

KIPPflexX 5-axis vice 5-axis clamping system compact



KIPPflexX 5-axis vice

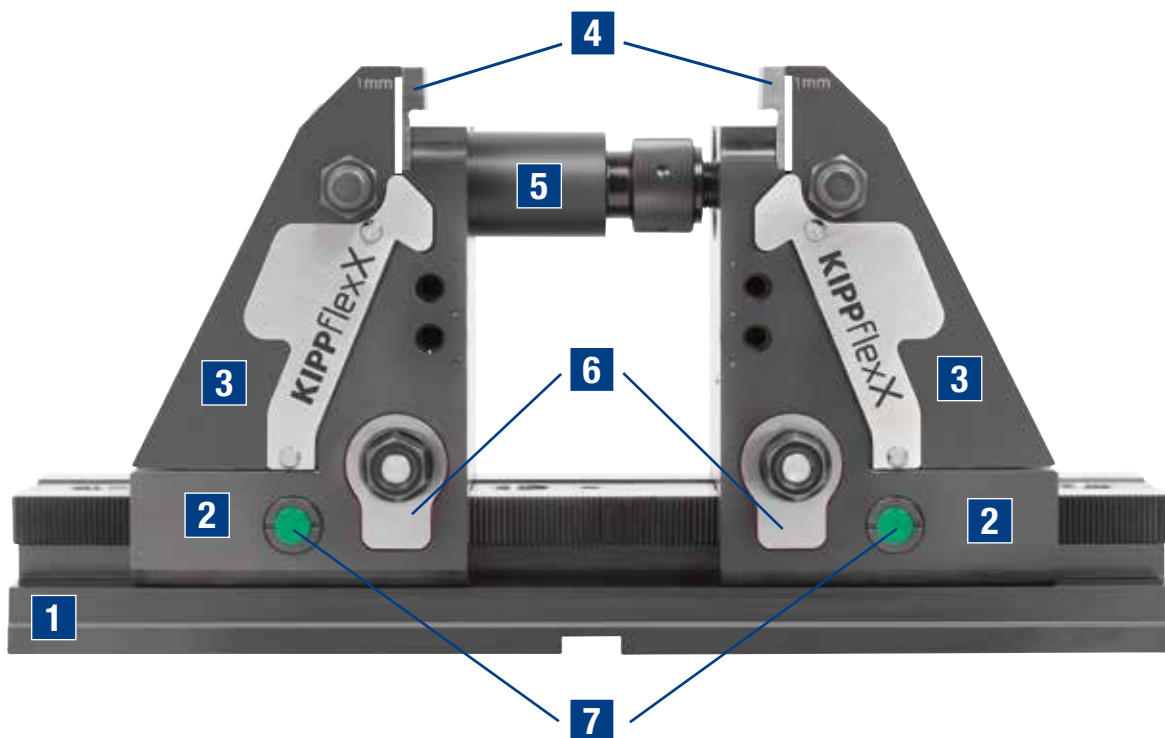


Function

The KIPPflexX 5-axis vice is the 3rd generation of vices for 5-axis milling machines.

The new generation, KIPPflexX, convinces by being much more user-friendly through the use of a crank handle and the proven clamping physics from the 5-axis vice compact series.

The KIPPflexX 5-axis vice can be used for clamping blanks or with positive-down effect. An enormous clamping force of 52 kN, optimum accessibility for short tools and very high rigidity are further advantages milling machine operators.



- 1** Base plate
- 2** Positioning elements
- 3** Vice jaws
- 4** Jaw plates
- 5** Extension shafts and threaded spindle
- 6** Clamping element with nut
- 7** Thrust pin for pre-centring

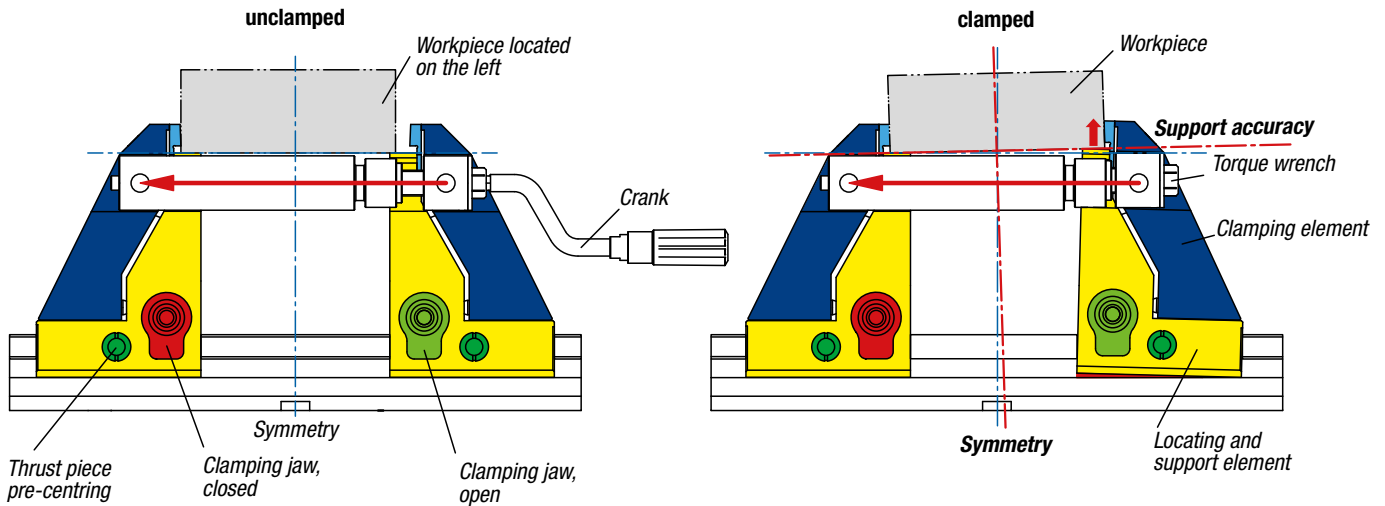
ADVANTAGES:

- Normal vice and centric vice 2 in 1
- Clamping with integrated positive- down effect
- Quick adjustment with the crank function
- Very high clamping force directly on the workpiece
- Highest rigidity in the system
- Best tool accessibility from all sides

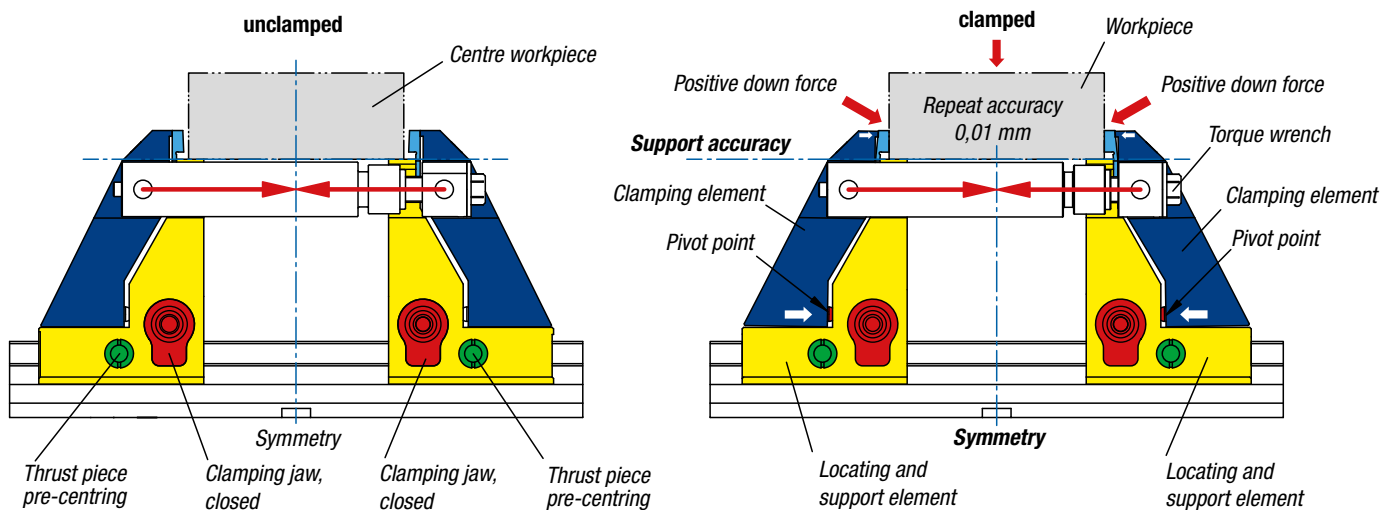
Technical explanation of the difference between positive-down force clamping and normal clamping



Blank clamping / Vice principle



Downthrust clamping



Clamping jaw (red) open on one side
-> used as a standard vice



Clamping jaw closed on both sides
-> used as a centric vice with pull-down effect

Applications



5-axis vice KIPPflexX in use clamping a blank. The left red jaw is open. Quick adjustment is carried out using the crank handle.



Positive-down effect clamping with the KIPPflexX.
Both jaws are closed so that a sure positive down force takes place onto the workpiece rest.



5-side machining on a 5-axis milling machine.
Optimum tool accessibility for machining directly over the 5-axis vice KIPPflexX.





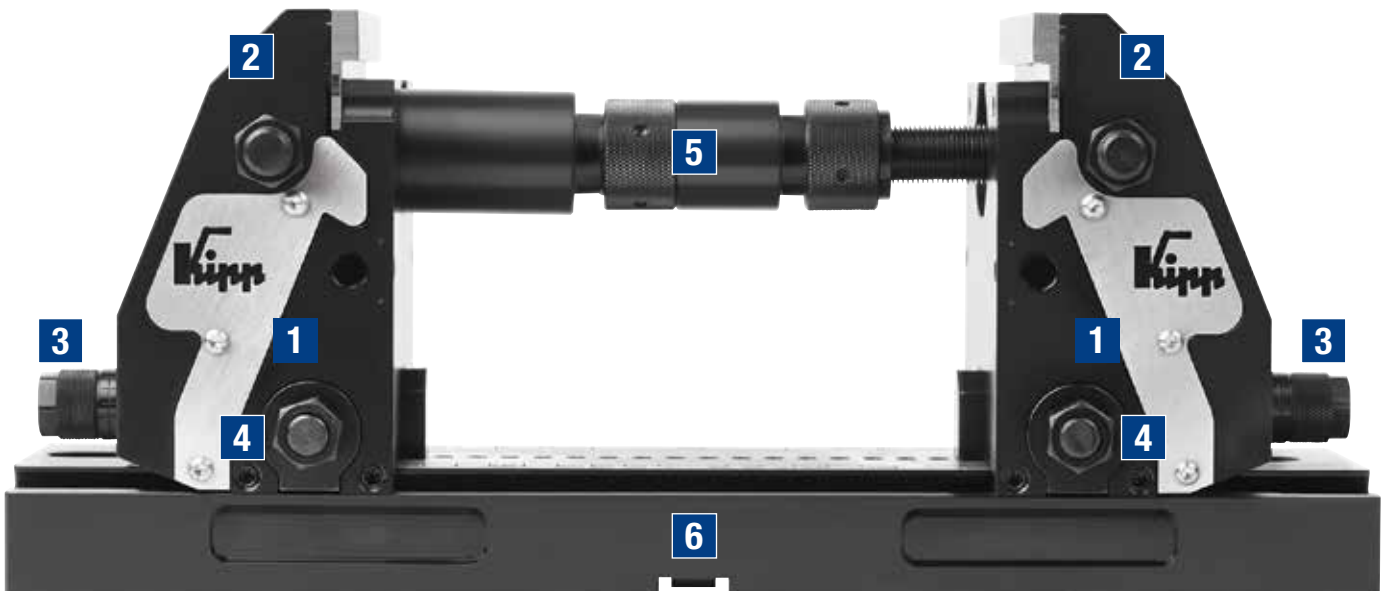
5-axis clamping system compact



Function

We are setting standards with the new „KIPP 5-axis clamping system compact“ in this field. The system was specifically designed for the optimal machining of complex workpieces on modern 5-axis machines.

The intelligent clamping technology increases clamping rigidity for the highest cutting and feed forces. The optimal accessibility to the workpiece allows short, standard tooling to be used. Tooling costs are significantly reduced.



- 1** Positioning unit with jaw plate
- 2** Vice jaws
- 3** Fine adjustment with knurled screw
- 4** Clamping screw
- 5** Extension shafts
- 6** Base plate

ADVANTAGES:

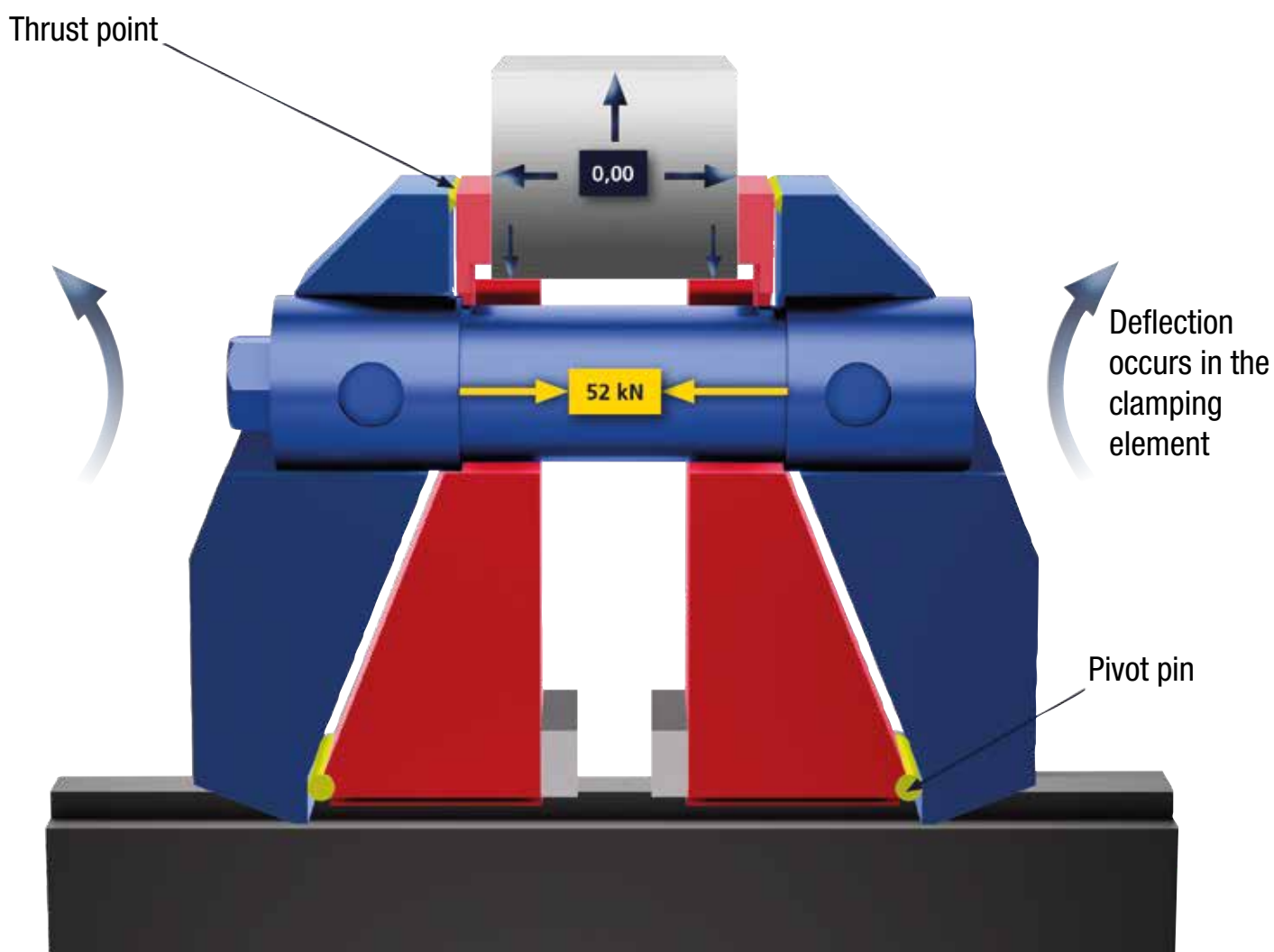
- Very high tractive force
- High stiffness in the system
- Pull-down function of the jaw plates on both sides
- Optimum fine adjustment of the jaw plates on the workpiece
- Increased tool service life
- The workpiece is always centred due to the systematic construction
- Large clamping width, 20 mm to 320 mm, freely extendable
- Clamping depth adjustable from 3 to 20 mm using seating ledges
- Best tool accessibility from all sides
- Easy to clean

Forces

The new clamping technology ensures force flow separation and workpiece positioning. The intelligent force distribution in the system allows only weak forces to be transferred to the machine table.

NEW CLAMPING TECHNOLOGY PATENT GRANTED

- Division of force flow and positioning
- Highest clamping force on the workpiece
- Maximum stiffness
- Centric tension



- Clamping elements
- Locators



Applications



5-axis clamping system compact incl. jaw with pins for clamping unmachined parts, and screw-on seating ledges. The clamping depth can be determined by machining the ledge.



Clamped blank. Sure set-up through positive clamping pins.



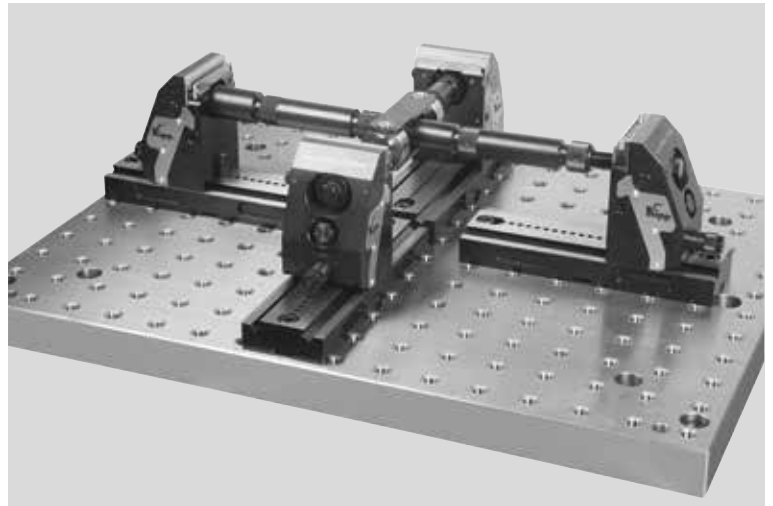
Blank after clamping. Clamping pin imprint is visible on the edge of the workpiece.



Applications



With the coupling for cross-clamping, two 5-axis clamping systems can be compactly connected with each other offset by 90 degrees. Setups for workpieces with different dimensions of 4 sides are possible.



5-axis clamping system compact positioned directly on the machine table.

Use of pendulum jaws which also act as fixed jaws.

Workpiece clamping with smooth jaws.



Positioning directly on the KIPP zero-point clamping system with integrated clamping pins in the 5-axis vice compact baseplate.

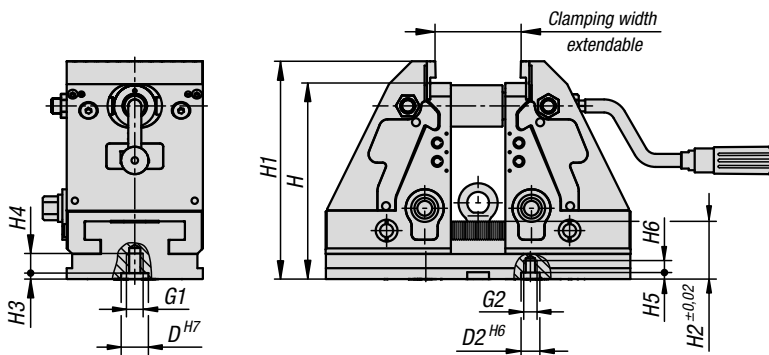
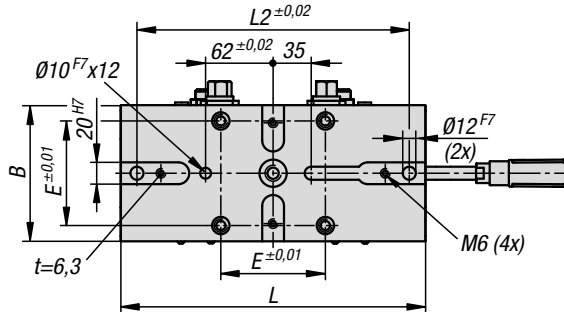


KIPPflexX 5-axis vice

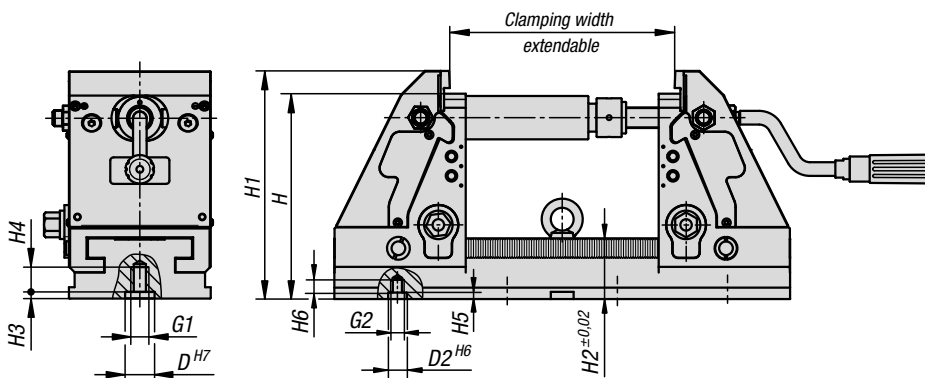
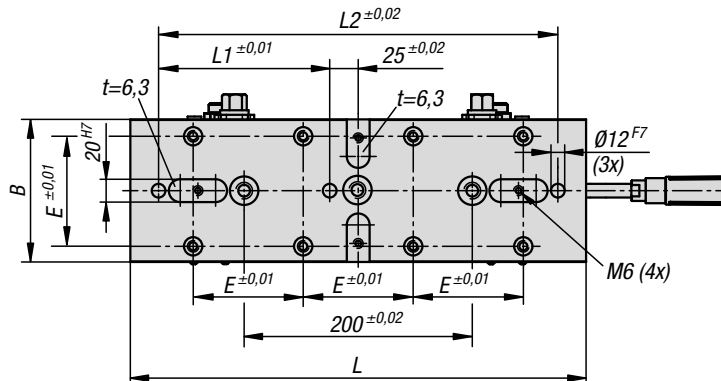
jaw plates smooth



L = 280



L = 400



The KIPPflexX 5-axis vice features excellent stability and flexibility, and is extremely easy to use. The KIPPflexX 5-axis vice can be used as a positive-down force vice or normal vice. When the positive down force function is used, the workpiece can be held with a repeat accuracy of ± 0.01 mm. A workpiece clamping height of 155/180 mm enables easy access during machining. The clamping width is preset using the crank handle, cutting down on setup times. Additionally, the closed geometries and the resistance to dirt that they provide keep maintenance and repair times to a minimum.

Material:
Steel.

Version:
Baseplate and workpiece support hardened.

Sample order:
K1555.124001251800

Note:
Additional product information can be found in the operating instructions.

Method of operation:
Quick adjustment using crank handle.

Advantages:
For use as centric-clamping device with positive down force function or vice.
Straightforward, infinite clamping width adjustment using crank handle.
Optimum clamping height for 5-axis machining.
Flexible options for connection to machine tables.

On request:
Various spare parts, larger clamping widths.

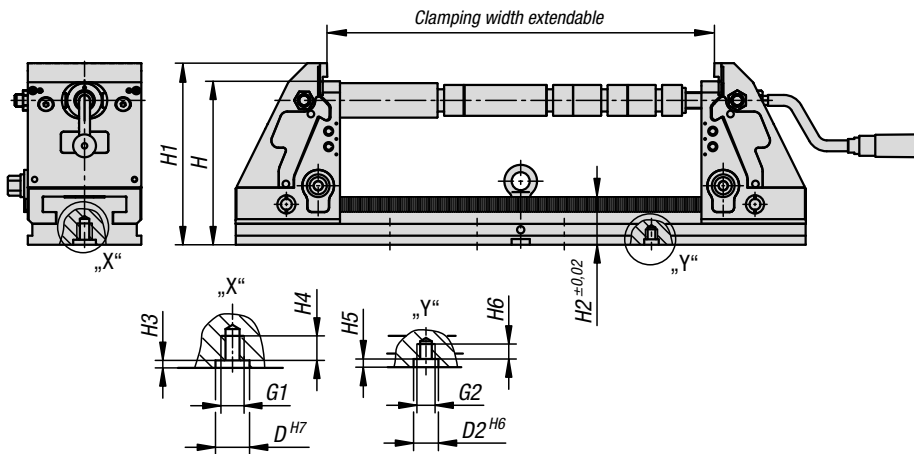
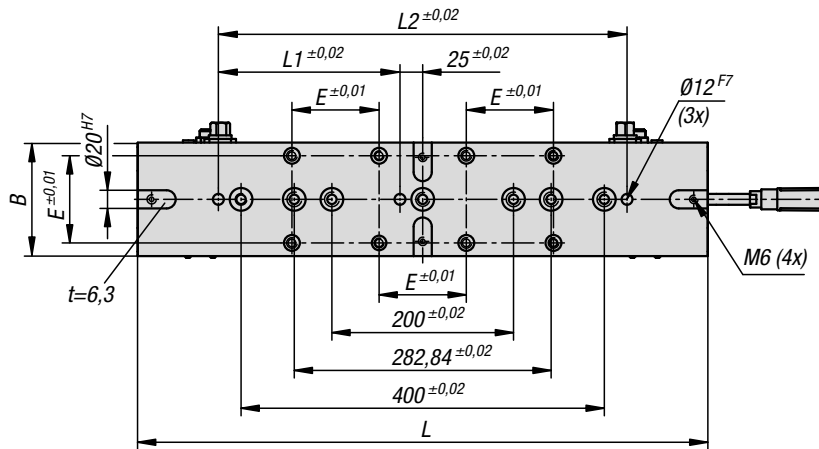
Supplied with:
Depending on the baseplate length, see operating instructions.

KIPPflexX 5-axis vice

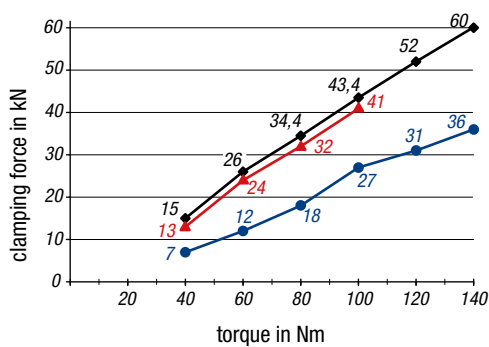
jaw plates smooth



L = 630



5-axis vice KIPPflexX clamping force diagram



- Spindle tractive force
- ▲ Normal vice / clamping blanks
- Positive-down effect clamping by 1 mm travel

KIPP KIPPflexX 5-axis vice jaw plates smooth

Order No.	B	L	H	L1	L2	H1	H2	H3	H4	H5	H6	D	D2	E	G1	G2	Clamping width extendable	Tractive force max. kN
K1555.122800901550	90	280	155	-	250	175	53	5,5	18	6	11	25H7	12H6	52	M12	M8	28-180	see diagram
K1555.124000901550	90	400	155	150	350	175	53	5,5	18	6	11	25H7	12H6	52	M12	M8	28-300	see diagram
K1555.122801251800	125	280	180	-	250	200	53	5,5	18	6	11	25H7	16H6	96	M12	M10	28-180	see diagram
K1555.124001251800	125	400	180	150	350	200	53	5,5	18	6	11	25H7	16H6	96	M12	M10	28-300	see diagram
K1555.126301251800	125	630	180	200	450	200	53	5,5	18	6	11	25H7	16H6	96	M12	M10	28-528	see diagram

Accessories:

- Baseplates K1556
- Jaw plates with pins K1557
- Combination jaw plates, smooth/with pins K1557
- Jaw plates, machinable K0975
- Seating ledges K0974
- Extension shafts K0990
- Cylinder clamping set K0989
- Stop set K0993
- Clamping pin K0967.140250516, K0967.240250516
- Clamping claw sets K1008
- Slot nuts K0954.1814X20
- Fitted bolts K0815.12065
- Socket head screws K0869.12X60
- Torque wrench K1489.01

Clamping force:

see diagram

Applications:

Suitable for T-slot and grid hole tables and zero-point clamping systems.
Size 282.84mm for diagonal alignment on zero-point clamping systems with gauge 52/96/200mm.

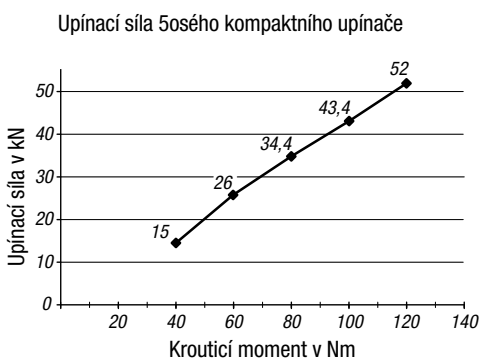
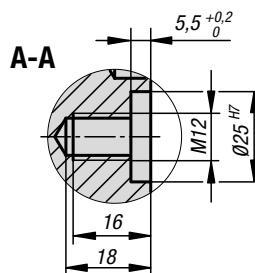
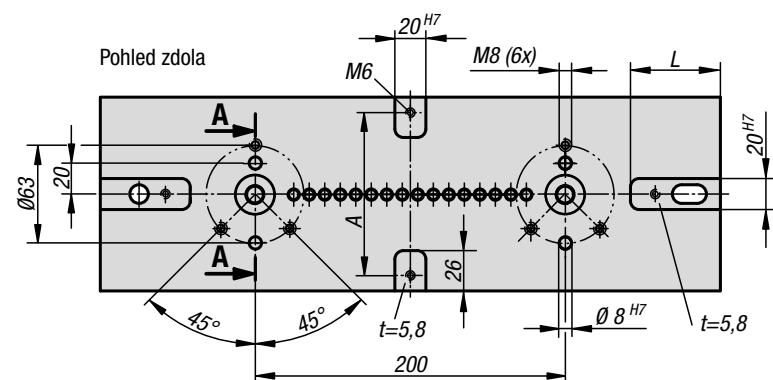
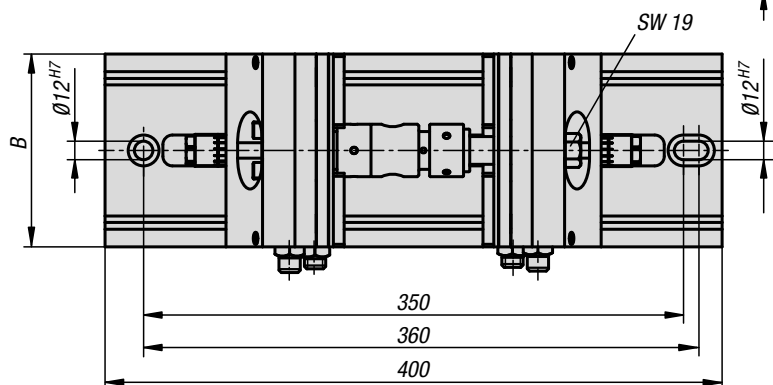
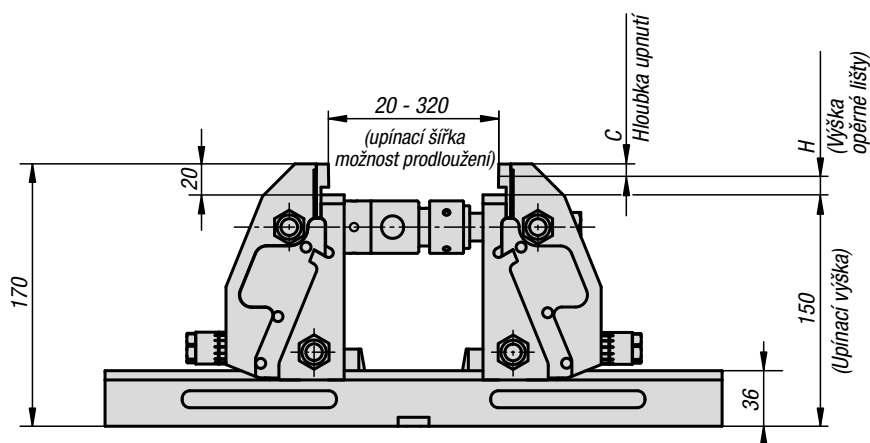
Tolerances:

With a clamping depth of > 5 mm, the repeat accuracy while the positive down force function is being used is ± 0.01 .



5-axis clamping system compact

smooth vice jaws



Material:

Base plate and jaw hardened steel.
Vice jaws tool steel.

Version:

Jaws black oxidised.
Jaw plates bright.

Sample order:

K0973.124000901500

Note:

The easy operability and rapid adjustment using a scale means that the clamping jaws can be quickly and surely adapted to new workpieces

The workpiece is always centred through the systematic construction of the 5-axis compact clamping system.

The optimal accessibility to the workpiece allows short, standard tooling to be used. Tooling costs are significantly reduced.

Positive down force by a clamping depth of >5 mm.
Clamping widths of 20 mm to 320 mm are possible.

Assembly:

The 5-axis clamping system compact can be mounted on T-slot tables, grid systems or, using an adapter flange on conventional zero-point clamping systems.

Supplied with:

- Baseplate K0994
- Clamping jaw K0976
- Extension shaft K0990.060
- Extension shaft K0990.120
- Adapter shaft K0991.060
- Adapter shaft K0991.120
- Threaded spindle K0940.999.002
- Spindle nut K0940.999.003

Accessories:

- Seating ledges K0974
- Jaw plates K0975
- Pendulum jaws K0988
- Centre jaws K0987
- Coupling for cross-clamping K0992

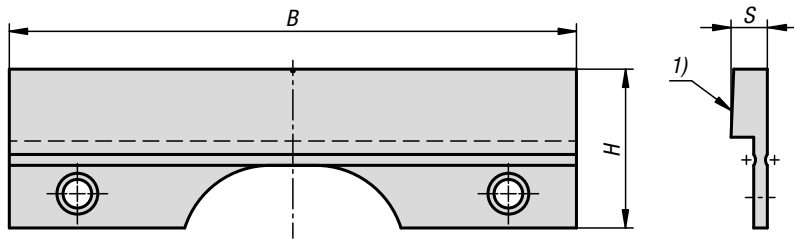
Order the seating ledges and jaw plates with pins separately.

KIPP 5-axis clamping system compact, smooth vice jaws

Order No.	A	B	C	H	L	Tractive force max. kN	Suitable shoulder screw	weight kg
K0973.124000901500	70	90	8/3	12/17	57,5	see diagram	K0815.12055	21,96
K0973.124001251500	105	125	8/3	12/17	58	see diagram	K0815.12055	30,16

Jaw plates smooth

carbide-coated



60	50	40	30	20	10	10	20	30	40	50	60
----	----	----	----	----	----	----	----	----	----	----	----

KIPP Jaw plates smooth, carbide-coated

Order No.	B	H	S
K1557.0900	90	35	8
K1557.1250	125	35	8,5



The smooth jaw plates are used for pull-down clamping of pre-machined and ground workpiece surfaces.

Material:
Steel.

Version:
Hardened, bright.
Laser marked scale.
Clamping surface carbide coated.

Sample order:
K1557.1250

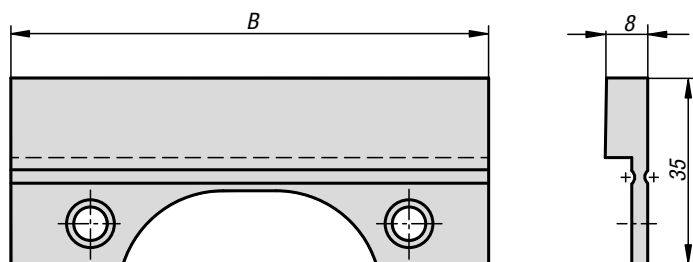
Note:
Additional product information can be found in the operating instructions.

Accessories:
Torx screws M6x10

Applications:
For pre-machined and ground workpiece surfaces.

Drawing reference:
1) Clamping surface carbide coated

Jaw plates smooth



KIPP Jaw plates smooth

Order No.	B
K0975.0900	90
K0975.1250	125



Material:
Tool steel.

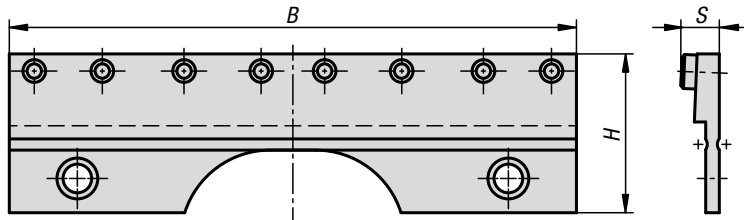
Version:
Hardened, bright.

Sample order:
K0975.0900

Note:
For clamping pre-machined workpieces and for final machining.

Supplied singly.

Jaw plates with pins



The jaw plates with pins are used for positive clamping without pre-forming; e.g. on blanks, castings and for roughing out.

Material:
Steel.

Version:
Hardened, bright jaw plates.
Hardened, black-oxidised jaw pins.
Laser marked scale.

Sample order:
K1557.1251

Note:
Additional product information can be found in the operating instructions.

Accessories:
Torx screws M6x10

Applications:
Positive clamping without pre-forming.

KIPP Jaw plates with pins

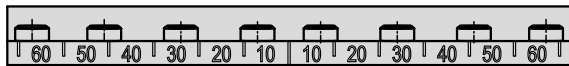
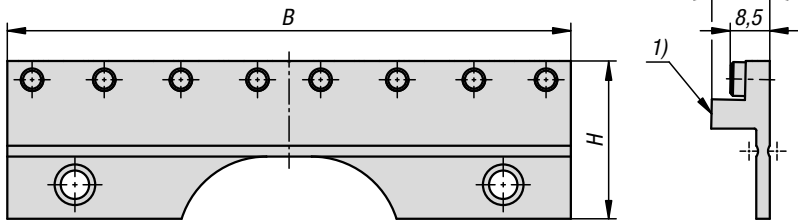
Order No.	B	H	S	No. of pins
K1557.0901	90	35	8,5	6
K1557.1251	125	35	8,5	8

Application example



Combination jaw plates

smooth and with pins



The combination jaw plates are used for positive clamping without pre-machining, e.g. for blanks, heavy duty cutting, castings etc. and for pull-down clamping of pre-machined and ground workpiece surfaces.

Material:
Steel.

Version:
Jaw plates hardened, bright.
Jaw pins hardened, black oxidised.
Clamping surface carbide coated.
Laser marked scale.

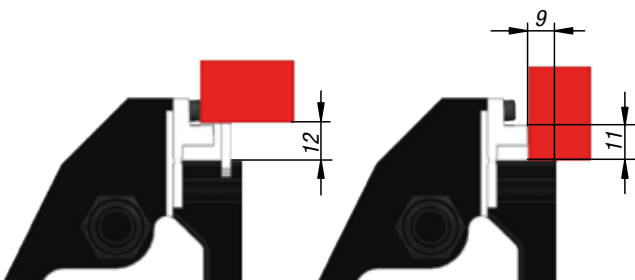
Sample order:
K1557.1252

Note:
When using the combi smooth / with pins jaw plates for clamping, the workpiece must be placed on a seating ledge with a height of 12 mm near to the clamping pins.

