



HEINRICH KIPP WERK



QUICKFINDER

Clamping technology

Standard elements

Operating parts

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Reg. No. 002081 QM



SERVICE HOURS

MONDAY-THURSDAY 7.00 AM - 5.30 PM

FRIDAY 7.00 AM - 3.30 PM

QUICKFINDER

Quick overview of product categories



The handy KIPP QUICKFINDER leads quickly and assuredly to the correct products. Clearly summarised in categories, you receive a compact overview of dimensions, materials, versions and finishes.

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

We can be reached during office hours at the telephone number +43 7242 9396-7640.

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.

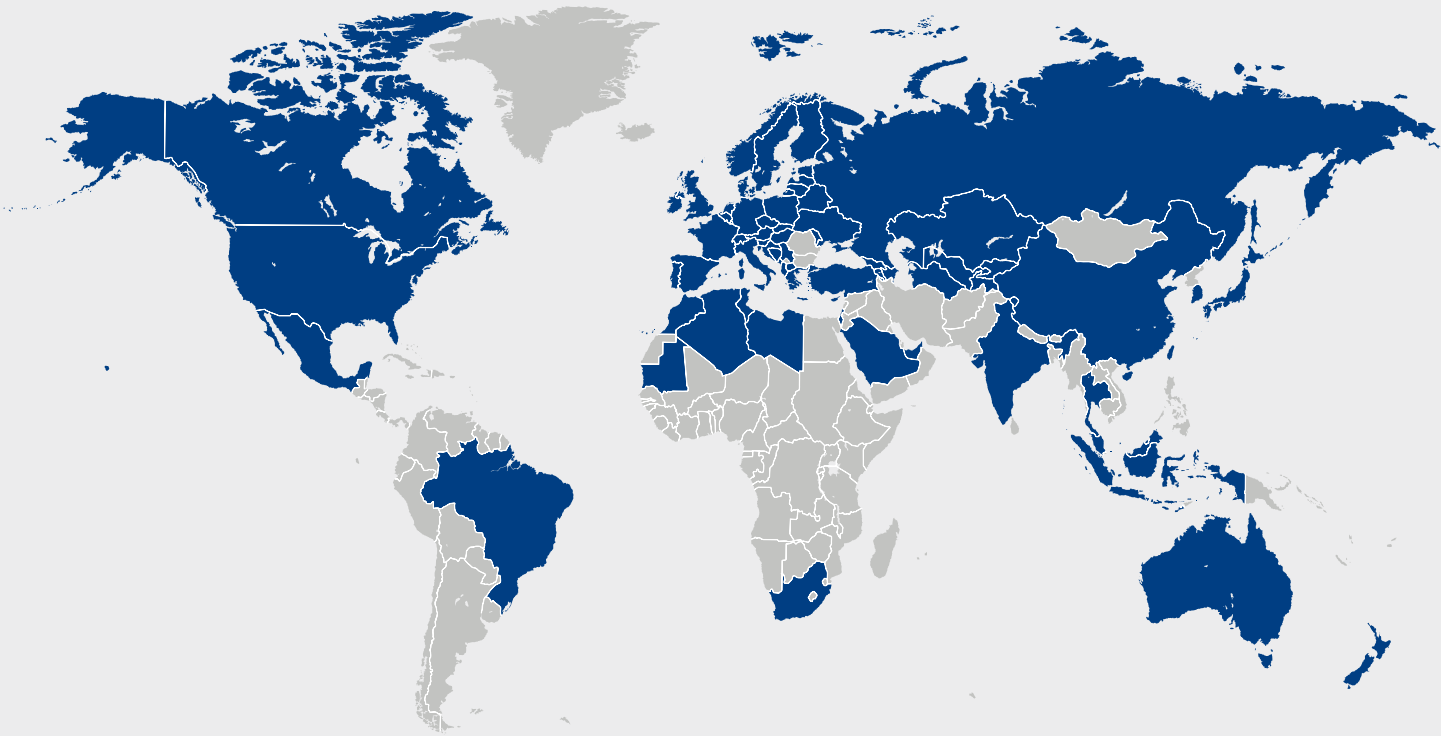


Nicolas Kipp

Heinrich Kipp

LOCATIONS

HEINRICH KIPP WERK is present worldwide with 12 branch locations and over 50 agencies, and so guarantees a high international delivery capability. We have a well-organised service and specialist consultants.



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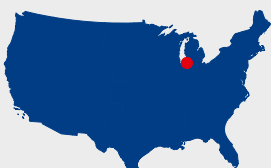
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PRODUCT LINES

NOVOgrip



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

SYMPAtouch



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

NATUREgrip



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

MEDigrip



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

FEATUREgrip



With the new FEATUREgrip 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 tri-valent 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.

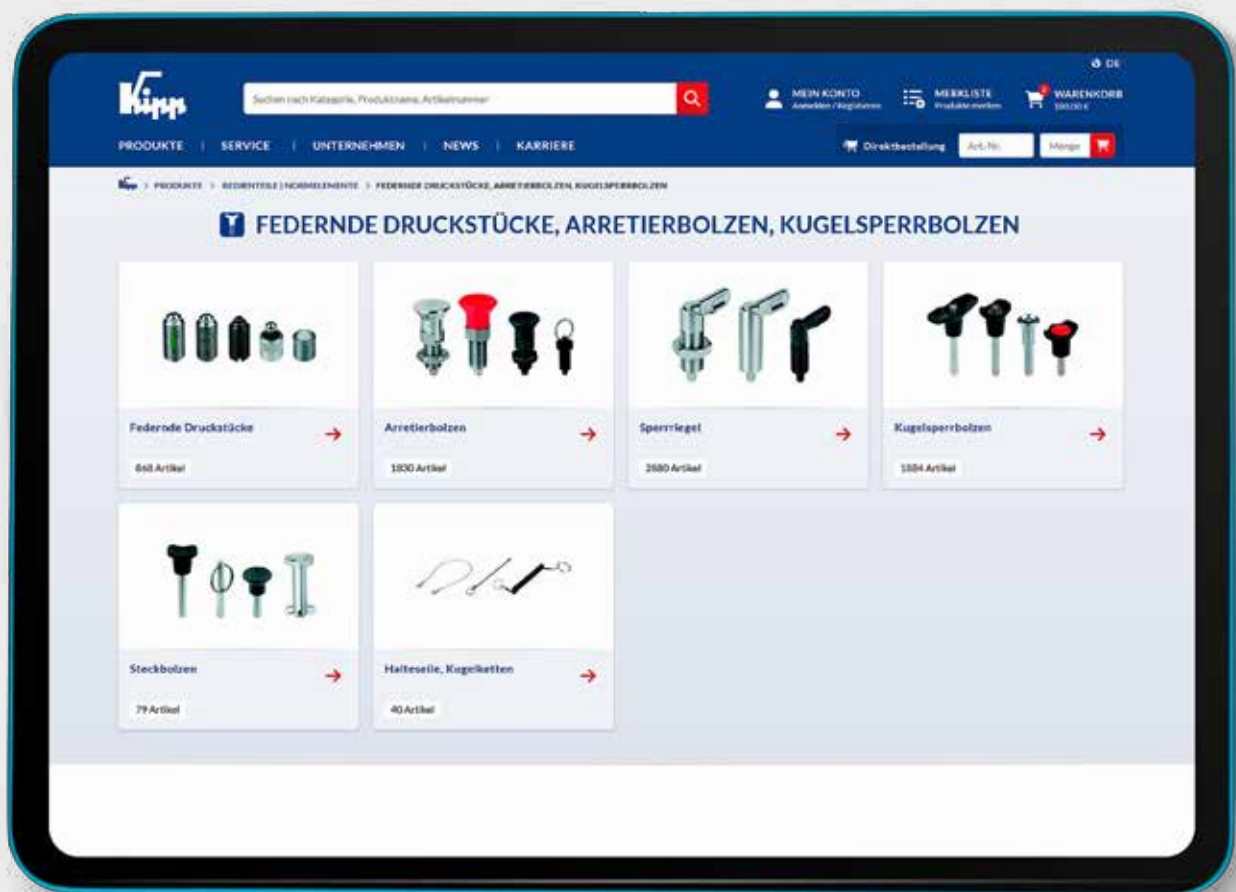
Thread versions

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.

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

- Order around the clock – 7 days a week
- 65,000 products in a structured overview
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Professional advice

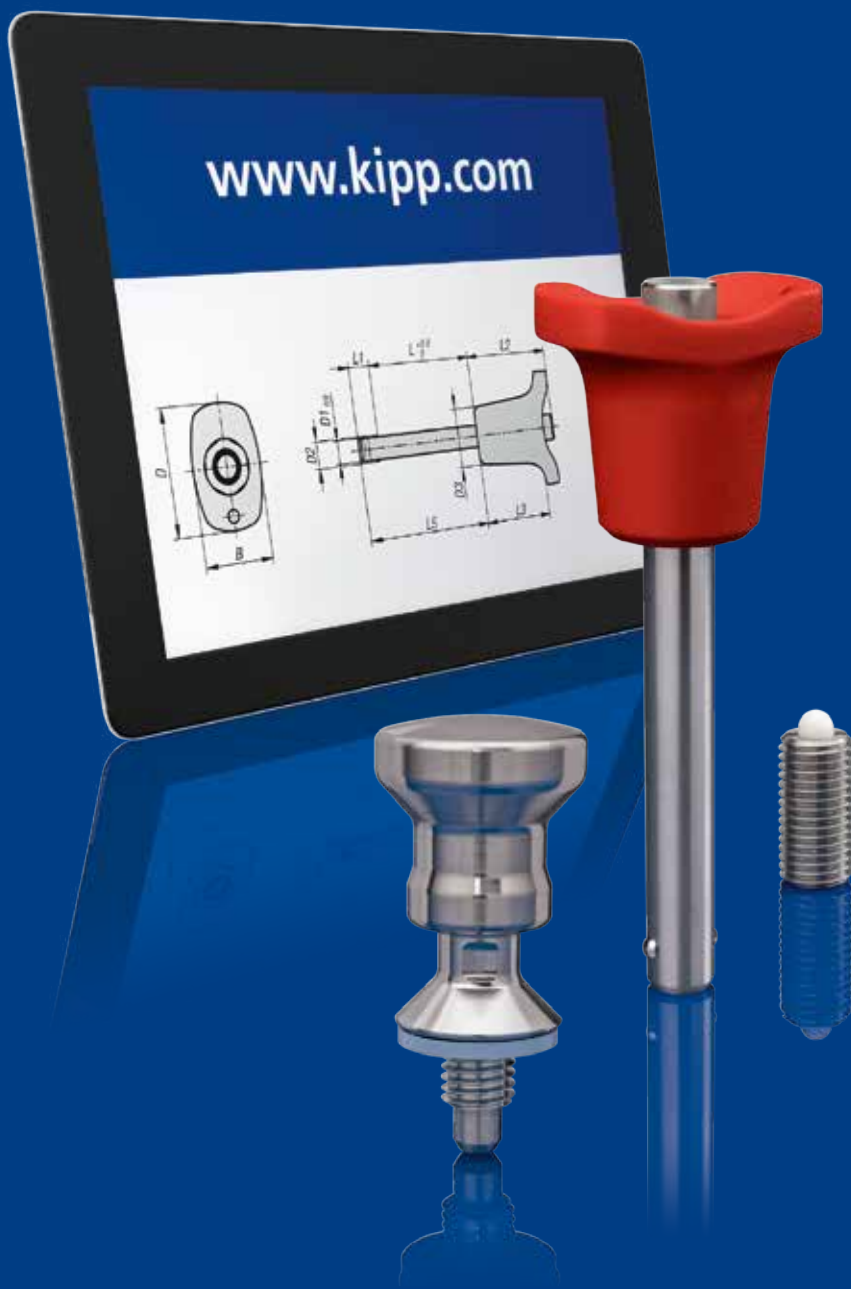
HEINRICH KIPP WERK has highly trained customer service staff and expert technical advisers with extensive experience.



