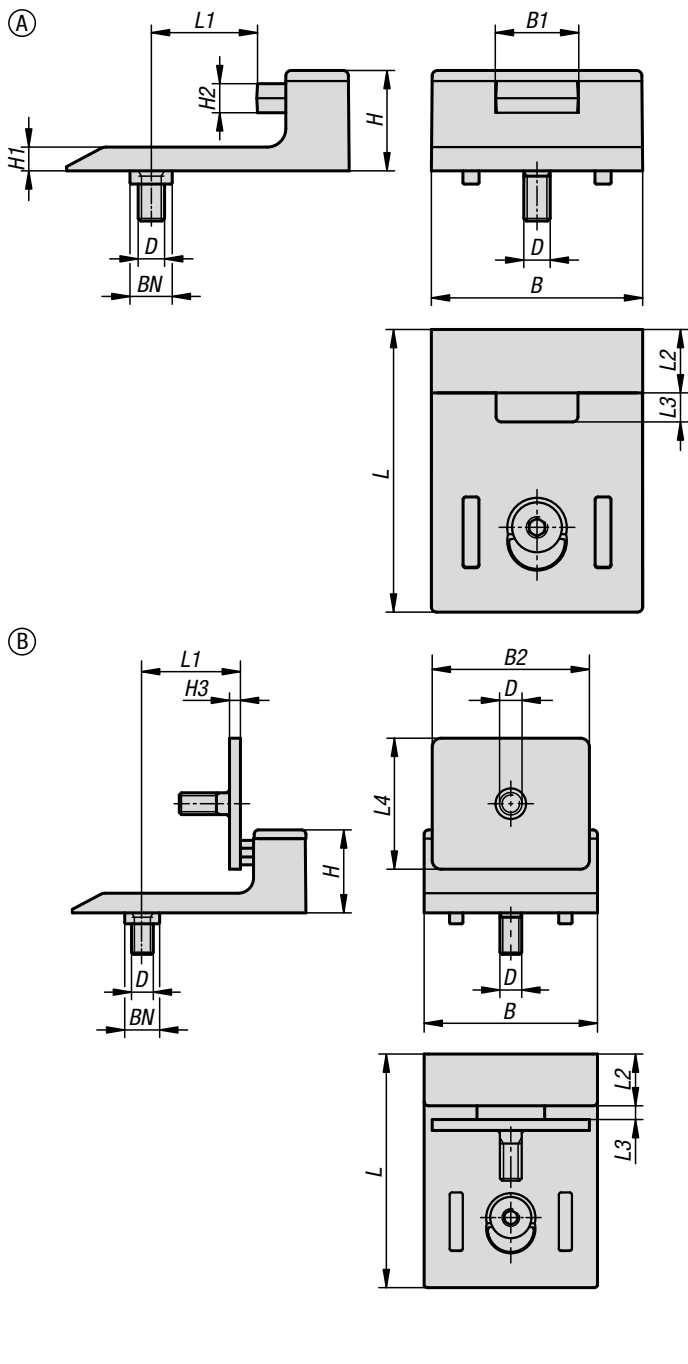
BU = blue

## KIPP Stops, adjustable, with end position feedback

| Order No.    | Size | B  | D   | D1 | H    | H1 | SW |
|--------------|------|----|-----|----|------|----|----|
| K0581.080352 | 1    | 25 | M8  | 3  | 35,2 | 2  | 13 |
| K0581.100352 | 2    | 25 | M10 | 3  | 35,2 | 2  | 17 |
| K0581.120352 | 3    | 25 | M12 | 3  | 35,2 | 2  | 19 |

## Door stops plastic

for aluminium profile with buffer or with magnetic catch



### Material:

Door stop fibreglass reinforced PA.  
Buffer EPDM.  
Retaining plate steel.  
Slot key die-cast zinc.  
Screw steel.  
Locking piece fibreglass reinforced PA.

### Version:

Steel electro zinc-plated.

### Sample order:

K1633.0

### Supplied with:

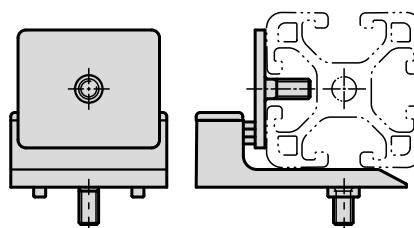
Door stop with buffer:  
1x door stop,  
1x slot key,  
1x M5x14 ISO 7991 screw,  
1x locking piece.

### Door stop with magnetic catch:

1x door stop,  
1x retaining plate,  
1x slot key,  
2x M5x14 ISO 7991 screws,  
1x locking piece.

### Accessories:

These door stops can be used to close doors or hatches mounted on aluminium profiles softly or magnetically.



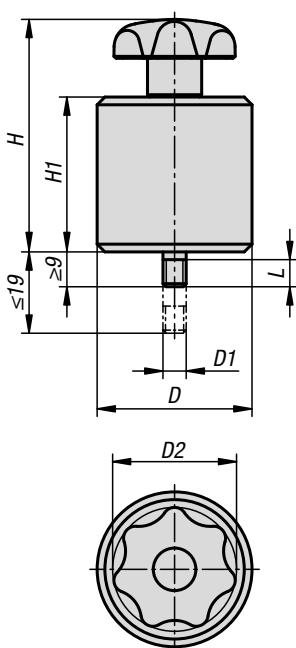
## KIPP Door stops plastic for aluminium profile with buffer or with magnetic catch

| Order No. | Version 1           | Form | Component material | Surface finish component | B  | B1 | B2 | D  | H  |
|-----------|---------------------|------|--------------------|--------------------------|----|----|----|----|----|
| K1633.0   | with buffer         | A    | EPDM               | -                        | 40 | 15 | -  | M5 | 19 |
| K1633.1   | with magnetic catch | B    | steel              | galvanised               | 40 | -  | 36 | M5 | 19 |

| Order No. | H1  | H2 | H3  | L    | L1      | L2 | L3 | L4 | BN=Slot width | Shore grade |
|-----------|-----|----|-----|------|---------|----|----|----|---------------|-------------|
| K1633.0   | 4,5 | 5  | -   | 53,5 | 20/22,5 | 12 | 5  | -  | 8/10          | -           |
| K1633.1   | 4,5 | -  | 2,5 | 53,5 | 20/22,5 | 12 | 3  | 30 | 8/10          | 70          |

## Clamp stops adjustable

for slot profiles



### Material:

Body aluminium.  
Other metal components steel.  
Plastic components PA6.

### Version:

Body natural tone anodised.  
Other metal components trivalent blue passivated.

### Sample order:

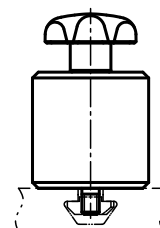
K1214.064040

### Note:

Sliding stop for profile systems type B, type I, and DIN 650 T-slots. Locked by turning the star grip. Sprung threaded pin ensures smooth sliding without tilting the slot key when loosened.

### Accessories:

K1023.0806  
K1024.0606  
K1024.0806  
K1025.0806  
K1026.1006  
K1027.1006  
K0377.06  
K0377.061  
K0377.806  
K0377.2061  
K0377.206



### KIPP Clamp stops adjustable for slot profiles

| Order No.    | D  | D1 | D2 | H  | H1 | L |
|--------------|----|----|----|----|----|---|
| K1214.064040 | 40 | M6 | 32 | 60 | 40 | 7 |

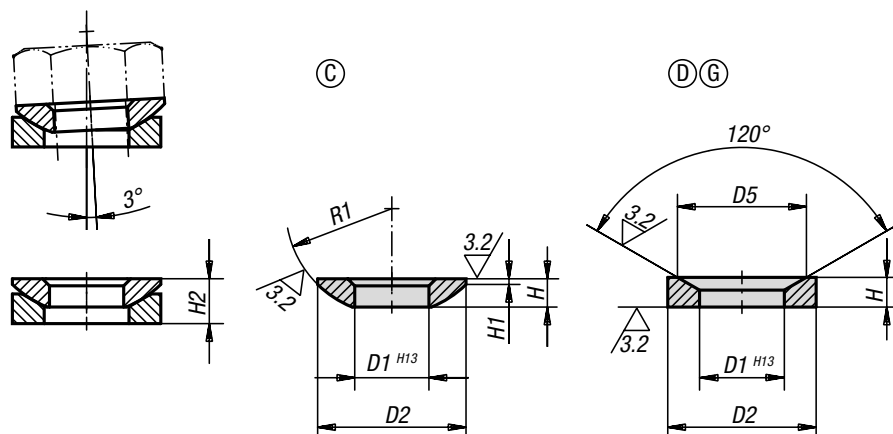


A large grid of graph paper for taking notes.



# Spherical washers

DIN 6319, edition 10/01

**Material:**

Mild steel, Q&amp;T steel or stainless steel.

**Version:**

Mild steel, case hardened, manganese-phosphated.  
 Tempered steel (HV 390 ±40), manganese-phosphated.  
 Stainless steel, bright.

**Sample order:**

K0729.216

**Note:**

Conical seat Form G should be used over slots.

**Drawing reference:**

Form C: spherical washer

Form D: conical seat

Form G: conical seat for slots

## KIPP Spherical washers Form C, DIN 6319, edition 10/01

| Order No.<br>mild steel | Order No.<br>stainless steel | Form | D1   | D2   | H    | H1  | R1  | Load rating<br>max. kN<br>(static load only) |
|-------------------------|------------------------------|------|------|------|------|-----|-----|----------------------------------------------|
| K0729.105               | -                            | C    | 5,25 | 10,5 | 2    | 0,4 | 7,5 | 6,5                                          |
| K0729.106               | K0729.0106                   | C    | 6,4  | 12   | 2,3  | 0,7 | 9   | 9/6                                          |
| K0729.108               | K0729.0108                   | C    | 8,4  | 17   | 3,2  | 0,6 | 12  | 17/12                                        |
| K0729.110               | K0729.0110                   | C    | 10,5 | 21   | 4    | 0,8 | 15  | 26/16                                        |
| K0729.112               | K0729.0112                   | C    | 13   | 24   | 4,6  | 1,1 | 17  | 38/24                                        |
| K0729.114               | -                            | C    | 15   | 28   | 5    | 1,2 | 22  | 53                                           |
| K0729.116               | K0729.0116                   | C    | 17   | 30   | 5,3  | 1,3 | 22  | 73/45                                        |
| K0729.120               | K0729.0120                   | C    | 21   | 36   | 6,3  | 2   | 27  | 117/71                                       |
| K0729.124               | K0729.0124                   | C    | 25   | 44   | 8,2  | 2,4 | 32  | 168/105                                      |
| K0729.130               | K0729.0130                   | C    | 31   | 56   | 11,2 | 3,6 | 41  | 269/191                                      |
| K0729.136               | K0729.0136                   | C    | 37   | 68   | 14   | 4,6 | 50  | 394/-                                        |
| K0729.142               | K0729.0142                   | C    | 43   | 78   | 17   | 6,5 | 58  | 542/-                                        |
| K0729.148               | K0729.0148                   | C    | 50   | 92   | 21   | 8   | 67  | 714/-                                        |
| K0729.156               | -                            | C    | 58   | 103  | 23   | 9,5 | 79  | 960                                          |
| K0729.164               | -                            | C    | 66   | 120  | 27   | 12  | 93  | 1269                                         |



## Spherical washers

DIN 6319, edition 10/01



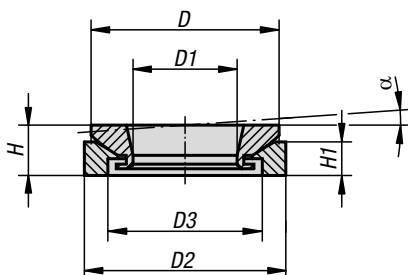
## KIPP Conical seats Form D, DIN 6319, edition 10/01

| Order No.<br>mild steel | Order No.<br>stainless steel | Form | D1   | D2   | D5   | H   | H2   | Load rating<br>max. kN<br>(static load only) |
|-------------------------|------------------------------|------|------|------|------|-----|------|----------------------------------------------|
| K0729.205               | -                            | D    | 6    | 10,5 | 9,25 | 2,1 | 3,1  | 6,5                                          |
| K0729.206               | K0729.0206                   | D    | 7,1  | 12   | 11   | 2,8 | 4,2  | 9/6                                          |
| K0729.208               | K0729.0208                   | D    | 9,6  | 17   | 14,5 | 3,5 | 5,6  | 17/12                                        |
| K0729.210               | K0729.0210                   | D    | 12   | 21   | 18,5 | 4,2 | 6,5  | 26/16                                        |
| K0729.212               | K0729.0212                   | D    | 14,2 | 24   | 20   | 5   | 8    | 38/24                                        |
| K0729.214               | -                            | D    | 16,5 | 28   | 24,8 | 5,6 | 8,5  | 53                                           |
| K0729.216               | K0729.0216                   | D    | 19   | 30   | 26   | 6,2 | 9,5  | 73/45                                        |
| K0729.220               | K0729.0220                   | D    | 23,2 | 36   | 31   | 7,5 | 11,7 | 117/71                                       |
| K0729.224               | K0729.0224                   | D    | 28   | 44   | 37   | 9,5 | 15,2 | 168/105                                      |
| K0729.230               | K0729.0230                   | D    | 35   | 56   | 49   | 12  | 19,2 | 269/191                                      |
| K0729.236               | K0729.0236                   | D    | 42   | 68   | 60   | 15  | 23,5 | 394/-                                        |
| K0729.242               | K0729.0242                   | D    | 49   | 78   | 70   | 18  | 29   | 542/-                                        |
| K0729.248               | K0729.0248                   | D    | 56   | 92   | 82   | 22  | 35,5 | 714/-                                        |
| K0729.256               | -                            | D    | 65   | 103  | 92   | 25  | 39,7 | 960                                          |
| K0729.264               | -                            | D    | 75   | 120  | 110  | 30  | 46,5 | 1269                                         |

## KIPP Conical seats Form G, DIN 6319 Edition 10/01

| Order No.<br>high carbon steel | Order No.<br>stainless steel | Form | D1   | D2 | D5   | H   | H2   | Load rating<br>max. kN<br>(static load only) |
|--------------------------------|------------------------------|------|------|----|------|-----|------|----------------------------------------------|
| K0729.305                      | -                            | G    | 6    | 15 | 9,25 | 2,5 | 3,5  | 6,5                                          |
| K0729.306                      | K0729.0306                   | G    | 7,1  | 17 | 11   | 4   | 5,4  | 9/6                                          |
| K0729.308                      | K0729.0308                   | G    | 9,6  | 24 | 14,5 | 5   | 7,1  | 17/12                                        |
| K0729.310                      | K0729.0310                   | G    | 12   | 30 | 18,5 | 5   | 7,3  | 26/16                                        |
| K0729.312                      | K0729.0312                   | G    | 14,2 | 36 | 20   | 6   | 9    | 38/24                                        |
| K0729.314                      | -                            | G    | 16,5 | 40 | 24,8 | 6   | 9,5  | 53                                           |
| K0729.316                      | K0729.0316                   | G    | 19   | 44 | 26   | 7   | 10,4 | 73/45                                        |
| K0729.320                      | K0729.0320                   | G    | 23,2 | 50 | 31   | 8   | 12,2 | 117/71                                       |
| K0729.324                      | K0729.0324                   | G    | 28   | 60 | 37   | 10  | 15,7 | 168/105                                      |
| K0729.330                      | K0729.0330                   | G    | 35   | 68 | 49   | 12  | 19,7 | 269/191                                      |
| K0729.336                      | -                            | G    | 42   | 80 | 60   | 12  | 20,3 | 394                                          |

## Spherical levelling washers



### Material:

Steel 1.7225.

Stainless steel 1.4305.

### Version:

Steel trivalent blue passivated.

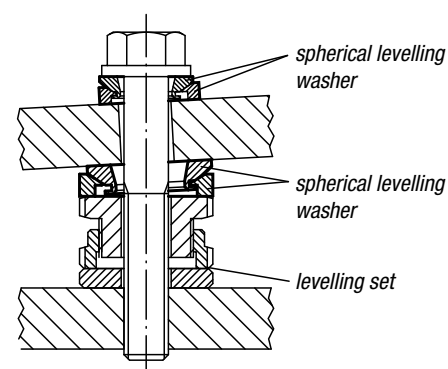
Stainless steel, bright.

### Sample order:

K0691.401

### Note:

Spherical levelling washers are for exact positioning when mounting up to 4° inclined surfaces. A second spherical levelling washer is recommended as support to correct the bolt angle if the angle of D3 is > 1°. The two washers cannot be detached from each other.

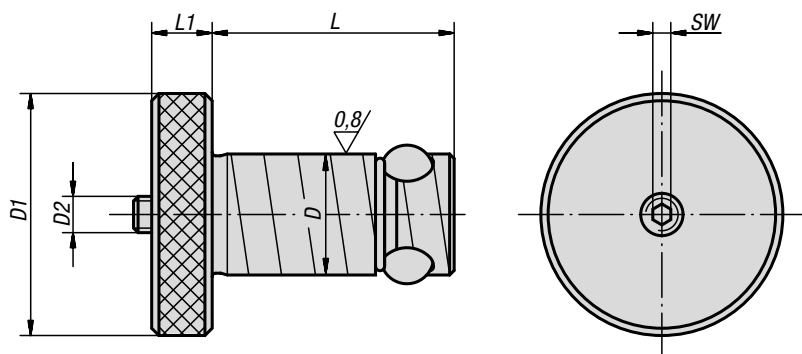


### KIPP Spherical levelling washers

| Order No.<br>steel | Order No.<br>stainless steel | H    | H1  | D  | D1  | D2 | D3 | α  |
|--------------------|------------------------------|------|-----|----|-----|----|----|----|
| K0691.151          | K0691.152                    | 8    | 5,5 | 23 | 8,5 | 25 | 15 | 4° |
| K0691.201          | K0691.202                    | 10   | 6,2 | 30 | 13  | 32 | 20 | 4° |
| K0691.301          | K0691.302                    | 12,5 | 9   | 40 | 20  | 45 | 30 | 4° |
| K0691.401          | K0691.402                    | 16   | 13  | 52 | 29  | 58 | 38 | 4° |
| K0691.501          | K0691.502                    | 20   | 14  | 65 | 36  | 70 | 48 | 4° |

# Locating cylinder

Ball Lock



## Material:

Locating cylinder carbon steel.  
Balls roller bearing steel.

## Version:

Locating cylinder tempered, black oxidised.  
Balls hardened, bright.

## Sample order:

K0935.16020

## Note:

By tightening the thrust screw (D2) the centre ball is pressed downwards and in turn forces the three locking balls outwards, where they locked in the receiver bush.

**With this easy to use system machine set-up times are up to twelve times shorter than when conventional methods are used.**

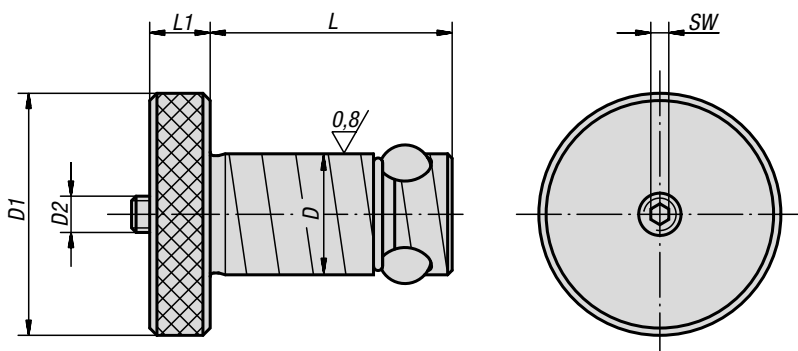


## KIPP Locating cylinders Ball lock

| Order No.   | Grid plate<br>thickness $\pm 0,05$ | D  | D1 | D2  | L    | L1 | SW  | Holding<br>force<br>F kN | Tightening<br>torque<br>max. Nm | Order No.<br>Repair Kit |
|-------------|------------------------------------|----|----|-----|------|----|-----|--------------------------|---------------------------------|-------------------------|
| K0935.13013 | 13                                 | 13 | 22 | M5  | 27,6 | 6  | 2,5 | 3,3                      | 1                               | K0935.913013            |
| K0935.13020 | 20                                 | 13 | 22 | M5  | 34,6 | 6  | 2,5 | 3,3                      | 1                               | K0935.913020            |
| K0935.16020 | 20                                 | 16 | 32 | M6  | 36,5 | 8  | 3   | 5,3                      | 3                               | K0935.916020            |
| K0935.16025 | 25                                 | 16 | 32 | M6  | 41,5 | 8  | 3   | 5,3                      | 3                               | K0935.916025            |
| K0935.20020 | 20                                 | 20 | 40 | M6  | 39,5 | 10 | 3   | 13,3                     | 4                               | K0935.920020            |
| K0935.20025 | 25                                 | 20 | 40 | M6  | 44,5 | 10 | 3   | 13,3                     | 4                               | K0935.920025            |
| K0935.25020 | 20                                 | 25 | 45 | M8  | 44   | 10 | 4   | 30                       | 9                               | K0935.925020            |
| K0935.25025 | 25                                 | 25 | 45 | M8  | 49   | 10 | 4   | 30                       | 9                               | K0935.925025            |
| K0935.30020 | 20                                 | 30 | 50 | M10 | 49   | 13 | 5   | 44                       | 15                              | K0935.930020            |
| K0935.30025 | 25                                 | 30 | 50 | M10 | 54   | 13 | 5   | 44                       | 15                              | K0935.930025            |
| K0935.35020 | 20                                 | 35 | 60 | M12 | 51   | 13 | 6   | 68                       | 25                              | K0935.935020            |
| K0935.35025 | 25                                 | 35 | 60 | M12 | 56   | 13 | 6   | 68                       | 25                              | K0935.935025            |
| K0935.35040 | 40                                 | 35 | 60 | M12 | 71   | 13 | 6   | 68                       | 25                              | K0935.935040            |
| K0935.35050 | 50                                 | 35 | 60 | M12 | 81   | 13 | 6   | 68                       | 25                              | K0935.935050            |
| K0935.50020 | 20                                 | 50 | 75 | M20 | 64   | 20 | 10  | 88                       | 50                              | K0935.950020            |
| K0935.50025 | 25                                 | 50 | 75 | M20 | 69   | 20 | 10  | 88                       | 50                              | K0935.950025            |
| K0935.50040 | 40                                 | 50 | 75 | M20 | 84   | 20 | 10  | 88                       | 50                              | K0935.950040            |
| K0935.50050 | 50                                 | 50 | 75 | M20 | 94   | 20 | 10  | 88                       | 50                              | K0935.950050            |

# Locating cylinder stainless steel

## Ball Lock


**Material:**

Locating cylinder and ball stainless steel 1.4542.

**Version:**

Locating cylinder and ball hardened to min. 40 HRC, bright.

**Sample order:**

K1474.16020

**Note:**

By tightening the thrust screw (D2) the centre ball is pressed downwards and in turn forces the three locking balls outwards, where they locked in the receiver bush.

**With this easy to use system machine set-up times are up to twelve times shorter than when conventional methods are used.**

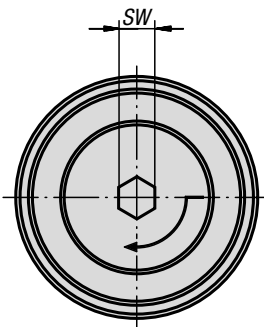
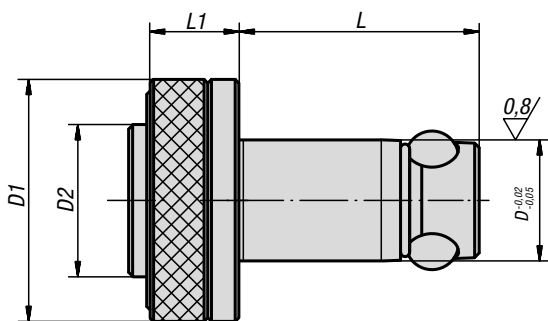


## KIPP Locating cylinder stainless steel Ball Lock

| Order No.   | Grid plate thickness $\pm 0.13$ | D  | D1 | D2  | L    | L1 | SW  | Holding force F kN | Tightening torque max. Nm | Order No. Repair Kit |
|-------------|---------------------------------|----|----|-----|------|----|-----|--------------------|---------------------------|----------------------|
| K1474.13013 | 13                              | 13 | 22 | M5  | 27,6 | 6  | 2,5 | 3,3                | 1,2                       | K1474.913013         |
| K1474.13020 | 20                              | 13 | 22 | M5  | 34,6 | 6  | 2,5 | 3,3                | 1,2                       | K1474.913020         |
| K1474.16020 | 20                              | 16 | 32 | M6  | 36,5 | 8  | 3   | 5,3                | 4,5                       | K1474.916020         |
| K1474.16025 | 25                              | 16 | 32 | M6  | 41,5 | 8  | 3   | 5,3                | 4,5                       | K1474.916025         |
| K1474.20020 | 20                              | 20 | 40 | M6  | 39,5 | 10 | 3   | 13,3               | 5,3                       | K1474.920020         |
| K1474.20025 | 25                              | 20 | 40 | M6  | 44,4 | 10 | 3   | 13,3               | 5,3                       | K1474.920025         |
| K1474.25020 | 20                              | 25 | 45 | M8  | 44   | 10 | 4   | 30                 | 11                        | K1474.925020         |
| K1474.25025 | 25                              | 25 | 45 | M8  | 49   | 10 | 4   | 30                 | 11                        | K1474.925025         |
| K1474.30020 | 20                              | 30 | 50 | M10 | 49   | 13 | 5   | 44                 | 18                        | K1474.930020         |
| K1474.30025 | 25                              | 30 | 50 | M10 | 54   | 13 | 5   | 44                 | 18                        | K1474.930025         |
| K1474.35020 | 20                              | 35 | 60 | M12 | 51   | 13 | 6   | 68                 | 33                        | K1474.935020         |
| K1474.35025 | 25                              | 35 | 60 | M12 | 56   | 13 | 6   | 68                 | 33                        | K1474.935025         |
| K1474.35040 | 40                              | 35 | 60 | M12 | 71   | 13 | 6   | 68                 | 33                        | K1474.935040         |
| K1474.35050 | 50                              | 35 | 60 | M12 | 81   | 13 | 6   | 68                 | 33                        | K1474.935050         |
| K1474.50020 | 20                              | 50 | 75 | M20 | 64   | 20 | 10  | 88                 | 65                        | K1474.950020         |
| K1474.50025 | 25                              | 50 | 75 | M20 | 69   | 20 | 10  | 88                 | 65                        | K1474.950025         |
| K1474.50040 | 40                              | 50 | 75 | M20 | 84   | 20 | 10  | 88                 | 65                        | K1474.950040         |
| K1474.50050 | 50                              | 50 | 75 | M20 | 94   | 20 | 10  | 88                 | 65                        | K1474.950050         |

# Locating cylinder

with quick clamping system



## Material:

Locating cylinder carbon steel.  
Balls roller bearing steel.

## Version:

Locating cylinder tempered, black oxidised.  
Balls hardened, bright.

## Sample order:

K0935.112013

## Note:

Locating cylinder with quick-clamp system for extra timesaving during setups.

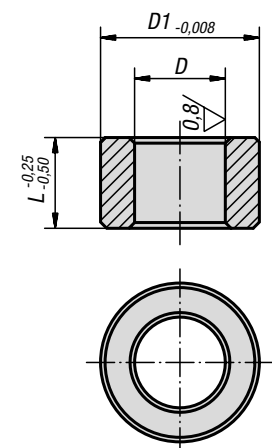
Insert the locating cylinder into the receiving hole and press the button. The three balls are pushed out and position the components. By tightening the set screw a 1/4 turn using an hexagonal key, the components are positively and securely held.



## KIPP Locating cylinder with quick clamping system

| Order No.    | Grid plate<br>thickness $\pm 0,05$ | D  | D1 | D2 | L    | L1 | SW | Holding<br>force<br>F kN | Tightening<br>torque<br>max. Nm |
|--------------|------------------------------------|----|----|----|------|----|----|--------------------------|---------------------------------|
| K0935.120025 | 25                                 | 20 | 40 | 25 | 44,5 | 15 | 6  | 8                        | 2                               |
| K0935.116020 | 20                                 | 16 | 32 | 20 | 36,5 | 15 | 6  | 8                        | 2                               |
| K0935.113020 | 20                                 | 13 | 25 | 16 | 34,6 | 12 | 4  | 4                        | 1                               |
| K0935.113013 | 13                                 | 13 | 25 | 16 | 27,6 | 12 | 4  | 4                        | 1                               |
| K0935.120020 | 20                                 | 20 | 40 | 25 | 39,5 | 15 | 6  | 8                        | 2                               |
| K0935.116025 | 25                                 | 16 | 32 | 20 | 41,5 | 15 | 6  | 8                        | 2                               |

# Centring bushes

**Material:**

Ball bearing steel

**Version:**

Hardened, black oxidised.

**Sample order:**

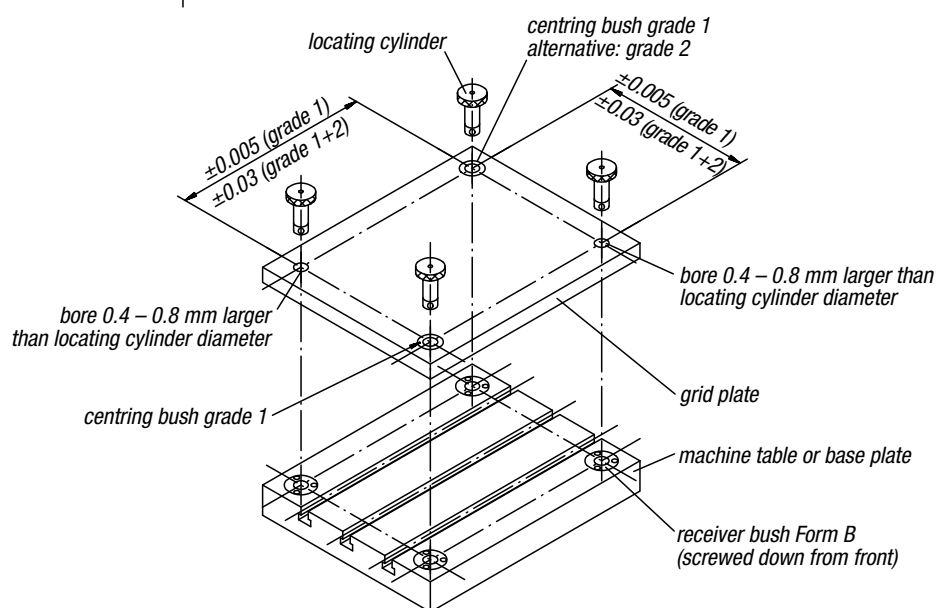
K0936.113020

**Note:**

By a centre distance tolerance of  $\pm 0.005$  mm and two grade I centring bushes a repeat accuracy of  $\pm 0.013$  mm is possible.

By a centre distance tolerance of  $\pm 0.03$  mm and one grade I and one grade II centring bush a repeat accuracy of 0.04 mm is possible.

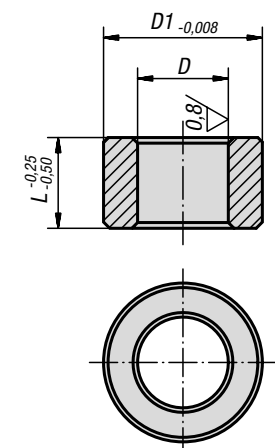
The centring bushes are pressed into the receiver holes of the tooling plates using a light pressure. For further details see "General information".



## KIPP Centring bushes

| Order No.<br>grade I | T=tolerance<br>grade I | Order No.<br>grade II | T=tolerance<br>grade II | D  | D1     | L  | Bore size for<br>centring bush<br>Ø +0.01 |
|----------------------|------------------------|-----------------------|-------------------------|----|--------|----|-------------------------------------------|
| K0936.113013         | +0,005 - +0,018        | K0936.213013          | +0,025 - +0,050         | 13 | 19,04  | 13 | 19,016                                    |
| K0936.113020         | +0,005 - +0,018        | K0936.213020          | +0,025 - +0,050         | 13 | 19,04  | 20 | 19,016                                    |
| K0936.116020         | +0,005 - +0,018        | K0936.216020          | +0,025 - +0,050         | 16 | 25,042 | 20 | 25,016                                    |
| K0936.116025         | +0,005 - +0,018        | K0936.216025          | +0,025 - +0,050         | 16 | 25,042 | 25 | 25,016                                    |
| K0936.120020         | +0,005 - +0,018        | K0936.220020          | +0,025 - +0,050         | 20 | 35,042 | 20 | 35,018                                    |
| K0936.120025         | +0,005 - +0,018        | K0936.220025          | +0,025 - +0,050         | 20 | 35,042 | 25 | 35,018                                    |
| K0936.125020         | +0,005 - +0,018        | K0936.225020          | +0,025 - +0,050         | 25 | 35,042 | 20 | 35,018                                    |
| K0936.125025         | +0,005 - +0,018        | K0936.225025          | +0,025 - +0,050         | 25 | 35,042 | 25 | 35,018                                    |
| K0936.130020         | +0,005 - +0,018        | K0936.230020          | +0,025 - +0,050         | 30 | 45,042 | 20 | 45,018                                    |
| K0936.130025         | +0,005 - +0,018        | -                     | -                       | 30 | 45,042 | 25 | 45,018                                    |
| K0936.135020         | +0,005 - +0,018        | -                     | -                       | 35 | 45,042 | 20 | 45,018                                    |
| K0936.135025         | +0,005 - +0,018        | K0936.235025          | +0,025 - +0,050         | 35 | 45,042 | 25 | 45,018                                    |
| K0936.135040         | +0,005 - +0,018        | K0936.235040          | +0,025 - +0,050         | 35 | 45,042 | 40 | 45,018                                    |
| K0936.135050         | +0,005 - +0,018        | K0936.235050          | +0,025 - +0,050         | 35 | 45,042 | 50 | 45,018                                    |
| K0936.150020         | +0,005 - +0,018        | -                     | -                       | 50 | 63,546 | 20 | 63,521                                    |
| -                    | -                      | K0936.250025          | +0,025 - +0,050         | 50 | 63,546 | 25 | 63,521                                    |
| K0936.150040         | +0,005 - +0,018        | K0936.250040          | +0,025 - +0,050         | 50 | 63,546 | 40 | 63,521                                    |
| K0936.150050         | +0,005 - +0,018        | K0936.250050          | +0,025 - +0,050         | 50 | 63,546 | 50 | 63,521                                    |

## Centring bushes stainless steel

**Material:**

Stainless steel 1.4548.

**Version:**

Hardened to min. 40 HRC, bright.

**Sample order:**

K1475.113020

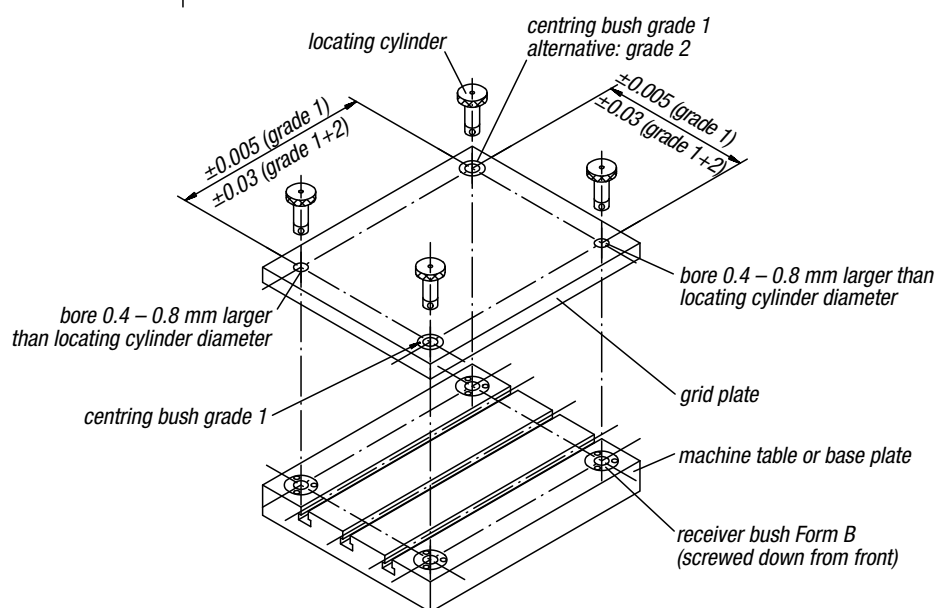
**Note:**

By a centre distance tolerance of  $\pm 0.005$  mm and two grade I centring bushes a repeat accuracy of  $\pm 0.013$  mm is possible.

By a centre distance tolerance of  $\pm 0.03$  mm and one grade I and one grade II centring bush a repeat accuracy of 0.04 mm is possible.

The centring bushes are pressed into the receiver holes of the tooling plates using a light pressure.

For further details see "General information".

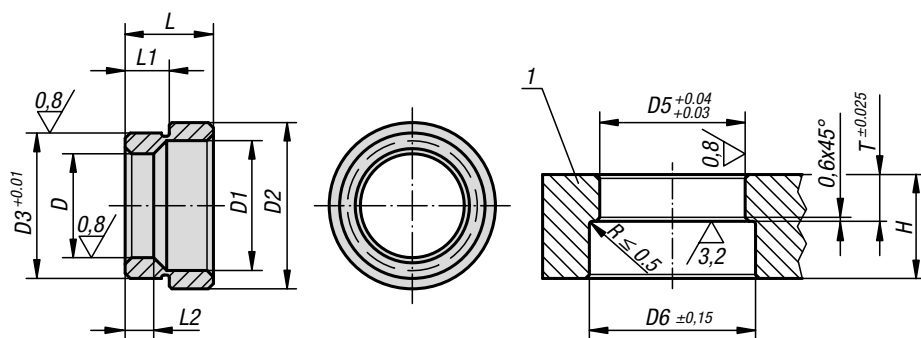


## KIPP Centring bushes stainless steel

| Order No.<br>grade I | T=tolerance<br>grade I | Order No.<br>grade II | T=tolerance<br>grade II | D  | D1     | L  | Bore size for<br>centring bush<br>Ø +0.01 |
|----------------------|------------------------|-----------------------|-------------------------|----|--------|----|-------------------------------------------|
| K1475.113013         | +0,005 - +0,018        | K1475.213013          | +0,025 - +0,050         | 13 | 19,04  | 13 | 19,016                                    |
| K1475.113020         | +0,005 - +0,018        | K1475.213020          | +0,025 - +0,050         | 13 | 19,04  | 20 | 19,016                                    |
| K1475.116020         | +0,005 - +0,018        | K1475.216020          | +0,025 - +0,050         | 16 | 25,042 | 20 | 25,016                                    |
| K1475.116025         | +0,005 - +0,018        | K1475.216025          | +0,025 - +0,050         | 16 | 25,042 | 25 | 25,016                                    |
| K1475.120020         | +0,005 - +0,018        | K1475.220020          | +0,025 - +0,050         | 20 | 35,042 | 20 | 35,018                                    |
| K1475.120025         | +0,005 - +0,018        | K1475.220025          | +0,025 - +0,050         | 20 | 35,042 | 25 | 35,018                                    |
| K1475.125020         | +0,005 - +0,018        | K1475.225020          | +0,025 - +0,050         | 25 | 35,042 | 20 | 35,018                                    |
| K1475.125025         | +0,005 - +0,018        | K1475.225025          | +0,025 - +0,050         | 25 | 35,042 | 25 | 35,018                                    |
| K1475.130020         | +0,005 - +0,018        | K1475.230020          | +0,025 - +0,050         | 30 | 45,042 | 20 | 45,018                                    |
| K1475.130025         | +0,005 - +0,018        | K1475.230025          | +0,025 - +0,050         | 30 | 45,042 | 25 | 45,018                                    |
| K1475.135020         | +0,005 - +0,018        | K1475.235020          | +0,025 - +0,050         | 35 | 45,042 | 20 | 45,018                                    |
| K1475.135025         | +0,005 - +0,018        | K1475.235025          | +0,025 - +0,050         | 35 | 45,042 | 25 | 45,018                                    |
| K1475.135040         | +0,005 - +0,018        | K1475.235040          | +0,025 - +0,050         | 35 | 45,042 | 40 | 45,018                                    |
| K1475.135050         | +0,005 - +0,018        | K1475.235050          | +0,025 - +0,050         | 35 | 45,042 | 50 | 45,018                                    |
| K1475.150020         | +0,005 - +0,018        | K1475.250020          | +0,025 - +0,050         | 50 | 63,546 | 20 | 63,521                                    |
| K1475.150025         | +0,005 - +0,018        | K1475.250025          | +0,025 - +0,050         | 50 | 63,546 | 25 | 63,521                                    |
| K1475.150040         | +0,005 - +0,018        | K1475.250040          | +0,025 - +0,050         | 50 | 63,546 | 40 | 63,521                                    |
| K1475.150050         | +0,005 - +0,018        | K1475.250050          | +0,025 - +0,050         | 50 | 63,546 | 50 | 63,521                                    |

# Locating bushes

Form A (pressed in from rear)



**Material:**  
Stainless steel 1.4548.

**Version:**  
Hardened to min. 40 HRC, bright.

**Sample order:**  
K1476.20

**Drawing reference:**  
1) grid plate

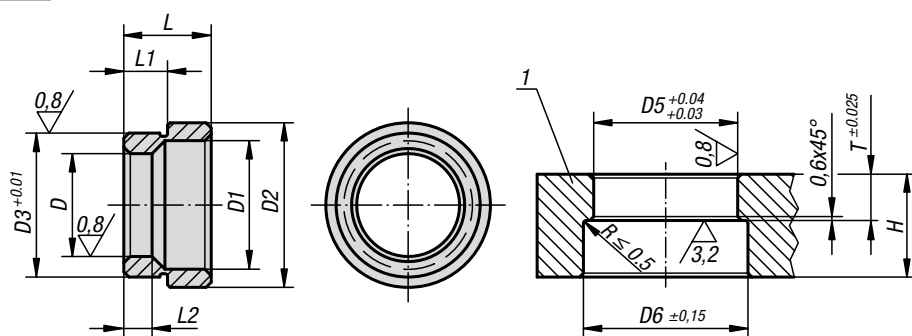
## KIPP Locating bushes Form A (pressed in from rear)

| Order No. | D  | D1   | D2   | D3    | L    | L1    | L2    | D5 | D6 | T     | Min.<br>grid plate<br>thickness H |
|-----------|----|------|------|-------|------|-------|-------|----|----|-------|-----------------------------------|
| K0937.13  | 13 | 17,3 | 25   | 20,03 | 12,1 | 6,6   | 5,58  | 20 | 26 | 6,92  | 20                                |
| K0937.16  | 16 | 20,7 | 28,6 | 22,03 | 12,1 | 6,9   | 6,6   | 22 | 29 | 7,24  | 20                                |
| K0937.20  | 20 | 24,8 | 32,2 | 28,03 | 17,1 | 8,42  | 8,13  | 28 | 33 | 8,74  | 25                                |
| K0937.25  | 25 | 30,4 | 40,2 | 35,03 | 21   | 10,22 | 10,16 | 35 | 41 | 10,54 | 25                                |
| K0937.30  | 30 | 36,2 | 48,2 | 42,03 | 21,8 | 10,63 | 11,18 | 42 | 49 | 10,95 | 30                                |
| K0937.35  | 35 | 41,3 | 54,2 | 48,03 | 25,1 | 12,18 | 14,78 | 48 | 55 | 12,5  | 32                                |
| K0937.50  | 50 | 58,4 | 75,2 | 67,03 | 31,1 | 15,43 | 18,67 | 67 | 76 | 15,75 | 45                                |

## K1476

# Locating bushes, stainless steel

Form A (pressed in from rear)



**Material:**  
Stainless steel 1.4548.

**Version:**  
Hardened to min. 40 HRC, bright.

**Sample order:**  
K1476.20

**Drawing reference:**  
1) grid plate

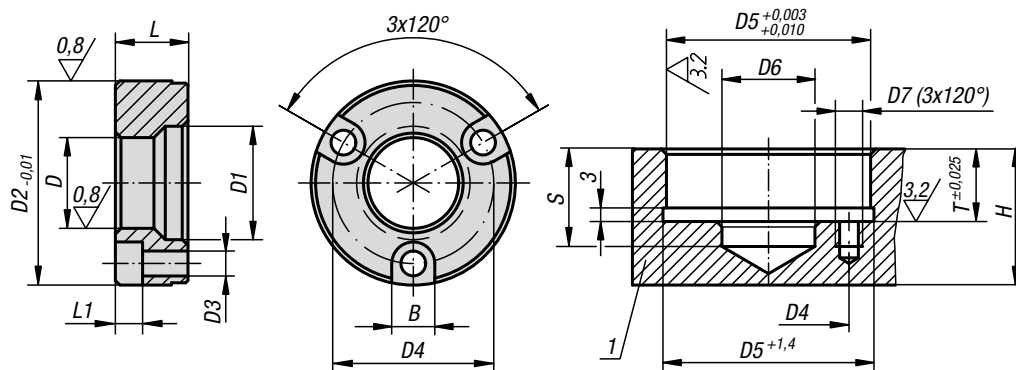
## KIPP Locating bushes stainless steel Form A (pressed in from rear)

| Order No. | D  | D1   | D2   | D3    | L    | L1    | L2    | D5 | D6 | T     | Min.<br>grid plate<br>thickness H |
|-----------|----|------|------|-------|------|-------|-------|----|----|-------|-----------------------------------|
| K1476.13  | 13 | 17,3 | 25   | 20,03 | 12,1 | 6,6   | 5,58  | 20 | 26 | 6,92  | 20                                |
| K1476.16  | 16 | 20,7 | 28,6 | 22,03 | 12,1 | 6,9   | 6,6   | 22 | 29 | 7,24  | 20                                |
| K1476.20  | 20 | 24,8 | 32,2 | 28,03 | 17,1 | 8,42  | 8,13  | 28 | 33 | 8,74  | 25                                |
| K1476.25  | 25 | 30,4 | 40,2 | 35,03 | 21   | 10,22 | 10,16 | 35 | 41 | 10,54 | 25                                |
| K1476.30  | 30 | 36,2 | 48,2 | 42,03 | 21,8 | 10,63 | 11,18 | 42 | 49 | 10,95 | 30                                |
| K1476.35  | 35 | 41,3 | 54,2 | 48,03 | 25,1 | 12,18 | 14,78 | 48 | 55 | 12,5  | 32                                |
| K1476.50  | 50 | 58,4 | 75,2 | 67,03 | 31,1 | 15,43 | 18,67 | 67 | 76 | 15,75 | 45                                |



## Locating bushes

Form B (screwed down from front)



**Material:**  
Carbon steel.

**Version:**  
Tempered and black oxidised.

**Sample order:**  
K0938.13

**Note:**  
Fastening screws included.

**Drawing reference:**  
1) grid plate

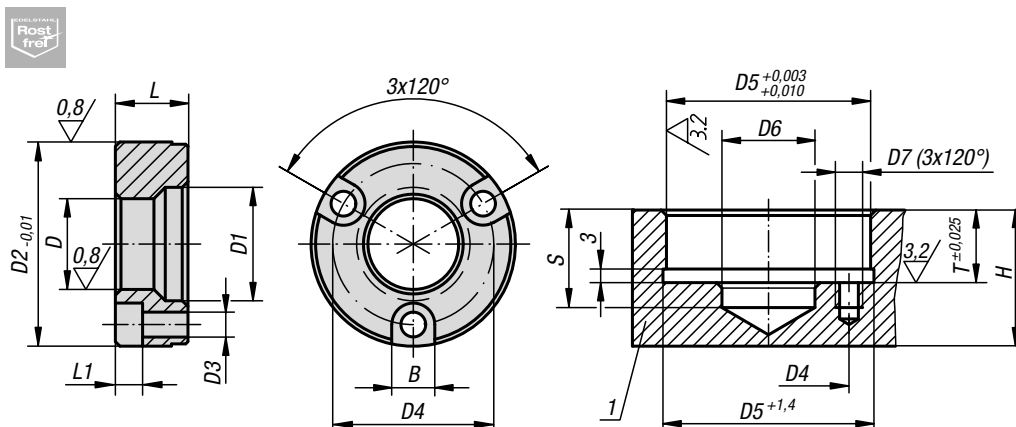
### KIPP Locating bushes Form B (screwed down from front)

| Order No. | D  | D1   | D2    | D3   | D4 | L     | L1  | B   | D5 | D6   | D7     | S  | T     | Min.<br>grid plate<br>thickness H |
|-----------|----|------|-------|------|----|-------|-----|-----|----|------|--------|----|-------|-----------------------------------|
| K0938.13  | 13 | 17,3 | 34,99 | 4,4  | 25 | 11,56 | 4,5 | 7,6 | 35 | 13,5 | M4x7   | 20 | 11,91 | 20                                |
| K0938.16  | 16 | 20,7 | 36,99 | 4,4  | 29 | 11,56 | 4,5 | 7,6 | 37 | 21   | M4x7   | 20 | 11,91 | 20                                |
| K0938.20  | 20 | 24,8 | 44,99 | 5,4  | 35 | 15,82 | 6   | 9,5 | 45 | 21   | M5x9   | 25 | 16,21 | 25                                |
| K0938.25  | 25 | 30,4 | 54,99 | 6,4  | 42 | 19,94 | 7   | 11  | 55 | 25,5 | M6x10  | 25 | 20,32 | 25                                |
| K0938.30  | 30 | 36,2 | 59,99 | 6,4  | 48 | 21,77 | 7   | 11  | 60 | 30,5 | M6x11  | 30 | 22,15 | 30                                |
| K0938.35  | 35 | 41,3 | 69,99 | 8,4  | 56 | 22,61 | 9   | 14  | 70 | 40   | M8x17  | 32 | 22,99 | 32                                |
| K0938.50  | 50 | 58,4 | 91,99 | 10,4 | 75 | 31,12 | 11  | 17  | 92 | 55   | M10x18 | 45 | 31,5  | 45                                |

## K1477

## Locating bushes, stainless steel

Form B (screwed down from front)



**Material:**  
Stainless steel 1.4548.

**Version:**  
Hardened to min. 40 HRC, bright.

**Sample order:**  
K1477.13

**Note:**  
Fastening screws included.

**Drawing reference:**  
1) grid plate

### KIPP Receiver bushes stainless steel Form B (screwed down from front)

| Order No. | D  | D1   | D2    | D3   | D4 | L     | L1  | B   | D5 | D6   | D7     | S  | T     | Min.<br>grid plate<br>thickness H |
|-----------|----|------|-------|------|----|-------|-----|-----|----|------|--------|----|-------|-----------------------------------|
| K1477.13  | 13 | 17,3 | 34,99 | 4,4  | 25 | 11,56 | 4,5 | 7,6 | 35 | 13,5 | M4x7   | 20 | 11,91 | 20                                |
| K1477.16  | 16 | 20,7 | 36,99 | 4,4  | 29 | 11,56 | 4,5 | 7,6 | 37 | 21   | M4x7   | 20 | 11,91 | 20                                |
| K1477.20  | 20 | 24,8 | 44,99 | 5,4  | 35 | 15,82 | 6   | 9,5 | 45 | 21   | M5x9   | 25 | 16,21 | 25                                |
| K1477.25  | 25 | 30,4 | 54,99 | 6,4  | 42 | 19,94 | 7   | 11  | 55 | 25,5 | M6x10  | 25 | 20,32 | 25                                |
| K1477.30  | 30 | 36,2 | 59,99 | 6,4  | 48 | 21,77 | 7   | 11  | 60 | 30,5 | M6x11  | 30 | 22,15 | 30                                |
| K1477.35  | 35 | 41,3 | 69,99 | 8,4  | 56 | 22,61 | 9   | 14  | 70 | 40   | M8x17  | 32 | 22,99 | 32                                |
| K1477.50  | 50 | 58,4 | 91,99 | 10,4 | 75 | 31,12 | 11  | 17  | 92 | 55   | M10x18 | 45 | 31,5  | 45                                |

## Locating cylinder with wedge clamp system



### Material:

Carbon steel.

### Version:

Black oxidised.

### Sample order:

K1802.1625

### Note:

A workpiece can be easily secured and centred in a bore using the locating cylinder.

Due to the low surface friction on rigid contact faces generated by the integrated axial needle bearing, increased clamping forces can be achieved.

The high load rating of the bearing guarantees a long service life.

Clamping cylinder with pull-down effect.

### Assembly:

Insert the locating cylinder through the mounting hole in the workpiece being secured.

Tighten the screw first by hand using the knurled part of the screw and then tighten further using a suitable spanner.

The knurled part can also be sunk into a counterbore provided for this purpose.

### Advantages:

Easily adjustable clamping range

Independent of the bores diameter and surface finish (up to H12)

Pull-down effect

Significant increase in clamping force for same tightening torque

High-quality axial needle bearing with high load rating and long service life

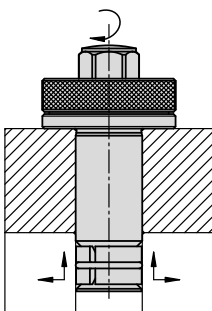
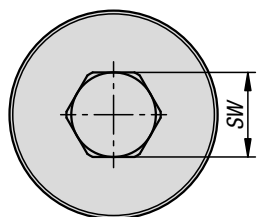
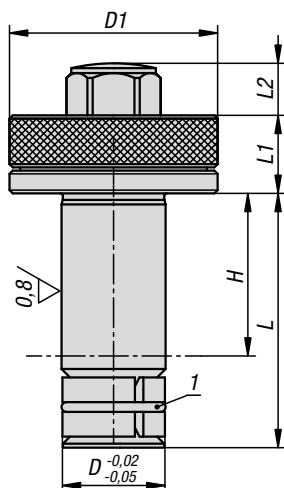
### Applications:

Ideal for fastening standard elements of various thicknesses. The clamping cylinder can also be used for quick-change systems.

### Drawing reference:

The dimension H refers to the clamping area.

1) O-ring



## KIPP Locating cylinder with wedge clamp system

| Order No.  | D  | D1 | H<br>clamping range | L    | L1 | L2 | SW | Holding<br>force<br>F kN | Tightening<br>torque<br>Nm | Order No.<br>Repair Kit |
|------------|----|----|---------------------|------|----|----|----|--------------------------|----------------------------|-------------------------|
| K1802.1010 | 10 | 20 | 0-10                | 20   | 8  | 5  | 8  | 5,4                      | 4,4                        | K1802.91010             |
| K1802.1215 | 12 | 26 | 0-15                | 27   | 10 | 6  | 10 | 8,8                      | 10,5                       | K1802.91215             |
| K1802.1625 | 16 | 32 | 0-25                | 39   | 12 | 8  | 13 | 16,8                     | 22                         | K1802.91625             |
| K1802.2030 | 20 | 38 | 0-30                | 49,5 | 15 | 9  | 17 | 22,6                     | 31                         | K1802.92030             |

Repair kits for locating cylinders



**Sample order:**  
K1802.91215

**Note:**  
Repair set consisting of screw with countersunk head,  
O-ring and 3-part jaws.



KIPP Repair kits for locating cylinders

| Order No.   | for D | for Art. No. |
|-------------|-------|--------------|
| K1802.91010 | 10    | K1802.1010   |
| K1802.91215 | 12    | K1802.1215   |
| K1802.91625 | 16    | K1802.1625   |
| K1802.92030 | 20    | K1802.2030   |

## Locating cylinder stainless steel

pneumatic



By locating cylinder Form A, the clamping balls are pushed out by a spring. Compressed air is used to retract the balls.

By locating cylinder Form B, the clamping balls are initially retracted. Compressed air pushes the balls out.

### Material:

Body, stainless steel.  
Seal, NBR.

### Version:

Stainless steel bright.

### Sample order:

K1738.10140

### Note for ordering:

Form A is marked with a groove.

### Note:

The stated clamping and retaining forces are related to an operating pressure of 0.5 Mpa.

When using several positioning units, the distance tolerance of  $\pm 0.1$  mm should not be exceeded.

Repeat accuracy  $\pm 0.2$  mm.

### Assembly:

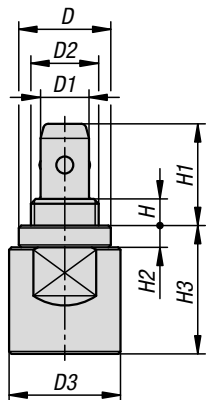
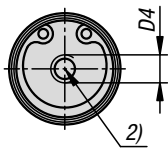
Installation dimensions are for a 6 mm thick plate.

### Accessories:

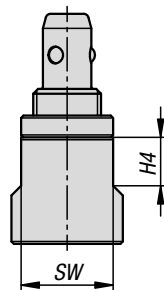
K1739 locating bushes stainless steel.

### Drawing reference:

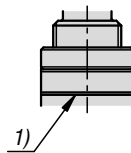
- 1) Form A ID groove
- 2) Pneumatic connection
- 3) Locating bush for locating cylinder
- 4) Form A locating cylinder
- 5) Form B locating cylinder



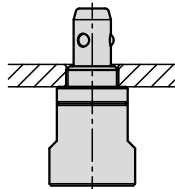
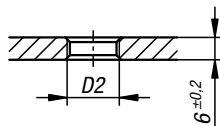
Ⓑ



Ⓐ

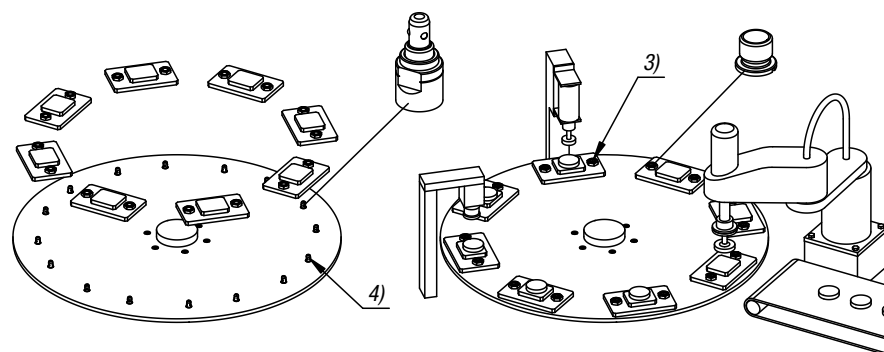
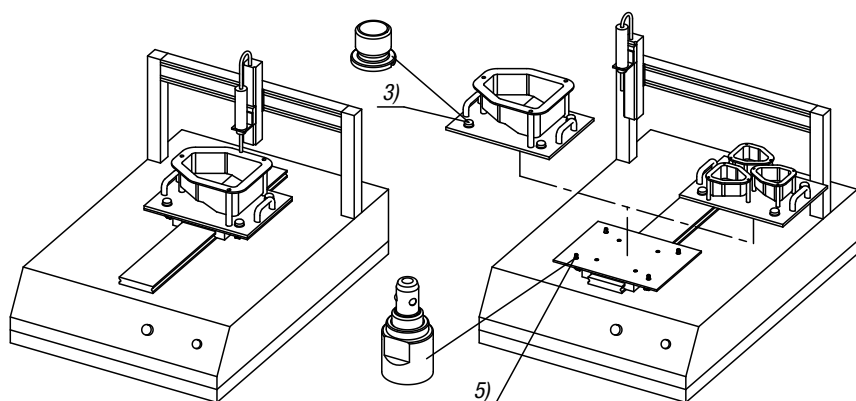


mounting instructions:



# Locating cylinder stainless steel

pneumatic

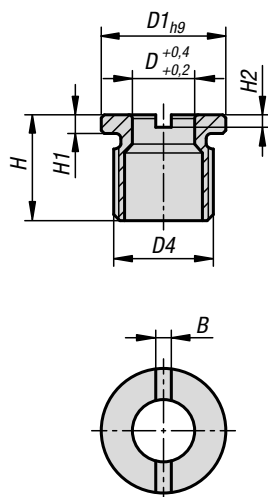


## KIPP Locating cylinder stainless steel, pneumatic

| Order No.   | Form | Form-Type             | D  | D1 | D2    | D3 | D4 | H   | H1 | H2  | H3   | H4 | SW | Operating pressure MPa | F N | Holding force N |
|-------------|------|-----------------------|----|----|-------|----|----|-----|----|-----|------|----|----|------------------------|-----|-----------------|
| K1738.10140 | A    | spring-loaded         | 19 | 10 | M14x1 | 23 | M5 | 5,5 | 21 | 4,5 | 26,5 | 10 | 19 | 0,3 - 0,7              | 50  | 150             |
| K1738.10141 | B    | Clamped pneumatically | 19 | 10 | M14x1 | 23 | M5 | 5,5 | 21 | 4,5 | 26,5 | 10 | 19 | 0,3 - 0,7              | 150 | 300             |

# Locating bushes stainless steel

for locating cylinder, pneumatic



## Material:

Stainless steel

## Version:

Hardened.

## Sample order:

K1739.101

## Note:

Mounting dimensions Form A:

Mounting with nut, max. plate thickness 10 mm.

Mounting dimensions Form B:

Screwed in, for plate thicknesses over 10 mm or in a blind hole.

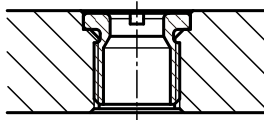
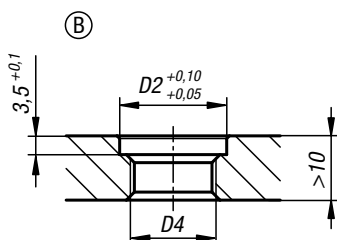
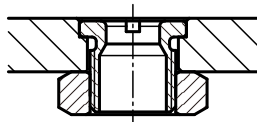
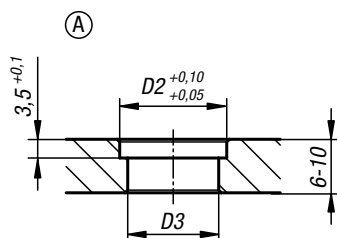
Colour may differ from the image due to the hardening process.

## On request:

Suitable nuts and assembly tool.

## Accessories:

K1738 Locating cylinder stainless steel, pneumatic

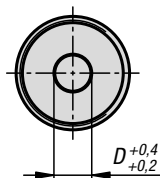
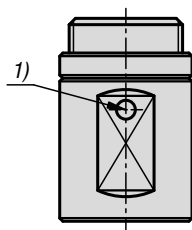
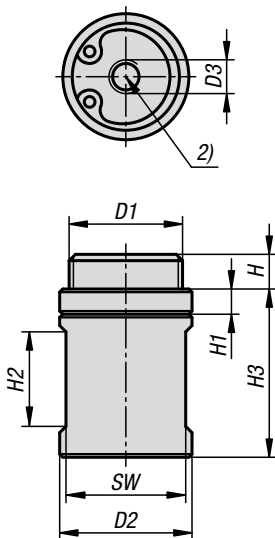


## KIPP Locating bushes stainless steel for locating cylinder, pneumatic

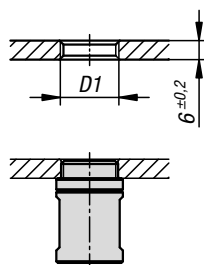
| Order No. | B   | D  | D1 | D2 | D3 | D4      | H  | H1 | H2 |
|-----------|-----|----|----|----|----|---------|----|----|----|
| K1739.101 | 2,5 | 10 | 20 | 20 | 17 | M16x1,5 | 17 | 3  | 2  |

## Locating adapters, cylindrical, stainless steel

pneumatic



mounting instructions:



**Clamped using compressed air.  
Released via integrate spring.**

**Material:**

Body, stainless steel.  
Seal, NBR.

**Version:**

Stainless steel bright.

**Sample order:**

K1740.0618

**Note:**

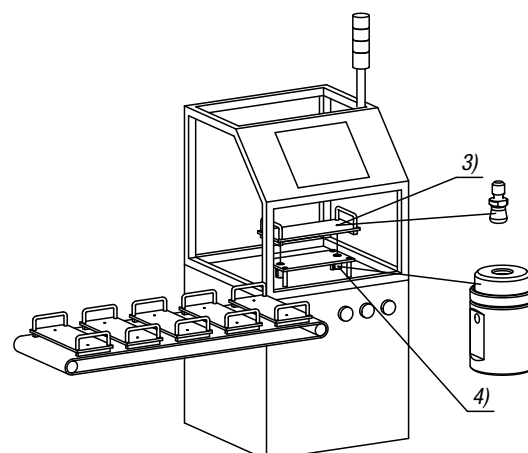
Installed dimensions for plate thickness 6 mm.  
The stated clamping and retaining forces are related to an operating pressure of 0.5 Mpa.  
When using several positioning units, the distance tolerance of  $\pm 0.1$  mm should not be exceeded.  
Repeat accuracy  $\pm 0.2$  mm.

**Accessories:**

Clamping pins K1564.

**Drawing reference:**

- 1) Air valve (one-sided)
- 2) Pneumatic connection
- 3) Clamping pin
- 4) Locating adapter



### KIPP Locating adapters, cylindrical, stainless steel, pneumatic

| Order No.  | D | D1    | D2 | D3 | H   | H1 | H2 | H3   | SW | Operating pressure MPa | F N | Holding force N |
|------------|---|-------|----|----|-----|----|----|------|----|------------------------|-----|-----------------|
| K1740.0618 | 6 | M18x1 | 21 | M5 | 5,5 | 4  | 15 | 26,7 | 19 | 0,3 - 0,7              | 30  | 75              |

## Locating adapters, flange, stainless steel

pneumatic



Clamped using compressed air. If the pressure fails, tension is retained by a spring.

A spring force of 6 N must be overcome to release the positioning adapters using compressed air.

### Material:

Body, stainless steel.

Seal, NBR.

### Version:

Stainless steel bright.

### Sample order:

K1741.0618

### Note for ordering:

M3x28 cap screws for fastening from below are supplied.

M4 cap screws for fastening from above are not supplied.

### Note:

Installed dimensions for plate thickness 6 mm.

The stated clamping and retaining forces are related to an operating pressure of 0.5 Mpa.

When using several positioning units, the distance tolerance of  $\pm 0.1$  mm should not be exceeded.

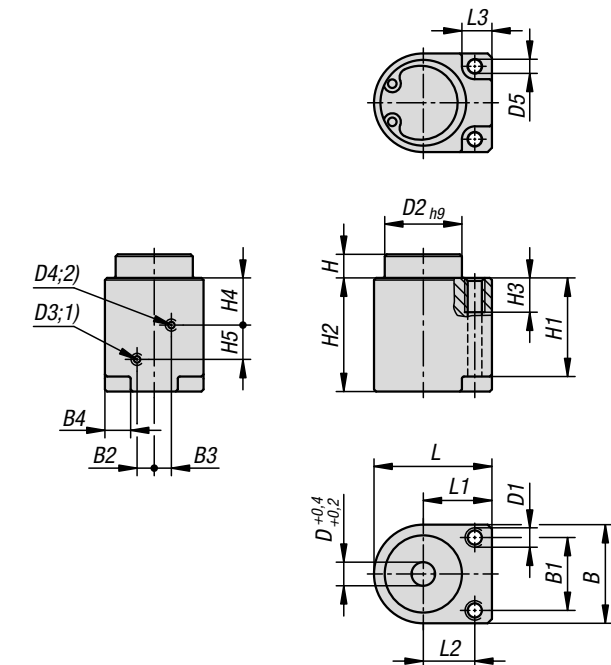
Repeat accuracy  $\pm 0.2$  mm.

### Accessories:

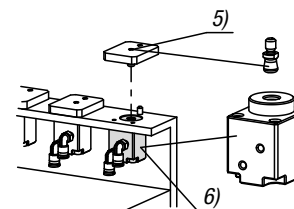
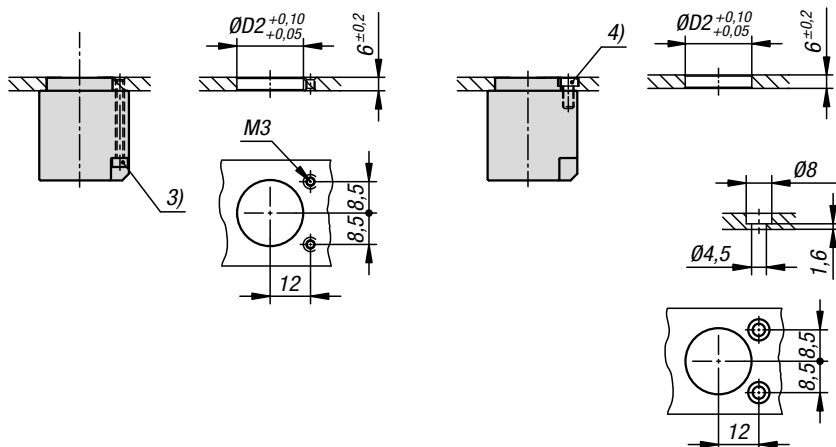
Clamping pins K1564.

### Drawing reference:

- 1) „Clamping“ connection
- 2) „Release“ connection
- 3) M3 cap screw
- 4) M4 cap screw
- 5) Clamping pin
- 6) Locating fixture



mounting instructions:



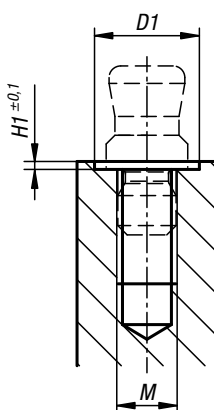
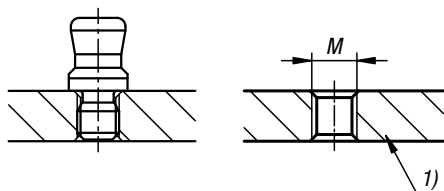
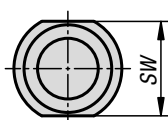
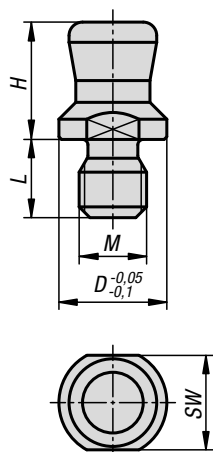
## KIPP Locating adapters, flange, stainless steel, pneumatic

| Order No.  | B  | B1 | B2 | B3 | B4 | D | D1 | D2 | D3 | D4 | D5  | H   | H1 | H2   |
|------------|----|----|----|----|----|---|----|----|----|----|-----|-----|----|------|
| K1741.0618 | 23 | 17 | 4  | 4  | 6  | 6 | M4 | 18 | M3 | M3 | 3,3 | 5,5 | 23 | 26,5 |

| Order No.  | H3 | H4 | H5 | L    | L1 | L2 | L3 | Operating pressure MPa | F=clamping force N (Pneu. clamped) | F1=Retaining force N (spring-loaded) | Holding force N |
|------------|----|----|----|------|----|----|----|------------------------|------------------------------------|--------------------------------------|-----------------|
| K1741.0618 | 8  | 11 | 8  | 27,5 | 16 | 12 | 7  | 0,3 - 0,7              | 40                                 | 6                                    | 100             |



## Clamping pin stainless steel

**Material:**

Stainless steel

**Version:**

Hardened.

**Sample order:**

K1564.16

**Note:**

Colour may differ from image due to curing process.

**Method of operation:**Screw the clamping pin into the thread and tighten.  
See assembly drawing.**Accessories:**Quarter-turn latches K1561.  
Push button latches K1562.  
Locating fixture round K1740.  
Locating fixture flange K1741.**Drawing reference:**

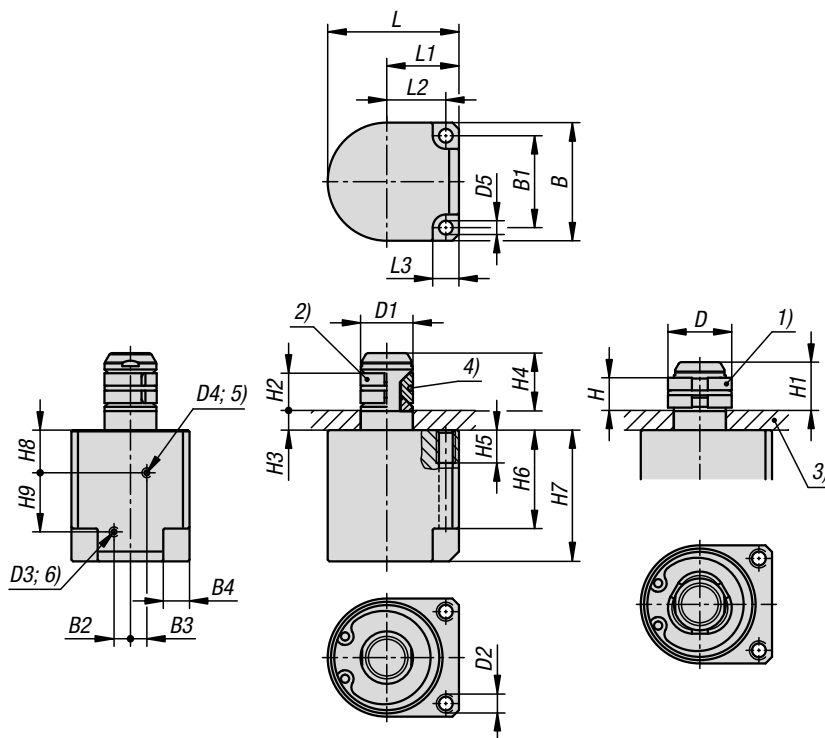
1) plate

## KIPP Clamping pin stainless steel

| Order No. | D | D1 | H   | H1  | L   | M       | SW |
|-----------|---|----|-----|-----|-----|---------|----|
| K1564.16  | 6 | 7  | 7,6 | 0,5 | 5,8 | M04X0,7 | 5  |
| K1564.18  | 8 | 9  | 8,7 | 0,5 | 5,8 | M05X0,8 | 7  |

## Centring clamp stainless steel

pneumatic



Workpieces are clamped and released by compressed air.

The possible clamping diameter is from 16 to 20 mm.

### Material:

Body, stainless steel.  
Seal, NBR.

### Version:

Stainless steel bright.

### Sample order:

K1742.16

### Note for ordering:

Cylinder head screws M4X35 for fastening from below are included with delivery.

Cylinder head screws with low head M5 for fastening from above are not included with delivery.

### Note:

Installed dimensions for plate thickness 6 mm.

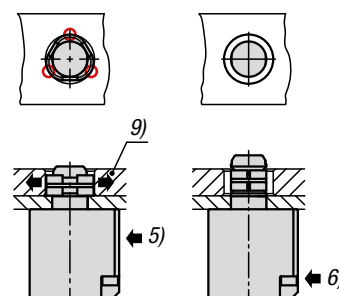
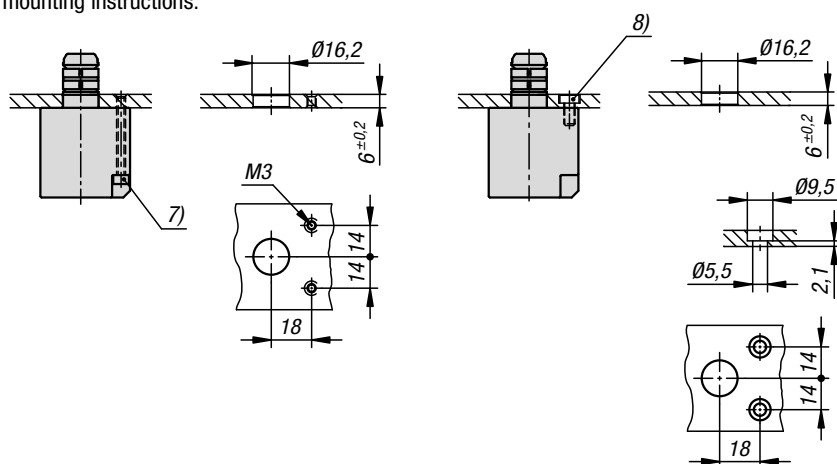
The stated retaining forces are related to an operating pressure of 0.5 Mpa and a surface quality of Ra 1.6 µm.

Repeat accuracy in this case is ±0.2 mm.

### Drawing reference:

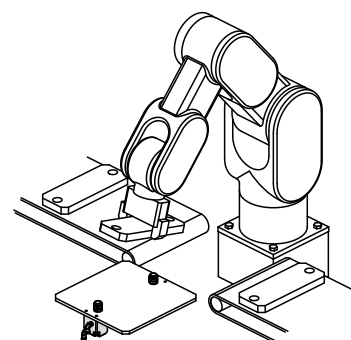
- 1) „Clamping“ position
- 2) „Release“ position
- 3) Mounting plate
- 4) O-ring
- 5) „Clamping“ connection
- 6) „Release“ connection
- 7) Cylinder head screw M4
- 8) Cylinder screw with low head M5
- 9) Workpiece

mounting instructions:



# Centring clamp stainless steel

pneumatic



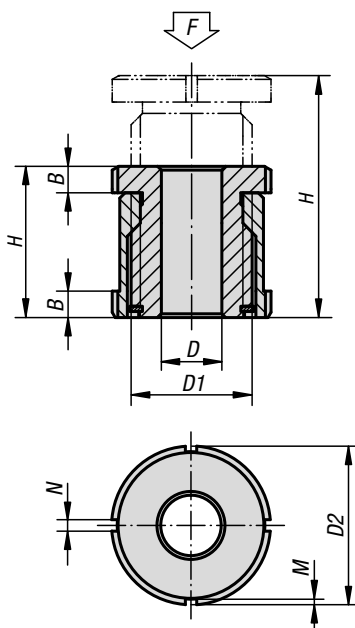
## KIPP Centring clamp stainless steel, pneumatic

| Order No. | B  | B1 | B2 | B3 | B4  | D  | D1 | D2 | D3 | D4 | D5  | H  | H1   | H2   |
|-----------|----|----|----|----|-----|----|----|----|----|----|-----|----|------|------|
| K1742.16  | 36 | 28 | 5  | 5  | 7,5 | 20 | 16 | M5 | M3 | M3 | 4,2 | 10 | 14,7 | 11,3 |

| Order No. | H3 | H4   | H5 | H6 | H7 | H8 | H9 | L  | L1 | L2 | L3 | Holding force N | Operating pressure MPa |
|-----------|----|------|----|----|----|----|----|----|----|----|----|-----------------|------------------------|
| K1742.16  | 6  | 17,5 | 10 | 30 | 40 | 13 | 18 | 40 | 22 | 18 | 8  | 77              | 0,3 - 0,7              |

## Levelling sets

high version



### Material:

Steel 1.7225.

Stainless steel 1.4305.

### Version:

Steel version trivalent blue passivated.

Stainless steel version bright.

### Sample order:

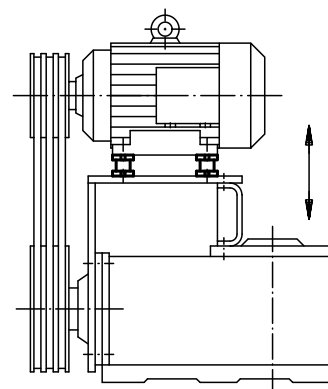
K0692.01505

### Note:

Levelling sets are used for mounting, levelling and aligning motors, aggregates, drive units and assembly lines. They have a large adjustment range of 15 mm to 40 mm. Other sizes available on request.

## KIPP Levelling sets, high version

| Order No.    | Main material     | D    | for screw | D1      | D2 | H min. | H max. | B  | N | M   | F kN |
|--------------|-------------------|------|-----------|---------|----|--------|--------|----|---|-----|------|
| K0692.01504  | high carbon steel | 4,5  | M4        | M15x1   | 25 | 28     | 43     | 5  | 4 | 2   | 40   |
| K0692.01505  | high carbon steel | 5,5  | M5        | M15x1   | 25 | 28     | 43     | 5  | 4 | 2   | 40   |
| K0692.01506  | high carbon steel | 6,6  | M6        | M15x1   | 25 | 28     | 43     | 5  | 4 | 2   | 40   |
| K0692.02006  | high carbon steel | 6,6  | M6        | M20x1   | 32 | 35     | 55     | 6  | 4 | 2   | 65   |
| K0692.02008  | high carbon steel | 9    | M8        | M20x1   | 32 | 35     | 55     | 6  | 4 | 2   | 65   |
| K0692.02010  | high carbon steel | 11   | M10       | M20x1   | 32 | 35     | 55     | 6  | 4 | 2   | 65   |
| K0692.02510  | high carbon steel | 11   | M10       | M30x1,5 | 45 | 42     | 67     | 7  | 5 | 2   | 120  |
| K0692.02512  | high carbon steel | 13,5 | M12       | M30x1,5 | 45 | 42     | 67     | 7  | 5 | 2   | 120  |
| K0692.02516  | high carbon steel | 17,5 | M16       | M30x1,5 | 45 | 42     | 67     | 7  | 5 | 2   | 120  |
| K0692.03216  | high carbon steel | 17,5 | M16       | M40x1,5 | 58 | 54     | 86     | 9  | 6 | 2,5 | 210  |
| K0692.03220  | high carbon steel | 22   | M20       | M40x1,5 | 58 | 54     | 86     | 9  | 6 | 2,5 | 210  |
| K0692.03224  | high carbon steel | 26   | M24       | M40x1,5 | 58 | 54     | 86     | 9  | 6 | 2,5 | 210  |
| K0692.04020  | high carbon steel | 22   | M20       | M50x1,5 | 70 | 66     | 106    | 11 | 6 | 2,5 | 330  |
| K0692.04024  | high carbon steel | 26   | M24       | M50x1,5 | 70 | 66     | 106    | 11 | 6 | 2,5 | 330  |
| K0692.04030  | high carbon steel | 33   | M30       | M50x1,5 | 70 | 66     | 106    | 11 | 6 | 2,5 | 330  |
| K0692.015041 | stainless steel   | 4,5  | M4        | M15x1   | 25 | 28     | 43     | 5  | 4 | 2   | 27,1 |
| K0692.015051 | stainless steel   | 5,5  | M5        | M15x1   | 25 | 28     | 43     | 5  | 4 | 2   | 27,1 |
| K0692.015061 | stainless steel   | 6,6  | M6        | M15x1   | 25 | 28     | 43     | 5  | 4 | 2   | 27,1 |
| K0692.020061 | stainless steel   | 6,6  | M6        | M20x1   | 32 | 35     | 55     | 6  | 4 | 2   | 43,4 |
| K0692.020081 | stainless steel   | 9    | M8        | M20x1   | 32 | 35     | 55     | 6  | 4 | 2   | 43,4 |
| K0692.020101 | stainless steel   | 11   | M10       | M20x1   | 32 | 35     | 55     | 6  | 4 | 2   | 43,4 |
| K0692.025101 | stainless steel   | 11   | M10       | M30x1,5 | 45 | 42     | 67     | 7  | 5 | 2   | 84   |
| K0692.025121 | stainless steel   | 13,5 | M12       | M30x1,5 | 45 | 42     | 67     | 7  | 5 | 2   | 84   |
| K0692.025161 | stainless steel   | 17,5 | M16       | M30x1,5 | 45 | 42     | 67     | 7  | 5 | 2   | 84   |
| K0692.032161 | stainless steel   | 17,5 | M16       | M40x1,5 | 58 | 54     | 86     | 9  | 6 | 2,5 | 148  |
| K0692.032201 | stainless steel   | 22   | M20       | M40x1,5 | 58 | 54     | 86     | 9  | 6 | 2,5 | 148  |
| K0692.032241 | stainless steel   | 26   | M24       | M40x1,5 | 58 | 54     | 86     | 9  | 6 | 2,5 | 148  |
| K0692.040201 | stainless steel   | 22   | M20       | M50x1,5 | 70 | 66     | 106    | 11 | 6 | 2,5 | 225  |
| K0692.040241 | stainless steel   | 26   | M24       | M50x1,5 | 70 | 66     | 106    | 11 | 6 | 2,5 | 225  |
| K0692.040301 | stainless steel   | 33   | M30       | M50x1,5 | 70 | 66     | 106    | 11 | 6 | 2,5 | 225  |



# Levelling sets

with locknut



## Material:

Steel 1.7225.

Stainless steel 1.4305.

## Version:

Seel version trivalent blue passivated.

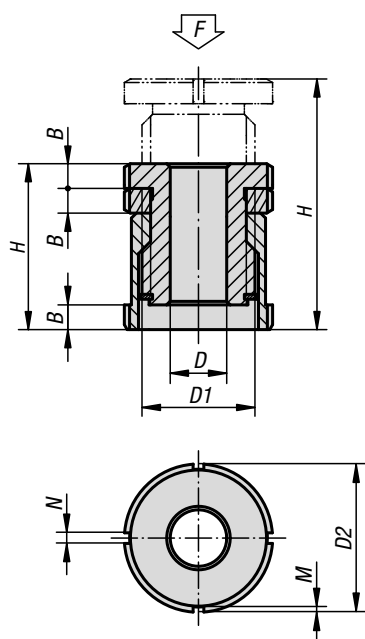
Stainless steel version bright.

## Sample order:

K0693.01004

## Note:

Levelling sets are used for mounting, levelling and aligning motors, aggregates, drive units and assembly lines. The locknut locks the set height. Other sizes available on request.



## KIPP Levelling sets, with locknut

| Order No.    | Main material     | D    | for screw | D1      | D2 | H min. | H max. | B  | N | M   | F kN |
|--------------|-------------------|------|-----------|---------|----|--------|--------|----|---|-----|------|
| K0693.01004  | high carbon steel | 4,5  | M4        | M15x1   | 25 | 33     | 43     | 5  | 4 | 2   | 40   |
| K0693.01005  | high carbon steel | 5,5  | M5        | M15x1   | 25 | 33     | 43     | 5  | 4 | 2   | 40   |
| K0693.01006  | high carbon steel | 6,6  | M6        | M15x1   | 25 | 33     | 43     | 5  | 4 | 2   | 40   |
| K0693.01406  | high carbon steel | 6,6  | M6        | M20x1   | 32 | 41     | 55     | 6  | 4 | 2   | 65   |
| K0693.01408  | high carbon steel | 9    | M8        | M20x1   | 32 | 41     | 55     | 6  | 4 | 2   | 65   |
| K0693.01410  | high carbon steel | 11   | M10       | M20x1   | 32 | 41     | 55     | 6  | 4 | 2   | 65   |
| K0693.01810  | high carbon steel | 11   | M10       | M30x1,5 | 45 | 49     | 67     | 7  | 5 | 2   | 120  |
| K0693.01812  | high carbon steel | 13,5 | M12       | M30x1,5 | 45 | 49     | 67     | 7  | 5 | 2   | 120  |
| K0693.01816  | high carbon steel | 17,5 | M16       | M30x1,5 | 45 | 49     | 67     | 7  | 5 | 2   | 120  |
| K0693.02316  | high carbon steel | 17,5 | M16       | M40x1,5 | 58 | 63     | 86     | 9  | 6 | 2,5 | 210  |
| K0693.02320  | high carbon steel | 22   | M20       | M40x1,5 | 58 | 63     | 86     | 9  | 6 | 2,5 | 210  |
| K0693.02324  | high carbon steel | 26   | M24       | M40x1,5 | 58 | 63     | 86     | 9  | 6 | 2,5 | 210  |
| K0693.02920  | high carbon steel | 22   | M20       | M50x1,5 | 70 | 77     | 106    | 11 | 6 | 2,5 | 330  |
| K0693.02924  | high carbon steel | 26   | M24       | M50x1,5 | 70 | 77     | 106    | 11 | 6 | 2,5 | 330  |
| K0693.02930  | high carbon steel | 33   | M30       | M50x1,5 | 70 | 77     | 106    | 11 | 6 | 2,5 | 330  |
| K0693.010041 | stainless steel   | 4,5  | M4        | M15x1   | 25 | 33     | 43     | 5  | 4 | 2   | 27,1 |
| K0693.010051 | stainless steel   | 5,5  | M5        | M15x1   | 25 | 33     | 43     | 5  | 4 | 2   | 27,1 |
| K0693.010061 | stainless steel   | 6,6  | M6        | M15x1   | 25 | 33     | 43     | 5  | 4 | 2   | 27,1 |
| K0693.014061 | stainless steel   | 6,6  | M6        | M20x1   | 32 | 41     | 55     | 6  | 4 | 2   | 43,4 |
| K0693.014081 | stainless steel   | 9    | M8        | M20x1   | 32 | 41     | 55     | 6  | 4 | 2   | 43,4 |
| K0693.014101 | stainless steel   | 11   | M10       | M20x1   | 32 | 41     | 55     | 6  | 4 | 2   | 43,4 |
| K0693.018101 | stainless steel   | 11   | M10       | M30x1,5 | 45 | 49     | 67     | 7  | 5 | 2   | 84   |
| K0693.018121 | stainless steel   | 13,5 | M12       | M30x1,5 | 45 | 49     | 67     | 7  | 5 | 2   | 84   |
| K0693.018161 | stainless steel   | 17,5 | M16       | M30x1,5 | 45 | 49     | 67     | 7  | 5 | 2   | 84   |
| K0693.023161 | stainless steel   | 17,5 | M16       | M40x1,5 | 58 | 63     | 86     | 9  | 6 | 2,5 | 148  |
| K0693.023201 | stainless steel   | 22   | M20       | M40x1,5 | 58 | 63     | 86     | 9  | 6 | 2,5 | 148  |
| K0693.023241 | stainless steel   | 26   | M24       | M40x1,5 | 58 | 63     | 86     | 9  | 6 | 2,5 | 148  |
| K0693.029201 | stainless steel   | 22   | M20       | M50x1,5 | 70 | 77     | 106    | 11 | 6 | 2,5 | 225  |
| K0693.029241 | stainless steel   | 26   | M24       | M50x1,5 | 70 | 77     | 106    | 11 | 6 | 2,5 | 225  |
| K0693.029301 | stainless steel   | 33   | M30       | M50x1,5 | 70 | 77     | 106    | 11 | 6 | 2,5 | 225  |

# Levelling sets

low version



## Material:

Steel 1.7225.

Stainless steel 1.4305.

## Version:

Steel version trivalent blue passivated.

Stainless steel version bright.

## Sample order:

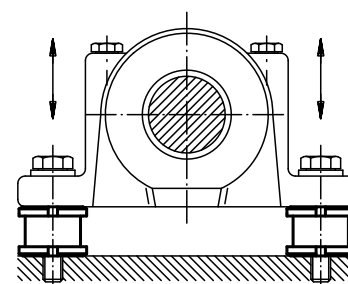
K0694.0404

## Note:

Levelling sets are used for mounting, levelling and aligning motors, aggregates, drive units and assembly lines. This levelling set has an extremely low height. Single levelling sets can be set at several mounting points to achieve a precise and torsion-free alignment.

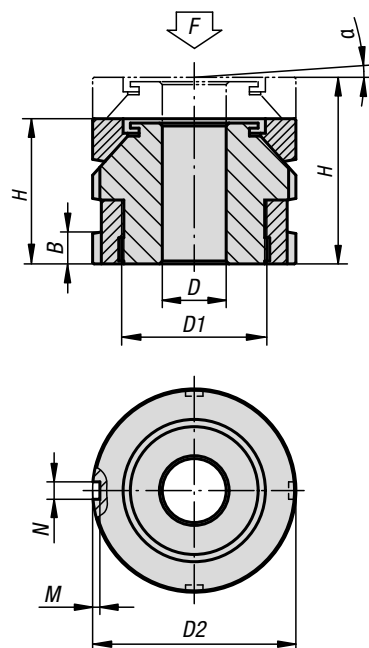
## KIPP Levelling sets, low version

| Order No.   | Main material     | D    | for screw | D1      | D2 | H min. | H max. | B  | N | M   | F kN |
|-------------|-------------------|------|-----------|---------|----|--------|--------|----|---|-----|------|
| K0694.0404  | high carbon steel | 4,5  | M4        | M15x1   | 25 | 15     | 19     | 5  | 4 | 2   | 40   |
| K0694.0405  | high carbon steel | 5,5  | M5        | M15x1   | 25 | 15     | 19     | 5  | 4 | 2   | 40   |
| K0694.0406  | high carbon steel | 6,6  | M6        | M15x1   | 25 | 15     | 19     | 5  | 4 | 2   | 40   |
| K0694.0506  | high carbon steel | 6,6  | M6        | M20x1   | 32 | 18     | 23     | 6  | 4 | 2   | 65   |
| K0694.0508  | high carbon steel | 9    | M8        | M20x1   | 32 | 18     | 23     | 6  | 4 | 2   | 65   |
| K0694.0510  | high carbon steel | 11   | M10       | M20x1   | 32 | 18     | 23     | 6  | 4 | 2   | 65   |
| K0694.0710  | high carbon steel | 11   | M10       | M30x1,5 | 45 | 22     | 29     | 7  | 5 | 2   | 120  |
| K0694.0712  | high carbon steel | 13,5 | M12       | M30x1,5 | 45 | 22     | 29     | 7  | 5 | 2   | 120  |
| K0694.0716  | high carbon steel | 17,5 | M16       | M30x1,5 | 45 | 22     | 29     | 7  | 5 | 2   | 120  |
| K0694.0916  | high carbon steel | 17,5 | M16       | M40x1,5 | 58 | 28     | 37     | 9  | 6 | 2,5 | 210  |
| K0694.0920  | high carbon steel | 22   | M20       | M40x1,5 | 58 | 28     | 37     | 9  | 6 | 2,5 | 210  |
| K0694.0924  | high carbon steel | 26   | M24       | M40x1,5 | 58 | 28     | 37     | 9  | 6 | 2,5 | 210  |
| K0694.1020  | high carbon steel | 22   | M20       | M50x1,5 | 70 | 33     | 43     | 11 | 6 | 2,5 | 330  |
| K0694.1024  | high carbon steel | 26   | M24       | M50x1,5 | 70 | 33     | 43     | 11 | 6 | 2,5 | 330  |
| K0694.1030  | high carbon steel | 33   | M30       | M50x1,5 | 70 | 33     | 43     | 11 | 6 | 2,5 | 330  |
| K0694.04041 | stainless steel   | 4,5  | M4        | M15x1   | 25 | 15     | 19     | 5  | 4 | 2   | 27,1 |
| K0694.04051 | stainless steel   | 5,5  | M5        | M15x1   | 25 | 15     | 19     | 5  | 4 | 2   | 27,1 |
| K0694.04061 | stainless steel   | 6,6  | M6        | M15x1   | 25 | 15     | 19     | 5  | 4 | 2   | 27,1 |
| K0694.05061 | stainless steel   | 6,6  | M6        | M20x1   | 32 | 18     | 23     | 6  | 4 | 2   | 43,4 |
| K0694.05081 | stainless steel   | 9    | M8        | M20x1   | 32 | 18     | 23     | 6  | 4 | 2   | 43,4 |
| K0694.05101 | stainless steel   | 11   | M10       | M20x1   | 32 | 18     | 23     | 6  | 4 | 2   | 43,4 |
| K0694.07101 | stainless steel   | 11   | M10       | M30x1,5 | 45 | 22     | 29     | 7  | 5 | 2   | 84   |
| K0694.07121 | stainless steel   | 13,5 | M12       | M30x1,5 | 45 | 22     | 29     | 7  | 5 | 2   | 84   |
| K0694.07161 | stainless steel   | 17,5 | M16       | M30x1,5 | 45 | 22     | 29     | 7  | 5 | 2   | 84   |
| K0694.09161 | stainless steel   | 17,5 | M16       | M40x1,5 | 58 | 28     | 37     | 9  | 6 | 2,5 | 148  |
| K0694.09201 | stainless steel   | 22   | M20       | M40x1,5 | 58 | 28     | 37     | 9  | 6 | 2,5 | 148  |
| K0694.09241 | stainless steel   | 26   | M24       | M40x1,5 | 58 | 28     | 37     | 9  | 6 | 2,5 | 148  |
| K0694.10201 | stainless steel   | 22   | M20       | M50x1,5 | 70 | 33     | 43     | 11 | 6 | 2,5 | 225  |
| K0694.10241 | stainless steel   | 26   | M24       | M50x1,5 | 70 | 33     | 43     | 11 | 6 | 2,5 | 225  |
| K0694.10301 | stainless steel   | 33   | M30       | M50x1,5 | 70 | 33     | 43     | 11 | 6 | 2,5 | 225  |



# Levelling sets

spherical washer



## Material:

Steel 1.7225.

Stainless steel 1.4305.

## Version:

Steel version trivalent blue passivated.

Stainless steel version bright.

## Sample order:

K0695.0406

## Note:

Levelling sets with spherical washers are used for mounting, levelling and aligning motors, aggregates, drive units and assembly lines. The spherical washer permits exact alignment when mounting inclined surfaces of up to 4°.

## KIPP Levelling Sets with spherical washer

| Order No.   | Main material     | D    | for screw | D1      | D2 | H min. | H max. | B  | N | M   | α  | F kN |
|-------------|-------------------|------|-----------|---------|----|--------|--------|----|---|-----|----|------|
| K0695.0406  | high carbon steel | 6,6  | M6        | M15x1   | 25 | 22     | 26     | 5  | 4 | 2   | 4° | 40   |
| K0695.0506  | high carbon steel | 6,6  | M6        | M20x1   | 32 | 26     | 31     | 6  | 4 | 2   | 4° | 65   |
| K0695.0508  | high carbon steel | 9    | M8        | M20x1   | 32 | 26     | 31     | 6  | 4 | 2   | 4° | 65   |
| K0695.0510  | high carbon steel | 11   | M10       | M20x1   | 32 | 26     | 31     | 6  | 4 | 2   | 4° | 65   |
| K0695.0710  | high carbon steel | 11   | M10       | M30x1,5 | 45 | 34     | 41     | 7  | 5 | 2   | 4° | 120  |
| K0695.0712  | high carbon steel | 13,5 | M12       | M30x1,5 | 45 | 34     | 41     | 7  | 5 | 2   | 4° | 120  |
| K0695.0716  | high carbon steel | 17,5 | M16       | M30x1,5 | 45 | 34     | 41     | 7  | 5 | 2   | 4° | 120  |
| K0695.0916  | high carbon steel | 17,5 | M16       | M40x1,5 | 58 | 44     | 53     | 9  | 6 | 2,5 | 4° | 210  |
| K0695.0920  | high carbon steel | 22   | M20       | M40x1,5 | 58 | 44     | 53     | 9  | 6 | 2,5 | 4° | 210  |
| K0695.0924  | high carbon steel | 26   | M24       | M40x1,5 | 58 | 44     | 53     | 9  | 6 | 2,5 | 4° | 210  |
| K0695.1020  | high carbon steel | 22   | M20       | M50x1,5 | 70 | 50     | 60     | 11 | 6 | 2,5 | 4° | 330  |
| K0695.1024  | high carbon steel | 26   | M24       | M50x1,5 | 70 | 50     | 60     | 11 | 6 | 2,5 | 4° | 330  |
| K0695.1030  | high carbon steel | 33   | M30       | M50x1,5 | 70 | 50     | 60     | 11 | 6 | 2,5 | 4° | 330  |
| K0695.1224  | high carbon steel | 26   | M24       | M60x2   | 80 | 56     | 68     | 11 | 7 | 3   | 4° | 495  |
| K0695.1230  | high carbon steel | 33   | M30       | M60x2   | 80 | 56     | 68     | 11 | 7 | 3   | 4° | 495  |
| K0695.04061 | stainless steel   | 6,6  | M6        | M15x1   | 25 | 22     | 26     | 5  | 4 | 2   | 4° | 27,1 |
| K0695.05061 | stainless steel   | 6,6  | M6        | M20x1   | 32 | 26     | 31     | 6  | 4 | 2   | 4° | 43,4 |
| K0695.05081 | stainless steel   | 9    | M8        | M20x1   | 32 | 26     | 31     | 6  | 4 | 2   | 4° | 43,4 |
| K0695.05101 | stainless steel   | 11   | M10       | M20x1   | 32 | 26     | 31     | 6  | 4 | 2   | 4° | 43,4 |
| K0695.07101 | stainless steel   | 11   | M10       | M30x1,5 | 45 | 34     | 41     | 7  | 5 | 2   | 4° | 84   |
| K0695.07121 | stainless steel   | 13,5 | M12       | M30x1,5 | 45 | 34     | 41     | 7  | 5 | 2   | 4° | 84   |
| K0695.07161 | stainless steel   | 17,5 | M16       | M30x1,5 | 45 | 34     | 41     | 7  | 5 | 2   | 4° | 84   |
| K0695.09161 | stainless steel   | 17,5 | M16       | M40x1,5 | 58 | 44     | 53     | 9  | 6 | 2,5 | 4° | 148  |
| K0695.09201 | stainless steel   | 22   | M20       | M40x1,5 | 58 | 44     | 53     | 9  | 6 | 2,5 | 4° | 148  |
| K0695.09241 | stainless steel   | 26   | M24       | M40x1,5 | 58 | 44     | 53     | 9  | 6 | 2,5 | 4° | 148  |
| K0695.10201 | stainless steel   | 22   | M20       | M50x1,5 | 70 | 50     | 60     | 11 | 6 | 2,5 | 4° | 225  |
| K0695.10241 | stainless steel   | 26   | M24       | M50x1,5 | 70 | 50     | 60     | 11 | 6 | 2,5 | 4° | 225  |
| K0695.10301 | stainless steel   | 33   | M30       | M50x1,5 | 70 | 50     | 60     | 11 | 6 | 2,5 | 4° | 225  |
| K0695.12241 | stainless steel   | 26   | M24       | M60x2   | 80 | 56     | 68     | 11 | 7 | 3   | 4° | 323  |
| K0695.12301 | stainless steel   | 33   | M30       | M60x2   | 80 | 56     | 68     | 11 | 7 | 3   | 4° | 323  |

## Levelling sets

with locknut



### Material:

Steel 1.7225.

Stainless steel 1.4305.

### Version:

Standard version trivalent blue passivated.

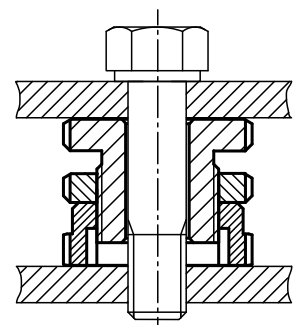
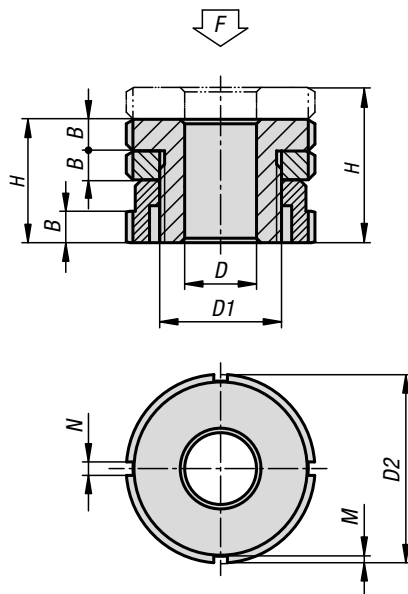
Stainless steel version bright.

### Sample order:

K0097.0404

### Note:

These low version levelling sets with locknut are used to mount and align motors, aggregates, drive units and production lines. The advantage is the low height. Alignments can be made quickly and easily even with several levelling points. Distortion-free mounting is guaranteed. The locknut secures a prescribed adjustment.





# Levelling sets

with locknut



## KIPP Levelling sets with locknut

| Order No.   | Main material     | D    | for screw | D1      | D2 | H min. | H max. | B  | N | M   | F kN |
|-------------|-------------------|------|-----------|---------|----|--------|--------|----|---|-----|------|
| K0097.0404  | high carbon steel | 4,5  | M4        | M15x1   | 25 | 20     | 24     | 5  | 4 | 2   | 40   |
| K0097.0405  | high carbon steel | 5,5  | M5        | M15x1   | 25 | 20     | 24     | 5  | 4 | 2   | 40   |
| K0097.0406  | high carbon steel | 6,6  | M6        | M15x1   | 25 | 20     | 24     | 5  | 4 | 2   | 40   |
| K0097.0506  | high carbon steel | 6,6  | M6        | M20x1   | 32 | 24     | 29     | 6  | 4 | 2   | 65   |
| K0097.0508  | high carbon steel | 9    | M8        | M20x1   | 32 | 24     | 29     | 6  | 4 | 2   | 65   |
| K0097.0510  | high carbon steel | 11   | M10       | M20x1   | 32 | 24     | 29     | 6  | 4 | 2   | 65   |
| K0097.0710  | high carbon steel | 11   | M10       | M30x1,5 | 45 | 29     | 36     | 7  | 5 | 2   | 120  |
| K0097.0712  | high carbon steel | 13,5 | M12       | M30x1,5 | 45 | 29     | 36     | 7  | 5 | 2   | 120  |
| K0097.0716  | high carbon steel | 17,5 | M16       | M30x1,5 | 45 | 29     | 36     | 7  | 5 | 2   | 120  |
| K0097.0916  | high carbon steel | 17,5 | M16       | M40x1,5 | 58 | 37     | 46     | 9  | 6 | 2,5 | 210  |
| K0097.0920  | high carbon steel | 22   | M20       | M40x1,5 | 58 | 37     | 46     | 9  | 6 | 2,5 | 210  |
| K0097.0924  | high carbon steel | 26   | M24       | M40x1,5 | 58 | 37     | 46     | 9  | 6 | 2,5 | 210  |
| K0097.1020  | high carbon steel | 22   | M20       | M50x1,5 | 70 | 44     | 54     | 11 | 6 | 2,5 | 330  |
| K0097.1024  | high carbon steel | 26   | M24       | M50x1,5 | 70 | 44     | 54     | 11 | 6 | 2,5 | 330  |
| K0097.1030  | high carbon steel | 33   | M30       | M50x1,5 | 70 | 44     | 54     | 11 | 6 | 2,5 | 330  |
| K0097.04041 | stainless steel   | 4,5  | M4        | M15x1   | 25 | 20     | 24     | 5  | 4 | 2   | 27,1 |
| K0097.04051 | stainless steel   | 5,5  | M5        | M15x1   | 25 | 20     | 24     | 5  | 4 | 2   | 27,1 |
| K0097.04061 | stainless steel   | 6,6  | M6        | M15x1   | 25 | 20     | 24     | 5  | 4 | 2   | 27,1 |
| K0097.05061 | stainless steel   | 6,6  | M6        | M20x1   | 32 | 24     | 29     | 6  | 4 | 2   | 43,4 |
| K0097.05081 | stainless steel   | 9    | M8        | M20x1   | 32 | 24     | 29     | 6  | 4 | 2   | 43,4 |
| K0097.05101 | stainless steel   | 11   | M10       | M20x1   | 32 | 24     | 29     | 6  | 4 | 2   | 43,4 |
| K0097.07101 | stainless steel   | 11   | M10       | M30x1,5 | 45 | 29     | 36     | 7  | 5 | 2   | 84   |
| K0097.07121 | stainless steel   | 13,5 | M12       | M30x1,5 | 45 | 29     | 36     | 7  | 5 | 2   | 84   |
| K0097.07161 | stainless steel   | 17,5 | M16       | M30x1,5 | 45 | 29     | 36     | 7  | 5 | 2   | 84   |
| K0097.09161 | stainless steel   | 17,5 | M16       | M40x1,5 | 58 | 37     | 46     | 9  | 6 | 2,5 | 148  |
| K0097.09201 | stainless steel   | 22   | M20       | M40x1,5 | 58 | 37     | 46     | 9  | 6 | 2,5 | 148  |
| K0097.09241 | stainless steel   | 26   | M24       | M40x1,5 | 58 | 37     | 46     | 9  | 6 | 2,5 | 148  |
| K0097.10201 | stainless steel   | 22   | M20       | M50x1,5 | 70 | 44     | 54     | 11 | 6 | 2,5 | 225  |
| K0097.10241 | stainless steel   | 26   | M24       | M50x1,5 | 70 | 44     | 54     | 11 | 6 | 2,5 | 225  |
| K0097.10301 | stainless steel   | 33   | M30       | M50x1,5 | 70 | 44     | 54     | 11 | 6 | 2,5 | 225  |

## Levelling sets

spherical washer with locknut



### Material:

Steel 1.7225.

Stainless steel 1.4305.

### Version:

Standard version trivalent blue passivated.

Stainless steel version bright.

### Sample order:

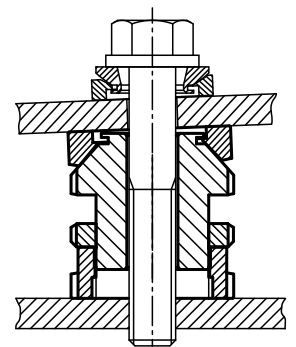
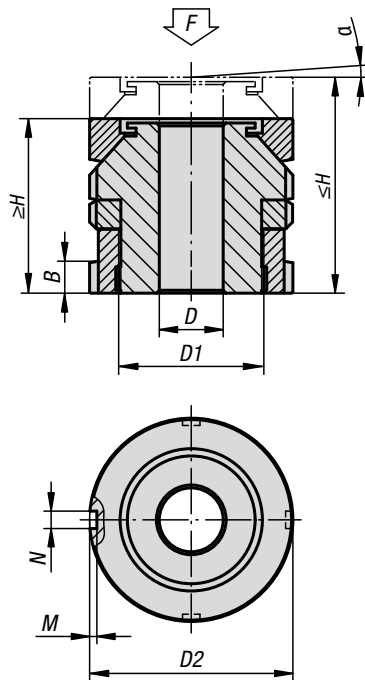
K0115.0406

### Note:

The spherical washer levelling set is used to mount and align motors, aggregates, drive units and production lines. The spherical washer gives exact alignment of sloping faces with an inclination of up to 4°. The locknut secures a prescribed adjustment.

### Accessories:

Spherical levelling washers K0691



# Levelling sets

spherical washer with locknut



## KIPP Levelling sets spherical washer with locknut

| Order No.   | Main material     | D    | for screw | D1      | D2 | H min. | H max. | B  | N | M   | α  | F kN |
|-------------|-------------------|------|-----------|---------|----|--------|--------|----|---|-----|----|------|
| K0115.0406  | high carbon steel | 6,6  | M6        | M15x1   | 25 | 27     | 31     | 5  | 4 | 2   | 4° | 40   |
| K0115.0506  | high carbon steel | 6,6  | M6        | M20x1   | 32 | 32     | 37     | 6  | 4 | 2   | 4° | 65   |
| K0115.0508  | high carbon steel | 9    | M8        | M20x1   | 32 | 32     | 37     | 6  | 4 | 2   | 4° | 65   |
| K0115.0510  | high carbon steel | 11   | M10       | M20x1   | 32 | 32     | 37     | 6  | 4 | 2   | 4° | 65   |
| K0115.0710  | high carbon steel | 11   | M10       | M30x1,5 | 45 | 41     | 48     | 7  | 5 | 2   | 4° | 120  |
| K0115.0712  | high carbon steel | 13,5 | M12       | M30x1,5 | 45 | 41     | 48     | 7  | 5 | 2   | 4° | 120  |
| K0115.0716  | high carbon steel | 17,5 | M16       | M30x1,5 | 45 | 41     | 48     | 7  | 5 | 2   | 4° | 120  |
| K0115.0916  | high carbon steel | 17,5 | M16       | M40x1,5 | 58 | 53     | 62     | 9  | 6 | 2,5 | 4° | 210  |
| K0115.0920  | high carbon steel | 22   | M20       | M40x1,5 | 58 | 53     | 62     | 9  | 6 | 2,5 | 4° | 210  |
| K0115.0924  | high carbon steel | 26   | M24       | M40x1,5 | 58 | 53     | 62     | 9  | 6 | 2,5 | 4° | 210  |
| K0115.1020  | high carbon steel | 22   | M20       | M50x1,5 | 70 | 61     | 71     | 11 | 6 | 2,5 | 4° | 330  |
| K0115.1024  | high carbon steel | 26   | M24       | M50x1,5 | 70 | 61     | 71     | 11 | 6 | 2,5 | 4° | 330  |
| K0115.1030  | high carbon steel | 33   | M30       | M50x1,5 | 70 | 61     | 71     | 11 | 6 | 2,5 | 4° | 330  |
| K0115.1224  | high carbon steel | 26   | M24       | M60x2   | 80 | 67     | 79     | 11 | 7 | 3   | 4° | 495  |
| K0115.1230  | high carbon steel | 33   | M30       | M60x2   | 80 | 67     | 79     | 11 | 7 | 3   | 4° | 495  |
| K0115.04061 | stainless steel   | 6,6  | M6        | M15x1   | 25 | 27     | 31     | 5  | 4 | 2   | 4° | 27,1 |
| K0115.05061 | stainless steel   | 6,6  | M6        | M20x1   | 32 | 32     | 37     | 6  | 4 | 2   | 4° | 43,4 |
| K0115.05081 | stainless steel   | 9    | M8        | M20x1   | 32 | 32     | 37     | 6  | 4 | 2   | 4° | 43,4 |
| K0115.05101 | stainless steel   | 11   | M10       | M20x1   | 32 | 32     | 37     | 6  | 4 | 2   | 4° | 43,4 |
| K0115.07101 | stainless steel   | 11   | M10       | M30x1,5 | 45 | 41     | 48     | 7  | 5 | 2   | 4° | 84   |
| K0115.07121 | stainless steel   | 13,5 | M12       | M30x1,5 | 45 | 41     | 48     | 7  | 5 | 2   | 4° | 84   |
| K0115.07161 | stainless steel   | 17,5 | M16       | M30x1,5 | 45 | 41     | 48     | 7  | 5 | 2   | 4° | 84   |
| K0115.09161 | stainless steel   | 17,5 | M16       | M40x1,5 | 58 | 53     | 62     | 9  | 6 | 2,5 | 4° | 148  |
| K0115.09201 | stainless steel   | 22   | M20       | M40x1,5 | 58 | 53     | 62     | 9  | 6 | 2,5 | 4° | 148  |
| K0115.09241 | stainless steel   | 26   | M24       | M40x1,5 | 58 | 53     | 62     | 9  | 6 | 2,5 | 4° | 148  |
| K0115.10201 | stainless steel   | 22   | M20       | M50x1,5 | 70 | 61     | 71     | 11 | 6 | 2,5 | 4° | 225  |
| K0115.10241 | stainless steel   | 26   | M24       | M50x1,5 | 70 | 61     | 71     | 11 | 6 | 2,5 | 4° | 225  |
| K0115.10301 | stainless steel   | 33   | M30       | M50x1,5 | 70 | 61     | 71     | 11 | 6 | 2,5 | 4° | 225  |
| K0115.12241 | stainless steel   | 26   | M24       | M60x2   | 80 | 67     | 79     | 11 | 7 | 3   | 4° | 323  |
| K0115.12301 | stainless steel   | 33   | M30       | M60x2   | 80 | 67     | 79     | 11 | 7 | 3   | 4° | 323  |

# Levelling sets

spherical washer



## Material:

Steel 1.7225.

Stainless steel 1.4305.

## Version:

Standard version trivalent blue passivated.

Stainless steel version bright.

## Sample order:

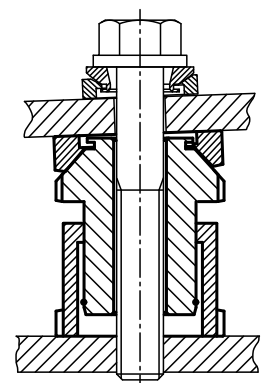
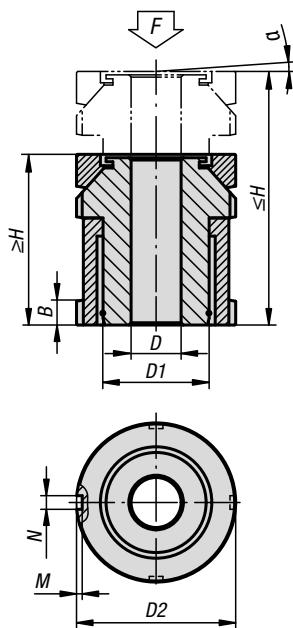
K0057.1506

## Note:

The spherical washer levelling sets are used to mount and align motors, aggregates, drive units and production lines. The spherical washer permits exact alignment when mounting sloping surfaces of up to 4°. These levellers have a long travel of 15 mm to 50 mm.

## Accessories:

Spherical levelling washers K0691



# Levelling sets

spherical washer



## KIPP Levelling sets spherical washer

| Order No.   | Main material     | D    | for screw | D1      | D2 | H min. | H max. | B  | N | M   | α  | F kN |
|-------------|-------------------|------|-----------|---------|----|--------|--------|----|---|-----|----|------|
| K0057.1506  | high carbon steel | 6,6  | M6        | M15x1   | 25 | 35     | 50     | 5  | 4 | 2   | 4° | 40   |
| K0057.2006  | high carbon steel | 6,6  | M6        | M20x1   | 32 | 43     | 63     | 6  | 4 | 2   | 4° | 65   |
| K0057.2008  | high carbon steel | 9    | M8        | M20x1   | 32 | 43     | 63     | 6  | 4 | 2   | 4° | 65   |
| K0057.2010  | high carbon steel | 11   | M10       | M20x1   | 32 | 43     | 63     | 6  | 4 | 2   | 4° | 65   |
| K0057.2510  | high carbon steel | 11   | M10       | M30x1,5 | 45 | 54     | 79     | 7  | 5 | 2   | 4° | 120  |
| K0057.2512  | high carbon steel | 13,5 | M12       | M30x1,5 | 45 | 54     | 79     | 7  | 5 | 2   | 4° | 120  |
| K0057.2516  | high carbon steel | 17,5 | M16       | M30x1,5 | 45 | 54     | 79     | 7  | 5 | 2   | 4° | 120  |
| K0057.3216  | high carbon steel | 17,5 | M16       | M40x1,5 | 58 | 70     | 102    | 9  | 6 | 2,5 | 4° | 210  |
| K0057.3220  | high carbon steel | 22   | M20       | M40x1,5 | 58 | 70     | 102    | 9  | 6 | 2,5 | 4° | 210  |
| K0057.3224  | high carbon steel | 26   | M24       | M40x1,5 | 58 | 70     | 102    | 9  | 6 | 2,5 | 4° | 210  |
| K0057.4020  | high carbon steel | 22   | M20       | M50x1,5 | 70 | 83     | 123    | 11 | 6 | 2,5 | 4° | 330  |
| K0057.4024  | high carbon steel | 26   | M24       | M50x1,5 | 70 | 83     | 123    | 11 | 6 | 2,5 | 4° | 330  |
| K0057.4030  | high carbon steel | 33   | M30       | M50x1,5 | 70 | 83     | 123    | 11 | 6 | 2,5 | 4° | 330  |
| K0057.5024  | high carbon steel | 26   | M24       | M60x2   | 80 | 94     | 144    | 11 | 7 | 3   | 4° | 495  |
| K0057.5030  | high carbon steel | 33   | M30       | M60x2   | 80 | 94     | 144    | 11 | 7 | 3   | 4° | 495  |
| K0057.15061 | stainless steel   | 6,6  | M6        | M15x1   | 25 | 35     | 50     | 5  | 4 | 2   | 4° | 27,1 |
| K0057.20061 | stainless steel   | 6,6  | M6        | M20x1   | 32 | 43     | 63     | 6  | 4 | 2   | 4° | 43,4 |
| K0057.20081 | stainless steel   | 9    | M8        | M20x1   | 32 | 43     | 63     | 6  | 4 | 2   | 4° | 43,4 |
| K0057.20101 | stainless steel   | 11   | M10       | M20x1   | 32 | 43     | 63     | 6  | 4 | 2   | 4° | 43,4 |
| K0057.25101 | stainless steel   | 11   | M10       | M30x1,5 | 45 | 54     | 79     | 7  | 5 | 2   | 4° | 84   |
| K0057.25121 | stainless steel   | 13,5 | M12       | M30x1,5 | 45 | 54     | 79     | 7  | 5 | 2   | 4° | 84   |
| K0057.25161 | stainless steel   | 17,5 | M16       | M30x1,5 | 45 | 54     | 79     | 7  | 5 | 2   | 4° | 84   |
| K0057.32161 | stainless steel   | 17,5 | M16       | M40x1,5 | 58 | 70     | 102    | 9  | 6 | 2,5 | 4° | 148  |
| K0057.32201 | stainless steel   | 22   | M20       | M40x1,5 | 58 | 70     | 102    | 9  | 6 | 2,5 | 4° | 148  |
| K0057.32241 | stainless steel   | 26   | M24       | M40x1,5 | 58 | 70     | 102    | 9  | 6 | 2,5 | 4° | 148  |
| K0057.40201 | stainless steel   | 22   | M20       | M50x1,5 | 70 | 83     | 123    | 11 | 6 | 2,5 | 4° | 225  |
| K0057.40241 | stainless steel   | 26   | M24       | M50x1,5 | 70 | 83     | 123    | 11 | 6 | 2,5 | 4° | 225  |
| K0057.40301 | stainless steel   | 33   | M30       | M50x1,5 | 70 | 83     | 123    | 11 | 6 | 2,5 | 4° | 225  |
| K0057.50241 | stainless steel   | 26   | M24       | M60x2   | 80 | 94     | 144    | 11 | 7 | 3   | 4° | 323  |
| K0057.50301 | stainless steel   | 33   | M30       | M60x2   | 80 | 94     | 144    | 11 | 7 | 3   | 4° | 323  |

## Levelling sets

spherical washer with locknut



### Material:

Steel 1.7225.

Stainless steel 1.4305.

### Version:

Standard version trivalent blue passivated.

Stainless steel version bright.

### Sample order:

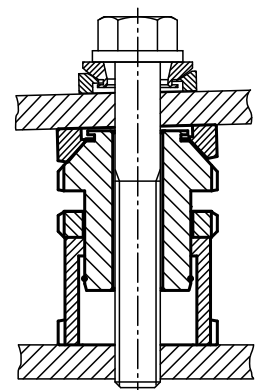
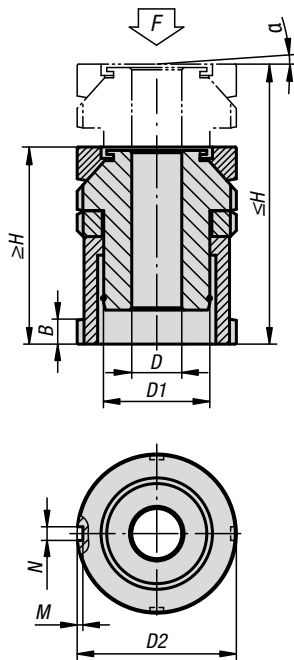
K0119.1006

### Note:

The spherical washer levelling sets are used to mount and align motors, aggregates, drive units and production lines. The spherical washer permits exact alignment when mounting sloping surfaces of up to 4°. The locknut secures a prescribed adjustment. These levellers have a long travel of 10 mm to 39 mm.

### Accessories:

Spherical levelling washers K0691



# Levelling sets

spherical washer with locknut



## KIPP Levelling sets spherical washer with locknut

| Order No.   | Main material     | D    | for screw | D1      | D2 | H min. | H max. | B  | N | M   | α  | F kN |
|-------------|-------------------|------|-----------|---------|----|--------|--------|----|---|-----|----|------|
| K0119.1006  | high carbon steel | 6,6  | M6        | M15x1   | 25 | 40     | 50     | 5  | 4 | 2   | 4° | 40   |
| K0119.1406  | high carbon steel | 6,6  | M6        | M20x1   | 32 | 49     | 63     | 6  | 4 | 2   | 4° | 65   |
| K0119.1408  | high carbon steel | 9    | M8        | M20x1   | 32 | 49     | 63     | 6  | 4 | 2   | 4° | 65   |
| K0119.1410  | high carbon steel | 11   | M10       | M20x1   | 32 | 49     | 63     | 6  | 4 | 2   | 4° | 65   |
| K0119.1810  | high carbon steel | 11   | M10       | M30x1,5 | 45 | 61     | 79     | 7  | 5 | 2   | 4° | 120  |
| K0119.1812  | high carbon steel | 13,5 | M12       | M30x1,5 | 45 | 61     | 79     | 7  | 5 | 2   | 4° | 120  |
| K0119.1816  | high carbon steel | 17,5 | M16       | M30x1,5 | 45 | 61     | 79     | 7  | 5 | 2   | 4° | 120  |
| K0119.2316  | high carbon steel | 17,5 | M16       | M40x1,5 | 58 | 79     | 102    | 9  | 6 | 2,5 | 4° | 210  |
| K0119.2320  | high carbon steel | 22   | M20       | M40x1,5 | 58 | 79     | 102    | 9  | 6 | 2,5 | 4° | 210  |
| K0119.2324  | high carbon steel | 26   | M24       | M40x1,5 | 58 | 79     | 102    | 9  | 6 | 2,5 | 4° | 210  |
| K0119.2920  | high carbon steel | 22   | M20       | M50x1,5 | 70 | 94     | 123    | 11 | 6 | 2,5 | 4° | 330  |
| K0119.2924  | high carbon steel | 26   | M24       | M50x1,5 | 70 | 94     | 123    | 11 | 6 | 2,5 | 4° | 330  |
| K0119.2930  | high carbon steel | 33   | M30       | M50x1,5 | 70 | 94     | 123    | 11 | 6 | 2,5 | 4° | 330  |
| K0119.3924  | high carbon steel | 26   | M24       | M60x2   | 80 | 105    | 144    | 11 | 7 | 3   | 4° | 495  |
| K0119.3930  | high carbon steel | 33   | M30       | M60x2   | 80 | 105    | 144    | 11 | 7 | 3   | 4° | 495  |
| K0119.10061 | stainless steel   | 6,6  | M6        | M15x1   | 25 | 40     | 50     | 5  | 4 | 2   | 4° | 27,1 |
| K0119.14061 | stainless steel   | 6,6  | M6        | M20x1   | 32 | 49     | 63     | 6  | 4 | 2   | 4° | 43,4 |
| K0119.14081 | stainless steel   | 9    | M8        | M20x1   | 32 | 49     | 63     | 6  | 4 | 2   | 4° | 43,4 |
| K0119.14101 | stainless steel   | 11   | M10       | M20x1   | 32 | 49     | 63     | 6  | 4 | 2   | 4° | 43,4 |
| K0119.18101 | stainless steel   | 11   | M10       | M30x1,5 | 45 | 61     | 79     | 7  | 5 | 2   | 4° | 84   |
| K0119.18121 | stainless steel   | 13,5 | M12       | M30x1,5 | 45 | 61     | 79     | 7  | 5 | 2   | 4° | 84   |
| K0119.18161 | stainless steel   | 17,5 | M16       | M30x1,5 | 45 | 61     | 79     | 7  | 5 | 2   | 4° | 84   |
| K0119.23161 | stainless steel   | 17,5 | M16       | M40x1,5 | 58 | 79     | 102    | 9  | 6 | 2,5 | 4° | 148  |
| K0119.23201 | stainless steel   | 22   | M20       | M40x1,5 | 58 | 79     | 102    | 9  | 6 | 2,5 | 4° | 148  |
| K0119.23241 | stainless steel   | 26   | M24       | M40x1,5 | 58 | 79     | 102    | 9  | 6 | 2,5 | 4° | 148  |
| K0119.29201 | stainless steel   | 22   | M20       | M50x1,5 | 70 | 94     | 123    | 11 | 6 | 2,5 | 4° | 225  |
| K0119.29241 | stainless steel   | 26   | M24       | M50x1,5 | 70 | 94     | 123    | 11 | 6 | 2,5 | 4° | 225  |
| K0119.29301 | stainless steel   | 33   | M30       | M50x1,5 | 70 | 94     | 123    | 11 | 6 | 2,5 | 4° | 225  |
| K0119.39241 | stainless steel   | 26   | M24       | M60x2   | 80 | 105    | 144    | 11 | 7 | 3   | 4° | 323  |
| K0119.39301 | stainless steel   | 33   | M30       | M60x2   | 80 | 105    | 144    | 11 | 7 | 3   | 4° | 323  |

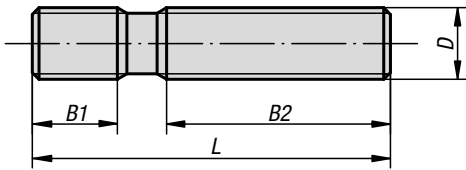






# Studs

DIN 6379



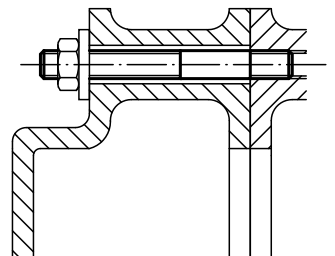
**Material:**  
Carbon steel.

**Version:**  
Thread rolled.  
M6-M12 tempered to 10.9, black.  
M14-M36 tempered to 8.8, black.

## KIPP Studs DIN 6379

| Order No.   | D   | L   | B1 | B2  |
|-------------|-----|-----|----|-----|
| K0697.0632  | M6  | 32  | 9  | 16  |
| K0697.0640  | M6  | 40  | 9  | 20  |
| K0697.0650  | M6  | 50  | 9  | 30  |
| K0697.0663  | M6  | 63  | 9  | 40  |
| K0697.0680  | M6  | 80  | 9  | 50  |
| K0697.06100 | M6  | 100 | 9  | 63  |
| K0697.0840  | M8  | 40  | 11 | 20  |
| K0697.0863  | M8  | 63  | 11 | 40  |
| K0697.0880  | M8  | 80  | 11 | 50  |
| K0697.08100 | M8  | 100 | 11 | 63  |
| K0697.08125 | M8  | 125 | 11 | 75  |
| K0697.08160 | M8  | 160 | 11 | 100 |
| K0697.1050  | M10 | 50  | 13 | 25  |
| K0697.1080  | M10 | 80  | 13 | 50  |
| K0697.10100 | M10 | 100 | 13 | 75  |
| K0697.10125 | M10 | 125 | 13 | 75  |
| K0697.10160 | M10 | 160 | 13 | 100 |
| K0697.10200 | M10 | 200 | 13 | 125 |
| K0697.1250  | M12 | 50  | 15 | 25  |
| K0697.1263  | M12 | 63  | 15 | 32  |
| K0697.1280  | M12 | 80  | 15 | 50  |
| K0697.12100 | M12 | 100 | 15 | 63  |
| K0697.12125 | M12 | 125 | 15 | 75  |
| K0697.12160 | M12 | 160 | 15 | 100 |
| K0697.12200 | M12 | 200 | 15 | 125 |
| K0697.1463  | M14 | 63  | 17 | 32  |
| K0697.1480  | M14 | 80  | 17 | 50  |
| K0697.14100 | M14 | 100 | 17 | 63  |
| K0697.14125 | M14 | 125 | 17 | 75  |
| K0697.14160 | M14 | 160 | 17 | 100 |
| K0697.14200 | M14 | 200 | 17 | 125 |
| K0697.14250 | M14 | 250 | 17 | 160 |
| K0697.1663  | M16 | 63  | 19 | 32  |
| K0697.1680  | M16 | 80  | 19 | 50  |
| K0697.16100 | M16 | 100 | 19 | 63  |
| K0697.16125 | M16 | 125 | 19 | 75  |
| K0697.16160 | M16 | 160 | 19 | 100 |
| K0697.16200 | M16 | 200 | 19 | 125 |
| K0697.16250 | M16 | 250 | 19 | 160 |
| K0697.16315 | M16 | 315 | 19 | 180 |

**Sample order:**  
K0697.12125



## Studs

DIN 6379

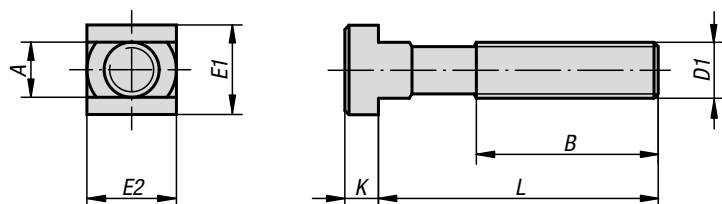


| Order No.    | D   | L    | B1 | B2  |
|--------------|-----|------|----|-----|
| K0697.16350  | M16 | 350  | 19 | 200 |
| K0697.16500  | M16 | 500  | 20 | 315 |
| K0697.1880   | M18 | 80   | 23 | 50  |
| K0697.18125  | M18 | 125  | 23 | 75  |
| K0697.18160  | M18 | 160  | 23 | 100 |
| K0697.18200  | M18 | 200  | 23 | 125 |
| K0697.18250  | M18 | 250  | 23 | 150 |
| K0697.18315  | M18 | 315  | 23 | 180 |
| K0697.2080   | M20 | 80   | 27 | 32  |
| K0697.20125  | M20 | 125  | 27 | 70  |
| K0697.20160  | M20 | 160  | 27 | 100 |
| K0697.20200  | M20 | 200  | 27 | 125 |
| K0697.20250  | M20 | 250  | 27 | 160 |
| K0697.20315  | M20 | 315  | 27 | 200 |
| K0697.20400  | M20 | 400  | 27 | 250 |
| K0697.20500  | M20 | 500  | 27 | 315 |
| K0697.22100  | M22 | 100  | 31 | 45  |
| K0697.22160  | M22 | 160  | 31 | 100 |
| K0697.22200  | M22 | 200  | 31 | 125 |
| K0697.22250  | M22 | 250  | 31 | 160 |
| K0697.22315  | M22 | 315  | 31 | 180 |
| K0697.22400  | M22 | 400  | 31 | 250 |
| K0697.24100  | M24 | 100  | 35 | 45  |
| K0697.24125  | M24 | 125  | 35 | 63  |
| K0697.24160  | M24 | 160  | 35 | 100 |
| K0697.24200  | M24 | 200  | 35 | 125 |
| K0697.24250  | M24 | 250  | 35 | 160 |
| K0697.24315  | M24 | 315  | 35 | 200 |
| K0697.24400  | M24 | 400  | 35 | 250 |
| K0697.24500  | M24 | 500  | 35 | 315 |
| K0697.24630  | M24 | 630  | 35 | 315 |
| K0697.27125  | M27 | 125  | 39 | 56  |
| K0697.27200  | M27 | 200  | 39 | 125 |
| K0697.27315  | M27 | 315  | 39 | 200 |
| K0697.27400  | M27 | 400  | 39 | 250 |
| K0697.27500  | M27 | 500  | 39 | 315 |
| K0697.30125  | M30 | 125  | 43 | 56  |
| K0697.30200  | M30 | 200  | 43 | 125 |
| K0697.30315  | M30 | 315  | 43 | 200 |
| K0697.30500  | M30 | 500  | 43 | 315 |
| K0697.30700  | M30 | 700  | 43 | 400 |
| K0697.301000 | M30 | 1000 | 44 | 400 |
| K0697.36160  | M36 | 160  | 51 | 80  |
| K0697.36200  | M36 | 200  | 51 | 125 |
| K0697.36250  | M36 | 250  | 51 | 160 |
| K0697.36315  | M36 | 315  | 51 | 200 |
| K0697.36400  | M36 | 400  | 51 | 250 |
| K0697.36500  | M36 | 500  | 51 | 315 |
| K0697.36700  | M36 | 700  | 51 | 400 |



## T-slot bolts

DIN 787



## KIPP T-slot bolts DIN 787

| Order No.    | Slot width | D1  | L   | A    | B   | E1/E2 | K  |
|--------------|------------|-----|-----|------|-----|-------|----|
| K0698.0625   | 6          | M6  | 25  | 5,7  | 15  | 10    | 4  |
| K0698.0640   | 6          | M6  | 40  | 5,7  | 28  | 10    | 4  |
| K0698.0663   | 6          | M6  | 63  | 5,7  | 40  | 10    | 4  |
| K0698.0832   | 8          | M8  | 32  | 7,7  | 22  | 13    | 6  |
| K0698.0850   | 8          | M8  | 50  | 7,7  | 35  | 13    | 6  |
| K0698.0880   | 8          | M8  | 80  | 7,7  | 50  | 13    | 6  |
| K0698.1040   | 10         | M10 | 40  | 9,7  | 30  | 15    | 6  |
| K0698.1063   | 10         | M10 | 63  | 9,7  | 45  | 15    | 6  |
| K0698.10100  | 10         | M10 | 100 | 9,7  | 60  | 15    | 6  |
| K0698.1250   | 12         | M12 | 50  | 11,7 | 35  | 18    | 7  |
| K0698.1263   | 12         | M12 | 63  | 11,7 | 40  | 18    | 7  |
| K0698.1280   | 12         | M12 | 80  | 11,7 | 55  | 18    | 7  |
| K0698.12100  | 12         | M12 | 100 | 11,7 | 65  | 18    | 7  |
| K0698.12125  | 12         | M12 | 125 | 11,7 | 75  | 18    | 7  |
| K0698.12160  | 12         | M12 | 160 | 11,7 | 100 | 18    | 7  |
| K0698.12200  | 12         | M12 | 200 | 11,7 | 120 | 18    | 7  |
| K0698.1450   | 14         | M12 | 50  | 13,7 | 35  | 22    | 8  |
| K0698.1463   | 14         | M12 | 63  | 13,7 | 45  | 22    | 8  |
| K0698.1480   | 14         | M12 | 80  | 13,7 | 55  | 22    | 8  |
| K0698.14100  | 14         | M12 | 100 | 13,7 | 65  | 22    | 8  |
| K0698.14125  | 14         | M12 | 125 | 13,7 | 75  | 22    | 8  |
| K0698.14160  | 14         | M12 | 160 | 13,7 | 100 | 22    | 8  |
| K0698.14200  | 14         | M12 | 200 | 13,7 | 120 | 22    | 8  |
| K0698.16631  | 16         | M14 | 63  | 15,7 | 45  | 25    | 9  |
| K0698.16801  | 16         | M14 | 80  | 15,7 | 55  | 25    | 9  |
| K0698.161001 | 16         | M14 | 100 | 15,7 | 65  | 25    | 9  |
| K0698.161251 | 16         | M14 | 125 | 15,7 | 75  | 25    | 9  |
| K0698.161601 | 16         | M14 | 160 | 15,7 | 100 | 25    | 9  |
| K0698.162501 | 16         | M14 | 250 | 15,7 | 150 | 25    | 9  |
| K0698.1663   | 16         | M16 | 63  | 15,7 | 45  | 25    | 9  |
| K0698.1680   | 16         | M16 | 80  | 15,7 | 55  | 25    | 9  |
| K0698.16100  | 16         | M16 | 100 | 15,7 | 65  | 25    | 9  |
| K0698.16125  | 16         | M16 | 125 | 15,7 | 85  | 25    | 9  |
| K0698.16160  | 16         | M16 | 160 | 15,7 | 100 | 25    | 9  |
| K0698.16200  | 16         | M16 | 200 | 15,7 | 125 | 25    | 9  |
| K0698.16250  | 16         | M16 | 250 | 15,7 | 150 | 25    | 9  |
| K0698.1863   | 18         | M16 | 63  | 17,7 | 45  | 28    | 10 |

**Material:**

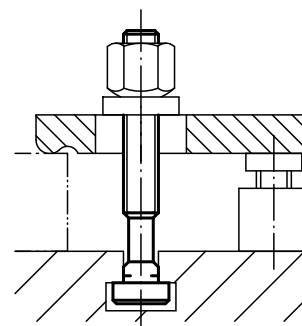
Carbon steel.

**Version:**

Forged and milled, rolled thread.  
M6-M12 tempered to 10.9, black.  
M14-M36 tempered to 8.8, black.

**Sample order:**

K0698.1263



## T-slot bolts

DIN 787

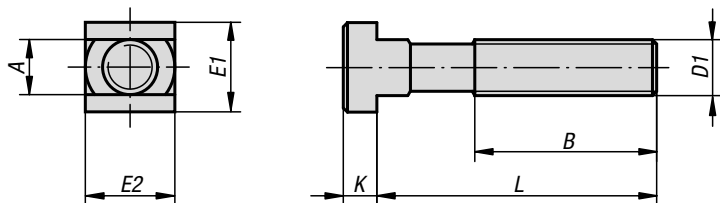


| Order No.   | Slot width | D1  | L   | A    | B   | E1/E2 | K  |
|-------------|------------|-----|-----|------|-----|-------|----|
| K0698.1880  | 18         | M16 | 80  | 17,7 | 55  | 28    | 10 |
| K0698.18100 | 18         | M16 | 100 | 17,7 | 65  | 28    | 10 |
| K0698.18125 | 18         | M16 | 125 | 17,7 | 85  | 28    | 10 |
| K0698.18160 | 18         | M16 | 160 | 17,7 | 100 | 28    | 10 |
| K0698.18200 | 18         | M16 | 200 | 17,7 | 125 | 28    | 10 |
| K0698.18250 | 18         | M16 | 250 | 17,7 | 150 | 28    | 10 |
| K0698.2080  | 20         | M20 | 80  | 19,7 | 55  | 32    | 12 |
| K0698.20100 | 20         | M20 | 100 | 19,7 | 65  | 32    | 12 |
| K0698.20125 | 20         | M20 | 125 | 19,7 | 85  | 32    | 12 |
| K0698.20160 | 20         | M20 | 160 | 19,7 | 110 | 32    | 12 |
| K0698.20200 | 20         | M20 | 200 | 19,7 | 125 | 32    | 12 |
| K0698.20250 | 20         | M20 | 250 | 19,7 | 150 | 32    | 12 |
| K0698.20315 | 20         | M20 | 315 | 19,7 | 190 | 32    | 12 |
| K0698.2280  | 22         | M20 | 80  | 21,7 | 55  | 35    | 14 |
| K0698.22100 | 22         | M20 | 100 | 21,7 | 65  | 35    | 14 |
| K0698.22125 | 22         | M20 | 125 | 21,7 | 85  | 35    | 14 |
| K0698.22160 | 22         | M20 | 160 | 21,7 | 110 | 35    | 14 |
| K0698.22200 | 22         | M20 | 200 | 21,7 | 125 | 35    | 14 |
| K0698.22250 | 22         | M20 | 250 | 21,7 | 150 | 35    | 14 |
| K0698.22315 | 22         | M20 | 315 | 21,7 | 190 | 35    | 14 |
| K0698.24100 | 24         | M24 | 100 | 23,7 | 70  | 40    | 16 |
| K0698.24125 | 24         | M24 | 125 | 23,7 | 85  | 40    | 16 |
| K0698.24160 | 24         | M24 | 160 | 23,7 | 110 | 40    | 16 |
| K0698.24200 | 24         | M24 | 200 | 23,7 | 125 | 40    | 16 |
| K0698.24250 | 24         | M24 | 250 | 23,7 | 150 | 40    | 16 |
| K0698.24315 | 24         | M24 | 315 | 23,7 | 190 | 40    | 16 |
| K0698.24400 | 24         | M24 | 400 | 23,7 | 240 | 40    | 16 |
| K0698.28100 | 28         | M24 | 100 | 27,7 | 70  | 44    | 18 |
| K0698.28125 | 28         | M24 | 125 | 27,7 | 85  | 44    | 18 |
| K0698.28160 | 28         | M24 | 160 | 27,7 | 110 | 44    | 18 |
| K0698.28200 | 28         | M24 | 200 | 27,7 | 125 | 44    | 18 |
| K0698.28250 | 28         | M24 | 250 | 27,7 | 150 | 44    | 18 |
| K0698.28315 | 28         | M24 | 315 | 27,7 | 190 | 44    | 18 |
| K0698.28400 | 28         | M24 | 400 | 27,7 | 240 | 44    | 18 |
| K0698.36125 | 36         | M30 | 125 | 35,6 | 80  | 54    | 22 |
| K0698.36160 | 36         | M30 | 160 | 35,6 | 110 | 54    | 22 |
| K0698.36200 | 36         | M30 | 200 | 35,6 | 135 | 54    | 22 |
| K0698.36250 | 36         | M30 | 250 | 35,6 | 150 | 54    | 22 |
| K0698.36315 | 36         | M30 | 315 | 35,6 | 200 | 54    | 22 |
| K0698.36500 | 36         | M30 | 500 | 35,6 | 300 | 54    | 22 |
| K0698.42160 | 42         | M36 | 160 | 41,6 | 100 | 65    | 26 |
| K0698.42250 | 42         | M36 | 250 | 41,6 | 175 | 65    | 26 |
| K0698.42400 | 42         | M36 | 400 | 41,6 | 250 | 65    | 26 |



# T-slot bolts

DIN 787, 12.9



## KIPP T-slot bolts DIN 787, 12.9

| Order No.    | Slot width | D1  | L   | A    | B   | E1/E2 | K  |
|--------------|------------|-----|-----|------|-----|-------|----|
| K0699.11250  | 12         | M12 | 50  | 11,7 | 35  | 18    | 7  |
| K0699.11280  | 12         | M12 | 80  | 11,7 | 55  | 18    | 7  |
| K0699.112100 | 12         | M12 | 100 | 11,7 | 65  | 18    | 7  |
| K0699.112125 | 12         | M12 | 125 | 11,7 | 75  | 18    | 7  |
| K0699.112160 | 12         | M12 | 160 | 11,7 | 100 | 18    | 7  |
| K0699.112200 | 12         | M12 | 200 | 11,7 | 120 | 18    | 7  |
| K0699.11450  | 14         | M12 | 50  | 13,7 | 35  | 22    | 8  |
| K0699.11480  | 14         | M12 | 80  | 13,7 | 55  | 22    | 8  |
| K0699.114100 | 14         | M12 | 100 | 13,7 | 65  | 22    | 8  |
| K0699.114125 | 14         | M12 | 125 | 13,7 | 75  | 22    | 8  |
| K0699.114160 | 14         | M12 | 160 | 13,7 | 100 | 22    | 8  |
| K0699.114200 | 14         | M12 | 200 | 13,7 | 120 | 22    | 8  |
| K0699.11663  | 16         | M16 | 63  | 15,7 | 45  | 25    | 9  |
| K0699.116100 | 16         | M16 | 100 | 15,7 | 65  | 25    | 9  |
| K0699.116125 | 16         | M16 | 125 | 15,7 | 85  | 25    | 9  |
| K0699.116160 | 16         | M16 | 160 | 15,7 | 100 | 25    | 9  |
| K0699.116250 | 16         | M16 | 250 | 15,7 | 150 | 25    | 9  |
| K0699.11863  | 18         | M16 | 63  | 17,7 | 45  | 28    | 10 |
| K0699.118100 | 18         | M16 | 100 | 17,7 | 65  | 28    | 10 |
| K0699.118125 | 18         | M16 | 125 | 17,7 | 85  | 28    | 10 |
| K0699.118160 | 18         | M16 | 160 | 17,7 | 100 | 28    | 10 |
| K0699.118250 | 18         | M16 | 250 | 17,7 | 150 | 28    | 10 |
| K0699.12080  | 20         | M20 | 80  | 19,7 | 55  | 32    | 12 |
| K0699.120125 | 20         | M20 | 125 | 19,7 | 85  | 32    | 12 |
| K0699.120200 | 20         | M20 | 200 | 19,7 | 125 | 32    | 12 |
| K0699.120315 | 20         | M20 | 315 | 19,7 | 190 | 32    | 12 |
| K0699.12280  | 22         | M20 | 80  | 21,7 | 55  | 35    | 14 |
| K0699.122125 | 22         | M20 | 125 | 21,7 | 85  | 35    | 14 |
| K0699.122200 | 22         | M20 | 200 | 21,7 | 125 | 35    | 14 |
| K0699.122315 | 22         | M20 | 315 | 21,7 | 190 | 35    | 14 |
| K0699.124100 | 24         | M24 | 100 | 23,7 | 70  | 40    | 16 |
| K0699.124160 | 24         | M24 | 160 | 23,7 | 110 | 40    | 16 |
| K0699.124250 | 24         | M24 | 250 | 23,7 | 150 | 40    | 16 |
| K0699.124400 | 24         | M24 | 400 | 23,7 | 240 | 40    | 16 |
| K0699.128100 | 28         | M24 | 100 | 27,7 | 70  | 44    | 18 |
| K0699.128160 | 28         | M24 | 160 | 27,7 | 110 | 44    | 18 |
| K0699.128250 | 28         | M24 | 250 | 27,7 | 150 | 44    | 18 |
| K0699.128400 | 28         | M24 | 400 | 27,7 | 240 | 44    | 18 |

### Material:

Carbon steel.

### Version:

Forged and milled, rolled thread, tempered to 12.9, black.

### Sample order:

K0699.112125

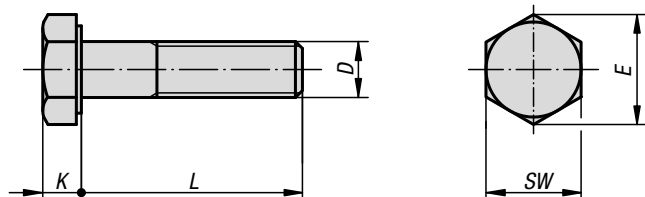


A large rectangular area filled with a light gray grid pattern, intended for taking notes.



# Hexagon head bolts

DIN 931/ISO 4014



## Material:

Steel, stainless steel A2 or stainless steel A4.

## Version:

Steel grade 8.8, bright (black) or electro zinc-plated.

Steel grade 10.9, bright (black) or electro zinc-plated.

Steel grade 12.9, bright (black)

Stainless steel A2-70, bright.

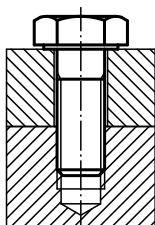
Stainless steel A4-70, bright.

## Sample order:

K0870.110X50 (include length L)

## On request:

DIN ISO 272 spanner sizes.



## KIPP Hexagon head bolts with shaft DIN 931/ISO 4014

| Order No.<br>steel<br>Grade 8.8 | Order No.<br>steel<br>Grade 10.9 | Surface finish<br>body | D   | E     | K    | L                             | SW |
|---------------------------------|----------------------------------|------------------------|-----|-------|------|-------------------------------|----|
| K0870.04X                       | -                                | bright (black)         | M4  | 7,66  | 2,8  | 25/30/35/40/45/50             | 7  |
| K0870.05X                       | -                                | bright (black)         | M5  | 8,79  | 3,5  | 25/30/35/40/45/50/60          | 8  |
| K0870.06X                       | K0870.306X                       | bright (black)         | M6  | 11,05 | 4    | 30/35/40/45/50/60/70          | 10 |
| K0870.08X                       | K0870.308X                       | bright (black)         | M8  | 14,38 | 5,3  | 35/40/45/50/60/70/80          | 13 |
| K0870.10X                       | K0870.310X                       | bright (black)         | M10 | 18,9  | 6,4  | 40/45/50/60/70/80/90/100      | 17 |
| K0870.12X                       | K0870.312X                       | bright (black)         | M12 | 21,1  | 7,5  | 45/50/60/70/80/90/100/110/120 | 19 |
| K0870.16X                       | K0870.316X                       | bright (black)         | M16 | 26,75 | 10   | 60/70/80/90/100/110/120       | 24 |
| K0870.20X                       | K0870.320X                       | bright (black)         | M20 | 33,53 | 12,5 | 70/80/90/100/110/120          | 30 |
| K0870.404X                      | -                                | galvanised             | M4  | 7,66  | 2,8  | 25/30/35/40/45/50             | 7  |
| K0870.405X                      | -                                | galvanised             | M5  | 8,79  | 3,5  | 25/30/35/40/45/50/60          | 8  |
| K0870.406X                      | K0870.506X                       | galvanised             | M6  | 11,05 | 4    | 30/35/40/45/50/60/70          | 10 |
| K0870.408X                      | K0870.508X                       | galvanised             | M8  | 14,38 | 5,3  | 35/40/45/50/60/70/80          | 13 |
| K0870.410X                      | K0870.510X                       | galvanised             | M10 | 18,9  | 6,4  | 40/45/50/60/70/80/90/100      | 17 |
| K0870.412X                      | K0870.512X                       | galvanised             | M12 | 21,1  | 7,5  | 45/50/60/70/80/90/100/110/120 | 19 |
| K0870.416X                      | K0870.516X                       | galvanised             | M16 | 26,75 | 10   | 60/70/80/90/100/110/120       | 24 |
| K0870.420X                      | K0870.520X                       | galvanised             | M20 | 33,53 | 12,5 | 70/80/90/100/110/120          | 30 |



## Hexagon head bolts

DIN 931/ISO 4014

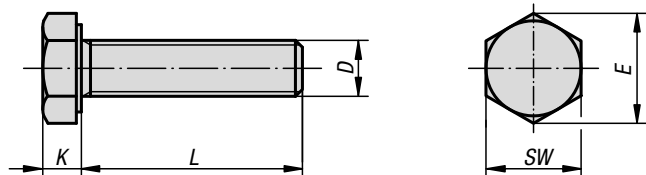


| Order No.<br>steel<br>Grade 12.9 | Surface finish<br>body | D   | E     | K    | L                         | SW |
|----------------------------------|------------------------|-----|-------|------|---------------------------|----|
| K0870.210X                       | bright (black)         | M10 | 18,9  | 6,4  | 40/45/50/60/70/80/90/100  | 17 |
| K0870.212X                       | bright (black)         | M12 | 21,1  | 7,5  | 45/50/60/70/80/90/100/120 | 19 |
| K0870.216X                       | bright (black)         | M16 | 26,75 | 10   | 60/70/80/90/100/120       | 24 |
| K0870.220X                       | bright (black)         | M20 | 33,53 | 12,5 | 70/80/90/100/120          | 30 |

| Order No.<br>stainless steel A2 | Order No.<br>stainless steel A4 | Surface finish<br>body | D   | E     | K   | L                             | SW |
|---------------------------------|---------------------------------|------------------------|-----|-------|-----|-------------------------------|----|
| K0870.105X                      | K0870.605X                      | bright                 | M5  | 8,79  | 3,5 | 25/30/35/40/45/50/60          | 8  |
| K0870.106X                      | K0870.606X                      | bright                 | M6  | 11,05 | 4   | 30/35/40/45/50/60/70          | 10 |
| K0870.108X                      | K0870.608X                      | bright                 | M8  | 14,38 | 5,3 | 35/40/45/50/60/70/80          | 13 |
| K0870.110X                      | K0870.610X                      | bright                 | M10 | 18,9  | 6,4 | 100/40/45/50/60/70/80/90      | 17 |
| K0870.112X                      | K0870.612X                      | bright                 | M12 | 21,1  | 7,5 | 100/110/120/45/50/60/70/80/90 | 19 |
| K0870.116X                      | K0870.616X                      | bright                 | M16 | 26,75 | 10  | 100/110/120/60/70/80/90       | 24 |

## Hexagon head bolts

DIN 933/ISO 4017

**Material:**

Steel, stainless steel A2 or stainless steel A4.

