Reference Table - Conversion of Measurements



| Pressure | | |
|------------------------------------------------|------------------------------------------------|----------------------------------|
| From | То | Conversion |
| psi | Kilopond/cm ² (kp/cm ²) | psi x $0.07031 = \text{kp/cm}^2$ |
| Kilopond/cm ² (kp/cm ²) | psi | kp/cm ² x 14.22 = psi |
| psi | Bar | psi x 0.07 = Bar |
| Bar | psi | Bar x 14.29 = psi |

| Linear Measure | | |
|-----------------|-----------------|---------------------|
| From | То | Conversion |
| Inch (in) | Millimeter (mm) | in x 25.4 = mm |
| Millimeter (mm) | Inch (in) | mm x 0.03937 = in |
| Zoll | Millimeter (mm) | Zoll x 25.4 = mm |
| Millimeter (mm) | Zoll | mm x 0.03937 = Zoll |
| Foot | Meter (m) | Foot x $0.3048 = m$ |
| Meter (m) | Foot | m x 3.281 = Foot |
| Yard | Meter (m) | Yard x $0.9144 = m$ |
| Meter (m) | Yard | m x 1.0936 = Yard |
| Miles (mls) | Kilometer (km) | mls x 1.609 = km |
| Kilometer (km) | Miles (mls) | km x 0.622 = mls |

| Forces | | |
|-----------------|-----------------|------------------|
| From | То | Conversion |
| Pounds (lbs) | Newton (N) | lbs x $4.45 = N$ |
| Newton (N) | Pounds (lbs) | N x 0.225 = lbs |
| PS (horsepower) | Kilowatt (kW) | PS x 0.735 = kW |
| Kilowatt (kW) | PS (horsepower) | kW x 1.36 = PS |

| Weights | | |
|------------------------------------------------|------------------------------------------------|----------------------------|
| From | То | Conversion |
| Pounds (Ibs) | Kilopond/cm ² (kp/cm ²) | $lbs x 0.45 = kp/cm^2$ |
| Kilopond/cm ² (kp/cm ²) | Pounds (lbs) | $kp/cm^2 \times 2.2 = lbs$ |
| Ounces (oz) | Gramm (g) | oz x 28 = g |
| Gramm (g) | Ounces (oz) | g x 0.035 = oz |
| Pounds (lbs) | Kilogramm (kg) | lbs x 0.4536 = kg |
| Kilogramm (kg) | Pounds (lbs) | kg x 2.205 = lbs |

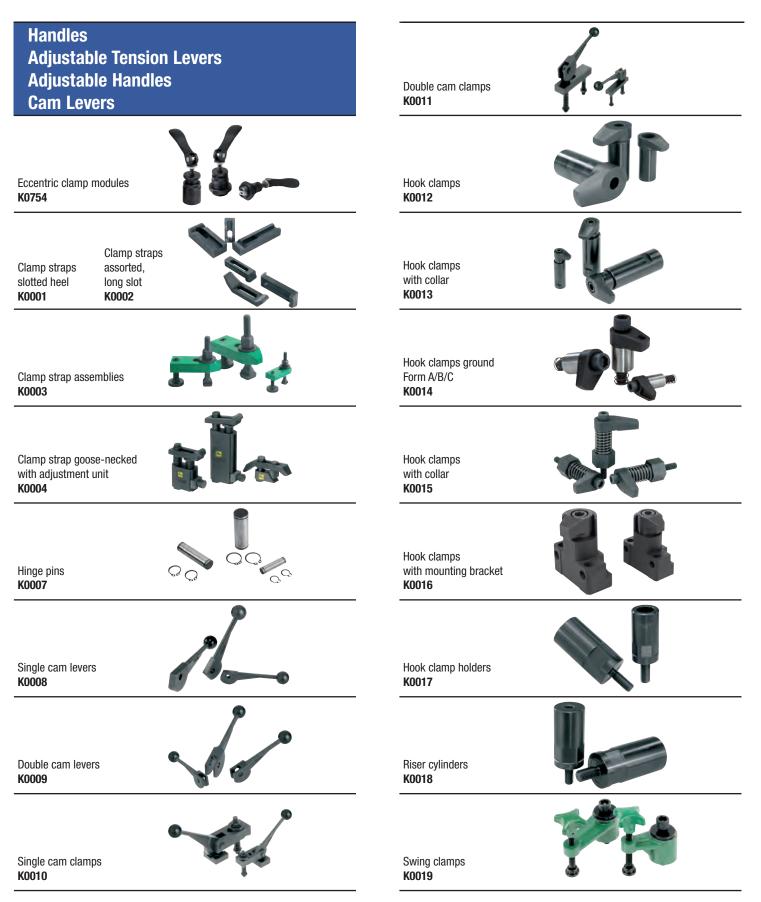
| Torque | | |
|----------------------|----------------------|----------------------|
| From | То | Conversion |
| Foot-pounds (ft-lbs) | Newton-Meter (Nm) | ft/lbs x 1.35 = Nm |
| Newton-Meter (Nm) | Foot-pounds (ft-lbs) | Nm x $0.74 = ft/lbs$ |
| Newton-Meter (Nm) | Kilopond/cm (kp/cm) | Nm x 0.102 = kp/cm |