Accessories:
Torx screws M6x10

Applications:
Positive clamping without pre-machining.
Pre-machined and ground workpiece surfaces.

Drawing reference:
1) Clamping surface carbide coated



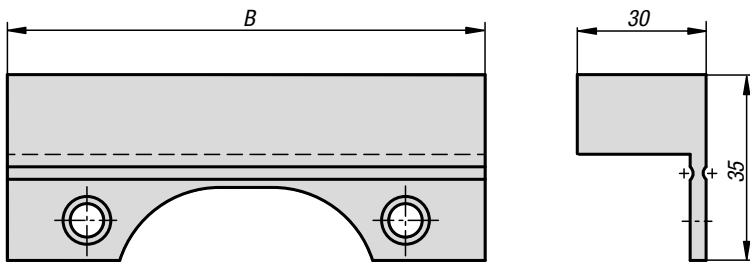
KIPP Combination jaw plates, smooth and with pins

Order No.	B	H	S	No. of pins
K1557.0902	90	35	13	6
K1557.1252	125	35	13	8



Jaw plates

machinable



Material:
Carbon steel.

Version:
Black oxidised.

Sample order:
K0975.0902

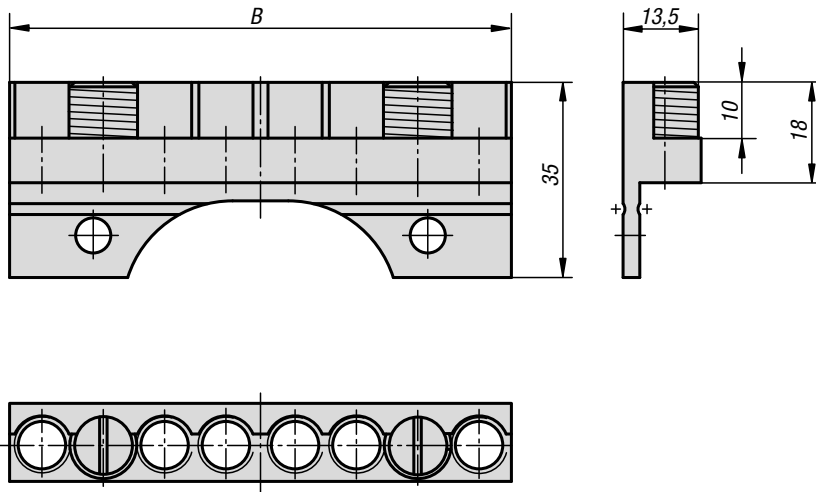
Note for ordering:
Supplied singly.

Note:
Machinable jaw plates are ideal for gripping on workpiece contours and machining in steps.

KIPP Jaw plates, machinable

Order No.	B
K0975.0902	90
K0975.1252	125

Cylinder clamping sets



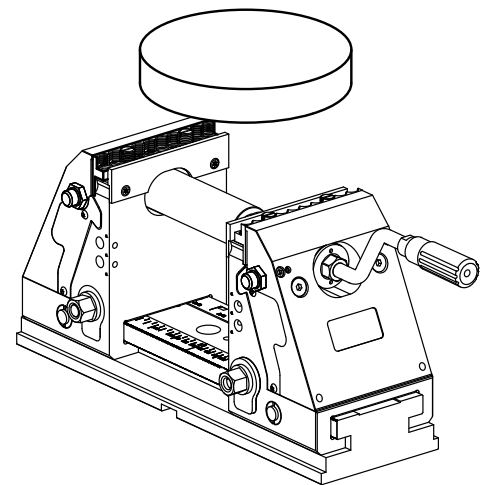
Material:
Tool steel.

Version:
Vice jaw hardened, bright.
Pins hardened, black oxidised.

Sample order:
K0989.09035

Note:
For holding round workpieces.
Max. clamping travel of jaw is 1 mm.

Supplied in pairs.

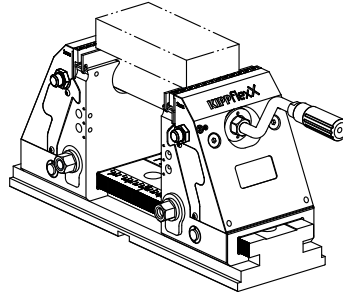
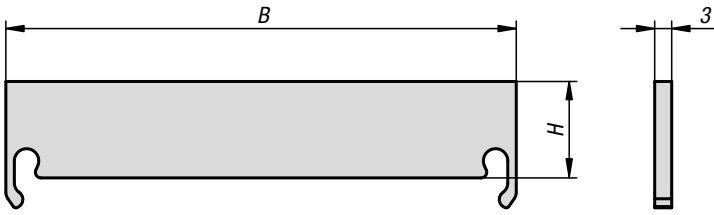


KIPP Cylinder clamping sets

Order No.	B	Clamping range min. - max.
K0989.09035	90	20 mm - 250 mm
K0989.12535	125	20 mm - 320 mm

Seating ledges

to clip on



Material:
Hardened steel

Version:
Bright.

Sample order:
K0974.0900312

Note:
The seating ledges are suitable for adjusting the clamping depth of the workpiece on the compact 5-axis clamping system/ KIPPflexX. The 12 mm version does not interfere with the positive-down effect. By the 17 mm version, the positive-down force is reduced but causes less edge deformation.

Supplied in pairs.

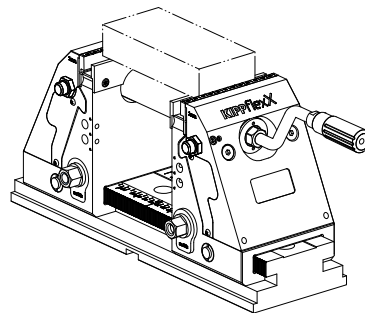
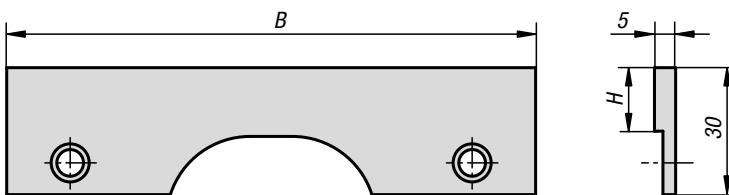
Accessories:
for K0973, K1555

KIPP Seating ledges to clip on

Order No.	B	H
K0974.0900312	90	12
K0974.0900317	90	17
K0974.1250312	125	12
K0974.1250317	125	17

Seating ledges

screw-on



Material:
Steel.

Version:
Bright.

Sample order:
K0974.0900515

Note:
Screw-on seating ledges are used to set the seating height of the workpiece. The desired seating height is achieved by milling over the screwed on ledges. A very high accuracy of the height to the machine table can be achieved.

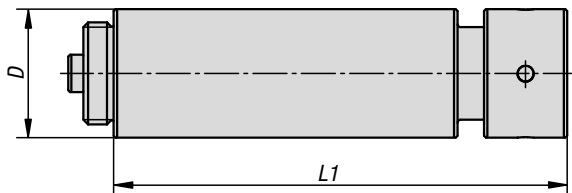
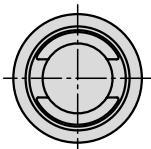
Supplied in pairs.

Accessories:
for K0973, K1555

KIPP Seating ledges, screw-on

Order No.	B	H
K0974.0900515	90	15
K0974.1250515	125	15

Extension shafts



Material:

Carbon steel.

Version:

Black oxidised.

Sample order:

K0990.060

Note:

For setting the clamping width.

Supplied with union nut.

The extension shafts can be combined as required.

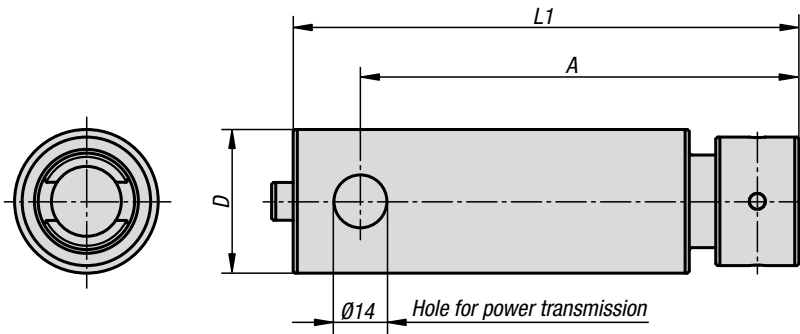
KIPP Extension shafts

Order No.	D	L1	Clamp range
K0990.060	34	60	extension by 60 mm
K0990.120	34	120	extension by 120 mm
K0990.240	34	240	extension by 240 mm
K0990.480	34	480	extension by 480 mm

Notes



Adapter shafts



Material:

Carbon steel.

Version:

Black oxidised.

Sample order:

K0991.060

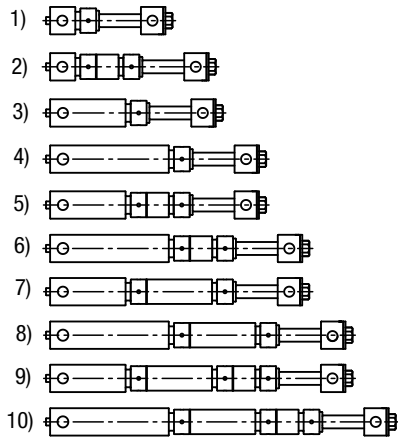
Note:

For setting the clamping width.

Supplied with union nut.

The adapter shafts are linked to the vice jaws by the lateral holes.

An adapter shaft must be mounted in every compact 5-axis clamp/KIPPflexX.



Drawing reference:

- 1) Clamping width 20-72 mm
- Adapter shaft 60 mm + threaded spindle
- 2) Clamping width 72-135 mm
- Adapter shaft 60 mm + expansion rod 60 mm + threaded spindle
- 3) Clamping width 80-140 mm
- Adapter shaft 120 mm + threaded spindle
- 4) Clamping width 140-200 mm
- Adapter shaft 180 mm + threaded spindle
- 5) Clamping width 140-200 mm
- Adapter shaft 120 mm + extension shaft 60 mm + threaded spindle
- 6) Clamping width 200-260 mm
- Adapter shaft 180 mm + extension shaft 60 mm + threaded spindle
- 7) Clamping width 200-260 mm
- Adapter shaft 120 mm + extension shaft 120 mm + threaded spindle
- 8) Clamping width 260-320 mm
- Adapter shaft 180 mm + extension shaft 120 mm + threaded spindle
- 9) Clamping width 260-320 mm
- Adapter shaft 120 mm + extension shaft 120 mm + extension shaft 60 mm + threaded spindle
- 10) Clamping width 320-380 mm
- Adapter shaft 180 mm + extension shaft 120 mm + extension shaft 60 mm + threaded spindle

KIPP Adapter shafts

Order No.	A	D	L1	Clamp range
K0991.060	56	38	74	20-80
K0991.120	116	38	134	80-140
K0991.180	176	38	194	140-200

Stop sets



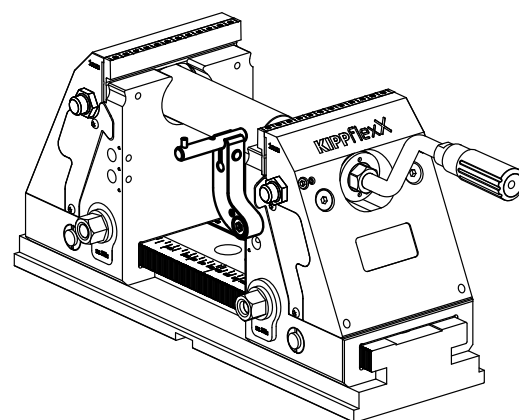
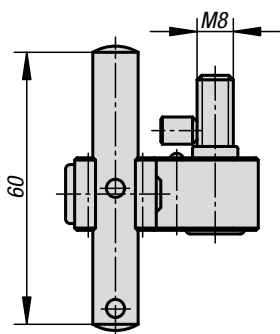
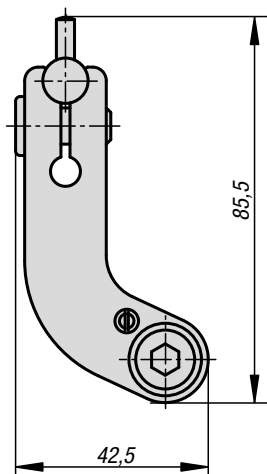
Material:
Steel.

Version:
Swivel arm, black oxidised.
Stop pin bright.

Sample order:
K0993.150

Note:
Stop set for direct fastening to jaws. The stop can be swivelled aside for machining the workpiece without losing the stop dimension.

Supplied complete with attachment parts.



KIPP Stop sets

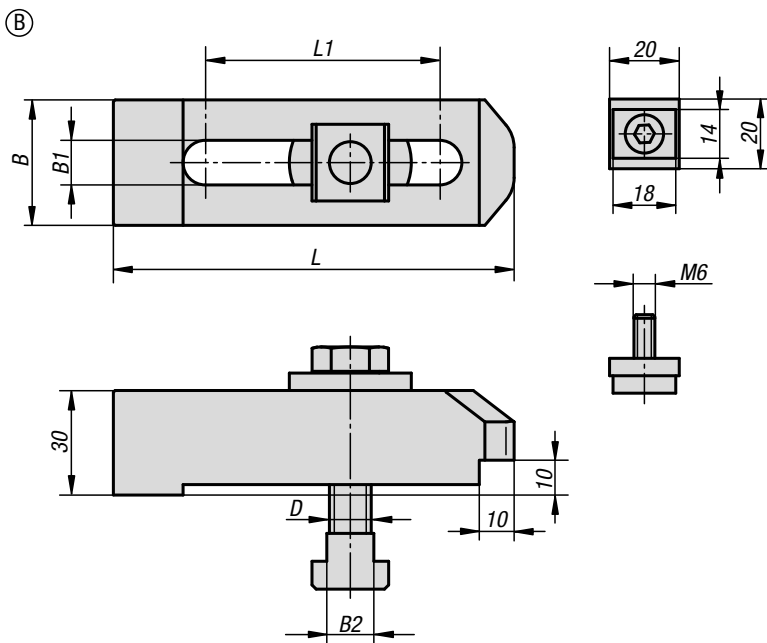
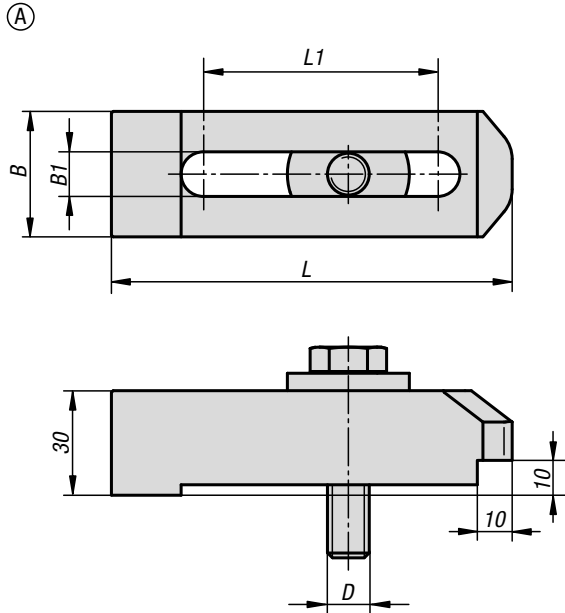
Order No.

Suitable for

K0993.150

5-axis vice compact and KIPPflexX

Clamping claw sets



Material:
Carbon steel.

Version:
Black oxidised.

Sample order:
K1008.0012

Supplied with:
Form A
K1008.0012
4x M12 claw clamps
4x M12x55 hex head screws grade 12.9
4x M12 washers for clamps

K1008.0016
4x M16 claw clamps
4x M16x60 hex head screws grade 12.9
4x M16 washers for clamps

Form B
K1008.1412
4x M12 claw clamps
4x M12x55 hex head screws grade 12.9
4x M12 washers for clamps
4x T-slot nuts for 14mm slots
2x Slot keys
2x M6x12 cap screws

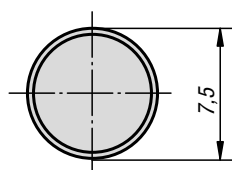
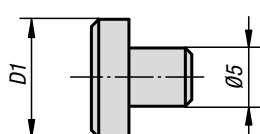
K1008.1816
4x M16 claw clamps
4x M16x60 hex head screws grade 12.9
4x M16 washers for clamps
4x T-slot nuts for 18mm slots
2x Slot keys
2x M6x12 cap screws

KIPP Clamping claw sets

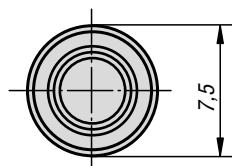
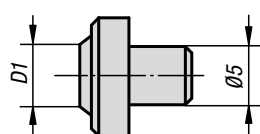
Order No.	Form	Form-Type	B	B1	B2	D	L	L1
K1008.0012	A	without slot key	40	12,8	-	M12	115	67,2
K1008.0016	A	without slot key	40	16,8	-	M16	115	67,2
K1008.1412	B	with t-slot key	40	12,8	13,5	M12	115	67,2
K1008.1816	B	with t-slot key	40	16,8	17,5	M16	115	67,2



flattened



cup point



Material:
Tool steel.

Version:
Hardened.

Sample order:
K0946.05600

Note:
Suitable for standard jaw plates and jaw adapters of round workpieces.
Installed by pressing in.

KIPP Jaw pins

Order No.	Version 1	D1	Application
K0946.05000	flattened	7,5	material over 1000 N/mm ² tensile strength
K0946.05400	cup point	4	material up to ca. 1000 N/mm ² tensile strength
K0946.05600	cup point	6	material up to ca. 1000 N/mm ² tensile strength

Couplings for cross-clamping



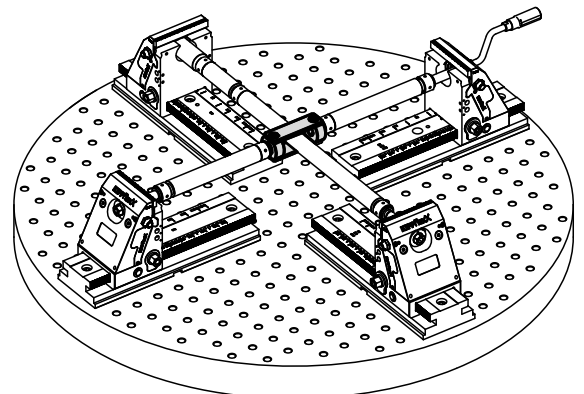
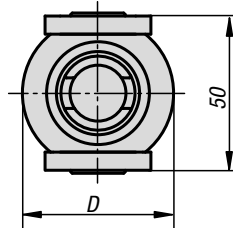
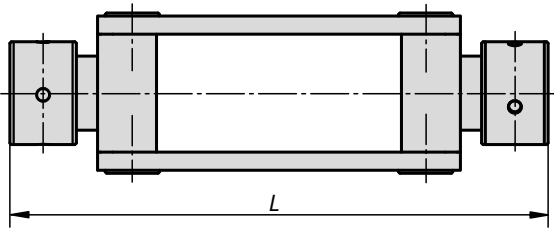
Material:
Carbon steel.

Version:
Black oxidised.

Sample order:
K0992.178

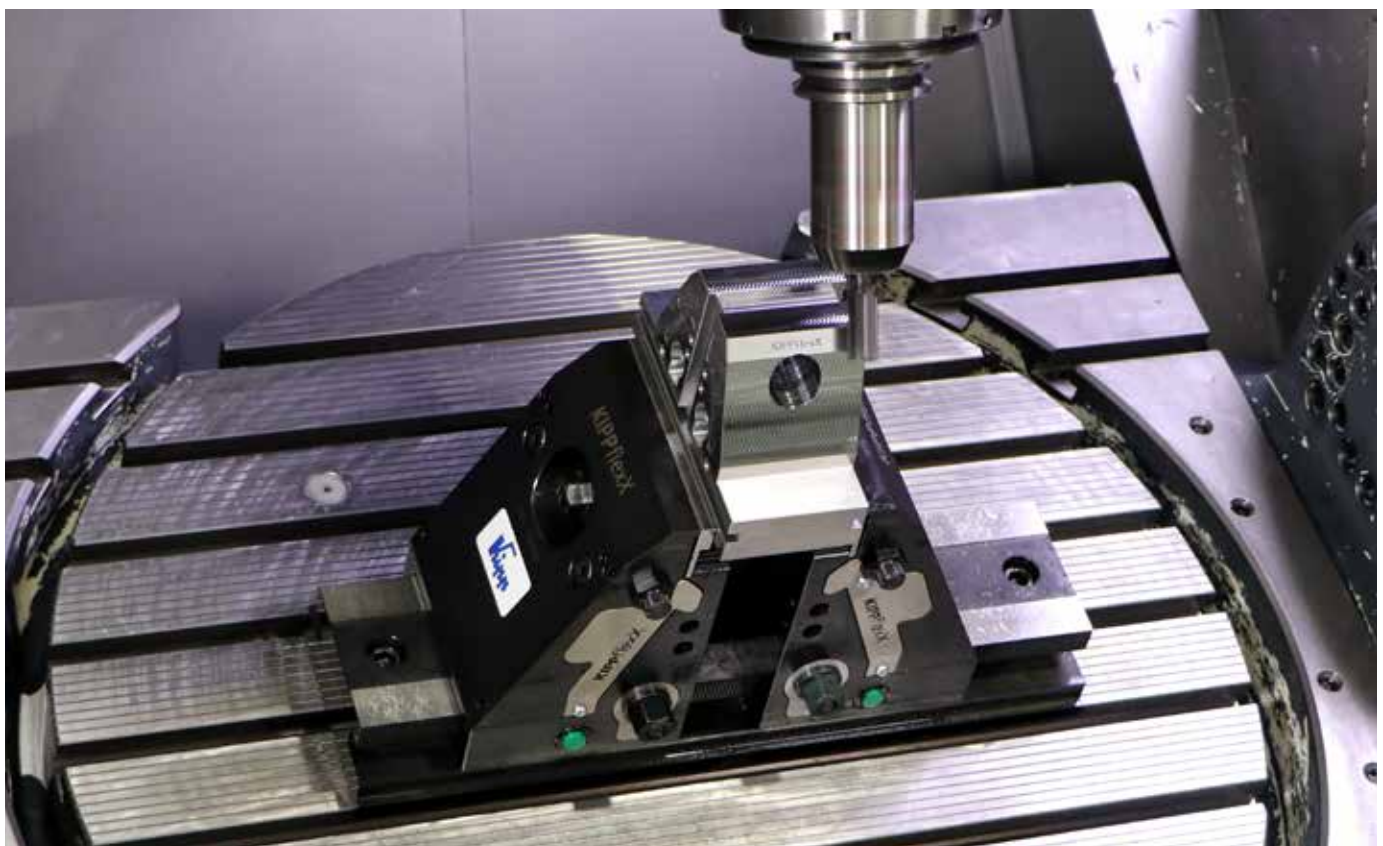
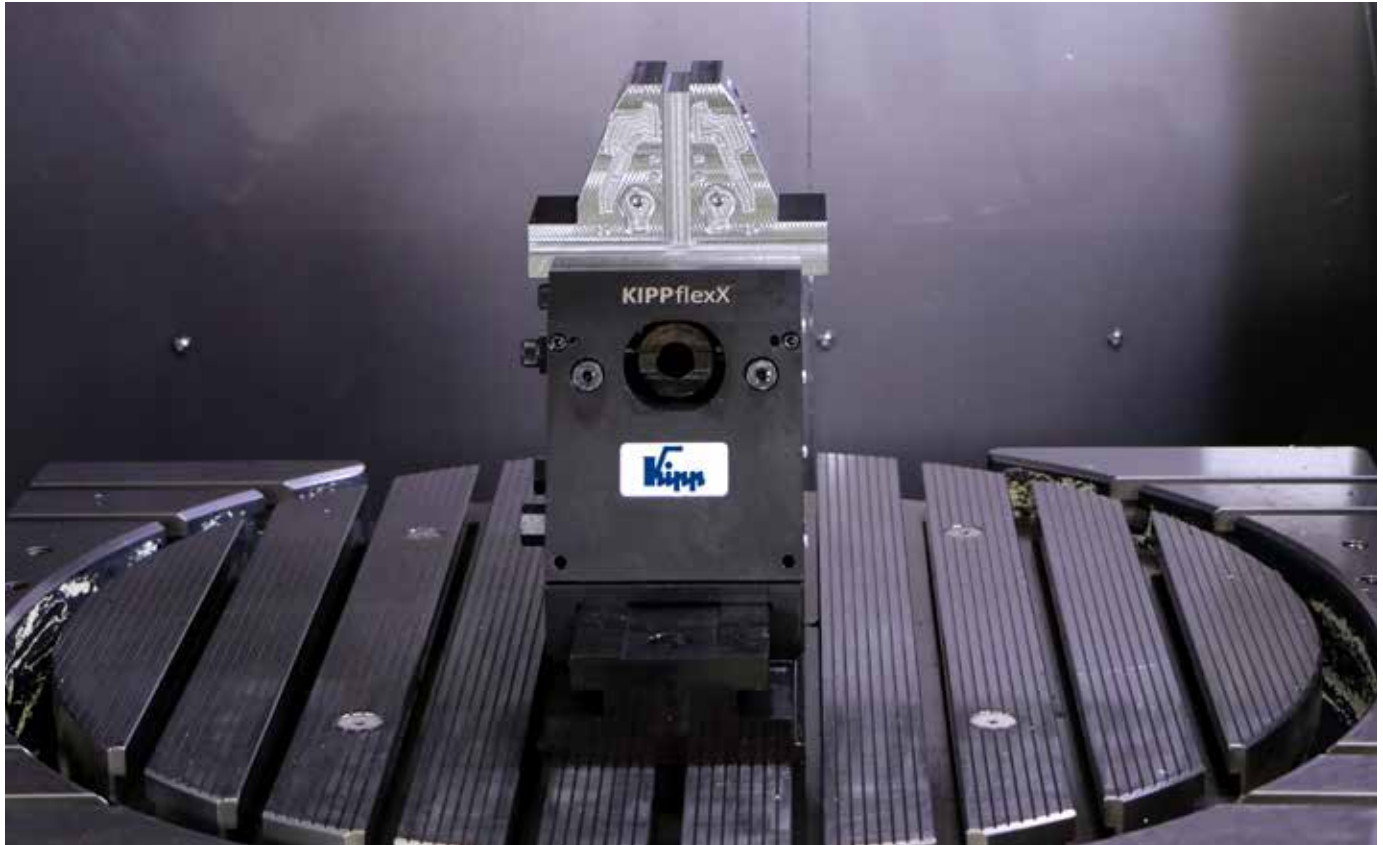
Note:
With the coupling for cross-clamping, two 5-axis clamping systems compact / KIPPflexX can be connected with each other. This enables workpieces to be clamped from four sides.
To enable the coupling for cross-clamping to be precisely centred on the transverse spindle, a threaded spindle and a spindle nut is required for each end. These items must be ordered separately as accessories under the following numbers:
Threaded spindle K1555.999.008
Spindle nut K0940.999.003

Attention:
Due to the design of the coupling, the maximum clamping depth for cross clamping is 12mm.



KIPP Couplings for cross-clamping

Order No.	D	L
K0992.178	50	178

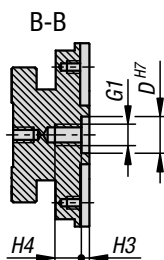
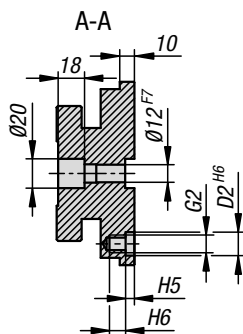
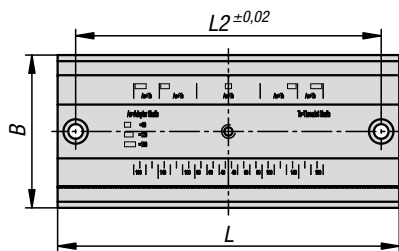
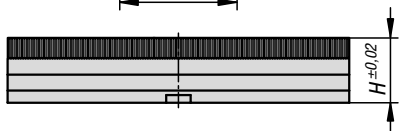
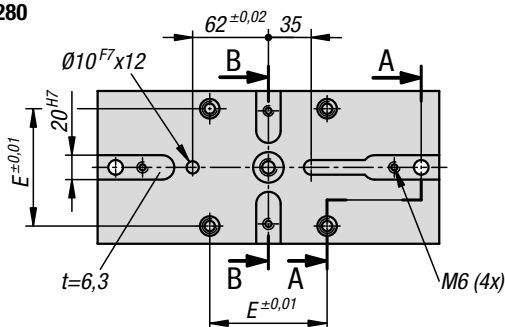


Baseplates

KIPPflexX 5-axis vice



L = 280



The baseplates offer versatile connection options. The locating slots on the underside can be used to perform alignment directly on the machine table using slot keys. Fastening in 12F7 grid holes with grid spacing of 50 mm is also possible. Claw clamps or separate clamping devices can be located on the side recess. The baseplate is also suitable for all standard zero-point clamping systems with a centre distance of 52/96/200 mm. The integrated central hole can also be used for alignment. In this case, a specific centre pin is used to perform central alignment on the machine table.

Material:

Steel.

Version:

Hardened and black oxidised.
Contact faces ground.

Sample order:

K1556.125400

Note:

Additional product information can be found in the operating instructions.

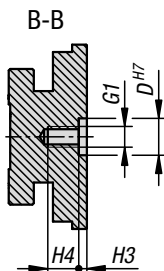
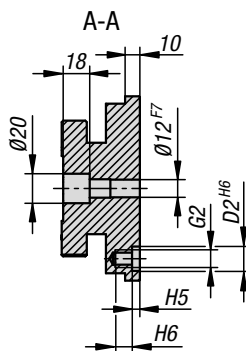
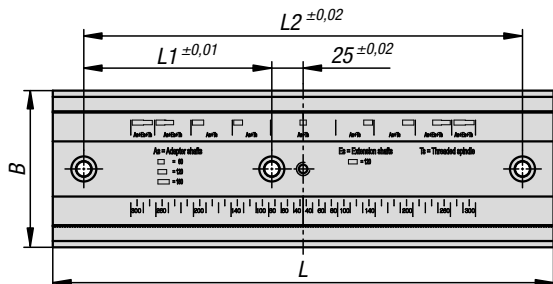
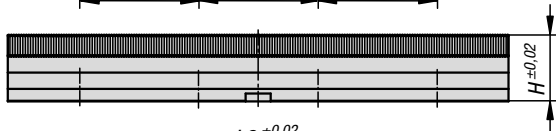
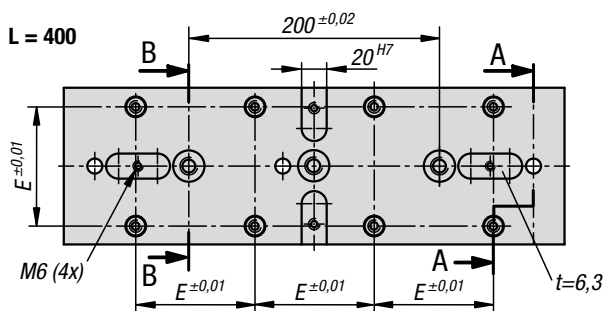
On request:

other dimensions.

Applications:

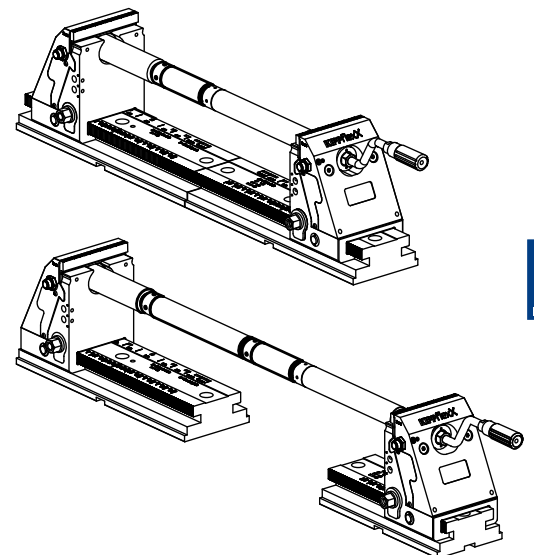
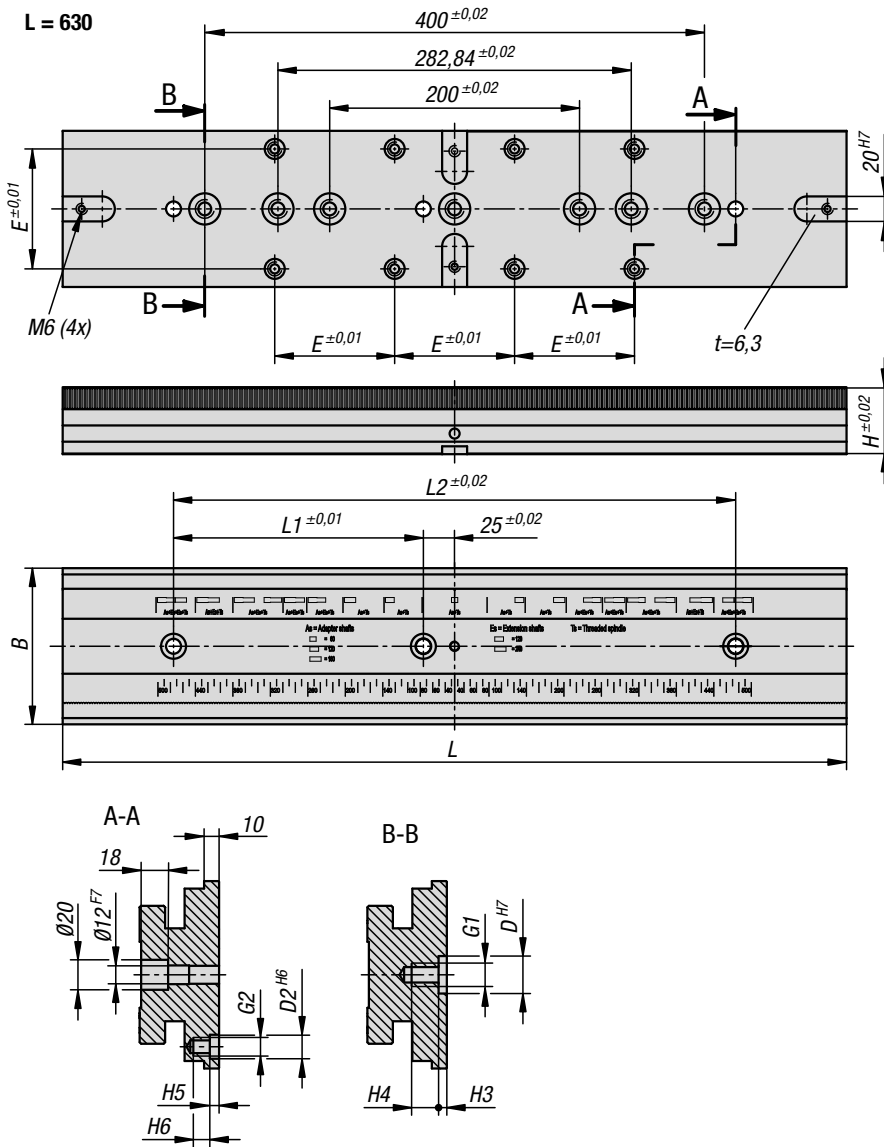
Suitable for T-slot tables, basic elements with grid holes and zero-point clamping systems.

L = 400



Baseplates

KIPPFlexX 5-axis vice

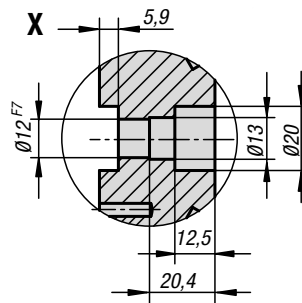
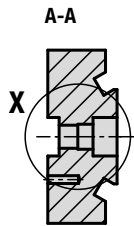
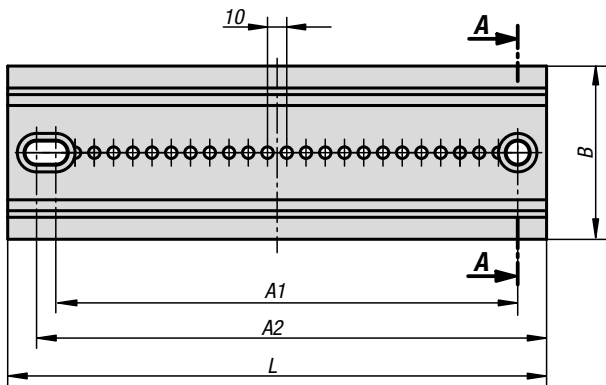
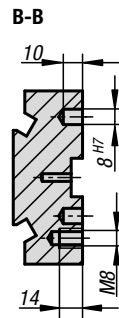
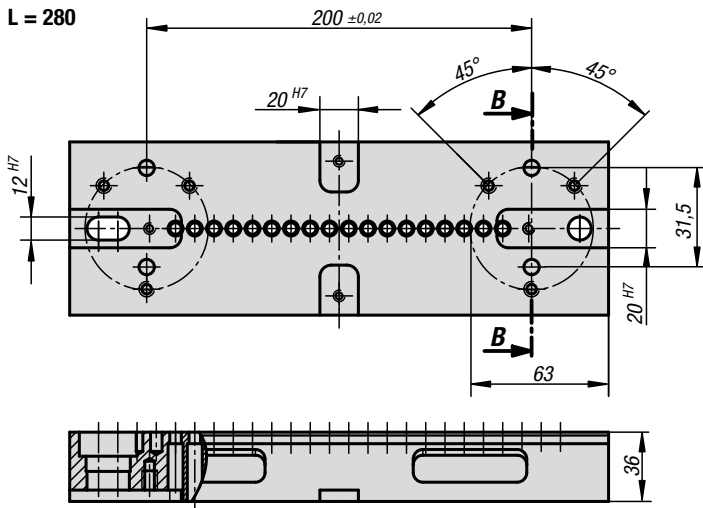


KIPP Baseplates, KIPPFlexX 5-axis vice

Order No.	B	H	L	L1	L2	H3	H4	H5	H6	D	D2	E	G1	G2
K1556.090280	90	53	280	-	250	5,5	18	6	11	25H7	12H6	52	M12	M8
K1556.090400	90	53	400	150	350	5,5	18	6	11	25H7	12H6	52	M12	M8
K1556.125280	125	53	280	-	250	5,5	18	6	11	25H7	16H6	96	M12	M10
K1556.125400	125	53	400	150	350	5,5	18	6	11	25H7	16H6	96	M12	M10
K1556.125630	125	53	630	200	450	5,5	18	6	11	25H7	16H6	96	M12	M10

Base plates

5-axis clamping system compact



Material:
Steel.