TÜV SAARLAND SEHR GUT
Kundenratet
11/2021 tuvw-saar.de/SC44347
Service tested

Delivery

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



OPERATING PARTS |
STANDARD ELEMENTS



Clamping levers



Product versions:

Thread Ø:	M5 - M16, #8 - 5/8
Thread type:	internal thread, external thread
Thread length:	10 - 90 mm
Thread depth:	9 - 27 mm
Handle length:	37 - 126 mm
Materials:	steel, stainless steel, die-cast zinc, plastic
Versions:	with pushbutton, with protective cap, Hygienic USIT®, flat, antistatic, antibacterial, metal detectable, visually detectable, 2-component, ECO, with thrust pad, ergonomic, non-adjustable, with safety function, with clamping force intensifier
Surfaces:	bright, plastic coated, bright chrome-plated, high gloss polished, hammer paint finish
Colours:	black, grey, red, green, yellow, blue, orange, silver



Product description:

Clamping levers are intended for manual alignment with fixation tasks and clamping applications. There is a lot of variation in this product group due to the range of designs, materials and colours available. These classic elements can be used in a wide variety of applications. However, they are most suitable for machine and plant construction, and in toolmaking.



Cam levers



Product versions:

Thread Ø:	M3 - M10, #6 - 3/8
Thread type:	internal thread, external thread
Thread length:	10 - 50 mm
Height:	13 - 29 mm
Handle length:	41.7 - 110 mm
Clamping force:	1.5 - 8 kN
Materials:	stainless steel, steel, plastic, cast aluminium
Versions:	adjustable, quick lock, elastomer lock
Surfaces:	bright, powder-coated, electrolytic polished, abrasive blasted
Colours:	black, red, silver



Product description:

Cam levers are ideal for quick fixation. The products are available in various materials and colours. They are used in machine and plant construction, in toolmaking, and in medical and rehabilitation technology.





Tension levers / flat tension levers



Product versions:

Thread Ø:	M6 - M24, 5/16 - 3/4
Thread type:	internal thread, external thread
Thread length:	15 - 90 mm
Thread depth:	14 - 27 mm
Materials:	stainless steel, steel
Versions:	safety function, flat
Surfaces:	bright, plastic-coated, black oxidised
Colours:	black, silver

Product description:

Tension levers are used for simple clamping tasks. The threaded insert is available in different versions and sizes. Tension levers are used in machine and plant construction.



Knurled nuts / knurled screws / knurled knobs



Product versions:

Thread Ø:	M3 - M12, #8 - 1/2
Thread type:	internal thread, external thread
Thread length:	10 - 60 mm
Thread depth:	5 - 22 mm
Outside diameter:	12 - 63 mm
Materials:	stainless steel, free-cutting steel, Q&A steel, thermoplastic, thermoset, biopolymer (beech), aluminium
Versions:	quick-clamp function, flat, high, low, antistatic, metal detectable, visually detectable, for screws
Surfaces:	bright, black oxidised
Colours:	black, grey, red, green, yellow, blue, orange, silver

Product description:

Nuts, screws and knurled knobs are particularly suitable for manual positioning and clamping. They enable smooth, tool-free assembly. The various designs, thread sizes and materials can be used in a whole host of applications in machine and plant construction as well as toolmaking.





Palm grips / star grips / clamping grips



Product versions:

Thread Ø:	M4 - M20, #10 - 1/2
Thread type:	external thread, internal thread, through-hole, blind hole, thread drilled out
Thread length:	10 - 60 mm
Thread depth:	7.5 - 36 mm
Outside diameter:	25 - 105 mm
Materials:	aluminium, stainless steel, grey cast iron, thermoset, thermoplastic, biopolymer, glass fibre reinforced plastic
Versions:	cover, locating bush, quick-acting, high collar, extended hub, safety lanyard, antibacterial, flat, high, soft, ergonomic, tapped bush, with prominent steel bush, metal detectable, visually detectable, with clamping force intensifier
Surfaces:	bright, ground, ground and polished, abrasive blasted
Colours:	black, slate grey, light grey, red, yellow, silver, blue

Product description:

Clamping grips, star grips and palm grips are primarily used as retaining and fastening elements for manual tasks. An ergonomic design is among the key features of these products. They come in a range of different materials, sizes and shapes, allowing them to be used in applications such as machine construction and the chemical industry.



Knobs



Product versions:

Thread Ø:	M2-M12, #2 - 3/8
Thread type:	external thread, internal thread
Thread length:	10-20 mm
Thread depth:	4-20 mm
Outside diameter:	14-63 mm
Materials:	steel, stainless steel, aluminium, thermoplastic, biopolymer (beech)
Versions:	antistatic, antibacterial, high collar, low collar, Hygienic USIT®
Surfaces:	bright, ground and polished, blasted, galvanised and blue passivated, anodised
Colours:	black, red, yellow, light grey, dark grey, slate grey, graphite black

Product description:

Knobs can be used as a clamping, retaining and fastening element. They are available in various designs and thread sizes. Knobs are primarily used for manually adjusting assemblies, machines or aggregates.





Wing grips / T-grips / grip nuts / grip screws



Product versions:

Thread Ø:	M3–M12 #8 - 3/8
Thread type:	external thread, internal thread
Grip length:	22–90 mm
Thread length:	8–50 mm
Materials:	stainless steel, polyamide, thermoplastic, steel, biopolymer (beech)
Versions:	one-sided, for screws, antibacterial, antistatic, Hygienic USIT®, Hygienic DESIGN, metal detectable, visually detectable
Surfaces:	bright, ground, ground and polished, abrasive blasted
Colours:	black, grey, red, green, yellow, blue, white, silver, slate grey, graphite black

Product description:

Wing grips and T-grips as well as grip nuts and screws are used as clamping, retaining and fastening elements in various applications. They are standard elements in machine and plant construction and function as manual controls on assemblies, machines or aggregates.



Ball knobs / spherical knobs



Product versions:

Thread Ø:	M4 – M12, #8 - 1/2
Thread type:	external thread, internal thread
Thread length:	10–40 mm
Thread depth:	6–23 mm
Outside diameter:	16–50 mm
Materials:	thermoset, thermoplastic, stainless steel, aluminium, biopolymer (beech)
Versions:	rotating, tapped bush
Surfaces:	bright, polished
Colours:	black, grey, red, yellow, blue, orange, silver

Product description:

Ball knobs and spherical knobs are used as clamping, retaining and fastening elements. They are primarily used for manually adjusting assemblies, machines or aggregates.



Torque grips



Product versions:

Thread Ø:	M5–M12
Thread type:	external thread, internal thread
Thread length:	30–60 mm
Thread depth:	5–13 mm
Outside diameter:	26–80 mm
Materials:	thermoplastic
Colours:	black, grey, red, yellow, blue, orange

Product description:

Torque grips can also be used as clamping, retaining and fastening elements. They are primarily used for manually adjusting assemblies, machines or aggregates. Depending on the version, the torque is signalled via clicking or free turning.



Pull handles / tubular handles



Product versions:

Fastening hole:	Ø5.5 – Ø9 mm / M3 – M10
Hole spacing:	55 – 600 mm
Length:	67 – 633 mm
Load capacity:	300 – 3700 N
Materials:	stainless steel, investment cast stainless steel, round aluminium, oval aluminium, aluminium profile, aluminium, thermoplastic, SEBS, SG iron, thermoset, PP, round steel, steel
Versions:	angled, soft inner face, high temperature resistant, antibacterial, antistatic, with/without end cap, with/without baseplate, oblique, oval, round, fold-down, screw head counterbore, threaded insert, screw-on one side, compact, adjustable, Hygienic USIT®, with electric switching function, metal detectable, visually detectable
Surface finish:	bright, abrasive blasted, polished, anodised, ground, chromed
Colours:	black, grey, orange, red, silver, blue

Product description:

Pull handles are particularly suitable for opening and closing covers, panels or hoods. What makes ours special is the fact that they have good haptics, are exceptionally stable and have an ergonomic design. The product range offers a variety of sizes, shapes, materials and colours.





Recessed handles / recessed fold-down handles

19"



Product versions:

Length:	90–170 mm
Height:	40–79 mm
Load capacity:	250–1000 N
Materials:	aluminium profile, die cast aluminium, thermoplastic, stainless steel, polyamide
Versions:	fold-down, clip-in
Surfaces:	anodised, bright, polished
Colours:	black, light grey, silver

Product description:

Recessed handles can be installed quickly and easily due to their ergonomic shape. The fold-down version enables installation even in places where only a shallow installation depth is available. Recessed handles are available in a range of versions and colours. Recessed fold-down handles are ideally suited to crates and lids.



Ledge handles



Product versions:

Fastening hole:	M4–M8
Hole spacing:	30–120 mm
Load capacity:	200–1000 N
Materials:	profile aluminium, profile stainless steel
Surfaces:	anodised, polished.
Colours:	black, silver

Product description:

Ledge handles are extremely versatile and are used as elements for opening and closing covers, panels and hatches. They are available in various versions, designs and materials. Ledge handles are used in machine and plant construction as well as toolmaking.



