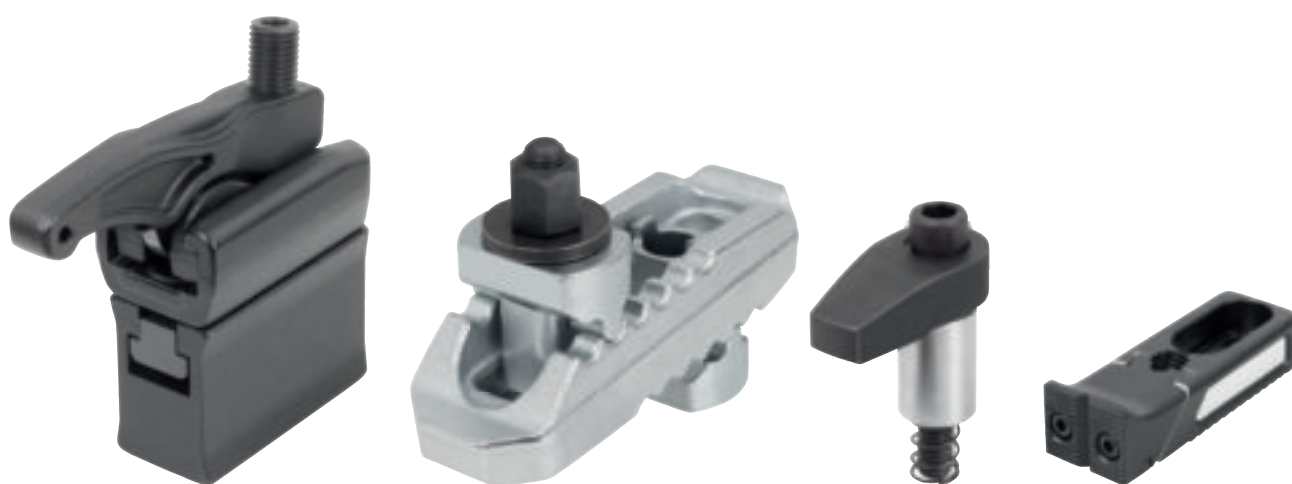
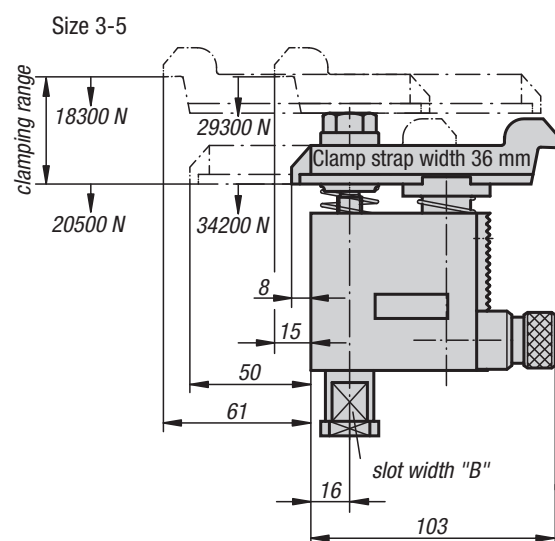
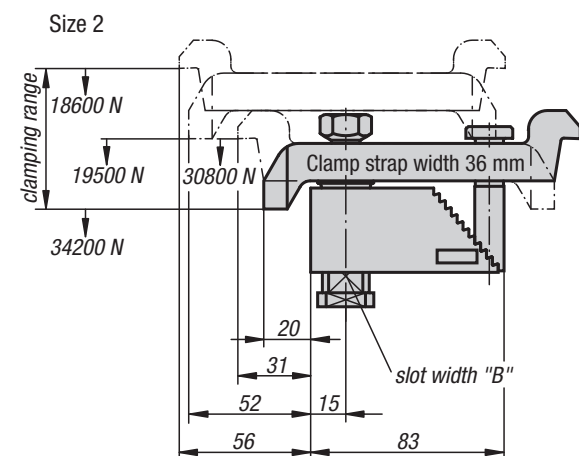
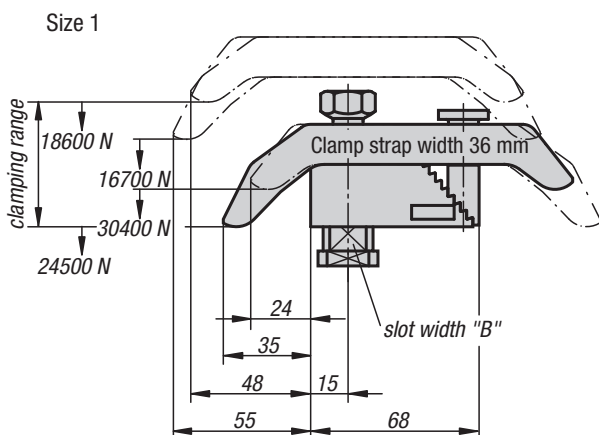


Clamping elements



Clamp straps

with adjustment unit



Material:

Base, ductile iron.

Clamp strap and clamping screw carbon steel.

Version:

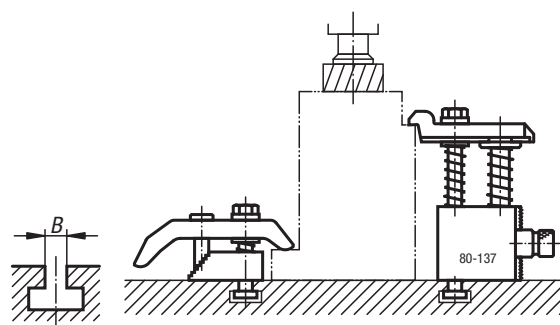
Black oxidised.

Sample order:

K0004.40X16 (include slot width B)

Note:

These clamp strap modules are universal, flexible clamps constructed from individual components building a compact unit. There are no loose parts which first have to be altered for a clamping operation. The compact design allows these clamps to be placed close to the workpiece enabling the full area of the machine table to be used.

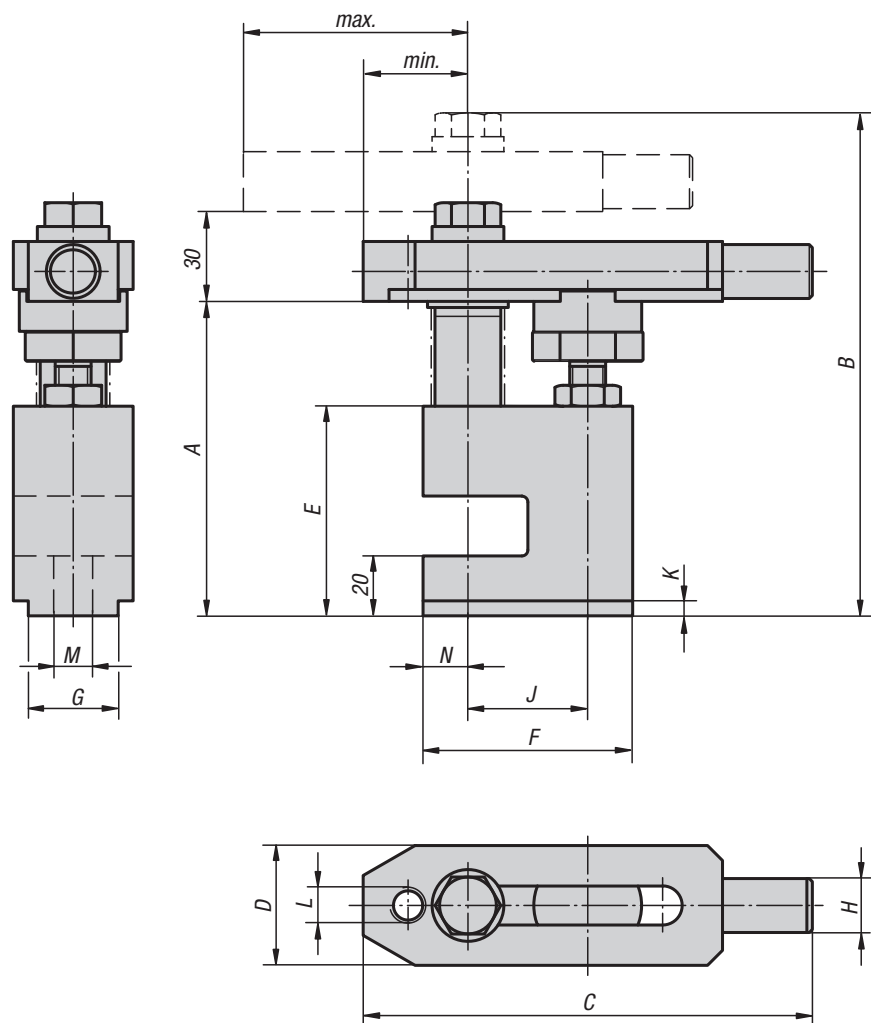


KIPP Clamp straps with adjustment unit

Order No.	Size	Clamp range	Slot width B to DIN 650
K0004.10X	1	0-35	12/14/16/18
K0004.20X	2	25-85	12/14/16/18
K0004.30X	3	80-137	12/14/16/18
K0004.40X	4	125-224	12/14/16/18
K0004.50X	5	160-300	12/14/16/18

Clamping units

pin-end strap



Material, version:

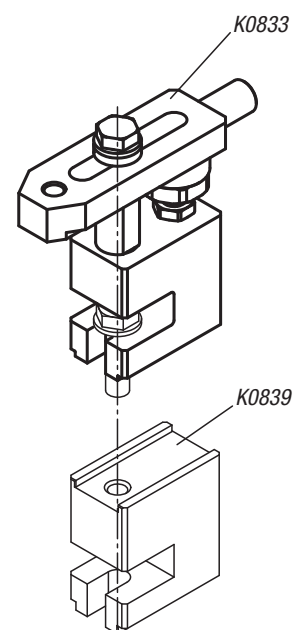
Body carbon steel, black oxidised.
Strap carbon steel, tempered and black oxidised.
Clamping screw carbon steel, tempered and black oxidised.

Sample order:

K0833.12105

Note:

Both ends of the strap can be used for clamping workpieces. The clamps can be combined with other fixture elements, such as K0839, K0821, K0307.

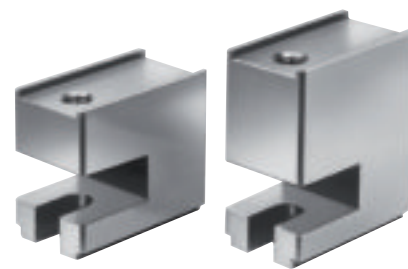


KIPP Clamping units, pin-end strap

Order No.	A	B	C	D	E	F	G	H	J	K	L	M	N	min.	max.
K0833.12105	105	168	150	40	70	70	30	18	40	5	M12	13	15	35	75
K0833.16110	110	188	190	50	75	90	40	24	50	5	M16	17	20	45	95

Riser blocks

Form P

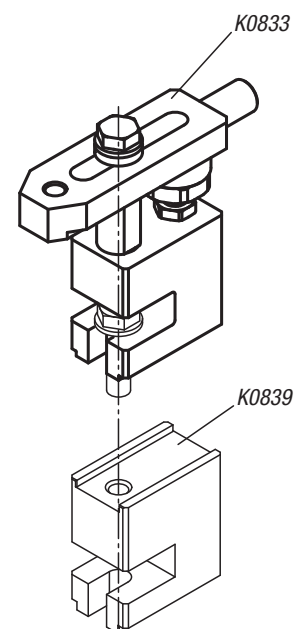
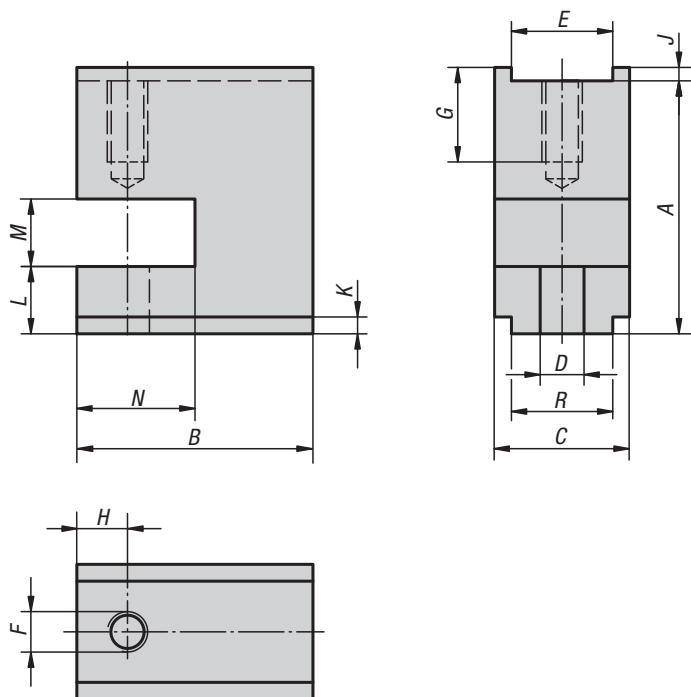


Material:
Carbon steel.

Version:
Black oxidised.

Sample order:
K0839.12075

Note:
These riser blocks Form P are used together with clamping straps to clamp high workpieces.



KIPP Riser blocks Form P

Order No.	A	B	C	D	E	F	G	H	J	K	L	M	N	R
K0839.12075	75	70	40	13	30	M12	24	15	4	5	20	20	35	30
K0839.12100	100	70	40	13	30	M12	24	15	3	5	20	20	35	30
K0839.16075	75	90	50	17	40	M16	30	20	4	5	20	20	45	40
K0839.16100	100	90	50	17	40	M16	30	20	3	5	20	20	45	40

Clamp strap assemblies



Material:

Steel.

Version:

Form A: Tempered and galvanized.

Form B: Tempered and galvanized.

Complete with DIN 787 screw for T-slots, DIN 6340 washer and DIN 6330B nut.

Form C: Tempered and galvanized.

Complete with DIN 6379 stud, DIN 6340 washer and DIN 6330B nut.

Sample order:

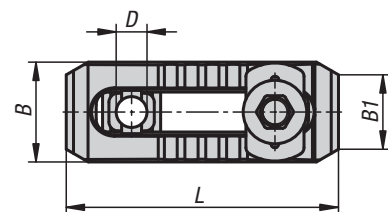
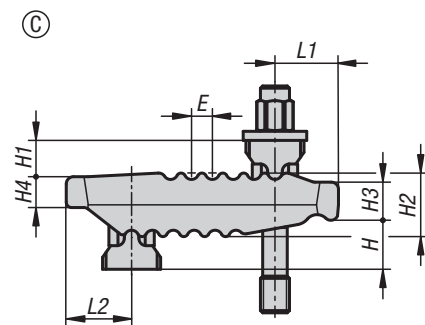
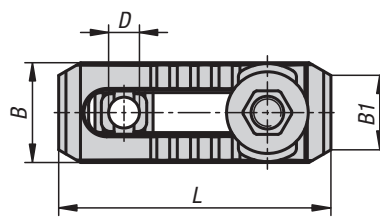
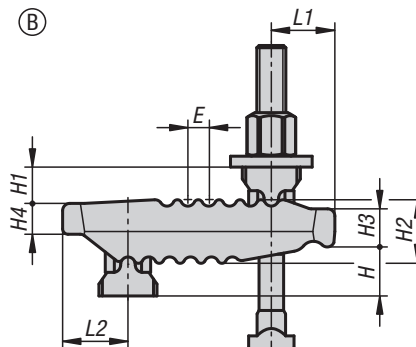
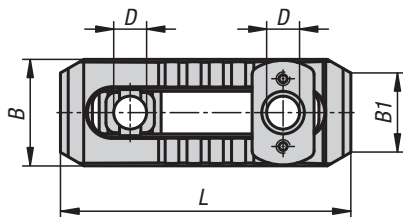
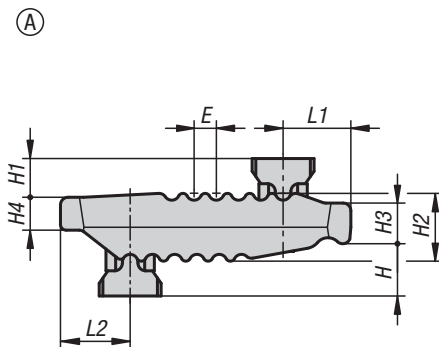
K1165.113115

Note:

These clamp strap assemblies can be quickly and infinitely adapted to the clamping situation. The clamp straps have different heel types both sides enabling the best end to be selected depending on the specific application. These extremely versatile clamp straps are suitable for use by metal cutting or non-cutting machining and also for press and injection-moulding applications.

Accessories:

K1204 Adjustable heel supports



Clamp strap assemblies



KIPP Clamp strap assemblies

Order No.	Form	B	B1	D	E	H clamping range	H1	H2	H3	H4	L	L1	L2	Nominal slot size	Clamping force kN
K1165.113115	A	44	30	13	11	0-55	18	27	17	12	115	25	30	10-12-14	30
K1165.117150	A	55	41	17	12	0-70	20	36	21	17	150	35	36	12-14-16-18	40
K1165.121187	A	62	30	21	14	0-80	30	42	27	20	187	44	44	16-18-20-22	60
K1165.125235	A	70	30	25	17	0-100	31	51	34	24	235	60	47	20-22-24-28	75
K1165.125285	A	73	30	25	17	0-100	35	56	35	24	285	62	51	20-22-24-28	75

Order No. with T-slot nut	Form	B	B1	D	E	H clamping range	H1	H2	H3	H4	L	L1	L2	Nominal slot size	Fastening screw(s)	Clamping force kN
K1165.210115100	B	44	30	13	11	0-40	18	27	17	12	115	25	30	10	M10X100	25
K1165.212115125	B	44	30	13	11	0-55	18	27	17	12	115	25	30	12	M12X125	30
K1165.214115125	B	44	30	13	11	0-55	18	27	17	12	115	25	30	14	M12X125	30
K1165.212150160	B	55	41	17	12	0-70	20	36	21	17	150	35	36	12	M12X160	35
K1165.214150160	B	55	41	17	12	0-70	20	36	21	17	150	35	36	14	M12X160	35
K1165.216150160	B	55	41	17	12	0-70	20	36	21	17	150	35	36	16	M16X160	40
K1165.218150160	B	55	41	17	12	0-70	20	36	21	17	150	35	36	18	M16X160	40
K1165.216187200	B	62	30	21	14	0-80	30	42	27	20	187	44	44	16	M16X200	55
K1165.218187200	B	62	30	21	14	0-80	30	42	27	20	187	44	44	18	M16X200	55
K1165.220187200	B	62	30	21	14	0-80	30	42	27	20	187	44	44	20	M20X200	60
K1165.222187200	B	62	30	21	14	0-80	30	42	27	20	187	44	44	22	M20X200	60
K1165.220235250	B	70	30	25	17	0-100	31	51	34	24	235	60	47	20	M20X250	70
K1165.222235250	B	70	30	25	17	0-100	31	51	34	24	235	60	47	22	M20X250	70
K1165.224235250	B	70	30	25	17	0-100	31	51	34	24	235	60	47	24	M24X250	75
K1165.228235250	B	70	30	25	17	0-100	31	51	34	24	235	60	47	28	M24X250	75

Order No. with stud	Form	B	B1	D	E	H clamping range	H1	H2	H3	H4	L	L1	L2	Fastening screw(s)	Clamping force kN
K1165.312115100	C	44	30	13	11	0-30	18	27	17	12	115	25	30	M12X100	30
K1165.312115125	C	44	30	13	11	0-55	18	27	17	12	115	25	30	M12X125	30
K1165.312150125	C	55	41	17	12	0-50	20	36	21	17	150	35	36	M12X125	40
K1165.312150160	C	55	41	17	12	0-70	20	36	21	17	150	35	36	M12X160	40
K1165.316150125	C	55	41	17	12	0-40	20	36	21	17	150	35	36	M16X125	40
K1165.316150160	C	55	41	17	12	0-70	20	36	21	17	150	35	36	M16X160	40
K1165.320187160	C	62	30	21	14	0-40	30	42	27	20	187	44	44	M20X160	60
K1165.320187200	C	62	30	21	14	0-80	30	42	27	20	187	44	44	M20X200	60
K1165.320235200	C	70	30	25	17	0-70	31	51	34	24	235	60	47	M20X200	75
K1165.320235250	C	70	30	25	17	0-100	31	51	34	24	235	60	47	M20X250	75
K1165.324235200	C	70	30	25	17	0-50	31	51	34	24	235	60	47	M24X200	75
K1165.324235250	C	70	30	25	17	0-100	31	51	34	24	235	60	47	M24X250	75

Adjustable heel supports

for clamp strap assembly



Material:

Carbon steel.

Version:

Body tempered and galvanized.

Support bolt tempered, grade 8.8.

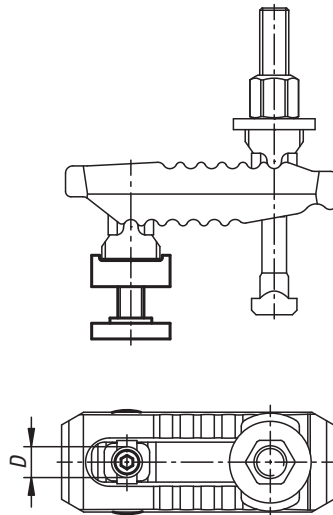
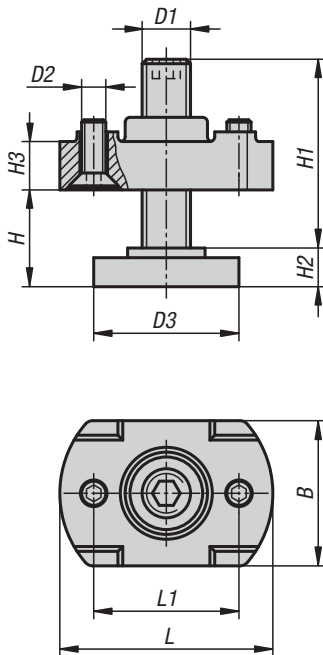
Sample order:

K1204.1039

Note:

These adjustable heel supports consist of support plate, support bolt and fastening screws for the strap heel support.

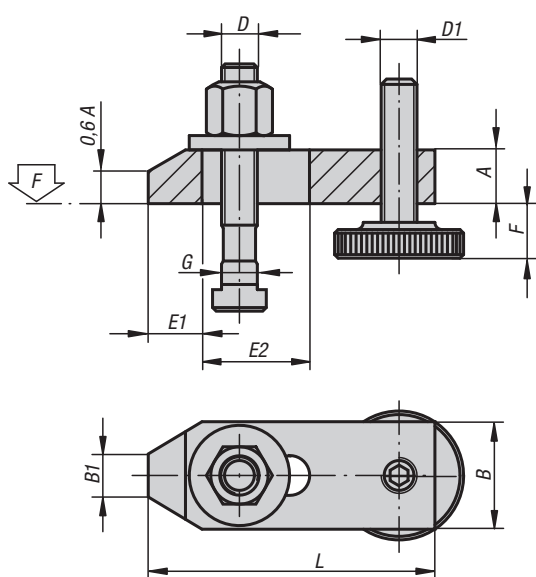
Adjustable heel supports are used to increase the clamping height of the clamp strap assemblies.



KIPP Adjustable heel supports for clamp strap assembly

Order No.	B	D	D1	D2	D3	H clamping range	H1	H2	H3	L	L1
K1204.1039	30	13	M10	M5	30	8-30	39	8	10	44	30
K1204.1249	42	17	M12	M5	36	10-37	49	10	16	54	35
K1204.1294	42	17	M12	M5	36	10-80	94	10	16	54	35
K1204.1655	50	21	M16	M5	42	13-41	55	13	20	60	40
K1204.1690	50	21	M16	M5	42	13-73	90	13	20	60	40
K1204.2069	50	25	M20	M6	50	16-52	69	16	25	70	50
K1204.20109	50	25	M20	M6	50	16-91	109	16	25	70	50

Clamp strap assemblies



Material:

Carbon steel.
Screws tempered to 8.8.

Version:

Clamp painted. Screws black oxidised.

Sample order:

K0003.1616

Note:

"F" is dependent on the depth of slot according to DIN 650.

KIPP Clamp strap assemblies

Order No.	L	A	B	B1	E1	E2	F	G for T-slot	D	D1	F kN
K0003.1010	80	15	30	12	15	30	8-32	10	M10x80	M10	13,9
K0003.1212	100	20	40	14	21	40	10-40	12	M12x100	M12	20,2
K0003.1214	100	20	40	14	21	40	10-38	14	M12x100	M12	20,2
K0003.1616	125	25	50	18	26	45	13-49	16	M16x125	M16	37,8
K0003.1618	125	25	50	18	26	45	13-46	18	M16x125	M16	37,8
K0003.2020	160	30	60	22	30	60	16-65	20	M20x160	M20	58,8
K0003.2022	160	30	60	22	30	60	16-65	22	M20x160	M20	58,8

Power clamp



Material:

Carbon steel.

Version:

Forged, black galvanized.

Sample order:

K1205.012135

Note:

We recommend using a lubricating paste to reduce wear to the adjustment screw.

Risers are available to increase the height of the power clamp.

Supplied with clamping element, support element, DIN 508 slot key and grade 12.9 bolt.

Application:

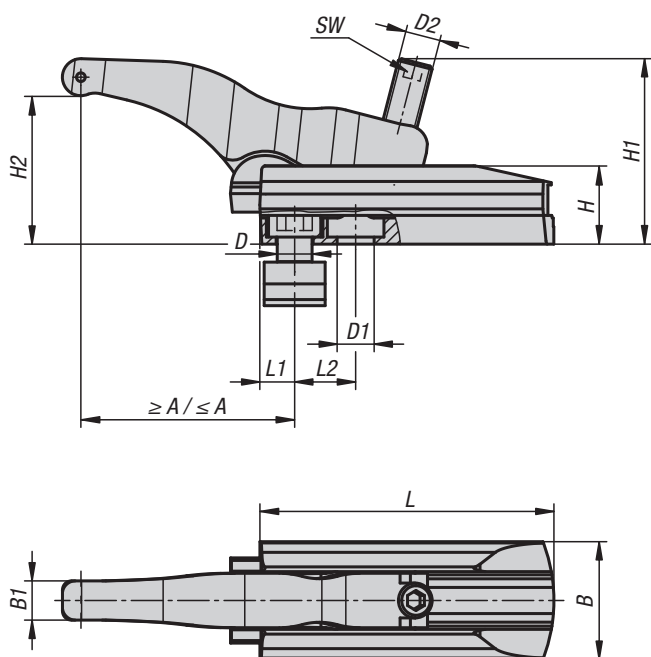
The height of the clamping arm can be infinitely adjusted using the adjustment screw and the workpiece can then be clamped.

Advantages:

- Very high retaining forces of 30–49 kN.
- Low height.
- Simple element assembly.
- Enables very fast, simple clamping.
- Infinitely adjustable height and length.
- Use in 14–28 mm T-slots or M12, M16, M20 grid systems.
- Thrust pad available in smooth and serrated versions.

Accessories:

Raiser K1206

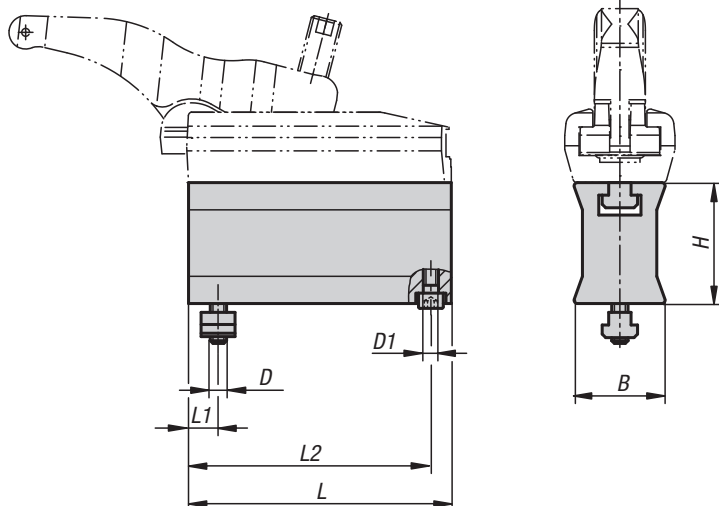


KIPP Power clamp

Order No.	Version	H2	A min.	A max.	B	B1	Slot width	D	D1	D2	H	H1	L	L1	L2	SW	Clamping force kN
K1205.112135	long	6-68	13	110	54	18	14	M12	13	M16	36	85	135	13	25	8	30
K1205.116135	long	6-68	16	114	54	18	18	M16	17	M16	36	85	135	16	28	8	30
K1205.116155	long	5-80	16	134	60	20	18	M16	17	M20	42	105	155	16	32	10	43
K1205.120175	long	7-88	19	165	75	25	22	M20	21	M24	52	125	175	19	36	12	49
K1205.212095	short	6-50	12	82	54	18	14	M12	13	M16	36	78	95	12	20	8	32
K1205.216110	short	6-50	15	95	60	20	18	M16	17	M20	42	92	110	15	26	10	40

Risers

for power clamp



KIPP Raiser for power clamp

Order No.	Version	Slot width	B	D	D1	H	L	L1	L2	Clamping force kN
K1206.012060	long	14	45	M12	M8	60	135	12	127	30
K1206.016070	long	18	48	M16	M12	70	155	16	145	43
K1206.020080	long	22	58	M20	M12	80	175	19	165	49
K1206.112060	short	14	44,5	M12	M8	60	95	12	88	32
K1206.116070	short	18	47,5	M16	M12	70	110	16	100	40



Material:
Carbon steel.

Version:
Forged, black galvanized.