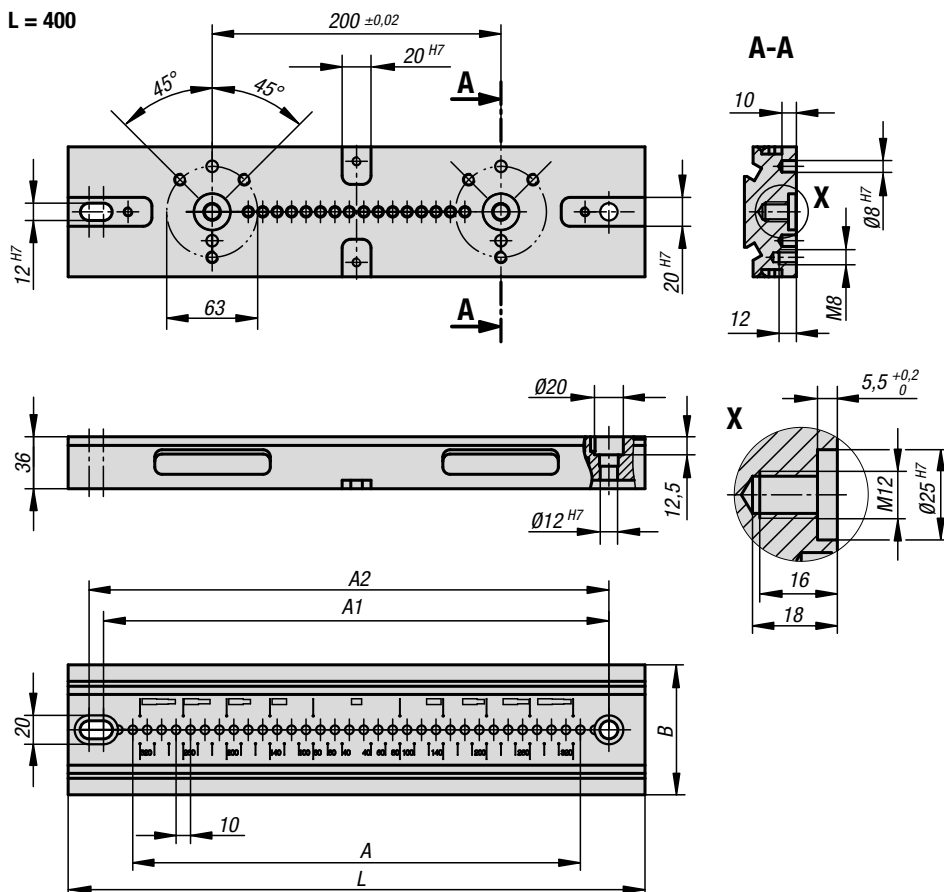
Version:
Black oxidised.
Function faces ground.

Sample order:
K0994.090280

Note:
Base plates with locating slots on the underside for easy alignment of the plate on the machine table. Securing via grid holes 12F7 for 40 mm and 50 mm grid spacing possible. Lateral recesses provided for separate clamping means.

Base plates

5-axis clamping system compact



KIPP Base plates, 5-axis clamping system compact

Order No.	A	A1	A2	B	L	Suitable shoulder screw	weight kg
K0994.090280	20x10	240	250	90	280	K0815.12055	6,14
K0994.090400	31x10	350	360	90	400	K0815.12055	8,58
K0994.125280	20x10	240	250	125	280	K0815.12055	8,86
K0994.125400	31x10	350	360	125	400	K0815.12055	12,24

Pendulum jaws

5-axis-clamping-system compact



Material:

Body mild steel.
Jaw plates tool steel.

Version:

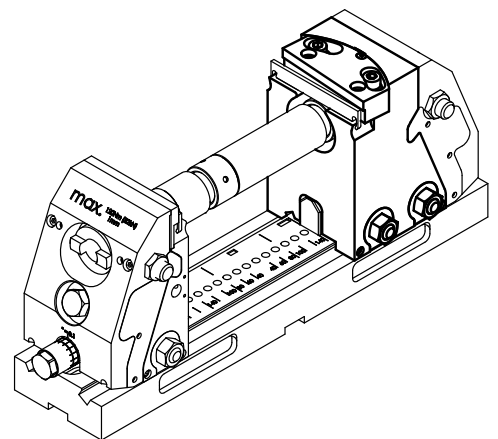
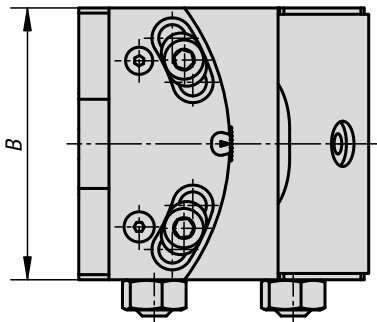
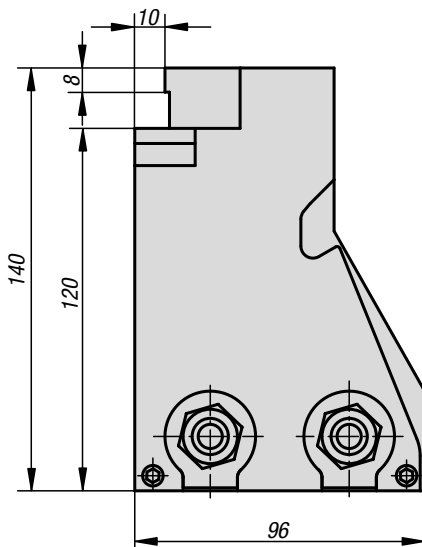
Body black oxidised.
Vice jaws hardened, bright.

Sample order:

K0988.09015010

Note:

Pendulum jaws are used to hold oblique workpieces.
The jaw plates of the pendulum jaws can be swivelled by $\pm 4^\circ$.
Pendulum jaws can also be used as fixed jaws.
Rigid design with 2 fastening screws.



KIPP Pendulum jaws, 5-axis-clamping-system compact

Order No.	B	weight kg
K0988.09015010	90	6
K0988.12515010	125	8,77

Jaw plates smooth for pendulum jaw

5-axis clamping system compact



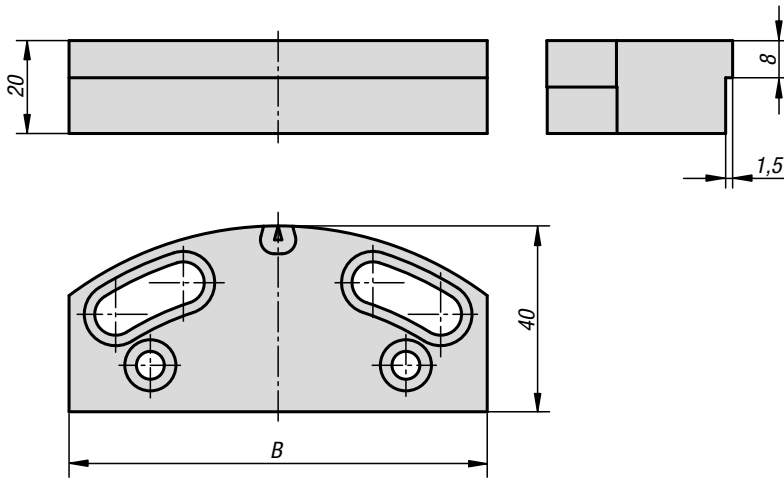
Material:
Tool steel.

Version:
Hardened, bright.

Sample order:
K1001.0900

Note:
For clamping pre-machined and ground workpieces.

Supplied singly.



KIPP Jaw plates smooth for pendulum jaw, 5-axis clamping system compact

Order No.	B
K1001.1250	125
K1001.0900	90

Jaw plates with pins for pendulum jaw

5-axis clamping system compact



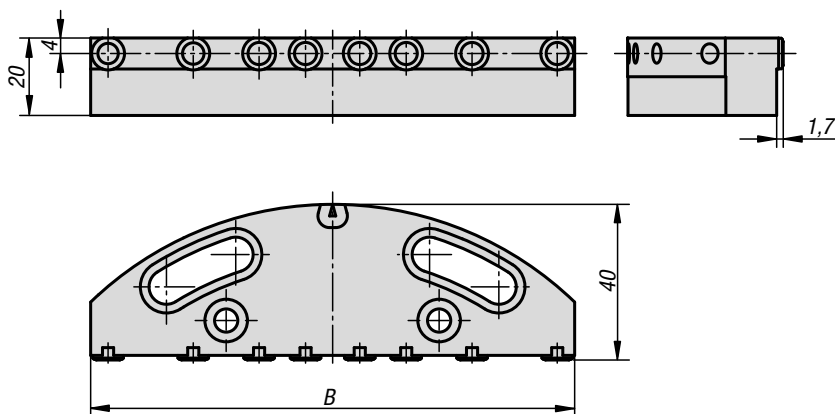
Material:
Tool steel.

Version:
Vice jaw hardened, bright.
Pins hardened, black oxidised.

Sample order:
K1001.0901

Note:
For positive clamping without preforming, e.g. rough pieces, heavy cutting, castings etc.

Supplied singly.

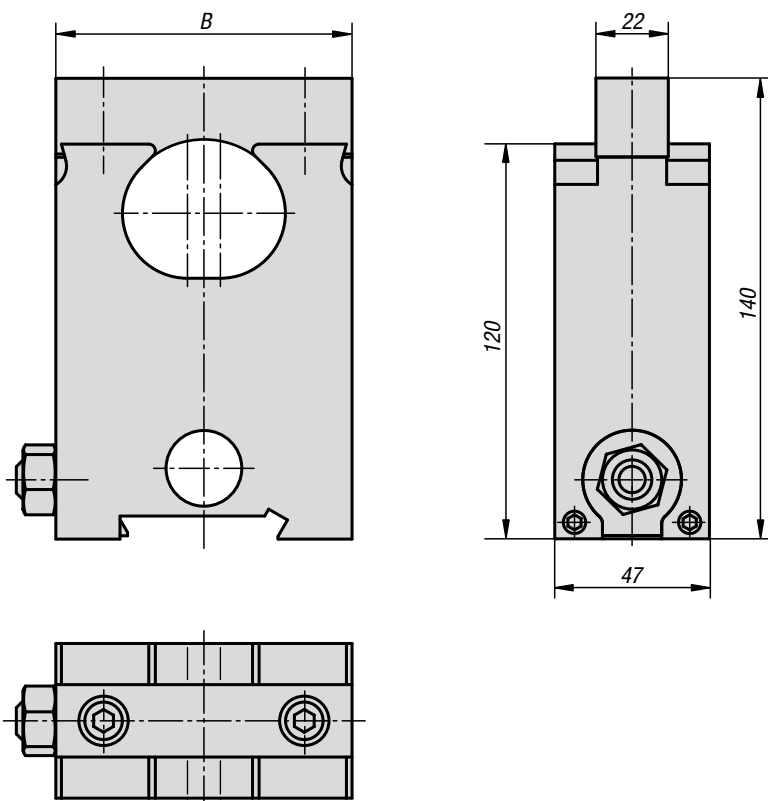


KIPP Jaw plates with pins for pendulum jaw, 5-axis clamping system compact

Order No.	B	No. of pins
K1001.1251	125	8
K1001.0901	90	6

Centre jaws

5-axis clamping system compact



Material:

Body mild steel.
Jaw plates tool steel.

Version:

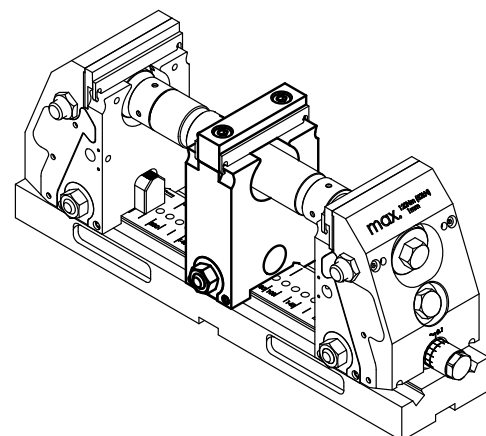
Body black oxidised.
Vice jaws hardened, bright.

Sample order:

K0987.0901500

Note:

Centre jaws are used to clamp 2 workpieces simultaneously.
The centre jaws can be moved to suit the size of the workpiece. 2 different sized workpiece can be clamped.



KIPP Centre jaws, 5-axis clamping system compact

Order No.	B	weight kg
K0987.0901500	90	3,38
K0987.1251500	125	5,1

Jaw plates smooth for centre jaw

5-axis clamping system compact



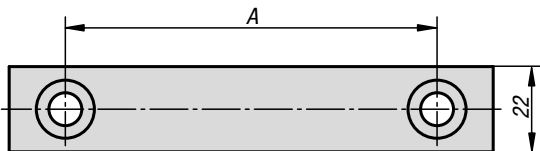
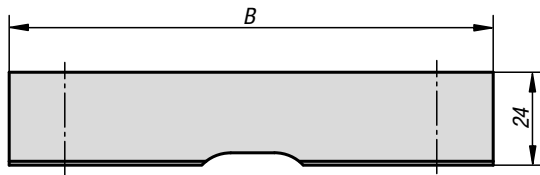
Material:
Tool steel.

Version:
Hardened, bright.

Sample order:
K1002.0900

Note:
For clamping pre-machined and ground workpieces.

Supplied singly.



KIPP Jaw plates smooth for centre jaw, 5-axis clamping system compact

Order No.	A	B
K1002.0900	61	90
K1002.1250	96	125

Jaw plates with pins for centre jaw

5-axis clamping system compact



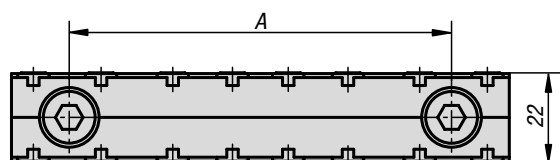
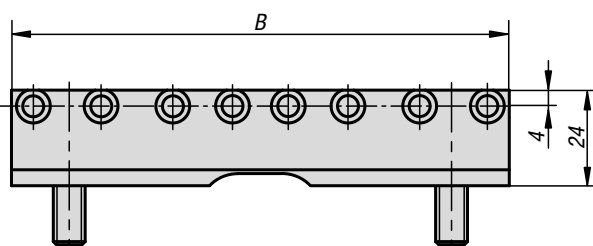
Material:
Tool steel.

Version:
Vice jaw hardened, bright.
Pins hardened, black oxidised.

Sample order:
K1002.0901

Note:
For positive clamping without preforming, e.g. rough pieces, heavy cutting, castings etc.

Supplied singly.

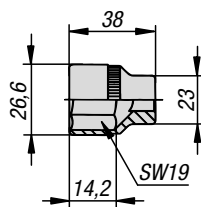
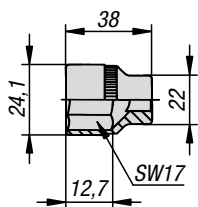
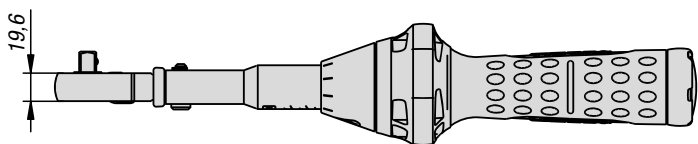
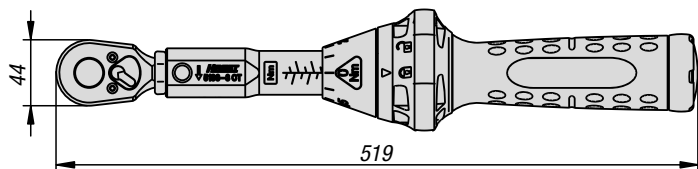


KIPP Jaw plates with pins for centre jaw, 5-axis clamping system compact

Order No.	A	B	No. of pins
K1002.0901	61	90	6
K1002.1251	96	125	8

Torque wrench

for 5-axis clamping system



Material:

Steel.

Version:

Surface: hard chromed

Sample order:

K1489.01

Note:

Torque wrench 40-200 set:

Precision +/- 3% of the scale value (in direction of actuation)

(5107-3 CT +/- 4% release precision)

Secure: - haptic (short path trip)

- acoustic (snap element)

Designed for rough workshop use.

Broad spectrum of use for controlled screw tightening. Applications in industry and trades.

Optimised sealing ring for protection from foreign matter.

Ratchet repair set for customer-oriented self-assembly permits use for decades.

Handle with anti-roll for easier power transmission through more grip.

Adjustment aid through indexing points for optimised operator guidance guarantees secure and fast setting of the desired torque value by turning the handle.

Secure locking of the setting values through detent on the swivel head.

Lock symbols signal the respective locking condition.

Possibility to fasten rope loop through openings on the locking mechanism swivel head.

Easily readable, contrast-rich scale.

Permanent readability through laser labelling of the scale sleeve.

Integrated switch lever.

Certified acc. to DIN EN ISO 6789-2:2017.

With calibration certificate and serial number.

Supplied in stable hexagonal hinged box.

Square acc. to DIN 3120, ISO 1174-1, DIN EN ISO 6789-2:2017.

Key insert (hex):

With knurling

Surface: chrome-plated, polished

DIN 3124, ISO 2725-1

Recommendation:

Annual check interval for torque wrenches, in which the upper limit is 5,000 load cycles.

Supplied with:

Set comprising:

Torque wrench

Key insert SW17

Key insert SW19

Functional principle:

Operating principle of torque wrench

Unlock.

Press handle ca. 8 mm forward and rotate in the desired direction.

Continue to turn handle to set the desired torque.

Turn the handle backwards a little.

Lock.

Suitable for:

3 Axis clamping system

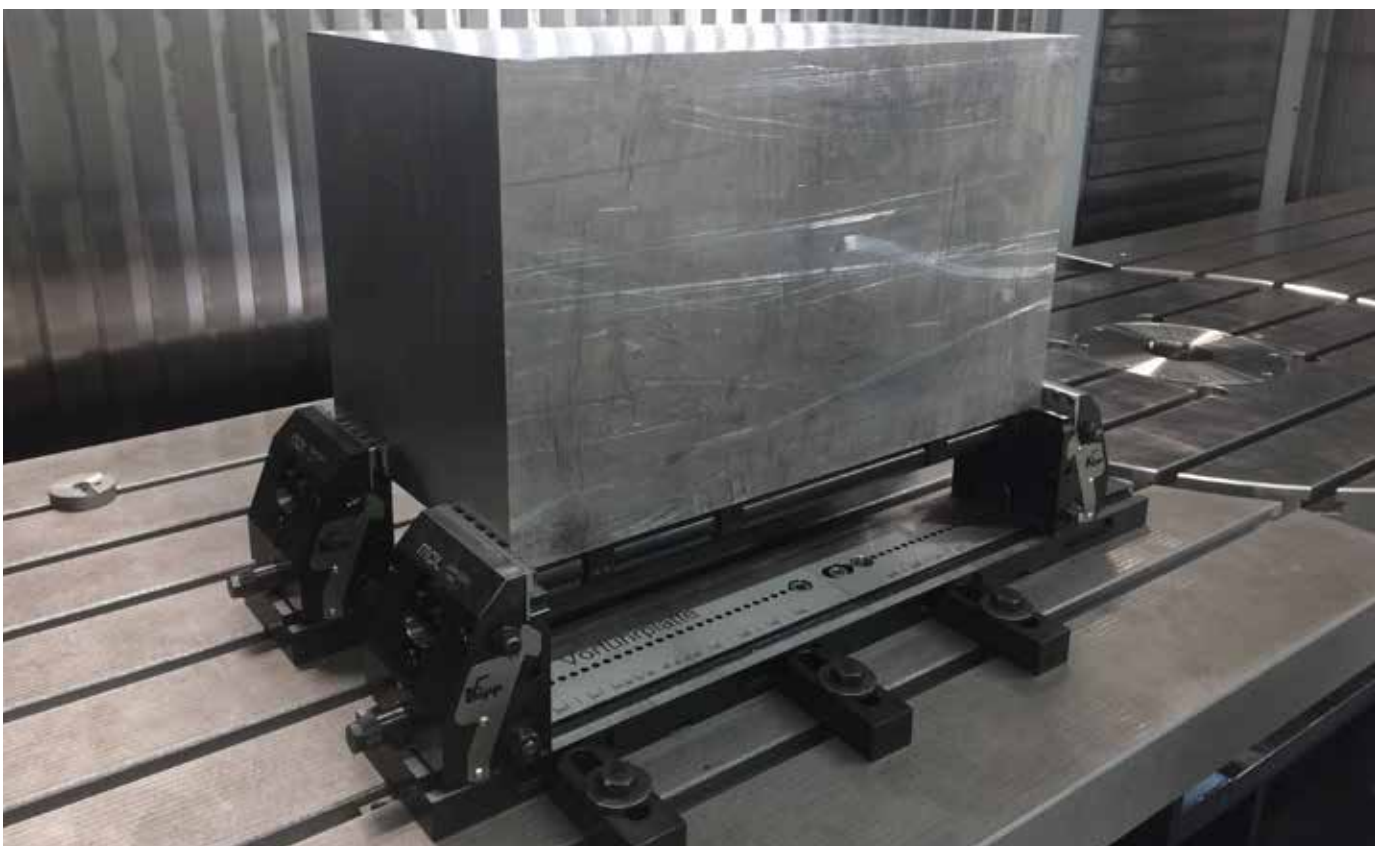
5 Axis clamping system

5 Axis Clamping system compact

KIPPFlexX 5-axis vice

KIPP Torque wrench for 5-axis clamping system

Order No.	Item	Version 1	Product type	Torque Nm
K1489.01	Torque Wrench	set	revolving grip	40 - 200



3-axis clamping system 5-axis clamping system



5 Axis clamping system



Trend-setting clamping concept for 5-sided machining

The 5-Axis Clamping System is an unbeatable overall concept to supplement state-of-the-art milling centres.

Many products are becoming more complicated than ever, and also have to be produced in an extremely short time and with maximum precision. In order to satisfy these criteria, the complete machining of workpieces is becoming increasingly more common. For this reason, state-of-the-art manufacturing technologies at machine tool manufacturers have developed toward 5-axis machining. Complete machining of workpieces on 5-axis centres transfers the entire high machine precision to the workpiece.

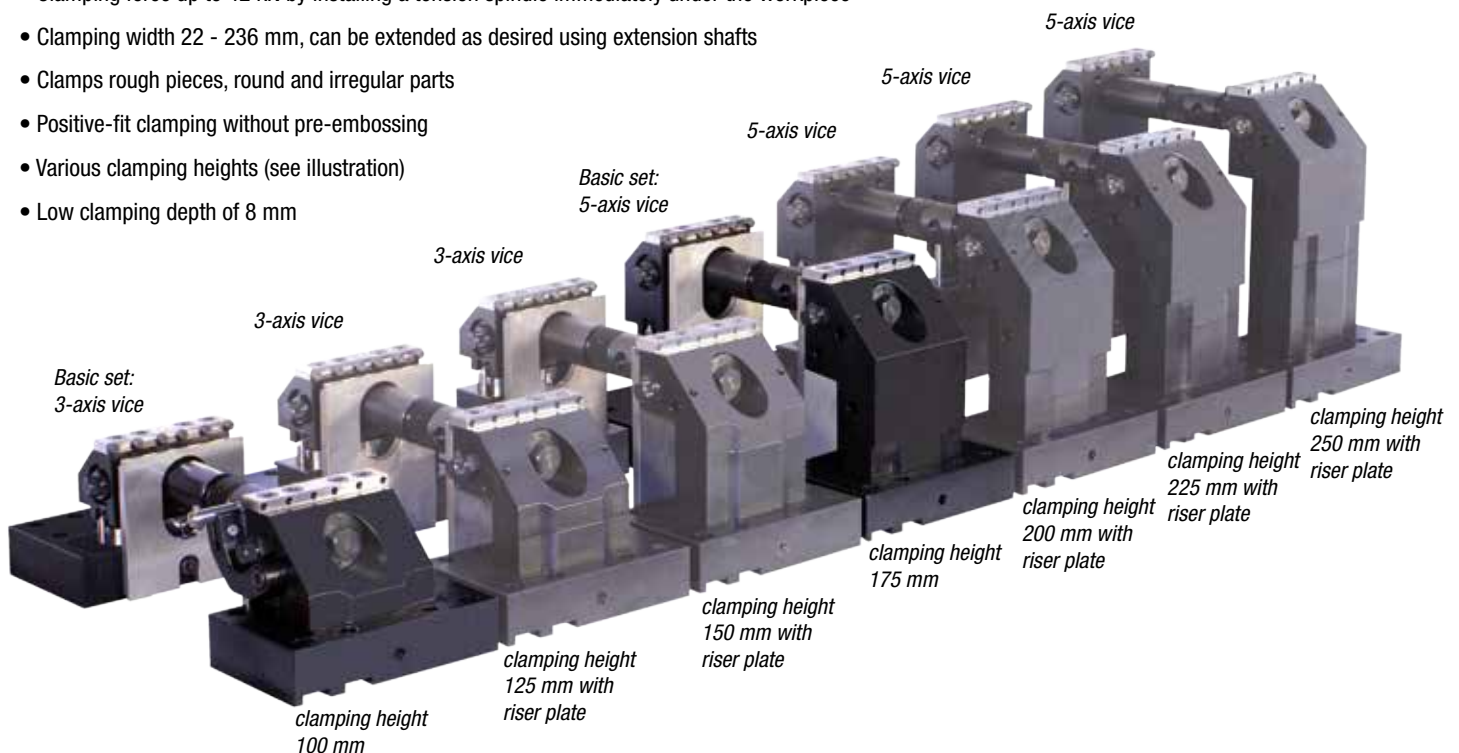
Due to the greater freedom for designing workpieces provided by 5-axis machining, a high-performance clamping system is an essential precondition for the efficient use of these machines. Among other things, an optimised clamping system helps guarantee that the machine's complex travel can produce a high-precision workpiece.

The 5-axis clamping systems allow machining free of interfering edges and vibration, with extremely high cutting and feed forces. They enable the application of extremely short tools in order to guarantee the required tolerances and surfaces.



5 and 3 axis vices for trouble-free 5-sided machining with a single setup

- Can be set up on grid hole plates, on T-slot plates and on your own fixtures
- Clamping force up to 42 kN by installing a tension spindle immediately under the workpiece
- Clamping width 22 - 236 mm, can be extended as desired using extension shafts
- Clamps rough pieces, round and irregular parts
- Positive-fit clamping without pre-embossing
- Various clamping heights (see illustration)
- Low clamping depth of 8 mm



5 Axis clamping system



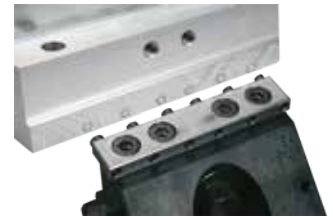
Special technical features - clamping process



before clamping

The clamping process involves the penetration of hardened, exchangeable clamping pins in to the workpiece. This guarantees positive-fit clamping without pre-embossing. Optionally, flattened clamping pins are available for clamping workpieces with sensitive surfaces. Additional flexible applications are possible using accessories, including clamping jaws for specific clamping tasks and round clamping elements for clamping round parts.

The 5 axis clamping systems provides you with a universal clamping element that is able to clamp workpieces with a clamping width of 22 - 236 mm. The clamping width can be extended as desired through the use of extension shafts.

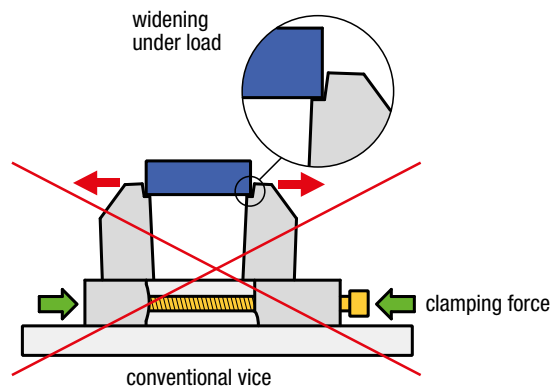


after clamping

High clamping forces up to 42 kN that are not lost due to flexing

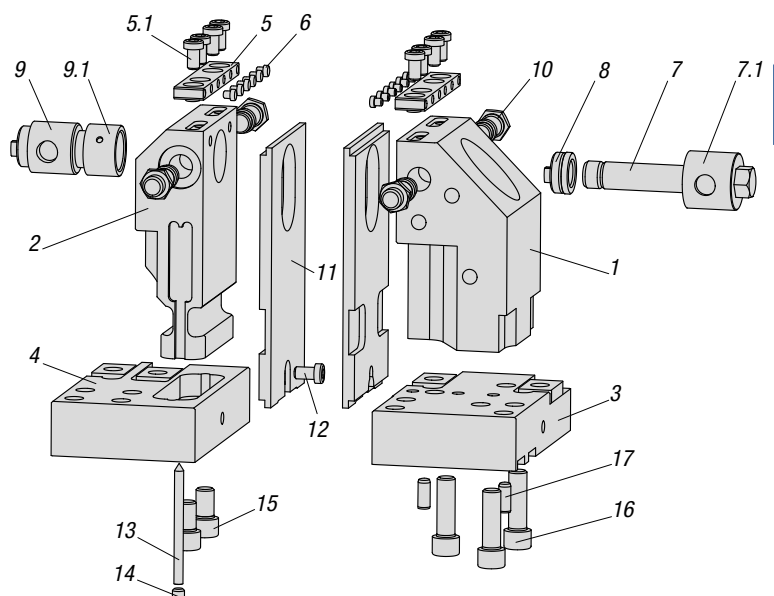
By installing a tension spindle directly under the workpiece support the clamping force is generated where it is required.

- no widening the jaws under load
- no distortion of the machine table
- extreme rigidity allows highest cutting forces



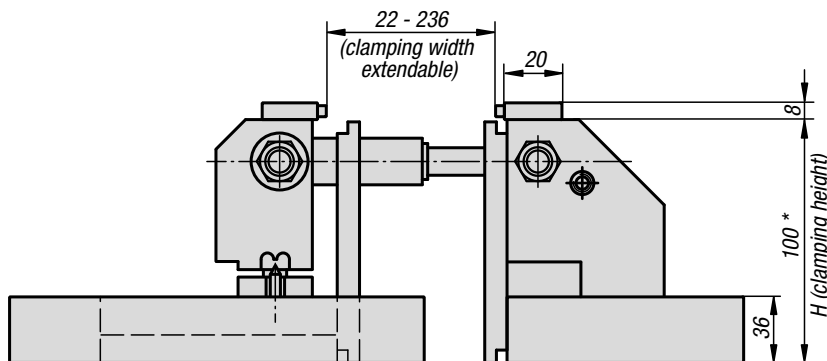
5-axis vice - system design

pos.	description	pcs.
1	fixed jaws	1
2	moveable jaws	1
3	base plate for fixed jaws	1
4	base plate for movable jaws	1
5	standard jaw pads with cap screws (5.1)	2
6	clamping pin	12
7	threaded spindle (7) with tension housing (7.1)	1
8	spindle nut	1
9	extension shaft (9) with union nut (9.1)	1
10	fastening screw	4
11	seating ledge	2
12	DIN 6912 M8x12 cap screw	2
13	pointer	1
14	DIN 913 M8x8 grub screw	1
15	DIN 912 M12x20 cap screw	2
16	DIN 912 M12x40 cap screw	3
17	DIN 7979 8x20 dowel pin	2



3-axis clamping system

for grid plates



Material:

Base plates and jaws low-carbon steel.
Seating ledges steel.
Jaw plates special steel.
Clamping pins tool steel.

Version:

Base plates and jaws black oxidised.
Seating ledges hardened, bright.
Jaw plates bright.
Clamping pins hardened, bright.

Sample order:

K0939.4012100

Note:

3-axis vices for mounting on grid plates. These vices enable 3-sided machining free of interfering edges with a clamping depth of only 8 mm. With this clamping system, clamping widths of 22 - 236 mm are possible, and can be extended as desired using the optionally available K0947 extension shafts.

By installing a tension spindle immediately under the workpiece support, a force of up to 22 kN is applied to the workpiece; this is not lost due to flexing. The use of clamping pins with a 4 mm cup point allows positive-fit clamping without pre-embossing.

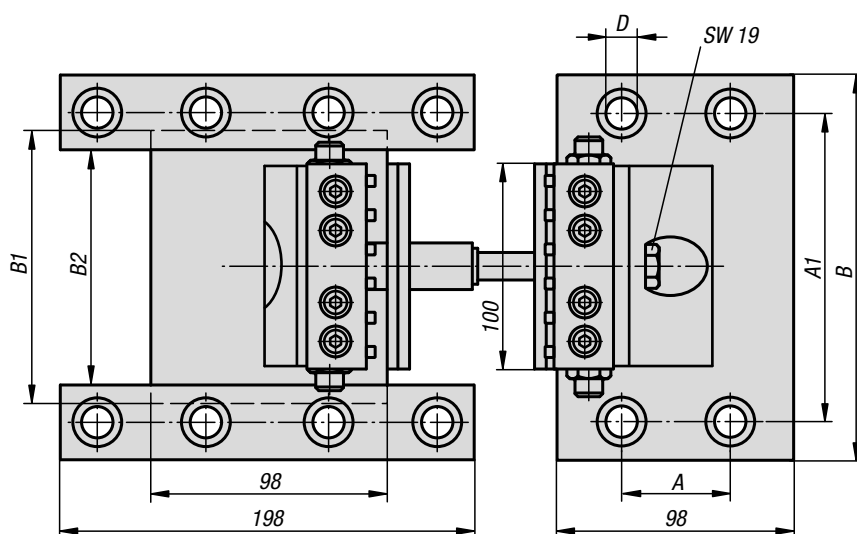
The shoulder screws K0815 are recommended for mounting the vices on grid hole plates.

The set includes one extension shaft with L = 60 mm and one with L = 120 mm.

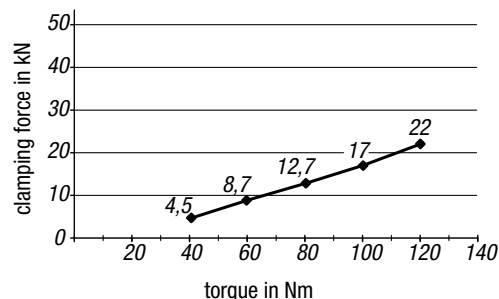
* The clamping height can be extended with the riser plates K0941 and seating ledges K0942.

Accessories:

Stop set K0948
Shoulder screws K0815



clamping force 3 axis clamping system

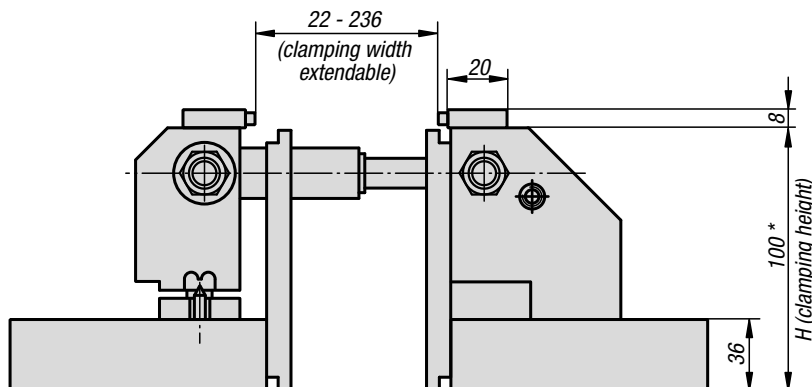


KIPP 3 Axis clamping system for grid plates

Order No.	Grid spacing	A	A1	B	B1	B2	D	H	Clamping force max. kN	weight kg
K0939.4012100	40x40 (M12)	40	160	190	148	124	12	100 *	22	18,88
K0939.5012100	50x50 (M12)	50	150	190	138	114	12	100 *	22	19,445
K0939.5016100	50x50 (M16)	50	150	190	134	110	16	100 *	22	18,74

3-axis clamping system

for T-slots



Material:

Base plates and jaws low-carbon steel.
Seating ledges steel.
Jaw plates special steel.
Clamping pins tool steel.

Version:

Base plates and jaws black oxidised.
Seating ledges hardened, bright.
Jaw plates bright.
Clamping pins hardened, bright.

Sample order:

K0940.063100

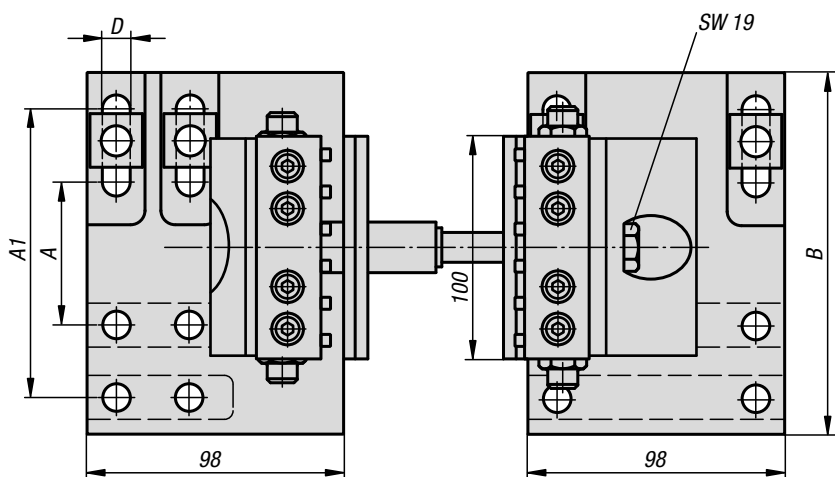
Note:

3-axis vices for mounting on machine tables with T-slots. These vices enable 3-sided machining free of interfering edges with a clamping depth of only 8 mm. With this clamping system, clamping widths of 22 - 236 mm are possible, and can be extended as desired using the optionally available K0947 extension shafts. By installing a tension spindle immediately under the workpiece support, a force of up to 22 kN is applied to the workpiece, this is not lost due to flexing. The use of clamping pins with a 4 mm cup point allows positive-fit clamping without pre-embossing. The fastening set K0951 is recommended for mounting the vices on T-slot tables. The set includes one extension shaft with L = 60 mm and one with L = 120 mm.

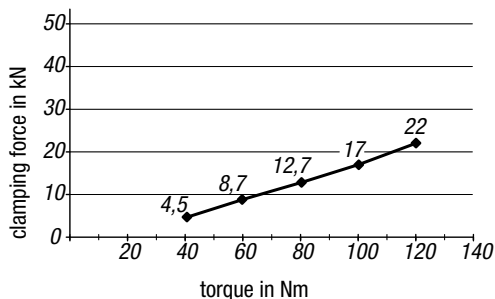
* The clamping height can be extended with the riser plates K0941 and seating ledges K0942.