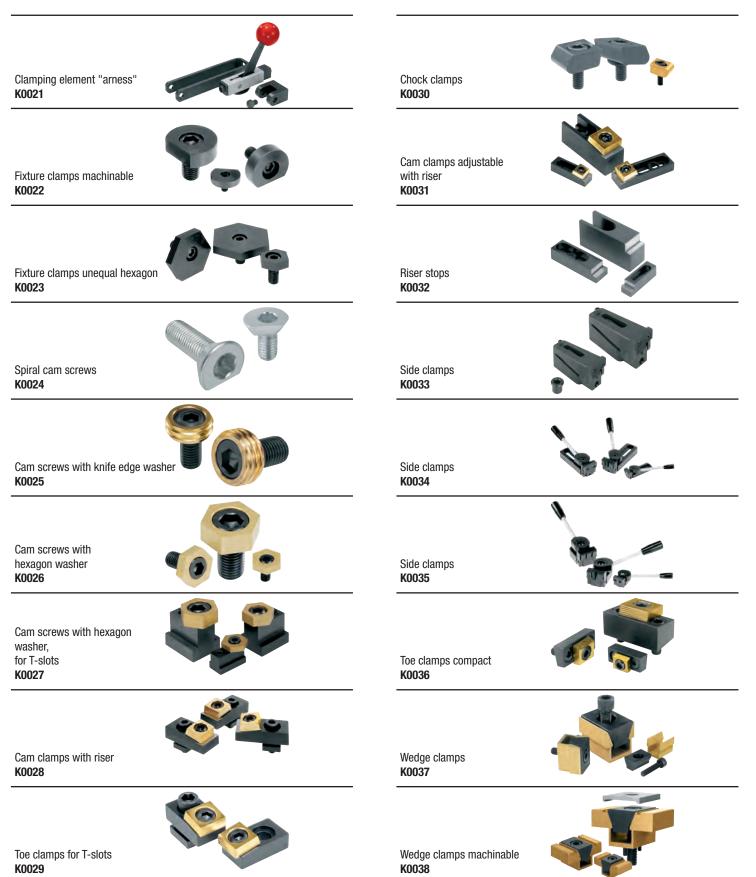
Clamping Tools





Clamping Tools





Clamping Tools



Clamping Devices Quick-Acting Clamps Hook Clamps Taper Clamping Units

Wedge clamps jaw face smooth or serrated **K0039**



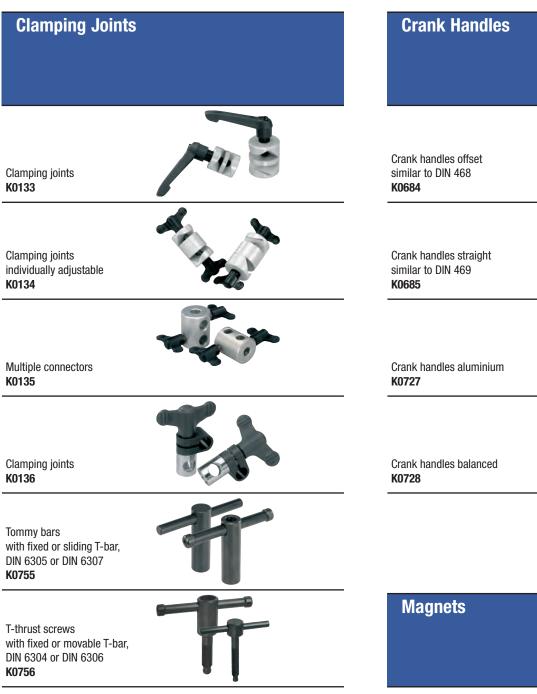
Wedge clamps machinable **K0649**

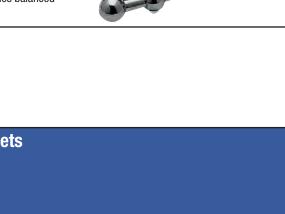




Clamping Tools









Additional Products Available Upon Request Operating Parts



Knurled Nuts Star and Palm Grips Quick-Acting Knurled Nuts Knobs **Knurled Thumb Screws Ball Knobs** Knurled nuts Palm grips plastic similar to DIN 6335 K0138 K0148 Star grips similar to DIN 6336 Knurled nuts quick-acting K0139 K0152 Knurled thumb screws plastic Knobs flat K0141 K0157 Ball knobs smooth Knurled knobs DIN 319 enhanced K0142 K0159 13 Palm grips plastic coated grey cast iron, Knurled nuts high steel and stainless steel, DIN 466 DIN 6335 K0143 K0682 Knurled nuts flat steel and stainless steel, DIN 467 Ball grips revolving K0726 K0144 Knurled knobs K0110 Knurled heads for hexagon socket screws K0680