**Version:**

Steel grade 8.8, bright (black) or electro zinc-plated.  
 Steel grade 10.9, bright (black) or electro zinc-plated.  
 Steel grade 12.9, bright (black)  
 Stainless steel A2-70, bright.  
 Stainless steel A4-70, bright.

**Sample order:**

K0871.05X40 (include length L)

## KIPP Hexagon head bolts DIN 933/ISO 4017

| Order No.<br>steel<br>Grade 8.8 | Order No.<br>steel<br>Grade 10.9 | Surface finish<br>body | D   | E     | K    | L                                            | SW |
|---------------------------------|----------------------------------|------------------------|-----|-------|------|----------------------------------------------|----|
| K0871.04X                       | -                                | bright (black)         | M4  | 7,66  | 2,8  | 10/12/16/18/20/25                            | 7  |
| K0871.05X                       | -                                | bright (black)         | M5  | 8,79  | 3,5  | 10/12/16/18/20/25/30/35/40                   | 8  |
| K0871.06X                       | K0871.306X                       | bright (black)         | M6  | 11,05 | 4    | 10/12/16/18/20/25/30/35/40/45/50/55/60       | 10 |
| K0871.08X                       | K0871.308X                       | bright (black)         | M8  | 14,38 | 5,3  | 16/18/20/25/30/35/40/45/50/60/70/80/90/100   | 13 |
| K0871.10X                       | K0871.310X                       | bright (black)         | M10 | 18,9  | 6,4  | 16/18/20/25/30/35/40/45/50/60/70/80/90/100   | 17 |
| K0871.12X                       | K0871.312X                       | bright (black)         | M12 | 21,1  | 7,5  | 20/25/30/35/40/45/50/60/70/80/90/100/110/120 | 19 |
| K0871.14X                       | -                                | bright (black)         | M14 | 24,49 | 8,8  | 30/35/40/45/50/60/70/80/90/100/110/120       | 22 |
| K0871.16X                       | K0871.316X                       | bright (black)         | M16 | 26,75 | 10   | 30/35/40/45/50/60/70/80/90/100/110/120       | 24 |
| K0871.20X                       | K0871.320X                       | bright (black)         | M20 | 33,53 | 12,5 | 40/45/50/60/70/80/90/100/110/120             | 30 |
| K0871.404X                      | -                                | galvanised             | M4  | 7,66  | 2,8  | 10/12/16/18/20/25                            | 7  |
| K0871.405X                      | -                                | galvanised             | M5  | 8,79  | 3,5  | 10/12/16/18/20/25/30/35/40                   | 8  |
| K0871.406X                      | K0871.506X                       | galvanised             | M6  | 11,05 | 4    | 10/12/16/18/20/25/30/35/40/45/50/55/60       | 10 |
| K0871.408X                      | K0871.508X                       | galvanised             | M8  | 14,38 | 5,3  | 16/18/20/25/30/35/40/45/50/60/70/80/90/100   | 13 |
| K0871.410X                      | K0871.510X                       | galvanised             | M10 | 18,9  | 6,4  | 16/18/20/25/30/35/40/45/50/60/70/80/90/100   | 17 |
| K0871.412X                      | K0871.512X                       | galvanised             | M12 | 21,1  | 7,5  | 20/25/30/35/40/45/50/60/70/80/90/100/110/120 | 19 |
| K0871.414X                      | -                                | galvanised             | M14 | 24,49 | 8,8  | 30/35/40/45/50/60/70/80/90/100/110/120       | 22 |
| K0871.416X                      | K0871.516X                       | galvanised             | M16 | 26,75 | 10   | 30/35/40/45/50/60/70/80/90/100/110/120       | 24 |
| K0871.420X                      | K0871.520X                       | galvanised             | M20 | 33,53 | 12,5 | 40/45/50/60/70/80/90/100/110/120             | 30 |

## Hexagon head bolts

DIN 933/ISO 4017

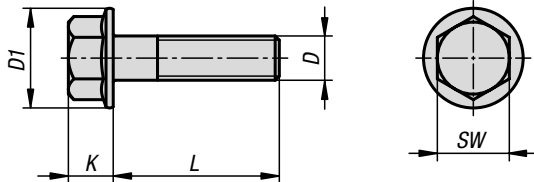


| Order No.  | Main material | Grade | Surface finish body | D   | E     | K    | L                              | SW |
|------------|---------------|-------|---------------------|-----|-------|------|--------------------------------|----|
| K0871.206X | steel         | 12.9  | bright (black)      | M6  | 11,05 | 4    | 12/16/20/25/30                 | 10 |
| K0871.208X | steel         | 12.9  | bright (black)      | M8  | 14,38 | 5,3  | 16/20/25/30/35/40/45/50/60     | 13 |
| K0871.210X | steel         | 12.9  | bright (black)      | M10 | 18,9  | 6,4  | 20/25/30/35/40/45/50/60        | 17 |
| K0871.212X | steel         | 12.9  | bright (black)      | M12 | 21,1  | 7,5  | 25/30/35/40/45/50/60           | 19 |
| K0871.216X | steel         | 12.9  | bright (black)      | M16 | 26,75 | 10   | 30/35/40/45/50/60/70/80/90/100 | 24 |
| K0871.220X | steel         | 12.9  | bright (black)      | M20 | 33,53 | 12,5 | 40/45/50/60/70/80/90/100       | 30 |

| Order No.<br>stainless steel A2 | Order No.<br>stainless steel A4 | Grade | Surface finish body | D   | E     | K    | L                                            | SW  |
|---------------------------------|---------------------------------|-------|---------------------|-----|-------|------|----------------------------------------------|-----|
| K0871.104X                      | K0871.604X                      | 70    | bright              | M4  | 7,66  | 2,8  | 10/12/16/18/20/25/8                          | 7   |
| K0871.105X                      | K0871.605X                      | 70    | bright              | M5  | 8,79  | 3,5  | 10/12/16/18/20/25/30/35/40                   | 8   |
| K0871.106X                      | K0871.606X                      | 70    | bright              | M6  | 11,05 | 4    | 10/12/16/18/20/25/30/35/40/45/50/55/60       | 10  |
| K0871.108X                      | K0871.608X                      | 70    | bright              | M8  | 14,38 | 5,3  | 16/18/20/25/30/35/40/45/50/60/70/80/90/100   | 13  |
| K0871.110X                      | K0871.610X                      | 70    | bright              | M10 | 18,9  | 6,4  | 16/18/20/25/30/35/40/45/50/60/70/80/90/100   | 17  |
| K0871.112X                      | K0871.612X                      | 70    | bright              | M12 | 21,1  | 7,5  | 20/25/30/35/40/45/50/60/70/80/90/100/110/120 | 19  |
| K0871.116X                      | K0871.616X                      | 70    | bright              | M16 | 26,75 | 10   | 30/35/40/45/50/60/70/80/90/100/110/120       | 24  |
| K0871.120X                      | K0871.620X                      | 70    | bright              | M20 | 33,53 | 12,5 | 40/45/50/60/70/80/90/100/110/120             | 30  |
| -                               | K0871.603X                      | 70    | bright              | M3  | 6,01  | 2    | 6/8/10                                       | 5,5 |

# Hexagon head bolts with flange

DIN EN 1665

**Material:**

Steel or stainless steel A2.

**Version:**

Steel grade 8.8, electro zinc-plated.  
 Steel grade 10.9, electro zinc-plated.  
 Bright stainless steel.

**Sample order:**

K1161.406X12 (include length L)

**Note:**

Screws where the dimension L is < B are threaded up to the head. The screw length or thread length is specified by the dimension L. Screws where L is > B have a shaft.

## KIPP Hexagon head screws with flange DIN EN 1665

| Order No.  | Main material      | Grade | D   | L                          | B  | D1   | SW | K    |
|------------|--------------------|-------|-----|----------------------------|----|------|----|------|
| K1161.406X | steel              | 8.8   | M6  | 12/16/20/25/30             | 18 | 14,2 | 10 | 6,6  |
| K1161.408X | steel              | 8.8   | M8  | 12/16/20/25/30/35/40/50/60 | 22 | 18   | 13 | 8,1  |
| K1161.410X | steel              | 8.8   | M10 | 20/25/30/35/40/50          | 26 | 22,3 | 16 | 10,4 |
| K1161.412X | steel              | 8.8   | M12 | 20/25/30/40/50             | 30 | 26,6 | 18 | 11,8 |
| K1161.416X | steel              | 8.8   | M16 | 30/35/40/45/50/70          | 38 | 35   | 24 | 15,4 |
| K1161.506X | steel              | 10.9  | M6  | 12/16/20/25/30             | 18 | 14,2 | 10 | 6,6  |
| K1161.508X | steel              | 10.9  | M8  | 12/16/20/25/30/35/40       | 22 | 18   | 13 | 8,1  |
| K1161.510X | steel              | 10.9  | M10 | 25/30/40                   | 26 | 22,3 | 16 | 10,4 |
| K1161.512X | steel              | 10.9  | M12 | 20/35/40/45/50             | 30 | 26,6 | 18 | 11,8 |
| K1161.516X | steel              | 10.9  | M16 | 30/35/40/45/50/60          | 38 | 35   | 24 | 15,4 |
| K1161.106X | stainless steel A2 | 70    | M6  | 12/16/20/25/30             | 18 | 14,2 | 10 | 6,6  |
| K1161.108X | stainless steel A2 | 70    | M8  | 16/20/25/30/35/40/50       | 22 | 18   | 13 | 8,1  |
| K1161.110X | stainless steel A2 | 70    | M10 | 20/25/30/35/40/50/60       | 26 | 22,3 | 16 | 10,4 |

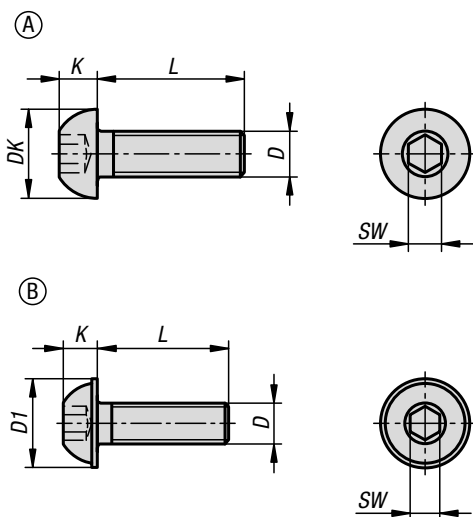


A large grid of graph paper for taking notes.



# Button head screws

EN ISO 7380

**Material:**

Steel, stainless steel A2 or stainless steel A4.

**Version:**

Steel grade 10.9, bright (black) or electro zinc-plated.

Stainless steel A2-70, bright.

Stainless steel A4-70, bright.

**Sample order:**

K1796.1603X10 (include length L)

**Note:**

EN ISO 7380-1 Form A: Hexagon socket button head screws.

EN ISO 7380-2 Form B: Hexagon socket button head screws with collar.

## KIPP Button head screws EN ISO 7380

| Order No.   | Form | Main material | Surface finish body | Grade | D   | DK   | K    | L                                     | SW  |
|-------------|------|---------------|---------------------|-------|-----|------|------|---------------------------------------|-----|
| K1796.1303X | A    | steel         | bright (black)      | 10.9  | M3  | 5,7  | 1,65 | 8/10/12/16/20                         | 2   |
| K1796.1304X | A    | steel         | bright (black)      | 10.9  | M4  | 7,6  | 2,2  | 8/10/12/16/20/25/30                   | 2,5 |
| K1796.1305X | A    | steel         | bright (black)      | 10.9  | M5  | 9,5  | 2,75 | 8/10/12/16/20/25/30/35/40             | 3   |
| K1796.1306X | A    | steel         | bright (black)      | 10.9  | M6  | 10,5 | 3,3  | 8/10/12/16/20/25/30/35/40/45/50/55/60 | 4   |
| K1796.1308X | A    | steel         | bright (black)      | 10.9  | M8  | 14   | 4,4  | 8/10/12/16/20/25/30/35/40/45/50/55/60 | 5   |
| K1796.1310X | A    | steel         | bright (black)      | 10.9  | M10 | 17,5 | 5,5  | 12/16/20/25/30/35/40/45/50/55/60      | 6   |
| K1796.1503X | A    | steel         | galvanised          | 10.9  | M3  | 5,7  | 1,65 | 8/10/12/16/20                         | 2   |
| K1796.1504X | A    | steel         | galvanised          | 10.9  | M4  | 7,6  | 2,2  | 8/10/12/16/20/25/30                   | 2,5 |
| K1796.1505X | A    | steel         | galvanised          | 10.9  | M5  | 9,5  | 2,75 | 8/10/12/16/20/25/30/35/40/45          | 3   |
| K1796.1506X | A    | steel         | galvanised          | 10.9  | M6  | 10,5 | 3,3  | 8/10/12/16/20/25/30/35/40/45/50/55/60 | 4   |
| K1796.1508X | A    | steel         | galvanised          | 10.9  | M8  | 14   | 4,4  | 8/10/12/16/20/25/30/35/40/45/50/55/60 | 5   |
| K1796.1510X | A    | steel         | galvanised          | 10.9  | M10 | 17,5 | 5,5  | 12/16/20/25/30/35/40/45/50/55/60      | 6   |
| K1796.1512X | A    | steel         | galvanised          | 10.9  | M12 | 21   | 6,6  | 16/20/25/30/35/40/45/50/60            | 8   |
| K1796.1516X | A    | steel         | galvanised          | 10.9  | M16 | 28   | 8,8  | 30/40/45/50/60                        | 10  |

## Button head screws

EN ISO 7380



| Order No.   | Form | Main material | Surface finish body | Grade | D   | D1   | K    | L                          | SW  |
|-------------|------|---------------|---------------------|-------|-----|------|------|----------------------------|-----|
| K1796.2304X | B    | steel         | bright (black)      | 10.9  | M4  | 9,4  | 2,2  | 8/10/12/16/20/25/30        | 2,5 |
| K1796.2305X | B    | steel         | bright (black)      | 10.9  | M5  | 11,8 | 2,75 | 8/10/12/16/20/25/30/35     | 3   |
| K1796.2306X | B    | steel         | bright (black)      | 10.9  | M6  | 13,6 | 3,3  | 8/10/12/16/20/25/30/35/40  | 4   |
| K1796.2308X | B    | steel         | bright (black)      | 10.9  | M8  | 17,8 | 4,4  | 12/16/20/25/30/35/40/50/60 | 5   |
| K1796.2310X | B    | steel         | bright (black)      | 10.9  | M10 | 21,9 | 5,5  | 25/30/35                   | 6   |
| K1796.2504X | B    | steel         | galvanised          | 10.9  | M4  | 9,4  | 2,2  | 8/10/12/16/20/25/30        | 2,5 |
| K1796.2505X | B    | steel         | galvanised          | 10.9  | M5  | 11,8 | 2,75 | 8/10/12/16/20/25/30/35     | 3   |
| K1796.2506X | B    | steel         | galvanised          | 10.9  | M6  | 13,6 | 3,3  | 8/10/12/16/20/25/30/35/40  | 4   |
| K1796.2508X | B    | steel         | galvanised          | 10.9  | M8  | 17,8 | 4,4  | 12/16/20/25/30/35/40/50/60 | 5   |
| K1796.2510X | B    | steel         | galvanised          | 10.9  | M10 | 21,9 | 5,5  | 20/30/35/40/50             | 6   |
| K1796.2512X | B    | steel         | galvanised          | 10.9  | M12 | 26   | 6,6  | 20/25/30/40/50/60          | 8   |

| Order No.   | Form | Main material      | Surface finish body | D   | DK   | D1   | K    | L                                  | SW  |
|-------------|------|--------------------|---------------------|-----|------|------|------|------------------------------------|-----|
| K1796.1103X | A    | stainless steel A2 | bright              | M3  | 5,7  | -    | 1,65 | 8/10/12/16/20                      | 2   |
| K1796.1104X | A    | stainless steel A2 | bright              | M4  | 7,6  | -    | 2,2  | 8/10/12/16/20/25/30                | 2,5 |
| K1796.1105X | A    | stainless steel A2 | bright              | M5  | 9,5  | -    | 2,75 | 8/10/12/16/20/25/30/40/45          | 3   |
| K1796.1106X | A    | stainless steel A2 | bright              | M6  | 10,5 | -    | 3,3  | 8/10/12/16/20/25/30/35/40/45/50/60 | 4   |
| K1796.1108X | A    | stainless steel A2 | bright              | M8  | 14   | -    | 4,4  | 10/12/16/20/25/30/35/40/45/50/60   | 5   |
| K1796.1110X | A    | stainless steel A2 | bright              | M10 | 17,5 | -    | 5,5  | 16/20/25/30/40/50                  | 6   |
| K1796.1603X | A    | stainless steel A4 | bright              | M3  | 5,7  | -    | 1,65 | 10/12/16/20                        | 2   |
| K1796.1604X | A    | stainless steel A4 | bright              | M4  | 7,6  | -    | 2,2  | 8/10/12/16/20/25/30                | 2,5 |
| K1796.1605X | A    | stainless steel A4 | bright              | M5  | 9,5  | -    | 2,75 | 8/10/12/16/20/25/30/40/45          | 3   |
| K1796.1606X | A    | stainless steel A4 | bright              | M6  | 10,5 | -    | 3,3  | 8/10/12/16/20/25/30/35/40/45/50/60 | 4   |
| K1796.1608X | A    | stainless steel A4 | bright              | M8  | 14   | -    | 4,4  | 10/12/16/20/25/30/35/40/45/50/60   | 5   |
| K1796.1610X | A    | stainless steel A4 | bright              | M10 | 17,5 | -    | 5,5  | 16/20/25/30/40/50                  | 6   |
| K1796.2103X | B    | stainless steel A2 | bright              | M3  | -    | 6,9  | 1,65 | 8/10                               | 2   |
| K1796.2104X | B    | stainless steel A2 | bright              | M4  | -    | 9,4  | 2,2  | 8/10/12/16/20/25                   | 2,5 |
| K1796.2105X | B    | stainless steel A2 | bright              | M5  | -    | 11,8 | 2,75 | 8/10/12/16/20/25                   | 3   |
| K1796.2106X | B    | stainless steel A2 | bright              | M6  | -    | 13,6 | 3,3  | 8/10/12/16/20/25/30/35/40/45       | 4   |
| K1796.2108X | B    | stainless steel A2 | bright              | M8  | -    | 17,8 | 4,4  | 10/12/16/20/25                     | 5   |

## Technical Information

### For hygienic sealing in and at the product area

With its highly reliable sealing and design that is compliant with hygiene requirements, the Hygienic USIT® seal and shim washer is setting new standards for cleanliness in the process industry. Many manufacturers of machinery and systems for the food and pharmaceutical industries often use standard shim washers or O-rings for screw connections in or on the product chamber. These are not EHEDG-compliant, however, as contamination and biofilms in the form of bacteria colonies and corrosion can form under the screw head, preventing the design from achieving maximum hygiene standards.

The metallic shim washer with a fixed sealing ring made from 70 EPDM 291 (black) or 70 EPDM 253815 (white) provides a secure, cavity-free seal. The Hygienic USIT® seal and shim washer, made from the fluorinated premium compound Fluoroprene® XP 45, is suitable for applications involving particularly aggressive CIP/SIP cleaning temperatures, high steam sterilisation temperatures and process media containing grease. This material has an even larger operating temperature range and is resistant to polar and non-polar media as well as flavouring substances.

Approvals such as FDA, EU1935/2004 and USP Class VI (121 °C), plus EHEDG certification, confirm that the Hygienic USIT® washer represents the ideal choice for hygienically demanding applications in the food, beverage and pharmaceutical industries.

The EHEDG certificate is only valid when a specifically matched hexagon head bolt K1492 or cap nut K1493 is used.

| Material              | Colour | Conformity/Approvals                                                                                                                                                 | Temperature range  | Others     |
|-----------------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|------------|
| 70 EPDM 291           | black  | - FDA 21 CFR 177.2600<br>- 3-A® SANITARY STANDARDS CLASS II<br>- EU (VO) 1935/2004 AND 2023/2006<br>- USP CH. 87 AND CH. 88 – CLASS VI – 121 °C (250 °F)<br>- NSF 51 | -40 °C to +150 °C. | - ADI free |
| 70 EPDM 253815        | white  | - FDA 21 CFR 177.2600<br>- 3-A® Sanitary Standards Class II<br>- EU (VO) 1935/2004 and 2023/2006<br>- USP Ch. 87 and Ch. 88 – Class VI – 121 °C (250 °F)             | -40 °C to +150 °C. | - ADI free |
| 75 FLUOROPRENE® XP 45 | blue   | - FDA 21 CFR 177.2600<br>- EU (VO) 1935/2004 AND 2023/2006                                                                                                           | -15 °C to +200 °C. | - ADI free |





## Technical Information

### Screw connection according to Hygienic DESIGN

The Hygienic USIT® is a further development of the conventional standard Usit rings. It ensures reliable hygienic sealing of the screw head. It also allows easy CIP (Cleaning in Place), WIP (Washing in Place) or SIP (Sterilization in Place) without having to take the system apart.

These special screw heads have been developed according to DIN EN 1665 for areas or aseptic isolators in contact with the product. This combination prevents the medium from getting under the screw head. This eliminates the risk of contamination and formation of microfilms.

By a special production process, NOVOnox hygienic obtains a surface roughness of  $Ra < 0.8 \mu m$ . This eliminates any dents or sharp burrs on the collar.

In addition, screws and cap nuts with collar are polished to a high gloss. To fasten them consistently in accordance with Hygienic DESIGN, NovoNox has developed box nuts and associated protective inserts. They do not damage the screw when tightening.

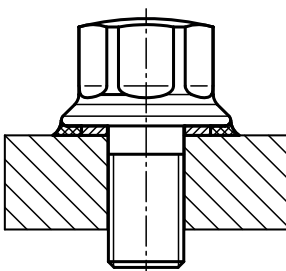
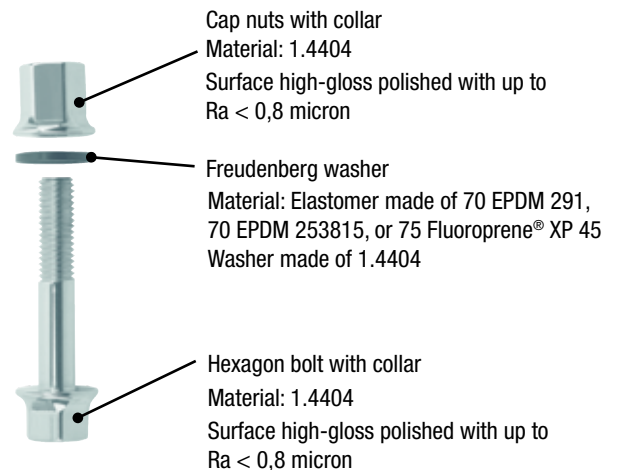
For screw connections outside the product area, standard hexagon bolts with flange according to DIN EN 1665 are suitable. However, they do not meet the Hygienic DESIGN requirements regarding optimum cleanability. They are therefore not suitable for use in product contact areas.

The bond is available in the dimensions M4, M5, M6, M8, M10, M12 and M16.



#### Values to the customer

- Cavity-free solution
- Prevents microbial contamination
- Replaces inflexible welding solution
- Clearances/approvals for food and pharmaceutical industry
- No tooling costs for standard parts
- Cleaning with the CIP, SIP, WIP, COP and WOP processes



## Tightening torques

Contact surface/head support made from A2 or A4 stainless steel.

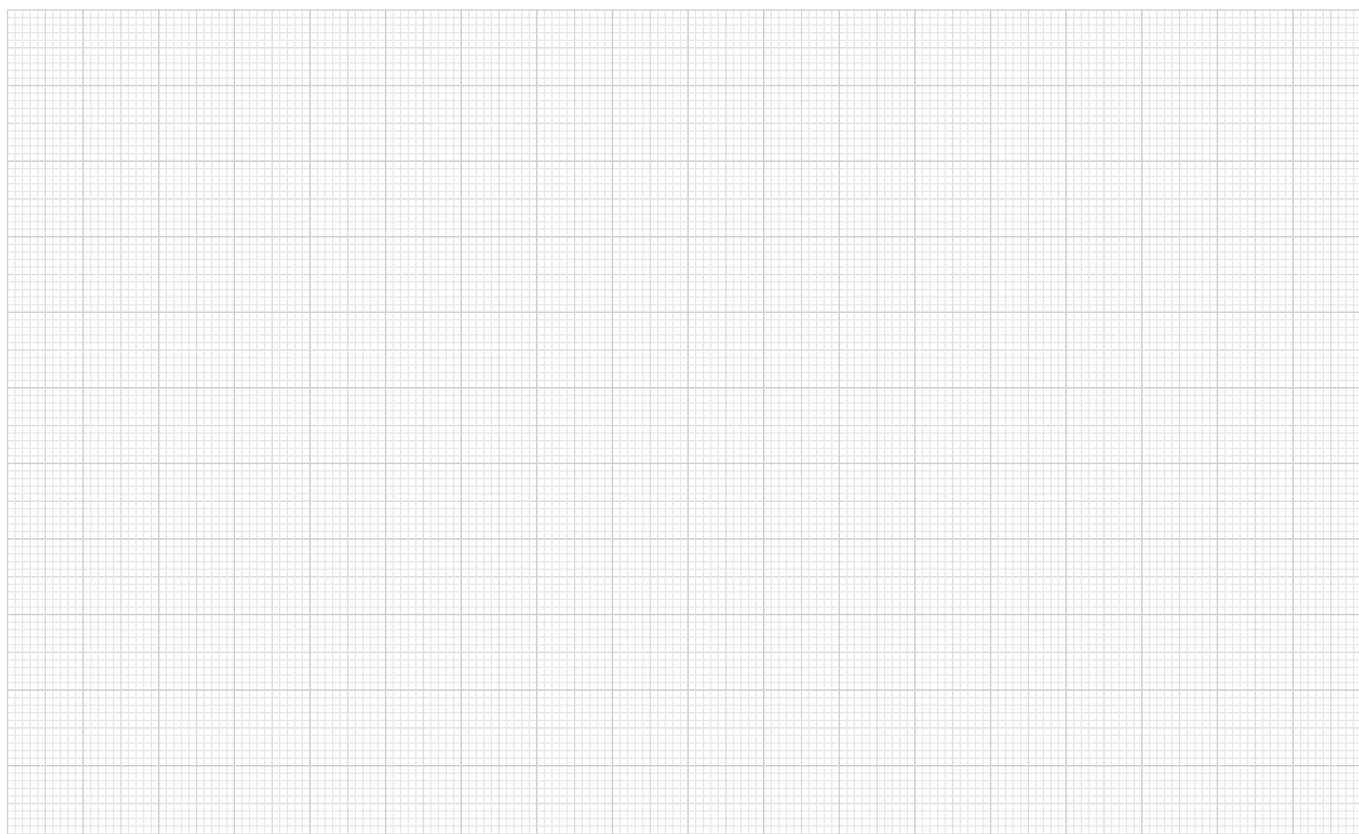
Coefficient of friction for thread and head support  $\mu_{ges} = 0.23$ .

Incl. use of K1491 Hygienic USIT® sealing and shim washer (hole diameter of washer = di).

Preload force based on 80% of the 0.2% yield point of  $Rp0.2 = 200 \text{ N/mm}^2$ .

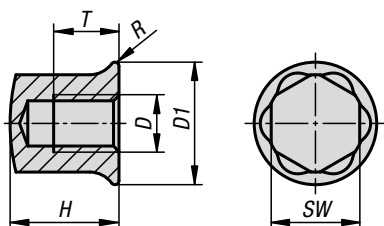
|     | Coefficient of friction<br>$\mu_{ges}$ | Hole Ø<br>[mm] | Tensile stress cross<br>section [mm <sup>2</sup> ] | Preload force<br>FV [N] | Tightening torque MA<br>[Nm] |
|-----|----------------------------------------|----------------|----------------------------------------------------|-------------------------|------------------------------|
| M3  | 0,23                                   | 4,2            | 5,03                                               | 805                     | 1,05                         |
| M4  | 0,23                                   | 4,2            | 8,78                                               | 1405                    | 2,04                         |
| M5  | 0,23                                   | 5,2            | 14,2                                               | 2272                    | 3,89                         |
| M6  | 0,23                                   | 6,2            | 20,1                                               | 3216                    | 6,61                         |
| M8  | 0,23                                   | 8,2            | 36,6                                               | 5856                    | 15,68                        |
| M10 | 0,23                                   | 10,2           | 58                                                 | 9280                    | 30,87                        |
| M12 | 0,23                                   | 12,2           | 84,3                                               | 13488                   | 53,63                        |
| M16 | 0,23                                   | 16,2           | 157                                                | 25120                   | 131,65                       |

## Notes



# Stainless steel cap nuts with collar

for Hygienic USIT® seal and shim washers



A cavity-free seal can only be assured in combination with the Hygienic USIT® seal and shim washer. The polished cap nuts have a surface finish of  $Ra < 0.8 \mu m$ . Internal transition areas with a minimum radius of 3 mm are also provided, preventing dirt particles from adhering to the components and ensuring easy cleaning.

The cap nut with collar for Hygienic USIT® seal and shim washers is ideal for fastening in sterile areas and also conform to EHEDG regulations, something that is confirmed with the relevant certificate.

#### Material:

Stainless steel 1.4404.

#### Version:

Polished.

#### Sample order:

K1493.05

#### Note:

The EHEDG certificate is only valid when a specifically matched Hygienic USIT® seal and shim washer K1491 is used.

#### On request:

Special versions.

#### Accessories:

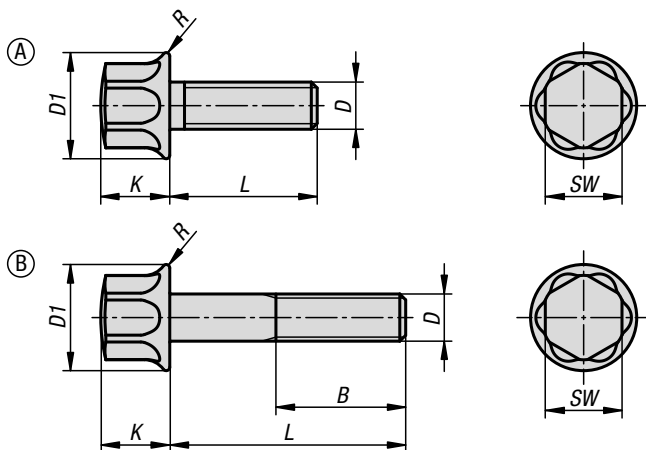
Hygienic USIT® seal and shim washer K1491. Hexagon head bolts with collar K1492. Sockets with plastic inserts K1361. Ring/open-end spanner with protective caps K1362.

## KIPP Stainless steel cap nuts with collar for Hygienic USIT® seal and shim washers

| Order No. | D   | D1   | H  | R    | SW | T    |
|-----------|-----|------|----|------|----|------|
| K1493.04  | M4  | 10,8 | 9  | 0,45 | 7  | 4,8  |
| K1493.05  | M5  | 11,8 | 11 | 0,5  | 8  | 6    |
| K1493.06  | M6  | 14   | 13 | 0,55 | 10 | 7,2  |
| K1493.08  | M8  | 18   | 16 | 0,6  | 13 | 9,6  |
| K1493.10  | M10 | 22   | 20 | 0,75 | 16 | 12   |
| K1493.12  | M12 | 26,6 | 23 | 0,9  | 18 | 14,4 |
| K1493.16  | M16 | 35   | 30 | 1,2  | 24 | 19,2 |

## Stainless steel hexagon head screws with collar

for Hygienic USIT® seal and shim washers



A cavity-free seal can only be assured in combination with the Hygienic USIT® seal and shim washer. The polished screws have a surface finish of  $Ra < 0.8 \mu m$ . Internal transition areas with a minimum radius of 3 mm are also provided, preventing dirt particles from adhering to the components and ensuring easy cleaning.

Hexagon head bolts with collar for Hygienic USIT® seal and shim washers are ideal for fastening in sterile areas and also conform to EHEDG regulations, something that is confirmed with the relevant certificate.

**Material:**

Stainless steel 1.4404.

**Version:**

Polished.

**Sample order:**

K1492.05X12 (include length L)

**Note:**

The EHEDG certificate is only valid when a specifically matched Hygienic USIT® seal and shim washer K1491 is used.

**On request:**

Special versions.

**Accessories:**

Hygienic USIT® seal and shim washer K1491. Hexagon cap nut with collar K1493. Sockets with plastic inserts K1361. Ring/open-end spanner with protective caps K1362.

# Stainless steel hexagon head screws with collar

for Hygienic USIT® seal and shim washers



## KIPP Stainless steel hexagon head screws with collar for Hygienic USIT® seal and shim washers

| Order No. | Form | D   | D1   | K    | L                 | R    | SW |
|-----------|------|-----|------|------|-------------------|------|----|
| K1492.04X | A    | M4  | 10,8 | 6,9  | 8/10/12/16/20     | 0,45 | 7  |
| K1492.05X | A    | M5  | 11,8 | 8,5  | 10/12/16/20       | 0,5  | 8  |
| K1492.06X | A    | M6  | 14   | 9,2  | 12/16/20/25       | 0,55 | 10 |
| K1492.08X | A    | M8  | 18   | 11,7 | 16/20/25/30/35    | 0,6  | 13 |
| K1492.10X | A    | M10 | 22   | 14   | 20/25/30/35/40    | 0,75 | 16 |
| K1492.12X | A    | M12 | 26,6 | 17   | 25/30/35/40/45    | 0,9  | 18 |
| K1492.16X | A    | M16 | 35   | 21,8 | 30/35/40/45/50/60 | 1,2  | 24 |

| Order No. | Form | D   | D1   | B  | K    | L                 | R    | SW |
|-----------|------|-----|------|----|------|-------------------|------|----|
| K1492.04X | B    | M4  | 10,8 | 14 | 6,9  | 25/30/35/40       | 0,45 | 7  |
| K1492.05X | B    | M5  | 11,8 | 16 | 8,5  | 25/30/35/40/45/50 | 0,5  | 8  |
| K1492.06X | B    | M6  | 14   | 18 | 9,2  | 30/35/40/45/50/60 | 0,55 | 10 |
| K1492.08X | B    | M8  | 18   | 22 | 11,7 | 40/45/50/60/70/80 | 0,6  | 13 |
| K1492.10X | B    | M10 | 22   | 26 | 14   | 45/50/60/70/80    | 0,75 | 16 |
| K1492.12X | B    | M12 | 26,6 | 30 | 17   | 50/60/70/80       | 0,9  | 18 |
| K1492.16X | B    | M16 | 35   | 38 | 21,8 | 70/80             | 1,2  | 24 |

## Stainless steel hexagon head screws with collar

and seal and shim washer for Hygienic USIT® set



**Set:** hexagon head screw with collar K1492 + Hygienic USIT® seal and shim washer K1491.

**Only the combination of a hexagon head screw with collar and the Hygienic USIT® seal and shim washer assures a cavity-free seal.**

**The hexagon head screw with collar for Hygienic USIT® seal and shim washers is ideal for fastening in sterile areas and also conforms to EHEDG regulations, which is confirmed with the relevant certificate.**

### Material:

Hexagon head screw: stainless steel 1.4404.

Washer: stainless steel 1.4404.

Seal ring:

70 EPDM 291 (black).

70 EPDM 253815 (white).

75 Fluoroprene® XP 45 (blue).

### Version:

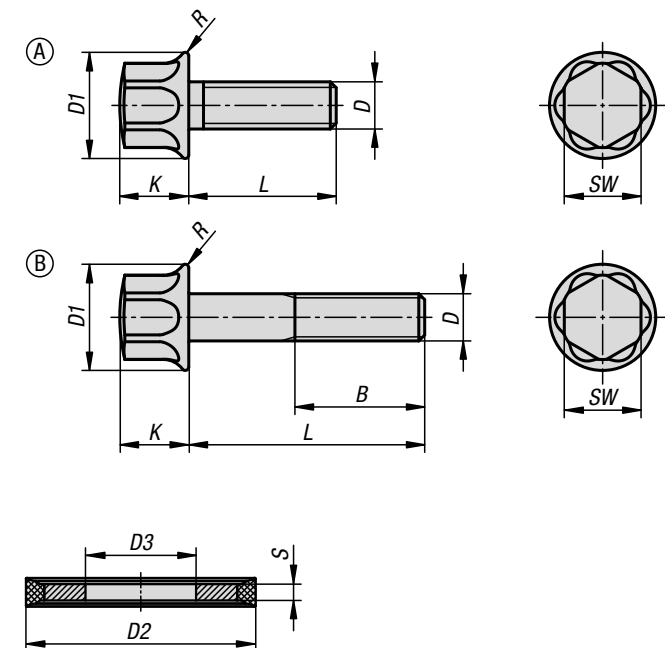
Hexagon head screw: polished

### Sample order:

K1595.041X20

### Note:

The EHEDG certificate is only valid when a combination of hexagon head screw with collar K1492 and specially matched Hygienic USIT® seal and shim washer K1491 is used.



### Attention:

The function of the Hygienic USIT® screw connection system has been tested in combination with stainless steel materials and standard cleaning materials. The user must check that it is suitable for the application in question.

### Accessories:

Cap nut with collar K1493.

Sockets with plastic inserts K1361.

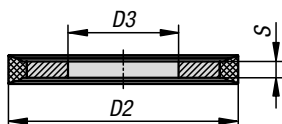
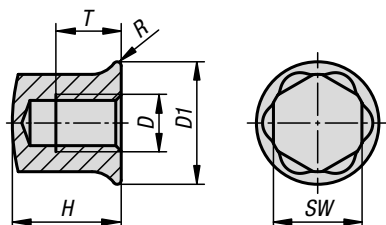
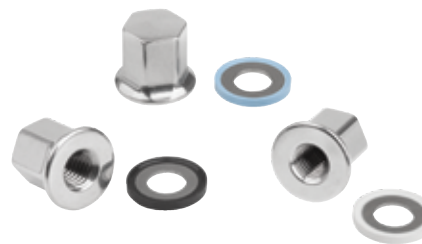
Ring/open-end spanner with protective caps K1362.

## KIPP Stainless steel hexagon head screws with collar and seal and shim washer for Hygienic USIT® set

| Order No.<br>70 EPDM 291<br>black | Order No.<br>70 EPDM 253815<br>white | Order No.<br>fluoroprene XP 45<br>blue | Form | D   | L                 | D1   | B  | K    | R    | SW | D2   | D3   | S   | Approval /<br>Certification |
|-----------------------------------|--------------------------------------|----------------------------------------|------|-----|-------------------|------|----|------|------|----|------|------|-----|-----------------------------|
| K1595.041X                        | K1595.042X                           | K1595.044X                             | A    | M4  | 8/10/12/16/20     | 10,8 | -  | 6,9  | 0,45 | 7  | 9,7  | 4,1  | 1   | EHEDG                       |
| K1595.041X                        | K1595.042X                           | K1595.044X                             | B    | M4  | 25/30/35/40       | 10,8 | 14 | 6,9  | 0,45 | 7  | 9,7  | 4,1  | 1   | EHEDG                       |
| K1595.051X                        | K1595.052X                           | K1595.054X                             | A    | M5  | 10/12/16/20       | 11,8 | -  | 8,5  | 0,5  | 8  | 10,7 | 5,1  | 1   | EHEDG                       |
| K1595.051X                        | K1595.052X                           | K1595.054X                             | B    | M5  | 25/30/35/40/45/50 | 11,8 | 16 | 8,5  | 0,5  | 8  | 10,7 | 5,1  | 1   | EHEDG                       |
| K1595.061X                        | K1595.062X                           | K1595.064X                             | A    | M6  | 12/16/20/25       | 14   | -  | 9,2  | 0,55 | 10 | 13,1 | 6,1  | 1   | EHEDG                       |
| K1595.061X                        | K1595.062X                           | K1595.064X                             | B    | M6  | 30/35/40/45/50/60 | 14   | 18 | 9,2  | 0,55 | 10 | 13,1 | 6,1  | 1   | EHEDG                       |
| K1595.081X                        | K1595.082X                           | K1595.084X                             | A    | M8  | 16/20/25/30/35    | 18   | -  | 11,7 | 0,6  | 13 | 16,9 | 8,1  | 1   | EHEDG                       |
| K1595.081X                        | K1595.082X                           | K1595.084X                             | B    | M8  | 40/45/50/60/70/80 | 18   | 22 | 11,7 | 0,6  | 13 | 16,9 | 8,1  | 1   | EHEDG                       |
| K1595.101X                        | K1595.102X                           | K1595.104X                             | A    | M10 | 20/25/30/35/40    | 22   | -  | 14   | 0,75 | 16 | 21,2 | 10,1 | 1,5 | EHEDG                       |
| K1595.101X                        | K1595.102X                           | K1595.104X                             | B    | M10 | 45/50/60/70/80    | 22   | 26 | 14   | 0,75 | 16 | 21,2 | 10,1 | 1,5 | EHEDG                       |
| K1595.121X                        | K1595.122X                           | K1595.124X                             | A    | M12 | 25/30/35/40/45    | 26,6 | -  | 17   | 0,9  | 18 | 25,5 | 12,1 | 1,5 | EHEDG                       |
| K1595.121X                        | K1595.122X                           | K1595.124X                             | B    | M12 | 50/60/70/80       | 26,6 | 30 | 17   | 0,9  | 18 | 25,5 | 12,1 | 1,5 | EHEDG                       |
| K1595.161X                        | K1595.162X                           | K1595.164X                             | A    | M16 | 30/35/40/45/50/60 | 35   | -  | 21,8 | 1,2  | 24 | 33,9 | 16,1 | 1,5 | EHEDG                       |
| K1595.161X                        | K1595.162X                           | K1595.164X                             | B    | M16 | 70/80             | 35   | 38 | 21,8 | 1,2  | 24 | 33,9 | 16,1 | 1,5 | EHEDG                       |

## Stainless steel cap nuts with collar

and seal and shim washer for Hygienic USIT® set



**Set:** cap nut with collar K1493 + Hygienic USIT® seal and shim washer K1491.

**Only the combination of a cap nut with collar and the Hygienic USIT® seal and shim washer assures a cavity-free seal.**

**The cap nut with collar for Hygienic USIT® seal and shim washers is ideal for fastening in sterile areas and also conform to EHEDG regulations, which is confirmed with the relevant certificate.**

### Material:

Cap nut: stainless steel 1.4404.

Washer: stainless steel 1.4404.

Seal ring:

70 EPDM 291 (black).

70 EPDM 253815 (white).

75 Fluoroprene® XP 45 (blue).

### Version:

Cap nut: polished.

### Sample order:

K1594.041

### Note:

The EHEDG certificate is only valid when a combination of cap nut with collar K1493 and specially matched Hygienic USIT® seal and shim washer K1491 is used.

### Attention:

The function of the Hygienic USIT® screw connection system has been tested in combination with stainless steel materials and standard cleaning materials. The user must check that it is suitable for the application in question.

### Accessories:

Hexagon head screw with collar K1492.

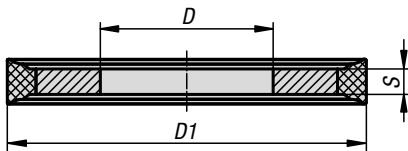
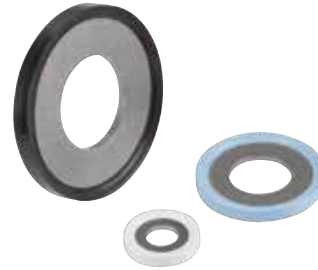
Sockets with plastic inserts K1361.

Ring/open-end spanner with protective caps K1362.

## KIPP Stainless steel cap nuts with collar and seal and shim washer for Hygienic USIT® set

| Order No.<br>70 EPDM 291<br>black | Order No.<br>70 EPDM 253815<br>white | Order No.<br>fluoroprene XP 41<br>blue | D   | D1   | D2   | D3   | H  | R    | S   | SW | T    | Approval /<br>Certification |
|-----------------------------------|--------------------------------------|----------------------------------------|-----|------|------|------|----|------|-----|----|------|-----------------------------|
| K1594.041                         | K1594.042                            | K1594.044                              | M4  | 10,8 | 9,7  | 4,1  | 9  | 0,45 | 1   | 7  | 4,8  | EHEDG                       |
| K1594.051                         | K1594.052                            | K1594.054                              | M5  | 11,8 | 10,7 | 5,1  | 11 | 0,5  | 1   | 8  | 6    | EHEDG                       |
| K1594.061                         | K1594.062                            | K1594.064                              | M6  | 14   | 13,1 | 6,1  | 13 | 0,55 | 1   | 10 | 7,2  | EHEDG                       |
| K1594.081                         | K1594.082                            | K1594.084                              | M8  | 18   | 16,9 | 8,1  | 16 | 0,6  | 1   | 13 | 9,6  | EHEDG                       |
| K1594.101                         | K1594.102                            | K1594.104                              | M10 | 22   | 21,2 | 10,1 | 20 | 0,75 | 1,5 | 16 | 12   | EHEDG                       |
| K1594.121                         | K1594.122                            | K1594.124                              | M12 | 26,6 | 25,5 | 12,1 | 23 | 0,9  | 1,5 | 18 | 14,4 | EHEDG                       |
| K1594.161                         | K1594.162                            | K1594.164                              | M16 | 35   | 33,9 | 16,1 | 30 | 1,2  | 1,5 | 24 | 19,2 | EHEDG                       |

# Hygienic USIT® seal and shim washers



With its highly reliable sealing and design that is compliant with hygiene requirements, the Hygienic USIT® seal and shim washer is setting new standards for cleanliness in the process industry. Many manufacturers of machinery and systems for the food and pharmaceutical industries often use standard shim washers or O-rings for screw connections in or on the product chamber. These are not EHEDG-compliant, however, as contamination and biofilms in the form of bacteria colonies and corrosion can form under the screw head, preventing the design from achieving maximum hygiene standards. The metallic shim washer with a fixed sealing ring made from 70 EPDM 291 (black) or 70 EPDM 253815 (white) provides a secure, cavity-free seal. The Hygienic USIT® seal and shim washer, made from the fluorinated premium compound Fluoroprene® XP 45, is suitable for applications involving particularly aggressive CIP/SIP cleaning temperatures, high steam sterilisation temperatures and process media containing grease. This material has an even larger operating temperature range and is resistant to polar and non-polar media as well as flavouring substances. Approvals such as FDA, EU1935/2004 and USP Class VI (121°C), plus EHEDG certification, confirm that the Hygienic USIT® washer represents the ideal choice for hygienically demanding applications in the food, beverage and pharmaceutical industries.

## Material:

Washer:

Stainless steel 1.4404.

Sealing ring:

70 EPDM 291 (black)

70 EPDM 253815 (white)

75 Fluoroprene® XP 45 (blue)

## Sample order:

K1491.051

## Note:

The EHEDG certificate is only valid when a specifically matched hexagon head bolt K1492 or cap nut K1493 is used.

## Attention:

The function of the Hygienic USIT® screw connection system has been tested in combination with stainless steel materials and standard cleaning materials. The user must check that it is suitable for the application in question.

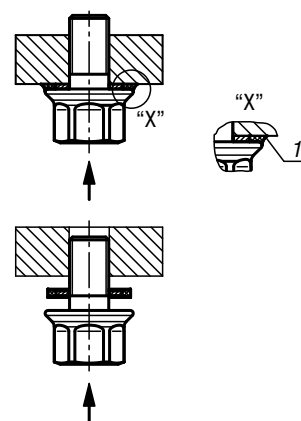
## Accessories:

The Hygienic USIT® seal and shim washers can be used with all other products of the Hygienic USIT® range.

## Drawing reference:

1) Cavity free sealing



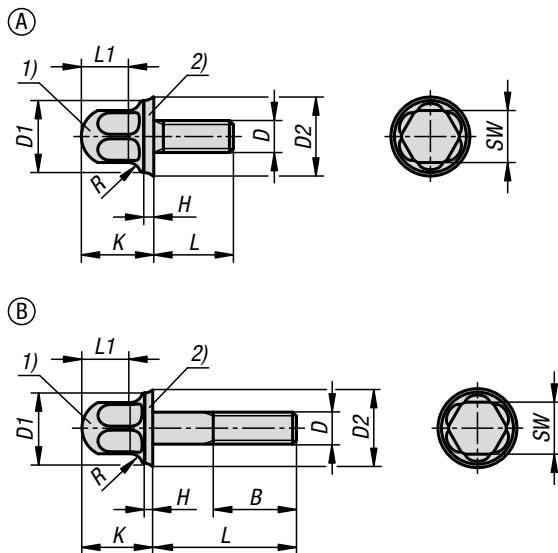
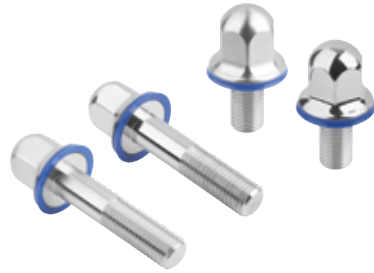


### KIPP Hygienic USIT® seal and shim washers

| Order No.<br>70 EPDM 291<br>black | Order No.<br>70 EPDM 253815<br>white | Order No.<br>fluoroprene XP 45<br>blue | D    | D1   | S   | Suitable for<br>hexagon screws | Suitable<br>cap nuts |
|-----------------------------------|--------------------------------------|----------------------------------------|------|------|-----|--------------------------------|----------------------|
| K1491.041                         | K1491.042                            | K1491.044                              | 4,1  | 9,7  | 1   | M4                             | M4                   |
| K1491.051                         | K1491.052                            | K1491.054                              | 5,1  | 10,7 | 1   | M5                             | M5                   |
| K1491.061                         | K1491.062                            | K1491.064                              | 6,1  | 13,1 | 1   | M6                             | M6                   |
| K1491.081                         | K1491.082                            | K1491.084                              | 8,1  | 16,9 | 1   | M8                             | M8                   |
| K1491.101                         | K1491.102                            | K1491.104                              | 10,1 | 21,2 | 1,5 | M10                            | M10                  |
| K1491.121                         | K1491.122                            | K1491.124                              | 12,1 | 25,5 | 1,5 | M12                            | M12                  |
| K1491.161                         | K1491.162                            | K1491.164                              | 16,1 | 33,9 | 1,5 | M16                            | M16                  |

## Hex head bolts, stainless steel with seal washer

in Hygienic DESIGN



The Hygienic DESIGN fastening system was specially developed for use in food-processing facilities. Special emphasis has been placed on the cleaning-optimised geometry and a surface finish of  $Ra \leq 0.8 \mu m$ . Quick and easy product installation due to a pre-mounted sealing washer rounds off the overall package.

### Material:

Hex head bolt: stainless steel 1.4404.

Sealing washer: EU10/2011 and FDA conform thermoplastic (POM).

### Version:

Hex head bolt: Polished or unpolished stainless steel.

Sealing washer: RAL5002 - ultra marine (POM).

### Sample order:

K1647.1104X08

(include length L e.g. 08 for L = 8 mm.)

### Note:

The contact face for the sealing ring must ideally be flat and perpendicular to the threaded hole and have a surface finish of  $Ra \leq 0.8 \mu m$ .

Sealing ring is unsuitable for acidic cleaning ( $pH < 4$ ) and oxidising agents.

### Temperature range:

-20° to +100° C (POM).

### Advantages:

Pre-installed, exchangeable seal washer.

Foodstuff conform material.

Cleaning optimised geometry.

### On request:

Special versions.

### Attention:

The suitability of the Hygienic DESIGN fasteners for the respective application must be checked by the user. Depending on the loads and external influences (temperature, cleaning media, product media), the sealing washer should be inspected regularly and replaced if necessary.

### Supplied with:

Hex head bolt incl. seal washer.

### Accessories:

Sealing washer K1649.

Stainless steel hex nut with sealing washer K1648.

Sockets with plastic inserts K1361.

Ring/open-end spanner with protective caps K1362.

### Threaded version:

M4 - M16.

### Drawing reference:

1) Hex head bolt

2) Sealing washer

## Hex head bolts, stainless steel with seal washer

in Hygienic DESIGN

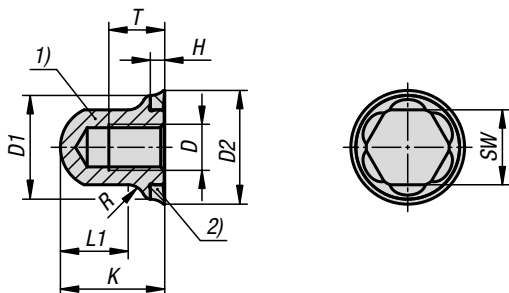


## KIPP Hex head bolts, stainless steel with seal washer in Hygienic DESIGN

| Order No.<br>polished | Order No.<br>not polished | Form | Form-Type     | B  | D   | D1 | D2    | H   | K    | L                 | L1   | R | SW |
|-----------------------|---------------------------|------|---------------|----|-----|----|-------|-----|------|-------------------|------|---|----|
| K1647.1104X           | K1647.2104X               | A    | without shaft | -  | M4  | 10 | 11,25 | 2   | 11,1 | 8/10/12/16/20     | 5,9  | 3 | 7  |
| K1647.1104X           | K1647.2104X               | B    | with shaft    | 14 | M4  | 10 | 11,25 | 2   | 11,1 | 25/30/35/40       | 5,9  | 3 | 7  |
| K1647.1105X           | K1647.2105X               | A    | without shaft | -  | M5  | 12 | 13,25 | 2   | 13,1 | 10/12/16/20       | 7,4  | 3 | 8  |
| K1647.1105X           | K1647.2105X               | B    | with shaft    | 16 | M5  | 12 | 13,25 | 2   | 13,1 | 25/30/35/40/45/50 | 7,4  | 3 | 8  |
| K1647.1106X           | K1647.2106X               | A    | without shaft | -  | M6  | 14 | 15,74 | 2,5 | 15,1 | 12/16/20/25       | 9,1  | 3 | 10 |
| K1647.1106X           | K1647.2106X               | B    | with shaft    | 18 | M6  | 14 | 15,74 | 2,5 | 15,1 | 30/35/40/45/50/60 | 9,1  | 3 | 10 |
| K1647.1108X           | K1647.2108X               | A    | without shaft | -  | M8  | 18 | 19,74 | 2,5 | 18,1 | 16/20/25/30/35    | 11,7 | 3 | 13 |
| K1647.1108X           | K1647.2108X               | B    | with shaft    | 22 | M8  | 18 | 19,74 | 2,5 | 18,1 | 40/45/50/60/70/80 | 11,7 | 3 | 13 |
| K1647.1110X           | K1647.2110X               | A    | without shaft | -  | M10 | 22 | 23,74 | 2,5 | 22,1 | 20/25/30/35/40    | 15   | 4 | 16 |
| K1647.1110X           | K1647.2110X               | B    | with shaft    | 26 | M10 | 22 | 23,74 | 2,5 | 22,1 | 45/50/60/70/80    | 15   | 4 | 16 |
| K1647.1112X           | K1647.2112X               | A    | without shaft | -  | M12 | 26 | 28,25 | 3   | 25,1 | 25/30/35/40/45    | 16,1 | 5 | 18 |
| K1647.1112X           | K1647.2112X               | B    | with shaft    | 30 | M12 | 26 | 28,25 | 3   | 25,1 | 50/60/70/80       | 16,1 | 5 | 18 |
| K1647.1116X           | K1647.2116X               | A    | without shaft | -  | M16 | 35 | 37,25 | 3   | 32,1 | 30/35/40/45/50/60 | 21,8 | 6 | 24 |
| K1647.1116X           | K1647.2116X               | B    | with shaft    | 38 | M16 | 35 | 37,25 | 3   | 32,1 | 70/80             | 21,8 | 6 | 24 |

## Hex nuts, stainless steel with seal washer

in Hygienic DESIGN



### Accessories:

Sealing washer K1649.  
Stainless steel hex head bolt with sealing washer K1647.  
Sockets with plastic inserts K1361.  
Ring/open-end spanner with protective caps K1362.

### Threaded version:

M4 - M16.

### Drawing reference:

- 1) Hex nut
- 2) Sealing washer

The Hygienic DESIGN fastening system was specially developed for use in food-processing facilities. Special emphasis has been placed on the cleaning-optimised geometry and a surface finish of  $Ra \leq 0.8 \mu m$ . Quick and easy product installation due to a pre-mounted sealing washer rounds off the overall package.

### Material:

Hex nut: stainless steel 1.4404.  
Sealing washer: EU10/2011 and FDA conform thermoplastic (POM).

### Version:

Hex nut: Polished or unpolished stainless steel.  
Sealing washer: RAL5002 - ultra marine (POM).

### Sample order:

K1648.1108

### Note:

The contact face for the sealing ring must ideally be flat and perpendicular to the threaded hole and have a surface finish of  $Ra \leq 0.8 \mu m$ .  
Sealing ring is unsuitable for acidic cleaning ( $pH < 4$ ) and oxidising agents.

### Temperature range:

-20° to +100° C (POM).

### Advantages:

Pre-installed, exchangeable seal washer.  
Foodstuff conform material.  
Cleaning optimised geometry.

### On request:

Special versions.

### Attention:

The suitability of the Hygienic DESIGN fasters for the respective application must be checked by the user. Depending on the loads and external influences (temperature, cleaning media, product media), the sealing washer should be inspected regularly and replaced if necessary.

### Supplied with:

Hex nut incl. seal washer.

## KIPP Hex nuts, stainless steel with seal washer in Hygienic DESIGN

| Order No.<br>polished | Order No.<br>not polished | D   | D1 | D2    | H   | K    | L1   | R | SW | T    |
|-----------------------|---------------------------|-----|----|-------|-----|------|------|---|----|------|
| K1648.1104            | K1648.2104                | M4  | 10 | 11,25 | 2   | 11,1 | 5,9  | 3 | 7  | 4,8  |
| K1648.1105            | K1648.2105                | M5  | 12 | 13,25 | 2   | 13,1 | 7,4  | 3 | 8  | 6    |
| K1648.1106            | K1648.2106                | M6  | 14 | 15,74 | 2,5 | 15,1 | 9,1  | 3 | 10 | 7,2  |
| K1648.1108            | K1648.2108                | M8  | 18 | 19,74 | 2,5 | 18,1 | 11,7 | 3 | 13 | 9,6  |
| K1648.1110            | K1648.2110                | M10 | 22 | 23,74 | 2,5 | 22,1 | 15   | 4 | 16 | 12   |
| K1648.1112            | K1648.2112                | M12 | 26 | 28,25 | 3   | 25,1 | 16,1 | 5 | 18 | 14,4 |
| K1648.1116            | K1648.2116                | M16 | 35 | 37,25 | 3   | 32,1 | 21,8 | 6 | 24 | 19,2 |

# Seal washers

in Hygienic DESIGN



The thermoplastic seal washer in Hygienic DESIGN was specially developed for use in combination with the hex head bolt K1647 or hex nut K1648. Special emphasis has been placed on the cleaning-optimised geometry and a surface finish of  $Ra \leq 0.8 \mu m$ . The seal washers are made from an EU10/2011 and FDA conform plastic granulate.

**Material:**

EU10/2011 and FDA conform thermoplastic (POM).

**Version:**

RAL5002 - Ultramarine blue (POM).

**Sample order:**

K1649.108

**Note:**

Sealing ring is unsuitable for acidic cleaning ( $pH < 4$ ) and oxidising agents.

**Temperature range:**

-20° to +100° C (POM).

**Advantages:**

Foodstuff conform material.  
Cleaning optimised geometry.

**On request:**

Special versions.

**Attention:**

The suitability of the Hygienic DESIGN fasters for the respective application must be checked by the user. Depending on the loads and external influences (temperature, cleaning media, product media), the sealing washer should be inspected regularly and replaced if necessary.

**Supplied with:**

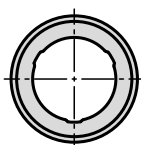
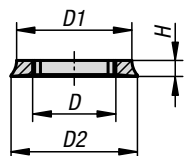
Seal washer.

**Accessories:**

Stainless steel hex head bolt with seal washer K1647.  
Stainless steel hex nut with seal washer K1648.

**Threaded version:**

M4 - M16.

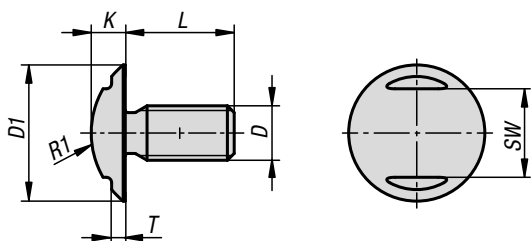


## KIPP Seal washers in Hygienic DESIGN

| Order No. | D  | D1 | D2    | H   | G=thread / for thread |
|-----------|----|----|-------|-----|-----------------------|
| K1649.104 | 6  | 10 | 11,25 | 2   | M4                    |
| K1649.105 | 8  | 12 | 13,25 | 2   | M5                    |
| K1649.106 | 9  | 14 | 15,74 | 2,5 | M6                    |
| K1649.108 | 13 | 18 | 19,74 | 2,5 | M8                    |
| K1649.110 | 17 | 22 | 23,74 | 2,5 | M10                   |
| K1649.112 | 20 | 26 | 28,25 | 3   | M12                   |
| K1649.116 | 29 | 35 | 37,25 | 3   | M16                   |

## Ball head screw

in Hygienic DESIGN



### Material:

Stainless steel 1.4404.

### Version:

Polished.

### Sample order:

K1329.06X20 (include length L)

### Note:

Ideal elements for fastening cladding panels, Plexiglas covers etc. The oversized flange and the thread undercut ensure a stress-free, uniform force distribution on the respective surfaces. Projecting edges are kept to a minimum by the head height being kept as low as possible. An open-end spanner is used to screw the fastener in.

The surface of the ball head screw is polished and, with regard to design optimised for the use in hygienic environments. The surface is polished to a surface finish of less than  $Ra\ 0.8\ \mu m$ . Dirt and residue from products or cleaners seldom adheres and easy cleaning is ensured.

### Accessories:

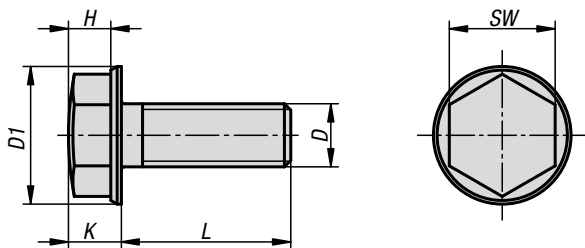
For damage-free tightening and loosening of the screw we recommend the open-end spanners together with the protective caps (K1362).

## KIPP Ball head screw in Hygienic DESIGN

| Order No. | D   | D1 | K   | T   | SW | R1   | L                         |
|-----------|-----|----|-----|-----|----|------|---------------------------|
| K1329.03X | M3  | 8  | 2   | 0,6 | 5  | 5,2  | 4/5/6/8/10/12/16/20/25/30 |
| K1329.04X | M4  | 11 | 3   | 1   | 6  | 6,7  | 5/6/8/10/12/16/20/25/30   |
| K1329.05X | M5  | 14 | 4   | 1   | 8  | 8,6  | 6/8/10/12/16/20/25/30     |
| K1329.06X | M6  | 17 | 5   | 1,5 | 10 | 10   | 8/10/12/16/20/25/30       |
| K1329.08X | M8  | 20 | 5   | 1,5 | 13 | 13   | 10/12/16/20/25/30/35/40   |
| K1329.10X | M10 | 22 | 6   | 1,5 | 15 | 13,5 | 12/16/20/25/30/35/37/40   |
| K1329.12X | M12 | 27 | 7,5 | 1,5 | 19 | 16,3 | 16/20/25/30/35/40/50      |
| K1329.16X | M16 | 36 | 9   | 1,5 | 24 | 23   | 20/25/30/35/40/50         |

# Hexagon head screws, stainless steel

in Hygienic DESIGN


**Material:**

Stainless steel 1.4404

**Version:**

Polished.

**Sample order:**

K1411.03X06  
(include length L e.g. 06 for L = 6 mm.)

**Note:**

The surface of the hexagon head bolt is polished and, with regard to design optimised for the use in hygienic environments.

The bolt head is convex on the top face and the collar has a conical formed top surface.

Instead of troublesome embossing or indentations, the bolt head is smooth with a surface finish of Ra 0.8 µm. Dirt and residue from products or cleaners seldom adheres and easy cleaning is ensured.

**Accessories:**

For damage-free tightening and loosening of the screw we recommend the open-end spanners together with the protective caps (K1362).

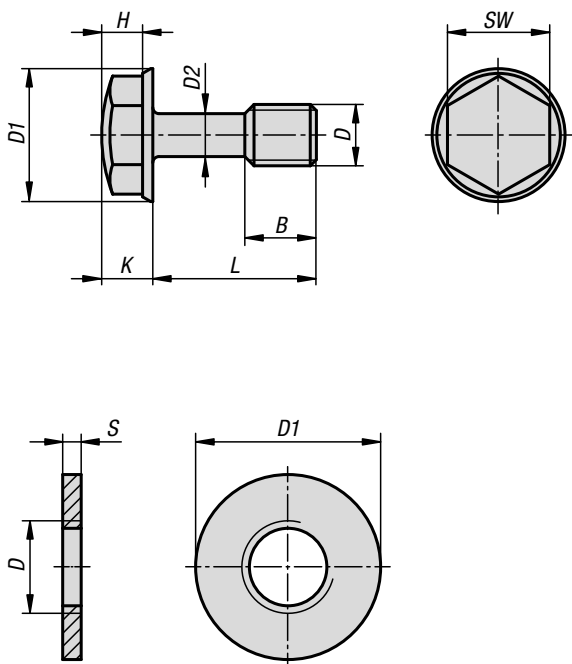


## KIPP Hexagon head screws, stainless steel in Hygienic DESIGN

| Order No. | Main material      | D   | D1   | H    | K    | L                                | SW  |
|-----------|--------------------|-----|------|------|------|----------------------------------|-----|
| K1411.03X | stainless steel A4 | M3  | 7    | 3    | 3,8  | 6/8/10/12/16/20/25/30            | 5,5 |
| K1411.04X | stainless steel A4 | M4  | 9,2  | 3    | 4    | 8/10/12/16/20/25/30/35/40        | 7   |
| K1411.05X | stainless steel A4 | M5  | 10,5 | 3,7  | 4,7  | 10/12/16/20/25/30/35/40/45/50    | 8   |
| K1411.06X | stainless steel A4 | M6  | 13   | 4    | 5    | 12/16/20/25/30/35/40/45/50/55/60 | 10  |
| K1411.08X | stainless steel A4 | M8  | 16,8 | 5,5  | 6,5  | 16/20/25/30/35/40/45/50/55/60    | 13  |
| K1411.10X | stainless steel A4 | M10 | 20,6 | 7,3  | 8,3  | 20/25/30/35/40/45/50/55/60       | 16  |
| K1411.12X | stainless steel A4 | M12 | 23,8 | 8,6  | 10   | 25/30/35/40/45/50/60             | 18  |
| K1411.16X | stainless steel A4 | M16 | 29,7 | 11,1 | 12,5 | 30/35/40/45/50/60                | 24  |
| K1411.20X | stainless steel A4 | M20 | 36   | 15   | 16,3 | 40/45/50/60                      | 30  |

## Hexagon bolts with narrow shaft

in Hygienic DESIGN



### Material:

Stainless steel 1.4404.

### Version:

Polished.

### Sample order:

K1330.06X30 (include length L)

### Note:

Narrow shaft bolts are preferably secured against unintentional loss with a retaining element. This satisfies the EU standard 2006/42/EG. With the optionally available retaining washer the bolt is permanently combined with the component before screwing in. The washer is screwed over the threaded section and can then move freely on the narrow shaft. The shaft is not damaged by e.g. notching caused by a spring effect. By manual operation it is not possible that the washer screws itself out again. However, by careful manipulation the washer can be removed from the bolt without damaging either.

The surface of the hexagon head bolt is polished and, with regard to design optimised for the use in hygienic environments. The bolt head is convex on the top face and the collar has a conical formed top surface. Instead of troublesome embossing or indentations, the bolt head is smooth with a surface finish of less than  $Ra\ 0.8\ \mu m$ . Dirt and residue from products or cleaners seldom adheres and easy cleaning is ensured.

### On request:

Inch threads, thread lengths, shaft lengths

### Accessories:

Locking washer K1331.



# Hexagon bolts with narrow shaft

in Hygienic DESIGN



## KIPP Hexagon bolts with narrow shaft in Hygienic DESIGN

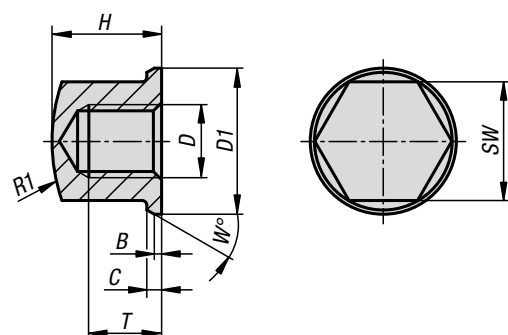
| Order No. | Main material      | D   | D1   | D2  | B    | H    | K    | L                       | SW |
|-----------|--------------------|-----|------|-----|------|------|------|-------------------------|----|
| K1330.04X | stainless steel A4 | M4  | 9,2  | 3,1 | 5    | 3    | 4    | 8/10/12/16              | 7  |
| K1330.04X | stainless steel A4 | M4  | 9,2  | 3,1 | 14   | 3    | 4    | 20/25/30/35/40          | 7  |
| K1330.05X | stainless steel A4 | M5  | 10,5 | 3,7 | 6    | 3,7  | 4,7  | 10/12/16/20             | 8  |
| K1330.05X | stainless steel A4 | M5  | 10,5 | 3,7 | 16   | 3,7  | 4,7  | 25/30/35/40/45/50       | 8  |
| K1330.06X | stainless steel A4 | M6  | 13   | 4,2 | 7    | 4    | 5    | 12/16/20                | 10 |
| K1330.06X | stainless steel A4 | M6  | 13   | 4,2 | 18   | 4    | 5    | 25/30/35/40/45/50/60    | 10 |
| K1330.08X | stainless steel A4 | M8  | 16,8 | 6   | 9,5  | 5,5  | 6,5  | 16/20/25                | 13 |
| K1330.08X | stainless steel A4 | M8  | 16,8 | 6   | 22   | 5,5  | 6,5  | 30/35/40/45/50/60/70/80 | 13 |
| K1330.10X | stainless steel A4 | M10 | 20,6 | 7,7 | 12   | 7,3  | 8,3  | 20/25/30/35             | 16 |
| K1330.10X | stainless steel A4 | M10 | 20,6 | 7,7 | 26   | 7,3  | 8,3  | 40/45/50/60/70/80       | 16 |
| K1330.12X | stainless steel A4 | M12 | 23,8 | 9,5 | 14,5 | 8,6  | 10   | 25/30/35/40             | 18 |
| K1330.12X | stainless steel A4 | M12 | 23,8 | 9,5 | 30   | 8,6  | 10   | 45/50/60/70/80          | 18 |
| K1330.16X | stainless steel A4 | M16 | 29,7 | 13  | 19   | 11,1 | 12,5 | 30/35/40/45/50          | 24 |
| K1330.16X | stainless steel A4 | M16 | 29,7 | 13  | 38   | 11,1 | 12,5 | 60/70/80                | 24 |

## KIPP Retaining washers for narrow shank screws

| Order No. | Main material      | D   | D1 | S   |
|-----------|--------------------|-----|----|-----|
| K1331.03  | stainless steel A4 | M3  | 6  | 1,5 |
| K1331.04  | stainless steel A4 | M4  | 8  | 1,5 |
| K1331.05  | stainless steel A4 | M5  | 10 | 1,5 |
| K1331.06  | stainless steel A4 | M6  | 12 | 1,5 |
| K1331.08  | stainless steel A4 | M8  | 16 | 2   |
| K1331.10  | stainless steel A4 | M10 | 20 | 2   |
| K1331.12  | stainless steel A4 | M12 | 24 | 2,5 |
| K1331.16  | stainless steel A4 | M16 | 32 | 3   |

# Cap nut compact

in Hygienic DESIGN


**Material:**

Stainless steel 1.4404.

**Version:**

Polished.

**Sample order:**

K1332.08

**Note:**

The surface of the cap nut is polished and, with regard to design optimised for the use in hygienic environments. The top of the nut is spherical and the collar has a conical formed top face. The nut has been designed as a low version so as to keep troublesome corners as few as possible. Due to the extremely high quality surface finish of much less than  $Ra\ 0.8\ \mu m$ , hardly any dirt particles adhere to the surface.

**On request:**

Inch threads, high versions.

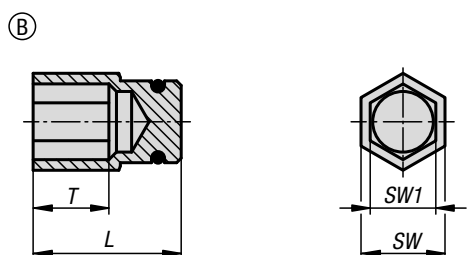
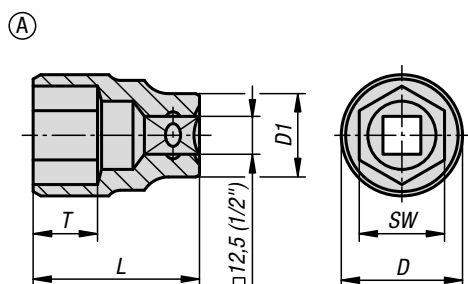
**Accessories:**

For damage-free tightening and loosening of the screw we recommend the open-end spanners together with the protective caps (K1362).

## KIPP Cap nut compact in Hygienic DESIGN

| Order No. | Main material      | D   | D1  | B    | C   | H    | R1  | SW  | T  | W  |
|-----------|--------------------|-----|-----|------|-----|------|-----|-----|----|----|
| K1332.03  | stainless steel A4 | M3  | 6,8 | 0,25 | 0,5 | 4,95 | 8,8 | 5,5 | 3  | 20 |
| K1332.04  | stainless steel A4 | M4  | 9   | 0,3  | 0,8 | 6,5  | 10  | 7   | 4  | 30 |
| K1332.05  | stainless steel A4 | M5  | 10  | 0,5  | 1   | 7    | 16  | 8   | 4  | 30 |
| K1332.06  | stainless steel A4 | M6  | 12  | 0,8  | 1   | 9    | 16  | 10  | 6  | 30 |
| K1332.08  | stainless steel A4 | M8  | 16  | 0,8  | 1,6 | 12   | 20  | 13  | 8  | 30 |
| K1332.10  | stainless steel A4 | M10 | 20  | 1    | 2   | 14   | 32  | 16  | 10 | 30 |
| K1332.12  | stainless steel A4 | M12 | 24  | 1    | 2,5 | 16   | 35  | 19  | 11 | 30 |

## Sockets and plastic inserts



### Material:

Socket tool steel.  
Insert special PETP.

### Version:

Socket chromium-plated.

### Sample order:

K1361.1112 (Socket SW11)  
K1361.0805 (Plastic insert SW8 for M5 hex head screw)

### Note:

Socket:

Socket with 1/2" drive, made by Hazet. Specially modified, for holding the plastic inserts. The plastic inserts are securely held by the inner form and length of the socket. Optimal drive torque is transmitted to the screw head. By careful use, metallic contact between the socket and the hex head is prevented. Contact corrosion is eliminated.

Plastic insert:

Plastic inserts for tightening and loosening the screws and nuts of the KIPP product range NOVOnox hygienic. Polished and sensitive surfaces are protected and a later contact corrosion is avoided.

The plastic inserts are made from a specially manufactured PETP and have FDA approval. The inserts are pressed into the special socket manually. The form fit and locking device ensures an optimal hold in the socket. No special tools are required to exchange the worn out inserts.

By a tightening torque of  $\mu$  0.12 coefficient of friction (DIN for A4-70 for screws and nuts), the plastic inserts have a life expectancy of up to 1000 alternating cycles.

### Drawing reference:

A) Socket  
B) Plastic insert

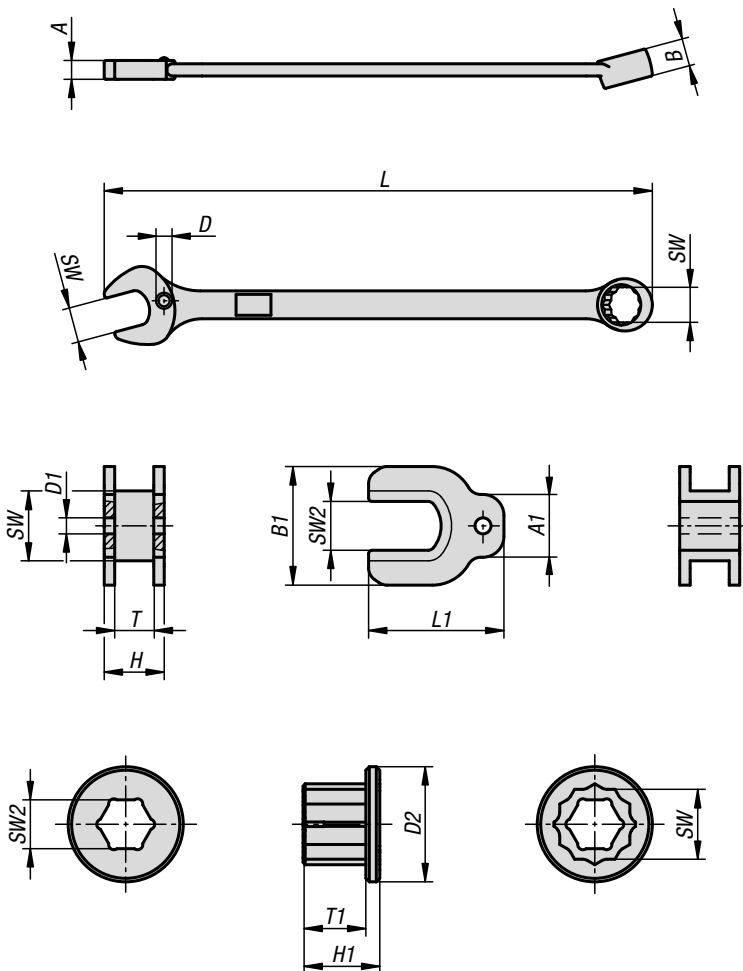
### KIPP Sockets

| Order No.  | D    | D1   | L    | T    | SW |
|------------|------|------|------|------|----|
| K1361.1012 | 15,3 | 22   | 36,6 | 10,6 | 10 |
| K1361.1112 | 16,6 | 22   | 37,3 | 10,1 | 11 |
| K1361.1312 | 19,1 | 22   | 37,3 | 10,6 | 13 |
| K1361.1612 | 22,9 | 23,6 | 37,1 | 11,3 | 16 |
| K1361.1912 | 26,6 | 23   | 37   | 13,2 | 19 |
| K1361.2112 | 29   | 25   | 36,8 | 12,9 | 21 |
| K1361.2712 | 35,2 | 25   | 44,4 | 18,1 | 27 |

### KIPP Plastic inserts

| Order No.  | L    | T    | SW | SW1 | Suitable for hexagon screws |
|------------|------|------|----|-----|-----------------------------|
| K1361.0704 | 17,4 | 5,5  | 10 | 7   | M4                          |
| K1361.0805 | 18   | 6    | 11 | 8   | M5                          |
| K1361.1006 | 19,5 | 10   | 13 | 10  | M6                          |
| K1361.1308 | 21,5 | 11   | 16 | 13  | M8                          |
| K1361.1610 | 22   | 13,5 | 19 | 16  | M10                         |
| K1361.1812 | 21,5 | 12   | 21 | 18  | M12                         |
| K1361.2416 | 26,5 | 18   | 27 | 24  | M16                         |

# Combination spanner with protective caps



## Material:

Combination spanner tool steel.  
Protective cap AlSi1MgMn.

## Sample order:

K1362.10 combination spanner  
K1362.1007 caps for open-end spanner  
K1362.11007 caps for ring spanner

## Note:

The protective cap was specially developed for tightening and loosening screw connections with sensitive surfaces. With normal tools, the surface of polished screws are so damaged from the first tightening, that cavities are created making easy and effective cleaning no longer possible.

The protective caps ensure damage free tightening and loosening of fasteners with outer contours. The soft aluminium leaves no scratches or other damage on sensitive surfaces. By correct and professional use the protective caps have a service life of ca. 1000 operating cycles.

Additionally, with the protective caps the risk of contact corrosion is reliably prevented on stainless steel fasteners. The projecting contour largely prevents unintentional contact points between spanner and stainless steel screw. The protective caps are made of the aluminium alloy EN AW 6082 and so comply with EN 602 - aluminium in contact with food.

The protective cap is held securely in the spanner by a special moulding or spring clip element. The cap cannot fall out on its own. Worn-out protective caps are changed manually.

## On request:

Other sizes.

## Combination spanner with protective caps



## KIPP Combination spanner

| Order No. | SW | A    | B    | L     | D |
|-----------|----|------|------|-------|---|
| K1362.10  | 10 | 5    | 8    | 154,5 | 5 |
| K1362.11  | 11 | 5,5  | 8,4  | 168,5 | 5 |
| K1362.13  | 13 | 6,3  | 10   | 193   | 6 |
| K1362.16  | 16 | 7    | 11,4 | 230,5 | 6 |
| K1362.19  | 19 | 8    | 13,5 | 268,5 | 7 |
| K1362.21  | 21 | 8,5  | 13,7 | 292   | 7 |
| K1362.27  | 27 | 10,5 | 16   | 380   | 9 |

## KIPP Cap for open-end spanner

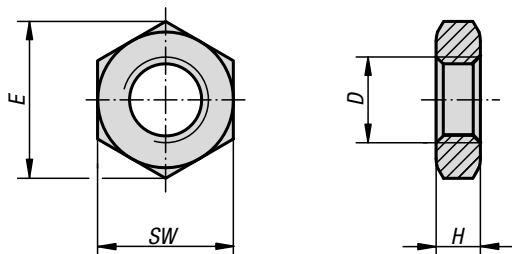
| Order No.  | SW | SW2 | A1 | B1 | L1   | D1  | T    | H    |
|------------|----|-----|----|----|------|-----|------|------|
| K1362.1007 | 10 | 7   | 9  | 17 | 19,4 | 2,3 | 5,6  | 8,6  |
| K1362.1108 | 11 | 8   | 9  | 18 | 20,7 | 2,3 | 5,7  | 8,7  |
| K1362.1310 | 13 | 10  | 10 | 22 | 23,2 | 3   | 6,7  | 10,7 |
| K1362.1613 | 16 | 13  | 13 | 27 | 28,6 | 3   | 7,7  | 11,7 |
| K1362.1916 | 19 | 16  | 13 | 30 | 32,5 | 4   | 8,6  | 12,6 |
| K1362.2118 | 21 | 18  | 13 | 32 | 35   | 4   | 9    | 13   |
| K1362.2724 | 27 | 24  | 14 | 40 | 43,8 | 4   | 10,8 | 15   |

## KIPP Cap for ring spanner

| Order No.   | SW | SW2 | D2   | T1   | H1   |
|-------------|----|-----|------|------|------|
| K1362.11007 | 10 | 7   | 16,5 | 8    | 11   |
| K1362.11108 | 11 | 8   | 18   | 9,4  | 11,4 |
| K1362.11310 | 13 | 10  | 21   | 11   | 13   |
| K1362.11613 | 16 | 13  | 25   | 12,4 | 14,4 |
| K1362.11916 | 19 | 16  | 30   | 14,5 | 16,5 |
| K1362.12118 | 21 | 18  | 32   | 14,7 | 16,7 |
| K1362.12724 | 27 | 24  | 41   | 17   | 19   |

## Hexagon nuts thin

DIN 439

**Material:**

Steel, stainless steel A2 or stainless steel A4.

**Version:**

Steel grade 04, electro zinc-plated or black oxidised.  
 Stainless steel A2, bright.  
 Stainless steel A4, bright.

**Sample order:**

K0700.10

**Note:**

These hexagon nuts are used in screw connections exposed to limited loads, e.g. as a locknut for clevis joints or rod ends.

## KIPP Hexagon nuts thin DIN 439

| Order No.<br>steel<br>black oxidised | Order No.<br>steel<br>galvanised | Version 2 | D        | E     | H   | SW |
|--------------------------------------|----------------------------------|-----------|----------|-------|-----|----|
| K0700.205                            | K0700.05                         | RH thread | M5       | 8,79  | 2,7 | 8  |
| K0700.206                            | K0700.06                         | RH thread | M6       | 11,05 | 3,2 | 10 |
| K0700.2063                           | K0700.006                        | RH thread | M6X0,75  | 11,05 | 3,2 | 10 |
| K0700.208                            | K0700.08                         | RH thread | M8       | 14,38 | 4   | 13 |
| K0700.2083                           | K0700.008                        | RH thread | M8X1     | 14,38 | 4   | 13 |
| K0700.210                            | K0700.10                         | RH thread | M10      | 18,9  | 5   | 17 |
| K0700.2103                           | K0700.103                        | RH thread | M10X1    | 18,9  | 5   | 17 |
| -                                    | K0700.104                        | RH thread | M10X1,25 | 18,9  | 5   | 17 |
| K0700.212                            | K0700.12                         | RH thread | M12      | 21,1  | 6   | 19 |
| -                                    | K0700.123                        | RH thread | M12X1,25 | 21,1  | 6   | 19 |
| K0700.2124                           | K0700.124                        | RH thread | M12X1,5  | 21,1  | 6   | 19 |
| -                                    | K0700.14                         | RH thread | M14      | 24,49 | 7   | 22 |
| K0700.216                            | K0700.16                         | RH thread | M16      | 26,76 | 8   | 24 |
| K0700.2163                           | K0700.163                        | RH thread | M16x1,5  | 26,76 | 8   | 24 |
| -                                    | K0700.183                        | RH thread | M18x1,5  | 29,56 | 9   | 27 |
| -                                    | K0700.20                         | RH thread | M20      | 32,95 | 10  | 30 |
| K0700.2203                           | K0700.203                        | RH thread | M20X1,5  | 32,95 | 10  | 30 |
| -                                    | K0700.223                        | RH thread | M22x1,5  | 36,9  | 10  | 32 |
| -                                    | K0700.24                         | RH thread | M24      | 39,55 | 12  | 36 |
| K0700.2243                           | -                                | RH thread | M24x2    | 39,6  | 12  | 36 |
| -                                    | K0700.30                         | RH thread | M30      | 50,85 | 15  | 46 |
| -                                    | K0700.061                        | LH thread | M6       | 11,05 | 3,2 | 10 |
| -                                    | K0700.081                        | LH thread | M8       | 14,38 | 4   | 13 |
| -                                    | K0700.101                        | LH thread | M10      | 18,9  | 5   | 17 |
| -                                    | K0700.1031                       | LH thread | M10X1    | 18,9  | 5   | 17 |
| -                                    | K0700.1041                       | LH thread | M10X1,25 | 18,9  | 5   | 17 |
| -                                    | K0700.121                        | LH thread | M12      | 21,1  | 6   | 19 |
| -                                    | K0700.1231                       | LH thread | M12X1,25 | 21,1  | 6   | 19 |
| -                                    | K0700.1241                       | LH thread | M12X1,5  | 21,1  | 6   | 19 |
| -                                    | K0700.161                        | LH thread | M16      | 26,76 | 8   | 24 |
| -                                    | K0700.2031                       | LH thread | M20X1,5  | 32,95 | 10  | 30 |
| -                                    | K0700.2231                       | LH thread | M22x1,5  | 36,9  | 10  | 32 |

## Hexagon nuts thin

DIN 439

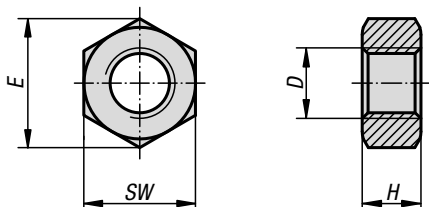


## KIPP Hexagon nuts thin DIN 439

| Order No.<br>stainless steel A2 | Order No.<br>stainless steel A4 | Version 2 | D        | E     | H   | SW |
|---------------------------------|---------------------------------|-----------|----------|-------|-----|----|
| K0700.105                       | K0700.605                       | RH thread | M5       | 8,79  | 2,7 | 8  |
| K0700.106                       | K0700.606                       | RH thread | M6       | 11,05 | 3,2 | 10 |
| K0700.1062                      | K0700.6062                      | RH thread | M6X0,75  | 11,05 | 3,2 | 10 |
| K0700.108                       | K0700.608                       | RH thread | M8       | 14,38 | 4   | 13 |
| K0700.1083                      | K0700.6083                      | RH thread | M8X1     | 14,38 | 4   | 13 |
| K0700.110                       | K0700.610                       | RH thread | M10      | 18,9  | 5   | 17 |
| K0700.1103                      | K0700.6103                      | RH thread | M10X1    | 18,9  | 5   | 17 |
| K0700.1104                      | K0700.6104                      | RH thread | M10X1,25 | 18,9  | 5   | 17 |
| K0700.112                       | K0700.612                       | RH thread | M12      | 21,1  | 6   | 19 |
| K0700.1123                      | K0700.6123                      | RH thread | M12X1,25 | 21,1  | 6   | 19 |
| K0700.1124                      | K0700.6124                      | RH thread | M12X1,5  | 21,1  | 6   | 19 |
| K0700.114                       | K0700.614                       | RH thread | M14      | 24,49 | 7   | 22 |
| K0700.116                       | K0700.616                       | RH thread | M16      | 26,76 | 8   | 24 |
| K0700.1163                      | K0700.6163                      | RH thread | M16x1,5  | 26,76 | 8   | 24 |
| K0700.120                       | K0700.620                       | RH thread | M20      | 32,95 | 10  | 30 |
| K0700.1203                      | K0700.6203                      | RH thread | M20X1,5  | 32,95 | 10  | 30 |
| K0700.1223                      | K0700.6223                      | RH thread | M22x1,5  | 36,9  | 10  | 32 |
| K0700.1244                      | K0700.6244                      | RH thread | M24      | 39,55 | 12  | 36 |
| K0700.1243                      | K0700.6243                      | RH thread | M24x2    | 39,6  | 12  | 36 |
| K0700.1061                      | -                               | LH thread | M6       | 11,05 | 3,2 | 10 |
| K0700.1081                      | -                               | LH thread | M8       | 14,38 | 4   | 13 |
| K0700.1101                      | -                               | LH thread | M10      | 18,9  | 5   | 17 |
| K0700.11031                     | -                               | LH thread | M10X1    | 18,9  | 5   | 17 |
| K0700.11041                     | -                               | LH thread | M10X1,25 | 18,9  | 5   | 17 |
| K0700.1121                      | -                               | LH thread | M12      | 21,1  | 6   | 19 |
| K0700.11231                     | -                               | LH thread | M12X1,25 | 21,1  | 6   | 19 |
| K0700.11241                     | -                               | LH thread | M12X1,5  | 21,1  | 6   | 19 |
| K0700.1161                      | -                               | LH thread | M16      | 26,76 | 8   | 24 |
| K0700.12031                     | -                               | LH thread | M20X1,5  | 32,95 | 10  | 30 |
| K0700.12231                     | -                               | LH thread | M22x1,5  | 36,9  | 10  | 32 |

# Hexagon nuts

DIN 934/DIN EN ISO 4032/DIN EN 24032

**Material:**

Steel, stainless steel A2 or stainless steel A4.

**Version:**

Steel grade 8, bright or electro zinc-plated.  
 Steel grade 10, bright or electro zinc-plated.  
 Steel grade 12, bright.  
 Stainless steel A2-70, bright.  
 Stainless steel A4-70, bright.

**Sample order:**

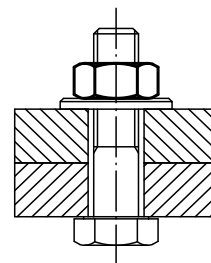
K1145.10

**Note:**

The nut grade must always be the same or higher than the bolt grade, i.e. bolts with grade 8.8 are always paired with nuts grade 8 or higher, but never less.

**On request:**

DIN ISO 272 spanner sizes.



## KIPP Hexagon nuts DIN 934/DIN EN ISO 4032/DIN EN 24032

| Order No.<br>stainless steel A2<br>Grade 70 | Order No.<br>stainless steel A4<br>Grade 70 | D   | E     | H   | SW  |
|---------------------------------------------|---------------------------------------------|-----|-------|-----|-----|
| K1145.103                                   | K1145.603                                   | M3  | 6,01  | 2,4 | 5,5 |
| K1145.104                                   | K1145.604                                   | M4  | 7,66  | 3,2 | 7   |
| K1145.105                                   | K1145.605                                   | M5  | 8,79  | 4   | 8   |
| K1145.106                                   | K1145.606                                   | M6  | 11,05 | 5   | 10  |
| K1145.108                                   | K1145.608                                   | M8  | 14,38 | 6,5 | 13  |
| K1145.110                                   | K1145.610                                   | M10 | 18,9  | 8   | 17  |
| K1145.112                                   | K1145.612                                   | M12 | 21,1  | 10  | 19  |
| K1145.116                                   | K1145.616                                   | M16 | 26,76 | 13  | 24  |
| K1145.120                                   | K1145.620                                   | M20 | 32,95 | 16  | 30  |
| K1145.130                                   | K1145.630                                   | M30 | 50,9  | 24  | 46  |
| K1145.136                                   | K1145.636                                   | M36 | 60,8  | 29  | 55  |
| K1145.114                                   | K1145.614                                   | M14 | 23,9  | 11  | 22  |
| K1145.122                                   | K1145.622                                   | M22 | 35    | 18  | 32  |
| K1145.124                                   | K1145.624                                   | M24 | 39,6  | 19  | 36  |
| K1145.127                                   | K1145.627                                   | M27 | 45,2  | 22  | 41  |
| K1145.133                                   | K1145.633                                   | M33 | 55,4  | 26  | 50  |



# Hexagon nuts

DIN 934/DIN EN ISO 4032/DIN EN 24032

## KIPP Hexagon nuts DIN 934/DIN EN ISO 4032/DIN EN 24032



| Order No.<br>steel<br>Grade 8 | Order No.<br>steel<br>Grade 10 | Order No.<br>steel<br>Grade 12 | Surface finish<br>body | D   | E     | H   | SW  |
|-------------------------------|--------------------------------|--------------------------------|------------------------|-----|-------|-----|-----|
| K1145.03                      | K1145.403                      | -                              | bright (black)         | M3  | 6,01  | 2,4 | 5,5 |
| K1145.04                      | K1145.404                      | -                              | bright (black)         | M4  | 7,66  | 3,2 | 7   |
| K1145.05                      | K1145.405                      | -                              | bright (black)         | M5  | 8,79  | 4   | 8   |
| K1145.06                      | K1145.406                      | K1145.506                      | bright (black)         | M6  | 11,05 | 5   | 10  |
| K1145.08                      | K1145.408                      | K1145.508                      | bright (black)         | M8  | 14,38 | 6,5 | 13  |
| K1145.10                      | K1145.410                      | K1145.510                      | bright (black)         | M10 | 18,9  | 8   | 17  |
| K1145.12                      | K1145.412                      | K1145.512                      | bright (black)         | M12 | 21,1  | 10  | 19  |
| K1145.14                      | K1145.414                      | -                              | bright (black)         | M14 | 23,9  | 11  | 22  |
| K1145.16                      | K1145.416                      | K1145.516                      | bright (black)         | M16 | 26,76 | 13  | 24  |
| K1145.20                      | K1145.420                      | K1145.520                      | bright (black)         | M20 | 32,95 | 16  | 30  |
| K1145.22                      | K1145.422                      | -                              | bright (black)         | M22 | 35    | 18  | 32  |
| K1145.24                      | K1145.424                      | K1145.524                      | bright (black)         | M24 | 39,6  | 19  | 36  |
| K1145.27                      | K1145.427                      | K1145.527                      | bright (black)         | M27 | 45,2  | 22  | 41  |
| K1145.30                      | K1145.430                      | K1145.530                      | bright (black)         | M30 | 50,9  | 24  | 46  |
| K1145.33                      | K1145.433                      | -                              | bright (black)         | M33 | 55,4  | 26  | 50  |
| K1145.36                      | K1145.436                      | K1145.536                      | bright (black)         | M36 | 60,8  | 29  | 55  |
| K1145.203                     | -                              | -                              | galvanised             | M3  | 6,01  | 2,4 | 5,5 |
| K1145.204                     | K1145.304                      | -                              | galvanised             | M4  | 7,66  | 3,2 | 7   |
| K1145.205                     | K1145.305                      | -                              | galvanised             | M5  | 8,79  | 4   | 8   |
| K1145.206                     | K1145.306                      | -                              | galvanised             | M6  | 11,05 | 5   | 10  |
| K1145.208                     | K1145.308                      | -                              | galvanised             | M8  | 14,38 | 6,5 | 13  |
| K1145.210                     | K1145.310                      | -                              | galvanised             | M10 | 18,9  | 8   | 17  |
| K1145.212                     | K1145.312                      | -                              | galvanised             | M12 | 21,1  | 10  | 19  |
| K1145.214                     | K1145.314                      | -                              | galvanised             | M14 | 23,9  | 11  | 22  |
| K1145.216                     | K1145.316                      | -                              | galvanised             | M16 | 26,76 | 13  | 24  |
| K1145.220                     | K1145.320                      | -                              | galvanised             | M20 | 32,95 | 16  | 30  |
| K1145.222                     | K1145.322                      | -                              | galvanised             | M22 | 35    | 18  | 32  |
| K1145.224                     | K1145.324                      | -                              | galvanised             | M24 | 39,6  | 19  | 36  |
| K1145.227                     | K1145.327                      | -                              | galvanised             | M27 | 45,2  | 22  | 41  |
| K1145.230                     | K1145.330                      | -                              | galvanised             | M30 | 50,9  | 24  | 46  |
| K1145.233                     | K1145.333                      | -                              | galvanised             | M33 | 55,4  | 26  | 50  |
| K1145.236                     | K1145.336                      | -                              | galvanised             | M36 | 60,8  | 29  | 55  |

# Hexagon nuts with polyamide thread lock

high type, DIN 982 / stainless steel similar to DIN 982



## Material:

Steel, stainless steel A2 or stainless steel A4.

## Version:

Steel electro zinc-plated.

Stainless steel A2, bright.

Stainless steel A4, bright.

## Sample order:

K1147.204

## Note:

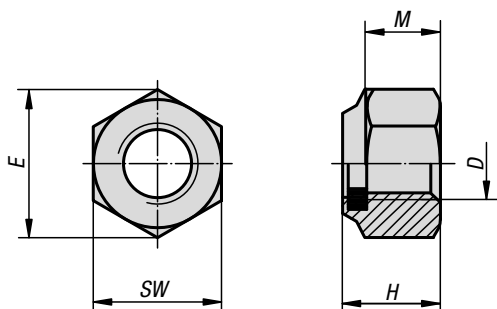
When screwing the nuts onto the thread, the thread lock is plastically and elastically deformed. The elastic deformation causes a radial frictional lock against the nuts being loosened.

The plastic thread lock is only effective when the nuts are fully screwed onto the male thread. The screw length must be selected so that at least two full threads protrude from the nut.

Due to the plastic deformation of the thread lock, these nuts should only be used once.

## Temperature range:

-50°C to +120°C.



# Hexagon nuts with polyamide thread lock

high type, DIN 982 / stainless steel similar to DIN 982

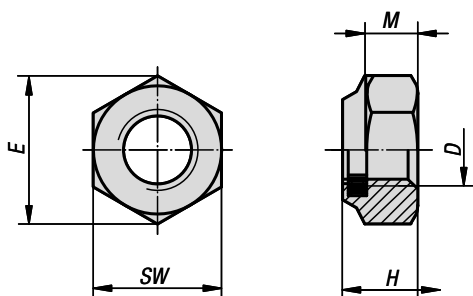


## KIPP Hexagon nuts with polyamide thread lock, high type, DIN 982 / stainless steel similar to DIN 982

| Order No. | Main material      | Grade | DIN     | D   | E     | H    | M     | SW |
|-----------|--------------------|-------|---------|-----|-------|------|-------|----|
| K1147.204 | steel              | 6-8   | DIN 982 | M4  | 7,66  | 6    | 2,9   | 7  |
| K1147.205 | steel              | 8     | DIN 982 | M5  | 8,79  | 6,3  | 4,4   | 8  |
| K1147.206 | steel              | 8     | DIN 982 | M6  | 11,05 | 8    | 4,9   | 10 |
| K1147.208 | steel              | 8     | DIN 982 | M8  | 14,38 | 9,5  | 6,44  | 13 |
| K1147.210 | steel              | 8     | DIN 982 | M10 | 18,9  | 11,5 | 8,04  | 17 |
| K1147.212 | steel              | 8     | DIN 982 | M12 | 21,1  | 14   | 10,37 | 19 |
| K1147.214 | steel              | 8     | DIN 982 | M14 | 23,9  | 16   | 12,1  | 22 |
| K1147.216 | steel              | 8     | DIN 982 | M16 | 26,76 | 18   | 14,1  | 24 |
| K1147.220 | steel              | 8     | DIN 982 | M20 | 32,95 | 22   | 16,9  | 30 |
| K1147.224 | steel              | 8     | DIN 982 | M24 | 39,55 | 28   | 20,2  | 36 |
| K1147.310 | steel              | 10    | DIN 982 | M10 | 18,9  | 11,5 | 8,04  | 17 |
| K1147.312 | steel              | 10    | DIN 982 | M12 | 21,1  | 14   | 10,37 | 19 |
| K1147.316 | steel              | 10    | DIN 982 | M16 | 26,76 | 18   | 14,1  | 24 |
| K1147.320 | steel              | 10    | DIN 982 | M20 | 32,95 | 22   | 16,9  | 30 |
| K1147.324 | steel              | 10    | DIN 982 | M24 | 39,55 | 28   | 20,2  | 36 |
| K1147.105 | stainless steel A2 | -     | DIN 982 | M5  | 8,79  | 6,3  | 4,4   | 8  |
| K1147.106 | stainless steel A2 | -     | DIN 982 | M6  | 11,05 | 8    | 4,9   | 10 |
| K1147.108 | stainless steel A2 | -     | DIN 982 | M8  | 14,38 | 9,5  | 6,44  | 13 |
| K1147.110 | stainless steel A2 | -     | DIN 982 | M10 | 18,9  | 11,5 | 8,04  | 17 |
| K1147.112 | stainless steel A2 | -     | DIN 982 | M12 | 21,1  | 14   | 10,37 | 19 |
| K1147.116 | stainless steel A2 | -     | DIN 982 | M16 | 26,76 | 18   | 14,1  | 24 |
| K1147.120 | stainless steel A2 | -     | DIN 982 | M20 | 32,95 | 22   | 16,9  | 30 |
| K1147.605 | stainless steel A4 | -     | DIN 982 | M5  | 8,79  | 6,3  | 4,4   | 8  |
| K1147.606 | stainless steel A4 | -     | DIN 982 | M6  | 11,05 | 8    | 4,9   | 10 |
| K1147.608 | stainless steel A4 | -     | DIN 982 | M8  | 14,38 | 9,5  | 6,44  | 13 |
| K1147.610 | stainless steel A4 | -     | DIN 982 | M10 | 18,9  | 11,5 | 8,04  | 17 |
| K1147.612 | stainless steel A4 | -     | DIN 982 | M12 | 21,1  | 14   | 10,37 | 19 |
| K1147.616 | stainless steel A4 | -     | DIN 982 | M16 | 26,76 | 18   | 14,1  | 24 |
| K1147.620 | stainless steel A4 | -     | DIN 982 | M20 | 32,95 | 22   | 16,9  | 30 |

# Hexagon nuts with polyamide thread lock

thin type, DIN 985



## Material:

Steel, stainless steel A2 or stainless steel A4.

## Version:

Steel electro zinc-plated.  
Stainless steel A2, bright.  
Stainless steel A4, bright.

## Sample order:

K1148.203

## Note:

When screwing the nuts onto the thread, the thread lock is plastically and elastically deformed. The elastic deformation causes a radial frictional lock against the nuts being loosened.

The plastic thread lock is only effective when the nuts are fully screwed onto the male thread. The screw length must be selected so that at least two full threads protrude from the nut.

Due to the plastic deformation of the thread lock, these nuts should only be used once.

## Temperature range:

-50°C to +120°C.

## KIPP Hexagon nuts with polyamide thread lock, thin type DIN 985

| Order No.<br>steel<br>Grade 6-8 | Order No.<br>steel<br>Grade 8 | Order No.<br>steel<br>Grade 10 | D   | E     | H  | M    | SW  |
|---------------------------------|-------------------------------|--------------------------------|-----|-------|----|------|-----|
| K1148.203                       | -                             | -                              | M3  | 6,08  | 4  | 2,4  | 5,5 |
| K1148.204                       | -                             | -                              | M4  | 7,66  | 5  | 2,9  | 7   |
| K1148.205                       | -                             | -                              | M5  | 8,79  | 5  | 3,2  | 8   |
| -                               | K1148.206                     | K1148.306                      | M6  | 11,05 | 6  | 4    | 10  |
| -                               | K1148.208                     | K1148.308                      | M8  | 14,38 | 8  | 5,5  | 13  |
| -                               | K1148.210                     | K1148.310                      | M10 | 18,9  | 10 | 6,5  | 17  |
| -                               | K1148.212                     | K1148.312                      | M12 | 21,1  | 12 | 8    | 19  |
| -                               | K1148.214                     | K1148.314                      | M14 | 23,9  | 14 | 9,5  | 22  |
| -                               | K1148.216                     | K1148.316                      | M16 | 26,76 | 16 | 10,5 | 24  |
| -                               | K1148.220                     | K1148.320                      | M20 | 32,95 | 20 | 14   | 30  |
| -                               | K1148.224                     | -                              | M24 | 39,55 | 24 | 15   | 36  |
| -                               | K1148.227                     | K1148.327                      | M27 | 45,2  | 27 | 17   | 41  |
| -                               | K1148.230                     | K1148.330                      | M30 | 50,85 | 30 | 19   | 46  |
| -                               | -                             | K1148.324                      | M24 | 35    | 24 | 15   | 36  |

## Hexagon nuts with polyamide thread lock

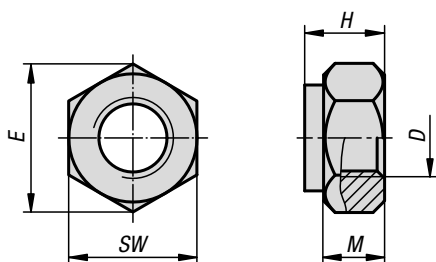
thin type, DIN 985



| Order No. | Main material      | Grade | D   | E     | H  | M    | SW  |
|-----------|--------------------|-------|-----|-------|----|------|-----|
| K1148.103 | stainless steel A2 | 70    | M3  | 6,08  | 4  | 2,4  | 5,5 |
| K1148.104 | stainless steel A2 | 70    | M4  | 7,66  | 5  | 2,9  | 7   |
| K1148.105 | stainless steel A2 | 70    | M5  | 8,79  | 5  | 3,2  | 8   |
| K1148.106 | stainless steel A2 | 70    | M6  | 11,05 | 6  | 4    | 10  |
| K1148.108 | stainless steel A2 | 70    | M8  | 14,38 | 8  | 5,5  | 13  |
| K1148.110 | stainless steel A2 | 70    | M10 | 18,9  | 10 | 6,5  | 17  |
| K1148.112 | stainless steel A2 | 70    | M12 | 21,1  | 12 | 8    | 19  |
| K1148.114 | stainless steel A2 | 70    | M14 | 23,9  | 14 | 9,5  | 22  |
| K1148.116 | stainless steel A2 | 70    | M16 | 26,76 | 16 | 10,5 | 24  |
| K1148.120 | stainless steel A2 | 70    | M20 | 32,95 | 20 | 14   | 30  |
| K1148.124 | stainless steel A2 | 70    | M24 | 39,55 | 24 | 15   | 36  |
| K1148.127 | stainless steel A2 | 70    | M27 | 45,2  | 27 | 17   | 41  |
| K1148.130 | stainless steel A2 | 70    | M30 | 50,85 | 30 | 19   | 46  |
| K1148.603 | stainless steel A4 | 70    | M3  | 6,08  | 4  | 2,4  | 5,5 |
| K1148.604 | stainless steel A4 | 70    | M4  | 7,66  | 5  | 2,9  | 7   |
| K1148.605 | stainless steel A4 | 70    | M5  | 8,79  | 5  | 3,2  | 8   |
| K1148.606 | stainless steel A4 | 70    | M6  | 11,05 | 6  | 4    | 10  |
| K1148.608 | stainless steel A4 | 70    | M8  | 14,38 | 8  | 5,5  | 13  |
| K1148.610 | stainless steel A4 | 70    | M10 | 18,9  | 10 | 6,5  | 17  |
| K1148.612 | stainless steel A4 | 70    | M12 | 21,1  | 12 | 8    | 19  |
| K1148.614 | stainless steel A4 | 70    | M14 | 23,9  | 14 | 9,5  | 22  |
| K1148.616 | stainless steel A4 | 70    | M16 | 26,76 | 16 | 10,5 | 24  |
| K1148.620 | stainless steel A4 | 70    | M20 | 32,95 | 20 | 14   | 30  |
| K1148.624 | stainless steel A4 | 70    | M24 | 39,55 | 24 | 15   | 36  |
| K1148.627 | stainless steel A4 | 70    | M27 | 45,2  | 27 | 17   | 41  |
| K1148.630 | stainless steel A4 | 70    | M30 | 50,85 | 30 | 19   | 46  |

## Hexagon nuts with thread lock

DIN 980

**Material:**

Steel or stainless steel A2.

**Version:**

Electro zinc-plated steel.

Bright stainless steel.

**Sample order:**

K1146.204

**Note:**

Hexagon nuts with thread lock DIN 980, Form V (all-metal nut, one piece).

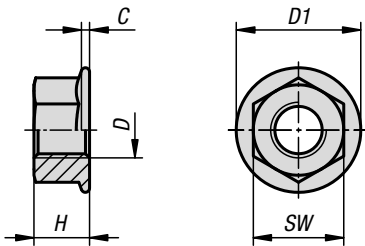
## KIPP Hexagon nuts with thread lock DIN 980

| Order No.<br>steel<br>Grade 8 | Order No.<br>steel<br>Grade 10 | D   | E        | H   | M    | SW |
|-------------------------------|--------------------------------|-----|----------|-----|------|----|
| K1146.204                     | -                              | M4  | 7,66     | 4,2 | 2,2  | 7  |
| K1146.205                     | -                              | M5  | 8,79     | 5,1 | 2,75 | 8  |
| K1146.206                     | -                              | M6  | 11,05    | 6   | 3,3  | 10 |
| K1146.208                     | K1146.308                      | M8  | 14,38    | 8   | 4,4  | 13 |
| K1146.210                     | K1146.310                      | M10 | 18,9     | 10  | 5,5  | 17 |
| K1146.212                     | K1146.312                      | M12 | 21,1     | 12  | 6,6  | 19 |
| K1146.214                     | K1146.314                      | M14 | 23,9     | 14  | 7,7  | 22 |
| K1146.216                     | K1146.316                      | M16 | 26,76    | 16  | 8,8  | 24 |
| K1146.220                     | K1146.320                      | M20 | 32,95    | 20  | 11   | 30 |
| K1146.224                     | K1146.324                      | M24 | 39,55/35 | 24  | 13,2 | 36 |
| K1146.227                     | K1146.327                      | M27 | 45,2     | 27  | 14,8 | 41 |
| K1146.230                     | K1146.330                      | M30 | 50,85    | 30  | 16,5 | 46 |

| Order No. | Main<br>material   | Grade | D   | E     | H   | M    | SW |
|-----------|--------------------|-------|-----|-------|-----|------|----|
| K1146.104 | stainless steel A2 | 70    | M4  | 7,66  | 4,2 | 2,2  | 7  |
| K1146.105 | stainless steel A2 | 70    | M5  | 8,79  | 5,1 | 2,75 | 8  |
| K1146.106 | stainless steel A2 | 70    | M6  | 11,05 | 6   | 3,3  | 10 |
| K1146.108 | stainless steel A2 | 70    | M8  | 14,38 | 8   | 4,4  | 13 |
| K1146.110 | stainless steel A2 | 70    | M10 | 18,9  | 10  | 5,5  | 17 |
| K1146.112 | stainless steel A2 | 70    | M12 | 21,1  | 12  | 6,6  | 19 |
| K1146.114 | stainless steel A2 | 70    | M14 | 23,9  | 14  | 7,7  | 22 |
| K1146.116 | stainless steel A2 | 70    | M16 | 26,76 | 16  | 8,8  | 24 |
| K1146.120 | stainless steel A2 | 70    | M20 | 32,95 | 20  | 11   | 30 |
| K1146.124 | stainless steel A2 | 70    | M24 | 39,55 | 24  | 13,2 | 36 |

## Hexagon nuts with flange

EN 1661

**Material:**

Steel, stainless steel A2 or stainless steel A4.

**Version:**

Steel grade 8, electro zinc-plated.

Stainless steel A2, bright.

Stainless steel A4, bright.

**Sample order:**

K1797.605

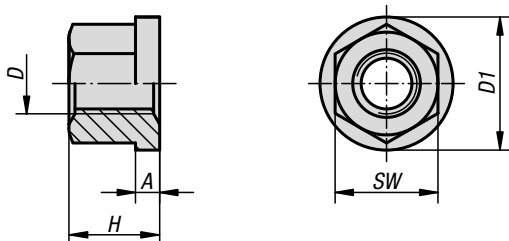


## KIPP Hexagon nuts with flange EN 1661

| Order No.<br>steel | Order No.<br>stainless steel A2 | Order No.<br>stainless steel A4 | D   | D1   | C   | H    | SW |
|--------------------|---------------------------------|---------------------------------|-----|------|-----|------|----|
| K1797.204          | K1797.104                       | -                               | M4  | 10   | 0,9 | 4,65 | 7  |
| K1797.205          | K1797.105                       | K1797.605                       | M5  | 11,8 | 1   | 5    | 8  |
| K1797.206          | K1797.106                       | K1797.606                       | M6  | 14,2 | 1,1 | 6    | 10 |
| K1797.208          | K1797.108                       | K1797.608                       | M8  | 17,9 | 1,2 | 8    | 13 |
| K1797.210          | K1797.110                       | K1797.610                       | M10 | 21,8 | 1,5 | 10   | 15 |
| K1797.212          | K1797.112                       | K1797.612                       | M12 | 26   | 1,8 | 12   | 18 |
| K1797.216          | -                               | -                               | M16 | 34,5 | 2,4 | 16   | 24 |
| K1797.220          | -                               | -                               | M20 | 42,8 | 3   | 20   | 30 |

# Hexagon nuts with collar

height 1.5xD, DIN 6331 enhanced


**Material:**

High-carbon steel, stainless steel A2 or A4.

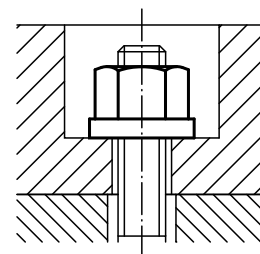
**Version:**

Steel grade 10, bright (blackened).

Stainless steel bright.

**Sample order:**

K0701.16



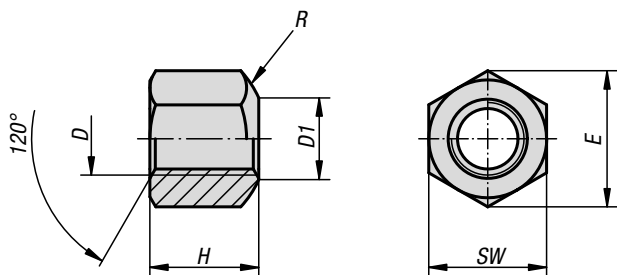
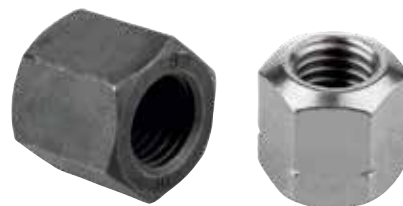
## KIPP Hexagon nuts with collar height 1.5xD, DIN 6331 enhanced

| Order No.<br>high carbon steel | Order No.<br>stainless steel A2 | Order No.<br>stainless steel A4 | D   | H = 1,5 x D | A   | D1 | SW |
|--------------------------------|---------------------------------|---------------------------------|-----|-------------|-----|----|----|
| K0701.05                       | -                               | -                               | M5  | 7,5         | 2   | 12 | 9  |
| K0701.06                       | K0701.806                       | -                               | M6  | 9           | 3   | 14 | 10 |
| K0701.08                       | K0701.808                       | K0701.908                       | M8  | 12          | 3,5 | 18 | 13 |
| K0701.10                       | K0701.810                       | -                               | M10 | 15          | 4   | 22 | 16 |
| K0701.101                      | K0701.811                       | K0701.910                       | M10 | 15          | 4   | 22 | 17 |
| K0701.12                       | K0701.812                       | -                               | M12 | 18          | 4   | 25 | 18 |
| K0701.121                      | K0701.8121                      | K0701.912                       | M12 | 18          | 4   | 25 | 19 |
| K0701.14                       | -                               | -                               | M14 | 21          | 4,5 | 28 | 22 |
| K0701.16                       | K0701.816                       | K0701.916                       | M16 | 24          | 5   | 31 | 24 |
| K0701.18                       | -                               | -                               | M18 | 27          | 5   | 34 | 27 |
| K0701.20                       | K0701.820                       | K0701.920                       | M20 | 30          | 6   | 37 | 30 |
| K0701.22                       | -                               | -                               | M22 | 33          | 6   | 40 | 34 |
| K0701.24                       | -                               | -                               | M24 | 36          | 6   | 45 | 36 |
| K0701.30                       | -                               | -                               | M30 | 45          | 8   | 58 | 46 |
| K0701.36                       | -                               | -                               | M36 | 54          | 10  | 68 | 55 |



# Hexagon nuts

height 1.5xD, DIN 6330 enhanced


**Material:**

Carbon steel or stainless steel A2.

**Version:**

Steel grade 10, bright (blackened).

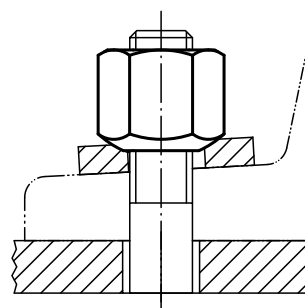
Stainless steel A2-70, bright

**Sample order:**

K0702.12

**Note:**

These hexagon nuts can be used with the conical seats K0729, Form D and G.



## KIPP Hexagon nuts height 1.5xD, DIN 6330 enhanced

| Order No. | Main material      | D   | H = 1,5 x D | D1   | SW | E    | R    |
|-----------|--------------------|-----|-------------|------|----|------|------|
| K0702.05  | high carbon steel  | M5  | 7,5         | 6,5  | 9  | 10,4 | 7    |
| K0702.06  | high carbon steel  | M6  | 9           | 7    | 10 | 11,5 | 9    |
| K0702.08  | high carbon steel  | M8  | 12          | 9    | 13 | 15   | 11   |
| K0702.10  | high carbon steel  | M10 | 15          | 11,5 | 16 | 18,4 | 15   |
| K0702.101 | high carbon steel  | M10 | 15          | 11,5 | 17 | 19,6 | 15   |
| K0702.12  | high carbon steel  | M12 | 18          | 14   | 18 | 20,7 | 17   |
| K0702.121 | high carbon steel  | M12 | 18          | 14   | 19 | 21,9 | 17   |
| K0702.14  | high carbon steel  | M14 | 21          | 16   | 22 | 25,4 | 20   |
| K0702.16  | high carbon steel  | M16 | 24          | 18   | 24 | 27,7 | 22   |
| K0702.18  | high carbon steel  | M18 | 27          | 20   | 27 | 31,2 | 24,5 |
| K0702.20  | high carbon steel  | M20 | 30          | 22   | 30 | 34,6 | 27   |
| K0702.22  | high carbon steel  | M22 | 33          | 24   | 32 | 36,9 | 29   |
| K0702.24  | high carbon steel  | M24 | 36          | 26   | 36 | 41,6 | 32   |
| K0702.30  | high carbon steel  | M30 | 45          | 32   | 46 | 53,1 | 41   |
| K0702.36  | high carbon steel  | M36 | 54          | 38   | 55 | 63,5 | 50   |
| K0702.806 | stainless steel A2 | M6  | 9           | 7    | 10 | 11,5 | 9    |
| K0702.808 | stainless steel A2 | M8  | 12          | 9    | 13 | 15   | 11   |
| K0702.810 | stainless steel A2 | M10 | 15          | 11,5 | 16 | 18,4 | 15   |
| K0702.811 | stainless steel A2 | M10 | 15          | 11,5 | 17 | 19,6 | 15   |
| K0702.812 | stainless steel A2 | M12 | 18          | 14   | 18 | 20,7 | 17   |
| K0702.816 | stainless steel A2 | M16 | 24          | 18   | 24 | 27,7 | 22   |
| K0702.820 | stainless steel A2 | M20 | 30          | 22   | 30 | 34,6 | 27   |

## Hexagon nuts

with spherical seat



### Material:

Carbon steel or stainless steel A2.

### Version:

Steel version:

tempered to 900 N/mm<sup>2</sup>, black oxidised.

Stainless steel version:

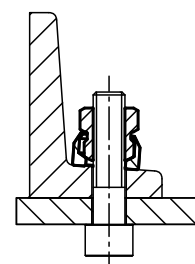
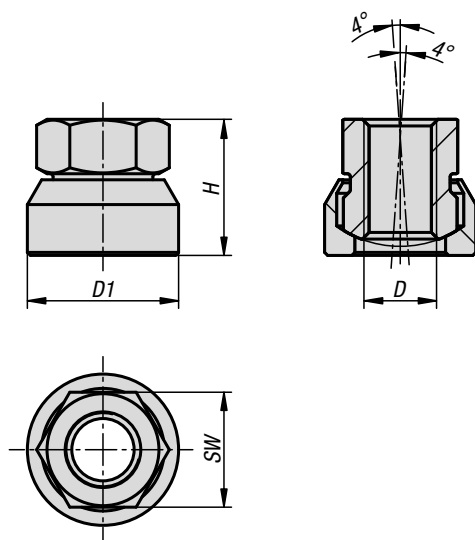
tempered to 900 N/mm<sup>2</sup>, bright.

### Sample order:

K0794.12

### Note:

Captive components (one-piece).



### KIPP Hexagon nuts with spherical seat

| Order No. | Main material      | D   | D1 | H    | SW |
|-----------|--------------------|-----|----|------|----|
| K0794.08  | steel              | M8  | 18 | 15   | 13 |
| K0794.10  | steel              | M10 | 22 | 18,5 | 17 |
| K0794.12  | steel              | M12 | 25 | 22,5 | 19 |
| K0794.16  | steel              | M16 | 31 | 29   | 24 |
| K0794.808 | stainless steel A2 | M8  | 18 | 15   | 13 |
| K0794.810 | stainless steel A2 | M10 | 22 | 18,5 | 17 |
| K0794.812 | stainless steel A2 | M12 | 25 | 22,5 | 19 |
| K0794.816 | stainless steel A2 | M16 | 31 | 29   | 24 |

# Hex cap nut, high style DIN 1587

steel or stainless steel



## Material:

Steel, stainless steel A2 or stainless steel A4.

## Version:

Steel grade 6, bright or electro zinc-plated

Stainless steel A2-70, bright

Stainless steel A4-70, bright

## Sample order:

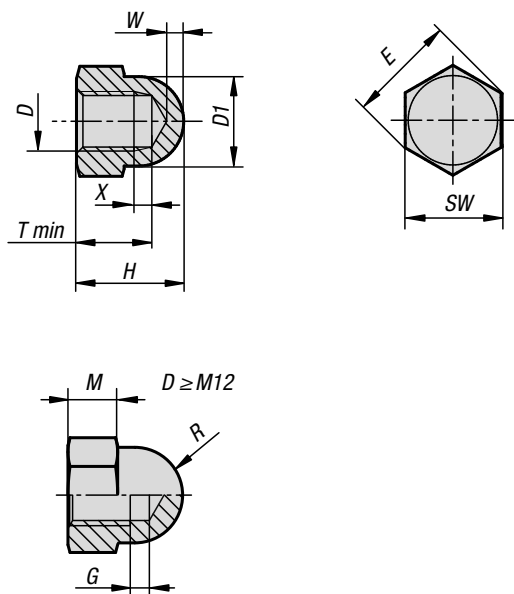
K1800.112

## Note:

Cap nuts are mainly used for decorative screw connections. The cap nut covers and protects the thread end. They are also used to protect against sharp edges on machines, equipment, fitness equipment and wherever people or objects could be injured or damaged by an exposed thread end.

## Technical data:

From size D = M12 the cap nuts have a DIN 76-1 Form D thread undercut.



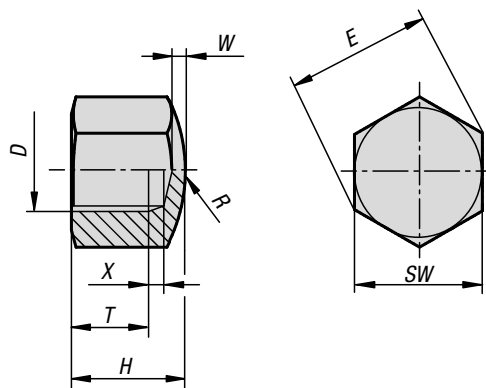
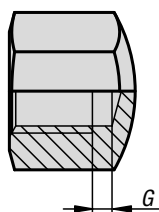
## KIPP Hex cap nut, high style DIN 1587 steel or stainless steel

| Order No.<br>steel<br>bright | Order No.<br>steel<br>galvanised | D   | D1   | T<br>min. | H  | M   | SW | E     | R    | W | X   | G    |
|------------------------------|----------------------------------|-----|------|-----------|----|-----|----|-------|------|---|-----|------|
| K1800.104                    | K1800.204                        | M4  | 6,5  | 5,26      | 8  | 3,2 | 7  | 7,66  | 3,25 | 2 | 1,4 | -    |
| K1800.105                    | K1800.205                        | M5  | 7,5  | 7,21      | 10 | 4   | 8  | 8,79  | 3,75 | 2 | 1,6 | -    |
| K1800.106                    | K1800.206                        | M6  | 9,5  | 7,71      | 12 | 5   | 10 | 11,05 | 4,75 | 2 | 2   | -    |
| K1800.108                    | K1800.208                        | M8  | 12,5 | 10,65     | 15 | 6,5 | 13 | 14,38 | 6,25 | 2 | 2,4 | -    |
| K1800.110                    | K1800.210                        | M10 | 15   | 12,65     | 18 | 8   | 17 | 18,9  | 7,5  | 2 | 3   | -    |
| K1800.112                    | K1800.212                        | M12 | 17   | 15,65     | 22 | 10  | 19 | 21,1  | 8,5  | 3 | -   | 6,4  |
| K1800.114                    | K1800.214                        | M14 | 20   | 17,65     | 25 | 11  | 22 | 23,9  | 10   | 4 | -   | 7,3  |
| K1800.116                    | K1800.216                        | M16 | 23   | 20,58     | 28 | 13  | 24 | 26,76 | 11,5 | 4 | -   | 7,3  |
| K1800.120                    | K1800.220                        | M20 | 28   | 25,58     | 34 | 16  | 30 | 32,95 | 14   | 5 | -   | 9,3  |
| K1800.124                    | K1800.224                        | M24 | 34   | 30,5      | 42 | 19  | 36 | 39,6  | 17   | 6 | -   | 10,7 |
| -                            | K1800.230                        | M30 | 44   | 39        | 50 | 24  | 46 | 50,9  | 22   | 7 | -   | 12,7 |

| Order No.<br>stainless steel A2 | Order No.<br>stainless steel A4 | D   | D1   | T<br>min. | H  | M   | SW | E     | R    | W | X   | G    |
|---------------------------------|---------------------------------|-----|------|-----------|----|-----|----|-------|------|---|-----|------|
| K1800.304                       | K1800.404                       | M4  | 6,5  | 5,26      | 8  | 3,2 | 7  | 7,66  | 3,25 | 2 | 1,4 | -    |
| K1800.305                       | K1800.405                       | M5  | 7,5  | 7,21      | 10 | 4   | 8  | 8,79  | 3,75 | 2 | 1,6 | -    |
| K1800.306                       | K1800.406                       | M6  | 9,5  | 7,71      | 12 | 5   | 10 | 11,05 | 4,75 | 2 | 2   | -    |
| K1800.308                       | K1800.408                       | M8  | 12,5 | 10,65     | 15 | 6,5 | 13 | 14,38 | 6,25 | 2 | 2,4 | -    |
| K1800.310                       | K1800.410                       | M10 | 15   | 12,65     | 18 | 8   | 17 | 18,9  | 7,5  | 2 | 3   | -    |
| K1800.312                       | K1800.412                       | M12 | 17   | 15,65     | 22 | 10  | 19 | 21,1  | 8,5  | 3 | -   | 6,4  |
| K1800.314                       | K1800.414                       | M14 | 20   | 17,65     | 25 | 11  | 22 | 23,9  | 10   | 4 | -   | 7,3  |
| K1800.316                       | K1800.416                       | M16 | 23   | 20,58     | 28 | 13  | 24 | 26,76 | 11,5 | 4 | -   | 7,3  |
| K1800.320                       | K1800.420                       | M20 | 28   | 25,58     | 34 | 16  | 30 | 32,95 | 14   | 5 | -   | 9,3  |
| K1800.324                       | K1800.424                       | M24 | 34   | 30,5      | 42 | 19  | 36 | 39,6  | 17   | 6 | -   | 10,7 |
| K1800.330                       | -                               | M30 | 44   | 39        | 50 | 24  | 46 | 50,9  | 22   | 7 | -   | 12,7 |

## Hex cap nut, low style DIN 917

steel or stainless steel

 $D \geq M10$ **Material:**

Steel, stainless steel A2 or stainless steel A4.

**Version:**

Steel grade 6, bright or electro zinc-plated

Stainless steel A2-70, bright

Stainless steel A4-70, bright

**Sample order:**

K1801.112

**Note:**

Cap nuts are mainly used for decorative screw connections. The cap nut covers and protects the thread end. They are also used to protect against sharp edges on machines, equipment, fitness equipment and wherever people or objects could be injured or damaged by an exposed thread end.

**Technical data:**

From size D = M10 the cap nuts have a DIN 76-1 Form D thread undercut.

## KIPP Hex cap nut, low style DIN 917 steel or stainless steel

| Order No.<br>steel<br>bright | Order No.<br>steel<br>galvanised | D   | T<br>min. | H   | SW | E     | R  | W   | X    | G    |
|------------------------------|----------------------------------|-----|-----------|-----|----|-------|----|-----|------|------|
| K1801.104                    | K1801.204                        | M4  | 4,16      | 5,5 | 7  | 7,66  | 8  | 1   | 1,05 | -    |
| K1801.105                    | K1801.205                        | M5  | 4,96      | 7   | 8  | 8,79  | 10 | 1   | 1,2  | -    |
| K1801.106                    | K1801.206                        | M6  | 6,71      | 9   | 10 | 11,05 | 12 | 1,5 | 1,5  | -    |
| K1801.108                    | K1801.208                        | M8  | 9,21      | 12  | 13 | 14,38 | 15 | 2   | 1,87 | -    |
| K1801.110                    | K1801.210                        | M10 | 10,65     | 14  | 17 | 18,9  | 20 | 2   | -    | 2,25 |
| K1801.112                    | K1801.212                        | M12 | 13,15     | 16  | 19 | 21,1  | 25 | 2   | -    | 6,4  |
| K1801.116                    | K1801.216                        | M16 | 16,65     | 20  | 24 | 26,76 | 30 | 2   | -    | 7,3  |
| K1801.120                    | K1801.220                        | M20 | 20,58     | 25  | 30 | 32,95 | 35 | 2,5 | -    | 9,3  |
| K1801.124                    | K1801.224                        | M24 | 23,58     | 30  | 36 | 39,6  | 40 | 3   | -    | 10,7 |
| K1801.130                    | K1801.230                        | M30 | 27,58     | 34  | 46 | 50,9  | 60 | 3   | -    | 12,7 |

| Order No.<br>stainless steel A2 | Order No.<br>stainless steel A4 | D   | T<br>min. | H   | SW | E     | R  | W   | X    | G    |
|---------------------------------|---------------------------------|-----|-----------|-----|----|-------|----|-----|------|------|
| K1801.304                       | K1801.404                       | M4  | 4,16      | 5,5 | 7  | 7,66  | 8  | 1   | 1,05 | -    |
| K1801.305                       | K1801.405                       | M5  | 4,96      | 7   | 8  | 8,79  | 10 | 1   | 1,2  | -    |
| K1801.306                       | K1801.406                       | M6  | 6,71      | 9   | 10 | 11,05 | 12 | 1,5 | 1,5  | -    |
| K1801.308                       | K1801.408                       | M8  | 9,21      | 12  | 13 | 14,38 | 15 | 2   | 1,87 | -    |
| K1801.310                       | K1801.410                       | M10 | 10,65     | 14  | 17 | 18,9  | 20 | 2   | -    | 2,25 |
| K1801.312                       | K1801.412                       | M12 | 13,15     | 16  | 19 | 21,1  | 25 | 2   | -    | 6,4  |
| K1801.316                       | K1801.416                       | M16 | 16,65     | 20  | 24 | 26,76 | 30 | 2   | -    | 7,3  |
| K1801.320                       | K1801.420                       | M20 | 20,58     | 25  | 30 | 32,95 | 35 | 2,5 | -    | 9,3  |
| K1801.324                       | -                               | M24 | 23,58     | 30  | 36 | 39,6  | 40 | 3   | -    | 10,7 |
| K1801.330                       | -                               | M30 | 27,58     | 34  | 46 | 50,9  | 60 | 3   | -    | 12,7 |

# Washers

medium, DIN EN ISO 7089 A


**Material:**

Steel, stainless steel A2 or stainless steel A4.

**Version:**

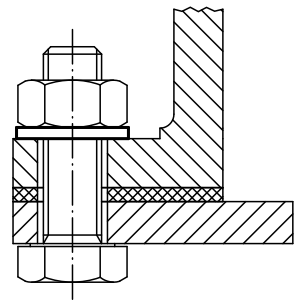
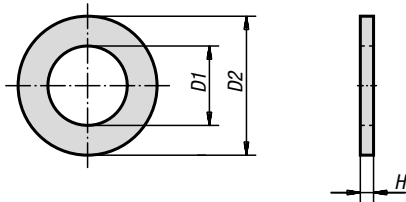
Steel, bright.

Stainless steel A2, bright.

Stainless steel A4, bright.

**Sample order:**

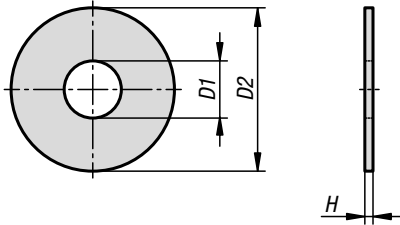
K0868.10


**KIPP Medium washers DIN EN ISO 7089 A**

| Order No.<br>steel | Order No.<br>stainless steel A2 | Order No.<br>stainless steel A4 | for<br>screws | D1   | D2 | H   |
|--------------------|---------------------------------|---------------------------------|---------------|------|----|-----|
| K0868.03           | K0868.103                       | K0868.603                       | M3            | 3,2  | 7  | 0,5 |
| K0868.04           | K0868.104                       | K0868.604                       | M4            | 4,3  | 9  | 0,8 |
| K0868.05           | K0868.105                       | K0868.605                       | M5            | 5,3  | 10 | 1   |
| K0868.06           | K0868.106                       | K0868.606                       | M6            | 6,4  | 12 | 1,6 |
| K0868.08           | K0868.108                       | K0868.608                       | M8            | 8,4  | 16 | 1,6 |
| K0868.10           | K0868.110                       | K0868.610                       | M10           | 10,5 | 20 | 2   |
| K0868.12           | K0868.112                       | K0868.612                       | M12           | 13   | 24 | 2,5 |
| K0868.14           | K0868.114                       | K0868.614                       | M14           | 15   | 28 | 2,5 |
| K0868.16           | K0868.116                       | K0868.616                       | M16           | 17   | 30 | 3   |
| K0868.20           | K0868.120                       | K0868.620                       | M20           | 21   | 37 | 3   |
| K0868.24           | K0868.124                       | K0868.624                       | M24           | 25   | 44 | 4   |
| K0868.30           | K0868.130                       | K0868.630                       | M30           | 31   | 56 | 4   |
| K0868.36           | K0868.136                       | K0868.636                       | M36           | 37   | 66 | 5   |

## Washers with large OD

DIN 9021

**Material:**

Steel, stainless steel A2 or stainless steel A4.

**Version:**

Steel electro zinc-plated, hardness

D1 ≤ 14 = 140 HV.

D1 &gt; 17 = 100 HV.

Stainless steel A2, bright.

Stainless steel A4, bright.

**Sample order:**

K1150.03

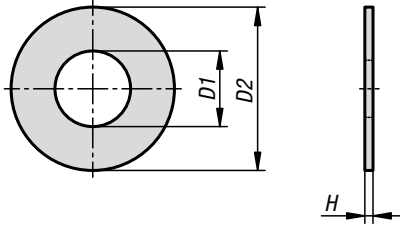
**Note:**The pulleys have an OD of  $D2 = \sim 3 \times D1$ .

## KIPP Washers with large OD DIN 9021

| Order No.<br>steel | Order No.<br>stainless steel A2 | Order No.<br>stainless steel A4 | for<br>screws | D1   | D2 | H   |
|--------------------|---------------------------------|---------------------------------|---------------|------|----|-----|
| K1150.03           | K1150.103                       | K1150.603                       | M3            | 3,2  | 9  | 0,8 |
| K1150.04           | K1150.104                       | K1150.604                       | M4            | 4,3  | 12 | 1   |
| K1150.05           | K1150.105                       | K1150.605                       | M5            | 5,3  | 15 | 1,2 |
| K1150.06           | K1150.106                       | K1150.606                       | M6            | 6,4  | 18 | 1,6 |
| K1150.08           | K1150.108                       | K1150.608                       | M8            | 8,4  | 24 | 2   |
| K1150.10           | K1150.110                       | K1150.610                       | M10           | 10,5 | 30 | 2,5 |
| K1150.12           | K1150.112                       | K1150.612                       | M12           | 13   | 37 | 3   |
| K1150.14           | K1150.114                       | K1150.614                       | M14           | 15   | 44 | 3   |
| K1150.16           | K1150.116                       | K1150.616                       | M16           | 17   | 50 | 3   |
| K1150.18           | K1150.118                       | K1150.618                       | M18           | 20   | 56 | 4   |
| K1150.20           | K1150.120                       | K1150.620                       | M20           | 22   | 60 | 4   |
| K1150.24           | K1150.124                       | K1150.624                       | M24           | 26   | 72 | 5   |
| K1150.30           | -                               | -                               | M30           | 33   | 92 | 6   |

## Shim washers

DIN 988

**Material:**

Steel.

**Version:**

Bright.

**Sample order:**

K1151.0306010

(include dimension H e.g. 010 for H = 0,1 mm)

**Note:**

With shim washers, an existing axial backlash can be significantly reduced. They are available with a thicknesses from 0.1 mm. Any thicknesses can be made by combining several shim washers.

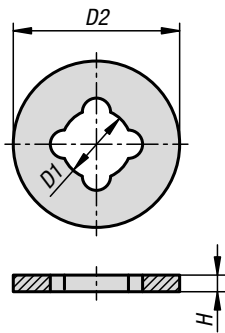
## KIPP Shim washers DIN 988



| Order No.     | Main material | D1 | D2 | H                                     |
|---------------|---------------|----|----|---------------------------------------|
| K1151.0306*** | steel         | 3  | 6  | 0,1/0,15/0,2/0,25/0,3/0,5/1           |
| K1151.0408*** | steel         | 4  | 8  | 0,1/0,15/0,2/0,3/0,5/1                |
| K1151.0510*** | steel         | 5  | 10 | 0,1/0,15/0,2/0,25/0,3/0,5/1           |
| K1151.0612*** | steel         | 6  | 12 | 0,1/0,2/0,25/0,3/0,5/1                |
| K1151.0713*** | steel         | 7  | 13 | 0,1/0,2/0,3/0,5/1                     |
| K1151.0814*** | steel         | 8  | 14 | 0,1/0,15/0,2/0,25/0,3/0,5/1           |
| K1151.0915*** | steel         | 9  | 15 | 0,1/0,15/0,2/0,3/0,5/1                |
| K1151.1016*** | steel         | 10 | 16 | 0,1/0,15/0,2/0,25/0,3/0,5/1           |
| K1151.1117*** | steel         | 11 | 17 | 0,1/0,2/0,25/0,3/0,5/1                |
| K1151.1218*** | steel         | 12 | 18 | 0,1/0,15/0,2/0,25/0,3/0,5/1           |
| K1151.1319*** | steel         | 13 | 19 | 0,1/0,15/0,2/0,25/0,3/0,5/1           |
| K1151.1420*** | steel         | 14 | 20 | 0,1/0,15/0,2/0,25/0,3/0,5/1           |
| K1151.1521*** | steel         | 15 | 21 | 0,1/0,15/0,2/0,25/0,3/0,5/1/1,2       |
| K1151.1622*** | steel         | 16 | 22 | 0,15/0,2/0,25/0,3/0,5/1/1,2           |
| K1151.1724*** | steel         | 17 | 24 | 0,1/0,15/0,2/0,25/0,3/0,5/1/1,2       |
| K1151.1825*** | steel         | 18 | 25 | 0,1/0,15/0,2/0,25/0,3/0,5/1/1,2       |
| K1151.1926*** | steel         | 19 | 26 | 0,1/0,15/0,2/0,25/0,3/0,5/1/1,2       |
| K1151.2028*** | steel         | 20 | 28 | 0,1/0,15/0,2/0,25/0,3/0,5/1/1,2/1,5   |
| K1151.2230*** | steel         | 22 | 30 | 0,1/0,15/0,2/0,25/0,3/0,5/1/1,2/1,5   |
| K1151.2535*** | steel         | 25 | 35 | 0,1/0,15/0,2/0,25/0,3/0,5/1/1,2/1,5   |
| K1151.2637*** | steel         | 26 | 37 | 0,1/0,15/0,2/0,25/0,3/0,5/1/1,2/1,5   |
| K1151.2840*** | steel         | 28 | 40 | 0,1/0,15/0,2/0,25/0,3/0,5/1/1,2/1,5   |
| K1151.3042*** | steel         | 30 | 42 | 0,1/0,15/0,2/0,25/0,3/0,5/1/1,2/1,5/2 |
| K1151.3245*** | steel         | 32 | 45 | 0,1/0,15/0,2/0,25/0,3/0,5/1/1,2/1,5/2 |
| K1151.3545*** | steel         | 35 | 45 | 0,1/0,15/0,2/0,25/0,3/0,5/1/1,2/1,5/2 |
| K1151.3645*** | steel         | 36 | 45 | 0,1/0,15/0,2/0,25/0,3/0,5/1/1,2/1,5/2 |
| K1151.3747*** | steel         | 37 | 47 | 0,1/0,15/0,2/0,25/0,3/0,5/1/1,2/1,5/2 |
| K1151.4050*** | steel         | 40 | 50 | 0,1/0,15/0,2/0,25/0,3/0,5/1/1,2/1,5/2 |
| K1151.4252*** | steel         | 42 | 52 | 0,1/0,15/0,2/0,25/0,3/0,5/1/1,2/1,5/2 |
| K1151.4555*** | steel         | 45 | 55 | 0,1/0,15/0,2/0,25/0,3/0,5/1/1,2/1,5/2 |
| K1151.4860*** | steel         | 48 | 60 | 0,1/0,15/0,2/0,25/0,3/0,5/1/1,2/1,5/2 |
| K1151.5062*** | steel         | 50 | 62 | 0,1/0,15/0,2/0,25/0,3/0,5/1/1,2/1,5/2 |

# Washers plastic

captive


**Material:**

Polyamide.

**Version:**

white.

**Sample order:**

K1526.05

**Note:**

The washers are vibration dampers and protect the screw connection during e.g. pre-assembly. The washers also protect the surface from damage. Only suitable for threads with undercut i.e. ring bolts

**Application:**

Press or twist the washers over the thread.

**Attention:**

When shim washers with rings bolts are used, the forces specified for the ring bolts cannot be guaranteed.



## KIPP Captive washers, plastic

| Order No. | D1   | D2 | G   | H   |
|-----------|------|----|-----|-----|
| K1526.05  | 4,3  | 10 | M5  | 0,5 |
| K1526.06  | 5,1  | 12 | M6  | 0,5 |
| K1526.08  | 6,2  | 14 | M8  | 0,5 |
| K1526.10  | 8,4  | 20 | M10 | 1   |
| K1526.12  | 9,8  | 20 | M12 | 1   |
| K1526.16  | 13,5 | 28 | M16 | 1   |



## C-washers

DIN 6372 enhanced



**Material:**

Carbon steel.

**Version:**

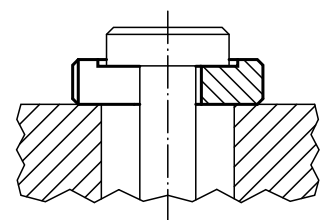
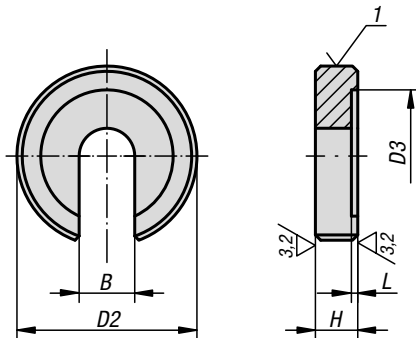
Tempered and black oxidised.

**Sample order:**

K0730.12

**Drawing reference:**

1) cross knurl

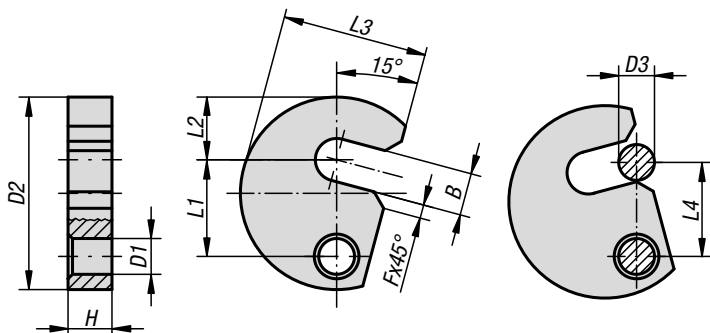


### KIPP C-washers for fixtures DIN 6372 enhanced

| Order No. | B    | D2  | D3 | H  | L    |
|-----------|------|-----|----|----|------|
| K0730.05  | 5,25 | 17  | 12 | 5  | 0,75 |
| K0730.06  | 6,4  | 22  | 16 | 6  | 0,8  |
| K0730.08  | 8,4  | 28  | 21 | 7  | 1    |
| K0730.10  | 10,5 | 34  | 25 | 8  | 1,2  |
| K0730.12  | 13   | 40  | 30 | 9  | 1,8  |
| K0730.14  | 14,5 | 48  | 33 | 12 | 1,8  |
| K0730.16  | 17   | 56  | 37 | 12 | 1,8  |
| K0730.20  | 21   | 64  | 45 | 14 | 2    |
| K0730.24  | 25   | 75  | 52 | 16 | 2    |
| K0730.30  | 31   | 90  | 65 | 18 | 2    |
| K0730.36  | 37   | 100 | 75 | 20 | 2,5  |

## C-washers captive

DIN 6371



**Material:**  
Carbon steel 1.0760.

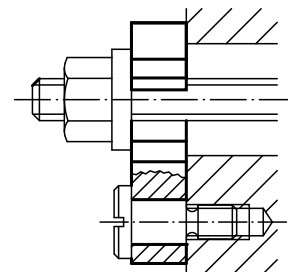
**Version:**  
Nitrided and black oxidised.

**Sample order:**  
K0703.12

**Note:**  
K0703.14 is not standard. Suitable shoulder screws see K0704.

### KIPP C-washers captive DIN 6371

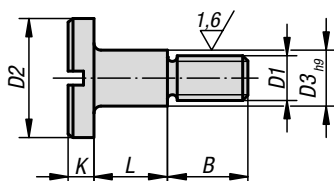
| Order No. | B    | D1 | D2 | D3 | F | H    | L1   | L2 | L3   | L4 |
|-----------|------|----|----|----|---|------|------|----|------|----|
| K0703.06  | 7,5  | 9  | 38 | 6  | 3 | 9,8  | 19,6 | 11 | 29   | 19 |
| K0703.08  | 9,5  | 9  | 43 | 8  | 3 | 9,8  | 21,6 | 14 | 32,5 | 21 |
| K0703.10  | 11,5 | 9  | 48 | 10 | 3 | 9,8  | 23,6 | 17 | 36,5 | 23 |
| K0703.12  | 13,5 | 11 | 61 | 12 | 3 | 11,8 | 29,6 | 22 | 45   | 29 |
| K0703.14  | 15,5 | 11 | 65 | 14 | 3 | 11,8 | 31,6 | 23 | 49   | 31 |
| K0703.16  | 17,5 | 11 | 68 | 16 | 3 | 11,8 | 33,6 | 25 | 50   | 33 |
| K0703.20  | 21,5 | 11 | 74 | 20 | 4 | 11,8 | 36,6 | 28 | 55   | 36 |



# K0704

## Shoulder screws with slotted flat head

DIN 923



**Material:**  
Steel.

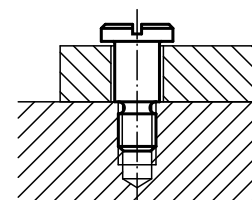
**Version:**  
Black oxidised, grade 5.8.

**Sample order:**  
K0704.08

**Note:**  
For use with captive C-washers K0703.

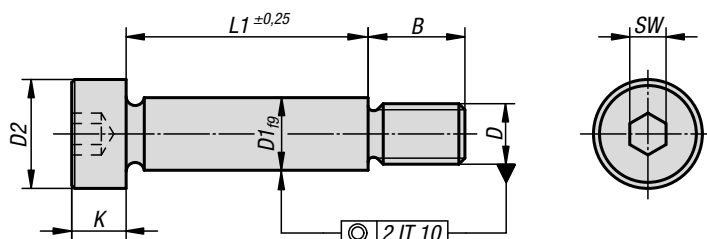
### KIPP Shoulder screws with slotted flat head DIN 923

| Order No. | D1  | D2 | D3 | L              | B    | K   |
|-----------|-----|----|----|----------------|------|-----|
| K0704.06  | M6  | 13 | 8  | 10 +0,15/+0,07 | 9    | 3,1 |
| K0704.08  | M8  | 16 | 10 | 12 +0,2/+0,1   | 11   | 3,8 |
| K0704.10  | M10 | 20 | 13 | 16 +0,2/+0,1   | 13,5 | 4,6 |



# Shoulder screws

similar to DIN ISO 7379



## Material:

Steel or stainless steel A2.

## Version:

Grade 12.9. Shaft OD ground and bright.  
Bright stainless steel or tempered steel.

## Sample order:

K0705.06X20 (include length L1)

## Note:

Hexagon socket head shoulder screws are precision construction elements for many applications. As they can simplify complicated constructions, they are frequently chosen as the most cost-effective solution. Shoulder screws provide the decisive rationalising effect required today.