Accessories:

Stop set K0948
Fastening set K0951



clamping force 3 axis clamping system

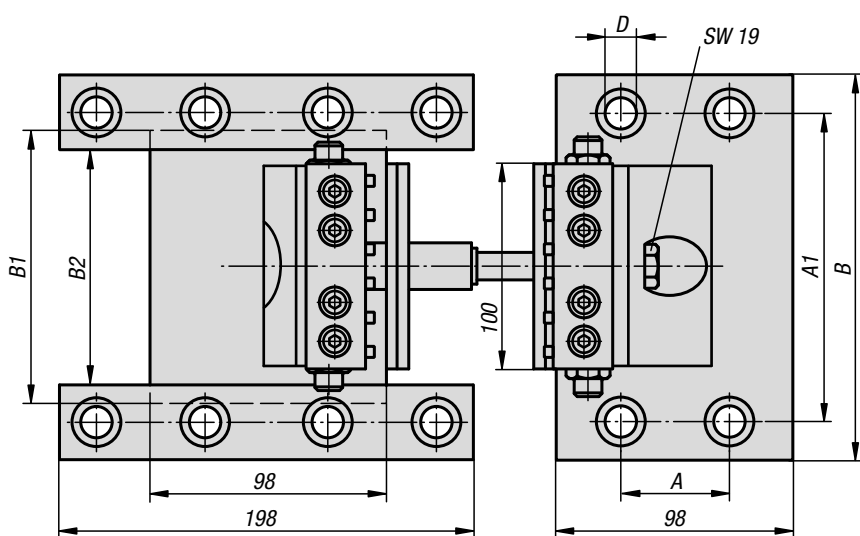
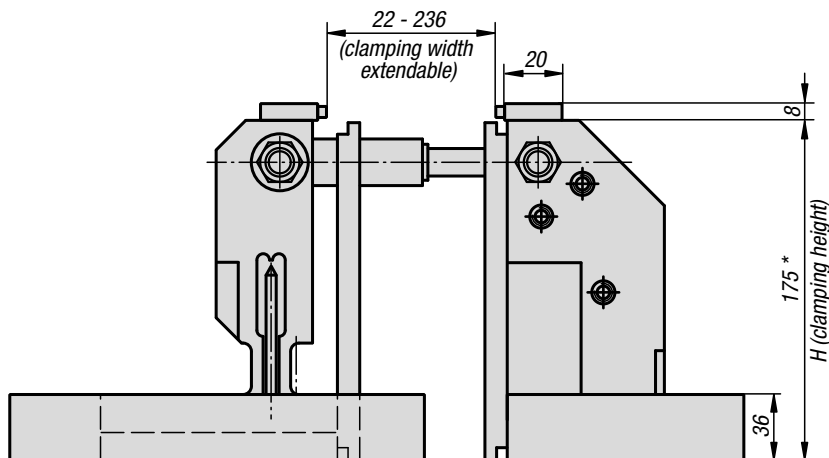


KIPP 3 Axis clamping system for T-slots

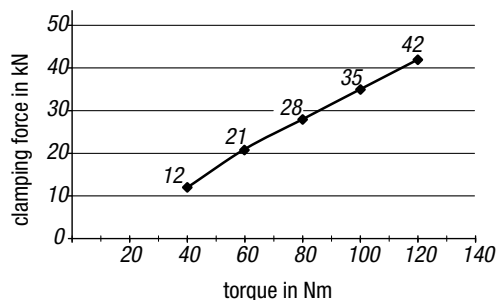
Order No.	Suitable for	A	A1	B	D	H	Clamping force max. kN	weight kg
K0940.063100	slot spacing 63 - 126	63	126	158	12,5	100 *	22	14,8

5-axis clamping system

for grid plates



clamping force 5 axis clamping system



Material:

Base plates and jaws low-carbon steel.
Seating ledges steel.
Jaw plates special steel.
Clamping pins tool steel.

Version:

Base plates and jaws black oxidised.
Seating ledges hardened, bright.
Jaw plates bright.
Clamping pins hardened, bright.

Sample order:

K0939.4012175

Note:

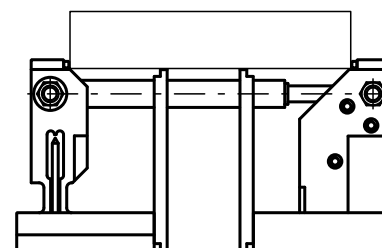
5-axis vices for mounting on grid plates. These vices enable 5-sided machining free of interfering edges with a clamping depth of only 8 mm. With this clamping system, clamping widths of 22 - 236 mm are possible, and can be extended as desired using the optionally available K0947 extension shafts.

By installing a tension spindle immediately under the workpiece support, a force of up to 42 kN is applied to the workpiece; this is not lost due to bending. The use of clamping pins with a 4 mm cup point allows positive-fit clamping without pre-embossing. The shoulder screws K0815 are recommended for mounting the vices on grid hole plates. The set includes one extension shaft with L = 60 mm and one with L = 120 mm.

* The clamping height can be extended with the riser plates K0941 and seating ledges K0942.

Accessories:

Stop set K0948
Locating bolts K0815

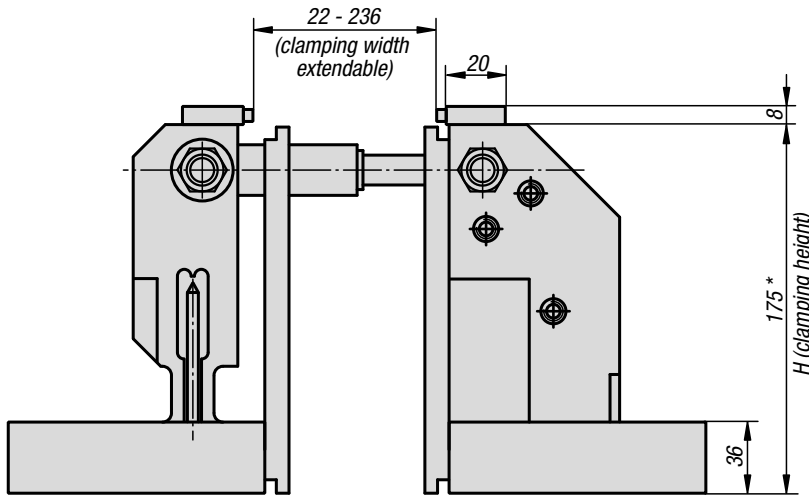


KIPP 5 Axis clamping system for grid plates

Order No.	Grid spacing	A	A1	B	B1	B2	D	H	Clamping force max. kN	weight kg
K0939.4012175	40x40 (M12)	40	160	190	148	124	12	175*	42	25,095
K0939.5012175	50x50 (M12)	50	150	190	138	114	12	175*	42	25,232
K0939.5016175	50x50 (M16)	50	150	190	134	110	16	175*	42	25

5-axis clamping system

for T-slots

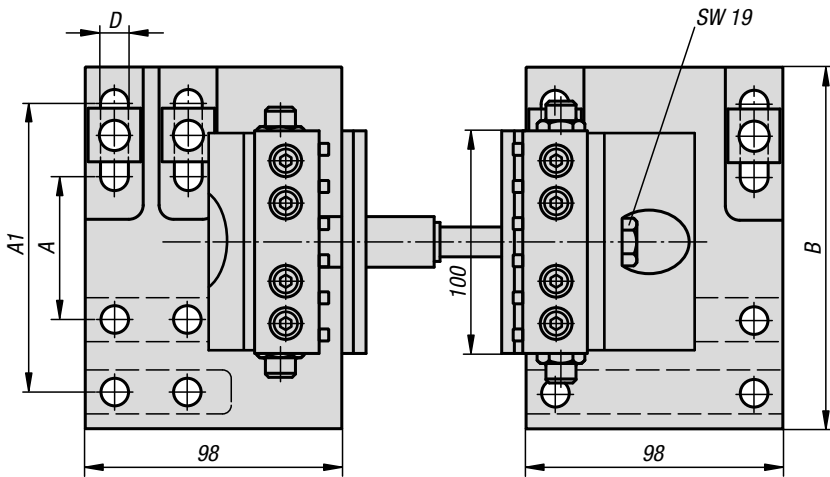


Material:
 Base plates and jaws low-carbon steel.
 Seating ledges steel.
 Jaw plates special steel.
 Clamping pins tool steel.

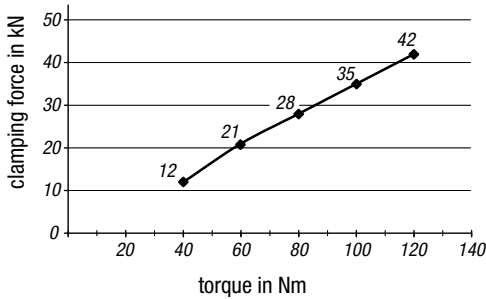
Version:
 Base plates and jaws black oxidised.
 Seating ledges hardened, bright.
 Jaw plates bright.
 Clamping pins hardened, bright.

Sample order:
 K0940.063175

Note:
 5-axis vices for mounting on machine tables with T-slots. These vices enable 5-sided machining free of interfering edges with a clamping depth of only 8 mm. With this clamping system, clamping widths of 22–236 mm are possible, and can be extended as desired using the optionally available K0947 extension shafts. By installing a tension spindle immediately under the workpiece support, a force of up to 42 kN is applied to the workpiece, this is not lost due to flexing. The use of clamping pins with a 4 mm cup point allows positive-fit clamping without pre-embossing. The fastening set K0951 is recommended for mounting the vices on T-slot tables. The set includes one extension shaft with L = 60 mm and one with L = 120 mm.



clamping force 5 axis clamping system



* The clamping height can be extended with the riser plates K0941 and seating ledges K0942.

Accessories:
 Stop set K0948
 Fastening set K0951



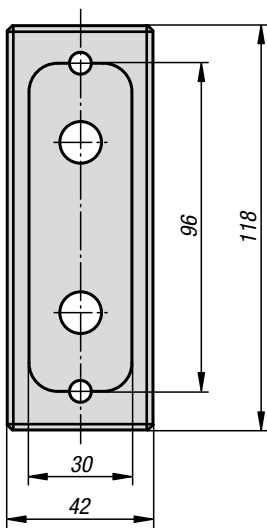
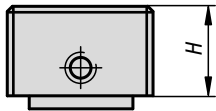
KIPP 5 Axis clamping system for T-slots

Order No.	Suitable for	A	A1	B	D	H	Clamping force max. kN	weight kg
K0940.063175	slot spacing 63 - 126	63	126	158	12,5	175 *	42	21,32

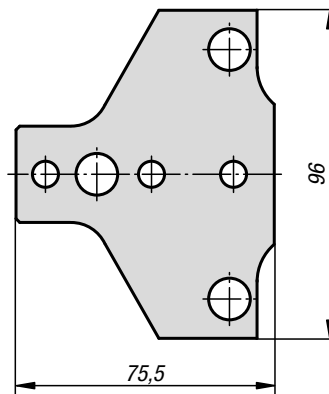
Riser plates



risers for
moveable side



risers for
fixed side



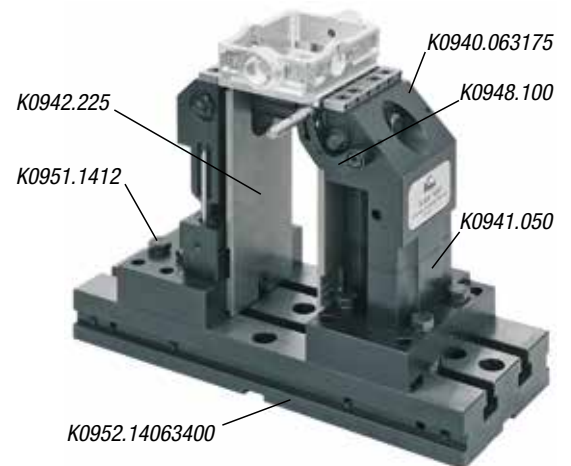
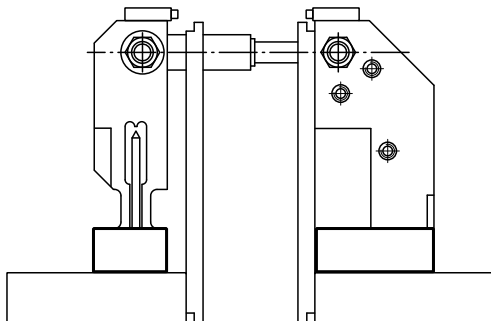
Material:
Steel.

Version:
Black oxidised.

Sample order:
K0941.025
(supplied in pairs)

Note:
The riser plates are mounted between the base plate and the jaw body, raising the 3-axis vices to 125 or 150 mm. The 5-axis vices can be raised to 200, 225 or 250 mm. When using the riser plates the matching seating ledges K0942 must also be installed.

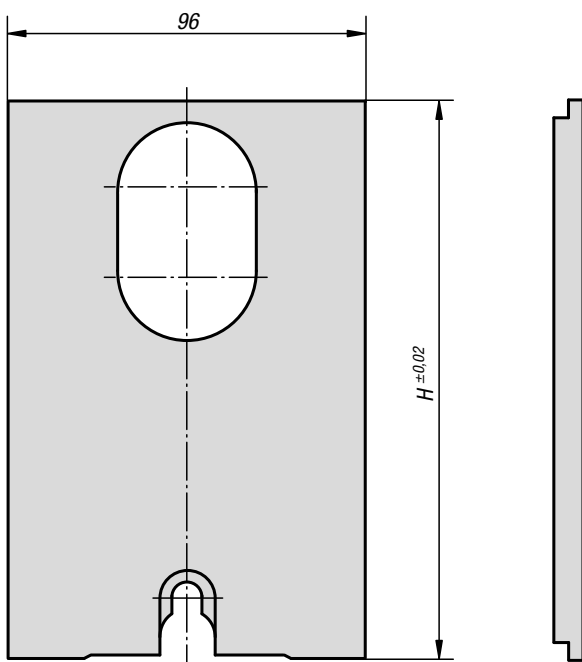
Supplied with fastening screws and cylindrical pins.



KIPP Riser plates

Order No.	H	weight kg
K0941.025	25	1,945
K0941.050	50	3,68
K0941.075	75 (25 + 50)	5,271

Seating ledges



Material:

Steel.

Version:

Hardened and bright.

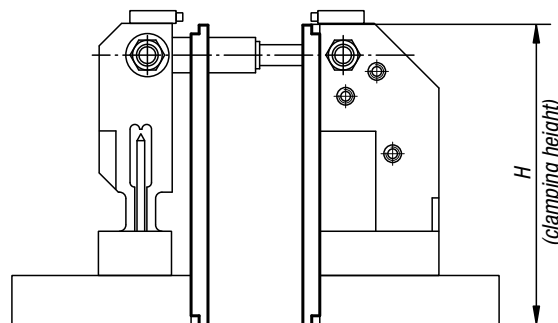
Sample order:

K0942.100
(supplied in pairs)

Note:

If the riser plates K0941 are used to raise the height, the seating ledges must be changed to suit.

*Including 12 jaw pins K0946.05600.

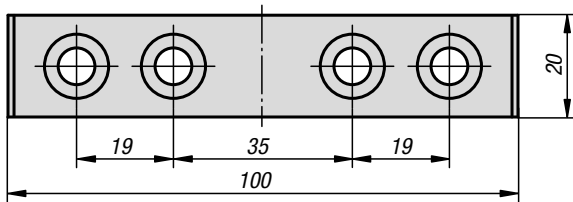
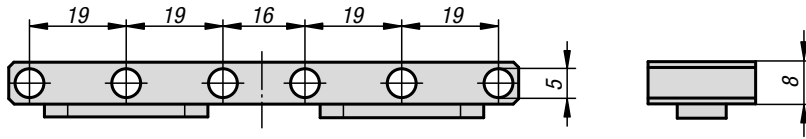


KIPP Seating ledges

Order No.	H	Suitable for
K0942.100	100	3-axis vice basic set
K0942.105*	105	3-axis vice basic set
K0942.125	125	3-axis vice with 25 mm riser plate
K0942.150	150	3-axis vice with 50 mm riser plate
K0942.175	175	5-axis vice basic set
K0942.180*	180	5-axis vice basic set
K0942.200	200	5-axis vice with 25 mm riser plate
K0942.225	225	5-axis vice with 50 mm riser plate
K0942.250	250	5-axis vice with 75 mm riser plate (25 + 50)

K0943

Jaw plates standard



Material:
Special steel.

Version:
Bright.

Sample order:
K0943.110008

Note:
Jaw plates with holes to press the jaw pins into.
Suitable for all 3-axis and 5-axis vices.

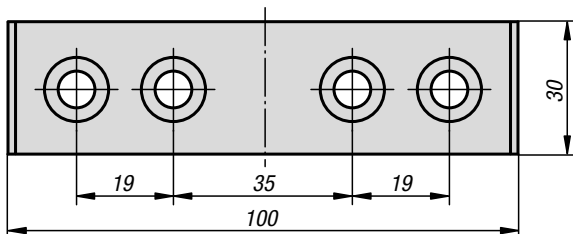
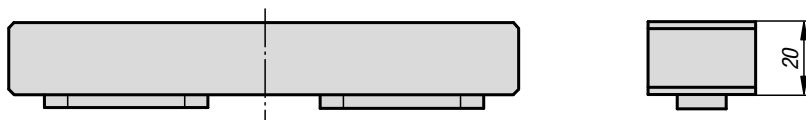
Accessories:
Jaw pins K0946

KIPP Jaw plates, standard

Order No.	Suitable for
K0943.110008	All 3-axis and 5-axis clamping systems

K0944

Jaw plates machinable



Material:
Steel 1.0503.

Version:
Bright.

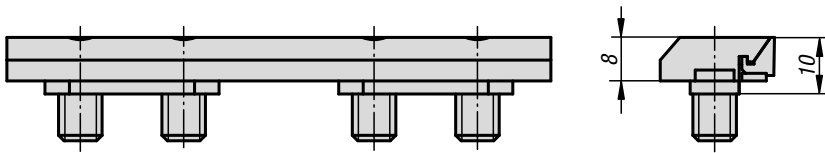
Sample order:
K0944.210020

Note:
Machinable jaw plates can be machined to suit specific workpieces. Suitable for all 3-axis and 5-axis vices.

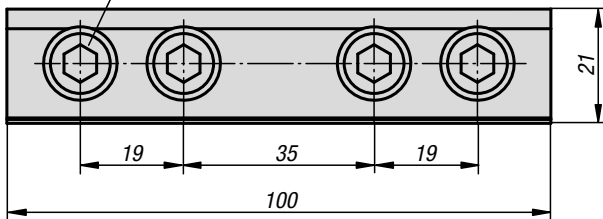
KIPP Jaw plates, machinable

Order No.	Suitable for
K0944.210020	All 3-axis and 5-axis clamping systems

Draw-down jaws



DIN 6912 M8x12 8.8 cap screw



Material:
Special steel.

Version:
Bright.

Sample order:
K0953.110008

Note:
Positive down jaw plates for clamping pre-machined workpieces.
Suitable for all 3-axis and 5-axis vices.

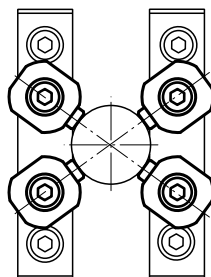
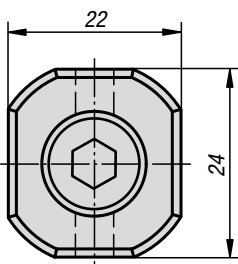
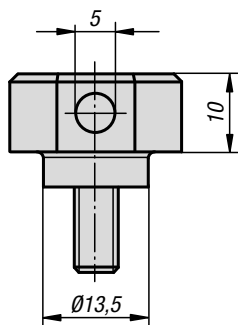
Supplied in pairs.

KIPP Draw-down jaws

Order No.	Suitable for
K0953.110008	All 3-axis and 5-axis clamping systems

Jaw adapters

for round workpieces



Material:
Jaw adapters Q&T steel.
Cap screw steel.

Version:
Jaw adapters black oxidised.
Cap screw, grade 10.9.

Sample order:
K0945.135010
(supplied in sets of 4)

Note:
For clamping round workpieces with a diameter of 30–200 mm. Screwed directly into the standard or machinable jaw plates.

KIPP Jaw adapters for round workpieces

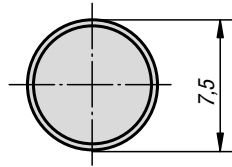
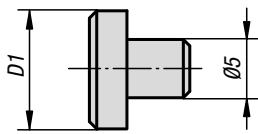
Order No.	Suitable for
K0945.135010	All 3-axis and 5-axis clamping systems

Accessories:
Jaw pins K0946

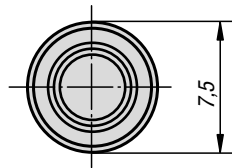
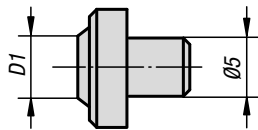
Jaw pins



flattened



cup point



Material:
Tool steel.

Version:
Hardened.

Sample order:
K0946.05600

Note:
Suitable for standard jaw plates and jaw adapters of round workpieces.
Installed by pressing in.

KIPP Jaw pins

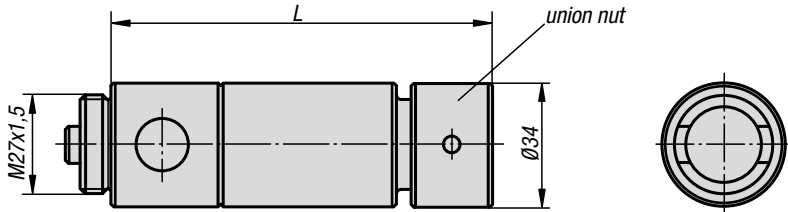
Order No.	Version 1	D1	Application
K0946.05000	flattened	7,5	material over 1000 N/mm ² tensile strength
K0946.05400	cup point	4	material up to ca. 1000 N/mm ² tensile strength
K0946.05600	cup point	6	material up to ca. 1000 N/mm ² tensile strength

Applications



Extension shafts

with union nut



Material:
Carbon steel.

Version:
Black oxidised.

Sample order:
K0947.060

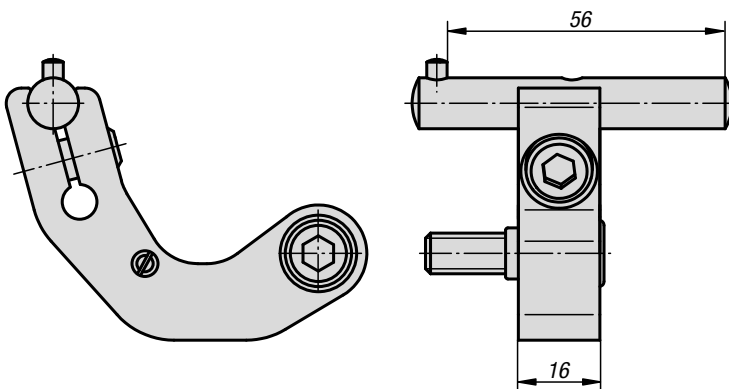
Note:
To extend the clamping width.
Supplied with union nut. The extension shafts can be combined as desired.

KIPP Extension shafts with union nut

Order No.	L	Clamp range
K0947.060	60	22-82
K0947.120	120	82-142
K0947.240	240	extension by 240 mm
K0947.480	480	extension by 480 mm

K0948

Stop set



Material:
Steel.

Version:
Swivel arm, black oxidised.
Stop pin bright.

Sample order:
K0948.100

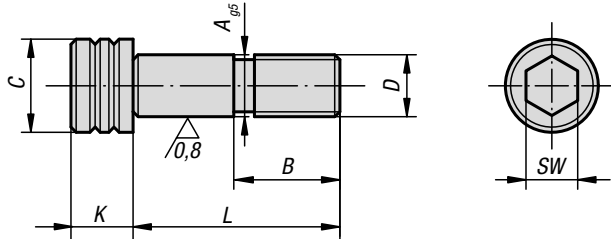
Note:
Stop set for direct fastening to fixed jaws. The stop can be swivelled aside for machining of the workpiece without losing the stop dimension. Supplied complete with attaching parts.

KIPP Stop set

Order No.	Suitable for
K0948.100	All 3-axis and 5-axis clamping systems

Shoulder screws

Form B



Material:
Carbon steel.

Version:
Tempered, black oxidised.
Precision diameters ground.

Sample order:
K0815.12055

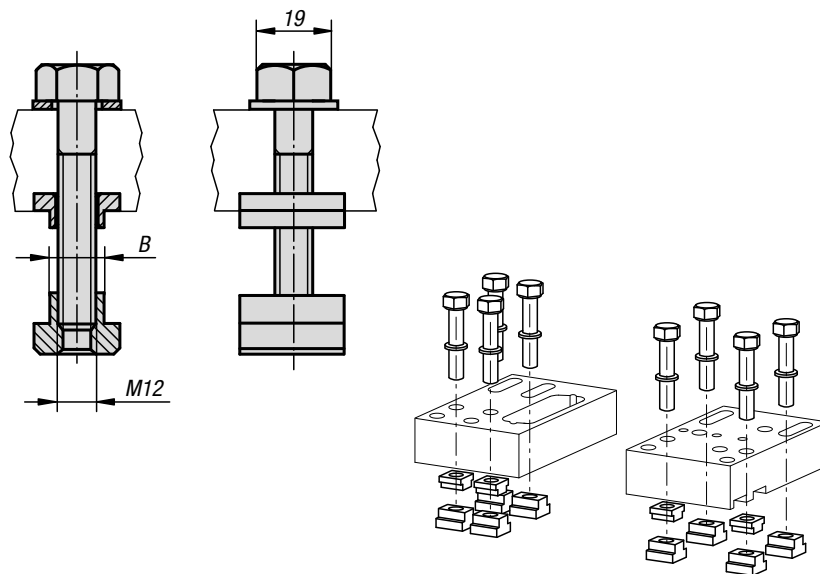
KIPP Shoulder screws Form B

Order No.	Form	A	B	C	D	K	L	SW	Tightening torque max. Nm
K0815.12055	B	12	22	18	M12	12	55	10	88
K0815.16055	B	16	25	24	M16	16	55	14	216

K0951

Fastening set

for T-slots



Material:
Carbon steel.

Version:
Black oxidised.

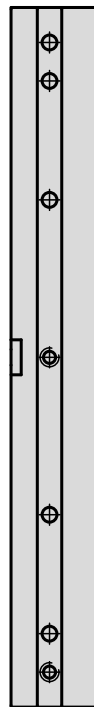
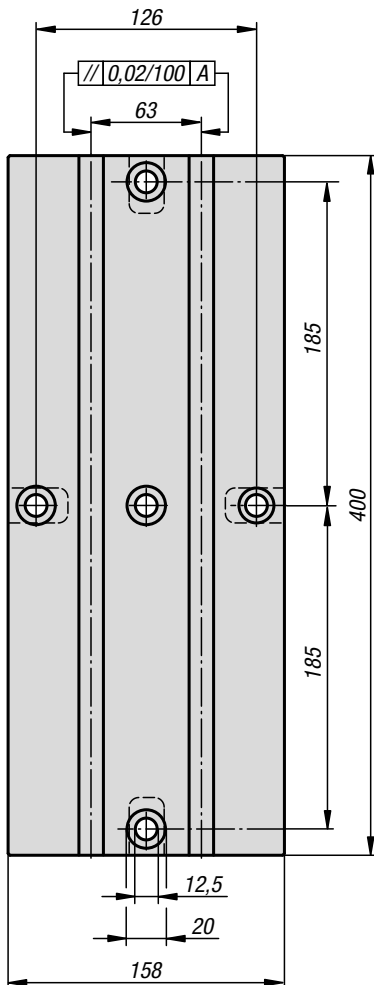
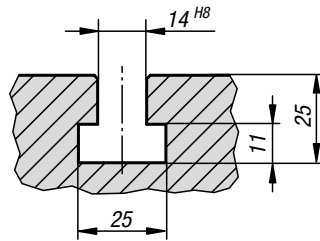
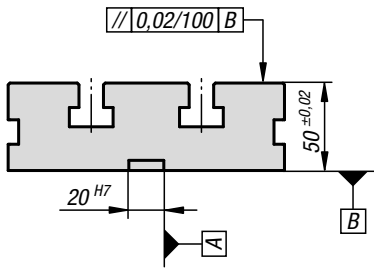
Sample order:
K0951.1412

Note:
Fastening sets for aligning and securing 3 and 5 axis vices on tables with T-slots sizes 14 or 18.
Sets consisting of:
8x ISO 4014 M 12x60 12.9 hex head bolts
8x DIN 508 T-slot nuts
8x washers
4x slot keys

KIPP Fastening set for T-slots

Order No.	Version	B
K0951.1412	Slot width 14	14
K0951.1812	Slot width 18	18

T-slot plate



Material:

Carbon steel.

Version:

Black oxidised.
Contact faces ground.

Sample order:

K0952.14063400

Note:

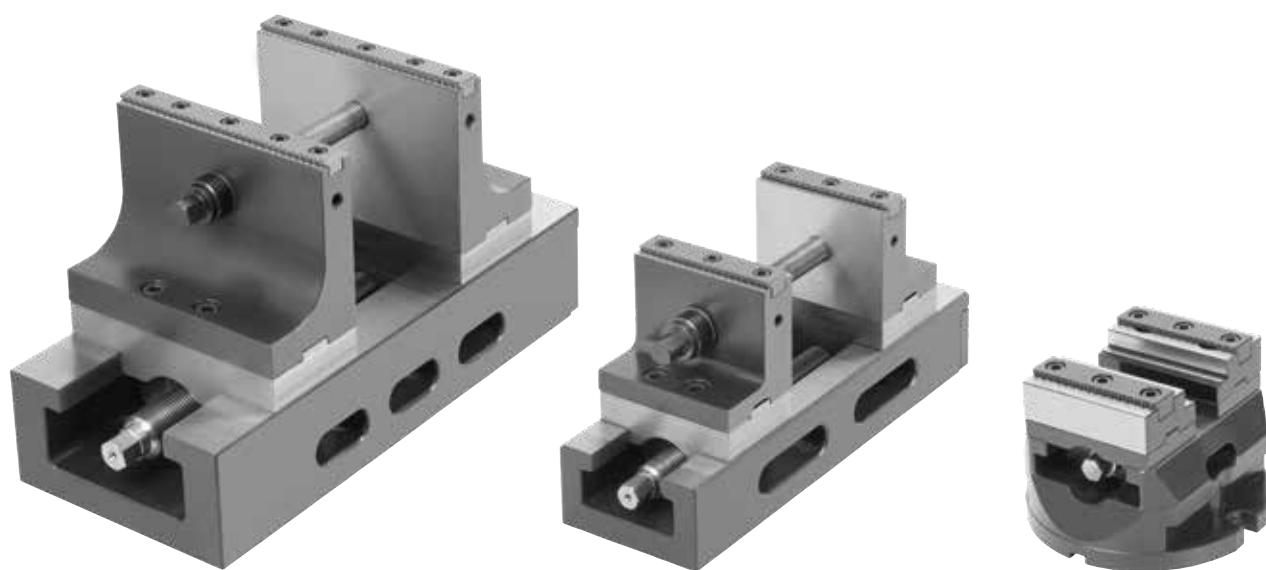
T-slot plates with locating slots on the underside for easy alignment of the plate on the machine table.



KIPP T-slot plate

Order No.	Version	weight kg
K0952.14063400	Slot width 14 / slot spacing 63	21,135

Centric vices



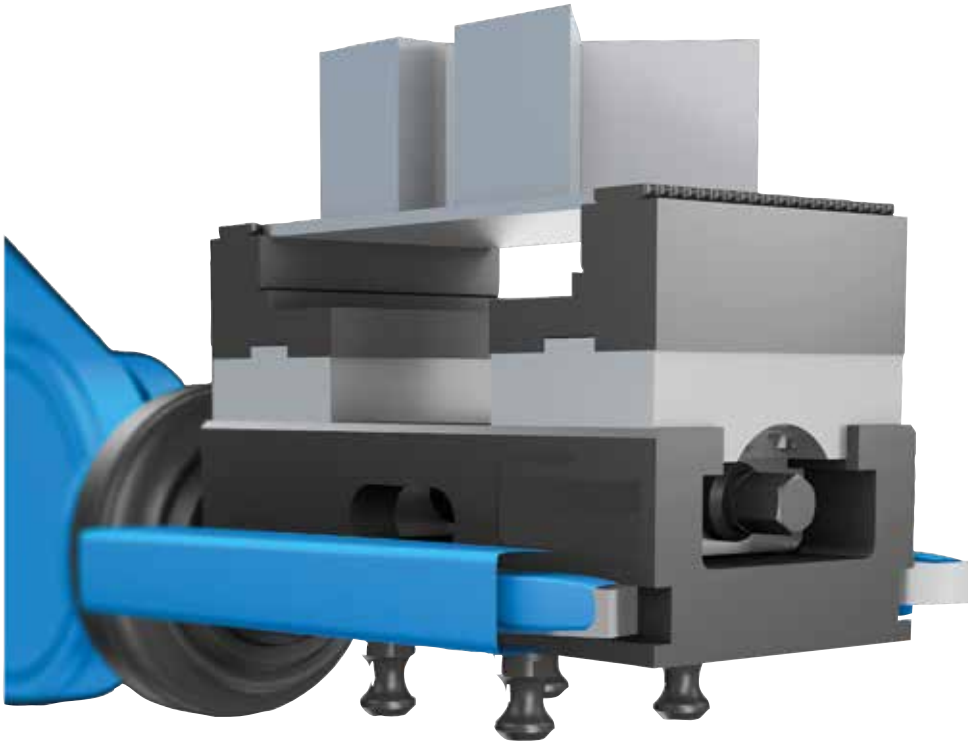
Technical information for centric vices



Mechanically actuated centric vice

Centring precision ± 0.02 mm across the entire clamping range.

We recommend using a torque wrench for controlling the clamping force.



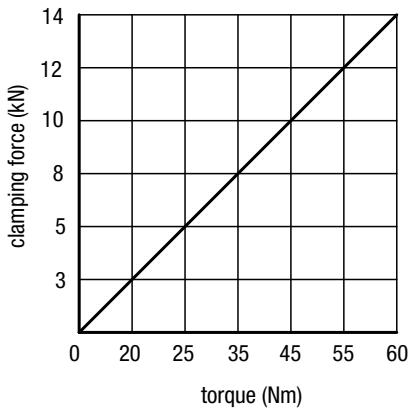
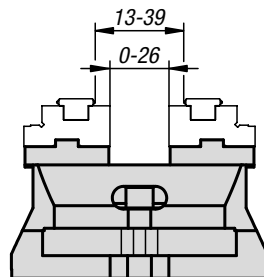
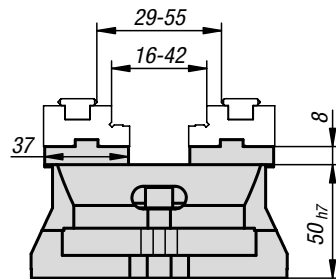
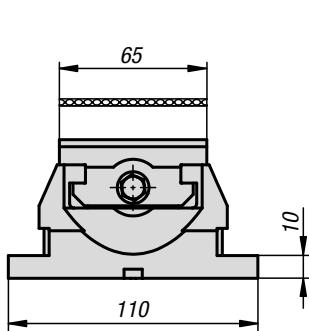
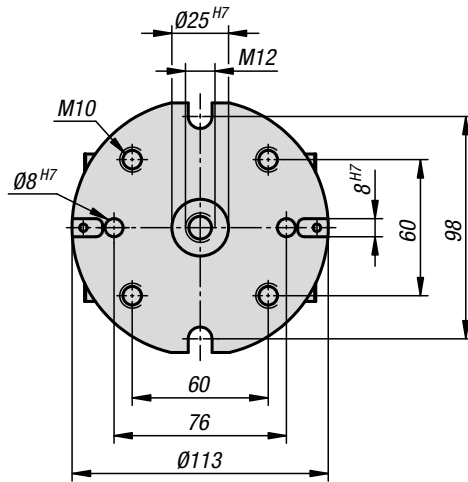
Flexible connection options:

1. Support for the zero-point clamping system. Fitting 25H6/M12.
Reamed and tapped holes for clamping pins for zero-point clamping systems are integrated into each centric vice. These vices can therefore be used on conventional zero-point clamping systems.
2. Support for handling systems / suitable for automation.
There is also the option of transporting the centric vices using handling systems.
3. Support with adapter plate for grid system M12/Ø12F7, grid spacing 50 mm.
Assembly with an adapter plate suitable for grid systems M12/Ø12F7 ensures flexible positioning on basic elements with a grid system.
4. Support directly on the machine table.
Using the lateral fastening slots, the centric vices can also be mounted on the machine table as required.



Centric vices

jaw width 65 mm



Material:

Body and jaw holder mild steel.
Spindle high-strength special steel.

Version:

Body and jaw holder hardened and ground.

Sample order:

K1236.065100

Note for ordering:

Supplied with hexagon crank handle.
Order jaw plates separately.

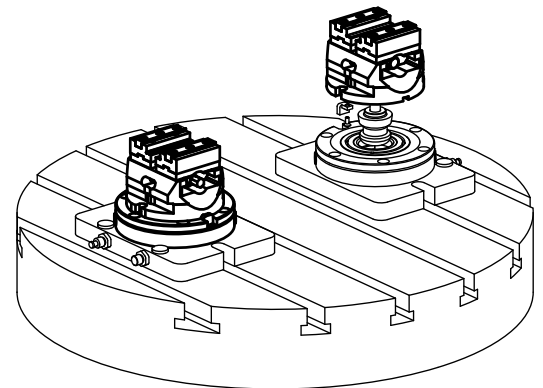
Note:

Mechanically operated centric vice.
Suitable for automation: prepared with gripper slot for handling systems.
Flexible mounting: suitable for zero-point systems, mounting on machine tables or on custom systems via a baseplate.
Centring precision: +/- 0.02 mm.

The use of a torque wrench is recommended to achieve a controlled clamping force.

Features:

- Clamping slide and spindle nut in one piece
- Slots and fastening threads for mounting attachment jaws
- Reversible jaws (accessories) with lateral thread for workpiece stop enables a wider clamping range
- Good swarf and coolant removal

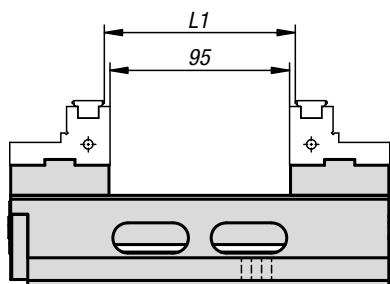
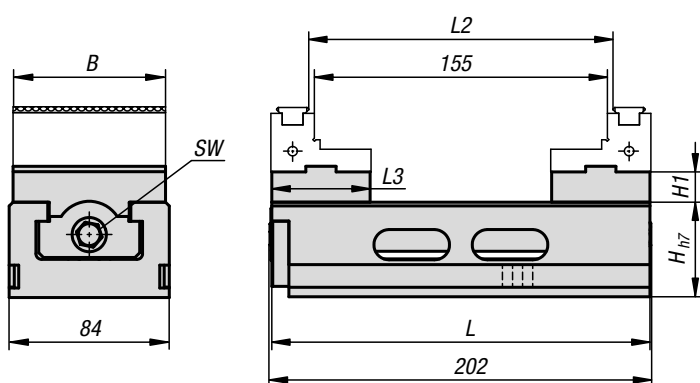
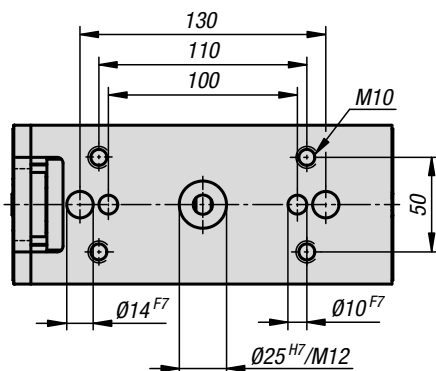


KIPP Centric vice jaw width 65 mm

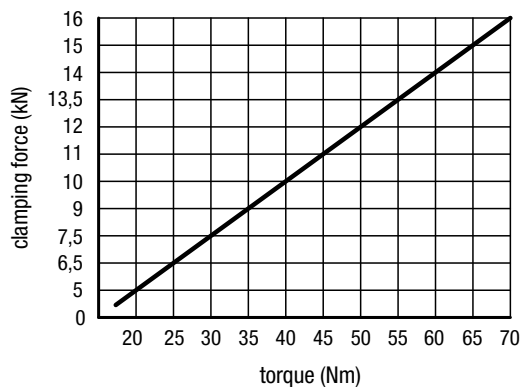
Order No.	Dimensions	weight kg
K1236.065100	see drawing	2,95

Centric vices

jaw width 80–125 mm



B = 80 mm



Material:

Body and jaw holder mild steel.
Spindle high-strength special steel.