Operating Parts



Non-Adjustable Clamp Levers Control Handles Triangular Star Grips Five Lobe Grips

| Levers DIN 99 K0174 | | |
|----------------------------------------------------|-----|--|
| Clamping levers non-adjustable K0175 | 0 0 | |
| Control handles K0176 | | |
| Control handles flat K0177 | | |
| Lock grip K0178 | | |
| T-grips K0180 | | |
| T-grips K0181 | | |
| Wing screws with a counter grip K0182 | | |

Clamping grips tristar with high collar **K0183**



Five lobe grips **K0185**

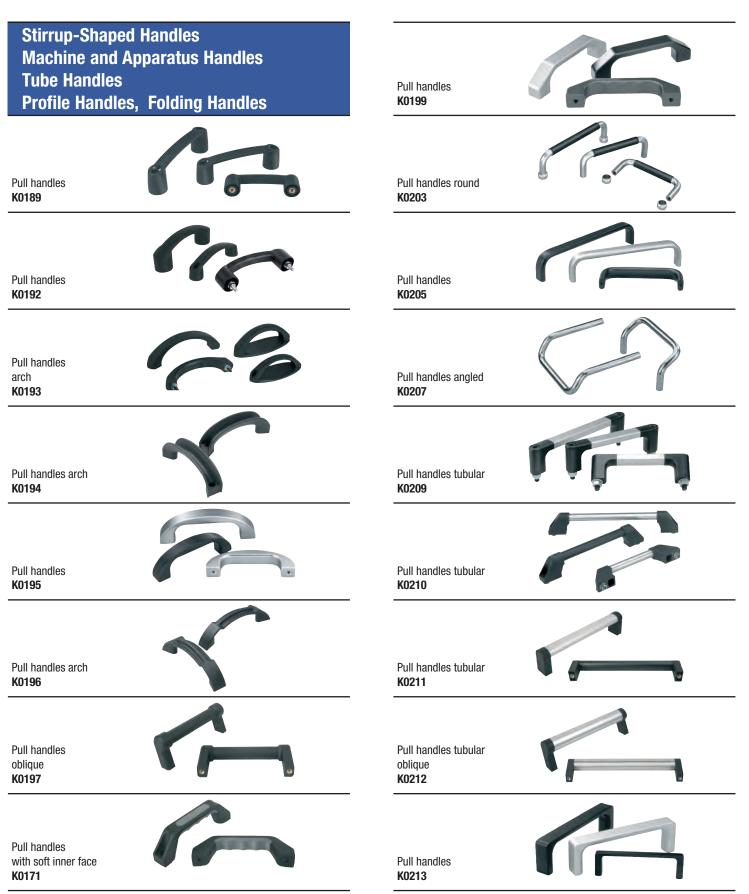


Wing grips for hexagon socket screws **K0681**



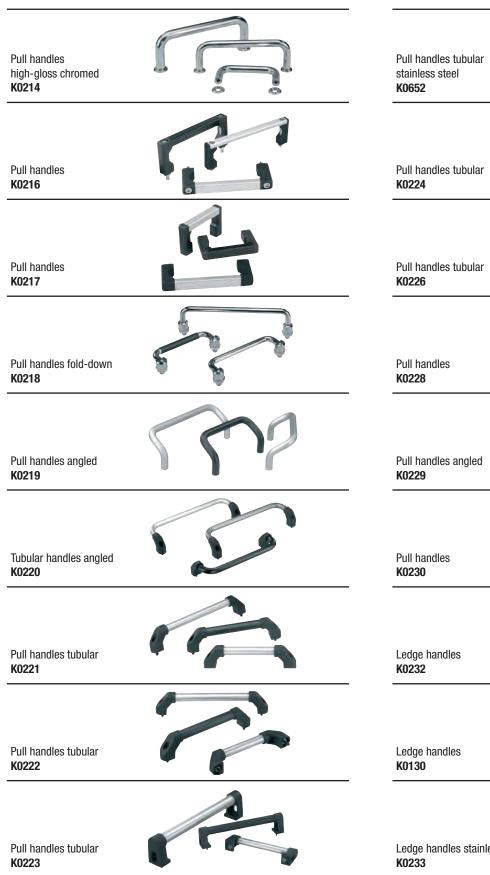
Operating Parts

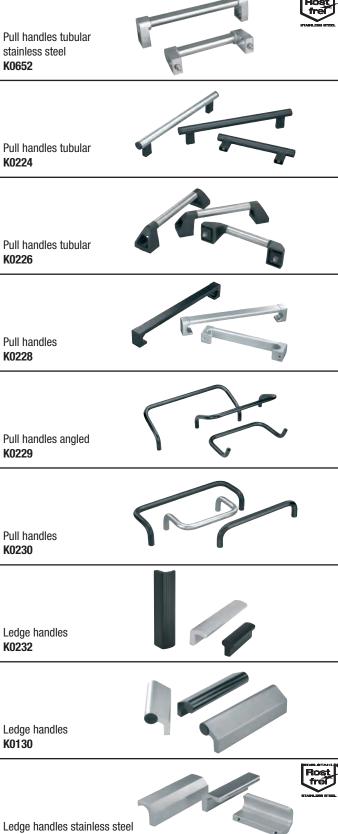




Operating Parts



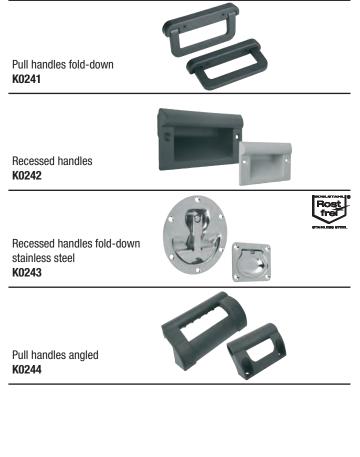




Operating Parts

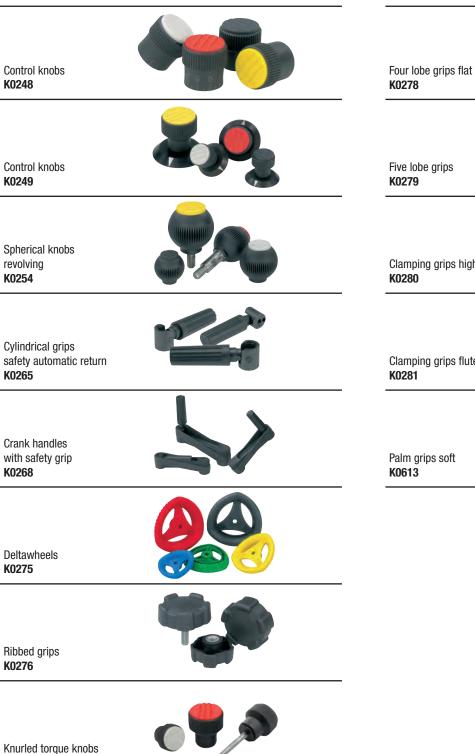






| Telescopic slides | |
|-------------------|--|
| | |
| | |

Novo-Grip



K0277