Sample order:
K1206.012060

Application:
The raiser is positioned and fastened to the machine table, the power clamp is then screwed onto the raiser.
By turning the adjustment screw on the power clamp, the height of the clamping arm can be infinitely adjusted and the workpiece clamped.

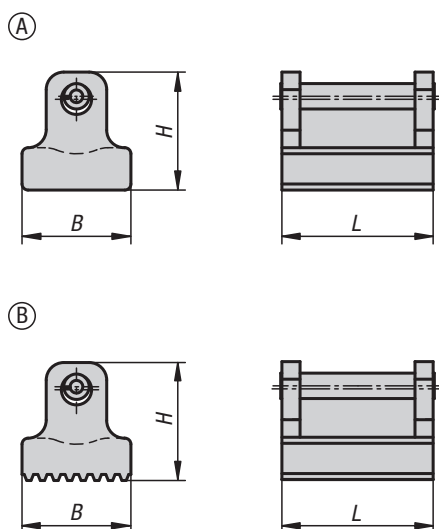
Advantages:

- Other clamping heights can be achieved by mounting multiple risers one on the other.
- Infinite transition between clamping heights.
- Simple element assembly.
- For use in 14-28 mm T-slots or M12, M16, M20 grid systems.

K1215

Thrust pads

for power clamp



Material:
Stainless steel

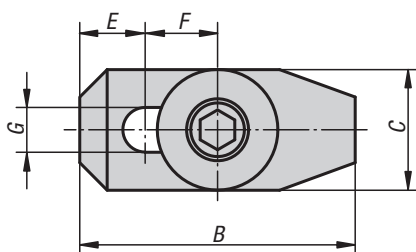
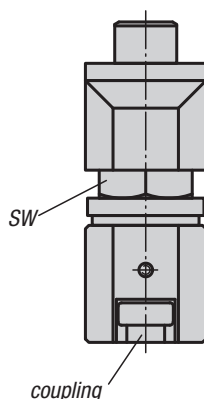
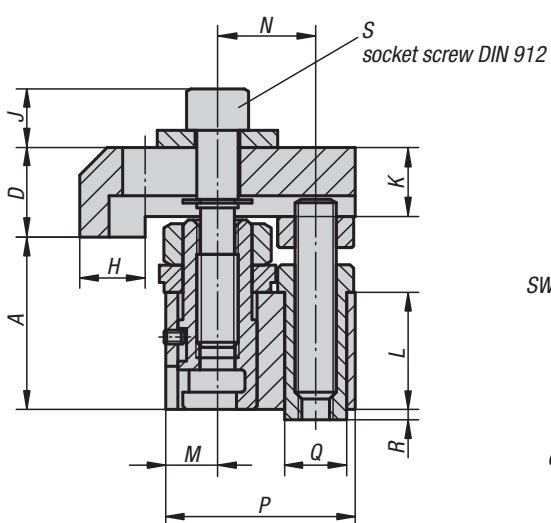
Sample order:
K1215.025

Note:
Power clamps can be fitted with serrated or smooth thrust pads.

KIPP Thrust pads for power clamp

Order No. Form A smooth	Order No. Form B serrated	B	H	L
K1215.025	K1215.125	18	19,5	25
K1215.030	K1215.130	20	24	30
K1215.036	K1215.136	25	28	36

Clamping units



Material:

Riser and clamp strap high-strength aluminium.
Accessories carbon steel.

Version:

Riser and clamp strap anodized.
Accessories black oxidised.

Sample order:

K0841.12050055

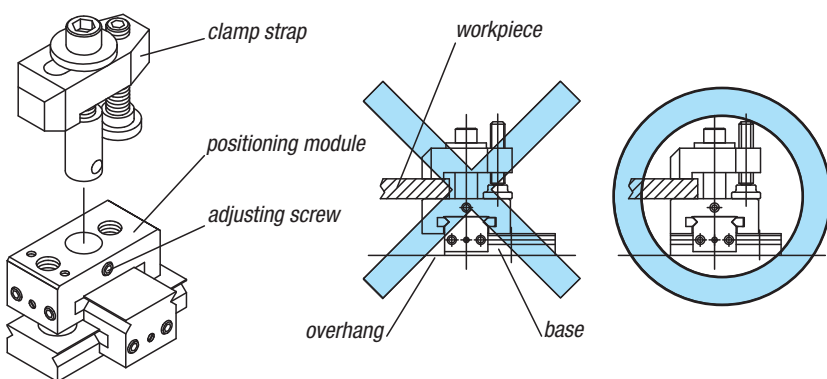
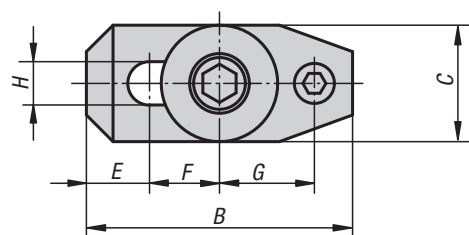
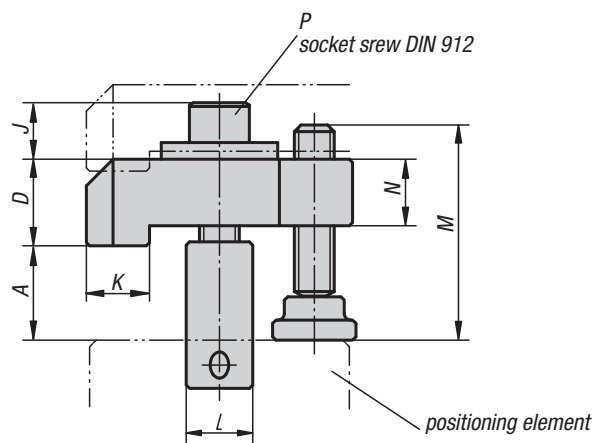
Note:

Clamping units can be combined with risers and positioning units to form a clamping module. By using risers the height of the clamping units can be increased almost indefinitely.

KIPP Clamping units

Order No.	Version	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	SW
K0841.16055068	short	55-80	100	45	34	24	26	17	24	22	27	36,5	18	35	68	22	4	M16x75	32
K0841.16055093	long	55-80	150	45	34	24	51	17	24	22	27	36,5	18	60	93	22	4	M16x75	32

Clamp strap unit



To secure the clamp tighten the adjusting screw located on the wide face of the upper slide.

The upper part of the positioning module must not project over the edge of the base if this is used to support a workpiece.



Material:
Strap high-strength aluminium.
Accessories carbon steel.

Version:
Clamp strap anodized.
Accessories black oxidised.

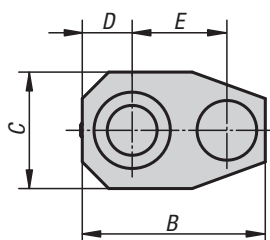
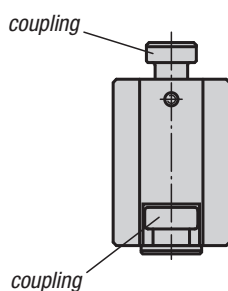
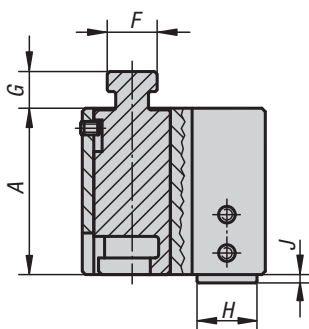
Sample order:
K0842.30016025

Note:
The clamp strap unit is mounted directly onto a positioning module.
The height of the clamp strap can be individually adjusted with a socket head screw (height adjustment 23-55 mm). For clamping heights 0-23 mm a connecting bush (K0850.700) must be used.

KIPP Clamp strap unit

Order No.	A	B	C	D	E	F	G	H	J	K	L	M	N	P
K0842.30016025	25-55	100	45	34	24	26	35	17	22	24	25	85	27	M16 x 75

Riser blocks



Material:

Riser blocks high-strength aluminium.
Connecting bolts and clamp screws carbon steel.

Version:

Riser blocks anodized.
Connecting bolts and clamp screws black oxidised.

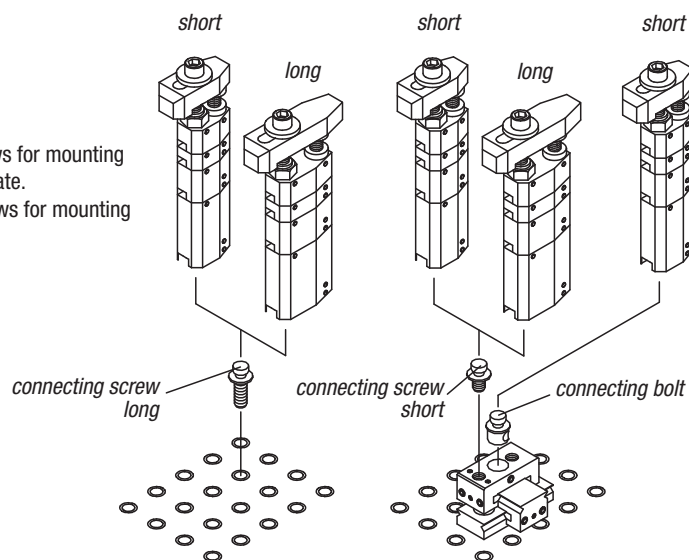
Sample order:

K0843.16025068

Note:

The height of clamping units can be increased as required using these riser blocks.

Use long connecting screws for mounting directly onto the tooling plate.
Use short connecting screws for mounting onto a positioning unit.



KIPP Riser blocks

Order No.	Version	A	B	C	D	E	F	G	H	J	Matching clamping units
K0843.16025068	short	25	68	45	18	35	25	9	22	4	K0841.16055068
K0843.16050068	short	50	68	45	18	35	25	9	22	4	K0841.16055068
K0843.16100068	short	100	68	45	18	35	25	9	22	4	K0841.16055068
K0843.16025093	long	25	93	45	18	60	25	9	22	4	K0841.16055093
K0843.16050093	long	50	93	45	18	60	25	9	22	4	K0841.16055093
K0843.16100093	long	100	93	45	18	60	25	9	22	4	K0841.16055093

Connecting screws short

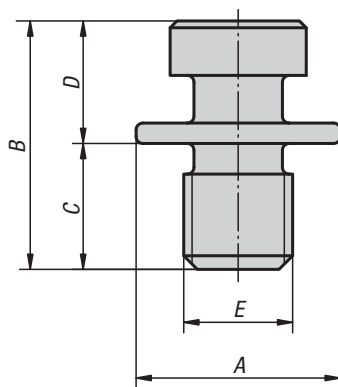


Material:
Carbon steel.

Version:
Black oxidised.

Sample order:
K0844.16025

Note:
Short connecting screws are used for the quick positioning and locking of clamping units onto positioning units.
See application example K0843.



KIPP Connecting screws short

Order No.	A	B	C	D	E
K0844.16025	28	35	19	16	M16

K0845

Connecting screws long

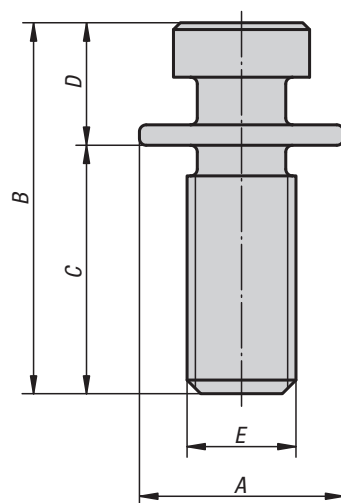


Material:
Carbon steel.

Version:
Black oxidised.

Sample order:
K0845.42216025

Note:
Long connecting screws are used for quick positioning and locking the clamping units directly onto a tooling plate.
See application example K0843.



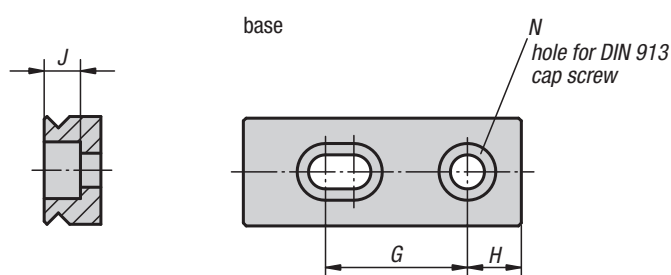
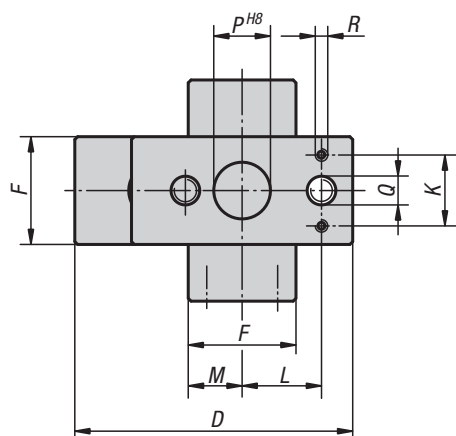
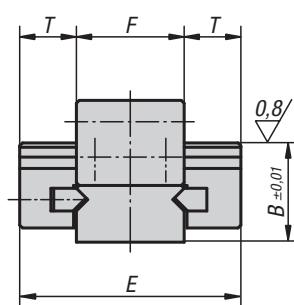
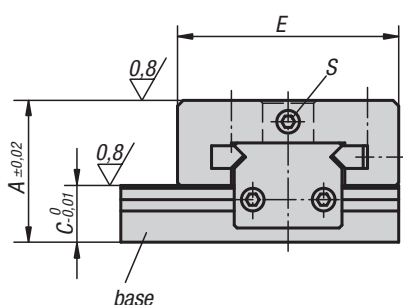
KIPP Connecting screws long

Order No.	A	B	C	D	E
K0845.42216025	28	51	35	16	M16



A large rectangular area filled with a fine grid of light gray lines, intended for taking notes or drawing.

Positioning units



Material:

Carbon steel.

Version:

Ground, black oxidised.

Sample order:

K0846.20012050

Note:

Positioning units allow workpieces and clamping units to be positioned anywhere on the tooling plate (travel 40-50 mm).

Graduation marks on the slides allow the position to be read, and the clamping fixture construction to be documented.

Positioning units are modules that can be combined with wedge clamps, stops and clamping units to form a flexible clamping fixture.

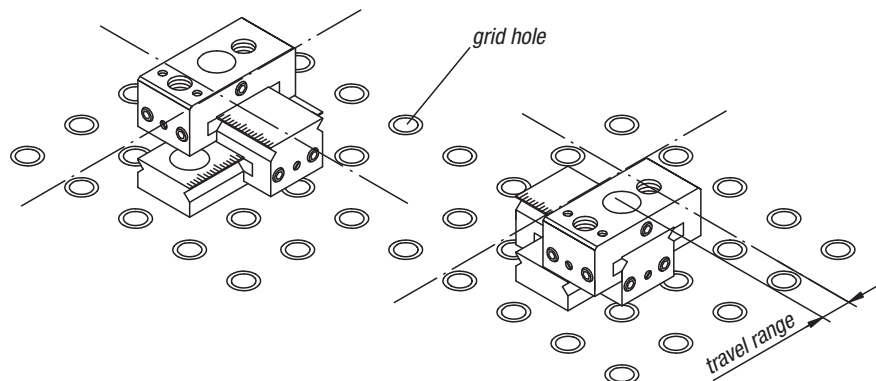
KIPP Positioning units

Order No.	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T
K0846.20016063	63	43	23	123	98	48	50	24	17	32	34	25	M16	25	M16x19	M6x12	M10	25

Technical notes for positioning units



Positioning units allow parts to be located at any desired position on the grid plate.



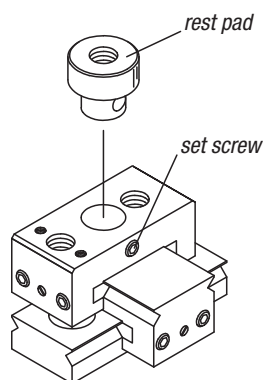
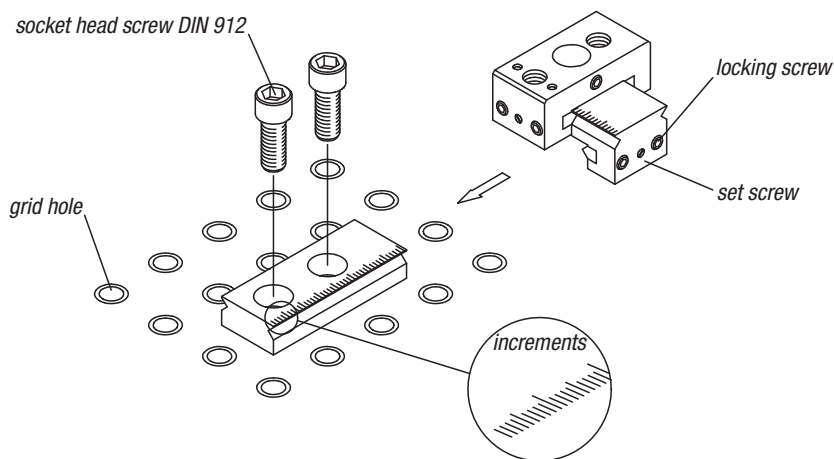
Note:

Use socket head screws to secure the base.

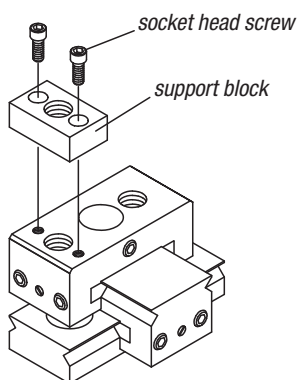
Tighten locking screws to lock the lower slide after positioning.

The set screw allows the slide pressure to be adjusted.

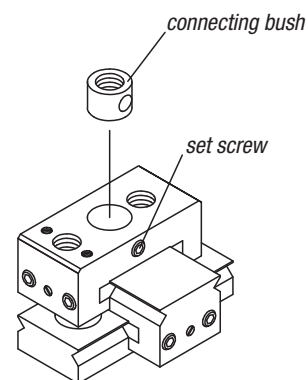
The graduations on the base unit allow you to read off the position and to document the adjustment path.



To secure, tighten the set screw.



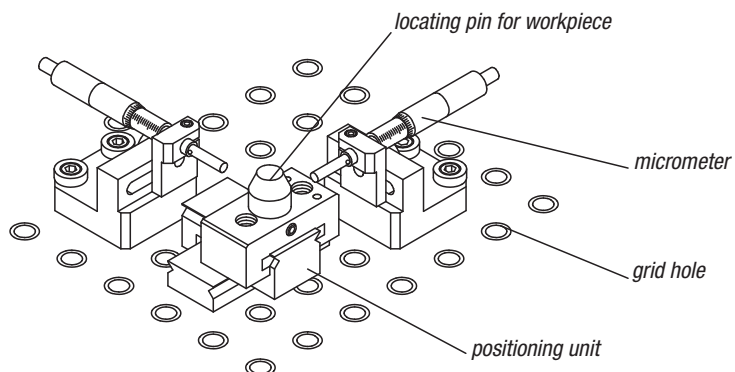
Secure support block on top slide with socket head screws.



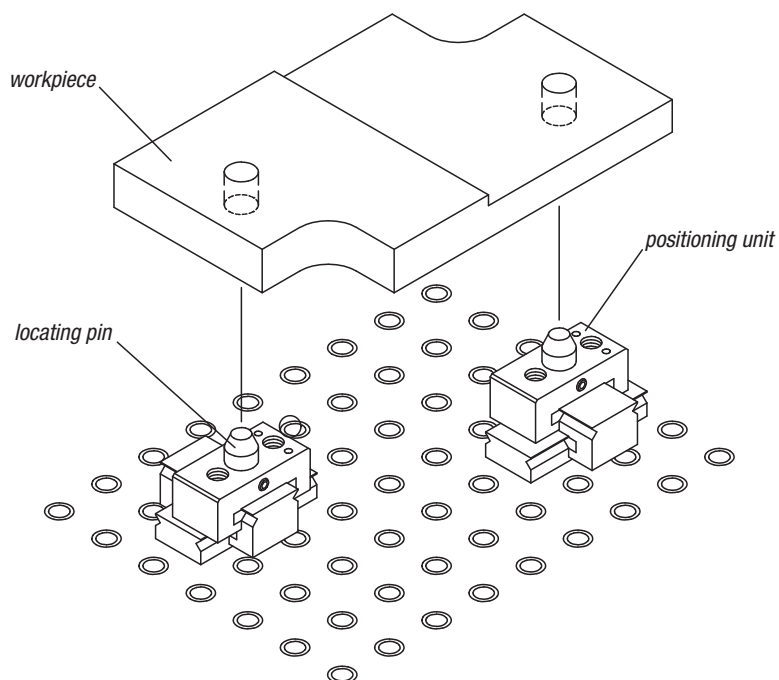
To secure, tighten the set screw.

Example of positioning unit use

The micrometer eases the precise positioning of the locating pin on the base unit to a desired distance from a grid hole on the grid plate.



One application is positioning workpieces which have pre-drilled holes.



Connecting bolts

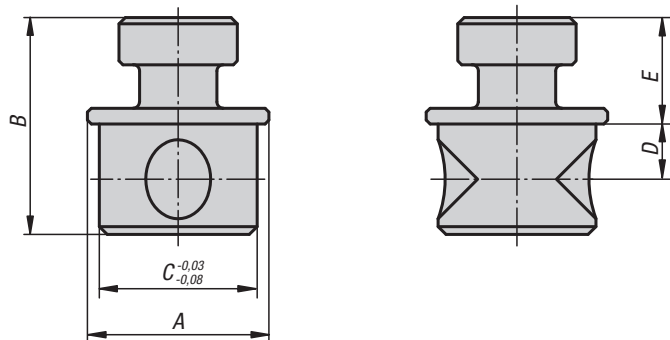


Material:
Carbon steel.

Version:
Black oxidised.

Sample order:
K0847.42016025

Note:
Connecting bolts are used for quickly positioning and locking clamping units (K0841.16055068) on positioning units.
See application example K0843.



KIPP Connecting bolts

Order No.	A	B	C	D	E
K0847.42016025	28	35	25	9,5	16

K0848

Rest pads

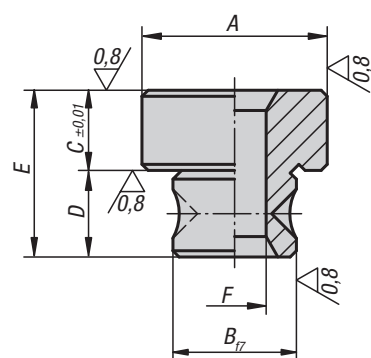


Material:
Carbon steel.

Version:
Case-hardened and ground.

Sample order:
K0848.55016040

Note:
These rest pads are for supporting workpieces on positioning units.



KIPP Rest pads

Order No.	A	B	C	D	E	F
K0848.55016040	40	25	17	19	36	M16

Support blocks

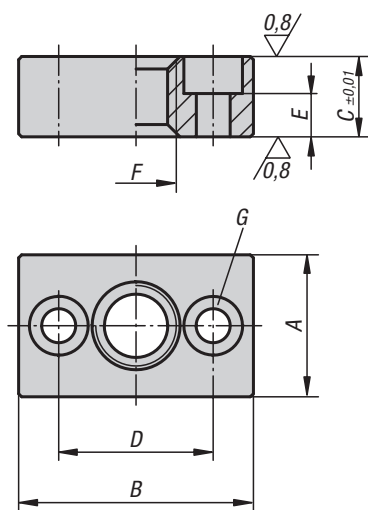


Material:
Carbon steel.

Version:
Case-hardened, ground, black oxidised.

Sample order:
K0849.60016017

Note:
Support blocks are used to support workpieces on positioning units.



KIPP Support blocks

Order No.	A	B	C	D	E	F	G for socket head screw
K0849.60016017	30	48	17	32	10	M16	M6

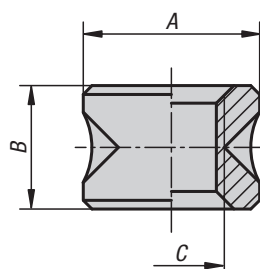
Connecting bushes



Material:
Carbon steel.

Version:
Case-hardened and black oxidised.

Sample order:
K0850.70016025



KIPP Connecting bushes

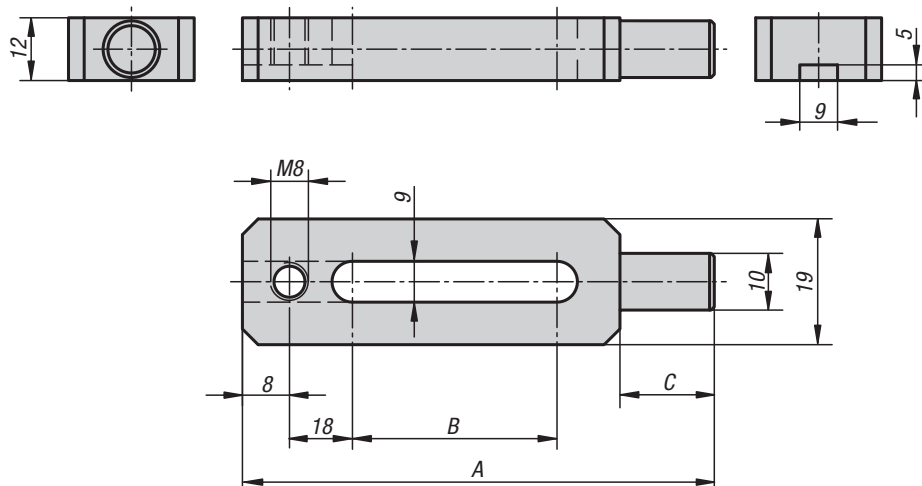
Order No.	A	B	C
K0850.70016025	25	18	M16

Clamp straps

pin-end



K0834.08063
K0834.08075



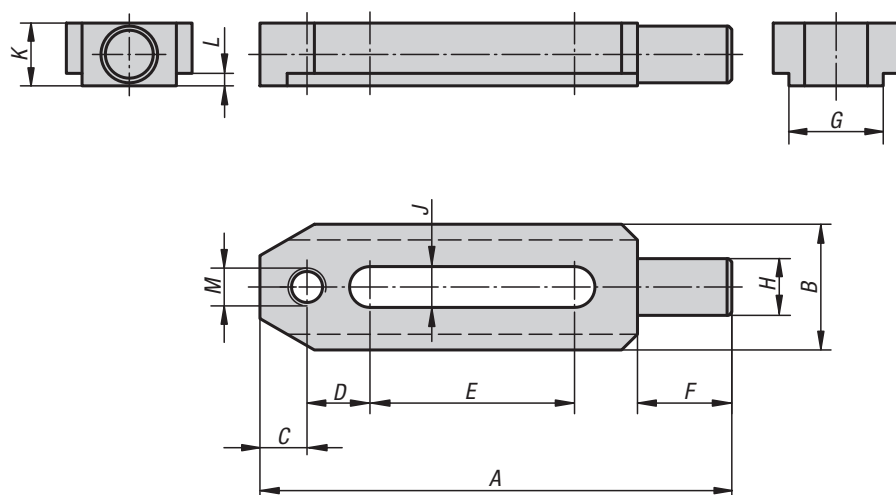
Material:
Carbon steel.

Version:
Tempered and black oxidised.

Sample order:
K0834.08063

Note:
Pin-end straps can be used in conjunction with other fixture elements, such as K0839, K0821, K0307.

K0834.12150
K0834.16190



KIPP Pin-end straps

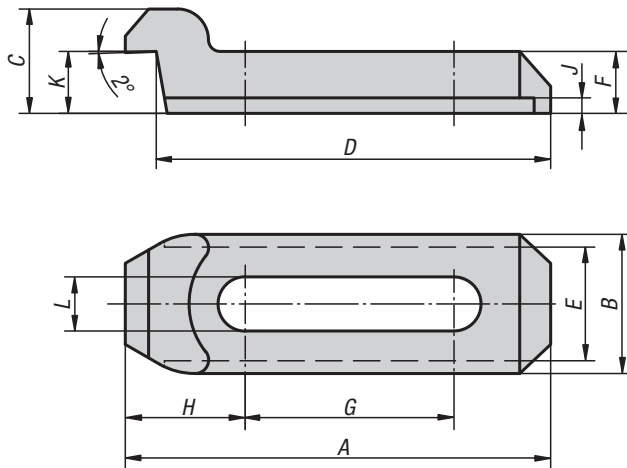
Order No.	A	B	C
K0834.08063	63	15	14
K0834.08075	75	20	20

KIPP Pin-end straps

Order No.	A	B	C	D	E	F	G	H	J	K	L	M
K0834.12150	150	40	15	20	65	30	30	18	13	20	4	M12
K0834.16190	190	50	20	25	80	36	40	24	18	28	5	M16

Clamp straps

goose-neck

**Material:**

Carbon steel 1.7225

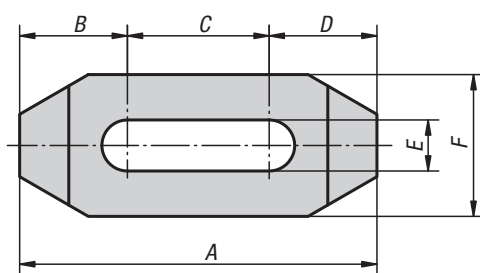
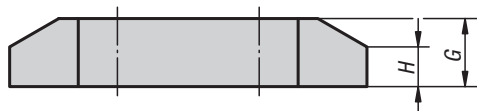
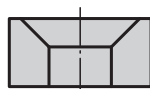
Version:Tempered to 1000 N/mm², black oxidised.**Sample order:**

K0002.10

KIPP Clamp straps goose-neck

Order No.	A	B	C	D	E	F	G	H	J	K	L
K0002.10	110	36	27	102	29	16	54	31	4	15	13
K0002.16	165	50	50	145	40	25	70	60	5	24,5	18

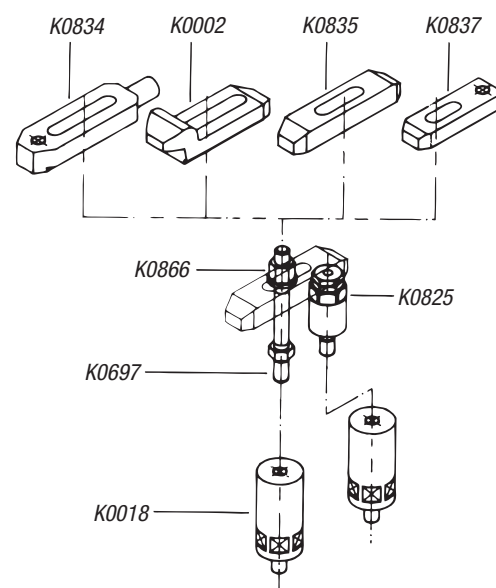
Clamp straps



Material:
Carbon steel.