Handwheels



Product versions:

Fastening hole:	8–43 mm, 0.312" - 1"
Outside diameter:	80–500 mm
Materials:	aluminium, thermoset, thermoplastic, grey cast iron, polyamide, stainless steel
Versions:	rotating / fixed / no handle, straight wheel rim, pre-drilled, reamed hole, fold-down handle, safety cylinder grip, with keyway, without keyway
Surfaces:	bright, polished, powder-coated
Colours:	black, dark grey, green, red, yellow, blue, silver

Product description:

Handwheels are used to position and adjust shafts and spindles manually. They are predominantly used as control elements in machine and plant construction. They are also suitable for opening and closing valves in hydraulic and steam aggregates.



Grips for handwheels



Product versions:

Thread Ø:	M3–M16, #8 - 5/16
Thread type:	internal thread, external thread
Thread length:	6–70.5 mm
Thread depth:	7.5–26 mm
Materials:	steel, stainless steel, aluminium, thermoset, thermoplastic
Versions:	fixed cylinder grips, rotating, fold-down, safety auto-return, oval, taper grips, machine handles, moulded thread
Surfaces:	bright, galvanised and blue passivated, polished
Colours:	black, silver

Product description:

Machine handles, cylinder grips, taper grips and ball grips are used in a wide variety of applications.



Position indicators



Product versions:

Receiving hole:	Ø 10–Ø 30 mm
Width:	22 – 48 mm
Height:	33 – 71 mm
Length:	26 – 38.8 mm
Materials:	plastic
Versions:	programmed, not programmed
Colours:	orange, black

Product description:

Position indicators enable the precise measurement of the travel path. Despite their small size, they are extremely precise. They are especially suitable for small shaft diameters. Position indicators are available as either mechanical or digital indicators.



Crank handles



Product versions:

Thread Ø:	7–17, SW (square bar) 10–22, 0.375" - 0.5"
Height:	13 – 44 mm
Materials:	aluminium, steel, stainless steel, thermoplastic, cast iron
Versions:	rotating, fold-down
Surfaces:	bright, zinc-plated, abrasive blasted, powder-coated
Colours:	black, silver

Product description:

Crank handles are highly recommended for longer travel paths. They are fastened axially or radially using cross-pinning or a socket head screw.





Quarter-turn locks



Product versions:

Actuator:	square bar, slot, handle, double lug
Tongue length:	25 – 60 mm
Tongue spacing:	4.5 – 74 mm
Wall thickness:	5 – 40 mm
Materials:	die-cast zinc, steel, stainless steel, plastic, thermoset
Versions:	small/long version, lockable, stepped cam, variable compression, flat, free turning, Hygienic DESIGN
Surfaces:	chromed, powder-coated, bright, polished, plastic coated
Colours:	black, red, silver

Product description:

Quarter-turn locks are locks for hatches, control cabinets, steel cabinets and machine doors. They are sturdy and have an optional cylinder lock. They are used in control cabinet construction, in all transport sectors, as well as in service and logistics vehicles. If required, quarter-turn locks can be installed pre-assembled. In most cases, the tongues can be flexibly combined with other quarter-turn locks.



Quarter-turn clamp lock



Product versions:

Actuation:	Twist knob, slot, cross slot, knurled knob, star grip
Wall thickness:	6 - 20 mm
Clamping force:	up to 400 N
Materials:	Steel or stainless steel
Twist knob:	Plastic or stainless steel

Product description:

Quarter-turn clamp locks are used as locking elements for quickly and easily replacing and securing fixtures, plates or hatches. As a practical alternative to conventional quarter-turn locks, quarter-turn clamp locks act as toolless operating elements in machine construction, where their function method is strongly reminiscent of the ball lock pin.



Edge protection profiles

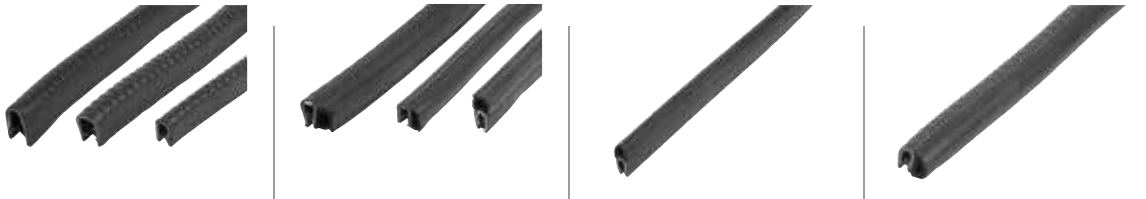


Product versions:

Width:	8 – 11 mm
Height:	10 – 22 mm
Length:	2000 – 50,000 mm
Materials:	PVC, EPDM, EPDM foam rubber
Versions:	with integrated steel retaining strip / steel wire core
Colours:	black

Product description:

Edge protection profiles are used in machine construction to cover and decorate the sharp edges of sheet metal. They are installed quickly and easily by pressing on by hand. No extra adhesive or fastening material is required. The optional EPDM foam rubber also provides a seal against moisture, dust and dirt.



Accessories for quarter-turn locks



Product versions:

Materials:	plastic thermoplastic, die-cast zinc
Versions:	dust cap, opening grip, key
Surfaces:	chromed, blue powder-coated
Colours:	black, silver, blue

Product description:

Our extensive range of quarter-turn locks are supplemented by additional accessories such as opening grips, keys and dust caps which provide additional protection if required.



Hinges



Product versions:

- Width: 28–240 mm
- Fastening type: weldable, fastening holes, fastening screws, fastening nuts, bushes, elongated holes
- Materials: thermoplastic, aluminium, die-cast aluminium, die-cast zinc, stainless steel, steel
- Versions: lift-off right/left, fixed, guide tabs, elongated holes, clamping function, detent, adjustable friction, closing/opening spring, elect. switching function, inset
- Surfaces: bright, abrasive blasted, polished, electro zinc-plated, anodised, chromed, powder-coated

Product description:

Hinges are used in furniture and traditional machine construction as well as on other equipment, where they are mounted on doors, hatches and hoods, etc. Classic hinges are available made from plastic, aluminum, steel, sheet metal and stainless steel.



Levelling feet



Product versions:

- Thread Ø: M10 – M30
- Thread length: 15 – 225 mm
- Height: 7 – 32 mm
- Plate Ø: 28.5 – 120 mm
- Load rating: 1.5 – 55 kN
- Materials: steel, stainless steel, plastic
- Versions: with hexagon, with knurled base, with hole, height-adjustable, Hygienic DESIGN
- Surfaces: zinc-plated, bright, painted, polished

Product description:

Levelling feet provide an easy way of counteracting any unevenness in the floor. They are used for alignment purposes to ensure that the equipment is installed securely. Levelling feet are available with vibration absorption and structure-borne sound absorption.





Threaded spindles



Product versions:

Thread Ø: M6–M24
 Thread length: 15–200 mm
 Materials: steel, stainless steel
 Surfaces: bright, black oxidized, blue passivated

Product description:

Threaded spindles are required as components for assembling swivel feet and levelling feet. Depending on the application, the threaded spindles may need to be coordinated with the plates. If desired, threaded spindles and plates can be ordered pre-assembled.



Plates



Product versions:

Plate Ø: 30 – 175 mm
 Load rating: 0.2 – 55 kN
 Materials: steel, stainless steel, die-cast zinc, plastic
 Versions: antistatic, with extension, with vibration absorption, with rubber base
 Surfaces: bright, zinc-plated, chromed, polished, powder-coated

Product description:

Plates, like threaded spindles, are also required as components for assembling levelling and swivel feet. Plates and threaded spindles can be combined in any configuration. The extra anti-slip plate absorbs vibrations and prevents the foot from slipping, making it more stable.





Levelling feet accessories



Product versions:

Materials: Steel, stainless steel, plastic
 Versions: Thrust pads, thrust spindles, ball joints, thread caps, screw plugs, caps
 Surfaces: Bright, black oxidised, polished

Product description:

Possible accessories for levelling feet include caps for the feet that protect against scratch marks and tube inserts that act as a fastening element.



Tube clamps



Product versions:

Diameter: 12 – 50 mm, 0.5" - 2"
 Square bar: 20 – 40 mm, 0.75" - 1.5"
 Materials: aluminium, stainless steel, plastic, steel
 Versions: cross piece, T-angle, angle, foot, flange, joint, ball joint, linear actuator, reducer sleeve, round tube, square tube
 Surfaces: vibratory ground, bright, polished, powder-coated

Product description:

Tube connectors are ideal for assembling round and square profiles. A suitable clamping lever for fastening can be supplied on request.



Square tube connectors

INCH
Parts



Product versions:

Sizes: 20 – 30 mm, 1"
 Materials: plastic, aluminium
 Versions: connecting piece, right angle, star, joint, square tube, finned square tube
 Colours: black, anodised

Product description:

Square tube connectors are ideal for assembling square profiles.



Monitor brackets

INCH
Parts

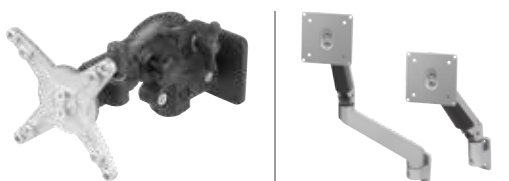


Produktvarianten:

Length: 88 - 720 mm
 Materials: steel, aluminum, plastic
 Versions: compact, with rotating flange, with ball joint, wall bracket, profile bracket, connection plate, support arm, keyboard tray, tablet holder, height adjustable
 Surface: black, bright, painted, galvanized

Produktbeschreibung:

Monitor brackets enable screens, tablets and keyboards to be attached to a tube connection system.



Accessories for aluminium profiles



Product versions:

Materials: Steel, die-cast, plastic
 Versions: Straps, angle sets, profile sliders, clamping angles, joints, covers, cable holders, sensor holders, foot plates
 Surface finish: bright, electro zinc-plated

Product description:

The answer to connecting, clamping and holding aluminium profiles. All components are a perfect match for modern profiles with 8 mm or 10 mm slot widths.



Telescopic slides



Product versions:

Length: 150 – 1524 mm
 Travel: 133 – 1524 mm
 Load capacity per pair: 10 – 300 kg
 Materials: steel, stainless steel, aluminium
 Versions: electro zinc-plated, bright

Product description:

Telescopic slides are used in drawers and pull-out systems. They are easy to handle and offer a great deal of stability. They are available with partial, full and over-extension.





Latches



Product versions:

Retaining force N: 500–30,500 N
 Materials: steel, stainless steel
 Versions: with spring clip, draw bail, release, adjustable
 Surfaces: galvanised, blue passivated, bright

Product description:

Latches are used as simple locks for covers, cladding and containers in machine, plant and container construction. The clamping stroke exceeds the dead centre point, which makes them able to withstand vibrations.