Sympa Touch





Five lobe grips

Clamping grips high form



Clamping grips fluted

Palm grips soft





Machine and Jig Devices



Toggle Locators Thrust Bolts Locating Bolts Locating Feet



Self-aligning pads K0282



Self-aligning pads with 0-ring K0284



Self-aligning pads with o-ring and exchangeable inserts K0285

Self-aligning pads self-righting K0286



Self-aligning pads adjustable K0287

Self-aligning pads, adjustable with 0-ring K0288

Self-aligning pads adjustable with o-ring and exchangeable inserts K0289







K0290

K0291

Rest pads

K0295

with positioning pin

Self-aligning pads adjustable

with o-ring and hexagon socket



Rest pads K0294

Feet with threaded pin, DIN 6320 (edition 1971) K0296



Support bolts K0297







Fixture feet with external thread K0300

Fixture feet with internal thread K0301

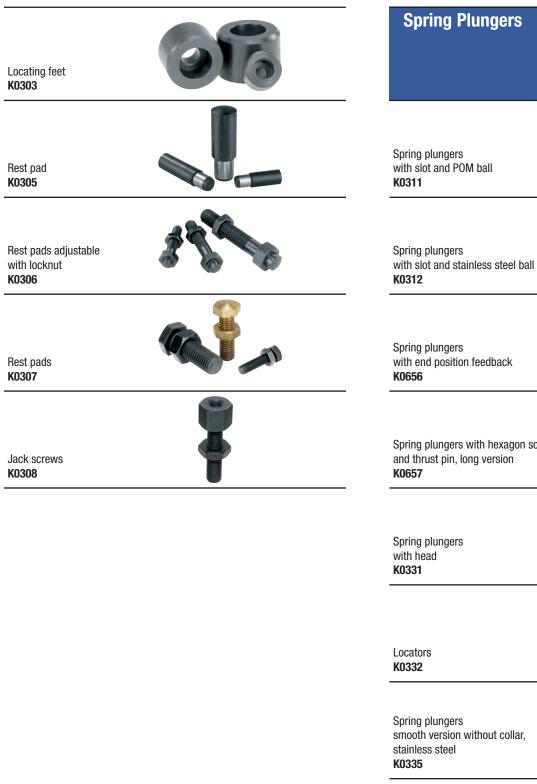
Self-aligning pads swivel angle 12° K0302