Version:
Tempered and black oxidised.

Sample order:
K0835.08063

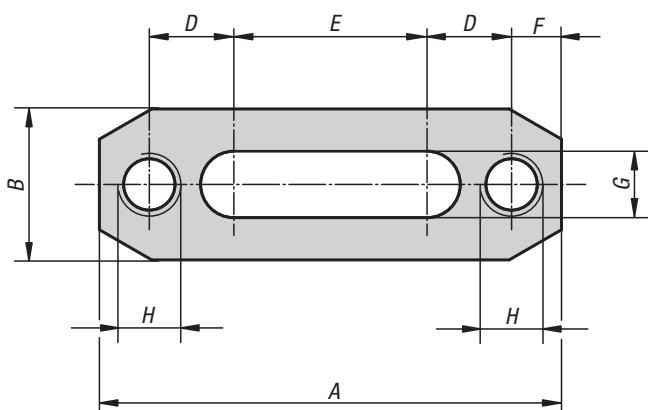
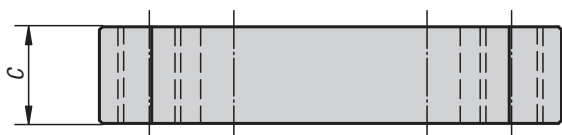


KIPP Clamp straps

Order No.	A	B	C	D	E	F	G	H
K0835.08063	63	19	25	19	9	25	12	7
K0835.08080	80	24	32	24	9	25	12	7
K0835.08100	100	30	40	30	9	25	16	10
K0835.10063	63	19	25	19	11	25	12	7
K0835.10080	80	24	32	24	11	25	16	10
K0835.10100	100	30	40	30	11	25	16	10
K0835.10125	125	40	45	40	11	32	19	13
K0835.10160	160	55	50	55	11	32	19	13
K0835.12063	63	19	25	19	13	32	16	10
K0835.12080	80	24	32	24	13	32	16	10
K0835.12100	100	30	40	30	13	32	19	13
K0835.12125	125	40	45	40	13	32	19	13
K0835.12160	160	55	50	55	13	32	25	15
K0835.16080	80	27,5	25	27,5	17	32	16	10
K0835.16100	100	34	32	34	17	38	19	13
K0835.16125	125	42,5	40	42,5	17	38	19	13
K0835.16160	160	55	50	55	17	38	25	15
K0835.20100	100	34	32	34	21	38	19	13
K0835.20125	125	42,5	40	42,5	21	38	25	15
K0835.20160	160	55	50	55	21	38	25	15
K0835.20200	200	68,5	63	68,5	21	50	25	15

Clamp straps

tapped both ends



Material:

Carbon steel 1.0503.

Version:

Tempered and black oxidised.

Sample order:

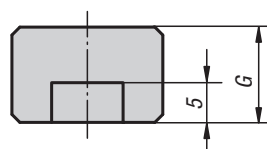
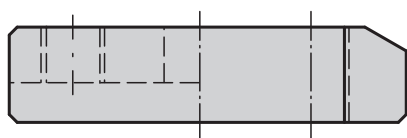
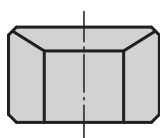
K0836.08063

KIPP Clamp straps, tapped both ends

Order No.	A	B	C	D	E	F	G	H	Clamping force N	Tightening torque max. Nm
K0836.08063	63	25	12	12	25	7	9	M8	6900	22
K0836.08080	80	25	12	17	32	7	9	M8	6900	22
K0836.10080	80	25	16	14	32	10	11	M10	11300	45
K0836.10100	100	25	16	20	40	10	11	M10	11300	45
K0836.10125	125	25	16	30	45	10	11	M10	11300	45
K0836.12100	100	32	19	20	40	10	13	M12	16700	80
K0836.12125	125	32	19	30	45	10	13	M12	16700	80
K0836.12160	160	32	22	45	50	10	13	M12	16700	80
K0836.16125	125	38	19	30,5	40	12	17	M16	18000	115
K0836.16160	160	38	22	43	50	12	17	M16	18000	115
K0836.16200	200	38	25	58	60	12	17	M16	20200	129
K0836.20125	125	38	22	27,5	40	15	21	M20	19700	157
K0836.20160	160	38	22	40	50	15	21	M20	19700	157
K0836.20200	200	50	25	55	60	15	21	M20	22900	183

Clamp straps

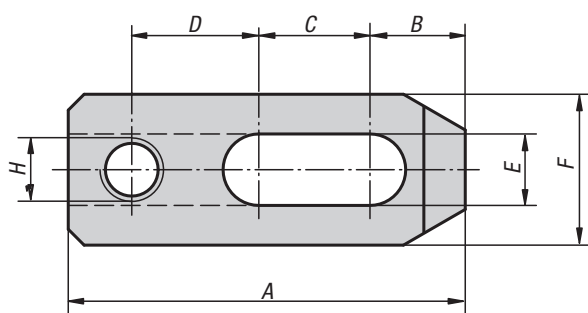
tapped heel



Material:
Carbon steel.

Version:
Tempered and black oxidised.

Sample order:
K0837.08040

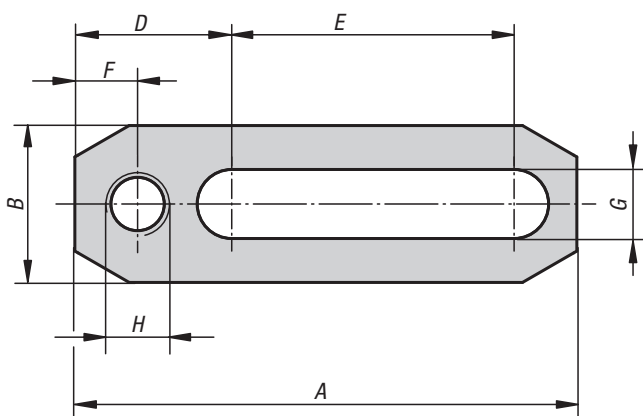


KIPP Clamp straps, tapped heel

Order No.	A	B	C	D	E	F	G	H
K0837.08040	40	10	6	16	9	19	12	M8
K0837.08050	50	12	14	16	9	19	12	M8
K0837.08063	63	12	27	16	9	19	12	M8
K0837.10050	50	12	8	20	11	25	12	M10
K0837.10063	63	15	18	20	11	25	12	M10
K0837.10080	80	15	32	23	11	25	16	M10
K0837.10100	100	15	40	35	11	25	16	M10
K0837.10125	125	15	50	50	11	25	16	M10
K0837.12063	63	14	14	24	13	32	16	M12
K0837.12080	80	20	25	24	13	32	16	M12
K0837.12100	100	20	40	29	13	32	19	M12
K0837.12125	125	20	50	44	13	32	19	M12
K0837.12160	160	20	60	69	13	32	19	M12
K0837.16080	80	18	17	30	17	38	19	M16
K0837.16100	100	25	30	30	17	38	25	M16
K0837.16125	125	25	45	40	17	38	25	M16
K0837.16160	160	25	65	55	17	38	25	M16
K0837.20160	160	32	60	52	21	50	25	M20
K0837.20200	200	32	80	72	21	50	25	M20

Clamp straps

tapped heel



Material:

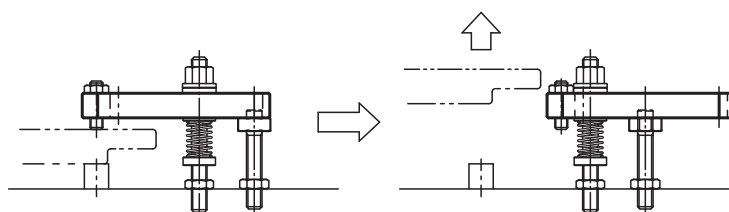
Carbon steel 1.0503.

Version:

Tempered and black oxidised.

Sample order:

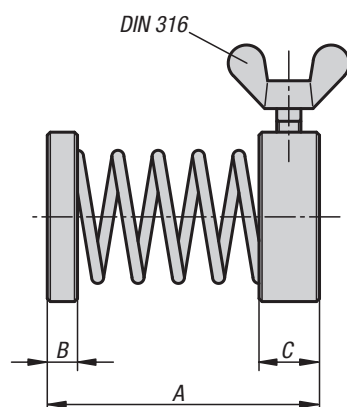
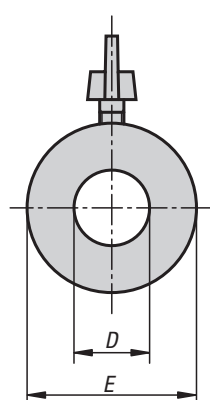
K0838.08063



KIPP Clamp straps, tapped heel

Order No.	A	B	C	D	E	F	G	H	Clamping force N	Tightening torque max. Nm
K0838.08063	63	19	12	19	36	7	9	M8	3200-8000	17
K0838.08080	80	19	12	19	53	7	9	M8	3500-8600	17
K0838.10080	80	25	16	25	45	10	11	M10	6800-16900	45
K0838.10100	100	25	16	25	65	10	11	M10	7300-18300	45
K0838.10125	125	25	16	25	90	10	11	M10	7700-19300	45
K0838.12100	100	32	19	28	60	10	13	M12	10200-25600	80
K0838.12125	125	32	19	28	85	10	13	M12	11000-27500	80
K0838.12160	160	32	19	28	120	10	13	M12	11600-29000	80
K0838.16125	125	38	25	36	73	12	17	M16	12100-30300	129
K0838.16160	160	38	25	36	108	12	17	M16	13200-33000	129
K0838.16200	200	38	25	36	148	12	17	M16	13900-34700	129
K0838.20160	160	50	25	45	90	15	21	M20	15000-36000	183
K0838.20200	200	50	32	45	130	15	21	M20	16000-37000	183
K0838.20250	250	50	32	45	180	15	21	M20	17000-38000	183

Clamp springs



Material:

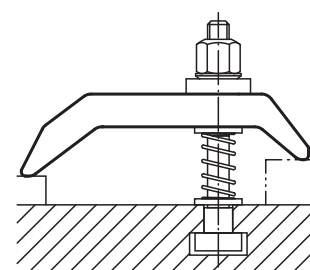
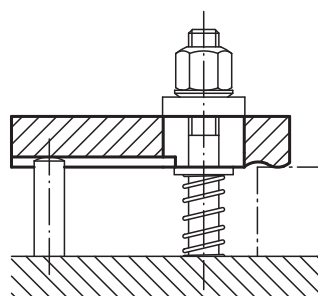
Thrust and retaining ring carbon steel, spring spring steel

Version:

Thrust and retaining ring black oxidised.
Spring bright.

Sample order:

K0859.12046

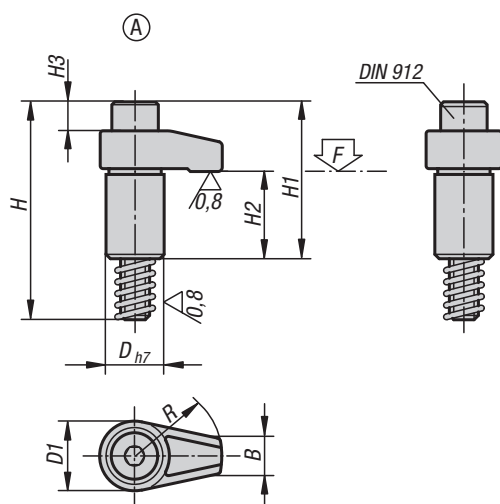


KIPP Clamp springs

Order No.	A	B	C	D	E	Wing nuts to DIN 316
K0859.08029	29	2	6	8,5	16	M4x6
K0859.12046	46	3	8	13	25	M4x10
K0859.16050	50	4	8	16,5	28	M5x10

Hook clamps ground

Form A/B/C

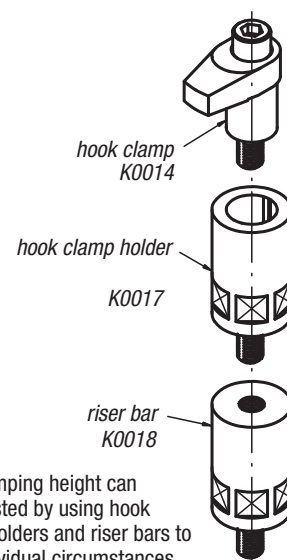
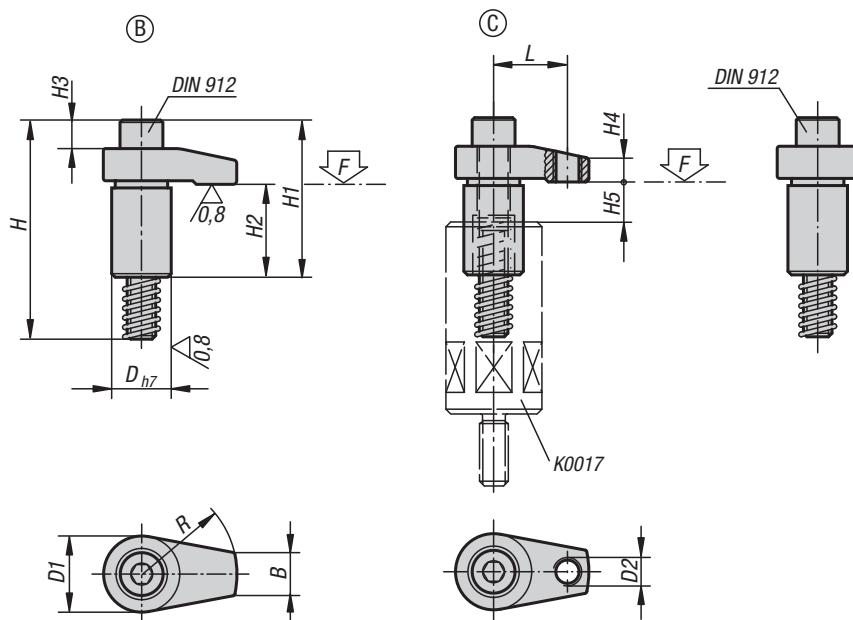


Material:
Carbon steel, tempered.

Version:
Black oxidised. Shaft OD ground.

Sample order:
K0014.216040

Note:
The stated clamping forces (F max.) and tightening torques are valid within the stated clamping ranges (H5).

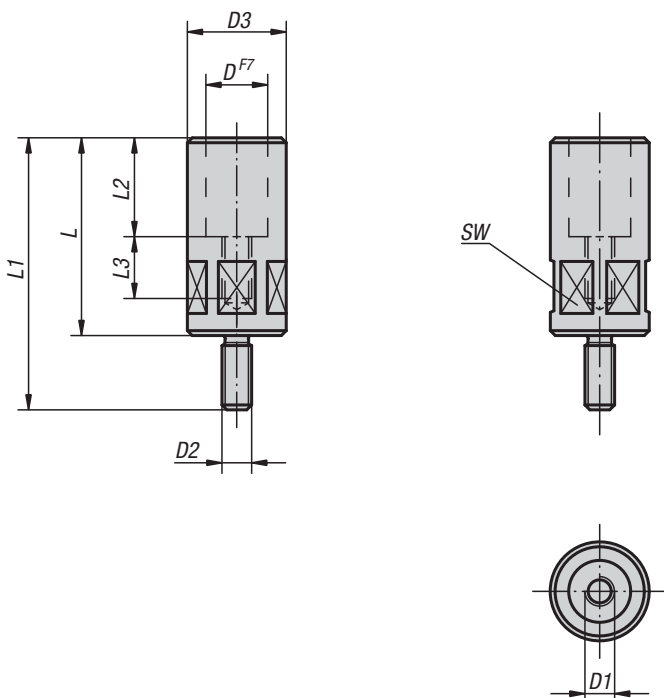


The clamping height can be adjusted by using hook clamp holders and riser bars to suit individual circumstances.

KIPP Hook clamps, ground, Form A/B/C

Order No.	Form	D	D1	D2	H	H1	H2	H3	H4	H5 max. clamping range	B	L	R	Socket head screw DIN 912	Tightening torque max. Nm	F max. kN
K0014.110030	A	20	25	-	75	54	30	9	10	12	12	-	30	M10x65	37,2	13
K0014.110040	A	20	25	-	75	54	30	9	10	12	12	-	40	M10x65	31,4	9,8
K0014.208020	B	18	22	-	58	37	23	2	7	10	10	-	20	M8x50	37,2	13,6
K0014.208025	B	18	22	-	58	37	23	2	7	10	10	-	25	M8x50	32,3	10,9
K0014.208030	B	18	22	-	58	37	23	2	7	10	10	-	30	M8x50	29,4	9
K0014.212040	B	25	32	-	92	66	39	11	12	15	18	-	40	M12x80	58,8	17,5
K0014.212050	B	25	32	-	92	68	39	11	12	15	18	-	50	M12x80	49	14
K0014.212060	B	25	32	-	92	68	39	11	12	15	18	-	60	M12x80	45,1	11,6
K0014.216040	B	32	36	-	101	75	39	15	15	15	22	-	40	M16x85	166,6	37,9
K0014.216050	B	32	36	-	101	75	39	15	15	15	22	-	50	M16x85	147	30,4
K0014.216060	B	32	36	-	101	75	39	15	15	15	22	-	60	M16x85	127,4	25,2
K0014.312140	C	25	32	M12	92	66	39	11	10	15	18	31	40	M12x80	58,8	22,6
K0014.312150	C	25	32	M12	92	68	39	11	13	15	18	38	50	M12x80	49	18,5
K0014.312160	C	25	32	M12	92	68	39	11	13	15	18	46	60	M12x80	45,1	15,2
K0014.316150	C	32	36	M12	101	75	39	15	16	15	22	38	50	M16x85	147	38
K0014.316160	C	32	36	M12	101	75	39	15	16	15	22	46	50	M16x85	127,4	33

Hook clamp holders

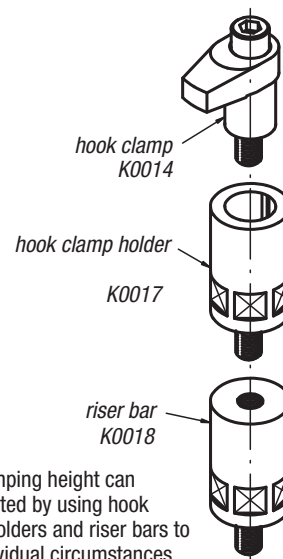


Material:
Carbon steel.

Version:
Black oxidised.

Sample order:
K0017.12080

Note:
Hook clamp holders are for holding and raising hook clamps.

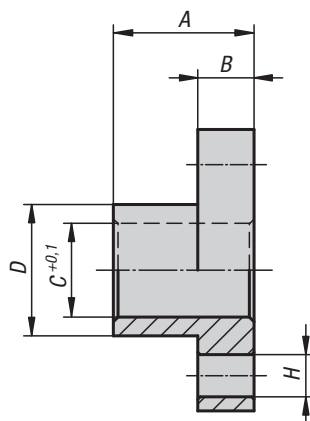
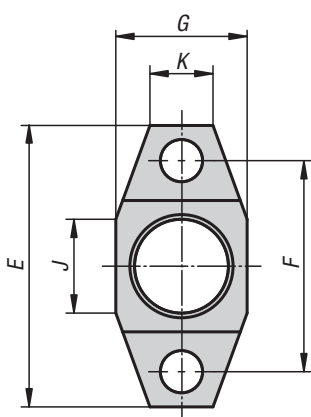


The clamping height can be adjusted by using hook clamp holders and riser bars to suit individual circumstances.

KIPP Hook clamp holders

Order No.	D	D1	D2	D3	L	L1	L2	L3	SW	Tightening torque max. Nm
K0017.08055	18	M8	M8	24	55	74	25	20	22	29,4
K0017.10063	20	M10	M12	32	63	93	30	21	30	39,2
K0017.10080	20	M10	M12	32	80	110	30	23	30	39,2
K0017.12080	25	M12	M12	40	80	110	40	25	36	49
K0017.12100	25	M12	M12	40	100	130	40	28	36	49
K0017.16080	32	M16	M16	50	80	110	40	25	46	78,4
K0017.16100	32	M16	M16	50	100	130	40	28	46	78,4

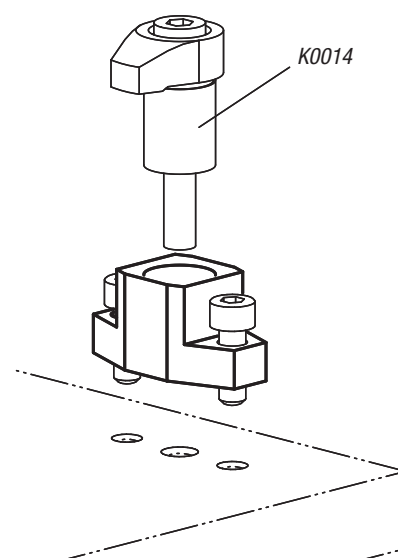
Hook clamp holders



Material:
Carbon steel 1.0503.

Version:
Black oxidised.

Sample order:
K0851.08025

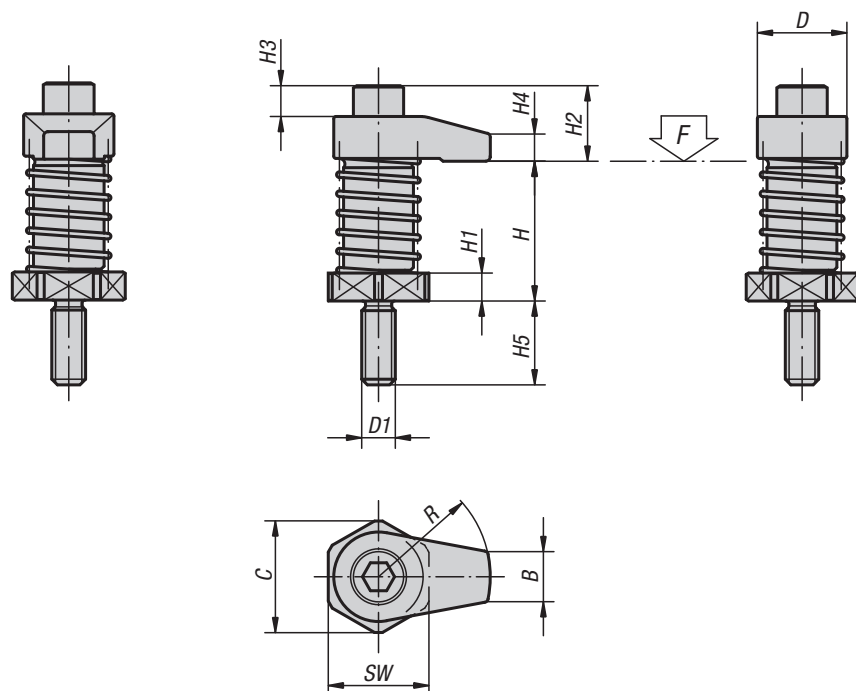


KIPP Hook clamp holders

Order No.	A	B	C	D	E	F	G	H	J	K
K0851.08025	25	10	18	24	50	38	24	6,6	15	11,3
K0851.10030	30	12	20	28	60	45	28	9	20	13,4
K0851.12040	40	14	25	35	75	55	35	11	20	15
K0851.16040	40	16	32	42	85	65	42	13,5	25	20,2

Hook clamps

with collar



Material:

Hook clamps and hook clamp holders carbon steel, tempered.

Version:

Black oxidised.

Sample order:

K0015.12060

Note:

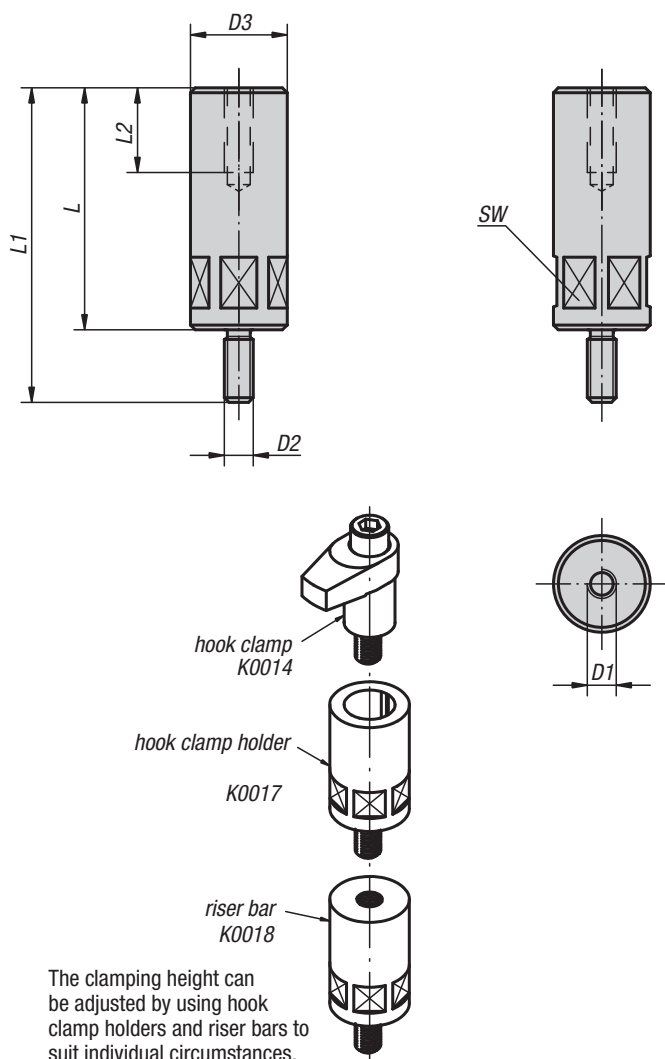
Hook clamps with collar can be screwed directly into grid holes etc. without counterbore.

For suitable riser elements, see riser bars K0018.

KIPP Hook clamps with collar

Order No.	D	D1	H clamping range	H1	H2	H3	H4	H5	B	C	R	SW	Tightening torque max. Nm	F max. kN
K0015.08020	22	M8	35 - 45	6	14	2	7	19	10	25	20	22	20	7,9
K0015.08025	22	M8	35 - 45	6	14	2	7	19	10	25	25	22	20	7,3
K0015.08030	22	M8	35 - 45	6	14	2	7	19	10	25	30	22	20	6,7
K0015.08120	22	M8	45 - 55	16	14	2	7	19	10	25	20	22	20	7,9
K0015.08125	22	M8	45 - 55	16	14	2	7	19	10	25	25	22	20	7,3
K0015.08130	22	M8	45 - 55	16	14	2	7	19	10	25	30	22	20	6,7
K0015.12040	32	M12	50 - 65	10	27	11	10	30	18	40	40	36	45	13,5
K0015.12050	32	M12	50 - 65	10	29	11	12	30	18	40	50	36	45	12,6
K0015.12060	32	M12	50 - 65	10	29	11	12	30	18	40	60	36	45	11,7
K0015.12140	32	M12	65 - 80	25	27	11	10	30	18	40	40	36	45	13,5
K0015.12150	32	M12	65 - 80	25	29	11	12	30	18	40	50	36	45	12,6
K0015.12160	32	M12	65 - 80	25	29	11	12	30	18	40	60	36	45	11,7
K0015.16040	36	M16	50 - 65	10	36	15	15	30	22	40	40	36	60	13,4
K0015.16050	36	M16	50 - 65	10	36	15	15	30	22	40	50	36	60	12,4
K0015.16060	36	M16	50 - 65	10	36	15	15	30	22	40	60	36	60	12
K0015.16140	36	M16	65 - 80	25	36	15	15	30	22	40	40	36	60	13,4
K0015.16150	36	M16	65 - 80	25	36	15	15	30	22	40	50	36	60	12,4
K0015.16160	36	M16	65 - 80	25	36	15	15	30	22	40	60	36	60	12

Riser bars



Material:
Carbon steel.

Version:
Black oxidised.