Version:

Body and jaw holder hardened and ground.

Sample order:

K1237.080200

Note for ordering:

Supplied with hexagon crank handle.
Order jaw plates separately.

Note:

Mechanically operated centric vice.
Suitable for automation: prepared with gripper slot for handling systems.
Flexible mounting: suitable for zero-point systems, mounting on machine tables or on custom systems via a baseplate.
Centring precision: +/- 0.02 mm.

The use of a torque wrench is recommended to achieve a controlled clamping force.

Features:

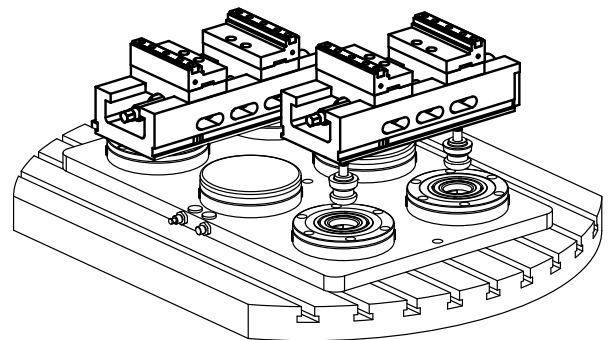
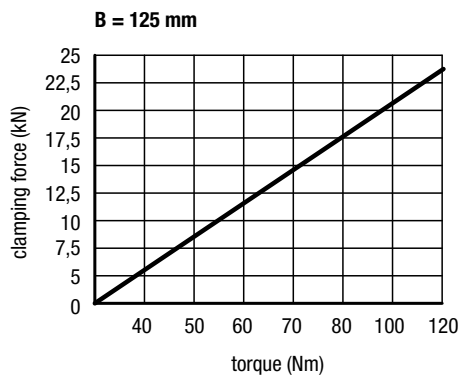
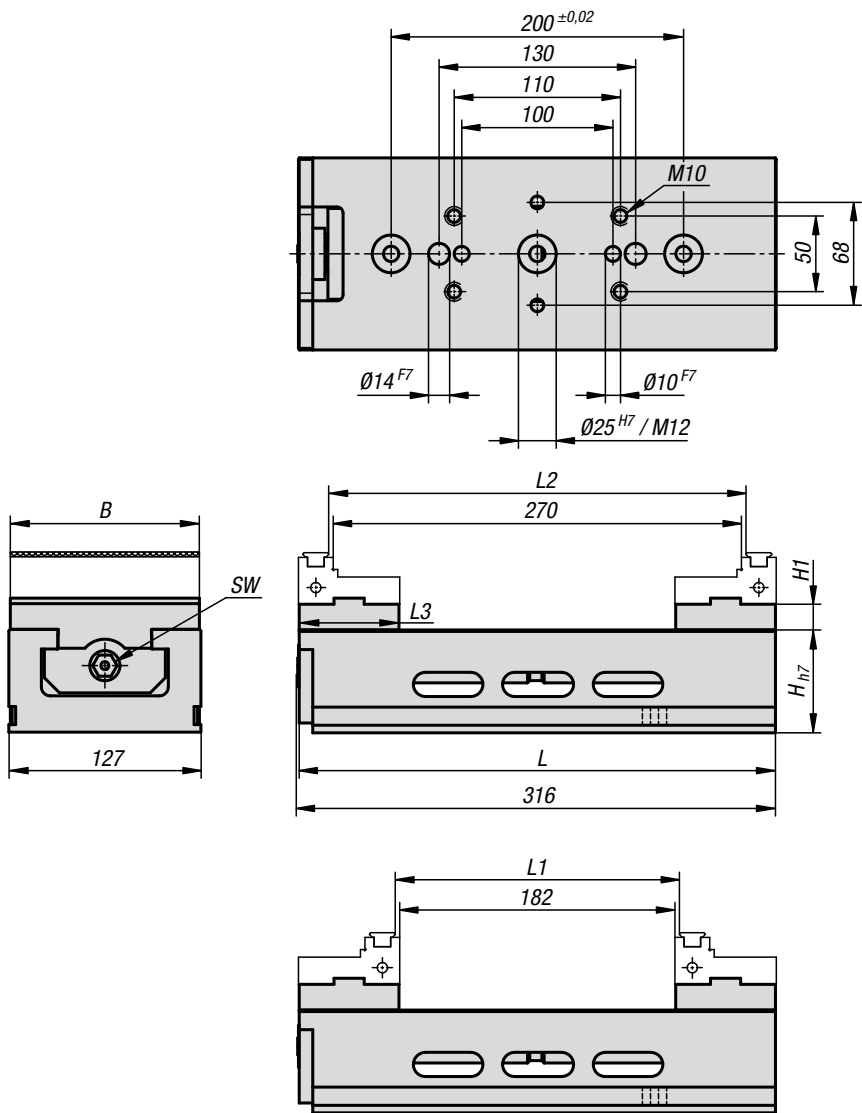
- Clamping slide and spindle nut in one piece
- Slots and fastening threads for mounting attachment jaws
- Reversible jaws (accessories) with lateral thread for workpiece stop enables a wider clamping range
- Good swarf and coolant removal

KIPP Centric vices, jaw width 80 mm

Order No.	B	H	H1	L	L1	L2	L3	SW	weight kg
K1237.080200	80	50h7	16	200	6-101	66-161	52	12	5,82

Centric vices

jaw width 80–125 mm

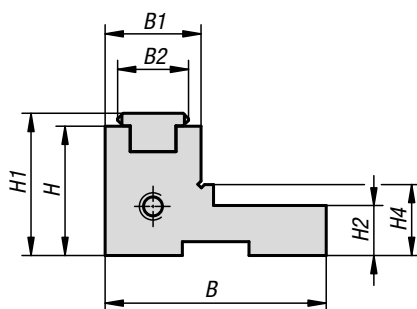
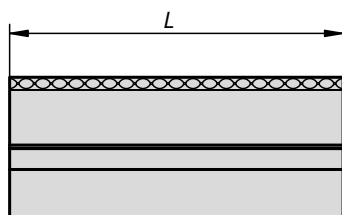


KIPP Centric vices, jaw width 125 mm

Order No.	B	H	H1	L	L1	L2	L3	SW	weight kg
K1237.125315	125	68h7	17	315	6-188	94-276	66	14	16,85

Attachment jaws

stepped, with grip rail



Material:

Steel.

Version:

Stepped jaws hardened, clamping faces ground.
Grip rail hardened.

Sample order:

K0587.0801

Note:

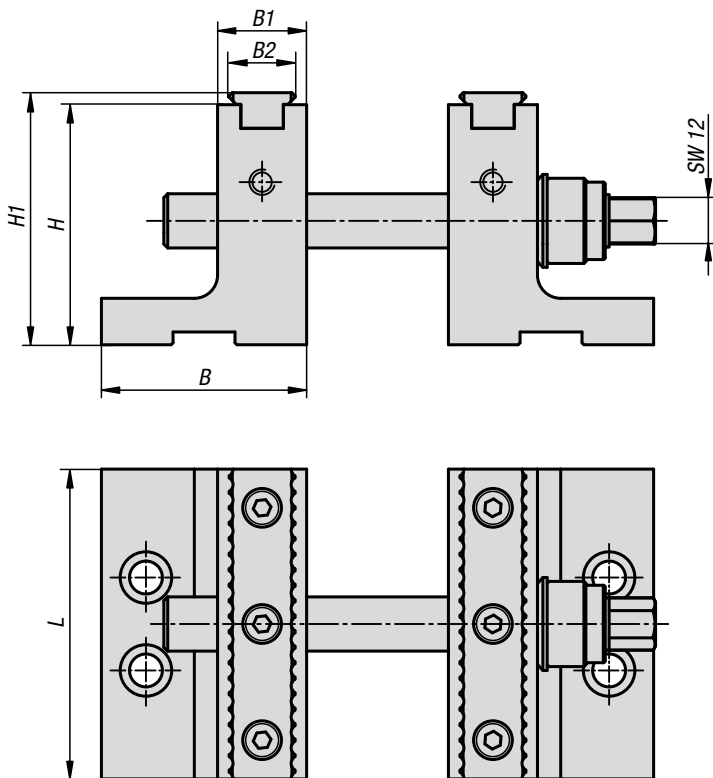
These attachment step jaws are suitable for centric vices. The clamping width can be increased or decreased by reversing the jaws. The gripper jaw pads can also be exchanged for smooth jaw pads.

KIPP Attachment jaws, stepped, with grip rail

Order No.	B	B1	B2	H	H1	H2	H4	L	weight kg
K0587.0651	38	30	17	18	21,1	9	9,5	65	0,354
K0587.0801	53	23	17	31	34,1	12	17	80	0,5
K0587.1251	67	23	17	31	34,1	18	23	125	1,55

Step jaw attachment

for 5-axis machining



Material:
Steel.

Version:
Stepped jaws hardened, clamping faces ground.
Grip rail hardened.

Sample order:
K1115.0801

Note for ordering:
High attachment step jaws in pairs with two gripper inserts and three different lengths of clamping spindle.

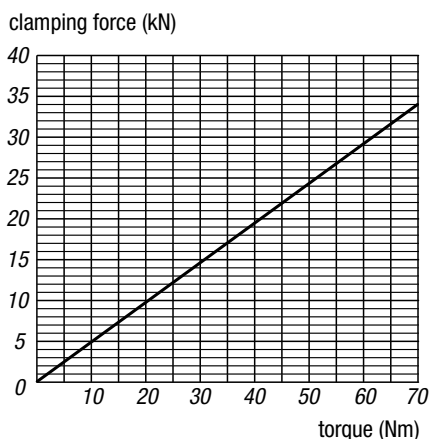
Note:
The workpiece is first centred using the lower centring spindle, then finally clamped using the upper clamping spindle.

Basic set:
For 80 mm jaw width.
Supplied with a pair of high add-on step jaws with 2 gripper inserts and 3 clamping spindles in various lengths.
1. length 80 mm clamping range 6mm - 35mm.
2. length 140 mm clamping range 6mm - 95mm.
3. length 200 mm clamping range 6mm - 155mm.

For jaw width 125 mm.
Supplied with a pair of high attachment step jaws with 2 gripper inserts and 3 clamping spindles in various lengths.
1. Length 110 mm, clamping range 6 mm – 60 mm.
2. Length 245 mm, clamping range 6 mm – 200 mm.
3. Length 315 mm, clamping range 6 mm – 270 mm.

Advantages:
Ideal for 5-side machining. High setup on the machine table for 5-axis machines. Clamping force directly under the workpiece. The attachment jaws can be retrofitted for the 80 mm and 125 mm centric vices. The workpiece is first centred using the lower centring spindle, then finally clamped using the upper clamping spindle.

clamping force diagram

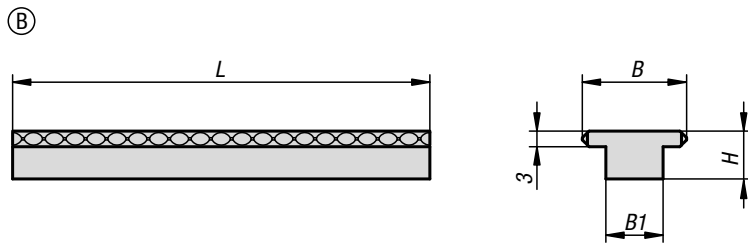
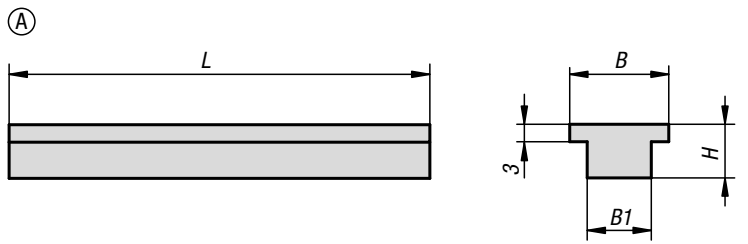


KIPP Step jaw attachment for 5-axis machining

Order No.	Version 1	B	B1	B2	H	H1	L	weight kg
K1115.0801	for 5-axis machining	53	23	17	62	65,1	80	2,689
K1115.1251	for 5-axis machining	67	23	17	90	93,1	125	6,32

Inserts

for stepped jaw



Material:
Steel.

Version:
Hardened and ground.

Sample order:
K0591.080117

Note:
Inserts Form A with smooth face Form B serrated face for maximum holding force.

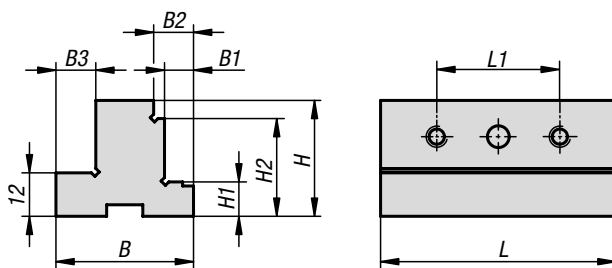
KIPP Inserts for stepped jaws

Order No. Form A	Order No. Form B	B	B1	H	L
K0591.065117	K0591.065217	17	11	9,2	65
K0591.080117	K0591.080217	17	11	9,2	80
K0591.125117	K0591.125217	17	11	9,2	125

K1383

Attachment step jaws

for centric vice, jaw width 65 mm



Material:
Steel.

Version:
Hardened.

Sample order:
K1383.06532

Note:
Attachment step jaws are the base onto which the jaw pads are screwed. They in turn are screwed directly onto the centric vice base. They enable various jaw plates to be exchanged quickly.

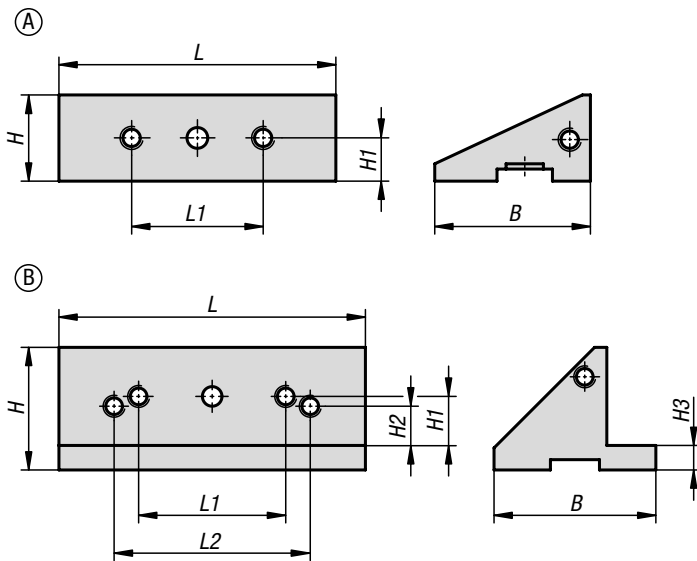
KIPP Attachment step jaws for centric vice, jaw width 65 mm

Order No.	B	B1	B2	B3	H	H1	H2	L	L1
K1383.06532	38	8	11	11	32	9,5	27	65	34

Suitable for K1236

Attachment step jaws

for centric vice, jaw width 80–125 mm



Material:
Steel.

Version:
Hardened.

Sample order:
K1384.08025

Note:
Attachment step jaws are the base onto which the jaw pads are screwed. They in turn are screwed directly onto the centric vice base. They enable various jaw plates to be exchanged quickly.

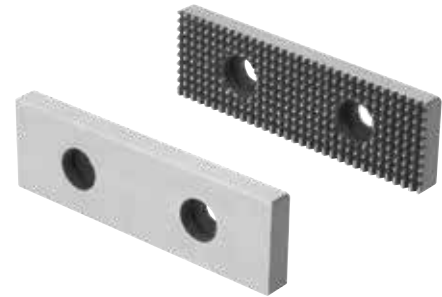
Suitable for K1237

KIPP Attachment step jaws for centric vice, jaw width 80–125 mm

Order No.	Form	B	H	H1	H2	H3	L	L1	L2
K1384.08025	A	45	25	12,5	-	-	80	38	-
K1384.12550	B	66	50	20	16	10	125	60	80

Jaw pads

for centric vice 65-80-125 mm



Material:
Steel hardened.

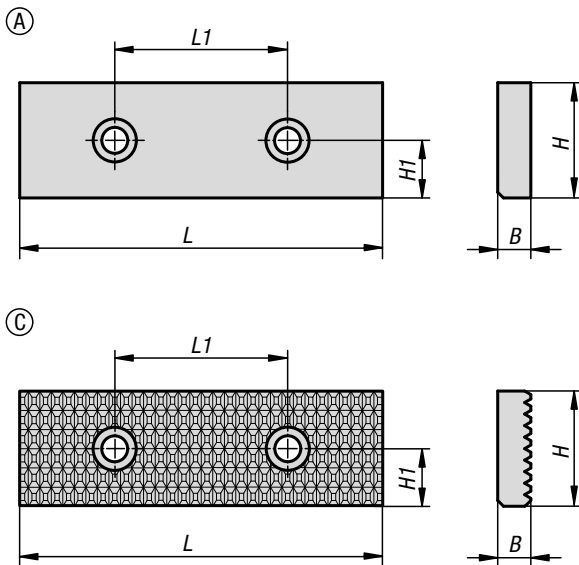
Version:
Clamping faces ground.

Sample order:
K0598.0651

Note:
These jaw pads can be used for clamping various workpiece types. Depending on the pad used, rough or pre-machined workpieces can be held. The jaw pads are screwed onto the attachment jaws.

Suitable for K1236, K1237

Drawing reference:
Form A: smooth
Form C: serrated

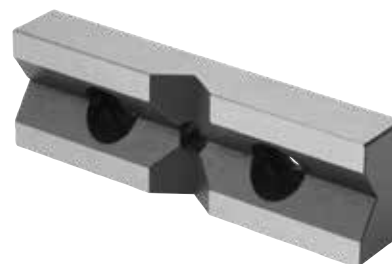
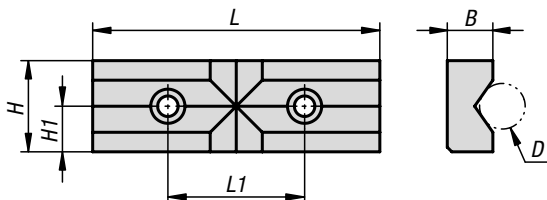


KIPP Jaw pads for centric vice 65-80-125 mm

Order No.	Form	B	H	H1	L	L1
K0598.0651	A	7,5	20	10	66	34
K0598.0801	A	7,5	25	12,5	81	38
K0598.1251	A	11,5	40	20	126	60
K0598.0653	C	7,5	20	10	66	34
K0598.0803	C	7,5	25	12,5	81	38
K0598.1253	C	11,5	40	20	126	60

Prism jaw pads

for centric vice, 65–80–125 mm



Material:
Steel.

Version:
Hardened.

Sample order:
K1375.065

Note:
Prism jaws are used for clamping round material, tubes, rods, profiles, etc. The prisms are machined in horizontally and vertically. The prism jaw pads are screwed onto the attachment jaws.

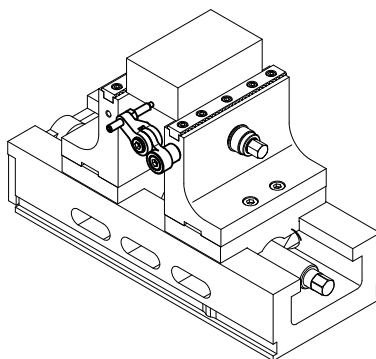
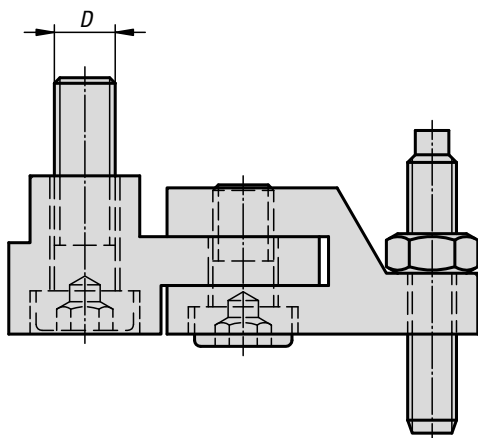
Suitable for K1236 and K1237

KIPP Prism jaw pads for centric vice, 65–80–125 mm

Order No.	B	D	H	H1	L	L1
K1375.065	12,5	5-25	20	10	66	34
K1375.080	12,5	5-25	25	12,5	81	38
K1375.125	20	8-38	40	20	126	60

K0607

Hinged stops



Material:
Steel.

Version:
Black oxidised.

Sample order:
K0607.080

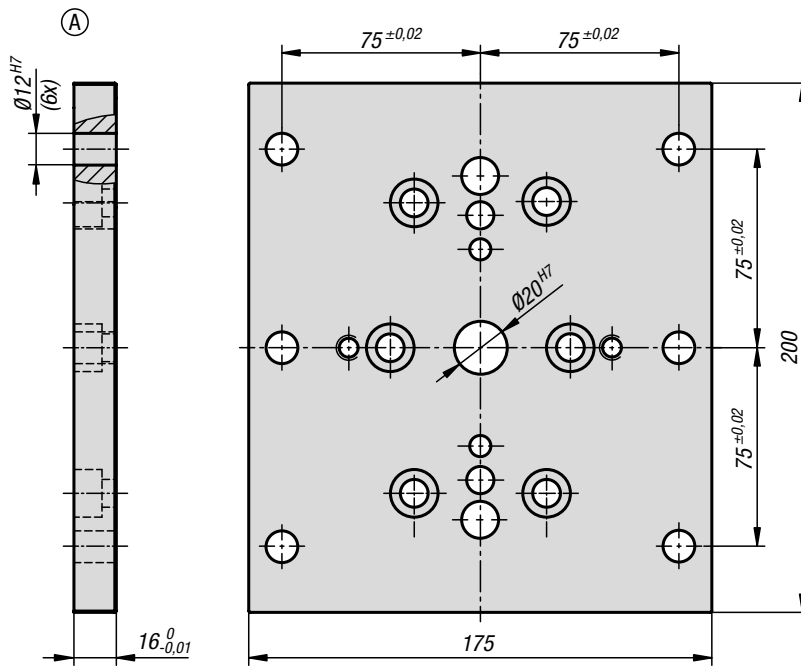
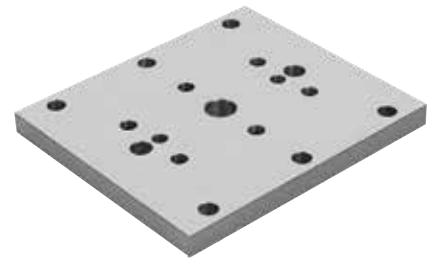
Note:
Hinged stop for fastening directly to the sliding or middle jaw.

KIPP Hinged stops

Order No.	D	Suitable for
K0607.080	M6	centric vice 65, 80
K0607.100	M8	centric vice 125

Baseplate

for centric vice



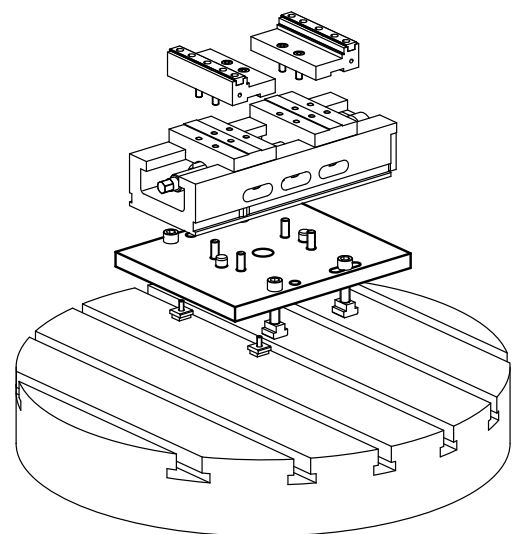
Material:
Steel.

Version:
Hardened and ground.

Sample order:
K1274.12175200

Note:
Form A:
The baseplate enables the centric vices (65 - 80 - 125) to be mounted onto 50 mm x M12/12F7 grid systems.

Form B+C:
The baseplate enables the centric vices (65 - 80 - 125) to be mounted on machine tables with T-slots.

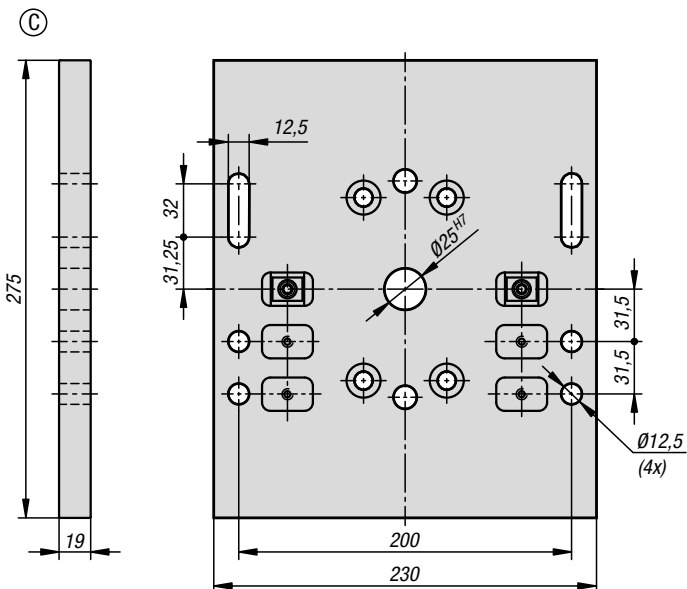
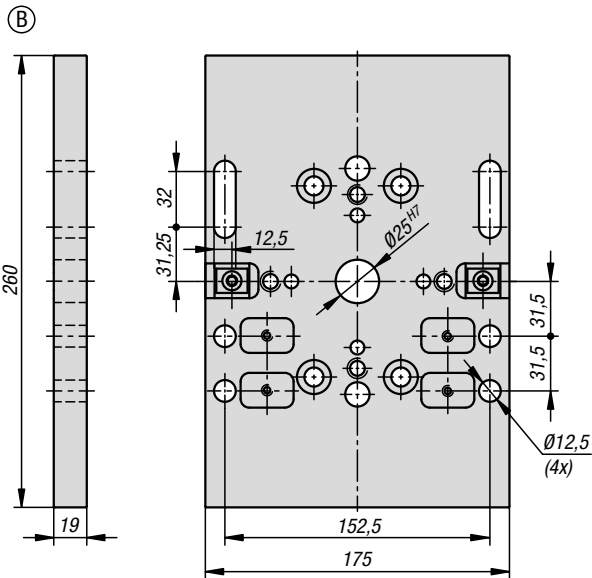


KIPP Baseplate for centric vice

Order No.	Form	Suitable for	weight kg
K1274.12175200	A	centric vice 65, 80, 125	4,03

Baseplate

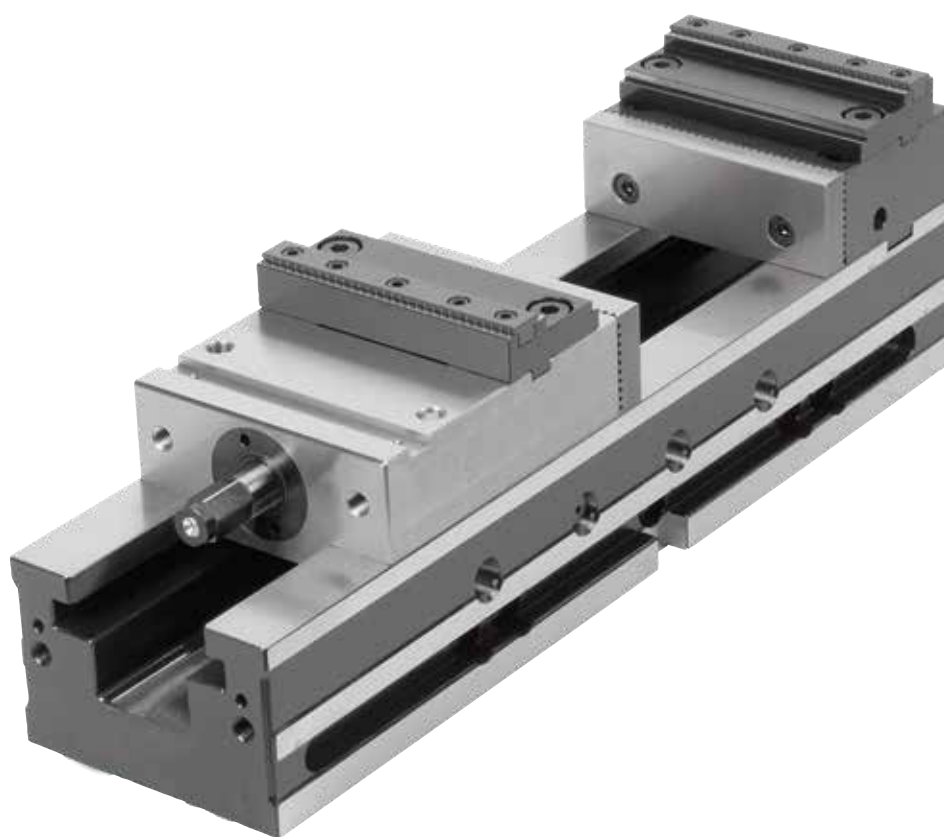
for centric vice



KIPP Baseplate for centric vice

Order No.	Form	Suitable for	weight kg
K1274.00175260	B	centric vice 65, 80	6,3
K1274.00230275	C	centric vice 125	7,5

NC Vices



Technical information for NC vices



Adaptable

Slot and thread for attachment jaws and for grippers.

Optional

Multiple clamping

Several workpieces can be clamped using reversible jaws. Tools are not used for installation.

Individual

Flexible – can be used for any machine table, ready to use immediately with clamp strap set and slot keys (optional).

Optimum positioning

Cross slot for alignment.

Quick pre-adjustment

Locking pins for quick pre-positioning.

Spindle drive

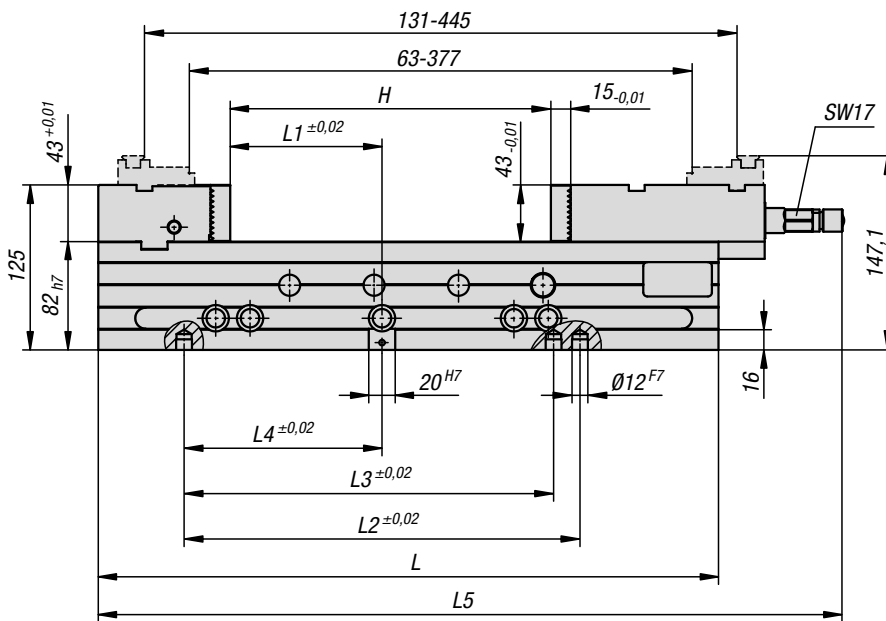
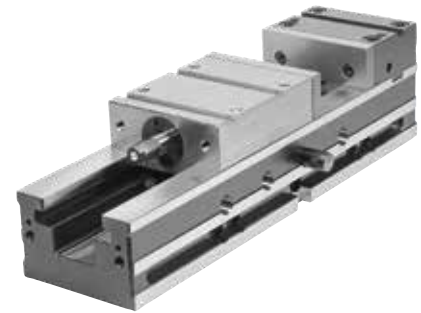
Mechanical-hydraulic version up to 40 kN or purely mechanical clamping up to 10 kN.

Impressive advantages:

- Repeat accuracy ≤ 0.01 mm
- Fixed jaw locked in all directions (X,Y,Z)
- Wide clamping range due to use of attachment step jaws
- Basic equipment: 2 reversible screw-on jaws and 1 crank handle
- Can be laid on the side, with fastening holes for slot spacing of 63 mm and 100 mm.

NC vice

jaw width 125 mm



Material:

Body and jaw holder mild steel.

Version:

Hardened and ground all sides.

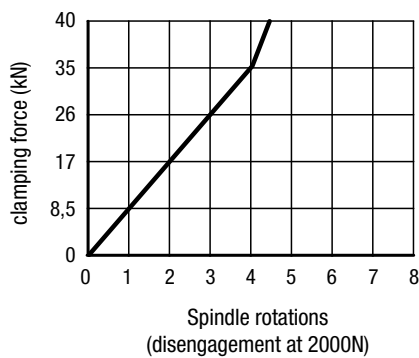
Sample order:

K1238.125470

Features:

NC vices can be used for a wide range of clamping tasks:

- Repeat accuracy ≤ 0.01 mm
- Fixed jaw locked in all directions (X,Y,Z)
- Vertical use directly on the machine table
- Wide clamping range by using attachment step jaws
- Can be laid on the side, with fastening holes for slot spacing of 63 mm and 100 mm
- Quick pre-adjustment of the clamping range using locking pins
- Basic equipment includes two reversible screw-on jaws and one crank handle

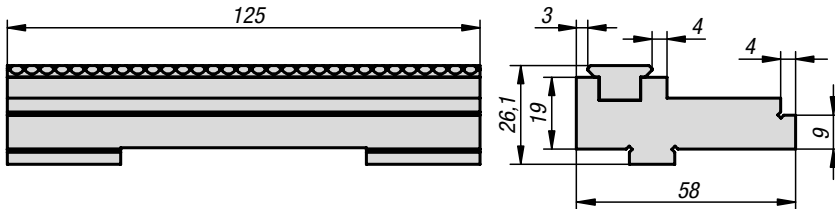


KIPP NC vice jaw width 125 mm

Order No.	B	L	L1	L2	L3	L4	L5	H clamping range	weight kg
K1238.125470	125	470	115	300	280	150	564	0-239	37,6

Attachment step jaw

with gripper for NC vice



Material:
Steel.

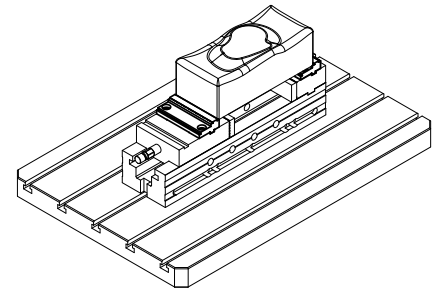
Version:
Hardened and ground.

Sample order:
K1273.1251

Note:
The attachment step jaws are for expanding the NC vice clamping width. The gripper jaw pads can be exchanged for smooth jaw pads K0591.125117.

KIPP Attachment step jaw with gripper jaw pad for NC vice

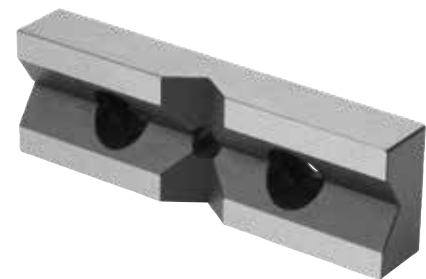
Order No.	Suitable for
K1273.1251	NC vice 125



K1376

Prism jaws

for NC vice



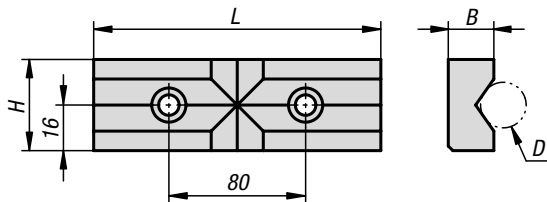
Material:
Steel.

Version:
Hardened.

Sample order:
K1376.125

Note:
Prism jaw for clamping round material, tubes, rods, profiles, etc. Prism machined horizontally and vertically.

Suitable for K1238.125470

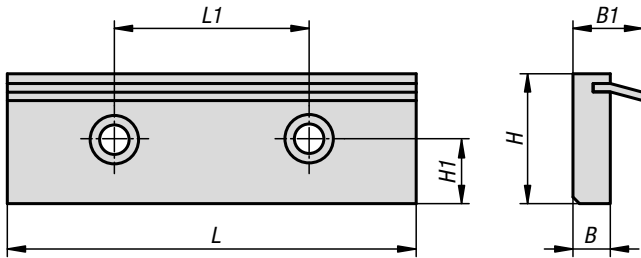


KIPP Prism jaws for NC vice

Order No.	B	D	H	L
K1376.125	20	8-38	43	125

Hold-down jaw pads with spring blade

for NC vice



Material:
Steel.

Version:
Hardened.

Sample order:
K0601.125

Note:

The hold-down jaw pads with spring blade are used for clamping rough workpieces. The spring blade exerts extra pressure to the workpiece, forcing it onto the seating face.

KIPP Hold-down jaw pads with spring blade for NC vice

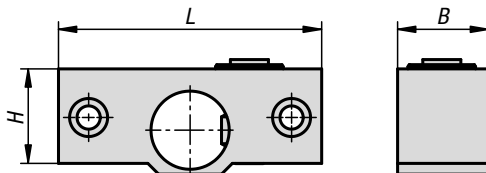
Suitable for K1238.125470

Order No.	B	B1	H	H1	L	L1
K0601.125	11,5	21,5	43	16	125	80

K1377

Angle drives

for NC vice



Material:
Housing steel.
Drive, steel.

Sample order:
K1377.125

Note:

The angle drive is used to operate the NC vice from above or in tight spaces.

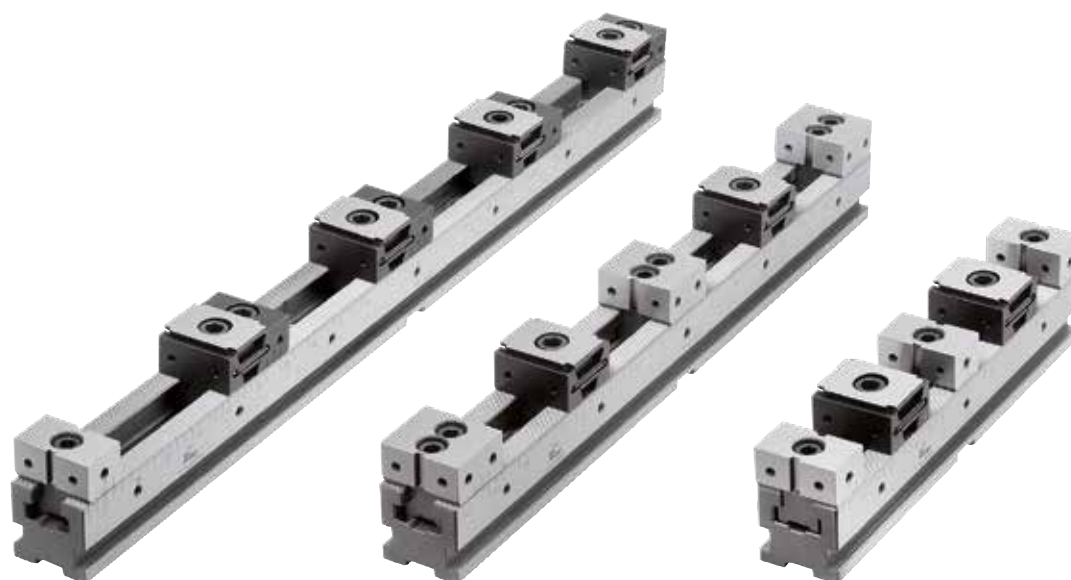
- The ratio is 1:1.4
- NC vice without angle drive max. 4.5 turns. With angle drive max. 6.3 turns.
- The angle drive is especially useful for horizontal use of NC vices, e.g. in the case of clamping cubes or workholding towers. The angle drive can also be used to operate the NC vice from above or in tight spaces.