Snap locks



Product versions:

Maximum operating load: 310 N
 Materials: plastic
 Versions: folding, snap-in, with knob, with twist knob, lockable
 Colours: black, white, beige, silver

Product description:

Snap locks are intended for flush installation in doors, hatches and hoods. With the snap function, the door can be latched securely by simply pushing it shut. Snap locks can be used in indoor and outdoor areas in ship/boat building, transport, the packaging industry, medical technology, and the automobile industry.





Slam latches



Product versions:

Actuation: square bar, double lug, key
 Materials: aluminium
 Versions: with integrated safety function
 Surfaces: powder-coated
 Colours: black

Product description:

Slam latches are used for simply and securely locking doors and hatches. These products are also available with integrated safety function.



Toggle clamps



Product versions:

Hand force: 50 – 500 N
 Retaining force: 250 – 15,000 N
 Clamping force: 170 - 3900 N
 Materials: steel, stainless steel
 Versions: horizontal, vertical, with safety interlock, antistatic, with force sensor
 Surface finish: bright, carbonitrided and black oxidised, electro zinc-plated
 Grip colour: black, red, blue, orange



Product description:

Toggle clamps are intended for assembly and clamping fixtures and are used in machine construction, metalworking and woodworking. Due to their slim design, toggle clamps can be easily integrated into tight spaces.





Toggle clamp latches / toggle clamp hooks



Product versions:

Hand force N:	80–600 N
Tractive force N:	1500–30,000 N
Retaining force N:	2000–40,000 N
Materials:	steel, stainless steel
Versions:	horizontal, vertical, with catch plate
Surfaces:	galvanised, chromed, bright
Grip colour:	red, orange

Product description:

Toggle clamp latches and hooks are ideal as an assembly and clamping fixture for quick closing and fastening of lids and hatches.



Push-pull toggle clamps



Product versions:

Hand force N:	40 – 200 N
Retaining force N:	500 – 50,000 N
Clamping force N:	500 – 7000 N
Materials:	steel, stainless steel, ductile iron
Versions:	with mounting bracket, without mounting bracket, mini, with reversible hand lever
Surfaces:	zinc-plated, chromated, phosphated
Grip colour:	blue, red, orange

Product description:

Push-pull toggle clamps act as an assembly and clamping fixture in machine construction and metalworking. As push-pull toggle clamps lock in both closed and open positions, they can be operated by either pushing or pulling.



Pneumatic clamps



Product versions:

Retaining force N:	1000–25,000 N
Clamping force N:	800–8000 N
Operating pressure in bar:	2–6 bar
Materials:	steel, cast steel
Versions:	horizontal, vertical
Surfaces:	galvanised, chromed, black oxidised, phosphated

Product description:

Pneumatic clamps are especially suitable for metalworking and woodworking. Due to the fact they are easy to operate, they are ideal for automated, efficient and quick clamping tasks. The pneumatic cylinder is available with double-action function without end position damping.



Toggle clamp accessories



Product versions:

Materials:	steel, stainless steel, plastic, aluminium
Versions:	plastic grips, clamping spindles, angle brackets, nuts, thrust pads, protective caps, thrust screws, adapter block, adapter plate, status sensor
Surfaces:	zinc-plated, chromed, bright, phosphated, anodised

Product description:

Accessory parts are used to replace or add to individual components.



Clamping units



Product versions:

Materials: steel, cast, aluminium
 Versions: clamp straps, clamp strap units, riser blocks, connecting screws, power clamp, thrust pads
 Surfaces: galvanised, painted, black oxidised

Product description:

Clamping units are used to clamp workpieces. Various types are available.



Clamp straps



Product versions:

Materials: steel
 Versions: pin-end clamping, offset, double-sided, movable
 Surfaces: black

Product description:

Clamp straps used in machine and fixture construction and in toolmaking are used to clamp workpieces and components. They are very versatile, made of carbon steel and are available in various designs.



Hook clamps



Product versions:

Materials: Steel
 Versions: with protective insert, elongated clamp strap, with collar, with mounting bracket, ground, hook clamp holder
 Surface finish: black oxidised, ground, tempered

Product description:

Notable features of the hook clamps are that they can be used in a wide range of applications and do not require much space. For example, they can be used in the construction of machines, tools and fixtures.



Swing clamps



Product versions:

Clamping force N: 800–6000 N
 Hand force N: 100–600 N
 Materials: steel, cast iron
 Versions: heavy, mini, pneumatic
 Surfaces: black, green

Product description:

Swing clamps are used where the clamping points must be free when the workpiece is loaded or removed. They are actuated manually or pneumatically. They are predominantly used in machine construction, fixture construction and toolmaking. They can be installed either horizontally or vertically.



Pull and thrust clamps



Product versions:

Clamping force N: 900 - 8000 N
 Retaining force N: 2000 - 14,000 N
 Materials: steel
 Versions: heavy, pneumatic, actima clamping element, clamping pin, clamping screws
 Surfaces: bright, ground, black oxidised, hardened

Product description:

Pull clamps and thrust clamps are suitable for simultaneously clamping and positioning workpieces. They are actuated manually or pneumatically. Different types can be mounted either horizontally or vertically.



Side clamps



Product versions:

Clamping force kN: 3–46 kN
 Materials: steel, cast
 Versions: with rest pad, with support, with riser
 Surfaces: black

Product description:

Some side clamps hold workpieces in place by rotating a spiral cam which exerts pressure on the swivel jaw, simultaneously producing a positive down force.



Toe clamps



Product versions:

Clamping force kN:	2–40 kN
Tightening torque Nm:	2.7–200 Nm
Materials:	steel
Versions:	adjustable, stepped, flat clamps, rack plates, toe clamps
Surfaces:	black

Product description:

Toe clamps exert a positive down force. Their low height prevents protruding edges.



Fixture clamps / cam screw clamps



Product versions:

Materials:	steel, aluminium, plastic, brass
Surface finish:	black oxidised, electro zinc-plated, hardened, brass coated, ground, tempered, anodised
Versions:	fixture clamps, side clamps with cam, form-fit cam clamps, cam screws

Product description:

Fixture clamps are particularly suitable for clamping workpieces from the side to enable vertical machining. The compact design makes them highly suitable for applications where space is limited.



T-slot clamps



Product versions:

Materials: steel, stainless steel
 Versions: low-profile clamp, flat clamp
 Surfaces: bright, hardened, nickel-plated, black oxidised

Product description:

T-slot clamps produce a positive down force when the workpiece is clamped. They are suitable for flat workpieces.



Wedge clamps



Product versions:

Thread Ø: M4–M16
 Clamping range min.–max.: 12.3–13.1 mm to 101.6–103.9 mm
 Clamping force kN: 11–60 kN
 Tightening torque Nm: 3–210 Nm
 Materials: steel, aluminium profile
 Versions: double, machinable
 Surfaces: black, anodised

Product description:

Wedge clamps are suitable for clamping both single and multiple workpieces. Their compact design enables space-saving series clamping.



Centring clamps



Product versions:

Clamping force kN:	0.5–45 kN
Tightening torque Nm:	0.7–650 Nm
Materials:	steel, stainless steel
Versions:	with balls, hexagon, internal thread, external thread, mandrel collet, shaft clamping units
Surfaces:	black, bright

Product description:

These centring clamps enable workpieces to be centred on and clamped in a bore. The advantages of centring clamps include precise self-centring, distortion-free clamping and a low overall height.



Clamping elements for grid systems



Product versions:

Actuation:	clamping lever, hexagon
Materials:	steel, stainless steel, POM, die-cast zinc
Surface finish:	black oxidised, plastic coated, phosphated, electro zinc-plated and blue passivated.

Product description:

These clamping pins are perfect for fixating standard stop elements with various thicknesses to hole grid boards / welding tables with hole Ø 16 mm or 28 mm.



Spring plungers

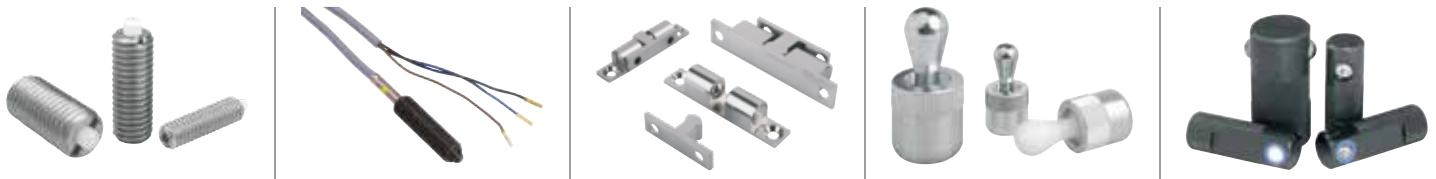


Product versions:

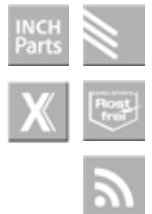
OD:	M3 – M24, Ø2.5 – Ø16 mm, #8 - 5/8, Ø1/4" - Ø5/8"
Length:	4 – 80 mm
Travel:	0.4 – 40 mm
Initial spring force:	0.4 – 95 N
Final spring force:	2.5 – 240 N
Materials:	steel, stainless steel
Versions:	hexagon socket, slot, with head, proximity switch, AF, with ball, with thrust pin
Surface finish:	black oxidised, bright

Product description:

Spring plungers are used for indexing, positioning and fixing components. As they are extremely versatile and easy to install, spring plungers are used in machine construction, crafts and in the household.



Indexing plungers



Product versions:

Pin diameter:	3 – 25 mm, 1/4" - 1"
OD:	Ø5 – Ø50 mm, M6 – M24
Length:	10 – 106 mm
Travel:	3.5 – 44 mm
Materials:	steel, stainless steel, plastic
Versions:	hardened, not hardened, with lock, with thread lock, short version, with long indexing pin, with five lobe grip, with markings, without collar, pneumatic, Premium with conical pin, with locking and clamping grip, with visual locking indicator, with remote actuation, with status sensor, hardwired, with cam lever, Hygienic USIT®, with twist knob
Surface finish:	black oxidised, bright, hardened and ground, electro zinc-plated

Product description:

Indexing plungers facilitate fast indexing and locking of moving components. Mushroom grips makes them easy to operate.