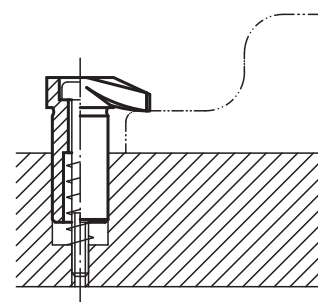
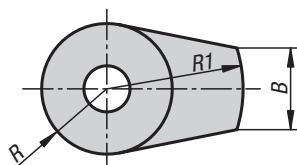
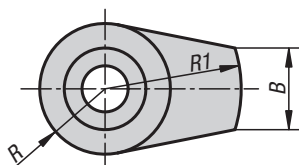
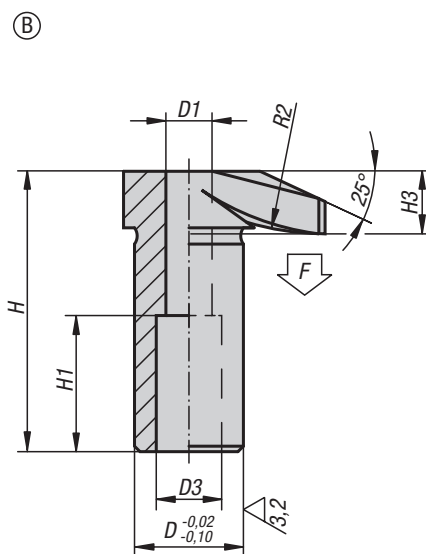
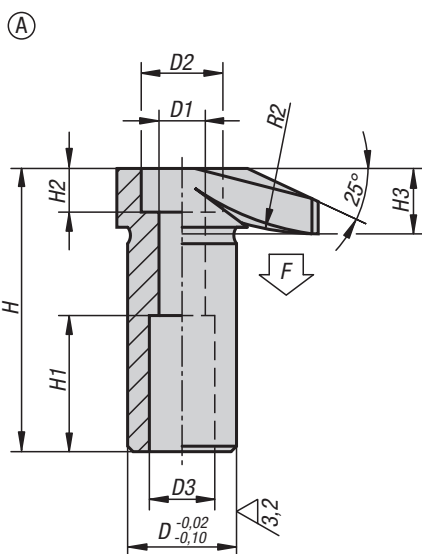
Sample order:
K0018.16050

Note:
The height of the hook clamps and hook clamp holders can be raised using these riser bars.

KIPP Riser bars

Order No.	D1	D2	D3	L	L1	L2	SW	Tightening torque max. Nm
K0018.08032	M8	M8	24	32	51	20	22	29,4
K0018.08040	M8	M8	24	40	59	20	22	29,4
K0018.08050	M8	M8	24	50	69	20	22	29,4
K0018.08065	M8	M8	24	65	84	20	22	29,4
K0018.12050	M12	M12	40	50	80	35	36	49
K0018.12065	M12	M12	40	65	95	35	36	49
K0018.12080	M12	M12	40	80	110	35	36	49
K0018.12100	M12	M12	40	100	130	35	36	49
K0018.12125	M12	M12	40	125	155	35	36	49
K0018.12160	M12	M12	40	160	190	35	36	49
K0018.12200	M12	M12	40	200	230	35	36	49
K0018.16050	M16	M16	50	50	80	35	46	78,4
K0018.16065	M16	M16	50	65	95	35	46	78,4
K0018.16080	M16	M16	50	80	110	35	46	78,4
K0018.16100	M16	M16	50	100	130	35	46	78,4
K0018.16125	M16	M16	50	125	155	35	46	78,4
K0018.16160	M16	M16	60	160	190	35	55	78,4
K0018.16200	M16	M16	60	200	230	35	55	78,4

Hook clamps



Material:

Carbon steel, tempered.

Version:

Black oxidised.

Sample order:

K0012.10

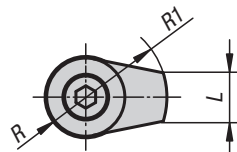
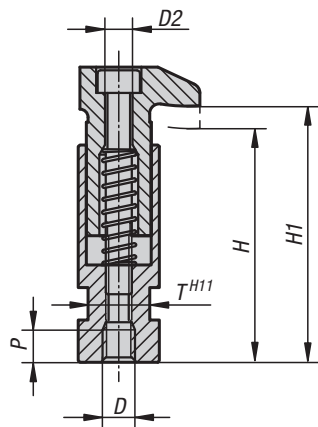
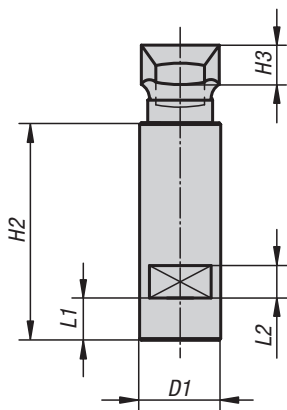
KIPP Hook clamps

Order No.	Form	D	D1	D2	D3	H	H1	H2	H3	B	R	R1	R2	F max. kN
K0012.06	A	16	6,5	11	10	42	20	6	10	11	9	20	30	4,8
K0012.08	A	20	8,5	15	12	52	25	8	12	15	12	25	50	8,8
K0012.10	A	25	10,5	18	14	66	32	10	16	17	14	32	60	13,9
K0012.12	A	32	12,5	20	17	83	40	12	20	20	18	40	80	20,2

Order No.	Form	D	D1	D3	H	H1	H3	B	R	R1	R2	F max. kN
K0012.106	B	16	6,5	10	41,5	20	9,5	11	9	20	30	4,8
K0012.108	B	20	8,5	12	51,5	25	11,5	15	12	25	50	8,8
K0012.110	B	25	10,5	14	65,5	32	15,5	17	14	32	60	13,9
K0012.112	B	32	12,5	17	82,5	40	19,5	20	18	40	80	20,2

Hook clamps

with collar



Material:
Carbon steel.

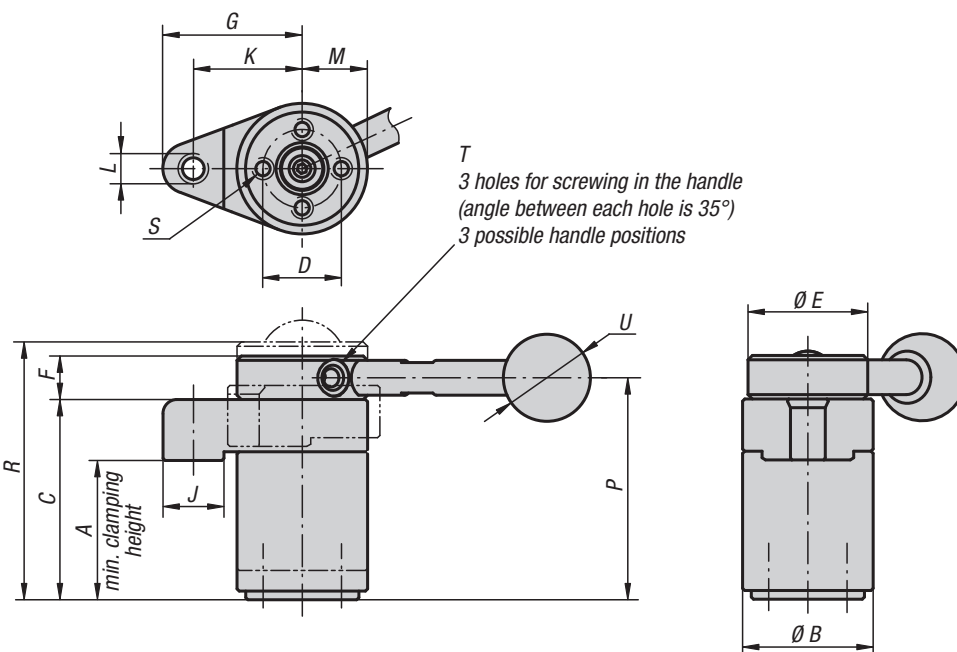
Version:
Tempered and black oxidised.

Sample order:
K0013.06

KIPP Hook clamps with collar

Order No.	D	D1	D2	H	H1	H2	H3	L	L1	L2	P	R	R1	T	Clamping force kN
K0013.06	M6	20	6	56	60	53	10	11	9	8	8	9	20	17	4,82
K0013.08	M8	20	6	56	60	53	10	11	9	8	8	9	20	17	8,77
K0013.10	M10	25	8	72	79	67	12	15	13	10	10	12	25	19	13,9
K0013.12	M12	32	10	88	96	82	16	17	18	12	12	14	32	27	20,2
K0013.16	M16	40	12	109	118	102	20	20	22	12	16	18	40	32	37,8

Swing clamps



Material:

Carbon steel.
Ball knob plastic.

Version:

Tempered and black oxidised.
Ball knob Duroplast PF 31, black.

Sample order:

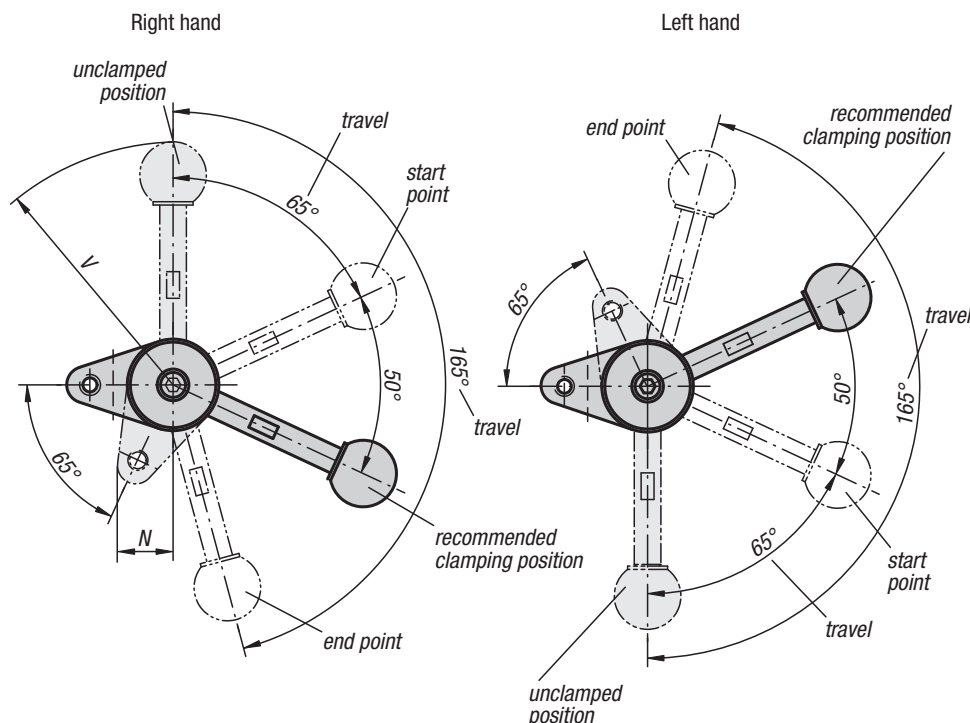
K0912.013232

Note:

* Admissible hand force to operate the handle.

Accessories:

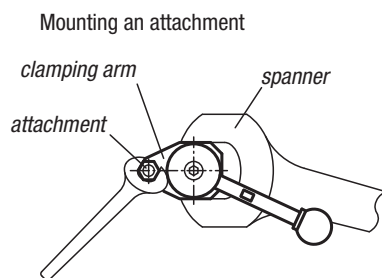
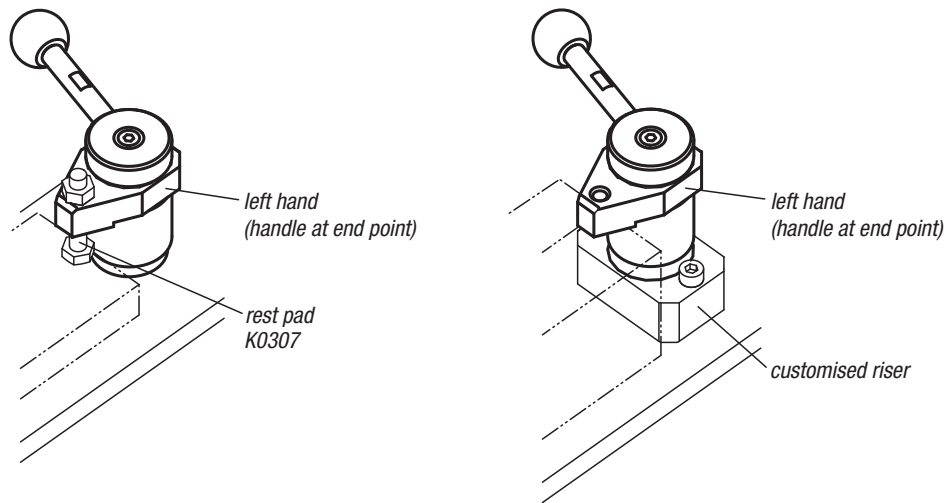
Standard handles K0915.
Screw-in handles with adjustable torque K0916.
Clamping arm for swing clamp K0912.03006010 and K0912.04007516.



KIPP Swing clamps

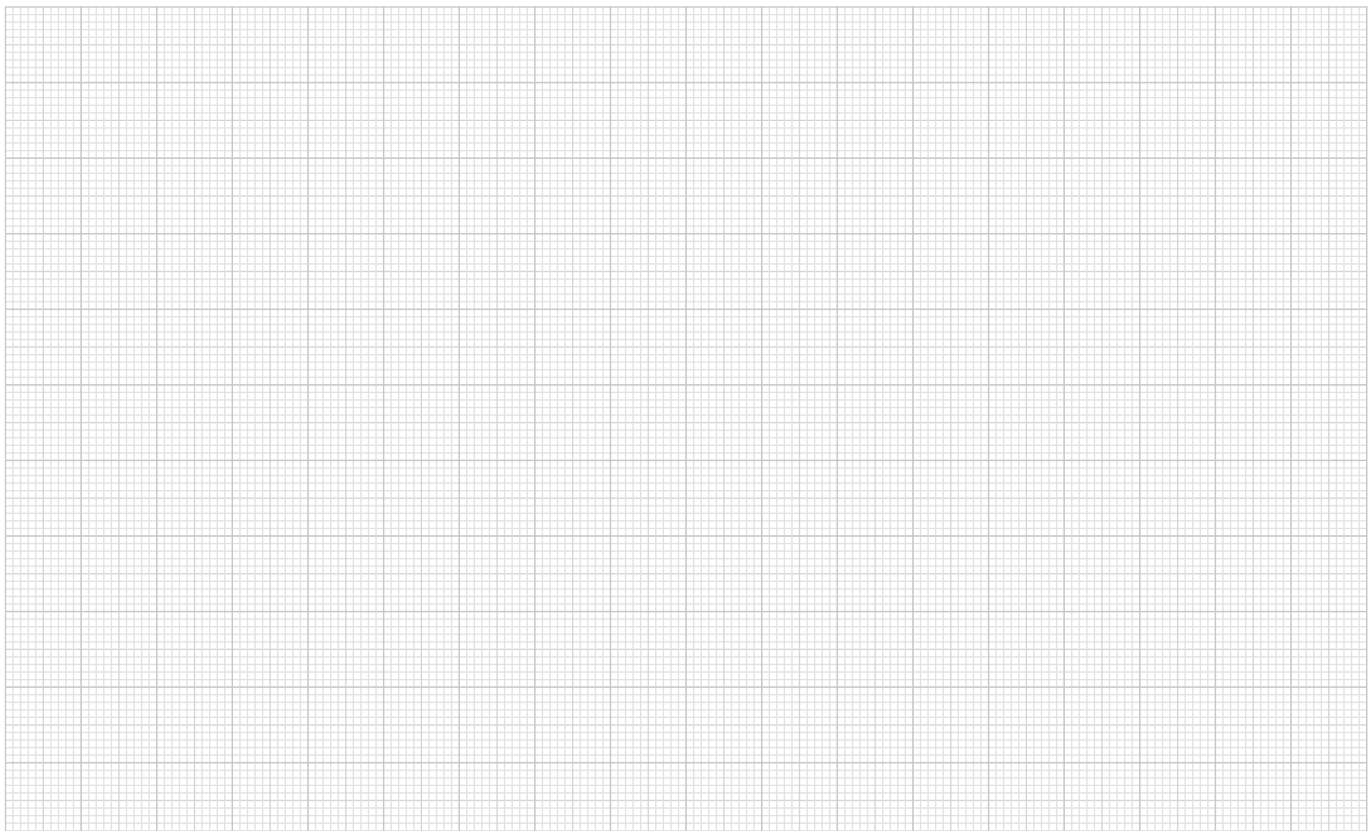
Order No. left	Order No. right	Grip	A min.	A max.	B	C	D	E	F	G	J	K	L	M	N	P	R	S	T	U	V	Clamping force N	Hand force FH N
K0912.003232	K0912.103232	without grip	31,4	32,6	30	46	18	30	10	32	14	25	M6	15	17	51	57,5	M4x8	M5	-	-	800	150*
K0912.004540	K0912.104540	without grip	44,1	45,9	40	63	25	38	13	40	16	32	M8	20	22,5	69,5	78,1	M6x12	M6	-	-	1200	200*
K0912.013232	K0912.113232	with grip	31,4	32,6	30	46	18	30	10	32	14	25	M6	15	17	51	57,5	M4x8	M5	20	73	800	150*
K0912.014540	K0912.114540	with grip	44,1	45,9	40	63	25	38	13	40	16	32	M8	20	22,5	69,5	78,1	M6x12	M6	25	107	1200	200*

Technical Information for swing clamps

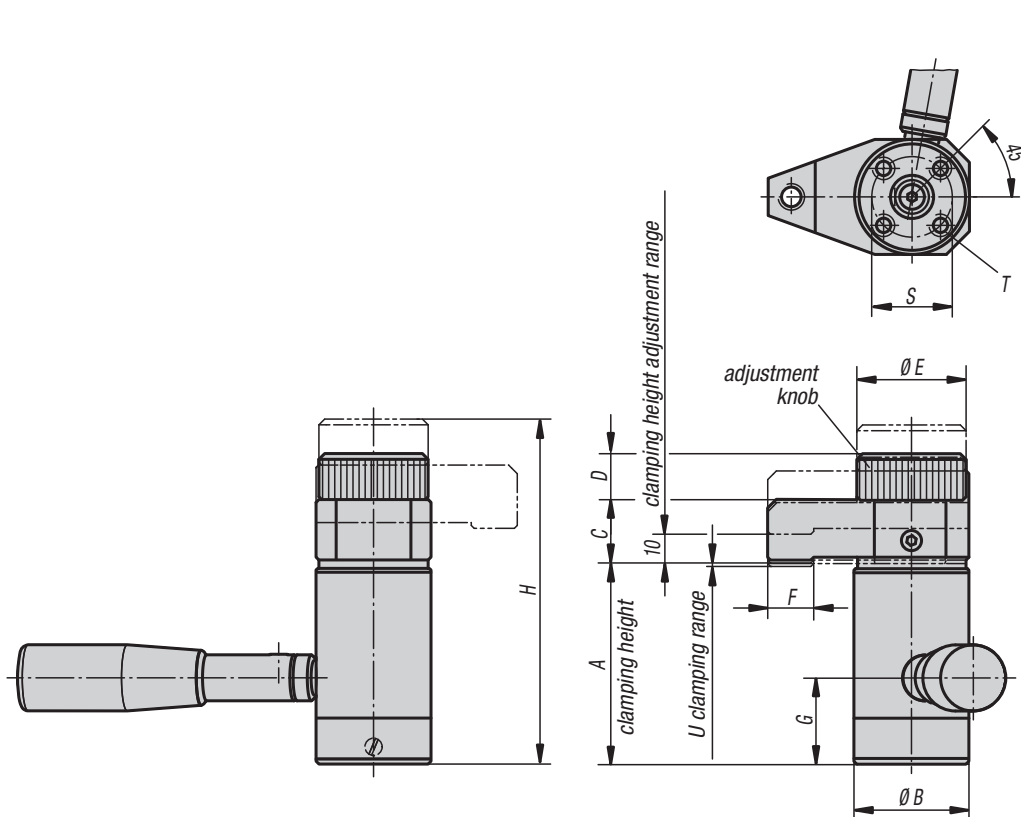


When mounting an attachment on the clamping arm, use a spanner to lock the arm and prevent it from turning.

Notes



Swing clamps (high force)

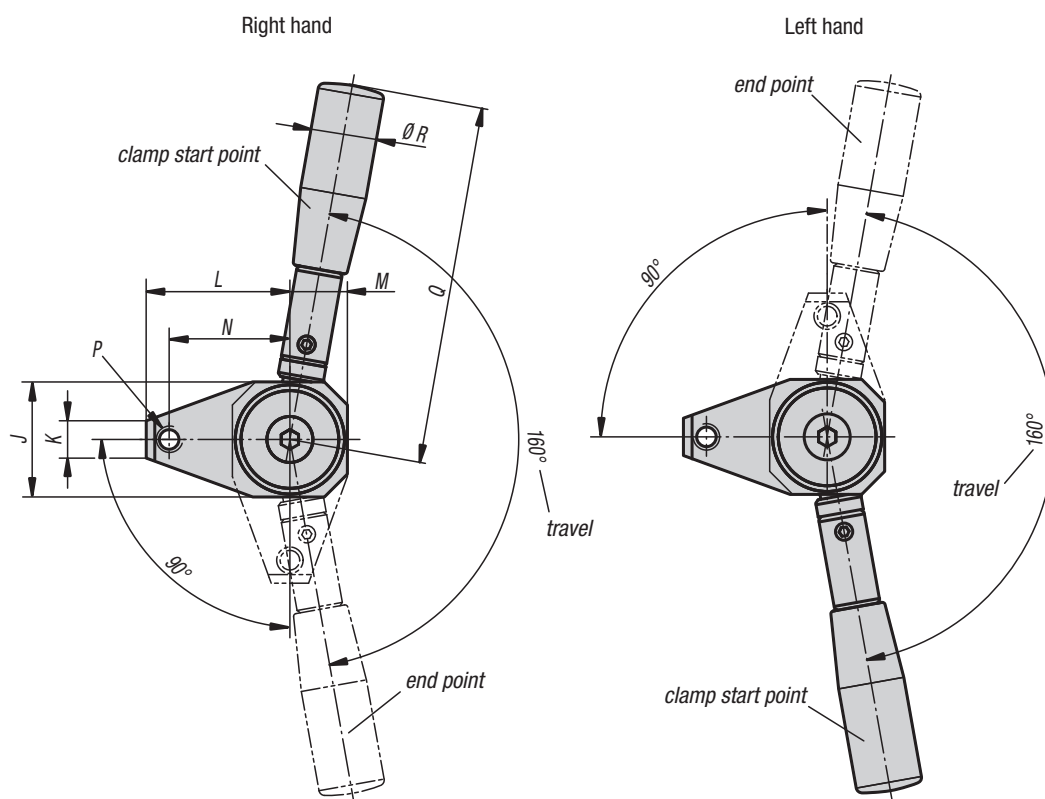


Material:
Carbon steel.
Grip plastic.

Version:
Tempered and black oxidised.
Grip black Duroplast PF 31.

Sample order:
K0913.017030

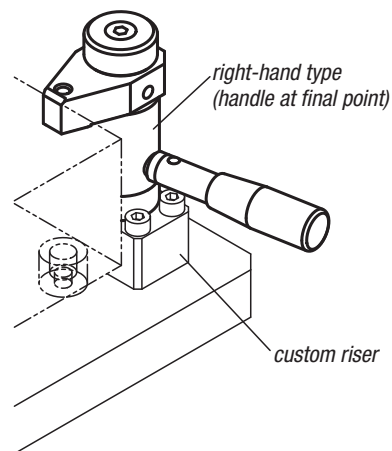
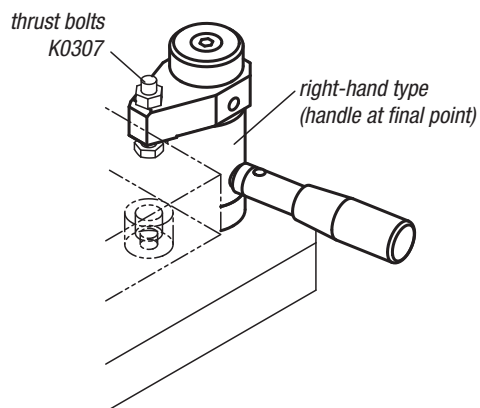
Note:
* Admissible hand force for the handle.



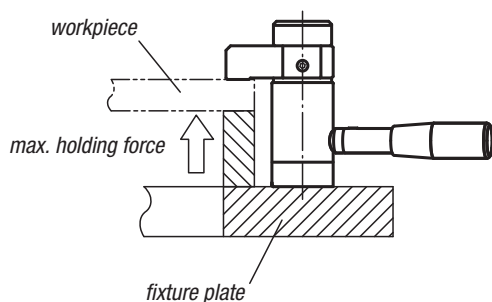
KIPP Swing clamps (high force)

Order No. left	Order No. right	A min.	A max.	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	U	Clamping force N	Hand force FH N	Holding force N
K0913.017030	K0913.117030	70	80	40	22	16	38	16	30	120	40	13	50	20	42	M8	125	23	28	M6x12	1,2	3500	600*	8000
K0913.018038	K0913.118038	80	90	50	25	20	48	24	38	137	50	18	60	25	48	M12	160	28	35	M8x16	1,6	6000	600*	14000

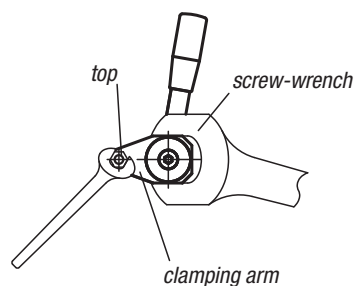
Technical information for swing clamps (high force)



Holding forces for workpiece processing

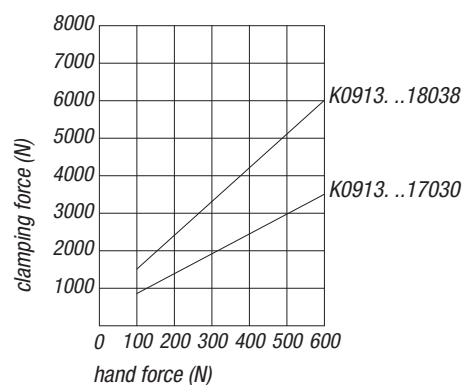


Top Installation



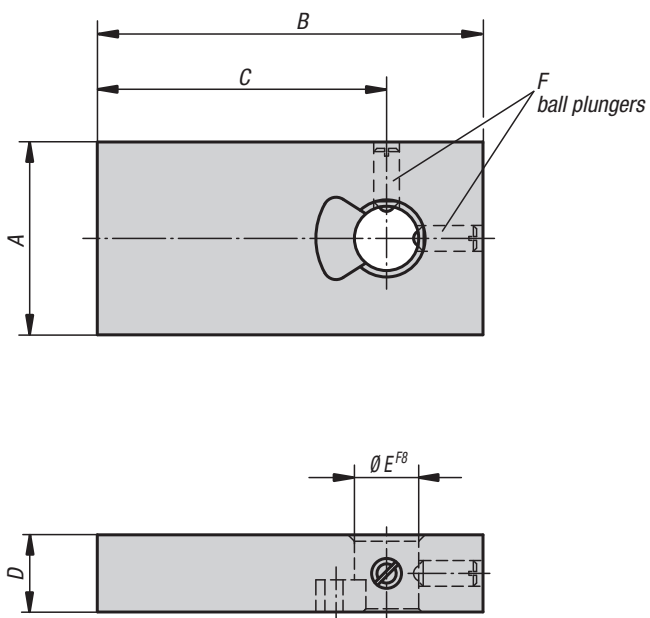
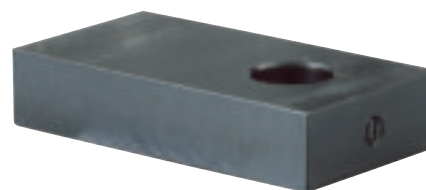
When mounting an attachment on the clamping arm, use a spanner to lock the arm and prevent it from turning.

K0913. performance curve



Clamping arms

for swing clamp

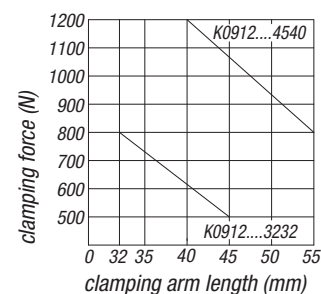


Material:
Carbon steel.

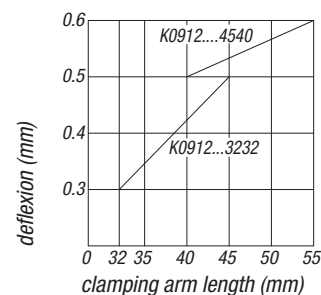
Version:
Black oxidised.

Sample order:
K0912.03006010

clamping arm length C vs. clamping force



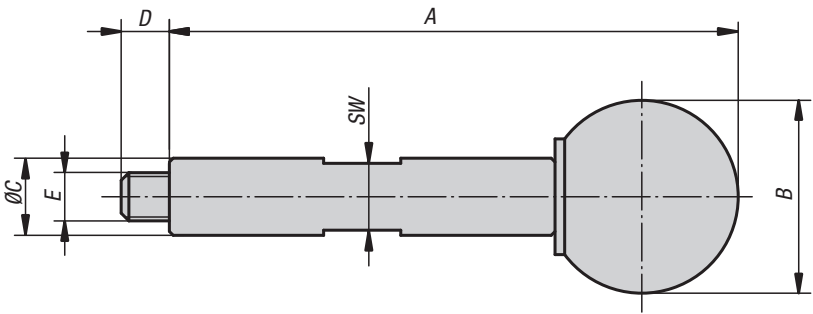
clamping arm length C vs. deflexion during clamping



KIPP Clamping arms for swing clamp

Order No.	A	B	C	D	E	F
K0912.03006010	30	60	45	12	10	M4
K0912.04007516	40	75	55	16	16	M5

Handles screw-in



Material:
Grip carbon steel.
Ball knob Duroplast PF 31.

Version:
Grip, black oxidised.
Ball knob, black.