KIPP Angle drives for NC vice

Suitable for K1238.125470

Order No.	B	H	L
K1377.125	43	45	124,5

Multi-clamping system



Multi-clamping system



Multi-clamping systems are mainly used for machining large workpiece batches.

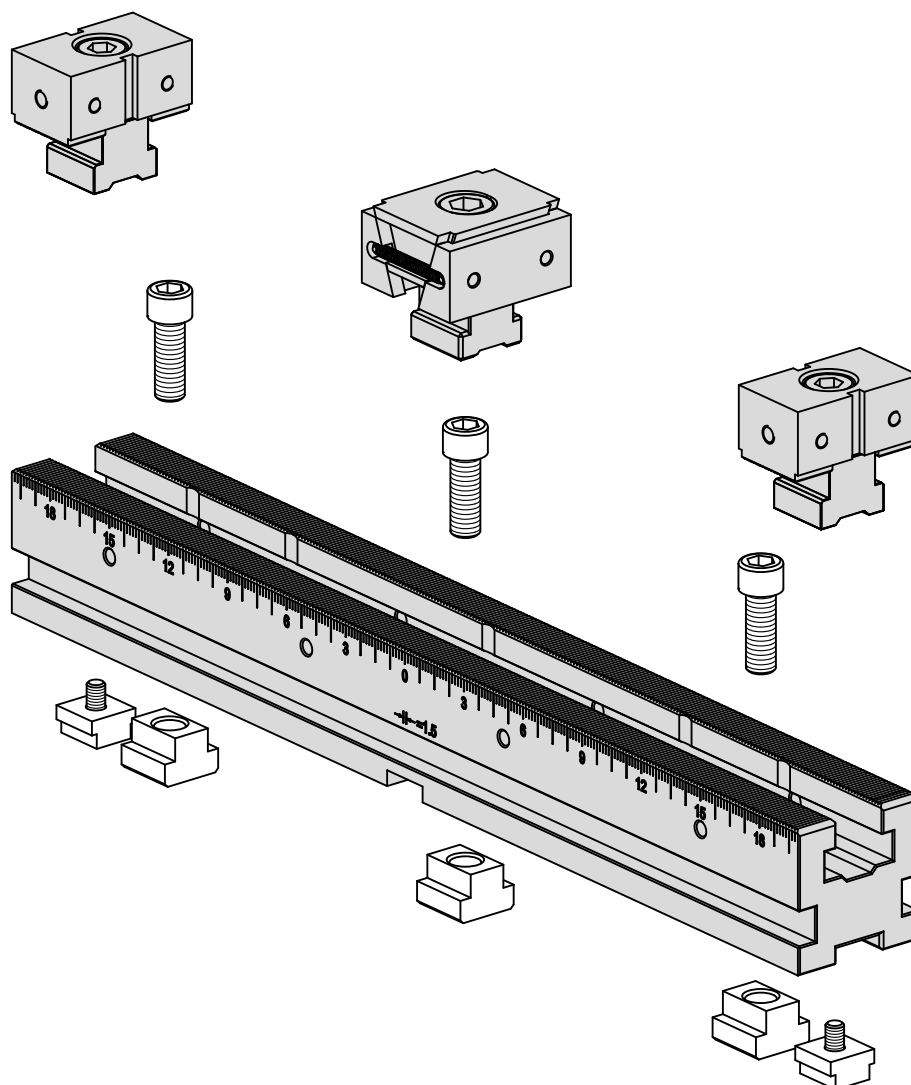
The system can be optionally set up for one or more workpieces.

Depending on the workpiece size and clamping rail length, several workpieces can thus be clamped simultaneously.

Due to the large component selection of the multiple clamping system (clamping rails, fixed jaws, wedge clamps and accessories) workpieces of different quantities and dimensions can be machined without problems and with optimised set-up times.

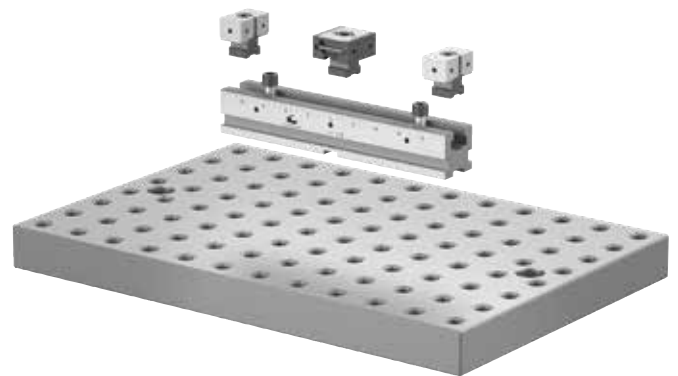
The user can choose between single-sided or double-sided types of wedge clamps.

The teeth on the clamping rails are precision-ground and guarantee secure and precise fastening of the fixed stops. By mounting several clamping rails along and across the table, the working area and the number of workpieces can be effectively optimised.

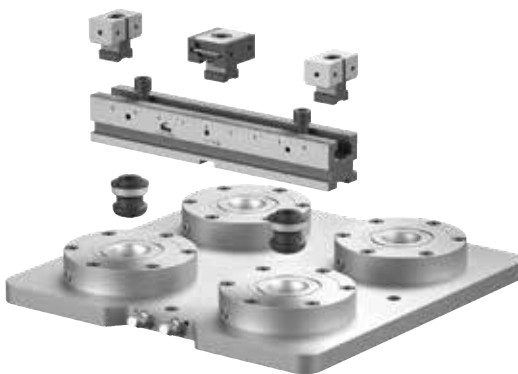




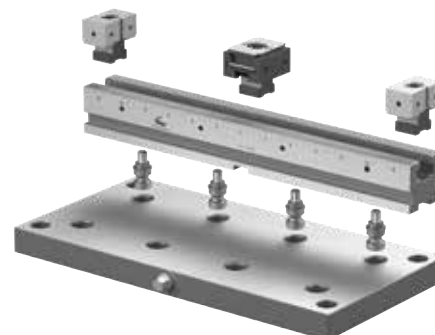
Mounting of the multi-clamping system along and across a T-slot machine table is possible. Alignment with slot keys. Secured using screws or clamping claws.



Mounting the multi-clamping system on a grid system. Positioned and fastened using shoulder screws.



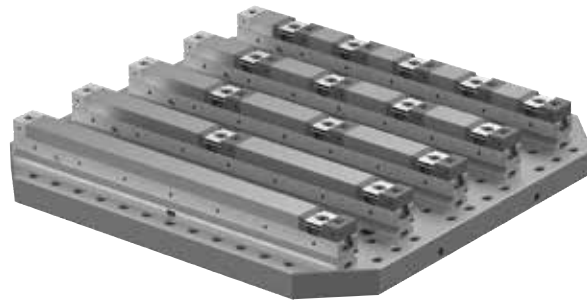
Adaptation of the multi-clamping system to a conventional zero-point clamping system. Fits on 200 mm gauge size. $\varnothing 25H6$ locating hole and M12 fastening screw.



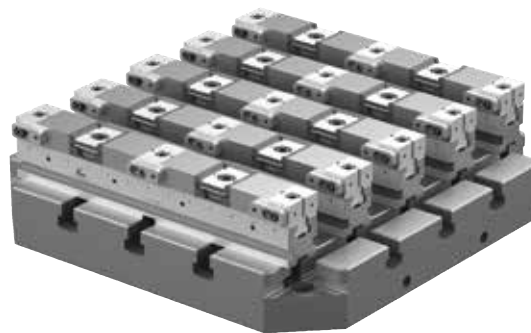
Adaptation of the multi-clamping system to a mechanical zero-point clamping system. Fits on 96mm gauge size. $\varnothing 16H6$ locating hole and M10 fastening thread.



Example of a multi-clamping system



Application of the multi-clamping system with different workpieces.
Wedge clamps used here have the force coming from one side.
Depending on the workpiece size, several workpieces can be clamped using identical clamping rails.
The multi-clamping system can be modified flexibly and quickly.



Multi-clamping system aligned and secured on pallet with T-slots.
Multi-clamping system set up for 20 identical workpieces.
Space-saving fixed jaws with one mounting screw.
Wedge clamps constructed as double-sided clamping element.

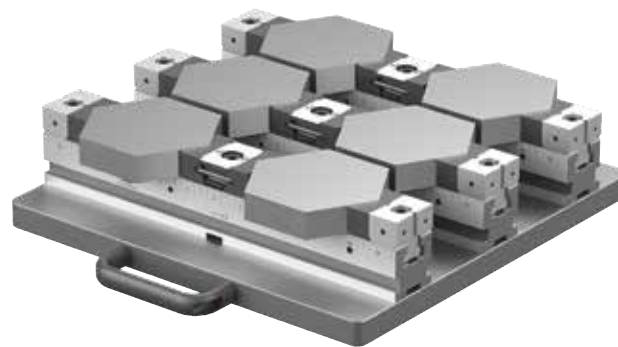


Flexible application of the multi-clamping system on an octagonal workholding tower.
With this clamping arrangement, many workpieces can be clamped simultaneously to extend the machine running time.

Example of a multi-clamping system



Multi-clamping system mounted on an interchangeable pallet.
The workpieces can be reloaded externally to the machine to extend the machine running time.
With the double-sided arrangement of the wedge clamps, both plates can be clamped simultaneously.

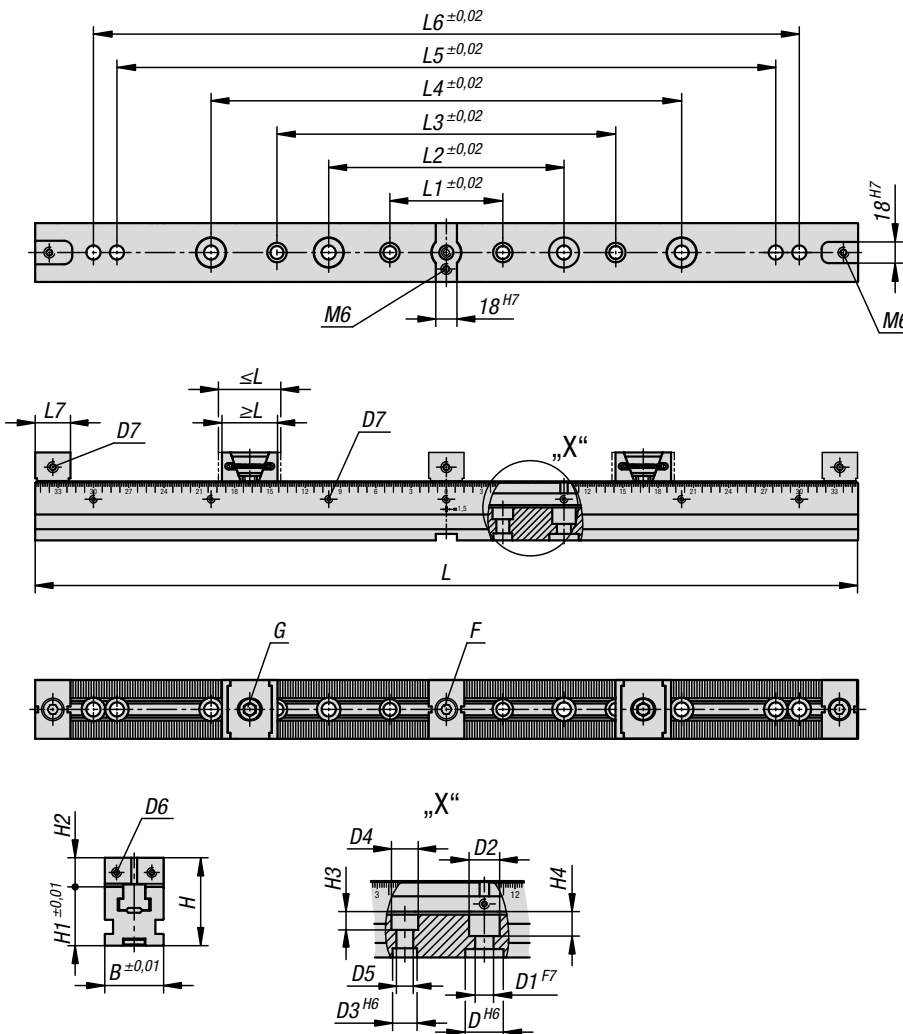


Multi-clamping system mounted on an interchangeable pallet.
Attachment jaws with prisms are screwed onto the fixed jaws of the multi-clamping system.
Machinable wedge clamps are used on the clamping elements. The workpiece contour is machined into the excess material.



Multi-clamping system double-sided wedge clamps

Fixed jaw ES



Material:

Clamping rail and fixed jaw tool steel.
Wedge clamp mild steel.

Version:

Clamping rail and fixed jaw hardened and ground (HRC 55 ± 2).
Wedge clamp hardened, phosphated.

Sample order:

K1828.05040001

Note:

The multi-clamping system can be fastened using various interfaces.

1. Lateral clamping edge for clamping claw set. Claw clamps can be fastened at any position.
2. Holes for DIN cap screws.
3. Ø25 mm locating holes for conventional zero-point clamping systems with 200 mm spacing.
4. Ø16 mm locating holes for zero-point clamping systems with 96 mm spacing.
5. Three 18H7 alignment slots for crosswise and lengthwise alignment on T-slot tables.
6. Ø12F7 and Ø16F7 reamed holes for 40 and 50 mm grid systems.

Three different versions are available:

- Multi-clamping system double-sided wedge clamp with OS fixed jaw / K1828.
- Multi-clamping system double-sided wedge clamp with DS fixed jaw / K1829.
- Multi-clamping system single-sided wedge clamp with OS fixed jaw / K1830.

Application:

A number of multi-clamping systems with different lengths can be mounted one behind the other or beside each other. The precision toothing enables highly precise positioning of the fixed jaws. Due to the lateral graduations on the clamping rails, each position of the fixed jaws can be documented and reset identically. Stops can be mounted in the tapped holes on the side. Turning the clamping screw moves the clamping segments outwards and press the workpieces against the fixed jaw.

Advantages:

Universal and flexible.
For small and large batch sizes.
Large components can also be clamped next to each other on several multiple clamping systems.

Multi-clamping system double-sided wedge clamps

Fixed jaw ES

**Supplied with:**

- 1x clamping rail.
- 2x double-sided wedge clamps.
- 3x fixed jaws ES.

Accessories:

- Clamping pin K0967.
- Cap screws K0869.10X30.
- Cap screws K0869.12X25.
- Shoulder screws K0815.12045 / K0815.16055.
- Seating ledges K1752.
- Attachment jaws with machining allowance K1753.
- Attachment jaws with prism K1754.
- Workpiece stop K1755.
- Spacer K1756.
- Clamping claw set K1757.
- T-slot nut K1758.
- T-slot key K0954.

KIPP Multi-clamping system double-sided wedge clamps, fixed jaw ES

Order No. smooth	Order No. serrated	L	B	H	L min.	L max.	L1	L2	L3	L4	L5	L6	L7
K1828.05030001	K1828.05030002	300	50	75	44,5	50,5	96	200	-	-	-	-	30
K1828.05040001	K1828.05040002	400	50	75	44,5	50,5	96	200	288	300	-	-	30
K1828.05050001	K1828.05050002	500	50	75	44,5	50,5	96	200	288	400	-	-	30
K1828.05060001	K1828.05060002	600	50	75	44,5	50,5	96	200	288	400	500	-	30
K1828.05070001	K1828.05070002	700	50	75	44,5	50,5	96	200	288	400	560	600	30

Order No. smooth	Order No. serrated	L	D	D1	D2	D3	D4	D5	D6	D7	H1	H2	H3	H4	F Socket head screw DIN 912	G cap screw DIN 912
K1828.05030001	K1828.05030002	300	25	12	20	16	17,5	11	M5	M6	50	25	12	16	M10x30	M12x25
K1828.05040001	K1828.05040002	400	25	12	20	16	17,5	11	M5	M6	50	25	12	16	M10x30	M12x25
K1828.05050001	K1828.05050002	500	25	12	20	16	17,5	11	M5	M6	50	25	12	16	M10x30	M12x25
K1828.05060001	K1828.05060002	600	25	12	20	16	17,5	11	M5	M6	50	25	12	16	M10x30	M12x25
K1828.05070001	K1828.05070002	700	25	12	20	16	17,5	11	M5	M6	50	25	12	16	M10x30	M12x25

Maximum workpiece size



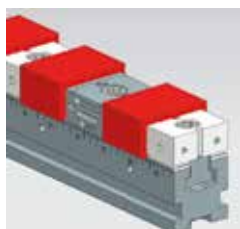
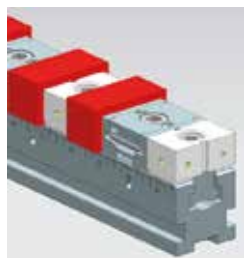
Maximum workpiece size for types double-sided wedge clamps and fixed jaw ES

Clamping rails	1 pcs.	2 pcs.
	B=50	B=50
L=300	193	96
L=400	292	146
L=500	394	197
L=600	493	246
L=700	592	296

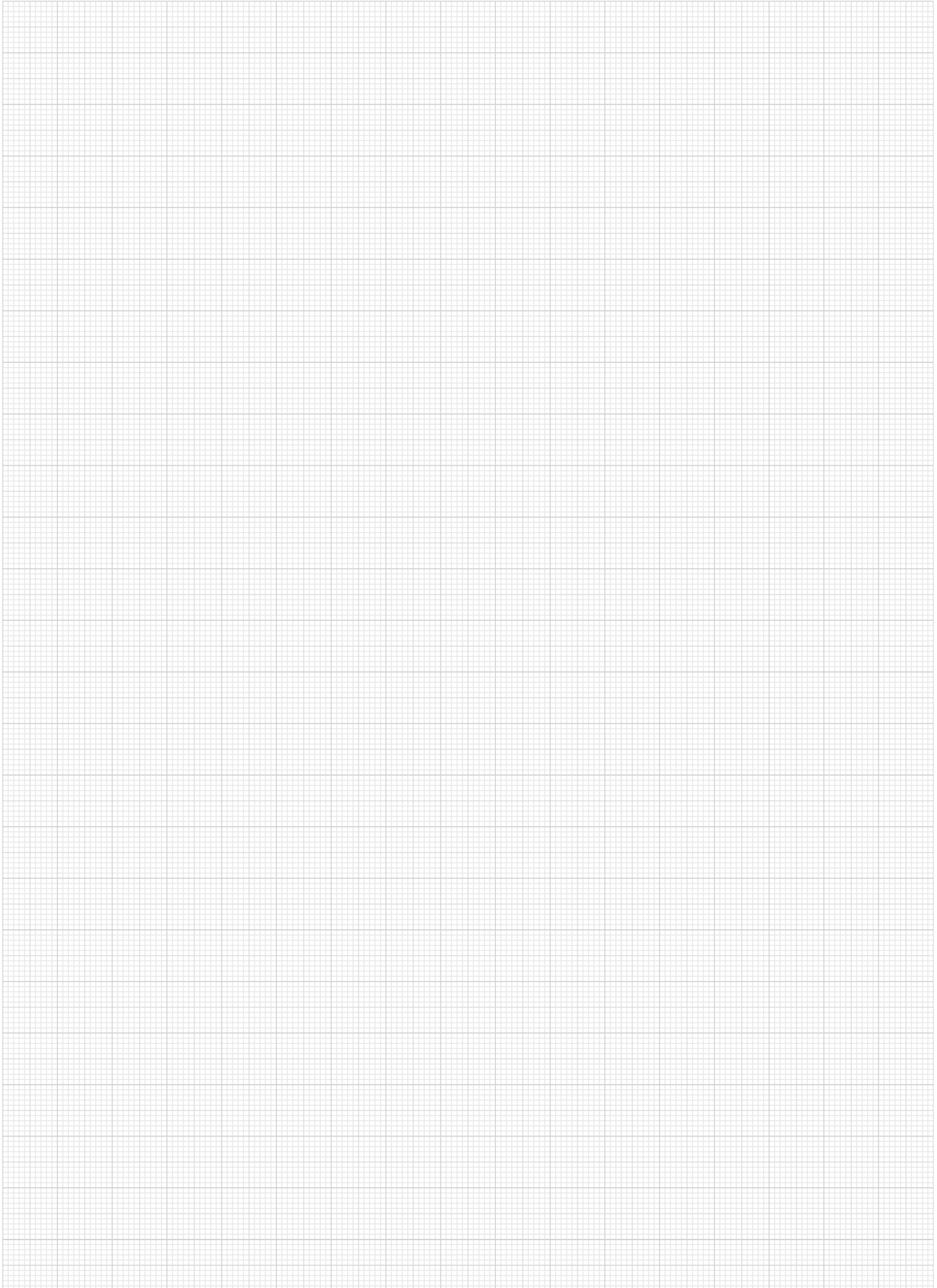
Clamping rails	3 pcs.	4 pcs.
	B=50	B=50
L=300	39	29
L=400	72	54
L=500	106	79
L=600	139	104
L=700	172	129

Clamping rails	5 pcs.	6 pcs.
	B=50	B=50
L=300	8	6
L=400	27	23
L=500	48	40
L=600	68	56
L=700	87	73

Clamping rails	7 pcs.	8 pcs.
	B=50	B=50
L=300	-	-
L=400	9	8
L=500	23	20
L=600	37	33
L=700	51	45

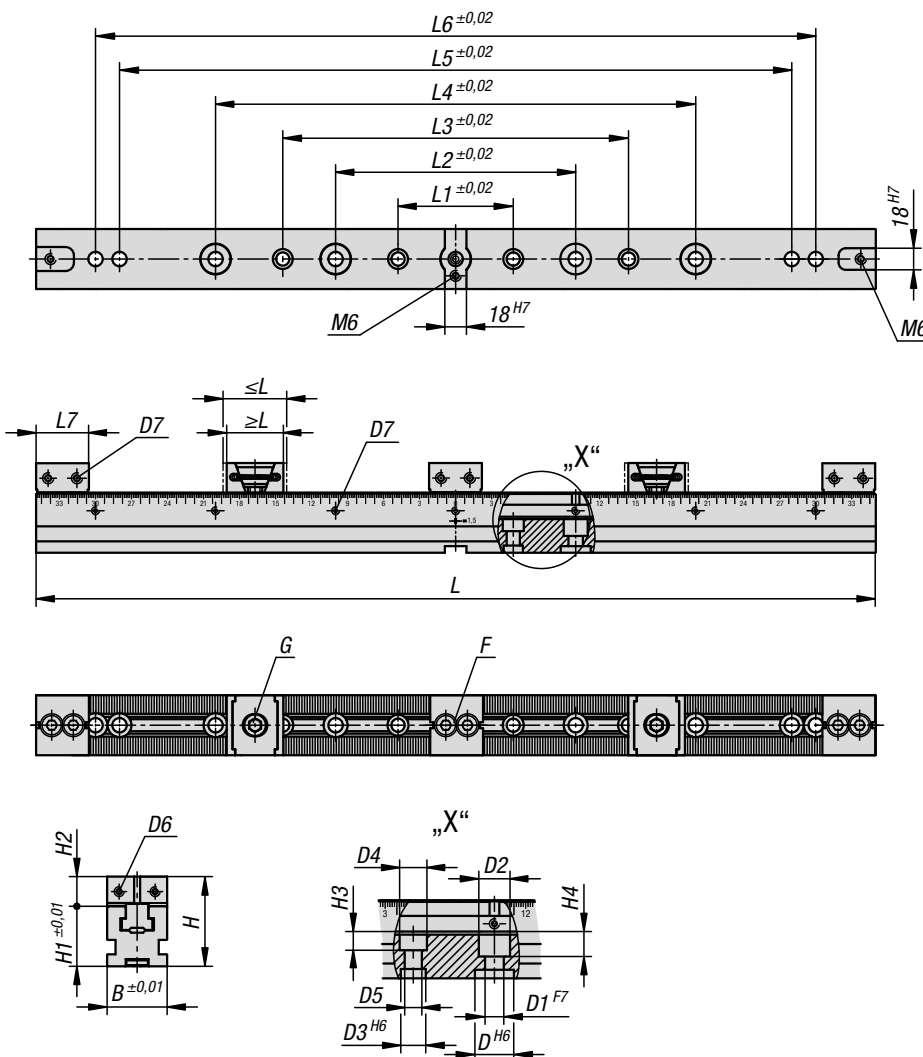


Combination of clamping rails for multi-clamping system K1746.
Wedge clamp K1748 and
Fixed jaw ES for multi-clamping system K1750.



Multi-clamping system double-sided wedge clamps

Fixed jaw DS



Material:

Clamping rail and fixed jaw tool steel.
Wedge clamp mild steel.

Version:

Clamping rail and fixed jaw hardened and ground (HRC 55 ±2).
Wedge clamp hardened, phosphated.

Sample order:

K1829.05040001

Note:

The multi-clamping system can be fastened using various interfaces.

1. Lateral clamping edge for clamping claw set.
Claw clamps can be fastened at any position.
2. Holes for DIN cap screws
3. Ø25 mm locating holes for conventional zero-point clamping systems with 200 mm spacing.
4. Ø16 mm locating holes for zero-point clamping systems with 96 mm spacing.
5. Three 18H7 alignment slots for crosswise and lengthwise alignment on T-slot tables.
6. Ø12F7 and Ø16F7 reamed holes for 40 and 50 mm grid systems.

Three different versions are available:

- Multi-clamping system double-sided wedge clamp with OS fixed jaw / K1828.
- Multi-clamping system double-sided wedge clamp with DS fixed jaw / K1829.
- Multi-clamping system single-sided wedge clamp with OS fixed jaw / K1830.

Application:

A number of multi-clamping systems with different lengths can be mounted one behind the other or beside each other. The precision toothing enables highly precise positioning of the fixed jaws. Due to the lateral graduations on the clamping rails, each position of the fixed jaws can be documented and reset identically. Stops can be mounted in the tapped holes on the side.

Turning the clamping screw moves the clamping segments outwards and press the workpieces against the fixed jaw.

Advantages:

Universal and flexible.

For small and large batch sizes.

Large components can also be clamped next to each other on several multiple clamping systems.

Multi-clamping system double-sided wedge clamps

Fixed jaw DS

**Supplied with:**

- 1x clamping rail.
- 2x double-sided wedge clamps.
- 3x fixed jaws DS.

Accessories:

- Clamping pin K0967.
- Cap screws K0869.10X30.
- Cap screws K0869.12X25.
- Shoulder screws K0815.12045 / K0815.16055.
- Seating ledges K1752.
- Attachment jaws with machining allowance K1753.
- Attachment jaws with prism K1754.
- Workpiece stop K1755.
- Spacer K1756.
- Clamping claw set K1757.
- T-slot nut K1758.
- T-slot key K0954.

KIPP Multi-clamping system double-sided wedge clamps, fixed jaw DS

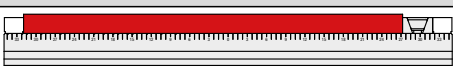
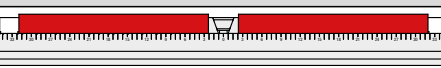
Order No. smooth	Order No. serrated	L	B	H	L min.	L max.	L1	L2	L3	L4	L5	L6	L7
K1829.05030001	K1829.05030002	300	50	75	44,5	50,5	96	200	-	-	-	-	44
K1829.05040001	K1829.05040002	400	50	75	44,5	50,5	96	200	288	300	-	-	44
K1829.05050001	K1829.05050002	500	50	75	44,5	50,5	96	200	288	400	-	-	44
K1829.05060001	K1829.05060002	600	50	75	44,5	50,5	96	200	288	400	500	-	44
K1829.05070001	K1829.05070002	700	50	75	44,5	50,5	96	200	288	400	560	600	44

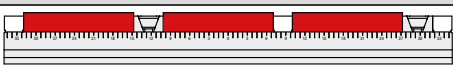
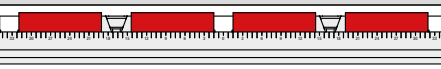
Order No. smooth	Order No. serrated	L	D	D1	D2	D3	D4	D5	D6	D7	H1	H2	H3	H4	F Socket head screw DIN 912	G cap screw DIN 912
K1829.05030001	K1829.05030002	300	25	12	20	16	17,5	11	M5	M6	50	25	12	16	M10x30	M12x25
K1829.05040001	K1829.05040002	400	25	12	20	16	17,5	11	M5	M6	50	25	12	16	M10x30	M12x25
K1829.05050001	K1829.05050002	500	25	12	20	16	17,5	11	M5	M6	50	25	12	16	M10x30	M12x25
K1829.05060001	K1829.05060002	600	25	12	20	16	17,5	11	M5	M6	50	25	12	16	M10x30	M12x25
K1829.05070001	K1829.05070002	700	25	12	20	16	17,5	11	M5	M6	50	25	12	16	M10x30	M12x25

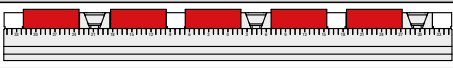
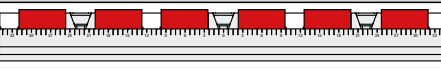
Maximum workpiece size

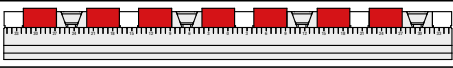
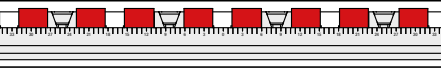


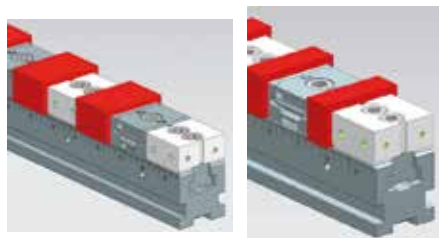
Maximum workpiece sizes for the types double-sided wedge clamp and fixed jaw DS

Clamping rails	1 pcs.	2 pcs.
		
	B=50	B=50
L=300	164	82
L=400	263	131
L=500	365	182
L=600	464	232
L=700	563	281

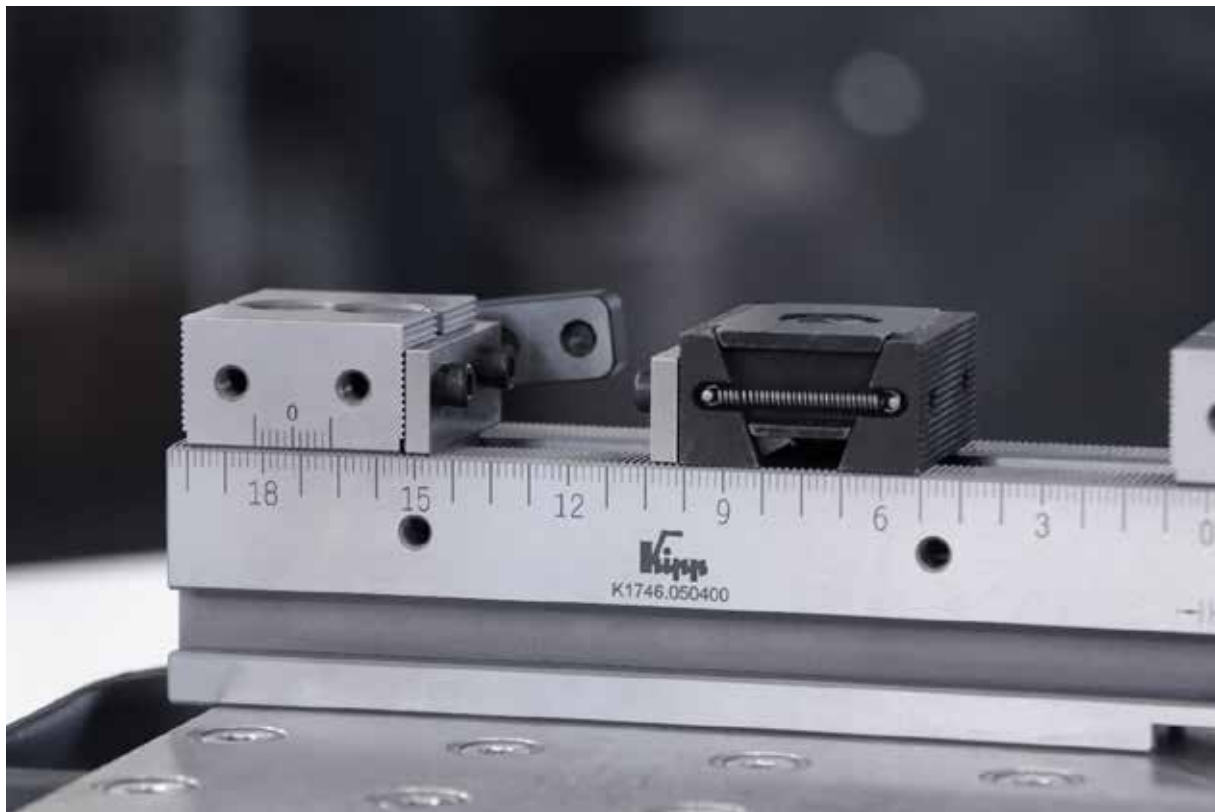
Clamping rails	3 pcs.	4 pcs.
		
	B=50	B=50
L=300	24	18
L=400	57	43
L=500	91	68
L=600	124	93
L=700	157	118

Clamping rails	5 pcs.	6 pcs.
		
	B=50	B=50
L=300	-	-
L=400	16	13
L=500	36	30
L=600	56	47
L=700	76	63

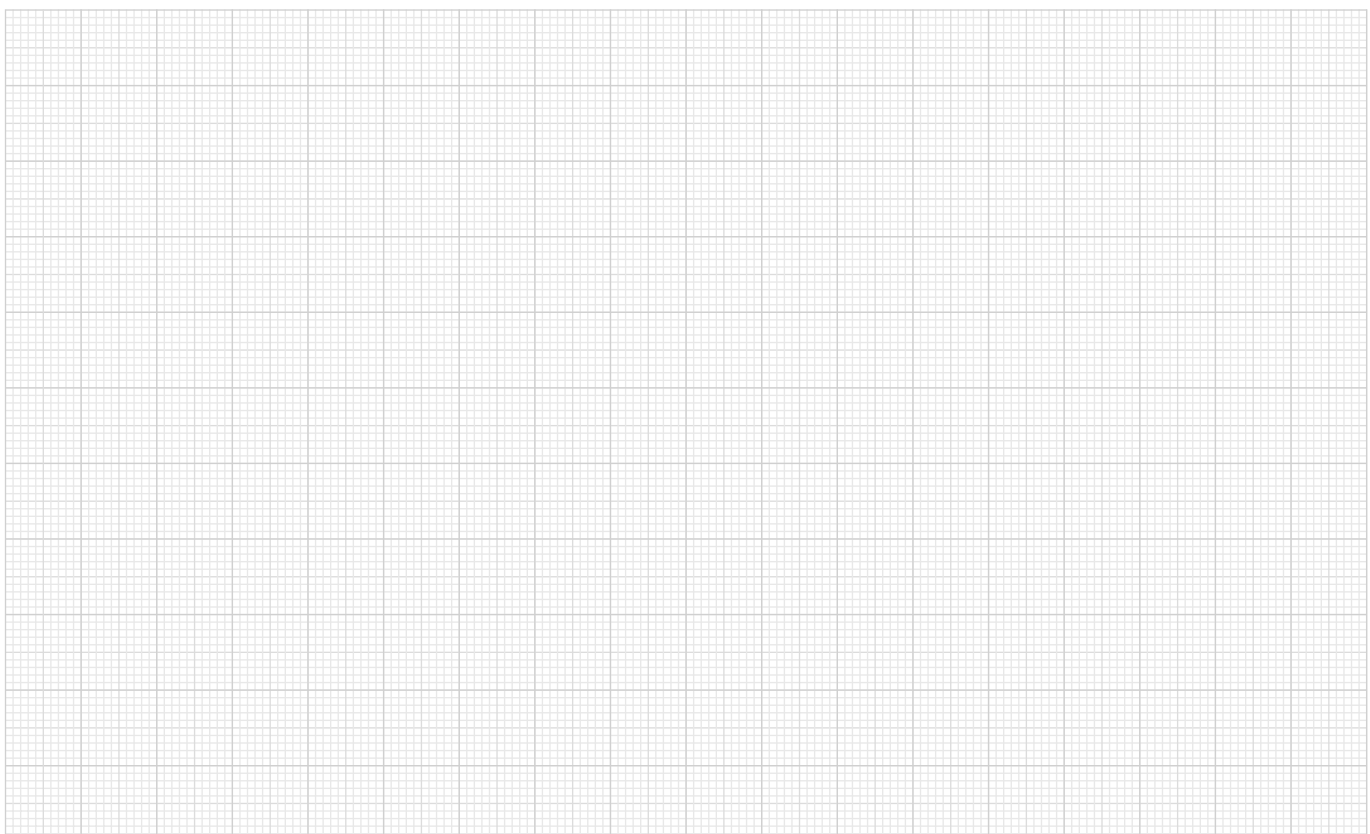
Clamping rails	7 pcs.	8 pcs.
		
	B=50	B=50
L=300	-	-
L=400	-	-
L=500	13	11
L=600	27	24
L=700	41	36



Combination of clamping rails for multi-clamping system K1746.
Wedge clamp K1748 and
Fixed jaw DS for multi-clamping system K1751.