Cam-action indexing plungers

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Product versions:

Pin diameter:	4 – 12.9 mm
Square:	8 - 16 mm
Thread:	M10 - M20; 3/8" - 3/4"
Length:	36.5 - 73.5 mm
Travel:	6 - 13 mm
Materials:	steel, stainless steel, aluminium, brass
Versions:	smooth, weldable, with stop, latch
Surfaces:	black oxidised, bright, electro zinc-plated, chrome plated

Product description:

Cam action indexing plungers can be used for all types of locking and fixing mechanisms, especially where the indexing pin must not be allowed to protrude. The lock is released by turning the grip 180°.



Ball lock pins

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Product versions:

Pin diameter:	5 - 19 mm, 3/16" - 3/4"
Length:	10 - 246 mm
Shear force double shear kN:	22 - 258 kN
Materials:	steel, stainless steel, plastic, Zamak
Versions:	L-grip, T-grip, with mushroom knob, with bracket, without knob, with axial lock, adjustable grip, with twist knob, with twist lock, with head lock, with high shear strength, lockable

Product description:

Ball lock pins are used to join and fasten machine parts and workpieces quickly and easily. The axial lock is released by pressing the push button.



Locking pins



Product versions:

Pin diameter:	6 - 12 mm, 1/4" - 1/2"
Length:	10 - 80 mm
Shear force double shear kN:	22 - 86 kN
Materials:	steel, stainless steel
Versions:	with magnetic axial lock, with key ring, with folding latch, with axial lock

Product description:

Locking pins are used for quick and easy fastening and joining of components or workpieces.



Retaining cables / ball chains

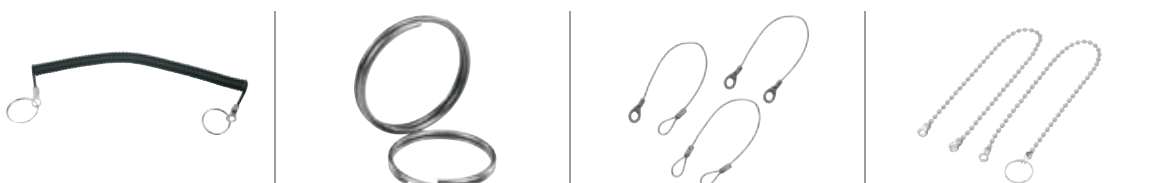


Product versions:

Length:	100 – 1000 mm
Materials:	steel, stainless steel, aluminium
Versions:	with loop, with crimp terminal, with key ring, safety spiral cable, key rings
Surfaces:	bright, chromed, plastic sheathing

Product description:

Retaining cables and ball chains are used to secure components. They are available with a loop or key ring.





Accessories for indexing plungers and cam-action indexing plungers



Product versions:

Materials: steel, stainless steel, aluminium
Versions: bushes, spacer rings, mounting brackets, double-ended ring spanners, locating bushes, ball lock bushes, locking pins, pin
Surfaces: black oxidised, hardened and ground, bright

Product description:

Accessories include products such as bushes, mounting brackets and spacer rings.



Spring plunger accessories



Product versions:

Versions: supports, angle brackets, riser plates, ball catches, magnetic catches, assembly keys, assembly tools, locators

Product description:

Assembly tools that make installation easier.





Ball lock pin accessories



Product versions:

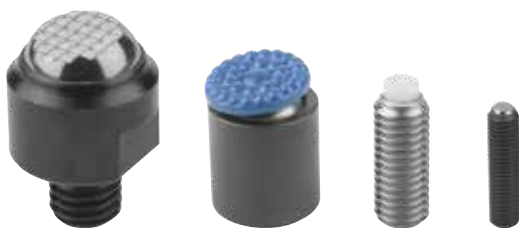
Materials: steel, stainless steel
 Versions: locating bushes, ball lock bushes with and without twist lock, magnetic bushes, locking pins, pins
 Surfaces: bright, nickel plated, tempered

Product description:

Accessories include products such as bushes for ball lock pins.



Self-aligning pads / thrust screws



Product versions:

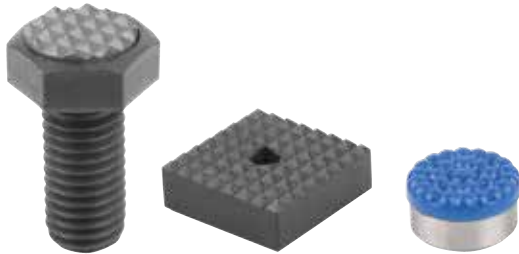
Adapter diameter: Ø10 – Ø24 mm, M3 – M24
 Ball diameter: 10 – 40 mm
 Loading kN: 0.3 – 220 kN
 Ball: flattened, flat, with serrations, diamond coated, polyurethane face
 Inserts: POM, carbide, stainless steel
 Materials: steel, stainless steel
 Versions: with 12°, 14° or 20° swivel angle, with O-ring, replaceable inserts, auto-return, adjustable, hexagon socket, ball-end thrust screws with head, without head, thrust screws
 Surface finish: bright, tempered and phosphated, tempered and black oxidised

Product description:

Self-aligning pads are used as supports, stops and thrust pads in machine construction, fixture construction and installation. In addition, they are used to support and clamp workpieces.



Inserts



Product versions:

Diameter:	Ø10 – Ø25 mm, M6 – M20
Height:	10 – 12 mm
Length:	25 – 60 mm
Materials:	steel, stainless steel, POM
Versions:	round, square, adjustable, hexagonal
Surface finish:	bright, black oxidised, hardened and bright, hardened and black oxidised, diamond coated, with polyurethane face, with carbide serrations

Product description:

Inserts are an important component for installing into clamping arms, clamping fixtures, jaw plates and self-aligning pads. They transfer very high torque values and above average retaining forces.



Locating pins / rest pads



Product versions:

Adapter diameter:	Ø3 – Ø50 mm, M6 – M20
Length:	4 – 50 mm
Materials:	steel, stainless steel, brass, aluminium
Versions:	with flattened ball-end, cylindrical positioning pins, free-milled, expanding locating pins, with internal thread, locating bushes, positioning feet, fixture feet, pin form with internal/external thread, with positioning pins, locating feet, support bolts, adjustable with locknut, stop screws, adjustable stops with end position feedback, movable clamp stop
Surface finish:	hardened and ground, ground and kolsterised, hardened, case hardened and black oxidised, electro zinc-plated, blue passivated

Product description:

One of the uses of locating pins is to position workpieces and fixtures. A ball-end helps to ease the fastening process. Rest pads can be used as feet or supports for workpieces and fixtures, depending on the design.



Height adjustment elements



Product versions:

Thread Ø:	Ø 4.5–Ø 33 mm
Min. height:	15–105 mm
Max. height:	19–144 mm
Power kN:	40–323 kN
Materials:	steel, stainless steel
Versions:	with locknut, low version, with spherical levelling washer, spherical washers, conical seats, spherical levelling washers
Surfaces:	bright, blue passivated, galvanised

Product description:

Height adjustment elements are intended for use in levelling and mounting motors, aggregates, drive units and assembly lines.



Positioning and clamping system



Product versions:

Type:	Ball Lock, pneumatic positioning and clamping system locating adapter, centring clamp, clamping pin, centring bush
Versions:	Locating cylinder, locating bush, positioning bush
Materials:	Steel
Actuation:	Mechanical / pneumatic

Product description:

The positioning and clamping system allows precise positioning and fastening of tooling and baseplates. The mechanical or pneumatic system consists of a locating cylinder, centring bush and locating bush. Easy installation of the system is achieved through self-installation.



Screws / nuts / washers



Product versions:

- Materials: Steel, stainless steel, aluminium
- Versions: Eye bolts, grub screws, studs, screws for T-slots, hexagon nuts, captive C-washers, shoulder screws, C-washers, T-thrust screws, cap nuts
- Surfaces: Bright, electro zinc-plated, polished, tempered, black oxidised

Product description:

Screws, nuts and washers can be used in a variety of applications.



Threaded Inserts



Product versions:

- External thread: M8 – M33
- Thread length: 8 – 33 mm
- Materials: steel, stainless steel
- Versions: reinforced, solid bodies, internal thread, self-locking, self-tapping, repair kit
- Surface finish: passivated, bright, electro zinc-plated

Product description:

Threaded inserts are particularly quick and easy to install. They enable tapped holes which have been damaged to be repaired.



Drill bushes

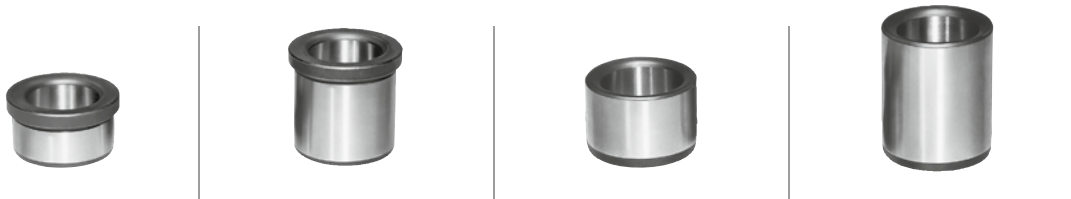


Product versions:

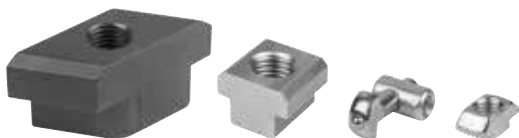
OD:	Ø3 – Ø62 mm
Length:	6 – 67 mm
Materials:	special case hardening steel
Versions:	cylindrical (DIN 179), with collar (DIN 172)
Surface finish:	hardened and ground

Product description:

Drill bushes help to guide the drill directly into the drilling jig. Using drill bushes simplifies and optimises the drilling process at the workplace.



Connectors for profiles and profile systems



Product versions:

Slot width:	6 – 10 mm
Materials:	steel, die-cast
Versions:	nuts, parallel keys, hammer-head screws, connecting sets, fastening sets
Surfaces:	bright, galvanised, tempered and black oxidised

Product description:

The answer to connecting, clamping and holding aluminium profiles. All components are a perfect match for modern profiles with 8 mm or 10 mm slot widths.



Accessories for machine and fixture elements



Product versions:

Materials: steel, stainless steel, aluminium
Versions: shim plates, swing screws, clamping joints, multiple connectors, clevis joints, screw joints for dial gauges, sliding clamps, detent elements
Surfaces: black anodised, bright, tempered and black oxidised

Product description:

Washers, sliding clamps, clevis joints, clamping joints and swing screws, indexing elements.