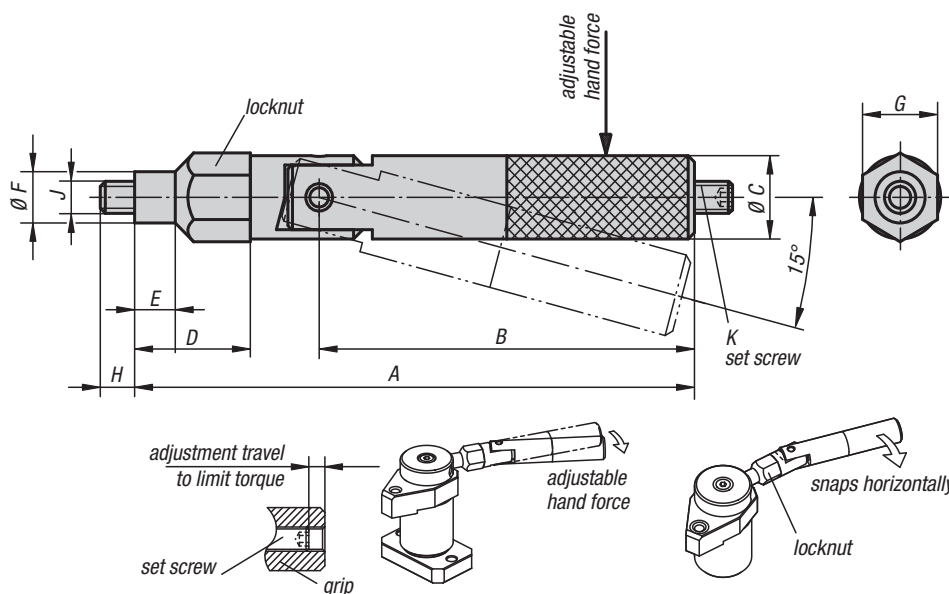
Sample order:
K0915.5059

KIPP Handles screw-in

Order No.	A	B	C	D	E	SW
K0915.05059	59	20	8	5	M5	7
K0915.06089	89	25	10	6	M6	8

Handles screw-in

with torque limit



Material:
Carbon steel.

Version:
Hardened, black oxidised.

Sample order:
K0916.05090

Note:
The desired clamping force can be set by using the set screw to alter the torque. The handle snaps 15° when the set torque is achieved.

Note:
Ensure that the handle is set to snap horizontally.

KIPP Handles, screw-in, with torque limit

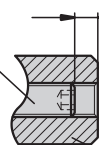
Order No.	A	B	C	D	E	F	G	H	J	K	Hand force FH N
K0916.05090	89,5	60	13	18,5	6,5	8	12	5,5	M5	M5x16	0-150
K0916.06119	119	84	15	23	8	10	14	6,5	M6	M6x20	0-200

Performance curves



set screw with hex socket

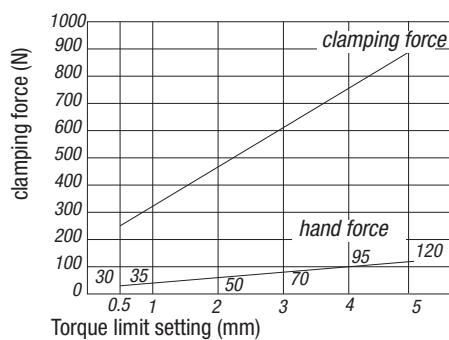
torque limit setting



adjustable torque wrench grip

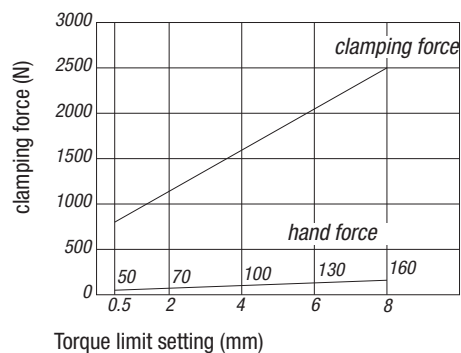


Pull Clamps K0910.3240...

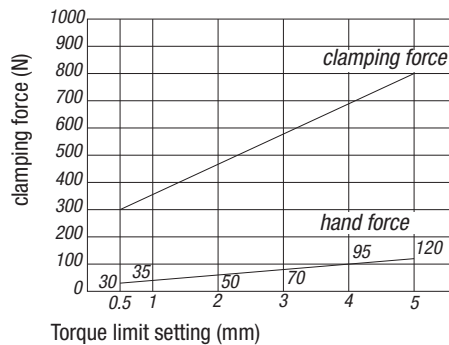


If clamping force is 900 N, Load-Setting Distance will be 5 mm. Hand force will be 120 N.

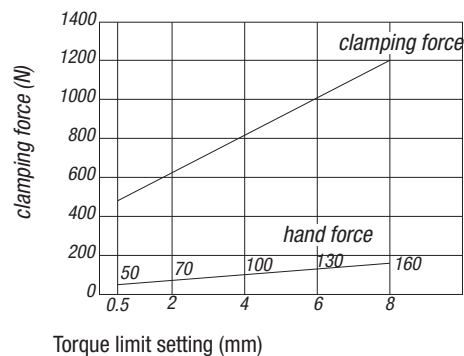
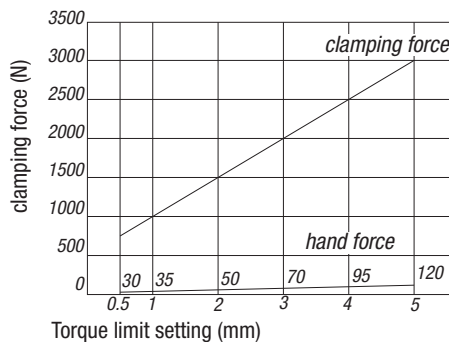
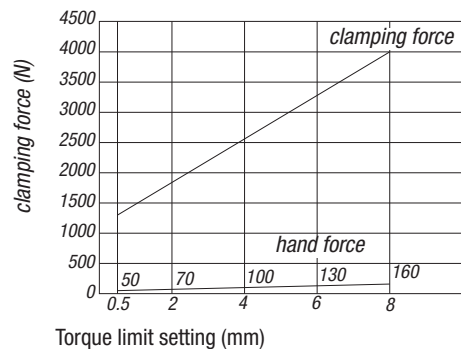
Pull Clamps K0910.4050...



Swing Clamps K0912....3232



Swing Clamps K0912....4540

Side Clamps K0928.0500
Side Clamps K0928.0501Side Clamps K0928.0800
Side Clamps K0928.0801

Note:

The above performance curves apply to degreased clamps

Swing clamps

mini, with cam lever



Material:

Carbon steel.

Version:

Tempered and black oxidised.

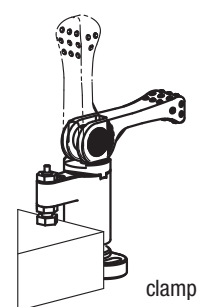
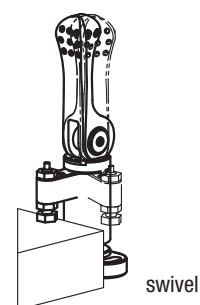
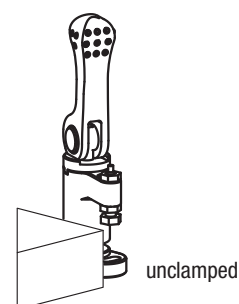
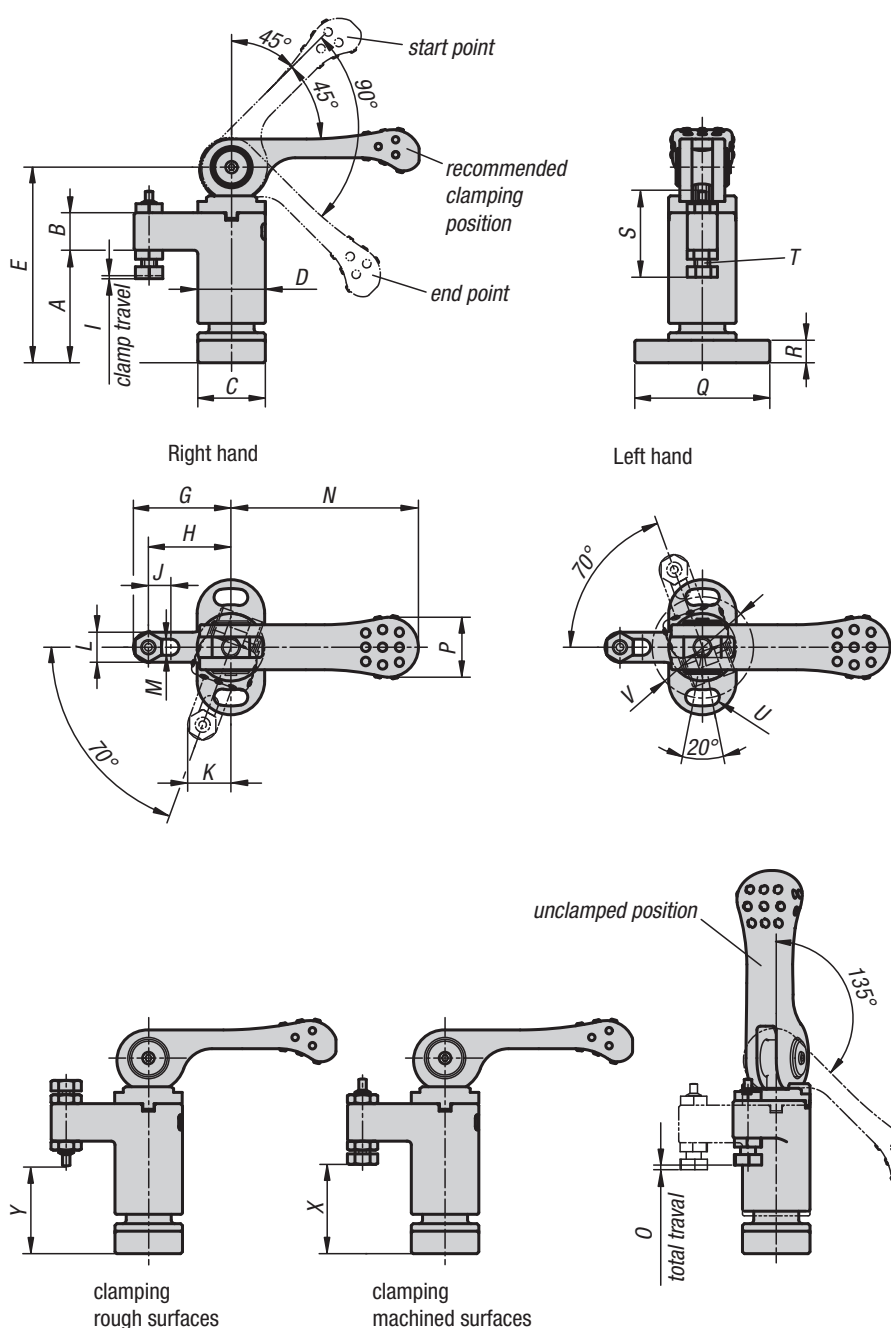
Sample order:

K0925.0100

Note:

Swing clamps are used where the clamping points must be free when the workpiece is loaded or removed.

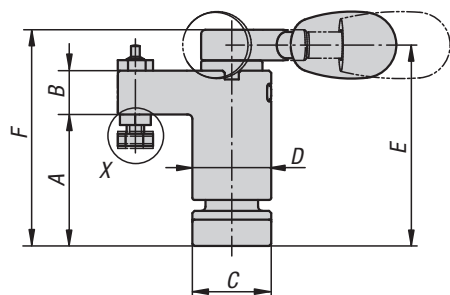
* Admissible hand force for the handle.



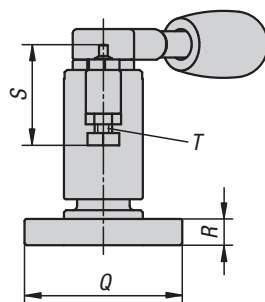
KIPP Swing clamps, mini, with cam lever

Order No. left	Order No. right	A	B	C	D	E	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	X min.	X max.	Y min.	Y max.	Clamping force N	Hand force FH N
K0925.0100	K0925.1100	30	10	18	18	52	26	22	0,8	6	11,5	8	4,3	50	1,2	16	36	6	22,8	M4	4,3	27	22,4	25,2	22	24,8	800	100*
K0925.0150	K0925.1150	40	14	23	23	68	35	30	1	8	15,3	10	5,3	63	1,5	19	45	8	28,5	M5	5,3	34	30,8	33,8	31,7	34,7	1500	150*
K0925.0200	K0925.1200	50	18	30	30	87	45	37	1,2	8	20,7	16	8,4	80	1,8	24	65	12	45,5	M8	8,4	48	31,9	39,6	32,9	40,6	2100	200*
K0925.0300	K0925.1300	60	22	40	40	107	55	45	1,5	8	25,4	20	10,4	100	2,3	30	85	15	57	M10	10,5	64	35,7	46,7	38,2	49,2	2800	300*

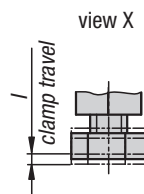
Swing clamps mini



Right hand



Left hand



view X



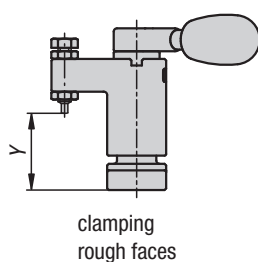
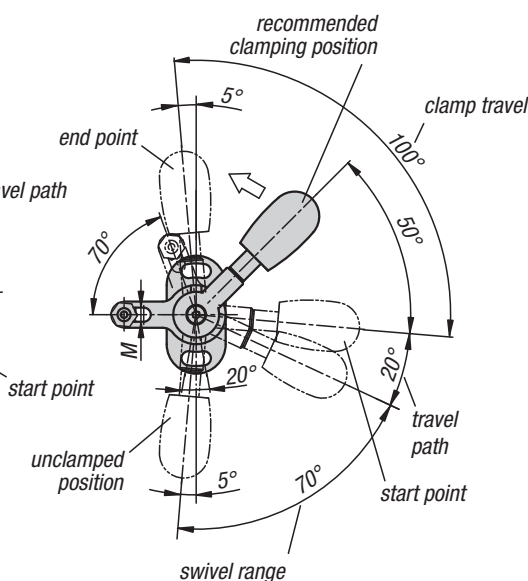
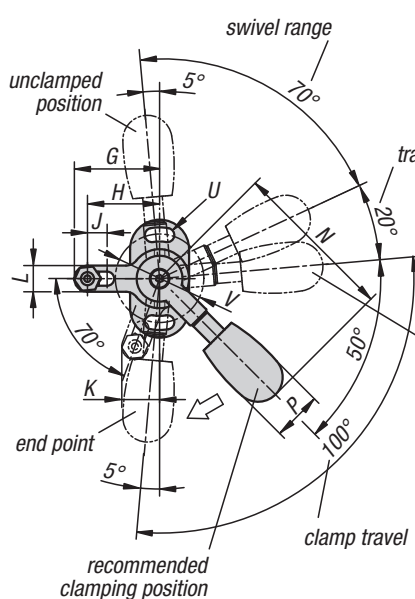
Material:
Carbon steel.
Grip plastic.

Version:
Tempered, black oxidised.
Grip black.

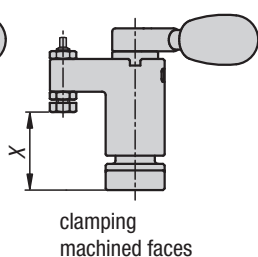
Sample order:
K0926.0100

Note:
Swing clamps are used where the clamping points must be free when the workpiece is loaded or removed.

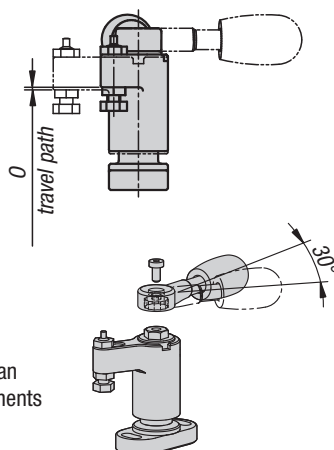
* Admissible hand force for the handle.



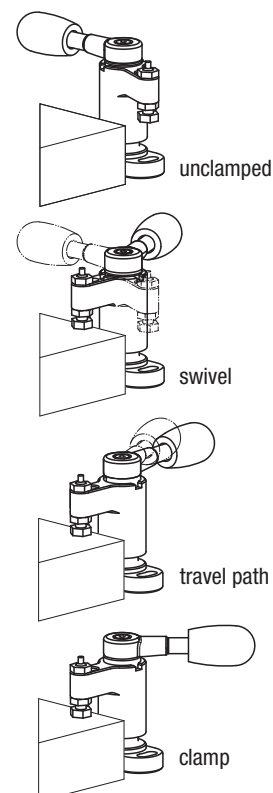
clamping
rough faces



clamping
machined faces



The position of the grip can
be adjusted in 30° increments

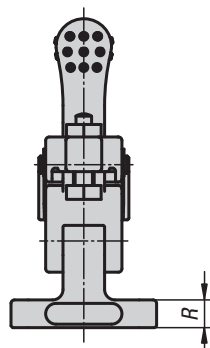
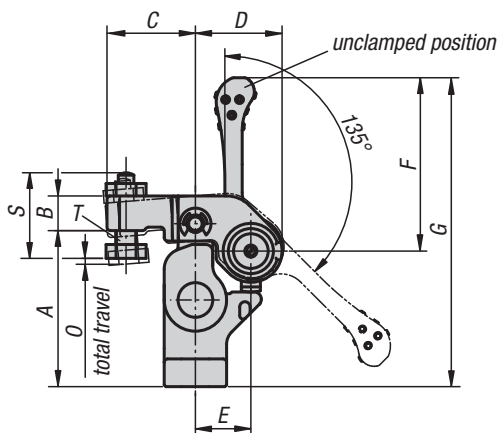


KIPP Swing clamps mini

Order No. left	Order No. right	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	X min.	X max.	Y min.	Y max.	Clamping force N	Hand force FH N
K0926.0100	K0926.1100	30	10	18	18	45,8	49	26	22	1	6	11,5	8	4,3	50	0,8	15	36	6	22,8	M4	4,3	27	22,3	25,3	21,9	24,9	1100	100*
K0926.0150	K0926.1150	40	14	23	23	61,3	66	35	30	1,4	8	15,3	10	5,3	63	1,1	20	45	8	28,5	M5	5,3	34	30,6	34	31,5	34,9	1800	150*
K0926.0200	K0926.1200	50	18	30	30	76,5	82	45	37	1,5	8	20,7	16	8,4	80	1,4	26	65	12	45,5	M8	8,4	48	31,7	39,7	32,7	40,7	2200	200*
K0926.0300	K0926.1300	60	22	40	40	93	100	55	45	1,9	8	25,4	20	10,4	100	1,7	33	85	15	57	M10	10,5	64	35,5	46,9	38	49,4	3500	300*

Swivel hold-down clamp

mini, with cam lever

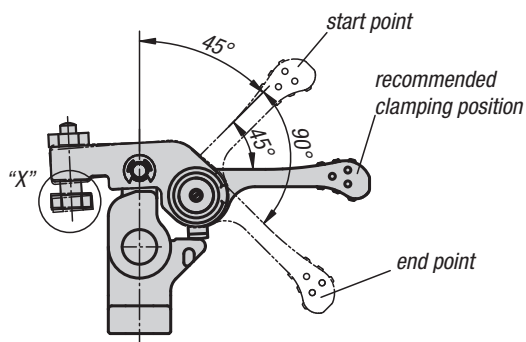
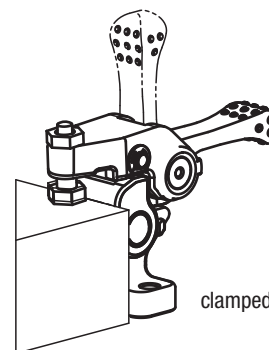
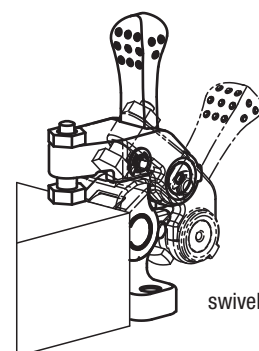
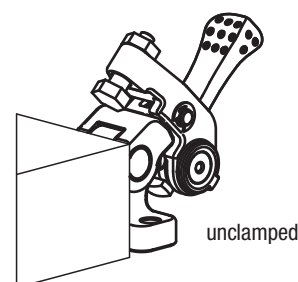
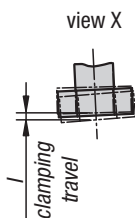
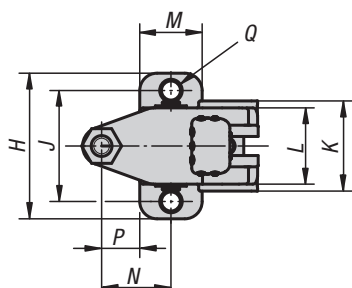


Material:
Carbon steel.

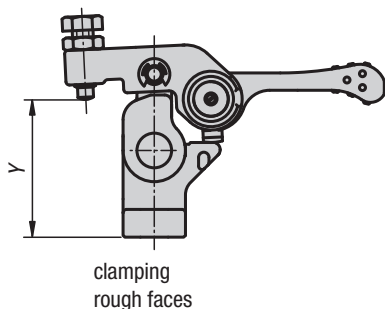
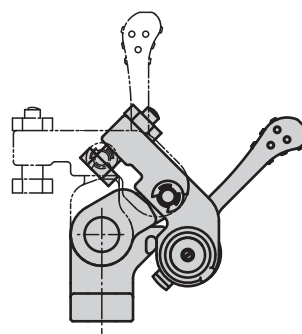
Sample order:
K0927.100

Note:
Swing clamps are used where the clamping points must be free when the workpiece is loaded or removed.

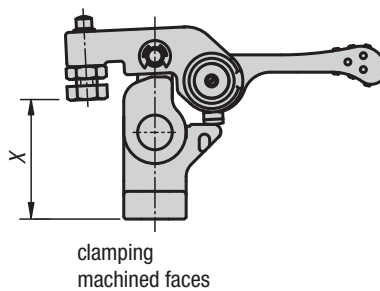
* Admissible hand force for the handle.



unclamped



clamping
rough faces



clamping
machined faces

KIPP Swivel hold-down clamp, mini, with cam lever

Order No.	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	X min.	X max.	Y min.	Y max.	Clamping force N	Hand force FH N
K0927.100	45	10	25,5	25	16	50	89	42	1	32	26	22	18	20	1,5	11	5,5	8	24	M6	31,5	40,5	34,5	43,5	700	100*
K0927.150	55	12	32	31	20	63	109	52	1,2	40	32	28	22	25	1,8	14	6,6	10	30,5	M8	36,4	48,6	41,4	53,6	1100	150*

Thrust clamps



Material, version:

Cam tool steel, hardened and black oxidised.
Shaft carbon steel, hardened and black oxidised.
Grip carbon steel, black oxidised.
Ball knob black Duroplast PF 31.

Sample order:

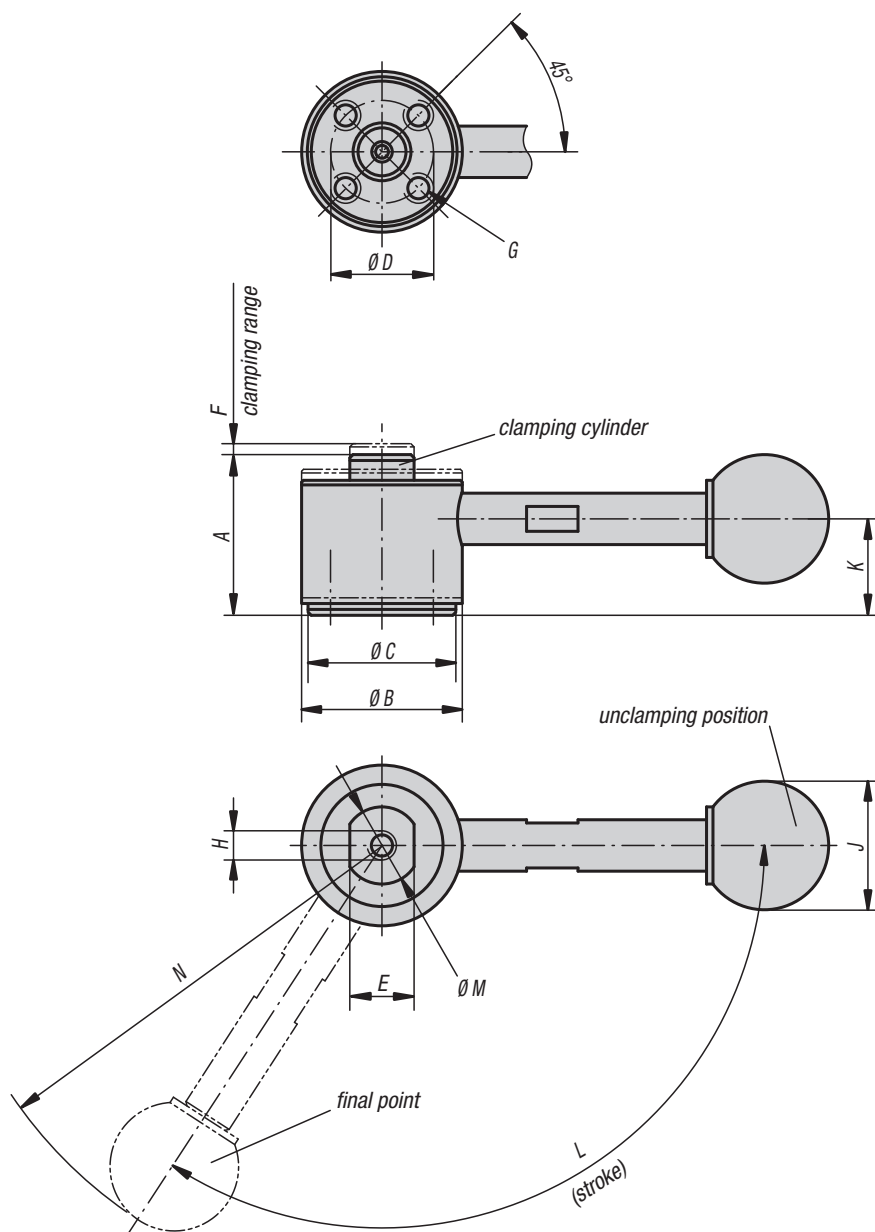
K0914.252501

Note:

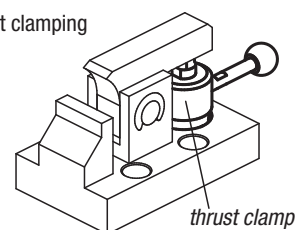
* Admissible hand force for the handle.

Accessories:

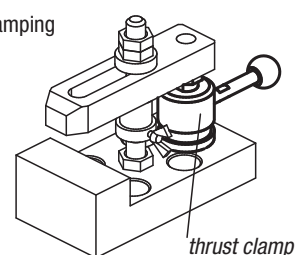
Standard handles K0915.
Screw-in handles with torque limit K0916.



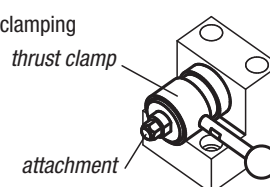
downthrust clamping



vertical clamping



horizontal clamping



When mounting an attachment on the clamping cylinder, hold the shaft using a spanner to prevent turning.

KIPP Thrust clamps

Order No.	Version	A min.	A max.	B	C	D	E	F	G	H	J	K	L	M	N	Clamping force N	Hand force FH N
K0914.252500	without grip	25	26,7	25	23	16	10	1,7	M4x6	M4x6	-	15	123°	12	-	3000	150*
K0914.252501	with grip	25	26,7	25	23	16	10	1,7	M4x6	M4x6	20	15	123°	12	69,5	3000	150*
K0914.323200	without grip	32	34,5	32	30	20	13	2,5	M6x9	M6x9	-	19,5	135°	15	-	4000	200*
K0914.323201	with grip	32	34,5	32	30	20	13	2,5	M6x9	M6x9	25	19,5	135°	15	103	4000	200*

Clamping bolts

**Material:**

Clamping bolt, steel.
Clamping screw, carbon steel.
Clamping ring brass.

Version:

Clamping bolt hardened and black oxidised.
Clamping screw black oxidised.
Clamping ring bright.

Sample order:

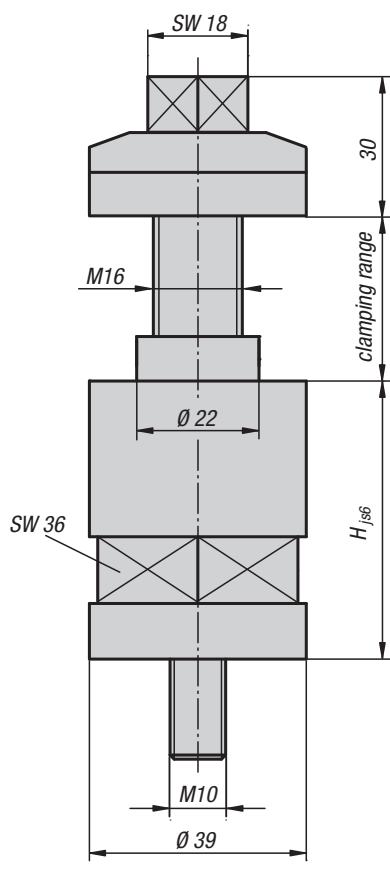
K1232.100

Note:

The clamping bolts can be fixed to the machine table directly with T-slot nuts. Clamping parallel to the table is guaranteed by low tolerance classes (js6) for the height.

The clamping range is 8 – 40 mm. Clamping screws for the ranges 40 – 67 and 65 – 87 mm are also available.

The intermediate plate prevents damage to the machine table, as well as shifting during tightening. The brass clamping ring prevents impressions on the workpiece.