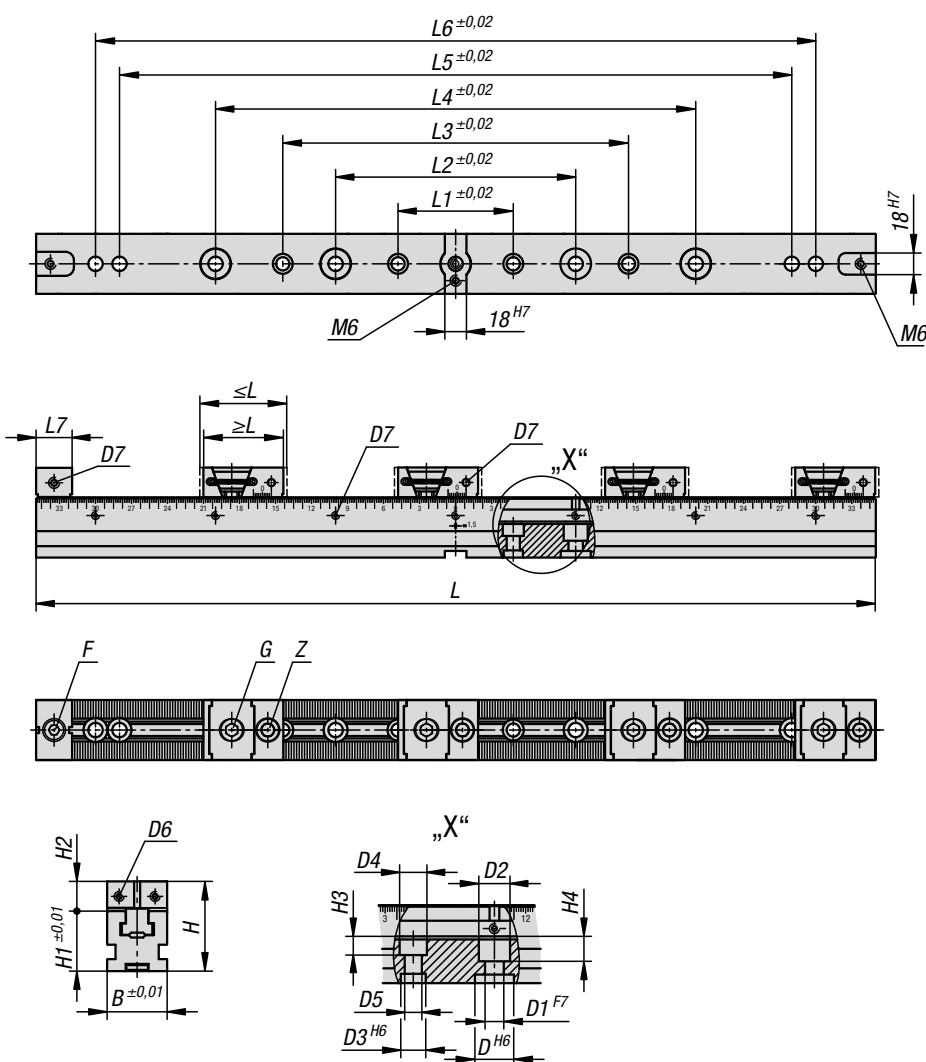


Notes



Multi-clamping system single-sided wedge clamps

Fixed jaw ES



Material:

Clamping rail and fixed jaw tool steel.
Wedge clamp mild steel.

Version:

Clamping rail and fixed jaw hardened and ground (HRC 55 ±2).
Wedge clamp hardened, phosphated.

Sample order:

K1830.05050001

Note:

The multi-clamping system can be fastened using various interfaces.

1. Lateral clamping edge for clamping claw set. Claw clamps can be fastened at any position.
2. Holes for DIN cap screws.
3. Ø25 mm locating holes for conventional zero-point clamping systems with 200 mm spacing.
4. Ø16 mm locating holes for zero-point clamping systems with 96 mm spacing.
5. Three 18H7 alignment slots for crosswise and lengthwise alignment on T-slot tables.
6. Ø12F7 and Ø16F7 reamed holes for 40 and 50 mm grid systems.

Three different versions are available:

- Multi-clamping system double-sided wedge clamp with OS fixed jaw / K1828.
- Multi-clamping system double-sided wedge clamp with DS fixed jaw / K1829.
- Multi-clamping system single-sided wedge clamp with OS fixed jaw / K1830.

Application:

A number of multi-clamping systems with different lengths can be mounted one behind the other or beside each other. The precision toothing enables highly precise positioning of the fixed jaws. Due to the lateral graduations on the clamping rails, each position of the fixed jaws can be documented and reset identically. Stops can be mounted in the tapped holes on the side.

Turning the clamping screw moves the clamping segments outwards and press the workpieces against the fixed jaw.

Advantages:

Universal and flexible.
For small and large batch sizes.
Large components can also be clamped next to each other on several multiple clamping systems.

Multi-clamping system single-sided wedge clamps

Fixed jaw ES



Supplied with:

- 1x clamping rail.
- 3x single-sided wedge clamps.
- 1x fixed jaw ES.

Accessories:

- Clamping pin K0967.
- Cap screws K0869.10X30.
- Cap screws K0869.12X25.
- Shoulder screws K0815.12045 / K0815.16055.
- Seating ledges K1752.
- Attachment jaws with machining allowance K1753.
- Attachment jaws with prism K1754.
- Workpiece stop K1755.
- Spacer K1756.
- Clamping claw set K1757.
- T-slot nut K1758.
- T-slot key K0954.

KIPP Multi-clamping system single-sided wedge clamps fixed jaw ES

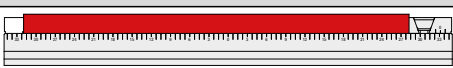
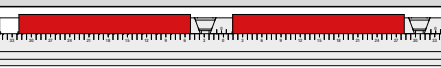
Order No. smooth	Order No. serrated	L	B	H	L min.	L max.	L1	L2	L3	L4	L5	L6	L7
K1830.05040001	K1830.05040002	400	50	75	64	70	96	200	288	300	-	-	30
K1830.05050001	K1830.05050002	500	50	75	64	70	96	200	288	400	-	-	30
K1830.05060001	K1830.05060002	600	50	75	64	70	96	200	288	400	500	-	30
K1830.05070001	K1830.05070002	700	50	75	64	70	96	200	288	400	560	600	30

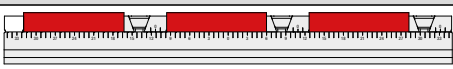
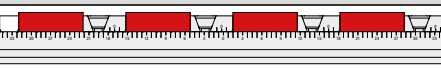
Order No. smooth	Order No. serrated	L	D	D1	D2	D3	D4	D5	D6	D7	H1	H2	H3	H4	F Socket head screw DIN 912	G cap screw DIN 912	Z cap screw DIN 912
K1830.05040001	K1830.05040002	400	25	12	20	16	17,5	11	M5	M6	50	25	12	16	M10x30	M12x25	M12x30
K1830.05050001	K1830.05050002	500	25	12	20	16	17,5	11	M5	M6	50	25	12	16	M10x30	M12x25	M12x30
K1830.05060001	K1830.05060002	600	25	12	20	16	17,5	11	M5	M6	50	25	12	16	M10x30	M12x25	M12x30
K1830.05070001	K1830.05070002	700	25	12	20	16	17,5	11	M5	M6	50	25	12	16	M10x30	M12x25	M12x30

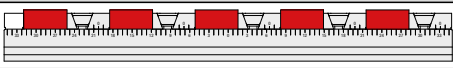
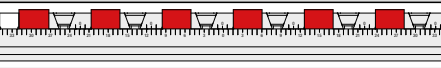
Maximum workpiece size

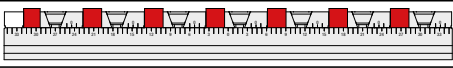
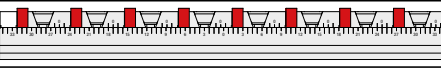


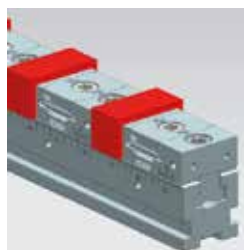
Maximum workpiece sizes for the types wedge clamp with fixed jaw

Clamping rails	1 pcs.	2 pcs.
		
	B=50	B=50
L=300	203	68
L=400	302	118
L=500	404	169
L=600	503	218
L=700	602	268

Clamping rails	3 pcs.	4 pcs.
		
	B=50	B=50
L=300	23	-
L=400	56	26
L=500	90	51
L=600	123	76
L=700	156	101

Clamping rails	5 pcs.	6 pcs.
		
	B=50	B=50
L=300	-	-
L=400	7	-
L=500	27	12
L=600	47	28
L=700	67	45

Clamping rails	7 pcs.	8 pcs.
		
	B=50	B=50
L=300	-	-
L=400	-	-
L=500	-	-
L=600	15	5
L=700	29	17



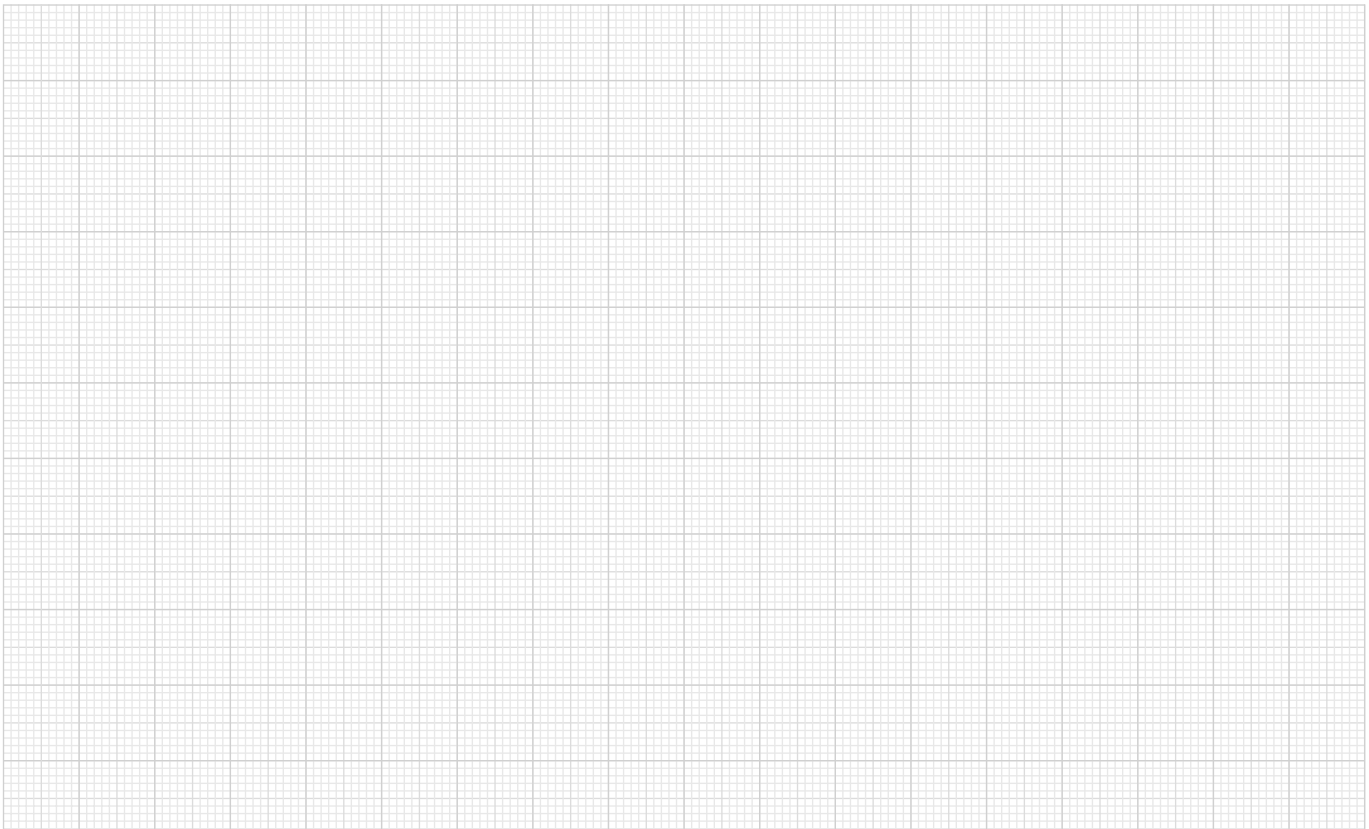
Combination of clamping rails for multi-clamping system K1746.
 Wedge clamp with fixed jaw for multi-clamping system K1749 and 1x fixed jaw ES for multi-clamping system K1750.

Multi-clamping system single-sided wedge clamps

Fixed jaw ES

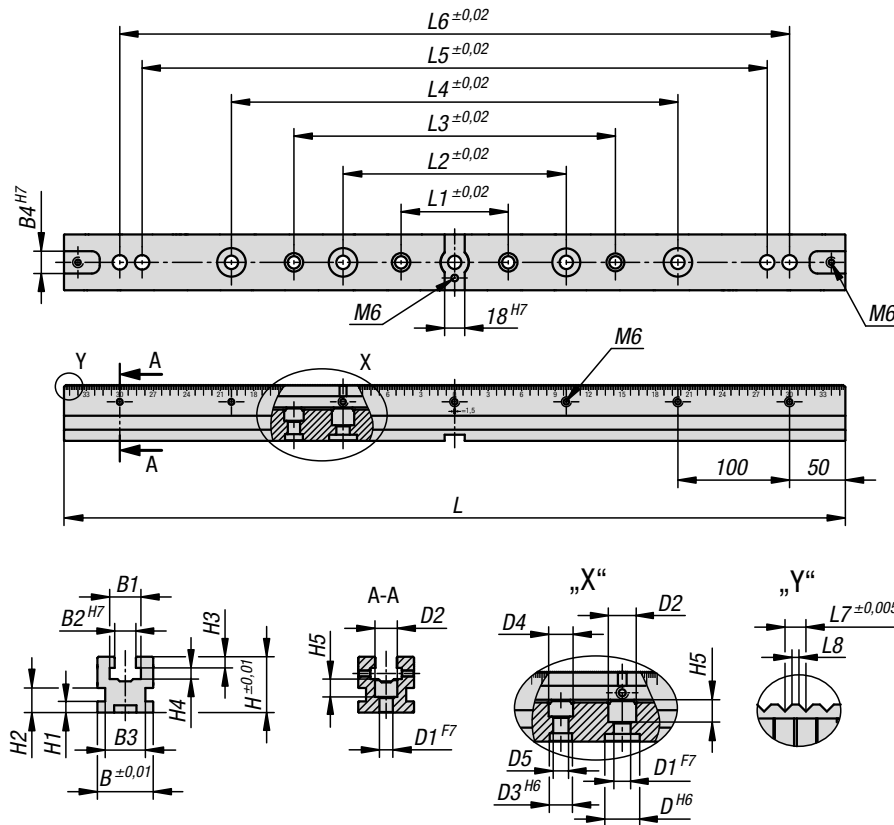
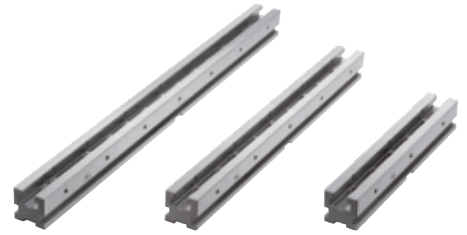


Notes



Clamping rails

for multi-clamping system



Material:
Tool steel.

Version:
Hardened and ground (HRC 55 ±2).

Sample order:
K1746.050300

- Note:**
The clamping rails can be fastened using various methods.
- Lateral edge for claw clamp set. Claw clamps can be fastened at any desired position.
 - Holes for DIN cap screws.
 - $\varnothing 25H6$ mm locating holes for conventional zero-point clamping systems with 100 mm system spacing.
 - $\varnothing 16H6$ mm locating holes for zero-point clamping systems with 96 mm system spacing.
 - Three $18H7$ alignment slots for T-slot tables.
 - $\varnothing 12F7$ and $\varnothing 16F7$ reamed holes for 40 mm and 50 mm grid systems.

Application:
Several clamping rails with different lengths can be mounted one behind the other or next to each other. The precision tothing enables very accurate positioning of the fixed jaws. Due to the scale on the side of the clamping rails, each position of the fixed jaws can be documented and reset identically. Stops can be mounted in the tapped holes on the side.

Advantages:
Universal and flexible.
For small and large batch sizes.
Large components can also be clamped beside each other on a number of clamping rails.



KIPP Clamping rails for multi-clamping system

Order No.	suitable for system width	L	B	H	L1	L2	L3	L4	L5	L6	L7	L8	B1	B2	B3	B4	H1	H2	H3	H4	H5	D	D1	D2	D3	D4	D5
K1746.050300	50	300	50	50	96	200	-	-	-	-	1,5	0,5	28	19	36	18	10	22	10	10	16	25	12	20	16	17,5	11
K1746.050400	50	400	50	50	96	200	288	300	-	-	1,5	0,5	28	19	36	18	10	22	10	10	16	25	12	20	16	17,5	11
K1746.050500	50	500	50	50	96	200	288	400	-	-	1,5	0,5	28	19	36	18	10	22	10	10	16	25	12	20	16	17,5	11
K1746.050600	50	600	50	50	96	200	288	400	500	-	1,5	0,5	28	19	36	18	10	22	10	10	16	25	12	20	16	17,5	11
K1746.050700	50	700	50	50	96	200	288	400	560	600	1,5	0,5	28	19	36	18	10	22	10	10	16	25	12	20	16	17,5	11

Clamping rails, short

for multi-clamping system



Material:
Tool steel.

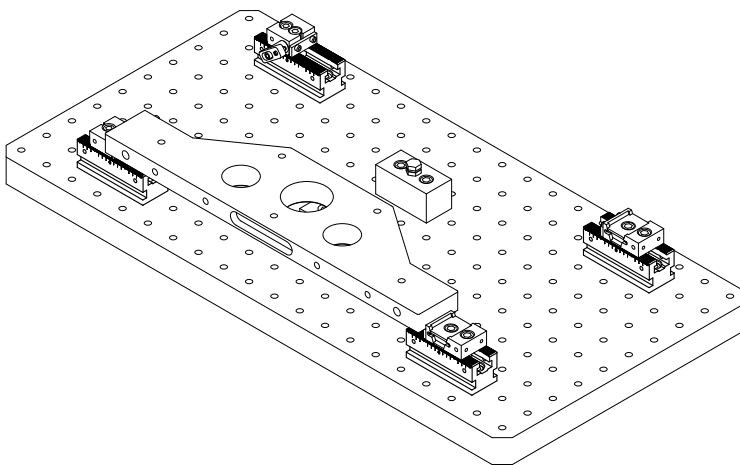
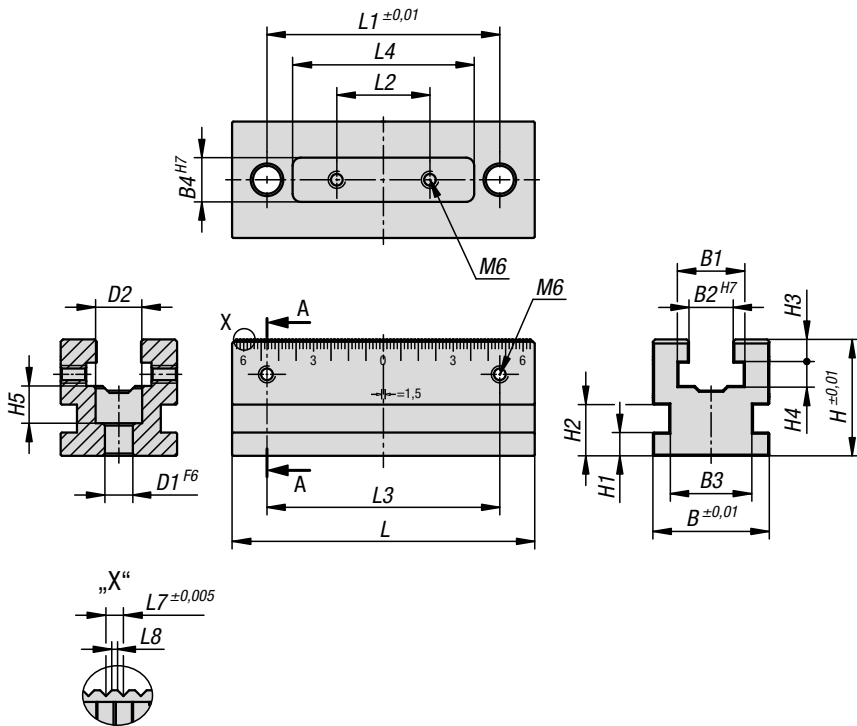
Version:
Hardened and ground (HRC 55 ± 2).

Sample order:
K1747.050130

- Note:**
The clamping rails can be fastened using various methods.
1. Lateral edge for claw clamp set. Claw clamps can be fastened at any desired position.
 2. Holes for DIN cap screws.
 3. One 18H7 alignment slot for T-slot tables.
 4. Ø12F7 and Ø16F7 reamed holes for 50 mm grid systems.

Application:
With the short clamping rails, clamping tasks can be implemented with low space requirements. The precision toothing enables very accurate positioning of the fixed jaws. Due to the scale on the side of the clamping rails, each position of the fixed jaws can be documented and reset identically. Stops can be mounted in the tapped holes on the side.

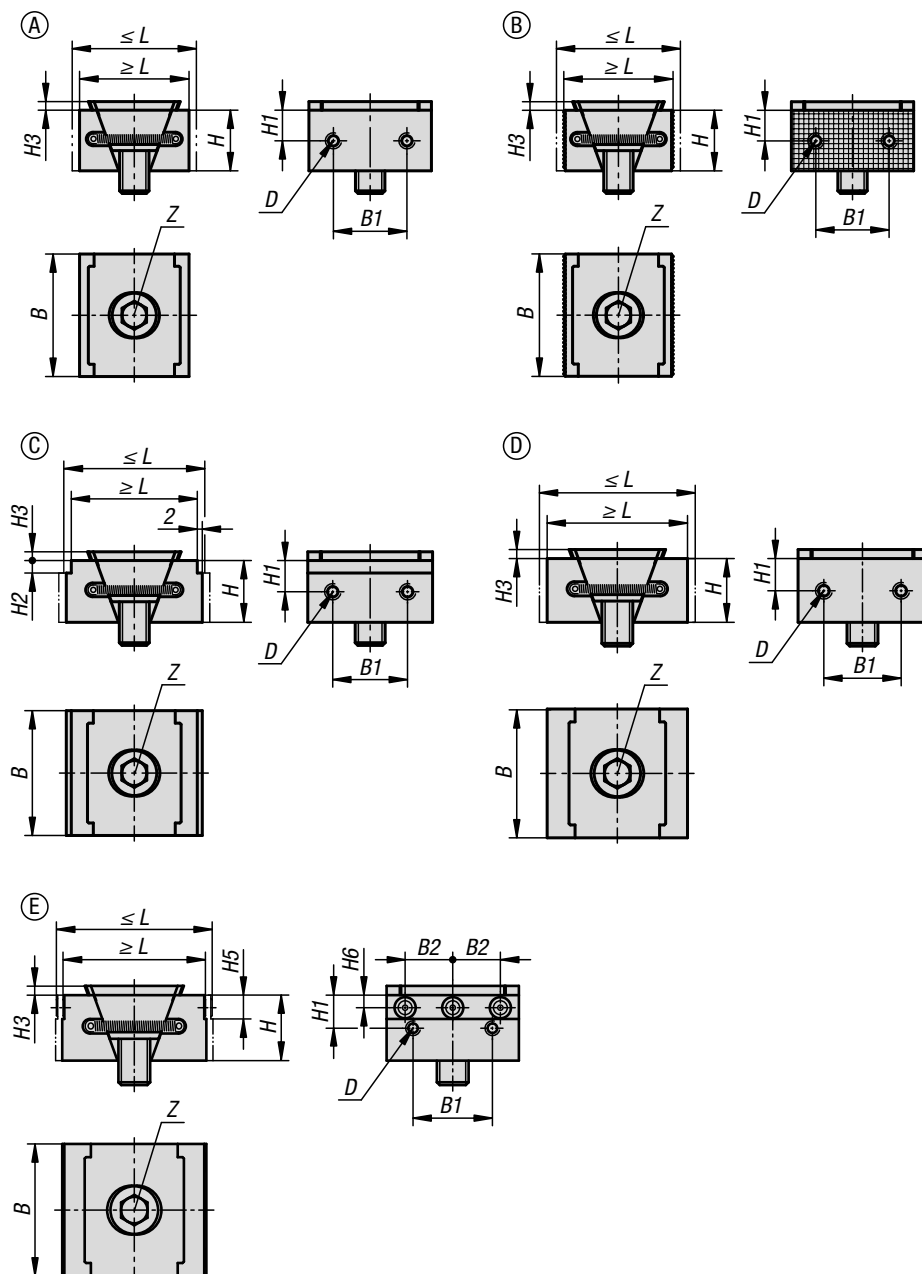
Advantages:
Universal and flexible application.
A number of short clamping rails can also be used to adapt flexibly to different clamping situations.



KIPP Short clamping rails for multi-clamping system

Order No.	suitable for system width	L	B	H	L1	L2	L3	L4	L7	L8	B1	B2	B3	B4	H1	H2	H3	H4	H5	D1	D2
K1747.050130	50	130	50	50	100	40	100	77	1,5	0,5	28	19	36	18	10	22	10	10	16	12	20

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 = ± 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

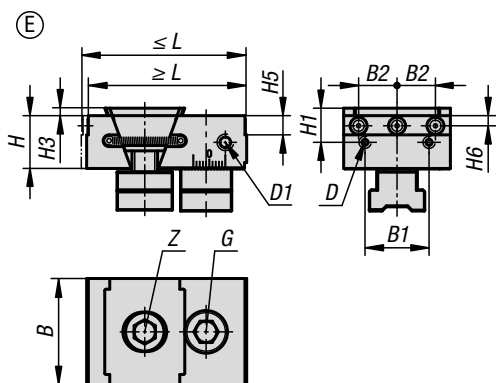
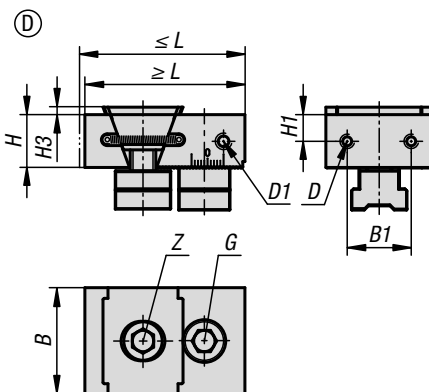
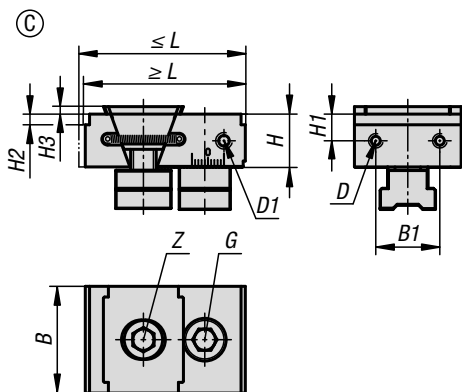
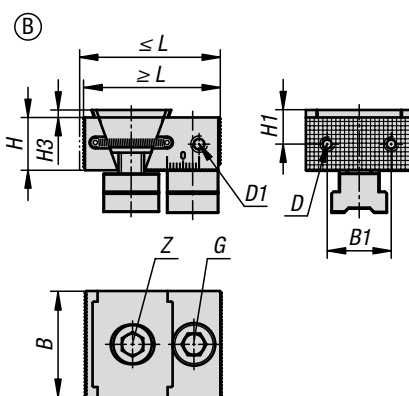
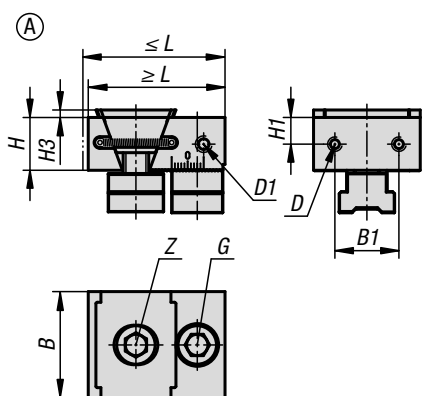
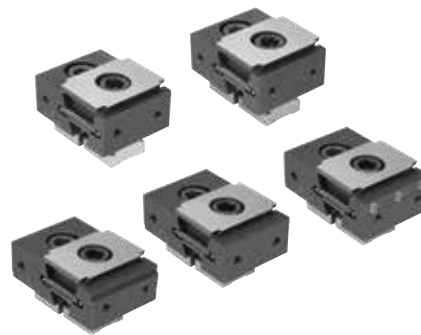
KIPP Wedge clamps

Order No.	Form	L min.	L 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 Internal thread	Z cap screw DIN 912	Clamping force max. kN	Tightening torque 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

for multi-clamping system



The functioning principle make the wedge clamps ideal for multi-clamping. The wedge shape creates high clamping forces. Tightening the clamping screw moves the clamping segments outwards and press the workpieces against the fixed jaws. The wedge has a slightly elongated hole allowing for movement to compensate for tolerances. Displacement: M12 = ± 1 mm.

Material:

Double wedge and clamping segments mild steel.

Version:

Double wedge and clamping segments hardened, phosphated.

Sample order:

K1749.05002

Note:

These wedge clamps can only be used in conjunction with the clamping rail K1746 for multiple clamping.

The lateral fastening holes are used to fasten workpiece stops.

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.

Advantages:

The lateral scale on the clamping rail and the fixed jaw guarantees a very high repeat clamping accuracy.

Supplied with:

Wedge clamps
Fastening screws.
Slot keys.

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

Wedge clamps with fixed jaw

for multi-clamping system



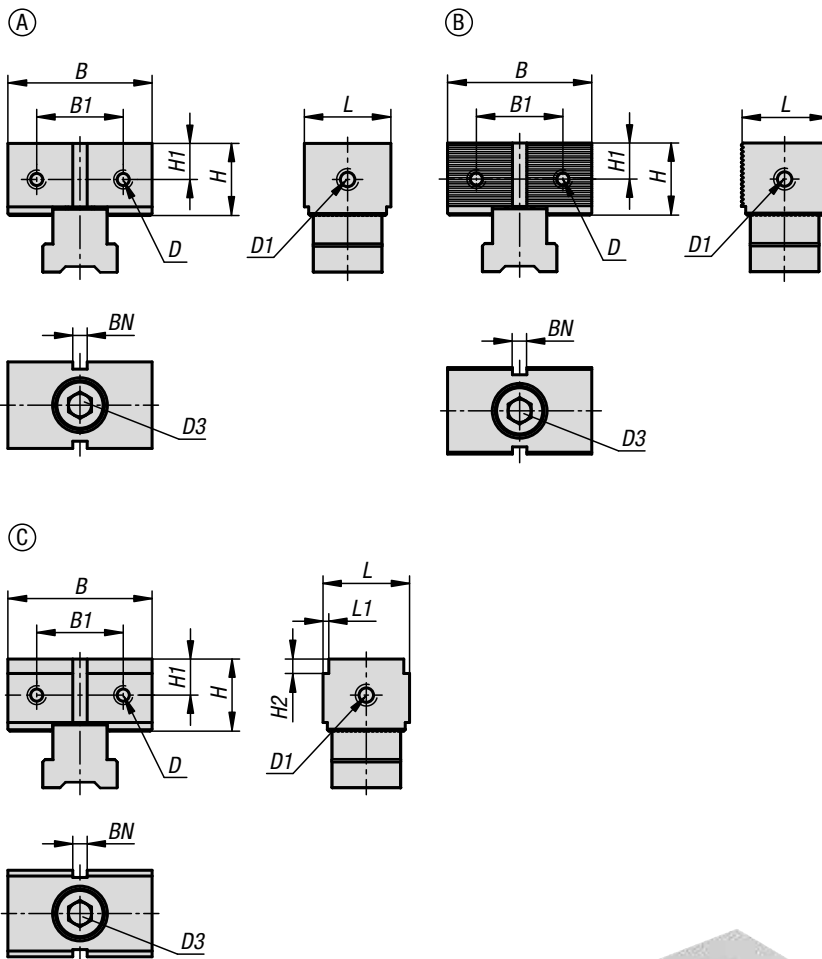
KIPP Wedge clamps with fixed jaw for multi-clamping system

Order No.	Form	L min.	L max.	B	H	B1	B2	H1	H2	H3	H5	H6
K1749.0500112	A	64	70	50	25	30	-	12,5	-	3,5	-	-
K1749.0500212	B	64	70	50	25	30	-	12,5	-	3,5	-	-
K1749.0502312	C	71	77	50	25	30	-	12,5	2	3,5	-	-
K1749.0505312	C	71	77	50	25	30	-	12,5	5	3,5	-	-
K1749.0500412	D	75	81	50	25	30	-	12,5	-	3,5	-	-
K1749.0500512	E	74,5	80,5	50	25	30	18	12,5	-	3,5	9	4,75

Order No.	Form	D Internal thread	D1	G cap screw DIN 912	Z cap screw DIN 912	Clamping force max. kN	Tightening torque max. Nm
K1749.0500112	A	M5	M6	M12x30	M12x25	30	85
K1749.0500212	B	M5	M6	M12x30	M12x25	30	85
K1749.0502312	C	M5	M6	M12x30	M12x25	30	85
K1749.0505312	C	M5	M6	M12x30	M12x25	30	85
K1749.0500412	D	M5	M6	M12x30	M12x25	30	85
K1749.0500512	E	M5	M6	M12x30	M12x25	30	85

Fixed jaws ES

for multi-clamping system



Material:

Tool steel.

Version:

Hardened and ground (HRC 55 ±2).

Sample order:

K1750.0503001

Note:

There are three different fixed jaw versions to choose from:

- Smooth version Form A for pre-machined workpieces.
- Serrated version Form B for raw parts.
- Offset jaws Form C for clamping with a small clamping edge.

The lateral fastening holes are used to fasten workpiece end stops. The two screw-on holes on the clamping surfaces also allow seating ledges to be mounted so as to optimise the clamping depth of the workpieces.

Application:

The ES fixed jaws are positioned on the clamping rails according to the clamping situation. When the fastening screw is tightened, the tothing allows a form-fit connection to be created. This allows high retaining forces to be carried through the clamping elements. With its slim design, the ES fixed jaw is especially suitable for clamping processes with smaller workpieces and large batch sizes. This also means that large production batches can be processed economically.

Advantages:

The lateral scale on the clamping rails and the fixed jaws allows precise positioning of the fixed stops.

Supplied with:

- ES fixed jaw.
- Fastening screw.
- Slot key.

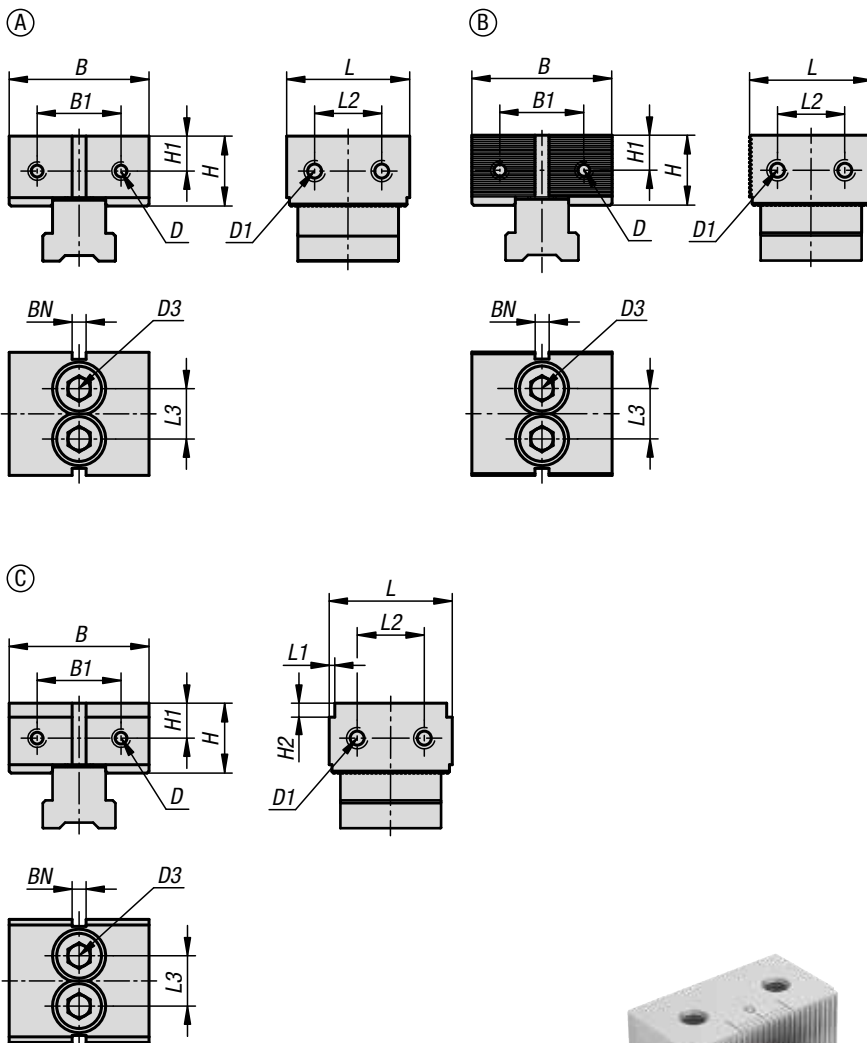


KIPP Fixed jaws ES for multi-clamping system

Order No.	suitable for system width	Form	Form-Type	L	B	H	L1	B1	H1	H2	D Internal thread	D1 internal thread	D3	BN=Slot width
K1750.0503001	50	A	smooth	30	50	25	-	30	12,5	-	M5	M6	M10x30	5
K1750.0503002	50	B	serrated	30	50	25	-	30	12,5	-	M5	M6	M10x30	5
K1750.0503023	50	C	stepped	30	50	25	2	30	12,5	2	M5	M6	M10x30	5
K1750.0503053	50	C	stepped	30	50	25	2	30	12,5	5	M5	M6	M10x30	5

Fixed jaws DS

for multi-clamping system



Material:
Tool steel.

Version:
Hardened and ground (HRC 55 ±2).

Sample order:
K1751.0504401

Note:
There are three different fixed jaw versions to choose from:

- Smooth version Form A for pre-machined workpieces.
- Serrated version Form B for raw parts.
- Offset jaws Form C for clamping with a small clamping edge.

The lateral fastening holes are used to fasten workpiece end stops. The two screw-on holes on the clamping surfaces also allow seating ledges to be mounted so as to optimise the clamping depth of the workpieces.

Application:

The DS fixed jaws are positioned on the clamping rails according to the clamping situation. When the fastening screw is tightened, the toothing allows a form-fit connection to be created. Fixed jaws with two fastening screws are to be preferred where higher machining forces are to be applied.

Advantages:

The lateral scale on the clamping rails and the fixed jaws allows precise positioning of the fixed stops.

Supplied with:

- DS fixed jaw.
- Fastening screw.
- Slot key.

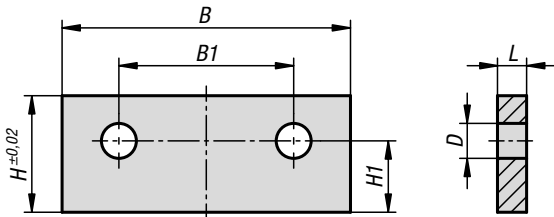


KIPP Fixed jaws DS for multi-clamping system

Order No.	suitable for system width	Form	Form-Type	L	B	H	L1	L2	L3	B1	H1	H2	D Internal thread	D1 internal thread	D3	BN=Slot width
K1751.0504401	50	A	smooth	44	50	25	-	24	18	30	12,5	-	M5	M6	M10x30	5
K1751.0504402	50	B	serrated	44	50	25	-	24	18	30	12,5	-	M5	M6	M10x30	5
K1751.0504423	50	C	stepped	44	50	25	2	24	18	30	12,5	2	M5	M6	M10x30	5
K1751.0504453	50	C	stepped	44	50	25	2	24	18	30	12,5	5	M5	M6	M10x30	5

Screw-on seating ledges

for multi-clamping system



Material:

Tool steel.

Version:

Hardened and ground (HRC 55 ±2).