Handles

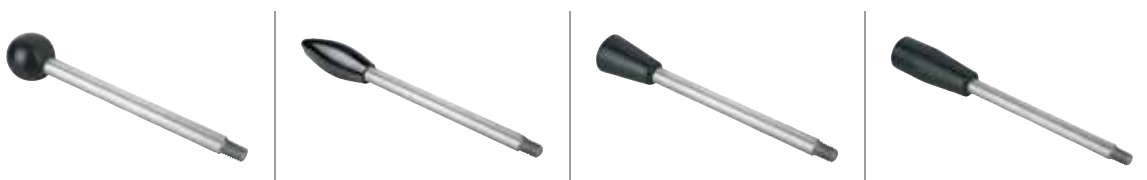


Product versions:

Thread Ø: M6 – M12, 1/4 - 1/2
Length: 35 – 150 mm
Materials: steel, stainless steel
Surfaces: grips black, bar bright

Product description:

Handles are available with various grip types and lengths.



Shaft collar / Clamping hubs



Product versions:

Outside diameter:	7 – 140 mm
Inside diameter:	3 – 100 mm, M4 – M20
Materials:	steel, stainless steel, aluminium
Versions:	with wing grip, with clamping lever, with thread, threaded pin, slotted, separated
Surfaces:	bright, galvanised and blue passivated

Product description:

Shaft collars and locking rings can be used as a position and stop element for shafts. In contrast, clamp hubs can turn and position shafts with the help of a handle.



Joints



Product versions:

Materials:	steel, stainless steel
Versions:	spherical seats, ball studs, rod ends, clevis joints, ball joints, axial joints, quick-fit couplings, splint pins, spherical bearings, rod-end eyes, snap-in pins, R-clips, circlips
Surfaces:	tempered and phosphated, bright, zinc-plated

Product description:

In machine construction, vehicle construction and transport technology, joints enable rotary movements, torque created by shafts, and forces to be transmitted and redirected. Alongside clevis joints, this group also includes quick-fit couplings, ball joints and axial joints.



Magnets raw



Product versions:

Outside diameter:	3 – 56 mm
Length:	10 – 80 mm
Magnetic force N:	1.1 – 125 N
Materials:	neodymium, AlNiCo
Versions:	disc form, block form, bar form
Surfaces:	bright, electro zinc-plated

Product description:

Raw magnets are always an unshielded system. All of the magnet's surfaces exert magnetic force.



Deep pot magnets



Product versions:

Diameter:	Ø6 – Ø65 mm
Length:	10 – 85 mm
Magnetic force N:	1.5 – 600 N
Materials:	neodymium (NdFeB), samarium-cobalt (SmCo), aluminium-nickel-cobalt (AlNiCo)
Housing:	steel, brass
Versions:	with fitting tolerance, with pin, with machinable magnetic face, with internal thread
Surface finish:	bright, electro zinc-plated, painted

Product description:

Deep pot magnets have a core that is made of a permanent magnetic material. They are a shielded system. Deep pot magnets are easily removable, flexible, non-positive fasteners.



Shallow pot magnets



Product versions:

Diameter:	Ø10 – Ø125 mm
Height:	4.5 – 26 mm
Magnetic force N:	4 – 1750 N
Materials:	neodymium (NdFeB), samarium-cobalt (SmCo), hard ferrite
Housing:	steel, stainless steel
Versions:	magnets with external/internal thread, with countersink/counterbore, with hook, protective rubber caps
Surfaces:	electro zinc-plated, bright

Product description:

Shallow pot magnets have a core that is made of a permanent magnetic material. They are a shielded system. Shallow pot magnets are easily removable, flexible, non-positive fasteners.



Magnets with rubber protective jacket



Product versions:

Diameter:	Ø12 – Ø88 mm
Height:	6 – 20 mm
Magnetic force N:	10 – 420 N
Materials:	neodymium (NdFeB)
Rubber protective jacket:	synthetic rubber
Versions:	magnets with internal/external thread
Colours:	black

Product description:

The magnet is encased in rubber to protect sensitive surfaces.



Retaining magnets



Product versions:

Diameter:	Ø10.5 – Ø36 mm
Height:	7 – 9 mm
Magnetic force N:	0.7 – 10 N
Materials:	plastic
Colours:	white, blue, red, black

Product description:

On the magnets, the magnetic core is encased in plastic. Their design makes them particularly suitable for use on noticeboards, whiteboards and thin metal sheets.



Magnets button / horseshoe magnets

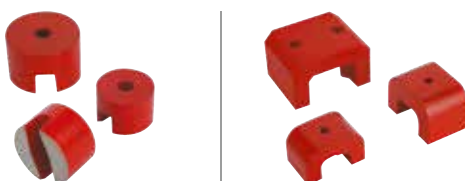


Product versions:

Diameter:	Ø13 - Ø32 mm
Width:	30 - 70 mm
Height:	10 - 41 mm
Magnetic force N:	7 - 320 N
Materials:	AlNiCo
Surface finish:	painted red

Product description:

This is an unshielded system with a two-part magnetic face. Magnet buttons and strong magnets are easily removable, flexible non-positive fasteners.





Rubber buffers



Product versions:

OD:	Ø8 – Ø125 mm
Thread:	M3 – M16
Thread length:	6 – 42 mm
Thread depth:	3 – 12 mm
Height:	8 – 93 mm
Spring stiffness N/mm:	3.7 – 2240 N/mm
Load N:	17–20,000 N
Materials:	steel, stainless steel
Versions:	waisted, suction foot, parabolic, conical, spherical

Product description:

Rubber buffers are intended to be used as a flexible buffer element and to reduce vibrations.



Oil level sight glasses



Product versions:

Thread:	G 1/4–G 2, M14–M40
Materials:	polyamide, aluminium
Versions:	with/ without reflector, can be pressed in, can be screwed in, with glass window, with domed plate
Temperature resistance:	90–150°C

Product description:

Oil level sight glasses are used in machine construction, vehicle technology and agricultural machinery.



Screw plugs / press-in plugs

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Product versions:

Standard: DIN 906, DIN 908, DIN 910
 Thread Ø: R 1/8–R 1 1/2, G 1/8–G 2, M8–M48
 Materials: steel, stainless steel, aluminium, plastic
 Versions: with hexagon socket, with hex head, with symbols, with magnet, with dipstick
 Surfaces: galvanised, bright

Product description:

They are suitable for sealing containers. They are also used where a medium needs to be changed or emptied after a certain period of time.



Filler necks



Product versions:

Versions: for pressing in, for screwing on, with/ without chain, with filter, with air and vent valve
 Materials: plastic, steel
 Surfaces: black/red, chrome

Product description:

Filler necks are predominantly used in machine construction, vehicle technology or agricultural machinery.



Grease nipples



Product versions:

Versions:	conical head, funnel form, flat type, protective caps
Standard:	DIN 71412, DIN 3404, DIN 3405
Thread Ø:	R 1/8–R 1/4, G 1/8–G 3/8, M6–M16
Form:	hexagonal, square
Materials:	steel, stainless steel, polyethylene
Protective cap colours:	black, yellow, green, red

Product description:

Grease nipples are used for applying a lubricant directly to a lubrication point. They are available as flush types, as flat types and in a conical form.



Oil level gauges



Product versions:

Versions:	with temperature scale, with reflector, long version, with electric oil level monitoring, with electric temperature monitoring, with electric oil level and temperature monitoring
Housing materials:	polyamide, steel, aluminium
Thermometer scale:	0 – 80°C, 0 – 100°C
Temperature resistance:	90°C – 100°C
Pressure resistance:	1 bar – 10 bar

Product description:

Oil level gauges are used to check the current fill level. They are also available with an electronic monitoring option. The oil level gauge is fitted directly into tapped holes or via two fastening holes.



Vent screws

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Product versions:

Versions: with filter, with splash guard, with check valve, with dipstick
 Materials: polyamide 66, brass
 Thread Ø: G1/4–G1 1/2 / M16–M22
 Surfaces: black/red, bright

Product description:

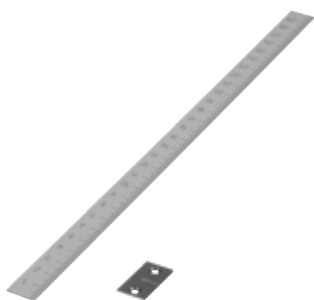
Vent screws are used to prevent too much pressure building up in the container. A filter prevents oil escaping without negatively affecting the pressure balance.



Scales

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Parts

Roost
free

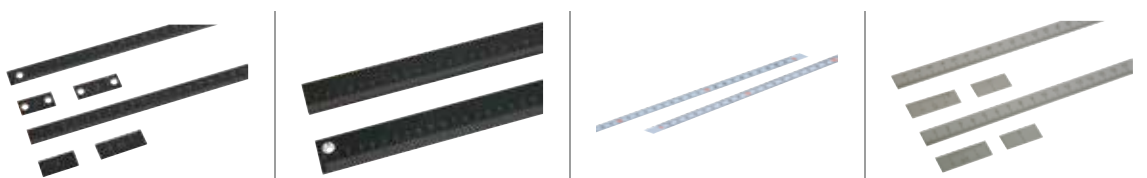


Product versions:

Versions: self-adhesive, with hole, zero mark, vernier
 Materials: aluminium, stainless steel
 Length: 250 – 1000 mm, 12" - 40"
 Mounting position: horizontal, vertical
 Surface finish: anodised, painted, bright

Product description:

Scales act as position indicators and help to obtain precise readings. They are attached using their self-adhesive back or by using screws.



Scale rings



Product versions:

Material: Steel
 Versions: Matt-finished chromed, scale marks and figures in black

Product description:

Scale rings facilitate adjustment to an exact position.



Level vials



Product versions:

Type: for screwing on, with plastic frame, with bead-edged frame, with cylindrical frame, without frame, tubular bubble levels
 Materials: brass, polymethylmethacrylate, stainless steel, aluminium, polyamide
 Housing/frame Ø: 12–34 mm
 Versions: nickel plated and polished, black, ivory

Product description:

Level vials are used as zero indicator instruments or for checking the horizontal position. They are available as bullseye and tubular bubble levels.



Wheels, castors



Product versions:

Type:	swivel casters, fixed casters, wheels, guide casters, heavy duty casters, lifting casters.
Rim material:	steel, polypropylene, polyamide, aluminum
Tread material:	solid rubber, steel wire reinforced elastic solid rubber tire, thermoplastic rubber, polyurethane, extrathane, polyamide, phenoplastics
Roller diameter:	30 - 250 mm
load capacity:	20 - 1.350 kg
Versions:	with housing, with plain bearing, with ball bearing, with locking system, heavy-duty, electrically conductive, steel-welded, for hygienic areas, with back hole, with screw-on plate, with sprayed-on tread, heat-resistant

Product description:

Castors and wheels are necessary for transportation in a wide variety of conditions.