**KIPP Clamping bolts**

Order No.	H	Clamp range
K1232.100	100	8 - 40
K1232.050	50	8 - 40

KIPP Clamping screws

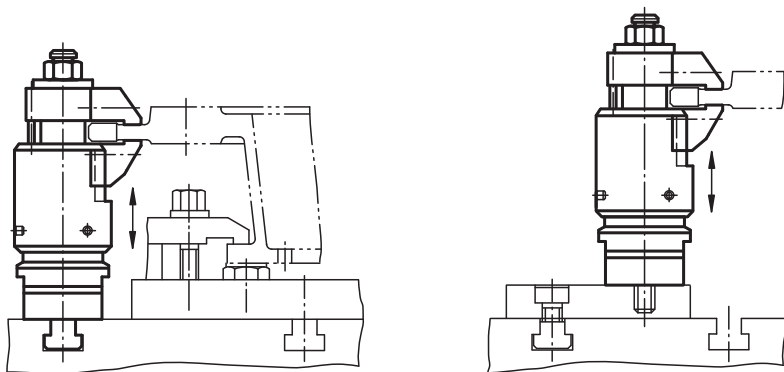
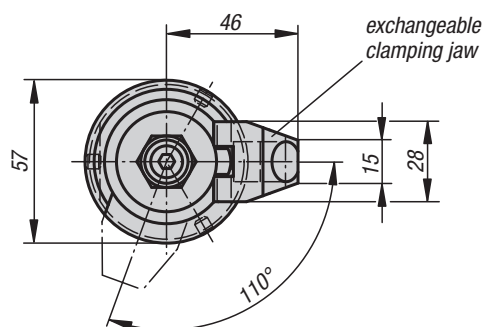
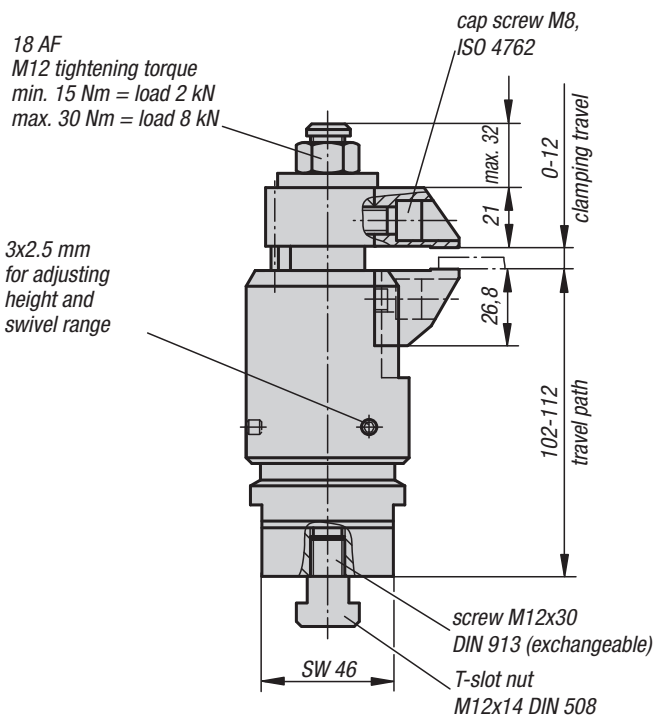
Order No.	Clamp range
K1232.6587	65 - 87
K1232.4067	40 - 67



A large rectangular area filled with a fine grid of light gray lines, intended for taking notes or drawing.



Floating clamp



Material:

Base body and jaws steel.
Housing aluminium.

Version:

Body nitrided, black oxidised and ground.
Jaws nitrided and black oxidised.
Housing red anodized.

Sample order:

K1228.100812

Note:

The floating clamp is used to clamp and support overhanging clamping points on components. It prevents vibrations and deflection during machining.

Method of operation:

1. Push the floating clamp down.
2. Pivot the jaws to the stop. The floating clamp contacts the bottom of the workpiece with a light spring force.
3. Tighten the floating clamp with the SW 18 hexagon nut (note the min. and max. torque). During clamping the workpiece is clamped and simultaneously supported.
4. Reverse the process to release.

Assembly:

Fasten the floating clamp to the fixture with the M12 screw.

Adjust the height stop and swivel range using the red sleeve and lock with the 3x2.5 mm grub screws. When setting the height leave generous clearance above.

For safe operation the M12 tapped hole must always be closed.

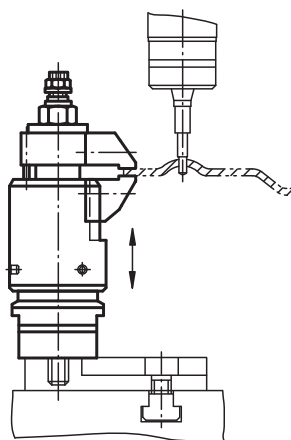
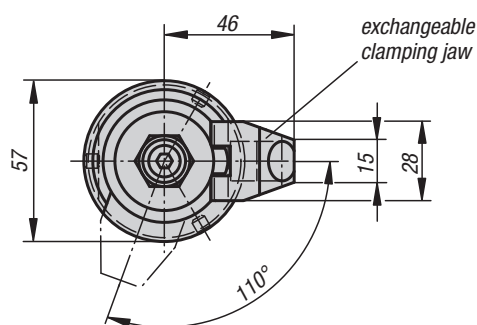
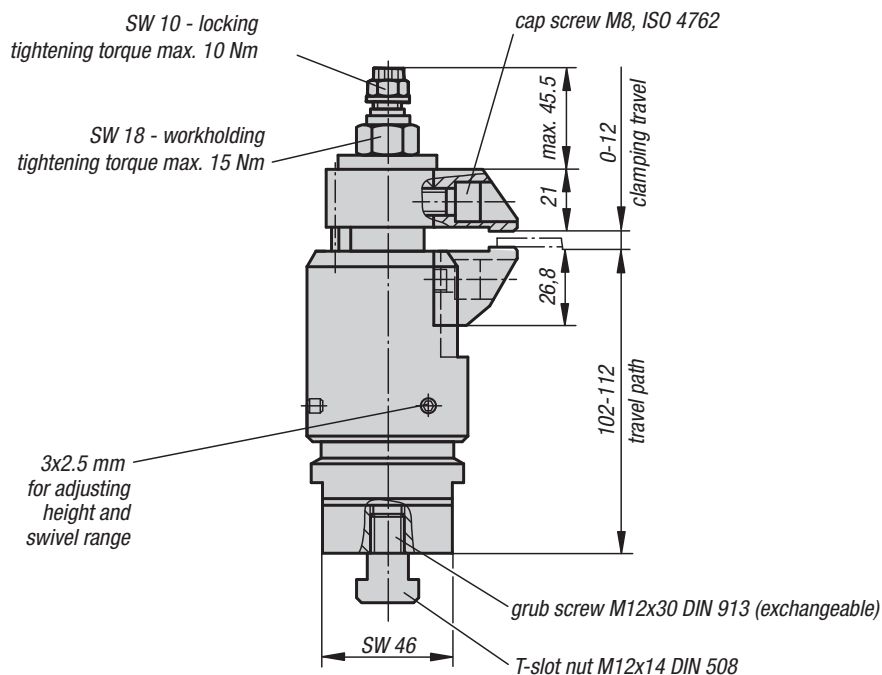
For specific clamping applications the standard jaws can be altered or replaced.

KIPP Floating clamp

Order No.	Travel path	max. clamping stroke	Load capacity N	Clamping force N
K1228.100812	10	12	8000	8000

Floating clamp

with separate workpiece clamp and interlock



Material:

Base body and jaws steel.
Housing aluminium.

Version:

Body nitrided, black oxidised and ground.
Jaws nitrided and black oxidised.
Housing blue anodized.

Sample order:

K1227.100812

Note:

This floating clamp is used to clamp and support overhanging clamping points on thin components. It prevents vibrations and deflection during machining.

Method of operation:

1. Push the floating clamp down.
2. Pivot the jaws. The lower jaw contacts the workpiece with a light spring force.
3. Tighten the SW 18 hexagon nut. The jaws clamp the workpiece, the clamp is still floating.
4. Tighten the SW 10 hexagon nut. The clamping process is completed.
5. Reverse the process to release.

Assembly:

Fasten the floating clamp to the fixture with the M12 screw.

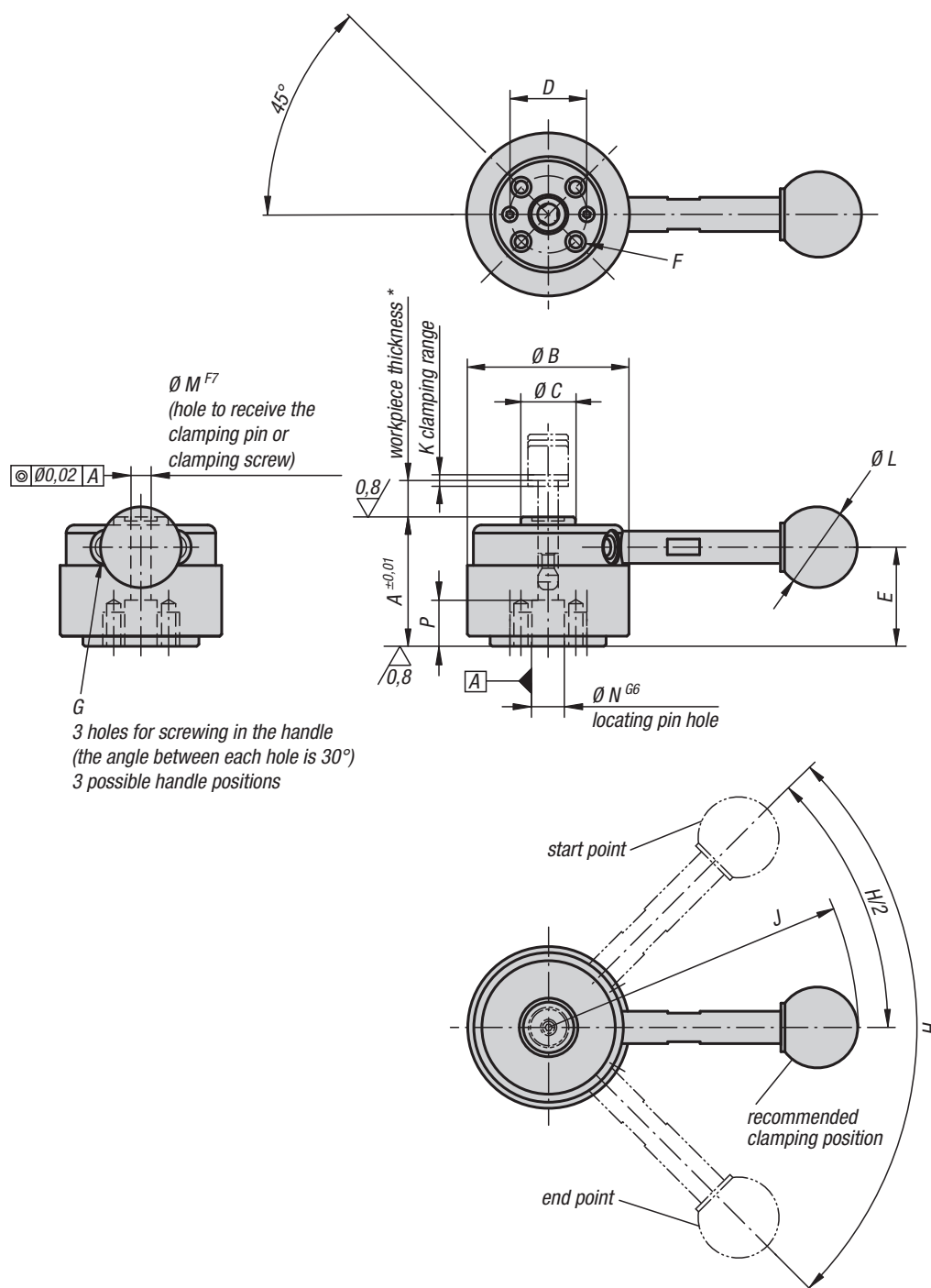
Adjust the height stop and the swivel range using the blue sleeve and lock with the 3x2.5 mm grub screws. When setting the height leave generous clearance above.

For safe operation the M12 tapped hole must always be closed.

For specific clamping applications the standard jaws can be altered or replaced.

KIPP Floating clamp with separate workpiece clamp and interlock

Order No.	Travel path	max. clamping stroke	Load capacity N	Clamping force N
K1227.100812	10	12	8000	8000



Material:

Housing and cam tool steel.
Grip carbon steel.
Ball knob Duroplast PF 31.

Version:

Housing and cam hardened and black oxidised.
Grip black oxidised.
Ball knob black.

Sample order:

K0910.324001

Note:

* Max. workpiece thickness see clamping pin K0910 (dimension C).
 ** Admissible hand force for the handle.

** Admissible hand force for the handle.

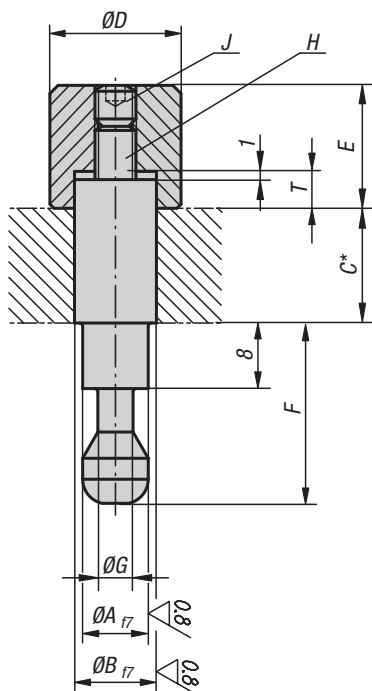
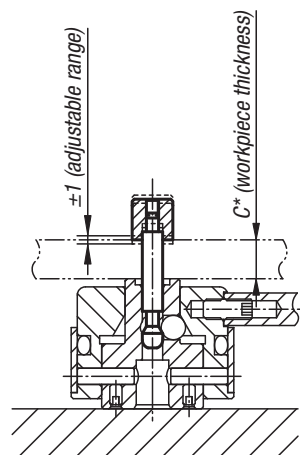
Accessories:

Standard handles K0915.
Screw-in handles with adjustable torque
K0916.

KIPP Pull clamps

Order No.	Version	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Clamping force N	Recommended workpiece thickness tolerance	Hand force FH N	Holding force N
K0910.324000	without grip	32	40	13,5	18	24,5	M4x8	M5	90°	-	1,5	-	5	8	10	900	±0,3*	150**	2000
K0910.324001	with grip	32	40	13,5	18	24,5	M4x8	M5	90°	76,5	1,5	20	5	8	10	900	±0,3*	150**	2000
K0910.405000	without grip	40	50	18	25	30,7	M6x9	M6	110°	-	2	-	8	12	13	2500	±0,5*	200**	5500
K0910.405001	with grip	40	50	18	25	30,7	M6x9	M6	110°	111,5	2	25	8	12	13	2500	±0,5*	200**	5500

Clamping pins



Material:
Carbon steel.

Version:
Pins tempered and ground.
Knurled knob tempered, black oxidised.

Sample order:
K0910.005050

Note:
* The clamping pin can be altered to suit the workpiece thickness.

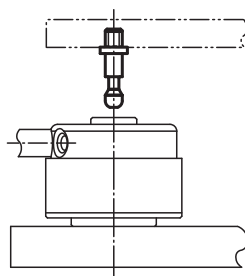
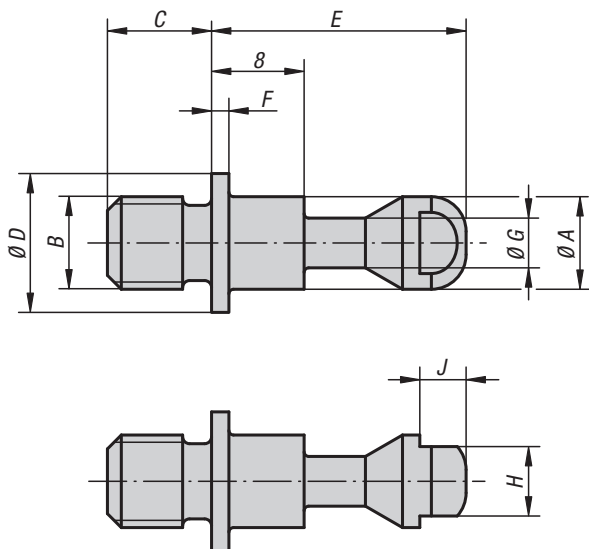
Accessories:
to:
K0910.3240... (K0910.005050 and K0910.006050),
K0910.4050... (K0910.008080 and K0910.010080)



KIPP Clamping pins

Order No.	A	B	C	D	E	F	G	H	J	T
K0910.005050	5	5	50	10	10	17	3	M3	M3x4	3
K0910.006050	5	6	50	10	10	17	3	M3	M3x4	3
K0910.008080	8	8	80	16	15	22	4,3	M5	M5x5	4,5
K0910.010080	8	10	80	16	15	22	4,3	M5	M5x5	4,5

Clamping screws



Material:
Carbon steel.

Version:
Tempered and black oxidised.

Sample order:
K0910.105060

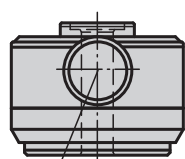
Accessories:
To:
K0910.3240 for K0910.105060 and
K0910.106070,
K0910.4050 for K0910.108090 and
K0910.110110

KIPP Clamping screws

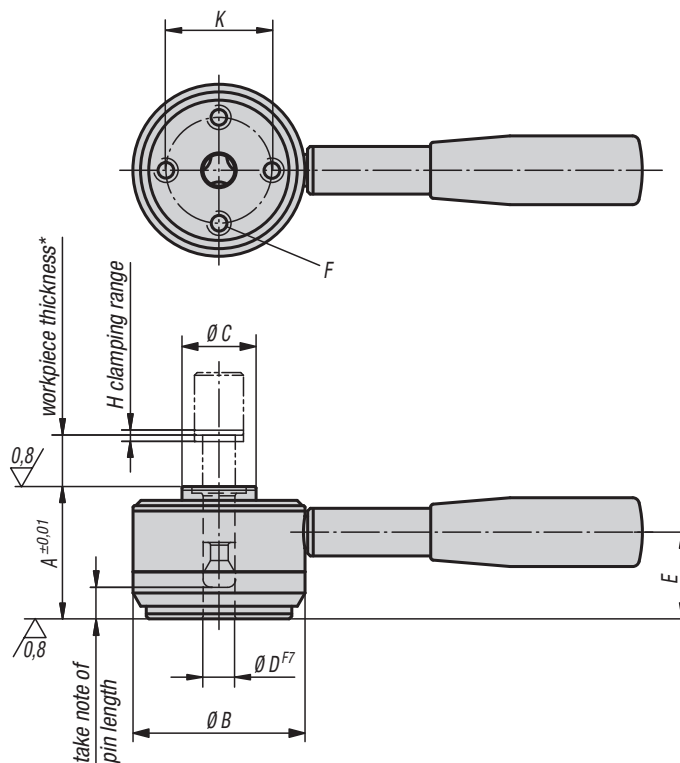
Order No.	A	B	C	D	E	F	G	H	J
K0910.105060	5	M5	6	8	17	1,2	3	4	2,5
K0910.106070	5	M6	7	8	17	1,2	3	4	2,5
K0910.108090	8	M8	9	12	22	1,5	4,3	6	4
K0910.110110	8	M10	11	12	22	1,5	4,3	6	4

Pull clamps

(high force)



3 holes for screwing in the handle
(angle between each hole is 35°)
3 possible handle positions



Material:

Housing, clamping ring and handles,
carbon steel.
Grip Duroplast PF 31.

Version:

Housing and clamping ring hardened and
black oxidised.
Handles black oxidised.
Grip black.

Sample order:

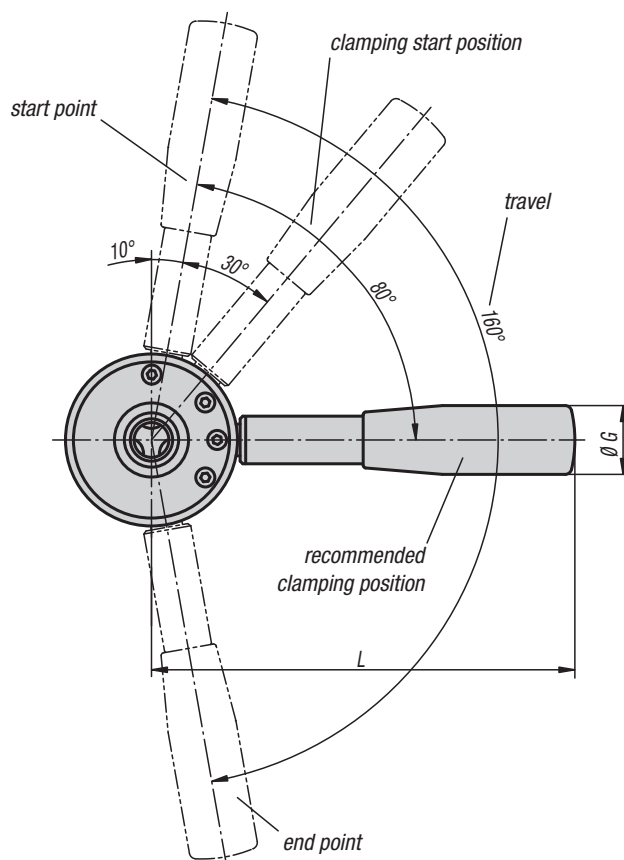
K0911.506501

Note:

When clamping with a high force
clamping pin the recommended
workpiece tolerances must be
maintained. The grip lever must lay
between the recommended clamping
position and end point for safe clamping.

* Max. workpiece thickness, see clamping
pin K0911 (dimension C).

** Admissible hand force for the handle.

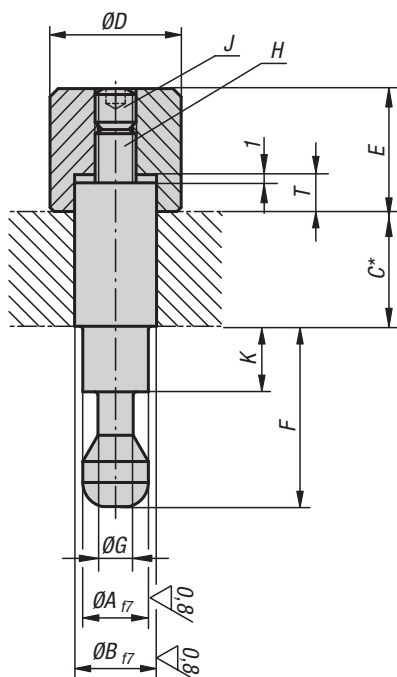
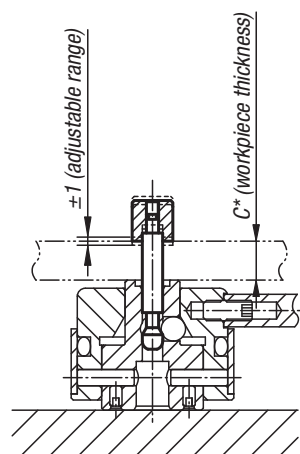


KIPP Pull clamps (high force)

Order No.	A	B	C	D	E	F	G	H	J	K	L	Clamping force N	Recommended workpiece thickness tolerance	Hand force FH N	Holding force N
K0911.506501	50	65	28	12	36	M8x14	26	2	10	40	160	6000	±0,5*	600**	8000
K0911.638001	63	80	34	16	45	M10x18	28	2,5	12	50	180	8000	±0,8*	600**	14000

Clamping pins

(high force)



Material:
Carbon steel.

Version:
Pins tempered and ground.
Knurled knob tempered, black oxidised.

Sample order:
K0911.412100

Note:
* The clamping pin can be altered to suit the workpiece thickness.

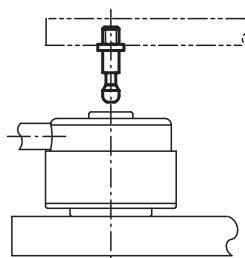
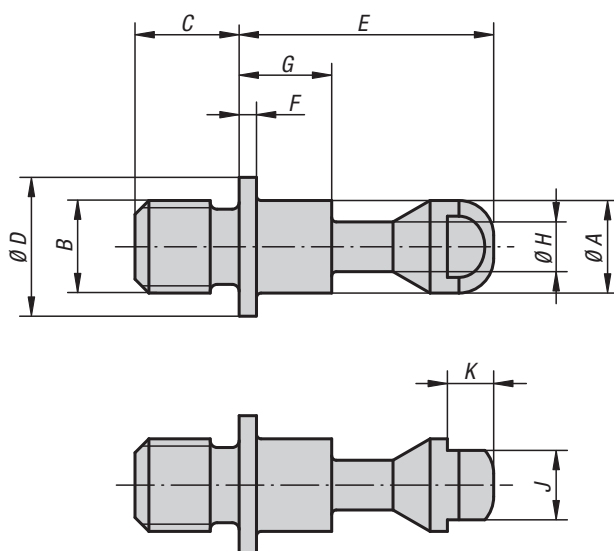


KIPP Clamping pins (high force)

Order No.	A	B	C	D	E	F	G	H	J	K	T	Suitable for
K0911.412100	12	12	100	18	23	38	6,5	M8	M8x8	21,5	7	K0911.506501
K0911.416100	12	16	100	24	23	38	6,5	M8	M8x8	21,5	7	K0911.506501
K0911.516120	16	16	120	24	29	48	9,5	M10	M10x10	28	9	K0911.638001
K0911.520120	16	20	120	30	29	48	9,5	M10	M10x10	28	9	K0911.638001

Clamping screws

(high force)



Material:
Carbon steel.

Version:
Tempered and black oxidised.

Sample order:
K0911.1412013



KIPP Clamping screws (high force)

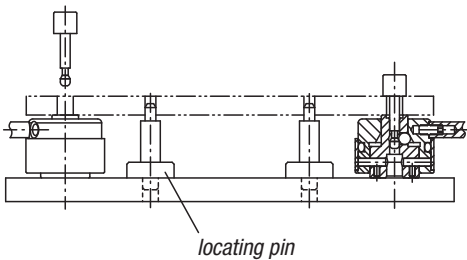
Order No.	A	B	C	D	E	F	G	H	J	K	Suitable for
K0911.1412013	12	M12	13	20	38	2	21,5	6,5	10	4	K0911.506501
K0911.1416017	12	M16	17	20	38	2	21,5	6,5	10	4	K0911.506501
K0911.1516017	16	M16	17	25	48	2,5	28	9,5	13	5	K0911.638001
K0911.1520021	16	M20	21	25	48	2,5	28	9,5	13	5	K0911.638001

How to locate workpiece

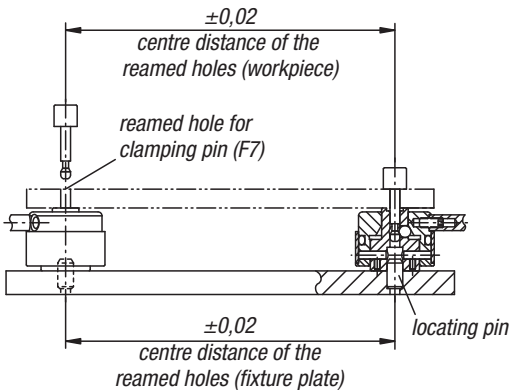


Workpiece positioning

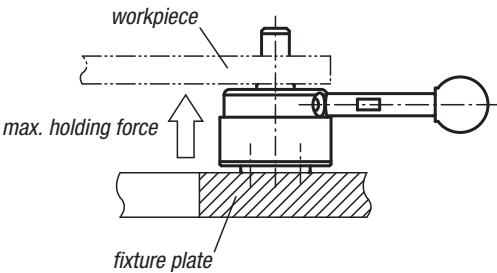
Clamping by means of pull clamp and clamping pin



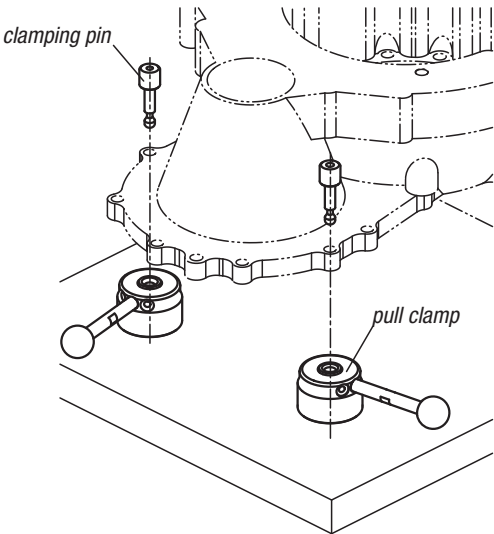
Simultaneous clamping and positioning of a workpiece



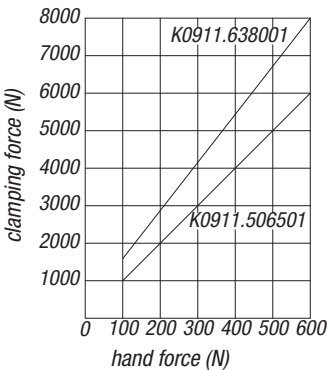
Holding forces for workpiece processing



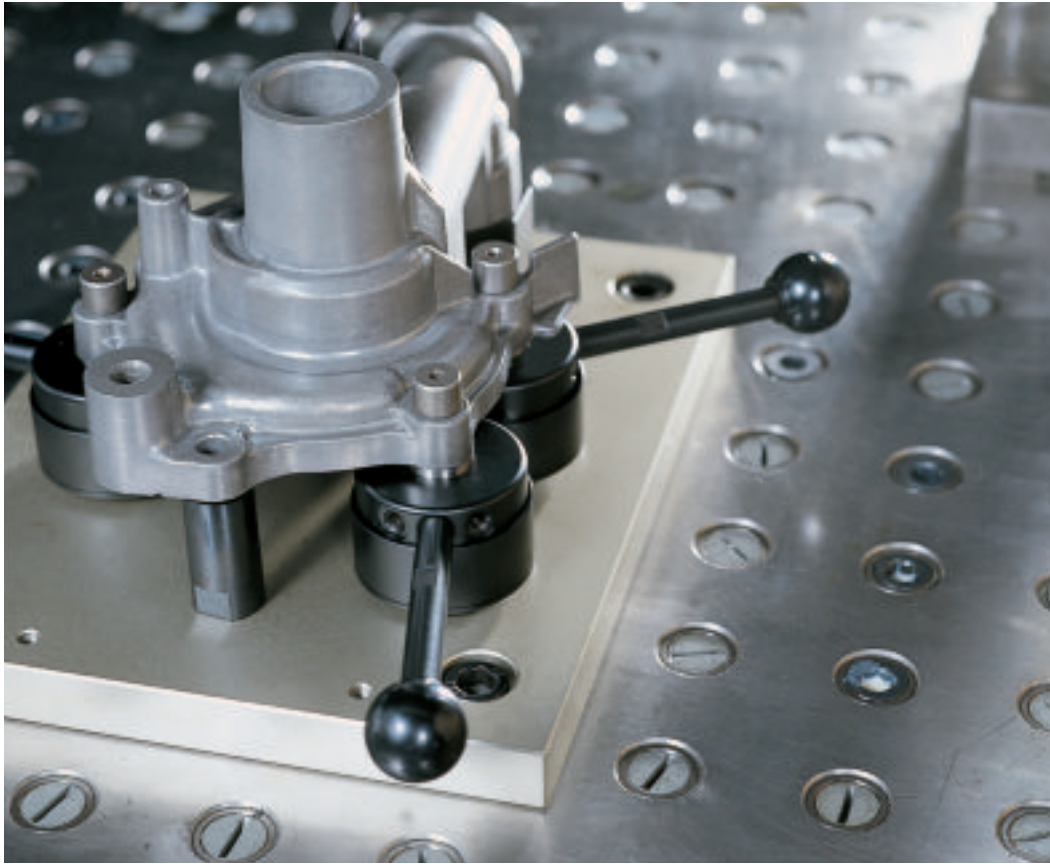
Make sure that no force exceeding the values in the table is affecting the bottom of the workpiece.