Sample order:

K1752.050175

Note:

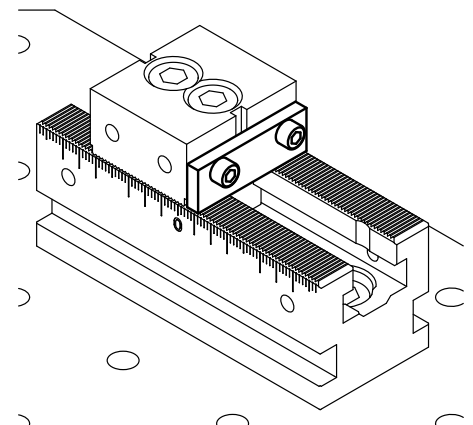
The seating ledges allow different workpiece clamping depths to be set.

Application:

The seating ledges can be screwed together with the ES and DS fixed jaws and with the wedge clamps.

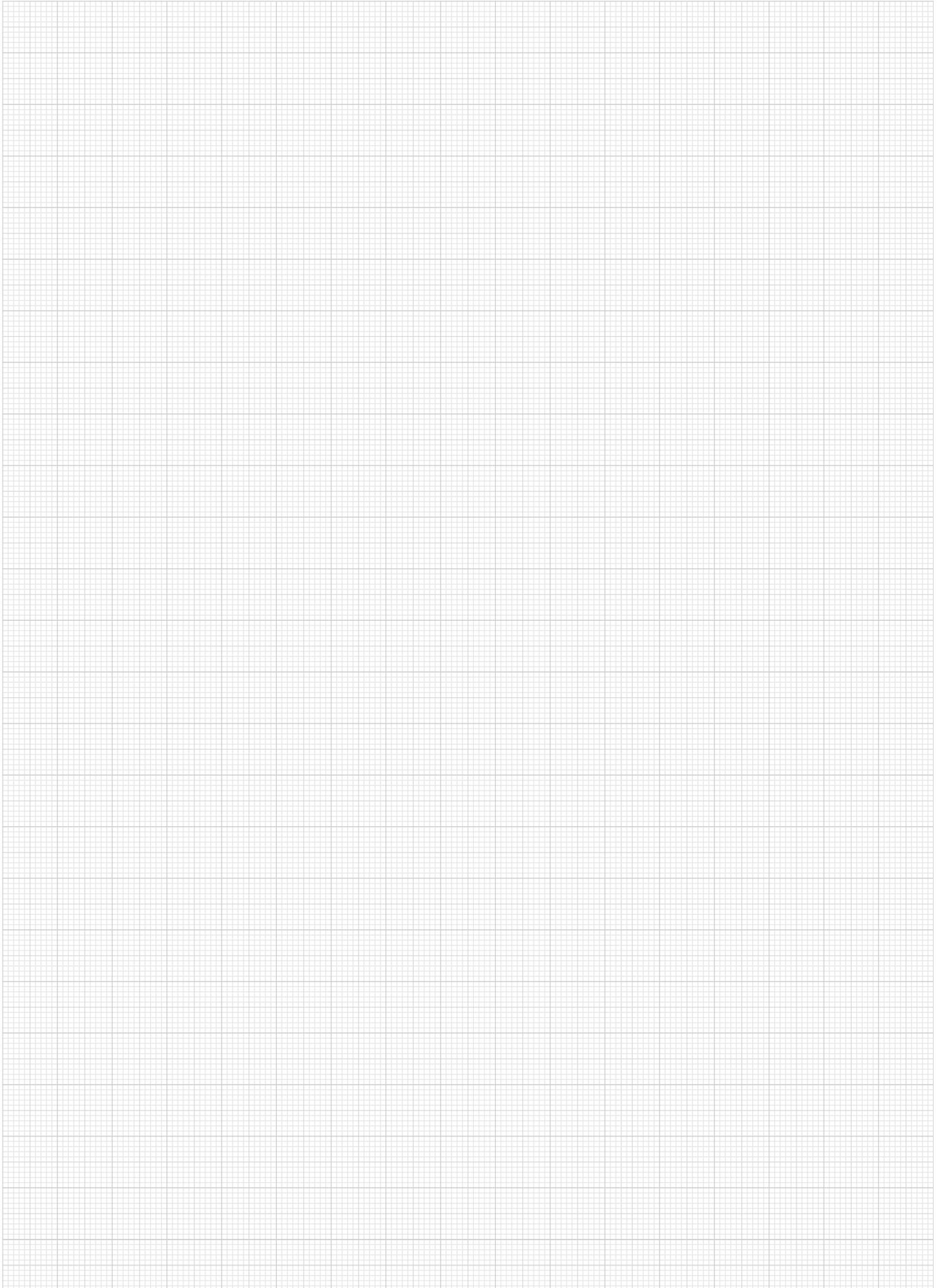
Advantages:

Quick setup of workpieces on the multiple clamping system. Uniform clamping depth of the workpieces with the ground support surface height.



KIPP Screw-on seating ledges for multi-clamping system

Order No.	suitable for system width	L	B	H	B1	H1	D
K1752.050175	50	5	49,5	17	30	12,3	6
K1752.050205	50	5	49,5	20	30	12,3	6
K1752.050223	50	3	49,5	22	30	12,3	6



Attachment jaws machinable

for fixed jaws DS and ES



Material:

Tool steel.

Version:

tempered (HRC32).

Sample order:

K1753.05017

Note:

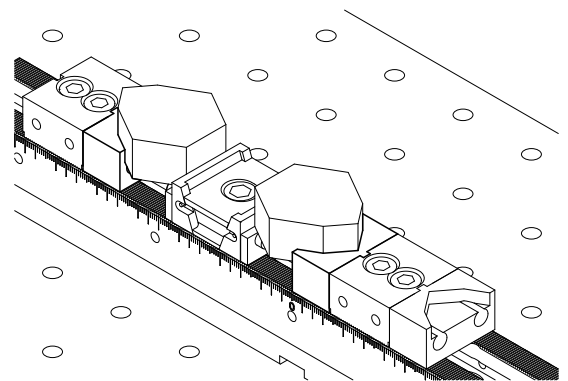
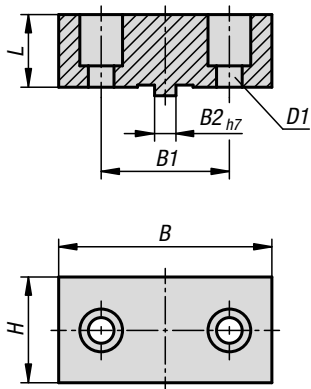
Attachment jaws are used to incorporate customer-specific workpiece contours.

Application:

The attachment jaws are screwed onto the ES and DS fixed stops.

Advantages:

Machined attachment jaws can be re-used for later series productions.

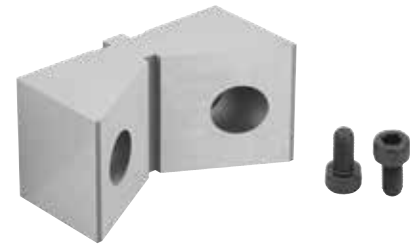


KIPP Machinable attachment jaws for DS and ES fixed jaws

Order No.	suitable for system width	L	B	H	B1	B2	D1 for screw to DIN 912
K1753.05017	50	17	50	25	30	5	M5
K1753.05027	50	27	80	25	30	5	M5

Attachment jaws with prism

for fixed jaws DS and ES



Material:
Tool steel.

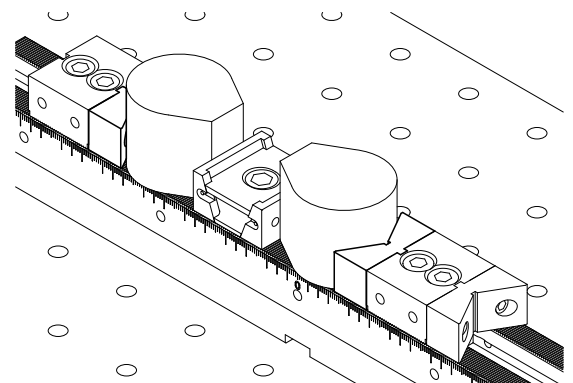
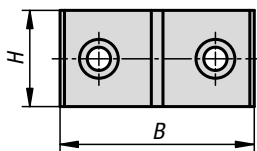
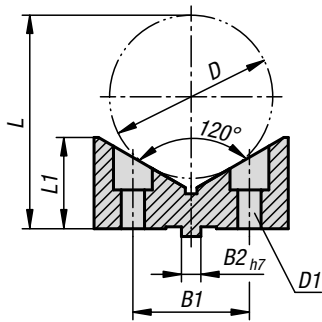
Version:
Hardened and ground (HRC 55).

Sample order:
K1754.05070

Note:
Attachment jaws with prism are used for clamping round workpieces. With the longitudinal slot on the back, they can be aligned exactly on the ES and DS fixed jaws.

Application:
The attachment jaws with prism are screwed onto the ES and DS fixed stops.

Advantages:
The attachment jaws with prism ensure repeat accuracy when clamping workpieces.

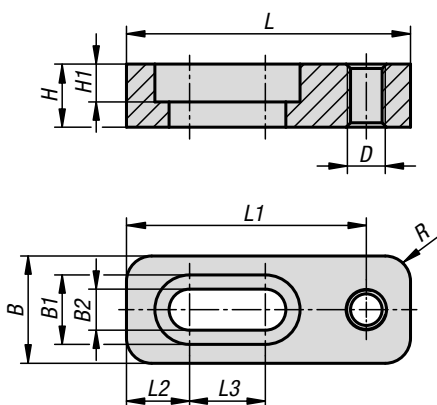


KIPP Attachment jaws with prism for DS and ES fixed jaws

Order No.	suitable for system width	L	B	H	L1	B1	B2	D	max. clamping diameter	D1 for screw to DIN 912
K1754.05070	50	54,98	50	25	23,5	30	5	42	70	M5

Workpiece stops

for multi-clamping system



Material:

Carbon steel.

Version:

Tempered and flat faces ground (HRC 32).

Sample order:

K1755.05045

Note:

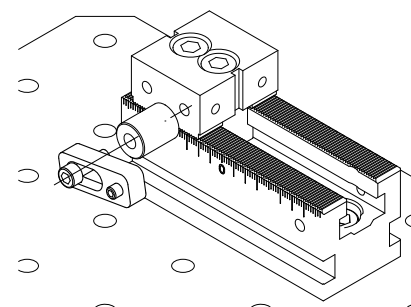
Workpieces can be positioned laterally using the workpiece stops for multi-clamping systems.

Application:

The end stop can be mounted laterally on both surfaces of the fixed jaws.

Advantages:

Flexible adjustment with the elongated hole.

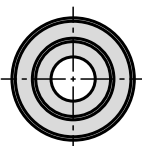
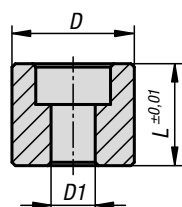


KIPP Workpiece stops for multi-clamping system

Order No.	suitable for system width	L	B	H	L1	L2	L3	B1	B2	H1	R	D Internal thread
K1755.05045	50	45	17	10	38	10	12	11	6,5	6	4	M6

Spacers

for multi-clamping system workpiece stop



Material:
Carbon steel.

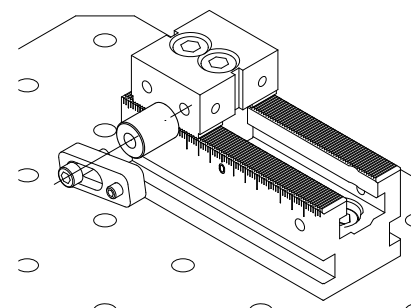
Version:
Tempered and flat faces ground (HRC 32).

Sample order:
K1756.05010

Note:
The spacer for the workpiece stop is used to extend the lateral stop dimension.

Application:
The spacer is screwed onto the side of the fixed jaw together with the workpiece stop.

Advantages:
Increases the adjustment range of the lateral end stop.

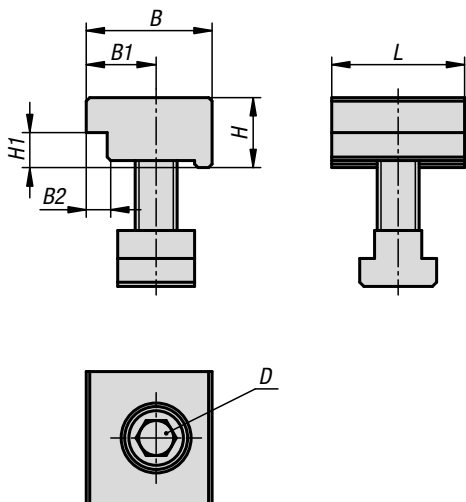
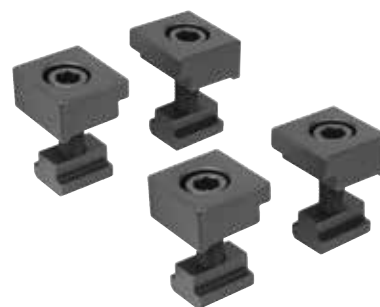


KIPP Spacers for multi-clamping system workpiece stops

Order No.	suitable for system width	L	D	D1 for screw to DIN 912
K1756.05010	50/72	10	18	M6
K1756.05015	50/72	15	18	M6
K1756.05023	50/72	23	18	M6

Clamping claw sets

for multi-clamping system



Material:

Carbon steel.

Version:

Tempered. Support faces ground (HRC 32).

Sample order:

K1757.05012

Note:

Using these clamping claw sets, the clamping rails can be secured at any position on the machine table.

Application:

The clamping claw set is inserted into the T-slot on the machine table and slid along to the desired position on the clamping rail. Tightened using a cap screw.

Advantages:

The clamping claw set can also be used for other types of mounting in the multi-clamping system.

Supplied with:

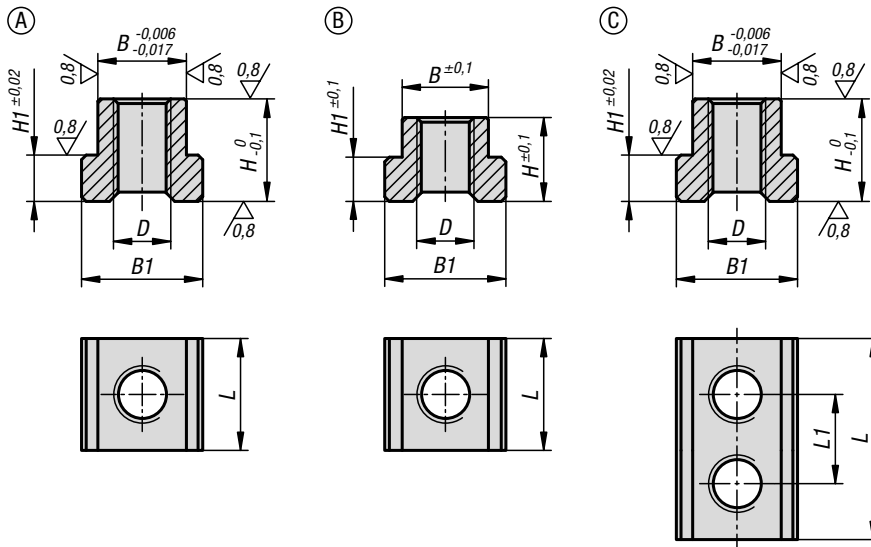
- 4x claw clamps.
- 4x DIN 912 cap screws.
- 4x DIN 508 T-slot nuts.

KIPP Clamping claw sets for multi-clamping system

Order No.	suitable for system width	L	B	H	B1	B2	H1	D for screw DIN 912	Slot width
K1757.05012	50	38	36	20	20	6	10	M12	14
K1757.07216	72/100	40	50	28	27	8	14	M16	18

T-slot keys

for wedge clamps



Material:

Carbon steel.

Version:

Tempered. Guide faces ground (HRC 38).

Sample order:

K1758.05010241

Note:

T-slot keys are matched to the multiple clamping system.
 Form A/C are used for fixed stops.
 Form B is for operating the clamping wedge of the clamping wedge segments.

Application:

The T-slot keys are inserted into the clamping rail at the appropriate position. The cap screw is used to screw the T-slot keys to the fixed stops and wedge clamps.

Advantages:

With Form A/C, the T-slot key has very little play in the clamping rail, so the fixed stops can also be inserted from the side.

KIPP T-slot keys for wedge clamps

Order No.	suitable for system width	Suitable for	Form	L	L1	B	H	B1	H1	D Internal thread
K1758.05010241	50	fixed jaw single-sided	A	24	-	19	22	26	9,95	M10
K1758.05010361	50	fixed jaw double-sided	C	36	18	19	22	26	9,95	M10
K1758.05012241	50	wedge clamp with fixed jaw	A	24	-	19	22	26	9,95	M12
K1758.05012262	50	double-sided wedge clamp	B	26	-	18,5	18	26	9,5	M12

Stationary chucks

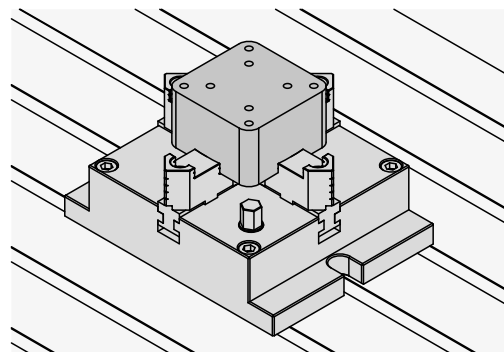
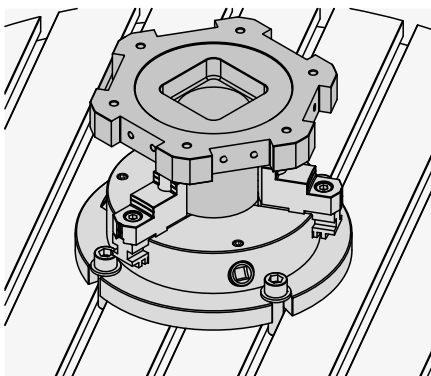
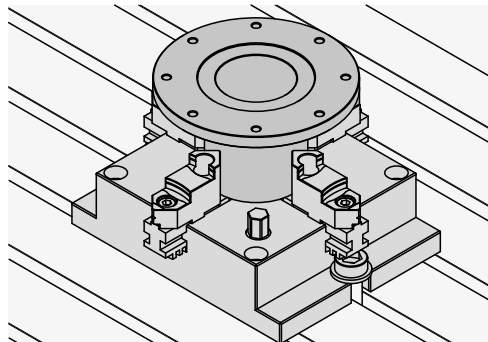
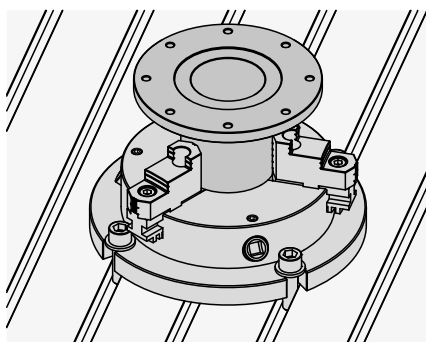
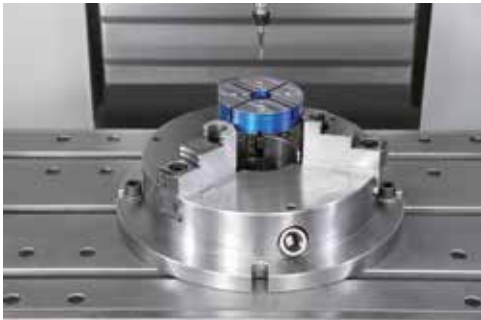


Technical information for stationary chucks



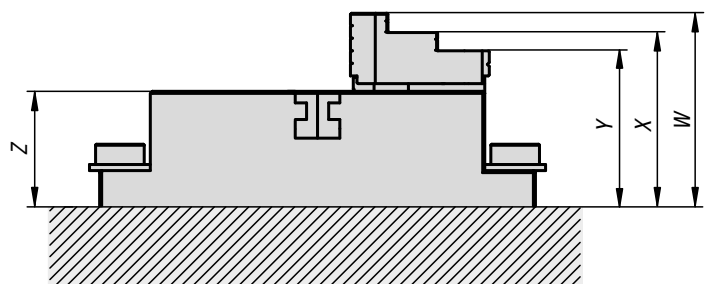
Function

Stationary 3 and 4-jaw chucks are especially suitable for centric workpiece holding on drilling and milling machines. The flexible arrangement of the hard and soft jaws enable diverse sizes and shapes of workpieces to be easily held on the outside or inside faces.



Precision

1. The chucks are precision ground. The W, X, Y, Z tolerances between the chucks is within 0.05 mm.
2. The repeat accuracy by centric clamping with hard jaws is within 0.02 mm.



Technical information for stationary chucks



Actuation

The moveable jaw bases are driven by the internal scroll plate.

The rotation of the pinion transfers the force over the scroll plate to the jaw bases and generates a synchronous movement of the jaws inwards or outwards.

Chuck advantages

1. Body precision ground
2. Flat design
3. Optimum accessibility to the lubrication system
4. Wide chuck bore for holding bar material
5. Actuated using a hex key. Quick and easy operation.
6. Soft jaws can also be attached to the jaw bases.

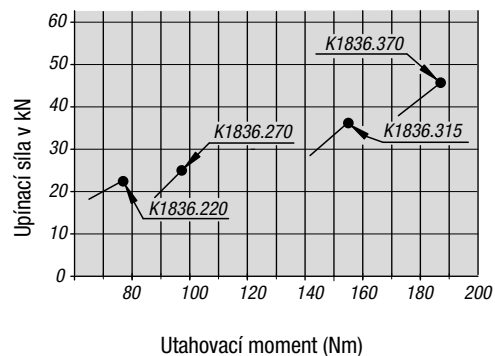
Note

Inadequate lubrication leads to excessive wear and reduction of the clamping force.

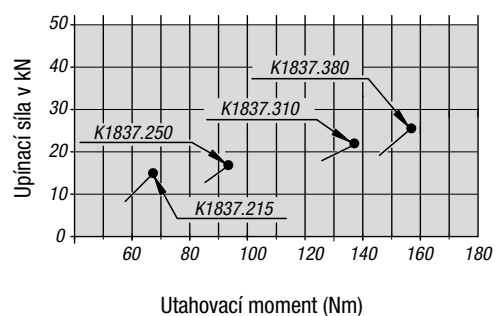
Please ensure regular lubrication intervals.

Stationary 3-jaw chuck

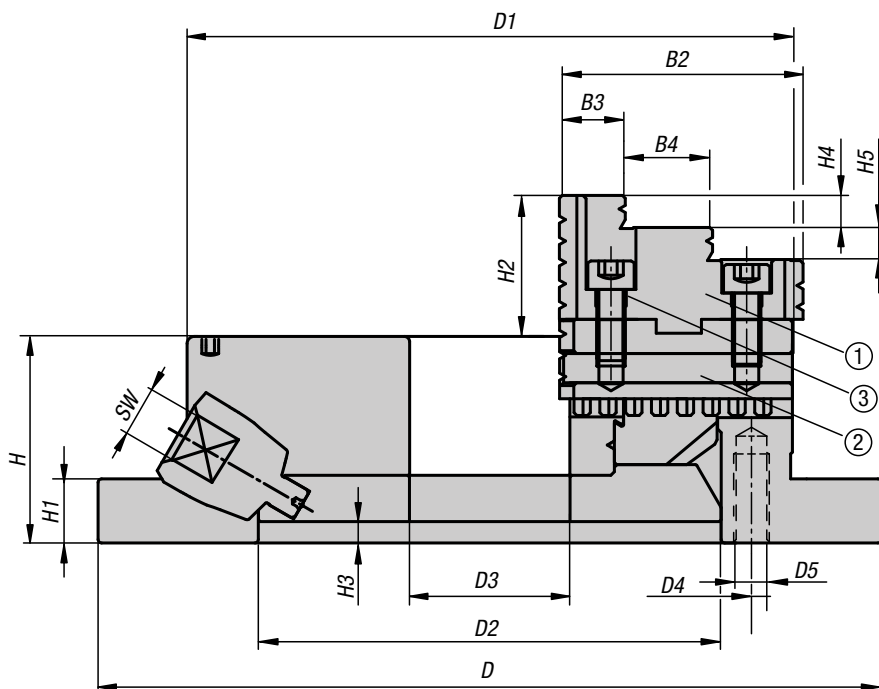
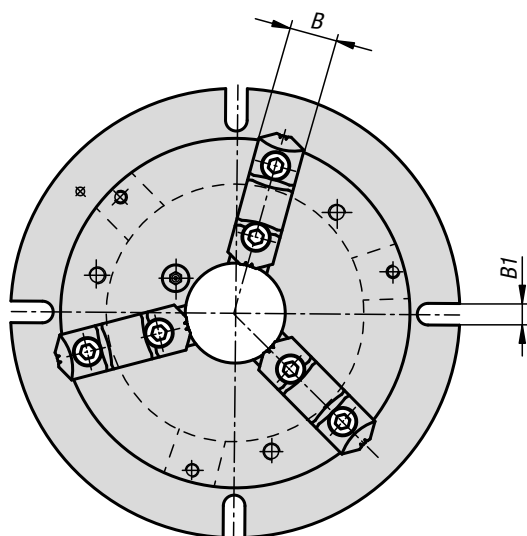
Torque and clamping force specifications for the jaws.



Stationary 4-jaw chuck



Stationary 3-jaw steel chuck



Stationary 3-jaw chucks are especially suitable for centric workpiece holding on drilling and milling machines. The flexible arrangement of the hard and soft jaws enable diverse sizes and shapes of workpieces to be easily held on the outside or inside faces.

Material:

Steel.

Version:

Contact faces on base ground.
Jaw plates hardened, ground.

Sample order:

K1836.270

Note:

Take note of the jaw numbers when mounting.
The chucks are precision ground. The W, X, Y, Z tolerances between the jaws is within 0.05 mm.
The repeat accuracy by centric clamping with hard jaws is within 0.02 mm.

The moveable jaw bases are driven by the internal scroll plate.

The rotation of the pinion transfers the force over the scroll plate to the jaw bases and generates a synchronous movement of the jaws inwards or outwards.

Inadequate lubrication leads to excessive wear and reduction of the clamping force. Please ensure regular lubrication intervals.

Advantages:

The repeat accuracy by centric clamping is 0.02 mm.
Flat design.

For drilling and milling machines.

The body is precision ground.

Optimum accessibility to the lubrication system.

Wide chuck bore for holding bar material.

Actuated using a hex key. Quick and easy to operation.

Soft jaws can also be attached to the jaw bases.

Supplied with:

Tightening key.

Accessories:

K1838 Steel jaws, soft

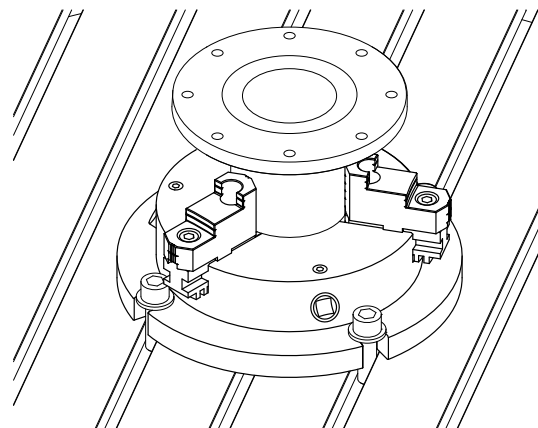
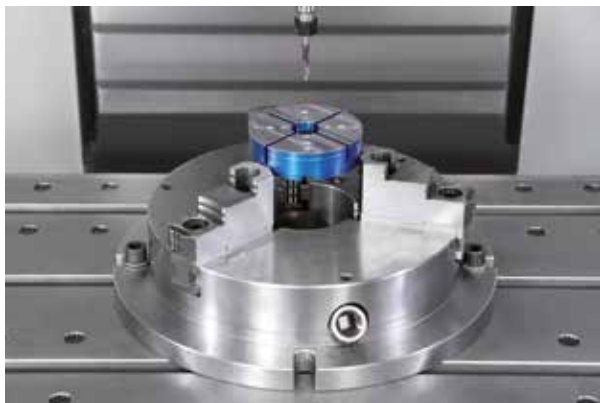
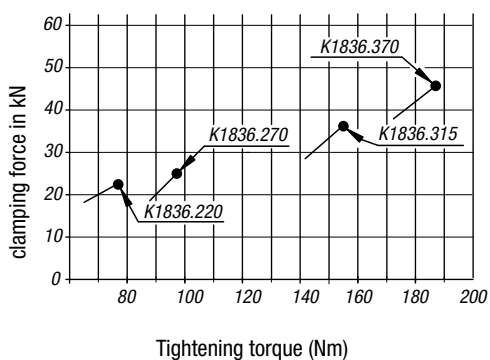
Drawing reference:

1) Reversible jaw

2) Standard jaws

3) Fastening screws

Stationary 3-jaw steel chuck



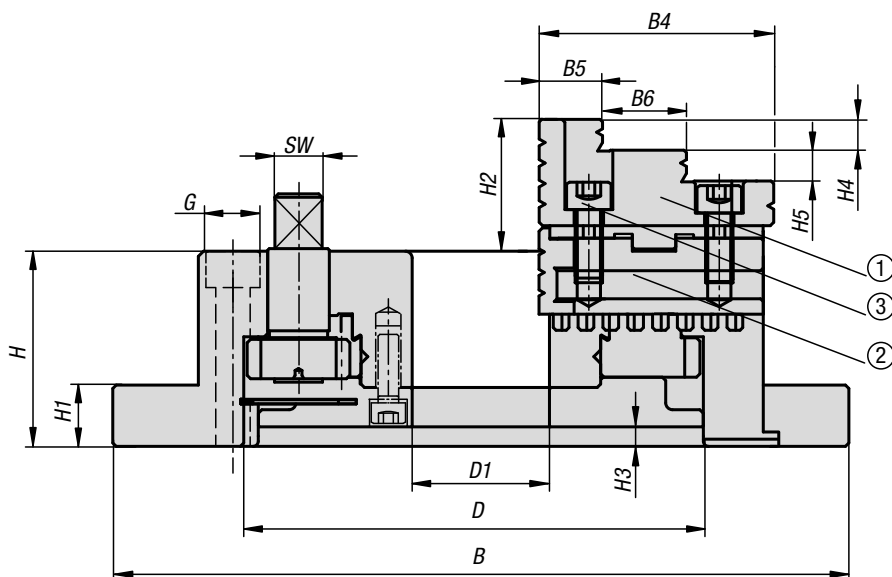
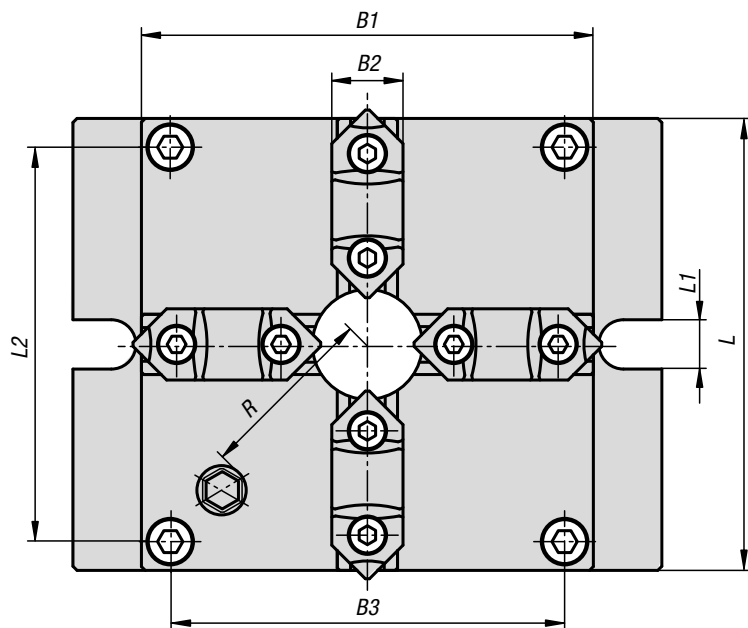
KIPP Stationary 3-jaw steel chuck

Order No.	D	D1	D2	D3	D4	D5	B	B1	B2	B3	B4
K1836.220	220	170	130	45	147	M10	26	13	68	18,5	24,5
K1836.270	270	210	155	60	172	M10	28	13	82	22,7	27,9
K1836.315	315	255	190	80	210	M12	32	16	93	24,9	32,5
K1836.370	370	305	250	105	285	M12	40	18	118	31,3	40,6

Order No.	H	H1	H2	H3	H4	H5	SW	Outer clamping range	Inner clamping range	Tightening torque max. Nm	Clamping force F (kN)	Accessories
K1836.220	58	18	40	6	9	9	10	8-160	48-150	78	21	K1838.2203
K1836.270	65	20	43	6	10	10	11	11-200	62-190	98	25	K1838.2703
K1836.315	73	20	52	6	12	12	12	12-250	72-240	156	36	K1838.3153
K1836.370	80	22	59	5	15	15	14	15-300	86-290	186	44	K1838.3703



Stationary 4-jaw steel chuck



Stationary 4-jaw chucks are especially suitable for centric workpiece holding on drilling and milling machines. The flexible arrangement of the hard and soft jaws enable diverse sizes and shapes of workpieces to be easily held on the outside or inside faces.

Material:
Steel.

Version:
Contact faces on base ground.
Jaw plates hardened, ground.

Sample order:
K1837.250

Note:
Take note of the jaw numbers when mounting. The chucks are precision ground. The W, X, Y, Z tolerances between the jaws is within 0.05 mm. The repeat accuracy by centric clamping with hard jaws is within 0.02 mm.

The moveable jaw bases are driven by the internal scroll plate.

The rotation of the pinion transfers the force over the scroll plate to the jaw bases and generates a synchronous movement of the jaws inwards or outwards.

Inadequate lubrication leads to excessive wear and reduction of the clamping force. Please ensure regular lubrication intervals.

Advantages:

- The repeat accuracy by centric clamping is 0.02 mm.
- Flat design.
- For drilling and milling machines.
- The body is precision ground.
- Optimum accessibility to the lubrication system.
- Wide chuck bore for holding bar material.
- Actuated using a hex key. Quick and easy to operation.
- Soft jaws can also be attached to the jaw bases.

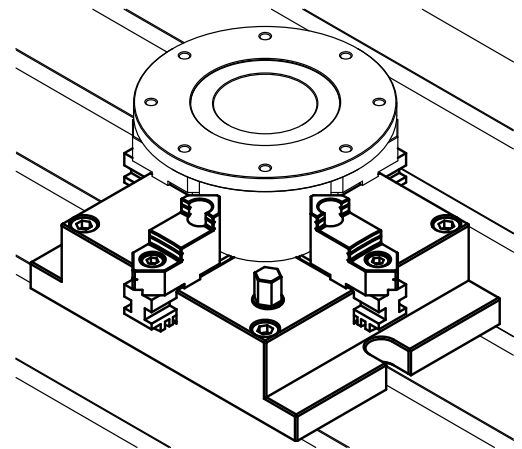
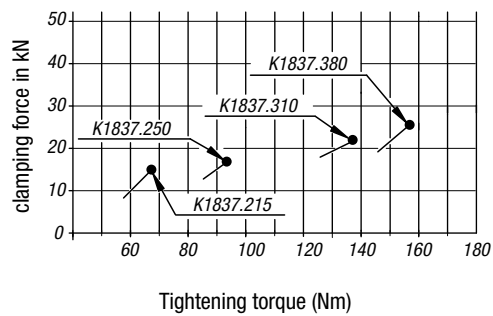
Supplied with:
Tightening key.

Accessories:
K1838 Steel jaws, soft

Drawing reference:

- 1) Reversible jaw
- 2) Standard jaws
- 3) Fastening screws

Stationary 4-jaw steel chuck



KIPP Stationary 4-jaw steel chuck

Order No.	L	L1	L2	B	B1	B2	B3	B4	B5	B6	D	D1	G for socket head screw	H	H1	H2
K1837.215	165	18	144	215	165	26	144	68	18,5	24,5	130	40	M10	57	18	39
K1837.250	200	18	174	250	200	28	174	82	23	27,9	160	55	M12	65	20	43
K1837.310	250	18	218	310	250	32	218	93	24,9	32,5	200	70	M14	72	22	50
K1837.380	310	22	274	380	310	40	274	117	31,2	40,6	260	100	M16	85	25	56

Order No.	H3	H4	H5	SW	R	Outer clamping range	Inner clamping range	Tightening torque max. Nm	Clamping force F (kN)	Accessories
K1837.215	5,5	9	9	14	66	4-128	55-128	68	15	K1838.2154
K1837.250	6	10	10	17	83	5-162	62-162	93	18	K1838.2154
K1837.310	6	12	12	21	104	6-200	72-200	137	22	K1838.2154
K1837.380	7	15	15	23	135	10-265	90-265	156	25	K1838.2154



Jaws, soft steel

for stationary chuck



Sets comprising 3 or 4 jaws

Soft jaws can be flexibly machined to generate custom contours and diameters.

Material:
Steel.

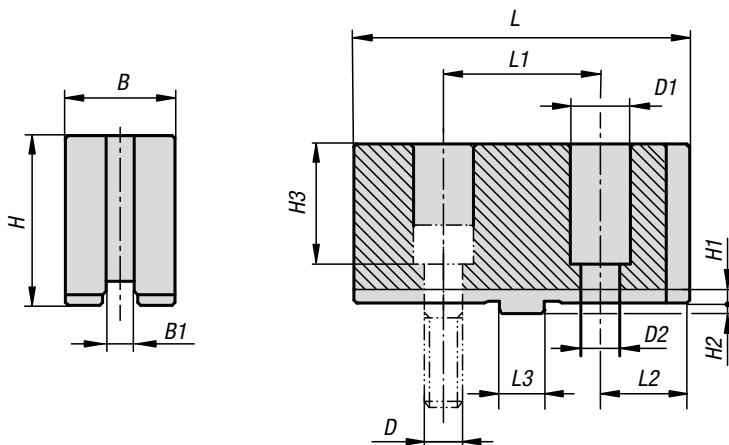
Version:
soft.

Sample order:
K1838.2703

Note:
The jaw set comprising 3 jaws are only suitable for the stationary 3-jaw chuck K1836. The jaw set comprising 4 jaws are only suitable for the stationary 4-jaw chuck K1837.

Advantages:
The soft jaws can be machined for internal or external gripping and are reversible.

Accessories:
K1836 Stationary 3-jaw chuck.
K1837 Stationary 4-jaw chuck.



KIPP Jaws, steel, soft, for stationary chuck

Order No.	Packaging unit	B	B1	H	H1	H2	H3	L	L1	L2	L3	D	D1	D2	Accessories
K1838.2203	3	26	7,94	37	3,5	3	25	73	38,1	17,45	12,68	M8	14	9	K1836.220
K1838.2703	3	31	7,94	48	3,8	3	34	95	44,4	25,3	12,68	M10	17	11	K1836.270
K1838.3153	3	37	12,7	48	4,2	3	34	110	54	28	19,03	M12	19	13	K1836.315
K1838.3703	3	42	12,7	54	4,2	3	38	125	63,5	30,75	19,03	M12	19	13	K1836.370
K1838.2154	4	26	7,94	37	3,5	3	25	73	38,1	17,45	12,68	M8	14	9	K1837.215
K1838.2504	4	31	7,94	48	3,8	3	34	95	44,4	25,3	12,68	M10	17	11	K1837.250
K1838.3104	4	37	12,7	48	4,2	3	34	110	54	28	19,03	M12	19	13	K1837.310
K1838.3804	4	42	12,7	54	4,2	3	38	125	63,5	30,75	19,03	M12	19	13	K1837.380