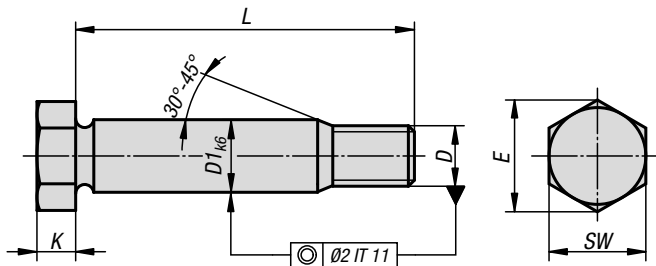


## KIPP Shoulder screws similar to ISO 7379

| Order No.  | Main material      | D1 | D   | D2 | B   | K   | SW  | L1                                |
|------------|--------------------|----|-----|----|-----|-----|-----|-----------------------------------|
| K0705.04X  | steel              | 4  | M3  | 7  | 7   | 3   | 2   | 6/8/10/12/16/20                   |
| K0705.05X  | steel              | 5  | M4  | 9  | 8   | 4   | 2,5 | 8/10/16/20/30/40                  |
| K0705.06X  | steel              | 6  | M5  | 10 | 9,5 | 4,5 | 3   | 16/20/25/30/40/50/60              |
| K0705.08X  | steel              | 8  | M6  | 13 | 11  | 5,5 | 4   | 16/20/25/30/40/50/60              |
| K0705.10X  | steel              | 10 | M8  | 16 | 13  | 7   | 5   | 16/20/25/30/40/50/60/70/80        |
| K0705.12X  | steel              | 12 | M10 | 18 | 16  | 9   | 6   | 16/20/25/30/40/50/60/70/80/90/100 |
| K0705.16X  | steel              | 16 | M12 | 24 | 18  | 11  | 8   | 30/40/50/60/70/80/90/100/120      |
| K0705.20X  | steel              | 20 | M16 | 30 | 22  | 14  | 10  | 30/40/50/60/70/80/90/100/120      |
| K0705.104X | stainless steel A2 | 4  | M3  | 7  | 7   | 3   | 2   | 6/8/10/16/20                      |
| K0705.105X | stainless steel A2 | 5  | M4  | 9  | 8   | 4   | 2,5 | 8/10/16/20/30/40                  |
| K0705.106X | stainless steel A2 | 6  | M5  | 10 | 9,5 | 4,5 | 3   | 16/20/25/30/40/50/60              |
| K0705.108X | stainless steel A2 | 8  | M6  | 13 | 11  | 5,5 | 4   | 16/20/25/30/40/50/60              |
| K0705.110X | stainless steel A2 | 10 | M8  | 16 | 13  | 7   | 5   | 16/20/25/30/40/50/60/70/80        |
| K0705.112X | stainless steel A2 | 12 | M10 | 18 | 16  | 9   | 6   | 16/20/25/30/40/50/60/70/80/90/100 |
| K0705.116X | stainless steel A2 | 16 | M12 | 24 | 18  | 11  | 8   | 30/40/50/60/70/80/90/100/120      |
| K0705.120X | stainless steel A2 | 20 | M16 | 30 | 22  | 14  | 10  | 30/40/50/60/70/80/90/100/120      |

## Shoulder screws

with hexagon head similar to DIN 609



**Material:**  
Steel.

**Version:**  
Grade 8.8, black oxidised.  
Shaft OD ground.

**Sample order:**  
K0706.09X40 (include length L)

**Note:**  
Shoulder screws are used if the screw connection is subjected to transverse forces or if workpieces must be positioned relative to each other.

### KIPP Shoulder screws with hexagon head, similar to DIN 609

| Order No.    | D1 | D   | E     | K   | L   | SW |
|--------------|----|-----|-------|-----|-----|----|
| K0706.09X25  | 9  | M8  | 14,38 | 5,3 | 25  | 13 |
| K0706.09X30  | 9  | M8  | 14,38 | 5,3 | 30  | 13 |
| K0706.09X35  | 9  | M8  | 14,38 | 5,3 | 35  | 13 |
| K0706.09X40  | 9  | M8  | 14,38 | 5,3 | 40  | 13 |
| K0706.09X45  | 9  | M8  | 14,38 | 5,3 | 45  | 13 |
| K0706.09X50  | 9  | M8  | 14,38 | 5,3 | 50  | 13 |
| K0706.09X60  | 9  | M8  | 14,38 | 5,3 | 60  | 13 |
| K0706.11X30  | 11 | M10 | 17,77 | 6,4 | 30  | 17 |
| K0706.11X35  | 11 | M10 | 17,77 | 6,4 | 35  | 17 |
| K0706.11X40  | 11 | M10 | 17,77 | 6,4 | 40  | 17 |
| K0706.11X45  | 11 | M10 | 17,77 | 6,4 | 45  | 17 |
| K0706.11X50  | 11 | M10 | 17,77 | 6,4 | 50  | 17 |
| K0706.11X60  | 11 | M10 | 17,77 | 6,4 | 60  | 17 |
| K0706.11X70  | 11 | M10 | 17,77 | 6,4 | 70  | 17 |
| K0706.11X80  | 11 | M10 | 17,77 | 6,4 | 80  | 17 |
| K0706.11X90  | 11 | M10 | 17,77 | 6,4 | 90  | 17 |
| K0706.11X100 | 11 | M10 | 17,77 | 6,4 | 100 | 17 |

# Shoulder screws

with hexagon head similar to DIN 609

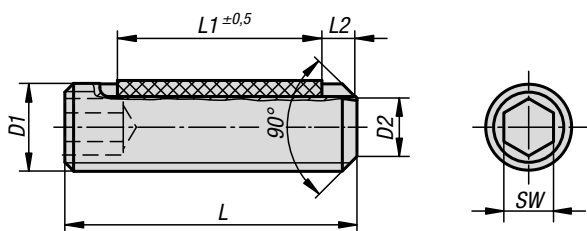
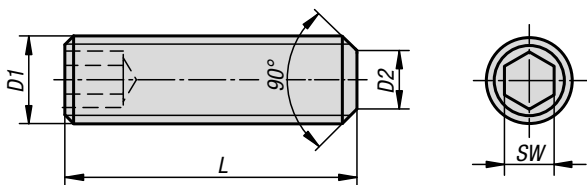


## KIPP Shoulder screws with hexagon head, similar to DIN 609

| Order No.    | D1 | D   | E     | K    | L   | SW |
|--------------|----|-----|-------|------|-----|----|
| K0706.13X35  | 13 | M12 | 19,85 | 7,5  | 35  | 19 |
| K0706.13X40  | 13 | M12 | 19,85 | 7,5  | 40  | 19 |
| K0706.13X45  | 13 | M12 | 19,85 | 7,5  | 45  | 19 |
| K0706.13X50  | 13 | M12 | 19,85 | 7,5  | 50  | 19 |
| K0706.13X60  | 13 | M12 | 19,85 | 7,5  | 60  | 19 |
| K0706.13X70  | 13 | M12 | 19,85 | 7,5  | 70  | 19 |
| K0706.13X80  | 13 | M12 | 19,85 | 7,5  | 80  | 19 |
| K0706.13X90  | 13 | M12 | 19,85 | 7,5  | 90  | 19 |
| K0706.13X100 | 13 | M12 | 19,85 | 7,5  | 100 | 19 |
| K0706.17X40  | 17 | M16 | 26,17 | 10   | 40  | 24 |
| K0706.17X45  | 17 | M16 | 26,17 | 10   | 45  | 24 |
| K0706.17X50  | 17 | M16 | 26,17 | 10   | 50  | 24 |
| K0706.17X60  | 17 | M16 | 26,17 | 10   | 60  | 24 |
| K0706.17X70  | 17 | M16 | 26,17 | 10   | 70  | 24 |
| K0706.17X80  | 17 | M16 | 26,17 | 10   | 80  | 24 |
| K0706.17X90  | 17 | M16 | 26,17 | 10   | 90  | 24 |
| K0706.17X100 | 17 | M16 | 26,17 | 10   | 100 | 24 |
| K0706.21X50  | 21 | M20 | 32,95 | 12,5 | 50  | 30 |
| K0706.21X60  | 21 | M20 | 32,95 | 12,5 | 60  | 30 |
| K0706.21X70  | 21 | M20 | 32,95 | 12,5 | 70  | 30 |
| K0706.21X80  | 21 | M20 | 32,95 | 12,5 | 80  | 30 |
| K0706.21X90  | 21 | M20 | 32,95 | 12,5 | 90  | 30 |
| K0706.21X100 | 21 | M20 | 32,95 | 12,5 | 100 | 30 |
| K0706.21X120 | 21 | M20 | 32,95 | 12,5 | 120 | 30 |
| K0706.25X60  | 25 | M24 | 39,35 | 15   | 60  | 36 |
| K0706.25X70  | 25 | M24 | 39,35 | 15   | 70  | 36 |
| K0706.25X80  | 25 | M24 | 39,35 | 15   | 80  | 36 |
| K0706.25X90  | 25 | M24 | 39,35 | 15   | 90  | 36 |
| K0706.25X100 | 25 | M24 | 39,35 | 15   | 100 | 36 |
| K0706.25X120 | 25 | M24 | 39,35 | 15   | 120 | 36 |

# Grub screws with flat point

hexagon socket DIN EN ISO 4026



## Material:

Steel or stainless steel (A 2).

Thread lock nylon.

## Version:

Steel class 45 H, black.

Stainless steel A2-70, bright.

## Sample order:

K0707.110X20 (include length L)

## Drawing reference:

L2 = approx. 2x thread pitch

## KIPP Grub screws with flat point, hexagon socket DIN EN ISO 4026

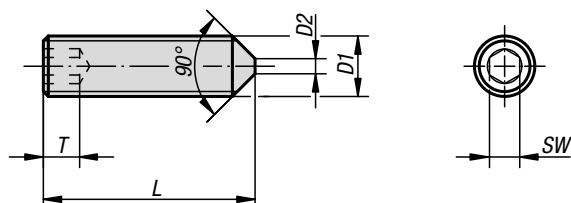
| Order No.  | Main material   | D1  | D2  | L                                             | SW  |
|------------|-----------------|-----|-----|-----------------------------------------------|-----|
| K0707.03X  | steel           | M3  | 2   | 5/6/8/10/12/16/20                             | 1,5 |
| K0707.04X  | steel           | M4  | 2,5 | 5/6/8/10/12/16/20/25                          | 2   |
| K0707.05X  | steel           | M5  | 3,5 | 5/6/8/10/12/16/20/25/30                       | 2,5 |
| K0707.06X  | steel           | M6  | 4   | 6/8/10/12/16/20/25/30/35/40/45/50/60          | 3   |
| K0707.08X  | steel           | M8  | 5,5 | 8/10/12/16/20/25/30/35/40/45/50/60/70/80      | 4   |
| K0707.10X  | steel           | M10 | 7   | 10/12/16/20/25/30/35/40/45/50/60/70/80/90/100 | 5   |
| K0707.103X | stainless steel | M3  | 2   | 5/6/8/10/12                                   | 1,5 |
| K0707.104X | stainless steel | M4  | 2,5 | 5/6/8/10/12/16/20                             | 2   |
| K0707.105X | stainless steel | M5  | 3,5 | 5/6/8/10/12/16/20/25/30                       | 2,5 |
| K0707.106X | stainless steel | M6  | 4   | 6/8/10/12/16/20/25/30/35/40                   | 3   |
| K0707.108X | stainless steel | M8  | 5,5 | 8/10/12/16/20/25/30/35/40/45/50               | 4   |
| K0707.110X | stainless steel | M10 | 7   | 10/12/16/20/25/30/35/40/45/50                 | 5   |

## KIPP Grub screws with hex socket and flat point, DIN EN ISO 4026, with thread lock

| Order No.  | Version 2        | Main material   | D1  | D2  | L               | L1              | SW  |
|------------|------------------|-----------------|-----|-----|-----------------|-----------------|-----|
| K0707.203X | with thread lock | steel           | M3  | 2   | 5/6/8/10/12     | 2/3/4/4/4       | 1,5 |
| K0707.204X | with thread lock | steel           | M4  | 2,5 | 5/6/8/10/12/16  | 2/2,5/3,5/5/5/5 | 2   |
| K0707.205X | with thread lock | steel           | M5  | 3,5 | 5/6/8/10/12/16  | 2/3/3,5/3,5/5/6 | 2,5 |
| K0707.206X | with thread lock | steel           | M6  | 4   | 6/8/10/12/16/20 | 2,5/3/3,5/5/7/7 | 3   |
| K0707.208X | with thread lock | steel           | M8  | 5,5 | 8/10/12/16/20   | 3/3,5/5/8/8     | 4   |
| K0707.210X | with thread lock | steel           | M10 | 7   | 10/12/16/20     | 5/5/9/9         | 5   |
| K0707.303X | with thread lock | stainless steel | M3  | 2   | 5/6/8/10/12     | 2/3/4/4/4       | 1,5 |
| K0707.304X | with thread lock | stainless steel | M4  | 2,5 | 5/6/8/10/12/16  | 2/2,5/3,5/5/5/5 | 2   |
| K0707.305X | with thread lock | stainless steel | M5  | 3,5 | 5/6/8/10/12/16  | 2/3/3,5/3,5/5/6 | 2,5 |
| K0707.306X | with thread lock | stainless steel | M6  | 4   | 6/8/10/12/16/20 | 2,5/3/3,5/5/7/7 | 3   |
| K0707.308X | with thread lock | stainless steel | M8  | 5,5 | 8/10/12/16/20   | 3/3,5/5/8/8     | 4   |
| K0707.310X | with thread lock | stainless steel | M10 | 7   | 10/12/16/20     | 5/5/9/9         | 5   |

# Grub screw with hexagon socket and pointed end

DIN EN ISO 4027

**Material:**

Steel or stainless steel A2.

**Version:**

Steel class 45 H, black.

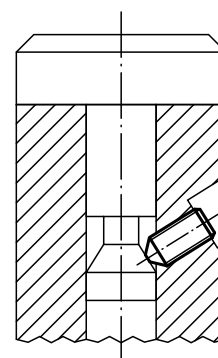
Stainless steel A2-70, bright.

**Sample order:**

K0797.110X12 (include length L)

**Note:**

By M4x5, M5x5, M5x6, M6x6, M8x8, M10x10 the point angle is 120°.



## KIPP Grub screw with hexagon socket and pointed end, DIN EN ISO 4027

| Order No.<br>steel | Order No.<br>stainless steel | D1  | D2  | L                                      | T   | SW  |
|--------------------|------------------------------|-----|-----|----------------------------------------|-----|-----|
| K0797.03X          | K0797.103X                   | M3  | -   | 5/6/8/10/12/16/20                      | 1,2 | 1,5 |
| K0797.04X          | K0797.104X                   | M4  | -   | 5/6/8/10/12/16/20/25                   | 1,5 | 2   |
| K0797.05X          | K0797.105X                   | M5  | -   | 5/6/8/10/12/14/16/20/25/30             | 2   | 2,5 |
| K0797.06X          | K0797.106X                   | M6  | 1,5 | 6/8/10/12/16/20/25/30/35/40/45/50/60   | 2   | 3   |
| K0797.08X          | K0797.108X                   | M8  | 2   | 8/10/12/14/16/20/25/30/35/40/45/50/60  | 3   | 4   |
| K0797.10X          | K0797.110X                   | M10 | 2,5 | 10/12/16/20/25/30/35/40/45/50/60/70/80 | 4   | 5   |

## Screws with countersunk head

hexagon socket DIN EN ISO 10642



### Material:

Steel, stainless steel A2 or stainless steel A4.

### Version:

Steel grade 8.8, bright (black) or electro zinc-plated.

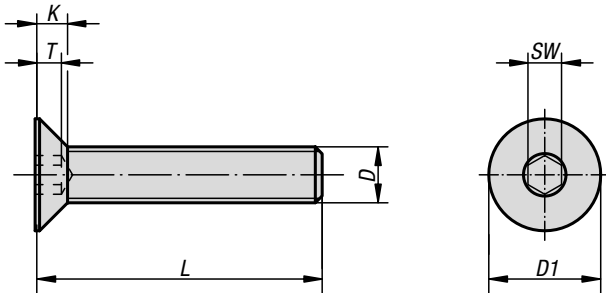
Steel grade 10.9, bright (black).

Stainless steel A2-70, bright.

Stainless steel A4-70, bright.

### Sample order:

K0708.106X20 (include length L)





## Screws with countersunk head

hexagon socket DIN EN ISO 10642



## KIPP Screws with countersunk head, hexagon socket DIN 7991

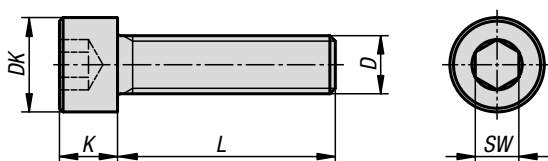


| Order No.<br>steel<br>Grade 8.8 | Order No.<br>steel<br>Grade 10.9 | Surface finish<br>body | D   | L                                | D1 | K   | T   | SW  |
|---------------------------------|----------------------------------|------------------------|-----|----------------------------------|----|-----|-----|-----|
| K0708.04X                       | K0708.304X                       | bright (black)         | M4  | 10/12/16/20/25                   | 8  | 2,3 | 1,8 | 2,5 |
| K0708.05X                       | K0708.305X                       | bright (black)         | M5  | 10/12/16/20/25/30                | 10 | 2,8 | 2,3 | 3   |
| K0708.06X                       | K0708.306X                       | bright (black)         | M6  | 10/12/16/20/25/30/35/40/45/50/60 | 12 | 3,3 | 2,5 | 4   |
| K0708.08X                       | K0708.308X                       | bright (black)         | M8  | 16/20/25/30/35/40/45/50/60       | 16 | 4,4 | 3,5 | 5   |
| K0708.10X                       | K0708.310X                       | bright (black)         | M10 | 16/20/25/30/35/40/45/50/60/70    | 20 | 5,5 | 4,4 | 6   |
| K0708.12X                       | K0708.312X                       | bright (black)         | M12 | 20/25/30/35/40/45/50/60/70/80    | 24 | 6,5 | 4,6 | 8   |
| K0708.16X                       | K0708.316X                       | bright (black)         | M16 | 30/35/40/45/50/60/70/80          | 30 | 7,5 | 5,3 | 10  |
| K0708.404X                      | -                                | galvanised             | M4  | 10/12/16/20/25                   | 8  | 2,3 | 1,8 | 2,5 |
| K0708.405X                      | -                                | galvanised             | M5  | 10/12/16/20/25/30                | 10 | 2,8 | 2,3 | 3   |
| K0708.406X                      | -                                | galvanised             | M6  | 10/12/16/20/25/30/35/40/45/50/60 | 12 | 3,3 | 2,5 | 4   |
| K0708.408X                      | -                                | galvanised             | M8  | 16/20/25/30/35/40/45/50/60       | 16 | 4,4 | 3,5 | 5   |
| K0708.410X                      | -                                | galvanised             | M10 | 16/20/25/30/35/40/45/50/60/70    | 20 | 5,5 | 4,4 | 6   |
| K0708.412X                      | -                                | galvanised             | M12 | 20/25/30/35/40/45/50/60/70/80    | 24 | 6,5 | 4,6 | 8   |
| K0708.416X                      | -                                | galvanised             | M16 | 30/35/40/45/50/60/70/80          | 30 | 7,5 | 5,3 | 10  |

| Order No.  | Main<br>material   | Surface finish<br>body | D   | L                                | K   | T   | D1 | SW  |
|------------|--------------------|------------------------|-----|----------------------------------|-----|-----|----|-----|
| K0708.104X | stainless steel A2 | bright                 | M4  | 10/12/16/20/25                   | 2,3 | 1,8 | 8  | 2,5 |
| K0708.105X | stainless steel A2 | bright                 | M5  | 10/12/16/20/25/30                | 2,8 | 2,3 | 10 | 3   |
| K0708.106X | stainless steel A2 | bright                 | M6  | 10/12/16/20/25/30/35/40/45/50/60 | 3,3 | 2,5 | 12 | 4   |
| K0708.108X | stainless steel A2 | bright                 | M8  | 16/20/25/30/35/40/45/50/60       | 4,4 | 3,5 | 16 | 5   |
| K0708.110X | stainless steel A2 | bright                 | M10 | 16/20/25/30/35/40/45/50/60/70    | 5,5 | 4,4 | 20 | 6   |
| K0708.112X | stainless steel A2 | bright                 | M12 | 20/25/30/35/40/45/50/60/70/80    | 6,5 | 4,6 | 24 | 8   |
| K0708.116X | stainless steel A2 | bright                 | M16 | 30/35/40/45/50/60/70/80          | 7,5 | 5,3 | 30 | 10  |
| K0708.604X | stainless steel A4 | bright                 | M4  | 10/12/16/20/25                   | 2,3 | 1,8 | 8  | 2,5 |
| K0708.605X | stainless steel A4 | bright                 | M5  | 10/12/16/20/25/30                | 2,8 | 2,3 | 10 | 3   |
| K0708.606X | stainless steel A4 | bright                 | M6  | 10/12/16/20/25/30/35/40/45/50/60 | 3,3 | 2,5 | 12 | 4   |
| K0708.608X | stainless steel A4 | bright                 | M8  | 16/20/25/30/35/40/45/50/60       | 4,4 | 3,5 | 16 | 5   |
| K0708.610X | stainless steel A4 | bright                 | M10 | 16/20/25/30/35/40/45/50/60/70    | 5,5 | 4,4 | 20 | 6   |
| K0708.612X | stainless steel A4 | bright                 | M12 | 20/25/30/35/40/45/50/60/70/80    | 6,5 | 4,6 | 24 | 8   |
| K0708.616X | stainless steel A4 | bright                 | M16 | 30/35/40/45/50/60/70/80          | 7,5 | 5,3 | 30 | 10  |

# Socket head screws

full thread, DIN 912



## Material:

Steel, stainless steel A2 or stainless steel A4.

## Version:

Steel grade 8.8, bright (blackened) or electro zinc-plated.

Stainless steel A2-70, bright

Stainless steel A4-70, bright

## Sample order:

K1159.05X40 (include length L)

## KIPP Socket head screws full thread, DIN 912

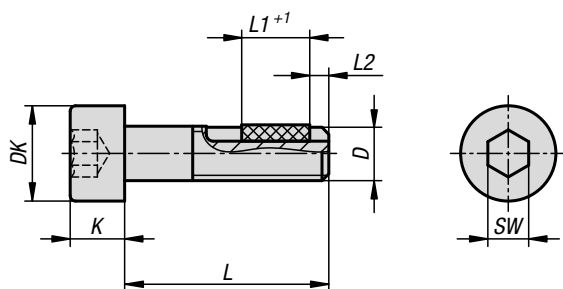
| Order No.  | Main material      | Surface finish body | D   | DK  | K  | L                     | SW |
|------------|--------------------|---------------------|-----|-----|----|-----------------------|----|
| K1159.05X  | steel              | bright (black)      | M5  | 8,5 | 5  | 40/50/60/80           | 4  |
| K1159.06X  | steel              | bright (black)      | M6  | 10  | 6  | 40/50/60/70/90/100    | 5  |
| K1159.08X  | steel              | bright (black)      | M8  | 13  | 8  | 50/60/70/80/90        | 6  |
| K1159.10X  | steel              | bright (black)      | M10 | 16  | 10 | 50/60/70/80/90/100    | 8  |
| K1159.12X  | steel              | bright (black)      | M12 | 18  | 12 | 80/90/100             | 10 |
| K1159.405X | steel              | galvanised          | M5  | 8,5 | 5  | 40/70/80              | 4  |
| K1159.406X | steel              | galvanised          | M6  | 10  | 6  | 40/50/60/70/80/90/100 | 5  |
| K1159.408X | steel              | galvanised          | M8  | 13  | 8  | 50/60/70/80/90/100    | 6  |
| K1159.410X | steel              | galvanised          | M10 | 16  | 10 | 50/60/70/80/90/100    | 8  |
| K1159.412X | steel              | galvanised          | M12 | 18  | 12 | 70/80/90/100          | 10 |
| K1159.105X | stainless steel A2 | bright              | M5  | 8,5 | 5  | 40/70                 | 4  |
| K1159.106X | stainless steel A2 | bright              | M6  | 10  | 6  | 40/50/60/70/80/90/100 | 5  |
| K1159.108X | stainless steel A2 | bright              | M8  | 13  | 8  | 50/60/70/80/90/100    | 6  |
| K1159.110X | stainless steel A2 | bright              | M10 | 16  | 10 | 50/60/70/80/90/100    | 8  |
| K1159.112X | stainless steel A2 | bright              | M12 | 18  | 12 | 70/80/90/100          | 10 |
| K1159.605X | stainless steel A4 | bright              | M5  | 8,5 | 5  | 40/70/80              | 4  |
| K1159.606X | stainless steel A4 | bright              | M6  | 10  | 6  | 40/50/60/70/80/90/100 | 5  |
| K1159.608X | stainless steel A4 | bright              | M8  | 13  | 8  | 50/60/70/80/90/100    | 6  |
| K1159.610X | stainless steel A4 | bright              | M10 | 16  | 10 | 50/60/70/80/90/100    | 8  |
| K1159.612X | stainless steel A4 | bright              | M12 | 18  | 12 | 80/100                | 10 |

# Socket head screws

DIN EN ISO 4762 with thread lock



**KIPP**lock



## Material:

Steel or stainless steel (A 2).

Thread lock nylon.

## Version:

Steel grade 8.8, black.

Stainless steel A2-70, bright.

## Sample order:

K0869.806X20 (include length L)

## Drawing reference:

L2 = approx. 2x thread pitch

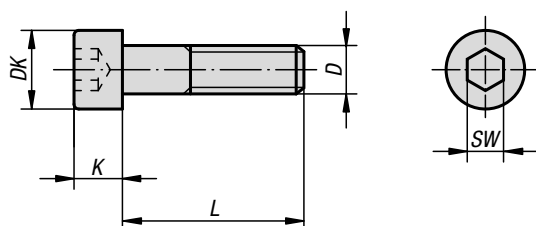


## KIPP Socket head screws DIN EN ISO 4762 with thread lock

| Order No.<br>steel | Order No.<br>stainless steel A2 | D   | DK  | K  | L                             | L1                | SW | Tightening torque<br>approx. Nm | Loosening torque<br>approx. Nm |
|--------------------|---------------------------------|-----|-----|----|-------------------------------|-------------------|----|---------------------------------|--------------------------------|
| K0869.804X         | K0869.904X                      | M4  | 7   | 4  | 10/12/16/20/25                | 5/5/6/7/7         | 3  | 0,15                            | 0,22                           |
| K0869.805X         | K0869.905X                      | M5  | 8,5 | 5  | 10/12/16/20/25/30/40          | 5/6/7/7/8/8/8     | 4  | 0,25                            | 0,1                            |
| K0869.806X         | K0869.906X                      | M6  | 10  | 6  | 10/12/16/20/25/30/35/40/45/50 | 5/6/7/7/8/8/8/8/8 | 5  | 0,45                            | 0,25                           |
| K0869.808X         | K0869.908X                      | M8  | 13  | 8  | 16/20/25/30/35/40/45          | 7/8/8/8/10/10/10  | 6  | 0,8                             | 0,4                            |
| K0869.810X         | K0869.910X                      | M10 | 16  | 10 | 25/30/40/50                   | 10/10/12/12       | 8  | 1,7                             | 0,9                            |
| K0869.812X         | K0869.912X                      | M12 | 18  | 12 | 30/40/50                      | 10/12/12          | 10 | 1,8                             | 0,9                            |

# Socket head screws

DIN EN ISO 4762 enhanced, steel or stainless steel



## Material:

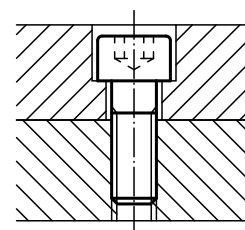
Steel, stainless steel A2 or stainless steel A4.

## Version:

Steel grade 8.8, bright (black) or electro zinc-plated.  
Steel grade 10.9, bright (black) or electro zinc-plated.  
Steel grade 12.9, bright (black)  
Stainless steel A2-70, bright.  
Stainless steel A4-70, bright.

## Sample order:

K0869.08X40 (include length L)



## KIPP Socket head screws, DIN EN ISO 4762 enhanced, steel or stainless steel

| Order No.<br>steel<br>bright (black) | Order No.<br>steel<br>galvanised | Grade | D   | L                                            | DK  | K  | SW |
|--------------------------------------|----------------------------------|-------|-----|----------------------------------------------|-----|----|----|
| K0869.04X                            | K0869.404X                       | 8.8   | M4  | 10/12/16/18/20/25                            | 7   | 4  | 3  |
| K0869.05X                            | K0869.405X                       | 8.8   | M5  | 10/12/16/18/20/25/30/40                      | 8,5 | 5  | 4  |
| K0869.06X                            | K0869.406X                       | 8.8   | M6  | 10/12/16/18/20/25/30/35/40/45/50/55/60       | 10  | 6  | 5  |
| K0869.08X                            | K0869.408X                       | 8.8   | M8  | 16/18/20/25/30/35/40/45/50/60/70/80          | 13  | 8  | 6  |
| K0869.10X                            | K0869.410X                       | 8.8   | M10 | 16/18/20/25/30/35/40/45/50/60/70/80/90/100   | 16  | 10 | 8  |
| K0869.12X                            | K0869.412X                       | 8.8   | M12 | 20/25/30/35/40/45/50/60/70/80/90/100/110/120 | 18  | 12 | 10 |
| K0869.14X                            | K0869.414X                       | 8.8   | M14 | 50/80/120                                    | 21  | 14 | 12 |
| K0869.16X                            | K0869.416X                       | 8.8   | M16 | 30/35/40/45/50/60/70/80/90/100/110/120       | 24  | 16 | 14 |
| K0869.20X                            | K0869.420X                       | 8.8   | M20 | 40/45/50/60/70/80/90/100/110/120             | 30  | 20 | 17 |

# Socket head screws

DIN EN ISO 4762 enhanced, steel or stainless steel



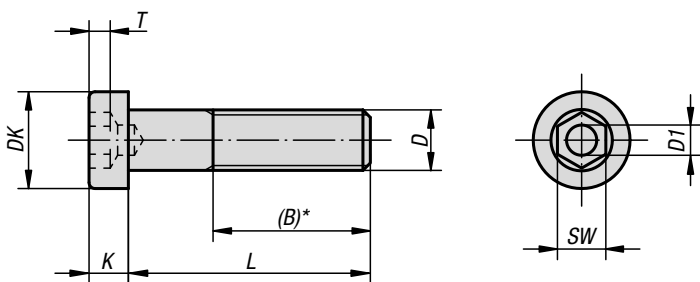
| Order No.<br>steel<br>bright (black) | Order No.<br>steel<br>galvanised | Grade | D   | L                                            | DK  | K  | SW |
|--------------------------------------|----------------------------------|-------|-----|----------------------------------------------|-----|----|----|
| K0869.304X                           | K0869.504X                       | 10.9  | M4  | 10/12/16/18/20/25                            | 7   | 4  | 3  |
| K0869.305X                           | K0869.505X                       | 10.9  | M5  | 10/12/16/18/20/25/30/40                      | 8,5 | 5  | 4  |
| K0869.306X                           | K0869.506X                       | 10.9  | M6  | 10/12/16/18/20/25/30/35/40/55/45/50/60       | 10  | 6  | 5  |
| K0869.308X                           | K0869.508X                       | 10.9  | M8  | 16/18/20/25/30/35/40/45/50/60/70/80          | 13  | 8  | 6  |
| K0869.310X                           | K0869.510X                       | 10.9  | M10 | 16/18/20/25/30/35/40/45/50/60/70/80/90/100   | 16  | 10 | 8  |
| K0869.312X                           | K0869.512X                       | 10.9  | M12 | 20/25/30/35/40/45/50/60/70/80/90/100/110/120 | 18  | 12 | 10 |
| K0869.314X                           | K0869.514X                       | 10.9  | M14 | 50/80/120                                    | 21  | 14 | 12 |
| K0869.316X                           | K0869.516X                       | 10.9  | M16 | 30/35/40/45/50/60/70/80/90/100/110/120       | 24  | 16 | 14 |
| K0869.320X                           | K0869.520X                       | 10.9  | M20 | 40/45/50/60/70/80/90/100/110/120             | 30  | 20 | 17 |

| Order No.<br>steel<br>bright (black) | Grade | D   | DK | K  | L                                                                        | SW |
|--------------------------------------|-------|-----|----|----|--------------------------------------------------------------------------|----|
| K0869.206X                           | 12.9  | M6  | 10 | 6  | 18/20/25/30/35/40/45/50/55/60/65/70/80/90/100                            | 5  |
| K0869.208X                           | 12.9  | M8  | 13 | 8  | 20/25/30/35/40/45/50/55/60/65/70/80/90/100/120                           | 6  |
| K0869.210X                           | 12.9  | M10 | 16 | 10 | 30/35/40/45/50/55/60/65/70/75/80/90/100/110/120/130/140                  | 8  |
| K0869.212X                           | 12.9  | M12 | 18 | 12 | 30/35/40/45/50/55/60/65/70/75/80/90/100/110/120/130/140                  | 10 |
| K0869.216X                           | 12.9  | M16 | 24 | 16 | 35/40/45/50/55/60/65/70/75/80/90/100/110/120/130/140/150/160/170/180/200 | 14 |
| K0869.218X                           | 12.9  | M18 | 27 | 18 | 35/40/45/50/55/60/65/70/75/80/90/100/110/120/130/140/150/160/170/180/200 | 14 |
| K0869.220X                           | 12.9  | M20 | 30 | 20 | 40/45/50/55/60/65/70/75/80/90/100/110/120/130/140/150/160/170/180/200    | 17 |

| Order No.<br>stainless steel A2 | Order No.<br>stainless steel A4 | D   | L                                            | DK  | K  | SW |
|---------------------------------|---------------------------------|-----|----------------------------------------------|-----|----|----|
| K0869.104X                      | K0869.604X                      | M4  | 10/12/16/18/20/25                            | 7   | 4  | 3  |
| K0869.105X                      | K0869.605X                      | M5  | 10/12/16/18/20/25/30/40                      | 8,5 | 5  | 4  |
| K0869.106X                      | K0869.606X                      | M6  | 10/12/16/18/20/25/30/35/40/45/50/55/60       | 10  | 6  | 5  |
| K0869.108X                      | K0869.608X                      | M8  | 16/18/20/25/30/35/40/45/50/60/70/80          | 13  | 8  | 6  |
| K0869.110X                      | K0869.610X                      | M10 | 16/18/20/25/30/35/40/45/50/60/70/80/90/100   | 16  | 10 | 8  |
| K0869.112X                      | K0869.612X                      | M12 | 20/25/30/35/40/45/50/60/70/80/90/100/110/120 | 18  | 12 | 10 |
| K0869.114X                      | K0869.614X                      | M14 | 50/80/120                                    | 21  | 14 | 12 |
| K0869.116X                      | K0869.616X                      | M16 | 30/35/40/45/50/60/70/80/90/100/110/120       | 24  | 16 | 14 |
| K0869.120X                      | K0869.620X                      | M20 | 40/45/50/60/70/80/90/100/110/120             | 30  | 20 | 17 |

# Socket head screws with low head

DIN 6912

**Material:**

Steel, stainless steel A2 or stainless steel A4.

**Version:**

Steel grade 8.8, bright (black) or electro zinc-plated.  
 Steel grade 10.9, bright (black) or electro zinc-plated.  
 Stainless steel A2-70, bright.  
 Stainless steel A4-70, bright.

**Sample order:**

K1160.110X20 (include length L)

**Note:**

Screws where the dimension L is < B are threaded up to the head. The screw length or thread length is specified by the dimension L. Screws where L is > B have a shaft.

**Drawing reference:**

\* reference dimension

## KIPP Socket head screws with low head DIN 6912, stainless steel

| Order No.<br>stainless steel A2 | Order No.<br>stainless steel A4 | D   | D1  | DK  | K   | SW | T    |
|---------------------------------|---------------------------------|-----|-----|-----|-----|----|------|
| K1160.104X                      | K1160.604X                      | M4  | 2   | 7   | 2,8 | 3  | 1,48 |
| K1160.105X                      | K1160.605X                      | M5  | 2,5 | 8,5 | 3,5 | 4  | 1,88 |
| K1160.106X                      | K1160.606X                      | M6  | 3   | 10  | 4   | 5  | 2,38 |
| K1160.108X                      | K1160.608X                      | M8  | 4   | 13  | 5   | 6  | 2,88 |
| K1160.110X                      | K1160.610X                      | M10 | 5   | 16  | 6,5 | 8  | 3,35 |
| K1160.112X                      | K1160.612X                      | M12 | 6   | 18  | 7,5 | 10 | 3,85 |

| Order No.  | Main material      | D   | B                                     | L                                   |
|------------|--------------------|-----|---------------------------------------|-------------------------------------|
| K1160.104X | stainless steel A2 | M4  | 6,5/8,5/12.5/14/14                    | 10/12/16/20/25                      |
| K1160.105X | stainless steel A2 | M5  | 5,8/7,85/11,8/15,8/16/16              | 10/12/16/20/25/30                   |
| K1160.106X | stainless steel A2 | M6  | 4,5/6,5/10,5/14,5/19,5/18/18/18/18/18 | 10/12/16/20/25/30/35/40/45/50/60    |
| K1160.108X | stainless steel A2 | M8  | /5/9/22/22/22/22/22/22/22/22/22       | 10/12/16/20/25/30/35/40/45/50/60/70 |
| K1160.110X | stainless steel A2 | M10 | 8/12/17/22/27/26/26/26/26/26          | 16/20/25/30/35/40/45/50/60/70       |
| K1160.112X | stainless steel A2 | M12 | 10,5/15,5/30/25,5/30,5/30/30/30/30    | 20/25/30/35/40/45/50/60/70          |
| K1160.604X | stainless steel A4 | M4  | 6,5/8,5/12.5/14/14                    | 10/12/16/20/25                      |
| K1160.605X | stainless steel A4 | M5  | 5,8/7,85/11,8/15,8/16/16              | 10/12/16/20/25/30                   |
| K1160.606X | stainless steel A4 | M6  | 4,5/6,5/10,5/14,5/19,5/18/18/18/18/18 | 10/12/16/20/25/30/35/40/45/50/60    |
| K1160.608X | stainless steel A4 | M8  | 4/5/9/22/22/22/22/22/22/22/22         | 10/12/16/20/25/30/35/40/45/50/60/70 |
| K1160.610X | stainless steel A4 | M10 | 8/12/17/22/27/26/26/26/26/26          | 16/20/25/30/35/40/45/50/60/70       |
| K1160.612X | stainless steel A4 | M12 | 10,5/15,5/30/25,5/30,5/30/30/30       | 20/25/30/35/40/45/50/70             |

## Socket head screws with low head

DIN 6912



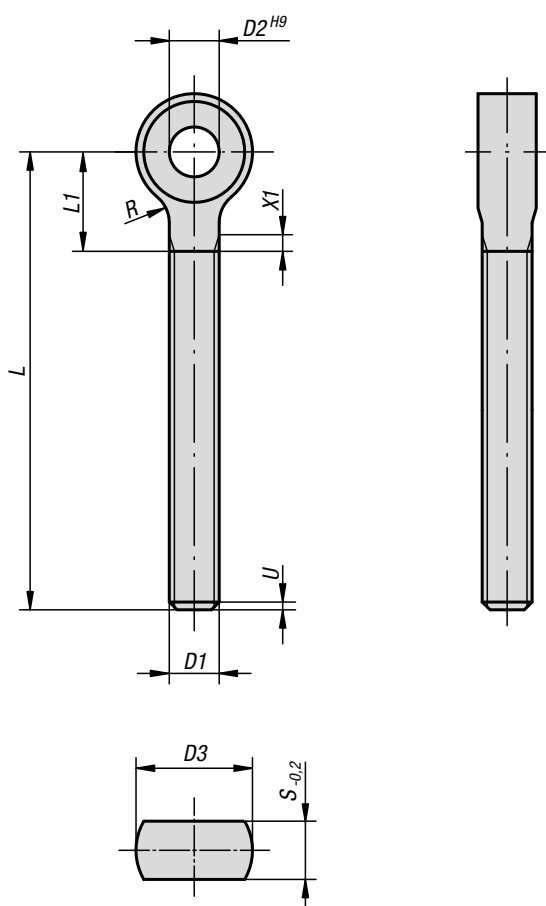
## KIPP Socket head screws with low head DIN 6912, steel

| Order No.<br>Grade 8.8<br>steel | Order No.<br>Grade 10.9<br>steel | D   | D1  | DK  | K   | SW | T    |
|---------------------------------|----------------------------------|-----|-----|-----|-----|----|------|
| K1160.04X                       | -                                | M4  | 2   | 7   | 2,8 | 3  | 1,48 |
| K1160.05X                       | -                                | M5  | 2,5 | 8,5 | 3,5 | 4  | 1,88 |
| K1160.06X                       | K1160.306X                       | M6  | 3   | 10  | 4   | 5  | 2,38 |
| K1160.08X                       | K1160.308X                       | M8  | 4   | 13  | 5   | 6  | 2,88 |
| K1160.10X                       | K1160.310X                       | M10 | 5   | 16  | 6,5 | 8  | 3,35 |
| K1160.12X                       | K1160.312X                       | M12 | 6   | 18  | 7,5 | 10 | 3,85 |
| K1160.16X                       | K1160.316X                       | M16 | 8   | 24  | 10  | 14 | 5,35 |
| K1160.20X                       | K1160.320X                       | M20 | 10  | 30  | 12  | 17 | 6,32 |

| Order No.<br>steel<br>bright (black) | Order No.<br>steel<br>galvanised | Grade | D   | B                           | L                                            |
|--------------------------------------|----------------------------------|-------|-----|-----------------------------|----------------------------------------------|
| K1160.04X                            | K1160.404X                       | 8.8   | M4  | 6,5/8,5/12,5/14             | 10/12/16/20/25                               |
| K1160.05X                            | K1160.405X                       | 8.8   | M5  | 5,8/7,85/11,8/15,8/16       | 10/12/16/20/25/30                            |
| K1160.06X                            | K1160.406X                       | 8.8   | M6  | 4,5/6,5/10,5/14,5/19,5/18   | 10/12/16/20/25/30/35/40/45/50/60             |
| K1160.08X                            | K1160.408X                       | 8.8   | M8  | 4/5/9/13/22                 | 10/12/16/20/25/30/35/40/45/50/60/70/80       |
| K1160.10X                            | K1160.410X                       | 8.8   | M10 | 12/17/22/27/26              | 20/25/30/35/40/45/50/60/70/80/90/100         |
| K1160.12X                            | K1160.412X                       | 8.8   | M12 | 10,5/15,5/20,5/25,5/30,5/30 | 20/25/30/35/40/45/50/60/70/80/90/100/110/120 |
| K1160.16X                            | K1160.416X                       | 8.8   | M16 | 19/24/38                    | 30/35/40/45/50/60/70/80/90/100/110/120       |
| K1160.20X                            | K1160.420X                       | 8.8   | M20 | 26/36/46                    | 40/45/50/60/70/80/90/100/110/120             |
| K1160.306X                           | -                                | 10.9  | M6  | 4,5/6,5/10,5/14,5/19,5/18   | 10/12/16/20/25/30/35/40                      |
| K1160.308X                           | -                                | 10.9  | M8  | 9/13/22                     | 16/20/30/35/40/45/50/60                      |
| K1160.310X                           | -                                | 10.9  | M10 | 12/17/27/26                 | 20/25/35/40/45/50/60                         |
| K1160.312X                           | -                                | 10.9  | M12 | 15,5/25,5/30                | 25/35/45/50/60                               |
| K1160.316X                           | -                                | 10.9  | M16 | 19/24/38                    | 30/35/40/45/60/50/70/80                      |
| K1160.320X                           | -                                | 10.9  | M20 | 26/36/46                    | 40/50/60/70                                  |

## Eye bolts DIN 444, Form B

with long thread



### Material:

Steel or 1.4305 stainless steel

### Version:

Steel grade 8.8, black oxidised.

Stainless steel bright.

### Sample order:

K1418.0850

### Note:

Eye bolts, threaded up to the eye.

See K0007 for suitable hinge pins.

### Drawing reference:

U = max. 2 P (incomplete thread)

X1 = to DIN 76 part 1



# Eye bolts DIN 444, Form B

with long thread

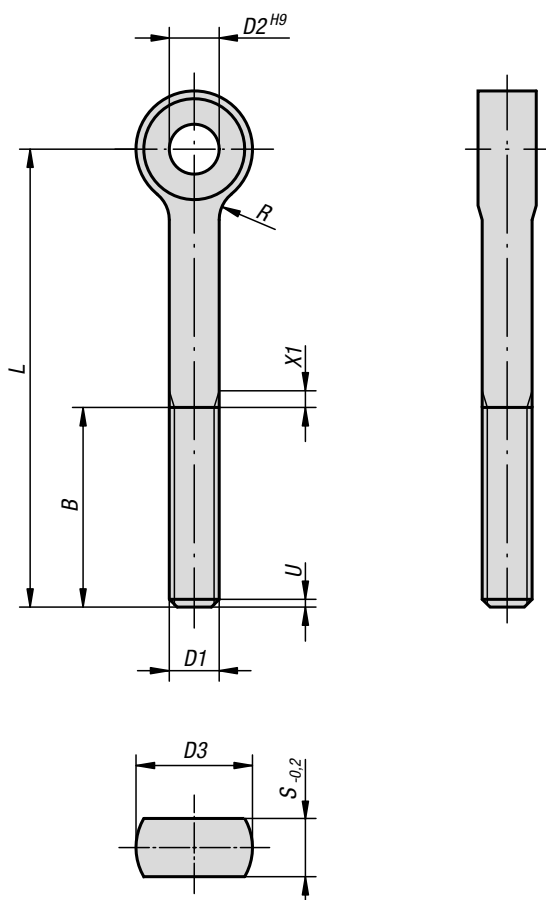


## KIPP Eye bolts DIN 444, Form B with long thread

| Order No.<br>steel | Order No.<br>stainless steel A2 | D1  | D2 | D3 | L   | L1<br>max. | R  | S  |
|--------------------|---------------------------------|-----|----|----|-----|------------|----|----|
| K1418.0650         | K1418.10650                     | M6  | 6  | 14 | 50  | 14         | 4  | 7  |
| K1418.0660         | K1418.10660                     | M6  | 6  | 14 | 60  | 14         | 4  | 7  |
| K1418.0670         | K1418.10670                     | M6  | 6  | 14 | 70  | 14         | 4  | 7  |
| K1418.0680         | K1418.10680                     | M6  | 6  | 14 | 80  | 14         | 4  | 7  |
| K1418.0850         | K1418.10850                     | M8  | 8  | 18 | 50  | 16         | 4  | 9  |
| K1418.0860         | K1418.10860                     | M8  | 8  | 18 | 60  | 16         | 4  | 9  |
| K1418.0870         | K1418.10870                     | M8  | 8  | 18 | 70  | 16         | 4  | 9  |
| K1418.0880         | K1418.10880                     | M8  | 8  | 18 | 80  | 16         | 4  | 9  |
| K1418.08100        | K1418.108100                    | M8  | 8  | 18 | 100 | 16         | 4  | 9  |
| K1418.1050         | K1418.11050                     | M10 | 10 | 20 | 50  | 18         | 4  | 12 |
| K1418.1060         | K1418.11060                     | M10 | 10 | 20 | 60  | 18         | 4  | 12 |
| K1418.1070         | K1418.11070                     | M10 | 10 | 20 | 70  | 18         | 4  | 12 |
| K1418.1080         | K1418.11080                     | M10 | 10 | 20 | 80  | 18         | 4  | 12 |
| K1418.10100        | K1418.110100                    | M10 | 10 | 20 | 100 | 18         | 4  | 12 |
| K1418.10120        | K1418.110120                    | M10 | 10 | 20 | 120 | 18         | 4  | 12 |
| K1418.1250         | K1418.11250                     | M12 | 12 | 25 | 50  | 23         | 6  | 14 |
| K1418.1260         | K1418.11260                     | M12 | 12 | 25 | 60  | 23         | 6  | 14 |
| K1418.1270         | K1418.11270                     | M12 | 12 | 25 | 70  | 23         | 6  | 14 |
| K1418.1280         | K1418.11280                     | M12 | 12 | 25 | 80  | 23         | 6  | 14 |
| K1418.12100        | K1418.112100                    | M12 | 12 | 25 | 100 | 23         | 6  | 14 |
| K1418.12120        | K1418.112120                    | M12 | 12 | 25 | 120 | 23         | 6  | 14 |
| K1418.12130        | K1418.112130                    | M12 | 12 | 25 | 130 | 23         | 6  | 14 |
| K1418.1670         | K1418.11670                     | M16 | 16 | 32 | 70  | 27         | 6  | 17 |
| K1418.1680         | K1418.11680                     | M16 | 16 | 32 | 80  | 27         | 6  | 17 |
| K1418.16100        | K1418.116100                    | M16 | 16 | 32 | 100 | 27         | 6  | 17 |
| K1418.16120        | K1418.116120                    | M16 | 16 | 32 | 120 | 27         | 6  | 17 |
| K1418.16140        | K1418.116140                    | M16 | 16 | 32 | 140 | 27         | 6  | 17 |
| K1418.16160        | K1418.116160                    | M16 | 16 | 32 | 160 | 27         | 6  | 17 |
| K1418.20100        | K1418.120100                    | M20 | 18 | 40 | 100 | 32         | 6  | 22 |
| K1418.20120        | K1418.120120                    | M20 | 18 | 40 | 120 | 32         | 6  | 22 |
| K1418.20140        | K1418.120140                    | M20 | 18 | 40 | 140 | 32         | 6  | 22 |
| K1418.20160        | K1418.120160                    | M20 | 18 | 40 | 160 | 32         | 6  | 22 |
| K1418.24160        | -                               | M24 | 22 | 45 | 160 | 40         | 10 | 25 |
| K1418.24240        | -                               | M24 | 22 | 45 | 240 | 40         | 10 | 25 |

## Eye bolts

DIN 444, Form B



### Material:

Steel or stainless steel A2.

### Version:

Steel grade 8.8, black oxidised.

Stainless steel A2-70, bright.

### Sample order:

K0396.12100

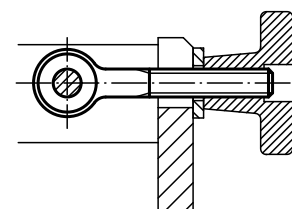
### Note:

Suitable hinge pin, see B0430.

### Drawing reference:

U = max. 2 P (incomplete thread)

X1 = to DIN 76 part 1



## KIPP Eye bolts DIN 444

| Order No.<br>steel<br>black oxidised | Order No.<br>stainless steel A2<br>bright | B  | D1  | D2 | D3 | L   | R   | S  |
|--------------------------------------|-------------------------------------------|----|-----|----|----|-----|-----|----|
| K0396.0550                           | K0396.10550                               | 16 | M5  | 5  | 12 | 50  | 2,5 | 6  |
| K0396.0575                           | -                                         | 16 | M5  | 5  | 12 | 75  | 2,5 | 6  |
| K0396.0650                           | K0396.10650                               | 18 | M6  | 6  | 14 | 50  | 4   | 7  |
| K0396.0675                           | K0396.10675                               | 18 | M6  | 6  | 14 | 75  | 4   | 7  |
| K0396.0850                           | K0396.10850                               | 22 | M8  | 8  | 18 | 50  | 4   | 9  |
| K0396.0875                           | K0396.10875                               | 22 | M8  | 8  | 18 | 75  | 4   | 9  |
| K0396.1075                           | K0396.11075                               | 26 | M10 | 10 | 20 | 75  | 4   | 12 |
| K0396.10100                          | K0396.110100                              | 26 | M10 | 10 | 20 | 100 | 4   | 12 |
| K0396.1275                           | K0396.11275                               | 30 | M12 | 12 | 25 | 75  | 6   | 14 |
| K0396.12100                          | K0396.112100                              | 30 | M12 | 12 | 25 | 100 | 6   | 14 |
| K0396.12120                          | K0396.112120                              | 30 | M12 | 12 | 25 | 120 | 6   | 14 |
| K0396.12130                          | K0396.112130                              | 36 | M12 | 12 | 25 | 130 | 6   | 14 |
| K0396.1475                           | K0396.11475                               | 36 | M14 | 14 | 28 | 75  | 6   | 16 |
| K0396.14130                          | K0396.114130                              | 36 | M14 | 14 | 28 | 130 | 6   | 16 |
| K0396.16130                          | K0396.116130                              | 44 | M16 | 16 | 32 | 130 | 6   | 17 |
| K0396.20140                          | K0396.120140                              | 52 | M20 | 18 | 40 | 140 | 6   | 22 |

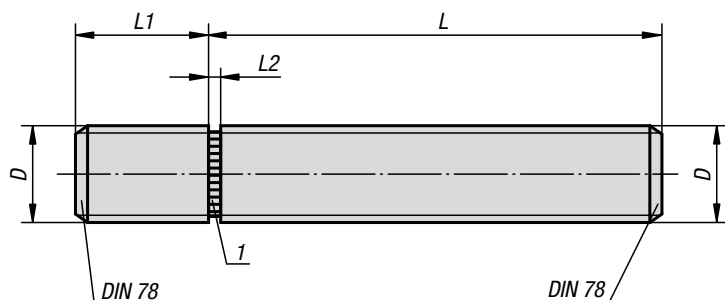


A large grid of graph paper for taking notes.



# Studs

with screw-in stop for gluing in


**Material:**

Steel or 1.4305 stainless steel

**Version:**

Steel trivalent blue passivated.  
Stainless steel, bright.

**Sample order:**

K0404.1040201

**Note:**

Studs with screw-in stop have been designed especially for gluing-in. They allow mechanical connecting elements with external thread to be made cost-effectively for small and medium-sized series. The LOCTITE products 638 and 648 (see K0655) have proven themselves in practice as successful bonding agents.

**Drawing reference:**

1) screw-in stop

**KIPP Studs with screw-in stop**

| Order No.<br>steel | Order No.<br>stainless steel | D   | L  | L1 | L2  |
|--------------------|------------------------------|-----|----|----|-----|
| K0404.1040201      | K0404.1040202                | M4  | 20 | 6  | 1   |
| K0404.1040301      | K0404.1040302                | M4  | 30 | 6  | 1   |
| K0404.1040401      | K0404.1040402                | M4  | 40 | 6  | 1   |
| K0404.1040501      | K0404.1040502                | M4  | 50 | 6  | 1   |
| K0404.1050201      | K0404.1050202                | M5  | 20 | 8  | 1   |
| K0404.1050301      | K0404.1050302                | M5  | 30 | 8  | 1   |
| K0404.1050401      | K0404.1050402                | M5  | 40 | 8  | 1   |
| K0404.1050501      | K0404.1050502                | M5  | 50 | 8  | 1   |
| K0404.1050601      | K0404.1050602                | M5  | 60 | 8  | 1   |
| K0404.1060201      | K0404.1060202                | M6  | 20 | 9  | 1,5 |
| K0404.1060301      | K0404.1060302                | M6  | 30 | 9  | 1,5 |
| K0404.1060401      | K0404.1060402                | M6  | 40 | 9  | 1,5 |
| K0404.1060501      | K0404.1060502                | M6  | 50 | 9  | 1,5 |
| K0404.1060601      | K0404.1060602                | M6  | 60 | 9  | 1,5 |
| K0404.1080201      | K0404.1080202                | M8  | 20 | 12 | 1,5 |
| K0404.1080301      | K0404.1080302                | M8  | 30 | 12 | 1,5 |
| K0404.1080401      | K0404.1080402                | M8  | 40 | 12 | 1,5 |
| K0404.1080501      | K0404.1080502                | M8  | 50 | 12 | 1,5 |
| K0404.1080601      | K0404.1080602                | M8  | 60 | 12 | 1,5 |
| K0404.1080801      | K0404.1080802                | M8  | 80 | 12 | 1,5 |
| K0404.1100201      | K0404.1100202                | M10 | 20 | 14 | 2   |
| K0404.1100301      | K0404.1100302                | M10 | 30 | 14 | 2   |
| K0404.1100401      | K0404.1100402                | M10 | 40 | 14 | 2   |
| K0404.1100501      | K0404.1100502                | M10 | 50 | 14 | 2   |
| K0404.1100601      | K0404.1100602                | M10 | 60 | 14 | 2   |
| K0404.1100801      | K0404.1100802                | M10 | 80 | 14 | 2   |
| K0404.1120301      | K0404.1120302                | M12 | 30 | 17 | 2   |
| K0404.1120401      | K0404.1120402                | M12 | 40 | 17 | 2   |
| K0404.1120501      | K0404.1120502                | M12 | 50 | 17 | 2   |
| K0404.1120601      | K0404.1120602                | M12 | 60 | 17 | 2   |
| K0404.1120801      | K0404.1120802                | M12 | 80 | 17 | 2   |
| K0404.1160301      | K0404.1160302                | M16 | 30 | 22 | 2   |
| K0404.1160401      | K0404.1160402                | M16 | 40 | 22 | 2   |
| K0404.1160501      | K0404.1160502                | M16 | 50 | 22 | 2   |
| K0404.1160601      | K0404.1160602                | M16 | 60 | 22 | 2   |
| K0404.1160801      | K0404.1160802                | M16 | 80 | 22 | 2   |

## Stud sets

with screw-in stop for gluing in


**Material:**

Steel or 1.4305 stainless steel

**Version:**

Steel trivalent blue passivated.  
Stainless steel, bright.

**Sample order:**

K0405.01

**Note:**

Studs with screw-in stop have been designed especially for gluing-in. They allow mechanical connecting elements with external thread to be made cost-effectively for small and medium-sized series. The LOCTITE products 638 and 648 have proven themselves in practice as a successful bonding agent. Technical data see K0404.

**Safety:**

Safety information is available on our internet site.



### KIPP Stud sets with screw-in stop

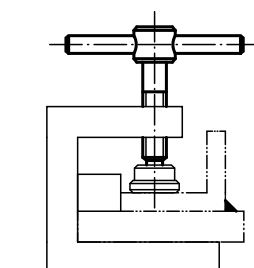
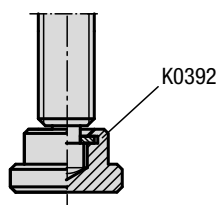
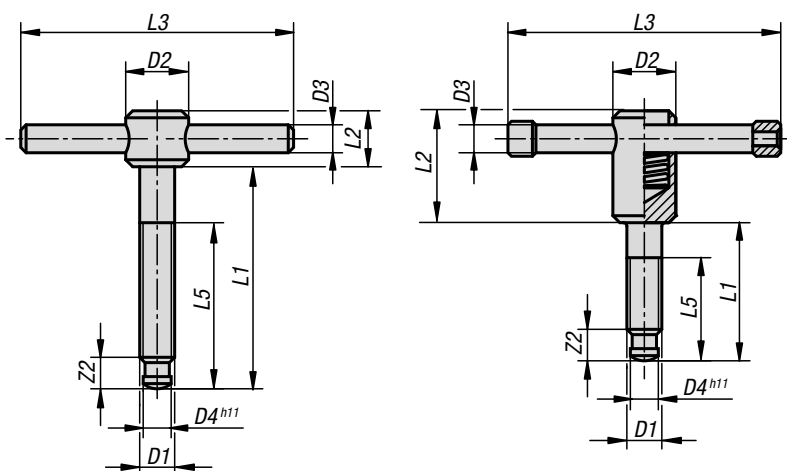
| Order No.<br>steel | Order No.<br>stainless steel | Content (pcs.)<br>(LOCTITE adhesives 638 and 648 not included)                                                                                                                                    |
|--------------------|------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| K0405.01           | K0405.02                     | M5x20 (x20), M5x40 (x20), M5x60 (x10),<br>M6x20 (x20), M6x40 (x20), M6x60 (x10),<br>M8x20 (x10), M8x40 (x10), M8x60 (x6),<br>M10x20 (x10), M10x40 (x10), M10x60 (x6),<br>M12x40 (x6), M12x60 (x6) |

### KIPP LOCTITE adhesives (accessories)

| Order No.     | Version     | Container    | Shearing strength<br>N/mm <sup>2</sup> | Break-away torque<br>Nm | Temperature<br>resistance |
|---------------|-------------|--------------|----------------------------------------|-------------------------|---------------------------|
| K0655.6380010 | LOCTITE 638 | 10 ml bottle | 20-35                                  | 35-60                   | -55 °C - +150 °C          |
| K0655.6480010 | LOCTITE 648 | 10 ml bottle | 16-30                                  | 30-55                   | -55 °C - +175 °C          |

## T-thrust screws

with fixed or sliding T-bar, DIN 6304 or DIN 6306



**Material:**  
Steel.

**Version:**  
Black oxidised. Thrust pin hardened.

**Sample order:**  
K0756.106X40

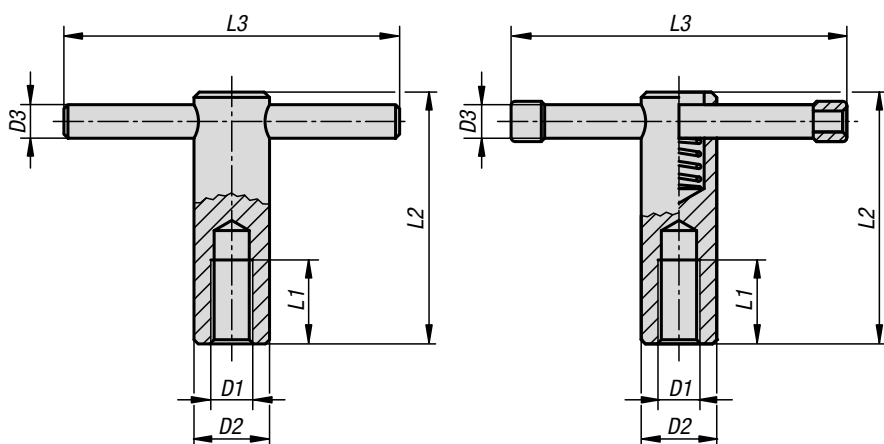
**Note:**  
By the thrust screws with sliding T-bar the bar is held in any desired position by a spring in the body. End stops prevent the bar falling out. By the fixed handles the T-bar is pressed in.

### KIPP T-thrust screws with fixed or sliding T-bar, DIN 6304 or DIN 6306

| Order No.     | Version 1     | D1  | D2 | D3 | D4   | L1  | L2 | L3  | L5 | Z2  |
|---------------|---------------|-----|----|----|------|-----|----|-----|----|-----|
| K0756.106X40  | fixed t-bar   | M6  | 12 | 5  | 4,5  | 40  | 10 | 50  | 30 | 6   |
| K0756.106X50  | fixed t-bar   | M6  | 12 | 5  | 4,5  | 50  | 10 | 50  | 40 | 6   |
| K0756.108X50  | fixed t-bar   | M8  | 14 | 6  | 6    | 50  | 12 | 60  | 35 | 7,5 |
| K0756.108X60  | fixed t-bar   | M8  | 14 | 6  | 6    | 60  | 12 | 60  | 45 | 7,5 |
| K0756.110X60  | fixed t-bar   | M10 | 18 | 8  | 8    | 60  | 14 | 80  | 40 | 9   |
| K0756.110X70  | fixed t-bar   | M10 | 18 | 8  | 8    | 70  | 14 | 80  | 50 | 9   |
| K0756.112X70  | fixed t-bar   | M12 | 20 | 10 | 8    | 70  | 18 | 100 | 50 | 10  |
| K0756.112X80  | fixed t-bar   | M12 | 20 | 10 | 8    | 80  | 18 | 100 | 60 | 10  |
| K0756.116X75  | fixed t-bar   | M16 | 24 | 12 | 12   | 75  | 20 | 120 | 55 | 12  |
| K0756.116X90  | fixed t-bar   | M16 | 24 | 12 | 12   | 90  | 20 | 120 | 70 | 12  |
| K0756.116X110 | fixed t-bar   | M16 | 24 | 12 | 12   | 110 | 20 | 120 | 90 | 12  |
| K0756.120X75  | fixed t-bar   | M20 | 30 | 16 | 15,5 | 75  | 28 | 140 | 55 | 14  |
| K0756.120X90  | fixed t-bar   | M20 | 30 | 16 | 15,5 | 90  | 28 | 140 | 70 | 14  |
| K0756.120X110 | fixed t-bar   | M20 | 30 | 16 | 15,5 | 110 | 28 | 140 | 90 | 14  |
| K0756.210X40  | sliding t-bar | M10 | 18 | 8  | 8    | 40  | 32 | 80  | 30 | 9   |
| K0756.210X50  | sliding t-bar | M10 | 18 | 8  | 8    | 50  | 32 | 80  | 40 | 9   |
| K0756.212X50  | sliding t-bar | M12 | 20 | 10 | 8    | 50  | 35 | 100 | 40 | 10  |
| K0756.212X60  | sliding t-bar | M12 | 20 | 10 | 8    | 60  | 35 | 100 | 50 | 10  |
| K0756.216X55  | sliding t-bar | M16 | 24 | 13 | 12   | 55  | 40 | 120 | 45 | 12  |
| K0756.216X70  | sliding t-bar | M16 | 24 | 13 | 12   | 70  | 40 | 120 | 60 | 12  |
| K0756.216X90  | sliding t-bar | M16 | 24 | 13 | 12   | 90  | 40 | 120 | 80 | 12  |
| K0756.220X55  | sliding t-bar | M20 | 30 | 16 | 15,5 | 55  | 45 | 140 | 45 | 14  |
| K0756.220X70  | sliding t-bar | M20 | 30 | 16 | 15,5 | 70  | 45 | 140 | 60 | 14  |
| K0756.220X90  | sliding t-bar | M20 | 30 | 16 | 15,5 | 90  | 45 | 140 | 80 | 14  |

## Tommy bars

with fixed or sliding T-bar, DIN 6305 or DIN 6307



### Material:

Steel.

### Version:

Black oxidised.

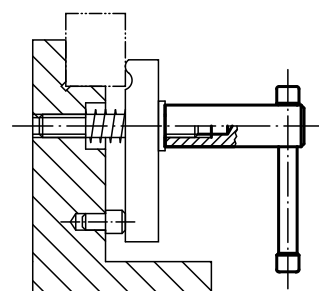
### Sample order:

K0755.210

### Note:

By the version with sliding T-bar the bar is held in any desired position by a spring in the body. End stops prevent the bar falling out.

By the version with fixed T-bar the bar is pressed in.



### KIPP Tommy bars with fixed or sliding T-bar, DIN 6305 or DIN 6307

| Order No. | Version 1     | D1  | D2 | D3 | L1 | L2 | L3  |
|-----------|---------------|-----|----|----|----|----|-----|
| K0755.110 | fixed t-bar   | M10 | 18 | 8  | 20 | 60 | 80  |
| K0755.112 | fixed t-bar   | M12 | 20 | 10 | 25 | 70 | 100 |
| K0755.116 | fixed t-bar   | M16 | 24 | 12 | 35 | 85 | 120 |
| K0755.120 | fixed t-bar   | M20 | 30 | 16 | 40 | 95 | 140 |
| K0755.210 | sliding t-bar | M10 | 18 | 8  | 20 | 60 | 80  |
| K0755.212 | sliding t-bar | M12 | 20 | 10 | 25 | 70 | 100 |
| K0755.216 | sliding t-bar | M16 | 24 | 13 | 35 | 85 | 120 |
| K0755.220 | sliding t-bar | M20 | 30 | 16 | 40 | 95 | 140 |

## Clamping force intensifiers



### Material:

Bearing housing steel.

### Version:

Black oxidised.

### Sample order:

K0584.06

### Note:

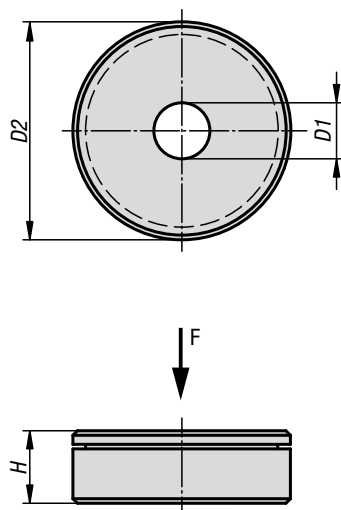
As a rule, the clamping force intensifier is used together with tightening or clamping elements. The integrated axial needle roller thrust bearing unit can achieve ca. twice the clamping force by the same lever length.

### Advantages:

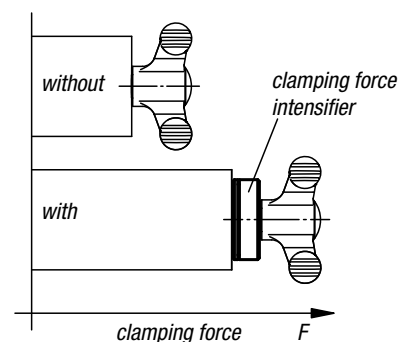
The component surface is protected by the stationary lower ring.

The higher preload force causes a lower tendency for material relaxation in the thread.

Clamping levers, wing and star grips, knurled knobs or hexagonal and socket head screws etc. can be used as tightening or clamping elements.



With constant torque



### KIPP Clamping force intensifiers

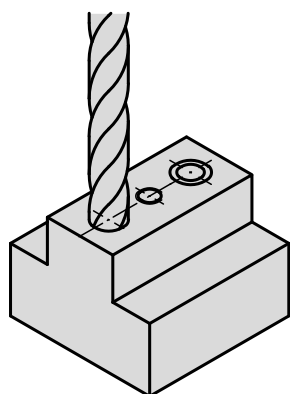
| Order No. | D1 | D2 | H | Dynamic load rating N | Static load rating N |
|-----------|----|----|---|-----------------------|----------------------|
| K0584.06  | 6  | 24 | 8 | 6800                  | 15500                |
| K0584.08  | 8  | 25 | 8 | 7800                  | 19400                |
| K0584.10  | 10 | 30 | 8 | 9200                  | 25500                |
| K0584.12  | 12 | 35 | 8 | 9900                  | 29000                |



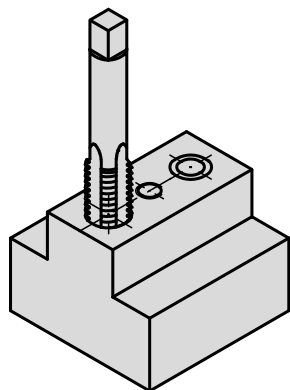
# Installing and removing threaded inserts



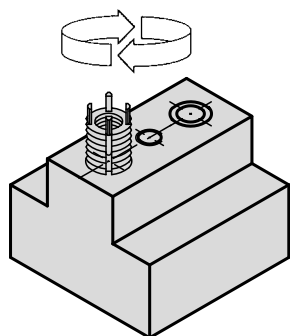
## Fitting instructions



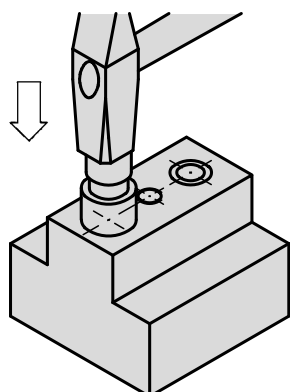
- 1.\*  
Rebore the old thread and countersink it ( $82^\circ - 100^\circ$ ).



- 2.\*  
Tap thread with a standard screw tap.



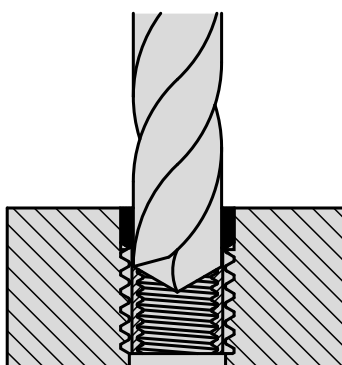
3.  
Screw in the insert to just below the surface ( $0.3 - 0.7 \text{ mm}$ ).



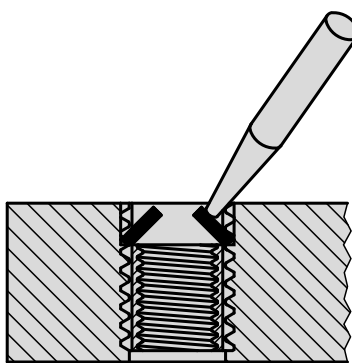
4.  
Drive in the locking pins by striking the assembly tool lightly with a hammer.

\* For steps 1 and 2 see table under installation of threaded inserts.

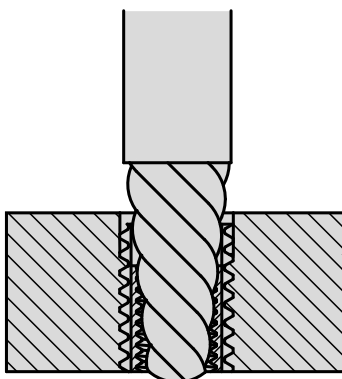
## Removal instructions



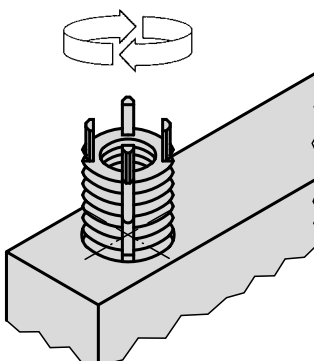
- 1.\*  
Rebore the material between the locking pins and the internal thread to the specified depth.



2.  
Bend the locking pins inwards and break them off.



3.  
Remove the old insert with a screw extractor.

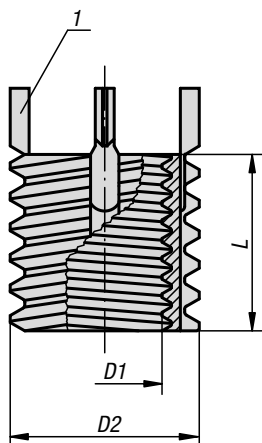


4.  
Install a new threaded insert in the original threaded hole.

\* For step 1 see tables under "removal drilling depth"



## Threaded inserts



### Material:

Threaded insert in steel or stainless steel.

### Version:

Passivated.

### Sample order:

Threaded Insert K0398.12

Assembly tool K0398.812

### Note:

Threaded inserts allow threaded holes which have been damaged, torn out or jammed to be used again or to be repaired, enabling expensive products to be saved from the scrap heap.

Threaded inserts are suitable for use in various materials, including light metals and castings.

Inserts with internal threads larger than M6 are supplied with four locking pins instead of two.

### Permissible deviations:

The medium tolerance class applies to the threads listed, i.e. 6H for nut threads and 6g for bolt threads. Other dimensions  $\pm 0.25$  mm.

Technical information see operating instructions for threaded inserts.

### Advantages:

- Quick and easy installation.
- The insert is fixed with pins in order to prevent torsion due to twisting or vibrations.
- No other special tools are required besides the assembly tool.

### Drawing reference:

1) locking pin

## KIPP Threaded inserts and assembly tools

| Order No.<br>steel | Order No.<br>stainless steel | D1<br>internal<br>thread | D2<br>external<br>thread | L<br>length | Core<br>drill Ø | Counter-<br>sink Ø<br>+0.25 | Tap<br>size | Min.<br>thread<br>depth | Removal<br>drill<br>Ø | Removal<br>drilling<br>depth | Order No.<br>assembly tools |
|--------------------|------------------------------|--------------------------|--------------------------|-------------|-----------------|-----------------------------|-------------|-------------------------|-----------------------|------------------------------|-----------------------------|
| K0398.05           | K0398.105                    | M5                       | M8                       | 8           | 6,9             | 8,3                         | M8          | 9,5                     | 5,5                   | 4                            | K0398.805                   |
| K0398.06           | K0398.106                    | M6                       | M10x1,25                 | 10          | 8,8             | 10,3                        | M10x1,25    | 11,5                    | 7,5                   | 4,8                          | K0398.806                   |
| K0398.08           | K0398.108                    | M8                       | M12x1,25                 | 12          | 10,8            | 12,3                        | M12x1,25    | 13,5                    | 9,5                   | 4,8                          | K0398.808                   |
| K0398.08X1         | K0398.108X1                  | M8x1                     | M12x1,25                 | 12          | 10,8            | 12,3                        | M12x1,25    | 13,5                    | 9,5                   | 4,8                          | K0398.808                   |
| K0398.10           | K0398.110                    | M10                      | M14x1,5                  | 14          | 12,8            | 14,3                        | M14x1,5     | 15,5                    | 11,5                  | 4,8                          | K0398.810                   |
| K0398.10X125       | K0398.110X125                | M10x1,25                 | M14x1,5                  | 14          | 12,8            | 14,3                        | M14x1,5     | 15,5                    | 11,5                  | 4,8                          | K0398.810                   |
| K0398.12           | K0398.112                    | M12                      | M16x1,5                  | 16          | 14,8            | 16,3                        | M16x1,5     | 17,5                    | 13,5                  | 4,8                          | K0398.812                   |
| K0398.12X125       | K0398.112X125                | M12x1,25                 | M16x1,5                  | 16          | 14,8            | 16,3                        | M16x1,5     | 17,5                    | 13,5                  | 4,8                          | K0398.812                   |

# Threaded inserts reinforced

**Material:**

Threaded insert in steel or stainless steel.

**Version:**

Passivated.

**Sample order:**

Reinforced threaded insert K0399.12

Assembly tool K0399.812

**Note:**

Reinforced threaded inserts allow threaded holes which have been damaged, torn out or jammed to be used again or to be repaired. This makes it possible to recover scrap and rejects of expensive products.

Reinforced threaded inserts are suitable for use in various materials, including light metals and casting.

Inserts with internal threads larger than M6 are supplied with four locking pins instead of two.

**Permissible deviations:**

The medium tolerance class applies to the threads listed, i.e. 6H for nut threads and 6g for bolt threads. Other dimensions  $\pm 0.25$  mm.



With reinforced threaded inserts we also offer a version with a stronger cross-section for use in applications with greater stress.

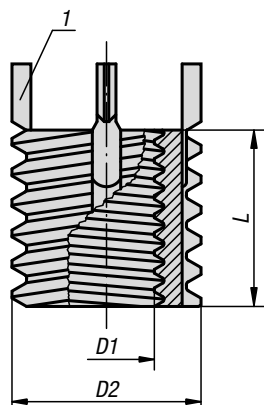
Technical information see operating instructions for threaded inserts.

**Advantages:**

- Quick and easy installation.
- The insert is fixed with pins in order to prevent torsion due to twisting or vibrations.
- No other special tools are required besides the assembly tool.

**Drawing reference:**

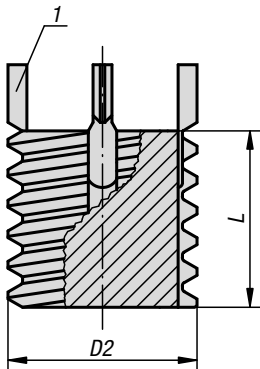
1) locking pin



## KIPP Threaded inserts reinforced and assembly tools

| Order No.<br>steel | Order No.<br>stainless steel | D1<br>internal<br>thread | D2<br>external<br>thread | L<br>length | Core<br>drill Ø | Counter-<br>sink Ø<br>+0.25 | Tap<br>size | Min.<br>thread<br>depth | Removal<br>drill<br>Ø | Removal<br>drilling<br>depth | Order No.<br>assembly tools |
|--------------------|------------------------------|--------------------------|--------------------------|-------------|-----------------|-----------------------------|-------------|-------------------------|-----------------------|------------------------------|-----------------------------|
| K0399.04           | K0399.104                    | M4                       | M8                       | 8           | 6,9             | 8,3                         | M8          | 9,5                     | 5,5                   | 4                            | K0399.804                   |
| K0399.05           | K0399.105                    | M5                       | M10x1,25                 | 10          | 8,8             | 10,3                        | M10x1,25    | 12,5                    | 7,5                   | 4,8                          | K0399.805                   |
| K0399.06           | K0399.106                    | M6                       | M12x1,25                 | 12          | 10,8            | 12,3                        | M12x1,25    | 14,5                    | 9,5                   | 4,8                          | K0399.806                   |
| K0399.08           | K0399.108                    | M8                       | M14x1,5                  | 14          | 12,8            | 14,3                        | M14x1,5     | 16,5                    | 11,5                  | 4,8                          | K0399.808                   |
| K0399.08X1         | K0399.108X1                  | M8x1                     | M14x1,5                  | 14          | 12,8            | 14,3                        | M14x1,5     | 16,5                    | 11,5                  | 4,8                          | K0399.808                   |
| K0399.10           | K0399.110                    | M10                      | M16x1,5                  | 16          | 14,8            | 16,3                        | M16x1,5     | 18,5                    | 13,5                  | 4,8                          | K0399.810                   |
| K0399.10X125       | K0399.110X125                | M10x1,25                 | M16x1,5                  | 16          | 14,8            | 16,3                        | M16x1,5     | 18,5                    | 13,5                  | 4,8                          | K0399.810                   |
| K0399.12           | K0399.112                    | M12                      | M18x1,5                  | 18          | 16,8            | 18,3                        | M18x1,5     | 20,5                    | 15,5                  | 4,8                          | K0399.812                   |
| K0399.12X125       | K0399.112X125                | M12x1,25                 | M18x1,5                  | 18          | 16,8            | 18,3                        | M18x1,5     | 20,5                    | 15,5                  | 4,8                          | K0399.812                   |
| K0399.14           | K0399.114                    | M14                      | M20x1,5                  | 20          | 18,8            | 20,3                        | M20x1,5     | 22,5                    | 17,5                  | 4,8                          | K0399.814                   |
| K0399.14X15        | K0399.114X15                 | M14x1,5                  | M20x1,5                  | 20          | 18,8            | 20,3                        | M20x1,5     | 22,5                    | 17,5                  | 4,8                          | K0399.814                   |
| K0399.16           | K0399.116                    | M16                      | M22x1,5                  | 22          | 20,7            | 22,3                        | M22x1,5     | 24,5                    | 17,8                  | 6,4                          | K0399.816                   |
| K0399.16X15        | K0399.116X15                 | M16x1,5                  | M22x1,5                  | 22          | 20,7            | 22,3                        | M22x1,5     | 24,5                    | 17,8                  | 6,4                          | K0399.816                   |
| K0399.18X15        | K0399.118X15                 | M18x1,5                  | M24x1,5                  | 24          | 22,5            | 24,3                        | M24x1,5     | 26,5                    | 19,8                  | 6,4                          | K0399.818                   |
| K0399.20           | K0399.120                    | M20                      | M30x2                    | 30          | 28              | 30,3                        | M30x2       | 34,5                    | 25,8                  | 6,4                          | K0399.820                   |
| K0399.20X15        | K0399.120X15                 | M20x1,5                  | M30x2                    | 30          | 28              | 30,3                        | M30x2       | 34,5                    | 25,8                  | 6,4                          | K0399.820                   |
| K0399.22X15        | K0399.122X15                 | M22x1,5                  | M32x2                    | 32          | 30              | 32,3                        | M32x2       | 36,5                    | 27,8                  | 6,4                          | K0399.822                   |
| K0399.24           | K0399.124                    | M24                      | M33x2                    | 33          | 31              | 33,3                        | M33x2       | 37,5                    | 28,8                  | 6,4                          | K0399.824                   |
| K0399.24X2         | K0399.124X2                  | M24x2                    | M33x2                    | 33          | 31              | 33,3                        | M33x2       | 37,5                    | 28,8                  | 6,4                          | K0399.824                   |

# Threaded inserts solid body

**Material:**

Threaded insert in steel.

**Version:**

Passivated.

**Sample order:**

Solid body threaded insert K0400.10X125

Assembly tool K0400.810

**Note:**

Solid body threaded inserts allow threaded holes which have been damaged, torn out or jammed to be used again or to be repaired. This makes it possible to recover scrap and rejects of expensive products.

Solid body threaded inserts are suitable for use in various materials, including light metals and castings.

Permissible deviations:

The medium tolerance class applies to the threads listed, i.e. 6g for bolt threads.

Other dimensions  $\pm 0.25$  mm.

Solid body threaded inserts are used where threaded holes that have been drilled too large or drill hole spacings that have not been observed in workpieces need to be redone.

Technical information see operating instructions for threaded inserts.

**Advantages:**

- Quick and easy installation.
- The insert is fixed with pins in order to prevent torsion due to twisting or vibrations.
- No other special tools are required besides the assembly tool.

**Drawing reference:**

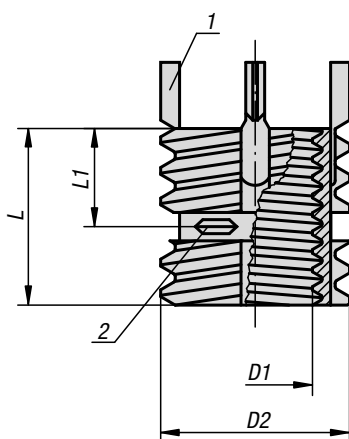
1) locking pin

## KIPP Threaded inserts solid body and assembly tools

| Order No.    | D2<br>external<br>thread | L<br>length | Core<br>drill Ø | Counter-<br>sink Ø<br>+0.25 | Tap<br>size | Min.<br>thread<br>depth | Removal<br>drill<br>Ø | Removal<br>drilling<br>depth | Order No.<br>assembly tools |
|--------------|--------------------------|-------------|-----------------|-----------------------------|-------------|-------------------------|-----------------------|------------------------------|-----------------------------|
| K0400.08     | M8                       | 8           | 6,9             | 8,3                         | M8          | 9,5                     | 5,5                   | 4                            | K0400.808                   |
| K0400.10X125 | M10x1,25                 | 10          | 8,8             | 10,3                        | M10x1,25    | 12,5                    | 7,5                   | 4,8                          | K0400.810                   |
| K0400.12X125 | M12x1,25                 | 12          | 10,8            | 12,3                        | M12x1,25    | 14,5                    | 9,5                   | 4,8                          | K0400.812                   |
| K0400.14X15  | M14x1,5                  | 14          | 12,8            | 14,3                        | M14x1,5     | 16,5                    | 11,5                  | 4,8                          | K0400.814                   |
| K0400.16X15  | M16x1,5                  | 16          | 14,8            | 16,3                        | M16x1,5     | 18,5                    | 13,5                  | 4,8                          | K0400.816                   |
| K0400.18X15  | M18x1,5                  | 18          | 16,8            | 18,3                        | M18x1,5     | 20,5                    | 15,5                  | 4,8                          | K0400.818                   |
| K0400.20X15  | M20x1,5                  | 20          | 18,8            | 20,3                        | M20x1,5     | 22,5                    | 17,5                  | 4,8                          | K0400.820                   |
| K0400.22X15  | M22x1,5                  | 22          | 20,7            | 22,3                        | M22x1,5     | 24,5                    | 17,8                  | 6,4                          | K0400.822                   |
| K0400.24X15  | M24x1,5                  | 24          | 22,5            | 24,3                        | M24x1,5     | 26,5                    | 19,8                  | 6,4                          | K0400.824                   |
| K0400.30X2   | M30x2                    | 30          | 28              | 30,3                        | M30x2       | 34,5                    | 25,8                  | 6,4                          | K0400.830                   |

# Threaded inserts

with internal thread, self-locking


**Material:**

Threaded insert in stainless steel.

**Version:**

Passivated.

**Sample order:**

Threaded Insert K0401.112

Assembly tool K0398.812

**Note:**

Threaded inserts allow threaded holes which have been damaged, torn out or jammed to be used again or to be repaired. This makes it possible to recover scrap and rejects of expensive products.

Threaded inserts are suitable for use in various materials, including light metals and casting. Inserts with internal threads larger than M6 are supplied with four locking pins instead of two.

Permissible deviations:

the medium tolerance class applies to the threads listed, i.e. 6H for nut threads and 6g for bolt threads. Other dimensions  $\pm 0.25$  mm.

Technical information see operating instructions for threaded inserts.

**Advantages:**

- Quick and easy installation.
- The insert is fixed with pins in order to prevent torsion due to twisting or vibrations.
- No other special tools are required besides the assembly tool.

**Drawing reference:**

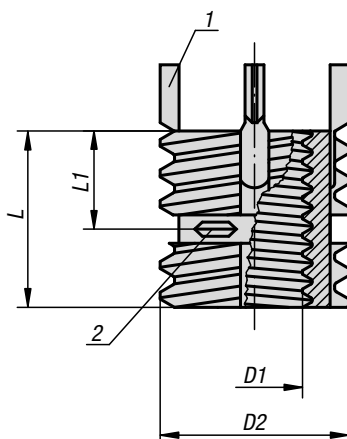
- 1) locking pin
- 2) self-locking part of internal thread

## KIPP Threaded inserts with internal thread, self-locking and assembly tools

| Order No. | D1<br>internal<br>thread | D2<br>external<br>thread | L1<br>length | L<br>length | Core<br>drill Ø | Counter-<br>sink Ø<br>+0.25 | Tap<br>size | Min.<br>thread<br>depth | Removal<br>drill<br>Ø | Removal<br>drilling<br>depth | Order No.<br>assembly tools |
|-----------|--------------------------|--------------------------|--------------|-------------|-----------------|-----------------------------|-------------|-------------------------|-----------------------|------------------------------|-----------------------------|
| K0401.105 | M5                       | M8                       | 4            | 8           | 6,9             | 8,3                         | M8          | 9,5                     | 5,5                   | 4                            | K0398.805                   |
| K0401.106 | M6                       | M10x1,25                 | 5            | 10          | 8,8             | 10,3                        | M10x1,25    | 11,5                    | 7,5                   | 4,8                          | K0398.806                   |
| K0401.108 | M8                       | M12x1,25                 | 6            | 12          | 10,8            | 12,3                        | M12x1,25    | 13,5                    | 9,5                   | 4,8                          | K0398.808                   |
| K0401.110 | M10                      | M14x1,5                  | 7            | 14          | 12,8            | 14,3                        | M14x1,5     | 15,5                    | 11,5                  | 4,8                          | K0398.810                   |
| K0401.112 | M12                      | M16x1,5                  | 8            | 16          | 14,8            | 16,3                        | M16x1,5     | 17,5                    | 13,5                  | 4,8                          | K0398.812                   |

# Threaded inserts reinforced

internal thread, self-locking


**Material:**

Threaded insert in stainless steel.

**Version:**

Passivated.

**Sample order:**

Reinforced threaded insert K0402.110

Assembly tool K0399.812

**Note:**

Reinforced threaded inserts allow threaded holes which have been damaged, torn out or jammed to be used again or to be repaired. This makes it possible to recover scrap and rejects of expensive products. Reinforced threaded inserts are suitable for use in various materials, including light metals and casting. Inserts with internal threads larger than M6 are supplied with four locking pins instead of two.

**Permissible deviations:**

The medium tolerance class applies to the threads listed, i.e. 6H for nut threads and 6g for bolt threads. Other dimensions  $\pm 0.25$  mm.

Technical information see operating instructions for threaded inserts.

**Advantages:**

- Quick and easy installation.
- The insert is fixed with pins in order to prevent torsion due to twisting or vibrations.
- No other special tools are required besides the assembly tool.

**Drawing reference:**

- 1) locking pin
- 2) self-locking part of internal thread

## KIPP Threaded inserts reinforced with internal thread, self-locking and assembly tools

| Order No.    | D1<br>internal<br>thread | D2<br>external<br>thread | L1<br>length | L<br>length | Core<br>drill Ø | Counter-<br>sink Ø<br>+0.25 | Tap<br>size | Min.<br>thread<br>depth | Removal<br>drill<br>Ø | Removal<br>drilling<br>depth | Order No.<br>assembly tools |
|--------------|--------------------------|--------------------------|--------------|-------------|-----------------|-----------------------------|-------------|-------------------------|-----------------------|------------------------------|-----------------------------|
| K0402.104    | M4                       | M8                       | 4            | 8           | 6,9             | 8,3                         | M8          | 9,5                     | 5,5                   | 4                            | K0399.804                   |
| K0402.105    | M5                       | M10x1,25                 | 5            | 10          | 8,8             | 10,3                        | M10x1,25    | 12,5                    | 7,5                   | 4,8                          | K0399.805                   |
| K0402.106    | M6                       | M12x1,25                 | 6            | 12          | 10,8            | 12,3                        | M12x1,25    | 14,5                    | 9,5                   | 4,8                          | K0399.806                   |
| K0402.108    | M8                       | M14x1,5                  | 7            | 14          | 12,8            | 14,3                        | M14x1,5     | 16,5                    | 11,5                  | 4,8                          | K0399.808                   |
| K0402.110    | M10                      | M16x1,5                  | 8            | 16          | 14,8            | 16,3                        | M16x1,5     | 18,5                    | 13,5                  | 4,8                          | K0399.810                   |
| K0402.112    | M12                      | M18x1,5                  | 9            | 18          | 16,8            | 18,3                        | M18x1,5     | 20,5                    | 15,5                  | 4,8                          | K0399.812                   |
| K0402.114    | M14                      | M20x1,5                  | 10           | 20          | 18,8            | 20,3                        | M20x1,5     | 22,5                    | 17,5                  | 4,8                          | K0399.814                   |
| K0402.116    | M16                      | M22x1,5                  | 11           | 22          | 20,7            | 22,3                        | M22x1,5     | 24,5                    | 17,8                  | 6,4                          | K0399.816                   |
| K0402.116X15 | M16x1,5                  | M22x1,5                  | 11           | 22          | 20,7            | 22,3                        | M22x1,5     | 24,5                    | 17,8                  | 6,4                          | K0399.816                   |
| K0402.118X15 | M18x1,5                  | M24x1,5                  | 12           | 24          | 22,5            | 24,3                        | M24x1,5     | 26,5                    | 19,8                  | 6,4                          | K0399.818                   |
| K0402.120    | M20                      | M30x2                    | 15           | 30          | 28              | 30,3                        | M30x2       | 34,5                    | 25,8                  | 6,4                          | K0399.820                   |

**Material:**

Threaded insert in steel.

**Version:**

Passivated.

**Sample order:**

K0653.01

**Note:**

The repair kit allows threaded holes which have been damaged, torn out or jammed to be used again or to be repaired. This makes it possible to recover scrap and rejects of expensive products.

Threaded inserts are suitable for use in various materials, including light metals and casting. Inserts with internal threads larger than M6 are supplied with four locking pins instead of two.

Permissible deviations:

the medium tolerance class applies to the threads listed, i.e. 6H for nut threads and 6g for bolt threads. Other dimensions  $\pm 0.25$  mm.

Technical information see operating instructions for threaded inserts.

**Advantages:**

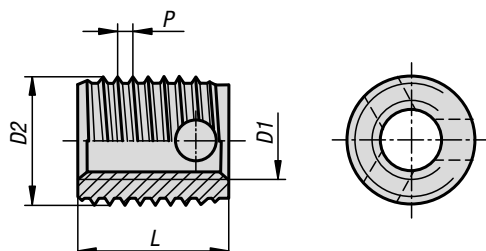
- Quick and easy installation.
- The insert is fixed with pins in order to prevent torsion due to twisting or vibrations.
- No other special tools are required besides the assembly tool.

**KIPP Repair kit**

| Order No. | Female threads | Male threads | Insert length | Number of inserts | Number of assembly tools | Order No. of individual insert |
|-----------|----------------|--------------|---------------|-------------------|--------------------------|--------------------------------|
| K0653.01  | M5             | M8           | 8             | 8                 | 1                        | K0398.05                       |
|           | M6             | M10X1,25     | 10            | 8                 | 1                        | K0398.06                       |
|           | M8             | M12X1,25     | 12            | 6                 | 1                        | K0398.08                       |
|           | M8X1           | M12X1,25     | 12            | 6                 | -                        | K0398.08X1                     |
|           | M10            | M14X1,5      | 14            | 4                 | 1                        | K0398.10                       |
|           | M10X1,25       | M14X1,5      | 14            | 4                 | -                        | K0398.10X125                   |
|           | M12            | M16X1,5      | 16            | 3                 | 1                        | K0398.12                       |
|           | M12X1,25       | M16X1,5      | 16            | 3                 | -                        | K0398.12X125                   |

# Threaded inserts self-tapping

with cutting bores


**Material:**

Steel or 1.4305 stainless steel

**Version:**

Steel case hardened, electro zinc-plated.  
Stainless steel bright.

**Sample order:**

K0979.03

**Note:**

Self-tapping threaded inserts for making high-strength, wear-free, vibration resistant screw connections in materials with low shear strength such as aluminium and aluminium alloys, brass, bronze, cast iron, duro and thermoplastics.

The threaded inserts are tapered at the bottom and have three cutting bores. They cut their own threads inside a receiver hole. This guarantees a completely secure and firm anchoring in the host material.

Internal thread D1 acc. to ISO 6H.

The threaded inserts with cutting bores are designed especially for materials difficult to machine. Due to the thicker wall, it can withstand greater force during cutting, which is also distributed over three cutting bores.

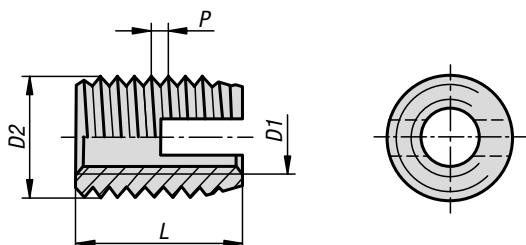
## KIPP Threaded inserts self-tapping with cutting bores

| Order No. | Main material   | D1 internal thread | D2  | L length | P    | T min. | R min. light metal | R min. cast iron | R min. plastics | Order No. Hand ass. tool | Order No. M/C ass. tool |
|-----------|-----------------|--------------------|-----|----------|------|--------|--------------------|------------------|-----------------|--------------------------|-------------------------|
| K0979.03  | steel           | M3                 | 5   | 4        | 0,6  | 6      | 1                  | 1,5              | 1,25            | K0978.803                | K0978.903               |
| K0979.04  | steel           | M4                 | 6,5 | 6        | 0,8  | 8      | 1,3                | 1,95             | 1,6             | K0978.804                | K0978.904               |
| K0979.05  | steel           | M5                 | 8   | 7        | 1    | 9      | 1,6                | 2,4              | 2               | K0978.805                | K0978.905               |
| K0979.06  | steel           | M6                 | 10  | 8        | 1,25 | 10     | 2                  | 3                | 2,5             | K0978.806                | K0978.906               |
| K0979.08  | steel           | M8                 | 12  | 9        | 1,5  | 11     | 2,4                | 3,6              | 3               | K0978.808                | K0978.908               |
| K0979.10  | steel           | M10                | 14  | 10       | 1,5  | 13     | 2,8                | 4,2              | 3,5             | K0978.810                | K0978.910               |
| K0979.12  | steel           | M12                | 16  | 12       | 1,75 | 15     | 3,2                | 4,8              | 4               | K0978.812                | K0978.912               |
| K0979.103 | stainless steel | M3                 | 5   | 4        | 0,6  | 6      | 1                  | 1,5              | 1,25            | K0978.803                | K0978.903               |
| K0979.104 | stainless steel | M4                 | 6,5 | 6        | 0,8  | 8      | 1,3                | 1,95             | 1,6             | K0978.804                | K0978.904               |
| K0979.105 | stainless steel | M5                 | 8   | 7        | 1    | 9      | 1,6                | 2,4              | 2               | K0978.805                | K0978.905               |
| K0979.106 | stainless steel | M6                 | 10  | 8        | 1,25 | 10     | 2                  | 3                | 2,5             | K0978.806                | K0978.906               |
| K0979.108 | stainless steel | M8                 | 12  | 9        | 1,5  | 11     | 2,4                | 3,6              | 3               | K0978.808                | K0978.908               |
| K0979.110 | stainless steel | M10                | 14  | 10       | 1,5  | 13     | 2,8                | 4,2              | 3,5             | K0978.810                | K0978.910               |
| K0979.112 | stainless steel | M12                | 16  | 12       | 1,75 | 15     | 3,2                | 4,8              | 4               | K0978.812                | K0978.912               |



# Threaded inserts self-tapping

with cutting slot



## Material:

Steel or 1.4305 stainless steel

## Version:

Steel case hardened, electro zinc-plated.  
Stainless steel bright.

## Sample order:

K0978.03

## Note:

Self-tapping threaded inserts for making high-strength, wear-free, vibration resistant screw connections in materials with low shear strength such as aluminium and aluminium alloys, brass, bronze, cast iron, duro and thermoplastics.



The threaded inserts are tapered at the bottom and have a cutting slot. By screwing in they cut their own threads inside a receiver hole. This guarantees a completely secure and firm anchoring in the host material.

Internal thread D1 acc. to ISO 6H.

The threaded inserts with cutting slot spring slightly inwards in the slot region in some materials. This results in a screw locking effect. If this is not desired, we recommend the threaded inserts with a cutting bore.

## KIPP Threaded inserts self-tapping with cutting slot

| Order No. | Main material   | D1 internal thread | D2  | L length | P    | T min. | R min. light metal | R min. cast iron | R min. plastics | Order No. Hand ass. tool | Order No. M/C ass. tool |
|-----------|-----------------|--------------------|-----|----------|------|--------|--------------------|------------------|-----------------|--------------------------|-------------------------|
| K0978.03  | steel           | M3                 | 5   | 6        | 0,5  | 8      | 1                  | 1,5              | 1,25            | K0978.803                | K0978.903               |
| K0978.04  | steel           | M4                 | 6,5 | 8        | 0,75 | 10     | 1,3                | 1,95             | 1,6             | K0978.804                | K0978.904               |
| K0978.05  | steel           | M5                 | 8   | 10       | 1    | 13     | 1,6                | 2,4              | 2               | K0978.805                | K0978.905               |
| K0978.06  | steel           | M6                 | 10  | 14       | 1,5  | 17     | 2                  | 3                | 2,5             | K0978.806                | K0978.906               |
| K0978.08  | steel           | M8                 | 12  | 15       | 1,5  | 18     | 2,4                | 3,6              | 3               | K0978.808                | K0978.908               |
| K0978.10  | steel           | M10                | 14  | 18       | 1,5  | 22     | 2,8                | 4,2              | 3,5             | K0978.810                | K0978.910               |
| K0978.12  | steel           | M12                | 16  | 22       | 1,5  | 26     | 3,2                | 4,8              | 4               | K0978.812                | K0978.912               |
| K0978.16  | steel           | M16                | 20  | 22       | 1,5  | 27     | 4                  | 6                | 5               | -                        | K0978.916               |
| K0978.103 | stainless steel | M3                 | 5   | 6        | 0,5  | 8      | 1                  | 1,5              | 1,25            | K0978.803                | K0978.903               |
| K0978.104 | stainless steel | M4                 | 6,5 | 8        | 0,75 | 10     | 1,3                | 1,95             | 1,6             | K0978.804                | K0978.904               |
| K0978.105 | stainless steel | M5                 | 8   | 10       | 1    | 13     | 1,6                | 2,4              | 2               | K0978.805                | K0978.905               |
| K0978.106 | stainless steel | M6                 | 10  | 14       | 1,5  | 17     | 2                  | 3                | 2,5             | K0978.806                | K0978.906               |
| K0978.108 | stainless steel | M8                 | 12  | 15       | 1,5  | 18     | 2,4                | 3,6              | 3               | K0978.808                | K0978.908               |
| K0978.110 | stainless steel | M10                | 14  | 18       | 1,5  | 22     | 2,8                | 4,2              | 3,5             | K0978.810                | K0978.910               |
| K0978.112 | stainless steel | M12                | 16  | 22       | 1,5  | 26     | 3,2                | 4,8              | 4               | K0978.812                | K0978.912               |
| K0978.116 | stainless steel | M16                | 20  | 22       | 1,5  | 27     | 4                  | 6                | 5               | -                        | K0978.916               |

## Drill bushes cylindrical

DIN 179



### Material:

Special low carbon steel

### Version:

Hardened to 740 ±80 HV 10 and ground.

### Sample order:

K1021.A0120X06  
(cylindrical drill bush, Form A with  
D1 = 1.2 mm and L1 = 6 mm)

### Note:

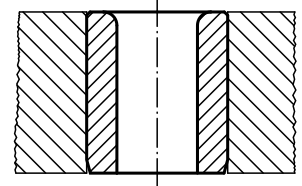
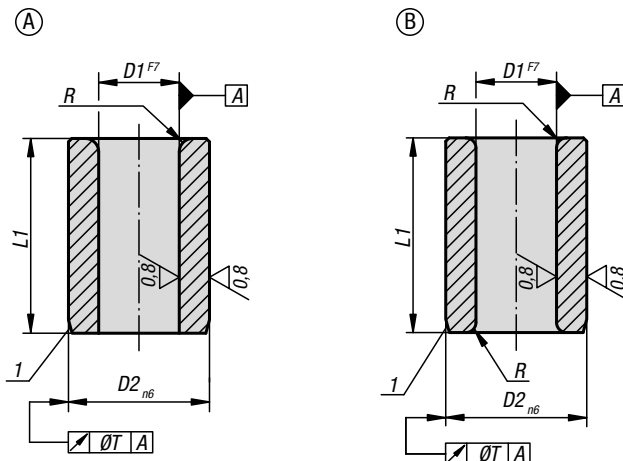
From diameter D1 over 15 mm size increases are  
0.5 mm.

### Drawing reference:

Form A: hole rounded one end

Form B: hole rounded both ends

1) Chamfer for insert

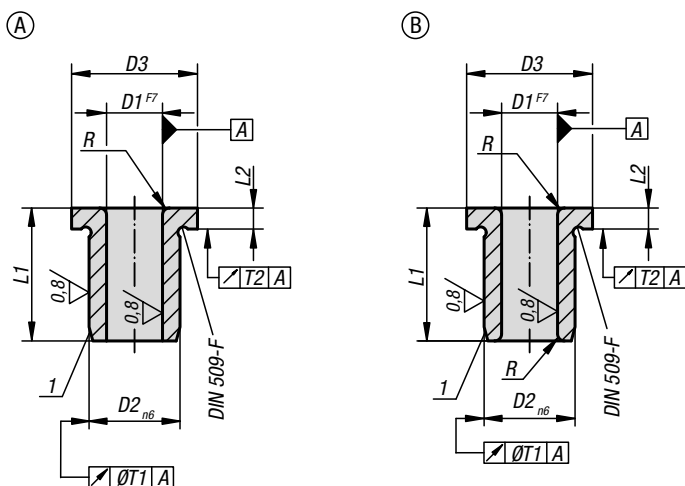


### KIPP Drill bushes cylindrical DIN 179

| D1                | D2 | L1       | Product type      | R   | T    |
|-------------------|----|----------|-------------------|-----|------|
| from 0.4 to 0.8   | 3  | 6        | short             | 1   | 0,01 |
| from 0.9 to 1.0   | 3  | 6/9      | short/medium      | 1   | 0,01 |
| from 1.1 to 1.8   | 4  | 6/9      | short/medium      | 1   | 0,01 |
| from 1.9 to 2.6   | 5  | 6/9      | short/medium      | 1   | 0,01 |
| from 2.7 to 3.3   | 6  | 12/16/8  | medium/long/short | 1   | 0,01 |
| from 3.4 to 4.0   | 7  | 8/12/16  | short/medium/long | 1   | 0,01 |
| from 4.1 to 5.0   | 8  | 8/12/16  | short/medium/long | 1   | 0,01 |
| from 5.1 to 6.0   | 10 | 10/16/20 | short/medium/long | 1,5 | 0,02 |
| from 6.1 to 8.0   | 12 | 10/16/20 | short/medium/long | 1,5 | 0,02 |
| from 8.1 to 10.0  | 15 | 12/20/25 | short/medium/long | 2   | 0,02 |
| from 10.1 to 12.0 | 18 | 12/20/25 | short/medium/long | 2   | 0,02 |
| from 12.1 to 15.0 | 22 | 16/28/36 | short/medium/long | 2   | 0,02 |
| from 15.5 to 18.0 | 26 | 16/28/36 | short/medium/long | 2   | 0,02 |
| from 18.5 to 22.0 | 30 | 20/36/45 | short/medium/long | 3   | 0,02 |
| from 22.5 to 26.0 | 35 | 20/36/45 | short/medium/long | 3   | 0,02 |
| from 26.5 to 30.0 | 42 | 25/45/56 | short/medium/long | 3   | 0,02 |
| from 30.5 to 35.0 | 48 | 25/45/56 | short/medium/long | 3   | 0,04 |
| from 35.5 to 42.0 | 55 | 30/56/67 | short/medium/long | 3,5 | 0,04 |
| from 42.5 to 48.0 | 62 | 30/56/67 | short/medium/long | 3,5 | 0,04 |

## Drill bushes flanged

DIN 172



### Material:

Special steel.

### Version:

Hardened and ground.  
Hardness 740 ±80 HV 10

### Sample order:

K1022.A0120X09  
(flanged drill bush, Form A with  
D1 = 1.2 mm and L1 = 9 mm)

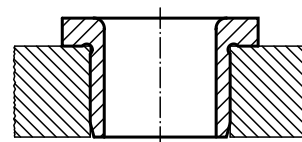
### Note:

From diameter D1 over 15 mm size increases are  
0.5 mm.

### Drawing reference:

Form A: hole rounded one end  
Form B: hole rounded both ends

1) Chamfer for insert

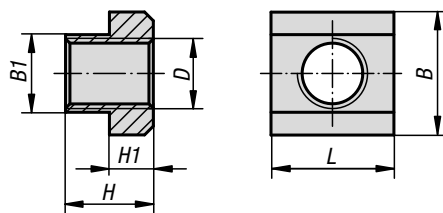


## KIPP Drill bushes flanged DIN 172

| D1                | D2 | D3 | L1       | Product type      | L2  | R   | T1   | T2   |
|-------------------|----|----|----------|-------------------|-----|-----|------|------|
| from 0.4 to 0.8   | 3  | 6  | 6        | short             | 2   | 1   | 0,01 | 0,03 |
| from 0.9 to 1.0   | 3  | 6  | 6/9      | short/medium      | 2   | 1   | 0,01 | 0,03 |
| from 1.1 to 1.8   | 4  | 7  | 6/9      | short/medium      | 2   | 1   | 0,01 | 0,03 |
| from 1.9 to 2.6   | 5  | 8  | 6/9      | short/medium      | 2   | 1   | 0,01 | 0,03 |
| from 2.7 to 3.3   | 6  | 9  | 8/12/16  | short/medium/long | 2,5 | 1   | 0,01 | 0,03 |
| from 3.4 to 4.0   | 7  | 10 | 8/12/16  | short/medium/long | 2,5 | 1   | 0,01 | 0,03 |
| from 4.1 to 5.0   | 8  | 11 | 8/12/16  | short/medium/long | 2,5 | 1   | 0,01 | 0,03 |
| from 5.1 to 6.0   | 10 | 13 | 10/16/20 | short/medium/long | 3   | 1,5 | 0,02 | 0,03 |
| from 6.1 to 8.0   | 12 | 15 | 10/16/20 | short/medium/long | 3   | 1,5 | 0,02 | 0,03 |
| from 8.1 to 10.0  | 15 | 18 | 12/20/25 | short/medium/long | 3   | 2   | 0,02 | 0,03 |
| from 10.1 to 12.0 | 18 | 22 | 12/20/25 | short/medium/long | 4   | 2   | 0,02 | 0,03 |
| from 12.1 to 15.0 | 22 | 26 | 16/28/36 | short/medium/long | 4   | 2   | 0,02 | 0,03 |
| from 15.5 to 18.0 | 26 | 30 | 16/28/36 | short/medium/long | 4   | 2   | 0,02 | 0,03 |
| from 18.5 to 22.0 | 30 | 34 | 20/36/45 | short/medium/long | 5   | 3   | 0,02 | 0,03 |
| from 22.5 to 26.0 | 35 | 39 | 20/36/45 | short/medium/long | 5   | 3   | 0,02 | 0,05 |
| from 26.5 to 30.0 | 42 | 46 | 25/45/56 | short/medium/long | 5   | 3   | 0,02 | 0,05 |
| from 30.5 to 35.0 | 48 | 52 | 25/45/56 | short/medium/long | 5   | 3   | 0,04 | 0,05 |
| from 35.5 to 42.0 | 55 | 59 | 30/56/67 | short/medium/long | 5   | 3,5 | 0,04 | 0,05 |
| from 42.5 to 48.0 | 62 | 66 | 30/56/67 | short/medium/long | 6   | 3,5 | 0,04 | 0,05 |

## Nuts for T-slots

DIN 508 enhanced



### KIPP Nuts for T-slots to DIN 508 enhanced

| Order No.  | Main material      | Slot width | B  | B1   | D   | H  | H1 | L  |
|------------|--------------------|------------|----|------|-----|----|----|----|
| K0377.05   | high carbon steel  | 6          | 10 | 5,6  | M5  | 8  | 4  | 10 |
| K0377.06   | high carbon steel  | 8          | 13 | 7,6  | M6  | 10 | 6  | 13 |
| K0377.061  | high carbon steel  | 10         | 15 | 9,6  | M6  | 12 | 6  | 15 |
| K0377.08   | high carbon steel  | 10         | 15 | 9,6  | M8  | 12 | 6  | 15 |
| K0377.081  | high carbon steel  | 12         | 18 | 11,6 | M8  | 14 | 7  | 18 |
| K0377.082  | high carbon steel  | 14         | 22 | 13,6 | M8  | 16 | 8  | 22 |
| K0377.10   | high carbon steel  | 12         | 18 | 11,6 | M10 | 14 | 7  | 18 |
| K0377.101  | high carbon steel  | 14         | 22 | 13,6 | M10 | 16 | 8  | 22 |
| K0377.12   | high carbon steel  | 14         | 22 | 13,6 | M12 | 16 | 8  | 22 |
| K0377.121  | high carbon steel  | 16         | 25 | 15,6 | M12 | 18 | 9  | 25 |
| K0377.122  | high carbon steel  | 18         | 28 | 17,6 | M12 | 20 | 10 | 28 |
| K0377.123  | high carbon steel  | 20         | 32 | 19,6 | M12 | 24 | 12 | 32 |
| K0377.124  | high carbon steel  | 22         | 35 | 21,6 | M12 | 28 | 14 | 35 |
| K0377.14   | high carbon steel  | 16         | 25 | 15,6 | M14 | 18 | 9  | 25 |
| K0377.141  | high carbon steel  | 18         | 28 | 17,6 | M14 | 20 | 10 | 28 |
| K0377.16   | high carbon steel  | 18         | 28 | 17,6 | M16 | 20 | 10 | 28 |
| K0377.161  | high carbon steel  | 20         | 32 | 19,6 | M16 | 24 | 12 | 32 |
| K0377.163  | high carbon steel  | 24         | 40 | 23,6 | M16 | 32 | 16 | 40 |
| K0377.164  | high carbon steel  | 28         | 44 | 27,6 | M16 | 36 | 18 | 44 |
| K0377.18   | high carbon steel  | 20         | 32 | 19,6 | M18 | 24 | 12 | 32 |
| K0377.181  | high carbon steel  | 22         | 35 | 21,6 | M18 | 28 | 14 | 35 |
| K0377.20   | high carbon steel  | 22         | 35 | 21,6 | M20 | 28 | 14 | 35 |
| K0377.201  | high carbon steel  | 24         | 40 | 23,6 | M20 | 32 | 16 | 40 |
| K0377.202  | high carbon steel  | 28         | 44 | 27,6 | M20 | 36 | 18 | 44 |
| K0377.22   | high carbon steel  | 24         | 40 | 23,6 | M22 | 32 | 16 | 40 |
| K0377.24   | high carbon steel  | 28         | 44 | 27,6 | M24 | 36 | 18 | 44 |
| K0377.241  | high carbon steel  | 36         | 54 | 35,5 | M24 | 44 | 22 | 54 |
| K0377.27   | high carbon steel  | 32         | 50 | 31,5 | M27 | 40 | 20 | 50 |
| K0377.30   | high carbon steel  | 36         | 54 | 35,5 | M30 | 44 | 22 | 54 |
| K0377.36   | high carbon steel  | 42         | 65 | 41,5 | M36 | 52 | 26 | 65 |
| K0377.204  | aluminium          | 6          | 10 | 5,6  | M4  | 8  | 4  | 10 |
| K0377.206  | aluminium          | 8          | 13 | 7,6  | M6  | 10 | 6  | 13 |
| K0377.2061 | aluminium          | 10         | 15 | 9,6  | M6  | 12 | 6  | 15 |
| K0377.208  | aluminium          | 12         | 18 | 11,6 | M8  | 14 | 7  | 18 |
| K0377.210  | aluminium          | 14         | 22 | 13,6 | M10 | 16 | 8  | 22 |
| K0377.216  | aluminium          | 22         | 35 | 21,6 | M16 | 28 | 14 | 35 |
| K0377.806  | stainless steel A4 | 8          | 13 | 7,6  | M6  | 10 | 6  | 13 |
| K0377.808  | stainless steel A4 | 10         | 15 | 9,6  | M8  | 12 | 6  | 15 |
| K0377.810  | stainless steel A4 | 12         | 18 | 11,6 | M10 | 14 | 7  | 18 |
| K0377.812  | stainless steel A4 | 14         | 22 | 13,6 | M12 | 16 | 8  | 22 |
| K0377.814  | stainless steel A4 | 16         | 25 | 15,6 | M14 | 18 | 9  | 25 |
| K0377.816  | stainless steel A4 | 18         | 28 | 17,6 | M16 | 20 | 10 | 28 |



#### Material:

Carbon steel grade 10, EN AW-7075 or stainless steel 1.4571.

#### Version:

Steel tempered (black).  
Aluminium and stainless steel bright.

#### Sample order:

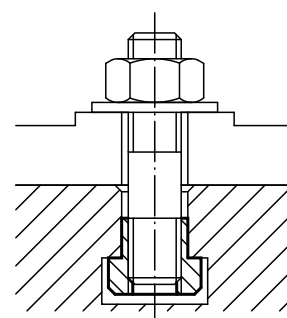
K0377.20

#### Note:

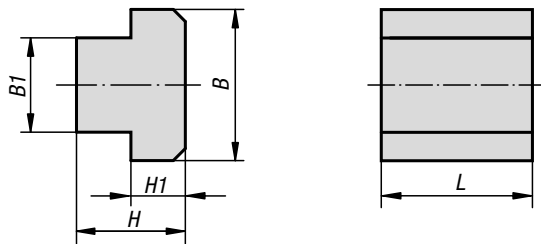
Aluminium T-slot nuts have steel threaded inserts.

Strength of stainless steel version:

$R_m = 700 \text{ N/mm}^2$ ,  $R_{p0,2} = 450 \text{ N/mm}^2$ .



## T-slot keys steel or stainless steel

**Material:**

High carbon steel or stainless steel 1.4305.

**Sample order:**

K0378.16

**Note:**

These blank nuts are used to make nuts for T-slots with all sorts of thread sizes cost-effectively.

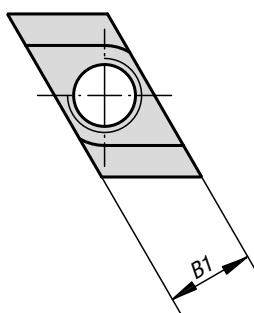
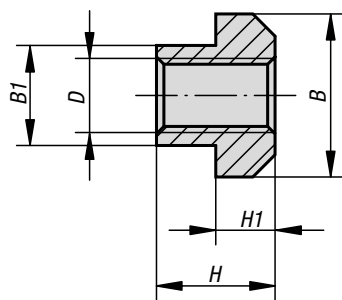


## KIPP T-slot keys steel or stainless steel

| Order No.<br>high carbon steel | Order No.<br>stainless steel | Slot<br>width | B  | B1   | H  | H1 | L  |
|--------------------------------|------------------------------|---------------|----|------|----|----|----|
| K0378.06                       | -                            | 6             | 10 | 5,6  | 8  | 4  | 10 |
| K0378.08                       | K0378.808                    | 8             | 13 | 7,6  | 10 | 6  | 13 |
| K0378.10                       | K0378.810                    | 10            | 15 | 9,6  | 12 | 6  | 15 |
| K0378.12                       | K0378.812                    | 12            | 18 | 11,5 | 14 | 7  | 18 |
| K0378.14                       | K0378.814                    | 14            | 22 | 13,5 | 16 | 8  | 22 |
| K0378.16                       | -                            | 16            | 25 | 15,6 | 18 | 9  | 25 |
| K0378.18                       | -                            | 18            | 28 | 17,5 | 20 | 10 | 28 |
| K0378.20                       | -                            | 20            | 32 | 19,6 | 24 | 12 | 32 |
| K0378.22                       | -                            | 22            | 35 | 21,6 | 28 | 14 | 35 |
| K0378.24                       | -                            | 24            | 40 | 23,6 | 32 | 16 | 40 |
| K0378.28                       | -                            | 28            | 44 | 27,6 | 36 | 18 | 44 |
| K0378.36                       | -                            | 36            | 54 | 35,5 | 44 | 22 | 54 |
| K0378.42                       | -                            | 42            | 65 | 41,6 | 52 | 26 | 65 |

## Nuts for T-slots

rhombic form



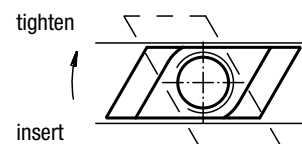
**Material:**  
Carbon steel.

**Version:**  
Tempered to 8 and black oxidised.

**Sample order:**  
K0379.114

**Note:**  
The benefit of rhombic nuts for T-slots is that they can be fitted in the slot from the top. They are particularly useful for long T-slots, or when the configuration on the machine table does not permit clamping screws or nuts for T-slots to be inserted from the side.

**Application:**  
Insert from above then twist in the slot until it stops.

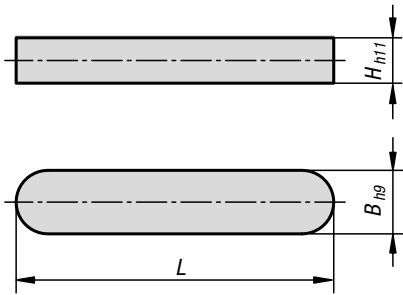


### KIPP Nuts for T-slots, rhombic form

| Order No. | Slot width | B  | B1   | D   | H  | H1 |
|-----------|------------|----|------|-----|----|----|
| K0379.105 | 6          | 10 | 5,6  | M5  | 8  | 4  |
| K0379.106 | 8          | 13 | 7,6  | M6  | 10 | 6  |
| K0379.108 | 10         | 15 | 9,7  | M8  | 12 | 6  |
| K0379.110 | 12         | 18 | 11,7 | M10 | 14 | 7  |
| K0379.210 | 14         | 22 | 13,5 | M10 | 16 | 8  |
| K0379.310 | 18         | 28 | 17,5 | M10 | 20 | 10 |
| K0379.112 | 14         | 22 | 13,7 | M12 | 16 | 8  |
| K0379.114 | 16         | 25 | 15,7 | M14 | 18 | 9  |
| K0379.116 | 18         | 28 | 17,7 | M16 | 20 | 10 |
| K0379.216 | 20         | 32 | 19,7 | M16 | 24 | 12 |
| K0379.316 | 22         | 35 | 21,5 | M16 | 28 | 14 |
| K0379.416 | 28         | 44 | 27,5 | M16 | 36 | 18 |
| K0379.118 | 20         | 32 | 19,7 | M18 | 24 | 12 |
| K0379.120 | 22         | 35 | 21,7 | M20 | 28 | 14 |
| K0379.124 | 28         | 44 | 27,7 | M24 | 36 | 18 |
| K0379.130 | 36         | 54 | 35,6 | M30 | 44 | 22 |
| K0379.136 | 42         | 65 | 41,5 | M36 | 52 | 26 |

## Parallel keys

DIN 6885 A

**Material:**

Steel 1.1192 or stainless steel 1.4571.

**Version:**

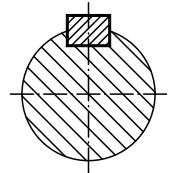
Bright.

**Sample order:**

K0696.04X12 (include length L)



Application example:

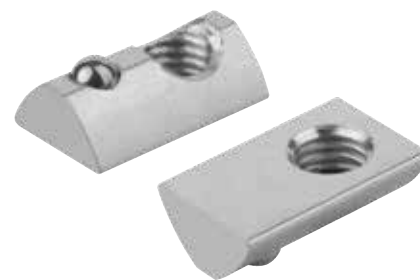


## KIPP Parallel keys DIN 6885 A

| Order No.  | Main material   | B  | H  | L = length                             |
|------------|-----------------|----|----|----------------------------------------|
| K0696.03X  | steel           | 3  | 3  | 8/10/12/14/16/18/20/22/25/28           |
| K0696.04X  | steel           | 4  | 4  | 8/10/12/14/16/18/20/22/25/28           |
| K0696.05X  | steel           | 5  | 5  | 12/14/16/18/20/22/25/28/32/36/40       |
| K0696.06X  | steel           | 6  | 6  | 12/14/16/18/20/22/25/28/32/36/40/45    |
| K0696.08X  | steel           | 8  | 7  | 14/16/18/20/22/25/28/32/36/40/45/50/70 |
| K0696.10X  | steel           | 10 | 8  | 22/25/28/32/36/40/45/50/56/70/80       |
| K0696.12X  | steel           | 12 | 8  | 25/28/32/36/40/45/50/56/70/80          |
| K0696.14X  | steel           | 14 | 9  | 25/28/32/36/40/45/50/56/70/80          |
| K0696.16X  | steel           | 16 | 10 | 50/56/63/70/80/90/100                  |
| K0696.103X | stainless steel | 3  | 3  | 10/12/16/20                            |
| K0696.104X | stainless steel | 4  | 4  | 10/12/14/16/18/20/22                   |
| K0696.105X | stainless steel | 5  | 5  | 12/14/16/18/20/22/25/28/36/40          |
| K0696.106X | stainless steel | 6  | 6  | 12/14/16/18/20/22/25/28/32/36/40       |
| K0696.108X | stainless steel | 8  | 7  | 16/18/20/22/25/28/32/36/40/45/50/70    |
| K0696.110X | stainless steel | 10 | 8  | 22/25/28/32/36/40/45/50/56/70/80       |
| K0696.112X | stainless steel | 12 | 8  | 28/32/36/40/45/50/56/70/80             |
| K0696.114X | stainless steel | 14 | 9  | 32/40/45/50/56/70/80                   |
| K0696.116X | stainless steel | 16 | 10 | 50/63/70/80/90/100                     |

## Slot nuts

twist-in Type I



**Material:**

Steel.

**Version:**

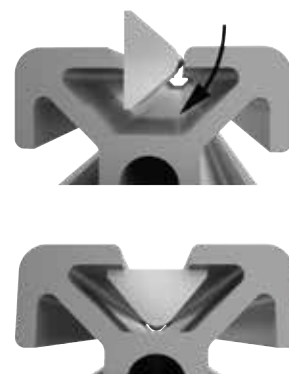
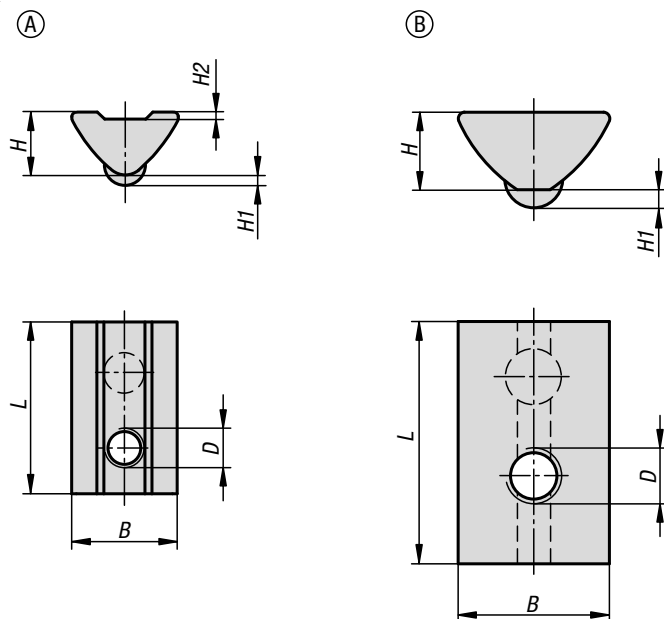
Electro zinc-plated.

**Sample order:**

K1023.0604

**Note:**

The slot nut is twisted into the profile slot and so can be subsequently inserted into existing systems. The spring-loaded ball allows the nut to be fixated anywhere in the profile slot.



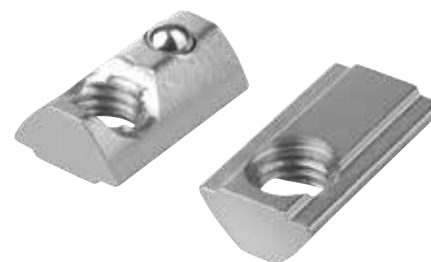
### KIPP Slot nuts twist-in Type I

| Order No.  | Form | Slot width | D  | B    | H   | H1  | H2  | L  |
|------------|------|------------|----|------|-----|-----|-----|----|
| K1023.0604 | A    | 6          | M4 | 10,5 | 6,3 | 1   | 0,7 | 17 |
| K1023.0605 | A    | 6          | M5 | 10,5 | 6,3 | 1   | 0,7 | 17 |
| K1023.0606 | A    | 6          | M6 | 10,5 | 6,3 | 1   | 0,7 | 17 |
| K1023.0804 | B    | 8          | M4 | 13,7 | 7   | 1,7 | 0,7 | 22 |
| K1023.0805 | B    | 8          | M5 | 13,7 | 7   | 1,7 | 0,7 | 22 |
| K1023.0806 | B    | 8          | M6 | 13,7 | 7   | 1,7 | 0,7 | 22 |
| K1023.0808 | B    | 8          | M8 | 13,7 | 7   | 1,7 | 0,7 | 22 |



## Slot nuts

twist-in, keyed Type I



### Material:

Steel.

### Version:

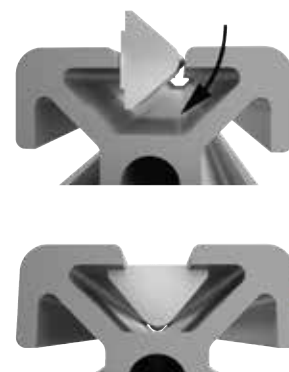
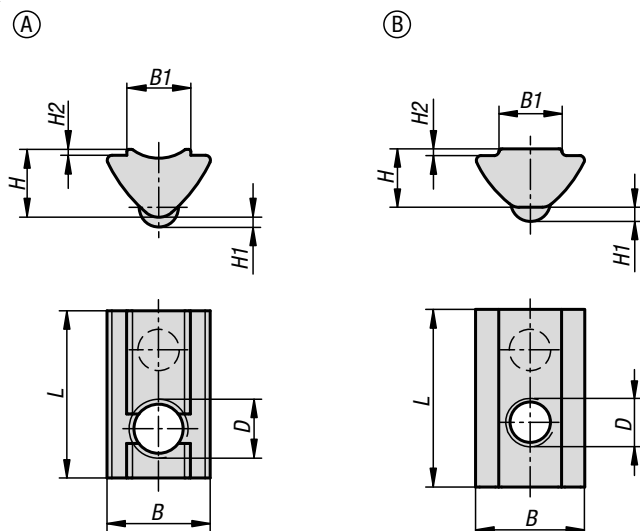
Electro zinc-plated.

### Sample order:

K1024.0604

### Note:

The slot nut is twisted into the profile slot and so can be subsequently inserted into existing systems. The spring-loaded ball allows the nut to be fixated anywhere in the profile slot. The key centres the nut in the profile slot and keeps it neatly seated.



### KIPP Slot nuts twist-in, keyed Type I

| Order No.  | Form | Slot width | D  | B    | B1  | H   | H1   | H2  | L  |
|------------|------|------------|----|------|-----|-----|------|-----|----|
| K1024.0604 | A    | 6          | M4 | 10,5 | 6,5 | 6,9 | 1    | 0,6 | 17 |
| K1024.0605 | A    | 6          | M5 | 10,5 | 6,5 | 6,9 | 1    | 0,6 | 17 |
| K1024.0606 | A    | 6          | M6 | 10,5 | 6,5 | 6,9 | 1    | 0,6 | 17 |
| K1024.0803 | B    | 8          | M3 | 13,5 | 7,8 | 7,2 | 1,75 | 0,8 | 22 |
| K1024.0804 | B    | 8          | M4 | 13,5 | 7,8 | 7,2 | 1,75 | 0,8 | 22 |
| K1024.0805 | B    | 8          | M5 | 13,5 | 7,8 | 7,2 | 1,75 | 0,8 | 22 |
| K1024.0806 | B    | 8          | M6 | 13,5 | 7,8 | 7,2 | 1,75 | 0,8 | 22 |
| K1024.0808 | B    | 8          | M8 | 13,5 | 7,8 | 7,2 | 1,75 | 0,8 | 22 |

## Slot keys

heavy duty Type I



**Material:**

Steel.

**Version:**

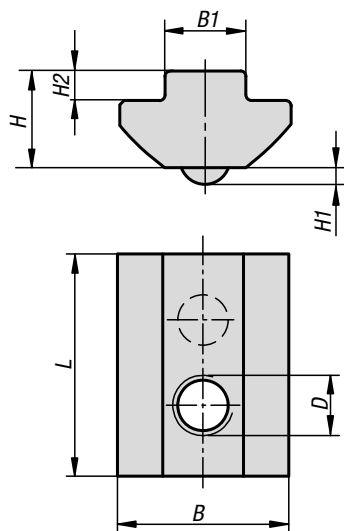
Electro zinc-plated.

**Sample order:**

K1025.0804

**Note:**

Suitable for high load connections. Since the key passes to the slot form of the profile, forces are transferred to the profile. The total height allows more threads to be engaged. The slot key can only be inserted into the profile slot from the end. The spring-loaded ball allows the slot key to be fixated anywhere in the profile slot.

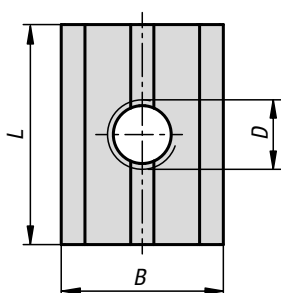
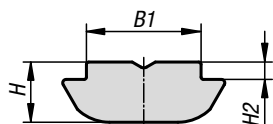


### KIPP Slot keys heavy duty Type I

| Order No.  | Slot width | B  | B1 | D  | H   | H1   | H2  | L  |
|------------|------------|----|----|----|-----|------|-----|----|
| K1025.0804 | 8          | 17 | 8  | M4 | 9,6 | 1,65 | 2,9 | 22 |
| K1025.0805 | 8          | 17 | 8  | M5 | 9,6 | 1,65 | 2,9 | 22 |
| K1025.0806 | 8          | 17 | 8  | M6 | 9,6 | 1,65 | 2,9 | 22 |
| K1025.0808 | 8          | 17 | 8  | M8 | 9,6 | 1,65 | 2,9 | 22 |

# Slot nuts

twist-in Type B


**Material:**

Steel.

**Version:**

Electro zinc-plated.

**Sample order:**

K1026.1004

**Note:**

The slot nut is twisted into the profile slot and so can be subsequently inserted into existing systems.

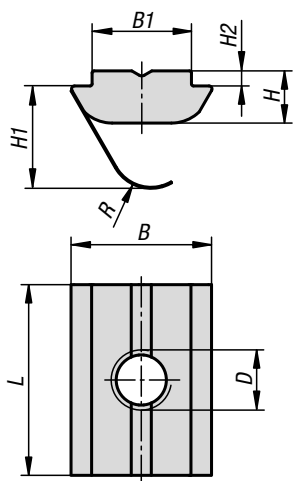


## KIPP Slot nuts twist-in Type B

| Order No.  | Slot width | B    | B1  | D  | H   | H2  | L  |
|------------|------------|------|-----|----|-----|-----|----|
| K1026.0804 | 8          | 11,6 | 7,9 | M4 | 4,6 | 1   | 16 |
| K1026.0805 | 8          | 11,6 | 7,9 | M5 | 4,6 | 1   | 16 |
| K1026.0806 | 8          | 11,6 | 7,9 | M6 | 4,6 | 1   | 16 |
| K1026.0808 | 8          | 11,6 | 7,9 | M8 | 4,6 | 1   | 16 |
| K1026.1004 | 10         | 14   | 9,9 | M4 | 5,2 | 1,5 | 19 |
| K1026.1005 | 10         | 14   | 9,9 | M5 | 5,2 | 1,5 | 19 |
| K1026.1006 | 10         | 14   | 9,9 | M6 | 5,2 | 1,5 | 19 |
| K1026.1008 | 10         | 14   | 9,9 | M8 | 5,2 | 1,5 | 19 |

# Slot nuts

twist-in with spring Type B


**Material:**

Steel.

**Version:**

Electro zinc-plated.

**Sample order:**

K1027.1004

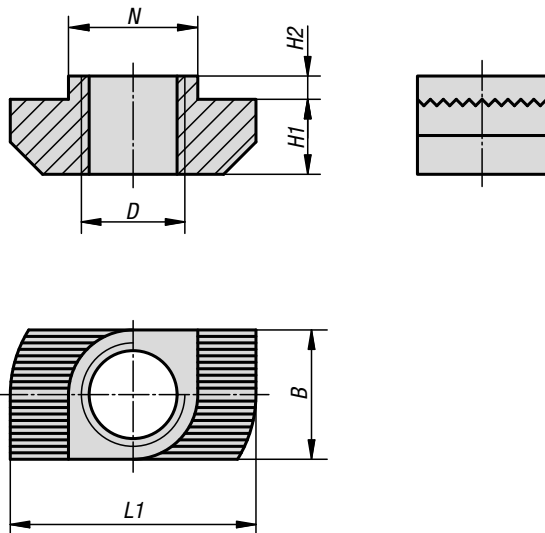
**Note:**

The slot nut is twisted into the profile slot and so can be subsequently inserted into existing systems. The spring allows the nut to be fixated anywhere in the profile slot.

## KIPP Slot nuts twist-in with spring Type B

| Order No.  | Slot width | B    | B1  | D  | H   | H1   | H2  | L  | R |
|------------|------------|------|-----|----|-----|------|-----|----|---|
| K1027.0804 | 8          | 11,6 | 7,9 | M4 | 4,6 | 8,8  | 1   | 16 | 3 |
| K1027.0805 | 8          | 11,6 | 7,9 | M5 | 4,6 | 8,8  | 1   | 16 | 3 |
| K1027.0806 | 8          | 11,6 | 7,9 | M6 | 4,6 | 8,8  | 1   | 16 | 3 |
| K1027.0808 | 8          | 11,6 | 7,9 | M8 | 4,6 | 8,8  | 1   | 16 | 3 |
| K1027.1004 | 10         | 14   | 9,9 | M4 | 5,2 | 10,2 | 1,5 | 19 | 4 |
| K1027.1005 | 10         | 14   | 9,9 | M5 | 5,2 | 10,2 | 1,5 | 19 | 4 |
| K1027.1006 | 10         | 14   | 9,9 | M6 | 5,2 | 10,2 | 1,5 | 19 | 4 |
| K1027.1008 | 10         | 14   | 9,9 | M8 | 5,2 | 10,2 | 1,5 | 19 | 4 |

## T-nuts



**Material:**  
Steel.

**Version:**  
Electro zinc-plated.

**Sample order:**  
K1028.0804015

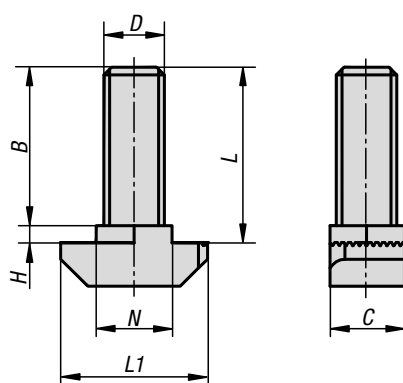
**Note:**  
Universal fastening element. The T-nut is twisted into the profile slot and so can be subsequently inserted into existing systems. The serrations break through the anodised film and creates a secure, electrical conductive connection.



### KIPP T-nuts

| Order No.     | Type | Slot width | B   | D  | H1  | H2  | L1 | N   |
|---------------|------|------------|-----|----|-----|-----|----|-----|
| K1028.0804015 | B    | 8          | 7,7 | M4 | 4,5 | 1,5 | 16 | 7,7 |
| K1028.0805015 | B    | 8          | 7,7 | M5 | 4,5 | 1,5 | 16 | 7,7 |
| K1028.0806015 | B    | 8          | 7,7 | M6 | 4,5 | 1,5 | 16 | 7,7 |
| K1028.1004030 | B    | 10         | 9,7 | M4 | 5,8 | 3   | 19 | 9,7 |
| K1028.1005017 | -    | 10         | 9,7 | M5 | 5,8 | 1,5 | 19 | 9,7 |
| K1028.1005030 | B    | 10         | 9,7 | M5 | 5,8 | 3   | 19 | 9,7 |
| K1028.1006017 | -    | 10         | 9,7 | M6 | 5,8 | 1,5 | 19 | 9,7 |
| K1028.1006030 | B    | 10         | 9,7 | M6 | 5,8 | 3   | 19 | 9,7 |
| K1028.1008017 | -    | 10         | 9,7 | M8 | 5,8 | 1,5 | 19 | 9,7 |
| K1028.1008030 | B    | 10         | 9,7 | M8 | 5,8 | 3   | 19 | 9,7 |

# Hammer-head screws



**Material:**  
Steel.

**Version:**  
Grade 8.8, electro zinc-plated.

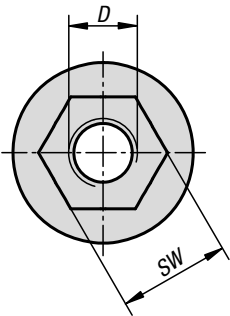
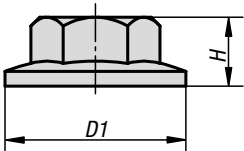
**Sample order:**  
K1029.0806015X16

**Note:**  
Universal fastening element. The hammer-headed screw is twisted into the profile slot and so can mounted into an existing systems at a later date. The serrations break through the anodised film and creates a secure, electrical conductive connection.

## KIPP Hammer-head screws

| Order No.        | Type | Slot width | B    | C   | D  | H   | L  | L1 | N   |
|------------------|------|------------|------|-----|----|-----|----|----|-----|
| K1029.0806015X16 | B    | 8          | 14,5 | 7,7 | M6 | 1,5 | 16 | 16 | 7,7 |
| K1029.0806015X20 | B    | 8          | 18,5 | 7,7 | M6 | 1,5 | 20 | 16 | 7,7 |
| K1029.0806015X25 | B    | 8          | 23,5 | 7,7 | M6 | 1,5 | 25 | 16 | 7,7 |
| K1029.1008030X20 | B    | 10         | 17   | 8,5 | M8 | 3   | 20 | 19 | 9,7 |
| K1029.1008030X25 | B    | 10         | 22   | 8,5 | M8 | 3   | 25 | 19 | 9,7 |
| K1029.1008030X30 | B    | 10         | 27   | 8,5 | M8 | 3   | 30 | 19 | 9,7 |
| K1029.1008030X40 | B    | 10         | 37   | 8,5 | M8 | 3   | 40 | 19 | 9,7 |
| K1029.1008030X60 | B    | 10         | 57   | 8,5 | M8 | 3   | 60 | 19 | 9,7 |

Hexagon nuts with flange



**Material:**  
Steel.

**Version:**  
Electro zinc-plated.

**Sample order:**  
K1030.08

**Note:**  
Nut with a large collar. Ideal together with a hammer-head screw.

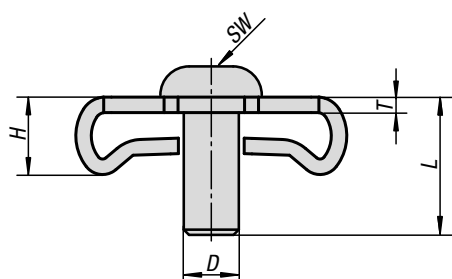
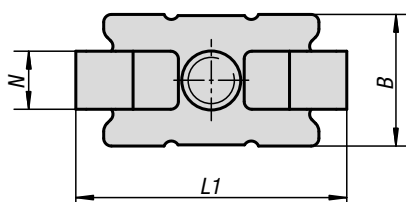


KIPP Hexagon nuts with flange

| Order No. | Type | Slot width | D  | D1 | H | SW |
|-----------|------|------------|----|----|---|----|
| K1030.08  | B    | 10         | M8 | 21 | 8 | 13 |

## Connecting sets standard

Type I



**Material:**  
Steel.

**Version:**  
Electro zinc-plated.

**Sample order:**  
K1031.06

**Note:**  
The connecting sets are used for connecting two aluminium profiles at right angles. The connection is non-rotating. For larger profiles several connecting sets can be mounted on the end for greater strength

Low workload. Cut a thread in the end face core hole. Drill a through hole for tightening the screw in the opposing profile.

### KIPP Connecting sets standard Type I

| Order No. | Type | Slot width | D  | B  | H   | L  | L1   | N | T | SW |
|-----------|------|------------|----|----|-----|----|------|---|---|----|
| K1031.06  | I    | 6          | M6 | 13 | 7,3 | 14 | 27,5 | 6 | 2 | 4  |
| K1031.08  | I    | 8          | M8 | 17 | 9,5 | 20 | 35   | 8 | 2 | 5  |



Central screw

Type B

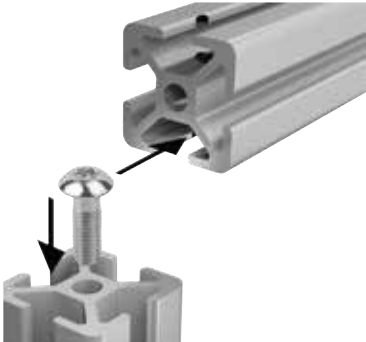
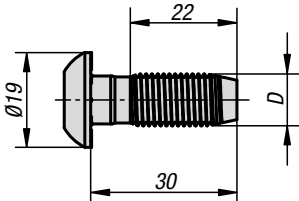


**Material:**  
Steel.

**Version:**  
Electro zinc-plated.

**Sample order:**  
K1040.1012

**Note:**  
Self-tapping screw for end face core hole. Ideal for fastenings without an angle or additional connectors not exposed to high loads.

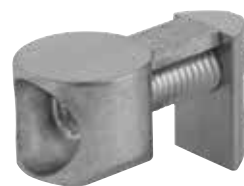


KIPP Central screw Type B

| Order No.  | Type | Slot width | D   | SW  |
|------------|------|------------|-----|-----|
| K1040.1012 | B    | 10         | S12 | T50 |

## Connecting sets universal

Type I



### Material:

Connector die-cast zinc.  
Screw and slot nuts steel.

### Version:

Electro zinc-plated.

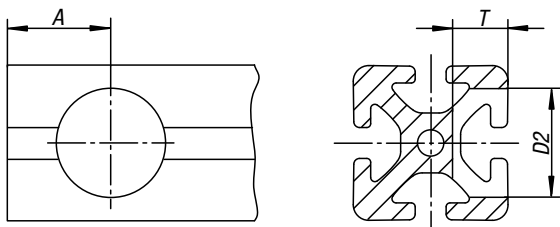
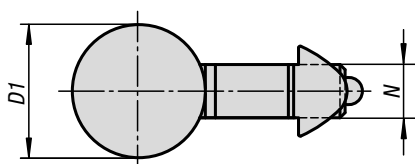
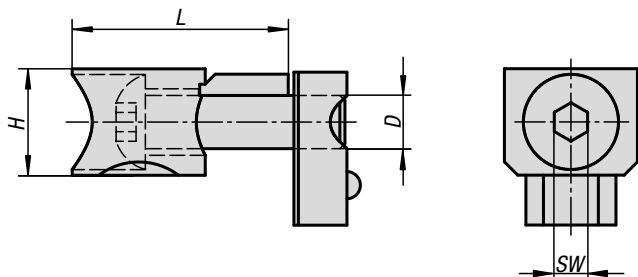
### Sample order:

K1032.06

### Note:

The connecting sets are used for connecting two aluminium profiles at right angles. They allow a free positioning of profiles. The connection is non-rotating (the rotation lock can be broken off). For larger profiles several connecting sets can be mounted on the end for greater strength. Retrofitting into existing constructions is possible.

Low workload. The connecting set requires only one hole drilled in one end.



### KIPP Connecting sets universal Type I

| Order No. | Type | Slot width | D  | D1 | H    | L    | N   | SW | A  | D2 | T    |
|-----------|------|------------|----|----|------|------|-----|----|----|----|------|
| K1032.06  | I    | 6          | M6 | 16 | 12,5 | 25,2 | 6,2 | 4  | 15 | 16 | 12,7 |
| K1032.08  | I    | 8          | M8 | 20 | 16   | 33,5 | 8   | 5  | 20 | 20 | 16   |

## Connecting sets central

Type I



### Material:

Steel.

### Version:

Electro zinc-plated.

### Sample order:

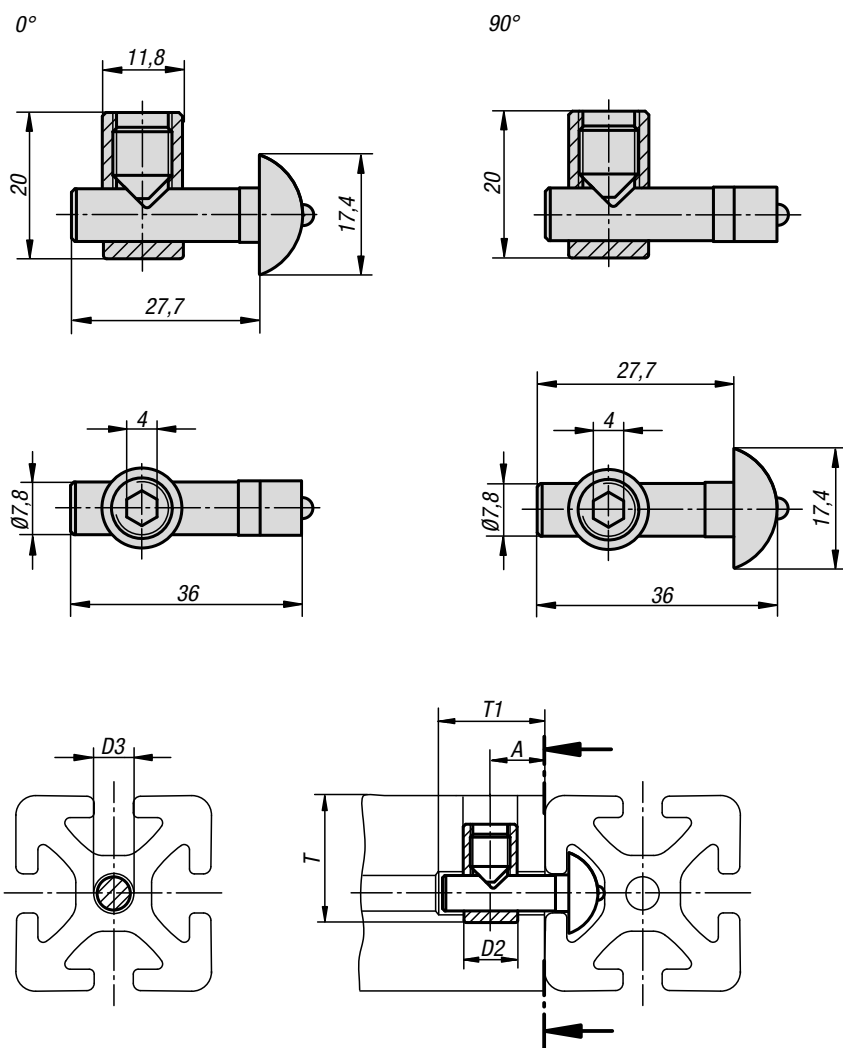
K1033.0800

### Note:

The connecting sets are used to connect two aluminium profiles at right angles. They allow free position of the profiles. The profile slots positioned at right-angles to each other remain free. Panel elements can be positioned in the profile grooves without additional machining.

Due to the reduced clamping force and omitted rotation locks, these connecting sets should only be used in combination with panel elements and lightly loaded constructions.

Low workload. To assemble a hole must be drilled into one of the profiles and the core hole must be drilled out.

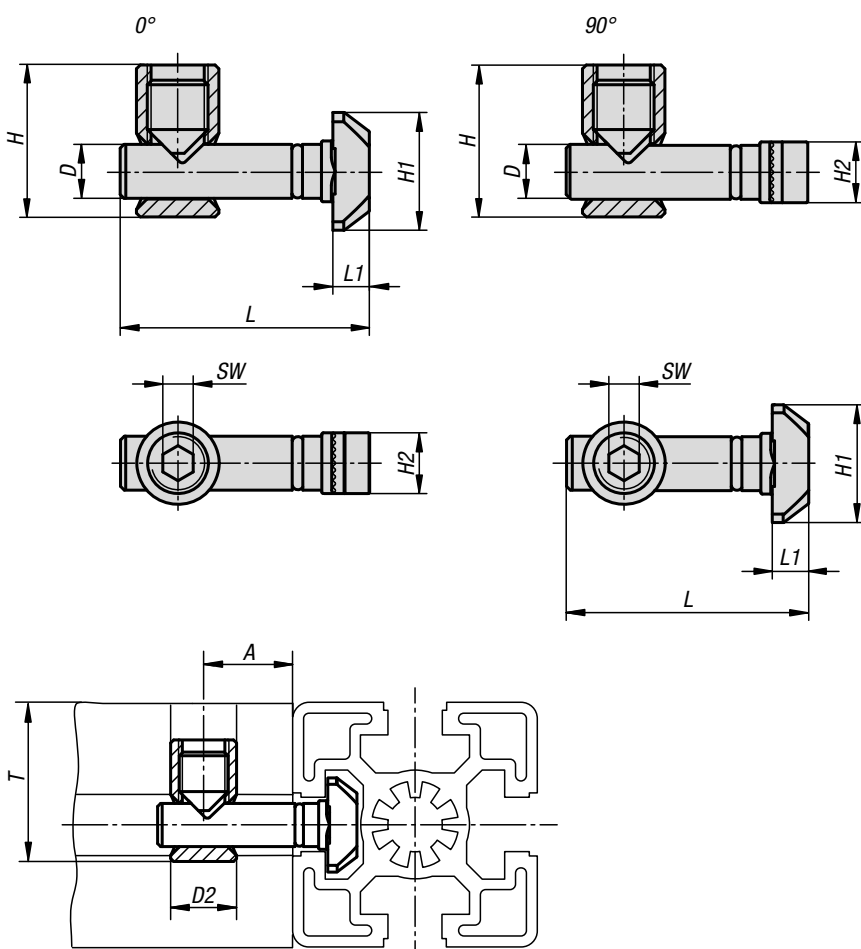


### KIPP Connecting sets central Type I

| Order No.  | Type | Slot width | Version | A  | D2 | D3 | T  | T1 |
|------------|------|------------|---------|----|----|----|----|----|
| K1033.0800 | I    | 8          | 0°      | 15 | 12 | 8  | 28 | 28 |
| K1033.0890 | I    | 8          | 90°     | 15 | 12 | 8  | 28 | 28 |

## Connecting sets central

Type B



**Material:**  
Steel.

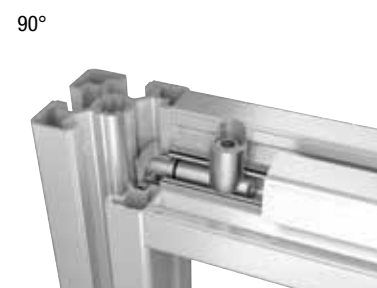
**Version:**  
Electro zinc-plated.