Lifting rings



Product versions:

Type:	ring bolts, ring nuts, swivel ring bolts, D-rings, shackles, load brackets
Thread Ø:	M8 – M36
Permissible load:	0–8500 kg
Materials:	steel, stainless steel
Versions:	4x safety, plastic coated, forged, cast
Colours:	yellow, red, blue

Product description:

D-rings are used to lift and pull objects. The welding block and bracket are made of steel, a material which is ideally suited to welding. This makes the equipment easy to install.



Ball transfer units



Product versions:

Housing materials:	Steel, stainless steel, plastic
Ball materials:	Steel, stainless steel, POM, polyamide
Housing Ø:	13–100 mm
Ball Ø:	4.8–57 mm
Versions:	With steel housing, with solid steel housing, without housing, undersprung, with felt seal, without felt seal, with lockable ball

Product description:

Ball transfer units transport heavy and sensitive goods. The goods can be rotated, positioned and moved in all directions with minimal effort.



Tools

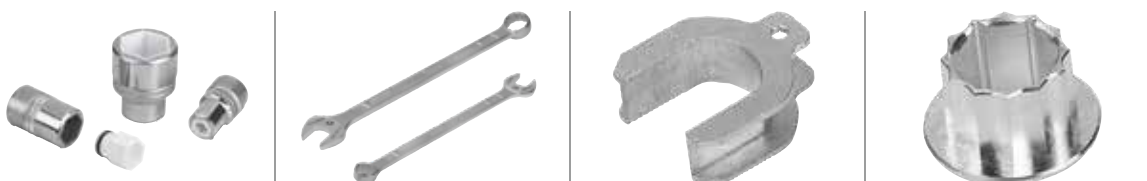


Product versions:

Materials:	tool steel, aluminium, plastic
Versions:	NOVOnox hygienic tools, sockets, protective caps for combination, open-ended and ring spanners
Surfaces:	silver, black

Product description:

The NOVOnox hygienic product line contains special tools with matching protective inserts and caps, which have been specially designed for tightening and loosening surface-sensitive fastener elements.





CLAMPING TECHNOLOGY

Clamping units



Product versions:

Materials: steel, cast, aluminium
Versions: clamp straps, clamp strap units, riser blocks, connecting screws, power clamp, thrust pads
Surfaces: galvanised, painted, black oxidised

Product description:

Clamping units are used to clamp workpieces. Various types are available.



Clamp straps



Product versions:

Materials: steel
Versions: pin-end clamping, offset, double-sided, movable
Surfaces: black

Product description:

Clamp straps used in machine and fixture construction and in toolmaking are used to clamp workpieces and components. They are very versatile, made of carbon steel and are available in various designs.



Hook clamps



Product versions:

Materials: Steel
 Versions: with protective insert, elongated clamp strap, with collar, with mounting bracket, ground, hook clamp holder
 Surface finish: black oxidised, ground, tempered

Product description:

Notable features of the hook clamps are that they can be used in a wide range of applications and do not require much space. For example, they can be used in the construction of machines, tools and fixtures.



Swing clamps



Product versions:

Clamping force N: 800–6000 N
 Hand force N: 100–600 N
 Materials: steel, cast iron
 Versions: heavy, mini, pneumatic
 Surfaces: black, green

Product description:

Swing clamps are used where the clamping points must be free when the workpiece is loaded or removed. They are actuated manually or pneumatically. They are predominantly used in machine construction, fixture construction and toolmaking. They can be installed either horizontally or vertically.



Pull and thrust clamps



Product versions:

Clamping force N:	900 - 8000 N
Retaining force N:	2000 - 14,000 N
Materials:	steel
Versions:	heavy, pneumatic, actima clamping element, clamping pin, clamping screws
Surfaces:	bright, ground, black oxidised, hardened

Product description:

Pull clamps and thrust clamps are suitable for simultaneously clamping and positioning workpieces. They are actuated manually or pneumatically. Different types can be mounted either horizontally or vertically.



Side clamps



Product versions:

Clamping force kN:	3–46 kN
Materials:	steel, cast
Versions:	with rest pad, with support, with riser
Surfaces:	black

Product description:

Some side clamps hold workpieces in place by rotating a spiral cam which exerts pressure on the swivel jaw, simultaneously producing a positive down force.



Toe clamps



Product versions:

Clamping force kN:	2–40 kN
Tightening torque Nm:	2.7–200 Nm
Materials:	steel
Versions:	adjustable, stepped, flat clamps, rack plates, toe clamps
Surfaces:	black

Product description:

Toe clamps exert a positive down force. Their low height prevents protruding edges.



Fixture clamps / cam screw clamps



Product versions:

Materials:	steel, aluminium, plastic, brass
Surface finish:	black oxidised, electro zinc-plated, hardened, brass coated, ground, tempered, anodised
Versions:	fixture clamps, side clamps with cam, form-fit cam clamps, cam screws

Product description:

Fixture clamps are particularly suitable for clamping workpieces from the side to enable vertical machining. The compact design makes them highly suitable for applications where space is limited.



T-slot clamps



Product versions:

Materials: steel, stainless steel
 Versions: low-profile clamp, flat clamp
 Surfaces: bright, hardened, nickel-plated, black oxidised

Product description:

T-slot clamps produce a positive down force when the workpiece is clamped. They are suitable for flat workpieces.



Wedge clamps



Product versions:

Thread Ø: M4–M16
 Clamping range min.–max.: 12.3–13.1 mm to 101.6–103.9 mm
 Clamping force kN: 11–60 kN
 Tightening torque Nm: 3–210 Nm
 Materials: steel, aluminium profile
 Versions: double, machinable
 Surfaces: black, anodised

Product description:

Wedge clamps are suitable for clamping both single and multiple workpieces. Their compact design enables space-saving series clamping.



Centring clamps



Product versions:

Clamping force kN:	0.5–45 kN
Tightening torque Nm:	0.7–650 Nm
Materials:	steel, stainless steel
Versions:	with balls, hexagon, internal thread, external thread, mandrel collet, shaft clamping units
Surfaces:	black, bright

Product description:

These centring clamps enable workpieces to be centred on and clamped in a bore. The advantages of centring clamps include precise self-centring, distortion-free clamping and a low overall height.



Clamping elements for grid systems



Product versions:

Actuation:	clamping lever, hexagon
Materials:	steel, stainless steel, POM, die-cast zinc
Surface finish:	black oxidised, plastic coated, phosphated, electro zinc-plated and blue passivated.

Product description:

These clamping pins are perfect for fixating standard stop elements with various thicknesses to hole grid boards / welding tables with hole \varnothing 16 mm or 28 mm.



Locating elements



Product versions:

Mount diameter: Ø 5 - Ø 50 mm

Materials: steel

Versions: shoulder screws, removable locating pins, positioning units

Surfaces: bright, hardened, ground, black oxidised

Product description:

Locating elements are suitable for positioning workpieces and fixtures. They enable a high degree of repeat accuracy when clamping workpieces.



Rest and stop elements



Product versions:

Materials: Steel, aluminium

Versions: Adjustable stops, locating supports, V-blocks vertical, V-blocks split, extension columns, supports, seating blocks, inserts, grub screws with thrust pad, positioning units, workpiece supports, workpiece support cylinders, atlas jacks, 5D workpiece stops, wedge supports, self-aligning pads, grippers

Surfaces: Bright, black oxidised, anodised, tempered, ground, painted

Product description:

Support and stop elements are suitable for positioning, supporting and securing workpieces and fixtures. They enable a high degree of repeat accuracy when clamping workpieces.



Form holding systems



Product versions:

Materials: steel, aluminium
 Versions: pneumatic, mechanical, external clamping, internal clamping, rectangular
 Clamping range: 10–140 mm
 Milling depth: 1–25 mm

Product description:

Form holding systems are used to clamp workpieces with asymmetrical contours. Systems with pneumatic and mechanical actuation are available. Two different collet types make it possible to clamp workpieces either externally or internally. A high degree of repeat accuracy is achieved due to the collets precise positioning.



Workpiece stabiliser



Product versions:

Material: steel
 Versions: extension shafts, fine adjustment, magnet, fastening sets, clamp strap unit, clamping balls with cup, workpiece stabiliser set with case
 Surfaces: bright, black oxidised
 Clamping range: 255 - 1500 mm

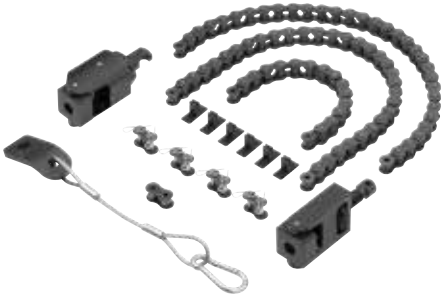
Product description:

The workpiece stabiliser has been developed specifically to minimise vibrations and oscillations when machining sensitive and thin-walled workpieces. This system is extremely flexible thanks to its different methods of fastening to the workpiece and the machine table.





Chain clamps

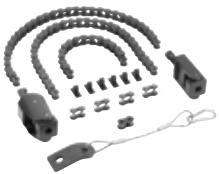


Product versions:

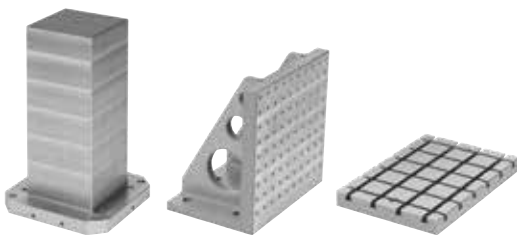
Clamping force: 15 - 40 kN
 Material: Steel
 Versions: Chain clamp sets, roller chains, turnbuckles, prisms

Product description:

Chain clamps are used mainly in machine and plant construction. They can be used to clamp cylindrical, unsymmetrical or large / very large workpieces securely and effectively in the simplest and quickest way.



Basic elements

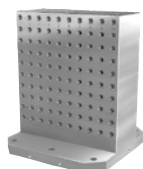
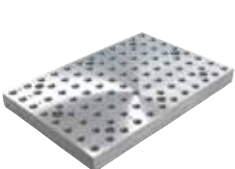


Product versions:

Materials: grey cast iron
 Variants: baseplates, grid plates, pallets, clamping cubes, angle plates double-sided, angle plates single-sided, octagonal workholding towers, hexagonal workholding towers
 Versions: with grid holes, without grid holes, with T-slots (grid plates, pallets)
 Grid holes: D12F7/M12, D16F7/M16
 Slot widths: 14 H7, 18 H7

Product description:

Basic elements are essential for workpiece clamping structures. There are various grid system sizes available. They are suitable for all machine tools. Custom-made versions are available on request.