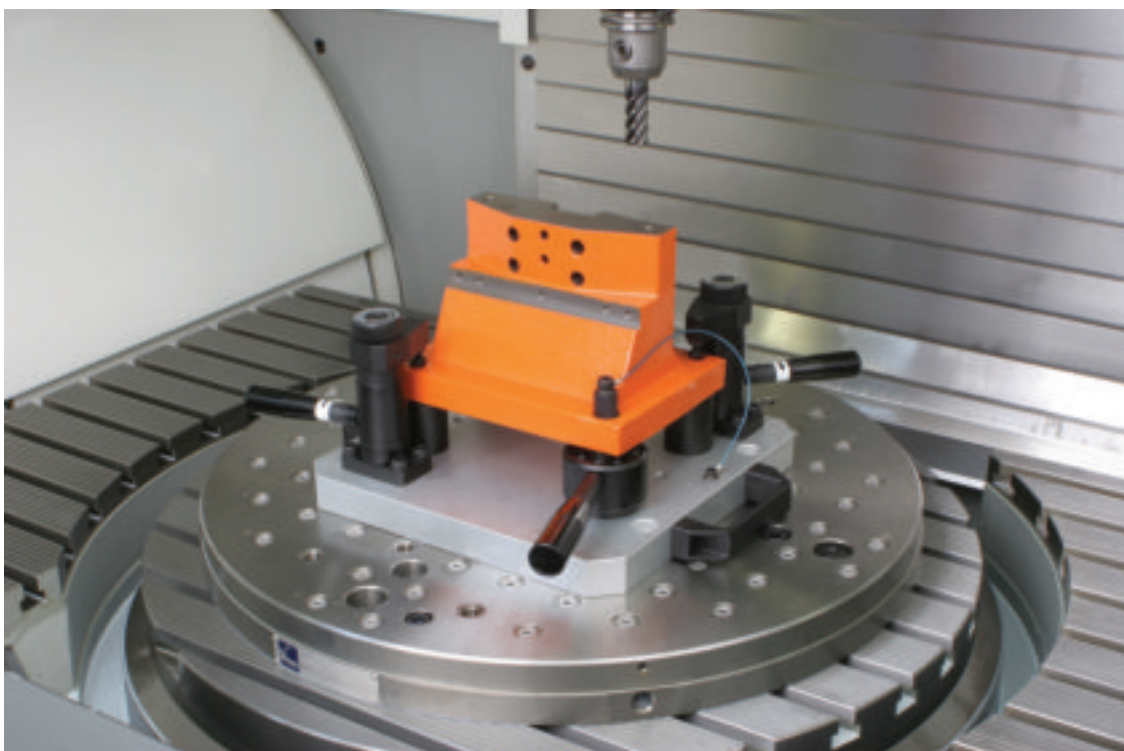
performance curve



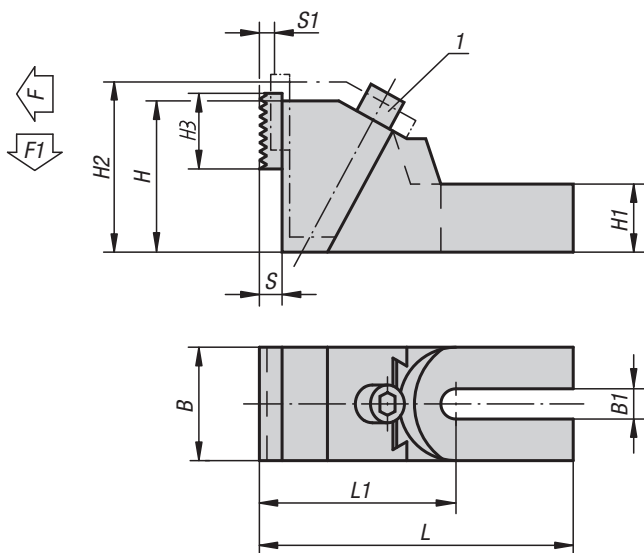
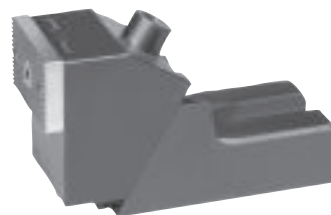
Pull clamps



Pull clamps + Swing clamps (high force)



Robust side clamps



Material:

Body malleable iron.
Jaws mild steel.

Version:

Black oxidised.
Jaws case-hardened.

Sample order:

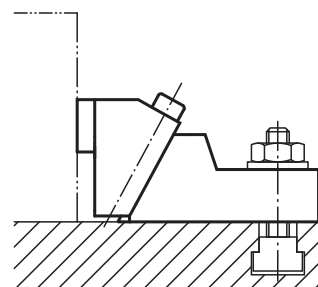
K0891.26

Note:

The jaws are reversible, smooth side for machined parts, serrated side for rough surfaces. We recommend using two bolts to mount the clamp to the machine table!

Drawing reference:

1) tightening torque max. 50 Nm



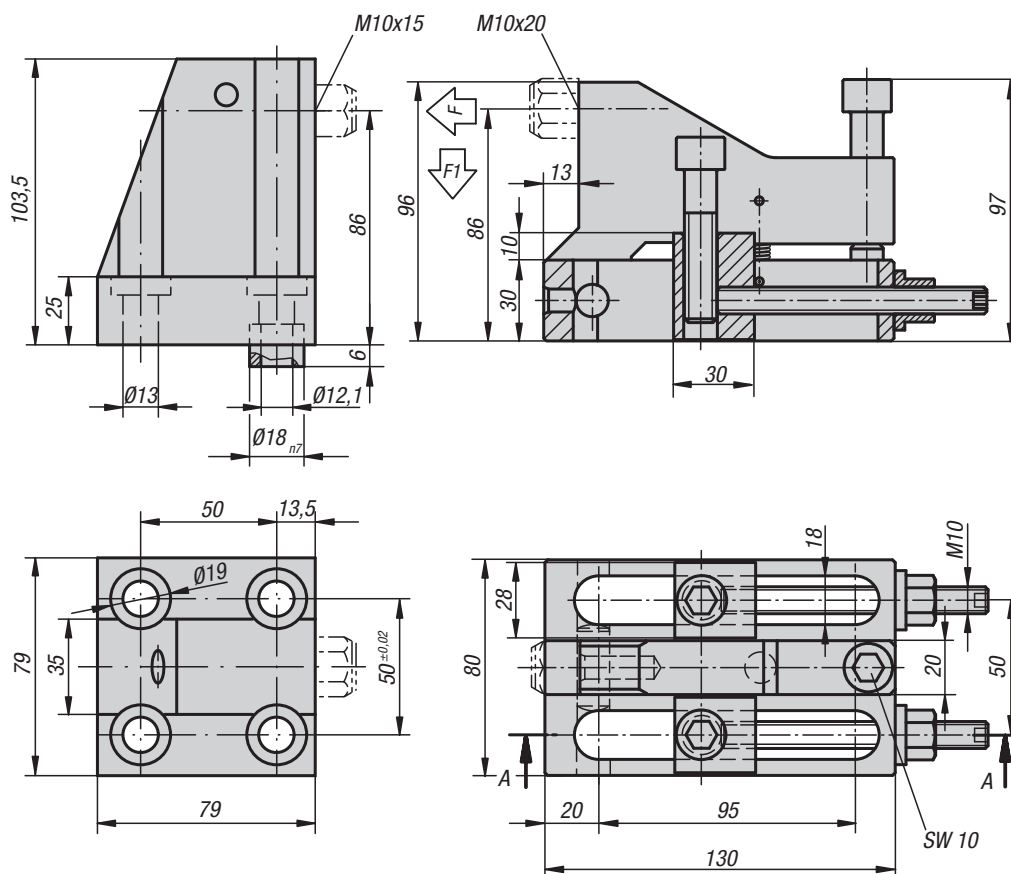
KIPP Robust side clamps

Order No.	suitable for slot width	L	L1	B	B1	H	H1	H2	H3	S	S1	F kN	F1 kN
K0891.19	12, 14, 16, 18	177,5	112,5	65	19	85	37	99	40	12	8	18,8	2,26
K0891.26	20, 22, 24, 28, 30	226,5	136,5	75	26	100	45	118	40	12	11	23,05	2,77
K0891.38	32, 36, 42	262,5	157,5	90	38	120	55	145	40	12	15	29,4	3,33



K0830.212

K0830.112
A-A



Material:

Body steel 1.1191.

Version:

Black oxidised.
Centring bush hardened.

Sample order:

K0830.112
(self-aligning pad not supplied)

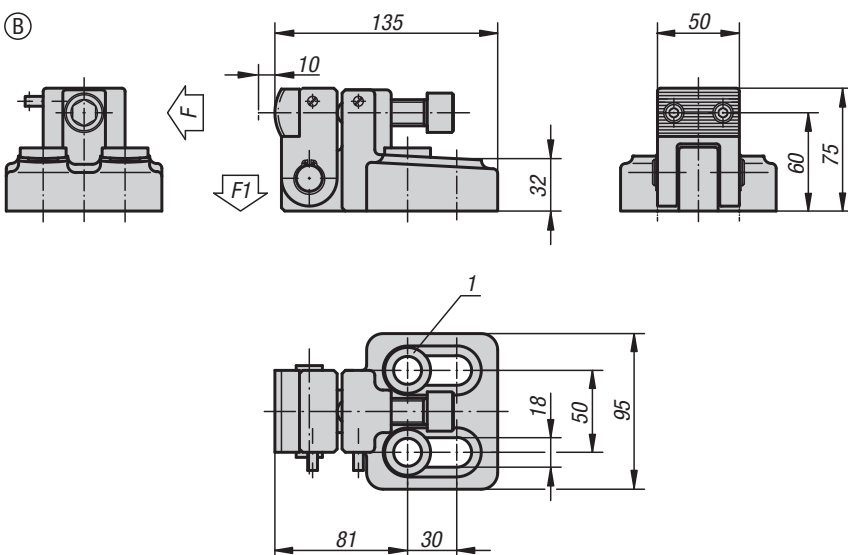
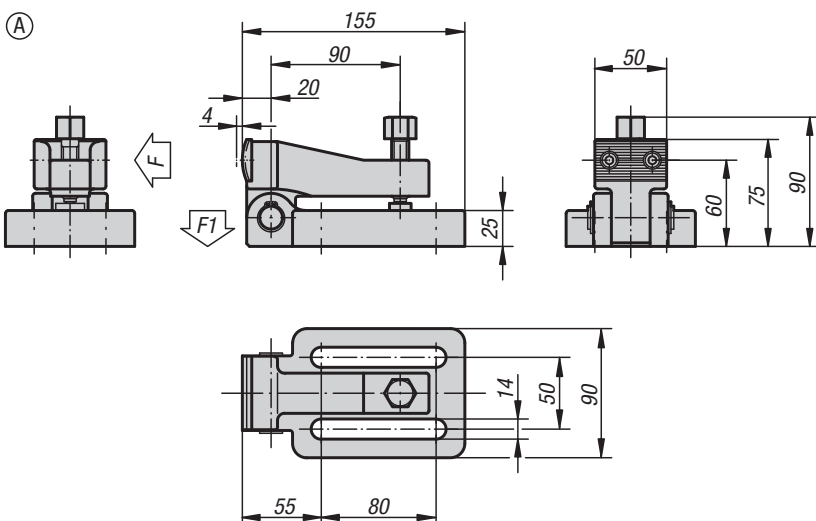
Note:

The unit comprises of an adjustable side clamp and a side stop and are used to clamp workpieces with a simultaneous positive down force. The side clamp has two DIN 913 grub screws which can be set to prevent backward slippage during clamping.

KIPP Side clamps

Order No.	F kN	F1 kN
K0830.112	25	5
K0830.212	22,5	4,5

Side clamps



Material:

Body ductile iron (SG iron).
Jaw hardened carbon steel.

Version:

Painted black.
Jaw bright.

Sample order:

K0831.03

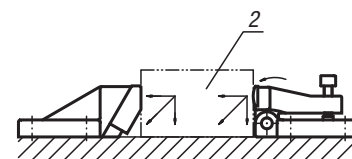
Note:

The workpiece is clamped between side clamps and the side stops, simultaneously producing a positive down force.

Side clamps and stops are secured with DIN 912 cylinder screws. A secure clamping is ensured when side clamps and side stops are used together.

Drawing reference:

- 1) spherical washer set for M12 and M16
- 2) workpiece



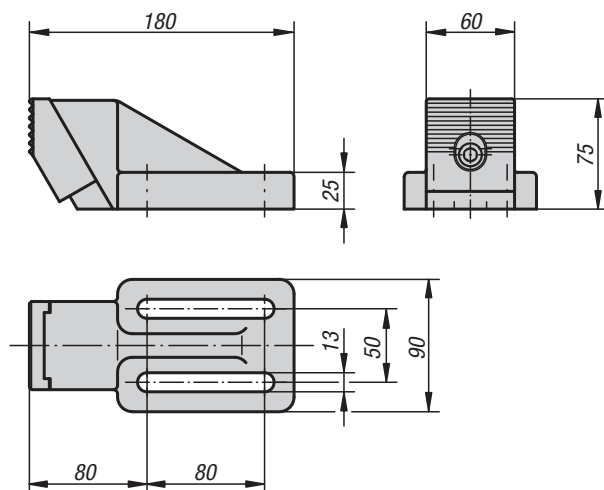
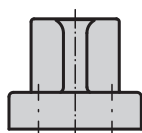
KIPP Side clamps

Order No.	Form	F kN	F1 kN	Tightening torque Nm
K0831.01	A	29	1,3	38
K0831.03	B	58	2,4	150

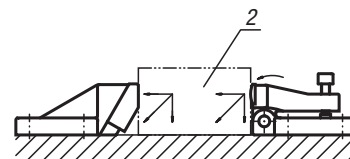
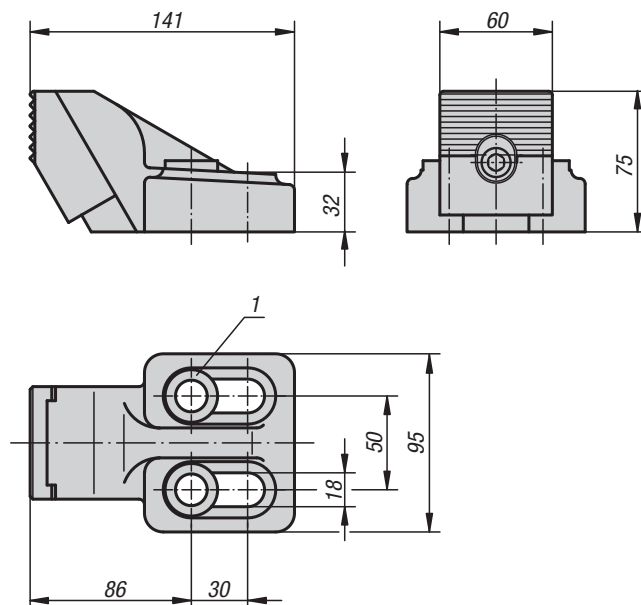
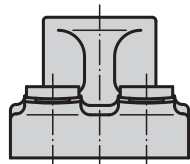
Side stops



A



B

**Material:**

Body ductile iron (SG iron).
Jaw hardened carbon steel.

Version:

Painted black.
Jaw bright.

Sample order:

K0832.01

Note:

The workpiece is clamped between side clamps and the side stops, simultaneously producing a positive down force.

Side clamps and stops are secured with DIN 912 cylinder screws. A secure clamping is ensured when side clamps and side stops are used together.

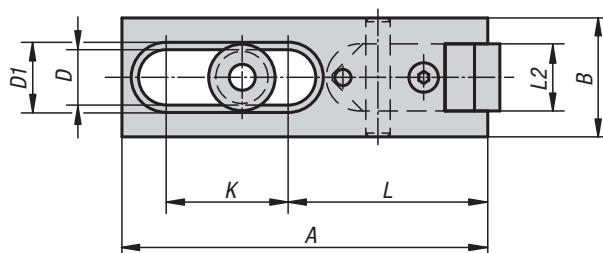
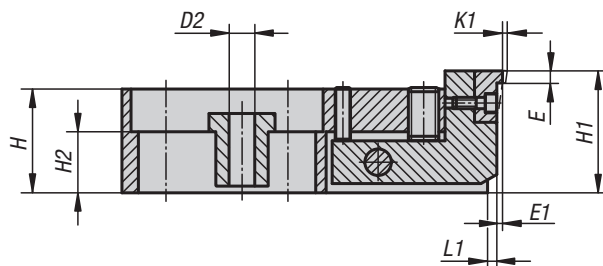
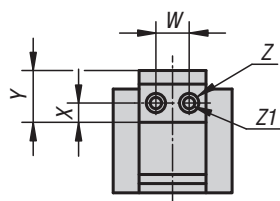
Drawing reference:

- 1) spherical washer set for M12 and M16
- 2) workpiece

KIPP Side stops

Order No.	Form
K0832.01	A
K0832.02	B

Side clamps



Material:

Body steel.
Jaw mild steel.
Centring bush with collar carbon steel.

Version:

Black oxidised.
Jaws case-hardened.

Sample order:

K0890.006

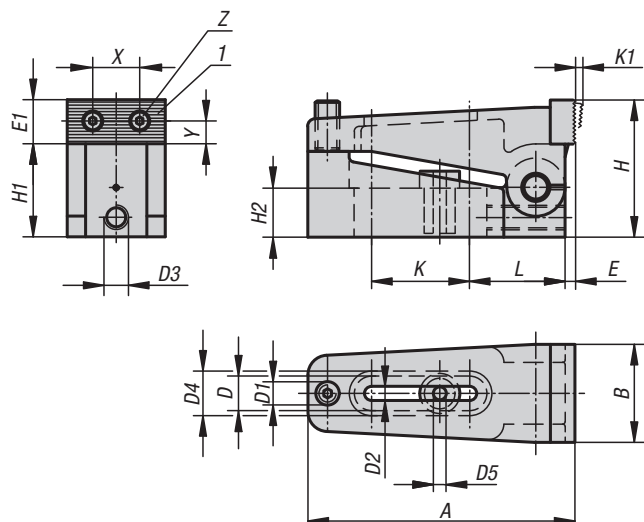
Note:

These flat design side clamps are ideal for machining low profile workpieces. The hardened jaws also provide positive down force.

KIPP Side clamps

Order No.	A	B	D	D1	D2	E	E1	H	H1	H2	K	K1	L	L1	L2	W	X	Y	Z	Z1	Clamping force kN
K0890.006	80	24	12,2	16	6,5	2,5	0,6	21	25,5	9	25,5	2	44,5	2,5	13,5	7	4,5	11	5	3	3
K0890.010	120	39	18,2	24	10,5	4	1	34	40	20	40,5	2,5	65,5	4	21,5	10	6	15	8	4,5	16
K0890.016	186	60	26,2	35	17	7	1,5	51	59	22	60,5	4	105	6,5	35,5	16	9	24	14	9	31

Side clamps



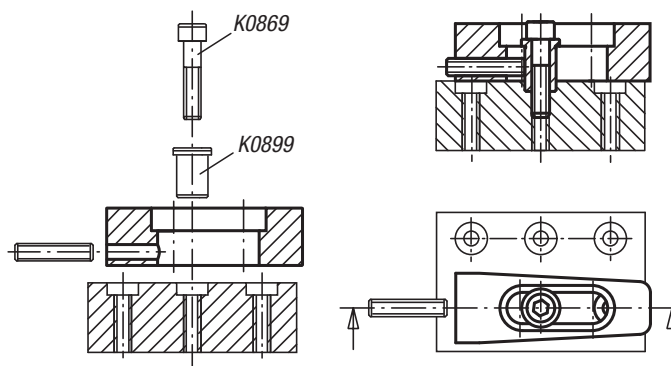
Material:
Body steel.
Jaw mild steel.
Centring bush carbon steel

Version:
Black oxidised.
Jaws case-hardened.

Sample order:
K0033.006

Note:
The jaws are reversible - smooth side for machined surfaces, serrated side for rough surfaces. A positive down force is also exerted during clamping.

Drawing reference:
1) reversible jaw



KIPP Side clamps

Order No.	A	B	D	D1	D2	D3	D4	D5	E	E1	H	H1	H2	K	K1	L	X	Y	Z	Clamping force kN
K0033.006	73	25	12,2	M6	7	M6	16	6,5	2,5	11	35	24	12,4	25,5	2,5	27	12	4,5	M3	10
K0033.010	110	39	18,2	M10	11	M10	24	10,5	4	18	56	38	20	40,5	4	39	20,5	8	M5	40
K0033.016	170	58	26,2	M16	17	M10	35	17	7	27	85	60	30	60,5	7	61	32	13	M8	100

Side clamps



Material:

Body and grip carbon steel.
Jaw and cam tool steel.
Ball knob Duroplast PF 31.

Version:

Body, jaw and cam hardened and black oxidised.
Grip black oxidised.
Ball knob black.

Sample order:

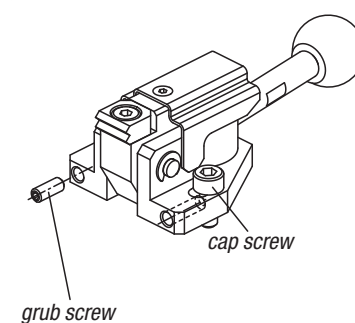
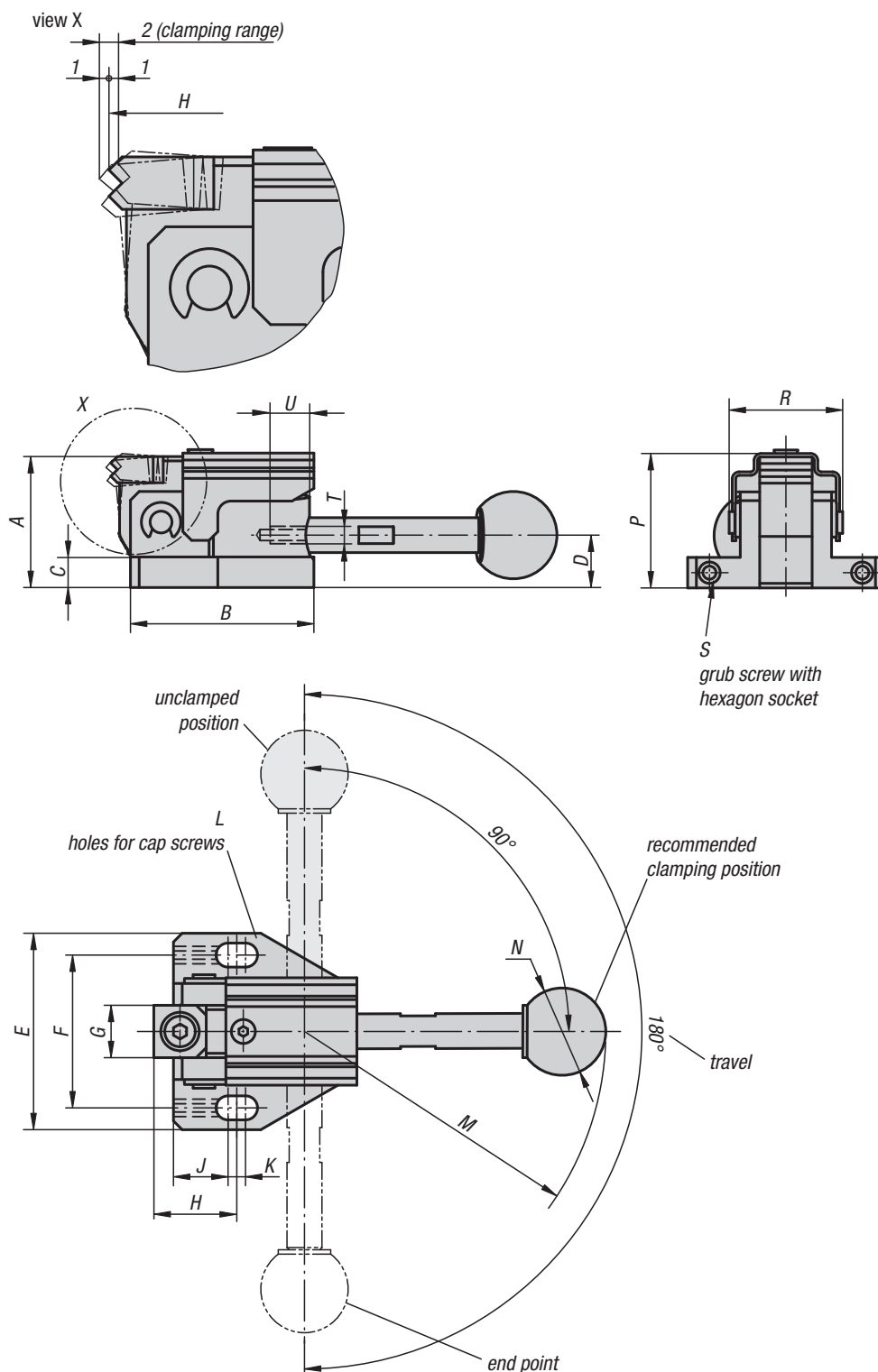
K0928.0501

Note:

* Permitted hand force for grip.

Accessories:

Standard handles K0915.
Screw-in handles with adjustable torque K0916.

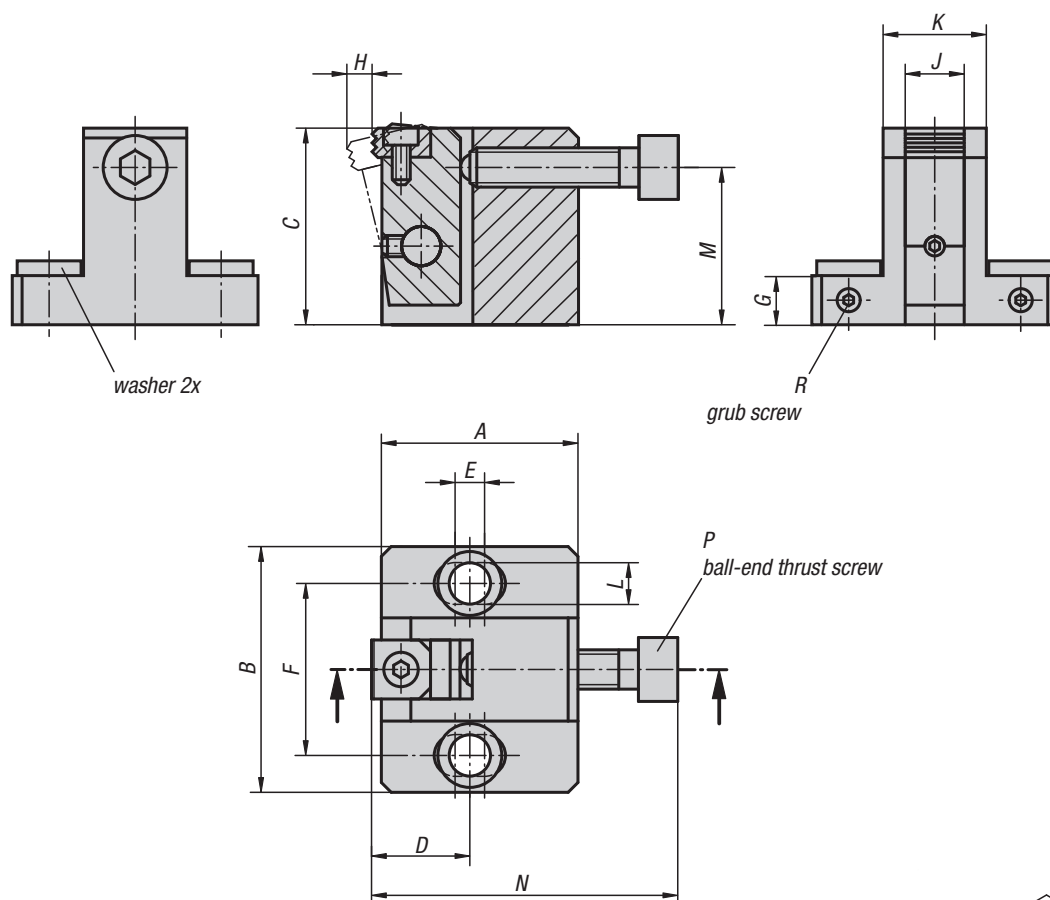


The slots enable final adjustment of the clamping range. Tightening the grub screws in the base front prevents the clamp sliding back during clamping.