**Sample order:**  
K1034.1000

**Note:**  
The connecting sets are used to connect two aluminium profiles at right angles. They allow free position of the profiles. The profile slots positioned at right-angles to each other remain free. Panel elements can be positioned in the profile slots without additional machining.

Due to the reduced clamping force and omitted rotation locks, these connecting sets should only be used in combination with panel elements and lightly loaded constructions.

Low workload. To assemble a hole must be drilled into one of the profiles. The D2 hole can also be drilled through.

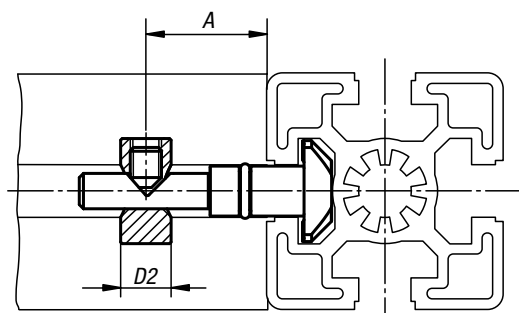
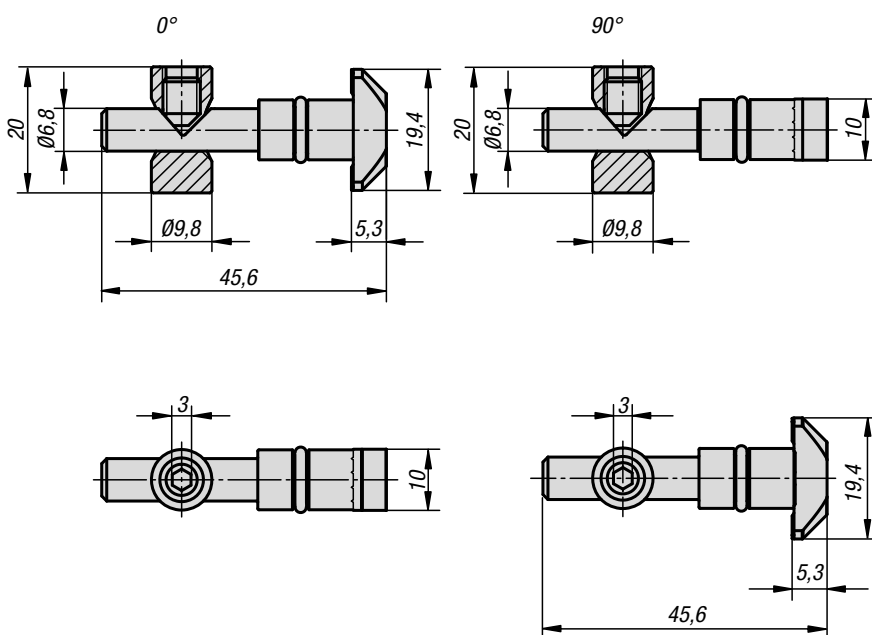


### KIPP Connecting sets central Type B

| Order No.  | Type | Slot width | Version | A    | D   | D2 | H  | H1   | H2 | L    | L1  | SW | T<br>for profile<br>30 | T<br>for profile<br>40 | T<br>for profile<br>45 | T<br>for profile<br>50 | T<br>for profile<br>60 |
|------------|------|------------|---------|------|-----|----|----|------|----|------|-----|----|------------------------|------------------------|------------------------|------------------------|------------------------|
| K1034.0800 | B    | 8          | 0°      | 18   | 7,1 | 11 | 20 | 15,5 | 8  | 33   | 4,8 | 4  | 22                     | -                      | -                      | -                      | -                      |
| K1034.0890 | B    | 8          | 90°     | 18   | 7,1 | 11 | 20 | 15,5 | 8  | 33   | 4,8 | 4  | 22                     | -                      | -                      | -                      | -                      |
| K1034.1000 | B    | 10         | 0°      | 22,5 | 9,7 | 17 | 28 | 19,5 | 10 | 45,5 | 5,5 | 6  | -                      | 31                     | 34                     | 36                     | 41                     |
| K1034.1090 | B    | 10         | 90°     | 22,5 | 9,7 | 17 | 28 | 19,5 | 10 | 45,5 | 5,5 | 6  | -                      | 31                     | 34                     | 36                     | 41                     |

## Connecting sets central

Type B



**Material:**  
Steel.

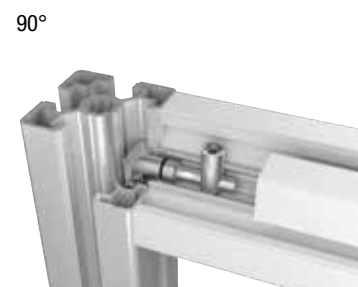
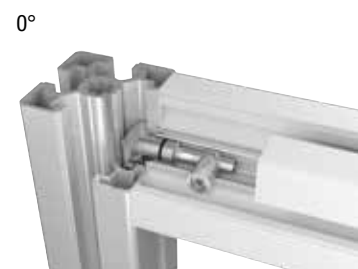
**Version:**  
Electro zinc-plated.

**Sample order:**  
K1035.1000

**Note:**  
The connecting sets are used to connect two aluminium profiles at right angles. They allow free position of the profiles. The profile slots positioned at right-angles to each other remain free. Panel elements can be positioned in the profile slots without additional machining.

Due to the reduced clamping force and omitted rotation locks, these connecting sets should only be used in combination with panel elements and lightly loaded constructions.

Low workload. To assemble a hole must be drilled into one of the profiles. Due to the reduced pin diameter the slot is not damaged and can be completely covered with a cover profile.

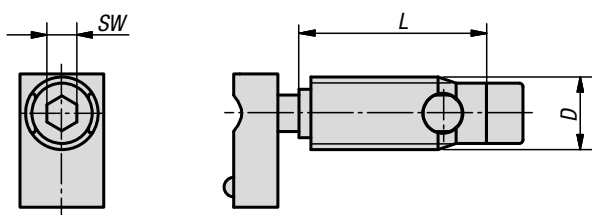


### KIPP Connecting sets central Type B

| Order No.  | Type | Slot width | Version | A    | D2  |
|------------|------|------------|---------|------|-----|
| K1035.1000 | B    | 10         | 0°      | 22,5 | 9,8 |
| K1035.1090 | B    | 10         | 90°     | 22,5 | 9,8 |

# Connecting sets automatic

Type I

**Material:**

Steel.

**Version:**

Electro zinc-plated.

**Sample order:**

K1036.06

**Note:**

The connecting sets are used to connect two aluminium profiles at right angles. They allow free position of the profiles.

No profile machining is necessary. The connector is screwed into the profile slot from the front (left-hand thread). The connector has a self-tapping thread. The use of lubricants is recommended.

Connecting sets automatic should always be used opposite each other in pairs.

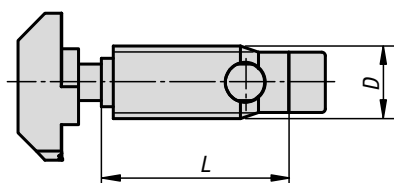
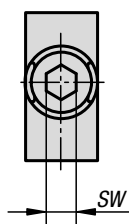
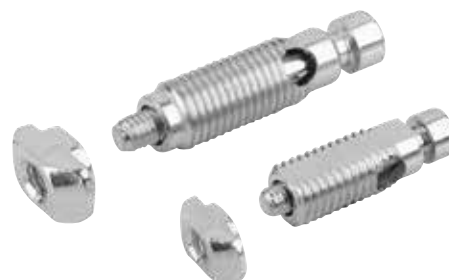


## KIPP Connecting sets automatic Type I

| Order No. | Type | Slot width | D  | L  | SW |
|-----------|------|------------|----|----|----|
| K1036.08  | I    | 8          | 12 | 31 | 5  |
| K1036.06  | I    | 6          | 10 | 27 | 4  |

# Connecting sets automatic

Type B

**Material:**

Steel.

**Version:**

Electro zinc-plated.

**Sample order:**

K1037.1012

**Note:**

The connecting sets are used to connect two aluminium profiles at right angles. They enable free positioning of the profiles.

No machining of the profile is required. The connector is screwed into the profile slot from the front (left-hand thread). The connector has a self-tapping thread. The use of lubricants is recommended.

Automatic connecting sets should always be used opposite each other in pairs.

Connecting set for slot width 8 has a flattened thread to prevent protruding after installation.



## KIPP Connecting sets automatic Type B

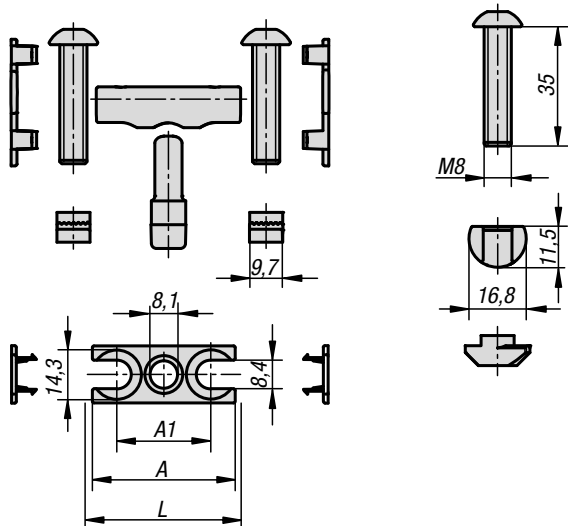
| Order No.  | Type | Slot width | D    | L  | SW |
|------------|------|------------|------|----|----|
| K1037.0810 | B    | 8          | 10,7 | 24 | 4  |
| K1037.1012 | B    | 10         | 12   | 35 | 5  |
| K1037.1013 | B    | 10 light   | 13   | 35 | 5  |

## Pin connector sets

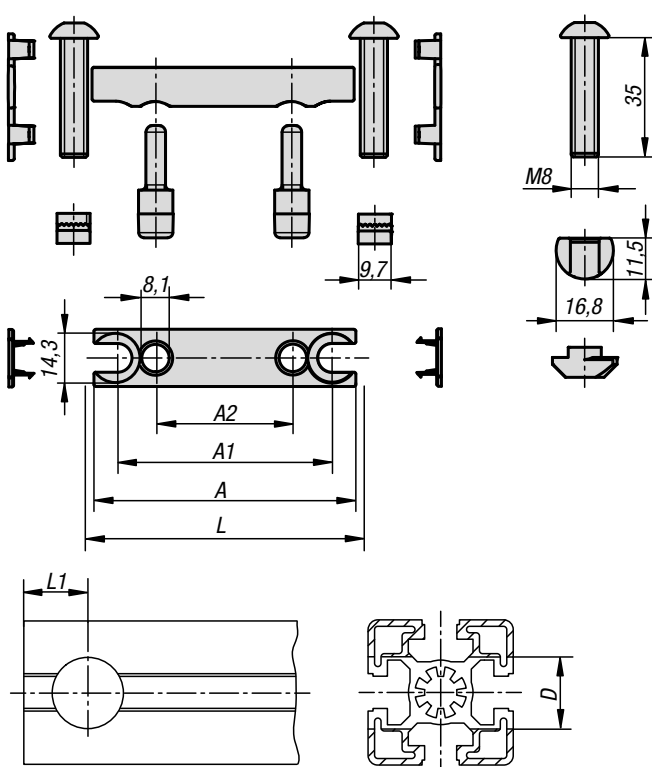
Type B



-1040 / -1045 / -1060



-1080 / -1090



### Material:

Pins, screws and T-nuts steel.  
Locating pin and end caps polyamide, fibreglass reinforced.

### Version:

Pins, screws and T-nuts electro zinc-plated.  
Locating pin and end caps black.

### Sample order:

K1038.1040

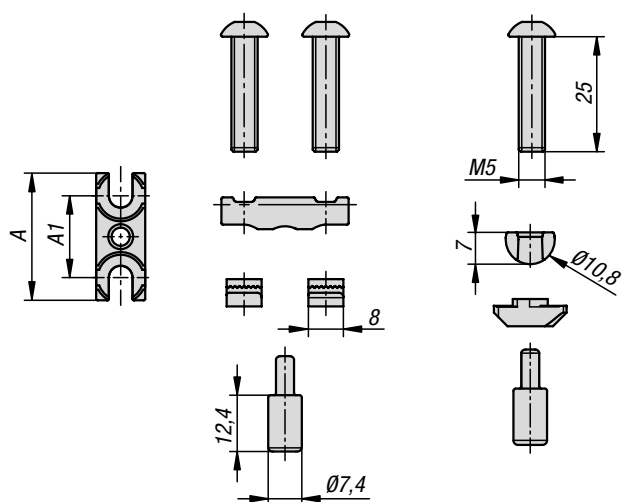
### Note:

The connecting sets are used to connect two aluminium profiles at right angles. They allow free position of the profiles. Suitable for high loads and torsional forces.

Low processing workload. The connecting set requires only one Ø17 mm hole drilled in one end for installation.

The connecting set K1038.0828 requires only one Ø11 mm hole drilled in one end for installation.

-0828



### KIPP Pin connector sets Type B

| Order No.  | Type | Slot width | A  | A1 | A2 | D  | L  | L1   |
|------------|------|------------|----|----|----|----|----|------|
| K1038.0828 | B    | 8          | 28 | 18 | -  | 11 | -  | 18   |
| K1038.1040 | B    | 10         | 37 | 23 | -  | 17 | 40 | 22,5 |
| K1038.1045 | B    | 10         | 42 | 28 | -  | 17 | 45 | 22,5 |
| K1038.1060 | B    | 10         | 57 | 43 | -  | 17 | 60 | 22,5 |
| K1038.1080 | B    | 10         | 77 | 63 | 40 | 17 | 80 | 22,5 |
| K1038.1090 | B    | 10         | 87 | 73 | 45 | 17 | 90 | 22,5 |



Cube connector sets

Type B



**Material:**  
Cube die-cast aluminium.  
Screws steel.  
End caps polyamide.

**Version:**  
Aluminium bright.  
Screws with self-tapping thread.  
End cap black.

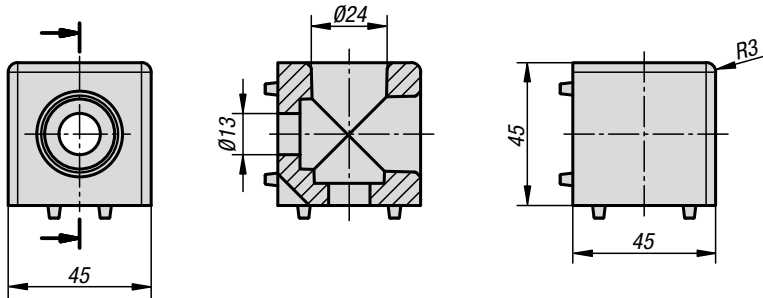
**Sample order:**  
K1039.102



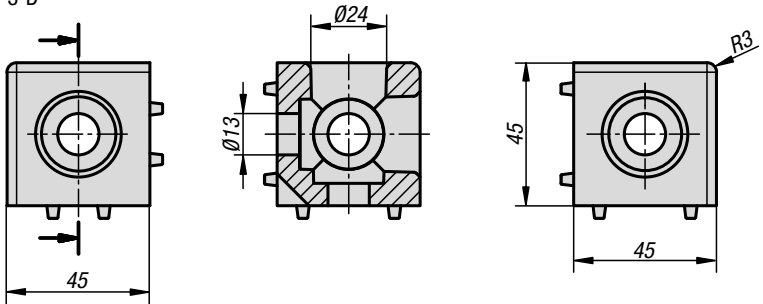
**Note:**  
The cube connector can be used to connect two or three profiles to each other by the end faces. The cube connectors have guide lugs that ensure a perfect and secure installation. Fastening to the profile is carried out by self-tapping screws. The open holes can be closed off with the end caps.

The profile slots positioned at right-angles to each other remain free. Panel elements can be positioned in the profile slots without additional machining.

2-D



3-D

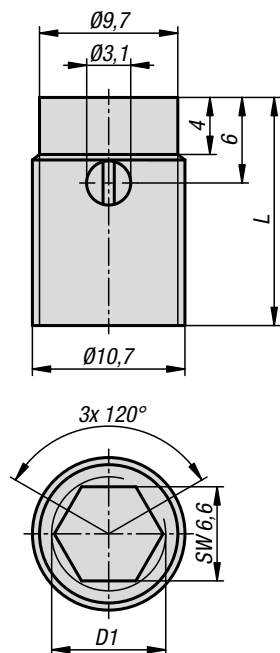


KIPP Cube connector sets Type B

| Order No. | Type | Slot width | Version |
|-----------|------|------------|---------|
| K1039.102 | B    | 10         | 2-D     |
| K1039.103 | B    | 10         | 3-D     |

# Threaded insert, steel, self-tapping

type B


**Material:**

Steel.

**Version:**

Steel, case hardened, electro zinc-plated.

**Sample order:**

K1538.08

**Note:**

Self-tapping threaded inserts for making high-strength, wear-free, vibration-resistant fastenings in aluminium profiles.

To reduce the thread size from M10 to M8.

Only suitable for aluminium profiles with a core hole diameter of 10 mm.

**Accessories:**

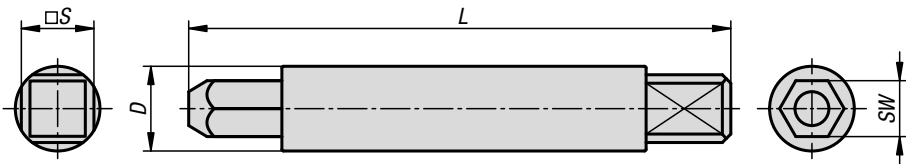
Assembly tool K1538.808.

## KIPP Threaded insert, steel, self-tapping, type B

| Order No. | D1 | L<br>length | for Art. No. |
|-----------|----|-------------|--------------|
| K1538.08  | M8 | 16          | K1538.808    |

Assembly tool, steel

for self-tapping threaded inserts, type B



**Material:**  
Steel.

**Version:**  
Manual assembly tool, electro zinc-plated.

**Sample order:**  
K1538.808

**Note:**  
Inserts are screwed in using this manual assembly tool together with a tap wrench, socket set, cordless screwdriver etc.



KIPP Assembly tool, steel, for self-tapping threaded inserts type B

| Order No. | SW  | L<br>length | S | D  |
|-----------|-----|-------------|---|----|
| K1538.808 | 6,6 | 64          | 8 | 10 |

Butt connector sets automatic

Type I



**Material:**  
Steel.

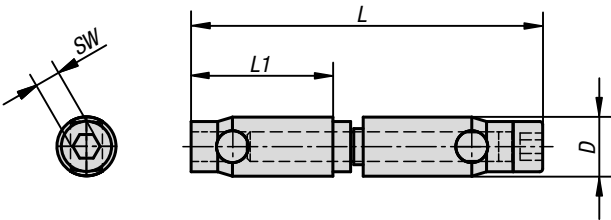
**Version:**  
Electro zinc-plated.

**Sample order:**  
K1041.06

**Note:**  
The connecting sets are used to connect two aluminum profiles of the same series from the front.

No machining of the profile is necessary. The connector is screwed into the profile slot from the front (connector with through hole left-hand thread. Connector with internal thread right-hand thread). The connector has a self-tapping thread. The use of lubricants is recommended.

Automatic connecting sets should always be used in pairs. More pairs are required for large profiles and loads.



KIPP Butt connector sets, automatic, Type I

| Order No. | Type | Slot width | D  | L  | L1 | SW |
|-----------|------|------------|----|----|----|----|
| K1041.06  | I    | 6          | 10 | 60 | 24 | 4  |
| K1041.08  | I    | 8          | 12 | 69 | 27 | 5  |

Fastening sets

for straps and angles

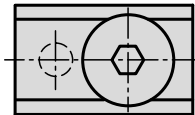
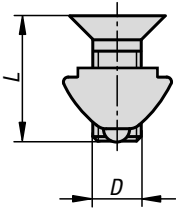
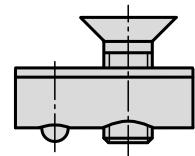


**Material:**  
Steel.

**Version:**  
Slot key electro zinc-plated.  
Screw electro zinc-plated, black.

**Sample order:**  
K1044.06

**Note:**  
Consists of two DIN 7991 countersunk screws and two slot nuts.



KIPP Fastening sets for straps and angles

| Order No. | Version 1 | Version 2          | Slot width | D  | L  |
|-----------|-----------|--------------------|------------|----|----|
| K1044.06  | type I    | slot key with step | 6          | M6 | 10 |
| K1044.08  | type I    | slot key with step | 8          | M8 | 14 |

## Shaft collars set screw

DIN 705, steel



**Material:**

Steel.

**Version:**

Bright or electro zinc-plated, trivalent blue passivated.

**Sample order:**

K0406.100301

**Note:**

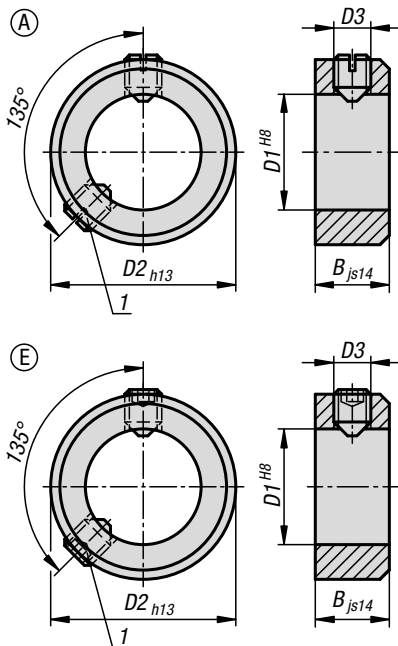
Form A: with DIN 553 grub screw (slit)

Form E: with DIN 914 grub screw (hex socket)

According to DIN 705, the stated tolerances apply to blank shaft collars. The tolerances cannot be guaranteed for with electro zinc-plated shaft collars. However, this has no influence on the function.

**Drawing reference:**

1) Second grub screw from  $D1 \geq 75$



# Shaft collars set screw

DIN 705, steel



## KIPP Shaft collars set screw DIN 705, steel

| Order No.<br>Form A<br>bright | Order No.<br>Form E<br>bright | Order No.<br>Form E<br>galvanised, blue-passivated | D1  | B  | D2  | D3<br>grub screw |
|-------------------------------|-------------------------------|----------------------------------------------------|-----|----|-----|------------------|
| K0406.100301                  | K0406.300301                  | K0406.300303                                       | 3   | 5  | 7   | M2x3             |
| K0406.100401                  | K0406.300401                  | K0406.300403                                       | 4   | 5  | 8   | M2,5x3           |
| K0406.100501                  | K0406.300501                  | K0406.300503                                       | 5   | 6  | 10  | M3x4             |
| K0406.100601                  | K0406.300601                  | K0406.300603                                       | 6   | 8  | 12  | M4x5             |
| K0406.100701                  | K0406.300701                  | K0406.300703                                       | 7   | 8  | 12  | M4x5             |
| K0406.100801                  | K0406.300801                  | K0406.300803                                       | 8   | 8  | 16  | M4x6             |
| K0406.100901                  | K0406.300901                  | K0406.300903                                       | 9   | 10 | 18  | M5x8             |
| K0406.101001                  | K0406.301001                  | K0406.301003                                       | 10  | 10 | 20  | M5x8             |
| K0406.101101                  | K0406.301101                  | K0406.301103                                       | 11  | 10 | 20  | M5x8             |
| K0406.101201                  | K0406.301201                  | K0406.301203                                       | 12  | 12 | 22  | M6x8             |
| K0406.101401                  | K0406.301401                  | K0406.301403                                       | 14  | 12 | 25  | M6x8             |
| K0406.101501                  | K0406.301501                  | K0406.301503                                       | 15  | 12 | 25  | M6x8             |
| K0406.101601                  | K0406.301601                  | K0406.301603                                       | 16  | 12 | 28  | M6x8             |
| K0406.101801                  | K0406.301801                  | K0406.301803                                       | 18  | 14 | 32  | M6x8             |
| K0406.102001                  | K0406.302001                  | K0406.302003                                       | 20  | 14 | 32  | M6x8             |
| K0406.102401                  | K0406.302401                  | K0406.302403                                       | 24  | 16 | 40  | M8x12            |
| K0406.102501                  | K0406.302501                  | K0406.302503                                       | 25  | 16 | 40  | M8x10            |
| K0406.102601                  | K0406.302601                  | K0406.302603                                       | 26  | 16 | 40  | M8x10            |
| K0406.102801                  | K0406.302801                  | K0406.302803                                       | 28  | 16 | 45  | M8x12            |
| K0406.103001                  | K0406.303001                  | K0406.303003                                       | 30  | 16 | 45  | M8x10            |
| K0406.103201                  | K0406.303201                  | K0406.303203                                       | 32  | 16 | 50  | M8x12            |
| K0406.103501                  | K0406.303501                  | K0406.303503                                       | 35  | 16 | 56  | M8x12            |
| K0406.103601                  | K0406.303601                  | K0406.303603                                       | 36  | 16 | 56  | M8x12            |
| K0406.103801                  | K0406.303801                  | K0406.303803                                       | 38  | 16 | 56  | M8x12            |
| K0406.104001                  | K0406.304001                  | K0406.304003                                       | 40  | 18 | 63  | M10x16           |
| K0406.104201                  | K0406.304201                  | K0406.304203                                       | 42  | 18 | 63  | M10x16           |
| K0406.104501                  | K0406.304501                  | K0406.304503                                       | 45  | 18 | 70  | M10x16           |
| K0406.104801                  | K0406.304801                  | K0406.304803                                       | 48  | 18 | 70  | M10x16           |
| K0406.105001                  | K0406.305001                  | K0406.305003                                       | 50  | 18 | 80  | M10x16           |
| K0406.105201                  | K0406.305201                  | K0406.305203                                       | 52  | 18 | 80  | M10x16           |
| K0406.105501                  | K0406.305501                  | K0406.305503                                       | 55  | 18 | 80  | M10x16           |
| K0406.105601                  | K0406.305601                  | K0406.305603                                       | 56  | 18 | 80  | M10x16           |
| K0406.105801                  | K0406.305801                  | K0406.305803                                       | 58  | 20 | 90  | M10x16           |
| K0406.106001                  | K0406.306001                  | K0406.306003                                       | 60  | 20 | 90  | M10x16           |
| K0406.106301                  | K0406.306301                  | K0406.306303                                       | 63  | 20 | 90  | M10x16           |
| K0406.106501                  | K0406.306501                  | K0406.306503                                       | 65  | 20 | 100 | M10x20           |
| K0406.106801                  | K0406.306801                  | K0406.306803                                       | 68  | 20 | 100 | M10x20           |
| K0406.107001                  | K0406.307001                  | K0406.307003                                       | 70  | 20 | 100 | M10x20           |
| K0406.107201                  | K0406.307201                  | K0406.307203                                       | 72  | 20 | 100 | M10x20           |
| K0406.107501                  | K0406.307501                  | K0406.307503                                       | 75  | 22 | 110 | M12x20           |
| K0406.108001                  | K0406.308001                  | K0406.308003                                       | 80  | 22 | 110 | M12x20           |
| K0406.108501                  | K0406.308501                  | K0406.308503                                       | 85  | 22 | 125 | M12x25           |
| K0406.109001                  | K0406.309001                  | K0406.309003                                       | 90  | 22 | 125 | M12x20           |
| K0406.110001                  | K0406.310001                  | K0406.310003                                       | 100 | 25 | 140 | M12x25           |



## Shaft collars set screw

DIN 705, stainless steel



**Material:**

Stainless steel 1.4305.

**Version:**

Bright.

**Sample order:**

K0406.100302

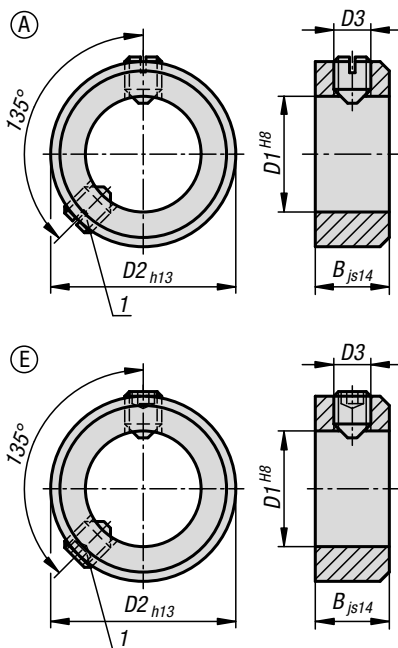
**Note:**

Form A: with grub screw DIN 553 (recess)

Form E: with grub screw DIN 914 (hexagon socket)

**Drawing reference:**

1) Second grub screw from  $D1 \geq 75$





# Shaft collars set screw

DIN 705, stainless steel



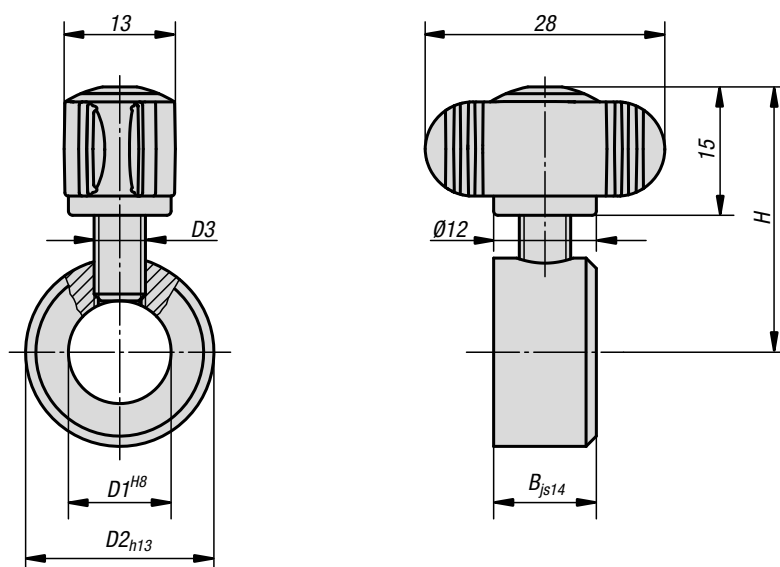
## KIPP Shaft collars set screw DIN 705, stainless steel

| Order No.<br>Form A | Order No.<br>Form E | D1  | B  | D2  | D3<br>grub screw |
|---------------------|---------------------|-----|----|-----|------------------|
| K0406.100302        | K0406.300302        | 3   | 5  | 7   | M2x3             |
| K0406.100402        | K0406.300402        | 4   | 5  | 8   | M2,5x3           |
| K0406.100502        | K0406.300502        | 5   | 6  | 10  | M3x4             |
| K0406.100602        | K0406.300602        | 6   | 8  | 12  | M4x5             |
| K0406.100702        | K0406.300702        | 7   | 8  | 12  | M4x5             |
| K0406.100802        | K0406.300802        | 8   | 8  | 16  | M4x6             |
| K0406.100902        | K0406.300902        | 9   | 10 | 18  | M5x8             |
| K0406.101002        | K0406.301002        | 10  | 10 | 20  | M5x8             |
| K0406.101102        | K0406.301102        | 11  | 10 | 20  | M5x8             |
| K0406.101202        | K0406.301202        | 12  | 12 | 22  | M6x8             |
| K0406.101402        | K0406.301402        | 14  | 12 | 25  | M6x8             |
| K0406.101502        | K0406.301502        | 15  | 12 | 25  | M6x8             |
| K0406.101602        | K0406.301602        | 16  | 12 | 28  | M6x8             |
| K0406.101802        | K0406.301802        | 18  | 14 | 32  | M6x8             |
| K0406.102002        | K0406.302002        | 20  | 14 | 32  | M6x8             |
| K0406.102402        | K0406.302402        | 24  | 16 | 40  | M8x12            |
| K0406.102502        | K0406.302502        | 25  | 16 | 40  | M8x10            |
| K0406.102602        | K0406.302602        | 26  | 16 | 40  | M8x10            |
| K0406.102802        | K0406.302802        | 28  | 16 | 45  | M8x12            |
| K0406.103002        | K0406.303002        | 30  | 16 | 45  | M8x10            |
| K0406.103202        | K0406.303202        | 32  | 16 | 50  | M8x12            |
| K0406.103502        | K0406.303502        | 35  | 16 | 56  | M8x12            |
| K0406.103602        | K0406.303602        | 36  | 16 | 56  | M8x12            |
| K0406.103802        | K0406.303802        | 38  | 16 | 56  | M8x12            |
| K0406.104002        | K0406.304002        | 40  | 18 | 63  | M10x16           |
| K0406.104202        | K0406.304202        | 42  | 18 | 63  | M10x16           |
| K0406.104502        | K0406.304502        | 45  | 18 | 70  | M10x16           |
| K0406.104802        | K0406.304802        | 48  | 18 | 70  | M10x16           |
| K0406.105002        | K0406.305002        | 50  | 18 | 80  | M10x16           |
| K0406.105202        | K0406.305202        | 52  | 18 | 80  | M10x16           |
| K0406.105502        | K0406.305502        | 55  | 18 | 80  | M10x16           |
| K0406.105602        | K0406.305602        | 56  | 18 | 80  | M10x16           |
| K0406.105802        | K0406.305802        | 58  | 20 | 90  | M10x16           |
| K0406.106002        | K0406.306002        | 60  | 20 | 90  | M10x16           |
| K0406.106302        | K0406.306302        | 63  | 20 | 90  | M10x16           |
| K0406.106502        | K0406.306502        | 65  | 20 | 100 | M10x20           |
| K0406.106802        | K0406.306802        | 68  | 20 | 100 | M10x20           |
| K0406.107002        | K0406.307002        | 70  | 20 | 100 | M10x20           |
| K0406.107202        | K0406.307202        | 72  | 20 | 100 | M10x20           |
| K0406.107502        | K0406.307502        | 75  | 22 | 110 | M12x20           |
| K0406.108002        | K0406.308002        | 80  | 22 | 110 | M12x20           |
| K0406.108502        | K0406.308502        | 85  | 22 | 125 | M12x25           |
| K0406.109002        | K0406.309002        | 90  | 22 | 125 | M12x20           |
| K0406.110002        | K0406.310002        | 100 | 25 | 140 | M12x25           |



## Shaft collars with wing grip

similar to DIN 705, steel



### Material:

Shaft collar steel.  
Wing grip thermoplastic.  
Threaded pin steel grade 5.8.

### Version:

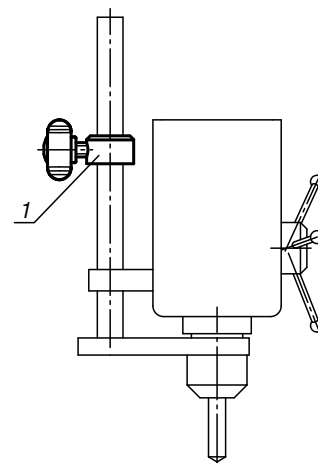
Shaft collar bright.  
Wing grip black grey.  
Screw blue passivated.

### Sample order:

K0407.100601

### Drawing reference:

1) variable stop



### KIPP Shaft collars with wing grip similar to DIN 705, steel

| Order No.    | B  | D1 | D2 | D3 | H    |
|--------------|----|----|----|----|------|
| K0407.100601 | 8  | 6  | 12 | M4 | 26   |
| K0407.100801 | 8  | 8  | 16 | M4 | 27   |
| K0407.101001 | 10 | 10 | 20 | M5 | 30   |
| K0407.101201 | 12 | 12 | 22 | M6 | 31   |
| K0407.101601 | 12 | 16 | 28 | M6 | 33   |
| K0407.102001 | 14 | 20 | 32 | M6 | 35   |
| K0407.102501 | 16 | 25 | 40 | M8 | 37,5 |
| K0407.103201 | 16 | 32 | 50 | M8 | 46   |

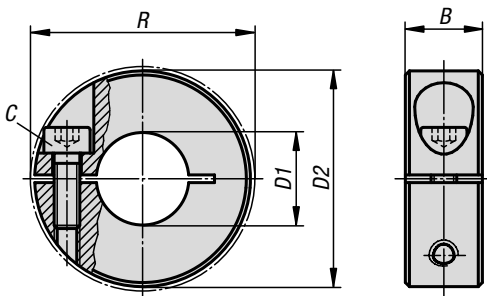


A large grid of graph paper for taking notes.



## One-piece shaft collars

slitted inside



### Material:

Steel.  
Stainless steel 1.4305.  
Stainless steel 1.4404.  
Aluminium.

### Version:

Steel black oxidised, screw steel 12.9.  
Stainless steel bright, screw stainless steel A2-70.  
Stainless steel bright, screw stainless steel A4-70.  
Aluminium bright, screw stainless steel A2-70.

### Sample order:

K0611.00504

### Note:

One-piece shaft collars with an inner slit surround the shaft with an equal distribution of the clamping force. This leads to a very precise fit and high retaining force without damaging the shaft.

The shaft tolerance should lie within h11.

The shaft collars made of A4 stainless steel have a small centre point mark on the OD.

### Temperature range:

-40 °C to +175 °C.

### On request:

Other dimensions.

# One-piece shaft collars

slitted inside



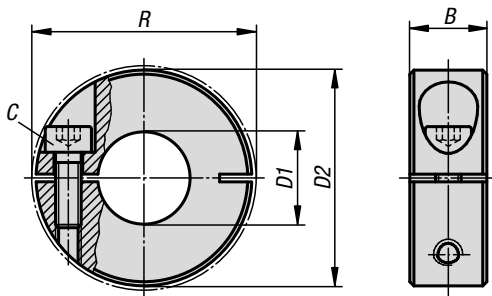
## KIPP One-piece shaft collar, slitted inside

| Order No.<br>steel | Order No.<br>aluminium | B  | C<br>(DIN 912) | D1 | D2 | R    |
|--------------------|------------------------|----|----------------|----|----|------|
| K0611.00401        | K0611.00403            | 9  | M3x8           | 4  | 16 | 20,7 |
| K0611.00501        | K0611.00503            | 9  | M3x8           | 5  | 16 | 20,7 |
| K0611.00601        | K0611.00603            | 9  | M3x8           | 6  | 16 | 20,7 |
| K0611.00801        | K0611.00803            | 9  | M3x8           | 8  | 18 | 22,4 |
| K0611.01001        | K0611.01003            | 9  | M3x10          | 10 | 24 | 26   |
| K0611.01201        | K0611.01203            | 11 | M4x12          | 12 | 28 | 31,8 |
| K0611.01501        | K0611.01503            | 13 | M5x16          | 15 | 34 | 39,4 |
| K0611.01601        | K0611.01603            | 13 | M5x16          | 16 | 34 | 39,4 |
| K0611.01801        | K0611.01803            | 13 | M5x16          | 18 | 36 | 41,1 |
| K0611.02001        | K0611.02003            | 15 | M6x18          | 20 | 40 | 46,4 |
| K0611.02201        | K0611.02203            | 15 | M6x18          | 22 | 42 | 48,1 |
| K0611.02501        | K0611.02503            | 15 | M6x18          | 25 | 45 | 50,8 |
| K0611.02801        | K0611.02803            | 15 | M6x18          | 28 | 48 | 53,7 |
| K0611.03001        | K0611.03003            | 15 | M6x18          | 30 | 54 | 58,6 |
| K0611.04001        | K0611.04003            | 15 | M6x18          | 40 | 60 | 65   |
| K0611.05001        | K0611.05003            | 19 | M8x25          | 50 | 78 | 87   |

| Order No.<br>stainless steel | Order No.<br>stainless steel A4 | B  | C<br>(DIN 912) | D1 | D2 | R    |
|------------------------------|---------------------------------|----|----------------|----|----|------|
| K0611.00402                  | K0611.00404                     | 9  | M3x8           | 4  | 16 | 20,7 |
| K0611.00502                  | K0611.00504                     | 9  | M3x8           | 5  | 16 | 20,7 |
| K0611.00602                  | K0611.00604                     | 9  | M3x8           | 6  | 16 | 20,7 |
| K0611.00802                  | K0611.00804                     | 9  | M3x8           | 8  | 18 | 22,4 |
| K0611.01002                  | K0611.01004                     | 9  | M3x10          | 10 | 24 | 26   |
| K0611.01202                  | K0611.01204                     | 11 | M4x12          | 12 | 28 | 31,8 |
| K0611.01502                  | K0611.01504                     | 13 | M5x16          | 15 | 34 | 39,4 |
| K0611.01602                  | K0611.01604                     | 13 | M5x16          | 16 | 34 | 39,4 |
| K0611.01802                  | K0611.01804                     | 13 | M5x16          | 18 | 36 | 41,1 |
| K0611.02002                  | K0611.02004                     | 15 | M6x18          | 20 | 40 | 46,4 |
| K0611.02202                  | K0611.02204                     | 15 | M6x18          | 22 | 42 | 48,1 |
| K0611.02502                  | K0611.02504                     | 15 | M6x18          | 25 | 45 | 50,8 |
| K0611.02802                  | K0611.02804                     | 15 | M6x18          | 28 | 48 | 53,7 |
| K0611.03002                  | K0611.03004                     | 15 | M6x18          | 30 | 54 | 58,6 |
| K0611.04002                  | K0611.04004                     | 15 | M6x18          | 40 | 60 | 65   |
| K0611.05002                  | K0611.05004                     | 19 | M8x25          | 50 | 78 | 87   |

## One-piece shaft collars

slitted outside



### Material:

Steel.  
Stainless steel 1.4305.  
Stainless steel 1.4404.  
Aluminium.

### Version:

Steel black oxidised, screw steel 12.9.  
Stainless steel bright, screw stainless steel A2-70.  
Stainless steel bright, screw stainless steel A4-70.  
Aluminium bright, screw stainless steel A2-70.

### Sample order:

K0611.100504

### Note:

One-piece shaft collars with an outer slit surround the shaft with an equal distribution of the clamping force. This leads to a very precise fit and high retaining force without damaging the shaft.

The shaft tolerance should lie within h11.

Due to the slit being on the outside of the shaft collar, up to 15% higher clamping forces can be achieved than with the version with slit on the inside. The bore remains cylindrical, thus precisely enclosing the shaft. Less imbalance.

The shaft collars made of A4 stainless steel have a small centre point mark on the OD.

### Temperature range:

-40 °C to +175 °C.

### On request:

Other dimensions.

# One-piece shaft collars

slitted outside



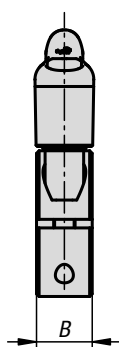
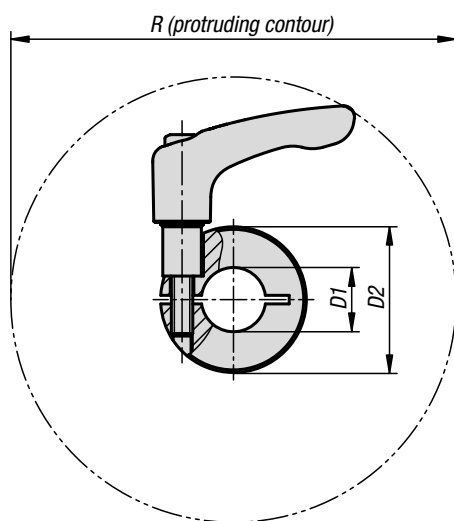
## KIPP One-piece shaft collar, slitted outside

| Order No.<br>steel | Order No.<br>aluminium | B  | C<br>(DIN 912) | D1 | D2 | R    |
|--------------------|------------------------|----|----------------|----|----|------|
| K0611.100401       | K0611.100403           | 9  | M3x8           | 4  | 16 | 20,7 |
| K0611.100501       | K0611.100503           | 9  | M3x8           | 5  | 16 | 20,7 |
| K0611.100601       | K0611.100603           | 9  | M3x8           | 6  | 16 | 20,7 |
| K0611.100801       | K0611.100803           | 9  | M3x8           | 8  | 18 | 22,4 |
| K0611.101001       | K0611.101003           | 9  | M3x10          | 10 | 24 | 26   |
| K0611.101201       | K0611.101203           | 11 | M4x12          | 12 | 28 | 31,8 |
| K0611.101501       | K0611.101503           | 13 | M5x16          | 15 | 34 | 39,4 |
| K0611.101601       | K0611.101603           | 13 | M5x16          | 16 | 34 | 39,4 |
| K0611.101801       | K0611.101803           | 13 | M5x16          | 18 | 36 | 41,1 |
| K0611.102001       | K0611.102003           | 15 | M6x18          | 20 | 40 | 46,4 |
| K0611.102201       | K0611.102203           | 15 | M6x18          | 22 | 42 | 48,1 |
| K0611.102501       | K0611.102503           | 15 | M6x18          | 25 | 45 | 50,8 |
| K0611.102801       | K0611.102803           | 15 | M6x18          | 28 | 48 | 53,7 |
| K0611.103001       | K0611.103003           | 15 | M6x18          | 30 | 54 | 58,6 |
| K0611.104001       | K0611.104003           | 15 | M6x18          | 40 | 60 | 65   |
| K0611.105001       | K0611.105003           | 19 | M8x25          | 50 | 78 | 87   |

| Order No.<br>stainless steel<br>1.4305 | Order No.<br>stainless steel A4 | B  | C<br>(DIN 912) | D1 | D2 | R    |
|----------------------------------------|---------------------------------|----|----------------|----|----|------|
| K0611.100402                           | K0611.100404                    | 9  | M3x8           | 4  | 16 | 20,7 |
| K0611.100502                           | K0611.100504                    | 9  | M3x8           | 5  | 16 | 20,7 |
| K0611.100602                           | K0611.100604                    | 9  | M3x8           | 6  | 16 | 20,7 |
| K0611.100802                           | K0611.100804                    | 9  | M3x8           | 8  | 18 | 22,4 |
| K0611.101002                           | K0611.101004                    | 9  | M3x10          | 10 | 24 | 26   |
| K0611.101202                           | K0611.101204                    | 11 | M4x12          | 12 | 28 | 31,8 |
| K0611.101502                           | K0611.101504                    | 13 | M5x16          | 15 | 34 | 39,4 |
| K0611.101602                           | K0611.101604                    | 13 | M5x16          | 16 | 34 | 39,4 |
| K0611.101802                           | K0611.101804                    | 13 | M5x16          | 18 | 36 | 41,1 |
| K0611.102002                           | K0611.102004                    | 15 | M6x18          | 20 | 40 | 46,4 |
| K0611.102202                           | K0611.102204                    | 15 | M6x18          | 22 | 42 | 48,1 |
| K0611.102502                           | K0611.102504                    | 15 | M6x18          | 25 | 45 | 50,8 |
| K0611.102802                           | K0611.102804                    | 15 | M6x18          | 28 | 48 | 53,7 |
| K0611.103002                           | K0611.103004                    | 15 | M6x18          | 30 | 54 | 58,6 |
| K0611.104002                           | K0611.104004                    | 15 | M6x18          | 40 | 60 | 65   |
| K0611.105002                           | K0611.105004                    | 19 | M8x25          | 50 | 78 | 87   |

# Shaft collars

one-piece, with clamping lever


**Material:**

Steel 1.0718.

Stainless steel 1.4305.

**Version:**

Steel black oxidised.

Stainless steel bright.

Insert stainless-steel.

**Sample order:**

K0611.11001

**Note:**

One-piece shaft collars surround the shaft with an equal distribution of the clamping force. This leads to a very precise fit and high retaining force without damaging the shaft.

The shaft tolerance should lie within h11.

**On request:**

Other dimensions.

## KIPP Shaft collars, one-piece, with clamping lever

| Order No.<br>steel | Order No.<br>stainless steel | B  | D1 | D2 | R     |
|--------------------|------------------------------|----|----|----|-------|
| K0611.11001        | K0611.11002                  | 9  | 10 | 24 | 44,1  |
| K0611.11201        | K0611.11202                  | 11 | 12 | 28 | 90,4  |
| K0611.11501        | K0611.11502                  | 13 | 15 | 34 | 105   |
| K0611.11601        | K0611.11602                  | 13 | 16 | 34 | 105   |
| K0611.11801        | K0611.11802                  | 13 | 18 | 36 | 105,7 |
| K0611.12001        | K0611.12002                  | 15 | 20 | 40 | 103,8 |
| K0611.12201        | K0611.12202                  | 15 | 22 | 42 | 104,2 |
| K0611.12501        | K0611.12502                  | 15 | 25 | 45 | 104,8 |
| K0611.12801        | K0611.12802                  | 15 | 28 | 48 | 106,8 |
| K0611.13001        | K0611.13002                  | 15 | 30 | 54 | 112,6 |
| K0611.14001        | K0611.14002                  | 15 | 40 | 60 | 113,2 |
| K0611.15001        | K0611.15002                  | 19 | 50 | 78 | 150,2 |

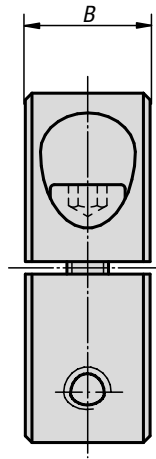
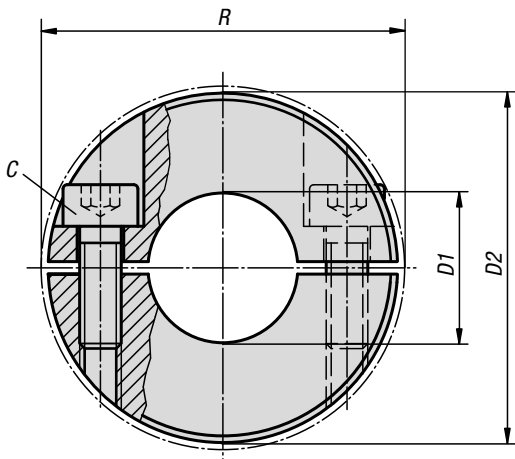




A large rectangular area filled with a light gray grid pattern, intended for taking notes.



# Shaft collars two-piece



## Material:

Steel.  
Stainless steel 1.4305.  
Stainless steel 1.4404.  
Aluminium.

## Version:

Steel black oxidised, screw steel 12.9.  
Stainless steel bright, screw stainless steel A2-70.  
Stainless steel bright, screw stainless steel A4-70.  
Aluminium bright, screw stainless steel A2-70.

## Sample order:

K0612.01001

## Note:

Two-piece shaft collars surround the shaft with an equal distribution of the clamping force. This leads to a very precise fit and high retaining force without damaging the shaft.

The shaft tolerance should lie within h11.

The two-part design enables simple and quick assembly without having to dismantle adjacent components.

The shaft collars made of A4 stainless steel have a small centre point mark on the OD.

## Temperature range:

-40 °C to +175 °C.

## On request:

Other dimensions.

## Shaft collars two-piece



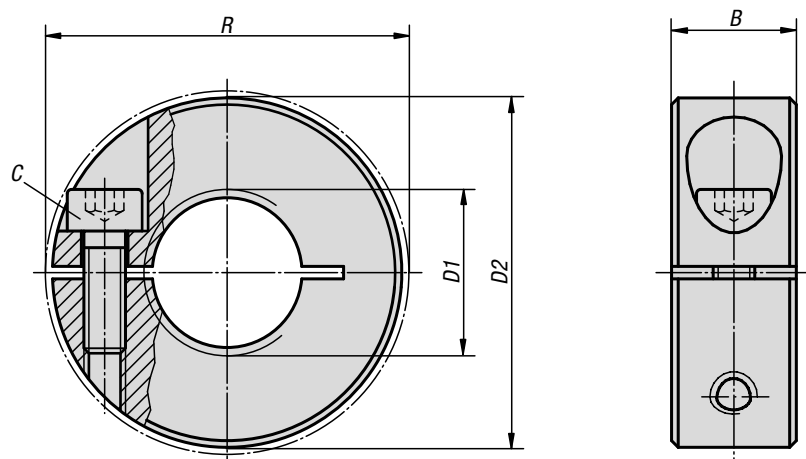
## KIPP Shaft collars two-piece

| Order No.<br>steel | Order No.<br>aluminium | B  | C<br>(DIN 912) | D1 | D2 | R    |
|--------------------|------------------------|----|----------------|----|----|------|
| K0612.00401        | K0612.00403            | 9  | M3x8           | 4  | 16 | 20,7 |
| K0612.00501        | K0612.00503            | 9  | M3x8           | 5  | 16 | 20,7 |
| K0612.00601        | K0612.00603            | 9  | M3x8           | 6  | 16 | 20,7 |
| K0612.00801        | K0612.00803            | 9  | M3x8           | 8  | 18 | 22,4 |
| K0612.01001        | K0612.01003            | 9  | M3x10          | 10 | 24 | 26   |
| K0612.01201        | K0612.01203            | 11 | M4x12          | 12 | 28 | 31,8 |
| K0612.01501        | K0612.01503            | 13 | M5x16          | 15 | 34 | 39,4 |
| K0612.01601        | K0612.01603            | 13 | M5x16          | 16 | 34 | 39,4 |
| K0612.01801        | K0612.01803            | 13 | M5x16          | 18 | 36 | 41,1 |
| K0612.02001        | K0612.02003            | 15 | M6x18          | 20 | 40 | 46,4 |
| K0612.02201        | K0612.02203            | 15 | M6x18          | 22 | 42 | 48,1 |
| K0612.02501        | K0612.02503            | 15 | M6x18          | 25 | 45 | 50,8 |
| K0612.02801        | K0612.02803            | 15 | M6x18          | 28 | 48 | 53,7 |
| K0612.03001        | K0612.03003            | 15 | M6x18          | 30 | 54 | 58,6 |
| K0612.04001        | K0612.04003            | 15 | M6x18          | 40 | 60 | 65   |
| K0612.05001        | K0612.05003            | 19 | M8x25          | 50 | 78 | 87   |

| Order No.<br>stainless steel | Order No.<br>stainless steel A4 | B  | C<br>(DIN 912) | D1 | D2 | R    |
|------------------------------|---------------------------------|----|----------------|----|----|------|
| K0612.00402                  | K0612.00404                     | 9  | M3x8           | 4  | 16 | 20,7 |
| K0612.00502                  | K0612.00504                     | 9  | M3x8           | 5  | 16 | 20,7 |
| K0612.00602                  | K0612.00604                     | 9  | M3x8           | 6  | 16 | 20,7 |
| K0612.00802                  | K0612.00804                     | 9  | M3x8           | 8  | 18 | 22,4 |
| K0612.01002                  | K0612.01004                     | 9  | M3x10          | 10 | 24 | 26   |
| K0612.01202                  | K0612.01204                     | 11 | M4x12          | 12 | 28 | 31,8 |
| K0612.01502                  | K0612.01504                     | 13 | M5x16          | 15 | 34 | 39,4 |
| K0612.01602                  | K0612.01604                     | 13 | M5x16          | 16 | 34 | 39,4 |
| K0612.01802                  | K0612.01804                     | 13 | M5x16          | 18 | 36 | 41,1 |
| K0612.02002                  | K0612.02004                     | 15 | M6x18          | 20 | 40 | 46,4 |
| K0612.02202                  | K0612.02204                     | 15 | M6x18          | 22 | 42 | 48,1 |
| K0612.02502                  | K0612.02504                     | 15 | M6x18          | 25 | 45 | 50,8 |
| K0612.02802                  | K0612.02804                     | 15 | M6x18          | 28 | 48 | 53,7 |
| K0612.03002                  | K0612.03004                     | 15 | M6x18          | 30 | 54 | 58,6 |
| K0612.04002                  | K0612.04004                     | 15 | M6x18          | 40 | 60 | 65   |
| K0612.05002                  | K0612.05004                     | 19 | M8x25          | 50 | 78 | 87   |

# Shaft collars

tapped

**Material:**

Steel.  
Stainless steel 1.4305.

**Version:**

Steel black oxidised.  
Screw 12.9 steel.  
Stainless steel bright.  
Screw A2-70 stainless steel.

**Sample order:**

K0986.0601

**Note:**

Shaft collars with thread surround the shaft with an equal distribution of clamping forces.  
The shaft collars can be used on threaded rods or shafts with a thread tolerance of 6g.

**Temperature range:**

-40 °C to +175 °C.

## KIPP Shaft collars tapped

| Order No.<br>steel | Order No.<br>stainless steel | B  | C     | D1  | D2 | R    |
|--------------------|------------------------------|----|-------|-----|----|------|
| K0986.0401         | K0986.0402                   | 9  | M3x8  | M4  | 16 | 20,7 |
| K0986.0501         | K0986.0502                   | 9  | M3x8  | M5  | 16 | 20,7 |
| K0986.0601         | K0986.0602                   | 9  | M3x8  | M6  | 16 | 20,7 |
| K0986.0801         | K0986.0802                   | 9  | M3x8  | M8  | 18 | 22,4 |
| K0986.1001         | K0986.1002                   | 9  | M3x10 | M10 | 24 | 26   |
| K0986.1201         | K0986.1202                   | 11 | M4x12 | M12 | 28 | 31,8 |
| K0986.1601         | K0986.1602                   | 13 | M5x16 | M16 | 34 | 39,4 |
| K0986.2001         | K0986.2002                   | 15 | M6x18 | M20 | 40 | 46,4 |

## Clamp hubs

**Material:**

Carbon steel 1.1206.

**Version:**

Black oxidised.

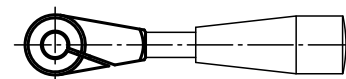
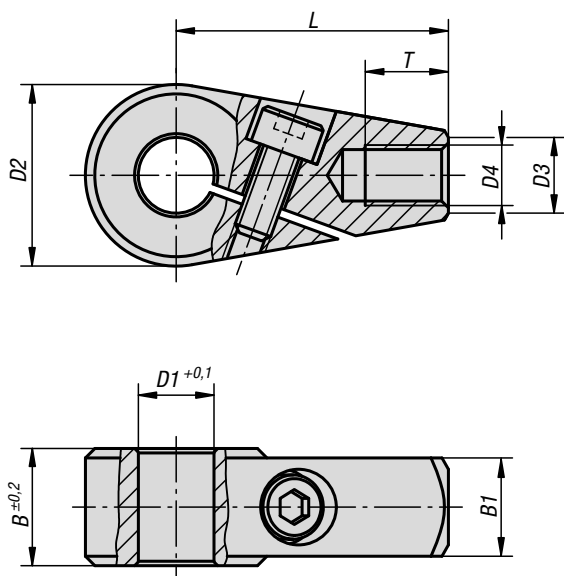
**Sample order:**

K0376.1012

**Note:**

Clamp hubs can be quickly and easily attached to shafts, adjusted in the proper operating position and then locked. For secure transmission of torque, shaft tolerance should not exceed h11.

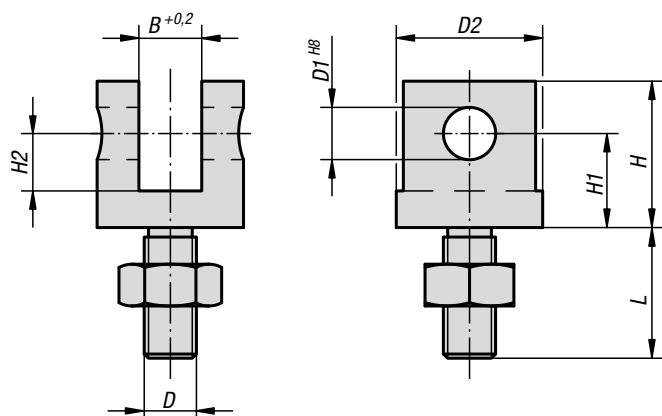
At fastening thread (D2), handles can be screwed on.

**KIPP Clamp hubs**

| Order No.  | D1 | D2 | D3 | D4  | B    | B1 | L  | T  |
|------------|----|----|----|-----|------|----|----|----|
| K0376.0810 | 10 | 24 | 10 | M8  | 15,5 | 13 | 36 | 11 |
| K0376.0812 | 12 | 24 | 10 | M8  | 15,5 | 13 | 36 | 11 |
| K0376.1012 | 12 | 28 | 12 | M10 | 17,5 | 15 | 41 | 14 |
| K0376.1014 | 14 | 28 | 12 | M10 | 17,5 | 15 | 41 | 14 |
| K0376.1214 | 14 | 32 | 14 | M12 | 19,5 | 17 | 45 | 16 |
| K0376.1216 | 16 | 32 | 14 | M12 | 19,5 | 17 | 45 | 16 |

## Clevises

with screw, steel or stainless steel



### Material:

Carbon steel 1.1191 or stainless steel 1.4305.

### Version:

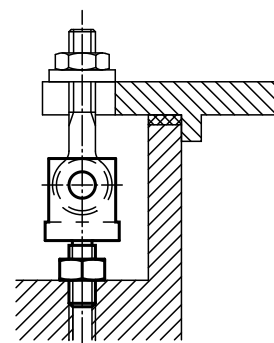
Carbon steel tempered and black oxidised.  
Stainless steel bright.

### Sample order:

K0397.05

### Note:

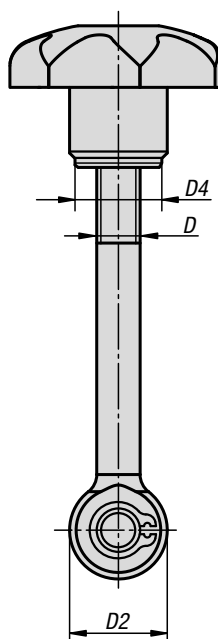
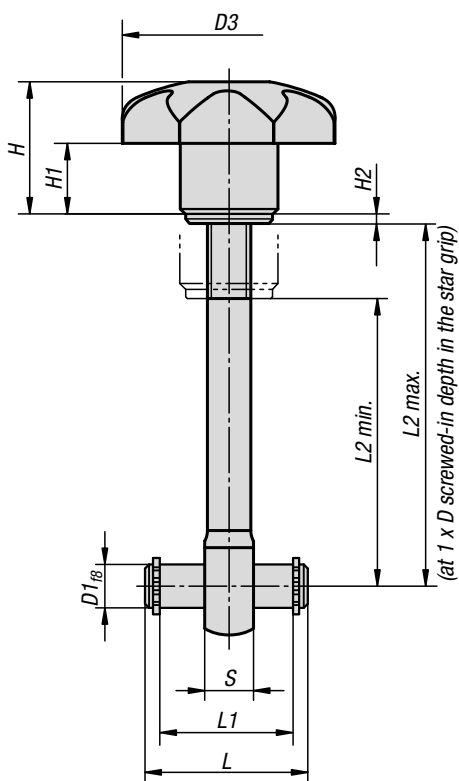
Suitable clevis pin see K0007.



## KIPP Clevises with screw, steel or stainless steel

| Order No. | Main material     | D   | D1 | D2 | B  | H  | H1 | H2   | L    |
|-----------|-------------------|-----|----|----|----|----|----|------|------|
| K0397.05  | high carbon steel | M5  | 5  | 12 | 6  | 16 | 10 | 7    | 14,5 |
| K0397.06  | high carbon steel | M6  | 6  | 16 | 7  | 19 | 12 | 8    | 15   |
| K0397.08  | high carbon steel | M8  | 8  | 20 | 9  | 23 | 15 | 10   | 20   |
| K0397.10  | high carbon steel | M10 | 10 | 28 | 12 | 28 | 18 | 11   | 25   |
| K0397.12  | high carbon steel | M12 | 12 | 30 | 14 | 34 | 21 | 13,5 | 30   |
| K0397.14  | high carbon steel | M14 | 14 | 36 | 16 | 37 | 23 | 15   | 35   |
| K0397.16  | high carbon steel | M16 | 16 | 40 | 17 | 42 | 26 | 17   | 40   |
| K0397.20  | high carbon steel | M20 | 18 | 50 | 22 | 52 | 32 | 21   | 50   |
| K0397.105 | stainless steel   | M5  | 5  | 12 | 6  | 16 | 10 | 7    | 14,5 |
| K0397.106 | stainless steel   | M6  | 6  | 16 | 7  | 19 | 12 | 8    | 15   |
| K0397.108 | stainless steel   | M8  | 8  | 20 | 9  | 23 | 15 | 10   | 20   |
| K0397.110 | stainless steel   | M10 | 10 | 28 | 12 | 28 | 18 | 11   | 25   |
| K0397.112 | stainless steel   | M12 | 12 | 30 | 14 | 34 | 21 | 13,5 | 30   |
| K0397.114 | stainless steel   | M14 | 14 | 36 | 16 | 37 | 23 | 15   | 35   |
| K0397.116 | stainless steel   | M16 | 16 | 40 | 17 | 42 | 26 | 17   | 40   |
| K0397.120 | stainless steel   | M20 | 18 | 50 | 22 | 52 | 32 | 21   | 50   |

## Swing screws



### Material:

Star grip thermoplastic.

Bush steel.

Washer steel 140 HV.

Eye bolt steel grade 8.8.

Hinge pin steel 1.1181.

### Version:

Star grip black.

Bush trivalent blue passivated

Washer bright.

Eye bolt black oxidised.

Hinge pins tempered, ground and bright.

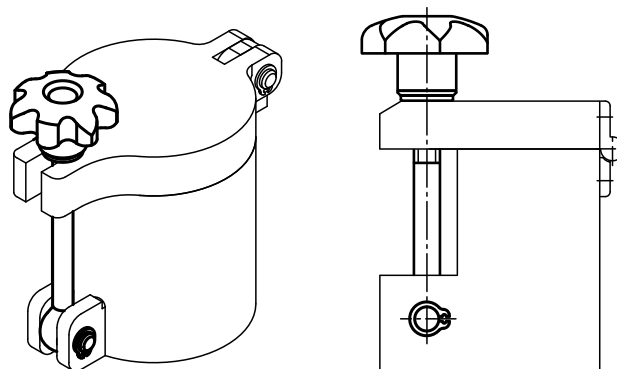
### Sample order:

K0053.06050

### Note:

The swing screws are supplied unassembled.

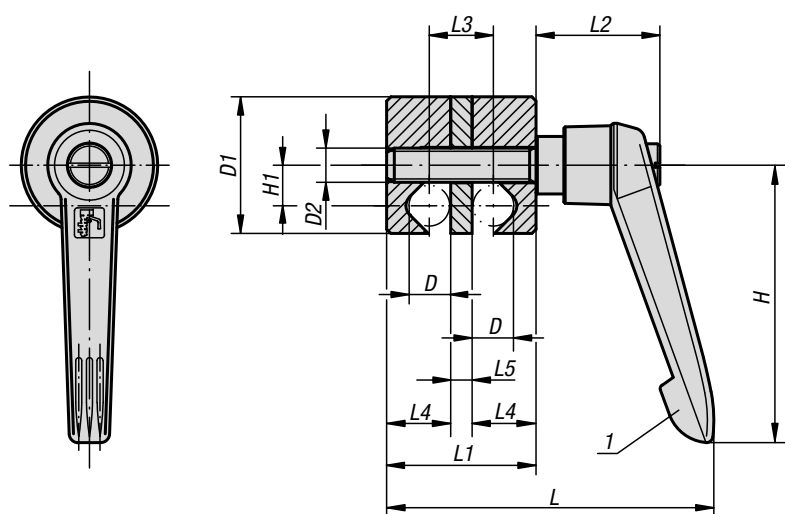
Suitable circlips are enclosed.



### KIPP Swing screws

| Order No.   | D   | D1 | D2 | D3 | D4 | H  | H1 | H2  | L  | L1 | L2 min. | L2 max. | S  |
|-------------|-----|----|----|----|----|----|----|-----|----|----|---------|---------|----|
| K0053.06050 | M6  | 6  | 14 | 32 | 12 | 20 | 10 | 1,6 | 22 | 17 | 32      | 44      | 7  |
| K0053.06075 | M6  | 6  | 14 | 32 | 12 | 20 | 10 | 1,6 | 22 | 17 | 57      | 69      | 7  |
| K0053.08050 | M8  | 8  | 18 | 40 | 16 | 24 | 13 | 1,6 | 30 | 25 | 28      | 42      | 9  |
| K0053.08075 | M8  | 8  | 18 | 40 | 16 | 24 | 13 | 1,6 | 30 | 25 | 53      | 67      | 9  |
| K0053.10075 | M10 | 10 | 20 | 50 | 20 | 31 | 17 | 2   | 37 | 32 | 49      | 65      | 12 |
| K0053.10100 | M10 | 10 | 20 | 50 | 20 | 31 | 17 | 2   | 37 | 32 | 74      | 90      | 12 |

## Clamping joints



### Material:

Clamping lever:

Handle fibreglass reinforced thermoplastic, black grey.

Steel parts:

grade 5.8.

Remaining components:

high-strength aluminium.

### Version:

Steel parts black oxidised.

Aluminium nickel silver anodised.

### Sample order:

K0133.03

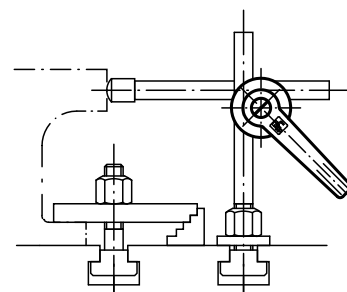
### Note:

Clamping joints are used to clamp round cross sections (bars, tubes, etc.) and are infinitely adjustable.

The simple design together with the adjustable clamping lever permits rapid clamping.

### Drawing reference:

1) Clamping lever



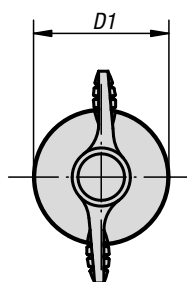
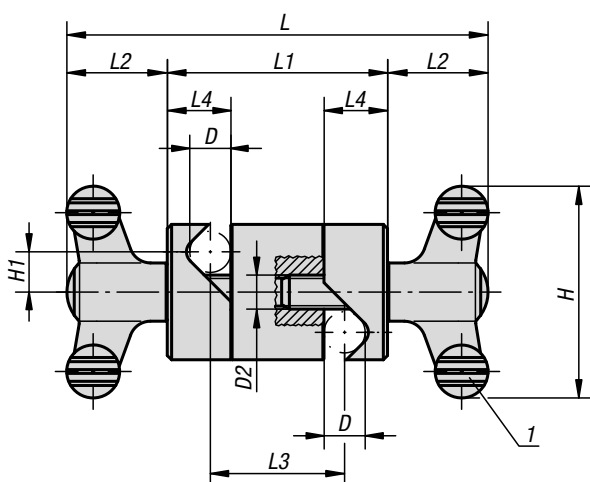
## KIPP Clamping joints

| Order No. | D  | D1 | D2  | H  | H1   | L   | L1 | L2   | L3 | L4 | L5 |
|-----------|----|----|-----|----|------|-----|----|------|----|----|----|
| K0133.01  | 8  | 28 | M8  | 65 | 8,5  | 72  | 31 | 29   | 13 | 13 | 5  |
| K0133.02  | 10 | 32 | M8  | 65 | 9,5  | 76  | 35 | 29   | 15 | 15 | 5  |
| K0133.03  | 12 | 36 | M8  | 65 | 10,5 | 81  | 40 | 29   | 18 | 17 | 6  |
| K0133.04  | 16 | 45 | M10 | 80 | 13,5 | 103 | 50 | 37,5 | 22 | 22 | 6  |
| K0133.05  | 20 | 74 | M10 | 95 | 22   | 131 | 70 | 42,5 | 30 | 30 | 10 |



## Clamping joints

individually adjustable



### Material:

Wing grip:  
grip black grey thermoplastic.  
Screw steel 5.8.  
Remaining components:  
high-strength aluminium.

### Version:

Steel parts trivalent blue-passivated.  
Aluminium nickel silver anodised.

### Sample order:

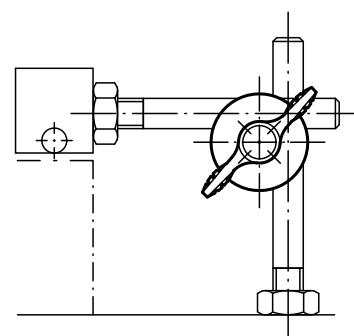
K0134.02

### Note:

Clamping joints are used to clamp round cross sections (bars, tubes, etc.) and are individually and infinitely adjustable.  
The simple design together with the wing grip permits rapid clamping.

### Drawing reference:

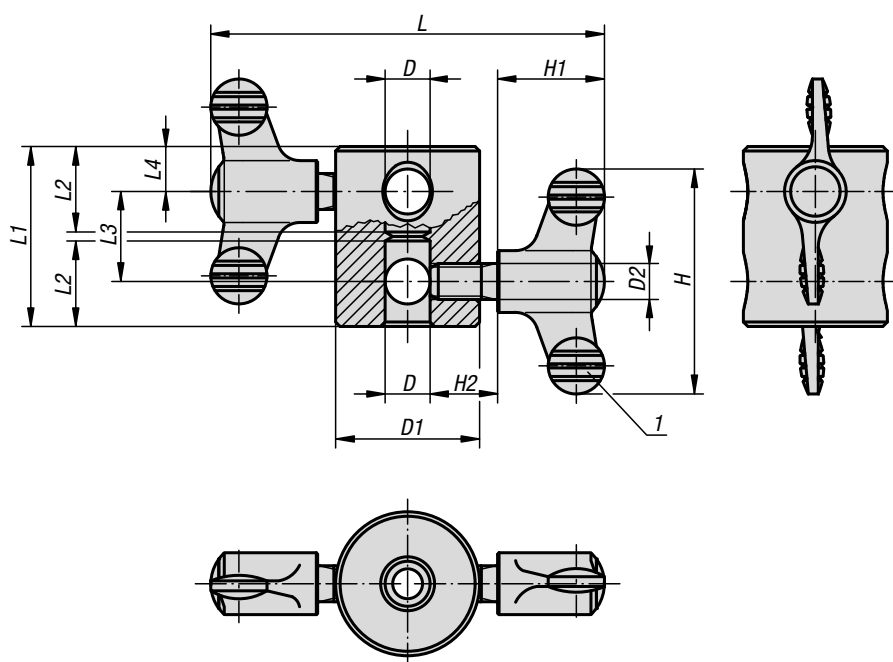
1) wing grip



### KIPP Clamping joints individually adjustable

| Order No. | D  | D1 | D2  | H  | H1   | L     | L1  | L2   | L3 | L4 |
|-----------|----|----|-----|----|------|-------|-----|------|----|----|
| K0134.01  | 8  | 28 | M8  | 50 | 8,5  | 90    | 42  | 24   | 24 | 13 |
| K0134.02  | 10 | 32 | M8  | 50 | 9,5  | 100   | 52  | 24   | 32 | 15 |
| K0134.03  | 12 | 36 | M8  | 50 | 10,5 | 104   | 56  | 24   | 34 | 17 |
| K0134.04  | 16 | 45 | M10 | 75 | 13,5 | 143,2 | 72  | 35,6 | 44 | 22 |
| K0134.05  | 20 | 74 | M10 | 75 | 22   | 173,2 | 102 | 35,6 | 62 | 30 |

# Multiple connectors


**Material:**

Wing grip:  
grip black grey thermoplastic.  
Screw steel 5.8.  
Body:  
high-strength aluminium.

**Version:**

Steel parts trivalent blue-passivated.  
Aluminium nickel silver anodised.

**Sample order:**

K0135.04

**Note:**

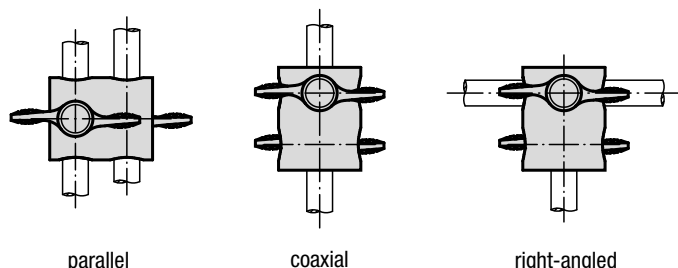
Multiple connectors are used to extend round cross sections (bars, tubes, etc.) in a coaxial or parallel arrangement.

By a parallel arrangement, a strengthening or stiffening of the construction can be achieved. The bore system in the body also allows for the production of right-angled connections.

**Drawing reference:**

1) wing grip

Arrangement:



parallel

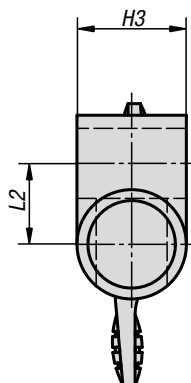
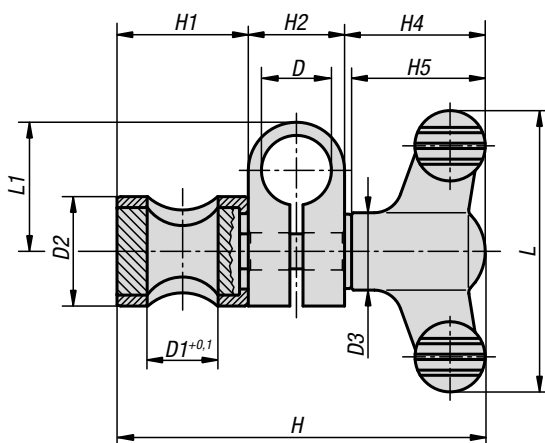
coaxial

right-angled

## KIPP Multiple connectors

| Order No. | D  | D1 | D2  | H  | H1   | H2 | L     | L1 | L2 | L3 | L4 |
|-----------|----|----|-----|----|------|----|-------|----|----|----|----|
| K0135.01  | 8  | 28 | M8  | 50 | 24   | 15 | 86    | 36 | 17 | 20 | 8  |
| K0135.02  | 10 | 32 | M8  | 50 | 24   | 15 | 88    | 40 | 19 | 20 | 10 |
| K0135.03  | 12 | 36 | M8  | 50 | 24   | 15 | 90    | 44 | 21 | 20 | 12 |
| K0135.04  | 16 | 45 | M10 | 75 | 35,6 | 20 | 127,2 | 56 | 27 | 24 | 16 |

## Clamping joints



### Material:

Sleeve and pin steel.  
Clamp block high-strength aluminium.  
Wing grip black grey thermoplastic.

### Version:

Sleeve and pin high-gloss chromed.  
Clamp block black anodised.

### Sample order:

K0136.1616

### Note:

Infinitely adjustable.  
Wing grip for rapid clamping.

### On request:

Different combinations diameters D and D1.



## KIPP Clamping joints

| Order No.  | Size | D  | D1 | D2 | D3 | H    | H1 | H2 | H3 | H4   | H5   | L  | L1   | L2   |
|------------|------|----|----|----|----|------|----|----|----|------|------|----|------|------|
| K0136.0606 | 1    | 6  | 6  | 14 | 12 | 43,6 | 15 | 9  | 14 | 19,6 | 18   | 38 | 13   | 8,5  |
| K0136.0808 | 2    | 8  | 8  | 16 | 14 | 54,6 | 17 | 12 | 16 | 25,6 | 24   | 50 | 18   | 12   |
| K0136.1010 | 3    | 10 | 10 | 18 | 14 | 60,6 | 20 | 15 | 18 | 25,6 | 24   | 50 | 22   | 14,5 |
| K0136.1212 | 4    | 12 | 12 | 20 | 21 | 77,2 | 23 | 17 | 20 | 37,2 | 35,6 | 75 | 24   | 15,5 |
| K0136.1616 | 5    | 16 | 16 | 25 | 21 | 90,2 | 31 | 22 | 25 | 37,2 | 35,6 | 75 | 29,5 | 18,5 |
| K0136.2020 | 6    | 20 | 20 | 30 | 21 | 98,2 | 36 | 25 | 30 | 37,2 | 35,6 | 75 | 30   | 17,5 |

## Dial gauge collets

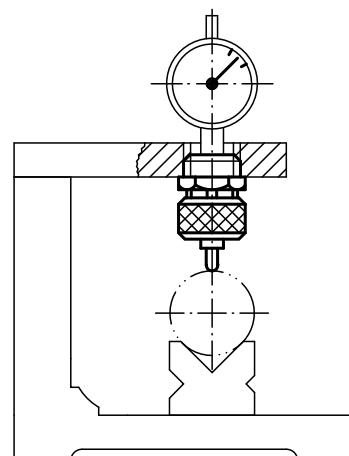
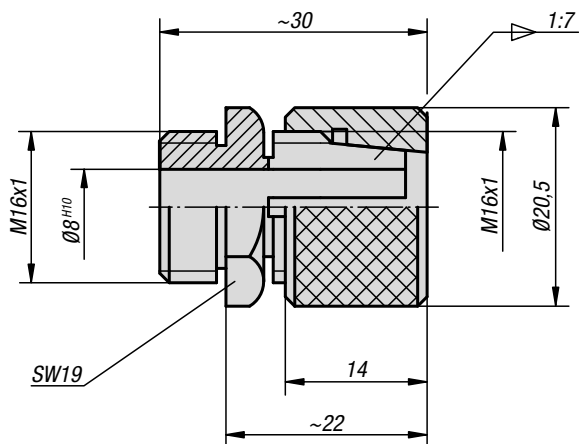
for Ø8 shafts



**Material:**  
Carbon steel.

**Version:**  
Black oxidised.  
Collet tempered.

**Sample order:**  
K0629.08



### KIPP Dial gauge collets for Ø8 shafts

| Order No. | Dimensions  |
|-----------|-------------|
| K0629.08  | see drawing |

# Technical information for sliding clamps K1070 and K1072



## Note:

The items are used as movable clamping elements on applications such as measuring scales.

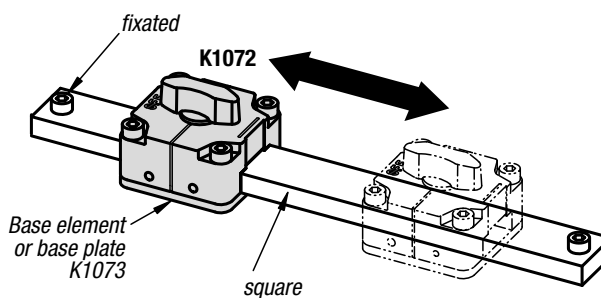
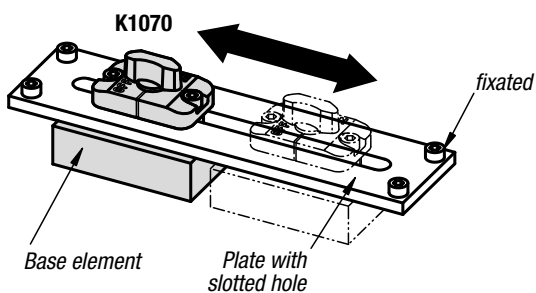
Turning the knob to "ON", operates the clamping mechanism. In the "OFF" position the element is movable. The switch must be in the "OFF" position during assembly.

If the sliding clamp is mounted directly on a base plate and the plate with slotted hole or square bar is secured, the sliding clamp and the base plate can be moved.

If the sliding clamp is mounted directly on a base plate and the base plate is secured, the plate with slotted hole or square bar can be moved.

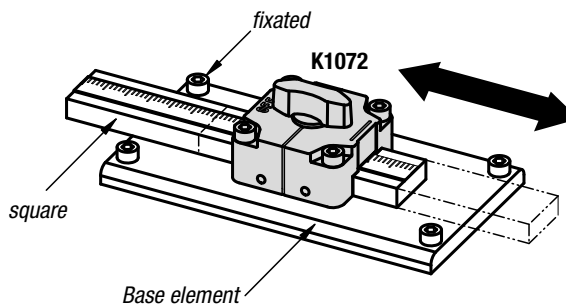
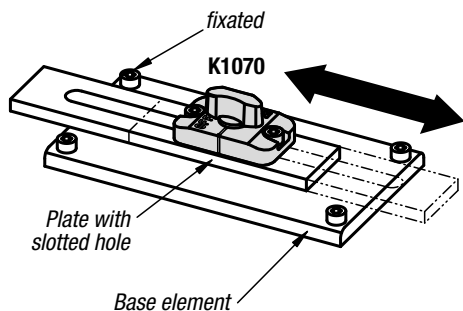
## Operating mode 1:

Sliding clamp with base element moveable – plates with slotted hole or square fixed

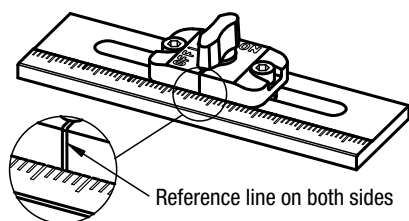


## Operating mode 2:

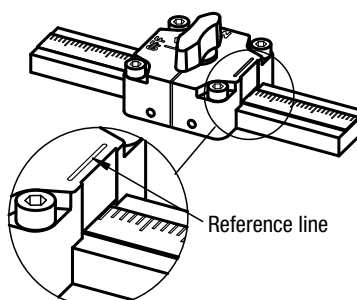
Plates with slotted hole or square bar moveable - Sliding clamp with base element fixated



## Application example K1070

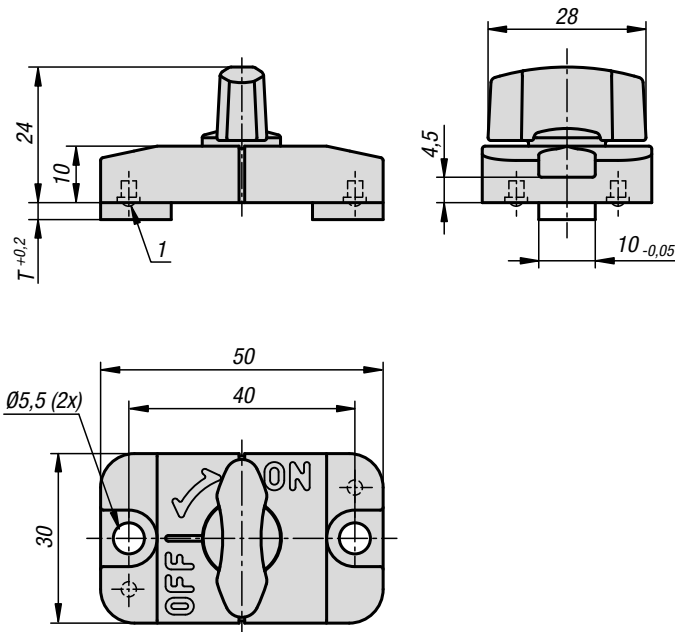


## Application example K1072

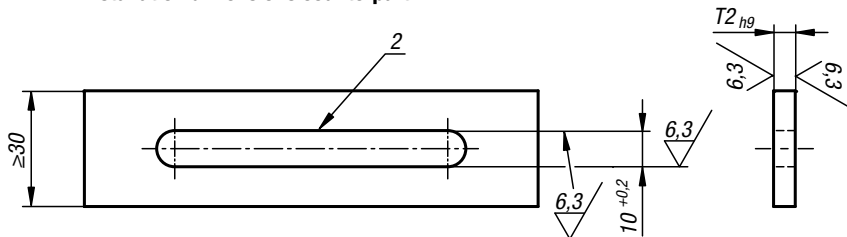


## Sliding clamps

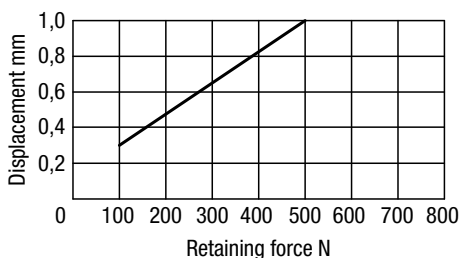
for slotted holes



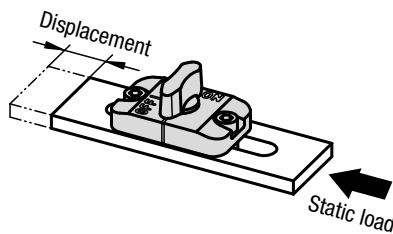
### Installation dimensions counterpart



### Displacement on static load from one direction



The forces apply to steel or stainless steel plates



**Material:**

Housing die-cast zinc.  
Knob thermoplastic PA (polyamide).

Pins and wedge stainless steel.  
Thrust pad POM.

**Version:**

Housing chromed.  
Knob black or orange, glass-bead reinforced.

**Sample order:**

K1070.32

**Note:**

Sliding clamps for slotted holes are inserted into an upper plate with an 10-mm-wide slotted hole and then fixed to the base plate. The knob must be turned to the “OFF” position while the component is being installed. The sliding clamps are used for precision plates with a thickness of 3 mm or 6 mm. For other thicknesses shim plates K1071 must be used.

By turning the knob, the pins mounted in the bottom section of sliding clamp are drawn together by the springs and forced downwards. The two pins press against the surface and clamp the sliding clamp. Two spring plungers lift the sliding clamp in the “ON” position allowing easier movement.

### Accessories:

Base plates K1071.

**Functional principle:**

The sliding clamps have 2 different operating principles.

Operating principle 1:

The sliding clamp is movable.

The sliding clamp is bolted onto a loose plate or block placed under a fixated slotted plate. The sliding clamp together with the plate or block can be slid up and down the fixated slotted plate.

Operating principle 2:

The sliding clamp is fixated.

The sliding clamp is bolted onto a fixated plate or block placed under a loose slotted plate. The sliding clamp cannot move but the slotted plate can be slid up and down over the fixated plate or block.

**Drawing reference:**

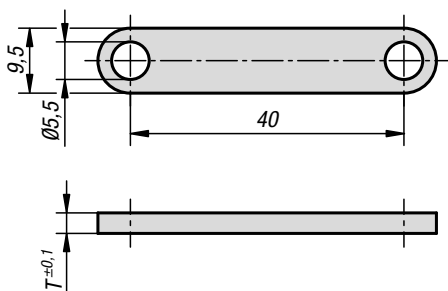
- 1) Spring plungers (2x)  
2) Chamfer  $\sim 0.3$

## KIPP Sliding clamps for slotted holes

| Order No.<br>black | Order No.<br>orange | T | T2 | Holding<br>force<br>N | Temperature<br>resistance |
|--------------------|---------------------|---|----|-----------------------|---------------------------|
| K1070.31           | K1070.32            | 3 | 3  | 500                   | ≤90 °C                    |
| K1070.61           | K1070.62            | 6 | 6  | 500                   | ≤90 °C                    |

# Shim plates

for sliding clamps for slotted hole


**Material:**

Stainless steel

**Version:**

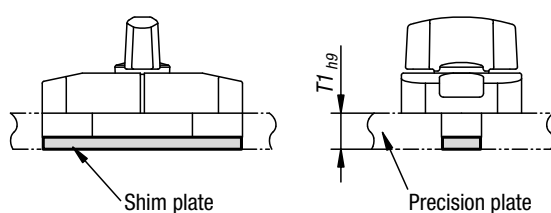
Bright.

**Sample order:**

K1071.2

**Note:**

Shim plates are required for sliding clamps for slotted holes with a plate thickness more than 3 mm or 6 mm.



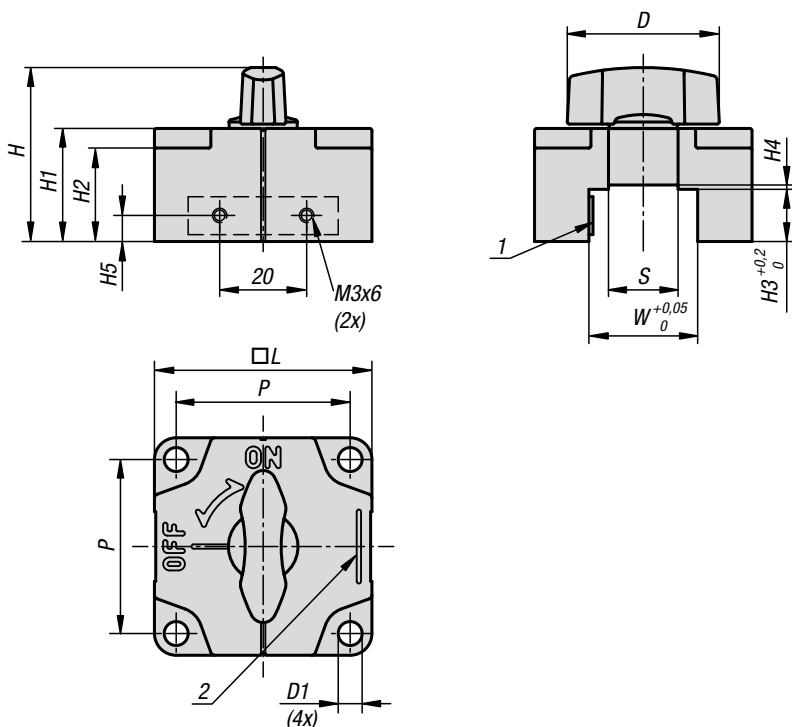
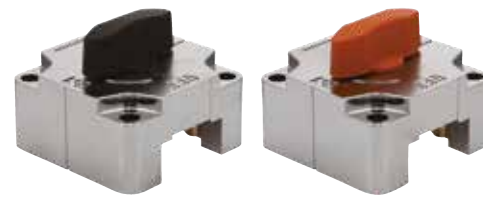
| Sliding clamp<br>for slotted holes | Suitable<br>shim plate | Precision plate<br>T1 (mm) |
|------------------------------------|------------------------|----------------------------|
| K1070.31                           | -                      | 3 <sub>-0,25</sub>         |
| K1070.32                           | K1071.2                | 5 <sub>-0,3</sub>          |
| K1070.61                           | -                      | 6 <sub>-0,3</sub>          |
| K1070.62                           | K1071.2                | 8 <sub>-0,36</sub>         |
|                                    | K1071.3                | 9 <sub>-0,36</sub>         |

## KIPP Shim plates for sliding clamps for slotted hole

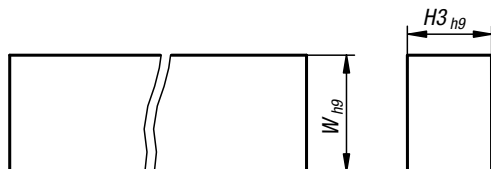
| Order No. | T |
|-----------|---|
| K1071.2   | 2 |
| K1071.3   | 3 |

## Sliding clamps

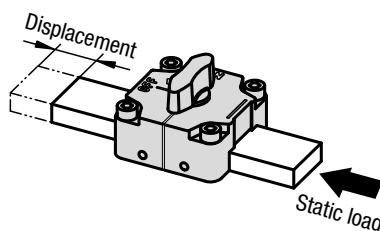
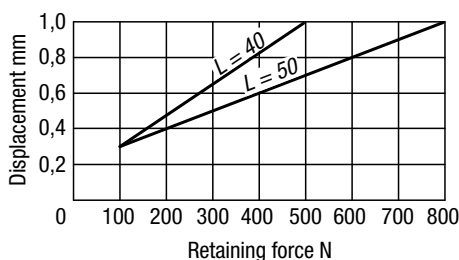
for square bars



### Installation dimensions counterpart square bar



### Displacement on static load from one direction



The forces apply to steel or stainless steel square material

### Material:

Housing die-cast zinc.  
Knob thermoplastic PA (polyamide).  
Pins and wedge stainless steel.  
Leaf spring phosphated bronze.

### Version:

Housing chromed.  
Knob black or orange, glass-bead reinforced.  
Pins and wedge bright.

### Sample order:

K1072.16162

### Note:

By turning the knob, the pins mounted in the bottom section of the sliding clamp are drawn together by the springs and forced downwards. The two pins press against the surface and fixate the sliding clamp.

### Accessories:

Base plates K1073.  
Scales stainless steel K0759.

### Functional principle:

The sliding clamps have 2 different operating principles.

#### Operating principle 1:

The sliding clamp is movable.  
The sliding clamp is bolted onto a base plate (K1073), loose plate or block placed under a fixated rectangular bar. The sliding clamp together with the plate or block can be slid up and down the fixated bar.

#### Operating principle 2:

The sliding clamp is fixated.  
The sliding clamp is bolted onto a fixated plate or block placed under a loose rectangular bar. The sliding clamp cannot move but the bar can be slid up and down over the fixated plate or block.

### Drawing reference:

- 1) Leaf spring
- 2) Reading line for scales

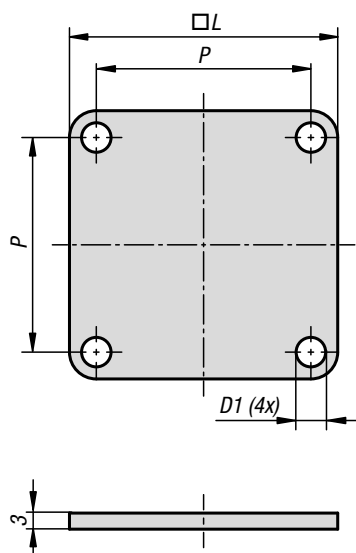
## KIPP Sliding clamp for square bars

| Order No.<br>black | Order No.<br>orange | L  | D  | D1  | H  | H1 | H2   | H3 | H4 | H5  | P  | W  | S  | Holding<br>force<br>N | Temperature<br>resistance |
|--------------------|---------------------|----|----|-----|----|----|------|----|----|-----|----|----|----|-----------------------|---------------------------|
| K1072.12121        | K1072.12122         | 40 | 28 | 4,5 | 36 | 22 | 18,5 | 12 | -  | 6   | 32 | 12 | -  | 500                   | ≤90 °C                    |
| K1072.16161        | K1072.16162         | 40 | 28 | 4,5 | 40 | 26 | 22,5 | 16 | -  | 8   | 32 | 16 | -  | 500                   | ≤90 °C                    |
| K1072.2591         | K1072.2592          | 50 | 35 | 5,5 | 37 | 23 | 18,5 | 9  | 1  | 4,5 | 40 | 25 | 16 | 800                   | ≤90 °C                    |
| K1072.25121        | K1072.25122         | 50 | 35 | 5,5 | 40 | 26 | 21,5 | 12 | 1  | 6   | 40 | 25 | 16 | 800                   | ≤90 °C                    |
| K1072.32121        | K1072.32122         | 50 | 35 | 5,5 | 40 | 26 | 21,5 | 12 | 1  | 6   | 40 | 32 | 16 | 800                   | ≤90 °C                    |
| K1072.32161        | K1072.32162         | 50 | 35 | 5,5 | 44 | 30 | 25,5 | 16 | 1  | 8   | 40 | 32 | 16 | 800                   | ≤90 °C                    |



# Base plates

for sliding clamp for square bars


**Material:**

Stainless steel

**Version:**

Bright.

**Sample order:**

K1073.40

**Note:**

Base plates raise the sliding clamp by 3 mm.  
It is used to mount the sliding clamp to a fixated square bar.

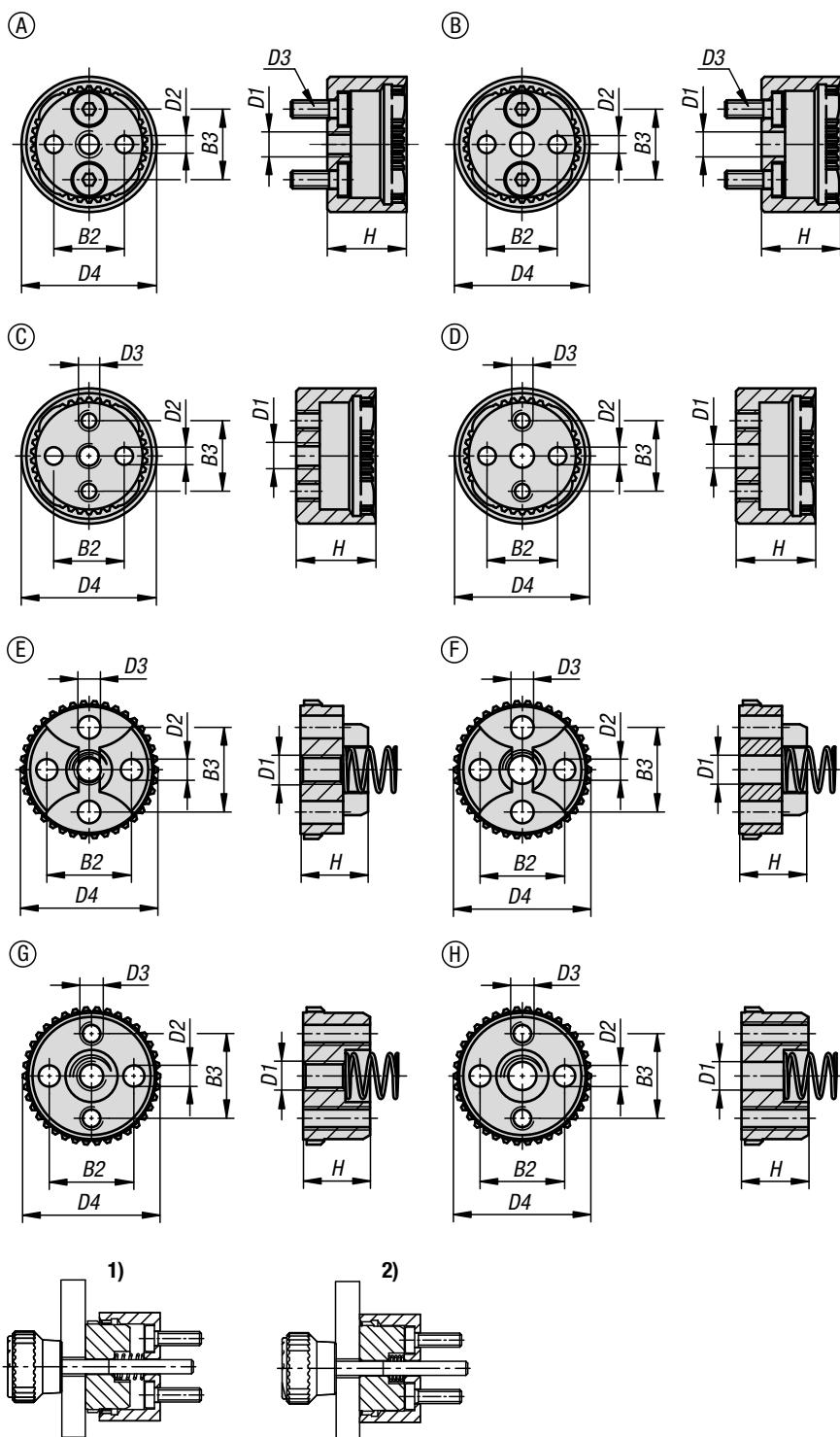


## KIPP Base plate for sliding clamps for square bars

| Order No. | L  | D1  | P  |
|-----------|----|-----|----|
| K1073.40  | 40 | 4,5 | 32 |
| K1073.50  | 50 | 5,5 | 40 |

# Ratchet elements

steel or stainless steel



Ratchet elements are used to connect two components together in any angular position with a positive fit. The ratchet elements with internal toothing (Forms A–D) can be combined with the ratchet elements with external toothing (Forms E–H) in any way depending on the application and installation possibilities. The springs mean that a new angular position can be quickly implemented.

## Material:

Ratchet element steel 1.0718 or stainless steel 1.4305.

Spring stainless steel 1.4310.

Cap screws steel or stainless steel A 2.

## Version:

Ratchet element black oxidised steel or bright stainless steel.

Spring bright.

Cap screw blackened steel grade 8.8 or bright A2-70 stainless steel.

## Sample order:

K1446.12338

## Note for ordering:

2 cap screws M3x8 or M5x10 are supplied with the internal toothed ratchet elements Forms A and B.

A stainless steel spring is supplied with the external toothed ratchet elements Forms E to H.

## Note:

Use DIN 7984 low headed cap screws for fastening the Form A and B ratchet elements.

## Function:

The ratchet elements are used for rotary adjustment of components. Fastening options can be arranged according to the application.

## Accessories:

DIN 912/DIN EN ISO 4762 cap screws

DIN 6912 cap screws

## Drawing reference:

Form A: internal toothing, centre tapped hole, 2x counterbores for low headed cap screws, 2x reamed holes

Form B: internal toothing, centre through bore, 2x counterbores for low headed cap screws, 2x reamed holes

Form C: internal toothing, centre tapped hole, 2x tapped holes for fastening, 2x reamed holes

Form D: internal toothing, centre through bore, 2x tapped holes for fastening, 2x reamed holes

Form E: external toothing, centre tapped hole, 2x counterbores for cap screws, 2x reamed holes

Form F: external toothing, centre through bore, 2x counterbores for cap screws, 2x reamed holes

Form G: external toothing, centre tapped hole, 2x tapped holes, 2x reamed holes

Form H: external toothing, centre through bore, 2x tapped holes, 2x reamed holes

1) disengaged

2) engaged

## KIPP Ratchet elements steel or stainless steel

| Order No.    | Form | Main material   | B2 | B3 | D1 | D2  | D3=<br>Cap screw<br>DIN 7984 | D4 | H    | No. of teeth |
|--------------|------|-----------------|----|----|----|-----|------------------------------|----|------|--------------|
| K1446.12338  | A    | steel           | 12 | 12 | M4 | 3H8 | M3                           | 23 | 13,5 | 38           |
| K1446.13346  | A    | steel           | 18 | 18 | M6 | 5H8 | M5                           | 33 | 19,5 | 46           |
| K1446.112338 | A    | stainless steel | 12 | 12 | M4 | 3H8 | M3                           | 23 | 13,5 | 38           |
| K1446.113346 | A    | stainless steel | 18 | 18 | M6 | 5H8 | M5                           | 33 | 19,5 | 46           |

| Order No.    | Form | Main material   | B2 | B3 | drill Ø<br>D1 | D2  | D3=<br>Cap screw<br>DIN 7984 | D4 | H    | No. of teeth |
|--------------|------|-----------------|----|----|---------------|-----|------------------------------|----|------|--------------|
| K1446.22338  | B    | steel           | 12 | 12 | 4,2           | 3H8 | M3                           | 23 | 13,5 | 38           |
| K1446.23346  | B    | steel           | 18 | 18 | 6,2           | 5H8 | M5                           | 33 | 19,5 | 46           |
| K1446.122338 | B    | stainless steel | 12 | 12 | 4,2           | 3H8 | M3                           | 23 | 13,5 | 38           |
| K1446.123346 | B    | stainless steel | 18 | 18 | 6,2           | 5H8 | M5                           | 33 | 19,5 | 46           |

| Order No.    | Form | Main material   | B2 | B3 | D1 | D2  | D3 | D4 | H    | No. of teeth |
|--------------|------|-----------------|----|----|----|-----|----|----|------|--------------|
| K1446.32338  | C    | steel           | 12 | 12 | M4 | 3H8 | M3 | 23 | 13,5 | 38           |
| K1446.33346  | C    | steel           | 18 | 18 | M6 | 5H8 | M5 | 33 | 19,5 | 46           |
| K1446.132338 | C    | stainless steel | 12 | 12 | M4 | 3H8 | M3 | 23 | 13,5 | 38           |
| K1446.133346 | C    | stainless steel | 18 | 18 | M6 | 5H8 | M5 | 33 | 19,5 | 46           |

| Order No.    | Form | Main material   | B2 | B3 | drill Ø<br>D1 | D2  | D3 | D4 | H    | No. of teeth |
|--------------|------|-----------------|----|----|---------------|-----|----|----|------|--------------|
| K1446.42338  | D    | steel           | 12 | 12 | 4,2           | 3H8 | M3 | 23 | 13,5 | 38           |
| K1446.43346  | D    | steel           | 18 | 18 | 6,2           | 5H8 | M5 | 33 | 19,5 | 46           |
| K1446.142338 | D    | stainless steel | 12 | 12 | 4,2           | 3H8 | M3 | 23 | 13,5 | 38           |
| K1446.143346 | D    | stainless steel | 18 | 18 | 6,2           | 5H8 | M5 | 33 | 19,5 | 46           |

| Order No.    | Form | Main material   | B2 | B3 | D1 | D2  | D3  | D4 | H   | No. of teeth |
|--------------|------|-----------------|----|----|----|-----|-----|----|-----|--------------|
| K1446.52338  | E    | steel           | 12 | 12 | M4 | 3H8 | 3,2 | 23 | 9,5 | 38           |
| K1446.53346  | E    | steel           | 18 | 18 | M6 | 5H8 | 5,3 | 33 | 13  | 46           |
| K1446.152338 | E    | stainless steel | 12 | 12 | M4 | 3H8 | 3,2 | 23 | 9,5 | 38           |
| K1446.153346 | E    | stainless steel | 18 | 18 | M6 | 5H8 | 5,3 | 33 | 13  | 46           |

| Order No.    | Form | Main material   | B2 | B3 | drill Ø<br>D1 | D2  | D3  | D4 | H   | No. of teeth |
|--------------|------|-----------------|----|----|---------------|-----|-----|----|-----|--------------|
| K1446.62338  | F    | steel           | 12 | 12 | 4,2           | 3H8 | 3,2 | 23 | 9,5 | 38           |
| K1446.63346  | F    | steel           | 18 | 18 | 6,2           | 5H8 | 5,3 | 33 | 13  | 46           |
| K1446.162338 | F    | stainless steel | 12 | 12 | 4,2           | 3H8 | 3,2 | 23 | 9,5 | 38           |
| K1446.163346 | F    | stainless steel | 18 | 18 | 6,2           | 5H8 | 5,3 | 33 | 13  | 46           |

| Order No.    | Form | Main material   | B2 | B3 | D1 | D2  | D3 | D4 | H   | No. of teeth |
|--------------|------|-----------------|----|----|----|-----|----|----|-----|--------------|
| K1446.72338  | G    | steel           | 12 | 12 | M4 | 3H8 | M3 | 23 | 9,5 | 38           |
| K1446.73346  | G    | steel           | 18 | 18 | M6 | 5H8 | M5 | 33 | 13  | 46           |
| K1446.172338 | G    | stainless steel | 12 | 12 | M4 | 3H8 | M3 | 23 | 9,5 | 38           |
| K1446.173346 | G    | stainless steel | 18 | 18 | M6 | 5H8 | M5 | 33 | 13  | 46           |

| Order No.    | Form | Main material   | B2 | B3 | drill Ø<br>D1 | D2  | D3 | D4 | H   | No. of teeth |
|--------------|------|-----------------|----|----|---------------|-----|----|----|-----|--------------|
| K1446.82338  | H    | steel           | 12 | 12 | 4,2           | 3H8 | M3 | 23 | 9,5 | 38           |
| K1446.83346  | H    | steel           | 18 | 18 | 6,2           | 5H8 | M5 | 33 | 13  | 46           |
| K1446.182338 | H    | stainless steel | 12 | 12 | 4,2           | 3H8 | M3 | 23 | 9,5 | 38           |
| K1446.183346 | H    | stainless steel | 18 | 18 | 6,2           | 5H8 | M5 | 33 | 13  | 46           |



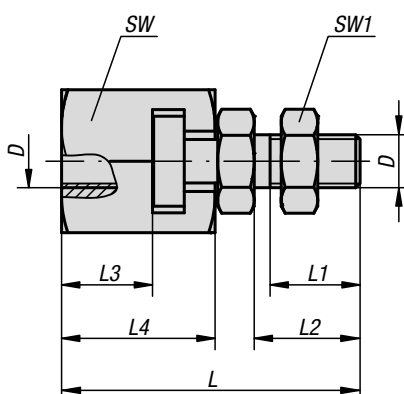
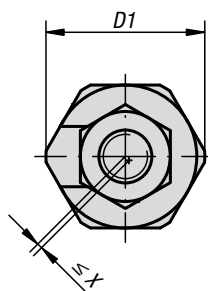


## Joints



## Quick-fit couplings

with radial offset compensation



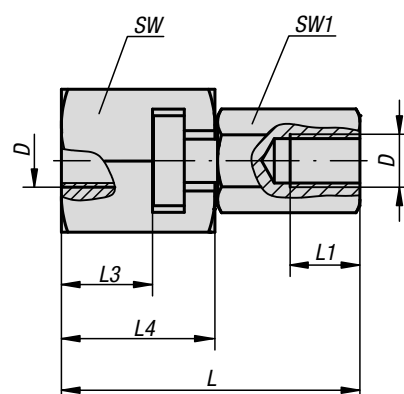
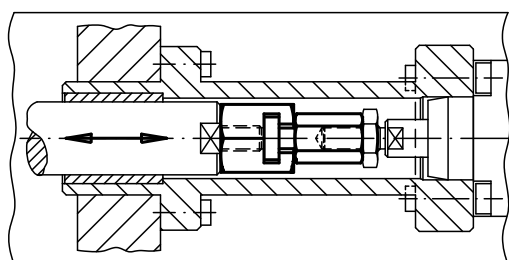
**Material:**  
Coupling part and claw in steel.  
Nut (DIN 439) in steel, grade 8.8.

**Version:**  
Coupling part and flange tempered and phosphated.  
Nut black oxidised.

**Sample order:**  
K0709.16

**Note:**  
Quick-fit couplings with radial offset compensation for multiple applications, e.g. as a link between a piston rod and a linear-movement unit. Assembly and disassembly of this simple, solid and two-part coupling is carried out by means of a T-slot; a manual re-adjustment is not necessary. The quick-fit coupling can be linked to all commonly used pneumatic and hydraulic cylinders via the connecting thread.

**The quick-fit coupling does not transmit any torque.**

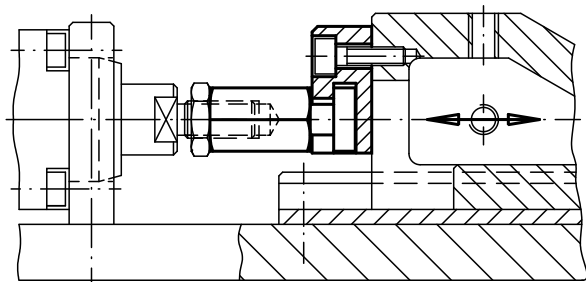
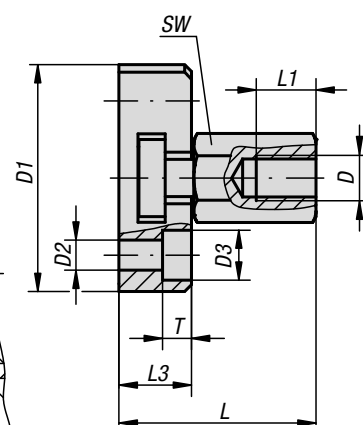
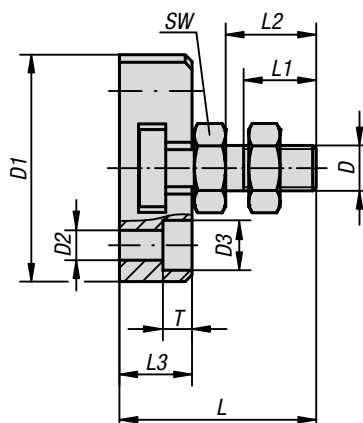
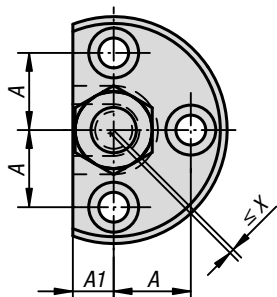


### KIPP Quick-fit couplings with radial offset compensation

| Order No.   | Version         | D        | D1   | L    | L1 min. | L2 | L3 min. | L4   | SW | SW1 | radial offset compensation X max. | Max. permissible tensile and compressive stress kN |
|-------------|-----------------|----------|------|------|---------|----|---------|------|----|-----|-----------------------------------|----------------------------------------------------|
| K0709.06    | internal thread | M6       | 21   | 37,5 | 11      | -  | 9       | 18   | 19 | 10  | 0,6                               | 2,5                                                |
| K0709.08    | internal thread | M8       | 26   | 45   | 13,5    | -  | 11,5    | 22,5 | 24 | 13  | 0,7                               | 4,5                                                |
| K0709.10    | internal thread | M10      | 30   | 56,2 | 15      | -  | 16      | 29   | 27 | 17  | 0,7                               | 6,5                                                |
| K0709.101   | internal thread | M10x1,25 | 30   | 56,2 | 15      | -  | 16      | 29   | 27 | 17  | 0,7                               | 6,5                                                |
| K0709.12    | internal thread | M12      | 32,5 | 66,7 | 17,5    | -  | 17      | 34   | 30 | 19  | 0,8                               | 10                                                 |
| K0709.121   | internal thread | M12x1,25 | 32,5 | 66,7 | 17,5    | -  | 17      | 34   | 30 | 19  | 0,8                               | 10                                                 |
| K0709.16    | internal thread | M16      | 39   | 83   | 22      | -  | 23      | 42   | 36 | 24  | 1                                 | 18                                                 |
| K0709.161   | internal thread | M16x1,5  | 39   | 83   | 22      | -  | 23      | 42   | 36 | 24  | 1                                 | 18                                                 |
| K0709.20    | internal thread | M20      | 44   | 93,5 | 25      | -  | 23,5    | 45,5 | 41 | 30  | 1                                 | 30                                                 |
| K0709.201   | internal thread | M20x1,5  | 44   | 93,5 | 25      | -  | 23,5    | 45,5 | 41 | 30  | 1                                 | 30                                                 |
| K0709.0614  | external thread | M6       | 21   | 37,5 | 11      | 14 | 9       | 18   | 19 | 10  | 0,6                               | 2,5                                                |
| K0709.0817  | external thread | M8       | 26   | 45   | 13,5    | 17 | 11,5    | 22,5 | 24 | 13  | 0,7                               | 4,5                                                |
| K0709.1020  | external thread | M10      | 30   | 56,2 | 16      | 20 | 16      | 29   | 27 | 17  | 0,7                               | 6,5                                                |
| K0709.10201 | external thread | M10x1,25 | 30   | 56,2 | 16      | 20 | 16      | 29   | 27 | 17  | 0,7                               | 6,5                                                |
| K0709.1225  | external thread | M12      | 32,5 | 66,7 | 21      | 25 | 17      | 34   | 30 | 19  | 0,8                               | 10                                                 |
| K0709.12251 | external thread | M12x1,25 | 32,5 | 66,7 | 21      | 25 | 17      | 34   | 30 | 19  | 0,8                               | 10                                                 |
| K0709.1630  | external thread | M16      | 39   | 83   | 25      | 30 | 23      | 42   | 36 | 24  | 1                                 | 18                                                 |
| K0709.16301 | external thread | M16x1,5  | 39   | 83   | 25      | 30 | 23      | 42   | 36 | 24  | 1                                 | 18                                                 |
| K0709.2035  | external thread | M20      | 44   | 93,5 | 29      | 35 | 23,5    | 45,5 | 41 | 30  | 1                                 | 30                                                 |
| K0709.20351 | external thread | M20x1,5  | 44   | 93,5 | 29      | 35 | 23,5    | 45,5 | 41 | 30  | 1                                 | 30                                                 |

# Quick-fit couplings

with radial offset compensation and mounting flange



## Material:

Coupling part and steel flange.  
Nut (DIN 439), grade 8.8.

## Version:

Coupling part and flange tempered and phosphated.  
Nut black oxidised.

## Sample order:

K0710.20351

## Note:

Space saving quick-fit couplings with radial offset compensation suitable for multiple applications, e.g. as a link between a piston rod and a linear-movement unit. Assembly and disassembly of this simple, solid and two-part coupling is with a T-slot, a manual re-adjustment is not necessary. The quick-fit coupling can be linked to all commonly used pneumatic and hydraulic lifting cylinders via the connecting thread.

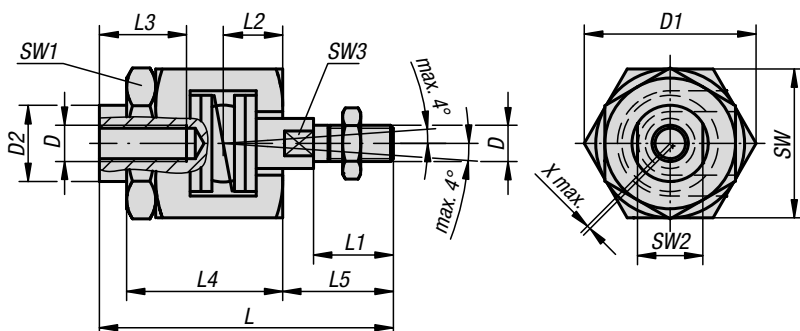
**The quick-fit coupling does not transmit any torque.**

## KIPP Quick-fit couplings with radial offset compensation and mounting flange

| Order No.   | Version         | D        | D1 | D2  | D3 | A    | A1   | L    | L1<br>min. | L2 | L3   | T   | SW | radial offset<br>compensation<br>X max. | Max. permissible tensile<br>and compressive stress<br>kN |
|-------------|-----------------|----------|----|-----|----|------|------|------|------------|----|------|-----|----|-----------------------------------------|----------------------------------------------------------|
| K0710.06    | internal thread | M6       | 42 | 5,5 | 10 | 14   | 7    | 30,5 | 11         | -  | 11   | 5,4 | 10 | 0,6                                     | 2,5                                                      |
| K0710.08    | internal thread | M8       | 48 | 6,6 | 11 | 16   | 8    | 35,5 | 13,5       | -  | 13   | 6,4 | 13 | 0,7                                     | 4,5                                                      |
| K0710.10    | internal thread | M10      | 50 | 6,6 | 11 | 17   | 9    | 43,2 | 15         | -  | 16   | 6,4 | 17 | 0,7                                     | 6,5                                                      |
| K0710.101   | internal thread | M10x1,25 | 50 | 6,6 | 11 | 17   | 9    | 43,2 | 15         | -  | 16   | 6,4 | 17 | 0,7                                     | 6,5                                                      |
| K0710.12    | internal thread | M12      | 55 | 6,6 | 11 | 19   | 10   | 53,2 | 17,5       | -  | 20,5 | 6,4 | 19 | 0,8                                     | 10                                                       |
| K0710.121   | internal thread | M12x1,25 | 55 | 6,6 | 11 | 19   | 10   | 53,2 | 17,5       | -  | 20,5 | 6,4 | 19 | 0,8                                     | 10                                                       |
| K0710.16    | internal thread | M16      | 65 | 9   | 15 | 22,5 | 12,5 | 64   | 22         | -  | 23   | 8,5 | 24 | 1                                       | 18                                                       |
| K0710.161   | internal thread | M16x1,5  | 65 | 9   | 15 | 22,5 | 12,5 | 64   | 22         | -  | 23   | 8,5 | 24 | 1                                       | 18                                                       |
| K0710.20    | internal thread | M20      | 80 | 11  | 18 | 28   | 17   | 74   | 25         | -  | 26   | 10  | 30 | 1                                       | 30                                                       |
| K0710.201   | internal thread | M20x1,5  | 80 | 11  | 18 | 28   | 17   | 74   | 25         | -  | 26   | 10  | 30 | 1                                       | 30                                                       |
| K0710.0614  | external thread | M6       | 42 | 5,5 | 10 | 14   | 7    | 30,5 | 11         | 14 | 11   | 5,4 | 10 | 0,6                                     | 2,5                                                      |
| K0710.0817  | external thread | M8       | 48 | 6,6 | 11 | 16   | 8    | 35,5 | 13,5       | 17 | 13   | 6,4 | 13 | 0,7                                     | 4,5                                                      |
| K0710.1020  | external thread | M10      | 50 | 6,6 | 11 | 17   | 9    | 43,2 | 16         | 20 | 16   | 6,4 | 17 | 0,7                                     | 6,5                                                      |
| K0710.10201 | external thread | M10x1,25 | 50 | 6,6 | 11 | 17   | 9    | 43,2 | 16         | 20 | 16   | 6,4 | 17 | 0,7                                     | 6,5                                                      |
| K0710.1225  | external thread | M12      | 55 | 6,6 | 11 | 19   | 10   | 53,2 | 21         | 25 | 20,5 | 6,4 | 19 | 0,8                                     | 10                                                       |
| K0710.12251 | external thread | M12x1,25 | 55 | 6,6 | 11 | 19   | 10   | 53,2 | 21         | 25 | 20,5 | 6,4 | 19 | 0,8                                     | 10                                                       |
| K0710.1630  | external thread | M16      | 65 | 9   | 15 | 22,5 | 12,5 | 64   | 25         | 30 | 23   | 8,5 | 24 | 1                                       | 18                                                       |
| K0710.16301 | external thread | M16x1,5  | 65 | 9   | 15 | 22,5 | 12,5 | 64   | 25         | 30 | 23   | 8,5 | 24 | 1                                       | 18                                                       |
| K0710.2035  | external thread | M20      | 80 | 11  | 18 | 28   | 17   | 74   | 29         | 35 | 26   | 10  | 30 | 1                                       | 30                                                       |
| K0710.20351 | external thread | M20x1,5  | 80 | 11  | 18 | 28   | 17   | 74   | 29         | 35 | 26   | 10  | 30 | 1                                       | 30                                                       |

## Quick-fit couplings

with angular and radial offset compensation



### Material:

Coupling part carbon steel.  
Claw and seat steel.  
Nut carbon steel.  
Locknut (EN 24035) grade 8.8 steel.  
Spring stainless steel.

### Version:

Coupling part nitrided, black.  
Claw and seat tempered and phosphated.  
Nut phosphated.  
Locknut black.

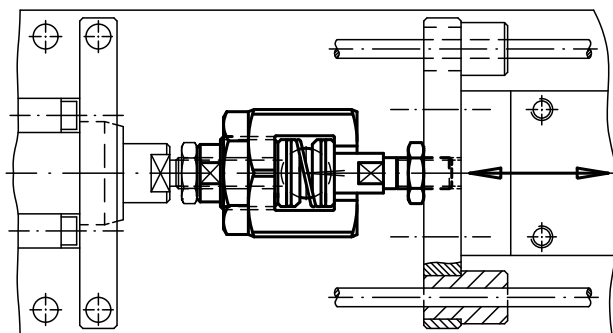
### Sample order:

K0711.12

### Note:

Quick-fit coupling, adjustable without axial play, including angular and radial offset compensation. Suitable for multiple applications, e.g. for non-aligned linear-movements. Solid and compact design, no loose elements. Assembly and disassembly with a T-slot; a manual re-adjustment is not necessary. The quick-fit coupling can be linked to all commonly used pneumatic and hydraulic lifting cylinders via the connecting thread.

**The quick-fit coupling does not transmit any torque.**



## KIPP Quick-fit couplings with angular and radial offset compensation

| Order No. | D        | D1   | D2  | L   | L1 | L2   | L3<br>min. | L4 | L5   | SW | SW1 | SW2 | SW3 | radial offset<br>compensation<br>X max. | Max. permissible tensile<br>and compressive stress<br>kN |
|-----------|----------|------|-----|-----|----|------|------------|----|------|----|-----|-----|-----|-----------------------------------------|----------------------------------------------------------|
| K0711.06  | M6       | 24,5 | 9,6 | 52  | 14 | 9,5  | 13         | 29 | 18,5 | 22 | 19  | 8   | 5   | 0,6                                     | 2,5                                                      |
| K0711.08  | M8       | 30   | 15  | 63  | 18 | 11,5 | 16         | 33 | 23,5 | 27 | 24  | 13  | 7   | 0,6                                     | 4,5                                                      |
| K0711.10  | M10      | 44   | 21  | 81  | 22 | 16   | 24         | 43 | 30,5 | 41 | 36  | 18  | 12  | 0,7                                     | 6,5                                                      |
| K0711.101 | M10x1,25 | 44   | 21  | 81  | 22 | 16   | 24         | 43 | 30,5 | 41 | 36  | 18  | 12  | 0,7                                     | 6,5                                                      |
| K0711.12  | M12      | 44   | 21  | 85  | 26 | 16   | 24         | 43 | 34,5 | 41 | 36  | 18  | 12  | 0,7                                     | 10                                                       |
| K0711.121 | M12x1,25 | 44   | 21  | 85  | 26 | 16   | 24         | 43 | 34,5 | 41 | 36  | 18  | 12  | 0,7                                     | 10                                                       |
| K0711.16  | M16      | 60   | 32  | 121 | 34 | 26   | 34         | 62 | 45   | 55 | 46  | 27  | 18  | 1                                       | 18                                                       |
| K0711.161 | M16x1,5  | 60   | 32  | 121 | 34 | 26   | 34         | 62 | 45   | 55 | 46  | 27  | 18  | 1                                       | 18                                                       |
| K0711.20  | M20      | 60   | 32  | 129 | 42 | 26   | 34         | 62 | 53   | 55 | 46  | 27  | 18  | 1                                       | 30                                                       |
| K0711.201 | M20x1,5  | 60   | 32  | 129 | 42 | 26   | 34         | 62 | 53   | 55 | 46  | 27  | 18  | 1                                       | 30                                                       |



## Clevis joints with snap-in pin

DIN 71752



### Material:

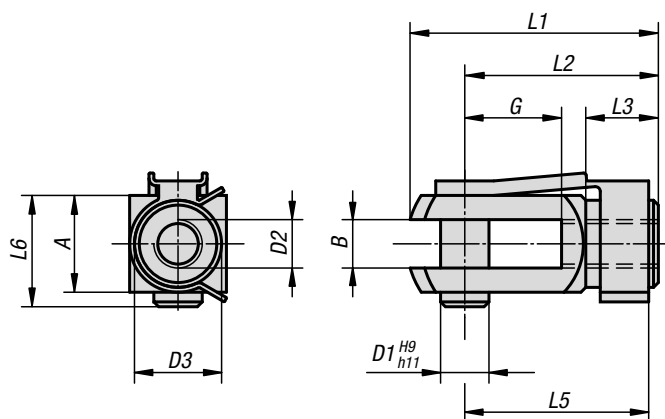
Clevis and pins free-cutting steel.  
Spring, spring steel.

### Version:

Trivalent passivated.

### Sample order:

K0731.0510

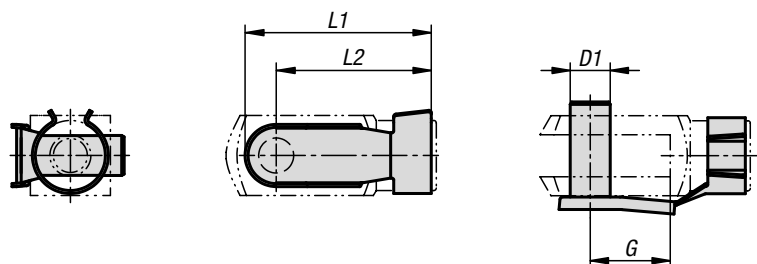


### KIPP Clevis joints with snap-in pin DIN 71752

| Order No.   | Version   | B  | G  | D1 | D2       | D3 | L1 | L2 | L3   | L5 | L6 | A  |
|-------------|-----------|----|----|----|----------|----|----|----|------|----|----|----|
| K0731.03508 | RH thread | 4  | 8  | 4  | M3,5     | 8  | 21 | 16 | 6    | 15 | 10 | 8  |
| K0731.0510  | RH thread | 5  | 10 | 5  | M5       | 9  | 26 | 20 | 7,5  | 19 | 12 | 10 |
| K0731.0612  | RH thread | 6  | 12 | 6  | M6       | 10 | 31 | 24 | 9    | 23 | 14 | 12 |
| K0731.0816  | RH thread | 8  | 16 | 8  | M8       | 14 | 42 | 32 | 12   | 31 | 19 | 16 |
| K0731.0832  | RH thread | 8  | 32 | 8  | M8       | 14 | 58 | 48 | 12   | 47 | 19 | 16 |
| K0731.1020  | RH thread | 10 | 20 | 10 | M10      | 18 | 52 | 40 | 15   | 39 | 23 | 20 |
| K0731.10120 | RH thread | 10 | 20 | 10 | M10x1,25 | 18 | 52 | 40 | 15   | 39 | 23 | 20 |
| K0731.1040  | RH thread | 10 | 40 | 10 | M10      | 18 | 72 | 60 | 15   | 59 | 23 | 20 |
| K0731.10140 | RH thread | 10 | 40 | 10 | M10x1,25 | 18 | 72 | 60 | 15   | 59 | 23 | 20 |
| K0731.1224  | RH thread | 12 | 24 | 12 | M12      | 20 | 62 | 48 | 18   | 47 | 28 | 24 |
| K0731.12124 | RH thread | 12 | 24 | 12 | M12x1,25 | 20 | 62 | 48 | 18   | 47 | 28 | 24 |
| K0731.1248  | RH thread | 12 | 48 | 12 | M12      | 20 | 86 | 72 | 18   | 69 | 28 | 24 |
| K0731.12148 | RH thread | 12 | 48 | 12 | M12x1,25 | 20 | 86 | 72 | 18   | 69 | 28 | 24 |
| K0731.1428  | RH thread | 14 | 28 | 14 | M14      | 24 | 72 | 56 | 22,5 | 52 | 31 | 27 |
| K0731.1632  | RH thread | 16 | 32 | 16 | M16      | 26 | 83 | 64 | 24   | 62 | 36 | 32 |
| K0731.16132 | RH thread | 16 | 32 | 16 | M16x1,5  | 26 | 83 | 64 | 24   | 62 | 36 | 32 |
| K0731.05101 | LH thread | 5  | 10 | 5  | M5       | 9  | 26 | 20 | 7,5  | 19 | 12 | 10 |
| K0731.06121 | LH thread | 6  | 12 | 6  | M6       | 10 | 31 | 24 | 9    | 23 | 14 | 12 |
| K0731.08161 | LH thread | 8  | 16 | 8  | M8       | 14 | 42 | 32 | 12   | 31 | 19 | 16 |
| K0731.08321 | LH thread | 8  | 32 | 8  | M8       | 14 | 58 | 48 | 12   | 47 | 19 | 16 |
| K0731.10201 | LH thread | 10 | 20 | 10 | M10      | 18 | 52 | 40 | 15   | 39 | 23 | 20 |
| K0731.10401 | LH thread | 10 | 40 | 10 | M10      | 18 | 72 | 60 | 15   | 59 | 23 | 20 |
| K0731.12241 | LH thread | 12 | 24 | 12 | M12      | 20 | 62 | 48 | 18   | 47 | 28 | 24 |
| K0731.16321 | LH thread | 16 | 32 | 16 | M16      | 26 | 83 | 64 | 24   | 62 | 36 | 32 |

## Snap-in pins

for clevis joints DIN 71752



**Material:**

Pin, steel.

Spring, tempered leaf spring steel.

**Version:**

Electro zinc-plated.

**Sample order:**

K1139.0408

**Note:**

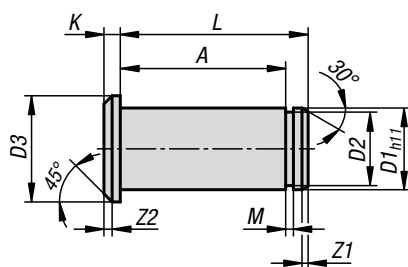
For DIN 71752 clevis.

### KIPP Snap-in pins for clevis joints DIN 71752

| Order No.  | D1 | G  | L1   | L2 |
|------------|----|----|------|----|
| K1139.0408 | 4  | 8  | 18,5 | 15 |
| K1139.0510 | 5  | 10 | 23   | 19 |
| K1139.0612 | 6  | 12 | 28   | 23 |
| K1139.0816 | 8  | 16 | 37   | 30 |
| K1139.0832 | 8  | 32 | 52   | 46 |
| K1139.1020 | 10 | 20 | 46   | 38 |
| K1139.1040 | 10 | 40 | 66   | 58 |
| K1139.1224 | 12 | 24 | 53   | 45 |
| K1139.1248 | 12 | 48 | 78   | 69 |
| K1139.1428 | 14 | 28 | 62   | 52 |
| K1139.1632 | 16 | 32 | 73   | 62 |

## Pins with circlip groove

suitable for clevis



### Material:

Steel or stainless steel 1.4301.

### Version:

Electro zinc-plated steel.

Bright stainless steel.

### Sample order:

K1454.004085

### Note:

Pin with groove, suitable for DIN 71752 clevis. Secured with a DIN 6799 E-type circlip (alternatively a KL or SL clip).

When combined with a suitable clevis and tang, forms a fully functional clevis joint.

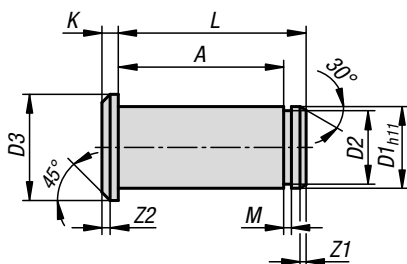


## KIPP Pins with circlip groove, suitable for clevis

| Order No.<br>steel | Order No.<br>stainless steel | D1 | D2   | D3 | A    | K   | L    | M    | Z1   | Z2  |
|--------------------|------------------------------|----|------|----|------|-----|------|------|------|-----|
| K1454.004085       | K1454.104085                 | 4  | 3,2  | 6  | 8,5  | 1   | 10,5 | 0,64 | 0,5  | 0,5 |
| K1454.005105       | K1454.105105                 | 5  | 4    | 8  | 10,5 | 1,5 | 13   | 0,74 | 0,5  | 0,5 |
| K1454.006125       | K1454.106125                 | 6  | 5    | 9  | 12,5 | 1,5 | 15,5 | 0,74 | 1    | 0,5 |
| K1454.008165       | K1454.108165                 | 8  | 6    | 12 | 16,5 | 2   | 20   | 0,94 | 0,5  | 1   |
| K1454.010205       | K1454.110205                 | 10 | 8    | 14 | 20,5 | 2   | 25   | 1,05 | 1    | 1   |
| K1454.012245       | K1454.112245                 | 12 | 9    | 17 | 24,5 | 3   | 30   | 1,15 | 1    | 1,5 |
| K1454.014275       | K1454.114275                 | 14 | 10   | 19 | 27,5 | 3   | 33   | 1,25 | 1,25 | 1,5 |
| K1454.016325       | K1454.116325                 | 16 | 12   | 21 | 32,5 | 3   | 38,5 | 1,35 | 1,5  | 1,5 |
| K1454.020405       | K1454.120405                 | 20 | 17,5 | 26 | 40,5 | 4   | 46   | 1,9  | 1,5  | 2   |
| K1454.025505       | -                            | 25 | 18   | 32 | 50,5 | 5   | 57   | 1,9  | 1,5  | 2   |

## Pins with circlip groove

suitable for clevis



### Material:

Steel or stainless steel 1.4301.

### Version:

Electro zinc-plated steel.

Bright stainless steel.

### Sample order:

K1455.004085

### Note:

Pins with groove suitable for DIN 71752 clevis. Secured with a DIN 471 circlip.

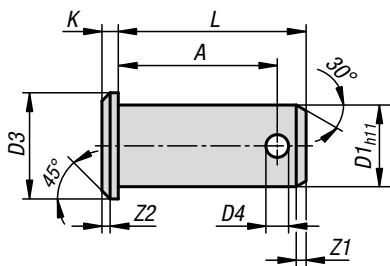
When combined with a suitable clevis and tang, forms a fully functional clevis joint.

## KIPP Pins with circlip groove suitable for clevis

| Order No.<br>steel | Order No.<br>stainless steel | D1 | D2   | D3 | A    | K   | L    | M   | Z1   | Z2  |
|--------------------|------------------------------|----|------|----|------|-----|------|-----|------|-----|
| K1455.004085       | K1455.104085                 | 4  | 3,8  | 6  | 8,5  | 1   | 10   | 0,5 | 0,5  | 0,5 |
| K1455.005105       | K1455.105105                 | 5  | 4,8  | 8  | 10,5 | 1,5 | 12,5 | 0,7 | 0,5  | 0,5 |
| K1455.006125       | K1455.106125                 | 6  | 5,7  | 9  | 12,5 | 1,5 | 15,5 | 0,8 | 0,75 | 0,5 |
| K1455.008165       | K1455.108165                 | 8  | 7,6  | 12 | 16,5 | 2   | 20,5 | 0,9 | 1    | 1   |
| K1455.010205       | K1455.110205                 | 10 | 9,6  | 14 | 20,5 | 2   | 24   | 1,1 | 1    | 1   |
| K1455.012245       | K1455.112245                 | 12 | 11,5 | 17 | 24,5 | 3   | 28   | 1,1 | 1,25 | 1,5 |
| K1455.014275       | -                            | 14 | 13,4 | 19 | 27,5 | 3   | 32   | 1,1 | 1,25 | 1,5 |
| K1455.016325       | K1455.116325                 | 16 | 15,2 | 21 | 32,5 | 3   | 37   | 1,1 | 1,5  | 1,5 |
| K1455.020405       | K1455.120405                 | 20 | 19   | 26 | 40,5 | 4   | 46   | 1,3 | 1,5  | 2   |

## Pins with split pin hole

suitable for clevis



### Material:

Steel 1.0718 or stainless steel 1.4305.

### Version:

Electro zinc-plated steel.

Bright stainless steel.

### Sample order:

K1456.004100

### Note:

Pins with a hole, suitable for DIN 71752 clevis. Secured with a split pin.

When combined with a suitable clevis and tang, forms a fully functional clevis joint.

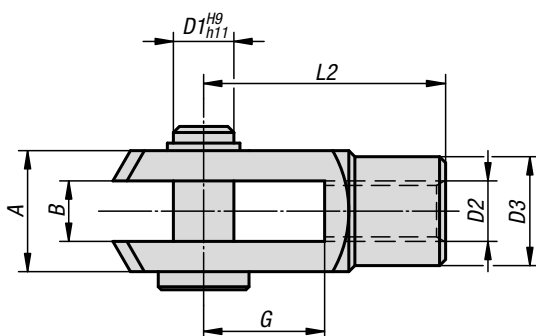


## KIPP Pins with split pin hole suitable for clevis

| Order No.<br>steel | Order No.<br>stainless steel | D1 | D3 | D4  | A    | K   | L   | Z1  | Z2  |
|--------------------|------------------------------|----|----|-----|------|-----|-----|-----|-----|
| K1456.004100       | K1456.104100                 | 4  | 6  | 1   | 10   | 1   | 12  | 1   | 0,5 |
| K1456.005123       | K1456.105123                 | 5  | 8  | 1,2 | 12,3 | 1,5 | 15  | 1   | 0,5 |
| K1456.006153       | K1456.106153                 | 6  | 9  | 1,6 | 15,3 | 1,5 | 18  | 1,5 | 0,5 |
| K1456.008195       | K1456.108195                 | 8  | 12 | 2   | 19,5 | 2   | 23  | 2   | 1   |
| K1456.010245       | K1456.110245                 | 10 | 14 | 3,2 | 24,5 | 2   | 29  | 2   | 1   |
| K1456.012295       | K1456.112295                 | 12 | 17 | 4   | 29,5 | 3   | 35  | 2,5 | 1,5 |
| K1456.014325       | K1456.114325                 | 14 | 19 | 4   | 32,5 | 3   | 40  | 2,5 | 1,5 |
| K1456.016382       | K1456.116382                 | 16 | 21 | 4   | 38,2 | 3   | 45  | 2,5 | 1,5 |
| K1456.020470       | K1456.120470                 | 20 | 26 | 5   | 47   | 4   | 53  | 3   | 2   |
| K1456.025590       | K1456.125590                 | 25 | 32 | 6,3 | 59   | 5   | 67  | 4   | 2   |
| K1456.028632       | -                            | 28 | 34 | 6,3 | 63,2 | 5   | 72  | 4   | 2   |
| K1456.030590       | K1456.130590                 | 30 | 36 | 6,3 | 59   | 5   | 67  | 4   | 2   |
| K1456.030682       | -                            | 30 | 36 | 6,3 | 68,2 | 5   | 77  | 4   | 2   |
| K1456.035765       | -                            | 35 | 44 | 8   | 76,5 | 6   | 87  | 5   | 2   |
| K1456.040900       | -                            | 40 | 48 | 8   | 90   | 6   | 100 | 5   | 2   |
| K1456.042900       | -                            | 42 | 48 | 8   | 90   | 7   | 100 | 5   | 2   |
| K1456.0501030      | -                            | 50 | 58 | 10  | 103  | 7   | 115 | 6   | 2   |

## Clevis joints stainless steel

DIN 71752



**Material:**

Stainless steel 1.4305.

**Version:**

Bright.

**Sample order:**

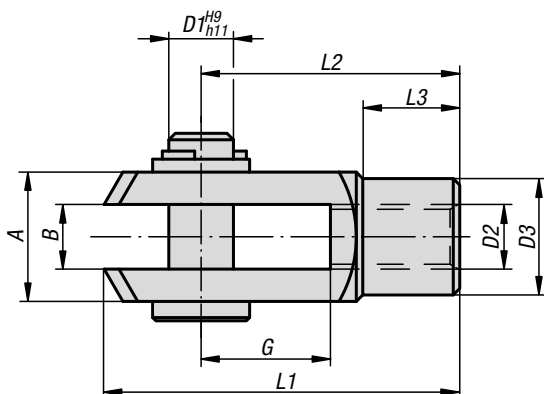
K0732.0816

### KIPP Clevis joints stainless steel DIN 71752

| Order No.   | Version   | B  | G  | D1 | D2       | D3 | L2 | A  |
|-------------|-----------|----|----|----|----------|----|----|----|
| K0732.0510  | RH thread | 5  | 10 | 5  | M5       | 9  | 20 | 10 |
| K0732.0612  | RH thread | 6  | 12 | 6  | M6       | 10 | 24 | 12 |
| K0732.0816  | RH thread | 8  | 16 | 8  | M8       | 14 | 32 | 16 |
| K0732.0832  | RH thread | 8  | 32 | 8  | M8       | 14 | 48 | 16 |
| K0732.1020  | RH thread | 10 | 20 | 10 | M10      | 18 | 40 | 20 |
| K0732.10120 | RH thread | 10 | 20 | 10 | M10x1,25 | 18 | 40 | 20 |
| K0732.1040  | RH thread | 10 | 40 | 10 | M10      | 18 | 60 | 20 |
| K0732.1224  | RH thread | 12 | 24 | 12 | M12      | 20 | 48 | 24 |
| K0732.12124 | RH thread | 12 | 24 | 12 | M12x1,25 | 20 | 48 | 24 |
| K0732.1248  | RH thread | 12 | 48 | 12 | M12      | 20 | 72 | 24 |
| K0732.12148 | RH thread | 12 | 48 | 12 | M12x1,25 | 20 | 72 | 24 |
| K0732.1428  | RH thread | 14 | 28 | 14 | M14      | 24 | 56 | 27 |
| K0732.1632  | RH thread | 16 | 32 | 16 | M16      | 26 | 64 | 32 |
| K0732.16132 | RH thread | 16 | 32 | 16 | M16x1,5  | 26 | 64 | 32 |
| K0732.05101 | LH thread | 5  | 10 | 5  | M5       | 9  | 20 | 10 |
| K0732.06121 | LH thread | 6  | 12 | 6  | M6       | 10 | 24 | 12 |
| K0732.08161 | LH thread | 8  | 16 | 8  | M8       | 14 | 32 | 16 |
| K0732.10201 | LH thread | 10 | 20 | 10 | M10      | 18 | 40 | 20 |
| K0732.12241 | LH thread | 12 | 24 | 12 | M12      | 20 | 48 | 24 |
| K0732.16321 | LH thread | 16 | 32 | 16 | M16      | 26 | 64 | 32 |

## Clevis joints

DIN 71752



**Material:**

Steel.

**Version:**

Electro zinc-plated.

**Sample order:**

K0733.0510

### KIPP Clevis joints DIN 71752

| Order No.   | Version 2 | B  | G  | D1 | D2       | D3 | L1 | L2 | L3   | A  |
|-------------|-----------|----|----|----|----------|----|----|----|------|----|
| K0733.0510  | RH thread | 5  | 10 | 5  | M5       | 9  | 26 | 20 | 7,5  | 10 |
| K0733.0612  | RH thread | 6  | 12 | 6  | M6       | 10 | 31 | 24 | 9    | 12 |
| K0733.0816  | RH thread | 8  | 16 | 8  | M8       | 14 | 42 | 32 | 12   | 16 |
| K0733.0832  | RH thread | 8  | 32 | 8  | M8       | 14 | 58 | 48 | 12   | 16 |
| K0733.1020  | RH thread | 10 | 20 | 10 | M10      | 18 | 52 | 40 | 15   | 20 |
| K0733.10120 | RH thread | 10 | 20 | 10 | M10x1,25 | 18 | 52 | 40 | 15   | 20 |
| K0733.1040  | RH thread | 10 | 40 | 10 | M10      | 18 | 72 | 60 | 15   | 20 |
| K0733.10140 | RH thread | 10 | 40 | 10 | M10x1,25 | 18 | 72 | 60 | 15   | 20 |
| K0733.1224  | RH thread | 12 | 24 | 12 | M12      | 20 | 62 | 48 | 18   | 24 |
| K0733.12124 | RH thread | 12 | 24 | 12 | M12x1,25 | 20 | 62 | 48 | 18   | 24 |
| K0733.1248  | RH thread | 12 | 48 | 12 | M12      | 20 | 86 | 72 | 18   | 24 |
| K0733.12148 | RH thread | 12 | 48 | 12 | M12x1,25 | 20 | 86 | 72 | 18   | 24 |
| K0733.1428  | RH thread | 14 | 28 | 14 | M14      | 24 | 72 | 56 | 22,5 | 27 |
| K0733.1632  | RH thread | 16 | 32 | 16 | M16      | 26 | 83 | 64 | 24   | 32 |
| K0733.16132 | RH thread | 16 | 32 | 16 | M16x1,5  | 26 | 83 | 64 | 24   | 32 |
| K0733.05101 | LH thread | 5  | 10 | 5  | M5       | 9  | 26 | 20 | 7,5  | 10 |
| K0733.06121 | LH thread | 6  | 12 | 6  | M6       | 10 | 31 | 24 | 9    | 12 |
| K0733.08161 | LH thread | 8  | 16 | 8  | M8       | 14 | 42 | 32 | 12   | 16 |
| K0733.10201 | LH thread | 10 | 20 | 10 | M10      | 18 | 52 | 40 | 15   | 20 |
| K0733.12241 | LH thread | 12 | 24 | 12 | M12      | 20 | 62 | 48 | 18   | 24 |
| K0733.16321 | LH thread | 16 | 32 | 16 | M16      | 26 | 83 | 64 | 24   | 32 |

## Clevis, steel or stainless steel

with male thread



### Material:

Steel or stainless steel 1.4301.

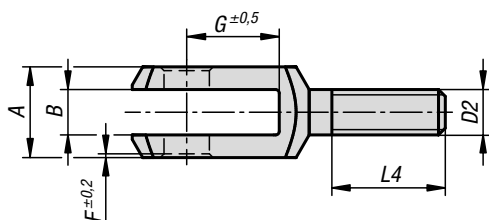
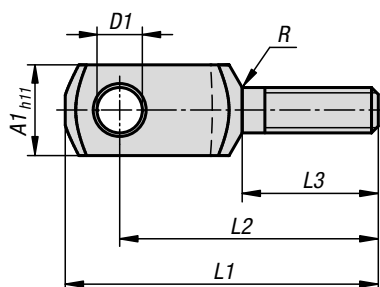
### Version:

Steel electro zinc-plated.

Stainless steel bright.

### Sample order:

K1459.0612



### KIPP Clevis, steel or stainless steel with male thread

| Order No.<br>steel | Order No.<br>stainless steel | A  | A1 | B  | D1 | D2  | F   | G  | L1  | L2  | L3 | L4 | R   |
|--------------------|------------------------------|----|----|----|----|-----|-----|----|-----|-----|----|----|-----|
| K1459.0612         | K1459.10612                  | 12 | 12 | 6  | 6  | M6  | 0,5 | 12 | 44  | 37  | 20 | 15 | 0,8 |
| K1459.0816         | K1459.10816                  | 16 | 16 | 8  | 8  | M8  | 0,5 | 16 | 57  | 47  | 25 | 20 | 0,8 |
| K1459.1020         | K1459.11020                  | 20 | 20 | 10 | 10 | M10 | 0,5 | 20 | 69  | 57  | 30 | 25 | 0,8 |
| K1459.1224         | K1459.11224                  | 24 | 24 | 12 | 12 | M12 | 0,5 | 24 | 82  | 68  | 35 | 30 | 0,8 |
| K1459.1428         | K1459.11428                  | 27 | 27 | 14 | 14 | M14 | 1   | 28 | 94  | 78  | 40 | 35 | 1,2 |
| K1459.1632         | K1459.11632                  | 32 | 32 | 16 | 16 | M16 | 1   | 32 | 108 | 89  | 45 | 40 | 1,2 |
| K1459.2040         | K1459.12040                  | 40 | 40 | 20 | 20 | M20 | 1   | 40 | 134 | 109 | 55 | 50 | 1,5 |



## Clevis tang, steel

**Material:**

Steel.