Add-on elements

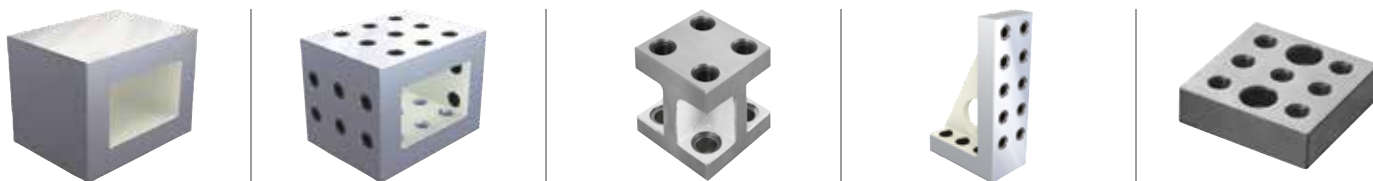


Product versions:

Versions: Tombstones, mounting brackets, riser blocks, fastening blocks, precision riser blocks, round positioning plates
Materials: Cast iron, steel
Grid holes: D12F7/M12, D16F7/M16
Support height: 25–250 mm

Product description:

Add-on elements are used as riser elements for clamping workpieces and fixtures. Elements of various heights and designs increase the flexibility of the clamping system.



Connecting elements, accessories



Product versions:

Materials: steel, stainless steel
Surfaces: tempered, black oxidised, case hardened, chromed, bright
Thread Ø: M6 - M36
Thread length: 10 - 400 mm

Product description:

Fastener elements are for positioning and securing components. The hardened and tempered finishes make them very durable. The accessories include elements for connecting, positioning and fastening. There is a wide range of centring pins, shoulder screws, tapped and locating bushes.



Zero-point clamping systems



Product versions:

Type:	UNILOCK
Versions:	Clamping stations, clamping modules, manual clamping modules, interchangeable subplates, clamping pins, protective pins
Materials:	Steel, aluminium
Retaining force N:	35,000–75,000 N
Support height:	28–50 mm
Number of clamping modules:	1x, 2x, 4x, 6x
Actuator:	Pneumatic/mechanical

Product description:

The UNILOCK zero-point clamping system enables quick and accurate clamping and referencing of fixtures and workpieces on all machine tools and machining centres. The pneumatic system clamps in a non-pressurised state. The key features of this system are its high retaining forces and high degree of repeat accuracy.



5-axis module clamping system 80



Product versions:

Type:	UNILOCK system size 80
Materials:	Steel
Versions:	Basic module, baseplate, add-on clamping module, face grip adapter, reducer adapter, clamping pin, centring clamp bolts, shoulder screws
Retaining force:	35,000–75,000 N
Support height:	75–400 mm
Actuator:	Mechanical

Product description:

The 5-axis modular clamping system 80 has been developed specifically for 5-side machining free from projecting edges. The workpieces can then be machined completely in a single clamping operation, guaranteeing a very high degree of repeat accuracy. As the modules are actuated mechanically, it is possible to achieve a high degree of clamping force.



5-axis module clamping system 50



Product versions:

Type:	UNILOCK size 50
Versions:	Basic module, add-on module, reducer adapter, clamping pins
Materials:	Steel
Retaining force:	15000 - 25000 N
Support height:	50–200 mm
Actuation:	mechanical

Product description:

The 5-axis modular clamping system 50 has been developed specifically for 5-side machining free from projecting edges. It is ideal for clamping smaller, complex workpieces. These can then be machined completely in a single clamping operation.



5-axis module clamping system 138



Product versions:

Type:	UNILOCK system size 138
Materials:	Steel
Versions:	Basic module, baseplate, reducer adapter, clamping pins
Retaining force:	75,000 - 230,000 N
Support height:	50–250 mm
Actuator:	Mechanical

Product description:

The 5-axis modular clamping system 138 has been developed specifically for 5-side machining free from projecting edges. It is ideal for clamping large, heavy workpieces. Each clamping module can tolerate loads of more than 10 tonnes. The workpieces can then be machined completely in a single clamping operation.





Positioning and clamping system



Product versions:

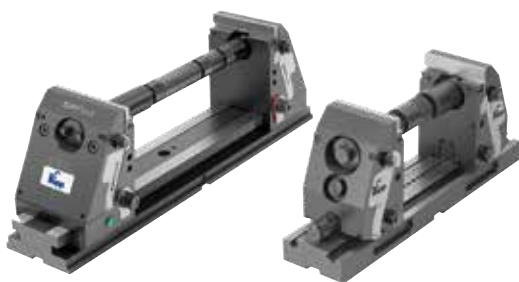
Type:	Ball Lock, pneumatic positioning and clamping system locating adapter, centring clamp, clamping pin, centring bush
Versions:	Locating cylinder, locating bush, positioning bush
Materials:	Steel
Actuation:	Mechanical / pneumatic

Product description:

The positioning and clamping system enables precise positioning and fastening of tooling and baseplates. The mechanical or pneumatic system consists of a locating cylinder, centring bush and locating bush. Easy installation of the system is achieved through self-installation.



KIPPflexX 5-axis vices 5-axis clamping system compact



Product versions:

Types:	5-axis vice KIPPflexX, 5-axis vice compact
Versions:	jaws, seating ledges, extension shafts, adapter shafts, baseplates, clamping pins, cylinder clamping set, couplings for cross-clamping, stop sets, claw clamp sets, pendulum jaws, middle jaws, torque wrench
Material:	steel
Clamping range:	20 -780 mm
Jaw width:	90 - 125 mm
Clamping height:	150, 155, 180 mm

Product description:

The KIPPflexX 5-axis vice is distinguished by its high stability, flexibility, and user-friendliness. This 5-axis vice can be used either as a centric vice or standard vice. When clamping workpieces, the operator can decide whether or not centric clamping is suitable.

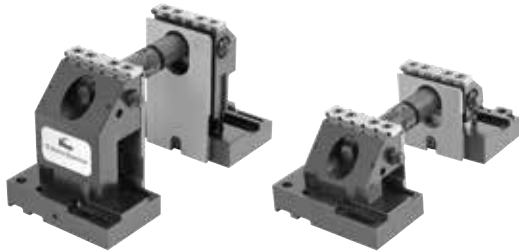




3-axis vices / 5-axis vices

Product versions:

Type:	3-axis vice, 5-axis vice
Versions:	Riser plates, seating blocks, draw-down jaws, jaw adapters for round workpieces, extension shaft jaw pins, stop set, standard jaw plates, blank jaw plates, T-slot plates, fastening set, torque wrench
Materials:	Steel
Clamping width:	22–236 mm (22–1000 mm)
Clamping height:	100, 105, 125, 150, 175, 200, 225, 250 mm
Jaw width:	100 mm
For grid spacing:	40 mm, 50 mm
For grid holes:	D12F7/M12, D16F7/M16
For slot spacing:	63, 80, 100, 125 mm



Product description:

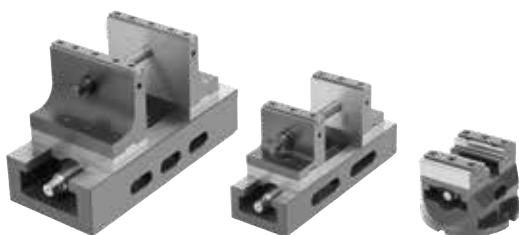
The 5-axis clamping system enables machining free of protruding edges and vibration, with extremely high cutting and feed forces. It enables the use of extremely short tools in order to guarantee the required tolerances and finishes. It can vary in height from 100 to 250 mm.



Centric vices

Product versions:

Type:	Centric vice
Versions:	Attachment stepped jaws, attachment stepped jaws for 5-axis machining, inserts for stepped jaws, screw-on jaws, prism jaws, jointed stops, baseplates
Materials:	Steel
Jaw width:	65 mm, 80 mm, 125 mm
Baseplate length:	113 mm, 202 mm, 316 mm
Clamping range:	0–55 mm, 6–161 mm, 6–276 mm



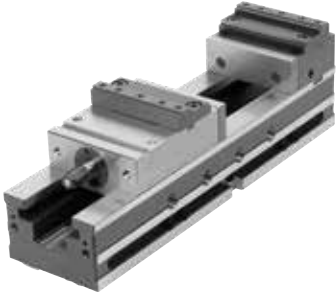
Product description:

Centric vices are especially suitable for clamping tasks in which workpiece clamping is positioned centrally. Centric vices are equipped with an interface for zero-point clamping systems, an interface for handling systems (suitable for automation) and an adapter plate for grid systems as standard.





NC vices



Product versions:

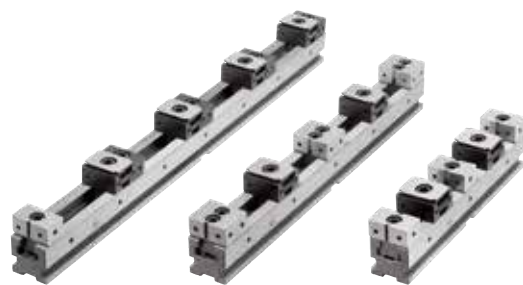
Type:	NC vice
Versions:	Draw-down jaws, attachment stepped jaws, prism jaws, angle drives
Materials:	Steel
Jaw width:	125 mm
Clamping range:	0–239 mm
Baseplate length:	470 mm
Overall length:	Max. 564 mm
For slot spacing:	63 mm and 100 mm

Product description:

NC vices are highly versatile pieces of equipment for clamping tasks. As the clamping range can be pre-adjusted quickly using a locking pin, the NC vice can be modified to fit various workpiece sizes in a short time. A wide variety of jaw plates ensures that the workpiece can be placed in the ideal clamping position.



Multi-clamping system



Product versions:

Type:	Multi-clamping system
Versions:	Clamping rails, short clamping rails, wedge clamps, wedge clamps with fixed jaws, fixed jaws ES, fixed jaws DS, seating ledges, machinable attachment jaws, prism jaws, workpiece stops, spacers, claw clamp sets, T-slot keys, assemblies
Materials:	Steel
Thread Ø:	M12, M16
Fastening holes:	25H6, 16H6, 12F7, 16F7
Lengths:	130 - 700 mm
Widths:	50, 72, 100 mm

Product description:

This clamping system can be used to clamp a number of workpieces at the same time. This makes it suitable for larger batch sizes. Different elements, such as base rails, stops and wedge clamps, make it possible to clamp workpieces of various sizes.





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SPECIAL SOLUTIONS

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