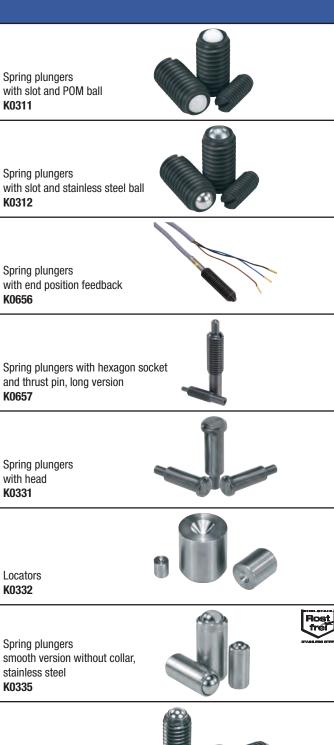




Machine and Jig Devices







Spring plungers with head **K0336**

















Machine and Jig Devices





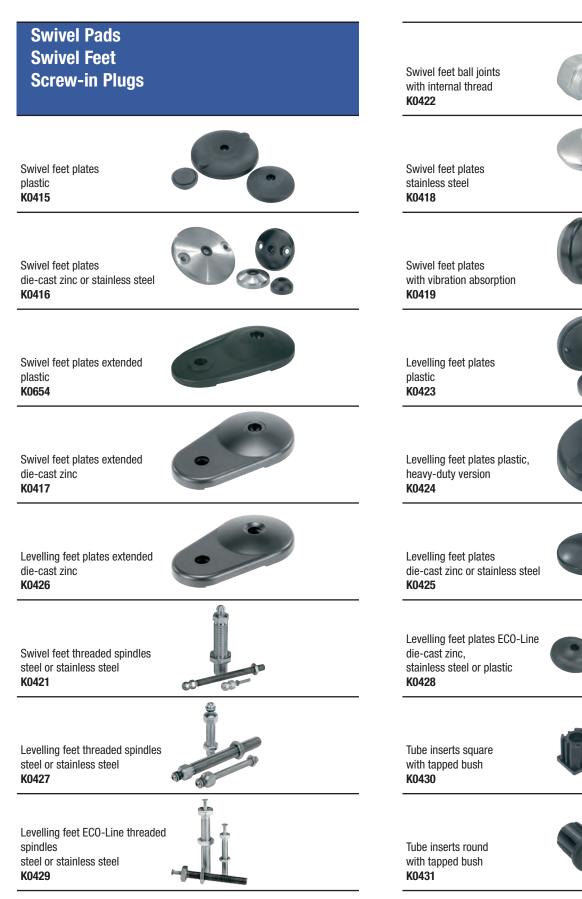
Intermediate plates K0413

Mounting brackets K0414



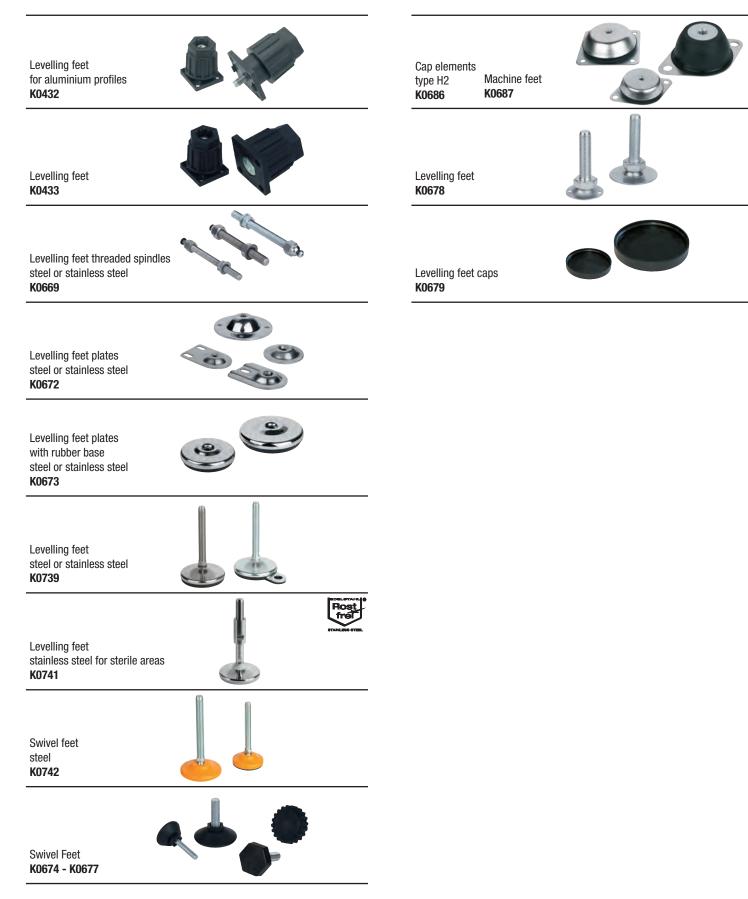
Machine and Jig Devices





423





Machine and Jig Devices

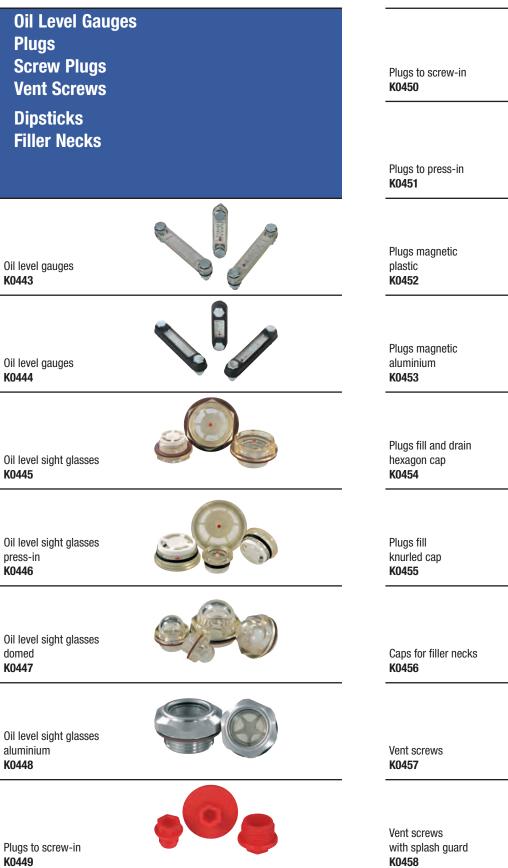




Hinges aluminium, lift-off, right **K0579**

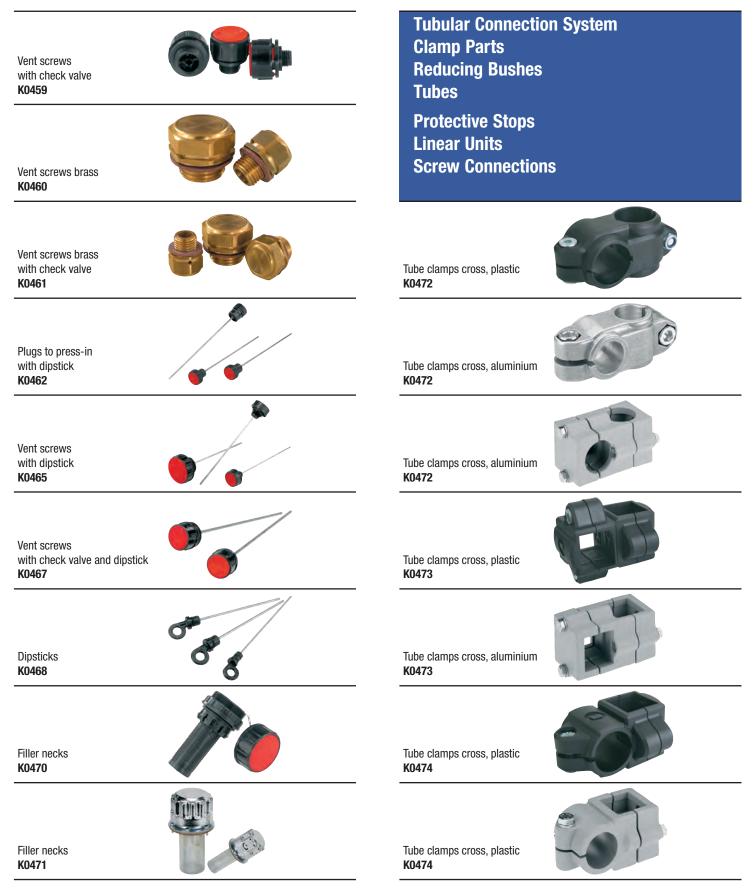




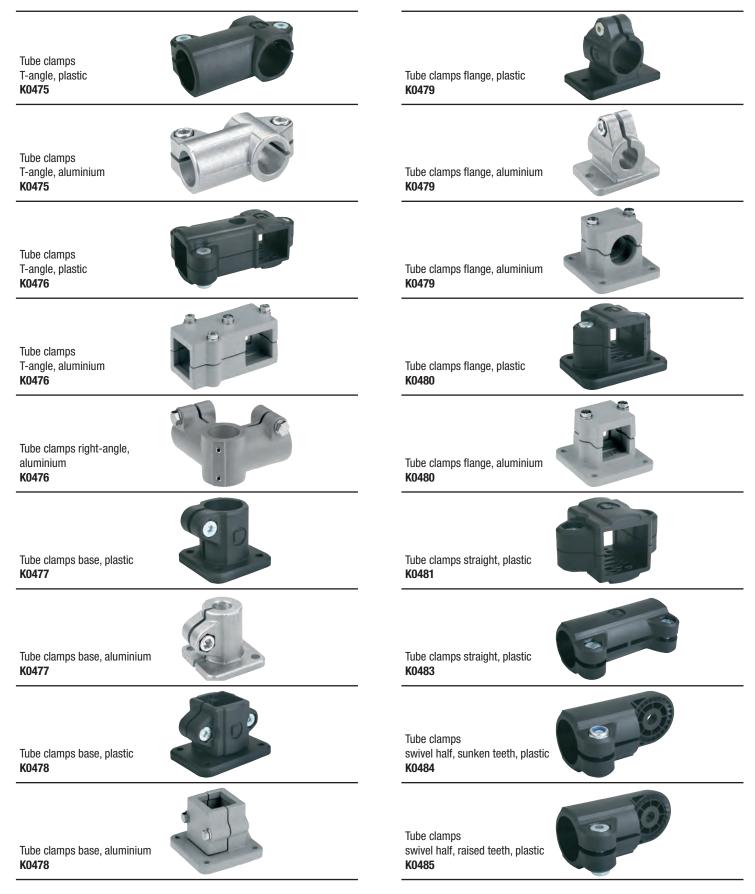




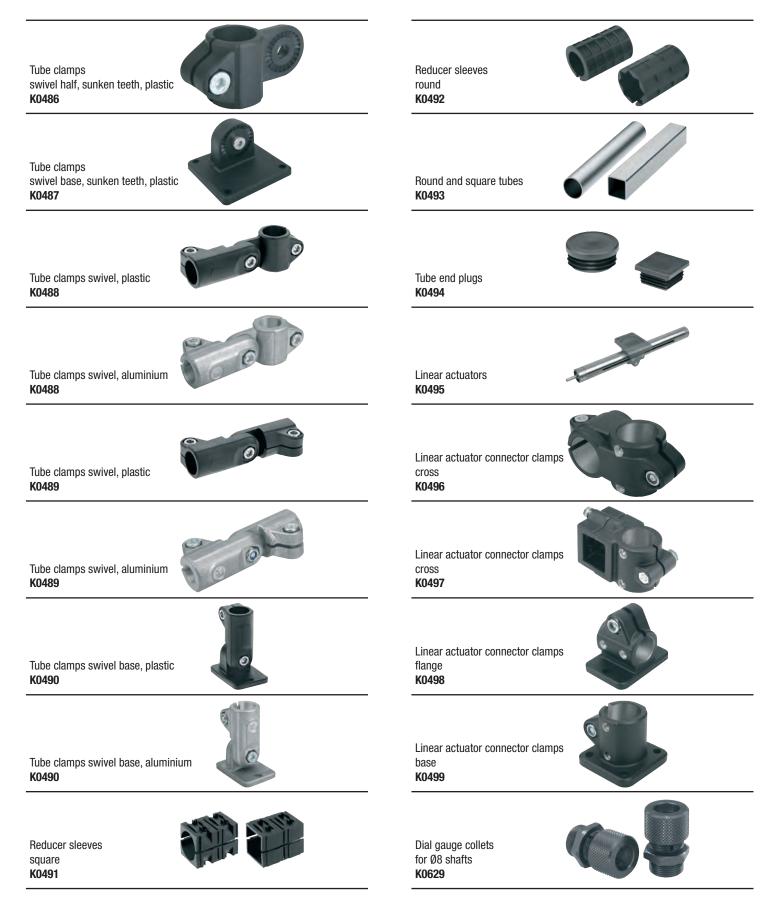




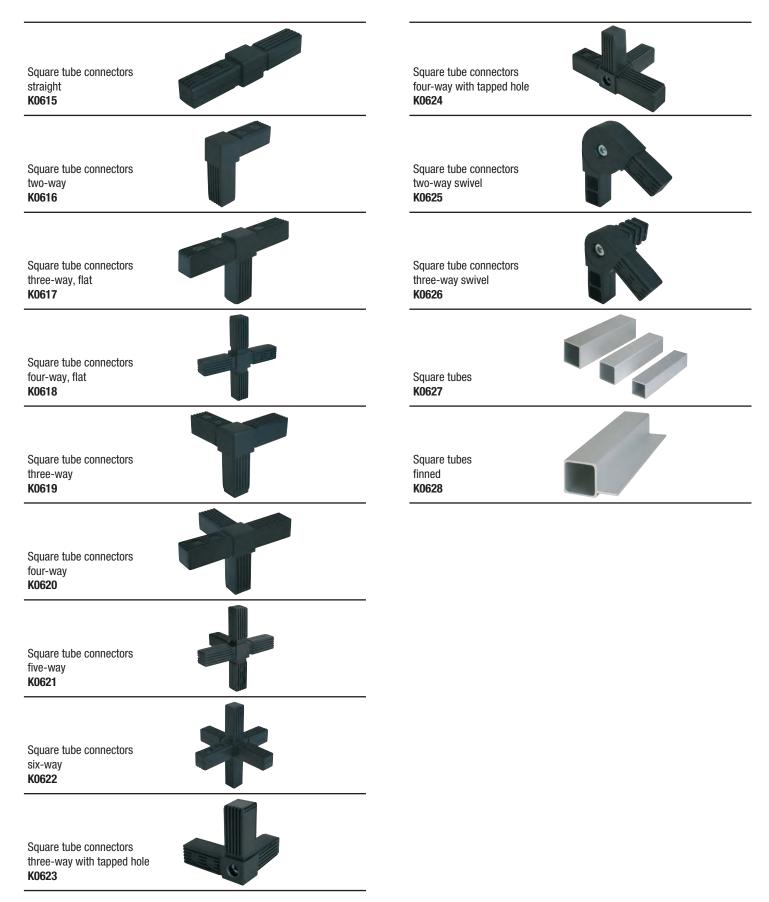












Kipp

Machine and Jig Devices



Transport technology



Scales, Scale Rings



General Information about:

KIPP Clamping Tools KIPP Operating Parts Novo-Grip Sympa Touch KIPP Machine and Jig Devices

Materials:

POM = Polyoxymethylene - Delrin[®] Deviating from the standard design, other materials and quality classes are available on request.

Surface finishes:

Other surface finishes are available at additional cost, e.g. matt-finished or high-polish chromium-plated steel parts.

Other colors are also available on request for plastic coatings or moulded plastic parts.

Threads:

Threads are manufactured to ISO DIN 13 medium tolerance class, i.e. 6H for nut threads and 6g for bolt threads. External threads up to 60 mm are generally supplied fully threaded. Screw lengths of 70 mm and more are supplied with 60 mm long threads.

Threads of aluminum grips:

Especially threads of aluminum grips cannot be true to gauge size due to final surface finish refinement and the removal of material during related pretreatment.

The majority of these threads are moulded in order to strengthen the material. As a result, the tearing resistance of aluminum for a thread with M5x10 is higher than 2000 N.

Special versions:

KIPP Clamp and Tension Levers can also be supplied on request with predrilled inserts, locating holes, locating bolts for pinning and other thread ends to DIN 78 (except for flat point) and to DIN 6332.

As a basic rule, you can rely on us as a competent partner for your daily clamping needs. We are always happy to advise you.

Thread Pitch Chart:

| Metric Coarse Thread: | Metric Fine Thread: |
|-----------------------|---------------------|
| M3 X 0.5 | M3 X 0.35 |
| M4 X 0.7 | M4 X 0.50 |
| M5 X 0.8 | M5 X 0.50 |
| M6 X 1.0 | M6 X 0.75 |
| M8 X 1.25 | M8 X 1.00 |
| M10 X 1.5 | M10 X 1.25 |
| M12 X 1.75 | M12 X 1.50 |
| M14 X 2.00 | M14 X 1.50 |
| M16 X 2.00 | M16 X 1.50 |
| M18 X 2.50 | M18 X 1.5 |
| M20 X 2.50 | M20 X 1.5 |
| M22 X 2.50 | M24 X 1.5 |
| M24 X 3.00 | M24 X 2.0 |

Conversion Chart:

10mm = .39" 12mm = .47" 15mm = .59" 20mm = .79" 25mm = .98" 30mm = 1.18" 25mm = 1.38" 40mm = 1.57" 45mm = 1.77" 50mm = 1.97" 55mm = 2.17" 60mm = 2.36" 70mm = 2.76" 80mm = 3.15" 90mm = 3.54" hipp

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