**Version:**

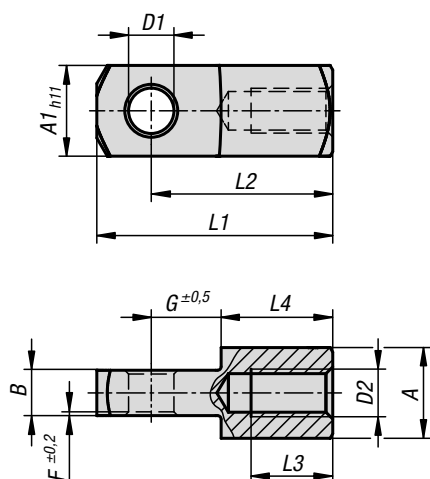
Electro zinc-plated.

**Sample order:**

K1460.0406

**Note:**

The clevis tang can be combined with a DIN 71752 clevis. These items are mainly used when connections are required to compensate for a directional shift in one direction.

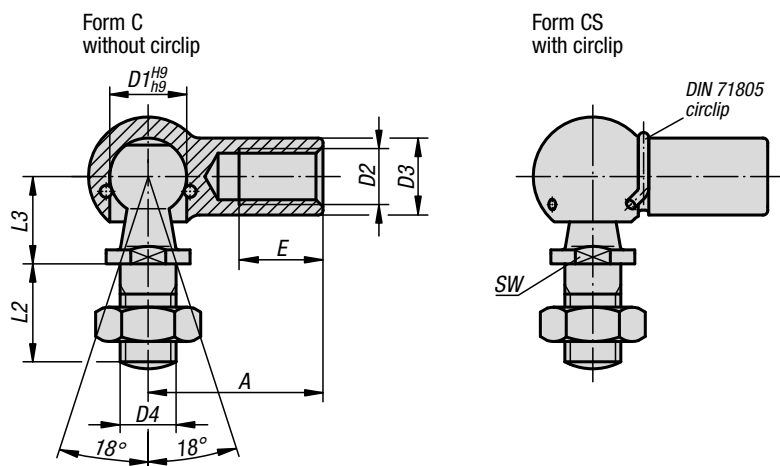


## KIPP Clevis tang, steel

| Order No.  | A  | A1 | B  | D1 | D2  | F   | G   | L1 | L2 | L3 | L4   |
|------------|----|----|----|----|-----|-----|-----|----|----|----|------|
| K1460.0406 | 8  | 8  | 4  | 4  | M4  | 0,5 | 6   | 21 | 16 | 6  | 10   |
| K1460.0507 | 10 | 10 | 5  | 5  | M5  | 0,5 | 7,5 | 26 | 20 | 8  | 12,5 |
| K1460.0609 | 12 | 12 | 6  | 6  | M6  | 0,5 | 9   | 31 | 24 | 11 | 15   |
| K1460.0812 | 16 | 16 | 8  | 8  | M8  | 0,5 | 12  | 42 | 32 | 14 | 20   |
| K1460.1015 | 20 | 20 | 10 | 10 | M10 | 0,5 | 15  | 52 | 40 | 18 | 25   |
| K1460.1218 | 24 | 24 | 12 | 12 | M12 | 0,5 | 18  | 62 | 48 | 22 | 30   |
| K1460.1421 | 27 | 27 | 14 | 14 | M14 | 1   | 21  | 72 | 56 | 25 | 35   |
| K1460.1624 | 32 | 32 | 16 | 16 | M16 | 1   | 24  | 83 | 64 | 30 | 40   |

## Ball joints

DIN 71802

**Material:**

Steel or 1.4305 stainless steel

**Version:**Trivalent passivated.  
Stainless steel version bright.**Sample order:**

K0734.08051

**Note:**

LH thread refers to dimension D2.

## KIPP Ball joints DIN 71802

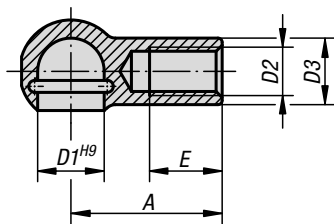
| Order No.<br>RH thread | Order No.<br>LH thread | Form | Main<br>material | D1 | D2      | D3 | D4      | A  | L2   | L3 | E    | SW |
|------------------------|------------------------|------|------------------|----|---------|----|---------|----|------|----|------|----|
| K0734.0805             | K0734.080501           | C    | steel            | 8  | M5      | 8  | M5      | 22 | 10,2 | 9  | 10,2 | 7  |
| K0734.1006             | K0734.100601           | C    | steel            | 10 | M6      | 10 | M6      | 25 | 12,5 | 11 | 11,5 | 8  |
| K0734.1308             | K0734.130801           | C    | steel            | 13 | M8      | 13 | M8      | 30 | 16,5 | 13 | 14   | 11 |
| K0734.1610             | K0734.161001           | C    | steel            | 16 | M10     | 16 | M10     | 35 | 20   | 16 | 15,5 | 13 |
| K0734.1612             | K0734.161201           | C    | steel            | 16 | M12     | 16 | M12     | 35 | 20   | 16 | 15,5 | 13 |
| K0734.1914             | K0734.191401           | C    | steel            | 19 | M14x1,5 | 22 | M14x1,5 | 45 | 28   | 20 | 21,5 | 16 |
| K0734.1916             | K0734.191601           | C    | steel            | 19 | M16     | 22 | M16     | 45 | 28   | 20 | 21,5 | 16 |
| K0734.080351           | -                      | CS   | steel            | 8  | M3,5    | 8  | M4      | 18 | 10,2 | 9  | 8    | 7  |
| K0734.08051            | K0734.080511           | CS   | steel            | 8  | M5      | 8  | M5      | 22 | 10,2 | 9  | 10,2 | 7  |
| K0734.10061            | K0734.100611           | CS   | steel            | 10 | M6      | 10 | M6      | 25 | 12,5 | 11 | 11,5 | 8  |
| K0734.13081            | K0734.130811           | CS   | steel            | 13 | M8      | 13 | M8      | 30 | 16,5 | 13 | 14   | 11 |
| K0734.16101            | K0734.161011           | CS   | steel            | 16 | M10     | 16 | M10     | 35 | 20   | 16 | 15,5 | 13 |
| K0734.16121            | K0734.161211           | CS   | steel            | 16 | M12     | 16 | M12     | 35 | 20   | 16 | 15,5 | 13 |
| K0734.19141            | K0734.191411           | CS   | steel            | 19 | M14x1,5 | 22 | M14x1,5 | 45 | 28   | 20 | 21,5 | 16 |
| K0734.19161            | K0734.191611           | CS   | steel            | 19 | M16     | 22 | M16     | 45 | 28   | 20 | 21,5 | 16 |
| K0734.08052            | K0734.080521           | CS   | stainless steel  | 8  | M5      | 8  | M5      | 22 | 10,2 | 9  | 10,2 | 7  |
| K0734.10062            | K0734.100621           | CS   | stainless steel  | 10 | M6      | 10 | M6      | 25 | 12,5 | 11 | 11,5 | 8  |
| K0734.13082            | K0734.130821           | CS   | stainless steel  | 13 | M8      | 13 | M8      | 30 | 16,5 | 13 | 14   | 11 |
| K0734.16102            | K0734.161021           | CS   | stainless steel  | 16 | M10     | 16 | M10     | 35 | 20   | 16 | 15,5 | 13 |
| K0734.16122            | K0734.161221           | CS   | stainless steel  | 16 | M12     | 16 | M12     | 35 | 20   | 16 | 15,5 | 13 |

## Ball seats for ball joints

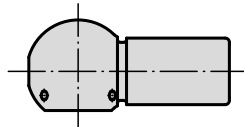
DIN 71805



Form A  
with snap ring



Form B  
with snap ring and  
groove for circlip



**Material:**  
Steel.

**Version:**  
Trivalent passivated.

**Sample order:**  
K0712.08051

**Note:**  
The ball seats are spare parts for DIN 71802 ball joints.  
See circlips for ball seats for suitable clips for Form B.

**On request:**  
Stainless steel ball seats.



### KIPP Ball seats for ball joints DIN 71805

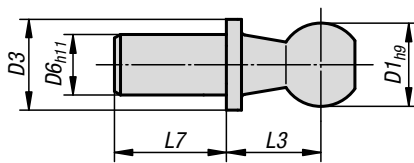
| Order No.    | Form | D1 | D2      | D3 | A  | E    |
|--------------|------|----|---------|----|----|------|
| K0712.0805   | A    | 8  | M5      | 8  | 22 | 10,2 |
| K0712.1006   | A    | 10 | M6      | 10 | 25 | 11,5 |
| K0712.1308   | A    | 13 | M8      | 13 | 30 | 14   |
| K0712.1610   | A    | 16 | M10     | 16 | 35 | 15,5 |
| K0712.1612   | A    | 16 | M12     | 16 | 35 | 15,5 |
| K0712.1914   | A    | 19 | M14x1,5 | 22 | 45 | 21,5 |
| K0712.1916   | A    | 19 | M16     | 22 | 45 | 21,5 |
| K0712.080351 | B    | 8  | M3,5    | 8  | 18 | 8    |
| K0712.08051  | B    | 8  | M5      | 8  | 22 | 10,2 |
| K0712.10061  | B    | 10 | M6      | 10 | 25 | 11,5 |
| K0712.13081  | B    | 13 | M8      | 13 | 30 | 14   |
| K0712.16101  | B    | 16 | M10     | 16 | 35 | 15,5 |
| K0712.16121  | B    | 16 | M12     | 16 | 35 | 15,5 |
| K0712.19141  | B    | 19 | M14x1,5 | 22 | 45 | 21,5 |
| K0712.19161  | B    | 19 | M16     | 22 | 45 | 21,5 |

## Ball studs for ball joints

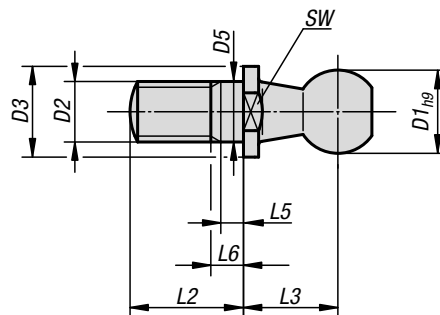
DIN 71803



Form B  
with rivet pin



Form C  
with thread and flats



**Material:**

Steel.

**Version:**

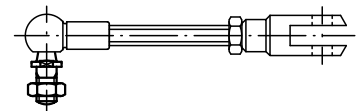
Trivalent passivated.

**Sample order:**

K0713.1006

**Note:**

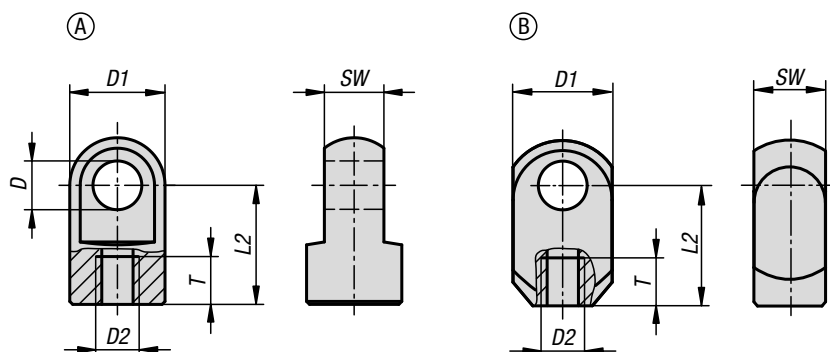
The ball studs are spare parts for DIN 71802 ball joints.



### KIPP Ball studs for ball joints DIN 71803

| Order No.  | Form | Version 2    | D1 | D2      | D3 | D5 | D6 | L2   | L3 | L5<br>min. | L6<br>max. | L7  | SW |
|------------|------|--------------|----|---------|----|----|----|------|----|------------|------------|-----|----|
| K0713.0840 | B    | short        | 8  | -       | 8  | -  | 5  | -    | 9  | -          | -          | 4   | -  |
| K0713.1045 | B    | short        | 10 | -       | 10 | -  | 6  | -    | 11 | -          | -          | 4,5 | -  |
| K0713.1305 | B    | short        | 13 | -       | 13 | -  | 8  | -    | 13 | -          | -          | 5   | -  |
| K0713.1606 | B    | short        | 16 | -       | 16 | -  | 10 | -    | 16 | -          | -          | 6   | -  |
| K0713.0875 | B    | long version | 8  | -       | 8  | -  | 5  | -    | 9  | -          | -          | 7,5 | -  |
| K0713.1080 | B    | long version | 10 | -       | 10 | -  | 6  | -    | 11 | -          | -          | 8   | -  |
| K0713.1310 | B    | long version | 13 | -       | 13 | -  | 8  | -    | 13 | -          | -          | 10  | -  |
| K0713.1613 | B    | long version | 16 | -       | 16 | -  | 10 | -    | 16 | -          | -          | 13  | -  |
| K0713.1918 | B    | long version | 19 | -       | 19 | -  | 14 | -    | 20 | -          | -          | 18  | -  |
| K0713.0805 | C    | -            | 8  | M5      | 8  | 5  | -  | 10,2 | 9  | 1,2        | 4          | -   | 7  |
| K0713.1006 | C    | -            | 10 | M6      | 10 | 6  | -  | 12,5 | 11 | 1,2        | 4          | -   | 8  |
| K0713.1308 | C    | -            | 13 | M8      | 13 | 8  | -  | 16,5 | 13 | 1,5        | 5,3        | -   | 11 |
| K0713.1610 | C    | -            | 16 | M10     | 16 | 10 | -  | 20   | 16 | 2,5        | 7,3        | -   | 13 |
| K0713.1612 | C    | -            | 16 | M12     | 16 | 12 | -  | 20   | 16 | 2,5        | 7,3        | -   | 13 |
| K0713.1914 | C    | -            | 19 | M14x1,5 | 19 | 14 | -  | 28   | 20 | 5          | 10,8       | -   | 16 |

## Rod-end eyes

**Material:**

Steel or 1.4305 stainless steel

**Version:**Steel electro zinc-plated.  
Stainless steel bright.**Sample order:**

K0127.03504111

**Note:**

With internal thread.

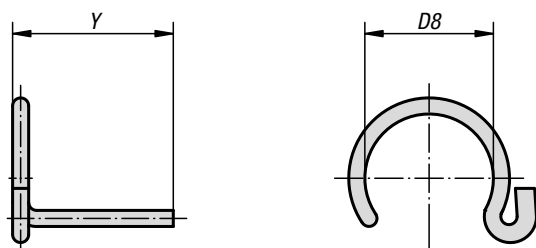
## KIPP Rod-end eyes

| Order No.<br>steel | Order No.<br>stainless steel | Form | D   | D1 | D2   | L2 | SW | T  |
|--------------------|------------------------------|------|-----|----|------|----|----|----|
| K0127.03504111     | -                            | A    | 4,1 | 8  | M3,5 | 11 | 4  | 6  |
| K0127.0506116      | K0127.05061161               | A    | 6,1 | 10 | M5   | 16 | 6  | 8  |
| K0127.0508116      | -                            | B    | 8,1 | 15 | M5   | 16 | 10 | 8  |
| K0127.0808119      | K0127.08081191               | A    | 8,1 | 14 | M8   | 19 | 10 | 11 |
| K0127.1008127      | K0127.10081271               | A    | 8,1 | 18 | M10  | 27 | 10 | 12 |

## K0714

## Circlips for ball seats

DIN 71805

**Material:**

Spring steel

**Version:**

Trivalent passivated.

**Sample order:**

K0714.08

**Note:**

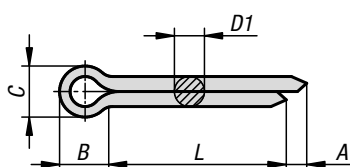
For DIN 71805 ball seats.

## KIPP Circlips for ball seats DIN 71805

| Order No. | D8  | Y    | Suitable for<br>ball sockets with D1 |
|-----------|-----|------|--------------------------------------|
| K0714.08  | 7   | 12   | 8                                    |
| K0714.10  | 8,7 | 12,5 | 10                                   |
| K0714.13  | 11  | 15,7 | 13                                   |
| K0714.16  | 13  | 19   | 16                                   |
| K0714.19  | 20  | 24   | 19                                   |

## Split pins

DIN EN ISO 1234

**Material:**

Steel or stainless steel 1.4310.

**Version:**

Steel electro zinc-plated.

Stainless steel bright.

**Sample order:**

K1136.1010X10 (include length L)

**Note:**

Split pins are used in machine construction and automotive engineering as retaining elements. They are often used for securing castle nuts. After the split pin is pushed through a hole, the ends are bent over to ensure a secure lock.

The split pin can be shortened. As a rule, the split pin should be roughly double the length of the hole.

As the material structure can weaken through bending and straightening, the split pins should not be reused after they have been removed from the hole.

## KIPP Split pins DIN EN ISO 1234

| Order No.   | Main material      | Hole diameters | D1 max. | L                       | A min. | B    | C max. | for screws | for screw Ø |
|-------------|--------------------|----------------|---------|-------------------------|--------|------|--------|------------|-------------|
| K1136.1010X | steel              | 1              | 0,9     | 10/12/16/20/25          | 0,8    | 3    | 1,8    | 3,5-4,5    | 3-4         |
| K1136.1016X | steel              | 1,6            | 1,4     | 12/16/20/25/32          | 1,25   | 3,2  | 2,8    | 5,5-7      | 5-6         |
| K1136.1020X | steel              | 2              | 1,8     | 10/16/20/25/32/36/40/50 | 1,25   | 4    | 3,6    | 7-9        | 6-8         |
| K1136.1025X | steel              | 2,5            | 2,3     | 20/25/32/36/40/50       | 1,25   | 5    | 4,6    | 9-11       | 8-9         |
| K1136.1032X | steel              | 3,2            | 2,9     | 16/20/25/32/36/40/50/63 | 1,6    | 6,4  | 5,8    | 11-14      | 9-12        |
| K1136.1040X | steel              | 4              | 3,7     | 20/25/32/36/40/50/63/80 | 2      | 8    | 7,4    | 14-20      | 12-17       |
| K1136.1050X | steel              | 5              | 4,6     | 25/32/36/40/50/63/80    | 2      | 10   | 9,2    | 20-27      | 17-23       |
| K1136.1063X | steel              | 6,3            | 5,9     | 32/36/40/50/63/80/100   | 2      | 12,6 | 11,8   | 27-39      | 23-29       |
| K1136.1080X | steel              | 8              | 7,5     | 50/63/80/100            | 2      | 16   | 15     | 39-56      | 29-44       |
| K1136.2010X | stainless steel A2 | 1              | 0,9     | 16/20                   | 0,8    | 3    | 1,8    | 3,5-4,5    | 3-4         |
| K1136.2016X | stainless steel A2 | 1,6            | 1,4     | 12/16/20/25/32          | 1,25   | 3,2  | 2,8    | 5,5-7      | 5-6         |
| K1136.2020X | stainless steel A2 | 2              | 1,8     | 10/16/20/25/32/40       | 1,25   | 4    | 3,6    | 7-9        | 6-8         |
| K1136.2025X | stainless steel A2 | 2,5            | 2,3     | 20/25/32                | 1,25   | 5    | 4,6    | 9-11       | 8-9         |
| K1136.2032X | stainless steel A2 | 3,2            | 2,9     | 16/20/25/32/36/40/50/63 | 1,6    | 6,4  | 5,8    | 11-14      | 9-12        |
| K1136.2040X | stainless steel A2 | 4              | 3,7     | 20/25/32/40/50/63       | 2      | 8    | 7,4    | 14-20      | 12-17       |
| K1136.2050X | stainless steel A2 | 5              | 4,6     | 32/36/40/50/63          | 2      | 10   | 9,2    | 20-27      | 17-23       |
| K1136.2063X | stainless steel A2 | 6,3            | 5,9     | 36/40/50/63/80          | 2      | 12,6 | 11,8   | 27-39      | 23-29       |
| K1136.2080X | stainless steel A2 | 8              | 7,5     | 50/80/100               | 2      | 16   | 15     | 39-56      | 29-44       |

## R-clips

similar to DIN 11024



**Material:**  
Steel or stainless steel A2.

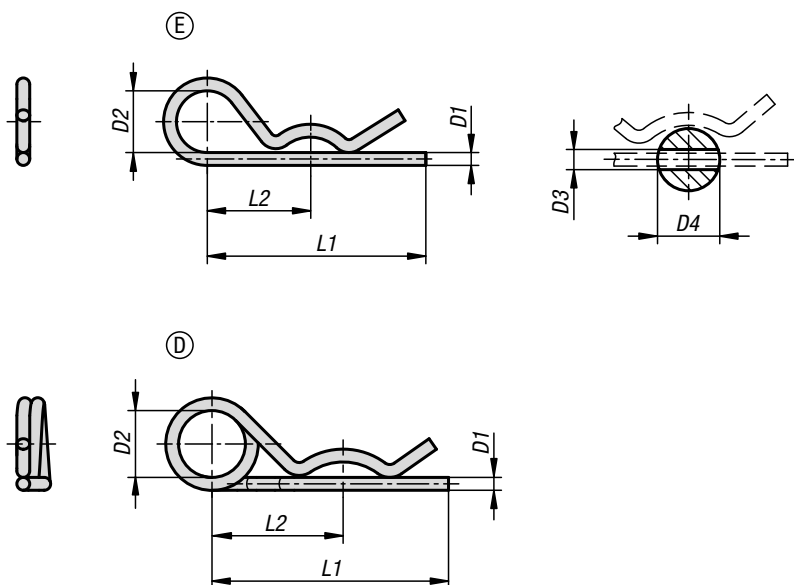
**Version:**  
Steel electro zinc-plated.  
Stainless steel bright.

**Sample order:**  
K1137.11200

**Note:**  
R-clips are used for securing bolts and axles. They are easy to install and can be reused. The ends have no sharp edges.

Double coil R-clips have a flatter spring characteristics and are easier to install. The double coil allows a tether cable to be attached to prevent loss.

**Drawing reference:**  
Form E: with single coil.  
Form D: with double coil (coil direction can differ from the drawing).



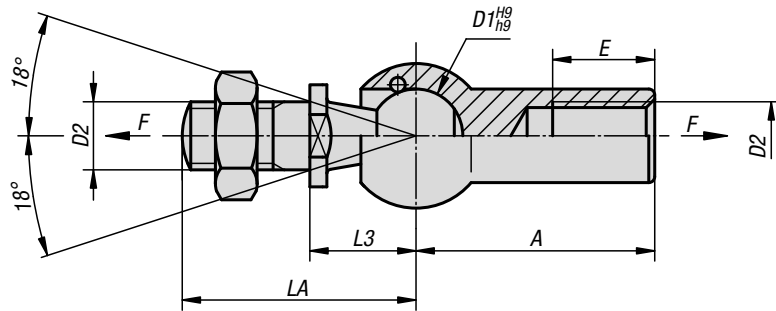
### KIPP R-clips similar to DIN 11024

| Order No.   | Form | Main material      | D1  | D2 | D3  | D4=for screw Ø | L1  | L2 |
|-------------|------|--------------------|-----|----|-----|----------------|-----|----|
| K1137.11200 | E    | steel              | 2   | 10 | 2,5 | 9-14           | 50  | 25 |
| K1137.11300 | E    | steel              | 3   | 18 | 3,5 | 10-16          | 60  | 28 |
| K1137.11400 | E    | steel              | 4   | 20 | 4,5 | 16-20          | 60  | 30 |
| K1137.11500 | E    | steel              | 5   | 24 | 6   | 20-28          | 85  | 40 |
| K1137.11600 | E    | steel              | 6   | 30 | 7   | 28-40          | 105 | 50 |
| K1137.11700 | E    | steel              | 7   | 30 | 8   | 28-45          | 105 | 50 |
| K1137.21200 | E    | stainless steel A2 | 2   | 10 | 2,5 | 7-8            | 40  | 25 |
| K1137.21250 | E    | stainless steel A2 | 2,5 | 11 | 3   | 10-16          | 46  | 24 |
| K1137.21300 | E    | stainless steel A2 | 3   | 16 | 3,5 | 16-18          | 60  | 34 |
| K1137.21400 | E    | stainless steel A2 | 4   | 19 | 4,5 | 18-20          | 64  | 36 |
| K1137.21500 | E    | stainless steel A2 | 5   | 26 | 6   | 20-28          | 82  | 45 |
| K1137.21600 | E    | stainless steel A2 | 6   | 30 | 7   | 28-40          | 110 | 60 |

| Order No.   | Form | Main material      | D1   | D2 | D3  | D4=for screw Ø | L1  | L2 |
|-------------|------|--------------------|------|----|-----|----------------|-----|----|
| K1137.12225 | D    | steel              | 2,25 | 20 | 2,5 | 9-11,2         | 42  | 24 |
| K1137.12280 | D    | steel              | 2,8  | 20 | 3,2 | 11,2-14        | 48  | 26 |
| K1137.12360 | D    | steel              | 3,6  | 20 | 4   | 14-20          | 64  | 32 |
| K1137.12450 | D    | steel              | 4,5  | 25 | 5   | 20-26          | 80  | 39 |
| K1137.12560 | D    | steel              | 5,6  | 25 | 6,3 | 26-34          | 97  | 45 |
| K1137.12630 | D    | steel              | 6,3  | 30 | 7   | 34-45          | 125 | 56 |
| K1137.12700 | D    | steel              | 7    | 30 | 8   | 45-56          | 150 | 63 |
| K1137.22225 | D    | stainless steel A2 | 2,25 | 20 | 2,5 | 7-9            | 42  | 24 |
| K1137.22280 | D    | stainless steel A2 | 2,8  | 20 | 3,2 | 11-14          | 48  | 26 |
| K1137.22360 | D    | stainless steel A2 | 3,6  | 20 | 4   | 14-20          | 64  | 32 |
| K1137.22450 | D    | stainless steel A2 | 4,5  | 25 | 5   | 20-26          | 80  | 39 |
| K1137.22560 | D    | stainless steel A2 | 5,6  | 25 | 6,3 | 26-34          | 97  | 45 |

## Axial joints

similar to DIN 71802



### Material:

Steel or 1.4305 stainless steel.

Stainless steel versions have Neoprene seals.

### Version:

Trivalent passivated.

Stainless steel version bright.

### Sample order:

K0715.10

### Note:

Protected against dust, dirt, water spray and vapour.  
Applicable temperature range from -30 °C to +110 °C.

### On request:

Axial joints with greater extraction force and left-hand thread available.

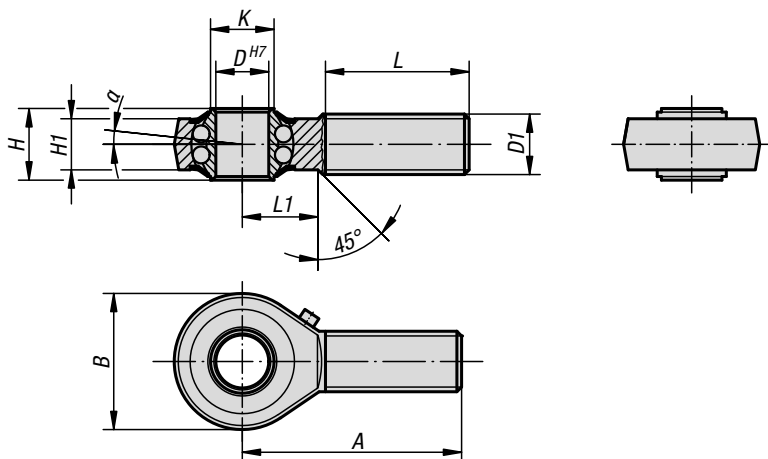
## KIPP Axial joints similar to DIN 71802

| Order No. | Main material   | D1 | D2      | A  | LA   | L3 | E    | Extraction force F<br>N |
|-----------|-----------------|----|---------|----|------|----|------|-------------------------|
| K0715.08  | steel           | 8  | M5      | 22 | 19,2 | 9  | 10,2 | 30                      |
| K0715.10  | steel           | 10 | M6      | 25 | 23,5 | 11 | 11,5 | 40                      |
| K0715.13  | steel           | 13 | M8      | 30 | 29,5 | 13 | 14   | 60                      |
| K0715.16  | steel           | 16 | M10     | 35 | 36   | 16 | 15,5 | 80                      |
| K0715.19  | steel           | 19 | M14x1,5 | 45 | 48   | 20 | 21,5 | 100                     |
| K0715.108 | stainless steel | 8  | M5      | 22 | 19,2 | 9  | 10,2 | 30                      |
| K0715.110 | stainless steel | 10 | M6      | 25 | 23,5 | 11 | 11,5 | 40                      |
| K0715.113 | stainless steel | 13 | M8      | 30 | 29,5 | 13 | 14   | 60                      |
| K0715.116 | stainless steel | 16 | M10     | 35 | 36   | 16 | 15,5 | 80                      |



## Rod ends with ball bearing

external thread, DIN ISO 12240-4



### Material:

Casing drop-forged steel, tempered.

### Version:

Electro zinc-plated.

Bearing play 15 - 40 µm.

### Sample order:

K0716.12

### Note:

The hardened ball bearing is long-term greased and sealed with cover washers. The connection dimensions comply with DIN 648 series KA.

Rod ends are primarily used where movement processes are transmitted and there is no exact alignment.

Up to D = 10 the rod ends have a DIN 3405/A flush type grease nipple.

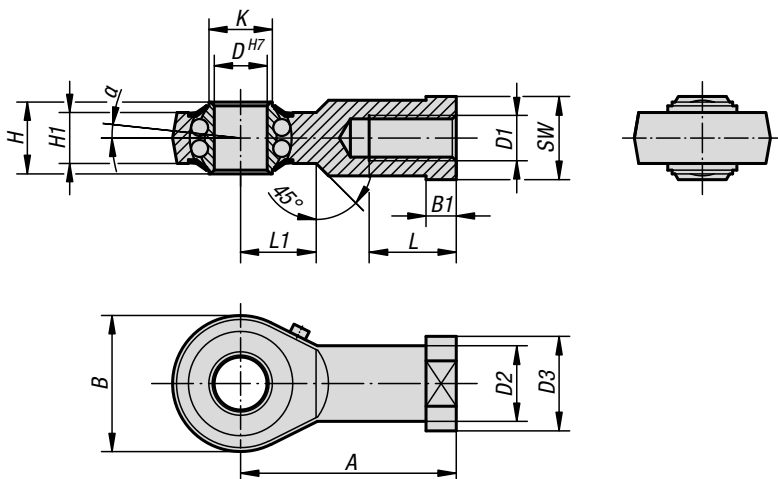
From D = 12 they have a DIN 71412/A conical head type grease nipple.

## KIPP Rod ends with ball bearing, external thread, DIN ISO 12240-4

| Order No.<br>RH thread | Order No.<br>LH thread | D  | D1      | A  | B  | H  | H1   | K    | L  | L1 | α    | Dynamic<br>load rating<br>N | Static<br>load rating<br>N | Rev. limit<br>n max. rpm |
|------------------------|------------------------|----|---------|----|----|----|------|------|----|----|------|-----------------------------|----------------------------|--------------------------|
| K0716.06               | K0716.061              | 6  | M6      | 36 | 20 | 9  | 6,75 | 9    | 22 | 12 | 8°   | 2750                        | 650                        | 1350                     |
| K0716.08               | K0716.081              | 8  | M8      | 42 | 24 | 12 | 9    | 10,5 | 25 | 15 | 8,5° | 4000                        | 1000                       | 1300                     |
| K0716.10               | K0716.101              | 10 | M10     | 48 | 28 | 14 | 10,5 | 12   | 29 | 15 | 8°   | 4450                        | 1450                       | 1225                     |
| K0716.12               | K0716.121              | 12 | M12     | 54 | 32 | 16 | 12   | 14,5 | 33 | 19 | 7,5° | 4950                        | 1800                       | 1125                     |
| K0716.16               | K0716.161              | 16 | M16     | 66 | 42 | 21 | 15   | 19   | 40 | 22 | 8°   | 6250                        | 2350                       | 975                      |
| K0716.20               | K0716.201              | 20 | M20x1,5 | 78 | 50 | 25 | 18   | 24,5 | 47 | 28 | 7°   | 7900                        | 3450                       | 825                      |
| K0716.22               | K0716.221              | 22 | M22x1,5 | 84 | 54 | 28 | 20   | 26   | 51 | 26 | 8°   | 9300                        | 3980                       | 725                      |

## Rod ends with ball bearing

internal thread, DIN ISO 12240-4



### Material:

Casing drop-forged steel, tempered.

### Version:

Electro zinc-plated.

Bearing play 15 - 40 µm.

### Sample order:

K0717.16

### Note:

The hardened ball bearing is long-term greased and sealed with cover washers. The connection dimensions comply with DIN 648 Form Series KA.

Up to D = 10 the rod ends have a DIN 3405/A flush type grease nipple.

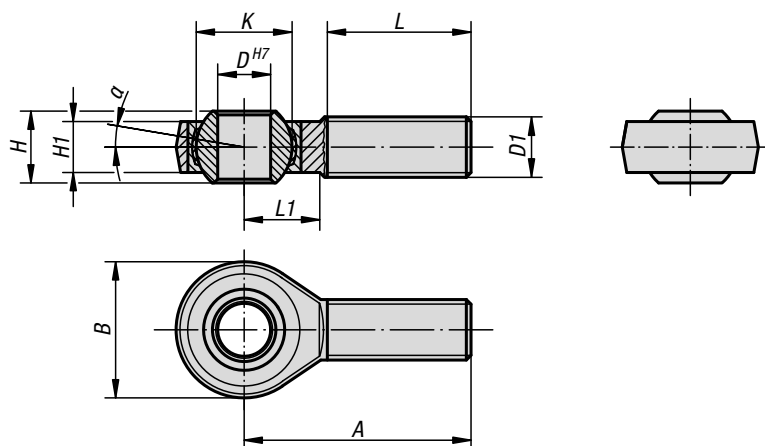
From D = 12 they have a DIN 71412/A conical head type grease nipple.

### KIPP Rod ends with ball bearing, internal thread, DIN ISO 12240-4

| Order No.<br>RH thread | Order No.<br>LH thread | D  | D1      | D2   | D3 | A  | B  | B1  | H  | H1   | K    | L  | L1 | SW | α    | Dynamic<br>load rating<br>N | Static<br>load rating<br>N | Rev. limit<br>n max. rpm |
|------------------------|------------------------|----|---------|------|----|----|----|-----|----|------|------|----|----|----|------|-----------------------------|----------------------------|--------------------------|
| K0717.06               | K0717.061              | 6  | M6      | 10   | 13 | 30 | 20 | 5   | 9  | 6,75 | 9    | 12 | 10 | 11 | 8°   | 2750                        | 650                        | 1350                     |
| K0717.08               | K0717.081              | 8  | M8      | 12,5 | 16 | 36 | 24 | 5   | 12 | 9    | 10,5 | 16 | 12 | 14 | 8,5° | 4000                        | 1000                       | 1300                     |
| K0717.10               | K0717.101              | 10 | M10     | 15   | 19 | 43 | 28 | 6,5 | 14 | 10,5 | 12   | 20 | 15 | 17 | 8°   | 4450                        | 1450                       | 1225                     |
| K0717.12               | K0717.121              | 12 | M12     | 17,5 | 22 | 50 | 32 | 6,5 | 16 | 12   | 14,5 | 22 | 16 | 19 | 7,5° | 4950                        | 1800                       | 1125                     |
| K0717.16               | K0717.161              | 16 | M16     | 22   | 27 | 64 | 42 | 8   | 21 | 15   | 19   | 28 | 22 | 22 | 8°   | 6250                        | 2350                       | 975                      |
| K0717.20               | K0717.201              | 20 | M20x1,5 | 27,5 | 34 | 77 | 50 | 10  | 25 | 18   | 24,5 | 33 | 26 | 30 | 7°   | 7900                        | 3450                       | 825                      |
| K0717.22               | K0717.221              | 22 | M22x1,5 | 30   | 38 | 84 | 54 | 12  | 28 | 20   | 26   | 37 | 26 | 32 | 8°   | 9300                        | 3980                       | 725                      |

# Rod ends with plain bearing

external thread, DIN ISO 12240-4



## Material:

Housing size (D) 5-12 turned steel.

From size (D) 16 forged steel.

Ball joint ball bearing steel, hardened, ground and polished.

Bearing shell steel with PTFE weave glued in.

## Version:

Electro zinc-plated.

## Sample order:

K0718.20

## Note:

The rod end bearing is maintenance-free. The connection dimensions comply with DIN 648 series KA.

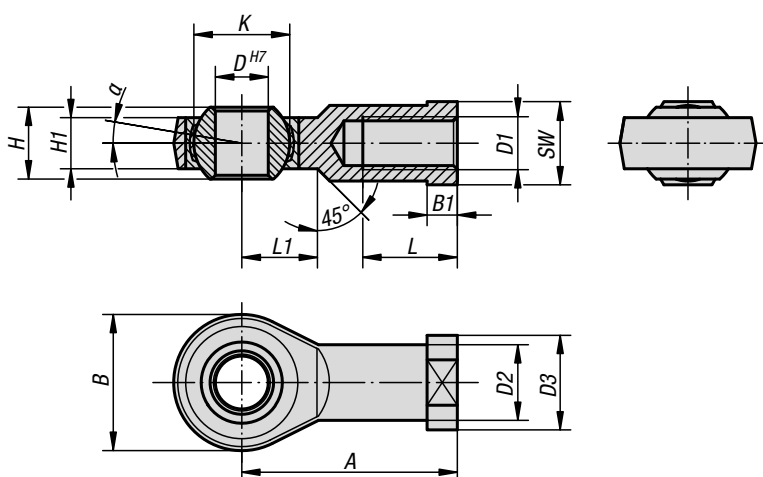


## KIPP Rod ends with plain bearing, external thread, DIN ISO 12240-4

| Order No.<br>RH thread | Order No.<br>LH thread | D  | D1      | A  | B  | H  | H1   | K     | L  | L1 | α   | Dynamic<br>base loads<br>kN | Static<br>base loads<br>kN |
|------------------------|------------------------|----|---------|----|----|----|------|-------|----|----|-----|-----------------------------|----------------------------|
| K0718.05               | K0718.051              | 5  | M5      | 33 | 18 | 8  | 6    | 11,11 | 20 | 9  | 13° | 7,5                         | 4,3                        |
| K0718.06               | K0718.061              | 6  | M6      | 36 | 20 | 9  | 6,75 | 12,7  | 22 | 12 | 13° | 9,3                         | 6                          |
| K0718.08               | K0718.081              | 8  | M8      | 42 | 24 | 12 | 9    | 15,87 | 25 | 15 | 13° | 16,7                        | 11                         |
| K0718.10               | K0718.101              | 10 | M10     | 48 | 28 | 14 | 10,5 | 19,05 | 29 | 15 | 13° | 23,4                        | 17,4                       |
| K0718.12               | K0718.121              | 12 | M12     | 54 | 32 | 16 | 12   | 22,22 | 33 | 19 | 13° | 32                          | 23,5                       |
| K0718.16               | K0718.161              | 16 | M16     | 66 | 42 | 21 | 15   | 28,57 | 40 | 22 | 15° | 52,7                        | 32                         |
| K0718.20               | K0718.201              | 20 | M20x1,5 | 78 | 50 | 25 | 18   | 34,92 | 47 | 28 | 15° | 78,1                        | 43,8                       |
| K0718.22               | K0718.221              | 22 | M22x1,5 | 84 | 54 | 28 | 20   | 38,1  | 51 | 26 | 15° | 97,2                        | 52,6                       |

## Rod ends with plain bearing

internal thread, DIN ISO 12240-4



### Material:

Housing size (D) 5-12 turned steel.

From size (D) 16 forged steel.

Ball joint ball bearing steel, hardened, ground and polished.

Bearing shell steel with PTFE weave glued in.

### Version:

Electro zinc-plated.

### Sample order:

K0719.22

### Note:

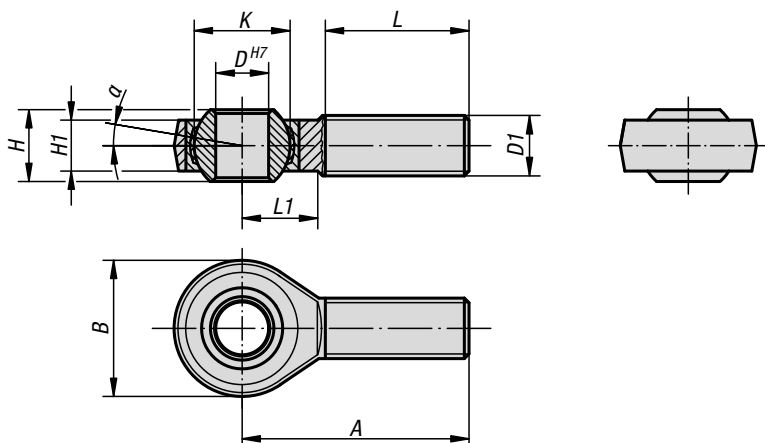
The rod end bearing is maintenance-free. The connection dimensions comply with DIN 648 series KJ.

## KIPP Rod ends with plain bearing, internal thread, DIN ISO 12240-4

| Order No.<br>RH thread | Order No.<br>LH thread | D  | D1       | D2   | D3 | A  | B  | B1  | H  | H1   | K     | L  | L1 | SW | $\alpha$ | Dynamic<br>base loads<br>kN | Static<br>base loads<br>kN |
|------------------------|------------------------|----|----------|------|----|----|----|-----|----|------|-------|----|----|----|----------|-----------------------------|----------------------------|
| K0719.05               | K0719.051              | 5  | M5       | 9    | 11 | 27 | 18 | 4   | 8  | 6    | 11,11 | 10 | 10 | 9  | 13°      | 7,5                         | 8                          |
| K0719.06               | K0719.061              | 6  | M6       | 10   | 13 | 30 | 20 | 5   | 9  | 6,75 | 12,7  | 12 | 10 | 11 | 13°      | 9,3                         | 8,9                        |
| K0719.08               | K0719.081              | 8  | M8       | 12,5 | 16 | 36 | 24 | 5   | 12 | 9    | 15,87 | 16 | 12 | 13 | 13°      | 16,7                        | 14,1                       |
| K0719.10               | K0719.101              | 10 | M10      | 15   | 19 | 43 | 28 | 6,5 | 14 | 10,5 | 19,05 | 20 | 15 | 17 | 13°      | 23,4                        | 19,3                       |
| K0719.10125            | K0719.101251           | 10 | M10x1,25 | 15   | 19 | 43 | 28 | 6,5 | 14 | 10,5 | 19,05 | 20 | 15 | 17 | 13°      | 23,4                        | 19,3                       |
| K0719.12               | K0719.121              | 12 | M12      | 17,5 | 22 | 50 | 32 | 6,5 | 16 | 12   | 22,22 | 22 | 16 | 19 | 13°      | 32                          | 23,5                       |
| K0719.12125            | K0719.121251           | 12 | M12x1,25 | 17,5 | 22 | 50 | 32 | 6,5 | 16 | 12   | 22,22 | 22 | 16 | 19 | 13°      | 32                          | 23,5                       |
| K0719.16               | K0719.161              | 16 | M16      | 22   | 27 | 64 | 42 | 8   | 21 | 15   | 28,57 | 28 | 22 | 22 | 15°      | 52,7                        | 32                         |
| K0719.1615             | K0719.16151            | 16 | M16x1,5  | 22   | 27 | 64 | 42 | 8   | 21 | 15   | 28,57 | 28 | 22 | 22 | 15°      | 52,7                        | 32                         |
| K0719.20               | K0719.201              | 20 | M20x1,5  | 27,5 | 34 | 77 | 50 | 10  | 25 | 18   | 34,92 | 33 | 26 | 32 | 15°      | 78,1                        | 43,8                       |
| K0719.22               | K0719.221              | 22 | M22x1,5  | 30   | 37 | 84 | 54 | 12  | 28 | 20   | 38,1  | 37 | 26 | 32 | 15°      | 97,2                        | 52,6                       |

# Rod ends with plain bearing

external thread, stainless steel, DIN ISO 12240-4



## Material:

Housing forged 1.4057 stainless steel.  
Ball joint 1.4034 hardened and ground.  
Bearing shell 1.4571 stainless steel.

## Version:

Polished.

## Sample order:

K0720.20

## Note:

The rod end bearing is maintenance-free.  
The connection dimensions comply with DIN 648 Form Series KA.

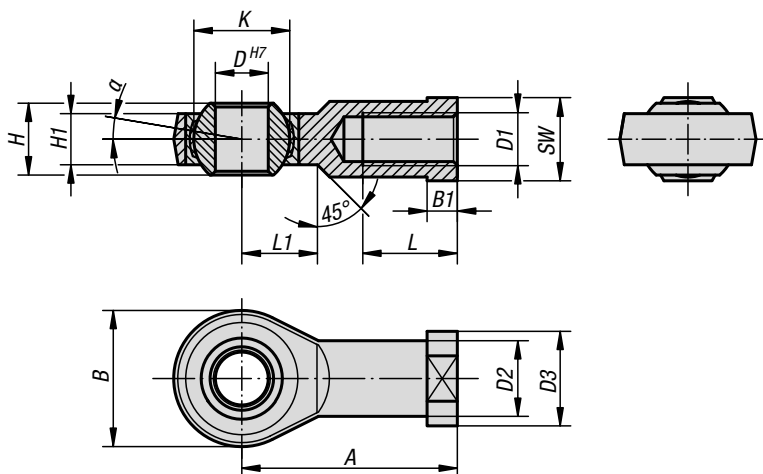


## KIPP Rod ends with plain bearing, external thread, stainless steel, DIN ISO 12240-4

| Order No.<br>RH thread | Order No.<br>LH thread | D  | D1      | A  | B  | H  | H1   | K     | L  | L1 | α   | Dynamic<br>base loads<br>kN | Static<br>base loads<br>kN |
|------------------------|------------------------|----|---------|----|----|----|------|-------|----|----|-----|-----------------------------|----------------------------|
| K0720.05               | K0720.051              | 5  | M5      | 33 | 18 | 8  | 6    | 11,11 | 20 | 9  | 13° | 7,5                         | 6,2                        |
| K0720.06               | K0720.061              | 6  | M6      | 36 | 20 | 9  | 6,75 | 12,7  | 22 | 12 | 13° | 9,3                         | 8,8                        |
| K0720.08               | K0720.081              | 8  | M8      | 42 | 24 | 12 | 9    | 15,87 | 25 | 15 | 13° | 16,7                        | 16,1                       |
| K0720.10               | K0720.101              | 10 | M10     | 48 | 28 | 14 | 10,5 | 19,05 | 29 | 15 | 13° | 23,4                        | 25,5                       |
| K0720.12               | K0720.121              | 12 | M12     | 54 | 32 | 16 | 12   | 22,22 | 33 | 19 | 13° | 32                          | 34,5                       |
| K0720.16               | K0720.161              | 16 | M16     | 66 | 42 | 21 | 15   | 28,57 | 40 | 22 | 15° | 52,7                        | 60,6                       |
| K0720.20               | K0720.201              | 20 | M20x1,5 | 78 | 50 | 25 | 18   | 34,92 | 47 | 28 | 15° | 78,1                        | 83,1                       |
| K0720.22               | K0720.221              | 22 | M22x1,5 | 84 | 54 | 28 | 20   | 38,1  | 51 | 26 | 15° | 97,2                        | 99,7                       |

## Rod ends with plain bearing

internal thread, stainless steel, DIN ISO 12240-4



### Material:

Housing forged 1.4057 stainless steel.  
Ball joint 1.4034 hardened and ground.  
Bearing shell 1.4571 stainless steel.

### Version:

Polished.

### Sample order:

K0721.22

### Note:

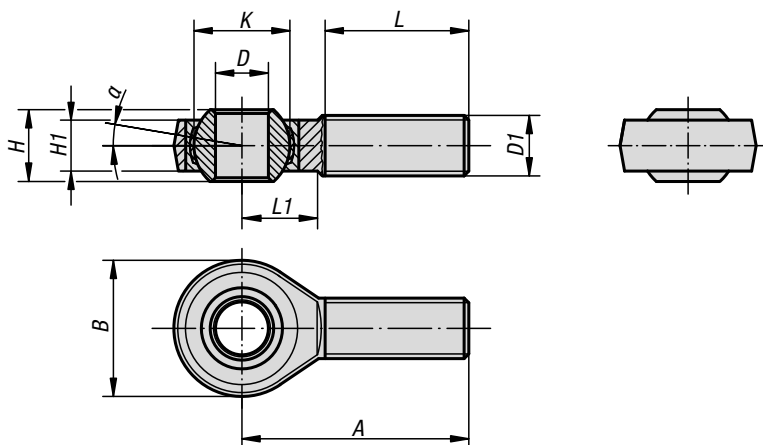
The rod end bearing is maintenance-free.  
The connection dimensions comply with DIN 648 Form Series KJ.

## KIPP Rod ends with plain bearing, internal thread, stainless steel, DIN ISO 12240-4

| Order No.<br>RH thread | Order No.<br>LH thread | D  | D1       | D2   | D3 | A  | B  | B1  | H  | H1   | K     | L  | L1 | SW | $\alpha$ | Dynamic<br>base loads<br>kN | Static<br>base loads<br>kN |
|------------------------|------------------------|----|----------|------|----|----|----|-----|----|------|-------|----|----|----|----------|-----------------------------|----------------------------|
| K0721.05               | K0721.051              | 5  | M5       | 9    | 11 | 27 | 18 | 4   | 8  | 6    | 11,11 | 10 | 10 | 9  | 13°      | 7,5                         | 11,8                       |
| K0721.06               | K0721.061              | 6  | M6       | 10   | 13 | 30 | 20 | 5   | 9  | 6,75 | 12,7  | 12 | 10 | 11 | 13°      | 9,3                         | 13,1                       |
| K0721.08               | K0721.081              | 8  | M8       | 12,5 | 16 | 36 | 24 | 5   | 12 | 9    | 15,87 | 16 | 12 | 13 | 13°      | 16,7                        | 20,7                       |
| K0721.10               | K0721.101              | 10 | M10      | 15   | 19 | 43 | 28 | 6,5 | 14 | 10,5 | 19,05 | 20 | 15 | 17 | 13°      | 23,4                        | 28,3                       |
| K0721.10125            | K0721.101251           | 10 | M10x1,25 | 15   | 19 | 43 | 28 | 6,5 | 14 | 10,5 | 19,05 | 20 | 15 | 17 | 13°      | 23,4                        | 28,3                       |
| K0721.12               | K0721.121              | 12 | M12      | 17,5 | 22 | 50 | 32 | 6,5 | 16 | 12   | 22,22 | 22 | 16 | 19 | 13°      | 32                          | 34,5                       |
| K0721.12125            | K0721.121251           | 12 | M12x1,25 | 17,5 | 22 | 50 | 32 | 6,5 | 16 | 12   | 22,22 | 22 | 16 | 19 | 13°      | 32                          | 34,5                       |
| K0721.16               | K0721.161              | 16 | M16      | 22   | 27 | 64 | 42 | 8   | 21 | 15   | 28,57 | 28 | 22 | 22 | 15°      | 52,7                        | 60,6                       |
| K0721.1615             | K0721.16151            | 16 | M16x1,5  | 22   | 27 | 64 | 42 | 8   | 21 | 15   | 28,57 | 28 | 22 | 22 | 15°      | 52,7                        | 60,6                       |
| K0721.20               | K0721.201              | 20 | M20x1,5  | 27,5 | 34 | 77 | 50 | 10  | 25 | 18   | 34,92 | 33 | 26 | 32 | 15°      | 78,1                        | 83,1                       |
| K0721.22               | K0721.221              | 22 | M22x1,5  | 30   | 37 | 84 | 54 | 12  | 28 | 20   | 38,1  | 37 | 26 | 32 | 15°      | 97,2                        | 99,7                       |

# Rod ends with plain bearing

external thread, narrow version, DIN ISO 12240-4



## Material:

Housing size (D) 6-10 turned steel.

From size (D) 12 forged steel.

Ball joint ball bearing steel, hardened, ground, polished and hard chromed.

Bearing shell ball bearing steel with PTFE weave glued in.

## Version:

Electro zinc-plated.

## Sample order:

K0722.20

## Note:

The rod end bearing is maintenance-free.

The connection dimensions comply with DIN 648 Form Series E.

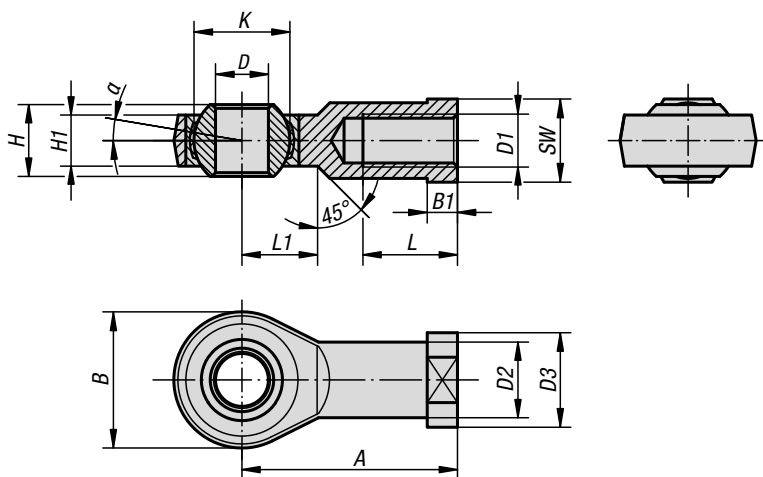


## KIPP Rod ends with plain bearing, external thread, narrow version, DIN ISO 12240-4

| Order No.<br>RH thread | Order No.<br>LH thread | D         | D1      | A  | B  | H  | H1  | K  | L  | L1 | α   | Dynamic<br>base loads<br>kN | Static<br>base loads<br>kN |
|------------------------|------------------------|-----------|---------|----|----|----|-----|----|----|----|-----|-----------------------------|----------------------------|
| K0722.06               | K0722.061              | 6 -0,008  | M6      | 36 | 20 | 6  | 4,4 | 10 | 18 | 11 | 12° | 3,6                         | 8,2                        |
| K0722.08               | K0722.081              | 8 -0,008  | M8      | 42 | 24 | 8  | 6   | 13 | 22 | 12 | 12° | 5,8                         | 12,9                       |
| K0722.10               | K0722.101              | 10 -0,008 | M10     | 48 | 28 | 9  | 7   | 16 | 26 | 15 | 12° | 8,6                         | 17,6                       |
| K0722.12               | K0722.121              | 12 -0,008 | M12     | 54 | 34 | 10 | 8   | 18 | 28 | 15 | 8°  | 11,4                        | 24,5                       |
| K0722.16               | K0722.161              | 17 -0,008 | M16     | 69 | 46 | 14 | 11  | 25 | 36 | 23 | 8°  | 22                          | 45                         |
| K0722.20               | K0722.201              | 20 -0,010 | M20x1,5 | 78 | 53 | 16 | 13  | 29 | 43 | 25 | 8°  | 31,5                        | 60                         |

# Rod ends with plain bearing

internal thread, narrow version, DIN ISO 12240-4



## Material:

Housing size (D) 6-10 turned steel.

From size (D) 12 forged steel.

Ball joint ball bearing steel, hardened, ground, polished and hard chromed.

Bearing shell ball bearing steel with PTFE weave glued in.

## Version:

Electro zinc-plated.

## Sample order:

K0723.12

## Note:

The rod end bearing is maintenance-free.

The connection dimensions comply with DIN 648 Form Series E.

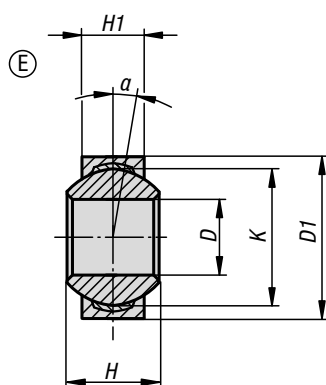
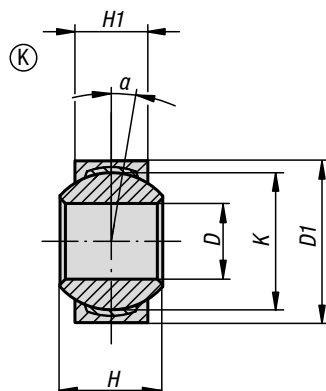
## KIPP Rod ends with plain bearing, internal thread, narrow version, DIN ISO 12240-4

| Order No.<br>LH thread | Order No.<br>RH thread | D         | D1       | D2   | D3 | A  | B  | B1  | H  | H1  | K  | L  | L1 | SW | $\alpha$ | Dynamic<br>base loads<br>kN | Static<br>base loads<br>kN |
|------------------------|------------------------|-----------|----------|------|----|----|----|-----|----|-----|----|----|----|----|----------|-----------------------------|----------------------------|
| K0723.101              | K0723.10               | 10 -0,008 | M10      | 15   | 19 | 43 | 28 | 6,5 | 9  | 7   | 16 | 20 | 13 | 17 | 12°      | 8,6                         | 17,6                       |
| K0723.121              | K0723.12               | 12 -0,008 | M12      | 17,5 | 22 | 50 | 34 | 6,5 | 10 | 8   | 18 | 22 | 15 | 19 | 8°       | 11,4                        | 24,5                       |
| K0723.121251           | K0723.12125            | 12 -0,008 | M12x1,25 | 17,5 | 22 | 50 | 34 | 6,5 | 10 | 8   | 18 | 22 | 15 | 19 | 8°       | 11,4                        | 24,5                       |
| K0723.061              | K0723.06               | 6 -0,008  | M6       | 10   | 13 | 30 | 20 | 5   | 6  | 4,4 | 10 | 12 | 11 | 11 | 12°      | 3,6                         | 8,2                        |
| K0723.081              | K0723.08               | 8 -0,008  | M8       | 12,5 | 16 | 36 | 24 | 5   | 8  | 6   | 13 | 16 | 12 | 14 | 12°      | 5,8                         | 12,9                       |
| K0723.161              | K0723.16               | 17 -0,008 | M16      | 24   | 30 | 67 | 46 | 10  | 14 | 11  | 25 | 33 | 20 | 27 | 8°       | 22                          | 45                         |
| K0723.101251           | K0723.10125            | 10 -0,008 | M10x1,25 | 15   | 19 | 43 | 28 | 6,5 | 9  | 7   | 16 | 20 | 13 | 17 | 12°      | 8,6                         | 17,6                       |
| K0723.201              | K0723.20               | 20 -0,010 | M20x1,5  | 27,5 | 35 | 77 | 53 | 10  | 16 | 13  | 29 | 38 | 23 | 32 | 8°       | 31,5                        | 60                         |



## Spherical bearings K/E series

DIN ISO 12240-1



### Material:

Bearing shell stainless steel 1.4571.

Ball joint stainless steel 1.4034.

Bearing surface PTFE/stainless steel insert.

### Version:

Ground, polished.

### Sample order:

K1324.10513

### Note:

Suitable for high dynamic loads. The fitting dimensions comply with DIN ISO 12240-1 E/K.



### KIPP Pivot bearings K series DIN ISO 12240-1

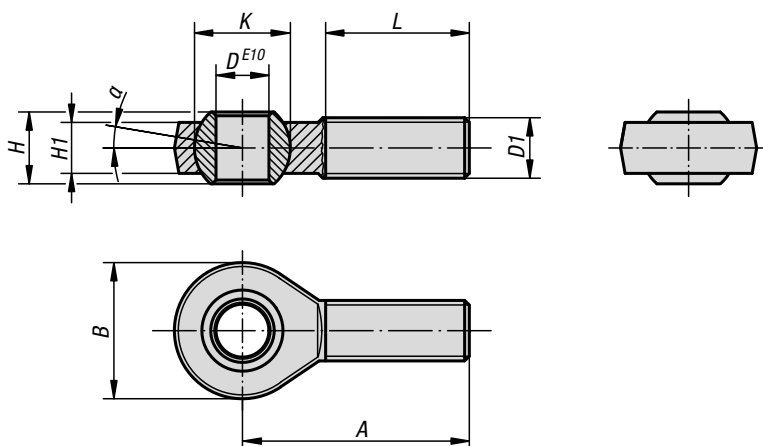
| Order No.   | D     | D1      | H  | H1   | K     | $\alpha$ | Dynamic load rating<br>N | Static load rating<br>N | Speed limit<br>rpm |
|-------------|-------|---------|----|------|-------|----------|--------------------------|-------------------------|--------------------|
| K1324.10513 | 5 H7  | 13 h7   | 8  | 6    | 11,11 | 13°      | 7500                     | 12500                   | 600                |
| K1324.10615 | 6 H7  | 15 h7   | 9  | 6,75 | 12,7  | 13°      | 9300                     | 15500                   | 530                |
| K1324.10818 | 8 H7  | 18 h7   | 12 | 9    | 15,87 | 14°      | 16700                    | 27800                   | 420                |
| K1324.11021 | 10 H7 | 21 h7   | 14 | 10,5 | 19,05 | 13°      | 23400                    | 39000                   | 350                |
| K1324.11224 | 12 H7 | 24,5 h7 | 16 | 12   | 22,22 | 13°      | 32000                    | 34500                   | 300                |
| K1324.11631 | 16 H7 | 31,5 h7 | 21 | 15   | 28,57 | 15°      | 52500                    | 88000                   | 230                |

### KIPP Pivot bearings E series DIN ISO 12240-1

| Order No.   | D         | D1        | H  | H1 | K  | $\alpha$ | Dynamic load rating<br>N | Static load rating<br>N |
|-------------|-----------|-----------|----|----|----|----------|--------------------------|-------------------------|
| K1324.20614 | 6 -0,008  | 14 -0,008 | 6  | 4  | 10 | 13°      | 4000                     | 9000                    |
| K1324.20816 | 8 -0,008  | 16 -0,008 | 8  | 5  | 13 | 15°      | 7000                     | 15600                   |
| K1324.21019 | 10 -0,008 | 19 -0,009 | 9  | 6  | 16 | 12°      | 10000                    | 23400                   |
| K1324.21222 | 12 -0,008 | 22 -0,009 | 10 | 7  | 18 | 11°      | 14000                    | 32000                   |
| K1324.21630 | 16 -0,008 | 30 -0,009 | 14 | 10 | 25 | 10°      | 39000                    | 65000                   |

## Rod ends igubal® with plain bearing

external thread, similar to DIN ISO 12240-4



### Material:

Housing igumid® G.  
Bearing seat iglidur® W300.

### Version:

Black.

### Sample order:

K1465.105

### Note:

The rod end has very high rigidity under alternating stresses, it is insensitive to dirt, dust and lint, and is both corrosion and chemical resistant. It is ideal for rotary, oscillating and linear movements.  
The connection dimensions comply with DIN ISO 12240 series K.

### Tolerances:

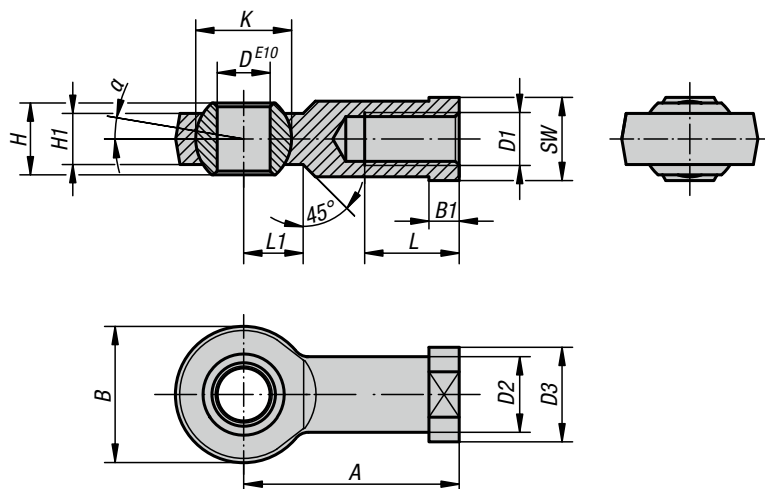
The bore of the inner ring has an E10 tolerance. The shaft tolerance should be between h6 and h9.

## KIPP Rod ends igubal® with plain bearing external thread, similar to DIN ISO 12240-4

| Order No.<br>RH thread | Order No.<br>LH thread | D  | D1       | A  | B  | H  | H1   | K     | L  | α     | Max. static<br>tensile stress N<br>short-term | Max. static<br>tensile stress N<br>long-term | Max. transverse<br>stress N<br>short-term | Max. transverse<br>stress N<br>long-term |
|------------------------|------------------------|----|----------|----|----|----|------|-------|----|-------|-----------------------------------------------|----------------------------------------------|-------------------------------------------|------------------------------------------|
| K1465.105              | K1465.1051             | 5  | M5       | 33 | 18 | 8  | 6    | 11,1  | 19 | 15°   | 800                                           | 400                                          | 80                                        | 40                                       |
| K1465.106              | K1465.1061             | 6  | M6       | 36 | 20 | 9  | 7    | 12,7  | 21 | 14,5° | 1000                                          | 500                                          | 100                                       | 50                                       |
| K1465.108              | K1465.1081             | 8  | M8       | 42 | 24 | 12 | 9    | 15,8  | 25 | 12,5° | 1700                                          | 850                                          | 200                                       | 100                                      |
| K1465.110              | K1465.1101             | 10 | M10      | 48 | 30 | 14 | 10,5 | 19    | 28 | 12,5° | 2500                                          | 1250                                         | 300                                       | 150                                      |
| K1465.110125           | K1465.1101251          | 10 | M10x1,25 | 48 | 30 | 14 | 10,5 | 19    | 28 | 12,5° | 2500                                          | 1250                                         | 300                                       | 150                                      |
| K1465.112              | K1465.1121             | 12 | M12      | 54 | 34 | 16 | 12   | 22,2  | 32 | 12,5° | 2700                                          | 1350                                         | 400                                       | 200                                      |
| K1465.112125           | K1465.1121251          | 12 | M12x1,25 | 54 | 34 | 16 | 12   | 22,2  | 32 | 12,5° | 2700                                          | 1350                                         | 400                                       | 200                                      |
| K1465.114              | K1465.1141             | 14 | M14      | 61 | 38 | 19 | 13,5 | 25,25 | 36 | 12,5° | 3400                                          | 1700                                         | 700                                       | 350                                      |
| K1465.116              | K1465.1161             | 16 | M16      | 66 | 42 | 21 | 15   | 28,3  | 37 | 11,5° | 3900                                          | 1950                                         | 800                                       | 400                                      |
| K1465.116150           | K1465.1161501          | 16 | M16x1,5  | 66 | 42 | 21 | 15   | 28,3  | 37 | 11,5° | 3900                                          | 1950                                         | 800                                       | 400                                      |
| K1465.118150           | K1465.1181501          | 18 | M18x1,5  | 72 | 46 | 23 | 16,5 | 31,35 | 41 | 11,5° | 4200                                          | 2100                                         | 1000                                      | 500                                      |
| K1465.120              | K1465.1201             | 20 | M20      | 78 | 50 | 25 | 18   | 34,9  | 45 | 11,5° | 6000                                          | 3000                                         | 1300                                      | 650                                      |
| K1465.120150           | K1465.1201501          | 20 | M20x1,5  | 78 | 50 | 25 | 18   | 34,9  | 45 | 11,5° | 6000                                          | 3000                                         | 1300                                      | 650                                      |

## Rod ends igubal® with plain bearing

internal thread, similar to DIN ISO 12240-4



### Material:

Housing igumid® G.  
Bearing seat iglidur® W300.

### Version:

Black.

### Sample order:

K1466.106

### KIPP Rod ends igubal® with plain bearing internal thread, similar to DIN ISO 12240-4

| Order No.<br>RH thread | Order No.<br>LH thread | D  | D1       | D2 | D3 | A  | B  | B1  | H  | H1   | K     | L  | L1 | SW | α     |
|------------------------|------------------------|----|----------|----|----|----|----|-----|----|------|-------|----|----|----|-------|
| K1466.104              | K1466.1041             | 5  | M4       | 9  | 12 | 27 | 18 | 4   | 8  | 6    | 11,1  | 10 | 9  | 9  | 15°   |
| K1466.105              | K1466.1051             | 5  | M5       | 9  | 12 | 27 | 18 | 4   | 8  | 6    | 11,1  | 10 | 9  | 9  | 15°   |
| K1466.106              | K1466.1061             | 6  | M6       | 10 | 13 | 30 | 20 | 5   | 9  | 7    | 12,7  | 12 | 10 | 11 | 14,5° |
| K1466.108              | K1466.1081             | 8  | M8       | 13 | 16 | 36 | 24 | 5   | 12 | 9    | 15,8  | 16 | 12 | 14 | 12,5° |
| K1466.110              | K1466.1101             | 10 | M10      | 15 | 19 | 43 | 30 | 6,5 | 14 | 10,5 | 19    | 20 | 14 | 17 | 12,5° |
| K1466.110125           | K1466.1101251          | 10 | M10x1,25 | 15 | 19 | 43 | 30 | 6,5 | 14 | 10,5 | 19    | 20 | 14 | 17 | 12,5° |
| K1466.112              | K1466.1121             | 12 | M12      | 18 | 22 | 50 | 34 | 6,5 | 16 | 12   | 22,2  | 22 | 16 | 17 | 12,5° |
| K1466.112125           | K1466.1121251          | 12 | M12x1,25 | 18 | 22 | 50 | 34 | 6,5 | 16 | 12   | 22,2  | 22 | 16 | 19 | 12,5° |
| K1466.114              | K1466.1141             | 14 | M14      | 20 | 25 | 57 | 38 | 8   | 19 | 13,5 | 25,25 | 25 | 18 | 22 | 11,5° |
| K1466.116              | K1466.1161             | 16 | M16      | 22 | 27 | 64 | 42 | 8   | 21 | 15   | 28,3  | 28 | 21 | 22 | 11,5° |
| K1466.116150           | K1466.1161501          | 16 | M16x1,5  | 22 | 27 | 64 | 42 | 8   | 21 | 15   | 28,3  | 28 | 21 | 22 | 11,5° |
| K1466.118150           | K1466.1181501          | 18 | M18x1,5  | 25 | 31 | 71 | 46 | 10  | 23 | 16,5 | 31,35 | 32 | 23 | 27 | 11,5° |
| K1466.120              | K1466.1201             | 20 | M20      | 28 | 34 | 77 | 50 | 10  | 25 | 18   | 34,9  | 33 | 25 | 30 | 11,5° |
| K1466.120150           | K1466.1201501          | 20 | M20x1,5  | 28 | 34 | 77 | 50 | 10  | 25 | 18   | 34,9  | 33 | 25 | 30 | 11,5° |

### Note:

The rod end has very high rigidity under alternating stresses, it is insensitive to dirt, dust and lint, and is both corrosion and chemical resistant. It is ideal for rotary, oscillating and linear movements. The connection dimensions comply DIN ISO 12240 series K.

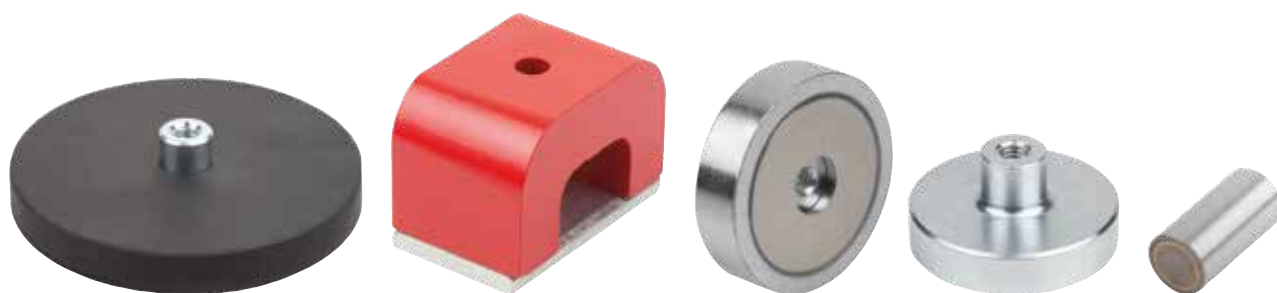
### Tolerances:

The bore of the inner ring has an E10 tolerance. The shaft tolerance should be between h6 and h9.

| Order No.<br>RH thread | Order No.<br>LH thread | D1       | Max. static<br>tensile stress N<br>short-term | Max. static<br>tensile stress N<br>long-term | Max. transverse<br>stress N<br>short-term | Max. transverse<br>stress N<br>long-term |
|------------------------|------------------------|----------|-----------------------------------------------|----------------------------------------------|-------------------------------------------|------------------------------------------|
| K1466.104              | K1466.1041             | M4       | 1000                                          | 500                                          | 250                                       | 125                                      |
| K1466.105              | K1466.1051             | M5       | 1000                                          | 500                                          | 250                                       | 125                                      |
| K1466.106              | K1466.1061             | M6       | 1400                                          | 700                                          | 400                                       | 200                                      |
| K1466.108              | K1466.1081             | M8       | 2100                                          | 1050                                         | 700                                       | 350                                      |
| K1466.110              | K1466.1101             | M10      | 3100                                          | 1550                                         | 800                                       | 400                                      |
| K1466.110125           | K1466.1101251          | M10x1,25 | 3100                                          | 1550                                         | 800                                       | 400                                      |
| K1466.112              | K1466.1121             | M12      | 3600                                          | 1800                                         | 900                                       | 450                                      |
| K1466.112125           | K1466.1121251          | M12x1,25 | 3600                                          | 1800                                         | 900                                       | 450                                      |
| K1466.114              | K1466.1141             | M14      | 4000                                          | 2000                                         | 1000                                      | 500                                      |
| K1466.116              | K1466.1161             | M16      | 4200                                          | 2100                                         | 1300                                      | 650                                      |
| K1466.116150           | K1466.1161501          | M16x1,5  | 4200                                          | 2100                                         | 1300                                      | 650                                      |
| K1466.118150           | K1466.1181501          | M18x1,5  | 4600                                          | 2300                                         | 1600                                      | 800                                      |
| K1466.120              | K1466.1201             | M20      | 5400                                          | 2700                                         | 2100                                      | 1050                                     |
| K1466.120150           | K1466.1201501          | M20x1,5  | 5400                                          | 2700                                         | 2100                                      | 1050                                     |



# Magnets



# Technical data for retaining magnets and raw magnets



## Construction:

Pot magnets are magnetic systems that, due to their technical structure have only one magnetic face. Unlike raw magnets, pot magnets only exert a magnetic force on one face. This design enables the spatial effect of the magnetic field to be limited. This prevents unwanted magnetisation of workpieces or machine elements by the pot magnet.

Raw magnets are not magnetic systems, all the faces are magnetic.

## Version:

### Shallow pot magnet:

The magnetic core is moulded or pressed into a housing. There is a non-magnetic barrier between the magnet and the housing, ensuring a shielded system.

### Retaining magnets:

The magnetic core here is enclosed in a plastic sheath. Their construction makes these magnets particularly suitable for use on noticeboards and thin metal sheets.

### Button magnets / horseshoe magnets:

These are unshielded systems with a divided magnetic face.

### Magnets with protective rubber jacket:

The magnet is encased in rubber, which helps to protect sensitive surfaces.

### Raw magnets:

These are always unshielded systems. All of the faces are magnetic.

### Deep pot magnets:

These are magnets with a permanent magnetic core which is isolated from the housing by a non-magnetic shield. This ensures a shielded system.

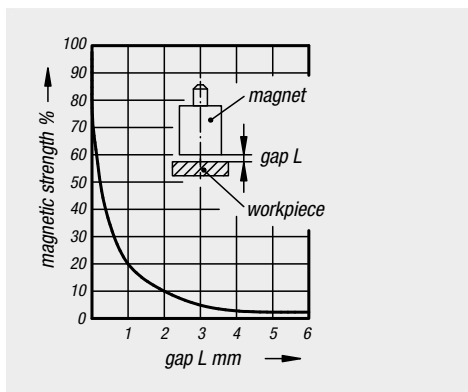
## Properties:

| Description           | Reference to designation      | Weak ←————→ Strong |              |              |              |
|-----------------------|-------------------------------|--------------------|--------------|--------------|--------------|
|                       |                               | Hard ferrite       | AlNiCo       | SmCo         | NdFeB        |
| Magnetic force        | Magnetic remanence            | Hard ferrite       | AlNiCo       | SmCo         | NdFeB        |
| Repeatable adsorption | Retention force               | AlNiCo             | Hard ferrite | SmCo         | NdFeB        |
| Mechanical strength   | -                             | SmCo               | Hard ferrite | NdFeB        | AlNiCo       |
| Corrosion resistance  | -                             | NdFeB              | AlNiCo       | SmCo         | Hard ferrite |
| Temperature stability | Material specific Curie point | NdFeB              | SmCo         | Hard ferrite | AlNiCo       |

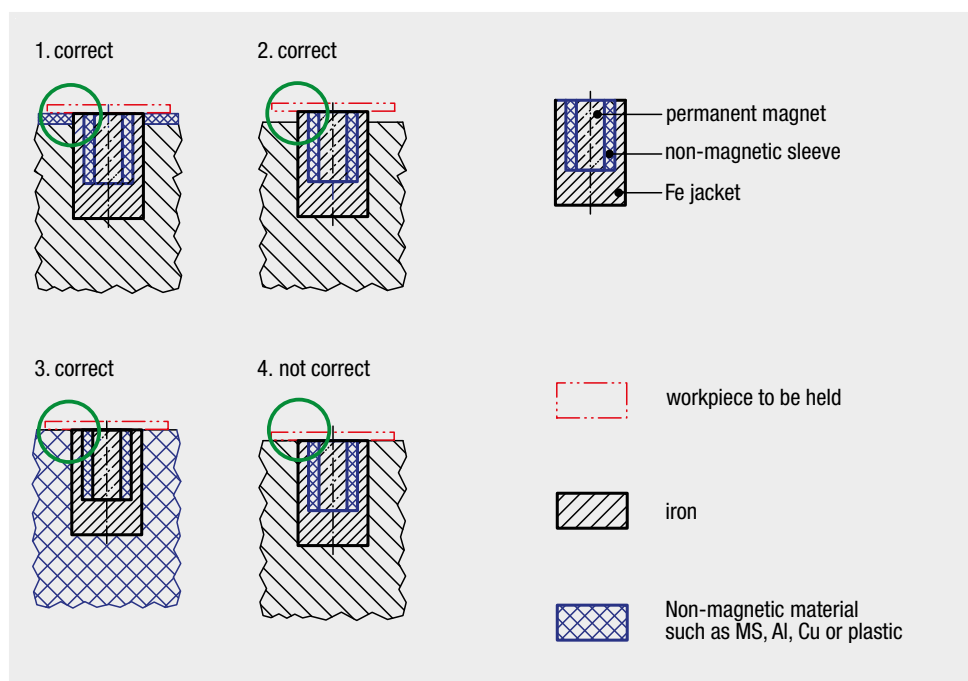
Long-term heating or alternating thermal stresses may lead to mechanical changes in the magnet system. In many cases, however, they have no influence on the function. The same applies to chemical stresses (chemical baths, aggressive gases, etc).

## Magnetic strengths:

The indicated magnetic forces are minimum values which are achieved by a vertical pull-off and full face contact. By dirty pole faces or uneven workpieces, air gaps are formed which sharply decrease the magnetic force. In general, the attractive force of a magnet decreases as the air gap increases. It is therefore advisable to always ensure a clean pole face and clean it from time to time. Non-magnetic barriers have the same effect as air gaps.



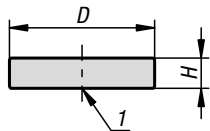
## Mounting instructions for shielded pot magnets without pins



1. Unwanted magnetisation of machine parts and components is prevented through non-magnetisable materials.
2. Sufficiently large air gap between workpiece and magnetisable material.
3. Use of non-magnetisable material for the machine parts or components prevents unwanted magnetisation.
4. Unfavourable because the workpiece is placed on a magnetisable material. This causes unwanted magnetisation of machine parts or components.

## Magnets raw

NdFeB, disc form



**Material:**  
NdFeB N35 (neodymium).

**Version:**  
nickel-plated.

**Sample order:**  
K1404.05

**Note:**  
Unshielded system.

**Temperature range:**  
max. 80°C.

**Assembly:**  
The magnets can be mounted by press-fit or gluing.

**Drawing reference:**  
1) magnetic face

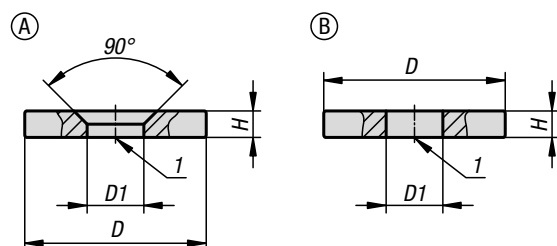
### KIPP Magnets raw, NdFeB, disc form

| Order No. | D       | H      | Magnetic force N |
|-----------|---------|--------|------------------|
| K1404.05  | 5 ±0,1  | 3 ±0,1 | 5                |
| K1404.06  | 6 ±0,1  | 3 ±0,1 | 7,5              |
| K1404.08  | 8 ±0,1  | 4 ±0,1 | 13               |
| K1404.10  | 10 ±0,1 | 3 ±0,1 | 15               |
| K1404.12  | 12 ±0,1 | 3 ±0,1 | 20               |
| K1404.15  | 15 ±0,1 | 3 ±0,1 | 25               |
| K1404.18  | 18 ±0,1 | 3 ±0,1 | 33               |
| K1404.24  | 24 ±0,1 | 3 ±0,1 | 39               |

# K1405

## Magnets raw with hole

NdFeB, disc form



**Material:**  
NdFeB N35 (neodymium).

**Version:**  
nickel-plated.

**Sample order:**  
K1405.12

**Note:**  
Unshielded system.

**Temperature range:**  
max. 80°C.

**Assembly:**  
The magnets can be mounted by press-fit, screwing-in or gluing.

**Drawing reference:**  
1) magnetic face

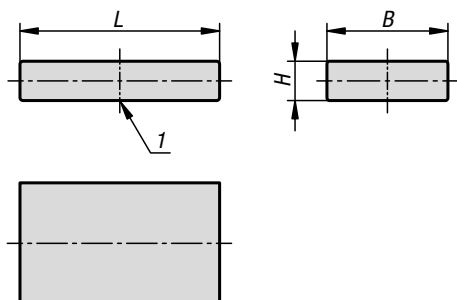
### KIPP Magnets raw with hole, NdFeB, disc form

| Order No. | Form | D       | D1        | H        | Tightening torque max. Nm | Magnetic force N |
|-----------|------|---------|-----------|----------|---------------------------|------------------|
| K1405.12  | A    | 12 ±0,1 | 3,5 ±0,1  | 3 ±0,1   | 3                         | 18               |
| K1405.15  | A    | 15 ±0,1 | 4,5 ±0,1  | 3,5 ±0,1 | 3                         | 29               |
| K1405.18  | A    | 18 ±0,1 | 4,5 ±0,1  | 4 ±0,1   | 3                         | 41               |
| K1405.24  | A    | 24 ±0,1 | 5,5 ±0,1  | 4 ±0,1   | 3                         | 66               |
| K1405.32  | B    | 32 ±0,1 | 10,5 ±0,1 | 2 ±0,1   | 3                         | 42               |
| K1405.38  | B    | 38 ±0,1 | 12 ±0,1   | 4 ±0,1   | 3                         | 110              |
| K1405.48  | B    | 48 ±0,2 | 15 ±0,1   | 5 ±0,1   | 3                         | 165              |
| K1405.56  | B    | 56 ±0,2 | 15 ±0,1   | 6 ±0,1   | 3                         | 230              |



# Magnets raw

NdFeB, block form


**Material:**

NdFeB N35 (neodymium).

**Version:**

nickel-plated.

**Sample order:**

K1406.0704

**Note:**

Unshielded system.

**Temperature range:**

max. 80°C.

**Assembly:**

The magnets can be mounted by press-fit or gluing.

**Drawing reference:**

1) magnetic face

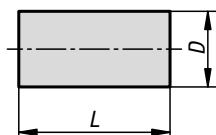


## KIPP Magnets raw, NdFeB, block form

| Order No.  | B         | H        | L        | Magnetic force<br>N |
|------------|-----------|----------|----------|---------------------|
| K1406.0704 | 4 ±0,1    | 1,5 ±0,1 | 7,5 ±0,1 | 5                   |
| K1406.0706 | 6 ±0,1    | 2 ±0,1   | 7,5 ±0,1 | 8                   |
| K1406.1007 | 7,5 ±0,1  | 2 ±0,1   | 10 ±0,1  | 11                  |
| K1406.1209 | 9,5 ±0,1  | 2,5 ±0,1 | 12 ±0,1  | 17                  |
| K1406.1612 | 12,5 ±0,1 | 2,5 ±0,1 | 16 ±0,1  | 24                  |
| K1406.1816 | 16,5 ±0,1 | 4 ±0,1   | 18 ±0,1  | 50                  |
| K1406.2620 | 20,3 ±0,1 | 5 ±0,1   | 26 ±0,1  | 77                  |
| K1406.3326 | 26 ±0,1   | 6,5 ±0,1 | 33 ±0,1  | 125                 |

# Magnets raw

AlNiCo, bar type


**Material:**

AlNiCo (aluminium, nickel, cobalt).

**Version:**

Bright.

**Sample order:**

K1407.0310

**Note:**

Unshielded system.

**Temperature range:**

max. 450°C.

**Assembly:**

The magnets can be mounted by press-fit or gluing.

## KIPP Magnets raw, AlNiCo, bar type

| Order No.  | D          | L       | Magnetic force N |
|------------|------------|---------|------------------|
| K1407.0310 | 3 +0/-0,2  | 10 ±0,1 | 1,1              |
| K1407.0312 | 3 +0/-0,2  | 12 ±0,1 | 1,3              |
| K1407.0416 | 4 +0/-0,2  | 16 ±0,1 | 1,9              |
| K1407.0420 | 4 +0/-0,2  | 20 ±0,1 | 2                |
| K1407.0520 | 5 +0/-0,2  | 20 ±0,1 | 2,3              |
| K1407.0615 | 6 +0/-0,2  | 15 ±0,1 | 2,8              |
| K1407.0624 | 6 +0/-0,2  | 24 ±0,1 | 2,8              |
| K1407.0630 | 6 +0/-0,2  | 30 ±0,1 | 2,8              |
| K1407.0825 | 8 +0/-0,2  | 25 ±0,1 | 3,8              |
| K1407.1020 | 10 +0/-0,2 | 20 ±0,1 | 5                |
| K1407.1040 | 10 +0/-0,2 | 40 ±0,1 | 7                |
| K1407.1240 | 12 +0/-0,2 | 40 ±0,1 | 8                |
| K1407.1530 | 15 +0/-0,2 | 30 ±0,2 | 10               |
| K1407.1560 | 15 +0/-0,2 | 60 ±0,2 | 11               |
| K1407.3480 | 34 +0/-0,2 | 80 ±0,2 | 61               |

# Magnets deep pot

AlNiCo with fitting tolerance


**Material:**

Housing, steel.

Magnetic core AlNiCo.

**Version:**

Housing bright.

**Sample order:**

K0545.01

**Note:**

Shielded system. Diameter "D" ground to a h6 tolerance. Fastening possibilities by press-in, shrink-fit or gluing.

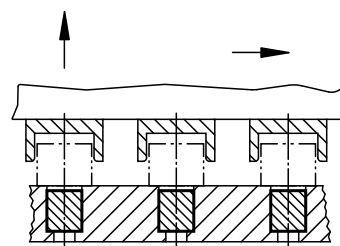
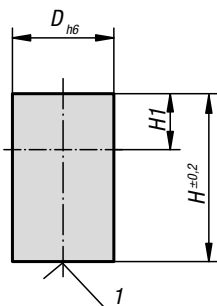
Deep pot magnets can be shortened by the dimension "H1" with no loss of magnetic force.

**Temperature range:**

max. 450°C.

**Drawing reference:**

1) magnetic face

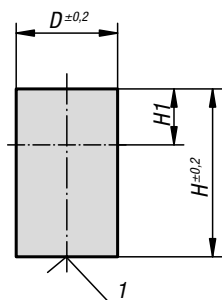


## KIPP Magnets deep pot AlNiCo with fitting tolerance

| Order No. | D  | H  | H1 | Magnetic force N |
|-----------|----|----|----|------------------|
| K0545.01  | 6  | 10 | 2  | 1,5              |
| K0545.02  | 8  | 12 | 3  | 3,5              |
| K0545.03  | 10 | 16 | 6  | 7                |
| K0545.04  | 13 | 18 | 7  | 10               |
| K0545.05  | 16 | 20 | 5  | 18               |
| K0545.06  | 20 | 25 | 6  | 42               |
| K0545.07  | 25 | 30 | 5  | 96               |
| K0545.08  | 32 | 35 | 3  | 180              |
| K0545.09  | 40 | 45 | 5  | 240              |
| K0545.10  | 50 | 50 | 2  | 420              |

# Magnets deep pot

AlNiCo without fitting tolerance


**Material:**

Housing, steel.

Magnetic core AlNiCo.

**Version:**

Housing, electro zinc-plated.

**Sample order:**

K0546.01

**Note:**

Shielded system. Diameter "D" without fitting tolerance. Fastening possibilities are press-in, shrink-fitting or gluing.

Deep pot magnets can be shortened by the dimension "H1" with no loss of magnetic force.

**Temperature range:**

max. 450°C.

**Drawing reference:**

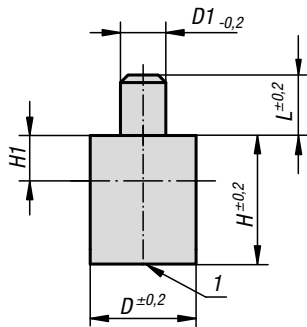
1) magnetic face

## KIPP Magnets deep pot AlNiCo without fitting tolerance

| Order No. | D  | H  | H1 | Magnetic force<br>N |
|-----------|----|----|----|---------------------|
| K0546.01  | 6  | 20 | 12 | 1,5                 |
| K0546.02  | 8  | 20 | 11 | 3,5                 |
| K0546.03  | 10 | 20 | 10 | 7                   |
| K0546.04  | 13 | 20 | 9  | 10                  |
| K0546.05  | 16 | 20 | 5  | 18                  |
| K0546.06  | 20 | 25 | 6  | 42                  |
| K0546.07  | 25 | 35 | 10 | 96                  |
| K0546.08  | 32 | 40 | 8  | 180                 |
| K0546.09  | 40 | 50 | 10 | 240                 |

# Magnets deep pot with pin

AlNiCo

**Material:**

Housing, steel.

Magnetic core AlNiCo.

**Version:**

Housing, electro zinc-plated.

**Sample order:**

K0547.01

**Note:**

Deep pot magnets with smooth pin, shielded system.  
The magnets can be shortened by the dimension "H1"  
with no loss of magnetic force.

**Temperature range:**

max. 450°C.

**Drawing reference:**

1) magnetic face

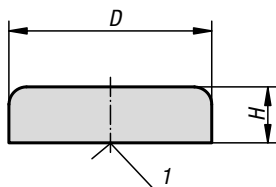


## KIPP Magnets deep pot with pin AlNiCo

| Order No. | D  | D1 | L  | H  | H1 | Magnetic force N |
|-----------|----|----|----|----|----|------------------|
| K0547.01  | 6  | 3  | 8  | 20 | 2  | 1,7              |
| K0547.02  | 8  | 3  | 8  | 20 | 3  | 4                |
| K0547.03  | 10 | 4  | 8  | 20 | 6  | 8,5              |
| K0547.04  | 13 | 4  | 8  | 20 | 7  | 12               |
| K0547.05  | 16 | 5  | 8  | 20 | 5  | 20               |
| K0547.06  | 20 | 6  | 8  | 25 | 6  | 50               |
| K0547.07  | 25 | 8  | 10 | 35 | 5  | 115              |
| K0547.08  | 32 | 10 | 10 | 40 | 3  | 200              |
| K0547.09  | 40 | 15 | 20 | 50 | 5  | 240              |
| K0547.10  | 50 | 18 | 25 | 60 | 2  | 420              |

# Magnets shallow pot

hard ferrite


**Material:**

Housing, steel.

Magnetic core hard ferrite.

**Version:**

Housing, electro zinc-plated.

**Sample order:**

K0548.01

**Note:**

Shallow pot magnets without threaded bush. These magnets are pressed or glued into the receiving holes.

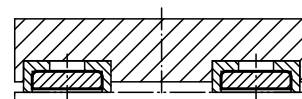
Hairline cracks in the magnetic material are unavoidable for technical reasons in the D=80 version. They do not impair the attracting function of the magnets in any way.

**Temperature range:**

max. 200°C.

**Drawing reference:**

1) magnetic face

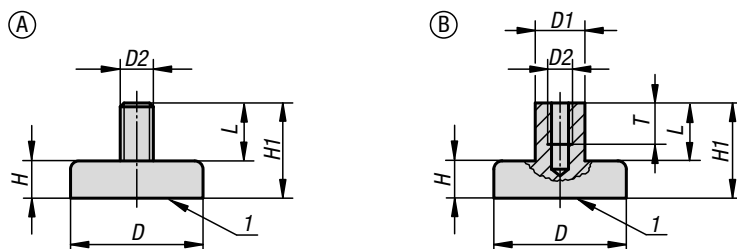


## KIPP Magnets shallow pot hard ferrite

| Order No. | D        | H   | Magnetic force<br>N |
|-----------|----------|-----|---------------------|
| K0548.01  | 10 ±0,15 | 4,5 | 4                   |
| K0548.02  | 13 ±0,15 | 4,5 | 10                  |
| K0548.03  | 16 ±0,15 | 4,5 | 18                  |
| K0548.04  | 20 ±0,15 | 6   | 30                  |
| K0548.05  | 25 ±0,15 | 7   | 40                  |
| K0548.06  | 32 ±0,20 | 7   | 80                  |
| K0548.07  | 40 ±0,20 | 8   | 125                 |
| K0548.08  | 50 ±0,20 | 10  | 220                 |
| K0548.09  | 63 ±0,20 | 14  | 350                 |
| K0548.10  | 80 ±0,25 | 18  | 600                 |

# Magnets shallow pot with thread

hard ferrite



## Material:

Housing, steel.  
Magnetic core hard ferrite.

## Version:

Housing, electro zinc-plated.

## Sample order:

K0549.01

## Note:

Shallow pot magnets, shielded system.

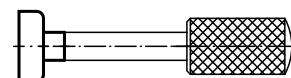
Hairline cracks in the magnetic material are unavoidable for technical reasons in D=80, D=100 and D=125 versions. They do not impair the attracting function of the magnets in any way.

## Temperature range:

max. 200°C.

## Drawing reference:

1) magnetic face

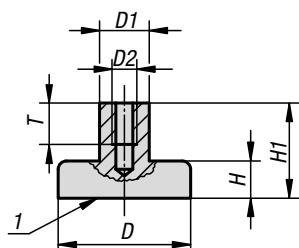


## KIPP Magnets shallow pot with thread, hard ferrite

| Order No.<br>Form A | Order No.<br>Form B | D         | D1  | D2  | L  | H   | H1   | T   | Magnetic<br>force<br>N |
|---------------------|---------------------|-----------|-----|-----|----|-----|------|-----|------------------------|
| K0549.21            | K0549.01            | 10 ±0,15  | -/6 | M3  | 7  | 4,5 | 11,5 | -/5 | 4                      |
| K0549.22            | K0549.02            | 13 ±0,15  | -/6 | M3  | 7  | 4,5 | 11,5 | -/5 | 10                     |
| K0549.23            | K0549.03            | 16 ±0,15  | -/6 | M3  | 7  | 4,5 | 11,5 | -/5 | 18                     |
| K0549.24            | K0549.04            | 20 ±0,15  | -/6 | M3  | 7  | 6   | 13   | -/5 | 30                     |
| K0549.25            | K0549.05            | 25 ±0,15  | -/8 | M4  | 8  | 7   | 15   | -/6 | 40                     |
| K0549.26            | K0549.06            | 32 ±0,20  | -/8 | M4  | 8  | 7   | 15   | -/6 | 80                     |
| -                   | K0549.07            | 40 ±0,20  | 10  | M5  | 10 | 8   | 18   | 8   | 125                    |
| -                   | K0549.08            | 50 ±0,20  | 12  | M6  | 12 | 10  | 22   | 10  | 220                    |
| -                   | K0549.09            | 63 ±0,20  | 15  | M8  | 16 | 14  | 30   | 14  | 350                    |
| -                   | K0549.10            | 80 ±0,25  | 20  | M10 | 16 | 18  | 34   | 14  | 600                    |
| -                   | K0549.11            | 99 ±0,25  | 22  | M12 | 20 | 22  | 42   | 17  | 900                    |
| -                   | K0549.12            | 125 ±0,25 | 25  | M14 | 24 | 26  | 50   | 20  | 1300                   |

# Magnets shallow pot with internal thread

hard ferrite with stainless-steel housing



## Material:

Housing stainless steel 1.4016.  
Screw stainless steel 1.4305.  
Magnetic core hard ferrite.

## Version:

Bright.

## Sample order:

K1400.125

## Note:

Shallow pot magnets, shielded system.

## Temperature range:

max. 220°C.

## Assembly:

The magnets can be mounted by press-fit, screwing-in or gluing.

## Drawing reference:

1) magnetic face

## KIPP Magnets shallow pot with internal thread, hard ferrite with stainless-steel housing

| Order No. | D            | D1 | D2 | H  | H1   | T  | Magnetic force N |
|-----------|--------------|----|----|----|------|----|------------------|
| K1400.125 | 25 ±0,1      | 8  | M5 | 7  | 16   | 10 | 32               |
| K1400.132 | 32 ±0,1      | 8  | M5 | 7  | 16   | 10 | 64               |
| K1400.140 | 40 +0,2/-0,1 | 8  | M5 | 8  | 16,5 | 10 | 100              |
| K1400.150 | 50 +0,2/-0,1 | 8  | M5 | 10 | 18,5 | 10 | 175              |
| K1400.163 | 63 +0,3/-0,1 | 8  | M5 | 14 | 22   | 10 | 280              |

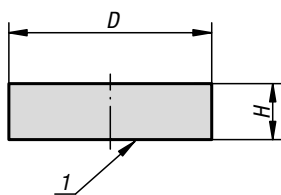


# Magnets shallow pot

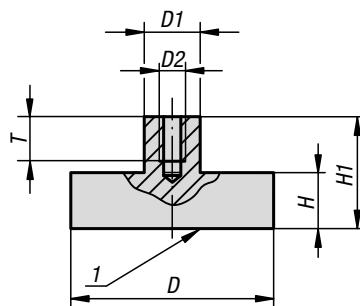
SmCo



A



B

**Material:**

Housing, steel.

Magnetic core, SmCo.

**Version:**

Housing, electro zinc-plated.

**Sample order:**

K0550.01

**Note:**

Shallow pot magnets, shielded system. Magnets with an SmCo core have three to five times the attracting force of AlNiCo or hard ferrite magnets.

**Temperature range:**

max. 200°C.

**Drawing reference:**

1) magnetic face

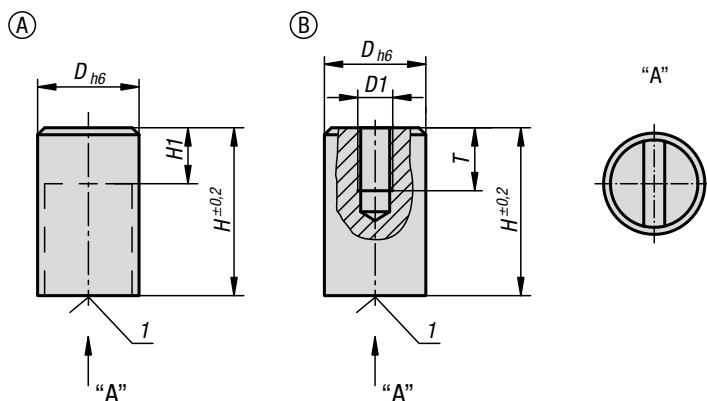


## KIPP Magnets shallow pot SmCo

| Order No.<br>Form A | Order No.<br>Form B | D        | D1   | D2   | H   | H1     | T    | Magnetic<br>force<br>N |
|---------------------|---------------------|----------|------|------|-----|--------|------|------------------------|
| K0550.01            | K0550.11            | 6 ±0,15  | -/6  | -/M3 | 4,5 | -/11,5 | -/6  | 5                      |
| K0550.02            | K0550.12            | 8 ±0,15  | -/6  | -/M3 | 4,5 | -/11,5 | -/6  | 11                     |
| K0550.03            | K0550.13            | 10 ±0,15 | -/6  | -/M3 | 4,5 | -/11,5 | -/6  | 20                     |
| K0550.04            | K0550.14            | 13 ±0,15 | -/6  | -/M3 | 4,5 | -/11,5 | -/6  | 40                     |
| K0550.05            | K0550.15            | 16 ±0,15 | -/6  | -/M4 | 4,5 | -/11,5 | -/6  | 60                     |
| K0550.06            | K0550.16            | 20 ±0,15 | -/8  | -/M4 | 6   | -/13   | -/9  | 90                     |
| K0550.07            | K0550.17            | 25 ±0,15 | -/8  | -/M4 | 7   | -/14   | -/9  | 150                    |
| K0550.08            | K0550.18            | 32 ±0,20 | -/10 | -/M5 | 7   | -/15,5 | -/10 | 220                    |

## Magnets deep pot

SmCo

**Material:**

Housing brass.

Magnetic core SmCo.

**Sample order:**

K0551.01

**Note:**

Smooth design, shielded system. Diameter "D" ground with h6 tolerance. Under no circumstances may SmCo magnets be pressed directly into iron, loss of attractive force due to magnetic short circuits occurs. SmCo magnets are especially suitable for direct use in spot-welding machines, as no demagnetisation occurs.

Deep pot magnets Form A can be shortened by the dimension "H1" with no loss of magnetic force.

**Temperature range:**

max. 200°C.

**Drawing reference:**

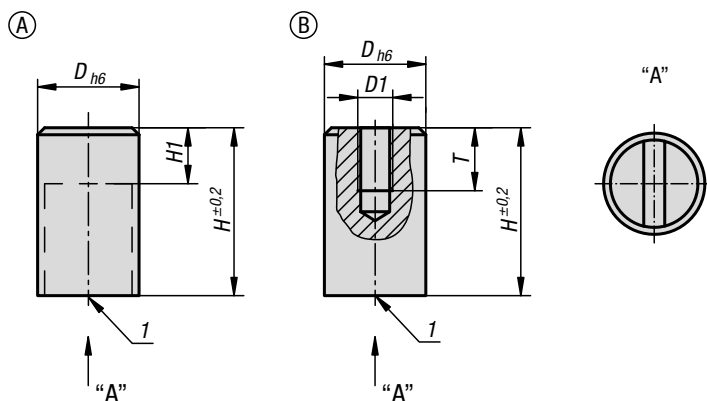
1) magnetic face

## KIPP Magnets deep pot SmCo

| Order No.<br>Form A | Order No.<br>Form B | D  | D1   | H1    | H     | T   | Magnetic<br>force<br>N | Gap to<br>iron wall<br>mm |
|---------------------|---------------------|----|------|-------|-------|-----|------------------------|---------------------------|
| K0551.01            | K0551.02            | 6  | -/M3 | 10/-  | 20    | -/5 | 8                      | 1,5                       |
| K0551.03            | K0551.04            | 8  | -/M3 | 10/-  | 20    | -/5 | 22                     | 1,5                       |
| K0551.05            | K0551.06            | 10 | -/M4 | 8/-   | 20    | -/7 | 40                     | 2                         |
| K0551.07            | K0551.08            | 13 | -/M4 | 6/-   | 20    | -/7 | 60                     | 2,5                       |
| K0551.09            | K0551.10            | 16 | -/M4 | 2/-   | 20/25 | -/8 | 125                    | 3                         |
| K0551.11            | K0551.12            | 20 | -/M6 | 5/-   | 25    | -/6 | 250                    | 4                         |
| K0551.13            | K0551.14            | 25 | -/M6 | 7/-   | 35    | -/8 | 400                    | 5                         |
| K0551.15            | K0551.16            | 32 | -/M6 | 4,5/- | 40    | -/6 | 600                    | 6                         |

## Magnets deep pot

NdFeB

**Material:**

Housing brass.

Magnetic core NdFeB (neodymium).

**Version:**

Housing smooth.

**Sample order:**

K1395.106

**Note:**

Smooth design, shielded system.

Under no circumstances may Neodym magnets be pressed directly into iron, loss of attractive force due to magnetic short circuits occurs.

Diameter "D" ground to tolerance h6.

The Form A magnets can be shortened by the dimension "H1" with no loss of magnetic force.

**Temperature range:**

max. 80°C.

**Assembly:**

The magnets can be mounted by press-fit, screwing-in or gluing.

**Drawing reference:**

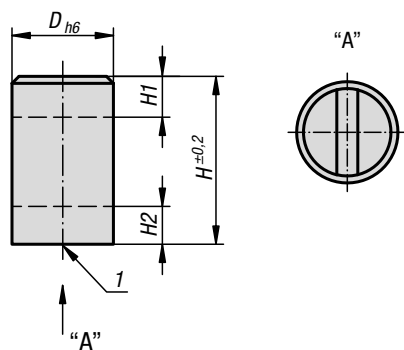
1) magnetic face

## KIPP Magnets deep pot NdFeB

| Order No. | Form | D  | D1 | H  | H1  | T | Magnetic force N | Gap to iron wall mm |
|-----------|------|----|----|----|-----|---|------------------|---------------------|
| K1395.106 | A    | 6  | -  | 20 | 10  | - | 10               | 1,5                 |
| K1395.108 | A    | 8  | -  | 20 | 10  | - | 25               | 1,5                 |
| K1395.110 | A    | 10 | -  | 20 | 8   | - | 45               | 2                   |
| K1395.113 | A    | 13 | -  | 20 | 6   | - | 70               | 2,5                 |
| K1395.116 | A    | 16 | -  | 20 | 2   | - | 150              | 3                   |
| K1395.120 | A    | 20 | -  | 25 | 5   | - | 280              | 4                   |
| K1395.125 | A    | 25 | -  | 35 | 7   | - | 450              | 5                   |
| K1395.132 | A    | 32 | -  | 40 | 4,5 | - | 700              | 6                   |
| K1395.206 | B    | 6  | M3 | 20 | -   | 5 | 10               | 1,5                 |
| K1395.208 | B    | 8  | M3 | 20 | -   | 5 | 25               | 1,5                 |
| K1395.210 | B    | 10 | M4 | 20 | -   | 7 | 45               | 2                   |
| K1395.213 | B    | 13 | M4 | 20 | -   | 7 | 70               | 2,5                 |
| K1395.216 | B    | 16 | M4 | 25 | -   | 8 | 150              | 3                   |
| K1395.220 | B    | 20 | M6 | 25 | -   | 6 | 280              | 4                   |
| K1395.225 | B    | 25 | M6 | 35 | -   | 8 | 450              | 5                   |
| K1395.232 | B    | 32 | M6 | 40 | -   | 6 | 700              | 6                   |

## Magnets deep pot with machinable magnetic face

NdFeB



### Material:

Housing brass.

Magnetic core NdFeB (neodymium).

### Sample order:

K1403.06

### Note:

Smooth design, shielded system. Under no circumstances may Neodym magnets be pressed directly into iron, loss of attractive force due to magnetic short circuits occurs. Diameter "D" ground to an h6 tolerance.

These magnets can be shortened by the dimensions "H1" and "H2".

### Temperature range:

max. 150°C.

### Assembly:

The magnets can be mounted by press-fit, screwing-in or gluing.

### Drawing reference:

1) magnetic face

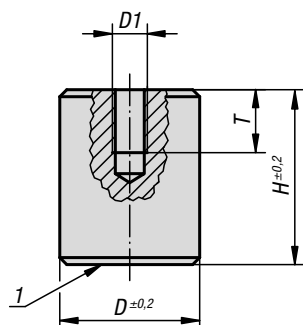


### KIPP Magnets deep pot with machinable magnetic face, NdFeB

| Order No. | D  | H  | H1  | H2 | Magnetic force N | Magnetic force at H2 max. N | Gap to iron wall mm |
|-----------|----|----|-----|----|------------------|-----------------------------|---------------------|
| K1403.06  | 6  | 20 | 10  | 3  | 9                | 12                          | 1,5                 |
| K1403.08  | 8  | 20 | 10  | 3  | 22               | 29                          | 1,5                 |
| K1403.10  | 10 | 20 | 8   | 5  | 27               | 38                          | 2                   |
| K1403.13  | 13 | 20 | 6   | 5  | 49               | 66                          | 2,5                 |
| K1403.16  | 16 | 20 | 2   | 6  | 94               | 108                         | 3                   |
| K1403.20  | 20 | 25 | 5   | 7  | 173              | 235                         | 4                   |
| K1403.25  | 25 | 35 | 7   | 8  | 292              | 380                         | 5                   |
| K1403.32  | 32 | 40 | 4,5 | 10 | 529              | 640                         | 6                   |

# Magnets deep pot with internal thread

NdFeB

**Material:**

Housing, steel.

Magnetic core NdFeB.

**Version:**

Housing, electro zinc-plated.

**Sample order:**

K0552.01

**Note:**

Shielded system. Deep pot magnets are used for mounting in steel and iron. This requirement is principally stipulated in plant and machine construction.

Can also be used in blind holes.

Size D=50 has 4 magnets Ø18 mm.

**Temperature range:**

max. 80°C.

**Drawing reference:**

1) magnetic face

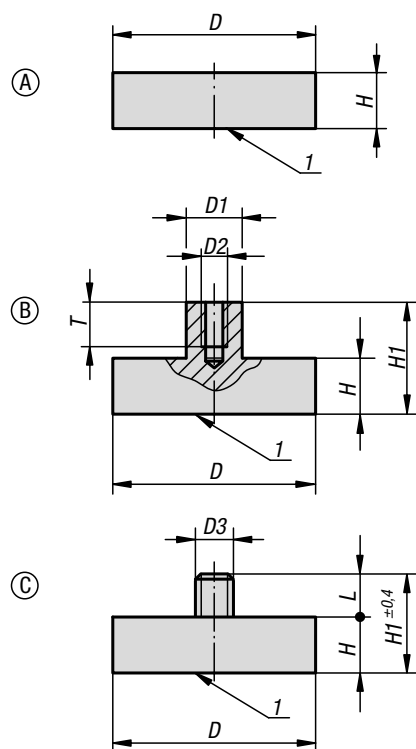


## KIPP Magnets deep pot with internal thread NdFeB

| Order No. | D  | D1  | H  | T  | Can be shortened by (mm) | Magnetic force N |
|-----------|----|-----|----|----|--------------------------|------------------|
| K0552.01  | 8  | M3  | 12 | 5  | 3                        | 12               |
| K0552.02  | 10 | M4  | 16 | 7  | 7                        | 24               |
| K0552.03  | 13 | M4  | 18 | 7  | 3                        | 60               |
| K0552.04  | 16 | M4  | 20 | 7  | 6                        | 90               |
| K0552.05  | 20 | M5  | 25 | 9  | 9                        | 135              |
| K0552.06  | 25 | M6  | 30 | 9  | 10                       | 190              |
| K0552.07  | 35 | M8  | 40 | 13 | 10                       | 300              |
| K0552.08  | 50 | M12 | 50 | 13 | 13                       | 550              |

# Magnets shallow pot

NdFeB

**Material:**

Housing, steel.  
Magnetic core NdFeB.

**Version:**

Housing, electro zinc-plated.

**Sample order:**

K0553.01

**Note:**

Shielded system. With the permanent magnetic material NdFeB the attractive force increases by ca. 10-20 % compared with SmCo.

**Temperature range:**

max. 80°C.

**Drawing reference:**

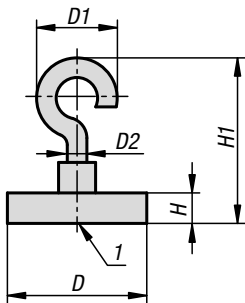
1) magnetic face

## KIPP Magnets shallow pot NdFeB

| Order No. | Form | D        | D1 | D2 | D3 | H   | H1   | L  | T  | Magnetic force N |
|-----------|------|----------|----|----|----|-----|------|----|----|------------------|
| K0553.01  | A    | 6 ±0,15  | -  | -  | -  | 4,5 | -    | -  | -  | 5                |
| K0553.02  | A    | 8 ±0,15  | -  | -  | -  | 4,5 | -    | -  | -  | 13               |
| K0553.03  | A    | 10 ±0,15 | -  | -  | -  | 4,5 | -    | -  | -  | 25               |
| K0553.04  | A    | 13 ±0,15 | -  | -  | -  | 4,5 | -    | -  | -  | 60               |
| K0553.05  | A    | 16 ±0,15 | -  | -  | -  | 4,5 | -    | -  | -  | 95               |
| K0553.06  | A    | 20 ±0,15 | -  | -  | -  | 6   | -    | -  | -  | 140              |
| K0553.07  | A    | 25 ±0,15 | -  | -  | -  | 7   | -    | -  | -  | 200              |
| K0553.08  | A    | 32 ±0,20 | -  | -  | -  | 7   | -    | -  | -  | 350              |
| K0553.11  | B    | 6 ±0,15  | 6  | M3 | -  | 4,5 | 11,5 | -  | 6  | 5                |
| K0553.12  | B    | 8 ±0,15  | 6  | M3 | -  | 4,5 | 11,5 | -  | 7  | 13               |
| K0553.13  | B    | 10 ±0,15 | 6  | M3 | -  | 4,5 | 11,5 | -  | 7  | 25               |
| K0553.14  | B    | 13 ±0,15 | 6  | M3 | -  | 4,5 | 11,5 | -  | 6  | 60               |
| K0553.15  | B    | 16 ±0,15 | 6  | M4 | -  | 4,5 | 11,5 | -  | 7  | 95               |
| K0553.16  | B    | 20 ±0,15 | 8  | M4 | -  | 6   | 13   | -  | 9  | 140              |
| K0553.17  | B    | 25 ±0,15 | 8  | M4 | -  | 7   | 14   | -  | 9  | 200              |
| K0553.18  | B    | 32 ±0,20 | 10 | M5 | -  | 7   | 15,5 | -  | 10 | 350              |
| K0553.19  | B    | 40 ±0,2  | 10 | M6 | -  | 8   | 18   | -  | 13 | 670              |
| K0553.20  | B    | 47 ±0,2  | 12 | M6 | -  | 9,2 | 20,5 | -  | 13 | 750              |
| K0553.21  | B    | 50 ±0,2  | 15 | M8 | -  | 10  | 22   | -  | 13 | 1000             |
| K0553.23  | C    | 10 ±0,15 | -  | -  | M3 | 4,5 | 11,5 | 7  | -  | 25               |
| K0553.24  | C    | 13 ±0,15 | -  | -  | M5 | 4,5 | 12,5 | 8  | -  | 60               |
| K0553.25  | C    | 16 ±0,15 | -  | -  | M6 | 4,5 | 12,5 | 8  | -  | 95               |
| K0553.26  | C    | 20 ±0,15 | -  | -  | M6 | 6   | 16   | 10 | -  | 140              |
| K0553.27  | C    | 25 ±0,15 | -  | -  | M6 | 7   | 17   | 10 | -  | 200              |
| K0553.28  | C    | 32 ±0,20 | -  | -  | M6 | 7   | 17   | 10 | -  | 350              |
| K0553.29  | C    | 40 ±0,2  | -  | -  | M8 | 8   | 20   | 12 | -  | 670              |
| K0553.30  | C    | 47 ±0,2  | -  | -  | M8 | 9,2 | 22,2 | 13 | -  | 790              |

# Magnets shallow pot with hook

NdFeB

**Material:**

Housing and hook steel.

Magnetic core NdFeB (neodymium).

**Version:**

Housing and hook electro zinc-plated.

**Sample order:**

K1402.10

**Note:**

Shielded system. With the permanent magnetic material NdFeB the attractive force increases by ca. 10-20 % compared with SmCo.

**Temperature range:**

max. 80°C.

**Drawing reference:**

1) magnetic face

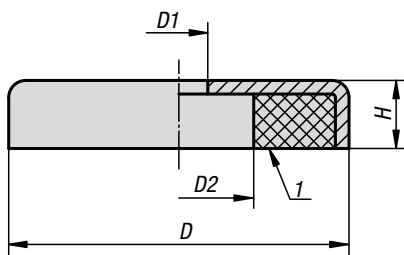


## KIPP Magnets shallow pot with hook, NdFeB

| Order No. | D  | D1   | D2  | H   | H1   | Magnetic force N |
|-----------|----|------|-----|-----|------|------------------|
| K1402.10  | 10 | 10   | 3   | 4,5 | 24   | 25               |
| K1402.13  | 13 | 10   | 3   | 4,5 | 24   | 60               |
| K1402.16  | 16 | 13   | 3,5 | 4,5 | 27   | 95               |
| K1402.20  | 20 | 13   | 3,5 | 6   | 27,5 | 140              |
| K1402.25  | 25 | 13   | 3,5 | 7   | 28   | 200              |
| K1402.32  | 32 | 18,5 | 4,5 | 7   | 38   | 350              |

## Magnets shallow pot with counterbore

hard ferrite



**Material:**  
Housing, steel.  
Magnetic core hard ferrite.

**Version:**  
Housing, electro zinc-plated.

**Sample order:**  
K0554.50

**Note:**  
Shielded system.

**Temperature range:**  
max. 200°C.

**Drawing reference:**  
1) magnetic face

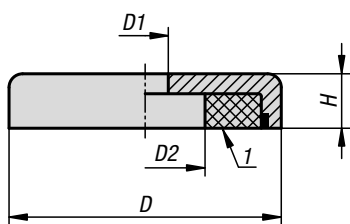
### KIPP Magnets shallow pot with counterbore hard ferrite

| Order No. | D        | D1  | D2   | H  | Magnetic force N |
|-----------|----------|-----|------|----|------------------|
| K0554.50  | 50 ±0,20 | 8,5 | 22   | 10 | 180              |
| K0554.63  | 63 ±0,20 | 6,5 | 24   | 14 | 290              |
| K0554.80  | 80 ±0,25 | 6,5 | 11,5 | 18 | 540              |

# K1399

## Magnets shallow pot with counterbore

SmCo with stainless-steel housing



**Material:**  
Housing stainless steel 1.4104.  
Magnetic core SmCo (samarium cobalt).

**Sample order:**  
K1399.120

**Note:**  
Shielded system.

**Temperature range:**  
max. 350°C.

**Assembly:**  
The magnets can be mounted by press-fit, screwing-in or gluing.

**Drawing reference:**  
1) magnetic face

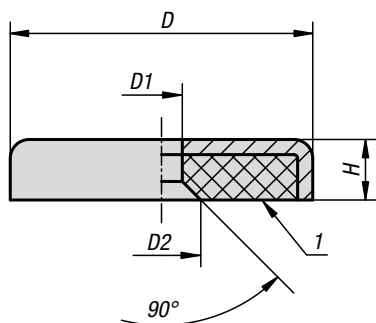
### KIPP Magnets shallow pot with counterbore, SmCo with stainless-steel housing

| Order No. | D        | D1  | D2   | H | Magnetic force N |
|-----------|----------|-----|------|---|------------------|
| K1399.120 | 20 ±0,15 | 4,5 | 8    | 6 | 60               |
| K1399.125 | 25 ±0,15 | 4,5 | 8    | 7 | 80               |
| K1399.132 | 32 ±0,2  | 5,5 | 11   | 7 | 200              |
| K1399.140 | 40 ±0,2  | 5,5 | 10,5 | 8 | 420              |



# Magnets shallow pot with countersink

hard ferrite



**Material:**  
Housing, steel.  
Magnetic core hard ferrite.

**Version:**  
Housing, electro zinc-plated.

**Sample order:**  
K0555.01

**Note:**  
Shielded system.

**Temperature range:**  
max. 200°C.

**Drawing reference:**  
1) magnetic face

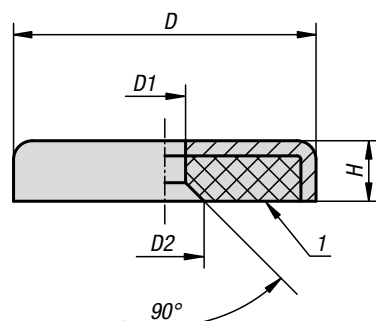
## KIPP Magnets shallow pot with countersink hard ferrite

| Order No. | D        | D1      | D2 | H   | Magnetic force N |
|-----------|----------|---------|----|-----|------------------|
| K0555.01  | 16 ±0,15 | 3,3±0,2 | 7  | 4,5 | 14               |
| K0555.02  | 20 ±0,15 | 4,2±0,2 | 9  | 6   | 27               |
| K0555.03  | 25 ±0,15 | 5,5±0,2 | 11 | 7   | 36               |
| K0555.04  | 32 ±0,20 | 5,5±0,2 | 11 | 7   | 72               |
| K0555.05  | 40 ±0,20 | 5,5±0,2 | 11 | 8   | 90               |

## K1408

# Magnets shallow pot with countersink

hard ferrite with stainless-steel housing



**Material:**  
Housing stainless steel 1.4016.  
Magnetic core hard ferrite.

**Version:**  
Bright.

**Sample order:**  
K1408.120

**Note:**  
Shielded system.

**Temperature range:**  
max. 220°C.

**Drawing reference:**  
1) magnetic face

## KIPP Magnets shallow pot with countersink, hard ferrite with stainless-steel housing

| Order No. | D       | D1  | D2   | H | Magnetic force N |
|-----------|---------|-----|------|---|------------------|
| K1408.120 | 20±0,15 | 4,2 | 9    | 6 | 22               |
| K1408.125 | 25±0,15 | 5,5 | 11   | 7 | 29               |
| K1408.132 | 32±0,15 | 5,5 | 11   | 7 | 58               |
| K1408.140 | 40±0,2  | 5,5 | 12,5 | 8 | 72               |

## Magnets shallow pot with countersink

SmCo



**Material:**  
Housing steel.  
Magnetic core SmCo (samarium cobalt).

**Version:**  
Housing, electro zinc-plated.

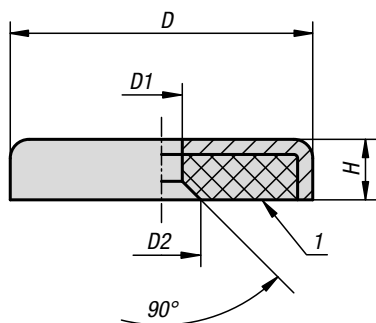
**Sample order:**  
K1401.16

**Note:**  
Shallow pot magnets, shielded system. Magnets with an SmCo core have three to five times the attracting force of AlNiCo or hard ferrite magnets.

**Temperature range:**  
max. 280°C.

**Assembly:**  
The magnets can be mounted by press-fit, screwing-in or gluing.

**Drawing reference:**  
1) magnetic face



### KIPP Magnets shallow pot with countersink, SmCo

| Order No. | D        | D1  | D2   | H   | Magnetic force N |
|-----------|----------|-----|------|-----|------------------|
| K1401.16  | 16 ±0,15 | 3,5 | 6,6  | 4,5 | 57               |
| K1401.20  | 20 ±0,15 | 4,5 | 9,3  | 6   | 81               |
| K1401.25  | 25 ±0,15 | 4,5 | 9,2  | 7   | 105              |
| K1401.32  | 32 ±0,2  | 5,5 | 11,5 | 7   | 235              |
| K1401.40  | 40 ±0,2  | 5,5 | 11,5 | 8   | 540              |

# K1393

## Magnets shallow pot with countersink

NdFeB



**Material:**  
Housing, steel.  
Magnetic core NdFeB (neodym).

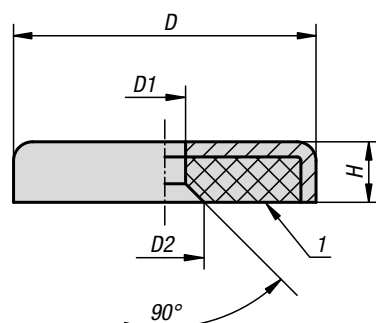
**Version:**  
Housing, electro zinc-plated.

**Sample order:**  
K1393.13

**Note:**  
Shielded system. With the permanent magnetic material NdFeB the attractive force increases by ca. 10-20 % compared with SmCo.

**Temperature range:**  
max. 80°C.

**Drawing reference:**  
1) magnetic face

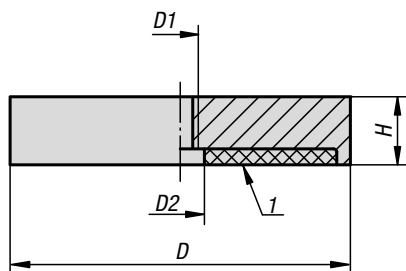


### KIPP Magnets shallow pot with countersink, NdFeB

| Order No. | D  | D1  | D2   | H   | Magnetic force N |
|-----------|----|-----|------|-----|------------------|
| K1393.13  | 13 | 3,5 | 6,6  | 4,5 | 40               |
| K1393.16  | 16 | 3,5 | 6,6  | 4,5 | 75               |
| K1393.20  | 20 | 4,5 | 9    | 6   | 105              |
| K1393.25  | 25 | 4,5 | 9    | 7   | 160              |
| K1393.32  | 32 | 5,5 | 11   | 7   | 310              |
| K1393.40  | 40 | 5,5 | 10,6 | 8   | 500              |

## Magnets shallow pot with internal thread

NdFeB



**Material:**  
Housing, steel.  
Magnetic core NdFeB.

**Version:**  
Housing, electro zinc-plated.

**Sample order:**  
K0556.01

**Note:**  
Shielded system

**Temperature range:**  
max. 80°C.

**Drawing reference:**  
1) magnetic face

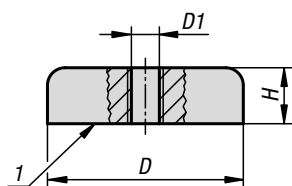
### KIPP Magnets shallow pot with internal thread NdFeB

| Order No. | D  | D1  | D2   | H  | Magnetic force N |
|-----------|----|-----|------|----|------------------|
| K0556.01  | 32 | M5  | 5,5  | 7  | 330              |
| K0556.02  | 40 | M5  | 10,5 | 8  | 550              |
| K0556.03  | 63 | M10 | 11,7 | 14 | 1100             |
| K0556.04  | 75 | M10 | 13   | 15 | 1750             |

# K1394

## Magnets shallow pot with internal thread

hard ferrite



**Material:**  
Housing, steel.  
Magnetic core hard ferrite.

**Version:**  
Housing, electro zinc-plated.

**Sample order:**  
K1394.2504

**Note:**  
Shielded system.

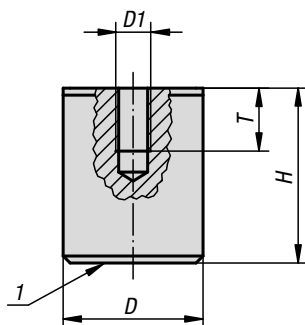
**Temperature range:**  
max. 200°C.

**Drawing reference:**  
1) magnetic face

### KIPP Magnets shallow pot with internal thread, hard ferrite

| Order No.  | D        | D1  | H  | Magnetic force N |
|------------|----------|-----|----|------------------|
| K1394.2504 | 25 ±0,15 | M4  | 7  | 36               |
| K1394.3204 | 32 ±0,2  | M4  | 7  | 75               |
| K1394.4004 | 40 ±0,2  | M4  | 8  | 90               |
| K1394.5006 | 50 ±0,2  | M6  | 10 | 170              |
| K1394.5008 | 50 ±0,2  | M8  | 10 | 170              |
| K1394.6308 | 63 ±0,20 | M8  | 14 | 290              |
| K1394.8008 | 80 ±0,25 | M8  | 18 | 550              |
| K1394.8010 | 80 ±0,25 | M10 | 18 | 550              |

## Magnets deep pot



### Material:

Housing, steel.  
Magnetic core AlNiCo.

### Version:

Housing painted red.

### Sample order:

K0557.01

### Note:

Hard magnet in aluminium housing and steel jacket. Shielded system. Pot magnets are used for retaining, lifting and mounting in fixtures. Due to the painted surface, the diameter D can be up to +0.8 mm.

### Temperature range:

max. 450°C.

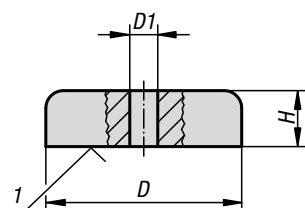
### Drawing reference:

1) magnetic face

### KIPP Magnets deep pot

| Order No. | D  | D1  | H  | T  | Magnetic force N |
|-----------|----|-----|----|----|------------------|
| K0557.01  | 17 | M6  | 16 | 4  | 18               |
| K0557.02  | 21 | M6  | 19 | 5  | 28               |
| K0557.03  | 27 | M6  | 25 | 6  | 65               |
| K0557.04  | 35 | M6  | 30 | 9  | 115              |
| K0557.05  | 65 | M12 | 43 | 13 | 400              |

## Magnets shallow pot



### Material:

Housing, steel.  
Magnetic core AlNiCo.

### Version:

Housing painted red.

### Sample order:

K0558.01

### Note:

Shielded system. Shallow pot magnets are used in fixtures with minimal space.

### Temperature range:

max. 450°C.

### On request:

Other colours.

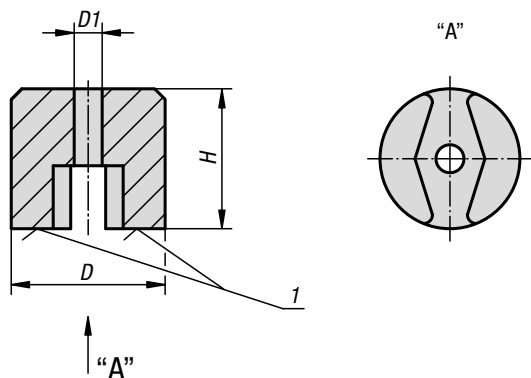
### Drawing reference:

1) magnetic face

### KIPP Magnets shallow pot

| Order No. | D  | D1  | H    | Magnetic force N |
|-----------|----|-----|------|------------------|
| K0558.01  | 19 | 3,5 | 8    | 30               |
| K0558.02  | 29 | 5   | 9    | 55               |
| K0558.03  | 38 | 5   | 10,5 | 95               |

## Magnets button



**Material:**  
Magnetic core AlNiCo.

**Version:**  
painted red.

**Sample order:**  
K0559.01

**Note:**  
Split attractive surface with through hole. Non-shielded system. Button magnets are used in laboratories, inspection rooms and for holding metal objects.

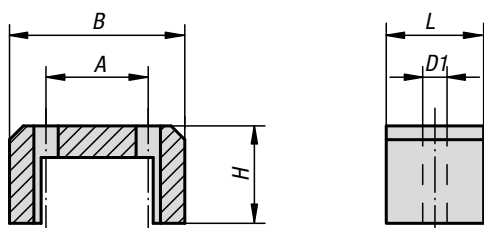
**Temperature range:**  
max. 450°C.

**Drawing reference:**  
1) magnetic face

### KIPP Magnets button

| Order No. | D  | D1  | H  | Magnetic force N |
|-----------|----|-----|----|------------------|
| K0559.01  | 13 | 4,5 | 10 | 7                |
| K0559.02  | 19 | 5,1 | 13 | 19               |
| K0559.03  | 25 | 5,1 | 16 | 29               |
| K0559.04  | 32 | 7   | 25 | 66               |

## Magnets strong



**Material:**  
Magnetic core AlNiCo.

**Version:**  
painted red.

**Sample order:**  
K0560.01

**Note:**  
Horseshoe magnets with high attractive force. Non-shielded system. The magnets are supplied with a electro zinc-plated protective plate and are used for holding, sorting and lifting. Sizes 1, 2 and 3 have only one attachment hole in the centre.

**Temperature range:**  
max. 450°C.

### KIPP Magnets strong

| Order No. | Size | A  | B  | D1 | H  | L  | Magnetic force N |
|-----------|------|----|----|----|----|----|------------------|
| K0560.01  | 1    | -  | 30 | 5  | 20 | 20 | 45               |
| K0560.02  | 2    | -  | 40 | 5  | 25 | 25 | 90               |
| K0560.03  | 3    | -  | 45 | 5  | 30 | 29 | 120              |
| K0560.04  | 4    | 32 | 57 | 8  | 35 | 45 | 230              |
| K0560.05  | 5    | 38 | 70 | 8  | 41 | 57 | 320              |

Protective rubber caps  
for shallow pot magnets



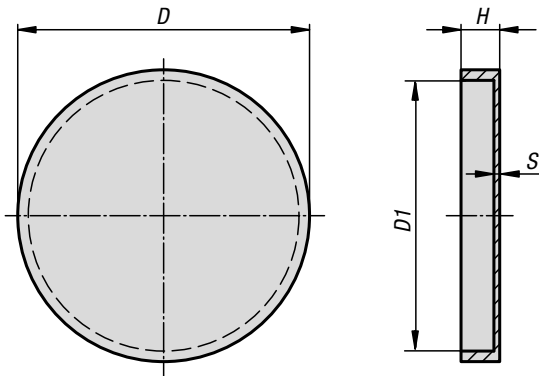
**Material:**  
Synthetic rubber.

**Version:**  
Black.

**Sample order:**  
K0561.50

**Note:**  
To protect sensitive surfaces. The protective rubber cap slips over the magnetic face of shallow pot magnets. The shear force required to move the magnet is doubled and achieves almost the original holding force of the magnet.  
The protective rubber caps fit all shallow pot magnets with diameter 50, 63 and 80 mm.

**Temperature range:**  
max. 60°C.

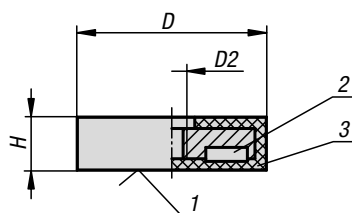


KIPP Protective rubber caps for shallow pot magnets

| Order No. | D  | D1 | H  | S   |
|-----------|----|----|----|-----|
| K0561.50  | 52 | 50 | 6  | 0,5 |
| K0561.63  | 65 | 63 | 8  | 0,5 |
| K0561.80  | 83 | 80 | 11 | 0,5 |

# Magnets shallow pot with internal thread

NdFeB, with rubber protective jacket



## Material:

Housing, steel.

Magnetic core NdFeB (neodym).

Protective rubber jacket, synthetic rubber.

## Version:

Housing, electro zinc-plated.

Black protective rubber jacket.

## Sample order:

K0562.01

## Note:

Magnet with internal thread. Shielded system. With rubber protective jacket for protecting sensitive surfaces. The coefficient of friction is increased by the rubber jacket so that high lateral friction is achieved.

## Temperature range:

max. 60°C.

## Drawing reference:

1) magnetic face

2) magnet

3) rubber



## KIPP Magnets shallow pot with internal thread NdFeB, with rubber protective jacket

| Order No. | D  | D2 | H   | Magnetic force<br>N |
|-----------|----|----|-----|---------------------|
| K0562.00  | 18 | M4 | 6   | 25                  |
| K0562.01  | 22 | M4 | 6   | 35                  |
| K0562.02  | 31 | M5 | 6   | 75                  |
| K0562.03  | 43 | M4 | 6   | 85                  |
| K0562.04  | 66 | M6 | 8,5 | 180                 |
| K0562.05  | 88 | M6 | 8   | 420                 |

## Magnets with internal thread

NdFeB, rectangular, with rubber protective jacket



### Material:

Housing steel.  
Magnetic core NdFeB (neodymium).  
Rubber protective jacket TPE.

### Version:

Housing, electro zinc-plated.  
Black protective rubber jacket.

### Sample order:

K1396.14331

### Note:

Magnet with internal thread. Shielded system. With rubber protective jacket for protecting sensitive surfaces. The coefficient of friction is increased by the rubber jacket so that high lateral friction is achieved.

### Temperature range:

max. 60°C.

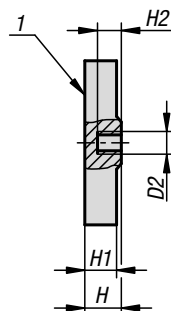
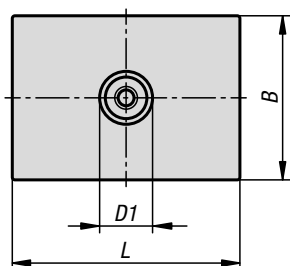
### Assembly:

Optimum hold on thin plate with sensitive surfaces.

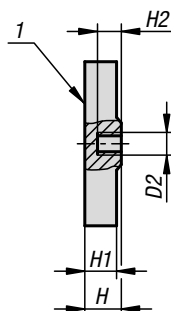
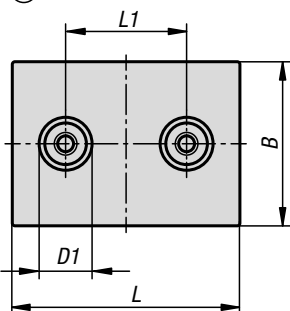
### Drawing reference:

1) magnetic face

Ⓐ



Ⓑ



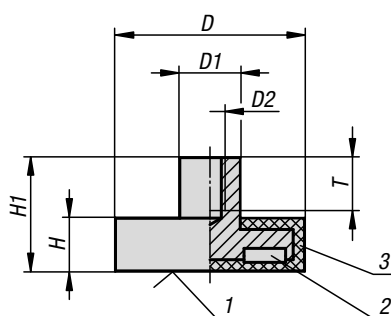
### KIPP Magnets with internal thread, NdFeB, rectangular, with rubber protective jacket

| Order No.   | Form | B  | D1 | D2 | H   | H1 | H2  | L  | L1 | Magnetic force N |
|-------------|------|----|----|----|-----|----|-----|----|----|------------------|
| K1396.14331 | A    | 31 | 10 | M4 | 6,9 | 6  | 4,5 | 43 | -  | 105              |
| K1396.24331 | B    | 31 | 10 | M4 | 6,9 | 6  | 4,5 | 43 | 25 | 146              |



# Magnets shallow pot with tapped pin

NdFeB, with rubber protective jacket



## Material:

Housing, steel.

Magnetic core NdFeB (neodym).

Protective rubber jacket, synthetic rubber.

## Version:

Housing, electro zinc-plated.

Black protective rubber jacket.

## Sample order:

K0563.01

## Note:

Shallow pot magnets with tapped pin, shielded system.

With rubber protective jacket for protecting sensitive surfaces. The coefficient of friction is increased by the rubber jacket so that high lateral friction is achieved.

## Temperature range:

max. 60°C.

## Drawing reference:

1) magnetic face

2) magnet

3) rubber

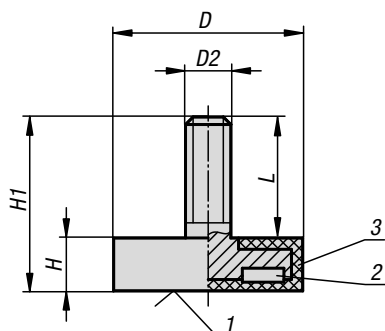


## KIPP Magnets shallow pot with tapped pin NdFeB, with rubber protective jacket

| Order No. | D  | D1 | D2 | H   | H1   | T  | Magnetic force N |
|-----------|----|----|----|-----|------|----|------------------|
| K0563.01  | 12 | 8  | M4 | 7   | 14,8 | 6  | 10               |
| K0563.07  | 18 | 8  | M4 | 6   | 11,5 | 6  | 37               |
| K0563.02  | 22 | 8  | M4 | 6   | 11,5 | 6  | 50               |
| K0563.03  | 31 | 8  | M4 | 6   | 11,5 | 5  | 75               |
| K0563.04  | 43 | 8  | M4 | 6   | 10,5 | 5  | 85               |
| K0563.05  | 66 | 10 | M5 | 8,2 | 15   | 8  | 180              |
| K0563.06  | 88 | 12 | M8 | 8,2 | 17   | 11 | 420              |

# Magnets shallow pot with threaded pin

NdFeB, with rubber protective jacket



## Material:

Housing, steel.

Magnetic core NdFeB (neodym).

Protective rubber jacket, synthetic rubber.

## Version:

Housing, electro zinc-plated.

Black protective rubber jacket.

## Sample order:

K0564.01

## Note:

Shallow pot magnets with threaded pin, shielded system. With rubber protective jacket for protecting sensitive surfaces. The coefficient of friction is increased by the rubber jacket, so that high lateral friction is achieved.

## Temperature range:

max. 60°C.

## Drawing reference:

1) magnetic face

2) magnet

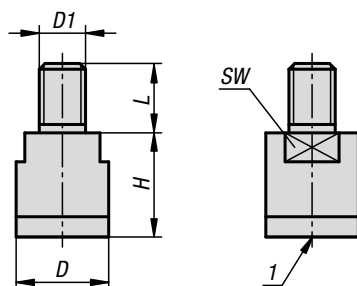
3) rubber

## KIPP Magnets shallow pot with threaded pin NdFeB, with rubber protective jacket

| Order No. | D  | D2 | H   | H1   | L    | Magnetic force N |
|-----------|----|----|-----|------|------|------------------|
| K0564.05  | 12 | M4 | 7   | 15,5 | 8,5  | 13               |
| K0564.06  | 18 | M4 | 6   | 12   | 6    | 37               |
| K0564.01  | 22 | M4 | 6   | 12,5 | 6,5  | 50               |
| K0564.07  | 31 | M6 | 6   | 17   | 11   | 89               |
| K0564.02  | 43 | M6 | 6   | 21   | 15   | 85               |
| K0564.03  | 66 | M8 | 8,2 | 23   | 14,8 | 180              |
| K0564.04  | 88 | M8 | 8,2 | 23,5 | 15,3 | 420              |

# Magnets deep pot with threaded pin

NdFeB, rubber magnetic face



## Material:

Housing stainless steel 1.4104.

Magnetic core NdFeB (neodymium).

Magnetic face rubberised (TPE).

## Sample order:

K1397.1306

## Note:

Deep pot magnet with external thread, shielded system. With rubber magnetic face to protect sensitive surfaces. The rubber face increases the coefficient of friction resulting in high lateral frictional forces.

## Temperature range:

max. 80°C.

## Assembly:

The deep pot magnets with rubberised magnetic face can be used as a magnetic stop system.



## Drawing reference:

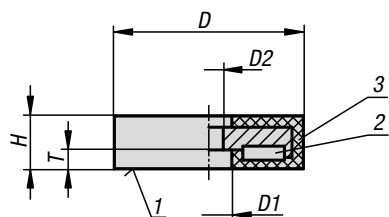
1) magnetic face

## KIPP Magnets deep pot with threaded pin, NdFeB, rubber magnetic face

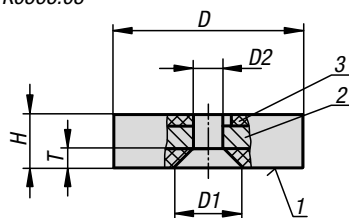
| Order No.  | D  | D1  | H  | L  | SW | Magnetic force N |
|------------|----|-----|----|----|----|------------------|
| K1397.1306 | 13 | M6  | 16 | 10 | 11 | 15               |
| K1397.1608 | 16 | M8  | 18 | 12 | 13 | 23               |
| K1397.2010 | 20 | M10 | 20 | 14 | 17 | 46               |

# Magnets shallow pot with through hole

NdFeB, with rubber protective jacket



K0565.03



## Material:

Housing, steel.

Magnetic core NdFeB (neodym).

Protective rubber jacket, synthetic rubber.

## Version:

Housing, electro zinc-plated.

Black protective rubber jacket.

## Sample order:

K0565.01

## Note:

Shallow pot magnets, shielded system. With rubber protective jacket for protecting sensitive surfaces. The coefficient of friction is increased by the rubber jacket so that high lateral friction is achieved.

## Temperature range:

max. 60°C.

## Drawing reference:

1) magnetic face

2) magnet

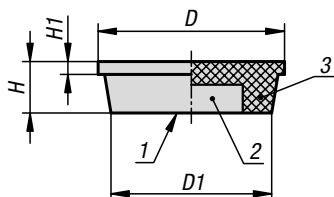
3) rubber

## KIPP Magnets shallow pot with through hole NdFeB, with rubber protective jacket

| Order No. | D  | D1   | D2  | H   | T   | Magnetic force N |
|-----------|----|------|-----|-----|-----|------------------|
| K0565.01  | 22 | 8,2  | 4   | 6   | 3,5 | 35               |
| K0565.02  | 31 | 9    | 6   | 6   | 3,5 | 75               |
| K0565.03  | 43 | 12,8 | 7,5 | 6   | 4,2 | 85               |
| K0565.04  | 57 | 25,3 | 8   | 7,6 | 3,3 | 175              |
| K0565.05  | 66 | 22   | 5,5 | 8,5 | 3,2 | 210              |

# Retaining magnets

hard ferrite


**Material:**

Housing plastic (ABS).  
Magnetic core hard ferrite.

**Sample order:**

K1398.101

**Note:**

These magnets are often used on notice boards, whiteboards and magnetic boards.

**Temperature range:**

max. 100°C.

**On request:**

Magnetic core NdFeB (neodymium).

**Drawing reference:**

- 1) Magnetic face
- 2) Magnet
- 3) Housing



## KIPP Retaining magnets, hard ferrite

| Order No.<br>white | Order No.<br>blue | Order No.<br>red | Order No.<br>black | D    | D1   | H | H1  | Magnetic<br>force<br>N |
|--------------------|-------------------|------------------|--------------------|------|------|---|-----|------------------------|
| K1398.101          | K1398.102         | K1398.103        | K1398.104          | 10,5 | 9,5  | 7 | 1,5 | 0,7                    |
| K1398.161          | K1398.162         | K1398.163        | K1398.164          | 16   | 14,5 | 7 | 1,1 | 1,3                    |
| K1398.201          | K1398.202         | K1398.203        | K1398.204          | 20   | 16   | 7 | 2,1 | 1,5                    |
| K1398.251          | K1398.252         | K1398.253        | K1398.254          | 25   | 22   | 8 | 2,2 | 10                     |
| K1398.301          | K1398.302         | K1398.303        | K1398.304          | 30   | 28   | 8 | 2   | 14                     |
| K1398.361          | K1398.362         | K1398.363        | K1398.364          | 36   | 32,5 | 9 | 2,2 | 9,5                    |



## Buffer elements

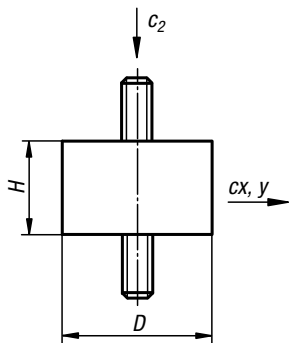


# Technical information for rubber buffers



## Note:

Our rubber buffers are simple and cost-efficient standard units for elastic mounting. They are ideally suited for compressive and axial loads of a diverse range of applications. With shear stress however, they are substantially less resilient than with compressive stress. The adjacent tables provide a guide to the static load values. By high dynamic alternating loads or high frequencies the loading should be reduced proportionately.



## Guide values for static load

| Type | D  | H  | Compressive loads      |        |      |                         |        |      | Shear stresses            |        |      |                         |        |      |
|------|----|----|------------------------|--------|------|-------------------------|--------|------|---------------------------|--------|------|-------------------------|--------|------|
|      |    |    | Spring rate c2 in N/mm |        |      | Permissible load F in N |        |      | Spring rate cx, y in N/mm |        |      | Permissible load F in N |        |      |
|      |    |    | hard                   | medium | soft | hard                    | medium | soft | hard                      | medium | soft | hard                    | medium | soft |
| A    | 20 | 15 | 300                    | 190    | 120  | 500                     | 320    | 200  | 60                        | 40     | 30   | 190                     | 120    | 70   |
| A    | 30 | 15 | 670                    | 410    | 250  | 1100                    | 700    | 400  | 90                        | 60     | 40   | 350                     | 210    | 130  |
| A    | 30 | 30 | 240                    | 150    | 100  | 900                     | 570    | 340  | 50                        | 30     | 20   | 430                     | 280    | 170  |
| A    | 40 | 30 | 480                    | 300    | 170  | 1800                    | 1110   | 670  | 90                        | 60     | 30   | 770                     | 500    | 250  |
| A    | 50 | 20 | 240                    | 1500   | 90   | 5000                    | 3190   | 1870 | 240                       | 160    | 100  | 1200                    | 770    | 460  |
| A    | 50 | 40 | 600                    | 280    | 220  | 2800                    | 1750   | 1050 | 120                       | 80     | 50   | 1280                    | 800    | 460  |
| A    | 75 | 25 | 5000                   | 2900   | 1700 | 8000                    | 5000   | 3300 | 410                       | 260    | 160  | 2800                    | 1750   | 1030 |
| A    | 75 | 55 | 650                    | 400    | 240  | 4700                    | 3000   | 1750 | 130                       | 80     | 50   | 2100                    | 1300   | 800  |
| B    | 25 | 20 | 320                    | 160    | 120  | 490                     | 320    | 190  | 70                        | 45     | 25   | 230                     | 160    | 90   |
| B    | 30 | 20 | 660                    | 430    | 260  | 830                     | 520    | 310  | 100                       | 75     | 50   | 330                     | 210    | 130  |
| B    | 40 | 30 | 550                    | 350    | 210  | 1250                    | 750    | 450  | 110                       | 70     | 40   | 520                     | 330    | 200  |
| B    | 40 | 30 | 550                    | 350    | 210  | 1250                    | 750    | 450  | 110                       | 70     | 40   | 520                     | 330    | 200  |
| B    | 50 | 40 | 560                    | 370    | 220  | 2100                    | 1270   | 760  | 120                       | 80     | 45   | 930                     | 580    | 350  |
| B    | 50 | 50 | 350                    | 220    | 130  | 1750                    | 1100   | 650  | 80                        | 50     | 30   | 800                     | 510    | 310  |
| B    | 75 | 50 | 950                    | 630    | 330  | 4700                    | 2910   | 1720 | 180                       | 120    | 80   | 1900                    | 1200   | 710  |
| C    | 20 | 25 | 200                    | 130    | 80   | 300                     | 190    | 120  | 50                        | 30     | 20   | 150                     | 90     | 60   |
| C    | 30 | 30 | 590                    | 380    | 220  | 720                     | 450    | 270  | 90                        | 60     | 50   | 260                     | 170    | 110  |
| C    | 40 | 30 | 900                    | 570    | 340  | 1080                    | 680    | 410  | 150                       | 90     | 60   | 380                     | 240    | 140  |
| C    | 50 | 30 | 1700                   | 1090   | 650  | 2500                    | 1750   | 950  | 210                       | 150    | 70   | 470                     | 290    | 170  |
| C    | 50 | 50 | 360                    | 220    | 140  | 1390                    | 870    | 520  | 80                        | 40     | 30   | 610                     | 390    | 230  |
| C    | 75 | 50 | 1010                   | 630    | 370  | 3650                    | 2050   | 1200 | 200                       | 130    | 80   | 1560                    | 980    | 580  |

| Type | D  | H  | Compressive loads                |                                   |
|------|----|----|----------------------------------|-----------------------------------|
|      |    |    | Spring rate c2 in N/mm<br>medium | Permissible load F in N<br>medium |
| D    | 25 | 20 | 150                              | 260                               |
| D    | 30 | 20 | 330                              | 730                               |
| D    | 40 | 30 | 250                              | 950                               |
| D    | 50 | 20 | 660                              | 1750                              |
| D    | 75 | 25 | 1430                             | 4650                              |

## Rubber hardness:

hard = Shore 70 medium = Shore 55 soft = Shore 45

For general guidance natural rubber is ca. Shore 55.

static compression load:  $F(\text{max.}) = \text{ca. } 6.5 \text{ kg/cm}^2 (63.77 \text{ N/cm}^2)$

static axial load:  $F(\text{max.}) = \text{ca. } 1.5 \text{ kg/cm}^2 (14.72 \text{ N/cm}^2)$

by 10 % spring displacement, or transverse travel during axial load.

Naturally, much higher loads are possible without damage, but these considerably effect the rubber buffer in its primary purpose. Tensile loads are possible but should be avoided on account of the peak stress at the contact edges and the notch sensitivity of rubber.

## Tolerances for rubber buffers:

Permissible dimensional deviations per DIN 7751 Part 2. Permissible hardness deviation  $\pm 5$  Shore A.

## Synoptical Table - Properties of the Individual Material

| Abb.    | Rubber material<br>Polymer     | Main Characteristics - Resistance to |                  |                     |       |       |        |     |      |          |                |
|---------|--------------------------------|--------------------------------------|------------------|---------------------|-------|-------|--------|-----|------|----------|----------------|
|         |                                | Temperature                          | Tensile strength | Fracture elongation | Aging | Ozone | Petrol | Oil | Acid | Alkali's | Tensile strain |
| NR (NK) | Natural rubber                 | -30 °C – +80 °C                      | 1                | 1                   | 3     | 4     | 6      | 6   | 3    | 3        | 600%           |
| SBR     | Styrene-butadiene rubber       | -30 °C – +80 °C                      | 5                | 2                   | 3     | 4     | 4      | 5   | 3    | 3        | 450%           |
| CR      | Chloroprene rubber             | -20 °C – +110 °C                     | 3                | 2                   | 2     | 2     | 2      | 2   | 2    | 2        | 450%           |
| NBR     | Acrylonitrile-butadiene rubber | -30 °C – +120 °C                     | 5                | 2                   | 3     | 3     | 1      | 1   | 4    | 3        | 450%           |
| EPDM    | Ethylene propylene terpolymer  | -30 °C – +130 °C                     | 5                | 3                   | 1     | 1     | 5      | 4   | 1    | 2        | 450%           |
| SI      | Silicone rubber                | -60 °C – +200 °C                     | 6                | 4                   | 1     | 1     | 5      | 4   | 5    | 5        | 500%           |

1 = excellent 2 = very good 3 = good 4 = moderate 5 = low 6 = insufficient



# Rubber buffers

steel or stainless steel, type A



## KIPP Rubber buffers, steel or stainless steel, type A

| Order No.       | Main material   | D  | G   | L  | H  | Spring stiffness<br>N/mm | Load<br>N |
|-----------------|-----------------|----|-----|----|----|--------------------------|-----------|
| K0566.00800855  | steel           | 8  | M3  | 6  | 8  | 24                       | 31        |
| K0566.01001055  | steel           | 10 | M4  | 10 | 10 | 35                       | 32        |
| K0566.01001555  | steel           | 10 | M4  | 10 | 15 | 50                       | 50        |
| K0566.01500855  | steel           | 15 | M4  | 10 | 8  | 130                      | 104       |
| K0566.01501055  | steel           | 15 | M4  | 10 | 10 | 122                      | 122       |
| K0566.01501555  | steel           | 15 | M4  | 10 | 15 | 59                       | 88        |
| K0566.02000855  | steel           | 20 | M6  | 18 | 8  | 725                      | 580       |
| K0566.02001055  | steel           | 20 | M6  | 18 | 10 | 300                      | 300       |
| K0566.02001555  | steel           | 20 | M6  | 18 | 15 | 200                      | 300       |
| K0566.02002055  | steel           | 20 | M6  | 18 | 20 | 133                      | 332       |
| K0566.02002555  | steel           | 20 | M6  | 18 | 25 | 90                       | 270       |
| K0566.02501055  | steel           | 25 | M6  | 18 | 10 | 800                      | 800       |
| K0566.02501555  | steel           | 25 | M6  | 18 | 15 | 294                      | 441       |
| K0566.02502055  | steel           | 25 | M6  | 18 | 20 | 200                      | 500       |
| K0566.02502555  | steel           | 25 | M6  | 18 | 25 | 94                       | 282       |
| K0566.02503055  | steel           | 25 | M6  | 18 | 30 | 70                       | 280       |
| K0566.03001555  | steel           | 30 | M8  | 23 | 15 | 587                      | 880       |
| K0566.03002055  | steel           | 30 | M8  | 23 | 20 | 318                      | 795       |
| K0566.03002555  | steel           | 30 | M8  | 23 | 25 | 183                      | 549       |
| K0566.03003055  | steel           | 30 | M8  | 23 | 30 | 150                      | 600       |
| K0566.03004055  | steel           | 30 | M8  | 23 | 40 | 77                       | 385       |
| K0566.04001555  | steel           | 40 | M8  | 23 | 15 | 1250                     | 1875      |
| K0566.04002055  | steel           | 40 | M8  | 23 | 20 | 565                      | 1412      |
| K0566.04003055  | steel           | 40 | M8  | 23 | 30 | 300                      | 1200      |
| K0566.04004055  | steel           | 40 | M8  | 23 | 40 | 189                      | 945       |
| K0566.05002055  | steel           | 50 | M10 | 28 | 20 | 1300                     | 3250      |
| K0566.05002555  | steel           | 50 | M10 | 28 | 25 | 667                      | 2000      |
| K0566.05003055  | steel           | 50 | M10 | 28 | 30 | 500                      | 2000      |
| K0566.05004055  | steel           | 50 | M10 | 28 | 40 | 300                      | 1500      |
| K0566.05005055  | steel           | 50 | M10 | 28 | 50 | 193                      | 1153      |
| K0566.06004055  | steel           | 60 | M10 | 28 | 40 | 377                      | 1885      |
| K0566.07004555  | steel           | 70 | M10 | 28 | 45 | 410                      | 2255      |
| K0566.07502555  | steel           | 75 | M12 | 37 | 25 | 1655                     | 4965      |
| K0566.07504055  | steel           | 75 | M12 | 37 | 40 | 717                      | 3585      |
| K0566.07505055  | steel           | 75 | M12 | 37 | 50 | 470                      | 2820      |
| K0566.07505555  | steel           | 75 | M12 | 37 | 55 | 405                      | 2835      |
| K0566.015015551 | stainless steel | 15 | M4  | 12 | 15 | 59                       | 88        |
| K0566.020015551 | stainless steel | 20 | M6  | 18 | 15 | 200                      | 300       |
| K0566.025020551 | stainless steel | 25 | M6  | 18 | 20 | 200                      | 500       |
| K0566.030020551 | stainless steel | 30 | M8  | 23 | 20 | 318                      | 795       |
| K0566.030025551 | stainless steel | 30 | M8  | 23 | 25 | 183                      | 549       |
| K0566.040030551 | stainless steel | 40 | M8  | 23 | 30 | 300                      | 1200      |

### Material:

Metal parts steel grade 5.6 or stainless steel.  
Elastomer natural rubber, medium hardness, Shore 55A.

### Version:

Steel electro zinc-plated.  
Stainless steel bright.

### Sample order:

K0566.00800855

### Note:

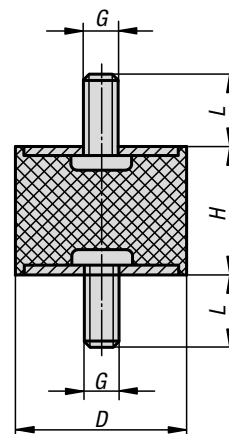
The rubber buffers are widely-used construction elements for elastic mounting. They are used, among other things, as mountings for aggregates, motors, compressors, pumps and testing machinery.

### Temperature range:

-30 °C to +80 °C

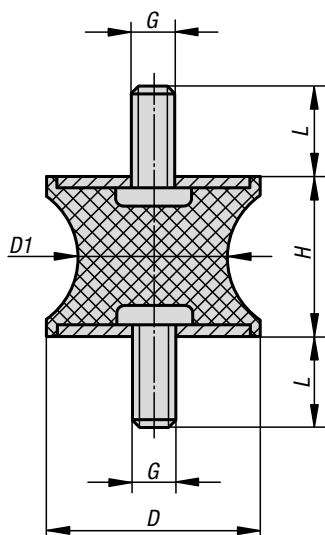
### On request:

Other Shore grades.



# Rubber buffers

type AT tapered


**Material:**

Metal parts, steel, grade 5.6.  
Elastomer natural rubber, medium hardness, Shore 57A.

**Version:**

Steel electro zinc-plated.

**Sample order:**

K0567.01001057

**Note:**

These rubber buffers are widely used construction elements for elastic mounting. They are used, among other things, as mountings for aggregates, motors, compressors, pumps and testing machinery. Rubber buffers with tapered rubber contour reduce high edge loads of the rubber by radial deflection and so increase the components service life.

**Temperature range:**

-30 °C to +80 °C

**On request:**

Other Shore grades.

## KIPP Rubber buffers type AT tapered

| Order No.      | D  | D1 | H  | G   | L  | Spring stiffness<br>N/mm | Load<br>N |
|----------------|----|----|----|-----|----|--------------------------|-----------|
| K0567.01001057 | 10 | 8  | 10 | M4  | 13 | 31                       | 37        |
| K0567.01501557 | 15 | 12 | 15 | M4  | 13 | 71                       | 135       |
| K0567.02001557 | 20 | 14 | 15 | M6  | 18 | 177                      | 283       |
| K0567.03002057 | 30 | 22 | 20 | M8  | 23 | 212                      | 763       |
| K0567.04003057 | 40 | 33 | 30 | M8  | 23 | 202                      | 1111      |
| K0567.04004857 | 40 | 20 | 48 | M8  | 23 | 101                      | 626       |
| K0567.05003057 | 50 | 40 | 30 | M10 | 28 | 351                      | 1229      |
| K0567.07504057 | 75 | 50 | 40 | M12 | 37 | 466                      | 2330      |

# Rubber buffers

steel or stainless steel, type B


**Material:**

Metal parts steel grade 5.6 or stainless steel.  
Elastomer natural rubber, medium hardness, Shore 55A.

**Version:**

Steel electro zinc-plated.  
Stainless steel bright.

**Sample order:**

K0568.00800855

**Note:**

Rubber buffers are widely-used construction elements for elastic mounting. They are used, among other things, as mountings for aggregates, motors, compressors, pumps and testing machinery.

**Temperature range:**

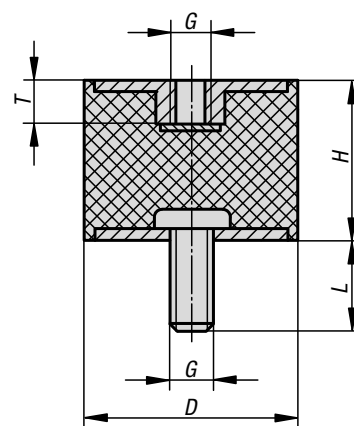
-30 °C to +80 °C

**On request:**

Other Shore grades.

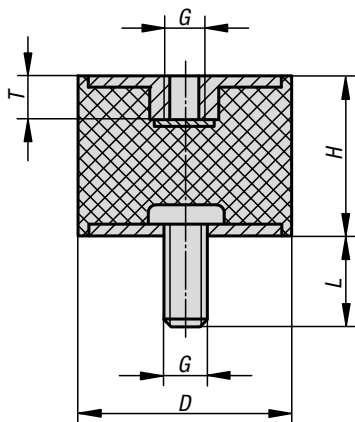
**KIPP Rubber buffers, steel or stainless steel, type B**

| Order No.       | Main material   | D  | H  | G   | L  | T  | Spring stiffness N/mm | Load N |
|-----------------|-----------------|----|----|-----|----|----|-----------------------|--------|
| K0568.00800855  | steel           | 8  | 8  | M3  | 6  | 3  | 35                    | 17     |
| K0568.01001055  | steel           | 10 | 10 | M4  | 10 | 4  | 75                    | 75     |
| K0568.01001555  | steel           | 10 | 15 | M4  | 10 | 4  | 50                    | 60     |
| K0568.01500855  | steel           | 15 | 10 | M4  | 10 | 4  | 130                   | 130    |
| K0568.01501555  | steel           | 15 | 15 | M4  | 10 | 4  | 100                   | 120    |
| K0568.02001555  | steel           | 20 | 15 | M6  | 18 | 6  | 325                   | 390    |
| K0568.02002055  | steel           | 20 | 20 | M6  | 18 | 6  | 130                   | 260    |
| K0568.02002555  | steel           | 20 | 25 | M6  | 18 | 6  | 95                    | 210    |
| K0568.02501555  | steel           | 25 | 15 | M6  | 18 | 6  | 333                   | 399    |
| K0568.02502055  | steel           | 25 | 20 | M6  | 18 | 6  | 195                   | 410    |
| K0568.02502555  | steel           | 25 | 25 | M6  | 18 | 6  | 117                   | 257    |
| K0568.02503055  | steel           | 25 | 30 | M6  | 18 | 6  | 100                   | 300    |
| K0568.03001555  | steel           | 30 | 15 | M8  | 23 | 8  | 590                   | 708    |
| K0568.03002055  | steel           | 30 | 20 | M8  | 23 | 8  | 280                   | 560    |
| K0568.03002555  | steel           | 30 | 25 | M8  | 23 | 8  | 180                   | 396    |
| K0568.03003055  | steel           | 30 | 30 | M8  | 23 | 8  | 168                   | 504    |
| K0568.03004055  | steel           | 30 | 40 | M8  | 23 | 8  | 88                    | 308    |
| K0568.04002055  | steel           | 40 | 20 | M8  | 23 | 8  | 700                   | 840    |
| K0568.04003055  | steel           | 40 | 30 | M8  | 23 | 8  | 273                   | 820    |
| K0568.04004055  | steel           | 40 | 40 | M8  | 23 | 8  | 189                   | 660    |
| K0568.05002055  | steel           | 50 | 20 | M10 | 28 | 10 | 1471                  | 2500   |
| K0568.05002555  | steel           | 50 | 25 | M10 | 28 | 10 | 630                   | 1386   |
| K0568.05003055  | steel           | 50 | 30 | M10 | 28 | 10 | 545                   | 1635   |
| K0568.05004055  | steel           | 50 | 40 | M10 | 28 | 10 | 310                   | 1116   |
| K0568.05005055  | steel           | 50 | 50 | M10 | 28 | 10 | 180                   | 900    |
| K0568.06004055  | steel           | 60 | 40 | M10 | 28 | 10 | 500                   | 1750   |
| K0568.07004555  | steel           | 70 | 45 | M10 | 28 | 10 | 600                   | 2400   |
| K0568.07502555  | steel           | 75 | 25 | M12 | 37 | 12 | 2440                  | 3660   |
| K0568.07504055  | steel           | 75 | 40 | M12 | 37 | 12 | 700                   | 2450   |
| K0568.07505055  | steel           | 75 | 50 | M12 | 37 | 12 | 520                   | 2600   |
| K0568.07505555  | steel           | 75 | 55 | M12 | 37 | 12 | 396                   | 2178   |
| K0568.008008551 | stainless steel | 8  | 8  | M3  | 8  | 3  | 35                    | 17     |
| K0568.010010551 | stainless steel | 10 | 10 | M4  | 10 | 4  | 75                    | 75     |
| K0568.015010551 | stainless steel | 15 | 10 | M4  | 10 | 4  | 130                   | 130    |
| K0568.020020551 | stainless steel | 20 | 20 | M6  | 18 | 6  | 130                   | 260    |
| K0568.025020551 | stainless steel | 25 | 20 | M6  | 18 | 6  | 195                   | 410    |
| K0568.030020551 | stainless steel | 30 | 20 | M8  | 23 | 8  | 280                   | 560    |
| K0568.040020551 | stainless steel | 40 | 20 | M8  | 23 | 8  | 700                   | 840    |



# Rubber buffers

stainless steel, type B



## Material:

Metal parts 1.4401 stainless steel.  
Elastomer natural rubber, medium hardness Shore 55A, grey.

## Version:

Stainless steel bright.

## Sample order:

K1321.00800855

## Note:

Rubber buffers are widely-used construction elements for elastic mounting. They are used, among other things, as mountings for aggregates, motors, compressors, pumps and testing machinery.

## Temperature range:

-30 °C to +80 °C

## On request:

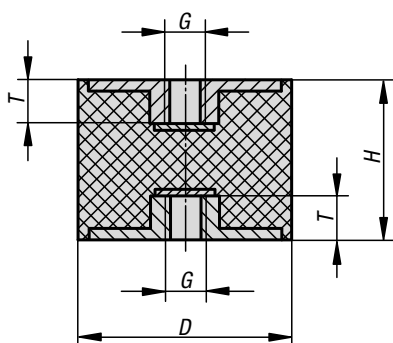
Metal parts 1.4301 stainless steel.

## KIPP Rubber buffers, stainless steel, type B

| Order No.      | D  | H  | G   | L  | T  | Spring stiffness<br>N/mm | Load<br>N |
|----------------|----|----|-----|----|----|--------------------------|-----------|
| K1321.00800855 | 8  | 8  | M3  | 6  | 3  | 35                       | 17        |
| K1321.01001055 | 10 | 10 | M4  | 10 | 4  | 75                       | 75        |
| K1321.01001555 | 10 | 15 | M4  | 10 | 4  | 50                       | 60        |
| K1321.01501055 | 15 | 10 | M4  | 10 | 4  | 130                      | 130       |
| K1321.01501555 | 15 | 15 | M4  | 10 | 4  | 100                      | 120       |
| K1321.02001555 | 20 | 15 | M6  | 18 | 5  | 325                      | 390       |
| K1321.02002055 | 20 | 20 | M6  | 18 | 5  | 130                      | 260       |
| K1321.02002555 | 20 | 25 | M6  | 18 | 5  | 95                       | 210       |
| K1321.02501555 | 25 | 15 | M6  | 18 | 5  | 333                      | 399       |
| K1321.02502055 | 25 | 20 | M6  | 18 | 5  | 195                      | 410       |
| K1321.02502555 | 25 | 25 | M6  | 18 | 5  | 117                      | 257       |
| K1321.02503055 | 25 | 30 | M6  | 18 | 5  | 100                      | 300       |
| K1321.03001555 | 30 | 15 | M8  | 23 | 7  | 590                      | 708       |
| K1321.03002055 | 30 | 20 | M8  | 23 | 7  | 280                      | 560       |
| K1321.03002555 | 30 | 25 | M8  | 23 | 7  | 180                      | 396       |
| K1321.03003055 | 30 | 30 | M8  | 23 | 7  | 168                      | 504       |
| K1321.03004055 | 30 | 40 | M8  | 23 | 7  | 88                       | 308       |
| K1321.04002055 | 40 | 20 | M8  | 23 | 7  | 700                      | 840       |
| K1321.04003055 | 40 | 30 | M8  | 23 | 7  | 273                      | 820       |
| K1321.04004055 | 40 | 40 | M8  | 23 | 7  | 189                      | 660       |
| K1321.05002055 | 50 | 20 | M10 | 28 | 8  | 1471                     | 2500      |
| K1321.05002555 | 50 | 25 | M10 | 28 | 8  | 630                      | 1386      |
| K1321.05003055 | 50 | 30 | M10 | 28 | 8  | 545                      | 1635      |
| K1321.05004055 | 50 | 40 | M10 | 28 | 8  | 310                      | 1116      |
| K1321.05005055 | 50 | 50 | M10 | 28 | 8  | 180                      | 900       |
| K1321.06004055 | 60 | 40 | M10 | 28 | 8  | 500                      | 1750      |
| K1321.07004555 | 70 | 45 | M10 | 28 | 8  | 600                      | 2400      |
| K1321.07502555 | 75 | 25 | M12 | 37 | 10 | 2440                     | 3660      |
| K1321.07504055 | 75 | 40 | M12 | 37 | 10 | 700                      | 2450      |
| K1321.07505055 | 75 | 50 | M12 | 37 | 10 | 520                      | 2600      |
| K1321.07505555 | 75 | 55 | M12 | 37 | 10 | 396                      | 2178      |

# Rubber buffers

steel or stainless steel, type C



## Material:

Metal parts steel grade 5.6 or stainless steel.  
Elastomer natural rubber, medium hardness, Shore 55A.

## Version:

Steel electro zinc-plated.  
Stainless steel bright.

## Sample order:

K0569.01001055

## Note:

The rubber buffers are widely-used construction elements for elastic mounting. They are used, among other things, as mountings for aggregates, motors, compressors, pumps and testing machinery.

## Temperature range:

-30 °C to +80 °C

## On request:

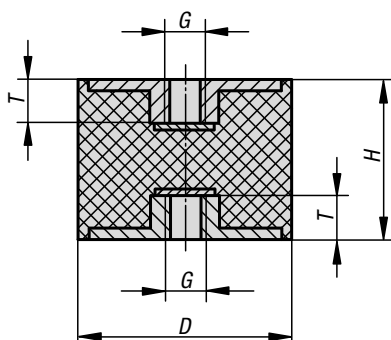
Other Shore grades.

## KIPP Rubber buffers, steel or stainless steel, type C

| Order No.       | Main material   | D  | H  | G   | T  | Spring stiffness N/mm | Load N |
|-----------------|-----------------|----|----|-----|----|-----------------------|--------|
| K0569.01001055  | steel           | 10 | 10 | M4  | 4  | 100                   | 50     |
| K0569.01001555  | steel           | 10 | 15 | M4  | 4  | 50                    | 50     |
| K0569.01501555  | steel           | 15 | 15 | M4  | 4  | 100                   | 100    |
| K0569.02002055  | steel           | 20 | 20 | M6  | 6  | 230                   | 276    |
| K0569.02002555  | steel           | 20 | 25 | M6  | 6  | 120                   | 180    |
| K0569.02502055  | steel           | 25 | 20 | M6  | 6  | 230                   | 276    |
| K0569.02502555  | steel           | 25 | 25 | M6  | 6  | 110                   | 165    |
| K0569.02503055  | steel           | 25 | 30 | M6  | 6  | 80                    | 160    |
| K0569.03002055  | steel           | 30 | 20 | M8  | 8  | 425                   | 637    |
| K0569.03003055  | steel           | 30 | 30 | M8  | 8  | 175                   | 350    |
| K0569.03004055  | steel           | 30 | 40 | M8  | 8  | 133                   | 400    |
| K0569.04003055  | steel           | 40 | 30 | M8  | 8  | 530                   | 1060   |
| K0569.04004055  | steel           | 40 | 40 | M8  | 8  | 222                   | 666    |
| K0569.05003055  | steel           | 50 | 30 | M10 | 10 | 680                   | 1360   |
| K0569.05004055  | steel           | 50 | 40 | M10 | 10 | 333                   | 1000   |
| K0569.05005055  | steel           | 50 | 50 | M10 | 10 | 190                   | 665    |
| K0569.07504055  | steel           | 75 | 40 | M12 | 12 | 750                   | 2250   |
| K0569.07505055  | steel           | 75 | 50 | M12 | 12 | 636                   | 2225   |
| K0569.010010551 | stainless steel | 10 | 10 | M4  | 4  | 100                   | 50     |
| K0569.015015551 | stainless steel | 15 | 15 | M4  | 4  | 100                   | 100    |
| K0569.020020551 | stainless steel | 20 | 20 | M6  | 6  | 230                   | 276    |
| K0569.025025551 | stainless steel | 25 | 25 | M6  | 6  | 110                   | 165    |
| K0569.030020551 | stainless steel | 30 | 20 | M8  | 8  | 425                   | 637    |
| K0569.030030551 | stainless steel | 30 | 30 | M8  | 8  | 175                   | 350    |
| K0569.040030551 | stainless steel | 40 | 30 | M8  | 8  | 530                   | 1060   |

# Rubber buffers

stainless steel, type C


**Material:**

Metal parts 1.4401 stainless steel.

Elastomer natural rubber, medium hardness Shore 55A, grey.

**Version:**

Stainless steel bright.

**Sample order:**

K1320.01001055

**Note:**

The rubber buffers are widely-used construction elements for elastic mounting. They are used, among other things, as mountings for aggregates, motors, compressors, pumps and testing machinery.

**Temperature range:**

-30 °C to +80 °C

**On request:**

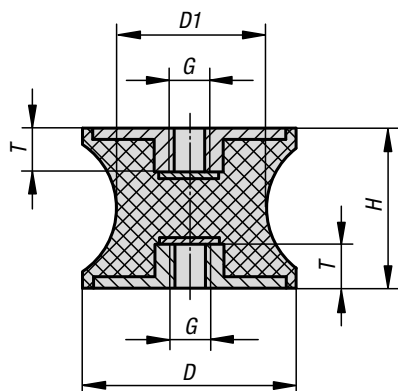
Metal parts 1.4301 stainless steel.

## KIPP Rubber buffers, stainless steel, type C

| Order No.      | D  | H  | G   | T  | Spring stiffness<br>N/mm | Load<br>N |
|----------------|----|----|-----|----|--------------------------|-----------|
| K1320.01001055 | 10 | 10 | M4  | 4  | 100                      | 50        |
| K1320.01001555 | 10 | 15 | M4  | 4  | 50                       | 50        |
| K1320.01501555 | 15 | 15 | M4  | 4  | 100                      | 100       |
| K1320.02002055 | 20 | 20 | M6  | 5  | 230                      | 276       |
| K1320.02002555 | 20 | 25 | M6  | 5  | 120                      | 180       |
| K1320.02502055 | 25 | 20 | M6  | 5  | 230                      | 276       |
| K1320.02502555 | 25 | 25 | M6  | 5  | 110                      | 165       |
| K1320.02503055 | 25 | 30 | M6  | 5  | 80                       | 160       |
| K1320.03002055 | 30 | 20 | M8  | 7  | 425                      | 637       |
| K1320.03003055 | 30 | 30 | M8  | 7  | 175                      | 350       |
| K1320.03004055 | 30 | 40 | M8  | 7  | 133                      | 400       |
| K1320.04003055 | 40 | 30 | M8  | 7  | 530                      | 1060      |
| K1320.04004055 | 40 | 40 | M8  | 7  | 222                      | 666       |
| K1320.05003055 | 50 | 30 | M10 | 8  | 680                      | 1360      |
| K1320.05004055 | 50 | 40 | M10 | 8  | 333                      | 1000      |
| K1320.05005055 | 50 | 50 | M10 | 8  | 190                      | 665       |
| K1320.07504055 | 75 | 40 | M12 | 10 | 750                      | 2250      |
| K1320.07505055 | 75 | 50 | M12 | 10 | 636                      | 2225      |

# Rubber buffers

type CT tapered


**Material:**

Metal parts, steel, grade 5.6.  
Elastomer natural rubber, medium hardness, Shore 57A.

**Version:**

Steel electro zinc-plated.

**Sample order:**

K0570.01501557

**Note:**

These rubber buffers are widely used construction elements for elastic mounting. They are used, among other things, as mountings for aggregates, motors, compressors, pumps and testing machinery. Rubber buffers with tapered rubber contour reduce high edge loads of the rubber by radial deflection and so increase the components service life.

**Temperature range:**

-30 °C to +80 °C

**On request:**

Other Shore grades.



## KIPP Rubber buffers type CT tapered

| Order No.      | D  | D1 | H  | G   | T  | Spring stiffness<br>N/mm | Load<br>N |
|----------------|----|----|----|-----|----|--------------------------|-----------|
| K0570.01501557 | 15 | 12 | 15 | M4  | 4  | 111                      | 122       |
| K0570.02001557 | 20 | 14 | 15 | M6  | 6  | 227                      | 227       |
| K0570.03002057 | 30 | 22 | 20 | M8  | 8  | 252                      | 504       |
| K0570.04003057 | 40 | 33 | 30 | M8  | 8  | 199                      | 796       |
| K0570.04004857 | 40 | 20 | 48 | M8  | 8  | 111                      | 555       |
| K0570.05003057 | 50 | 40 | 30 | M10 | 10 | 499                      | 998       |
| K0570.07504057 | 75 | 50 | 40 | M12 | 12 | 597                      | 2030      |

# Rubber buffers

steel or stainless steel, type D



## KIPP Rubber buffers, steel or stainless steel, type D

| Order No.       | Main material   | D  | H  | G   | L  | Spring stiffness<br>N/mm | Load<br>N |
|-----------------|-----------------|----|----|-----|----|--------------------------|-----------|
| K0571.00800855  | steel           | 8  | 8  | M3  | 6  | 40                       | 40        |
| K0571.01001055  | steel           | 10 | 10 | M4  | 10 | 35                       | 35        |
| K0571.01001555  | steel           | 10 | 15 | M4  | 10 | 26                       | 40        |
| K0571.01500655  | steel           | 15 | 6  | M4  | 10 | 175                      | 88        |
| K0571.01500855  | steel           | 15 | 8  | M4  | 10 | 187                      | 187       |
| K0571.01501055  | steel           | 15 | 10 | M4  | 10 | 100                      | 100       |
| K0571.01501555  | steel           | 15 | 15 | M4  | 10 | 50                       | 100       |
| K0571.02000555  | steel           | 20 | 5  | M6  | 18 | 135                      | 95        |
| K0571.02000855  | steel           | 20 | 8  | M6  | 18 | 250                      | 250       |
| K0571.02001055  | steel           | 20 | 10 | M6  | 18 | 240                      | 240       |
| K0571.02001555  | steel           | 20 | 15 | M6  | 18 | 110                      | 220       |
| K0571.02002055  | steel           | 20 | 20 | M6  | 18 | 75                       | 225       |
| K0571.02002555  | steel           | 20 | 25 | M6  | 18 | 65                       | 227,5     |
| K0571.02500855  | steel           | 25 | 8  | M6  | 18 | 850                      | 850       |
| K0571.02501055  | steel           | 25 | 10 | M6  | 18 | 400                      | 400       |
| K0571.02501555  | steel           | 25 | 15 | M6  | 18 | 210                      | 420       |
| K0571.02502055  | steel           | 25 | 20 | M6  | 18 | 140                      | 420       |
| K0571.02502555  | steel           | 25 | 25 | M6  | 18 | 100                      | 350       |
| K0571.02503055  | steel           | 25 | 30 | M6  | 18 | 79                       | 316       |
| K0571.03001555  | steel           | 30 | 15 | M8  | 23 | 270                      | 540       |
| K0571.03002055  | steel           | 30 | 20 | M8  | 23 | 238                      | 714       |
| K0571.03002555  | steel           | 30 | 25 | M8  | 23 | 153                      | 535,5     |
| K0571.03003055  | steel           | 30 | 30 | M8  | 23 | 127                      | 508       |
| K0571.03004055  | steel           | 30 | 40 | M8  | 23 | 88                       | 528       |
| K0571.04001555  | steel           | 40 | 15 | M8  | 23 | 710                      | 1420      |
| K0571.04002055  | steel           | 40 | 20 | M8  | 23 | 365                      | 1095      |
| K0571.04003055  | steel           | 40 | 30 | M8  | 23 | 205                      | 820       |
| K0571.04004055  | steel           | 40 | 40 | M8  | 23 | 143                      | 858       |
| K0571.05002055  | steel           | 50 | 20 | M10 | 28 | 646                      | 1938      |
| K0571.05003055  | steel           | 50 | 30 | M10 | 28 | 354                      | 1416      |
| K0571.05004055  | steel           | 50 | 40 | M10 | 28 | 230                      | 1380      |
| K0571.05005055  | steel           | 50 | 50 | M10 | 28 | 160                      | 1280      |
| K0571.06004055  | steel           | 60 | 40 | M10 | 28 | 317                      | 1902      |
| K0571.07002555  | steel           | 70 | 25 | M10 | 28 | 980                      | 3430      |
| K0571.07004555  | steel           | 70 | 45 | M10 | 28 | 438                      | 3066      |
| K0571.07502555  | steel           | 75 | 25 | M12 | 37 | 1318                     | 4613      |
| K0571.07504055  | steel           | 75 | 40 | M12 | 37 | 643                      | 3858      |
| K0571.07505055  | steel           | 75 | 50 | M12 | 37 | 472                      | 3776      |
| K0571.07505555  | steel           | 75 | 55 | M12 | 37 | 310                      | 3100      |
| K0571.008008551 | stainless steel | 8  | 8  | M3  | 8  | 40                       | 40        |
| K0571.010010551 | stainless steel | 10 | 10 | M4  | 10 | 35                       | 35        |
| K0571.015015551 | stainless steel | 15 | 15 | M4  | 10 | 50                       | 100       |
| K0571.020015551 | stainless steel | 20 | 15 | M6  | 18 | 110                      | 220       |
| K0571.025020551 | stainless steel | 25 | 20 | M6  | 18 | 140                      | 420       |
| K0571.030030551 | stainless steel | 30 | 30 | M8  | 23 | 127                      | 508       |
| K0571.040030551 | stainless steel | 40 | 30 | M8  | 23 | 205                      | 820       |



### Material:

Metal parts steel grade 5.6 or stainless steel.  
Elastomer natural rubber, medium hardness, Shore 55A.

### Version:

Steel electro zinc-plated.  
Stainless steel bright.

### Sample order:

K0571.00800855

### Note:

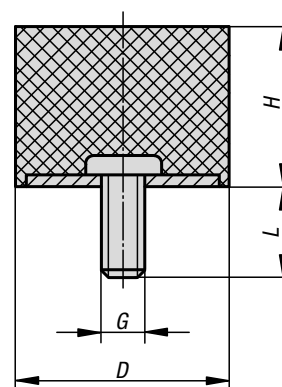
Rubber buffers are used, among other things for mounting aggregates and as elastic buffers to limit the travel of moving masses or as feet that are not firmly fixed in the floor or where the floor is sensitive i.e. office equipment.

### Temperature range:

-30 °C to +80 °C

### On request:

Other Shore grades.





# Rubber buffers

stainless steel, type D



## Material:

Metal parts 1.4401 stainless steel.  
Elastomer natural rubber, medium hardness Shore 55A, grey.

## Version:

Stainless steel bright.

## Sample order:

K1318.00800855

## Note:

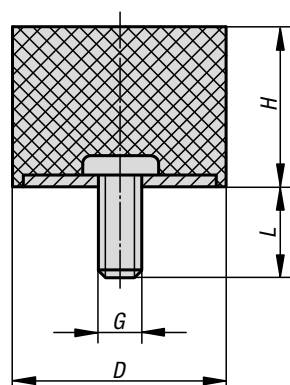
Rubber buffers are used, among other things for mounting aggregates and as elastic buffers to limit the travel of moving masses or as feet that are not firmly fixed in the floor or where the floor is sensitive i.e. office equipment.

## Temperature range:

-30 °C to +80 °C

## On request:

Metal parts 1.4301 stainless steel.



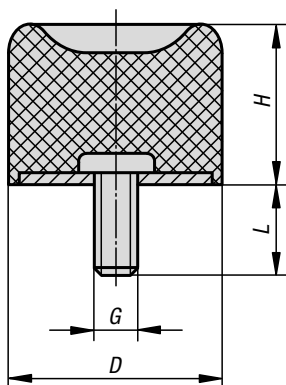
## KIPP Rubber buffers, stainless steel, type D

| Order No.      | D  | H  | G   | L  | Spring stiffness<br>N/mm | Load<br>N |
|----------------|----|----|-----|----|--------------------------|-----------|
| K1318.00800855 | 8  | 8  | M3  | 6  | 40                       | 40        |
| K1318.01001055 | 10 | 10 | M4  | 10 | 35                       | 35        |
| K1318.01001555 | 10 | 15 | M4  | 10 | 26                       | 40        |
| K1318.01500855 | 15 | 8  | M4  | 10 | 187                      | 187       |
| K1318.01501055 | 15 | 10 | M4  | 10 | 100                      | 100       |
| K1318.02000855 | 20 | 8  | M6  | 18 | 250                      | 250       |
| K1318.02001055 | 20 | 10 | M6  | 18 | 240                      | 240       |
| K1318.02001555 | 20 | 15 | M6  | 18 | 110                      | 220       |
| K1318.02002055 | 20 | 20 | M6  | 18 | 75                       | 225       |
| K1318.02500855 | 25 | 8  | M6  | 18 | 850                      | 850       |
| K1318.02501055 | 25 | 10 | M6  | 18 | 400                      | 400       |
| K1318.02501555 | 25 | 15 | M6  | 18 | 210                      | 420       |
| K1318.02502055 | 25 | 20 | M6  | 18 | 140                      | 420       |
| K1318.02502555 | 25 | 25 | M6  | 18 | 100                      | 350       |
| K1318.03001555 | 30 | 15 | M8  | 23 | 270                      | 540       |
| K1318.03002055 | 30 | 20 | M8  | 23 | 238                      | 714       |
| K1318.03003055 | 30 | 30 | M8  | 23 | 127                      | 508       |
| K1318.03004055 | 30 | 40 | M8  | 23 | 88                       | 528       |
| K1318.04001555 | 40 | 15 | M8  | 23 | 710                      | 1420      |
| K1318.04002055 | 40 | 20 | M8  | 23 | 365                      | 1095      |
| K1318.04003055 | 40 | 30 | M8  | 23 | 205                      | 820       |
| K1318.05002055 | 50 | 20 | M10 | 28 | 646                      | 1938      |
| K1318.05003055 | 50 | 30 | M10 | 28 | 354                      | 1416      |
| K1318.05004055 | 50 | 40 | M10 | 28 | 230                      | 1380      |



# Rubber buffers

type DS suction foot


**Material:**

Metal parts, steel, grade 5.6.  
Elastomer natural rubber, medium hardness, Shore 57A.

**Version:**

Steel electro zinc-plated.

**Sample order:**

K0572.01501457

**Note:**

Rubber buffers are used, among other things for mounting aggregates and as elastic buffers to limit the travel of moving masses.

**Temperature range:**

-30 °C to +80 °C

**On request:**

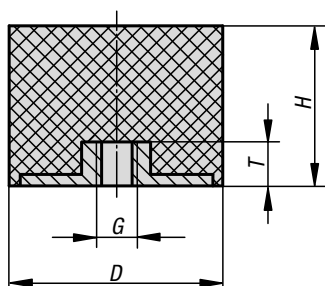
Other Shore grades.

## KIPP Rubber buffers type DS suction foot

| Order No.      | D   | H    | G   | L  | Spring stiffness<br>N/mm | Load<br>N |
|----------------|-----|------|-----|----|--------------------------|-----------|
| K0572.01501457 | 15  | 14   | M4  | 13 | 50                       | 100       |
| K0572.02501857 | 25  | 18,5 | M6  | 18 | 95                       | 285       |
| K0572.03002857 | 30  | 28,5 | M8  | 23 | 97                       | 340       |
| K0572.04002857 | 40  | 28   | M8  | 23 | 120                      | 480       |
| K0572.05002857 | 50  | 28   | M10 | 28 | 220                      | 990       |
| K0572.07003057 | 70  | 30   | M10 | 28 | 360                      | 2160      |
| K0572.07503757 | 75  | 37   | M12 | 37 | 390                      | 3510      |
| K0572.10005057 | 100 | 50   | M16 | 42 | 540                      | 8100      |

# Rubber buffers

type E



## Material:

Metal parts steel, grade 5.6.  
Elastomer natural rubber, medium hardness, Shore 55A.

## Version:

Steel electro zinc-plated.

## Sample order:

K0573.00800855

## Note:

Rubber buffers are widely-used construction elements for elastic mounting. They are used, among other things, as mountings for aggregates, motors, compressors, pumps and testing machinery.

## Temperature range:

-30 °C to +80 °C

## On request:

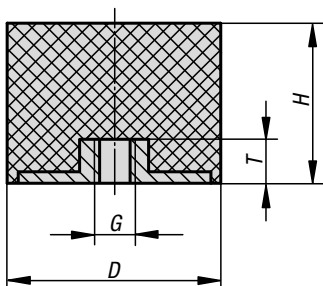
Other Shore grades.

## KIPP Rubber buffers type E

| Order No.      | D  | H  | G   | T  | Spring stiffness<br>N/mm | Load<br>N |
|----------------|----|----|-----|----|--------------------------|-----------|
| K0573.00800855 | 8  | 8  | M3  | 3  | 88                       | 44        |
| K0573.01501255 | 15 | 12 | M4  | 4  | 165                      | 182       |
| K0573.01501555 | 15 | 15 | M4  | 4  | 100                      | 130       |
| K0573.01502055 | 15 | 20 | M4  | 4  | 75                       | 113       |
| K0573.02001555 | 20 | 15 | M6  | 6  | 145                      | 246       |
| K0573.02002055 | 20 | 20 | M6  | 6  | 94                       | 216       |
| K0573.02002555 | 20 | 25 | M6  | 6  | 65                       | 169       |
| K0573.02501555 | 25 | 15 | M6  | 6  | 270                      | 540       |
| K0573.02502555 | 25 | 25 | M6  | 6  | 105                      | 315       |
| K0573.02503055 | 25 | 30 | M6  | 6  | 85                       | 281       |
| K0573.02504055 | 25 | 40 | M6  | 6  | 75                       | 300       |
| K0573.03001555 | 30 | 15 | M8  | 8  | 545                      | 491       |
| K0573.03002555 | 30 | 25 | M8  | 8  | 160                      | 416       |
| K0573.03003055 | 30 | 30 | M8  | 8  | 125                      | 425       |
| K0573.03004055 | 30 | 40 | M8  | 8  | 85                       | 315       |
| K0573.04002055 | 40 | 20 | M8  | 8  | 550                      | 660       |
| K0573.04002555 | 40 | 25 | M8  | 8  | 500                      | 1000      |
| K0573.04003055 | 40 | 30 | M8  | 8  | 300                      | 870       |
| K0573.04004055 | 40 | 40 | M8  | 8  | 260                      | 1040      |
| K0573.05002055 | 50 | 20 | M10 | 10 | 860                      | 860       |
| K0573.05002555 | 50 | 25 | M10 | 10 | 700                      | 1400      |
| K0573.05003055 | 50 | 30 | M10 | 10 | 450                      | 1575      |
| K0573.05004055 | 50 | 40 | M10 | 10 | 350                      | 1400      |
| K0573.05005055 | 50 | 50 | M10 | 10 | 170                      | 850       |
| K0573.06003055 | 60 | 30 | M10 | 10 | 700                      | 1400      |
| K0573.06004055 | 60 | 40 | M10 | 10 | 400                      | 1600      |
| K0573.06005055 | 60 | 50 | M10 | 10 | 240                      | 1200      |
| K0573.07004255 | 70 | 42 | M10 | 10 | 520                      | 2600      |
| K0573.07004555 | 70 | 45 | M10 | 10 | 680                      | 3060      |
| K0573.07502555 | 75 | 25 | M12 | 12 | 1211                     | 1816      |
| K0573.07503055 | 75 | 30 | M12 | 12 | 1090                     | 2289      |
| K0573.07504055 | 75 | 40 | M12 | 12 | 500                      | 2000      |
| K0573.07505055 | 75 | 50 | M12 | 12 | 550                      | 2750      |

# Rubber buffers

stainless steel, type E


**Material:**

Metal parts 1.4401 stainless steel.  
Elastomer natural rubber, medium hardness Shore 55A, grey.

**Version:**

Stainless steel bright.

**Sample order:**

K1319.00800855

**Note:**

Rubber buffers are widely-used construction elements for elastic mounting. They are used, among other things, as mountings for aggregates, motors, compressors, pumps and testing machinery.

**Temperature range:**

-30 °C to +80 °C

**On request:**

Metal parts 1.4301 stainless steel.

**KIPP Rubber buffers, stainless steel, type E**

| Order No.      | D  | H  | G   | T  | Spring stiffness<br>N/mm | Load<br>N |
|----------------|----|----|-----|----|--------------------------|-----------|
| K1319.00800855 | 8  | 8  | M3  | 3  | 88                       | 44        |
| K1319.01501255 | 15 | 12 | M4  | 4  | 165                      | 182       |
| K1319.01501555 | 15 | 15 | M4  | 4  | 100                      | 130       |
| K1319.01502055 | 15 | 20 | M4  | 4  | 75                       | 113       |
| K1319.02001555 | 20 | 15 | M6  | 5  | 145                      | 246       |
| K1319.02002055 | 20 | 20 | M6  | 5  | 94                       | 216       |
| K1319.02002555 | 20 | 25 | M6  | 5  | 65                       | 169       |
| K1319.02501555 | 25 | 15 | M8  | 7  | 270                      | 540       |
| K1319.02502555 | 25 | 25 | M8  | 7  | 105                      | 315       |
| K1319.02503055 | 25 | 30 | M8  | 7  | 85                       | 281       |
| K1319.02504055 | 25 | 40 | M8  | 7  | 75                       | 300       |
| K1319.03001555 | 30 | 15 | M8  | 7  | 545                      | 491       |
| K1319.03002555 | 30 | 25 | M8  | 7  | 160                      | 416       |
| K1319.03003055 | 30 | 30 | M8  | 7  | 125                      | 425       |
| K1319.03004055 | 30 | 40 | M8  | 7  | 85                       | 315       |
| K1319.04002055 | 40 | 20 | M8  | 7  | 550                      | 660       |
| K1319.04002555 | 40 | 25 | M8  | 7  | 500                      | 1000      |
| K1319.04003055 | 40 | 30 | M8  | 7  | 300                      | 870       |
| K1319.04004055 | 40 | 40 | M8  | 7  | 260                      | 1040      |
| K1319.05002055 | 50 | 20 | M10 | 8  | 860                      | 860       |
| K1319.05002555 | 50 | 25 | M10 | 8  | 700                      | 1400      |
| K1319.05003055 | 50 | 30 | M10 | 8  | 450                      | 1575      |
| K1319.05004055 | 50 | 40 | M10 | 8  | 350                      | 1400      |
| K1319.05005055 | 50 | 50 | M10 | 8  | 170                      | 850       |
| K1319.06003055 | 60 | 30 | M10 | 8  | 700                      | 1400      |
| K1319.06004055 | 60 | 40 | M10 | 8  | 400                      | 1600      |
| K1319.06005055 | 60 | 50 | M10 | 8  | 240                      | 1200      |
| K1319.07004255 | 70 | 42 | M10 | 8  | 520                      | 2600      |
| K1319.07004555 | 70 | 45 | M10 | 8  | 680                      | 3060      |
| K1319.07502555 | 75 | 25 | M12 | 10 | 1211                     | 1816      |
| K1319.07503055 | 75 | 30 | M12 | 10 | 1090                     | 2289      |
| K1319.07504055 | 75 | 40 | M12 | 10 | 500                      | 2000      |
| K1319.07505055 | 75 | 50 | M12 | 10 | 550                      | 2750      |



A large rectangular area filled with a light gray grid pattern, intended for taking notes.



# Rubber buffers

parabolic


**Material:**

Metal parts steel, grade 5.6.

Elastomer natural rubber, medium hardness, Shore 55A.

**Version:**

Steel electro zinc-plated.

**Sample order:**

K0574.02002455

**Note:**

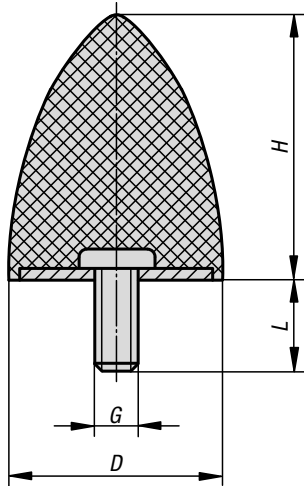
Rubber buffers are robust and effective elastic cushioning elements and shock absorbers. These buffers are ideal for elastic travel limitation and cushioning knocks by mobile and immobile aggregates and machines and as use as door stops.

**Temperature range:**

-30 °C to +80 °C

**On request:**

Other Shore grades.



## KIPP Rubber buffers, parabolic

| Order No.      | D  | H  | G   | L  | Spring stiffness<br>N/mm | Load<br>N |
|----------------|----|----|-----|----|--------------------------|-----------|
| K0574.02002455 | 20 | 24 | M6  | 18 | 14                       | 500       |
| K0574.03003655 | 30 | 36 | M8  | 20 | 15                       | 750       |
| K0574.03504055 | 35 | 40 | M8  | 23 | 16                       | 1750      |
| K0574.05005855 | 50 | 58 | M10 | 28 | 30                       | 3000      |
| K0574.05006755 | 50 | 67 | M8  | 38 | 30                       | 3200      |
| K0574.07508955 | 75 | 89 | M12 | 37 | 50                       | 8000      |

## Rubber buffers

conical



### Material:

Metal parts steel, grade 5.6.  
Elastomer natural rubber, medium hardness, Shore 55A.

### Version:

Steel electro zinc-plated.

### Sample order:

K0575.02501755

### Note:

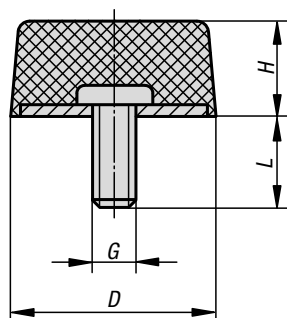
Rubber buffers are robust and effective elastic cushioning elements and shock absorbers. These buffers are ideal for elastic travel limitation and cushioning knocks by mobile and immobile aggregates and machines and as use as door stops.

### Temperature range:

-30 °C to +80 °C

### On request:

Other Shore grades.



### KIPP Rubber buffers, conical

| Order No.      | D  | H  | G   | L  | Spring stiffness<br>N/mm | Load<br>N |
|----------------|----|----|-----|----|--------------------------|-----------|
| K0575.05001855 | 50 | 18 | M10 | 28 | 670                      | 3600      |
| K0575.02501755 | 25 | 17 | M6  | 18 | 119                      | 678       |

# K0576

## Rubber buffers

spherical



### Material:

Metal parts steel, grade 5.6.  
Elastomer natural rubber, medium hardness, Shore 55A.

### Version:

Steel electro zinc-plated.

### Sample order:

K0576.05003555

### Note:

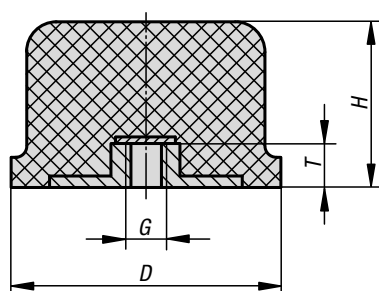
Rubber buffers are robust and effective elastic cushioning elements and shock absorbers. These buffers are ideal for elastic travel limitation and cushioning knocks by mobile and immobile aggregates and machines and as use as door stops.

### Temperature range:

-30 °C to +80 °C

### On request:

Other Shore grades.



### KIPP Rubber buffers, spherical

| Order No.      | D   | H  | G   | T  | Spring stiffness<br>N/mm | Load<br>N |
|----------------|-----|----|-----|----|--------------------------|-----------|
| K0576.05003555 | 50  | 35 | M10 | 10 | 120                      | 3000      |
| K0576.08006055 | 80  | 60 | M12 | 12 | 150                      | 11000     |
| K0576.12509055 | 125 | 93 | M16 | 16 | 200                      | 20000     |

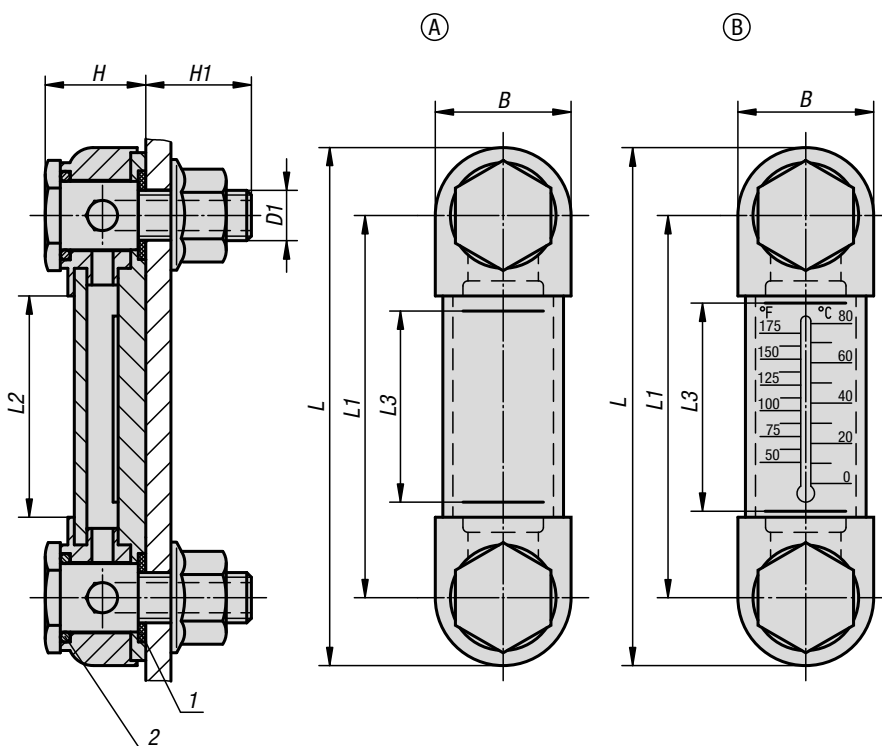




## Level indicators, screw plugs



## Oil level gauges



### Material:

Housing thermoplastic polyamide.  
O-ring and flat seal rubber (NBR).  
Reflector aluminium.  
Screw and hex nut steel.

### Version:

Transparent housing, high mechanical stability, non-ageing, temperature resistant up to 100 °C.  
Pressure resistant at 20 °C up to 10 bar, at 60 °C up to 8 bar.  
Reflector painted white, line marks and scale black.  
Screw and hexagon nut, electro zinc-plated.

### Sample order:

K0443.1127

### Note:

The oil level gauges can either be fastened as shown in the illustration or screwed directly into a tapped hole.  
Centre distance for the fastening holes =  $L1 \pm 0.3$ .  
The max. tightening torque for the fastening screws is 5 Nm.

### Drawing reference:

Form A: without thermometer  
Form B: with thermometer

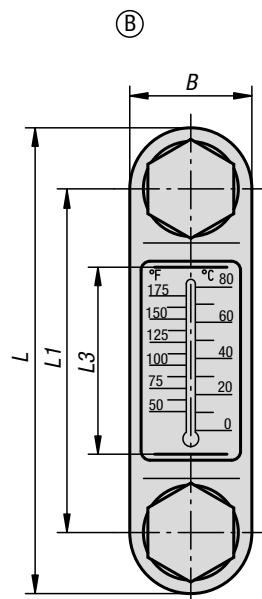
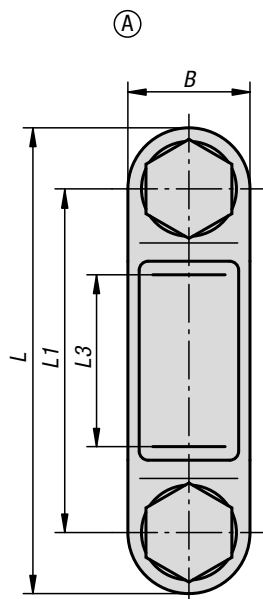
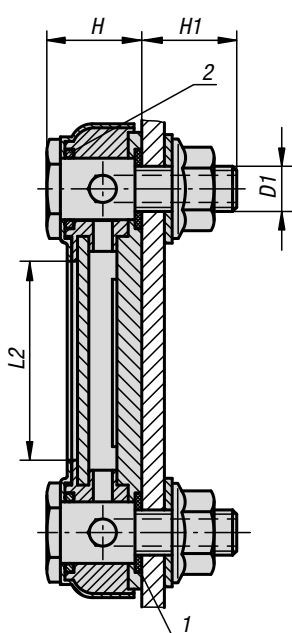
1) flat seal

2) O-ring

## KIPP Oil level gauges

| Order No.  | Form | B  | D1  | H  | H1 | L   | L1  | L2 | L3 | Number of fastening screws | Thermometer scale        |
|------------|------|----|-----|----|----|-----|-----|----|----|----------------------------|--------------------------|
| K0443.1076 | A    | 27 | M10 | 20 | 21 | 103 | 76  | 44 | 37 | 2                          | -                        |
| K0443.1127 | A    | 27 | M12 | 19 | 18 | 151 | 127 | 95 | 80 | 2                          | -                        |
| K0443.2076 | B    | 27 | M10 | 20 | 21 | 103 | 76  | 44 | 37 | 2                          | 0 - 80 °C / 50 - 175 °F  |
| K0443.2127 | B    | 27 | M12 | 19 | 18 | 151 | 127 | 95 | 80 | 2                          | 0 - 100 °C / 50 - 200 °F |

## Oil level gauges



### Material:

Housing steel.  
Viewing glass thermoplastic polyamide.  
O-ring and flat seal rubber (NBR).  
Reflector aluminium.  
Screw and hex nut steel.

### Version:

Housing painted black.  
Transparent viewing glass, high mechanical stability, non-ageing, temperature resistant with oil up to 100 °C, with water up to 70 °C.  
Reflector painted white, markings and scale black.  
Screw and hexagon nut, electro zinc-plated.

### Sample order:

K0444.107610

### Note:

The oil level gauges can either be fastened as shown in the illustration or directly in the threaded hole.  
Centre distance for the fastening holes =  $L1 \pm 0.5$ .  
The oil level gauges are suitable for tanks operating without pressure.  
Maximum operating temperature: 100 °C.

### Drawing reference:

Form A: without thermometer  
Form B: with thermometer

- 1) flat seal
- 2) O-ring

## KIPP Oil level gauges

| Order No.    | Form | B  | D1  | H    | H1 | L   | L1  | L2  | L3  | Number of fastening screws | Thermometer scale        |
|--------------|------|----|-----|------|----|-----|-----|-----|-----|----------------------------|--------------------------|
| K0444.107610 | A    | 31 | M10 | 24,5 | 20 | 107 | 76  | 39  | 37  | 2                          | -                        |
| K0444.107612 | A    | 31 | M12 | 24,5 | 20 | 107 | 76  | 39  | 37  | 2                          | -                        |
| K0444.112710 | A    | 31 | M10 | 24,5 | 20 | 156 | 127 | 90  | 80  | 2                          | -                        |
| K0444.112712 | A    | 31 | M12 | 24,5 | 20 | 156 | 127 | 90  | 80  | 2                          | -                        |
| K0444.125412 | A    | 34 | M12 | 33   | 17 | 286 | 254 | 200 | 178 | 2                          | -                        |
| K0444.207610 | B    | 31 | M10 | 24,5 | 20 | 107 | 76  | 39  | 37  | 2                          | 0 - 80 °C / 50 - 175 °F  |
| K0444.207612 | B    | 31 | M12 | 24,5 | 20 | 107 | 76  | 39  | 37  | 2                          | 0 - 80 °C / 50 - 175 °F  |
| K0444.212710 | B    | 31 | M10 | 24,5 | 20 | 156 | 127 | 90  | 80  | 2                          | 0 - 100 °C / 50 - 200 °F |
| K0444.212712 | B    | 31 | M12 | 24,5 | 20 | 156 | 127 | 90  | 80  | 2                          | 0 - 100 °C / 50 - 200 °F |
| K0444.225412 | B    | 34 | M12 | 33   | 17 | 286 | 254 | 200 | 178 | 2                          | 0 - 100 °C / 50 - 200 °F |

# Oil level gauges

with electronic oil level monitoring



## Material:

Housing fibreglass reinforced thermoplastic polyamide.  
Sight glass thermoplastic polyamide.  
O-ring and flat seal NBR.  
Reflector PVC.  
Float plastic.  
Screw and nut, steel.

## Version:

Housing black.  
Sight glass crystal clear, high mechanical stability, non-ageing.  
Reflector white.  
Float red, with magnetic element.  
Screw and nut electro zinc-plated.

## Sample order:

K1425.12712

## Note:

The oil level gauge not only enables the oil level to be viewed but also recorded using a REED switch. When the float element reaches the selected minimum value after the circuit has been closed, the system emits an electric signal.

The sensor is located on the housing and its height can be adjusted in line with the control requirements for the oil level. The minimum level is ca. 35 mm from the centre of the lower fastening screw.

The reed switch is equipped with a normally open (NO) contact as standard. The sight glass consists of two transparent components which are ultrasonically welded together following assembly. This ensures a seal around the entire body.

The maximum pressure is 1 bar. The maximum tightening torque of the fastening screws is 5 Nm.

The sight glass has high mechanical strength and is resistant to mineral oil, petrol, lubricants, petroleum, solvents and most chemical substances. Avoid contact with alcoholic solutions and hot water.

## Temperature range:

Maximum operating temperature: 75 °C.

## Assembly:

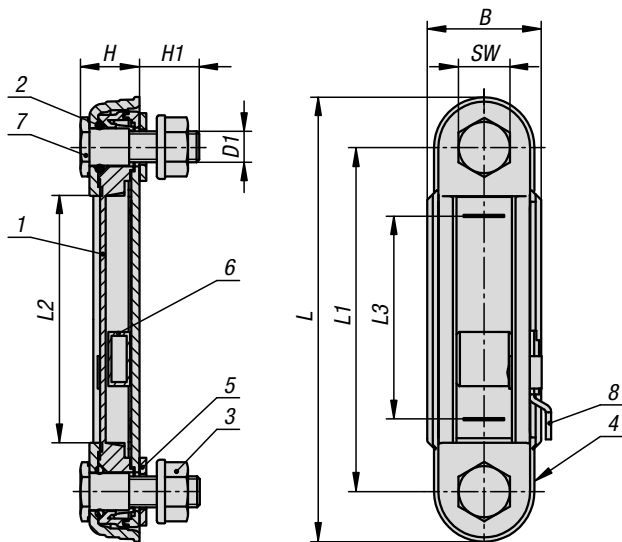
The oil level gauge is secured using two M12 tapped holes or, two 12.2 mm ( $\pm 0.2$  mm) holes and flange nuts. Centre distance for the fastening holes =  $L1 \pm 0.3$ .

## Function:

The oil level is measured using a float element with a magnet that activates the electrical contact when the REED level switch is reached. If the oil level falls below a particular level, an electrical pulse can be emitted.

## Attention:

Strong magnetic fields can impair function.



## Drawing reference:

- 1) Sight glass
- 2) O-ring
- 3) M12 flange nut
- 4) Housing
- 5) Flat seal
- 6) Float with magnet
- 7) M12 hollow screw
- 8) Reed switch

## KIPP Oil level gauge with electric oil level monitoring

| Order No.   | B  | D1  | H  | H1 | L   | L1  | L2 | L3 | SW | Number of fastening screws |
|-------------|----|-----|----|----|-----|-----|----|----|----|----------------------------|
| K1425.12712 | 42 | M12 | 21 | 21 | 164 | 127 | 91 | 75 | 19 | 2                          |

# Oil level gauges

with electronic temperature monitoring



## Material:

Housing fibreglass reinforced thermoplastic polyamide.  
Sight glass thermoplastic polyamide.  
O-ring and flat seal NBR.  
Reflector PVC.  
Screw and nut, steel.

## Version:

Housing black.  
Sight glass crystal clear, high mechanical stability, non-ageing.  
Reflector white.  
Screw and nut electro zinc-plated.

## Sample order:

K1426.112712

## Note:

In addition to a visual check, the oil level gauges can also emit an electric signal if the temperature of the liquid inside the container reaches the threshold of 70 °C.

The temperature is monitored by a temperature switch (bi-metal). When the specified temperature is reached, the sensor closes (NO) or opens (NC) the circuit depending on the model.

The sight glass consists of two transparent components which are ultrasonically welded together following assembly. This ensures a seal around the entire body.

The maximum pressure is 1 bar. The maximum tightening torque of the fastening screws is 5 Nm.

The sight glass has high mechanical strength and is resistant to mineral oil, petrol, lubricants, petroleum, solvents and most chemical substances. Avoid contact with alcoholic solutions and hot water.

## Temperature range:

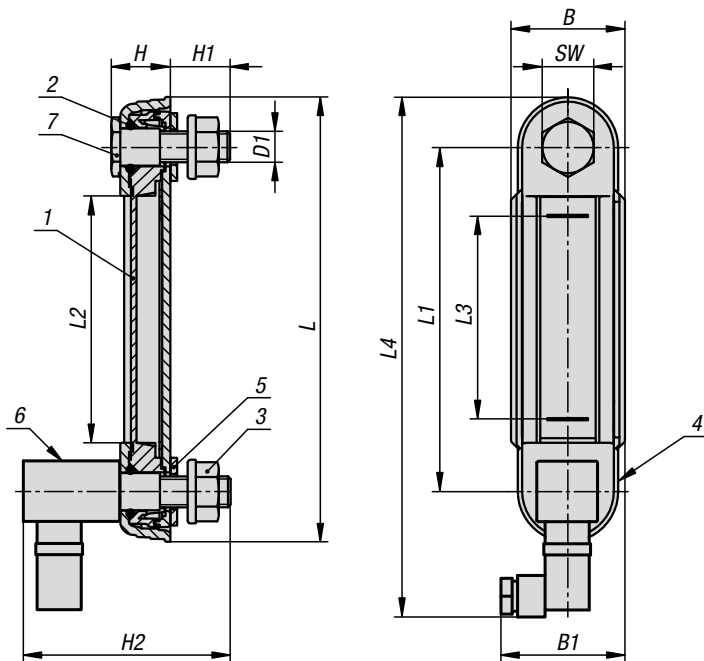
Maximum operating temperature: 75 °C.

## Assembly:

The oil level gauge is secured using two M12 tapped holes or, two 12.2 mm ( $\pm 0.2$  mm) holes and flange nuts. Centre distance for the fastening holes =  $L1 \pm 0.3$ .

## Drawing reference:

- 1) Inspection glass
- 2) O-ring
- 3) M12 flange nut
- 4) Housing
- 5) Flat seal
- 6) Temperature sensor
- 7) M12 hollow screw



## KIPP Oil level gauge with electric temperature monitoring

| Order No.    | Version 2               | B  | B1 | D1  | H  | H1 | H2 | L   | L1  | L2 | L3 | L4  | SW | Number of fastening screws |
|--------------|-------------------------|----|----|-----|----|----|----|-----|-----|----|----|-----|----|----------------------------|
| K1426.112712 | normally open contact   | 42 | 45 | M12 | 21 | 21 | 80 | 164 | 127 | 91 | 75 | 191 | 19 | 2                          |
| K1426.212712 | normally closed contact | 42 | 45 | M12 | 21 | 21 | 80 | 164 | 127 | 91 | 75 | 191 | 19 | 2                          |

# Oil level gauges

with electronic oil level and temperature monitoring



## Material:

Housing fibreglass reinforced thermoplastic polyamide.  
Sight glass thermoplastic polyamide.  
O-ring and flat seal NBR.  
Reflector PVC.  
Float plastic.  
Screw and nut, steel.

## Version:

Housing black.  
Sight glass crystal clear, high mechanical stability, non-ageing.  
Reflector white.  
Float red, with magnetic element.  
Screw and nut electro zinc-plated.

## Sample order:

K1427.112712

## Note:

The oil level gauge not only enables the oil level to be viewed but also recorded using a REED switch. In addition, the oil level gauges can also emit an electric signal if the temperature of the liquid inside the container reaches the threshold of 70 °C.

As soon as the float element approaches the selected minimum value after the circuit has been closed, the system emits an electric signal.

The sensor is located on the housing and its height can be adjusted in line with the control requirements for the oil level. The minimum level is ca. 35 mm from the centre of the lower fastening screw.

The reed switch is equipped with a normally open (NO) contact as standard. The temperature is monitored by a temperature switch (bi-metal). When the specified temperature is reached, the sensor closes (NO) or opens (NC) the circuit depending on the model.

The sight glass consists of two transparent components which are ultrasonically welded together following assembly. This ensures a seal around the entire body.

The maximum pressure is 1 bar. The maximum tightening torque of the fastening screws is 5 Nm.

The sight glass has high mechanical strength and is resistant to mineral oil, petrol, lubricants, petroleum, solvents and most chemical substances. Avoid contact with alcoholic solutions and hot water.

## Temperature range:

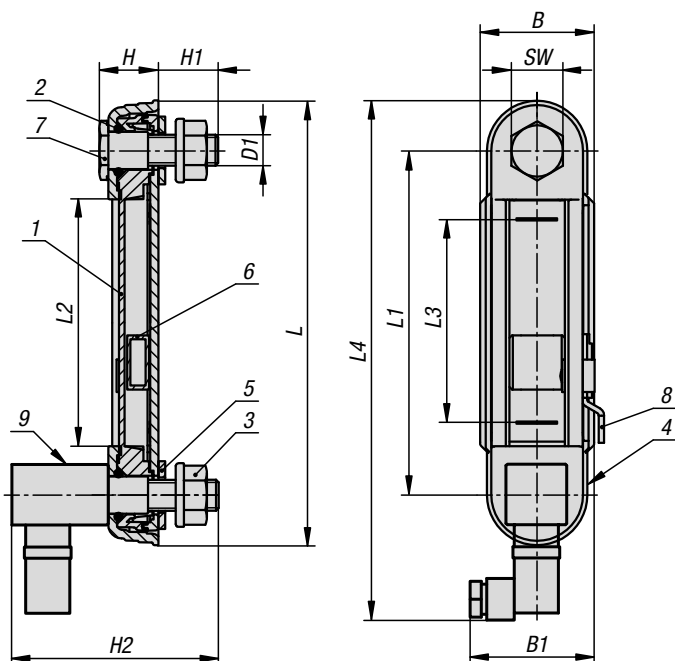
Maximum operating temperature: 75 °C.

## Assembly:

The oil level gauge is secured using two M12 tapped holes or, two 12.2 mm ( $\pm 0.2$  mm) holes and flange nuts. Centre distance for the fastening holes =  $L1 \pm 0.3$ .

## Function:

The oil level is measured using a float element with a magnet that activates the electrical contact when the REED level switch is reached. If the oil level falls below a particular level, an electrical pulse can be emitted.



## Attention:

Strong magnetic fields can impair function.

## Drawing reference:

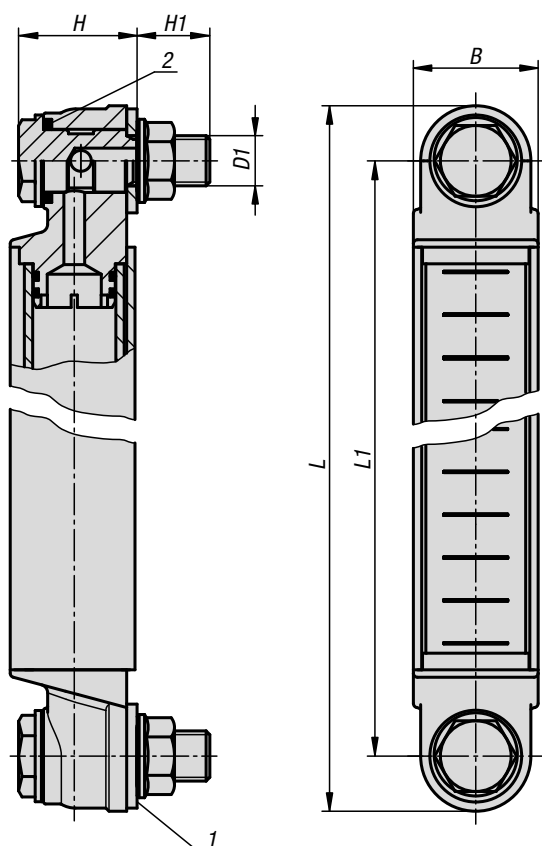
- 1) Sight glass
- 2) O-ring
- 3) M12 flange nut
- 4) Housing
- 5) Flat seal
- 6) Float with magnet
- 7) M12 hollow screw
- 8) Reed switch
- 9) Temperature sensor

## KIPP Oil level gauge with electric oil level and temperature monitoring

| Order No.    | Version 2               | B  | B1 | D1  | H  | H1 | H2 | L   | L1  | L2 | L3 | L4  | SW | Number of fastening screws |
|--------------|-------------------------|----|----|-----|----|----|----|-----|-----|----|----|-----|----|----------------------------|
| K1427.112712 | normally open contact   | 42 | 45 | M12 | 21 | 21 | 80 | 164 | 127 | 91 | 75 | 191 | 19 | 2                          |
| K1427.212712 | normally closed contact | 42 | 45 | M12 | 21 | 21 | 80 | 164 | 127 | 91 | 75 | 191 | 19 | 2                          |

# Oil level gauges

long version



## Material:

Housing aluminium.  
Tube polycarbonate.  
Caps polyamide.  
O-ring and flat seal NBR, Shore 70.  
Screw and hex. nut steel.

## Version:

Viewing glass transparent.  
Screws and nuts electro zinc-plated.

## Sample order:

K1100.1400

## Note:

The oil level gauges can either be fastened as shown in the illustration or directly in the tapped hole.  
Centre distance for the fastening holes =  $L1 \pm 0.3$ .  
The maximum operating temperature is 90 °C. The maximum pressure is 1 bar. The maximum tightening torque of the fastening screws is 5 Nm.

## Drawing reference:

- 1) flat seal
- 2) O-ring



## KIPP Oil level gauges long version

| Order No.  | B  | D1  | H  | H1   | L   | L1  |
|------------|----|-----|----|------|-----|-----|
| K1100.1300 | 30 | M12 | 30 | 16,5 | 325 | 300 |
| K1100.1400 | 30 | M12 | 30 | 16,5 | 425 | 400 |
| K1100.1500 | 30 | M12 | 30 | 16,5 | 525 | 500 |

# Oil level gauges

with electronic oil level monitoring, long version



## Material:

Housing aluminium.  
Tube polycarbonate.  
Caps polyamide.  
O-ring and flat seal NBR.  
Reflector PVC.  
Float plastic.  
Screws and nuts, steel.

## Version:

Sight glass crystal clear.  
Reflector white.  
Float red, with magnetic element.  
Screws and nuts electro zinc-plated.

## Sample order:

K1428.300

## Note:

The oil level gauge not only enables the oil level to be viewed but also recorded using a REED switch. If the float element reaches the selected minimum value after the circuit has been closed, the system emits an electric signal.

The sensor is located on the sight glass and its height can be adjusted in line with the control requirements for the oil level. The minimum level is around 50 mm from the centre of the lower fastening screw.

The reed switch is equipped with a normally open (NO) contact as standard.

The maximum pressure is 1 bar. The maximum tightening torque of the fastening screws is 5 Nm.

The sight glass has high mechanical strength and is resistant to mineral oil, petrol, lubricants, petroleum, solvents and most chemical substances. Avoid contact with alcoholic solutions and hot water.

## Temperature range:

Maximum operating temperature: 75 °C.

## Assembly:

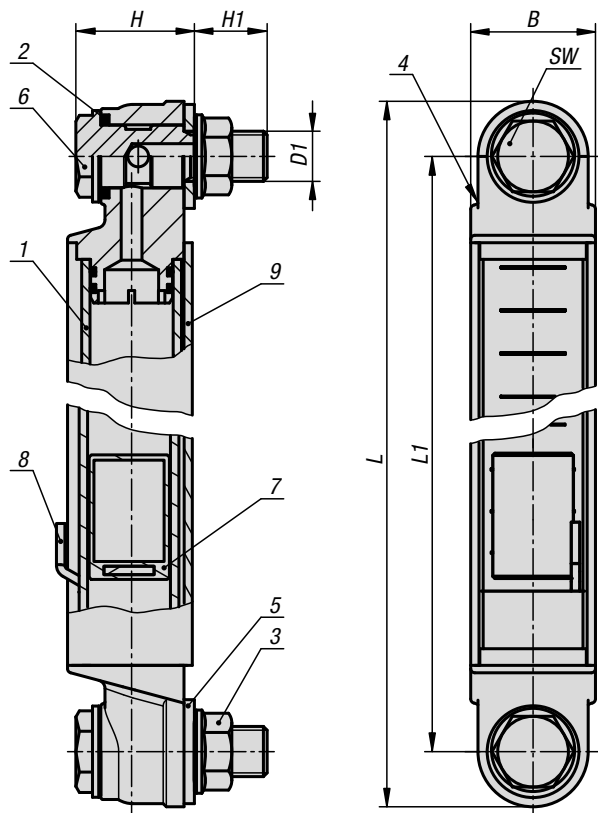
The oil level gauge is secured using two M12 tapped holes or, two 12.2 mm ( $\pm 0.2$  mm) holes and flange nuts. Centre distance for the fastening holes =  $L1 \pm 0.5$ .

## Function:

The oil level is measured using a float element with a magnet that activates the electrical contact when the REED level switch is reached. If the oil level falls below a particular level, an electrical pulse can be emitted.

## Attention:

Strong magnetic fields can impair function.



## Drawing reference:

- 1) Sight glass
- 2) O-ring
- 3) M12 flange nut
- 4) Plastic end cap
- 5) Flat seal
- 6) M12 hollow screw
- 7) Float with magnet
- 8) Reed switch
- 9) Aluminium housing

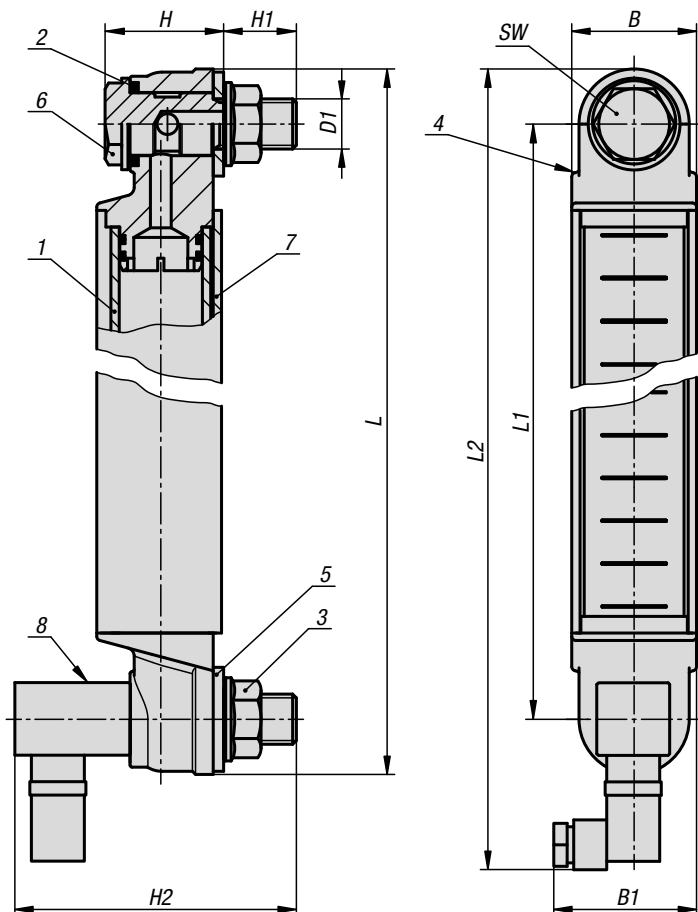
## KIPP Oil level gauge with electric oil level monitoring, long version

| Order No. | B  | D1  | H  | H1   | L     | L1  | SW | Number of fastening screws |
|-----------|----|-----|----|------|-------|-----|----|----------------------------|
| K1428.300 | 30 | M12 | 30 | 16,5 | 326,6 | 300 | 17 | 2                          |
| K1428.400 | 30 | M12 | 30 | 16,5 | 426,6 | 400 | 17 | 2                          |
| K1428.500 | 30 | M12 | 30 | 16,5 | 526,6 | 500 | 17 | 2                          |



## Oil level gauges

with electronic temperature monitoring, long version



### Material:

Housing aluminium.  
Tube polycarbonate.  
Caps polyamide.  
O-ring and flat seal NBR.  
Reflector PVC.  
Screws and nuts, steel.

### Version:

Sight glass crystal clear.  
Reflector white.  
Screws and nuts electro zinc-plated.

### Sample order:

K1429.1300

### Note:

In addition to a visual check, the oil level gauges can also emit an electric signal if the temperature of the liquid inside the container reaches the threshold of 70 °C. The temperature is monitored by a temperature switch (bi-metal). When the specified temperature is reached, the sensor closes (NO) or opens (NC) the circuit depending on the model. The maximum pressure is 1 bar. The maximum tightening torque of the fastening screws is 5 Nm. The sight glass has high mechanical strength and is resistant to mineral oil, petrol, lubricants, petroleum, solvents and most chemical substances. Avoid contact with alcoholic solutions and hot water.

### Temperature range:

Maximum operating temperature: 75 °C.

### Assembly:

The oil level gauge is secured using two M12 tapped holes or, two 12.2 mm ( $\pm 0.2$  mm) holes and flange nuts. Centre distance for the fastening holes =  $L1 \pm 0.5$ .

### Drawing reference:

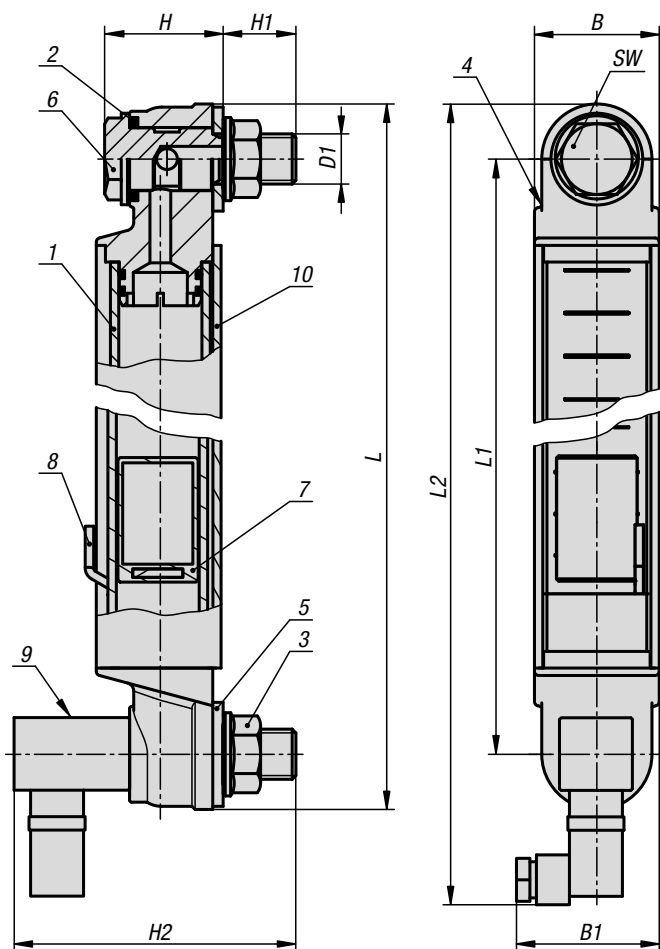
- 1) Sight glass
- 2) O-ring
- 3) M12 flange nut
- 4) Plastic end cap
- 5) Flat seal
- 6) M12 hollow screw
- 7) Aluminium housing
- 8) Temperature sensor

## KIPP Oil level gauge with electric temperature monitoring, long version

| Order No.  | Version 2               | B  | B1 | D1  | H  | H1   | H2 | L     | L1  | L2    | SW | Number of fastening screws |
|------------|-------------------------|----|----|-----|----|------|----|-------|-----|-------|----|----------------------------|
| K1429.1300 | normally open contact   | 30 | 39 | M12 | 30 | 16,5 | 80 | 326,6 | 300 | 358,3 | 17 | 2                          |
| K1429.2300 | normally closed contact | 30 | 39 | M12 | 30 | 16,5 | 80 | 326,6 | 300 | 358,3 | 17 | 2                          |
| K1429.1400 | normally open contact   | 30 | 39 | M12 | 30 | 16,5 | 80 | 426,6 | 400 | 458,3 | 17 | 2                          |
| K1429.2400 | normally closed contact | 30 | 39 | M12 | 30 | 16,5 | 80 | 426,6 | 400 | 458,3 | 17 | 2                          |
| K1429.1500 | normally open contact   | 30 | 39 | M12 | 30 | 16,5 | 80 | 526,6 | 500 | 558,3 | 17 | 2                          |
| K1429.2500 | normally closed contact | 30 | 39 | M12 | 30 | 16,5 | 80 | 526,6 | 500 | 558,3 | 17 | 2                          |

# Oil level gauges

with electronic oil level and temperature monitoring, long version



## Drawing reference:

- 1) Sight glass
- 2) O-ring
- 3) M12 flange nut
- 4) Plastic end cap
- 5) Flat seal
- 6) M12 hollow screw
- 7) Float with magnet
- 8) Reed switch
- 9) Temperature sensor
- 10) Aluminium housing

## Material:

Housing aluminium.  
Tube polycarbonate.  
Caps polyamide.  
O-ring and flat seal NBR.  
Reflector PVC.  
Float plastic.  
Screws and nuts, steel.

## Version:

Sight glass crystal clear.  
Reflector white.  
Float red, with magnetic element.  
Screws and nuts electro zinc-plated.

## Sample order:

K1430.1300

## Note:

The oil level gauge not only enables the oil level to be viewed but also recorded using a REED switch. In addition, the oil level gauges can also emit an electric signal if the temperature of the liquid inside the container reaches the threshold of 70 °C.

As soon as the float element approaches the selected minimum value after the circuit has been closed, the system emits an electric signal.

The sensor is located on the housing and its height can be adjusted in line with the control requirements for the oil level. The minimum level is ca. 35 mm from the centre of the lower fastening screw.

The reed switch is equipped with a normally open (NO) contact as standard.

The temperature is monitored by a temperature switch (bi-metal). When the specified temperature is reached, the sensor closes (NO) or opens (NC) the circuit depending on the model.

The maximum pressure is 1 bar. The maximum tightening torque of the fastening screws is 5 Nm.

The sight glass has high mechanical strength and is resistant to mineral oil, petrol, lubricants, petroleum, solvents and most chemical substances. Avoid contact with alcoholic solutions and hot water.

## Assembly:

The oil level gauge is secured using two M12 tapped holes or two 12.2 mm ( $\pm 0.2$  mm) holes and flange nuts. Centre distance for the fastening holes =  $L1 \pm 0.5$ .

## Function:

The oil level is measured using a float element with a magnet that activates the electrical contact when the REED level switch is reached. If the oil level falls below a particular level, an electrical pulse can be emitted.

## Attention:

Strong magnetic fields can impair function.

# Oil level gauges

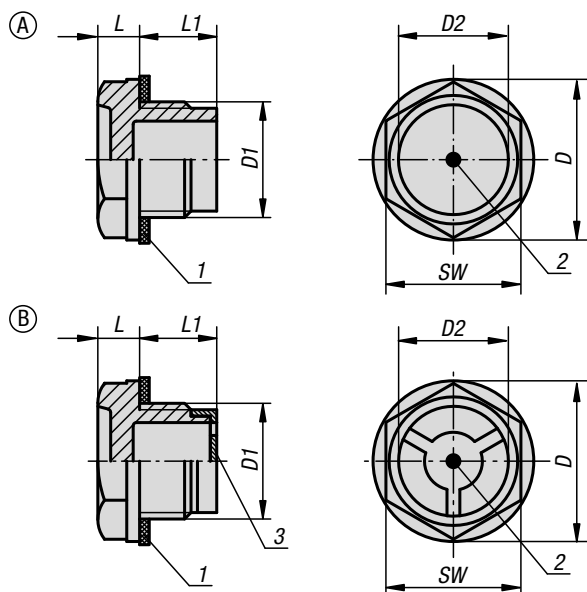
with electronic oil level and temperature monitoring, long version



## KIPP Oil level gauge with electric oil level and temperature monitoring, long version

| Order No.         | Version 2               | B  | B1 | D1  | H  | H1   | H2 | L     | L1  | L2    | SW | Number of fastening screws |
|-------------------|-------------------------|----|----|-----|----|------|----|-------|-----|-------|----|----------------------------|
| <b>K1430.1300</b> | normally open contact   | 30 | 39 | M12 | 30 | 16,5 | 80 | 326,6 | 300 | 358,3 | 17 | 2                          |
| <b>K1430.2300</b> | normally closed contact | 30 | 39 | M12 | 30 | 16,5 | 80 | 326,6 | 300 | 358,3 | 17 | 2                          |
| <b>K1430.1400</b> | normally open contact   | 30 | 39 | M12 | 30 | 16,5 | 80 | 426,6 | 400 | 458,3 | 17 | 2                          |
| <b>K1430.2400</b> | normally closed contact | 30 | 39 | M12 | 30 | 16,5 | 80 | 426,6 | 400 | 458,3 | 17 | 2                          |
| <b>K1430.1500</b> | normally open contact   | 30 | 39 | M12 | 30 | 16,5 | 80 | 526,6 | 500 | 558,3 | 17 | 2                          |
| <b>K1430.2500</b> | normally closed contact | 30 | 39 | M12 | 30 | 16,5 | 80 | 526,6 | 500 | 558,3 | 17 | 2                          |

## Oil level sight glasses



### Material:

Housing in thermoplastic polyamide.  
Plastic reflector.

### Version:

Housing, transparent, high mechanical stability, non-ageing, temperature resistant with oil up to 90 °C, resistant to solvents but not to alcohol or frost.  
Flat seal, asbestos-free.  
Reflector white.

### Sample order:

K0445.143100

### On request:

Rubber gasket (NBR).

### Drawing reference:

Form A: without reflector  
Form B: with reflector

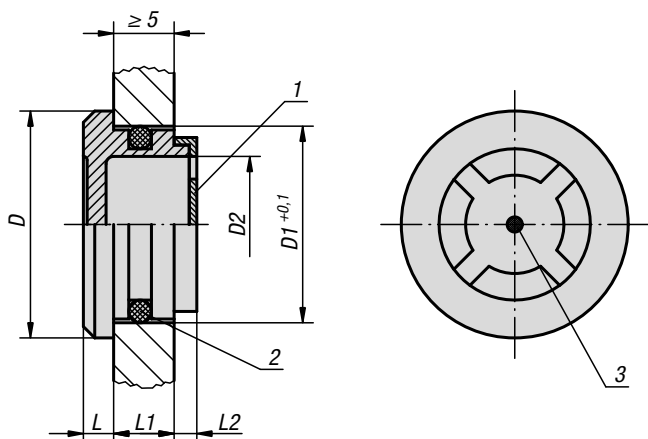
- 1) flat seal
- 2) check mark
- 3) reflector

### KIPP Oil level sight glasses

| Order No.     | Form | D    | D1      | D2 | L   | L1   | SW | Tightening torque max. Nm |
|---------------|------|------|---------|----|-----|------|----|---------------------------|
| K0445.120014  | A    | 20,5 | G1/4    | 12 | 8   | 8,5  | 17 | 5                         |
| K0445.122038  | A    | 22   | G3/8    | 12 | 6,5 | 12   | 18 | 7                         |
| K0445.128012  | A    | 28   | G1/2    | 16 | 8   | 12   | 24 | 15                        |
| K0445.135034  | A    | 36   | G3/4    | 21 | 8,5 | 13,5 | 30 | 20                        |
| K0445.143100  | A    | 42   | G1      | 30 | 9   | 16   | 36 | 25                        |
| K0445.151114  | A    | 51   | G1 1/4  | 32 | 10  | 17   | 42 | -                         |
| K0445.158112  | A    | 58   | G1 1/2  | 39 | 10  | 21   | 50 | -                         |
| K0445.174200  | A    | 74   | G2      | 48 | 12  | 20   | 64 | -                         |
| K0445.1201415 | A    | 20   | M14X1,5 | 12 | 7,5 | 8    | 17 | 5                         |
| K0445.1221615 | A    | 22   | M16X1,5 | 12 | 6,5 | 12,5 | 18 | 7                         |
| K0445.1251815 | A    | 25,5 | M18X1,5 | 14 | 6   | 12,5 | 21 | 10                        |
| K0445.1282015 | A    | 28   | M20X1,5 | 16 | 7,5 | 12   | 24 | 15                        |
| K0445.1282215 | A    | 28   | M22X1,5 | 16 | 7,5 | 12,5 | 24 | 15                        |
| K0445.1362615 | A    | 36   | M26X1,5 | 21 | 8,5 | 13,5 | 30 | 20                        |
| K0445.1362715 | A    | 36   | M27X1,5 | 21 | 8,5 | 13,5 | 30 | 20                        |
| K0445.1514015 | A    | 51   | M40X1,5 | 32 | 10  | 17   | 42 | -                         |
| K0445.222038  | B    | 22   | G3/8    | 12 | 6,5 | 12   | 18 | 7                         |
| K0445.228012  | B    | 28   | G1/2    | 16 | 8   | 12   | 24 | 15                        |
| K0445.235034  | B    | 36   | G3/4    | 21 | 8,5 | 13,5 | 30 | 20                        |
| K0445.243100  | B    | 42   | G1      | 30 | 9   | 16   | 36 | 25                        |
| K0445.251114  | B    | 51   | G1 1/4  | 32 | 10  | 17   | 42 | -                         |
| K0445.258112  | B    | 58   | G1 1/2  | 39 | 10  | 21   | 50 | -                         |
| K0445.274200  | B    | 74   | G2      | 48 | 12  | 20   | 64 | -                         |
| K0445.2221615 | B    | 22   | M16X1,5 | 12 | 6,5 | 12,5 | 18 | 7                         |
| K0445.2251815 | B    | 25,5 | M18X1,5 | 14 | 6   | 12,5 | 21 | 10                        |
| K0445.2282015 | B    | 28   | M20X1,5 | 16 | 7,5 | 12   | 24 | 15                        |
| K0445.2282215 | B    | 28   | M22X1,5 | 16 | 7,5 | 12,5 | 24 | 15                        |
| K0445.2362615 | B    | 36   | M26X1,5 | 21 | 8,5 | 13,5 | 30 | 20                        |
| K0445.2362715 | B    | 36   | M27X1,5 | 21 | 8,5 | 13,5 | 30 | 20                        |
| K0445.2514015 | B    | 51   | M40X1,5 | 32 | 10  | 17   | 42 | -                         |

## Oil level sight glasses

press-in



### Material:

Housing thermoplastic polyamide.  
O-ring NBR, Shore 70.  
Reflector plastic.

### Version:

Housing, transparent, high mechanical stability, non-ageing, temperature resistant up to 90 °C, resistant to solvents but not to alcohol or frost.  
Reflector white.

### Sample order:

K0446.3026

### Note:

For use where there is no internal pressure.

### Drawing reference:

- 1) reflector
- 2) O-ring
- 3) check mark

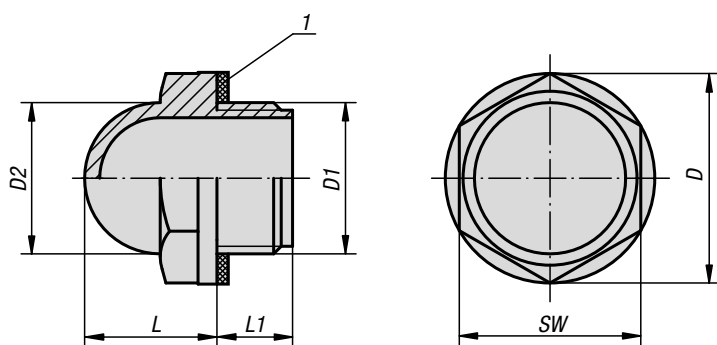
### KIPP Oil level sight glasses, press-in

| Order No.  | D  | D1 | D2 | L | L1 | L2  |
|------------|----|----|----|---|----|-----|
| K0446.2420 | 24 | 20 | 14 | 4 | 7  | 3   |
| K0446.3026 | 30 | 26 | 20 | 4 | 8  | 3,5 |
| K0446.3632 | 36 | 32 | 24 | 4 | 9  | 4   |
| K0446.4238 | 42 | 38 | 30 | 4 | 10 | 4   |
| K0446.4440 | 44 | 40 | 32 | 4 | 10 | 4   |

# K0447

## Oil level sight glasses

domed



### Material:

Housing in thermoplastic polyamide.

### Version:

Housing, transparent, high mechanical stability, non-ageing, temperature resistant with oil up to 100 °C, with water up to 70 °C.  
Resistant to solvents but not alcohol.  
Flat seal, asbestos-free.

### Sample order:

K0447.28012

### On request:

Rubber gasket (NBR).

### Drawing reference:

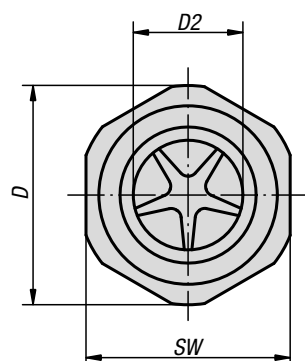
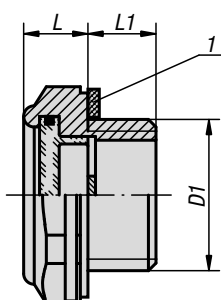
- 1) flat seal

### KIPP Oil level sight glasses, domed

| Order No.   | D  | D1   | D2 | L  | L1   | SW | Tightening torque max. Nm |
|-------------|----|------|----|----|------|----|---------------------------|
| K0447.22038 | 22 | G3/8 | 15 | 14 | 10   | 19 | 8                         |
| K0447.28012 | 28 | G1/2 | 20 | 17 | 10   | 24 | 12                        |
| K0447.35034 | 35 | G3/4 | 25 | 20 | 10   | 30 | 16                        |
| K0447.42100 | 42 | G1   | 31 | 24 | 10,5 | 36 | 20                        |

# Oil level sight glasses

aluminium



## Material:

Housing in aluminium.  
Reflector in aluminium or white plastic.  
Polyamide viewing lens.

## Version:

Transparent viewing lens,  
temperature-resistant with oil up to 100 °C,  
with water up to 70 °C.  
Flat seal, asbestos-free.

## Sample order:

K0448.29012

## Note:

The G3/8" and M18x1.5 versions have a white plastic reflector.

## Drawing reference:

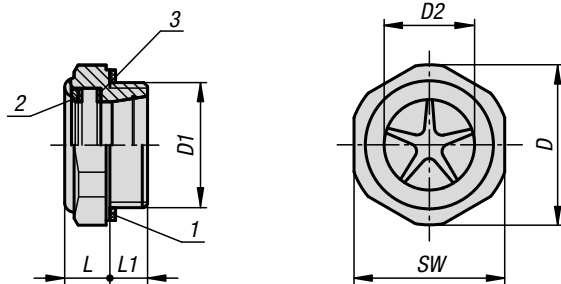
1) flat seal

## KIPP Oil level sight glasses, aluminium

| Order No.    | D    | D1      | D2   | L    | L1 | SW | Tightening torque<br>max. Nm | Pressure load<br>max. bar |
|--------------|------|---------|------|------|----|----|------------------------------|---------------------------|
| K0448.20014  | 20   | G1/4    | 11   | 8    | 8  | 17 | 4                            | 10                        |
| K0448.24038  | 24,1 | G3/8    | 12,7 | 9,5  | 9  | 22 | 10                           | 10                        |
| K0448.29012  | 29,7 | G1/2    | 15   | 10   | 9  | 27 | 15                           | 10                        |
| K0448.36034  | 35,2 | G3/4    | 21,9 | 10   | 11 | 32 | 22                           | 10                        |
| K0448.42100  | 44,1 | G1      | 25,1 | 11   | 11 | 40 | -                            | 10                        |
| K0448.52114  | 55   | G1 1/4  | 34   | 13,5 | 12 | 50 | -                            | 10                        |
| K0448.241815 | 24,5 | M18X1,5 | 13   | 10   | 9  | 22 | 12                           | 10                        |
| K0448.292215 | 29,5 | M22X1,5 | 16   | 10   | 9  | 27 | 15                           | 10                        |

# Oil level sight glasses

aluminium, glass window



## Material:

Housing, reflector in aluminium.  
Natural, clear glass viewing lens.  
Internal seal, Viton®.

## Version:

Viewing lens, temperature-resistant to 150 °C.  
Flat seal, asbestos-free.

## Sample order:

K0246.29012

## Note:

Resists high pressure and heat. Natural glass as the viewing lens ensures optimal light transmission and high surface hardness.

## Drawing reference:

- 1) flat seal
- 2) external seal
- 3) internal seal

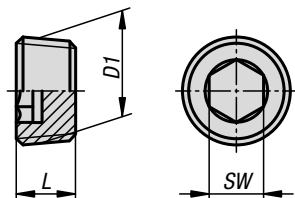


## KIPP Oil level sight glasses, aluminium, glass window

| Order No.    | D    | D1      | D2 | L  | L1 | SW | Tightening torque<br>max. Nm | Pressure load<br>max. bar |
|--------------|------|---------|----|----|----|----|------------------------------|---------------------------|
| K0246.29012  | 29,5 | G1/2    | 12 | 10 | 9  | 27 | 18                           | 20                        |
| K0246.34034  | 34,5 | G3/4    | 16 | 12 | 10 | 32 | 24                           | 20                        |
| K0246.42100  | 42,5 | G1      | 23 | 12 | 10 | 40 | -                            | 20                        |
| K0246.292015 | 29,5 | M20X1,5 | 12 | 10 | 9  | 27 | 18                           | 20                        |
| K0246.423315 | 42,5 | M33X1,5 | 23 | 12 | 10 | 40 | -                            | 20                        |

# Screw plugs with hexagon socket

DIN 906, tapered thread


**Material:**

Steel or stainless steel 1.4571.

**Version:**

Steel electro zinc-plated.

Stainless steel bright.

**Sample order:**

K1129.100810

**Note:**

Screw plugs with hexagon socket and tapered threads are suitable for plugging holes with parallel threads.

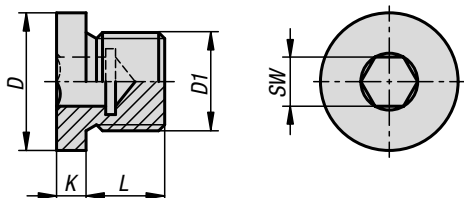
## KIPP Screw plugs with hexagon socket with tapered thread DIN 906

| Order No.<br>steel | Order No.<br>stainless steel | D1      | L  | SW |
|--------------------|------------------------------|---------|----|----|
| K1129.100810       | K1129.200810                 | M8x1    | 8  | 4  |
| K1129.101010       | K1129.201010                 | M10x1   | 8  | 5  |
| K1129.101215       | K1129.201215                 | M12X1,5 | 10 | 6  |
| K1129.101415       | K1129.201415                 | M14X1,5 | 10 | 7  |
| K1129.101615       | K1129.201615                 | M16X1,5 | 10 | 8  |
| K1129.101015       | K1129.201815                 | M18X1,5 | 10 | 8  |
| K1129.102015       | K1129.202015                 | M20X1,5 | 10 | 10 |
| K1129.102215       | K1129.202215                 | M22X1,5 | 10 | 10 |
| K1129.102415       | K1129.202415                 | M24X1,5 | 12 | 12 |
| K1129.102615       | -                            | M26X1,5 | 12 | 12 |
| K1129.103015       | -                            | M30X1,5 | 12 | 17 |
| K1129.103615       | -                            | M36X1,5 | 15 | 19 |
| K1129.104215       | -                            | M42X1,5 | 18 | 22 |
| K1129.104815       | -                            | M48X1,5 | 20 | 24 |
| K1129.10018        | K1129.2001815                | R1/8    | 8  | 5  |
| K1129.10014        | K1129.2001415                | R1/4    | 10 | 7  |
| K1129.10038        | K1129.2003815                | R3/8    | 10 | 8  |
| K1129.10012        | K1129.2001215                | R1/2    | 10 | 10 |
| K1129.10034        | K1129.2003415                | R3/4    | 12 | 12 |
| K1129.10100        | K1129.2010015                | R1      | 12 | 17 |
| K1129.10114        | -                            | R1 1/4  | 18 | 22 |
| K1129.10112        | -                            | R1 1/2  | 20 | 24 |



## Screw plugs with collar and hexagon socket

DIN 908



### Material:

Steel.

### Version:

Electro zinc-plated.

### Sample order:

K1130.100810

### Note:

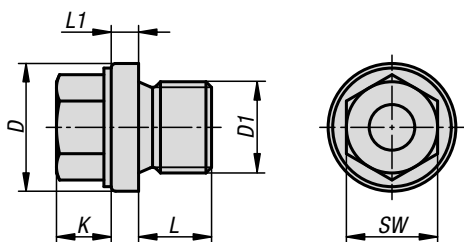
Screw plugs with collar and hexagon socket for plugging holes with parallel threads.

### KIPP Screw plugs with collar and hexagon socket DIN 908

| Order No.    | D  | D1      | K | L  | SW |
|--------------|----|---------|---|----|----|
| K1130.100810 | 12 | M8x1    | 3 | 8  | 4  |
| K1130.101010 | 14 | M10X1   | 3 | 8  | 5  |
| K1130.101215 | 17 | M12X1,5 | 3 | 12 | 6  |
| K1130.101415 | 19 | M14X1,5 | 3 | 12 | 6  |
| K1130.101615 | 21 | M16X1,5 | 3 | 12 | 8  |
| K1130.101815 | 23 | M18X1,5 | 4 | 12 | 8  |
| K1130.102015 | 25 | M20X1,5 | 4 | 14 | 10 |
| K1130.102215 | 27 | M22X1,5 | 4 | 14 | 10 |
| K1130.102415 | 29 | M24X1,5 | 4 | 14 | 12 |
| K1130.102615 | 31 | M26X1,5 | 4 | 16 | 12 |
| K1130.102720 | 32 | M27X2   | 4 | 16 | 12 |
| K1130.103015 | 36 | M30X1,5 | 4 | 16 | 17 |
| K1130.103320 | 39 | M33X2   | 5 | 16 | 17 |
| K1130.103615 | 42 | M36X1,5 | 5 | 16 | 19 |
| K1130.104215 | 49 | M42X1,5 | 5 | 16 | 22 |
| K1130.104220 | 49 | M42X2   | 5 | 16 | 22 |
| K1130.104815 | 55 | M48X1,5 | 5 | 16 | 24 |
| K1130.104820 | 55 | M48X2   | 5 | 16 | 24 |
| K1130.10018  | 14 | G1/8    | 3 | 8  | 5  |
| K1130.10014  | 18 | G1/4    | 3 | 12 | 6  |
| K1130.10038  | 22 | G3/8    | 3 | 12 | 8  |
| K1130.10012  | 26 | G1/2    | 4 | 14 | 10 |
| K1130.10034  | 32 | G3/4    | 4 | 16 | 12 |
| K1130.10100  | 39 | G1      | 5 | 16 | 17 |
| K1130.10114  | 49 | G1 1/4  | 5 | 16 | 22 |
| K1130.10112  | 55 | G1 1/2  | 5 | 16 | 24 |

## Screw plugs hex head with collar

DIN 910



**Material:**  
Steel.

**Version:**  
Electro zinc-plated.

**Sample order:**  
K1131.101010

**Note:**  
Screw plugs with collar and hexagonal head for plugging holes with parallel threads.

### KIPP Hexagon head screw plugs with collar DIN 910

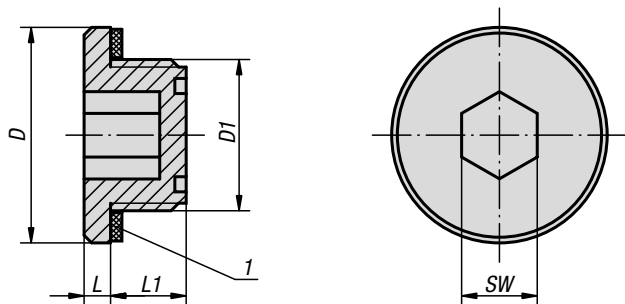
| Order No.    | D  | D1      | K  | L  | L1 | SW |
|--------------|----|---------|----|----|----|----|
| K1131.101010 | 14 | M10X1   | 6  | 8  | 3  | 10 |
| K1131.101215 | 17 | M12X1,5 | 6  | 12 | 3  | 13 |
| K1131.101415 | 19 | M14X1,5 | 6  | 12 | 3  | 13 |
| K1131.101615 | 21 | M16X1,5 | 6  | 12 | 3  | 17 |
| K1131.101815 | 23 | M18X1,5 | 8  | 12 | 4  | 17 |
| K1131.102015 | 25 | M20X1,5 | 8  | 14 | 4  | 19 |
| K1131.102215 | 27 | M22X1,5 | 8  | 14 | 4  | 19 |
| K1131.102415 | 29 | M24X1,5 | 9  | 14 | 4  | 22 |
| K1131.102615 | 31 | M26X1,5 | 10 | 16 | 4  | 24 |
| K1131.102720 | 32 | M27X2   | 10 | 16 | 4  | 24 |
| K1131.103015 | 36 | M30X1,5 | 10 | 16 | 4  | 24 |
| K1131.103320 | 39 | M33X2   | 11 | 16 | 5  | 27 |
| K1131.103615 | 42 | M36X1,5 | 11 | 16 | 5  | 27 |
| K1131.104215 | 49 | M42X1,5 | 12 | 16 | 5  | 30 |
| K1131.104220 | 49 | M42X2   | 12 | 16 | 5  | 30 |
| K1131.104815 | 55 | M48X1,5 | 12 | 16 | 5  | 30 |
| K1131.104820 | 55 | M48X2   | 12 | 16 | 5  | 30 |
| K1131.10018  | 14 | G1/8    | 6  | 8  | 3  | 10 |
| K1131.10014  | 18 | G1/4    | 6  | 12 | 3  | 13 |
| K1131.10038  | 22 | G3/8    | 6  | 12 | 3  | 17 |
| K1131.10012  | 26 | G1/2    | 8  | 14 | 4  | 19 |
| K1131.10034  | 32 | G3/4    | 10 | 16 | 4  | 24 |
| K1131.10100  | 39 | G1      | 11 | 16 | 5  | 27 |
| K1131.10114  | 49 | G1 1/4  | 12 | 16 | 5  | 30 |
| K1131.10112  | 55 | G1 1/2  | 12 | 16 | 5  | 30 |



A large rectangular area filled with a fine grid of light gray lines, intended for taking notes or drawing.



## Screw plugs



### KIPP Screw plugs

| Order No.    | D    | D1      | L   | L1   | SW | Tightening torque max. Nm |
|--------------|------|---------|-----|------|----|---------------------------|
| K0450.18014  | 18,2 | G1/4    | 2,5 | 8    | 6  | 3                         |
| K0450.22038  | 22,5 | G3/8    | 3,5 | 10,5 | 8  | 6                         |
| K0450.28012  | 28,5 | G1/2    | 3,5 | 10,5 | 10 | 8                         |
| K0450.35034  | 35   | G3/4    | 4   | 10,5 | 12 | 10                        |
| K0450.201415 | 20   | M14X1,5 | 2,5 | 8    | 6  | 3                         |
| K0450.221615 | 22,5 | M16X1,5 | 3,5 | 11   | 8  | 6                         |
| K0450.261815 | 26   | M18X1,5 | 3   | 10   | 10 | 7                         |
| K0450.282015 | 28,5 | M20X1,5 | 3   | 11   | 10 | 7                         |
| K0450.282215 | 28,5 | M22X1,5 | 3,5 | 10,5 | 10 | 7                         |
| K0450.352615 | 35   | M26X1,5 | 3   | 12   | 12 | 10                        |



**Material:**  
Thermoplastic polyamide 66, reinforced with 30% fibreglass.

**Version:**  
Black. Flat seal asbestos-free

**Sample order:**  
K0450.22038

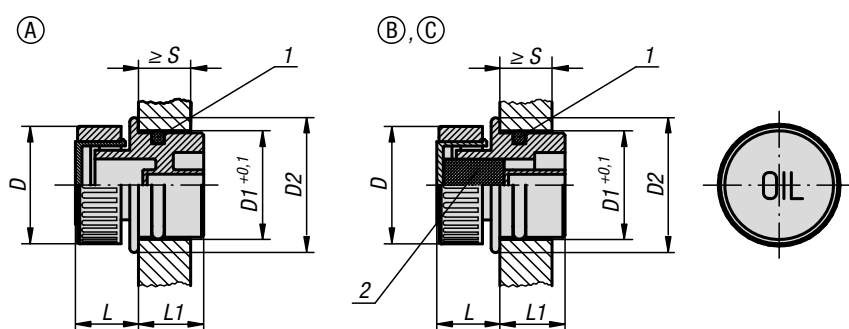
**Temperature range:**  
Temperature resistant with oil up to 100°C.

**On request:**  
O-ring or materials with higher stability.

**Drawing reference:**  
1) flat seal

# K0451

## Press-in plugs



**Material:**  
Housing and cap thermoplastic polyamide 66.  
Air filter polyurethane (PU foam).  
O-ring rubber (NBR).

**Version:**  
Housing black.  
Cap red.  
Filter mesh 50 µm.

**Sample order:**  
K0451.33030

**Temperature range:**  
Temperature resistant with oil up to 100°C.

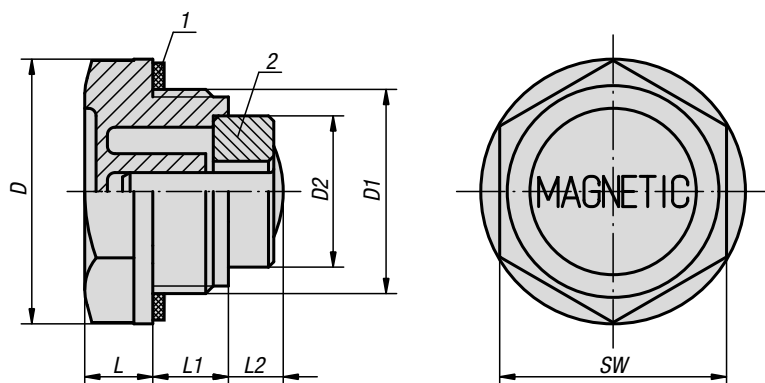
**Drawing reference:**  
Form A: without vent  
Form B: with vent  
Form C: with vent and air filter

1) O-ring  
2) air filter Form C only

### KIPP Press-in plugs

| Order No.<br>Form A | Order No.<br>Form B | Order No.<br>Form C | D  | D1 | D2 | L  | L1   | S<br>min. |
|---------------------|---------------------|---------------------|----|----|----|----|------|-----------|
| K0451.13018         | K0451.23018         | K0451.33018         | 30 | 18 | 23 | 14 | 14   | 8         |
| K0451.13020         | K0451.23020         | K0451.33020         | 30 | 20 | 24 | 14 | 15,5 | 8         |
| K0451.13026         | K0451.23026         | K0451.33026         | 30 | 26 | 30 | 14 | 16,5 | 9,5       |
| K0451.13030         | K0451.23030         | K0451.33030         | 30 | 30 | 34 | 14 | 17   | 9,5       |

## Screw plugs with magnet



### Material:

Thermoplastic polyamide 66. Ferrite permanent magnet.

### Version:

Black. Flat seal asbestos-free

### Sample order:

K0452.22038

### Note:

The magnetic effect of the screw plug attracts iron particles in the oil. Screwing the plug into the drain outlet diminishes possible damage to mechanical components.

### Temperature range:

Temperature resistant with oil up to 100°C.

### Drawing reference:

- 1) flat seal
- 2) magnet

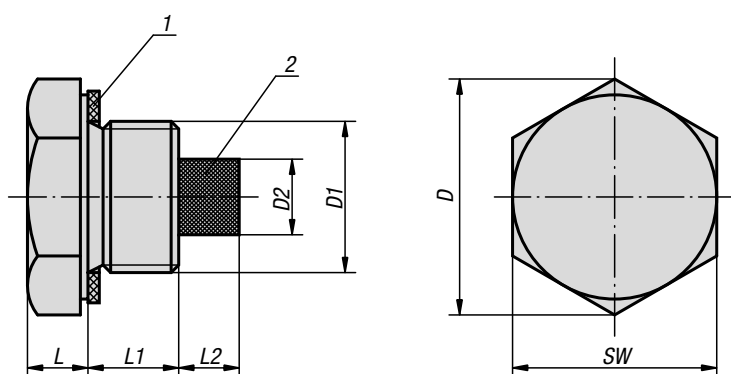
### KIPP Screw plugs with magnet

| Order No.    | D  | D1      | D2   | L    | L1 | L2  | SW |
|--------------|----|---------|------|------|----|-----|----|
| K0452.20014  | 20 | G1/4    | 8    | 7    | 9  | 5   | 17 |
| K0452.22038  | 22 | G3/8    | 13   | 7,5  | 10 | 10  | 18 |
| K0452.27012  | 27 | G1/2    | 13   | 8    | 11 | 9   | 24 |
| K0452.34034  | 34 | G3/4    | 19,6 | 9    | 11 | 6,5 | 30 |
| K0452.42100  | 42 | G1      | 19,6 | 10,5 | 12 | 14  | 35 |
| K0452.201415 | 20 | M14X1,5 | 8    | 7    | 9  | 5   | 17 |

# K0453

## Screw plugs aluminium

with magnet



### Material:

Aluminium. Ferrite permanent magnet.

### Version:

Bright. Flat seal asbestos-free.

### Sample order:

K0453.24038

### Note:

The magnetic effect of the screw plug attracts iron particles in the oil. Screwing the plug into the drain outlet diminishes possible damage to mechanical components.

### Drawing reference:

- 1) flat seal
- 2) magnet

### KIPP Screw plugs aluminium with magnet

| Order No.   | D    | D1   | D2 | L | L1 | L2 | SW |
|-------------|------|------|----|---|----|----|----|
| K0453.21014 | 21   | G1/4 | 5  | 7 | 10 | 6  | 19 |
| K0453.24038 | 24,5 | G3/8 | 8  | 7 | 10 | 7  | 22 |
| K0453.30012 | 30   | G1/2 | 10 | 8 | 10 | 7  | 27 |
| K0453.36034 | 36,5 | G3/4 | 13 | 8 | 10 | 7  | 34 |
| K0453.42100 | 42,5 | G1   | 13 | 8 | 14 | 7  | 40 |

## Screw plugs



### Material:

Thermoplastic polyamide 66

### Version:

Black. Flat seal asbestos-free

### Sample order:

K0454.142100

### Temperature range:

Temperature resistant with oil up to 100°C.

### Drawing reference:

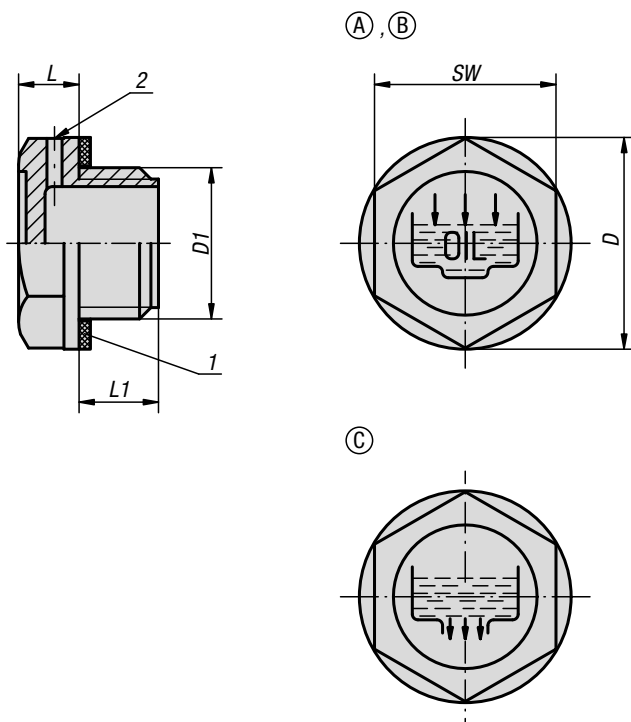
Form A: with fill symbol

Form B: with fill symbol and vent hole

Form C: with drain symbol

1) flat seal

2) vent hole Form B only

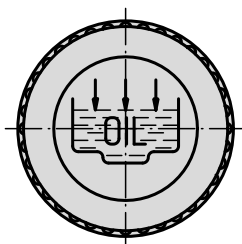
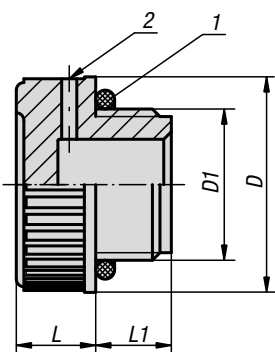


## KIPP Screw plugs

| Order No.<br>Form A | Order No.<br>Form B | Order No.<br>Form C | D    | D1      | L    | L1             | SW | Tightening<br>torque<br>max. Nm |
|---------------------|---------------------|---------------------|------|---------|------|----------------|----|---------------------------------|
| K0454.119014        | K0454.219014        | K0454.319014        | 19,5 | G1/4    | 7    | 9/9/9          | 17 | 5                               |
| K0454.122038        | K0454.222038        | K0454.322038        | 22   | G3/8    | 7,5  | 10/10/10       | 18 | 8                               |
| K0454.128012        | K0454.228012        | K0454.328012        | 28   | G1/2    | 7,5  | 11/11/11       | 24 | 9                               |
| K0454.134034        | K0454.234034        | K0454.334034        | 34   | G3/4    | 9    | 11/11/11       | 30 | 11                              |
| K0454.142100        | K0454.242100        | K0454.342100        | 42   | G1      | 10,5 | 12/12/12       | 35 | -                               |
| K0454.151114        | K0454.251114        | K0454.351114        | 51   | G1 1/4  | 12   | 13,5/13,5/13,5 | 42 | -                               |
| K0454.158112        | K0454.258112        | K0454.358112        | 58   | G1 1/2  | 10   | 14,5/14,5/14,5 | 50 | -                               |
| K0454.174200        | K0454.274200        | K0454.374200        | 74   | G2      | 13,5 | 16/16/16       | 64 | -                               |
| K0454.1191415       | K0454.2191415       | K0454.3191415       | 19,5 | M14X1,5 | 7    | 8/9/9          | 17 | 5                               |
| K0454.1211615       | K0454.2211615       | K0454.3211615       | 21   | M16X1,5 | 7,5  | 10/10/10       | 18 | 6                               |
| K0454.1261815       | K0454.2261815       | K0454.3261815       | 26   | M18X1,5 | 7,5  | 10/10/10       | 21 | 7                               |
| K0454.1282015       | K0454.2282015       | K0454.3282015       | 28   | M20X1,5 | 8    | 10/10/10       | 24 | 8                               |
| K0454.1282215       | K0454.2282215       | K0454.3282215       | 28   | M22X1,5 | 8    | 11/11/11       | 24 | 10                              |
| K0454.1524015       | K0454.2524015       | K0454.3524015       | 52   | M40X1,5 | 10   | 13/13/13       | 42 | -                               |

## Plugs fill

knurled cap



### Material:

Thermoplastic polyamide 66;  
O-ring in rubber (NBR)

### Version:

Black.

### Sample order:

K0455.128012

### Temperature range:

Temperature resistant with oil up to 100°C.

### Drawing reference:

Form A: with fill symbol

Form B: with fill symbol and vent hole

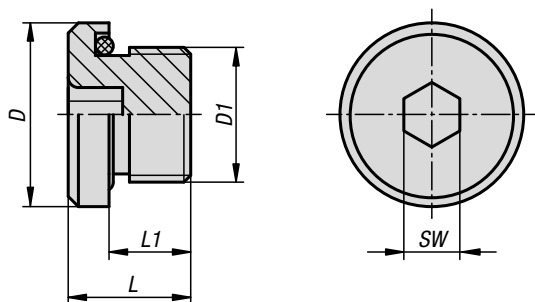
1) O-ring

2) vent hole only Form B

## KIPP Plugs fill, knurled cap

| Order No.     | Form | D    | D1      | L    | L1   |
|---------------|------|------|---------|------|------|
| K0455.120014  | A    | 20   | G1/4    | 9    | 9    |
| K0455.120038  | A    | 20,5 | G3/8    | 9    | 10   |
| K0455.128012  | A    | 28   | G1/2    | 10,5 | 10,5 |
| K0455.131034  | A    | 31   | G3/4    | 12   | 11   |
| K0455.139100  | A    | 39   | G1      | 12   | 12   |
| K0455.149114  | A    | 49   | G1 1/4  | 13   | 13,5 |
| K0455.155112  | A    | 55   | G1 1/2  | 14,7 | 14,5 |
| K0455.168200  | A    | 68,5 | G2      | 15   | 16   |
| K0455.1201415 | A    | 20   | M14X1,5 | 9    | 9    |
| K0455.1201615 | A    | 20   | M16X1,5 | 9    | 10   |
| K0455.1281815 | A    | 28   | M18X1,5 | 10,5 | 10   |
| K0455.1282015 | A    | 28   | M20X1,5 | 10,5 | 10   |
| K0455.1282215 | A    | 28   | M22X1,5 | 10,5 | 10   |
| K0455.220014  | B    | 20   | G1/4    | 9    | 9    |
| K0455.220038  | B    | 20,5 | G3/8    | 9    | 10   |
| K0455.228012  | B    | 28   | G1/2    | 10,5 | 10,5 |
| K0455.231034  | B    | 31   | G3/4    | 12   | 11   |
| K0455.239100  | B    | 39   | G1      | 12   | 12   |
| K0455.249114  | B    | 49   | G1 1/4  | 13   | 13,5 |
| K0455.255112  | B    | 55   | G1 1/2  | 14,7 | 14,5 |
| K0455.268200  | B    | 68,5 | G2      | 15   | 16   |
| K0455.2201415 | B    | 20   | M14X1,5 | 9    | 9    |
| K0455.2201615 | B    | 20   | M16X1,5 | 9    | 10   |
| K0455.2281815 | B    | 28   | M18X1,5 | 10,5 | 10   |
| K0455.2282015 | B    | 28   | M20X1,5 | 10,5 | 10   |
| K0455.2282215 | B    | 28   | M22X1,5 | 10,5 | 10   |

## Screw plugs with hexagon socket



### Material:

Steel 1.0737.  
O-ring NBR, Shore 90.

### Version:

Electro zinc-plated.

### Sample order:

K1102.15018

### Note:

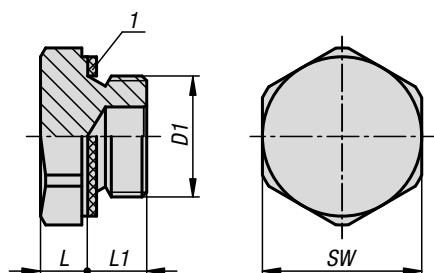
Operating temperature: -20°C / +100°C.  
Operating pressure: max. 70 bar for static application.

## KIPP Screw plugs with hexagon socket

| Order No.    | D  | D1      | L  | L1   | SW |
|--------------|----|---------|----|------|----|
| K1102.15018  | 15 | G1/8    | 13 | 9    | 4  |
| K1102.19014  | 19 | G1/4    | 16 | 11   | 6  |
| K1102.22038  | 22 | G3/8    | 17 | 11   | 6  |
| K1102.27012  | 27 | G1/2    | 20 | 14   | 8  |
| K1102.32034  | 32 | G3/4    | 20 | 14   | 12 |
| K1102.40001  | 40 | G1      | 22 | 16   | 12 |
| K1102.50114  | 50 | G1 1/4  | 25 | 18   | 12 |
| K1102.55112  | 55 | G1 1/2  | 24 | 17   | 24 |
| K1102.141010 | 15 | M10X1   | 12 | 8    | 5  |
| K1102.171215 | 17 | M12X1,5 | 16 | 10   | 6  |
| K1102.191415 | 19 | M14X1,5 | 16 | 10   | 6  |
| K1102.221615 | 22 | M16X1,5 | 16 | 10   | 6  |
| K1102.251815 | 25 | M18X1,5 | 17 | 11   | 8  |
| K1102.272015 | 27 | M20X1,5 | 18 | 12   | 8  |
| K1102.282215 | 28 | M22X1,5 | 18 | 12   | 10 |
| K1102.322615 | 32 | M26X1,5 | 20 | 13,5 | 12 |
| K1102.322702 | 32 | M27X2   | 20 | 13,5 | 12 |
| K1102.403302 | 40 | M33X2   | 21 | 15   | 17 |
| K1102.504202 | 50 | M42X2   | 24 | 17   | 22 |
| K1102.554802 | 55 | M48X2   | 24 | 17   | 24 |



## Screw plugs aluminium



**Material:**  
Aluminium.

**Version:**  
Bright. Flat seal asbestos-free.

**Sample order:**  
K1104.19014

**On request:**  
Cap marked OIL.

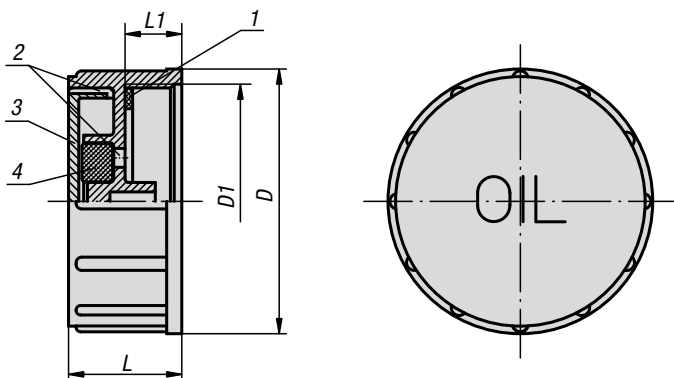
**Drawing reference:**  
1) flat seal



### KIPP Screw plugs aluminium

| Order No.    | D1      | L | L1 | SW |
|--------------|---------|---|----|----|
| K1104.141010 | M10X1   | 5 | 8  | 14 |
| K1104.171215 | M12X1,5 | 6 | 8  | 17 |
| K1104.171415 | M14X1,5 | 6 | 8  | 17 |
| K1104.221615 | M16X1,5 | 7 | 10 | 22 |
| K1104.221815 | M18X1,5 | 7 | 10 | 22 |
| K1104.242015 | M20X1,5 | 7 | 10 | 24 |
| K1104.19014  | G1/4    | 7 | 10 | 19 |
| K1104.22038  | G3/8    | 7 | 10 | 22 |
| K1104.27012  | G1/2    | 8 | 10 | 27 |
| K1104.34034  | G3/4    | 8 | 10 | 34 |
| K1104.40100  | G1      | 8 | 14 | 40 |

## Caps for filler necks



### Material:

Housing and cap thermoplastic polyamide 66.  
Air filter polyurethane (PU foam).  
Flat seal NBR, Shore 70.

### Version:

Black housing.  
Red cap.  
Filter mesh 40 µm.

### Sample order:

K0456.67200

### Temperature range:

Temperature resistant with oil up to 100°C.

### On request:

Cap in yellow for diesel oil.

### Drawing reference:

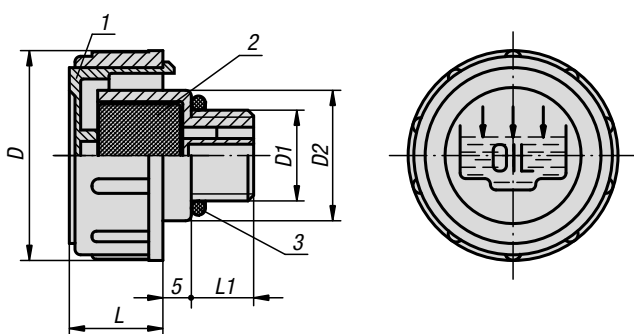
- 1) flat seal
- 2) vent
- 3) cap
- 4) air filter

### KIPP Caps for filler necks

| Order No.    | D    | D1    | L  | L1 |
|--------------|------|-------|----|----|
| K0456.67200  | 67,5 | G2    | 30 | 15 |
| K0456.676020 | 67,5 | M60x2 | 30 | 15 |

# K0457

## Vent screws



### Material:

Housing, cap in thermoplastic polyamide 66.  
Air filter (Form B only) in polyurethane (PU foam).  
O-ring in rubber (NBR).

### Version:

Black housing. Red cap. Filter mesh 60 µm.

### Sample order:

K0457.147034

### Note:

The removable cap allows easy cleaning of the air filter.

Form A: without air filter

Form B: with air filter

### Temperature range:

Temperature resistant with oil up to 100°C.

### Drawing reference:

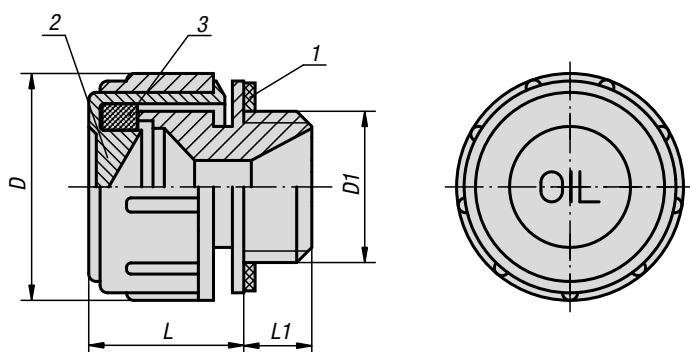
- 1) cap
- 2) air filter Form B only
- 3) O-ring

### KIPP Vent screws

| Order No.<br>Form A | Order No.<br>Form B | D  | D1      | D2 | L    | L1   |
|---------------------|---------------------|----|---------|----|------|------|
| K0457.136038        | K0457.236038        | 36 | G3/8    | 23 | 17   | 11   |
| K0457.141012        | K0457.241012        | 41 | G1/2    | 28 | 18   | 12   |
| K0457.147034        | K0457.247034        | 47 | G3/4    | 33 | 17   | 12   |
| K0457.152100        | K0457.252100        | 52 | G1      | 38 | 20   | 12   |
| K0457.163114        | K0457.263114        | 63 | G1 1/4  | 49 | 23   | 13   |
| K0457.163112        | K0457.263112        | 63 | G1 1/2  | 55 | 23   | 13,5 |
| K0457.1361615       | K0457.2361615       | 36 | M16x1,5 | 23 | 17   | 11   |
| K0457.1411815       | K0457.2411815       | 41 | M18x1,5 | 28 | 17,5 | 12   |
| K0457.1412015       | K0457.2412015       | 41 | M20x1,5 | 28 | 17,5 | 12   |
| K0457.1412215       | K0457.2412215       | 41 | M22x1,5 | 28 | 17,5 | 12   |

# Vent screws

with splash guard



## Material:

Housing and cap thermoplastic polyamide 66.  
Air filter polyurethane (PU foam).  
Flat seal NBR, Shore 70.

## Version:

Black housing.  
Red cap.  
Filter mesh 40 µm.

## Sample order:

K0458.30038

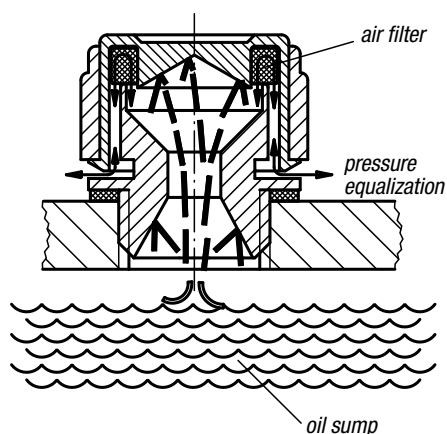
## Temperature range:

Temperature resistant with oil up to 100°C.

## Drawing reference:

- 1) flat seal
- 2) cap
- 3) air filter

## splash guard



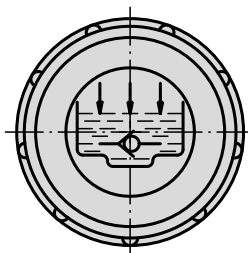
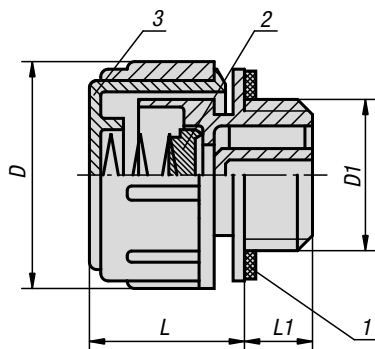
Gears partly immersed in an oil sump create an oil spray that may cause oil to leak from the vent cap. To avoid this the screw has been fitted with a splash guard. Only a small part of the oil spray can pass through the lower tapered bore. The oil that does reach the cap underside is redirected in such a way that it does not notably hinder the venting process.

## KIPP Vent screws with splash guard

| Order No.   | D  | D1   | L  | L1 |
|-------------|----|------|----|----|
| K0458.30014 | 30 | G1/4 | 21 | 10 |
| K0458.30038 | 30 | G3/8 | 21 | 10 |
| K0458.30012 | 30 | G1/2 | 21 | 10 |

## Vent screws

with check valve



### Material:

Housing and cap thermoplastic polyamide 66.  
Spring stainless steel.  
Lift disc and flat seal rubber (NBR).

### Version:

Housing black.  
Cap red.

### Sample order:

K0459.30014

### Note:

Opening pressure 0.20 – 0.25 bar.

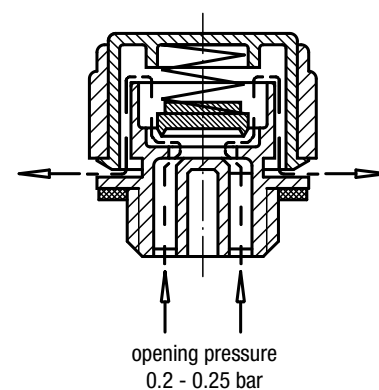
### Temperature range:

Temperature resistant with oil up to 100°C.

### Drawing reference:

- 1) flat seal
- 2) lift disc
- 3) cap

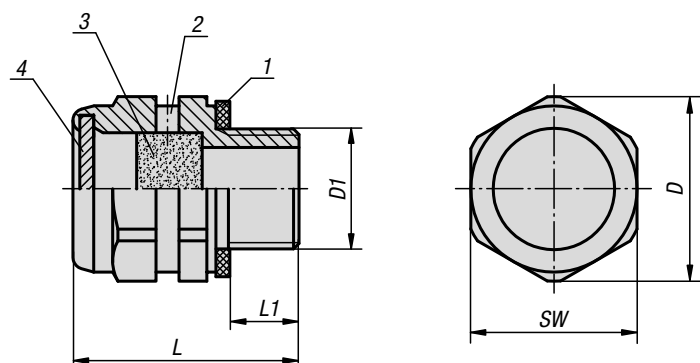
### Operating principle



### KIPP Vent screws with check valve

| Order No.   | D  | D1   | L  | L1 |
|-------------|----|------|----|----|
| K0459.30014 | 30 | G1/4 | 21 | 10 |
| K0459.30038 | 30 | G3/8 | 21 | 10 |
| K0459.30012 | 30 | G1/2 | 21 | 10 |

## Vent screws brass



### Material:

Housing and cap brass.  
Air filter electro zinc-plated steel wire mesh.

### Version:

Air filter mesh 50 - 60 µm.  
Flat seal asbestos-free.

### Sample order:

K0460.20014

### Drawing reference:

- 1) flat seal
- 2) vent hole 2x
- 3) air filter
- 4) cap

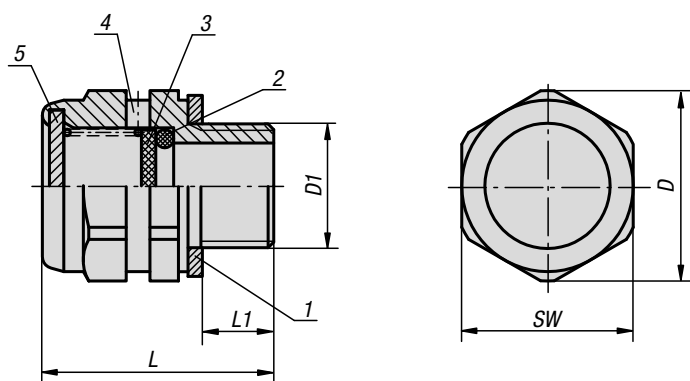
### KIPP Vent screws brass

| Order No.   | D    | D1   | L    | L1  | SW |
|-------------|------|------|------|-----|----|
| K0460.20014 | 20   | G1/4 | 24,5 | 7,5 | 18 |
| K0460.24038 | 24,5 | G3/8 | 24,5 | 8,5 | 22 |
| K0460.30012 | 30   | G1/2 | 24,5 | 8,5 | 27 |

# K0461

## Vent screws brass

with check valve



### Material:

Housing and cap brass.  
Spring stainless steel.  
Lift disc brass.  
O-ring NBR.

### Version:

Flat seal asbestos-free.

### Sample order:

K0461.20014

### Note:

Opening pressure 0.35 bar (±0,05).

### Functional principle:

See K0459 vent screws with check valve.

### Drawing reference:

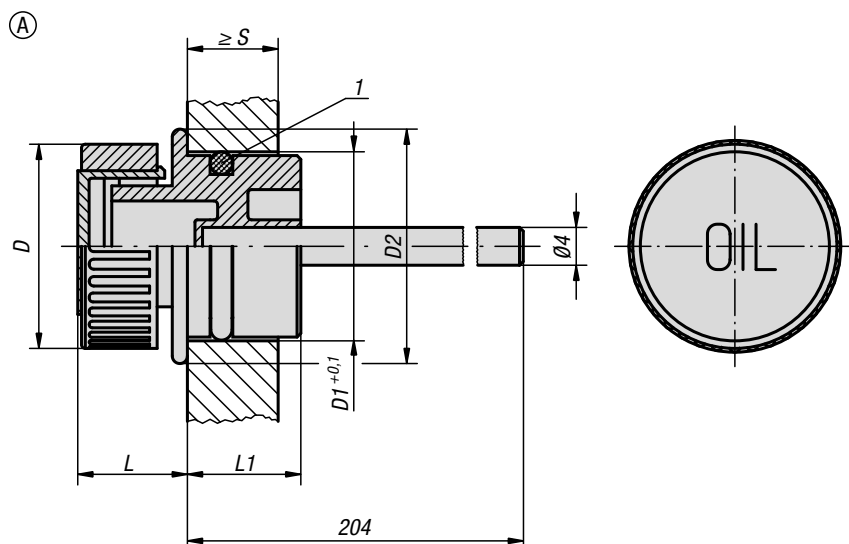
- 1) flat seal
- 2) O-ring
- 3) lift disc
- 4) vent hole 2x
- 5) cap

### KIPP Vent screws brass with check valve

| Order No.   | D    | D1   | L    | L1  | SW |
|-------------|------|------|------|-----|----|
| K0461.20014 | 20   | G1/4 | 24,3 | 7,5 | 18 |
| K0461.24038 | 24,5 | G3/8 | 24,5 | 8,5 | 22 |
| K0461.30012 | 30   | G1/2 | 24,5 | 8,5 | 27 |

## Press-in plugs

with dipstick



### Material:

Housing and cap thermoplastic polyamide 66.  
Air filter polyurethane (PU foam).  
Dipstick zinc.  
O-ring NBR, Shore 70.

### Version:

Housing black.  
Cap red.  
Filter mesh 50 µm.  
Dipstick phosphated.

### Sample order:

K0462.13018

### Temperature range:

Temperature resistant with oil up to 100°C.

### On request:

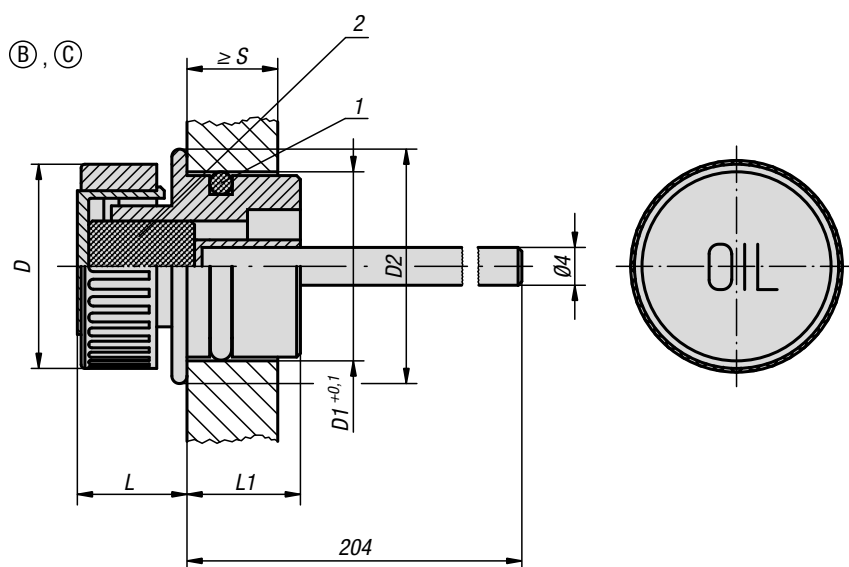
Min-Max markings.

### Drawing reference:

Form A: without vent  
Form B: with vent  
Form C: with vent and air filter

1) O-ring

2) air filter Form C only

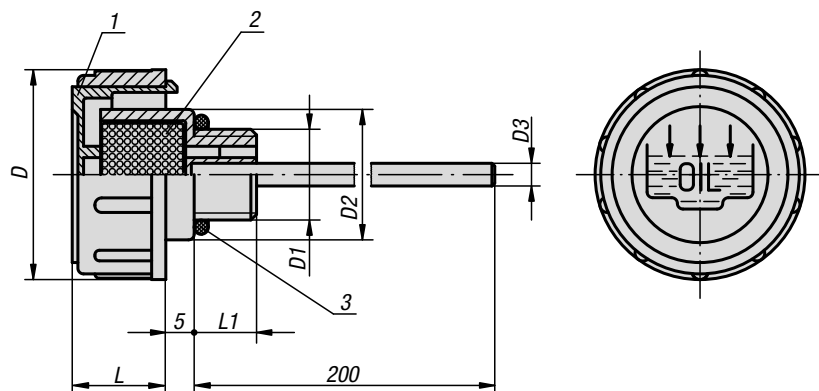


## KIPP Press-in plugs with dipstick

| Order No.<br>Form A | Order No.<br>Form B | Order No.<br>Form C | D  | D1 | D2 | L  | L1 | S<br>min. |
|---------------------|---------------------|---------------------|----|----|----|----|----|-----------|
| K0462.13018         | K0462.23018         | K0462.33018         | 30 | 18 | 23 | 14 | 14 | 8         |

# Vent screws

with dipstick



## Material:

Housing and cap thermoplastic polyamide 66.  
Air filter polyurethane (PU foam).  
Dipstick zinc.  
O-ring NBR, Shore 70.

## Version:

Housing black.  
Cap red.  
Filter mesh 50 µm.  
Dipstick phosphated.

## Sample order:

K0465.141012

## Note:

The removable cap allows easy cleaning of the air filter.

Form A: without air filter

Form B: with air filter

## Temperature range:

Temperature resistant with oil up to 100°C.

## On request:

Min-Max markings.

## Drawing reference:

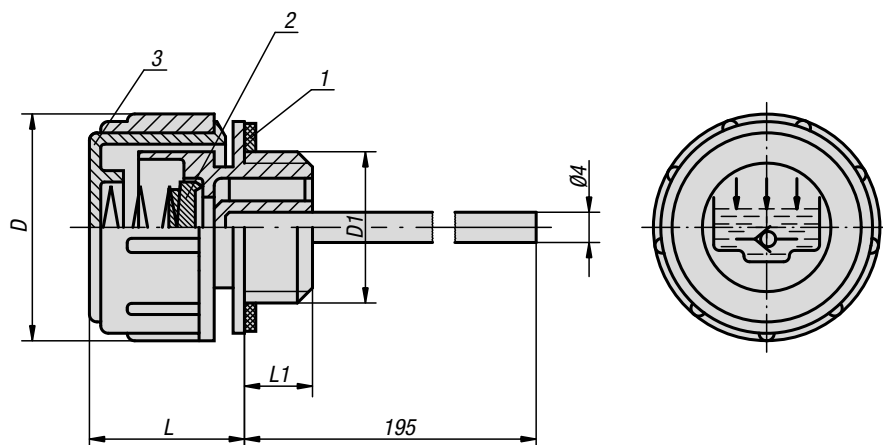
- 1) cap
- 2) air filter Form B only
- 3) O-ring

## KIPP Vent screws with dipstick

| Order No.     | Form | D  | D1      | D2 | D3 | L    | L1   |
|---------------|------|----|---------|----|----|------|------|
| K0465.136038  | A    | 36 | G3/8    | 23 | 4  | 17   | 11   |
| K0465.141012  | A    | 41 | G1/2    | 28 | 4  | 18   | 12   |
| K0465.147034  | A    | 47 | G3/4    | 33 | 5  | 17   | 12   |
| K0465.152100  | A    | 52 | G1      | 38 | 5  | 20   | 12   |
| K0465.163114  | A    | 63 | G1 1/4  | 49 | 5  | 23   | 13   |
| K0465.163112  | A    | 63 | G1 1/2  | 55 | 5  | 23   | 13,5 |
| K0465.1361615 | A    | 36 | M16x1,5 | 23 | 4  | 17   | 11   |
| K0465.1411815 | A    | 41 | M18x1,5 | 28 | 4  | 17,5 | 12   |
| K0465.1412015 | A    | 41 | M20x1,5 | 28 | 4  | 17,5 | 12   |
| K0465.1412215 | A    | 41 | M22x1,5 | 28 | 4  | 17,5 | 12   |
| K0465.236038  | B    | 36 | G3/8    | 23 | 4  | 17   | 11   |
| K0465.241012  | B    | 41 | G1/2    | 28 | 4  | 18   | 12   |
| K0465.247034  | B    | 47 | G3/4    | 33 | 5  | 17   | 12   |
| K0465.252100  | B    | 52 | G1      | 38 | 5  | 20   | 12   |
| K0465.263114  | B    | 63 | G1 1/4  | 49 | 5  | 23   | 13   |
| K0465.263112  | B    | 63 | G1 1/2  | 55 | 5  | 23   | 13,5 |
| K0465.2361615 | B    | 36 | M16x1,5 | 23 | 4  | 17   | 11   |
| K0465.2411815 | B    | 41 | M18x1,5 | 28 | 4  | 17,5 | 12   |
| K0465.2412015 | B    | 41 | M20x1,5 | 28 | 4  | 17,5 | 12   |
| K0465.2412215 | B    | 41 | M22x1,5 | 28 | 4  | 17,5 | 12   |

# Vent screws

with check valve and dipstick



## Material:

Housing and cap thermoplastic polyamide.  
Spring stainless steel.  
Dipstick zinc.  
Lift disc and seal rubber (NBR).

## Version:

Housing black.  
Cap red.  
Dipstick phosphated.

## Sample order:

K0467.30038

## Note:

Opening pressure 0.20 – 0.25 bar.

## Temperature range:

Temperature resistant with oil up to 100°C.

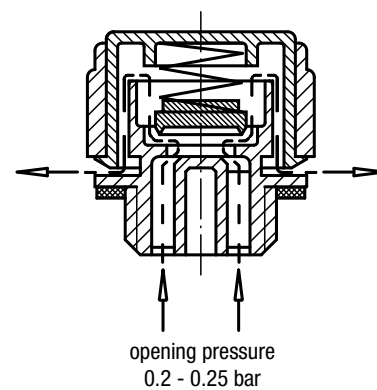
## On request:

Min-Max markings.

## Drawing reference:

- 1) flat seal
- 2) lift disc
- 3) cap

## Operating principle



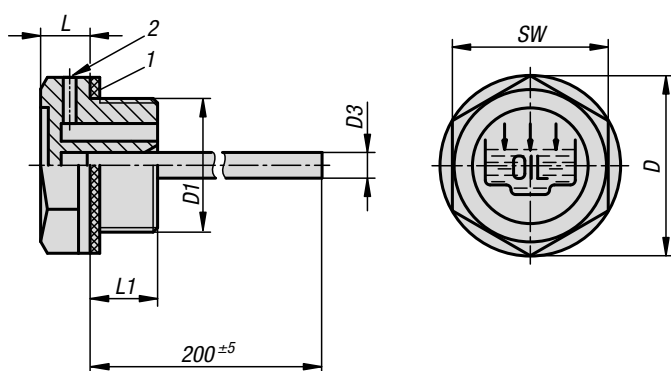
## KIPP Vent screws with check valve and dipstick

| Order No.   | D  | D1   | L  | L1 |
|-------------|----|------|----|----|
| K0467.30038 | 30 | G3/8 | 21 | 10 |
| K0467.30012 | 30 | G1/2 | 21 | 10 |



## Screw plugs

with dipstick



### Material:

Thermoplast, polyamide 66.  
Dipstick steel, zinc phosphated.

### Version:

Flat seal asbestos-free.

### Sample order:

K1101.122038

### Note:

Form B has a vent hole on the side of the hexagon head with a diameter of between 2 and 3.5 mm, depending on the size of the screw plug.

### Temperature range:

Temperature resistant with oil up to 100°C.

### Drawing reference:

- 1) flat seal
- 2) vent hole Form B only

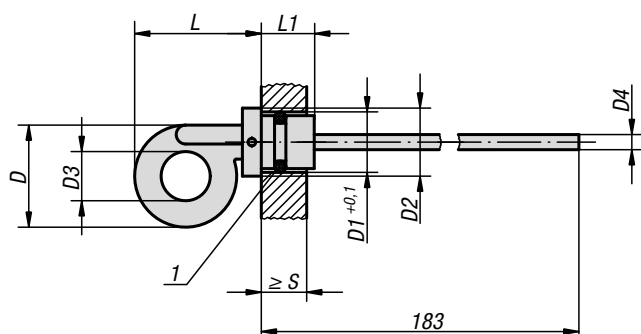
## KIPP Screw plugs with dipstick

| Order No.     | Form | D  | D1      | D3 | L    | L1   | SW |
|---------------|------|----|---------|----|------|------|----|
| K1101.119014  | A    | 19 | G1/4    | 4  | 7    | 9    | 17 |
| K1101.122038  | A    | 22 | G3/8    | 4  | 7,5  | 10   | 18 |
| K1101.128012  | A    | 28 | G1/2    | 4  | 7,5  | 11   | 24 |
| K1101.134034  | A    | 34 | G3/4    | 5  | 9    | 11   | 30 |
| K1101.142100  | A    | 42 | G1      | 5  | 10,5 | 12   | 36 |
| K1101.151114  | A    | 51 | G1 1/4  | 5  | 12   | 13,5 | 42 |
| K1101.1191415 | A    | 19 | M14X1,5 | 4  | 7    | 9    | 17 |
| K1101.1211615 | A    | 21 | M16X1,5 | 4  | 7,5  | 10   | 18 |
| K1101.1261815 | A    | 26 | M18X1,5 | 4  | 7,5  | 10   | 21 |
| K1101.1282015 | A    | 28 | M20X1,5 | 4  | 8    | 10   | 24 |
| K1101.1282215 | A    | 28 | M22X1,5 | 4  | 8    | 11   | 24 |
| K1101.219014  | B    | 19 | G1/4    | 4  | 7    | 9    | 17 |
| K1101.222038  | B    | 22 | G3/8    | 4  | 7,5  | 10   | 18 |
| K1101.228012  | B    | 28 | G1/2    | 4  | 7,5  | 11   | 24 |
| K1101.234034  | B    | 34 | G3/4    | 5  | 9    | 11   | 30 |
| K1101.242100  | B    | 42 | G1      | 5  | 10,5 | 12   | 36 |
| K1101.251114  | B    | 51 | G1 1/4  | 5  | 12   | 13,5 | 42 |
| K1101.2191415 | B    | 19 | M14X1,5 | 4  | 7    | 9    | 17 |
| K1101.2211615 | B    | 21 | M16X1,5 | 4  | 7,5  | 10   | 18 |
| K1101.2261815 | B    | 26 | M18X1,5 | 4  | 7,5  | 10   | 21 |
| K1101.2282015 | B    | 28 | M20X1,5 | 4  | 8    | 10   | 24 |

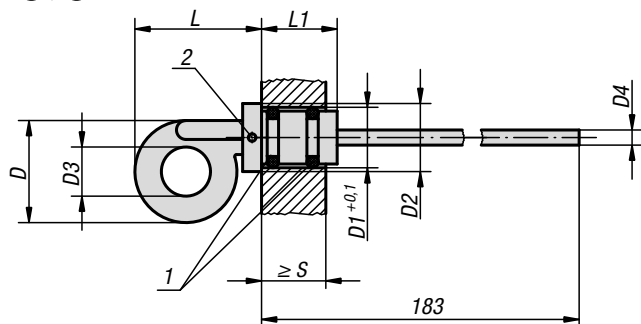
## Dipsticks



Ⓑ



Ⓒ, Ⓓ



### Material:

Grip thermoplastic polyamide.  
Dipstick steel.  
O-ring NBR, Shore 70.

### Version:

Black handle.  
Dipstick, phosphated.

### Sample order:

K0468.23218

### Temperature range:

Temperature resistant with oil up to 100°C.

### Drawing reference:

Form B: with vent hole  
Form C: without vent hole  
Form D: with vent hole

1) O-ring  
2) Form D only

## KIPP Dipsticks

| Order No.   | Form | D  | D1 | D2 | D3 | D4<br>Ø | L    | L1 | S<br>min. |
|-------------|------|----|----|----|----|---------|------|----|-----------|
| K0468.22714 | B    | 27 | 14 | 18 | 13 | 4       | 34   | 13 | 10        |
| K0468.23218 | B    | 32 | 18 | 24 | 14 | 5       | 45   | 17 | 9         |
| K0468.23220 | B    | 32 | 20 | 24 | 14 | 5       | 44,5 | 18 | 10        |
| K0468.32714 | C    | 27 | 14 | 18 | 13 | 4       | 34   | 20 | 17        |
| K0468.33012 | C    | 27 | 12 | 18 | 14 | 4       | 36   | 20 | 16        |
| K0468.33318 | C    | 33 | 18 | 24 | 14 | 5       | 44   | 21 | 17,5      |
| K0468.33520 | C    | 35 | 20 | 24 | 16 | 5       | 46   | 21 | 17,5      |
| K0468.42714 | D    | 27 | 14 | 18 | 13 | 4       | 34   | 20 | 17        |
| K0468.43318 | D    | 33 | 18 | 24 | 14 | 5       | 44   | 21 | 17,5      |

# Filler necks



## Material, version:

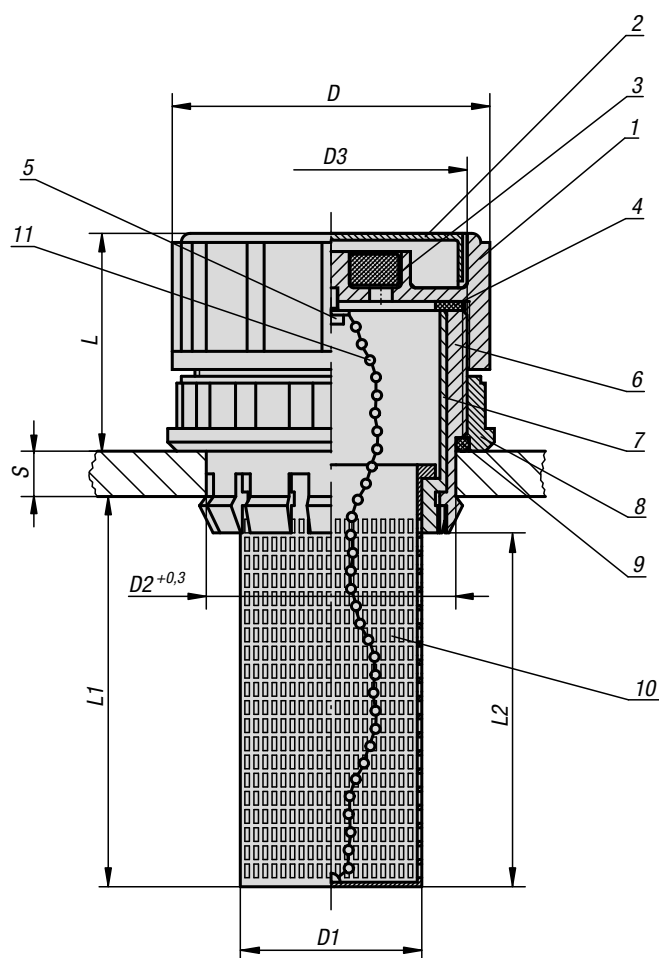
1. Housing black thermoplastic polyamide 66.
2. Sealing cap red thermoplastic polyamide 66.
3. Air filter polyurethane (PU foam), filter grade 40 µm.
4. Flat seal NBR
5. Fastening screw nickel-plated steel.
6. Press-in unit black thermoplastic polyamide 66.
7. Stop sleeve black thermoplastic polyamide 66.
8. Fastening nut black polyamide 66.
9. O-ring NBR, Shore 70.
10. Filler sieve black thermoplastic polypropylene.
11. Chain nickel-plated brass.

## Sample order:

K0470.706020

## Note:

Temperature resistant up to 80 °C.



## KIPP Filler necks

| Order No.    | D  | D1 | D2 | D3    | L    | L1 | L2 | S     |
|--------------|----|----|----|-------|------|----|----|-------|
| K0470.706020 | 70 | 38 | 55 | M60X2 | 46,5 | 88 | 80 | 2 - 8 |

## Filler necks



### Material, version:

1. Sealing cap red Polyamide 66 thermoplastic.

2. Filler sieve black Polypropylene thermoplastic.

3 Flange electro zinc-plated steel.

4. Fastening screws electro zinc-plated steel.

5 Flange seal cork.

6. Chain brass.

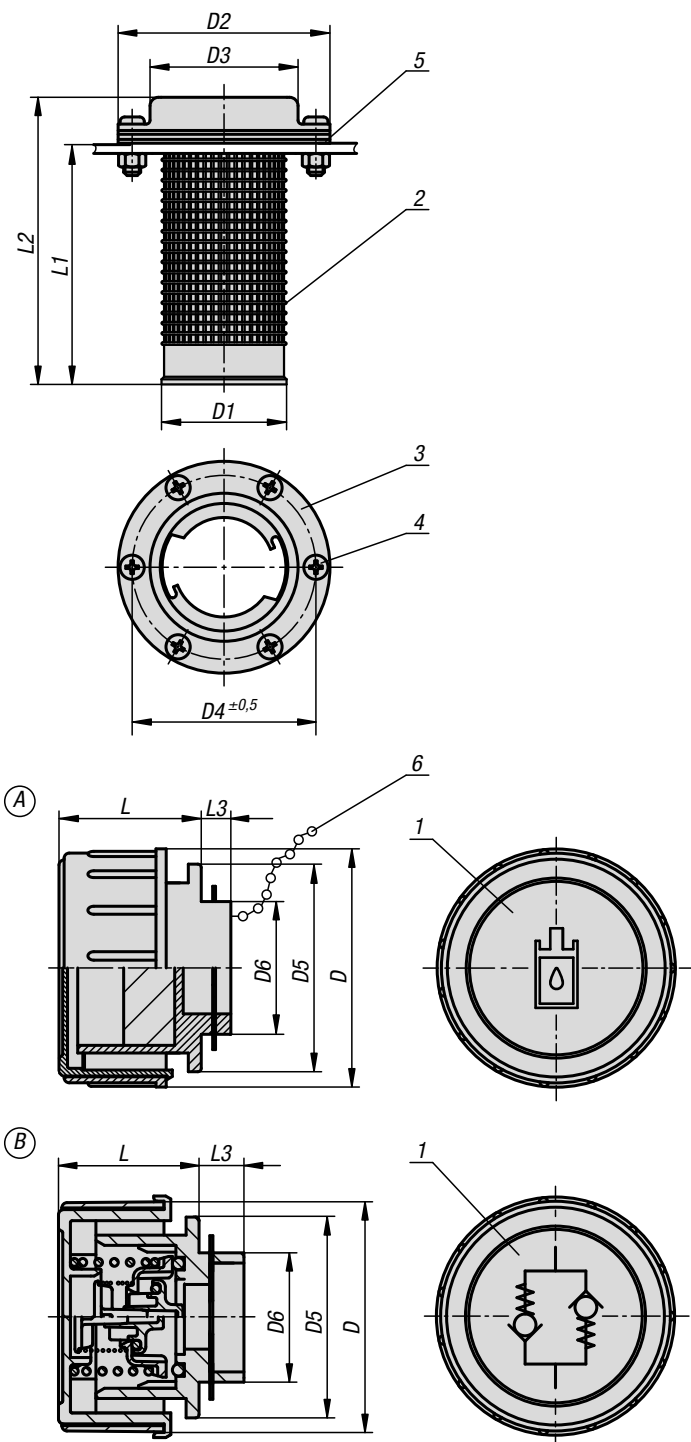
### Sample order:

K1103.170

### Note:

Form A: the max. pressure while venting is 50 mbar (0.73 psi) with a max. air volume of 500 l/min. The air filter prevents dirt entering.

Form B: contains a plastic vent and aeration valve. The opening pressure while venting is 0.35 bar ( $\pm 0.05$  bar). The opening pressure while aerating is 0.05 bar. This form is suitable for applications where the airflow needs to be controlled in both directions.



### KIPP Filler necks

| Order No. | Form | Version 2   | D  | D1 | D2 | D3 | D4 | D5 | D6 | L  | L1 | L2  | L3 |
|-----------|------|-------------|----|----|----|----|----|----|----|----|----|-----|----|
| K1103.170 | A    | with filter | 70 | 46 | 83 | 58 | 72 | 60 | 37 | 41 | 94 | 115 | 14 |
| K1103.270 | B    | vent valve  | 70 | 46 | 83 | 58 | 72 | 60 | 37 | 41 | 94 | 115 | 14 |

# Filler necks



## Material, version:

1. Filler housing chrome steel
2. Air filter polyurethane (PU foam), filter mesh 40 µm.  
Flow rate up to 720 l/min
3. Flat seal cork
4. Mounting flange with fastening screws, bayonet fitting
5. Flat seal cork
6. Chain nickel-plated brass
7. Filler sieve electro zinc-plated steel

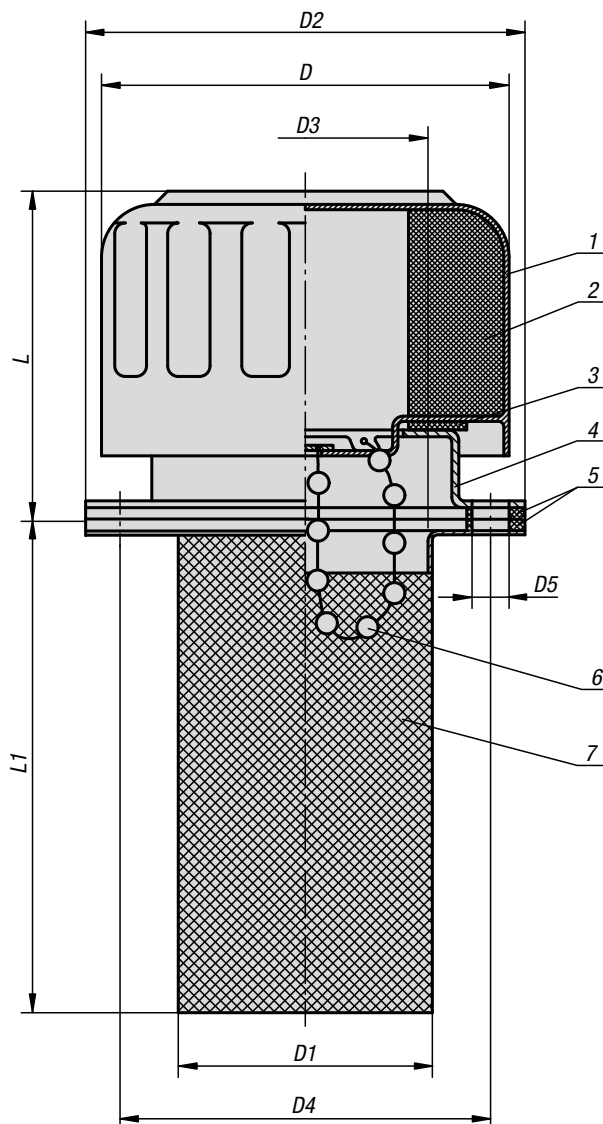
## Sample order:

K0471.45

## Note:

The filler necks are supplied with seals and M5 fastening screws.

Not suitable for water tanks.

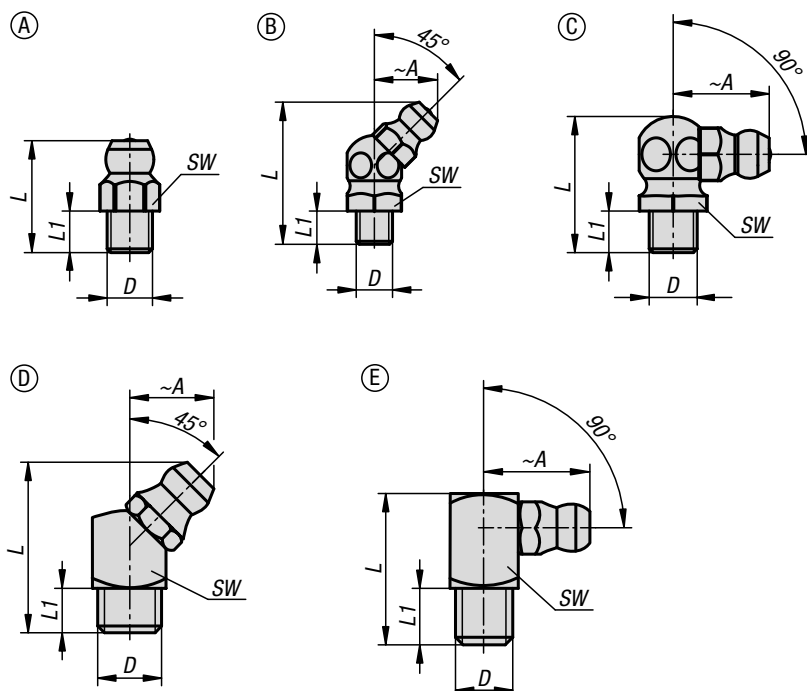


## KIPP Filler necks

| Order No. | Version 1     | D    | D1   | D2 | D3 | D4   | D5     | L  | L1 |
|-----------|---------------|------|------|----|----|------|--------|----|----|
| K0471.45  | without chain | 46,5 | 27,5 | 52 | 25 | 41,3 | 6 (3x) | 43 | 66 |
| K0471.77  | with chain    | 80   | 49   | 83 | 44 | 71,5 | 6 (6x) | 57 | 80 |

## Grease nipples

conical head DIN 71412



### Material:

Steel or 1.4305 stainless steel

### Version:

Steel hardened, min. 550 HV 1, electro zinc-plated.  
Stainless steel bright.

### Sample order:

K1132.1106100

### Note:

The conical head grease nipples have a tapered thread. They are suitable for grease points which must be lubricated often and reliably. Their versatility makes them the most widespread type of grease nipple.

### KIPP Form A, straight

| Order No.<br>steel | Order No.<br>stainless steel | Form | D       | L<br>max. | L1  | SW |
|--------------------|------------------------------|------|---------|-----------|-----|----|
| K1132.1106100      | K1132.2106100                | A    | M6x1    | 15        | 5,5 | 7  |
| K1132.1108100      | K1132.2108100                | A    | M8x1    | 15        | 5,5 | 9  |
| K1132.1108125      | K1132.2108125                | A    | M8x1,25 | 15        | 5,5 | 9  |
| K1132.1110100      | K1132.2110100                | A    | M10x1   | 15        | 5,5 | 11 |
| K1132.1110150      | K1132.2110150                | A    | M10x1,5 | 15        | 5,5 | 11 |
| K1132.1118         | K1132.2118                   | A    | R1/8    | 15        | 5,5 | 11 |
| K1132.1114         | K1132.2114                   | A    | R1/4    | 17,5      | 6,5 | 14 |

### KIPP Form B, 45°, hexagonal

| Order No.<br>steel | Order No.<br>stainless steel | Form | A    | D       | L<br>max. | L1  | SW |
|--------------------|------------------------------|------|------|---------|-----------|-----|----|
| K1132.1206100      | K1132.2206100                | B    | 10,5 | M6x1    | 23,5      | 5,5 | 9  |
| K1132.1208100      | K1132.2208100                | B    | 10,5 | M8x1    | 23,5      | 5,5 | 9  |
| K1132.1208125      | K1132.2208125                | B    | 10,5 | M8x1,25 | 23,5      | 5,5 | 9  |
| K1132.1210100      | K1132.2210100                | B    | 11,5 | M10x1   | 25        | 5,5 | 11 |
| K1132.1210150      | K1132.2210150                | B    | 11,5 | M10x1,5 | 25        | 5,5 | 11 |
| K1132.1218         | K1132.2218                   | B    | 11,5 | R1/8    | 25        | 5,5 | 11 |
| K1132.1214         | K1132.2214                   | B    | 12   | R1/4    | 22,5      | 6,5 | 14 |

## Grease nipples

conical head DIN 71412



## KIPP Form C, 90°, hexagonal

| Order No.<br>steel | Order No.<br>stainless steel | Form | A  | D       | L<br>max. | L1  | SW |
|--------------------|------------------------------|------|----|---------|-----------|-----|----|
| K1132.1306100      | K1132.2306100                | C    | 13 | M6x1    | 18        | 5,5 | 9  |
| K1132.1308100      | K1132.2308100                | C    | 13 | M8x1    | 18        | 5,5 | 9  |
| K1132.1308125      | K1132.2308125                | C    | 13 | M8x1,25 | 18        | 5,5 | 9  |
| K1132.1310100      | K1132.2310100                | C    | 14 | M10x1   | 20        | 5,5 | 11 |
| K1132.1310150      | K1132.2310150                | C    | 14 | M10x1,5 | 20        | 5,5 | 11 |
| K1132.1318         | K1132.2318                   | C    | 14 | R1/8    | 20        | 5,5 | 11 |
| K1132.1314         | K1132.2314                   | C    | 14 | R1/4    | 22        | 6,5 | 14 |

## KIPP Form D, 45°, square

| Order No.     | Form | Main<br>material | A    | D       | L<br>max. | L1  | SW |
|---------------|------|------------------|------|---------|-----------|-----|----|
| K1132.1406100 | D    | steel            | 10,5 | M6x1    | 21        | 5,5 | 9  |
| K1132.1408100 | D    | steel            | 10,5 | M8x1    | 21        | 5,5 | 9  |
| K1132.1408125 | D    | steel            | 10,5 | M8x1,25 | 21        | 5,5 | 9  |
| K1132.1410100 | D    | steel            | 11   | M10x1   | 21        | 5,5 | 11 |
| K1132.1418    | D    | steel            | 11   | R1/8    | 21        | 5,5 | 11 |

## KIPP Form E, 90°, square

| Order No.     | Form | Main<br>material | A  | D       | L<br>max. | L1  | SW |
|---------------|------|------------------|----|---------|-----------|-----|----|
| K1132.1506100 | E    | steel            | 14 | M6x1    | 18        | 5,5 | 9  |
| K1132.1508100 | E    | steel            | 14 | M8x1    | 18        | 5,5 | 9  |
| K1132.1508125 | E    | steel            | 14 | M8x1,25 | 18        | 5,5 | 9  |
| K1132.1510100 | E    | steel            | 15 | M10x1   | 18        | 5,5 | 11 |
| K1132.1518    | E    | steel            | 15 | R1/8    | 18        | 5,5 | 11 |

Grease nipple, steel, assortment box



**Material:**  
Steel.

**Version:**  
Electro zinc-plated.

**Sample order:**  
K1539.140

**Note:**  
Grease nipples in an organised assortment box in different forms and thread sizes.

DIN 71412 grease nipples, conical head, Form A (straight):  
25 x M6x1  
25 x M8x1  
15 x M10x1  
15 x G1/8"

DIN 71412 grease nipples, conical head, Form B (45°):  
10 x M6x1  
10 x M8x1  
5 x M10x1  
5 x G1/8"

DIN 71412 grease nipples, conical head, Form B (90°):  
10 x M6x1  
10 x M8x1  
5 x M10x1  
5 x G1/8"

KIPP Grease nipple assortment box, steel

| Order No. | Content    |
|-----------|------------|
| K1539.140 | 140 pieces |



Grease nipple caps  
for conical head grease nipples



**Material:**  
Polyethylene (PE-LLD).

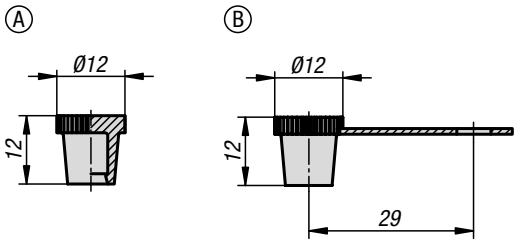
**Version:**  
red, green, yellow or black.

**Sample order:**  
K1133.911

**Note:**  
Suitable for all DIN 71412 conical head grease nipples. They keep dirt out of the head of the nipple. The different colours are for e.g. identifying the lubrication intervals.

Application temperature: -70°C to +85°C.

Form A: without tab  
Form B: with tab

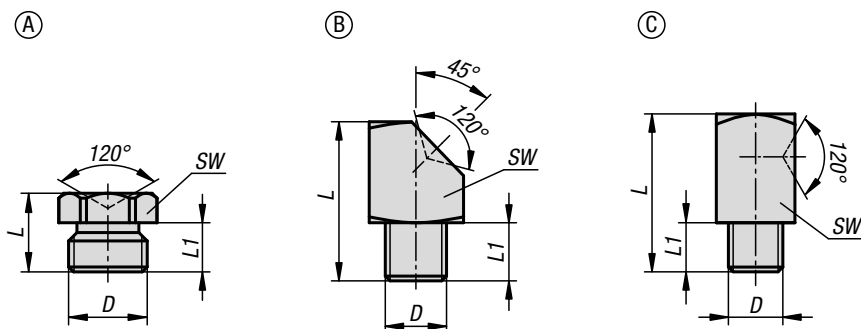


KIPP Grease nipple caps for conical grease nipples

| Order No. | Form | Colour |
|-----------|------|--------|
| K1133.911 | A    | red    |
| K1133.912 | A    | green  |
| K1133.913 | A    | yellow |
| K1133.914 | A    | black  |
| K1133.921 | B    | red    |
| K1133.922 | B    | green  |
| K1133.923 | B    | yellow |
| K1133.924 | B    | black  |

## Grease nipples

flush type DIN 3405



### Material:

Steel or 1.4305 stainless steel

### Version:

Steel electro zinc-plated.  
Stainless steel bright.

### Sample order:

K1134.1106100

### Note:

Flush type grease nipples are particularly suitable for flush or recessed installation.

By using flush type nipples, the required lubrication can also be carried out on points with poor accessibility.

### Drawing reference:

Form A: straight

Form B: 45°

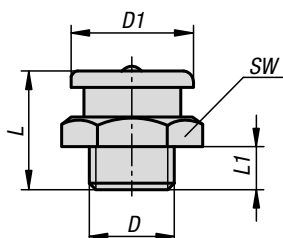
Form C: 90°

## KIPP Grease nipples flush type DIN 3405

| Order No.     | Form | Main material   | Type    | D       | L   | L1  | SW |
|---------------|------|-----------------|---------|---------|-----|-----|----|
| K1134.1106100 | A    | steel           | hexagon | M6x1    | 9   | 6   | 7  |
| K1134.1108100 | A    | steel           | hexagon | M8x1    | 9,5 | 6,5 | 9  |
| K1134.1108125 | A    | steel           | hexagon | M8x1,25 | 9,5 | 6,5 | 9  |
| K1134.1110100 | A    | steel           | hexagon | M10x1   | 9,5 | 6,5 | 11 |
| K1134.1118    | A    | steel           | hexagon | R1/8    | 9,5 | 6,5 | 11 |
| K1134.2106100 | A    | stainless steel | hexagon | M6x1    | 9   | 6   | 7  |
| K1134.2108100 | A    | stainless steel | hexagon | M8x1    | 9,5 | 6,5 | 9  |
| K1134.2108125 | A    | stainless steel | hexagon | M8x1,25 | 9,5 | 6,5 | 9  |
| K1134.2110100 | A    | stainless steel | hexagon | M10x1   | 9,5 | 6,5 | 11 |
| K1134.2118    | A    | stainless steel | hexagon | G1/8    | 9,5 | 6,5 | 11 |
| K1134.1206100 | B    | steel           | square  | M6x1    | 15  | 5,5 | 9  |
| K1134.1208100 | B    | steel           | square  | M8x1    | 15  | 5,5 | 9  |
| K1134.1208125 | B    | steel           | square  | M8x1,25 | 15  | 5,5 | 9  |
| K1134.1210100 | B    | steel           | square  | M10x1   | 15  | 5,5 | 11 |
| K1134.1218    | B    | steel           | square  | R1/8    | 15  | 5,5 | 11 |
| K1134.1306100 | C    | steel           | square  | M6x1    | 18  | 5,5 | 9  |
| K1134.1308100 | C    | steel           | square  | M8x1    | 18  | 5,5 | 9  |
| K1134.1308125 | C    | steel           | square  | M8x1,25 | 18  | 5,5 | 9  |
| K1134.1310100 | C    | steel           | square  | M10x1   | 18  | 5,5 | 11 |
| K1134.1318    | C    | steel           | square  | R1/8    | 18  | 5,5 | 11 |

## Grease nipples

button head DIN 3404

**Material:**

Steel or 1.4305 stainless steel

**Version:**

Steel electro zinc-plated.

Stainless steel bright.

**Sample order:**

K1135.11006100

**Note:**

As the construction of button head grease nipples allow for a high lubrication flow rate, they are especially useful for lubrication points which require a large grease volume. Because of the robust design, button head grease nipples are preferred for machines that are subjected to high external stress.

## KIPP Grease nipples button head DIN 3404

| Order No.      | Main material   | D       | D1 | L    | L1  | SW |
|----------------|-----------------|---------|----|------|-----|----|
| K1135.11006100 | steel           | M6x1    | 10 | 13,5 | 5,5 | 11 |
| K1135.11008100 | steel           | M8x1    | 10 | 13,5 | 5,5 | 11 |
| K1135.11010100 | steel           | M10x1   | 10 | 13,5 | 5,5 | 11 |
| K1135.11018    | steel           | G1/8    | 10 | 13,5 | 5,5 | 11 |
| K1135.11606100 | steel           | M6x1    | 16 | 17   | 6   | 17 |
| K1135.11608100 | steel           | M8x1    | 16 | 17   | 6   | 17 |
| K1135.11608125 | steel           | M8x1,25 | 16 | 17   | 6   | 17 |
| K1135.11610100 | steel           | M10x1   | 16 | 17   | 6   | 17 |
| K1135.11610150 | steel           | M10x1,5 | 16 | 17   | 6   | 17 |
| K1135.11612150 | steel           | M12x1,5 | 16 | 17   | 6   | 17 |
| K1135.11616150 | steel           | M16x1,5 | 16 | 18   | 7   | 17 |
| K1135.11618    | steel           | G1/8    | 16 | 17   | 6   | 17 |
| K1135.11614    | steel           | G1/4    | 16 | 17   | 6   | 17 |
| K1135.21606100 | stainless steel | M6x1    | 16 | 17   | 6   | 17 |
| K1135.21608100 | stainless steel | M8x1    | 16 | 17   | 6   | 17 |
| K1135.21608125 | stainless steel | M8x1,25 | 16 | 17   | 6   | 17 |
| K1135.21610100 | stainless steel | M10x1   | 16 | 17   | 6   | 17 |
| K1135.21610150 | stainless steel | M10x1,5 | 16 | 17   | 6   | 17 |
| K1135.21612150 | stainless steel | M12x1,5 | 16 | 17   | 6   | 17 |
| K1135.21618    | stainless steel | G1/8    | 16 | 17   | 6   | 17 |
| K1135.21614    | stainless steel | G1/4    | 16 | 17   | 6   | 17 |
| K1135.12216150 | steel           | M16x1,5 | 22 | 21,5 | 8   | 22 |
| K1135.12214    | steel           | G1/4    | 22 | 21,5 | 8   | 22 |
| K1135.12238    | steel           | G3/8    | 22 | 21,5 | 8   | 22 |
| K1135.22216150 | stainless steel | M16x1,5 | 22 | 21,5 | 8   | 22 |
| K1135.22214    | stainless steel | G1/4    | 22 | 21,5 | 8   | 22 |
| K1135.22238    | stainless steel | G3/8    | 22 | 21,5 | 8   | 22 |

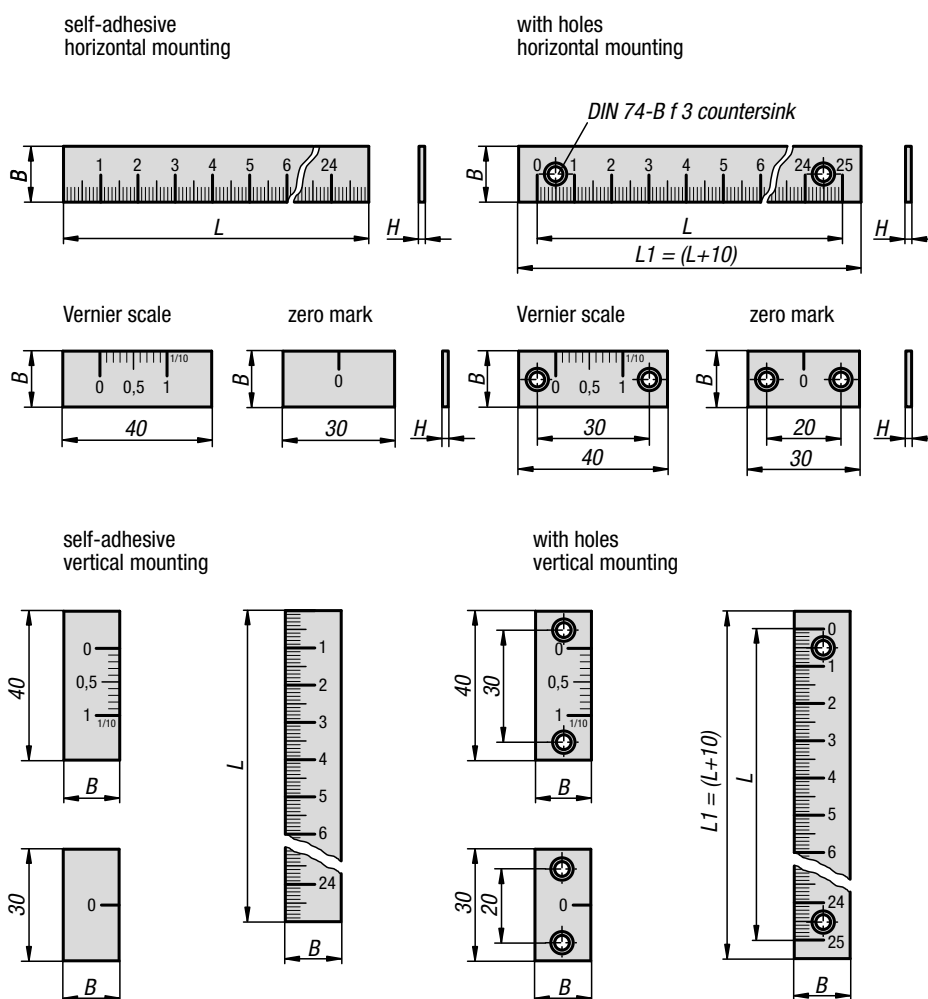


## Scales, scale rings, level vials



# Linear scales

self adhesive or with screw holes, aluminium



**Material:**  
Aluminium.

**Version:**  
Black anodised

**Sample order:**  
K0757.000010X0250 (include length L)

**Note:**  
Rigid design aluminium linear scales with self-adhesive back or with screw holes.  
Cross section 15 x 2 mm.

Black anodised surface and high contrast graduations for legibility without shading. The graduations are deep lasered.

**On request:**  
– Zero mark lower right or centre  
– Graduations upper right or both sides  
– Other lengths

| Length L | No. of holes |
|----------|--------------|
| 250      | 2            |
| 500      | 3            |
| 750      | 4            |
| 1000     | 5            |

## KIPP Linear scales, self adhesive or with screw holes, aluminium

| Order No.<br>self adhesive | Order No.<br>fastening holes | Product type | Version 1  | Zero point | Division | Graduations | B  | H | L                | L1  |
|----------------------------|------------------------------|--------------|------------|------------|----------|-------------|----|---|------------------|-----|
| K0757.000010X              | -                            | scale        | horizontal | left       | 1 mm     | bottom      | 15 | 2 | 250/500/750/1000 | 250 |
| K0757.010010X              | -                            | scale        | vertical   | top        | 1 mm     | left        | 15 | 2 | 250/500/750/1000 | 250 |
| -                          | K0757.100010X                | scale        | horizontal | left       | 1 mm     | bottom      | 15 | 2 | 250/500/750/1000 | 260 |
| -                          | K0757.110010X                | scale        | vertical   | top        | 1 mm     | left        | 15 | 2 | 250/500/750/1000 | 260 |

## KIPP Vernier scale and zero reference, self adhesive or with holes, aluminium

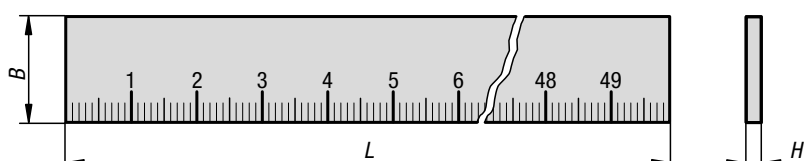
| Order No.<br>self adhesive | Order No.<br>fastening holes | Product type        | Version 1  | Zero point | Graduations | B  | H |
|----------------------------|------------------------------|---------------------|------------|------------|-------------|----|---|
| K0757.0001                 | K0757.1001                   | vernier scale       | horizontal | left       | top         | 15 | 2 |
| K0757.0101                 | K0757.1101                   | vernier scale       | vertical   | top        | right       | 15 | 2 |
| K0757.00                   | K0757.10                     | zero reference mark | horizontal | -          | -           | 15 | 2 |
| K0757.01                   | K0757.11                     | zero reference mark | vertical   | -          | -           | 15 | 2 |

# Linear scales

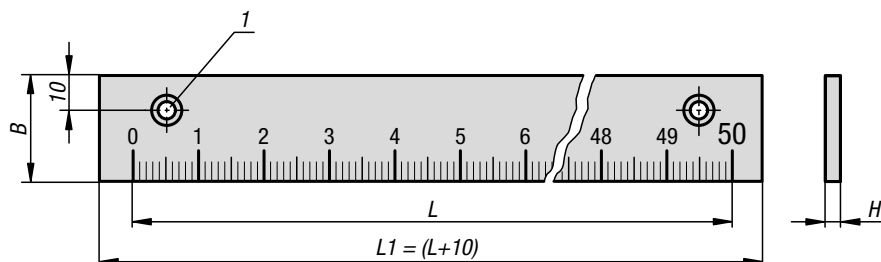
self-adhesive or with screw holes, aluminium



self-adhesive



with holes



| Length<br>L | No. of<br>holes |
|-------------|-----------------|
| 500         | 2               |
| 1000        | 3               |

## Material:

Aluminium.

## Version:

Scale surface ground and black anodised

## Sample order:

K0758.000010X0500 (include length L)

## Note:

Rigid, heavy-duty design aluminium linear scales.  
Cross section 30 x 6 mm.

Black anodised surface and high contrast graduations  
for legibility without shading.  
The graduations are deep lasered.

## On request:

- Zero mark right or centre
- Graduations top or both sides
- Other lengths

## Drawing reference:

1) counterbore to DIN 74-B f 5

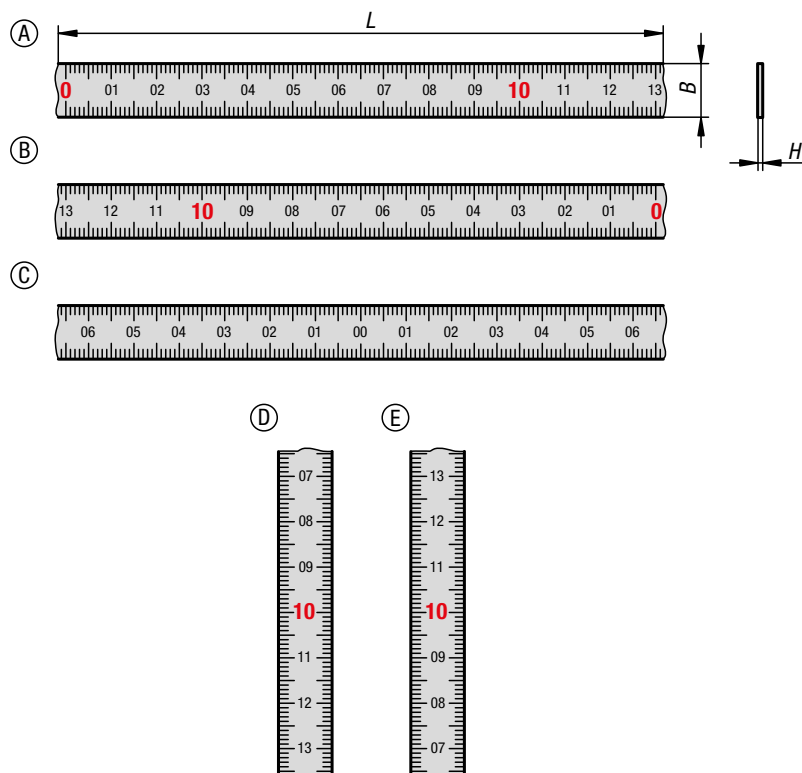
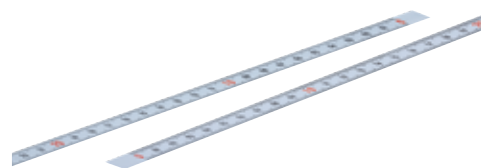


## KIPP Linear scales self-adhesive or with screw holes, aluminium

| Order No.<br>self adhesive | Order No.<br>fastening holes | Version 1  | Zero point | Division | Graduations | B  | H | L        | L1  |
|----------------------------|------------------------------|------------|------------|----------|-------------|----|---|----------|-----|
| K0758.000010X              | -                            | horizontal | left       | 1 mm     | bottom      | 30 | 6 | 500/1000 | 500 |
| -                          | K0758.100010X                | horizontal | left       | 1 mm     | bottom      | 30 | 6 | 500/1000 | 510 |

# Scale tape, steel

self-adhesive



## Material:

Steel.

## Version:

Painted white.

## Sample order:

K1301.00021010X0300 (include length L)

## Note:

Scale tapes with mm graduations on top and bottom edge in black and consecutive centimetre numbering. Decimal numbers in red (under 1 m lengths and with centre zero black only).

The scale tapes are self-adhesive with a peel-away foil film on the back. The film must be removed before use.

## Application:

The scale tapes can be used where a precise measurement is required. They are used on machines, work tables and workbenches.



## KIPP Scale tapes, steel, self-adhesive

| Order No.       | Kind of fastening | Product type | Version 1  | Form | Zero point | Division | Graduations | B  | H   | L                                |
|-----------------|-------------------|--------------|------------|------|------------|----------|-------------|----|-----|----------------------------------|
| K1301.00021010X | self adhesive     | scale tape   | horizontal | A    | left       | 1 mm     | both sides  | 10 | 0,5 | 300/500/1000/2000/3000/5000/6000 |
| K1301.00021013X | self adhesive     | scale tape   | horizontal | A    | left       | 1 mm     | both sides  | 13 | 0,5 | 300/500/1000/2000/3000/5000/6000 |
| K1301.00221010X | self adhesive     | scale tape   | horizontal | B    | right      | 1 mm     | both sides  | 10 | 0,5 | 300/500/1000/2000/3000/5000/6000 |
| K1301.00221013X | self adhesive     | scale tape   | horizontal | B    | right      | 1 mm     | both sides  | 13 | 0,5 | 300/500/1000/2000/3000/5000/6000 |
| K1301.00121013X | self adhesive     | scale tape   | horizontal | C    | centre     | 1 mm     | both sides  | 13 | 0,5 | 800/2000/2500/8000               |
| K1301.01021013X | self adhesive     | scale tape   | vertical   | D    | top        | 1 mm     | both sides  | 13 | 0,5 | 1000/2000/3000/5000              |
| K1301.01221013X | self adhesive     | scale tape   | vertical   | E    | bottom     | 1 mm     | both sides  | 13 | 0,5 | 1000/2000/3000/5000              |

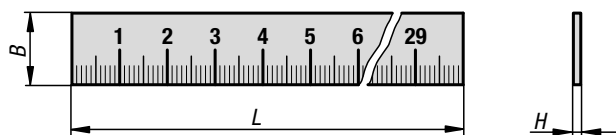


# Linear scales

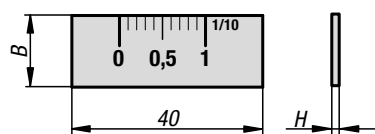
self-adhesive, stainless steel



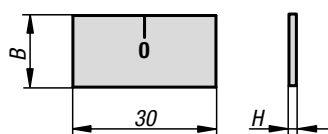
horizontal mounting



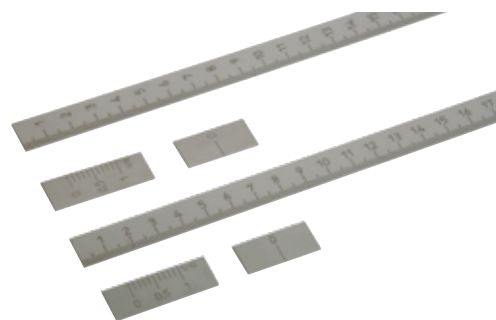
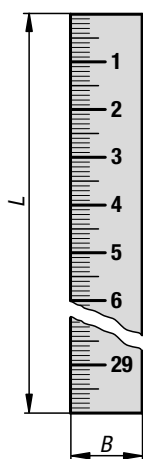
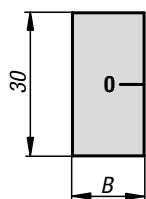
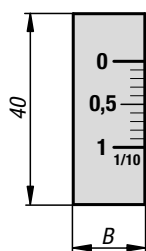
Vernier scale



zero mark



vertical mounting



## Material:

Stainless steel 1.4310.

## Version:

Bright.

## Sample order:

K0759.000010X0300 (include length L)

## Note:

Rigid design stainless steel linear scales with self-adhesive back.  
Cross section 15 x 1 mm.

Matt surface and black high contrast graduations. The graduations are deep lasered.

## On request:

- Zero mark lower right or centre
- Graduations upper right or both sides
- Other lengths

## KIPP Linear scales self-adhesive, stainless steel

| Order No.<br>self adhesive | Product type | Version 1  | Zero point | Division | Graduations | B  | H | L                |
|----------------------------|--------------|------------|------------|----------|-------------|----|---|------------------|
| K0759.000010X              | scale        | horizontal | left       | 1 mm     | bottom      | 15 | 1 | 300/500/700/1000 |
| K0759.010010X              | scale        | vertical   | top        | 1 mm     | left        | 15 | 1 | 300/500/700/1000 |

## KIPP Vernier scale and zero reference, self-adhesive, stainless steel

| Order No.  | Product type        | Version 1  | Zero point | Graduations | B  | H |
|------------|---------------------|------------|------------|-------------|----|---|
| K0759.0001 | vernier scale       | horizontal | left       | top         | 15 | 1 |
| K0759.0101 | vernier scale       | vertical   | top        | right       | 15 | 1 |
| K0759.00   | zero reference mark | horizontal | -          | -           | 15 | 1 |
| K0759.01   | zero reference mark | vertical   | -          | -           | 15 | 1 |

## Bullseye levels

in frame, to screw on



### Material:

Frame brass.  
Bullseye level body polyamide.

### Version:

Nickel-plated and high-gloss polished.

### Sample order:

K1154.1141030

### Note:

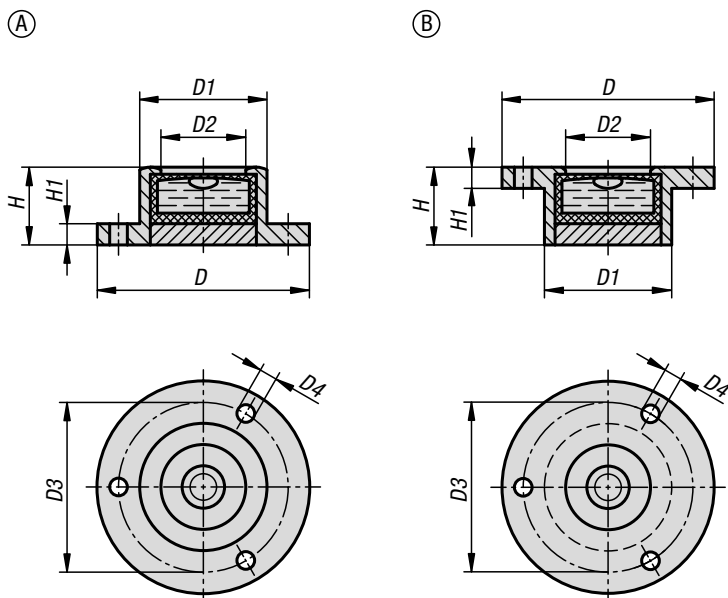
Bubble levels are used as a type of zero indicator instrument for checking horizontal inclination in e.g. spirit levels, inclinometers, metrology instruments and machine constructions.

These bullseye levels can either be screwed down using the three holes (Form A) or recessed (Form B).

- Form A: calibrated to the ground bottom face
- Form B: calibrated to the underside of the flange
- Sensitivity in angular minutes for 2 mm bubble travel
- Clear filling
- Black contrast ring
- White level base

### Temperature range:

-35 °C up to +55 °C.



## KIPP Bullseye levels in a frame to screw down

| Order No.     | Form | Version 1            | D  | D1 | D2 | D3   | D4  | H  | H1  | Sensitivity |
|---------------|------|----------------------|----|----|----|------|-----|----|-----|-------------|
| K1154.1141030 | A    | with mounting flange | 20 | 14 | 10 | 17   | 1,6 | 10 | 1,8 | 30'         |
| K1154.1171030 | A    | with mounting flange | 25 | 17 | 12 | 21   | 2   | 10 | 2   | 30'         |
| K1154.1181130 | A    | with mounting flange | 30 | 18 | 12 | 24   | 2,5 | 11 | 3   | 30'         |
| K1154.1281430 | A    | with mounting flange | 40 | 28 | 20 | 34,5 | 2,5 | 14 | 4   | 30'         |
| K1154.1341530 | A    | with mounting flange | 50 | 34 | 25 | 43   | 3   | 15 | 5   | 30'         |
| K1154.2141030 | B    | inlet flange         | 20 | 14 | 10 | 17   | 1,6 | 10 | 1,8 | 30'         |
| K1154.2171030 | B    | inlet flange         | 25 | 17 | 12 | 21   | 2   | 10 | 2   | 30'         |
| K1154.2181130 | B    | inlet flange         | 30 | 18 | 12 | 24   | 2,5 | 11 | 3   | 30'         |
| K1154.2281430 | B    | inlet flange         | 40 | 28 | 20 | 34,5 | 2,5 | 14 | 4   | 30'         |
| K1154.2341530 | B    | inlet flange         | 50 | 34 | 25 | 43   | 3   | 15 | 5   | 30'         |

# Bullseye levels

in plastic frame


**Material:**

Frame PMMA.

Bullseye level body acrylic glass.

**Version:**

Black.

**Sample order:**

K1153.171053

**Note:**

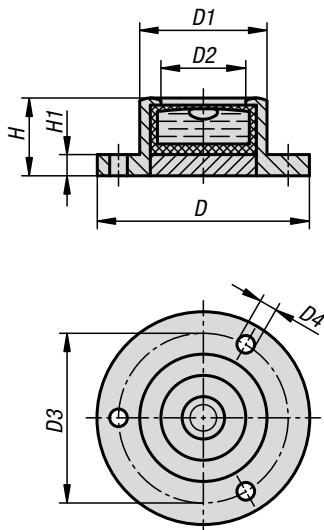
Bubble levels are used as a type of zero indicator instrument for checking horizontal inclination in e.g. spirit levels, inclinometers, metrology instruments and machine constructions.

These bullseye levels can be mounted using the three fastening holes.

- Calibrated to the ground bottom face
- Sensitivity in angular minutes for 2 mm bubble travel
- Clear filling
- Black contrast ring
- White level base

**Temperature range:**

-35 °C up to +55 °C.



## KIPP Bullseye levels in a plastic frame

| Order No.    | D  | D1 | D2   | D3   | D4  | H  | H1 | Sensitivity |
|--------------|----|----|------|------|-----|----|----|-------------|
| K1153.171053 | 26 | 17 | 11   | 21,5 | 2,3 | 10 | 3  | 53'         |
| K1153.201140 | 30 | 20 | 14   | 25   | 2,3 | 11 | 3  | 40'         |
| K1153.241153 | 36 | 24 | 18,5 | 29   | 3,2 | 11 | 3  | 53'         |

# Bullseye levels

with bead-edged frame


**Material:**

Frame brass.

Bullseye level body polyamide.

**Version:**

Nickel-plated and high-gloss polished.

**Sample order:**

K1152.181030

**Note:**

Bubble levels are used as a type of zero indicator instrument for checking horizontal inclination in e.g. spirit levels, inclinometers, metrology instruments and machine constructions.

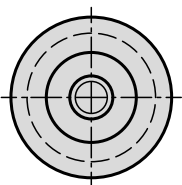
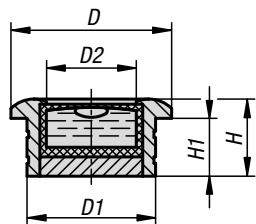
- Sensitivity in angular minutes for 2 mm bubble travel
- The bullseye level is calibrated to underside of the flange
- Bead edge with serrations for recessing
- Clear filling
- Black contrast ring
- White level base

**Temperature range:**

-35 °C up to +55 °C.

**Assembly:**

- Measure the level body
- Assemble by pressing in a hole that is 0.02 mm – 0.03 mm smaller than the Ø of the level body
- A chamfer on the hole will ease pressing in


**KIPP Bullseye levels with bead-edge frame**

| Order No.    | D  | D1 | D2 | H  | H1 | Sensitivity |
|--------------|----|----|----|----|----|-------------|
| K1152.181030 | 20 | 18 | 12 | 10 | 8  | 30'         |
| K1152.201230 | 25 | 20 | 14 | 12 | 9  | 30'         |
| K1152.281330 | 30 | 28 | 20 | 13 | 10 | 30'         |

# Bullseye levels

in round frame



## Material:

Frame brass.

Bullseye level body polyamide.

## Version:

Nickel-plated and high-gloss polished.

## Sample order:

K1155.1140930

## Note:

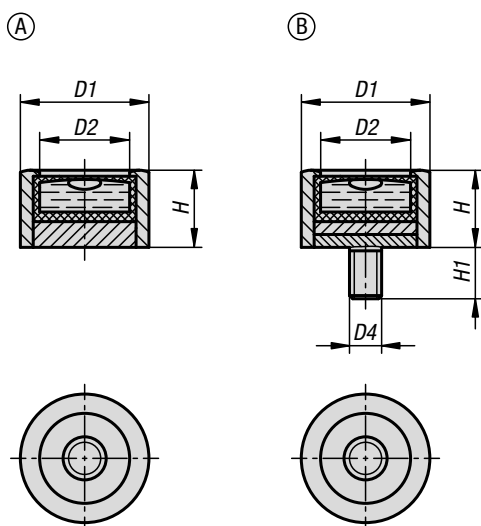
Bubble levels are used as a type of zero indicator instrument for checking horizontal inclination in e.g. spirit levels, inclinometers, metrology instruments and machine constructions.

Form B can be fastened using a grub screw.

- Sensitivity in angular minutes for 2 mm bubble travel
- The bullseye level is calibrated to the seating face of frame
- Various threads are available
- Clear filling
- Black contrast ring
- White level base

## Temperature range:

-35 °C up to +55 °C.

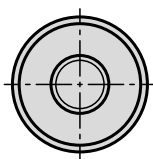
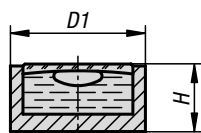


## KIPP Bullseye levels in a round frame

| Order No.     | Form | D1 | D2 | D4 | H   | H1 | Sensitivity |
|---------------|------|----|----|----|-----|----|-------------|
| K1155.1140930 | A    | 14 | 10 | -  | 9,5 | -  | 30'         |
| K1155.1181130 | A    | 18 | 12 | -  | 11  | -  | 30'         |
| K1155.1201230 | A    | 20 | 14 | -  | 12  | -  | 30'         |
| K1155.1301530 | A    | 30 | 21 | -  | 15  | -  | 30'         |
| K1155.2140730 | B    | 14 | 10 | M4 | 7,5 | 5  | 30'         |
| K1155.2181230 | B    | 18 | 12 | M6 | 12  | 5  | 30'         |
| K1155.2201230 | B    | 20 | 14 | M5 | 12  | 8  | 30'         |
| K1155.2301530 | B    | 30 | 21 | M8 | 15  | 10 | 30'         |



## Bullseye level body

**Material:**

Bullseye level body stainless steel up to Ø14 mm, then aluminium.

Sight window glass.

**Version:**

Aluminium black anodised.

**Sample order:**

K1156.120725

**Note:**

Bubble levels are used as a type of zero indicator instrument for checking horizontal inclination in e.g. spirit levels, inclinometers, metrology instruments and machine constructions.

Excellent bubble contour, with internal bubble ring to eliminate planar parallaxes.

- Sensitivity in angular minutes for 2 mm bubble travel
- Clear filling

**Temperature range:**

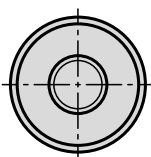
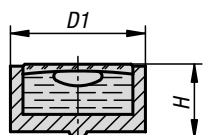
-35 °C up to +55 °C.

## KIPP Bullseye level body

| Order No.    | Main material   | D1 | H   | Sensitivity |
|--------------|-----------------|----|-----|-------------|
| K1156.120710 | stainless steel | 12 | 6   | 10'         |
| K1156.120725 | stainless steel | 12 | 6   | 25'         |
| K1156.140710 | aluminium       | 14 | 6,5 | 10'         |
| K1156.140720 | aluminium       | 14 | 6,5 | 20'         |
| K1156.150710 | aluminium       | 15 | 6,5 | 10'         |
| K1156.150720 | aluminium       | 15 | 6,8 | 20'         |
| K1156.200810 | aluminium       | 20 | 8,5 | 10'         |
| K1156.200820 | aluminium       | 20 | 8,5 | 20'         |
| K1156.250910 | aluminium       | 25 | 8,5 | 10'         |
| K1156.250920 | aluminium       | 25 | 8,5 | 20'         |

# Bullseye level body

plastic


**Material:**

Polyamide.

**Version:**

Ivory coloured.

**Sample order:**

K1157.120720

**Note:**

Bubble levels are used as a type of zero indicator instrument for checking horizontal inclination in e.g. spirit levels, inclinometers, metrology instruments and machine constructions.

With internal black contrast ring for better bubble contour.

- Protruding fill point underneath.
- Sensitivity in angular minutes for 2 mm bubble travel
- Clear filling

**Temperature range:**

-35 °C up to +55 °C.

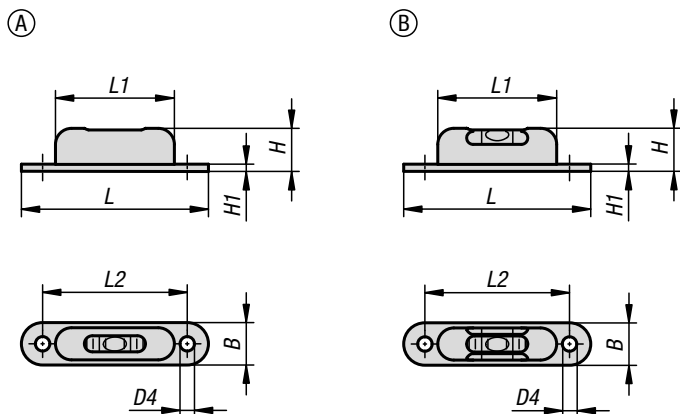


## KIPP Bullseye level body plastic

| Order No.    | D1 | H    | Sensitivity |
|--------------|----|------|-------------|
| K1157.120720 | 12 | 7    | 20'         |
| K1157.140730 | 14 | 7,7  | 30'         |
| K1157.150720 | 15 | 7,7  | 20'         |
| K1157.180930 | 18 | 9,2  | 30'         |
| K1157.201040 | 20 | 10,6 | 40'         |
| K1157.251230 | 25 | 11,5 | 30'         |

# Tubular bubble levels

with frame to screw on


**Material:**

Frame brass.

Tubular bubble vial glass.

**Version:**

Nickel-plated and high-gloss polished. Form B: black anodised.

**Sample order:**

K1158.1571350

**Note:**

Bubble levels are used as a type of zero indicator instrument for checking horizontal inclination in e.g. spirit levels, inclinometers, metrology instruments and machine constructions.

The tubular levels can be fastened using the two holes.

- Form A: one sight window
- Form B: three sight windows
- Sensitivity in angular minutes for 2 mm bubble travel
- Green filling

**Temperature range:**

-35 °C up to +55 °C.

## KIPP Tubular levels with frame to screw down

| Order No.     | Form | B    | D4  | H  | H1 | L  | L1 | L2 | Sensitivity |
|---------------|------|------|-----|----|----|----|----|----|-------------|
| K1158.1571350 | A    | 12,3 | 4,5 | 13 | 1  | 57 | 37 | 45 | 50'         |
| K1158.2571305 | B    | 12,3 | 4,5 | 13 | 1  | 57 | 37 | 45 | 5'          |



# Scale rings to customer specifications



**Material:**  
Steel 1.192.

**Version:**  
Matt-finished chromium-plated.  
Scale marks and figures in black.

**Note:**  
The above version has proven itself for „avoiding reading errors“. The matt-finished chromium-plated surface and the black scale marks and figures contrast very well.  
However, other surface finishes and materials are available on request.





## Material handling



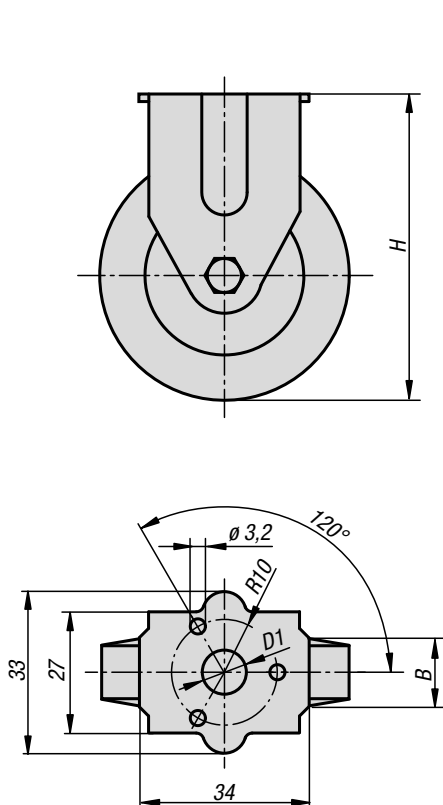
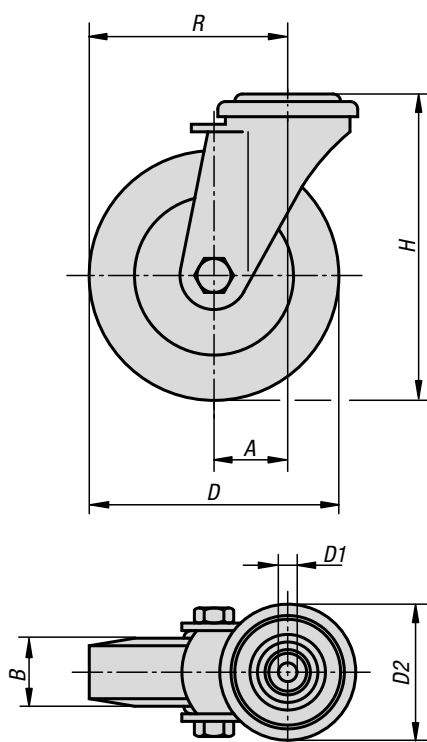
## Swivel and fixed castors

standard version



swivel castor

fixed castor



### Material:

Housing steel plate.  
Wheel treads solid rubber.  
Wheel rims polyamide.

### Version:

Housing press formed.  
Double ball bearing in the castor head.  
Plain bearing in wheels.

### Sample order:

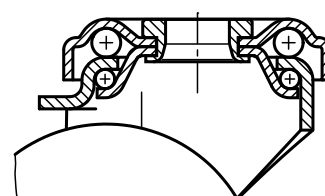
K1759.07525

### Note:

Wheel axle bolted.  
Swivel and fixed castors with bolt hole.  
Wheels grey, non-marking.



swivel head bearing



### KIPP Swivel and fixed castors standard version

| Order No.<br>Fixed castor<br>without locking system | Order No.<br>Swivel castor<br>without locking system | Order No.<br>Swivel castor<br>with stop-fix locking system | Wheel<br>bearing | A       | B  | D   | D1 | D2      | H   | R           | Permissible<br>load<br>kg |
|-----------------------------------------------------|------------------------------------------------------|------------------------------------------------------------|------------------|---------|----|-----|----|---------|-----|-------------|---------------------------|
| K1759.050181                                        | K1759.05018                                          | K1759.050182                                               | plain bearing    | -/25/25 | 18 | 50  | 11 | -/43/43 | 69  | -/50/50     | 40                        |
| K1759.075251                                        | K1759.07525                                          | K1759.075252                                               | plain bearing    | -/28/28 | 25 | 75  | 11 | -/43/43 | 98  | -/65,5/65,5 | 60                        |
| -                                                   | K1759.10025                                          | K1759.100252                                               | plain bearing    | 33/33   | 25 | 100 | 11 | 43/43   | 121 | 83/83       | 70                        |

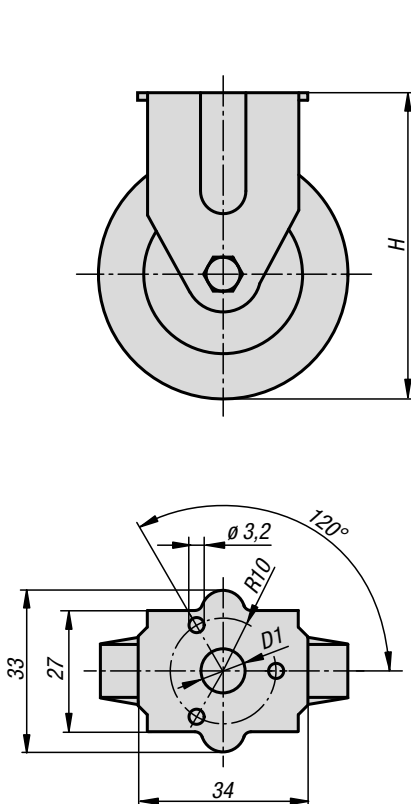
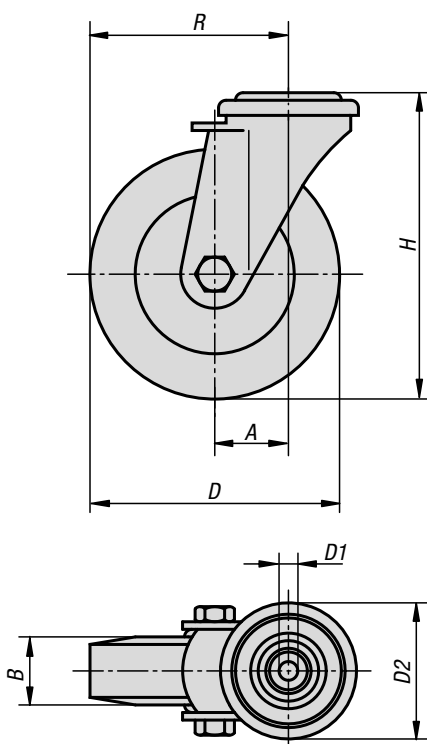
## Swivel and fixed castors

electrically conductive, standard version



swivel castor

fixed castor



### Material:

Housing steel plate.  
Wheels with thermoplastic rubber tread.  
Wheel body polypropylene.

### Version:

Housing press formed.  
Double ball bearing in the castor head.  
Plain bearing in wheels.

### Sample order:

K1759.1105019

### Note:

Wheel axle threaded. Swivel and fixed castors with bolt hole. Electrically conductive wheels, non-marking grey. The ohmic resistance of the wheel is less than  $10^4 \Omega$ .

### Application:

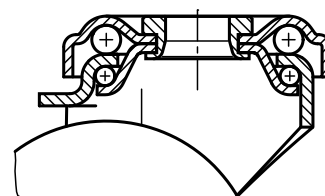
Electrically conductive wheels on swivel and fixed castors are used to protect against electrostatic discharge generated by transport equipment or the transported goods. Damage to sensitive goods and painful electrostatic shocks to the personal is so prevented.

### Temperature range:

-20 °C to +60 °C.



swivel head bearing



## KIPP Swivel and fixed castors standard versionSwivel and fixed castors electrically conductive, standard version

| Order No.<br>Fixed castor<br>without locking system | Order No.<br>Swivel castor<br>without locking system | Order No.<br>Swivel castor<br>with stop-fix locking system | Wheel<br>bearing | A       | B  | D   | D1 | D2      | H   | R           | Permissible<br>load<br>kg |
|-----------------------------------------------------|------------------------------------------------------|------------------------------------------------------------|------------------|---------|----|-----|----|---------|-----|-------------|---------------------------|
| K1759.11050191                                      | K1759.1105019                                        | K1759.11050192                                             | plain bearing    | -/25/25 | 19 | 50  | 11 | -/43/43 | 69  | -/50/50     | 30                        |
| K1759.11075251                                      | K1759.1107525                                        | K1759.11075252                                             | plain bearing    | -/29/29 | 25 | 75  | 11 | -/43/43 | 98  | -/66,5/66,5 | 50                        |
| -                                                   | K1759.1110025                                        | K1759.11100252                                             | plain bearing    | 33/33   | 25 | 100 | 11 | 43/43   | 121 | 83/83       | 60                        |

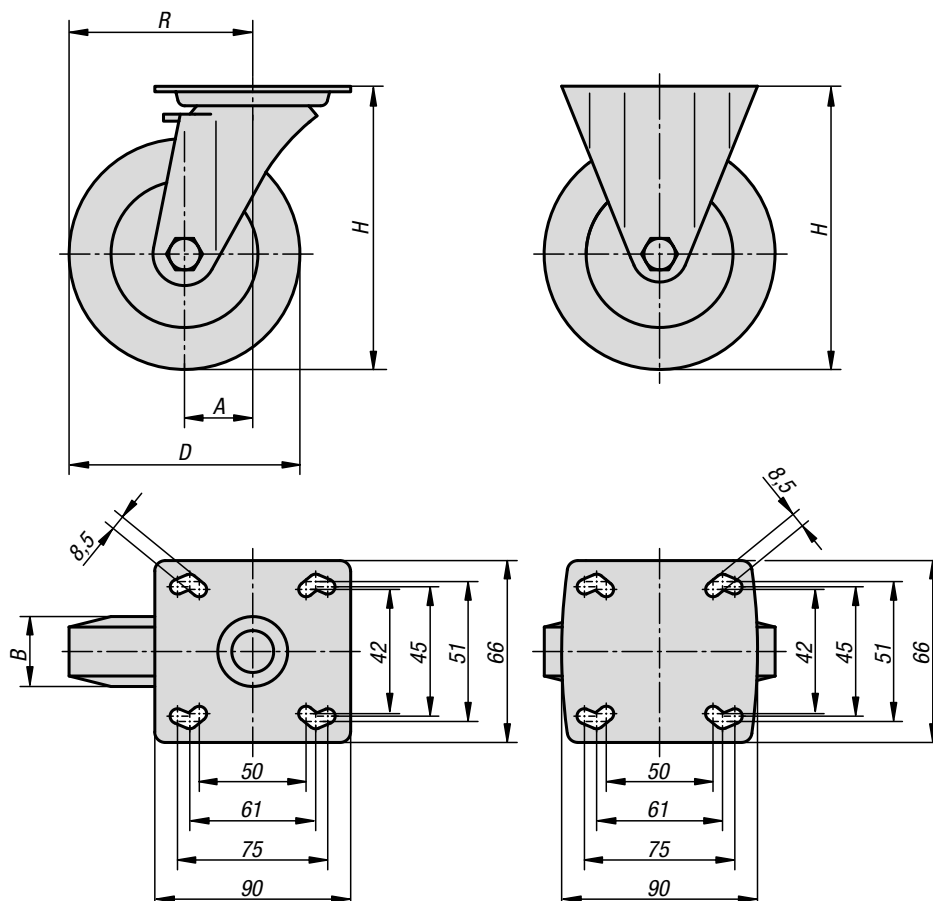
## Swivel and fixed castors

heavy-duty version



swivel castor

fixed castor



### Material:

Housing steel plate.  
Wheel treads solid rubber.  
Wheel rims polyamide.

### Version:

Housing press formed.  
Double ball bearing in the castor head.  
Plain bearing in wheels.

### Sample order:

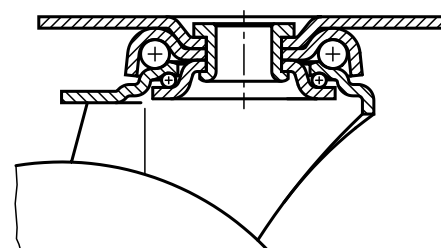
K1760.10032

### Note:

Wheel axle bolted.  
Solid rubber tyres are shock and impact proof and non-corroding.



swivel head bearing



## KIPP Swivel and fixed castors heavy-duty version

| Order No.<br>Fixed castor<br>without locking system | Order No.<br>Swivel castor<br>without locking system | Order No.<br>Swivel castor<br>with stop-fix locking system | Wheel<br>bearing | A       | B  | D   | H   | R             | Permissible<br>load<br>kg |
|-----------------------------------------------------|------------------------------------------------------|------------------------------------------------------------|------------------|---------|----|-----|-----|---------------|---------------------------|
| K1760.080251                                        | K1760.08025                                          | K1760.080252                                               | plain bearing    | -/40/40 | 25 | 80  | 111 | -/80/80       | 60                        |
| K1760.100321                                        | K1760.10032                                          | K1760.100322                                               | plain bearing    | -/40/40 | 32 | 100 | 136 | -/90/90       | 90                        |
| K1760.125251                                        | K1760.12525                                          | K1760.125252                                               | plain bearing    | -/40/40 | 25 | 125 | 161 | -/102,5/102,5 | 80                        |
| K1760.125321                                        | K1760.12532                                          | K1760.125322                                               | plain bearing    | -/40/40 | 32 | 125 | 161 | -/102,5/102,5 | 100                       |

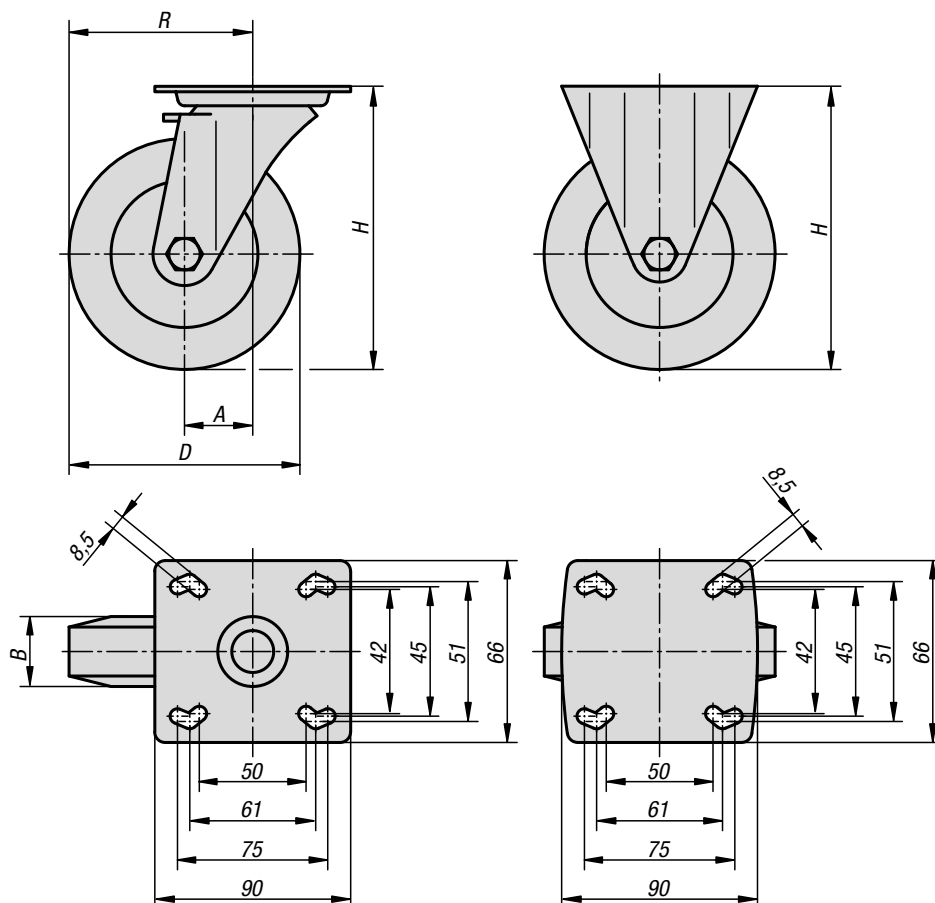
# Swivel and fixed castors

steel plate, electrically conductive, heavy-duty version



swivel castor

fixed castor



## Material:

Housing steel plate.  
Wheels with thermoplastic rubber tread.  
Wheel body polypropylene.

## Version:

Housing press formed.  
Double ball bearing in the castor head.  
Plain bearing in wheels.

## Sample order:

K1760.1108032

## Note:

Wheel axle threaded. Swivel and fixed castors with mounting plate. Electrically conductive wheels, non-marking grey. The ohmic resistance of the wheel is less than  $10^4 \Omega$ .

## Application:

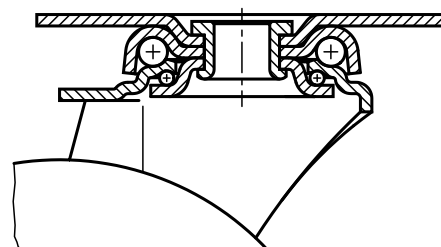
Electrically conductive wheels on swivel and fixed castors are used to protect against electrostatic discharge generated by transport equipment or the transported goods. Damage to sensitive goods and painful electrostatic shocks to the personal is so prevented.

## Temperature range:

-20 °C to +60 °C.



swivel head bearing



## KIPP Swivel and fixed castors steel plate, electrically conductive, heavy-duty version

| Order No.<br>Fixed castor<br>without locking system | Order No.<br>Swivel castor<br>without locking system | Order No.<br>Swivel castor<br>with stop-fix locking system | Wheel<br>bearing | A       | B  | D   | H   | R             | Permissible<br>load<br>kg |
|-----------------------------------------------------|------------------------------------------------------|------------------------------------------------------------|------------------|---------|----|-----|-----|---------------|---------------------------|
| K1760.11080321                                      | K1760.1108032                                        | K1760.11080322                                             | plain bearing    | -/40/40 | 32 | 80  | 111 | -/80/80       | 65                        |
| K1760.11100321                                      | K1760.1110032                                        | K1760.11100322                                             | plain bearing    | -/40/40 | 32 | 100 | 136 | -/90/90       | 70                        |
| K1760.11125321                                      | K1760.1112532                                        | K1760.11125322                                             | plain bearing    | -/40/40 | 32 | 125 | 161 | -/102,5/102,5 | 80                        |

## Swivel and fixed castors

standard version



### Material:

Housing and wheel rim steel plate.  
Tyres solid rubber.  
Wheel hub steel tube.

### Version:

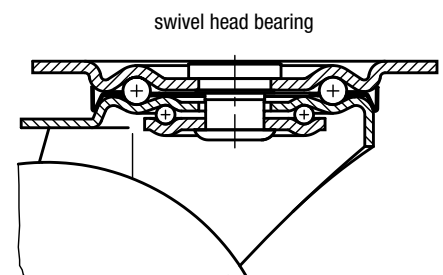
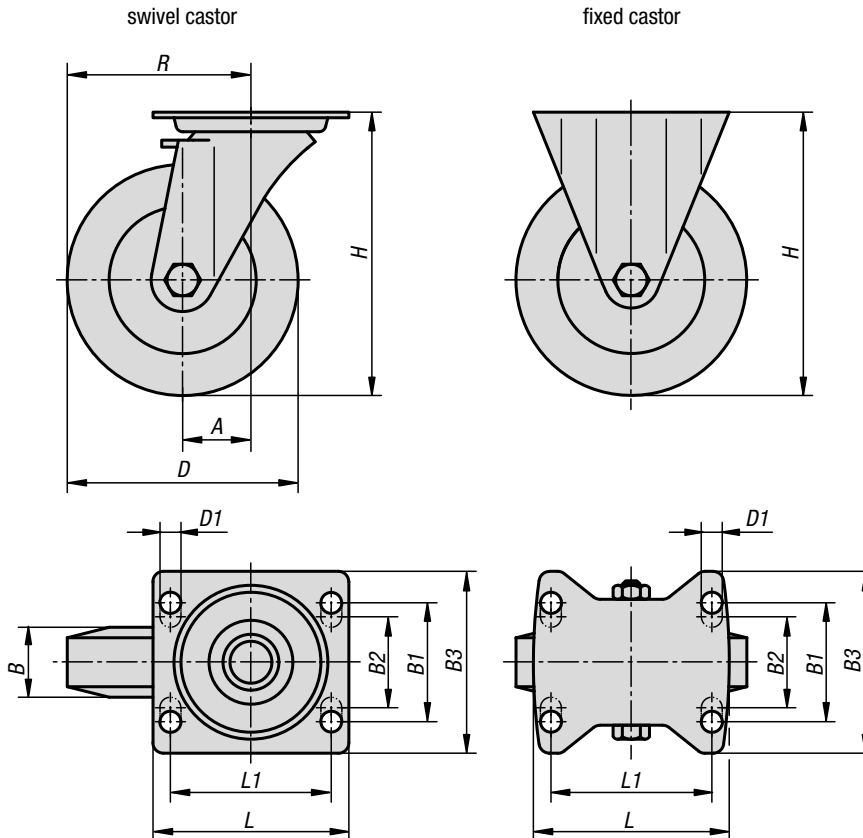
Housing and rim press formed.  
Double ball bearing with ball shield in castor head.  
Roller bearings in the wheels.

### Sample order:

K1761.10030

### Note:

Wheel axle bolted.



### KIPP Swivel and fixed castors standard version

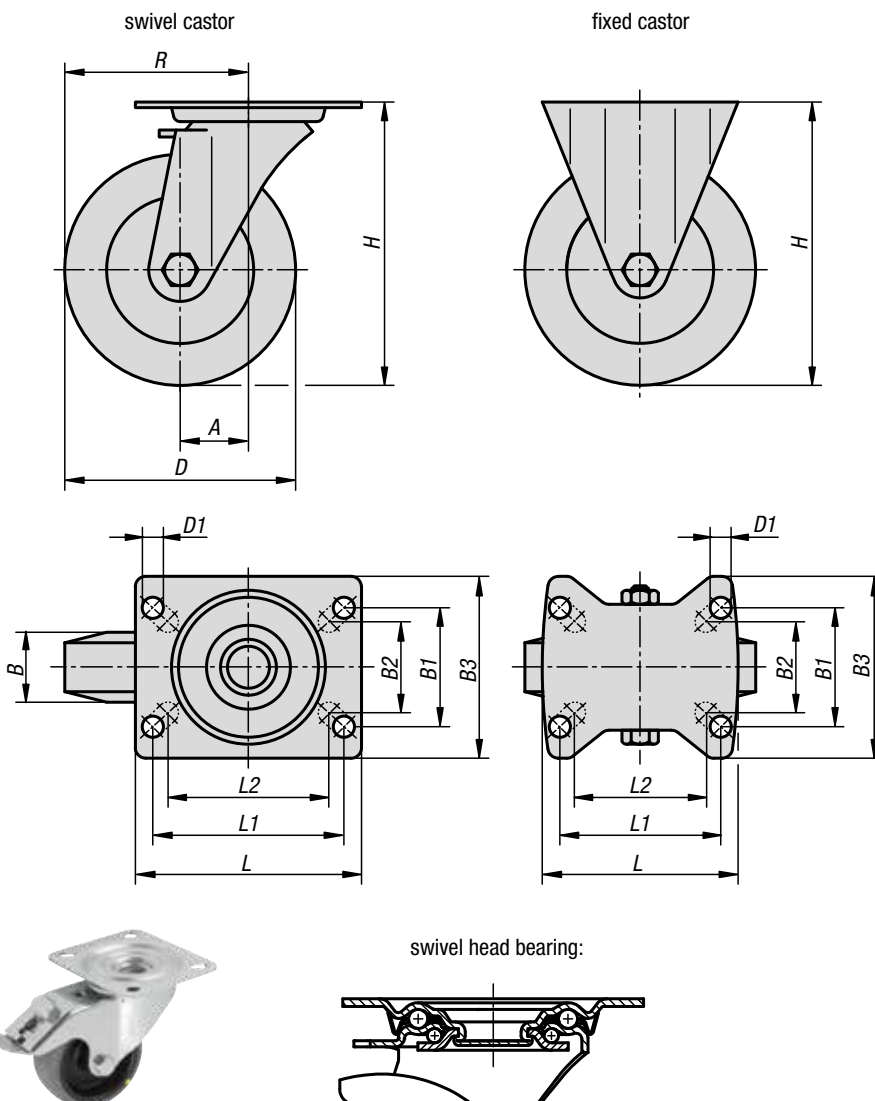
| Order No.<br>Fixed castor<br>without locking system | Order No.<br>Swivel castor<br>without locking system | Order No.<br>Swivel castor<br>with stop-fix locking system | Wheel<br>bearing | A       | B    | B1 | B2 | B3  | D   | D1 |
|-----------------------------------------------------|------------------------------------------------------|------------------------------------------------------------|------------------|---------|------|----|----|-----|-----|----|
| K1761.080251                                        | K1761.08025                                          | K1761.080252                                               | roller bearing   | -/38/38 | 25   | -  | 60 | 85  | 80  | 9  |
| K1761.100301                                        | K1761.10030                                          | K1761.100302                                               | roller bearing   | -/36/36 | 30   | -  | 60 | 85  | 100 | 9  |
| K1761.125381                                        | K1761.12538                                          | K1761.125382                                               | roller bearing   | -/40/40 | 37,5 | -  | 60 | 85  | 125 | 9  |
| K1761.160401                                        | K1761.16040                                          | K1761.160402                                               | roller bearing   | -/60/60 | 40   | 75 | 80 | 110 | 160 | 11 |
| K1761.200501                                        | K1761.20050                                          | K1761.200502                                               | roller bearing   | -/65/65 | 50   | 75 | 80 | 110 | 200 | 11 |

| Order No.<br>Fixed castor<br>without locking system | Order No.<br>Swivel castor<br>without locking system | Order No.<br>Swivel castor<br>with stop-fix locking system | Wheel<br>bearing | L   | L1  | H   | R             | Permissible<br>load<br>kg |
|-----------------------------------------------------|------------------------------------------------------|------------------------------------------------------------|------------------|-----|-----|-----|---------------|---------------------------|
| K1761.080251                                        | K1761.08025                                          | K1761.080252                                               | roller bearing   | 100 | 80  | 102 | -/78/78       | 50                        |
| K1761.100301                                        | K1761.10030                                          | K1761.100302                                               | roller bearing   | 100 | 80  | 125 | -/86/86       | 70                        |
| K1761.125381                                        | K1761.12538                                          | K1761.125382                                               | roller bearing   | 100 | 80  | 150 | -/102,5/102,5 | 100                       |
| K1761.160401                                        | K1761.16040                                          | K1761.160402                                               | roller bearing   | 140 | 105 | 195 | -/140/140     | 135                       |
| K1761.200501                                        | K1761.20050                                          | K1761.200502                                               | roller bearing   | 140 | 105 | 235 | -/165/165     | 205                       |



# Swivel and fixed castors

steel plate, electrically conductive standard version



## Material:

Housing steel plate.  
Wheels with thermoplastic rubber tread.  
Wheel body polypropylene.

## Version:

Housing press formed.  
Double ball bearing in the castor head.  
Plain bearing in wheels.

## Sample order:

K1761.1108032

## Note:

Wheel axle threaded. Swivel and fixed castors with mounting plate. Electrically conductive wheels, non-marking grey. The ohmic resistance of the wheel is less than  $10^4 \Omega$ .

## Application:

Electrically conductive wheels on swivel and fixed castors are used to protect against electrostatic discharge generated by transport equipment or the transported goods. Damage to sensitive goods and painful electrostatic shocks to the personal is so prevented.

## Temperature range:

-20 °C to +60 °C.

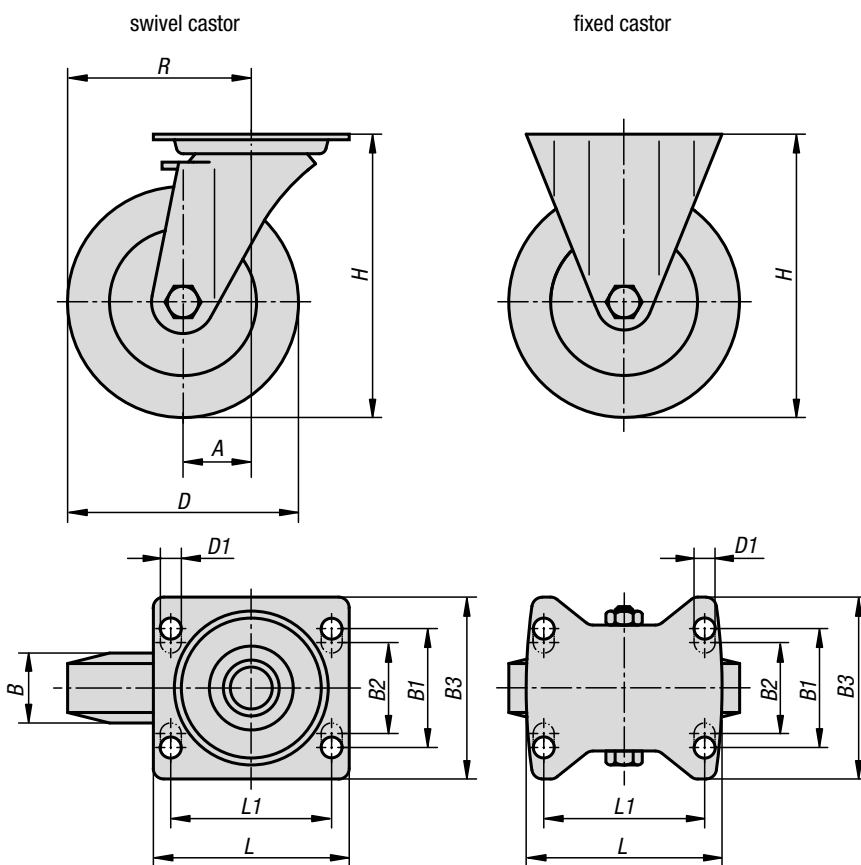
## KIPP Swivel and fixed castors, steel plate, electrically conductive standard version

| Order No.<br>Fixed castor<br>without locking system | Order No.<br>Swivel castor<br>without locking system | Order No.<br>Swivel castor<br>with stop-fix locking system | Wheel<br>bearing | A       | B  | B1 | B2 | B3  | D   | D1 |
|-----------------------------------------------------|------------------------------------------------------|------------------------------------------------------------|------------------|---------|----|----|----|-----|-----|----|
| K1761.11080321                                      | K1761.1108032                                        | K1761.11080322                                             | plain bearing    | -/38/38 | 32 | 55 | 60 | 85  | 80  | 9  |
| K1761.11100321                                      | K1761.1110032                                        | K1761.11100322                                             | plain bearing    | -/36/36 | 32 | 55 | 60 | 85  | 100 | 9  |
| K1761.11125321                                      | K1761.1112532                                        | K1761.11125322                                             | plain bearing    | -/40/40 | 32 | 55 | 60 | 85  | 125 | 9  |
| K1761.11160401                                      | K1761.1116040                                        | K1761.11160402                                             | plain bearing    | -/54/54 | 40 | 75 | 80 | 110 | 160 | 11 |
| K1761.11200401                                      | K1761.1120040                                        | K1761.11200402                                             | plain bearing    | -/54/54 | 40 | 75 | 80 | 110 | 200 | 11 |

| Order No.<br>Fixed castor<br>without locking system | Order No.<br>Swivel castor<br>without locking system | Order No.<br>Swivel castor<br>with stop-fix locking system | Wheel<br>bearing | L   | L1  | L2 | H   | R             | Permissible<br>load<br>kg |
|-----------------------------------------------------|------------------------------------------------------|------------------------------------------------------------|------------------|-----|-----|----|-----|---------------|---------------------------|
| K1761.11080321                                      | K1761.1108032                                        | K1761.11080322                                             | plain bearing    | 100 | 80  | 76 | 102 | -/78/78       | 65                        |
| K1761.11100321                                      | K1761.1110032                                        | K1761.11100322                                             | plain bearing    | 100 | 80  | 76 | 125 | -/86/86       | 70                        |
| K1761.11125321                                      | K1761.1112532                                        | K1761.11125322                                             | plain bearing    | 100 | 80  | 76 | 150 | -/102,5/102,5 | 80                        |
| K1761.11160401                                      | K1761.1116040                                        | K1761.11160402                                             | plain bearing    | 140 | 105 | -  | 195 | -/134/134     | 130                       |
| K1761.11200401                                      | K1761.1120040                                        | K1761.11200402                                             | plain bearing    | 140 | 105 | -  | 235 | -/154/154     | 160                       |

## Swivel and fixed castors

standard version



### Material:

Housing steel plate.

Wheel body PA 6 with vulcanised elastic solid rubber tyre.

### Version:

Housing press formed.

Double ball bearing with ball shield in castor head.

Roller bearings in the wheels.

### Sample order:

K1762.12537

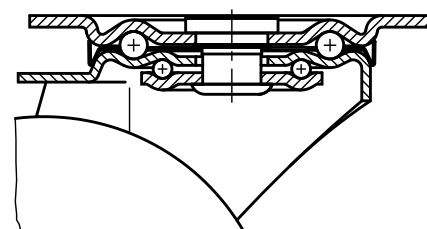
### Note:

Wheel axle bolted.

Wheels are shock and impact proof.



swivel head bearing



### KIPP Swivel and fixed castors standard version

| Order No.<br>Fixed castor<br>without locking system | Order No.<br>Swivel castor<br>without locking system | Order No.<br>Swivel castor<br>with stop-fix locking system | Wheel<br>bearing | A       | B  | B1 | B2 | B3  | D   | D1 |
|-----------------------------------------------------|------------------------------------------------------|------------------------------------------------------------|------------------|---------|----|----|----|-----|-----|----|
| K1762.100371                                        | K1762.10037                                          | K1762.100372                                               | roller bearing   | -/36/36 | 32 | -  | 60 | 85  | 100 | 9  |
| K1762.125371                                        | K1762.12537                                          | K1762.125372                                               | roller bearing   | -/40/40 | 37 | -  | 60 | 85  | 125 | 9  |
| K1762.160501                                        | K1762.16050                                          | K1762.160502                                               | roller bearing   | -/60/60 | 50 | 75 | 80 | 110 | 160 | 11 |
| K1762.200501                                        | K1762.20050                                          | K1762.200502                                               | roller bearing   | -/65/65 | 50 | 75 | 80 | 110 | 200 | 11 |

| Order No.<br>Fixed castor<br>without locking system | Order No.<br>Swivel castor<br>without locking system | Order No.<br>Swivel castor<br>with stop-fix locking system | Wheel<br>bearing | H   | L   | L1  | R             | Permissible<br>load<br>kg |
|-----------------------------------------------------|------------------------------------------------------|------------------------------------------------------------|------------------|-----|-----|-----|---------------|---------------------------|
| K1762.100371                                        | K1762.10037                                          | K1762.100372                                               | roller bearing   | 125 | 100 | 80  | -/86/86       | 170                       |
| K1762.125371                                        | K1762.12537                                          | K1762.125372                                               | roller bearing   | 150 | 100 | 80  | -/102,5/102,5 | 200                       |
| K1762.160501                                        | K1762.16050                                          | K1762.160502                                               | roller bearing   | 195 | 140 | 105 | -/140/140     | 350                       |
| K1762.200501                                        | K1762.20050                                          | K1762.200502                                               | roller bearing   | 235 | 140 | 105 | -/165/165     | 400                       |

## Swivel and fixed castors

heavy-duty version



### Material:

Housing thick steel plate.  
Tyres steel-wire reinforced elastic solid rubber.  
Wheel body welded steel.

### Version:

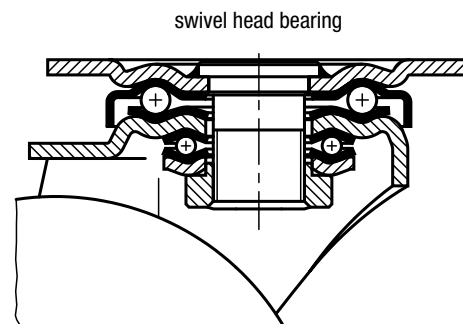
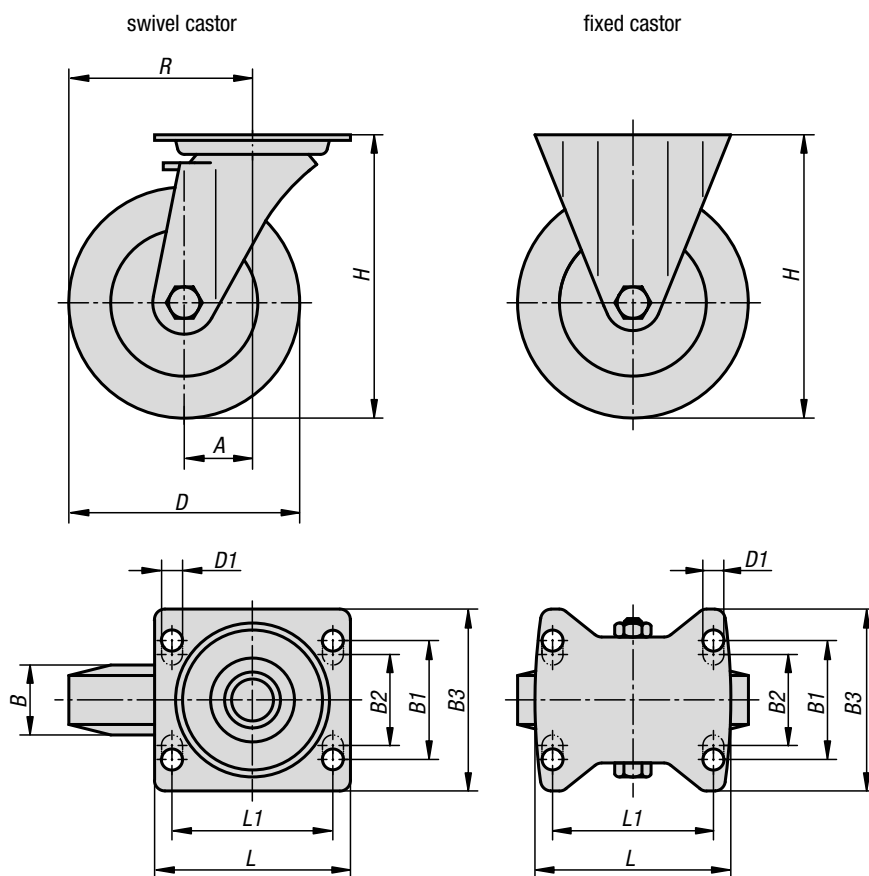
Housing press formed.  
Reinforced fork, base plate and centre pin.  
Double ball bearing with hardened shells in the castor head.  
Precision ball bearings in the wheels.

### Sample order:

K1763.12550

### Note:

These castors are particularly impact and shock proof and assure a high service life.  
Wheel axle bolted.



### KIPP Swivel and fixed castors heavy-duty version

| Order No.<br>Fixed castor<br>without locking system | Order No.<br>Swivel castor<br>without locking system | Order No.<br>Swivel castor<br>with stop-top locking system | Wheel<br>bearing | A       | B  | B1 | B2 | B3  | D   | D1 |
|-----------------------------------------------------|------------------------------------------------------|------------------------------------------------------------|------------------|---------|----|----|----|-----|-----|----|
| K1763.100401                                        | K1763.10040                                          | K1763.100402                                               | ball bearing     | -/45/45 | 40 | 60 | -  | 85  | 100 | 9  |
| K1763.125501                                        | K1763.12550                                          | K1763.125502                                               | ball bearing     | -/55/55 | 50 | 80 | 75 | 110 | 125 | 11 |
| K1763.160501                                        | K1763.16050                                          | K1763.160502                                               | ball bearing     | -/65/65 | 50 | 80 | 75 | 110 | 160 | 11 |
| K1763.200501                                        | K1763.20050                                          | K1763.200502                                               | ball bearing     | -/70/70 | 50 | 80 | 75 | 110 | 200 | 11 |
| K1763.250601                                        | K1763.25060                                          | K1763.250602                                               | ball bearing     | -/82/82 | 60 | 80 | 75 | 110 | 250 | 11 |

| Order No.<br>Fixed castor<br>without locking system | Order No.<br>Swivel castor<br>without locking system | Order No.<br>Swivel castor<br>with stop-top locking system | Wheel<br>bearing | H   | L   | L1  | R             | Permissible<br>load<br>kg |
|-----------------------------------------------------|------------------------------------------------------|------------------------------------------------------------|------------------|-----|-----|-----|---------------|---------------------------|
| K1763.100401                                        | K1763.10040                                          | K1763.100402                                               | ball bearing     | 140 | 100 | 80  | -/95/95       | 180                       |
| K1763.125501                                        | K1763.12550                                          | K1763.125502                                               | ball bearing     | 170 | 140 | 105 | -/117,5/117,5 | 280                       |
| K1763.160501                                        | K1763.16050                                          | K1763.160502                                               | ball bearing     | 202 | 140 | 105 | -/145/145     | 400                       |
| K1763.200501                                        | K1763.20050                                          | K1763.200502                                               | ball bearing     | 245 | 140 | 105 | -/170/170     | 500                       |
| K1763.250601                                        | K1763.25060                                          | K1763.250602                                               | ball bearing     | 295 | 140 | 105 | -/207/207     | 700                       |

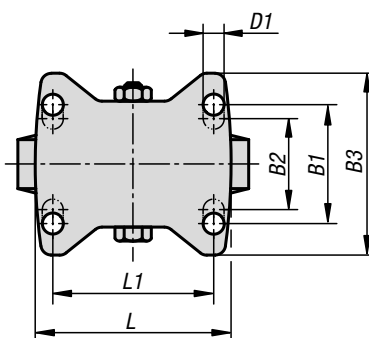
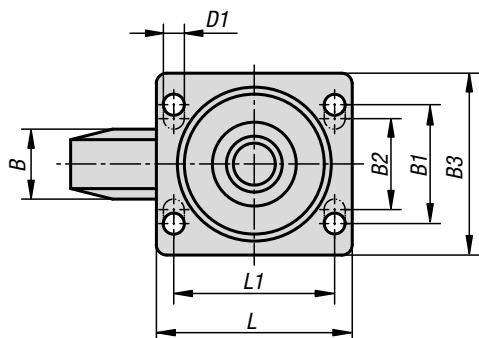
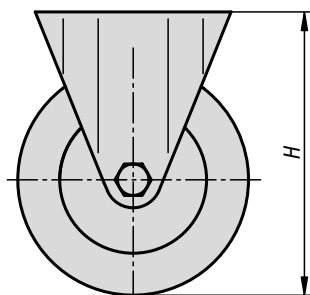
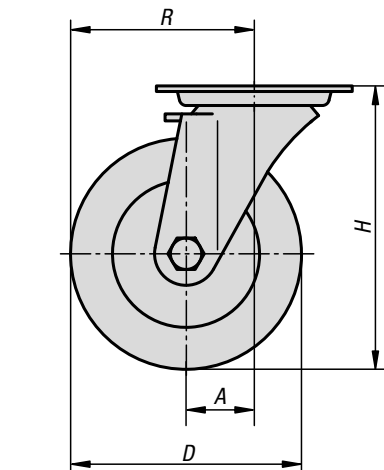
## Swivel and fixed castors

standard version



swivel castor

fixed castor



### Material:

Housing steel plate.

Wheel body PA 6 with abrasion-resistant polyurethane tread.

### Version:

Housing press formed.

Double ball bearing with ball shield in the castor head.  
Plain bearing in the wheels.

### Sample order:

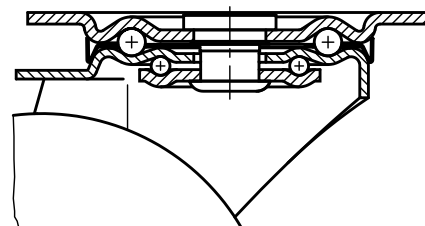
K1764.12535

### Note:

The wheels are unbreakable, maintenance-free and non-corroding. Wheel axle bolted. Tread non-marking.



swivel head bearing



## KIPP Swivel and fixed castors standard version

| Order No.<br>Fixed castor<br>without locking system | Order No.<br>Swivel castor<br>without locking system | Order No.<br>Swivel castor<br>with stop-fix locking system | Wheel<br>bearing | A       | B  | B1 | B2 | B3  | D   | D1 |
|-----------------------------------------------------|------------------------------------------------------|------------------------------------------------------------|------------------|---------|----|----|----|-----|-----|----|
| K1764.100351                                        | K1764.10035                                          | K1764.100352                                               | plain bearing    | -/36/36 | 35 | 60 | -  | 85  | 100 | 9  |
| K1764.125351                                        | K1764.12535                                          | K1764.125352                                               | plain bearing    | -/40/40 | 40 | 60 | -  | 85  | 125 | 9  |
| K1764.150401                                        | K1764.15040                                          | K1764.150402                                               | plain bearing    | -/60/60 | 45 | 80 | 75 | 110 | 150 | 11 |
| K1764.200501                                        | K1764.20050                                          | K1764.200502                                               | plain bearing    | -/65/65 | 50 | 80 | 75 | 110 | 200 | 11 |

| Order No.<br>Fixed castor<br>without locking system | Order No.<br>Swivel castor<br>without locking system | Order No.<br>Swivel castor<br>with stop-fix locking system | Wheel<br>bearing | H   | L   | L1  | R             | Permissible<br>load<br>kg |
|-----------------------------------------------------|------------------------------------------------------|------------------------------------------------------------|------------------|-----|-----|-----|---------------|---------------------------|
| K1764.100351                                        | K1764.10035                                          | K1764.100352                                               | plain bearing    | 125 | 100 | 80  | -/86/86       | 200                       |
| K1764.125351                                        | K1764.12535                                          | K1764.125352                                               | plain bearing    | 150 | 100 | 80  | -/102,5/102,5 | 200                       |
| K1764.150401                                        | K1764.15040                                          | K1764.150402                                               | plain bearing    | 190 | 140 | 105 | -/135/135     | 400                       |
| K1764.200501                                        | K1764.20050                                          | K1764.200502                                               | plain bearing    | 235 | 140 | 105 | -/165/165     | 400                       |

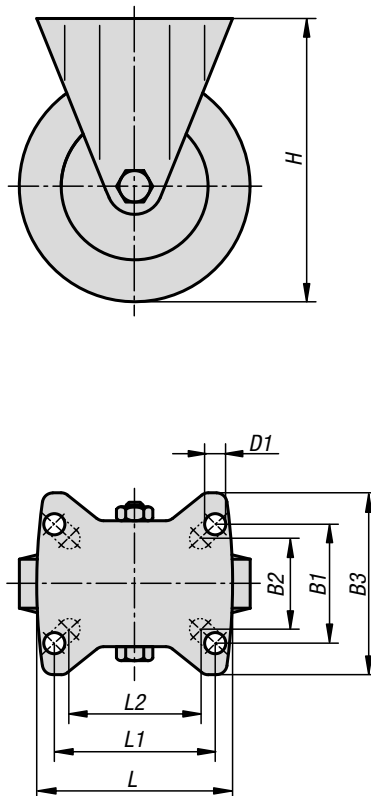
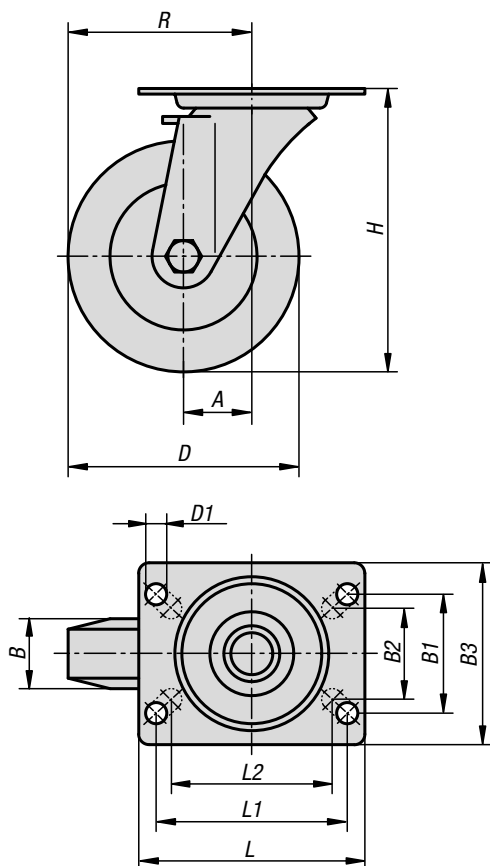
## Swivel and fixed castors

medium-duty version



swivel castor

fixed castor



### Material:

Housing, steel plate.  
Wheel tread, high quality polyurethane elastomere.  
Wheel rims, die-cast aluminium.

### Version:

Housing, press-formed.  
Swivel housing, double-row ball bearings in a swivel head.  
Ball bearing wheel axle bearings.

### Sample order:

K1765.101000401

### Note:

Wheel axle bolted.  
Swivel and fixed castors with mounting plate.

### Application:

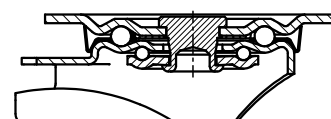
Heavy loads can be easily transported using this load handling equipment. The roll and swivel resistance is reduced with this new wheel series designed for intralogistic heavy load applications.

### Temperature range:

-25 °C to +70 °C



swivel head bearing:



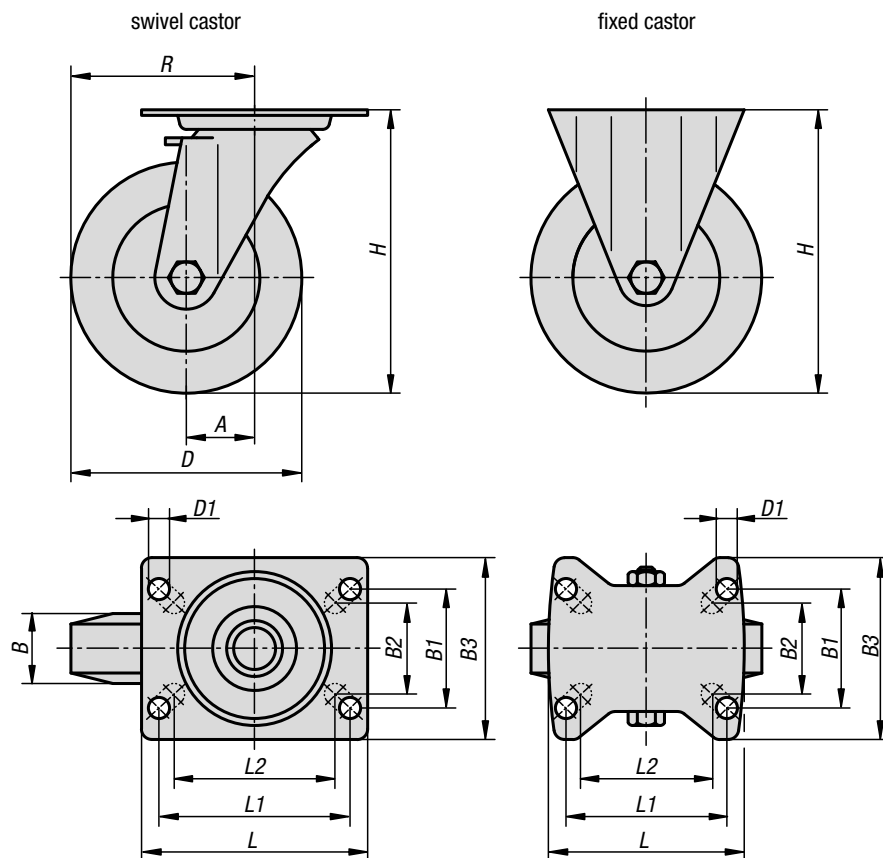
## KIPP Swivel and fixed castors medium-duty version

| Order No.<br>Fixed castor<br>without locking system | Order No.<br>Swivel castor<br>without locking system | Order No.<br>Swivel castor<br>with stop-fix locking system | Wheel<br>bearing | A       | B  | B1 | B2 | B3  | D   | D1 |
|-----------------------------------------------------|------------------------------------------------------|------------------------------------------------------------|------------------|---------|----|----|----|-----|-----|----|
| K1765.101000401                                     | K1765.10100040                                       | K1765.101000402                                            | ball bearing     | -/36/36 | 40 | 60 | 55 | 85  | 100 | 9  |
| K1765.101250401                                     | K1765.10125040                                       | K1765.101250402                                            | ball bearing     | -/40/40 | 40 | 60 | 55 | 85  | 125 | 9  |
| K1765.101500501                                     | K1765.10150050                                       | K1765.101500502                                            | ball bearing     | -/60/60 | 50 | 80 | 75 | 110 | 150 | 11 |
| K1765.101600501                                     | K1765.10160050                                       | K1765.101600502                                            | ball bearing     | -/60/60 | 50 | 80 | 75 | 110 | 160 | 11 |
| K1765.102000501                                     | K1765.10200050                                       | K1765.102000502                                            | ball bearing     | -/65/65 | 50 | 80 | 75 | 110 | 200 | 11 |

| Order No.<br>Fixed castor<br>without locking system | Order No.<br>Swivel castor<br>without locking system | Order No.<br>Swivel castor<br>with stop-fix locking system | Wheel<br>bearing | H   | L   | L1  | L2 | R             | Permissible<br>load<br>kg |
|-----------------------------------------------------|------------------------------------------------------|------------------------------------------------------------|------------------|-----|-----|-----|----|---------------|---------------------------|
| K1765.101000401                                     | K1765.10100040                                       | K1765.101000402                                            | ball bearing     | 125 | 100 | 80  | 76 | -/86/86       | 200                       |
| K1765.101250401                                     | K1765.10125040                                       | K1765.101250402                                            | ball bearing     | 150 | 100 | 80  | 76 | -/102,5/102,5 | 200                       |
| K1765.101500501                                     | K1765.10150050                                       | K1765.101500502                                            | ball bearing     | 190 | 140 | 105 | -  | -/135/135     | 400                       |
| K1765.101600501                                     | K1765.10160050                                       | K1765.101600502                                            | ball bearing     | 195 | 140 | 105 | -  | -/140/140     | 400                       |
| K1765.102000501                                     | K1765.10200050                                       | K1765.102000502                                            | ball bearing     | 235 | 140 | 105 | -  | -/165/165     | 400                       |

# Swivel and fixed castors

steel plate, heavy-duty version



## Material:

Housing, steel plate.  
Wheel tread, high quality polyurethane elastomere.  
Wheel rims, die-cast aluminium.

## Version:

Housing, press-formed.  
Swivel housing, double-row ball bearings in a swivel head.  
Ball bearing wheel axle bearings.

## Sample order:

K1788.1012504011

## Note:

Wheel axle bolted.  
Swivel and fixed castors with mounting plate.

## Application:

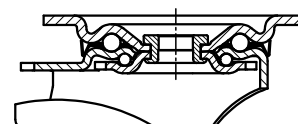
Heavy loads can be easily transported using this load handling equipment. The roll and swivel resistance is reduced with this new wheel series designed for intralogistic heavy load applications.

## Temperature range:

-25 °C to +70 °C



swivel head bearing:



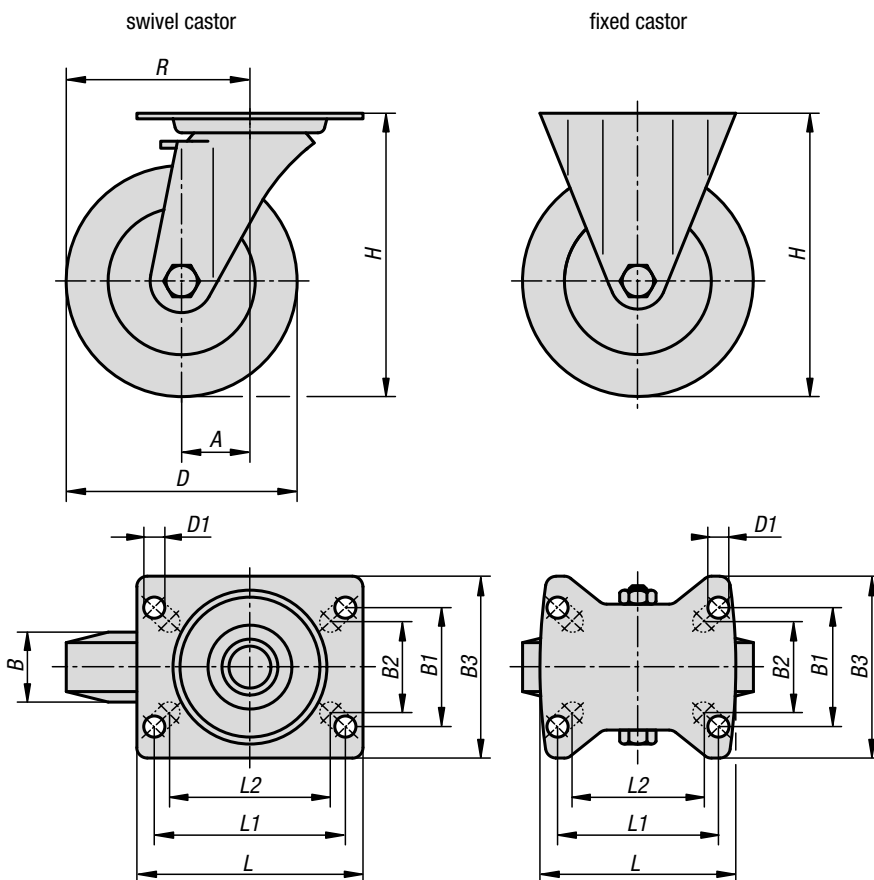
## KIPP Swivel and fixed castors steel plate, heavy-duty version

| Order No.<br>Fixed castor<br>without locking system | Order No.<br>Swivel castor<br>without locking system | Order No.<br>Swivel castor<br>with stop-fix locking system | Wheel<br>bearing | A       | B  | B1 | B2 | B3  | D   | D1 |
|-----------------------------------------------------|------------------------------------------------------|------------------------------------------------------------|------------------|---------|----|----|----|-----|-----|----|
| K1788.1010004011                                    | K1788.101000401                                      | K1788.1010004021                                           | ball bearing     | -/45/45 | 40 | 60 | 55 | 85  | 100 | 9  |
| K1788.1010004013                                    | K1788.101000403                                      | K1788.1010004023                                           | ball bearing     | -/45/45 | 40 | 80 | 75 | 110 | 100 | 11 |
| K1788.1012504011                                    | K1788.101250401                                      | K1788.1012504021                                           | ball bearing     | -/48/48 | 40 | 60 | 55 | 85  | 125 | 9  |
| K1788.1012504013                                    | K1788.101250403                                      | K1788.1012504023                                           | ball bearing     | -/48/48 | 40 | 80 | 75 | 110 | 125 | 11 |
| K1788.101500501                                     | K1788.10150050                                       | K1788.101500502                                            | ball bearing     | -/63/63 | 50 | 80 | 75 | 110 | 150 | 11 |
| K1788.101600501                                     | K1788.10160050                                       | K1788.101600502                                            | ball bearing     | -/63/63 | 50 | 80 | 75 | 110 | 160 | 11 |
| K1788.102000501                                     | K1788.10200050                                       | K1788.102000502                                            | ball bearing     | -/65/65 | 50 | 80 | 75 | 110 | 200 | 11 |

| Order No.<br>Fixed castor<br>without locking system | Order No.<br>Swivel castor<br>without locking system | Order No.<br>Swivel castor<br>with stop-fix locking system | Wheel<br>bearing | H   | L   | L1  | L2 | R             | Permissible<br>load<br>kg |
|-----------------------------------------------------|------------------------------------------------------|------------------------------------------------------------|------------------|-----|-----|-----|----|---------------|---------------------------|
| K1788.1010004011                                    | K1788.101000401                                      | K1788.1010004021                                           | ball bearing     | 130 | 100 | 80  | 76 | -/95/95       | 350                       |
| K1788.1010004013                                    | K1788.101000403                                      | K1788.1010004023                                           | ball bearing     | 130 | 140 | 105 | -  | -/95/95       | 350                       |
| K1788.1012504011                                    | K1788.101250401                                      | K1788.1012504021                                           | ball bearing     | 155 | 100 | 80  | 76 | -/110,5/110,5 | 350                       |
| K1788.1012504013                                    | K1788.101250403                                      | K1788.1012504023                                           | ball bearing     | 155 | 140 | 105 | -  | -/110,5/110,5 | 350                       |
| K1788.101500501                                     | K1788.10150050                                       | K1788.101500502                                            | ball bearing     | 197 | 140 | 105 | -  | -/138/138     | 500                       |
| K1788.101600501                                     | K1788.10160050                                       | K1788.101600502                                            | ball bearing     | 202 | 140 | 105 | -  | -/143/143     | 550                       |
| K1788.102000501                                     | K1788.10200050                                       | K1788.102000502                                            | ball bearing     | 245 | 140 | 105 | -  | -/165/165     | 600                       |

## Steel plate swivel and fixed castors

with soft rubber tyres



### Material:

Housing sheet steel,  
Wheels high quality elastic solid rubber.  
Wheel rim high-quality unbreakable polyamide (wheel Ø 100 and 125 mm) or die-cast aluminium (wheel Ø from 150 mm).

### Version:

Housing, press-formed.  
Swivel housing, double-row ball bearings in a swivel head.  
Ball bearing wheel axle bearings.

### Sample order:

K1766.10160050

### Note:

Wheel axle bolted.  
Swivel and fixed castors with mounting plate.

### Application:

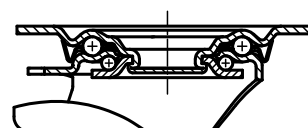
Maximum travel comfort, excellent cushioning of the transported goods. The new soft rubber series brings noticeable noise reduction in all applications.

### Temperature range:

-25 °C to +80 °C.



swivel head bearing:



## KIPP Steel plate swivel and fixed castors with soft rubber tyres

| Order No.<br>Fixed castor<br>without locking system | Order No.<br>Swivel castor<br>without locking system | Order No.<br>Swivel castor<br>with stop-fix locking system | Wheel<br>bearing | A       | B        | B1 | B2 | B3  | D   | D1 |
|-----------------------------------------------------|------------------------------------------------------|------------------------------------------------------------|------------------|---------|----------|----|----|-----|-----|----|
| K1766.101000401                                     | K1766.10100040                                       | K1766.101000402                                            | ball bearing     | -/36/36 | 40/40/40 | 60 | 55 | 85  | 100 | 9  |
| K1766.101250401                                     | K1766.10125040                                       | K1766.101250402                                            | ball bearing     | -/40/40 | 40/40/40 | 60 | 55 | 85  | 125 | 9  |
| K1766.101500401                                     | K1766.10150040                                       | K1766.101500402                                            | ball bearing     | -/54/54 | 40/40/50 | 80 | 75 | 110 | 150 | 11 |
| K1766.101600501                                     | K1766.10160050                                       | K1766.101600502                                            | ball bearing     | -/54/54 | 50/50/50 | 80 | 75 | 110 | 160 | 11 |
| K1766.102000501                                     | K1766.10200050                                       | K1766.102000502                                            | ball bearing     | -/54/54 | 50/50/50 | 80 | 75 | 110 | 200 | 11 |

| Order No.<br>Fixed castor<br>without locking system | Order No.<br>Swivel castor<br>without locking system | Order No.<br>Swivel castor<br>with stop-fix locking system | Wheel<br>bearing | H   | L   | L1  | L2 | R             | Permissible<br>load<br>kg |
|-----------------------------------------------------|------------------------------------------------------|------------------------------------------------------------|------------------|-----|-----|-----|----|---------------|---------------------------|
| K1766.101000401                                     | K1766.10100040                                       | K1766.101000402                                            | ball bearing     | 125 | 100 | 80  | 76 | -/86/86       | 150                       |
| K1766.101250401                                     | K1766.10125040                                       | K1766.101250402                                            | ball bearing     | 150 | 100 | 80  | 76 | -/102,5/102,5 | 150                       |
| K1766.101500401                                     | K1766.10150040                                       | K1766.101500402                                            | ball bearing     | 190 | 140 | 105 | -  | -/129/129     | 280                       |
| K1766.101600501                                     | K1766.10160050                                       | K1766.101600502                                            | ball bearing     | 195 | 140 | 105 | -  | -/134/134     | 300                       |
| K1766.102000501                                     | K1766.10200050                                       | K1766.102000502                                            | ball bearing     | 235 | 140 | 105 | -  | -/154/154     | 300                       |

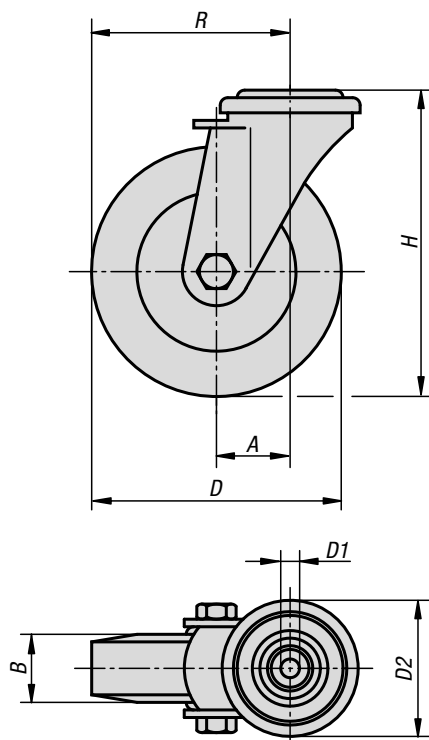


## Steel plate swivel castors

with soft rubber tyres and bolt hole



swivel castor



### Material:

Housing, steel plate.

Wheel tyre, high quality elastic solid rubber.

Wheel rim, high quality unbreakable polyamide.

### Version:

Housing, press-formed.

Swivel housing, double-row ball bearings in a swivel head.

Ball bearing wheel axle bearings.

### Sample order:

K1789.10125040

### Note:

Wheel axle bolted.

### Application:

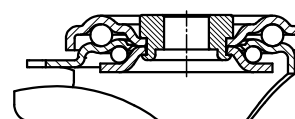
Maximum travel comfort, excellent cushioning of the transported goods. The new soft rubber series brings noticeable noise reduction in all applications.

### Temperature range:

-25 °C to +80 °C.



swivel head bearing:



## KIPP Steel plate swivel castors with soft rubber tyres and bolt hole

| Order No.<br>Swivel castor<br>without locking system | Order No.<br>Swivel castor<br>with stop-fix locking system | Wheel<br>bearing | A  | B  | D   | D1 | D2 | H   | R     | Permissible<br>load<br>kg |
|------------------------------------------------------|------------------------------------------------------------|------------------|----|----|-----|----|----|-----|-------|---------------------------|
| K1789.10100040                                       | K1789.101000402                                            | ball bearing     | 36 | 40 | 100 | 13 | 70 | 125 | 86    | 150                       |
| K1789.10125040                                       | K1789.101250402                                            | ball bearing     | 40 | 40 | 125 | 13 | 70 | 150 | 102,5 | 150                       |



# Swivel and fixed castors

medium-duty version



swivel castor

fixed castor



## Material:

Housing steel plate.  
Wheel body die-cast aluminium with Extrathane® tread.

## Version:

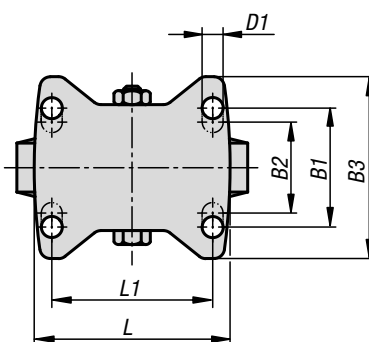
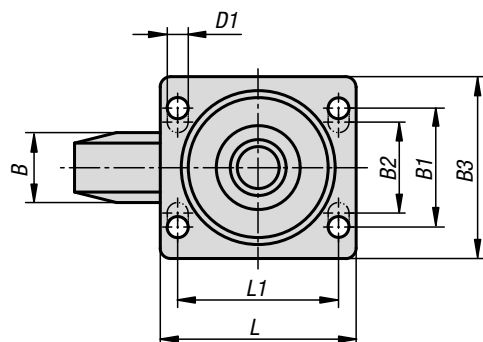
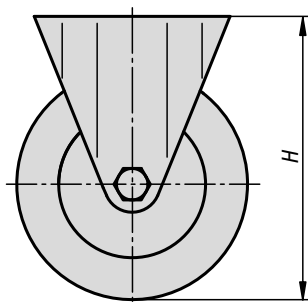
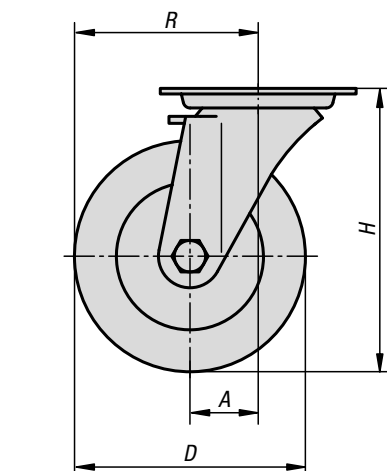
Housing press formed.  
Double ball bearing with ball shield in the castor head.  
Precision ball bearings in the wheels.

## Sample order:

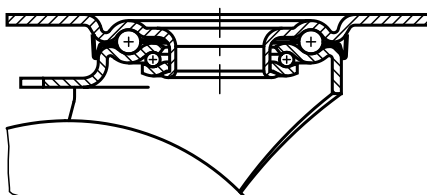
K1767.12540

## Note:

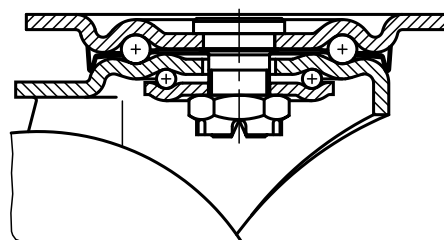
The wheels are non-corroding and have a low rolling resistance. Wheel axle bolted.



swivel head bearing  $R1 \leq 125$



swivel head bearing  $R1 \geq 160$



## KIPP Swivel and fixed castors medium-duty version

| Order No.<br>Fixed castor<br>without locking system | Order No.<br>Swivel castor<br>without locking system | Order No.<br>Swivel castor<br>with stop-top locking system | Wheel<br>bearing | A       | B  | B1 | B2 | B3  | D   | D1 |
|-----------------------------------------------------|------------------------------------------------------|------------------------------------------------------------|------------------|---------|----|----|----|-----|-----|----|
| K1767.100401                                        | K1767.10040                                          | K1767.100402                                               | ball bearing     | -/45/45 | 40 | 60 | -  | 85  | 100 | 9  |
| K1767.125401                                        | K1767.12540                                          | K1767.125402                                               | ball bearing     | -/48/48 | 40 | 60 | -  | 85  | 125 | 9  |
| K1767.160501                                        | K1767.16050                                          | K1767.160502                                               | ball bearing     | -/63/63 | 50 | 80 | 75 | 110 | 160 | 11 |
| K1767.200501                                        | K1767.20050                                          | K1767.200502                                               | ball bearing     | -/70/70 | 50 | 80 | 75 | 110 | 200 | 11 |

| Order No.<br>Fixed castor<br>without locking system | Order No.<br>Swivel castor<br>without locking system | Order No.<br>Swivel castor<br>with stop-top locking system | Wheel<br>bearing | H   | L   | L1  | R             | Permissible<br>load<br>kg |
|-----------------------------------------------------|------------------------------------------------------|------------------------------------------------------------|------------------|-----|-----|-----|---------------|---------------------------|
| K1767.100401                                        | K1767.10040                                          | K1767.100402                                               | ball bearing     | 130 | 100 | 80  | -/95/95       | 250                       |
| K1767.125401                                        | K1767.12540                                          | K1767.125402                                               | ball bearing     | 155 | 100 | 80  | -/110,5/110,5 | 250                       |
| K1767.160501                                        | K1767.16050                                          | K1767.160502                                               | ball bearing     | 202 | 140 | 105 | -/143/143     | 550                       |
| K1767.200501                                        | K1767.20050                                          | K1767.200502                                               | ball bearing     | 245 | 140 | 105 | -/170/170     | 800                       |

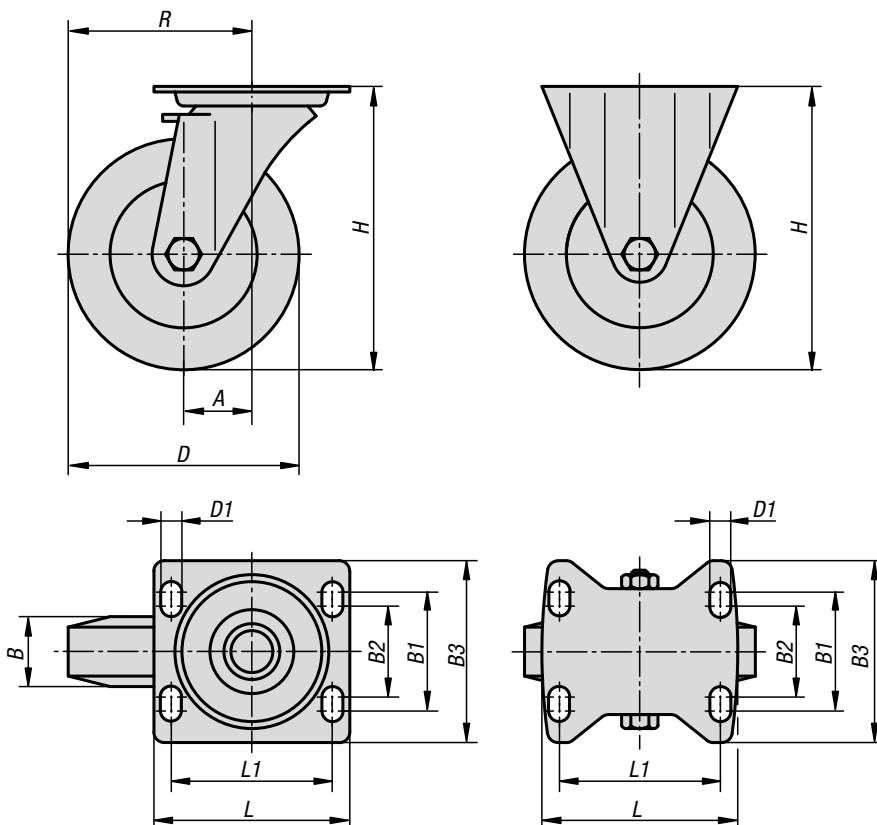
## Swivel and fixed castors

heavy-duty version



swivel castor

fixed castor



### Material:

Housing thick steel plate.  
Wheels welded steel body and Extrathane® tread.

### Version:

Housing press formed.  
Swivel castor housing with strong fork and base plate, very robust centre pin bolted and secured. The swivel head is additionally reinforced with specially formed and hardened bearing shells.

### Sample order:

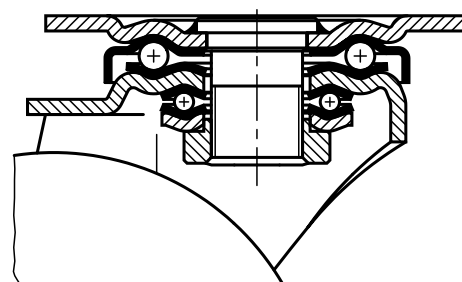
K1768.16050

### Note:

These castors are particularly shock and impact proof. The treads resist abrasion and are elastic and low-noise. Wheel axle bolted.



swivel head bearing



### KIPP Swivel and fixed castors heavy-duty version

| Order No.<br>Fixed castor<br>without locking system | Order No.<br>Swivel castor<br>without locking system | Order No.<br>Swivel castor<br>with stop-top locking system | Wheel<br>bearing | A       | B  | B1 | B2 | B3  | D   | D1 |
|-----------------------------------------------------|------------------------------------------------------|------------------------------------------------------------|------------------|---------|----|----|----|-----|-----|----|
| K1768.125501                                        | K1768.12550                                          | K1768.125502                                               | ball bearing     | -/55/55 | 50 | 80 | 75 | 110 | 125 | 11 |
| K1768.160501                                        | K1768.16050                                          | K1768.160502                                               | ball bearing     | -/65/65 | 50 | 80 | 75 | 110 | 160 | 11 |
| K1768.200501                                        | K1768.20050                                          | K1768.200502                                               | ball bearing     | -/70/70 | 50 | 80 | 75 | 110 | 200 | 11 |

| Order No.<br>Fixed castor<br>without locking system | Order No.<br>Swivel castor<br>without locking system | Order No.<br>Swivel castor<br>with stop-top locking system | Wheel<br>bearing | H   | L   | L1  | R             | Permissible<br>load<br>kg |
|-----------------------------------------------------|------------------------------------------------------|------------------------------------------------------------|------------------|-----|-----|-----|---------------|---------------------------|
| K1768.125501                                        | K1768.12550                                          | K1768.125502                                               | ball bearing     | 170 | 140 | 105 | -/117,5/117,5 | 500                       |
| K1768.160501                                        | K1768.16050                                          | K1768.160502                                               | ball bearing     | 202 | 140 | 105 | -/145/145     | 700                       |
| K1768.200501                                        | K1768.20050                                          | K1768.200502                                               | ball bearing     | 245 | 140 | 105 | -/170/170     | 900                       |

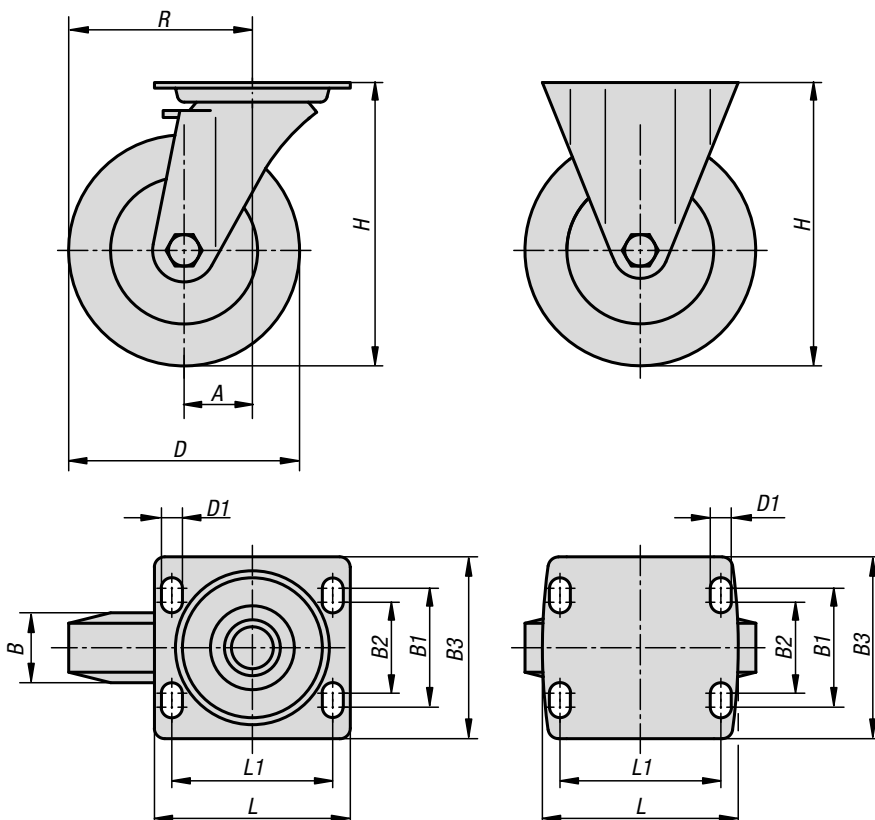
## Swivel and fixed castors

welded steel heavy-duty version



swivel castor

fixed castor



### Material:

Housing solid welded steel construction.  
Wheels with welded steel body and Extrathane® tread.

### Version:

The housing is a rugged welded steel construction.  
Swivel castor housing with DIN 711 axial groove ball bearing and DIN 720 tapered roller bearing in the swivel head. Dust and splash-proof, with grease nipple. Precision ball bearings in the wheels.

### Sample order:

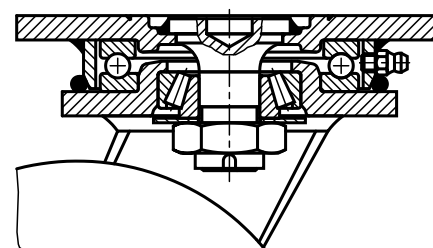
K1769.20050

### Note:

Centre pin welded in, bolted and secured. Wheel axle bolted.



swivel head bearing



### KIPP Swivel and fixed castors welded steel heavy-duty version

| Order No.<br>Fixed castor<br>without locking system | Order No.<br>Swivel castor<br>without locking system | Order No.<br>Swivel castor<br>with stop-top locking system | Wheel<br>bearing | A       | B  | B1  | B2 | B3  | D   | D1 |
|-----------------------------------------------------|------------------------------------------------------|------------------------------------------------------------|------------------|---------|----|-----|----|-----|-----|----|
| K1769.160501                                        | K1769.16050                                          | K1769.160502                                               | ball bearing     | -/55/55 | 50 | 80  | 75 | 110 | 160 | 11 |
| K1769.200501                                        | K1769.20050                                          | K1769.200502                                               | ball bearing     | -/60/60 | 50 | 80  | 75 | 110 | 200 | 11 |
| K1769.250601                                        | K1769.25060                                          | K1769.250602                                               | ball bearing     | -/75/75 | 60 | 105 | -  | 140 | 250 | 14 |

| Order No.<br>Fixed castor<br>without locking system | Order No.<br>Swivel castor<br>without locking system | Order No.<br>Swivel castor<br>with stop-top locking system | Wheel<br>bearing | H   | L   | L1  | R         | Permissible<br>load<br>kg |
|-----------------------------------------------------|------------------------------------------------------|------------------------------------------------------------|------------------|-----|-----|-----|-----------|---------------------------|
| K1769.160501                                        | K1769.16050                                          | K1769.160502                                               | ball bearing     | 205 | 140 | 105 | -/135/135 | 700                       |
| K1769.200501                                        | K1769.20050                                          | K1769.200502                                               | ball bearing     | 245 | 140 | 105 | -/160/160 | 1000                      |
| K1769.250601                                        | K1769.25060                                          | K1769.250602                                               | ball bearing     | 305 | 175 | 140 | -/200/200 | 1350                      |

## Swivel and fixed castors

standard version



### Material:

Housing steel plate.  
Wheels PA 6.

### Version:

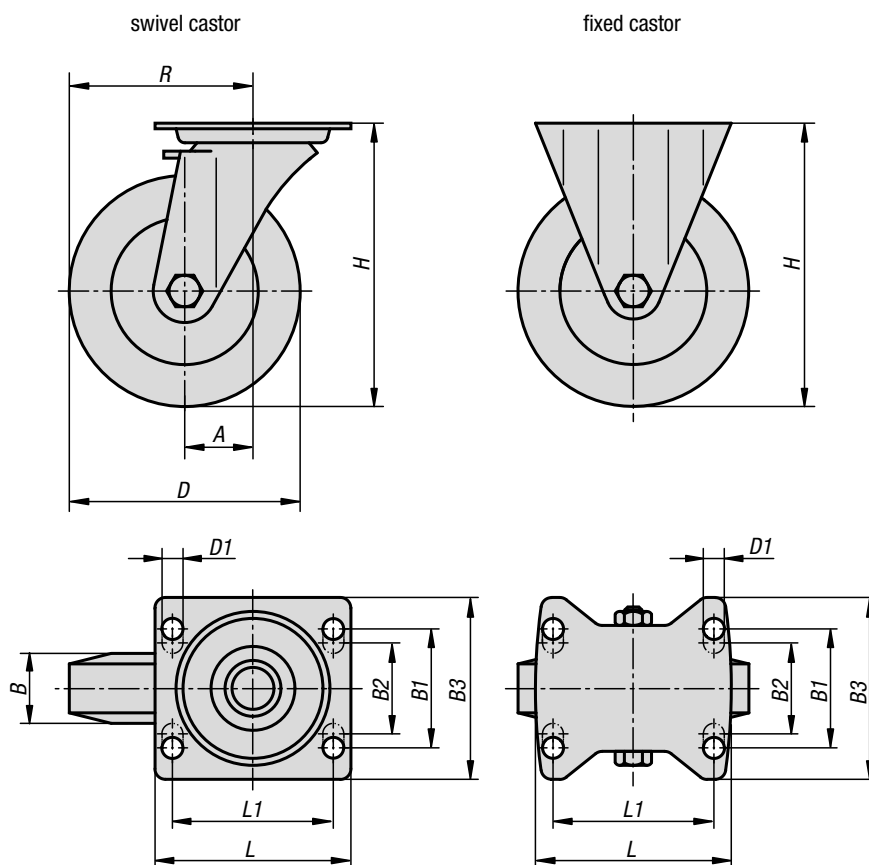
Housing press formed.  
Double ball bearing with ball shield in the castor head.  
Plain bearings in the wheels.

### Sample order:

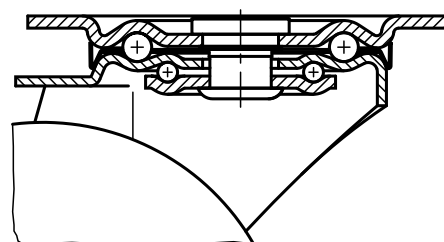
K1770.10037

### Note:

The PA 6 wheels have a low rolling resistance, are non-corroding, resist abrasion and are particularly shock and impact proof.



swivel head bearing



### KIPP Swivel and fixed castors standard version

| Order No.<br>Fixed castor<br>without locking system | Order No.<br>Swivel castor<br>without locking system | Order No.<br>Swivel castor<br>with stop-fix locking system | Wheel<br>bearing | A       | B  | B1 | B2 | B3  | D   | D1 |
|-----------------------------------------------------|------------------------------------------------------|------------------------------------------------------------|------------------|---------|----|----|----|-----|-----|----|
| K1770.075321                                        | K1770.07532                                          | K1770.075322                                               | plain bearing    | -/35/35 | 32 | 60 | -  | 85  | 75  | 9  |
| K1770.100371                                        | K1770.10037                                          | K1770.100372                                               | plain bearing    | -/35/35 | 37 | 60 | -  | 85  | 100 | 9  |
| K1770.125401                                        | K1770.12540                                          | K1770.125402                                               | plain bearing    | -/40/40 | 40 | 60 | -  | 85  | 125 | 9  |
| K1770.150501                                        | K1770.15050                                          | K1770.150502                                               | plain bearing    | -/60/60 | 50 | 80 | 75 | 110 | 150 | 11 |

| Order No.<br>Fixed castor<br>without locking system | Order No.<br>Swivel castor<br>without locking system | Order No.<br>Swivel castor<br>with stop-fix locking system | Wheel<br>bearing | H   | L   | L1     | R             | Permissible<br>load<br>kg |
|-----------------------------------------------------|------------------------------------------------------|------------------------------------------------------------|------------------|-----|-----|--------|---------------|---------------------------|
| K1770.075321                                        | K1770.07532                                          | K1770.075322                                               | plain bearing    | 98  | 100 | 80/105 | -/72,5/72,5   | 200                       |
| K1770.100371                                        | K1770.10037                                          | K1770.100372                                               | plain bearing    | 125 | 100 | 80/105 | -/85/85       | 200                       |
| K1770.125401                                        | K1770.12540                                          | K1770.125402                                               | plain bearing    | 150 | 100 | 80/105 | -/102,5/102,5 | 200                       |
| K1770.150501                                        | K1770.15050                                          | K1770.150502                                               | plain bearing    | 190 | 140 | 80/105 | -/135/135     | 400                       |

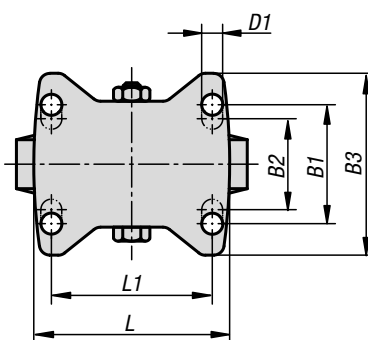
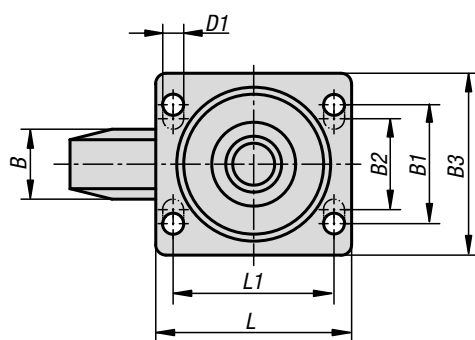
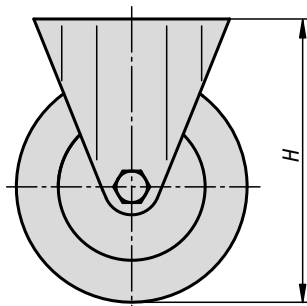
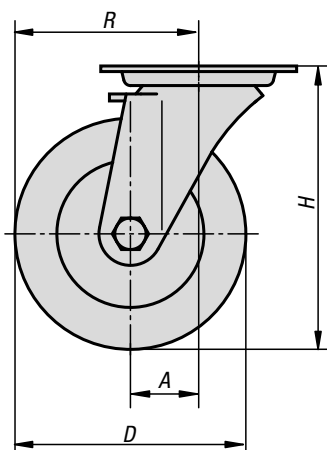
# Swivel and fixed castors

heavy-duty version



swivel castor

fixed castor



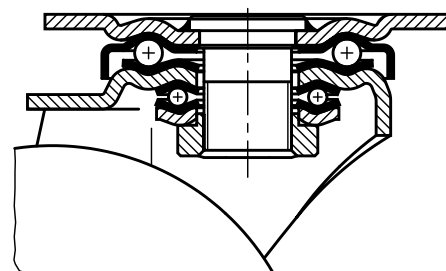
**Material:**  
Housing thick steel plate.  
Wheels PA 6.

**Version:**  
Housing press formed.  
Swivel castor housing with strong fork and base plate, very robust centre pin bolted and secured. The swivel head is additionally reinforced with specially formed and hardened bearing shells.  
Plain bearings in the wheels.

**Sample order:**  
K1771.12540

**Note:**  
Wheel axle bolted. The wheels are particularly shock and impact proof and have high abrasion resistance.

swivel head bearing



## KIPP Swivel and fixed castors heavy-duty version

| Order No.<br>Fixed castor<br>without locking system | Order No.<br>Swivel castor<br>without locking system | Order No.<br>Swivel castor<br>with stop-top locking system | Wheel<br>bearing | A       | B  | B1 | B2 | B3  | D   | D1 |
|-----------------------------------------------------|------------------------------------------------------|------------------------------------------------------------|------------------|---------|----|----|----|-----|-----|----|
| K1771.100371                                        | K1771.10037                                          | K1771.100372                                               | plain bearing    | -/45/45 | 37 | 60 | -  | 85  | 100 | 9  |
| K1771.125401                                        | K1771.12540                                          | K1771.125402                                               | plain bearing    | -/45/45 | 40 | 60 | -  | 85  | 125 | 9  |
| K1771.150501                                        | K1771.15050                                          | K1771.150502                                               | plain bearing    | -/65/65 | 50 | 80 | 75 | 110 | 150 | 11 |
| K1771.200501                                        | K1771.20050                                          | K1771.200502                                               | plain bearing    | -/70/70 | 50 | 80 | 75 | 110 | 200 | 11 |

| Order No.<br>Fixed castor<br>without locking system | Order No.<br>Swivel castor<br>without locking system | Order No.<br>Swivel castor<br>with stop-top locking system | Wheel<br>bearing | H   | L   | L1  | R             | Permissible<br>load<br>kg |
|-----------------------------------------------------|------------------------------------------------------|------------------------------------------------------------|------------------|-----|-----|-----|---------------|---------------------------|
| K1771.100371                                        | K1771.10037                                          | K1771.100372                                               | plain bearing    | 140 | 100 | 80  | -/95/95       | 280                       |
| K1771.125401                                        | K1771.12540                                          | K1771.125402                                               | plain bearing    | 165 | 100 | 80  | -/107,5/107,5 | 300                       |
| K1771.150501                                        | K1771.15050                                          | K1771.150502                                               | plain bearing    | 197 | 140 | 105 | -/140/140     | 400                       |
| K1771.200501                                        | K1771.20050                                          | K1771.200502                                               | plain bearing    | 245 | 140 | 105 | -/170/170     | 600                       |

## Swivel and fixed castors

heavy-duty version



swivel castor

fixed castor

### Material:

Housing thick steel plate.  
Wheels high-quality PA 6.

### Version:

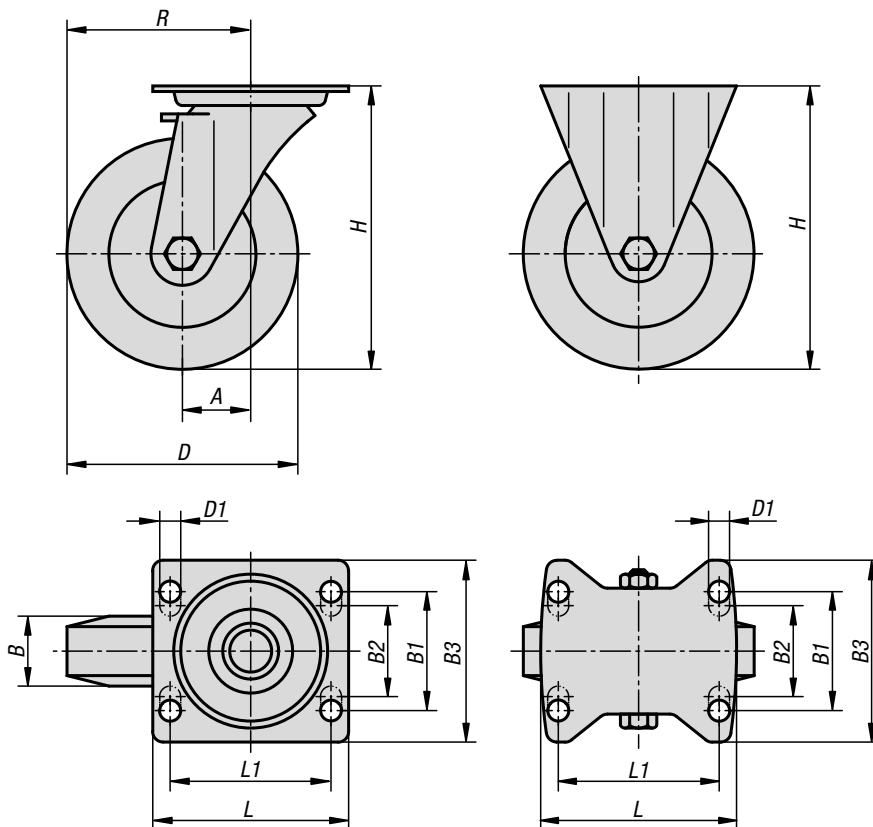
Housing press formed.  
Swivel castor housing with strong fork and base plate, very robust centre pin bolted and secured. The swivel head is additionally reinforced with specially formed and hardened bearing shells.

### Sample order:

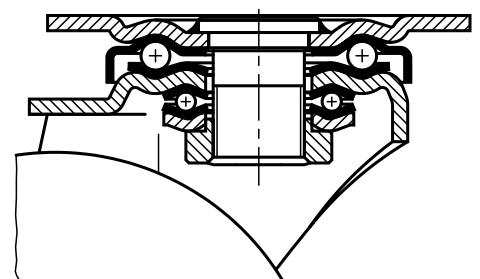
K1772.10037

### Note:

The hardened bearing shells make these castors particularly shock and impact proof. The wheels have high abrasion resistance. Wheel axle bolted.



swivel head bearing



# Swivel and fixed castors

heavy-duty version



## KIPP Swivel and fixed castors heavy-duty version

| Order No.<br>Fixed castor<br>without locking system | Order No.<br>Swivel castor<br>without locking system | Order No.<br>Swivel castor<br>with stop-top locking system | Wheel<br>bearing | A       | B  | B1 | B2 | B3  | D   | D1 |
|-----------------------------------------------------|------------------------------------------------------|------------------------------------------------------------|------------------|---------|----|----|----|-----|-----|----|
| K1772.075321                                        | K1772.07532                                          | K1772.075322                                               | plain bearing    | -/45/45 | 32 | 60 | -  | 85  | 75  | 9  |
| K1772.075324                                        | K1772.075323                                         | K1772.075325                                               | ball bearing     | -/45/45 | 32 | 60 | -  | 85  | 75  | 9  |
| K1772.100371                                        | K1772.10037                                          | K1772.100372                                               | plain bearing    | -/45/45 | 37 | 60 | -  | 85  | 100 | 9  |
| K1772.100374                                        | K1772.100373                                         | K1772.100375                                               | ball bearing     | -/45/45 | 37 | 60 | -  | 85  | 100 | 9  |
| K1772.125401                                        | K1772.12540                                          | K1772.125402                                               | plain bearing    | -/45/45 | 40 | 60 | -  | 85  | 125 | 9  |
| K1772.125404                                        | K1772.125403                                         | K1772.125405                                               | ball bearing     | -/45/45 | 40 | 60 | -  | 85  | 125 | 9  |
| K1772.150501                                        | K1772.15050                                          | K1772.150502                                               | plain bearing    | -/65/65 | 50 | 80 | 75 | 110 | 150 | 11 |
| K1772.150504                                        | K1772.150503                                         | K1772.150505                                               | ball bearing     | -/65/65 | 50 | 80 | 75 | 110 | 150 | 11 |

| Order No.<br>Fixed castor<br>without locking system | Order No.<br>Swivel castor<br>without locking system | Order No.<br>Swivel castor<br>with stop-top locking system | Wheel<br>bearing | H   | L   | L1  | R             | Permissible<br>load<br>kg |
|-----------------------------------------------------|------------------------------------------------------|------------------------------------------------------------|------------------|-----|-----|-----|---------------|---------------------------|
| K1772.075321                                        | K1772.07532                                          | K1772.075322                                               | plain bearing    | 118 | 100 | 80  | -/82,5/82,5   | 300                       |
| K1772.075324                                        | K1772.075323                                         | K1772.075325                                               | ball bearing     | 118 | 100 | 80  | -/82,5/82,5   | 300                       |
| K1772.100371                                        | K1772.10037                                          | K1772.100372                                               | plain bearing    | 140 | 100 | 80  | -/95/95       | 500                       |
| K1772.100374                                        | K1772.100373                                         | K1772.100375                                               | ball bearing     | 140 | 100 | 80  | -/95/95       | 500                       |
| K1772.125401                                        | K1772.12540                                          | K1772.125402                                               | plain bearing    | 165 | 100 | 80  | -/107,5/107,5 | 700                       |
| K1772.125404                                        | K1772.125403                                         | K1772.125405                                               | ball bearing     | 165 | 100 | 80  | -/107,5/107,5 | 700                       |
| K1772.150501                                        | K1772.15050                                          | K1772.150502                                               | plain bearing    | 197 | 140 | 105 | -/140/140     | 800                       |
| K1772.150504                                        | K1772.150503                                         | K1772.150505                                               | ball bearing     | 197 | 140 | 105 | -/140/140     | 800                       |

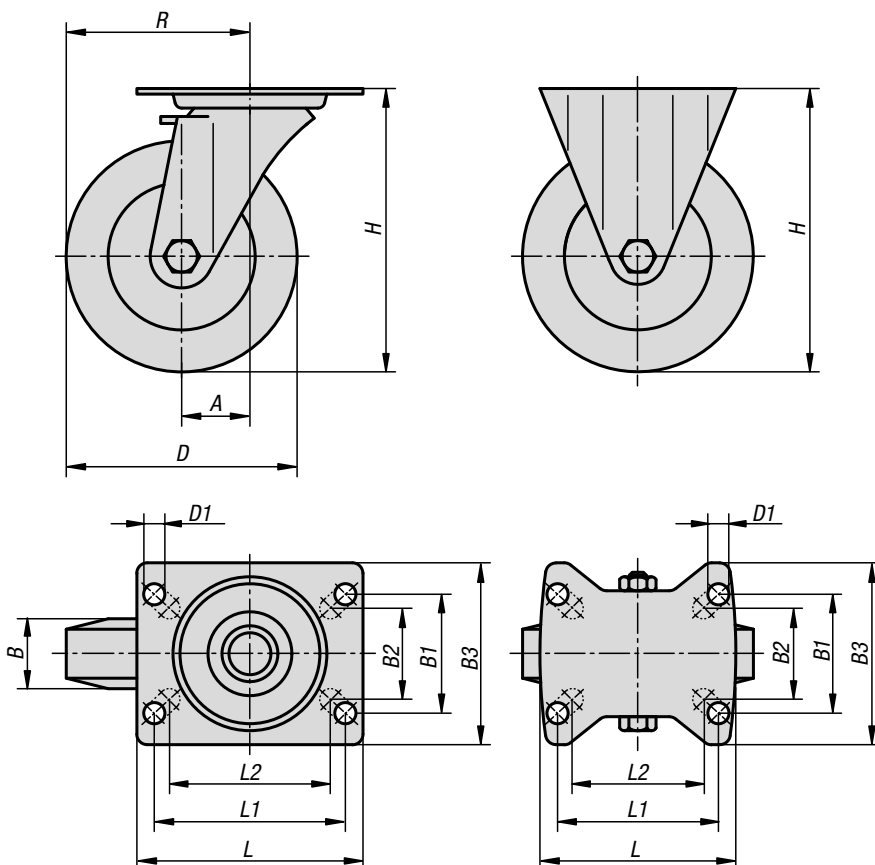
## Swivel and fixed castors

stainless steel, standard version



swivel castor

fixed castor



### Material:

Housing stainless steel 1.4301.  
Wheels high-quality unbreakable polyamide.

### Version:

Housing press formed.  
Double ball bearing in the castor head.  
Plain bearing in wheels.

### Sample order:

K1773.211000371

### Note:

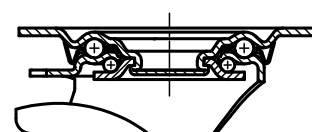
Wheel axle bolted.  
Swivel and fixed castors with mounting plate.  
Vibratory ground surface.  
Stainless.

### Temperature range:

-25 °C to +80 °C.



swivel head bearing:



## KIPP Swivel and fixed castors stainless steel, standard version

| Order No.<br>Fixed castor<br>without locking system | Order No.<br>Swivel castor<br>without locking system | Order No.<br>Swivel castor<br>with stop-fix locking system | Wheel<br>bearing | A       | B  | B1 | B2 | B3  | D   | D1 |
|-----------------------------------------------------|------------------------------------------------------|------------------------------------------------------------|------------------|---------|----|----|----|-----|-----|----|
| K1773.210750321                                     | K1773.21075032                                       | K1773.210750322                                            | plain bearing    | -/38/38 | 32 | 60 | 55 | 85  | 75  | 9  |
| K1773.211000371                                     | K1773.21100037                                       | K1773.211000372                                            | plain bearing    | -/36/36 | 37 | 60 | 55 | 85  | 100 | 9  |
| K1773.211250401                                     | K1773.21125040                                       | K1773.211250402                                            | plain bearing    | -/40/40 | 40 | 60 | 55 | 85  | 125 | 9  |
| K1773.211500501                                     | K1773.21150050                                       | K1773.211500502                                            | plain bearing    | -/54/54 | 50 | 80 | 75 | 110 | 150 | 11 |

| Order No.<br>Fixed castor<br>without locking system | Order No.<br>Swivel castor<br>without locking system | Order No.<br>Swivel castor<br>with stop-fix locking system | Wheel<br>bearing | H   | L   | L1  | L2 | R             | Permissible<br>load<br>kg |
|-----------------------------------------------------|------------------------------------------------------|------------------------------------------------------------|------------------|-----|-----|-----|----|---------------|---------------------------|
| K1773.210750321                                     | K1773.21075032                                       | K1773.210750322                                            | plain bearing    | 100 | 100 | 80  | 76 | -/75,5/75,5   | 150                       |
| K1773.211000371                                     | K1773.21100037                                       | K1773.211000372                                            | plain bearing    | 125 | 100 | 80  | 76 | -/86/86       | 150                       |
| K1773.211250401                                     | K1773.21125040                                       | K1773.211250402                                            | plain bearing    | 150 | 100 | 80  | 76 | -/102,5/102,5 | 150                       |
| K1773.211500501                                     | K1773.21150050                                       | K1773.211500502                                            | plain bearing    | 190 | 140 | 105 | -  | -/129/129     | 300                       |





A large rectangular area filled with a light gray grid pattern, intended for taking notes.



# Swivel castors

compact version



## Material:

Housing steel plate, trivalent blue passivated.  
Roller light brown polyurethane, Shore 92 A  
or white polyamide, Shore 80 D.

## Version:

Housing press formed.  
Swivel castor housing with 2x ball bearing in the swivel  
head and ball shield.  
Roller with two pressed-in ball bearings.

## Sample order:

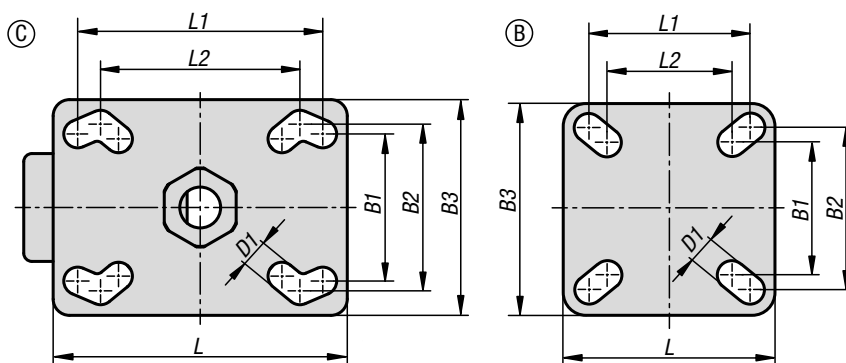
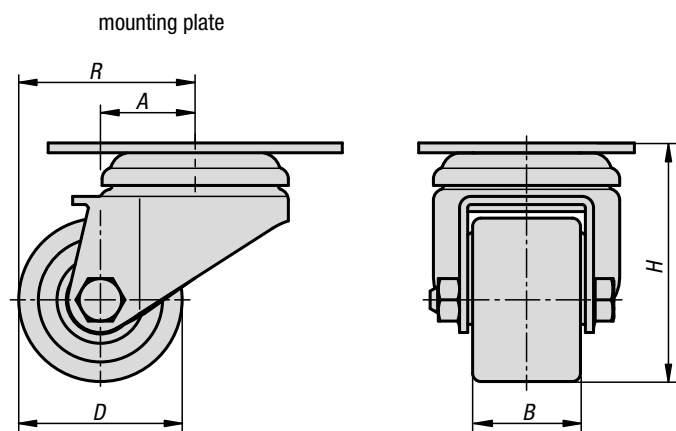
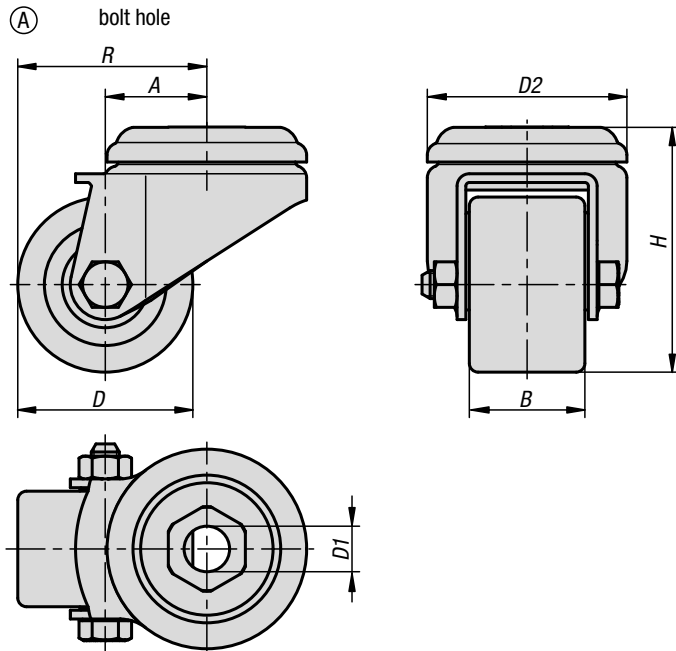
K1774.0352701

## Note:

Wheel axle bolted.

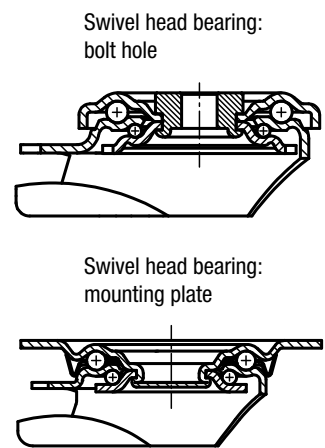
Polyurethane roller: low-noise, low rolling resistance,  
elastic, floor-protecting, very wear resistant , non-  
staining.

Polyamide roller: very low roll and pivot resistance,  
smooth running on smooth floors, very wear resistant.



# Swivel castors

compact version



## KIPP Swivel castors compact version

| Order No.     | Form | Item          | Version 1              | Wheel bearing | Material roller | A  | B  | B1 | B2 | B3 | D  | D1  |
|---------------|------|---------------|------------------------|---------------|-----------------|----|----|----|----|----|----|-----|
| K1774.0352701 | A    | Swivel castor | without locking system | ball bearing  | polyurethane    | 15 | 27 | -  | -  | -  | 35 | 11  |
| K1774.0352802 | A    | Swivel castor | without locking system | ball bearing  | polyamide       | 15 | 28 | -  | -  | -  | 35 | 11  |
| K1774.0503301 | A    | Swivel castor | without locking system | ball bearing  | polyurethane    | 29 | 33 | -  | -  | -  | 50 | 13  |
| K1774.0503202 | A    | Swivel castor | without locking system | ball bearing  | polyamide       | 29 | 32 | -  | -  | -  | 50 | 13  |
| K1774.0352711 | B    | Swivel castor | without locking system | ball bearing  | polyurethane    | 15 | 27 | 38 | 48 | 60 | 35 | 6,2 |
| K1774.0352812 | B    | Swivel castor | without locking system | ball bearing  | polyamide       | 15 | 28 | 38 | 48 | 60 | 35 | 6,2 |
| K1774.0503311 | C    | Swivel castor | without locking system | ball bearing  | polyurethane    | 29 | 33 | 45 | 51 | 66 | 50 | 8,5 |
| K1774.0503212 | C    | Swivel castor | without locking system | ball bearing  | polyamide       | 29 | 32 | 45 | 51 | 66 | 50 | 8,5 |

| Order No.     | Form | Item          | Version 1              | Wheel bearing | Material roller | D2 | H  | L  | L1 | L2 | R    | Permissible load kg |
|---------------|------|---------------|------------------------|---------------|-----------------|----|----|----|----|----|------|---------------------|
| K1774.0352701 | A    | Swivel castor | without locking system | ball bearing  | polyurethane    | 43 | 50 | -  | -  | -  | 32,5 | 100                 |
| K1774.0352802 | A    | Swivel castor | without locking system | ball bearing  | polyamide       | 43 | 50 | -  | -  | -  | 32,5 | 100                 |
| K1774.0503301 | A    | Swivel castor | without locking system | ball bearing  | polyurethane    | 57 | 70 | -  | -  | -  | 54   | 150                 |
| K1774.0503202 | A    | Swivel castor | without locking system | ball bearing  | polyamide       | 57 | 70 | -  | -  | -  | 54   | 150                 |
| K1774.0352711 | B    | Swivel castor | without locking system | ball bearing  | polyurethane    | -  | 52 | 60 | 48 | 38 | 32,5 | 100                 |
| K1774.0352812 | B    | Swivel castor | without locking system | ball bearing  | polyamide       | -  | 52 | 60 | 48 | 38 | 32,5 | 100                 |
| K1774.0503311 | C    | Swivel castor | without locking system | ball bearing  | polyurethane    | -  | 73 | 90 | 75 | 61 | 54   | 150                 |
| K1774.0503212 | C    | Swivel castor | without locking system | ball bearing  | polyamide       | -  | 73 | 90 | 75 | 61 | 54   | 150                 |

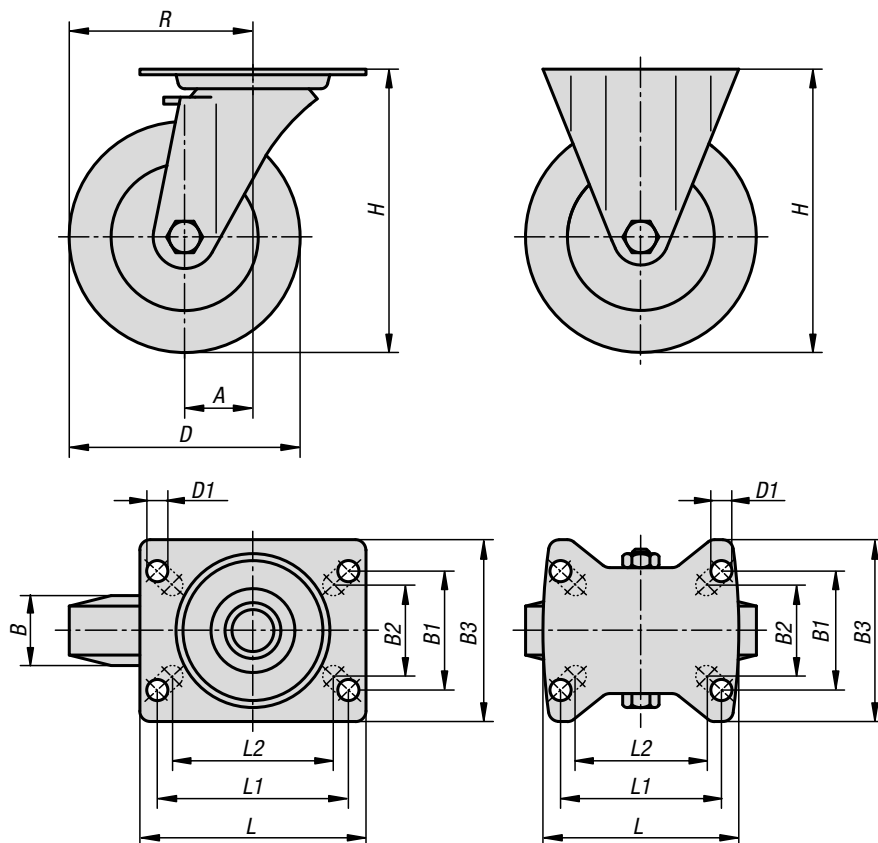
# Swivel and fixed castors

steel plate, for sterile areas



swivel castor

fixed castor



## Material:

Housing, steel plate.  
Wheel rim, high-quality thermoplastic polyurethane.  
Wheel tread, high-quality polyamide.

## Version:

Housing press formed.  
Double ball bearing in the castor head.  
Plain bearing in wheels.

## Sample order:

K1775.111250401

## Note:

Wheel axle bolted.  
Swivel and fixed castors with mounting plate.

## Application:

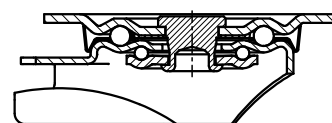
Loads can be transported with low noise and maximum ease in area's with high hygiene requirements.

## Temperature range:

-20°C to +70°C.



swivel head bearing:



## KIPP Swivel and fixed castors steel plate, for sterile areas

| Order No.<br>Fixed castor<br>without locking system | Order No.<br>Swivel castor<br>without locking system | Order No.<br>Swivel castor<br>with stop-fix locking system | Wheel<br>bearing | A       | B  | B1 | B2 | B3  | D   | D1 |
|-----------------------------------------------------|------------------------------------------------------|------------------------------------------------------------|------------------|---------|----|----|----|-----|-----|----|
| K1775.111000351                                     | K1775.11100035                                       | K1775.111000352                                            | plain bearing    | -/36/36 | 35 | 60 | 55 | 85  | 100 | 9  |
| K1775.111250401                                     | K1775.11125040                                       | K1775.111250402                                            | plain bearing    | -/40/40 | 40 | 60 | 55 | 85  | 125 | 9  |
| K1775.111600451                                     | K1775.11160045                                       | K1775.111600452                                            | plain bearing    | -/60/60 | 45 | 80 | 75 | 110 | 160 | 11 |
| K1775.112000501                                     | K1775.11200050                                       | K1775.112000502                                            | plain bearing    | -/65/65 | 50 | 80 | 75 | 110 | 200 | 11 |

| Order No.<br>Fixed castor<br>without locking system | Order No.<br>Swivel castor<br>without locking system | Order No.<br>Swivel castor<br>with stop-fix locking system | Wheel<br>bearing | H   | L   | L1  | L2 | R             | Permissible<br>load<br>kg |
|-----------------------------------------------------|------------------------------------------------------|------------------------------------------------------------|------------------|-----|-----|-----|----|---------------|---------------------------|
| K1775.111000351                                     | K1775.11100035                                       | K1775.111000352                                            | plain bearing    | 125 | 100 | 80  | 76 | -/86/86       | 200                       |
| K1775.111250401                                     | K1775.11125040                                       | K1775.111250402                                            | plain bearing    | 150 | 100 | 80  | 76 | -/102,5/102,5 | 250                       |
| K1775.111600451                                     | K1775.11160045                                       | K1775.111600452                                            | plain bearing    | 195 | 140 | 105 | -  | -/140/140     | 400                       |
| K1775.112000501                                     | K1775.11200050                                       | K1775.112000502                                            | plain bearing    | 235 | 140 | 105 | -  | -/165/165     | 400                       |

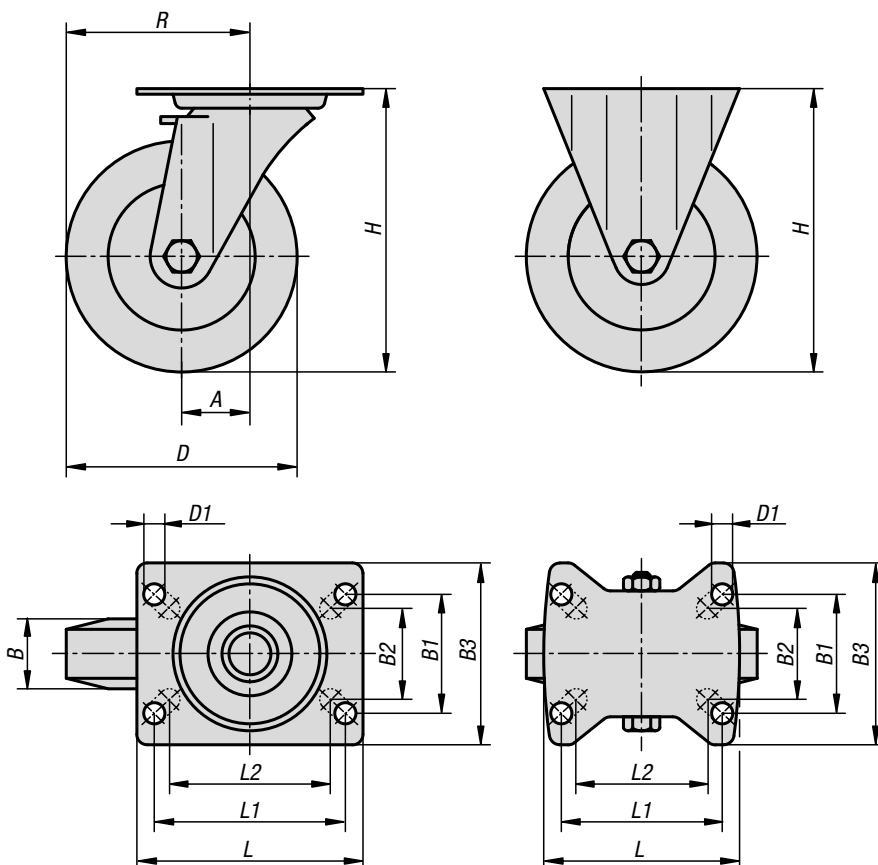
## Swivel and fixed castors

stainless steel, for sterile areas



swivel castor

fixed castor



### Material:

Housing stainless steel 1.4301.  
Wheel rim, high-quality thermoplastic polyurethane.  
Wheel tread, high-quality polyamide.

### Version:

Housing press formed.  
Double ball bearing in the castor head.  
Plain bearing in wheels.

### Sample order:

K1790.111250401

### Note:

Wheel axle bolted.  
Swivel and fixed castors with mounting plate.

### Application:

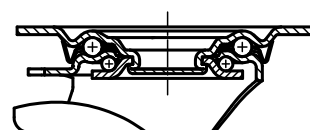
Loads can be transported with low noise and maximum ease in area's with high hygiene requirements.

### Temperature range:

-20°C to +70°C.



swivel head bearing:



## KIPP Swivel and fixed castors stainless steel, for sterile areas

| Order No.<br>Fixed castor<br>without locking system | Order No.<br>Swivel castor<br>without locking system | Order No.<br>Swivel castor<br>with stop-fix locking system | Wheel<br>bearing | A       | B  | B1 | B2 | B3  | D   | D1 |
|-----------------------------------------------------|------------------------------------------------------|------------------------------------------------------------|------------------|---------|----|----|----|-----|-----|----|
| K1790.211000351                                     | K1790.21100035                                       | K1790.211000352                                            | plain bearing    | -/30/30 | 35 | 60 | 55 | 85  | 100 | 9  |
| K1790.211250401                                     | K1790.21125040                                       | K1790.211250402                                            | plain bearing    | -/40/40 | 40 | 60 | 55 | 85  | 125 | 9  |
| K1790.211600451                                     | K1790.21160045                                       | K1790.211600452                                            | plain bearing    | -/60/60 | 45 | 80 | 75 | 110 | 160 | 11 |
| K1790.212000501                                     | K1790.21200050                                       | K1790.212000502                                            | plain bearing    | -/65/65 | 50 | 80 | 75 | 110 | 200 | 11 |

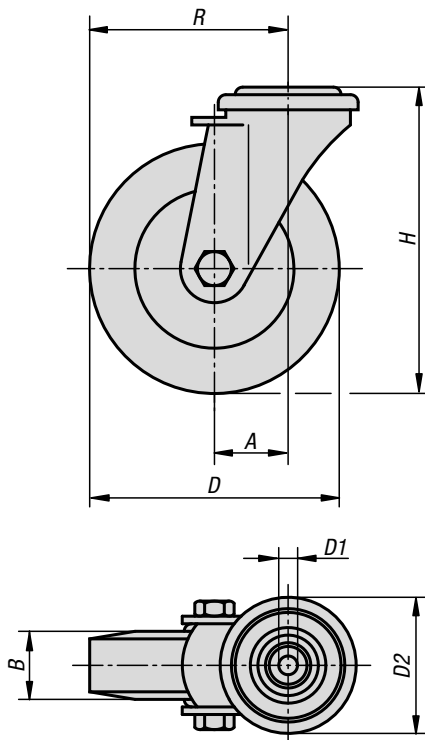
| Order No.<br>Fixed castor<br>without locking system | Order No.<br>Swivel castor<br>without locking system | Order No.<br>Swivel castor<br>with stop-fix locking system | Wheel<br>bearing | H   | L   | L1  | L2 | R             | Permissible<br>load<br>kg |
|-----------------------------------------------------|------------------------------------------------------|------------------------------------------------------------|------------------|-----|-----|-----|----|---------------|---------------------------|
| K1790.211000351                                     | K1790.21100035                                       | K1790.211000352                                            | plain bearing    | 125 | 100 | 80  | 76 | -/80/80       | 200                       |
| K1790.211250401                                     | K1790.21125040                                       | K1790.211250402                                            | plain bearing    | 150 | 100 | 80  | 76 | -/102,5/102,5 | 250                       |
| K1790.211600451                                     | K1790.21160045                                       | K1790.211600452                                            | plain bearing    | 195 | 140 | 105 | -  | -/140/140     | 400                       |
| K1790.212000501                                     | K1790.21200050                                       | K1790.212000502                                            | plain bearing    | 235 | 140 | 105 | -  | -/165/165     | 400                       |

## Swivel castors with bolt hole

stainless steel, for sterile areas



swivel castor



### Material:

Housing stainless steel 1.4301.  
Wheel rim, high-quality thermoplastic polyurethane.  
Wheel tread, high-quality polyamide.

### Version:

Housing press formed.  
Double ball bearing in the castor head.  
Plain bearing in wheels.

### Sample order:

K1791.21125040

### Note:

Wheel axle bolted.

### Application:

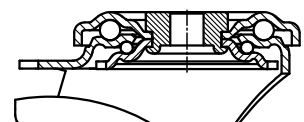
Loads can be transported with low noise and maximum ease in area's with high hygiene requirements.

### Temperature range:

-20°C to +70°C.



swivel head bearing:

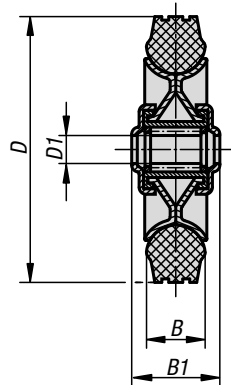
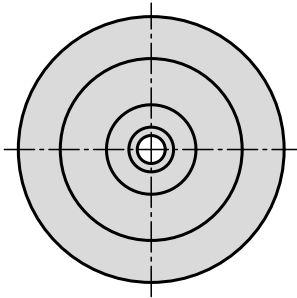


## KIPP Swivel castors with bolt hole stainless steel, for sterile areas

| Order No.<br>Swivel castor<br>without locking system | Order No.<br>Swivel castor<br>with stop-fix locking system | Wheel<br>bearing | A     | B  | D   | D1 | D2 | H   | R           | Permissible<br>load<br>kg |
|------------------------------------------------------|------------------------------------------------------------|------------------|-------|----|-----|----|----|-----|-------------|---------------------------|
| K1791.21100035                                       | K1791.211000352                                            | plain bearing    | 36/36 | 35 | 100 | 13 | 70 | 125 | 86/86       | 150                       |
| K1791.21125040                                       | K1791.211250402                                            | plain bearing    | 40/40 | 40 | 125 | 13 | 70 | 150 | 102,5/102,5 | 150                       |
| K1791.21160045                                       | K1791.211600452                                            | plain bearing    | 54/54 | 45 | 160 | 13 | 88 | 195 | 134/134     | 300                       |
| K1791.21200050                                       | K1791.212000502                                            | plain bearing    | 54/54 | 50 | 200 | 13 | 88 | 235 | 154/154     | 300                       |

# Wheels

rubber tyres on steel plate rims


**Material:**

Rim steel plate.  
Tyre solid rubber.

**Version:**

Rims trivalent passivated.  
Tyres black.

**Sample order:**

K1776.14038

**Note:**

This special rim design is exceptionally ridged even with extreme shocks and impacts. Low rolling resistance.

Temperature resistant from -30 °C to +80 °C.  
Suitable for K1761.



## KIPP Wheels rubber tyres on steel plate rims

| Order No.   | Wheel bearing  | D   | D1 | B    | B1 | Permissible load kg |
|-------------|----------------|-----|----|------|----|---------------------|
| K1776.08025 | roller bearing | 80  | 12 | 25   | 35 | 50                  |
| K1776.10030 | roller bearing | 100 | 15 | 30   | 45 | 70                  |
| K1776.12538 | roller bearing | 125 | 15 | 37,5 | 45 | 100                 |
| K1776.14038 | roller bearing | 140 | 15 | 37,5 | 45 | 115                 |
| K1776.16040 | roller bearing | 160 | 20 | 40   | 60 | 135                 |
| K1776.18050 | roller bearing | 180 | 20 | 50   | 60 | 170                 |
| K1776.20050 | roller bearing | 200 | 20 | 50   | 60 | 205                 |

Wheels

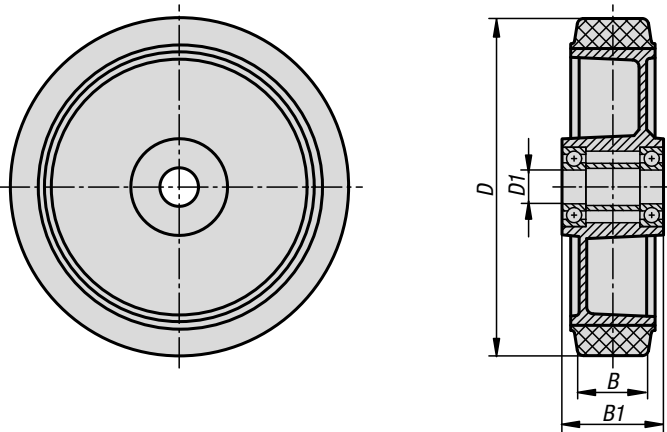
rubber tyres on die-cast aluminium rims



**Material:**  
Wheel rims die-cast aluminium.  
Tyre elastic solid rubber.

**Sample order:**  
K1777.200501

**Note:**  
The tyre is vulcanised onto the rim. Wheels with elastic solid rubber tyres have a high wear resistance, low rolling resistance and excellent drive comfort. Application temperature from -30 °C to +80 °C. These wheels are used as the front wheels on fork-lift trucks. Other sizes on request.



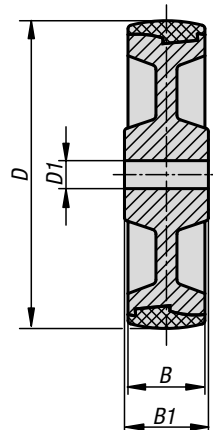
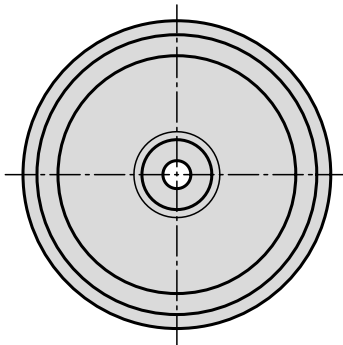
KIPP Wheels rubber tyres on die-cast aluminium rims

| Order No.    | Wheel bearing | D   | D1 | B  | B1 | Permissible load kg |
|--------------|---------------|-----|----|----|----|---------------------|
| K1777.200501 | ball bearing  | 200 | 20 | 35 | 60 | 450                 |



# Wheels

polyamide with injection-moulded tread



## Material:

Wheel body PA.

Tread thermoplastic polyurethane elastomer.

## Sample order:

K1778.12535

## Note:

Wheels with polyurethane tread have a high load capacity, resist abrasion, are gentle to floors, absorb shocks and vibration and are resistant to many chemicals and acids.

Temperature resistant from -30 °C to +80 °C.

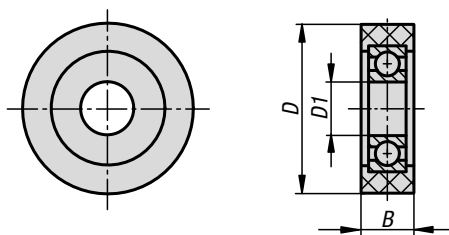
Suitable as replacement rollers for the castors K1764.



## KIPP Wheels polyamide with injection-moulded tread

| Order No.   | Wheel bearing | D   | D1 | B  | B1 | Permissible load kg |
|-------------|---------------|-----|----|----|----|---------------------|
| K1778.10035 | plain bearing | 100 | 15 | 35 | 45 | 200                 |
| K1778.12535 | plain bearing | 125 | 15 | 35 | 45 | 250                 |
| K1778.15040 | plain bearing | 150 | 20 | 40 | 60 | 400                 |
| K1778.20050 | plain bearing | 200 | 20 | 50 | 60 | 700                 |

# Guide rollers


**Material:**

Tread light brown Extrathane® Shore 92A or white polyamide 6 Shore 80D.

**Sample order:**

K1779.05015

**Note:**

The tread is firmly bonded onto a ball bearing.

Extrathane tread: quiet running, low roll resistance, elastic, gentle on floors, very wear resistant, high cut and tear resistance, non-marking, non-staining.

Polyamide 6 tread: unbreakable, very low roll resistance, light running on smooth floors, very wear resistant.

Uses: conveyor belts, doors, etc.

Other sizes on request.

## KIPP Guide rollers

| Order No.    | Version 1              | Material tread | Wheel bearing | D  | D1 | B  | Ball bearing | Permissible load kg |
|--------------|------------------------|----------------|---------------|----|----|----|--------------|---------------------|
| K1779.03008  | without locking system | extrathane     | ball bearing  | 30 | 6  | 8  | 626 2RS      | 20                  |
| K1779.03514  | without locking system | extrathane     | ball bearing  | 35 | 12 | 14 | 6001 2RS     | 40                  |
| K1779.04020  | without locking system | extrathane     | ball bearing  | 40 | 10 | 20 | 6000 2RS     | 40                  |
| K1779.05015  | without locking system | extrathane     | ball bearing  | 50 | 10 | 15 | 6200 2RS     | 60                  |
| K1779.06020  | without locking system | extrathane     | ball bearing  | 60 | 17 | 20 | 6203 2RS     | 90                  |
| K1779.07020  | without locking system | extrathane     | ball bearing  | 70 | 25 | 20 | 6205 2RS     | 125                 |
| K1779.030081 | without locking system | polyamide 6    | ball bearing  | 30 | 6  | 8  | 626 2RS      | 35                  |
| K1779.035111 | without locking system | polyamide 6    | ball bearing  | 35 | 8  | 11 | 608 2RS      | 55                  |
| K1779.040201 | without locking system | polyamide 6    | ball bearing  | 40 | 10 | 20 | 6200 2RS     | 100                 |
| K1779.050151 | without locking system | polyamide 6    | ball bearing  | 50 | 10 | 15 | 6200 2RS     | 100                 |
| K1779.060201 | without locking system | polyamide 6    | ball bearing  | 60 | 17 | 20 | 6203 2RS     | 165                 |
| K1779.070201 | without locking system | polyamide 6    | ball bearing  | 70 | 25 | 20 | 6205 2RS     | 185                 |

# Wheels

aluminium rims with injection-moulded tread


**Material:**

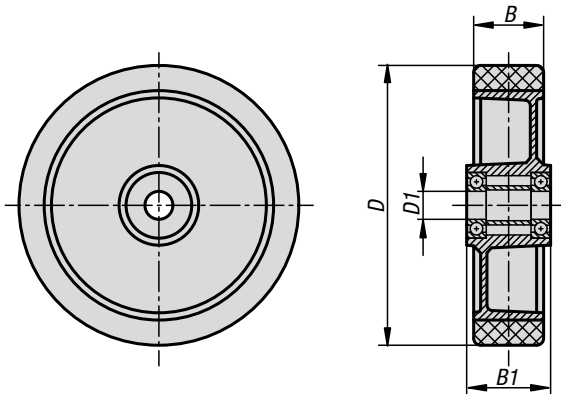
Wheel rim die-cast aluminium.  
Tread Extrathane®.

**Sample order:**

K1780.12540

**Note:**

These wheels are elastic, abrasion-resistant, gentle to floors, low-noise and have low roll resistance.  
Suitable as replacement rollers for castors K1767.

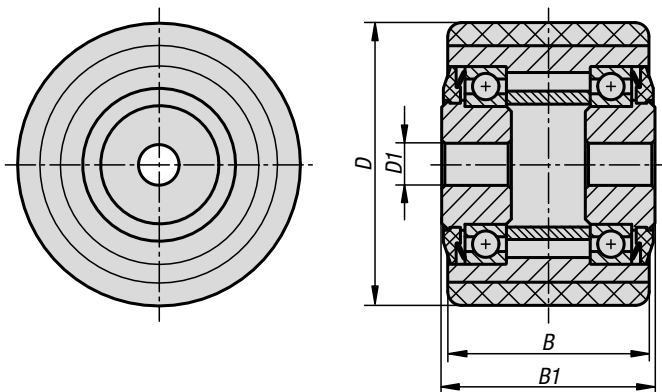


## KIPP Wheels aluminium rims with injection-moulded tread

| Order No.   | Wheel bearing | D   | D1 | B  | B1 | Permissible load kg |
|-------------|---------------|-----|----|----|----|---------------------|
| K1780.10040 | ball bearing  | 100 | 15 | 40 | 45 | 250                 |
| K1780.12540 | ball bearing  | 125 | 15 | 40 | 45 | 350                 |
| K1780.16050 | ball bearing  | 160 | 20 | 50 | 60 | 550                 |
| K1780.18050 | ball bearing  | 180 | 20 | 50 | 60 | 600                 |
| K1780.20050 | ball bearing  | 200 | 20 | 50 | 60 | 800                 |



## Rollers heavy-load


**Material:**

Wheel body steel tube with ball bearing.  
Tread Extrathane® 92 Shore A.

**Sample order:**

K1781.0857520

**Note:**

The ball bearing is splashproof. The tread is firmly bonded. These rollers resist abrasion, are non-staining, gentle to floors, low-noise, elastic, have low roll resistance and have a particularly high elastic restoration after long standing high cut and tear resistance.

Uses: pallet trucks, forklift, etc.

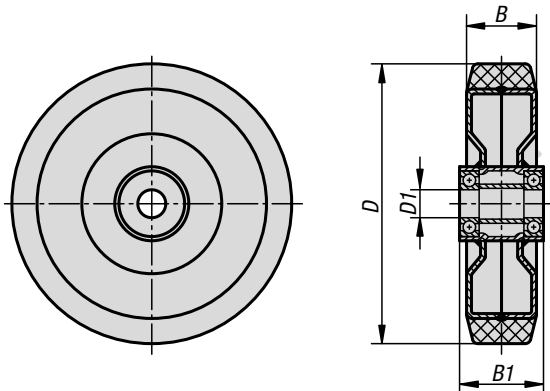
Other sizes on request.

### KIPP Rollers heavy-load

| Order No.     | Wheel bearing | D  | D1 | B  | B1  | Permissible load kg |
|---------------|---------------|----|----|----|-----|---------------------|
| K1781.0856020 | ball bearing  | 85 | 20 | 60 | 65  | 450                 |
| K1781.0856025 | ball bearing  | 85 | 25 | 60 | 65  | 450                 |
| K1781.0857520 | ball bearing  | 85 | 20 | 75 | 80  | 570                 |
| K1781.0857525 | ball bearing  | 85 | 25 | 75 | 80  | 570                 |
| K1781.0859525 | ball bearing  | 85 | 25 | 95 | 100 | 720                 |

# Wheels heavy-load

wheel body welded



## Material:

Wheel body welded steel construction.  
Tread Extrathane®.

## Sample order:

K1782.16050

## Note:

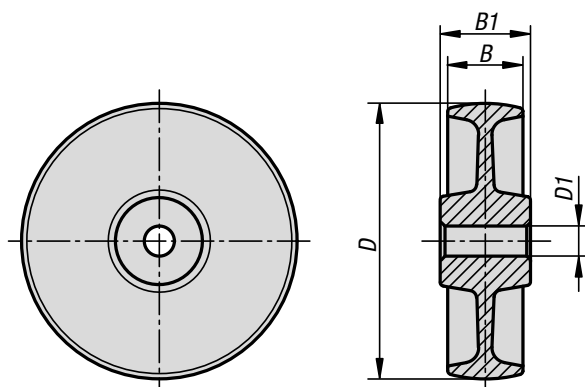
Extrathane treads are elastic, resist abrasion, gentle to floors, low-noise and have particularly high elastic restoration after long standing.  
Application temperature from -40 °C to +80 °C.  
Suitable as replacement rollers for the castors K1768 and K1769.



## KIPP Wheels heavy-load wheel body welded

| Order No.   | Wheel bearing | D   | D1 | B  | B1 | Permissible load kg |
|-------------|---------------|-----|----|----|----|---------------------|
| K1782.12550 | ball bearing  | 125 | 20 | 50 | 60 | 500                 |
| K1782.16050 | ball bearing  | 160 | 20 | 50 | 60 | 700                 |
| K1782.20050 | ball bearing  | 200 | 20 | 50 | 60 | 1000                |
| K1782.25060 | ball bearing  | 250 | 25 | 60 | 70 | 1350                |

## Wheels polyamide

**Material:**

Polyamide

**Sample order:**

K1783.12540

**Note:**

Polyamide wheels are unbreakable, non-corroding, shock and impact proof and chemical resistant. They also have high abrasion resistance and low roll resistance.

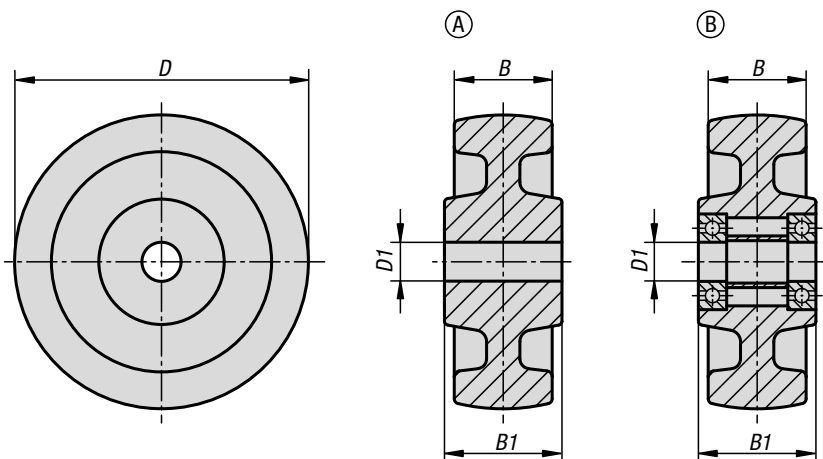
Other sizes or with ball bearing on request.

**KIPP Wheels polyamide**

| Order No.   | Wheel bearing | D   | D1 | B  | B1 | Permissible load kg |
|-------------|---------------|-----|----|----|----|---------------------|
| K1783.07532 | plain bearing | 75  | 12 | 32 | 35 | 200                 |
| K1783.10037 | plain bearing | 100 | 15 | 37 | 45 | 280                 |
| K1783.12540 | plain bearing | 125 | 15 | 40 | 45 | 300                 |
| K1783.15050 | plain bearing | 150 | 20 | 50 | 60 | 400                 |
| K1783.20050 | plain bearing | 200 | 20 | 50 | 60 | 600                 |

## Wheels polyamide

heavy-duty version



### Material:

Polyamide.

### Sample order:

K1784.10037

### Note:

Polyamide wheels are unbreakable, non-corroding, shock and impact proof and chemical resistant. They also have high abrasion resistance and low roll resistance. Suitable as replacement rollers for the castors K1772.

### Drawing reference:

Form A: plain bearing

Form B: ball bearing

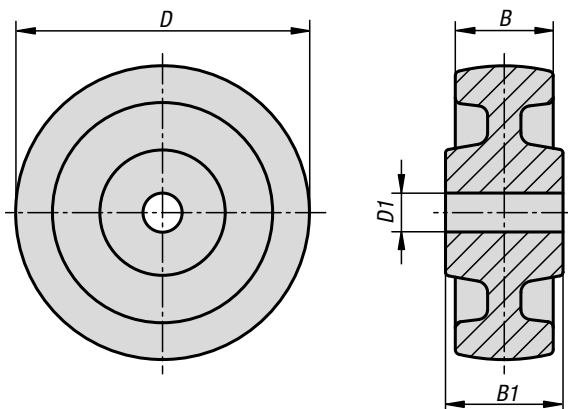
### KIPP Wheels polyamide heavy-duty version

| Order No.    | Form | Form-Type     | D   | D1 | B  | B1 | Permissible load kg |
|--------------|------|---------------|-----|----|----|----|---------------------|
| K1784.07532  | A    | plain bearing | 75  | 12 | 32 | 35 | 300                 |
| K1784.10037  | A    | plain bearing | 100 | 15 | 37 | 45 | 500                 |
| K1784.12540  | A    | plain bearing | 125 | 15 | 40 | 45 | 700                 |
| K1784.15050  | A    | plain bearing | 150 | 20 | 50 | 60 | 800                 |
| K1784.20050  | A    | plain bearing | 200 | 20 | 50 | 60 | 1500                |
| K1784.25065  | A    | plain bearing | 250 | 25 | 65 | 70 | 2000                |
| K1784.075321 | B    | ball bearing  | 75  | 15 | 32 | 35 | 300                 |
| K1784.100371 | B    | ball bearing  | 100 | 15 | 37 | 45 | 500                 |
| K1784.125401 | B    | ball bearing  | 125 | 20 | 40 | 45 | 700                 |
| K1784.150501 | B    | ball bearing  | 150 | 20 | 50 | 60 | 800                 |
| K1784.200501 | B    | ball bearing  | 200 | 25 | 50 | 60 | 1500                |
| K1784.250651 | B    | ball bearing  | 250 | 25 | 65 | 65 | 2000                |



# Wheels thermoset

heat-resistant


**Material:**

Thermoset PF.

**Version:**

Hardness Shore 90D, black.

Notch impact strength ca. 2.5 kJ/m<sup>2</sup>.

**Sample order:**

K1785.07528

**Note:**

Thermoset wheels for high-heat sectors, with exceptional running characteristics on smooth floors.

Excellent chemical resistance to many aggressive types of media. Typical uses are in hot plants, paint shops, bakers and smoking ovens.

Higher abrasion is unavoidable on rough floors. Running against curbs or bumps should be avoided due to the limited mechanical durability of phenolic resin.

**Temperature range:**

-35°C to +260°C, short-term up to +300°C.

**KIPP Wheels thermoset, heat-resistant**

| Order No.   | Wheel bearing | D   | D1   | B  | B1 | Permissible load kg |
|-------------|---------------|-----|------|----|----|---------------------|
| K1785.07528 | plain bearing | 75  | 8,4  | 28 | 31 | 100                 |
| K1785.10030 | plain bearing | 100 | 15,2 | 30 | 40 | 150                 |
| K1785.10038 | plain bearing | 100 | 15,2 | 38 | 42 | 200                 |
| K1785.12546 | plain bearing | 125 | 20,2 | 46 | 58 | 275                 |
| K1785.15050 | plain bearing | 150 | 20,2 | 50 | 58 | 300                 |
| K1785.20050 | plain bearing | 200 | 20,2 | 50 | 60 | 350                 |
| K1785.25050 | plain bearing | 250 | 20,2 | 50 | 58 | 350                 |



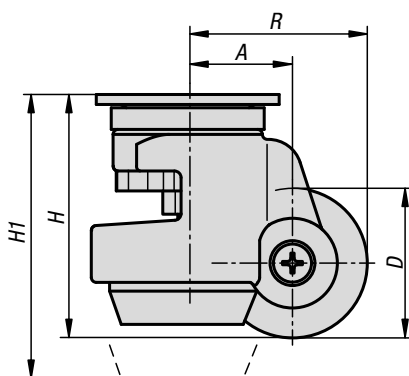
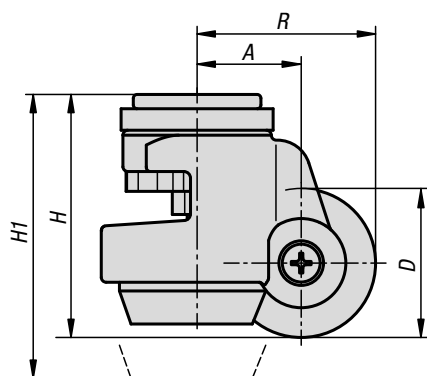
# Elevating castors with foot

with bolt hole or mounting plate



bolt hole

mounting plate



## Material:

Housing die-cast aluminium.  
Roller break resistant polyamide 6, Shore 70D.  
Foot hard rubber.

## Version:

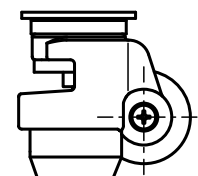
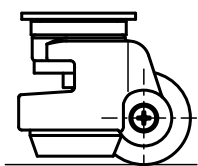
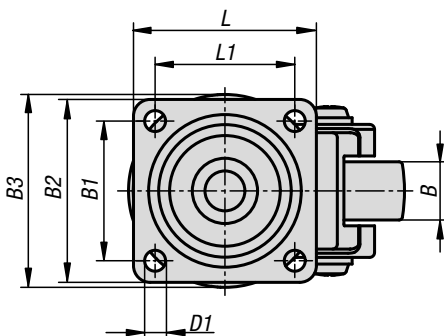
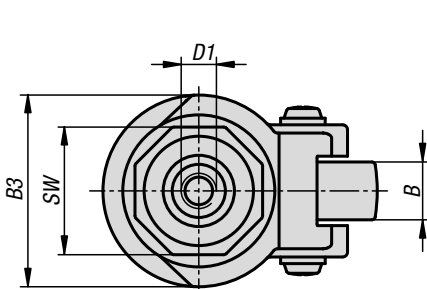
Housing, powder-coated, ivory.  
Steel parts trivalent blue passivated.  
Roller and foot black.

## Sample order:

K1786.045180

## Note:

Elevating castor with foot. With sealed ball bearing in the swivel head. Height adjustment with a 13 mm spanner or by the integrated adjustment screw. Wheel axle bolted.

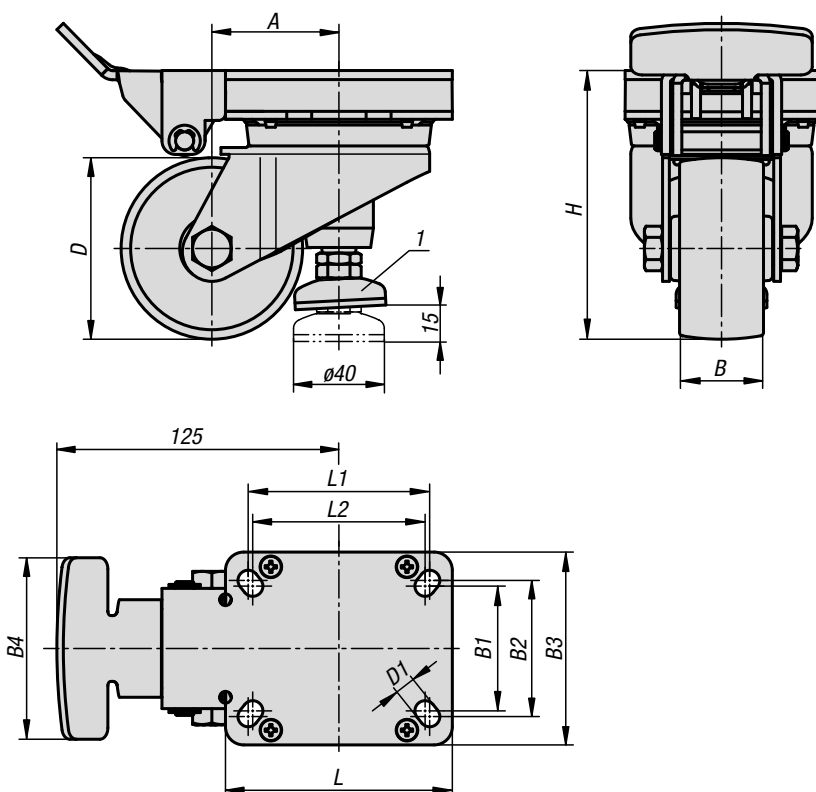
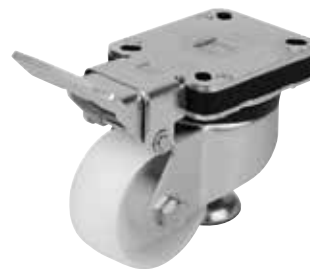


## KIPP Elevating castors with foot with bolt hole or mounting plate

| Order No.    | Version 1           | Wheel bearing | D  | D1     | A  | B  | B1 | B3 | H   | H1  | L  | L1 | R    | SW | Permissible load kg |
|--------------|---------------------|---------------|----|--------|----|----|----|----|-----|-----|----|----|------|----|---------------------|
| K1786.045180 | with locking system | plain bearing | 45 | M8x12  | 32 | 18 | -  | 58 | 72  | 82  | -  | -  | 54,5 | 40 | 180                 |
| K1786.050220 | with locking system | plain bearing | 50 | M12x15 | 38 | 22 | -  | 72 | 84  | 94  | -  | -  | 63   | 46 | 250                 |
| K1786.063290 | with locking system | plain bearing | 63 | M12x15 | 46 | 29 | -  | 85 | 104 | 119 | -  | -  | 77,5 | 65 | 500                 |
| K1786.045181 | with locking system | plain bearing | 45 | 7      | 32 | 18 | 42 | 58 | 72  | 82  | 55 | 42 | 54,5 | -  | 180                 |
| K1786.050221 | with locking system | plain bearing | 50 | 7      | 38 | 22 | 58 | 72 | 84  | 94  | 73 | 58 | 63   | -  | 250                 |
| K1786.063291 | with locking system | plain bearing | 63 | 9      | 46 | 29 | 70 | 85 | 104 | 119 | 90 | 70 | 77,5 | -  | 500                 |

## Elevating castors

with integrated machine foot



### Material:

Housing steel plate.  
Roller break resistant polyamide 6, Shore 70D.  
Machine foot steel.

### Version:

Housing trivalent blue passivated.  
Roller white.  
Machine foot electro zinc-plated with grey rubber pads.

### Sample order:

K1787.08037

### Note:

Elevating castor swivel version with integrated levelling machine foot. With sealed ball bearing in the swivel head. Wheel axle bolted. The ergonomic form of the non-swivelling actuating lever enables ease of operation. The short actuation travel with simultaneous long plunger stroke and very high lifting force enables heavy weights to be easily raised and safely fixated.

### Drawing reference:

1) swivelling



### KIPP Elevating castors with integrated machine foot

| Order No.   | Version 1           | Wheel bearing | D   | A  | B  | B1 | B2 | B3 | B4 | D1 | H   | L   | L1 | L2 | Permissible load kg |
|-------------|---------------------|---------------|-----|----|----|----|----|----|----|----|-----|-----|----|----|---------------------|
| K1787.08037 | with locking system | plain bearing | 80  | 56 | 37 | 55 | 60 | 80 | 85 | 9  | 120 | 100 | 80 | 76 | 230                 |
| K1787.10037 | with locking system | plain bearing | 100 | 65 | 37 | 55 | 60 | 80 | 85 | 9  | 142 | 100 | 80 | 76 | 230                 |

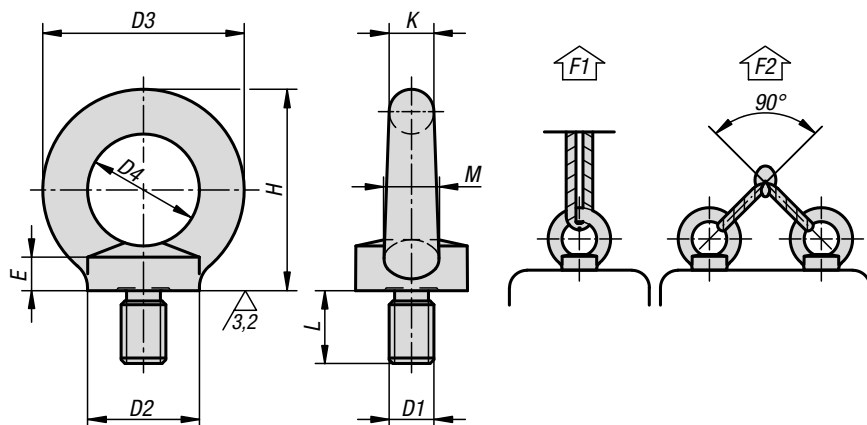


A large rectangular area filled with a light gray grid pattern, intended for taking notes.



## Ring bolts

DIN 580



### Material:

1.1141 steel, 1.4301 stainless steel or 1.4401 stainless steel.

### Version:

Drop forged.  
Steel, bright.  
Steel electro zinc-plated.

### Sample order:

K0767.20

### Note:

For high demand hoisting and carrying tasks in safety-relevant areas (machine construction, load handling equipment, lifting tackle).

The CE mark is impressed into the ring bolt.

F2 permissible load under max. 45° per ring bolt.

### On request:

Certificate of conformity.

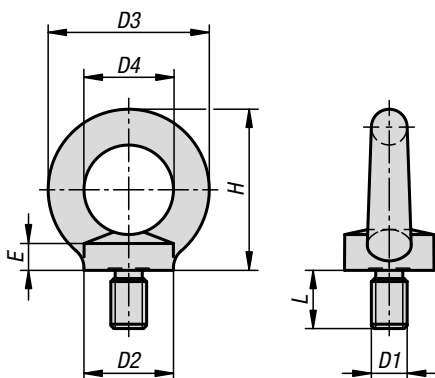
## KIPP Ring bolts DIN 580

| Order No.<br>steel<br>bright | Order No.<br>steel<br>galvanised | D1  | L    | D2 | D3 | D4 | E  | H  | K  | M  | F1 max.<br>kN | F2 max.<br>kN |
|------------------------------|----------------------------------|-----|------|----|----|----|----|----|----|----|---------------|---------------|
| K0767.08                     | K0767.008                        | M8  | 13   | 20 | 36 | 20 | 6  | 36 | 8  | 10 | 1,4           | 0,95          |
| K0767.10                     | K0767.010                        | M10 | 17   | 25 | 45 | 25 | 8  | 45 | 10 | 12 | 2,3           | 1,7           |
| K0767.12                     | K0767.012                        | M12 | 20,5 | 30 | 54 | 30 | 10 | 53 | 12 | 14 | 3,4           | 2,4           |
| K0767.16                     | K0767.016                        | M16 | 27   | 35 | 63 | 35 | 12 | 62 | 14 | 16 | 7             | 5             |
| K0767.20                     | K0767.020                        | M20 | 30   | 40 | 72 | 40 | 14 | 71 | 16 | 19 | 12            | 8,3           |
| K0767.24                     | K0767.024                        | M24 | 36   | 50 | 90 | 50 | 18 | 90 | 20 | 24 | 18            | 12,7          |

| Order No.<br>stainless steel<br>1.4301 | Order No.<br>stainless steel<br>1.4401 | D1  | L    | D2 | D3 | D4 | E  | H  | K  | M  | F1 max.<br>kN | F2 max.<br>kN |
|----------------------------------------|----------------------------------------|-----|------|----|----|----|----|----|----|----|---------------|---------------|
| K0767.108                              | K0767.208                              | M8  | 13   | 20 | 36 | 20 | 6  | 36 | 8  | 10 | 1,4           | 0,95          |
| K0767.110                              | K0767.210                              | M10 | 17   | 25 | 45 | 25 | 8  | 45 | 10 | 12 | 2,3           | 1,7           |
| K0767.112                              | K0767.212                              | M12 | 20,5 | 30 | 54 | 30 | 10 | 53 | 12 | 14 | 3,4           | 2,4           |
| K0767.116                              | K0767.216                              | M16 | 27   | 35 | 63 | 35 | 12 | 62 | 14 | 16 | 7             | 5             |
| K0767.120                              | K0767.220                              | M20 | 30   | 40 | 72 | 40 | 14 | 71 | 16 | 19 | 12            | 8,3           |
| K0767.124                              | K0767.224                              | M24 | 36   | 50 | 90 | 50 | 18 | 90 | 20 | 24 | 18            | 12,7          |

# Ring bolts

similar to DIN 580


**Material:**

Stainless steel 1.4401.

**Version:**

Bright.

**Sample order:**

K1333.08

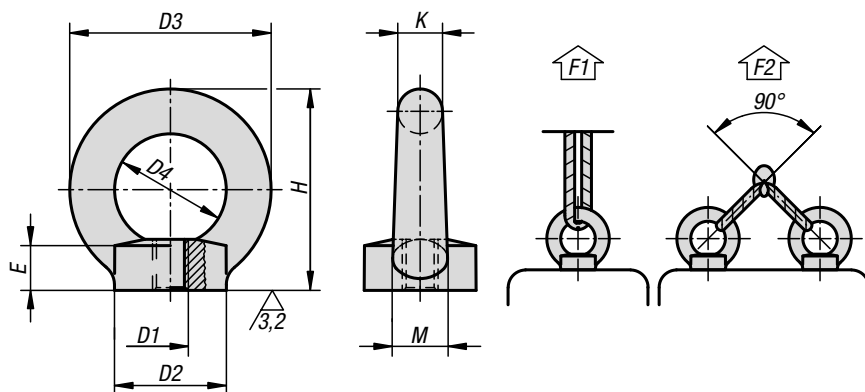
## KIPP Ring bolts similar to DIN 580

| Order No. | D1  | D2 | D3 | D4 | E  | H  | L    |
|-----------|-----|----|----|----|----|----|------|
| K1333.08  | M8  | 20 | 36 | 20 | 6  | 36 | 13   |
| K1333.10  | M10 | 25 | 45 | 25 | 8  | 45 | 17   |
| K1333.12  | M12 | 30 | 54 | 30 | 10 | 53 | 20,5 |
| K1333.16  | M16 | 35 | 63 | 35 | 12 | 62 | 27   |
| K1333.20  | M20 | 40 | 72 | 40 | 14 | 71 | 30   |



## Ring nuts

DIN 582



### Material:

1.1141 steel, 1.4301 stainless steel or 1.4401 stainless steel.

### Version:

Drop forged.  
Steel, bright.  
Steel electro zinc-plated.

### Sample order:

K0768.10

### Note:

For high demand hoisting and carrying tasks in safety-relevant areas (machine construction, load handling equipment, lifting tackle).  
The CE mark is impressed into the ring bolt.  
F2 permissible load under max. 45° per ring bolt.

### On request:

Certificate of conformity.

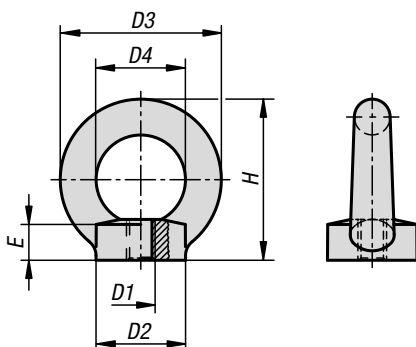
## KIPP Ring nuts DIN 582

| Order No.<br>steel<br>bright | Order No.<br>steel<br>galvanised | D1  | D2 | D3 | D4 | E   | H  | K  | M  | F1 max.<br>kN | F2 max.<br>kN |
|------------------------------|----------------------------------|-----|----|----|----|-----|----|----|----|---------------|---------------|
| K0768.08                     | K0768.008                        | M8  | 20 | 36 | 20 | 8,5 | 36 | 8  | 10 | 1,4           | 0,95          |
| K0768.10                     | K0768.010                        | M10 | 25 | 45 | 25 | 10  | 45 | 10 | 12 | 2,3           | 1,7           |
| K0768.12                     | K0768.012                        | M12 | 30 | 54 | 30 | 11  | 53 | 12 | 14 | 3,4           | 2,4           |
| K0768.16                     | K0768.016                        | M16 | 35 | 63 | 35 | 13  | 62 | 14 | 16 | 7             | 5             |
| K0768.20                     | K0768.020                        | M20 | 40 | 72 | 40 | 16  | 71 | 16 | 19 | 12            | 8,3           |
| K0768.24                     | K0768.024                        | M24 | 50 | 90 | 50 | 20  | 90 | 20 | 24 | 18            | 12,7          |

| Order No.<br>stainless steel<br>1.4301 | Order No.<br>stainless steel<br>1.4401 | D1  | D2 | D3 | D4 | E   | H  | K  | M  | F1 max.<br>kN | F2 max.<br>kN |
|----------------------------------------|----------------------------------------|-----|----|----|----|-----|----|----|----|---------------|---------------|
| K0768.108                              | K0768.208                              | M8  | 20 | 36 | 20 | 8,5 | 36 | 8  | 10 | 1,4           | 0,95          |
| K0768.110                              | K0768.210                              | M10 | 25 | 45 | 25 | 10  | 45 | 10 | 12 | 2,3           | 1,7           |
| K0768.112                              | K0768.212                              | M12 | 30 | 54 | 30 | 11  | 53 | 12 | 14 | 3,4           | 2,4           |
| K0768.116                              | K0768.216                              | M16 | 35 | 63 | 35 | 13  | 62 | 14 | 16 | 7             | 5             |
| K0768.120                              | K0768.220                              | M20 | 40 | 72 | 40 | 16  | 71 | 16 | 19 | 12            | 8,3           |
| K0768.124                              | K0768.224                              | M24 | 50 | 90 | 50 | 20  | 90 | 20 | 24 | 18            | 12,7          |

# Ring nuts

similar to DIN 582



**Material:**  
Stainless steel 1.4401.

**Version:**  
Bright.

**Sample order:**  
K1334.08

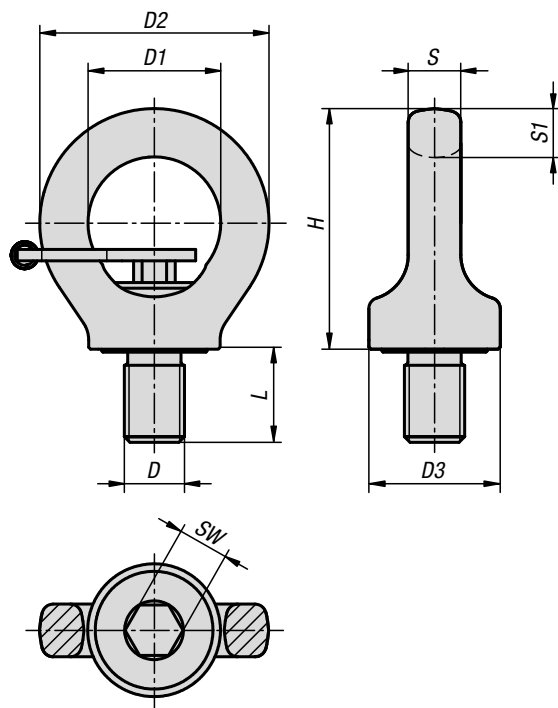


## KIPP Ring nuts similar to DIN 582

| Order No. | D1  | D2 | D3 | D4 | E  | H  |
|-----------|-----|----|----|----|----|----|
| K1334.08  | M8  | 20 | 36 | 20 | 6  | 36 |
| K1334.10  | M10 | 25 | 45 | 25 | 8  | 45 |
| K1334.12  | M12 | 30 | 54 | 30 | 10 | 53 |
| K1334.16  | M16 | 35 | 63 | 35 | 12 | 62 |
| K1334.20  | M20 | 40 | 72 | 40 | 14 | 71 |

# Ring bolts rotatable

high-strength grade 10



## Material:

Ring 1.6541 steel.  
Screw steel.

## Version:

Ring forged and high tensile tempered.  
100% electromagnetic crack tested per EN 1677-1,  
4x safety factor.  
Plastic-coated.  
Thread grade 10.9.

## Sample order:

K0769.08151

## Note:

In contrast to DIN 580 ring bolts this ring bolt is rotatable, therefore the load direction is adjustable and unintended tightening or loosening is negated.

Maximum lifting weight "G" in kg for different sling types

| Sling configuration  |       |       |      |      |        |         |        |         |
|----------------------|-------|-------|------|------|--------|---------|--------|---------|
| No. of slings        | 1     | 2     | 1    | 2    | 2      | 2       | 3 - 4  | 3 - 4   |
| Sling angle $\alpha$ | 0°    | 0°    | 90°  | 90°  | 0°-45° | 45°-60° | 0°-45° | 45°-60° |
| M8                   | 1000  | 2000  | 300  | 600  | 420    | 300     | 630    | 450     |
| M10                  | 1000  | 2000  | 400  | 800  | 560    | 400     | 840    | 600     |
| M12                  | 2000  | 4000  | 750  | 1500 | 1000   | 750     | 1600   | 1120    |
| M16                  | 4000  | 8000  | 1500 | 3000 | 2000   | 1500    | 3150   | 2250    |
| M20                  | 6000  | 12000 | 2300 | 4600 | 3220   | 2300    | 4830   | 3450    |
| M24                  | 8000  | 16000 | 3200 | 6400 | 4480   | 3200    | 6700   | 4800    |
| M30                  | 12000 | 24000 | 4500 | 9000 | 6300   | 4500    | 9400   | 6700    |

- 4x safety factor
- lateral loading up to 90° is possible
- ring can rotate 360° with tightened screw

The listed load values apply for a minimum screw length of 1x nominal thread diameter in steel with a minimum tensile strength of 363 N/mm<sup>2</sup>, at an application temperature of -20 °C to +100 °C.

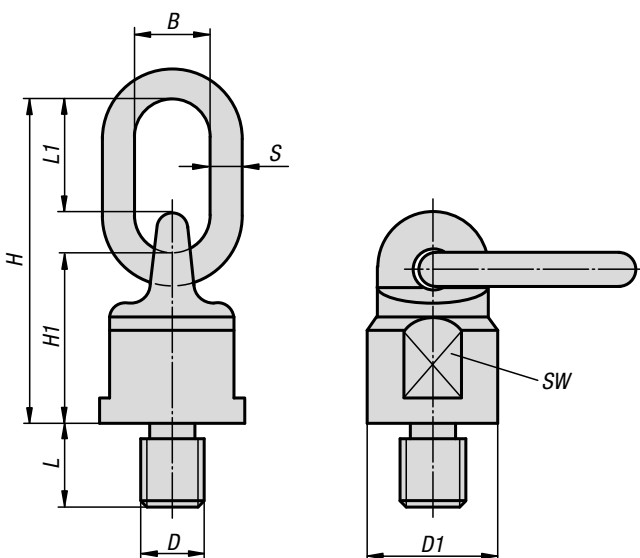
## KIPP Rotatable ring bolts, high-strength grade 10

| Order No.   | Version 2       | D   | D1 | D2  | D3 | H   | L  | S  | S1   | SW | Permissible load kg |
|-------------|-----------------|-----|----|-----|----|-----|----|----|------|----|---------------------|
| K0769.08151 | with hex key    | M8  | 25 | 44  | 25 | 47  | 12 | 9  | 9,5  | 6  | 300                 |
| K0769.10151 | with hex key    | M10 | 25 | 44  | 26 | 47  | 15 | 9  | 9,5  | 6  | 400                 |
| K0769.12181 | with hex key    | M12 | 30 | 52  | 34 | 55  | 18 | 11 | 11   | 8  | 750                 |
| K0769.16241 | with hex key    | M16 | 35 | 61  | 35 | 64  | 24 | 14 | 13   | 10 | 1500                |
| K0769.20301 | with hex key    | M20 | 40 | 70  | 44 | 74  | 30 | 16 | 15   | 12 | 2300                |
| K0769.24361 | with hex key    | M24 | 48 | 84  | 52 | 91  | 36 | 19 | 18   | 14 | 3200                |
| K0769.30451 | with hex key    | M30 | 60 | 105 | 61 | 112 | 45 | 25 | 22,5 | 17 | 4500                |
| K0769.08150 | without hex key | M8  | 25 | 44  | 25 | 47  | 12 | 8  | 11   | 6  | 300                 |
| K0769.10150 | without hex key | M10 | 25 | 44  | 25 | 47  | 15 | 8  | 11   | 6  | 400                 |
| K0769.12180 | without hex key | M12 | 30 | 52  | 33 | 55  | 18 | 10 | 13   | 8  | 750                 |
| K0769.16240 | without hex key | M16 | 35 | 61  | 35 | 64  | 24 | 14 | 13   | 10 | 1500                |
| K0769.20300 | without hex key | M20 | 40 | 70  | 44 | 74  | 30 | 16 | 17   | 12 | 2300                |
| K0769.24360 | without hex key | M24 | 48 | 84  | 52 | 91  | 36 | 19 | 21   | 14 | 3200                |
| K0769.30450 | without hex key | M30 | 60 | 108 | 62 | 112 | 45 | 27 | 26   | 17 | 4500                |



## Ring bolts

swivel, 360° rotatable, grade 8



**Material:**  
Steel.

**Version:**  
Quality class 8, ball bearing;  
red plastic-coated

**Sample order:**  
K0770.1018

**Note:**  
Compact and light design, full loading on all sides.  
4x safety factor against breakage in all loading axis.  
Rotatable 360°. Link swivel range max. 180°. The ball bearing allows the ring to rotate even under load.

Lifting or securing loads, swivel rings have many uses.

For the loading capacity to be valid it must be ensured that the ring is in line with the load. The swivel face must lie flat on the support beam and the screw must always be screwed in fully.

Maximum lifting weight "G" in kg for different sling types

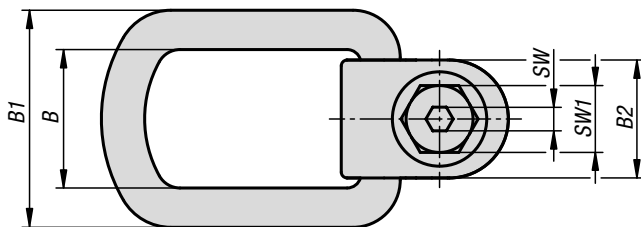
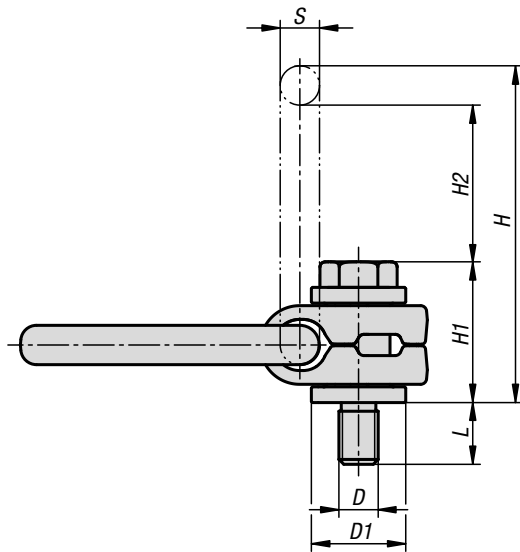
| Sling configuration  |       |       |      |       |        |         |        |         |
|----------------------|-------|-------|------|-------|--------|---------|--------|---------|
| No. of slings        | 1     | 2     | 1    | 2     | 2      | 2       | 3 - 4  | 3 - 4   |
| sling angle $\angle$ | 0°    | 0°    | 90°  | 90°   | 0°-45° | 45°-60° | 0°-45° | 45°-60° |
| M10                  | 600   | 1200  | 300  | 600   | 420    | 300     | 630    | 450     |
| M12                  | 1000  | 2000  | 500  | 1000  | 750    | 500     | 1100   | 750     |
| M16                  | 2000  | 4000  | 1120 | 2000  | 1500   | 1120    | 2360   | 1600    |
| M20                  | 4000  | 8000  | 2000 | 4000  | 2800   | 2000    | 4000   | 3000    |
| M24                  | 6300  | 12500 | 3150 | 6300  | 4250   | 3150    | 6300   | 4750    |
| M30                  | 10600 | 21200 | 5300 | 10600 | 7100   | 5800    | 11200  | 8000    |
| M36                  | 12500 | 25000 | 8000 | 16000 | 11200  | 8000    | 16800  | 12000   |

### KIPP Ring bolts, swivel, rotatable 360°, grade 8

| Order No.  | B  | D   | D1 | H   | H1 | L  | L1 | S  | SW | Permissible load kg |
|------------|----|-----|----|-----|----|----|----|----|----|---------------------|
| K0770.1018 | 30 | M10 | 38 | 105 | 50 | 18 | 46 | 13 | 30 | 300                 |
| K0770.1218 | 30 | M12 | 38 | 105 | 50 | 18 | 46 | 13 | 30 | 500                 |
| K0770.1620 | 30 | M16 | 38 | 105 | 50 | 20 | 46 | 13 | 30 | 1120                |
| K0770.2030 | 34 | M20 | 50 | 131 | 61 | 30 | 57 | 16 | 40 | 2000                |
| K0770.2430 | 40 | M24 | 58 | 153 | 68 | 30 | 70 | 19 | 48 | 3150                |
| K0770.3035 | 40 | M30 | 75 | 165 | 80 | 35 | 65 | 20 | 65 | 5300                |
| K0770.3654 | 50 | M36 | 85 | 205 | 95 | 54 | 90 | 22 | 75 | 8000                |

## Hoist rings, steel, 360° rotation

grade 10



### Material:

Ring and attachment shackle steel.  
Bolt and bushing steel.

### Version:

Ring and shackle forged, hardened and tempered.  
100% electromagnetic crack detection, painted blue.  
Bolt grade 10.9 or higher. 100% electromagnetic crack detection.  
Bush electro zinc-plated.

### Sample order:

K1735.12020

### Note:

The hoist ring can be folded-down, rotates through 360° and bears the full load in any permitted loading direction. The nominal load capacity is visibly indicated on the hoist ring. It applies to the most unfavourable load case (see table). The test load is 2.5 times the safe working load (SWL). The specified working load limit must not be exceeded.

With captive but removable hex bolt. The hoist rings comply with the Machinery Directive and are DGUV tested.

Tested according to DIN EN 1677-1.

The CE marking is stamped into the hoist ring.

### On request:

Certificate of conformity.

# Hoist rings, steel, 360° rotation

grade 10



Maximum lifting weight "G" in kg for different sling types

| Sling configuration  |      |      |       |       |        |         |            |        |         |            |
|----------------------|------|------|-------|-------|--------|---------|------------|--------|---------|------------|
| No. of slings        | 1    | 1    | 2     | 2     | 2      | 2       | 2          | 3 - 4  | 3 - 4   | 3 - 4      |
| sling angle $\alpha$ | 0°   | 90°  | 0°    | 90°   | 0°-45° | 45°-60° | asymmetric | 0°-45° | 45°-60° | asymmetric |
| M8                   | 300  | 300  | 600   | 600   | 420    | 300     | 300        | 640    | 450     | 300        |
| M10                  | 630  | 630  | 1260  | 1260  | 890    | 630     | 630        | 1340   | 950     | 630        |
| M12                  | 1000 | 1000 | 2000  | 2000  | 1410   | 1000    | 1000       | 2120   | 1500    | 1000       |
| M16                  | 1500 | 1500 | 3000  | 3000  | 2120   | 1500    | 1500       | 3180   | 2250    | 1500       |
| M20                  | 2500 | 2500 | 5000  | 5000  | 3540   | 2500    | 2500       | 5300   | 3750    | 2500       |
| M24                  | 4000 | 4000 | 8000  | 8000  | 5660   | 4000    | 4000       | 8480   | 6000    | 4000       |
| M30                  | 5000 | 5000 | 10000 | 10000 | 7070   | 5000    | 5000       | 10610  | 7500    | 5000       |
| M36                  | 8000 | 8000 | 16000 | 16000 | 11310  | 8000    | 8000       | 16970  | 12000   | 8000       |

## KIPP Hoist rings, steel, 360° rotation, grade 10

| Order No.   | B  | B1  | B2 | D   | D1 | H   | H1  | H2 | L  | S  | SW | SW1 | max.<br>permissible<br>load kg | Tightening<br>torque<br>Nm |
|-------------|----|-----|----|-----|----|-----|-----|----|----|----|----|-----|--------------------------------|----------------------------|
| K1735.08011 | 36 | 57  | 30 | M8  | 24 | 87  | 34  | 41 | 11 | 12 | 6  | 13  | 300                            | 20                         |
| K1735.10016 | 36 | 57  | 30 | M10 | 24 | 87  | 35  | 40 | 16 | 12 | 6  | 17  | 630                            | 30                         |
| K1735.12020 | 36 | 57  | 34 | M12 | 30 | 98  | 43  | 41 | 20 | 14 | 8  | 19  | 1000                           | 45                         |
| K1735.16025 | 36 | 57  | 34 | M16 | 30 | 98  | 46  | 39 | 25 | 14 | 10 | 24  | 1500                           | 150                        |
| K1735.20032 | 53 | 83  | 50 | M20 | 45 | 145 | 56  | 71 | 32 | 17 | 12 | 30  | 2500                           | 300                        |
| K1735.24037 | 53 | 83  | 50 | M24 | 45 | 145 | 59  | 69 | 37 | 17 | 14 | 36  | 4000                           | 400                        |
| K1735.30044 | 64 | 101 | 67 | M30 | 59 | 172 | 85  | 64 | 44 | 23 | 17 | 46  | 5000                           | 1000                       |
| K1735.36053 | 84 | 126 | 78 | M36 | 69 | 223 | 100 | 96 | 53 | 28 | 22 | 55  | 8000                           | 1800                       |

# Weld-on D-rings



## Material:

Eye 1.6541 steel.  
Welding block, S355JR steel.

## Version:

D-ring forged, high tensile tempered, red plastic coated.  
Welding block forged, high tensile tempered, bright.

## Sample order:

K0773.1000

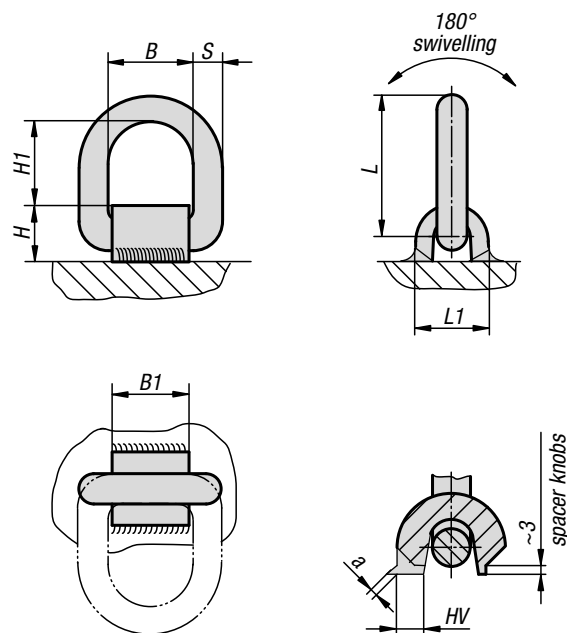
## Note:

Weld-on D-rings enable quick installation.

They offer a compact design and can be loaded from all sides, with 4x safety factor against breakage.

The welding block is forged from easy to weld S355JR (St 52-3). The small knobs serve as spacers for the air gap required for fillet welding (ca. 3 mm). The load data given in the table is clearly marked on the welding block, they apply to worst scenario cases for the lifting type shown.

Welding must be carried out by a proficient welder certified to EN 287-1.



Maximum lifting weight "G" in kg for different sling types

| Sling configuration  |      |       |      |       |        |         |        |         |
|----------------------|------|-------|------|-------|--------|---------|--------|---------|
| No. of slings        | 1    | 2     | 1    | 2     | 2      | 2       | 3 - 4  | 3 - 4   |
| Sling angle $\angle$ | 0°   | 0°    | 90°  | 90°   | 0°-45° | 45°-60° | 0°-45° | 45°-60° |
| K0773.1***           | 1600 | 3200  | 1120 | 2240  | 1500   | 1120    | 2360   | 1600    |
| K0773.2***           | 3000 | 6000  | 2000 | 4000  | 2800   | 2000    | 4000   | 3000    |
| K0773.3***           | 4750 | 9500  | 3150 | 6300  | 4250   | 3150    | 6300   | 4750    |
| K0773.5***           | 8000 | 16000 | 5300 | 10600 | 7100   | 5300    | 11200  | 8000    |

## KIPP Weld-on D-rings

| Order No.<br>without spring strip | Order No.<br>with spring strip | B  | B1 | H  | H1 | L   | L1 | S  | Weld seam  | Permissible<br>load<br>kg |
|-----------------------------------|--------------------------------|----|----|----|----|-----|----|----|------------|---------------------------|
| K0773.1000                        | K0773.1001                     | 40 | 38 | 32 | 40 | 73  | 38 | 13 | HV 5 + a3  | 1120                      |
| K0773.2000                        | K0773.2001                     | 41 | 38 | 32 | 45 | 81  | 40 | 13 | HV 5 + a3  | 2000                      |
| K0773.3000                        | K0773.3001                     | 45 | 43 | 38 | 45 | 87  | 42 | 17 | HV 8 + a3  | 3150                      |
| K0773.5000                        | K0773.5001                     | 55 | 50 | 48 | 57 | 108 | 60 | 22 | HV 12 + a4 | 5300                      |

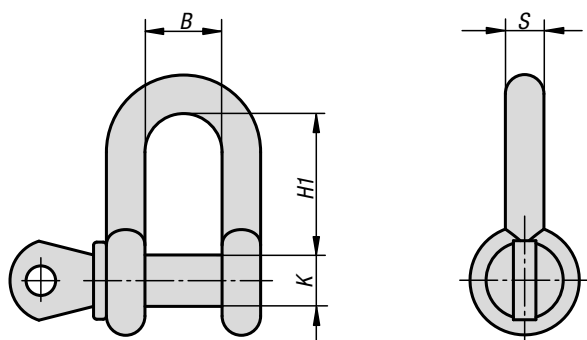


**Material:**  
Steel.

**Version:**  
D form

**Sample order:**  
K1059.0050008

**Note:**  
Shackles and bolts may vary in colour.  
Paint may cause the thread to be stiff.



### KIPP D-Shackles

| Order No.     | B    | S    | K    | H1   | Inches | Permissible load<br>kg |
|---------------|------|------|------|------|--------|------------------------|
| K1059.0050008 | 12   | 6,7  | 8    | 24,6 | 1/4    | 500                    |
| K1059.0075010 | 13,5 | 7,9  | 9,5  | 27,2 | 5/16   | 750                    |
| K1059.0100011 | 16,8 | 9,6  | 11   | 32,5 | 3/8    | 1000                   |
| K1059.0150012 | 19   | 11,2 | 12,7 | 37,6 | 7/16   | 1500                   |
| K1059.0200016 | 20,6 | 12,7 | 16   | 40,7 | 1/2    | 2000                   |
| K1059.0325019 | 27   | 16   | 19   | 50   | 5/8    | 3250                   |
| K1059.0475022 | 31,8 | 19   | 22,2 | 59,5 | 3/4    | 4750                   |
| K1059.0650025 | 36,6 | 22   | 25,4 | 71   | 7/8    | 6500                   |
| K1059.0850028 | 43   | 25   | 28,5 | 80,5 | 1      | 8500                   |



## Bow shackles

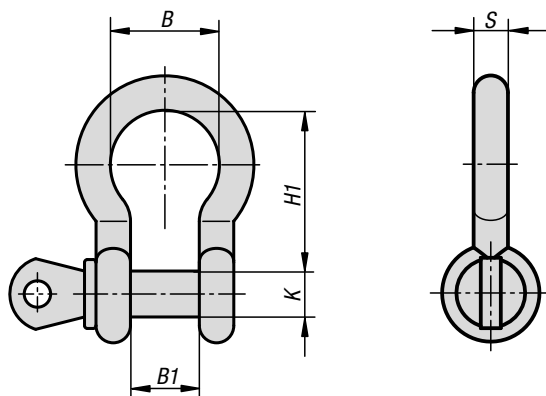


**Material:**  
Steel.

**Version:**  
Bow form.

**Sample order:**  
K1058.0100011

**Note:**  
Shackles and bolts may vary in colour.  
Paint may cause the thread to be stiff.



## KIPP Bow shackle

| Order No.     | B    | B1   | S    | K    | H1   | Inches | Permissible load<br>kg |
|---------------|------|------|------|------|------|--------|------------------------|
| K1058.0050008 | 19,8 | 12   | 6,4  | 8    | 28,7 | 1/4    | 500                    |
| K1058.0075010 | 21,3 | 13,5 | 7,9  | 9,5  | 31   | 5/16   | 750                    |
| K1058.0100011 | 26,2 | 16,8 | 9,6  | 11   | 36,5 | 3/8    | 1000                   |
| K1058.0150012 | 29,5 | 19   | 11,2 | 12,7 | 43   | 7/16   | 1500                   |
| K1058.0200016 | 33   | 20,6 | 12,7 | 16   | 48   | 1/2    | 2000                   |
| K1058.0325019 | 42   | 27   | 16   | 19   | 60   | 5/8    | 3250                   |
| K1058.0475022 | 51   | 31,8 | 19   | 22,2 | 71   | 3/4    | 4750                   |
| K1058.0650025 | 58   | 36,6 | 22   | 25,4 | 84   | 7/8    | 6500                   |
| K1058.0850028 | 68   | 43   | 25   | 28,5 | 95   | 1      | 8500                   |



# Mounting instructions and specifications

## Ball transfer units



Ball transfer units allow bulky goods to be easily transported, rotated and directed. They have long proven their worth in conveyor systems, feeder systems, machining centres and packaging plants.

### Applications:

#### Conveyor technology

- ball pallets, rotary tables and sorting and distribution switch points
- crossing points in permanent conveyance systems
- Airport luggage sorting plants
- Steel pipe transport
- Lifting platforms

#### General machine shops

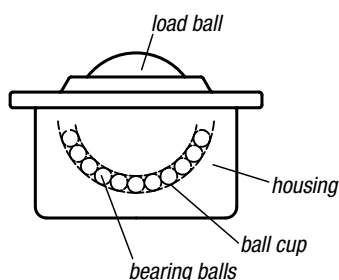
- Feed tables for sheetmetal handling machines
- Fixtures for bending machines
- Conveyors for machining centres
- Motor driven assembly aids in heavy engineering

#### Other applications

- Custom machine construction
- Aerospace technology
- Beverage production
- Stone processing

Ball transfer units have a steel housing with a hardened ball cup. This serves as the track for a number of small bearing balls. These bearing balls roll in the cup with the rotation of the load ball.

Ball transfer units are designed so that precise rolling and load carrying is guaranteed in all positions. Ball transfer units are low maintenance and almost all types have an oil soaked felt seal to protect from dirt.



### Calculating the ball transfer unit loading

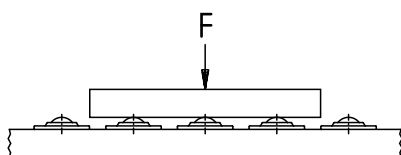
To calculate the loading for ball transfer units, divide the weight of the transported goods by 3. With good coordination of the load ball surface and, depending on the properties of the goods transported, the number of load bearing ball transfer units can also be calculated.

#### Example:

Weight of the transported goods = 300 kg

Ball transfer unit loading:

$$F = \frac{300 \text{ kg}}{3} = 100 \text{ kg}$$



### Arrangement of the ball transfer units

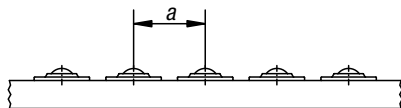
The arrangement of the ball transfer units depends on the surface area of the goods to be transported. By goods with a uniform, level surface area, such as the base of boxes, the distance between the ball transfer units is simply calculated from the length of the shortest edge divided by 2.5.

#### Example:

Surface area of goods  
= 500 x 1000 mm

Distance between ball transfer units:

$$a = \frac{500 \text{ mm}}{2,5} = 200 \text{ mm}$$



### Transport speed and load capacity

The recommended conveyance speed is 1 m/sec. With polyamid load balls 0.25 m/sec. The specified load rating applies to all mounting positions and relates to 106 revolutions of the load ball. By extended use in excess of 1 m/sec and depending on the loading, the temperature can be expected to rise and the useful life reduced, particularly with balls Ø60 to Ø90.

### Calculating the lifespan

$$L = \left( \frac{C}{F} \right)^3 \cdot 10^6 \text{ revs}$$

L = lifespan

C = load rating (N)

F = loading (N)

Attention:

Use high temperature lubricant!

Follow manufacturer's instructions!

It is possible that the existing lubrication oil may have to be washed out.

| Temperature load ball |             | Temperature factor fT |
|-----------------------|-------------|-----------------------|
| steel °C              | polyamid °C |                       |
| 125                   | 40          | 0,9                   |
| 150                   | 50          | 0,8                   |
| 175                   | 60          | 0,7                   |
| -                     | 70          | 0,6                   |
| 200                   | 80          | 0,5                   |

### Temperature resistance

For ball transfer units with a felt seal the temperature resistance is 100 °C by constant temperature.

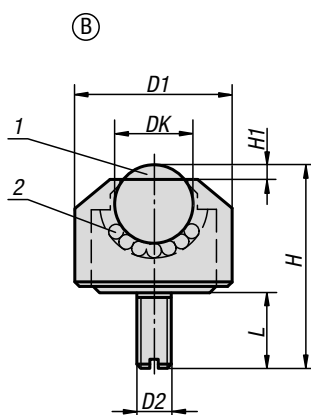
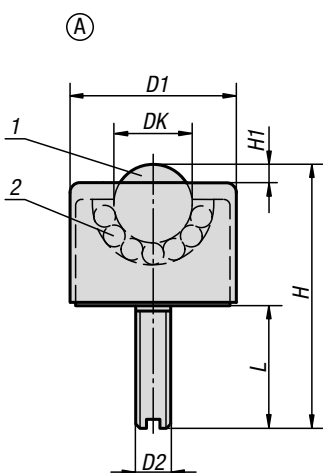
Only non-galvanised ball transfer units with a steel ball and no felt seal can be used at temperatures in excess of 100 °C. Note the load rating reduction! Multiply the load rating by the temperature factor (table).

### Calculating the loading by undersprung ball transfer units.

For these types the determining factor is the value given in the "Pre-tension" column of the table. The weight of the transported goods is divided by the number of supporting ball transfer units.



## Ball transfer units mini



### Material:

Steel version:  
Load ball steel.  
Bearing balls steel.  
Housing electro zinc-plated steel.  
Cover electro zinc-plated steel.

Stainless steel version:  
Load ball stainless steel.  
Bearing balls stainless steel.  
Housing stainless steel.  
Cover aluminium.

### Sample order:

K0749.1105

### Note:

The ball transfer units comprise a housing with integrated bearing shell, a cover, a load ball and several supporting balls. For use in measuring instruments, material conveyance in clean rooms and miniature mechanisms.

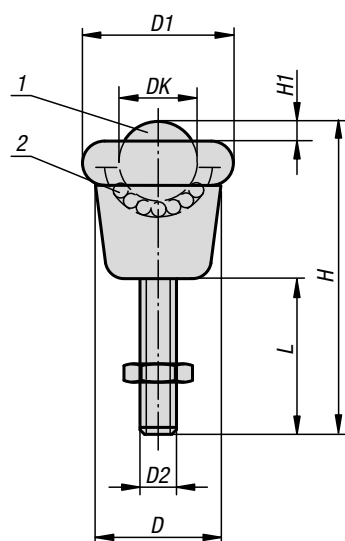
### Drawing reference:

- 1) load ball
- 2) bearing balls

## KIPP Ball transfer units mini

| Order No.  | Form | Main material   | DK   | D1 | D2 | H    | H1  | L   | Load rating C (N) |
|------------|------|-----------------|------|----|----|------|-----|-----|-------------------|
| K0749.1105 | A    | steel           | 4,8  | 13 | M6 | 24   | 1   | 15  | 100               |
| K0749.1106 | A    | steel           | 6,4  | 17 | M6 | 26   | 2   | 15  | 200               |
| K0749.1108 | A    | steel           | 7,9  | 18 | M8 | 32   | 2   | 18  | 300               |
| K0749.1110 | A    | steel           | 9,6  | 23 | M8 | 40   | 2   | 20  | 400               |
| K0749.1113 | A    | steel           | 12,7 | 28 | M8 | 48   | 3,5 | 23  | 500               |
| K0749.1216 | B    | steel           | 15,8 | 24 | M6 | 32,5 | 4   | 12  | 700               |
| K0749.2205 | B    | stainless steel | 4,8  | 8  | M2 | 8,5  | 1   | 2,5 | 50                |
| K0749.2206 | B    | stainless steel | 6,4  | 13 | M3 | 16,5 | 2   | 6   | 100               |
| K0749.2208 | B    | stainless steel | 7,9  | 15 | M4 | 20,5 | 2   | 8   | 150               |

# Ball transfer units with stud

**Material:**

Balls stainless steel 1.4021.  
Housing stainless steel 1.4301.

**Version:**

Bright.

**Sample order:**

K1322.190820

**Note:**

The ball transfer units has a large support area.  
The stud fastening allows for high stability and heavy loading.  
The formed wiper seal is external.

**Drawing reference:**

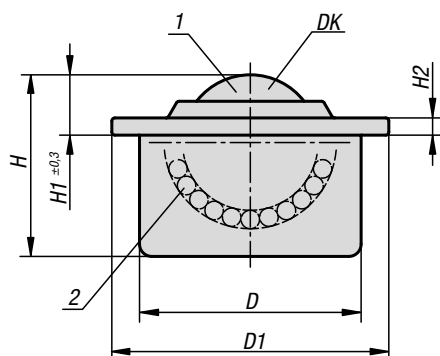
- 1) load ball
- 2) bearing balls

## KIPP Ball transfer units with stud

| Order No.    | DK | D    | D1   | D2 | H    | H1  | L  | Tightening torque of screws Nm | Load rating C (N) |
|--------------|----|------|------|----|------|-----|----|--------------------------------|-------------------|
| K1322.190820 | 19 | 25,4 | 32,1 | M8 | 50,2 | 4,7 | 20 | 15                             | 250               |
| K1322.190835 | 19 | 25,4 | 32,1 | M8 | 75,2 | 4,7 | 45 | 15                             | 250               |

## Ball transfer units

with steel housing



### Material:

Electro zinc-plated steel or stainless steel.

### Sample order:

K0760.122

### Note:

Ball transfer units with steel housing have a felt seal to protect against dirt. K0760-115 has no felt seal.

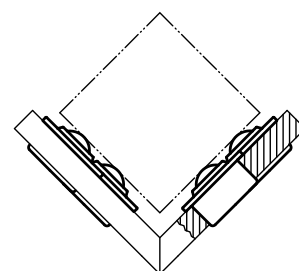
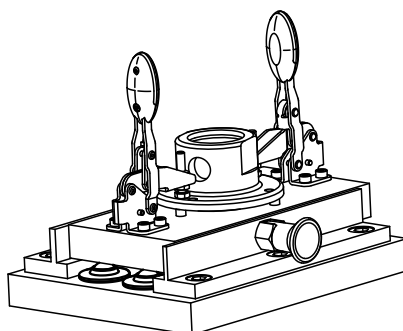
### Drawing reference:

- 1) load ball
- 2) bearing balls

Form B: cap and housing electro zinc-plated, balls steel

Form C: cap and housing electro zinc-plated, balls stainless steel

Form D: cap, housing and balls stainless steel

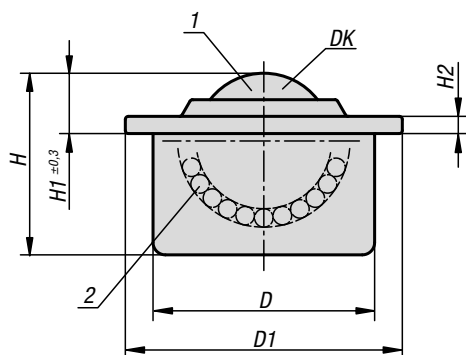


### KIPP Ball transfer units with steel housing

| Order No. | Form | DK   | D        | D1 | H    | H1   | H2  | Load rating C (N) | Suitable tolerance ring |
|-----------|------|------|----------|----|------|------|-----|-------------------|-------------------------|
| K0760.115 | B    | 15,8 | 24±0,065 | 31 | 21   | 9,5  | 2,8 | 600               | K0766.024               |
| K0760.122 | B    | 22,2 | 36±0,080 | 45 | 30   | 9,8  | 2,8 | 1600              | K0766.036               |
| K0760.130 | B    | 30   | 45±0,080 | 55 | 37   | 13,8 | 4   | 3000              | K0766.045               |
| K0760.145 | B    | 44,5 | 62±0,095 | 75 | 53,5 | 19   | 4   | 6100              | K0766.062               |
| K0760.215 | C    | 15,8 | 24±0,065 | 31 | 21   | 9,5  | 2,8 | 600               | K0766.024               |
| K0760.222 | C    | 22,2 | 36±0,080 | 45 | 30   | 9,8  | 2,8 | 1600              | K0766.036               |
| K0760.230 | C    | 30   | 45±0,080 | 55 | 37   | 13,8 | 4   | 3000              | K0766.045               |
| K0760.245 | C    | 44,5 | 62±0,095 | 75 | 53,5 | 19   | 4   | 6100              | K0766.062               |
| K0760.315 | D    | 15,8 | 24±0,065 | 31 | 21   | 9,5  | 2,8 | 380               | K0766.024               |
| K0760.322 | D    | 22,2 | 36±0,080 | 45 | 30   | 9,8  | 2,8 | 1000              | K0766.036               |
| K0760.330 | D    | 30   | 45±0,080 | 55 | 37   | 13,8 | 4   | 2000              | K0766.045               |

## Ball transfer units

with steel housing and plastic ball



### Material:

Electro zinc-plated steel.  
Polyamid PA 66 ball.

### Sample order:

K0761.122

### Note:

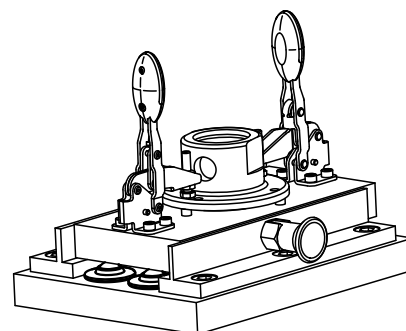
Ball transfer units with plastic balls are particularly suitable for transporting sensitive materials such as polished aluminium, brass and steel sheets or glass. They have a felt seal to protect against dirt.

### Drawing reference:

- 1) load ball
- 2) bearing balls

Form B: cap and housing electro zinc-plated, bearing balls steel.

Form C: cap and housing electro zinc-plated, bearing balls stainless steel

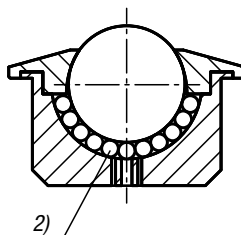
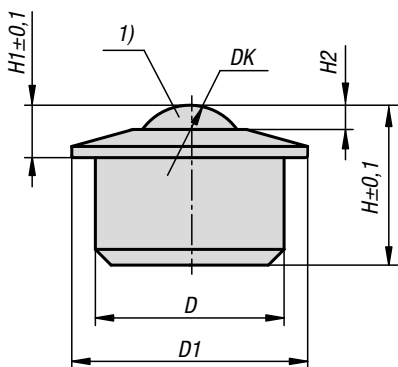


### KIPP Ball transfer units with steel housing and plastic ball

| Order No. | Form | DK   | D        | D1 | H  | H1   | H2  | Load rating C (N) | Suitable tolerance ring |
|-----------|------|------|----------|----|----|------|-----|-------------------|-------------------------|
| K0761.115 | B    | 15,8 | 24±0,065 | 31 | 21 | 9,5  | 2,8 | 100               | K0766.024               |
| K0761.122 | B    | 22,2 | 36±0,080 | 45 | 30 | 9,6  | 2,8 | 200               | K0766.036               |
| K0761.130 | B    | 30   | 45±0,080 | 55 | 37 | 13,6 | 4   | 250               | K0766.045               |
| K0761.215 | C    | 15,8 | 24±0,065 | 31 | 21 | 9,5  | 2,8 | 100               | K0766.024               |
| K0761.222 | C    | 22,2 | 36±0,080 | 45 | 30 | 9,6  | 2,8 | 200               | K0766.036               |
| K0761.230 | C    | 30   | 45±0,080 | 55 | 37 | 13,6 | 4   | 250               | K0766.045               |

# Ball transfer units

with plastic housing



## Material:

Housing and cap POM.  
Bearing ball stainless steel.  
Load ball stainless steel or plastic.

## Version:

Stainless steel, hardened.

## Sample order:

K1827.220

## Note:

The ball transfer units are made of a certified blue plastic which is suitable for use in the foodstuff sector. The ball transfer units are equipped with a gap-free and sealed cap, which prevents the formation of soiled edges.

The dirt holes underneath the housing enable particularly easy cleaning of the ball transfer units.

Conveying speed up to 1.5 m/s.

Foodstuff conform: Food Grade, EU Regulation 1935/2004, EU Regulation 10/2011.

## Temperature range:

-30 °C to +50 °C (up to +30°C with plastic load balls)

## Drawing reference:

- 1) Load ball
- 2) Bearing balls

Form A: cap and housing POM, bearing balls stainless steel, load ball POM

Form B: cap and housing POM, bearing balls stainless steel, load ball stainless steel



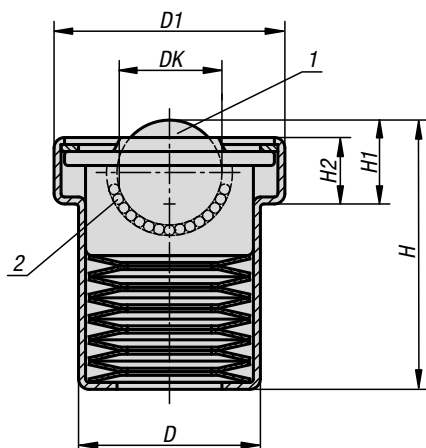
## KIPP Ball transfer units with plastic housing

| Order No. | Form | Form-Type | D  | D1 | DK     | H    | H1  | H2  | Load rating C (N) | Kind of fastening |
|-----------|------|-----------|----|----|--------|------|-----|-----|-------------------|-------------------|
| K1827.150 | A    | ball POM  | 24 | 31 | 15,875 | 20,5 | 9,5 | 4,5 | 200               | press-in          |
| K1827.220 | A    | ball POM  | 36 | 45 | 22,225 | 30,5 | 10  | 4,5 | 250               | press-in          |
| K1827.300 | A    | ball POM  | 45 | 55 | 30     | 37   | 14  | 5,5 | 350               | press-in          |
| K1827.440 | A    | ball POM  | 62 | 75 | 44,5   | 53,5 | 19  | 9   | 500               | press-in          |

| Order No. | Form | Form-Type            | D  | D1 | DK     | H    | H1  | H2  | Load rating C (N) | Kind of fastening |
|-----------|------|----------------------|----|----|--------|------|-----|-----|-------------------|-------------------|
| K1827.151 | B    | ball stainless steel | 24 | 31 | 15,875 | 20,5 | 9,5 | 4,5 | 200               | press-in          |
| K1827.221 | B    | ball stainless steel | 36 | 45 | 22,225 | 30,5 | 10  | 4,5 | 250               | press-in          |
| K1827.301 | B    | ball stainless steel | 45 | 55 | 30     | 37   | 14  | 5,5 | 350               | press-in          |
| K1827.441 | B    | ball stainless steel | 62 | 62 | 44,5   | 53,5 | 19  | 9   | 500               | press-in          |

# Ball transfer units

undersprung



## Material:

Steel electro zinc-plated.

## Sample order:

K0762.122

## Note:

Undersprung ball transfer units allow for even distribution of loads for goods with uneven surfaces.

When used in machines such as punch presses and bend form machines the ball rollers spring back up after the forming process and the finished article can be rolled off.

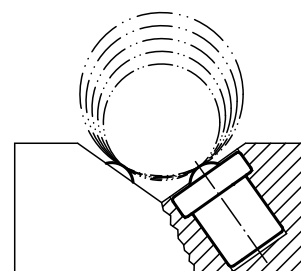
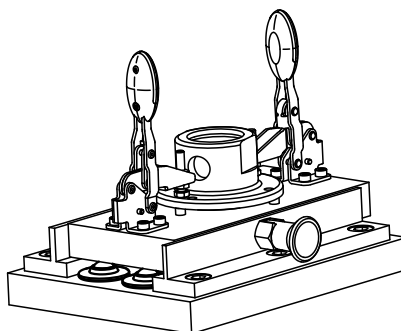
By the "End tension (N)" the ball has completely receded into the housing.

## Drawing reference:

- 1) load ball
- 2) bearing balls

Form B: cap and housing electro zinc-plated, balls steel

Form C: cap and housing electro zinc-plated, balls stainless steel

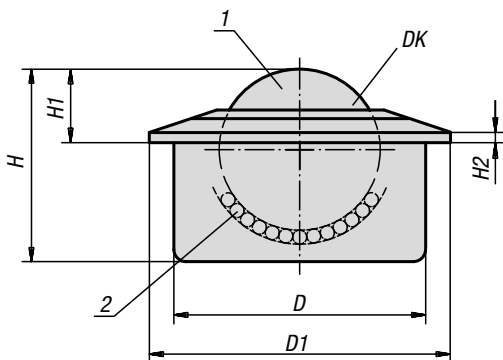


## KIPP Ball transfer units, undersprung

| Order No. | Form | DK   | D    | D1 | H     | H1   | H2   | Pre-tension (N) | End tension (N) | Tol. for pre and end tension (%) |
|-----------|------|------|------|----|-------|------|------|-----------------|-----------------|----------------------------------|
| K0762.122 | B    | 22,2 | 39   | 50 | 51,5  | 18,5 | 14   | 730             | 860             | +25 / -7,5                       |
| K0762.130 | B    | 30   | 48,2 | 62 | 70    | 24,4 | 17,7 | 1350            | 1600            | +15 / -7,5                       |
| K0762.145 | B    | 45   | 66,4 | 85 | 100,5 | 35,6 | 24,2 | 2280            | 2770            | +15 / -7,5                       |
| K0762.222 | C    | 22,2 | 39   | 50 | 51,5  | 18,5 | 14   | 730             | 860             | +25 / -7,5                       |
| K0762.230 | C    | 30   | 48,2 | 62 | 70    | 24,4 | 17,7 | 1350            | 1600            | +15 / -7,5                       |
| K0762.245 | C    | 45   | 66,4 | 85 | 100,5 | 35,6 | 24,2 | 2280            | 2770            | +15 / -7,5                       |

# Ball transfer units

with solid steel housing



## Material:

Steel electro zinc-plated.

## Sample order:

K0763.160

## Note:

Ball transfer units with solid housings remain functional even under heavy impact loads and extreme conditions.

They have a felt seal to protect against dirt.

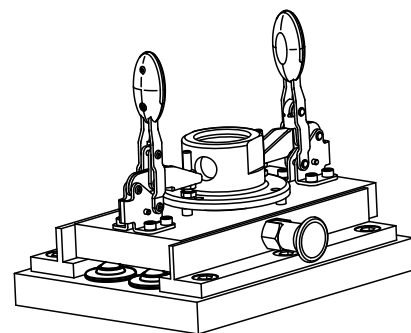
## Drawing reference:

1) load ball

2) bearing balls

Form B: cap and housing electro zinc-plated, balls steel

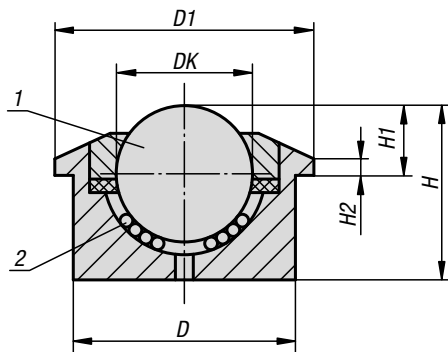
Form C: cap and housing electro zinc-plated, balls stainless steel



## KIPP Ball transfer units with solid steel housing

| Order No. | Form | DK   | D       | D1  | H    | H1   | H2 | Load rating C (N) | Suitable tolerance ring |
|-----------|------|------|---------|-----|------|------|----|-------------------|-------------------------|
| K0763.160 | B    | 57,1 | 100±0,1 | 117 | 77,5 | 29,5 | 5  | 15000             | K0766.100               |
| K0763.260 | C    | 57,1 | 100±0,1 | 117 | 77,5 | 29,5 | 5  | 10000             | K0766.100               |

# Ball transfer units heavy duty

**Material:**

Balls stainless steel 1.4021.  
Housing stainless steel 1.4301.

**Version:**

Bright.

**Sample order:**

K1323.322

**Note:**

Solid steel ball transfer units are designed for long life by impact loading.

The unit includes dust seals and self-cleaning apertures.

All units are supplied with solid steel housings and hardened surfaces.

**Drawing reference:**

- 1) load ball
- 2) bearing balls

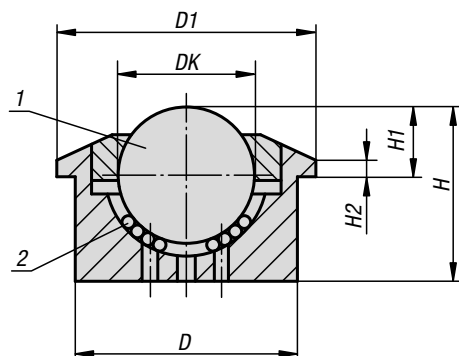
## KIPP Ball transfer units heavy duty

| Order No. | DK   | D1 | D        | H    | H1       | H2  | Load rating C (N) |
|-----------|------|----|----------|------|----------|-----|-------------------|
| K1323.322 | 22,2 | 45 | 36±0,080 | 30,5 | 9,8±0,2  | 3   | 1200              |
| K1323.330 | 30   | 55 | 45±0,080 | 36,8 | 13,8±0,2 | 3,4 | 2000              |



# Ball transfer units heavy duty

suitable for outdoor use



## Material:

Balls stainless steel 1.4021.

Housing stainless steel 1.4301.

## Version:

Bright.

## Sample order:

K1325.330

## Note:

Solid steel ball transfer units are designed for long life by impact loading.

All units are supplied with solid steel housings and hardened surfaces.

The large number of self-cleaning apertures give the ball transfer units a high self-cleaning efficiency making them suitable for outdoor use.

## Drawing reference:

1) load ball

2) bearing balls

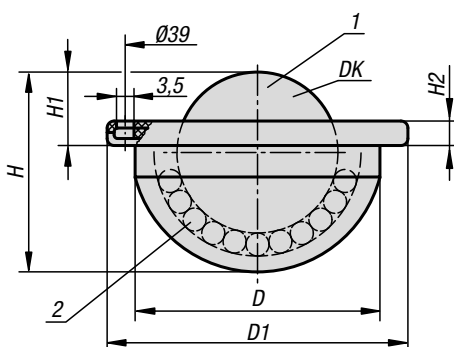


## KIPP Ball transfer units, heavy duty, suitable for outdoor use

| Order No. | DK   | D1 | D        | H    | H1       | H2  | Load rating C (N) |
|-----------|------|----|----------|------|----------|-----|-------------------|
| K1325.330 | 30   | 55 | 45±0,080 | 36,8 | 13,8±0,2 | 3,4 | 2000              |
| K1325.345 | 44,5 | 75 | 62±0,1   | 53,5 | 19       | 3,8 | 3000              |

# Ball transfer units

with fastening holes, without housing


**Material:**

Steel electro zinc-plated.

**Sample order:**

K0764.122

**Note:**

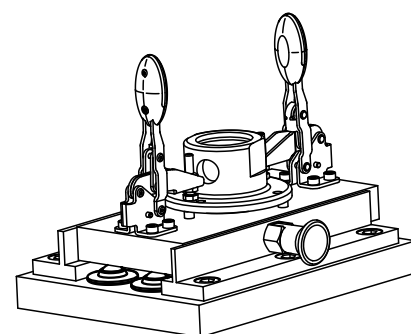
Ball transfer units with fastening holes for easy installation and removal.

**Drawing reference:**

- 1) load ball
- 2) bearing balls

Form B: cap and housing electro zinc-plated, balls steel

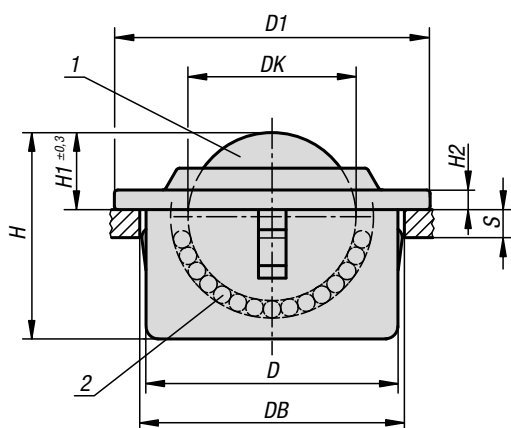
Form C: cap and housing electro zinc-plated, balls stainless steel


**KIPP Ball transfer units with fastening holes, without housing**

| Order No. | Form | DK | D      | D1 | H    | H1      | H2 | No. of fastening holes | Load rating C (N) |
|-----------|------|----|--------|----|------|---------|----|------------------------|-------------------|
| K0764.122 | B    | 22 | 33-0,2 | 45 | 27,7 | 9,8±0,2 | 5  | 3                      | 1200              |
| K0764.222 | C    | 22 | 33-0,2 | 45 | 27,7 | 9,8±0,2 | 5  | 3                      | 900               |

# Ball transfer units

with spring clips


**Material:**

Steel electro zinc-plated.

**Sample order:**

K0765.122

**Note:**

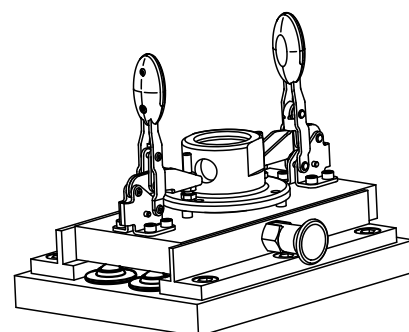
Ball transfer units with spring clips for easy installation and removal from the functional side. The roller is held in place with spring clips, this permits generous tolerances in the receiving hole. They have a felt seal to protect against dirt. S = Minimum nominal thickness of mounting base.

**Drawing reference:**

- 1) load ball
- 2) bearing balls

Form B: cap and housing electro zinc-plated, balls steel

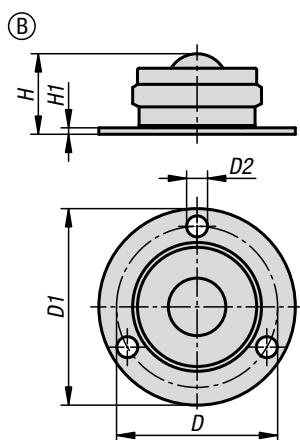
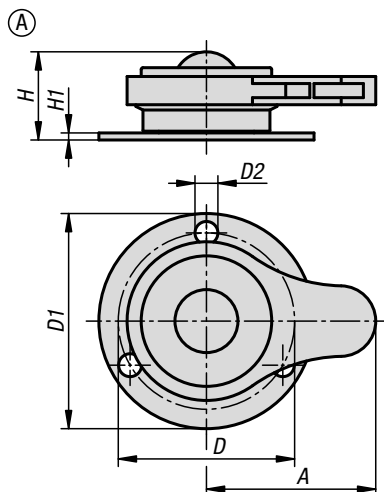
Form C: cap and housing electro zinc-plated, balls stainless steel


**KIPP Ball transfer units with spring clips**

| Order No. | Form | DK   | D      | D1 | Receiver-Ø<br>DB | H  | H1   | H2  | S | Load<br>rating C<br>(N) |
|-----------|------|------|--------|----|------------------|----|------|-----|---|-------------------------|
| K0765.115 | B    | 15,8 | 24±0,1 | 31 | 25 +0,5          | 21 | 9,5  | 2,8 | 2 | 600                     |
| K0765.122 | B    | 22,2 | 36±0,1 | 45 | 37 +0,5          | 30 | 9,8  | 2,8 | 3 | 1600                    |
| K0765.130 | B    | 30   | 45±0,1 | 55 | 46 +0,5          | 37 | 13,8 | 4   | 6 | 3000                    |
| K0765.215 | C    | 15,8 | 24±0,1 | 31 | 25 +0,5          | 21 | 9,5  | 2,8 | 2 | 600                     |
| K0765.222 | C    | 22,2 | 36±0,1 | 45 | 37 +0,5          | 30 | 9,8  | 2,8 | 3 | 1600                    |
| K0765.230 | C    | 30   | 45±0,1 | 55 | 46 +0,5          | 37 | 13,8 | 4   | 6 | 3000                    |

## Ball transfer units steel

with lockable ball



### Material:

Housing steel.

Lever polyamide.

Load ball stainless steel 1.4034 or polyamide.

### Version:

Steel electro zinc-plated.

### Sample order:

K1734.1219

### Note:

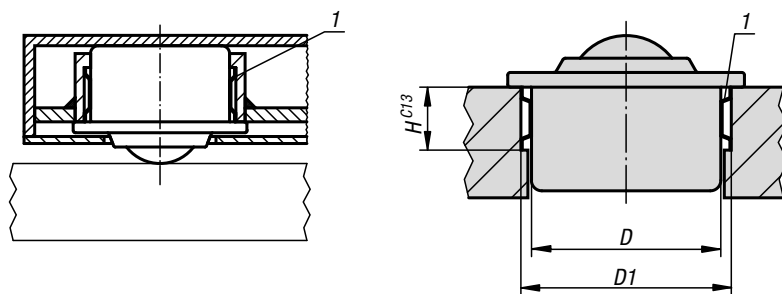
Ball transfer units with lockable balls are suitable for transporting and positioning sensitive goods such as glass or polished aluminium, brass and steel sheets. Ball transfer units can also be used as an alternative to standard rollers, making it easy to transport and position low profiles, e.g. in retail, production or at home.

### KIPP Ball transfer units steel with lockable ball

| Order No.  | Form | Form-Type     | Component material   | Ball-Ø | A  | D  | D1 | D2  | H  | H1 | Max load in kg ball on top | Max load in kg ball under |
|------------|------|---------------|----------------------|--------|----|----|----|-----|----|----|----------------------------|---------------------------|
| K1734.1119 | A    | with clamping | ball stainless steel | 19     | 48 | 50 | 63 | 6,5 | 25 | 2  | 120                        | 80                        |
| K1734.2119 | A    | with clamping | ball polyamide       | 19     | 48 | 50 | 63 | 6,5 | 25 | 2  | 120                        | 80                        |

| Order No.  | Form | Form-Type        | Component material   | Ball-Ø | D  | D1 | D2  | H  | H1 | Max load in kg ball on top | Max load in kg ball under |
|------------|------|------------------|----------------------|--------|----|----|-----|----|----|----------------------------|---------------------------|
| K1734.1219 | B    | without clamping | ball stainless steel | 19     | 50 | 63 | 6,5 | 25 | 2  | 120                        | 80                        |
| K1734.2219 | B    | without clamping | ball polyamide       | 19     | 50 | 63 | 6,5 | 25 | 2  | 120                        | 80                        |

## Tolerance rings



**Material:**  
Spring band steel

**Sample order:**  
K0766.024

**Note:**  
The use of tolerance rings allows for a greater tolerance range between the parts being assembled. The ball transfer units can be fitted quickly and cost effectively.

**Drawing reference:**  
1) tolerance ring



## KIPP Tolerance rings

| Order No. | D   | Assembly dimensions<br>D1 | Assembly dimensions<br>H |
|-----------|-----|---------------------------|--------------------------|
| K0766.024 | 24  | 25,7 +0,2                 | 7                        |
| K0766.036 | 36  | 37,7 +0,2                 | 12                       |
| K0766.045 | 45  | 46,7 +0,2                 | 12                       |
| K0766.062 | 62  | 64,1 +0,3                 | 15                       |
| K0766.100 | 100 | 102,5 +0,35               | 19                       |



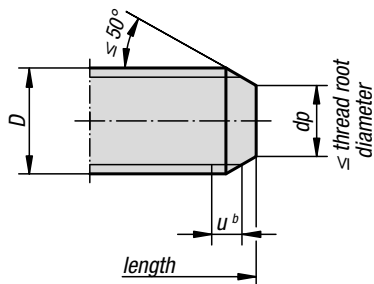
**Technical appendix**

**And more of the  
KIPP workholding  
programme**

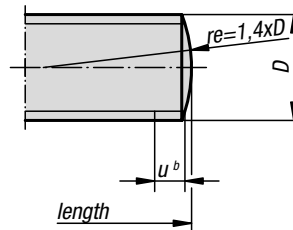
# DIN EN ISO 4753 thread ends DIN 6332 thrust points



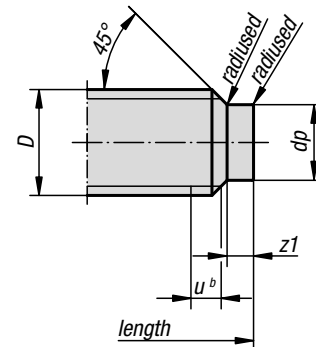
FL flat point



RN rounded end



SD short dog



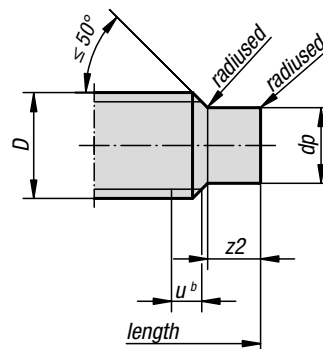
## Standard form:

DIN EN ISO 4753 flat point.

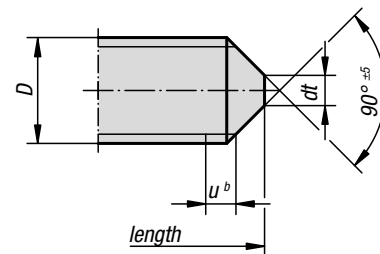
Any other thread end available at extra cost, depending on the quantity ordered.

$u^b$  = max. 2P incomplete thread

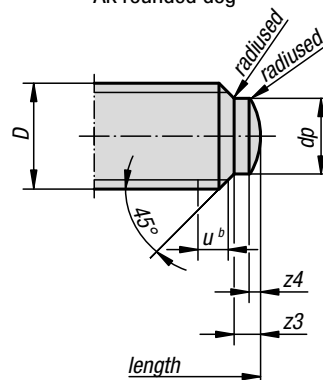
LD long dog



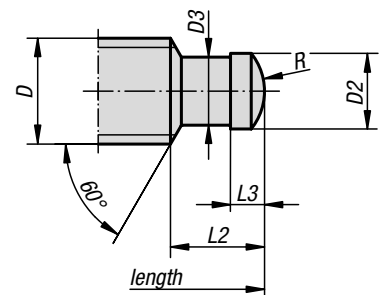
TC truncated cone



Ak rounded dog



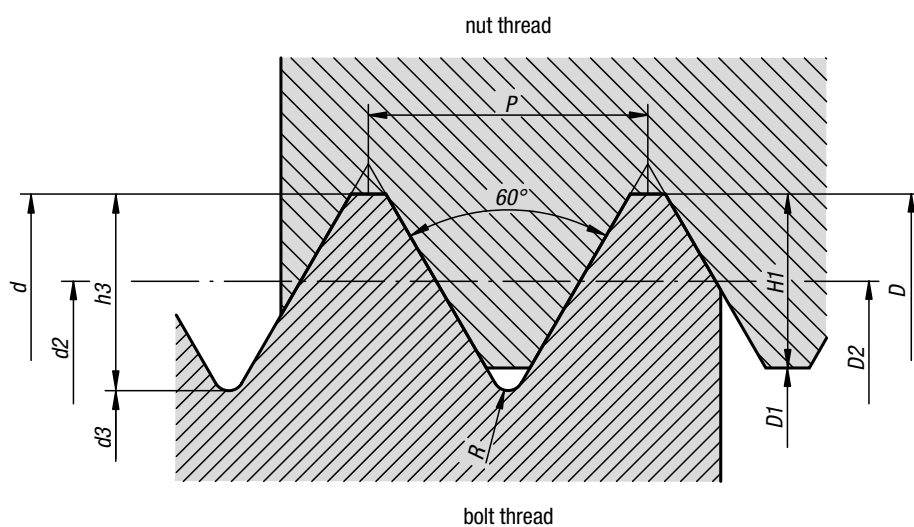
thrust point DIN 6332



| Thread diameter<br>D | Thread ends to DIN EN ISO 4753 |         |          |          |          |      | Thread ends with thrust points to DIN 6332 |         |     |     |    |
|----------------------|--------------------------------|---------|----------|----------|----------|------|--------------------------------------------|---------|-----|-----|----|
|                      | dp h13                         | dt h16* | z1 +IT14 | z2 +IT14 | z3 +IT14 | z4 ≈ | D2 h11                                     | D3 -0,1 | L2  | L3  | R  |
| M4                   | 2.5                            | —       | 1        | 2        | 1        | 0.5  | —                                          | —       | —   | —   | —  |
| M5                   | 3.5                            | —       | 1.25     | 2.5      | 1.25     | 0.6  | —                                          | —       | —   | —   | —  |
| M6                   | 4                              | 1.5     | 1.5      | 3        | 1.5      | 0.7  | 4.5                                        | 4       | 6   | 2.5 | 3  |
| M8                   | 5.5                            | 2       | 2        | 4        | 2        | 1    | 6                                          | 5.4     | 7.5 | 3   | 5  |
| M10                  | 7                              | 2.5     | 2.5      | 5        | 2.5      | 1    | 8                                          | 7.2     | 9   | 4.5 | 6  |
| M12                  | 8.5                            | 3       | 3        | 6        | 3        | 1.25 | 8                                          | 7.2     | 10  | 4.5 | 6  |
| M14                  | 10                             | 4       | 3.5      | 7        | 3.5      | 1.5  | —                                          | —       | —   | —   | —  |
| M16                  | 12                             | 4       | 4        | 8        | 4        | 1.75 | 12                                         | 11      | 12  | 5   | 9  |
| M18                  | 13                             | 5       | 4.5      | 9        | 4.5      | 2    | —                                          | —       | —   | —   | —  |
| M20                  | 15                             | 5       | 5        | 10       | 5        | 2    | 15.5                                       | 14.4    | 14  | 5.5 | 13 |
| M22                  | 17                             | 6       | 5.5      | 11       | 5.5      | 2.5  | —                                          | —       | —   | —   | —  |
| M24                  | 18                             | 6       | 6        | 12       | 6        | 2.5  | —                                          | —       | —   | —   | —  |
| M27                  | 21                             | 8       | 6.7      | 13.5     | 6.7      | 3    | —                                          | —       | —   | —   | —  |

\* Up to 5 mm diameter: thread end lightly flattened or lightly rounded.

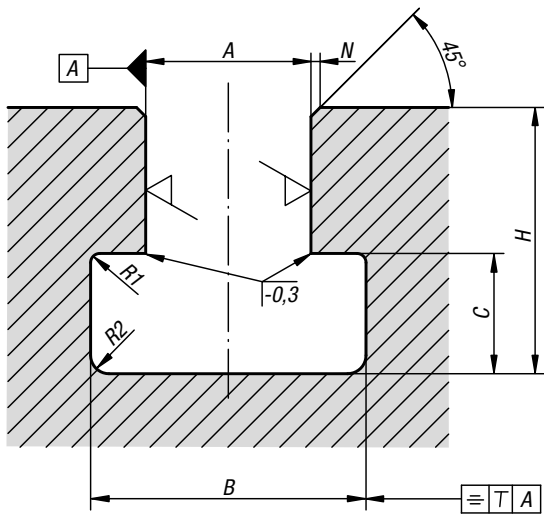




The medium tolerance class applies to the threads listed, i.e. 6H for nut threads and 6g for bolt threads. The (metal) threads in this catalogue are manufactured according to these tolerance classes.

## Coarse screw thread series 1

| Thread description<br>$d = D$ | Pitch<br>$P$ | Thread-pitch<br>$\emptyset$<br>$d_2 = D_2$ | Minor $\emptyset$<br>bolt<br>$d_3$ | Minor $\emptyset$<br>nut<br>$D_1$ | Thread depth<br>bolt<br>$h_3$ | Thread depth<br>nut<br>$H_1$ | Radius<br>$R$ | Core hole<br>drill<br>$\emptyset$ |
|-------------------------------|--------------|--------------------------------------------|------------------------------------|-----------------------------------|-------------------------------|------------------------------|---------------|-----------------------------------|
| M3                            | 0.5          | 2.68                                       | 2.39                               | 2.46                              | 0.31                          | 0.27                         | 0.07          | 2.5                               |
| M4                            | 0.7          | 3.55                                       | 3.14                               | 3.24                              | 0.43                          | 0.38                         | 0.10          | 3.3                               |
| M5                            | 0.8          | 4.48                                       | 4.02                               | 4.13                              | 0.49                          | 0.43                         | 0.12          | 4.2                               |
| M6                            | 1            | 5.35                                       | 4.77                               | 4.92                              | 0.61                          | 0.54                         | 0.14          | 5                                 |
| M8                            | 1.25         | 7.19                                       | 6.47                               | 6.65                              | 0.77                          | 0.68                         | 0.18          | 6.8                               |
| M10                           | 1.5          | 9.03                                       | 8.16                               | 8.38                              | 0.92                          | 0.81                         | 0.22          | 8.5                               |
| M12                           | 1.75         | 10.86                                      | 9.85                               | 10.11                             | 1.07                          | 0.95                         | 0.25          | 10.2                              |
| M16                           | 2            | 14.70                                      | 13.55                              | 13.84                             | 1.23                          | 1.08                         | 0.29          | 14                                |
| M20                           | 2.5          | 18.38                                      | 16.93                              | 17.29                             | 1.53                          | 1.35                         | 0.36          | 17.5                              |
| M24                           | 3            | 22.05                                      | 20.32                              | 20.75                             | 1.84                          | 1.62                         | 0.43          | 21                                |
| M30                           | 3.5          | 27.73                                      | 25.71                              | 26.21                             | 2.15                          | 1.89                         | 0.51          | 26.5                              |
| M36                           | 4            | 33.40                                      | 31.09                              | 31.67                             | 2.45                          | 2.17                         | 0.58          | 32                                |

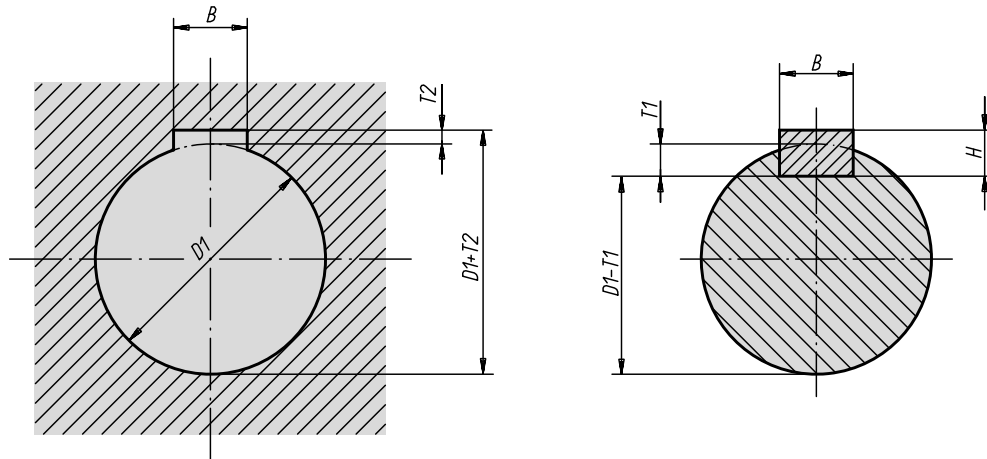


$\sqrt{6.3} / \left( \sqrt{\phantom{x}} = \sqrt{1.6} / \text{for tolerance H8 or } \sqrt{\phantom{x}} = \sqrt{3.2} / \text{for tolerance H12} \right)$

| A* | B    | B<br>permissible<br>deviation | C  | C<br>permissible<br>deviation | H<br>max. | H<br>min. | N<br>max. | R1<br>max. | R2<br>max. | T   |
|----|------|-------------------------------|----|-------------------------------|-----------|-----------|-----------|------------|------------|-----|
| 6  | 11   | $+1.5$<br>$0$                 | 5  | $+1$<br>$0$                   | 13        | 11        | 1         | 0.6        | 1          | 0.5 |
| 8  | 14.5 |                               | 7  |                               | 18        | 15        | 1         | 0.6        | 1          | 0.5 |
| 10 | 16   | $+2$<br>$0$                   | 7  |                               | 21        | 17        | 1         | 0.6        | 1          | 0.5 |
| 12 | 19   |                               | 8  | $+2$<br>$0$                   | 25        | 20        | 1         | 0.6        | 1          | 0.5 |
| 14 | 23   |                               | 9  |                               | 28        | 23        | 1.6       | 0.6        | 1.6        | 0.5 |
| 18 | 30   | $+3$<br>$0$                   | 12 |                               | 36        | 30        | 1.6       | 1          | 1.6        | 0.5 |
| 22 | 37   |                               | 16 |                               | 45        | 38        | 1.6       | 1          | 2.5        | 0.5 |
| 28 | 46   | $+4$<br>$0$                   | 20 |                               | 56        | 48        | 1.6       | 1          | 2.5        | 0.5 |
| 36 | 56   |                               | 25 | $+3$<br>$0$                   | 71        | 61        | 2.5       | 1          | 2.5        | 1   |
| 42 | 68   |                               | 32 |                               | 85        | 74        | 2.5       | 1.6        | 4          | 1   |

\* Tolerance H8 for tenon and clamping slots, H12 for clamping slots

# DIN 6885 keyways and parallel keys



## High form (sheet 1)

| For shaft<br>Ø<br>D1 | Shaft slot B*   |                    | Keyway B*       |                    | H  | T1<br>with top<br>clearance | T2<br>by top<br>clearance | T2<br>oversize      |
|----------------------|-----------------|--------------------|-----------------|--------------------|----|-----------------------------|---------------------------|---------------------|
|                      | tight fit<br>P9 | sliding fit<br>JS9 | tight fit<br>P9 | sliding fit<br>JS9 |    |                             |                           |                     |
| over 8 up to 10      | 3               | 3                  | 3               | 3                  | 3  | 1.8 <sup>+0.1</sup>         | 1.4 <sup>+0.1</sup>       | 0.9 <sup>+0.1</sup> |
| over 10 up to 12     | 4               | 4                  | 4               | 4                  | 4  | 2.5 <sup>+0.1</sup>         | 1.8 <sup>+0.1</sup>       | 1.2 <sup>+0.1</sup> |
| over 12 up to 17     | 5               | 5                  | 5               | 5                  | 5  | 3 <sup>+0.1</sup>           | 2.3 <sup>+0.1</sup>       | 1.7 <sup>+0.1</sup> |
| over 17 up to 22     | 6               | 6                  | 6               | 6                  | 6  | 3.5 <sup>+0.1</sup>         | 2.8 <sup>+0.1</sup>       | 2.2 <sup>+0.1</sup> |
| over 22 up to 30     | 8               | 8                  | 8               | 8                  | 7  | 4 <sup>+0.2</sup>           | 3.3 <sup>+0.2</sup>       | 2.4 <sup>+0.2</sup> |
| over 30 up to 38     | 10              | 10                 | 10              | 10                 | 8  | 5 <sup>+0.2</sup>           | 3.3 <sup>+0.2</sup>       | 2.4 <sup>+0.2</sup> |
| over 38 up to 44     | 12              | 12                 | 12              | 12                 | 8  | 5 <sup>+0.2</sup>           | 3.3 <sup>+0.2</sup>       | 2.4 <sup>+0.2</sup> |
| over 44 up to 50     | 14              | 14                 | 14              | 14                 | 9  | 5.5 <sup>+0.2</sup>         | 3.8 <sup>+0.2</sup>       | 2.9 <sup>+0.2</sup> |
| over 50 up to 58     | 16              | 16                 | 16              | 16                 | 10 | 6 <sup>+0.2</sup>           | 4.3 <sup>+0.2</sup>       | 3.4 <sup>+0.2</sup> |

## High form for machine tools (sheet 2)

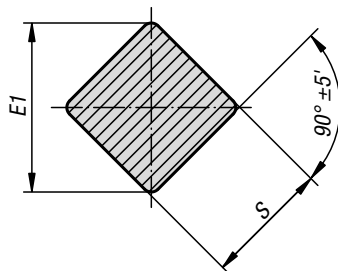
| For shaft<br>Ø<br>D1 | Shaft slot B*   |                    | Keyway B*       |                    | H  | T1                  | T2                  |
|----------------------|-----------------|--------------------|-----------------|--------------------|----|---------------------|---------------------|
|                      | tight fit<br>P9 | sliding fit<br>JS9 | tight fit<br>P9 | sliding fit<br>JS9 |    |                     |                     |
| over 10 up to 12     | 4               | 4                  | 4               | 4                  | 4  | 3 <sup>+0.1</sup>   | 1.1 <sup>+0.1</sup> |
| over 12 up to 17     | 5               | 5                  | 5               | 5                  | 5  | 3.8 <sup>+0.1</sup> | 1.3 <sup>+0.1</sup> |
| over 17 up to 22     | 6               | 6                  | 6               | 6                  | 6  | 4.4 <sup>+0.1</sup> | 1.7 <sup>+0.1</sup> |
| over 22 up to 30     | 8               | 8                  | 8               | 8                  | 7  | 5.4 <sup>+0.2</sup> | 1.7 <sup>+0.2</sup> |
| over 30 up to 38     | 10              | 10                 | 10              | 10                 | 8  | 6 <sup>+0.2</sup>   | 2.1 <sup>+0.2</sup> |
| over 38 up to 44     | 12              | 12                 | 12              | 12                 | 8  | 6 <sup>+0.2</sup>   | 2.1 <sup>+0.2</sup> |
| over 44 up to 50     | 14              | 14                 | 14              | 14                 | 9  | 6 <sup>+0.2</sup>   | 2.6 <sup>+0.2</sup> |
| over 50 up to 58     | 16              | 16                 | 16              | 16                 | 10 | 7.5 <sup>+0.2</sup> | 2.6 <sup>+0.2</sup> |

\* The indicated tolerances for slot widths apply, as a rule, for milled slots.  
ISO quality IT8 (i.e. P8 instead of P9, N8 instead of N9 and JS8 instead of JS9) are recommended for the width of broached slots.  
Tolerance H9 for the shaft keyway and D10 for the hub keyway are recommended for sliding fits.

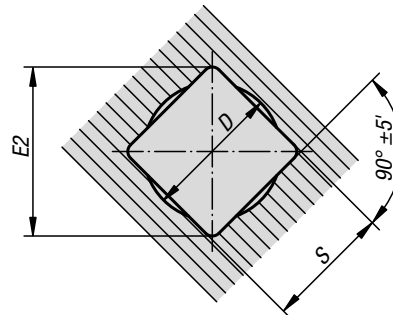
# Squares for DIN 79 operating spindles and operating parts



A External square



B Internal square



| S<br>H11 / h11 | D<br>max.* | E1<br>max. | E1<br>min.** | E2<br>min. |
|----------------|------------|------------|--------------|------------|
| 4              | 4.2        | 5          | 4.8          | 5.3        |
| 5              | 5.3        | 6.5        | 6            | 6.6        |
| 5.5            | 5.8        | 7          | 6.6          | 7.2        |
| 6              | 6.3        | 8          | 7.2          | 8.1        |
| 7              | 7.3        | 9          | 8.4          | 9.1        |
| 8              | 8.4        | 10         | 9.6          | 10.1       |
| 9              | 9.5        | 12         | 10.8         | 12.1       |
| 10             | 10.5       | 13         | 12           | 13.1       |
| 11             | 11.6       | 14         | 13.2         | 14.1       |
| 12             | 12.6       | 16         | 14.4         | 16.1       |
| 13             | 13.7       | 17         | 15.6         | 17.1       |
| 14             | 14.7       | 18         | 16.8         | 18.1       |
| 16             | 16.8       | 21         | 19.2         | 21.2       |
| 17             | 17.9       | 22         | 20.4         | 22.2       |
| 19             | 20         | 25         | 22.8         | 25.2       |
| 22             | 23.1       | 28         | 26.4         | 28.2       |

\* Internal squares are allowed to be recessed in the middle third of each side.  
D max. defines the borehole diameter which leaves appropriate clearance  
when disposed concentrically to the internal square.

\*\* External squares made on round steel bar may fall below the minimum size  
by the amount of tolerance on the steel bar, i.e. by h11.

# DIN ISO 1302 surface finish indication DIN ISO 2768 T1 and T2 general tolerances



## DIN ISO 1302 surface finish indication

| Surface symbol | Meaning                                                                                                                   |
|----------------|---------------------------------------------------------------------------------------------------------------------------|
|                | - remains in delivered condition<br>- material removal not permitted                                                      |
|                | - Material removal prescribed                                                                                             |
|                | - Material removal prescribed<br>- All surfaces have the same surface finish                                              |
|                | - Material removal prescribed<br>- Upper limit of the mean surface roughness (Rz) is 40 µm                                |
|                | - Material removal prescribed<br>- Upper limit of the mean surface roughness (Rz) is 6.3 µm<br>- Machining method: Ground |

- KIPP products are adapted and manufactured in such a way that they are suitable for their general purpose with reference to material and surface finish. As such, they meet all normal tolerance requirements.
- All dimensions are indicated in mm.
- The latest DIN standard sheet version applies to all parts made to DIN standards.
- Variations on dimensions without tolerance values are according to "DIN ISO 2768-mk".

## General tolerances for linear and angular dimensions (DIN ISO 2768 T1)

|                 |             | Linear Dimensions                                 |                |                 |                   |                    |                     |                      |                      |
|-----------------|-------------|---------------------------------------------------|----------------|-----------------|-------------------|--------------------|---------------------|----------------------|----------------------|
| Tolerance class |             | Deviations limits mm for nominal dimension ranges |                |                 |                   |                    |                     |                      |                      |
| abbreviation    | description | 0.5 up to 3                                       | over 3 up to 6 | over 6 up to 30 | over 30 up to 120 | over 120 up to 400 | over 400 up to 1000 | over 1000 up to 2000 | over 2000 up to 4000 |
| f               | fine        | ± 0.05                                            | ± 0.05         | ± 0.1           | ± 0.15            | ± 0.2              | ± 0.3               | ± 0.5                | –                    |
| m               | medium      | ± 0.1                                             | ± 0.1          | ± 0.2           | ± 0.3             | ± 0.5              | ± 0.8               | ± 1.2                | ± 2                  |
| c               | coarse      | ± 0.2                                             | ± 0.3          | ± 0.5           | ± 0.8             | ± 1.2              | ± 2                 | ± 3                  | ± 4                  |
| v               | very coarse | –                                                 | ± 0.5          | ± 1             | ± 1.5             | ± 2.5              | ± 4                 | ± 6                  | ± 8                  |

|                 |             | External Radii and Chamfer Heights                |                |        | Angular Dimensions                                                            |                  |                   |                    |          |
|-----------------|-------------|---------------------------------------------------|----------------|--------|-------------------------------------------------------------------------------|------------------|-------------------|--------------------|----------|
| Tolerance class |             | Deviations limits mm for nominal dimension ranges |                |        | Deviation limits degrees and minutes for nominal dimension ranges (short leg) |                  |                   |                    |          |
| abbreviation    | description | 0.5 up to 3                                       | over 3 up to 6 | over 6 | over 10                                                                       | over 10 up to 50 | over 50 up to 120 | over 120 up to 400 | over 400 |
| f               | fine        | ± 0.2                                             | ± 0.5          | ± 1    | ± 1°                                                                          | ± 0°30'          | ± 0°20'           | ± 0°10'            | ± 0°5'   |
| m               | medium      | ± 0.2                                             | ± 0.5          | ± 1    | ± 1°                                                                          | ± 0°30'          | ± 0°20'           | ± 0°10'            | ± 0°5'   |
| c               | coarse      | ± 0.4                                             | ± 1            | ± 2    | ± 1°30'                                                                       | ± 1°             | ± 0°30'           | ± 0°15'            | ± 0°10'  |
| v               | very coarse | ± 0.4                                             | ± 1            | ± 2    | ± 3°                                                                          | ± 2°             | ± 1°              | ± 0°30'            | ± 0°20'  |

## General Tolerances for Form and Position (DIN ISO 2768 T2)

|                 | Straightness and Flatness   |                  |                   |                    |                     |                      | Perpendicularity            |                    |                     |                      | Symmetry                    |                    |                     |                      | Run-out |
|-----------------|-----------------------------|------------------|-------------------|--------------------|---------------------|----------------------|-----------------------------|--------------------|---------------------|----------------------|-----------------------------|--------------------|---------------------|----------------------|---------|
| Tolerance class | nominal dimension ranges mm |                  |                   |                    |                     |                      | nominal dimension ranges mm |                    |                     |                      | nominal dimension ranges mm |                    |                     |                      |         |
|                 | up to 10                    | over 10 up to 30 | over 30 up to 100 | over 100 up to 300 | over 300 up to 1000 | over 1000 up to 3000 | up to 100                   | over 100 up to 300 | over 300 up to 1000 | over 1000 up to 3000 | up to 100                   | over 100 up to 300 | over 300 up to 1000 | over 1000 up to 3000 |         |
| H               | 0.02                        | 0.05             | 0.1               | 0.2                | 0.3                 | 0.4                  | 0.2                         | 0.3                | 0.4                 | 0.5                  | 0.5                         | 0.5                | 0.5                 | 0.5                  | 0.1     |
| K               | 0.05                        | 0.1              | 0.2               | 0.4                | 0.6                 | 0.8                  | 0.4                         | 0.6                | 0.8                 | 1                    | 0.6                         | 0.6                | 0.8                 | 1                    | 0.2     |
| L               | 0.1                         | 0.2              | 0.4               | 0.8                | 1.2                 | 1.6                  | 0.6                         | 1                  | 1.5                 | 2                    | 0.6                         | 1                  | 1.5                 | 2                    | 0.5     |

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components

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thick



Icon overview

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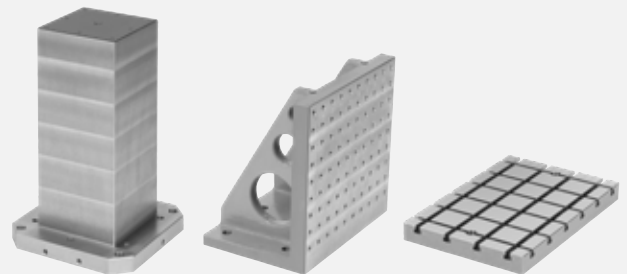
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