KIPP Side clamps

Order No.	Version	A	B	C	D	E	F	G	H	J	K	L	M	N	P	R	S	T	U	Clamping force N	Hand force FH N
K0928.0500	without grip	30	42	7	12	45	35	12	19	12,5	4	M5	69	20	31	26	M4x10	M5	7	3000	150*
K0928.0501	with handle	30	42	7	12	45	35	12	19	12,5	4	M5	69	20	31	26	M4x10	M5	7	3000	150*
K0928.0800	without grip	40	62	10	16	65	50	16	28	18,5	5	M8	104	25	41	38	M4x15	M6	9,5	4000	200*
K0928.0801	with handle	40	62	10	16	65	50	16	28	18,5	5	M8	104	25	41	38	M4x15	M6	9,5	4000	200*

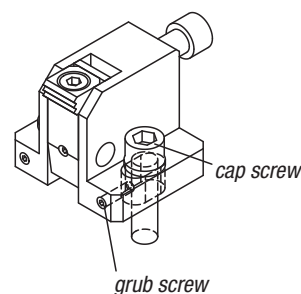
Side clamps



Material:
Housing and arm carbon steel.
Jaw tool steel.

Version:
Housing, black oxidised.
Arm and jaw tempered and black oxidised.

Sample order:
K0929.080400



KIPP Side clamps

Order No.	A	B	C	D	E	F	G	H	J	K	L	M	N	P	R	Clamping force N	Tightening torque Nm
K0929.080400	40	50	40	20	6	35	10	5,3	12	21	8,5	32	62,5	M8x35	M4x10	15000	25
K0929.100500	50	65	50	25	8	45	12	7,1	16	27	11	40	74	M10x40	M4x12	27000	50
K0929.120600	60	70	60	30	10	50	15	8	20	31	13	48	91	M12x50	M5x15	38000	90
K0929.160800	80	90	80	40	15	65	20	10,2	25	39	17	64	115	M16x60	M6x20	46000	130

Side clamps



Material:

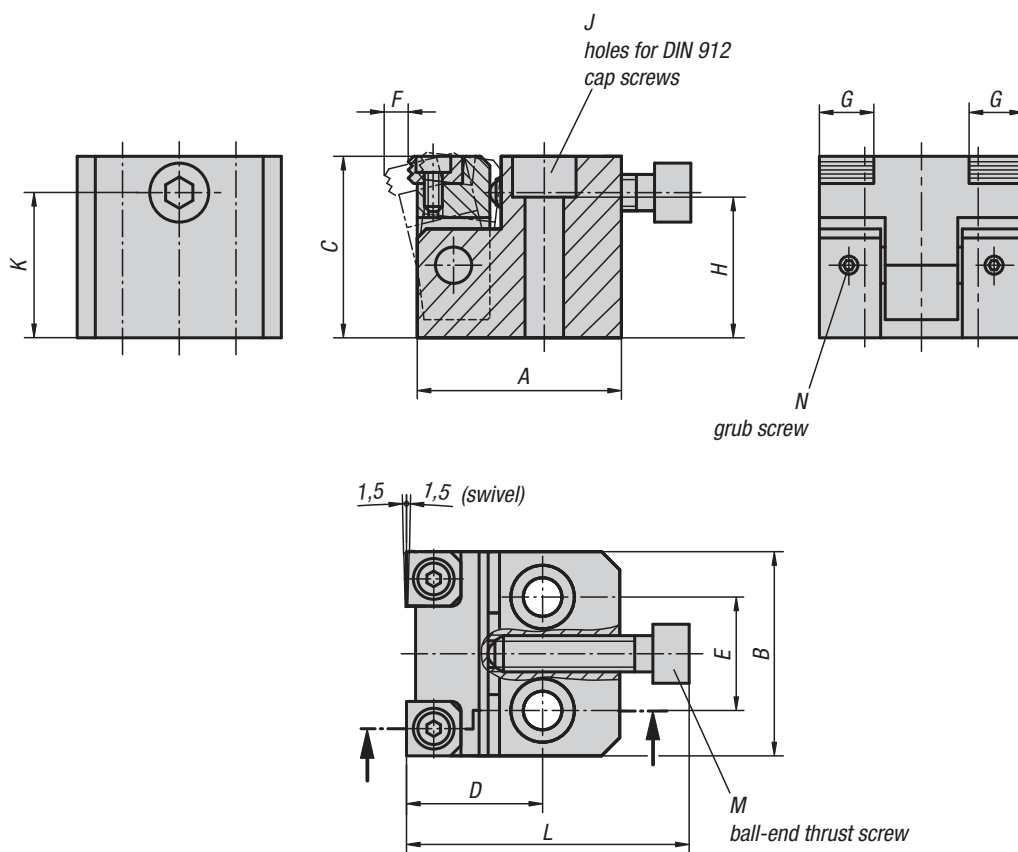
Body and arm carbon steel.
Jaw tool steel.

Version:

Body black oxidised.
Arm and jaw tempered and black oxidised.

Sample order:

K0930.080400

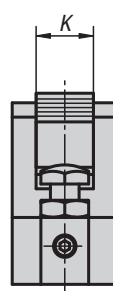
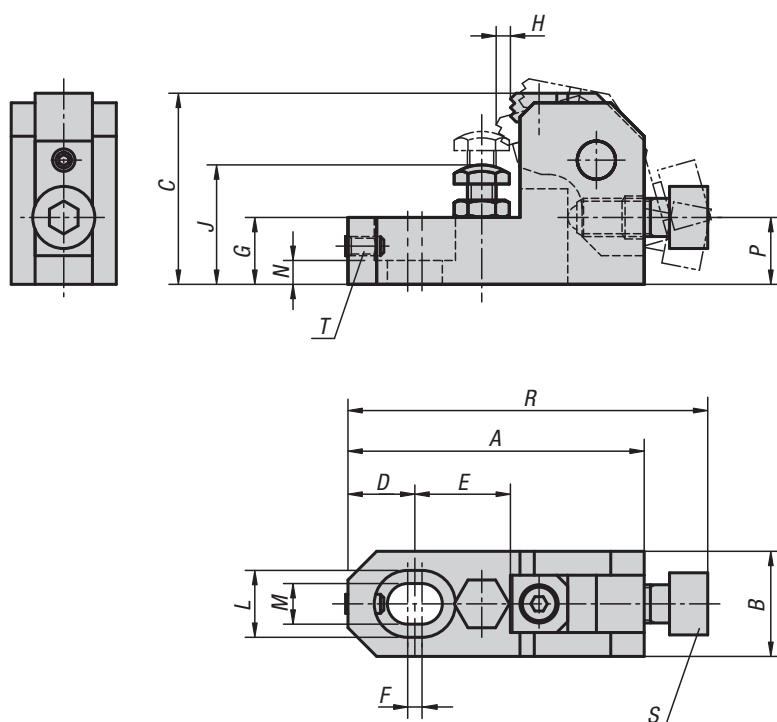


KIPP Side clamps

Order No.	A	B	C	D	E	F	G	H	J	K	L	M	N	Clamping force N	Tightening torque Nm
K0930.080400	45	45	40	30	25	5,3	12	31	M8	32	62,5	M8x35	M4x4	15000	25
K0930.100500	55	55	50	40	30	7,1	16	39	M10	40	74	M10x40	M4x4	27000	50
K0930.120600	65	65	60	45	35	8	20	47	M12	48	91	M12x50	M5x5	38000	90

Side clamps

with rest pad



Material:

Housing and arm carbon steel.
Jaw tool steel.

Version:

Housing tempered and black oxidised.
Arm black oxidised.
Jaw tempered and black oxidised.

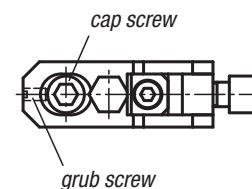
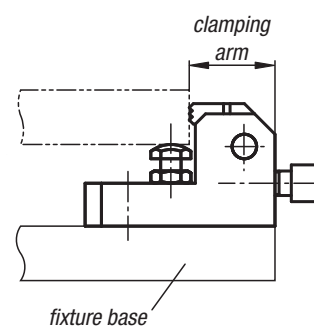
Sample order:

K0931.02508

Drawing reference:

T) grub screw

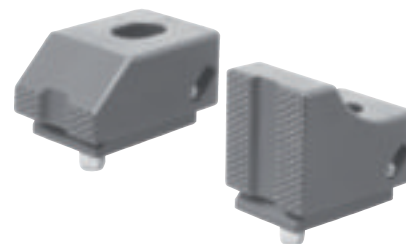
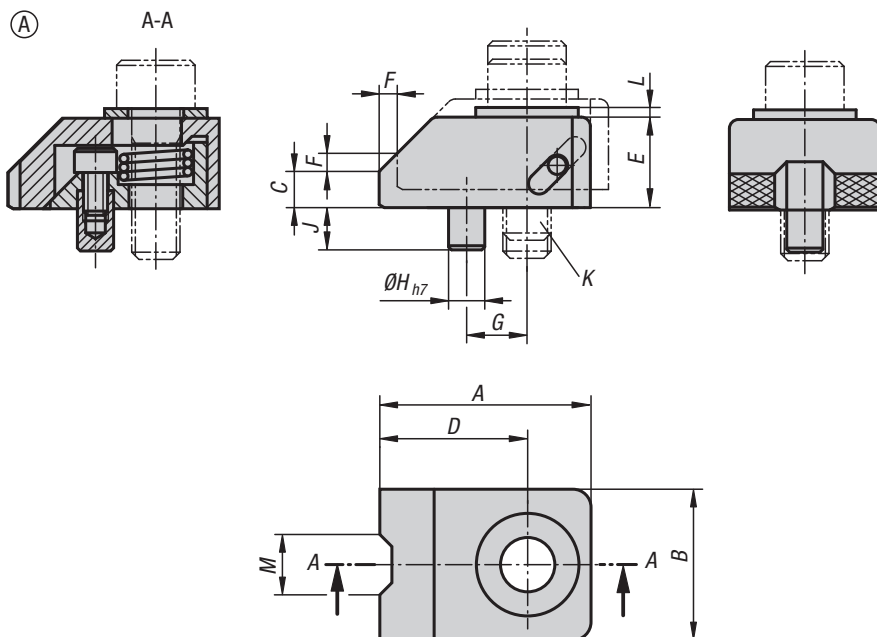
S) ball pressure screw



KIPP Side clamps with rest pad

Order No.	A	B	C	D	E	F	G	H	J	K	L	M	N	P	R	S	T	Clamping force N	Tightening torque Nm
K0931.02508	62	22	40	14	20	3	14	3	25-32	12	14	8,5	5	14	75,5	M8x20	M4x8	6000	15
K0931.03210	78	25	50	18	25	4	18	3,7	32-40	16	17,5	11	7	17,5	95	M10x25	M5x10	10000	30
K0931.04012	93	32	60	21	30	5	21	4,5	40-48	20	20	13	8	21	113	M12x30	M6x12	17000	65
K0931.04816	124	38	80	28	40	6	27	6	48-63	25	26	17	10	28	151	M16x40	M8x16	25000	130

Toe clamps

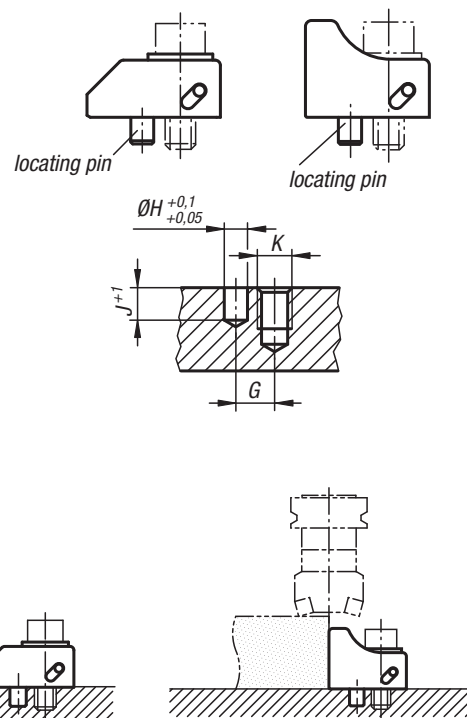
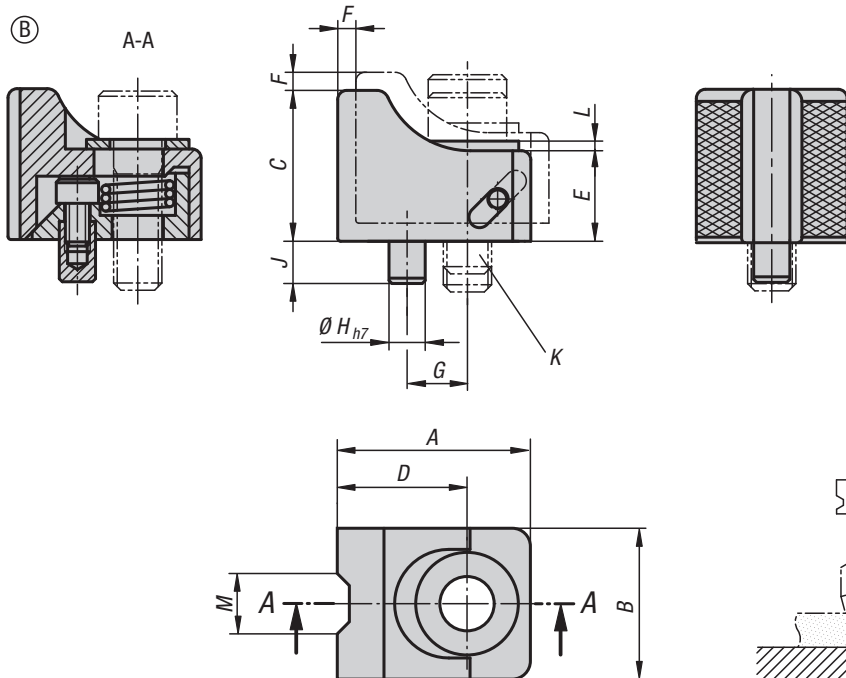


Material:
Carbon steel.

Version:
Tempered and black oxidised.

Sample order:
K0932.0806

mounting instructions:



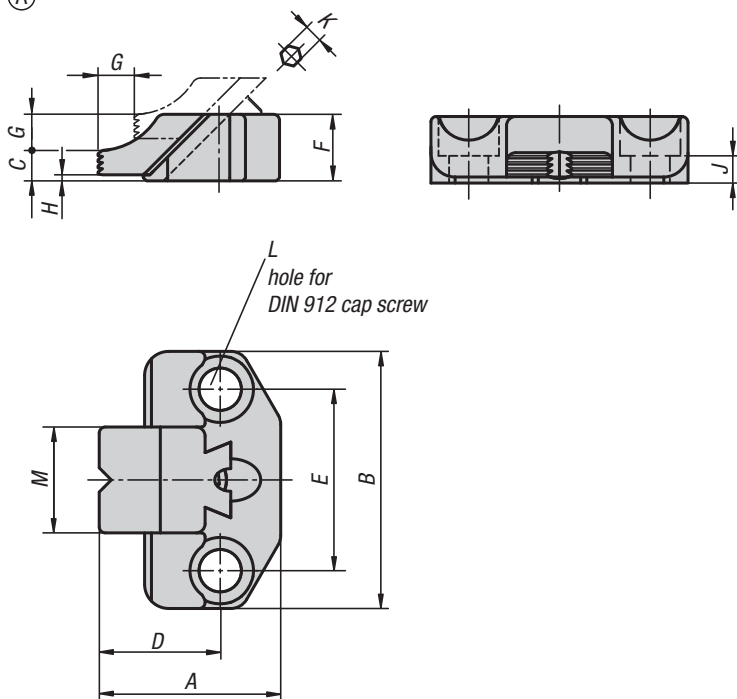
KIPP Toe clamps

Order No.	Form	A	B	C	D	E	F	G	H	J	K	L	M	Clamping force N	Tightening torque Nm
K0932.0806	A	35	25	6	24,5	15	3	10	6	7	M8	1,6	10	7000	25
K0932.1008	A	43	30	8	29	19	4	12	6	7	M10	2	11	8500	50
K0932.1209	A	54	35	9	37	23	5	16	8	10	M12	2,3	12	20000	90
K0932.1610	A	65	40	10	45	25	6	20	10	10	M16	3,2	14	40000	200
K0932.0825	B	32	25	25	21,5	15	3	10	6	7	M8	1,6	10	7000	25
K0932.1032	B	40	30	32	26	19	4	12	6	7	M10	2	11	8500	50
K0932.1238	B	50	35	38	33	23	5	16	8	10	M12	2,3	12	20000	90
K0932.1645	B	60	40	45	40	25	6	20	10	10	M16	3,2	14	40000	200

Toe clamps



Ⓐ



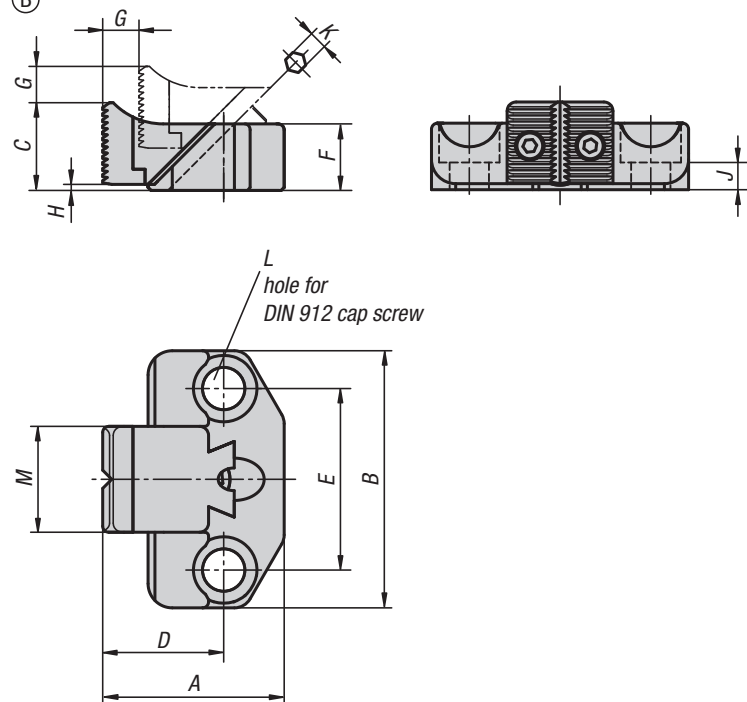
Material, version:

Body carbon steel, tempered and black oxidised.
Jaw carbon steel, black oxidised, corners tempered.

Sample order:

K0933.0808

Ⓑ

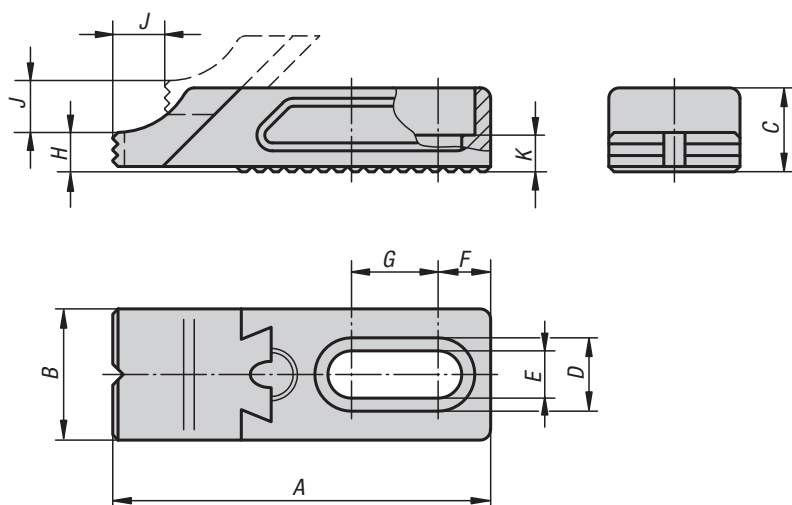


KIPP Toe clamps

Order No.	Form	A	B	C	D	E	F	G	H	J	K	L	M	Clamping force N	Tightening torque Nm
K0933.0808	A	39,5	65	7,5	25	45	16	7	1,5	7	4	M8	25	4000	8
K0933.1210	A	60	85	10	40	60	22	12	2	9	6	M12	35	9000	26
K0933.1614	A	77	100	14	50	70	30	14	2	13	8	M16	40	17000	60
K0933.0820	B	39,5	65	19,5	25	45	16	7	1,5	7	4	M8	25	4000	8
K0933.1229	B	60	85	29	40	60	22	12	2	9	6	M12	35	9000	26
K0933.1638	B	77	100	38	50	70	30	14	2	13	8	M16	40	17000	60

Toe clamps

stepped



Material, version:

Body carbon steel, black oxidised.
Jaw carbon steel, tempered, black oxidised.

Sample order:

K0853.92008016

Note:

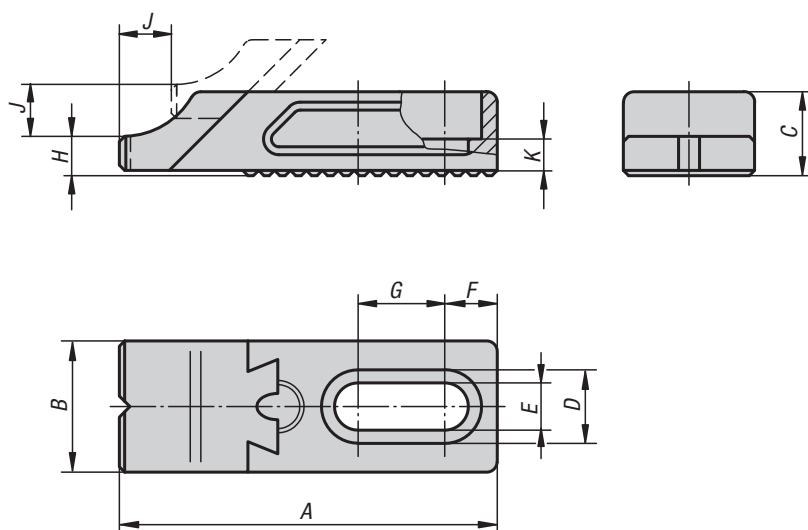
The adjustable toe clamp is used together with the rack plate CL.

KIPP Toe clamps, stepped

Order No.	A	B	C	D	E	F	G	H	J	K	F1 kN	M1 Nm
K0853.92008016	72	25	16	14	8,5	10	16,5	7,5	7	7	3,6	6,5
K0853.92012022	105	35	22	20	13	13,5	26,5	10	12	9	7,4	19
K0853.92016030	137	40	30	26	17	17,5	30	14	14	13	11,7	32

Toe clamps

stepped



Material, version:

Body carbon steel, black oxidised.
Jaw carbon steel, tempered.
The jaw surface is ground.

Sample order:

K0853.92108016

Note:

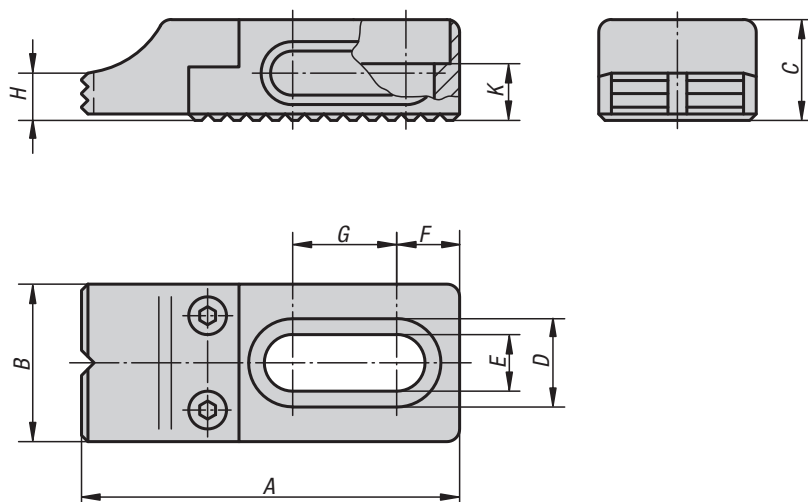
These toe clamps are used together with the rack plate CL.

KIPP Toe clamps, stepped

Order No.	A	B	C	D	E	F	G	H	J	K	F1 kN	M1 Nm
K0853.92108016	72	25	16	14	8,5	10	16,5	7,5	7	7	3,6	6,5
K0853.92112022	105	35	22	20	13	13,5	26,5	10	12	9	7,4	19
K0853.92116030	137	40	30	26	17	17,5	30	14	14	13	11,7	32

Toe stops

stepped



Material, version:

Body carbon steel, black oxidised.

Jaw carbon steel, tempered and black oxidised.

Sample order:

K0853.96008016

Note:

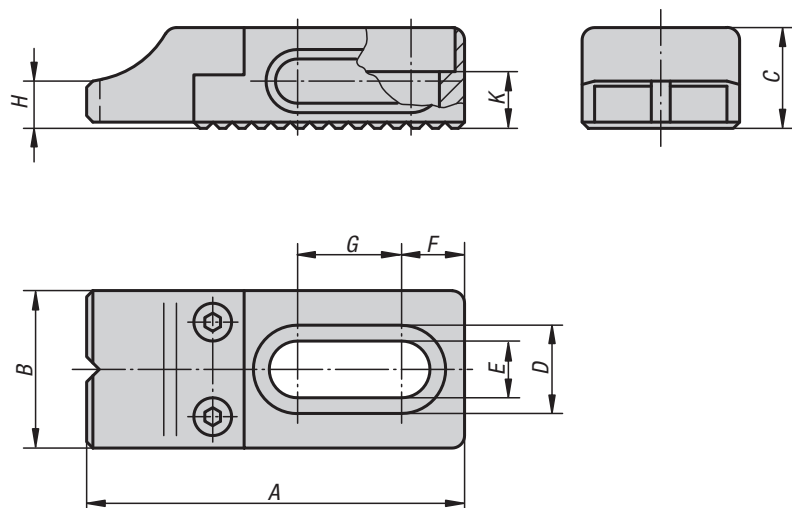
The adjustable stop is used together with the rack plate CL.

KIPP Toe stops, stepped

Order No.	A	B	C	D	E	F	G	H	K
K0853.96008016	60	25	16	14	8,5	10	16,5	7,5	7
K0853.96012022	90	35	22	20	13	13,5	26,5	10	10
K0853.96016030	115	40	30	26	17	17,5	30	14	13

Toe stops

stepped



Material, version:

Body carbon steel, black oxidised.

Jaw carbon steel, tempered and black oxidised.

The jaw surface is ground.

Sample order:

K0853.96108016

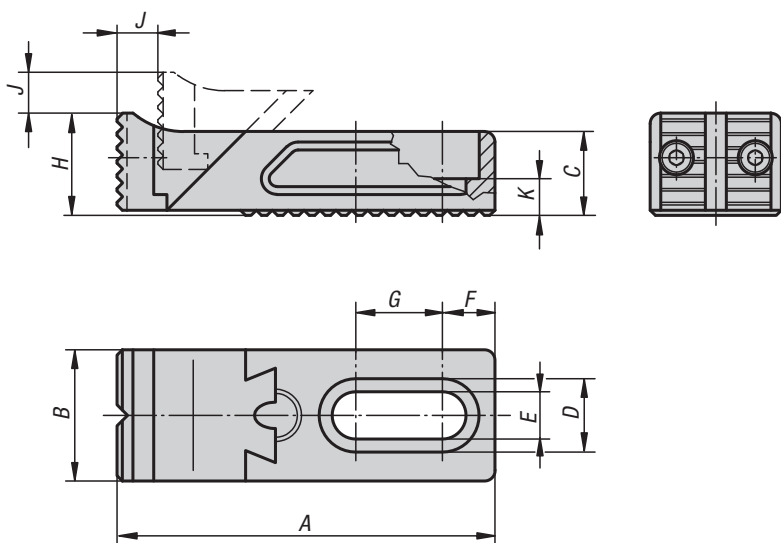
Note:

The adjustable stop is used together with the rack plate CL.

KIPP Toe stops, stepped

Order No.	A	B	C	D	E	F	G	H	K
K0853.96108016	60	25	16	14	8,5	10	16,5	7,5	7
K0853.96112022	90	35	22	20	13	13,5	26,5	10	10
K0853.96116030	115	40	30	26	17	17,5	30	14	13

Toe clamps



Material, version:

Body carbon steel, black oxidised.

Jaw carbon steel, tempered and black oxidised.

Sample order:

K0853.93008016

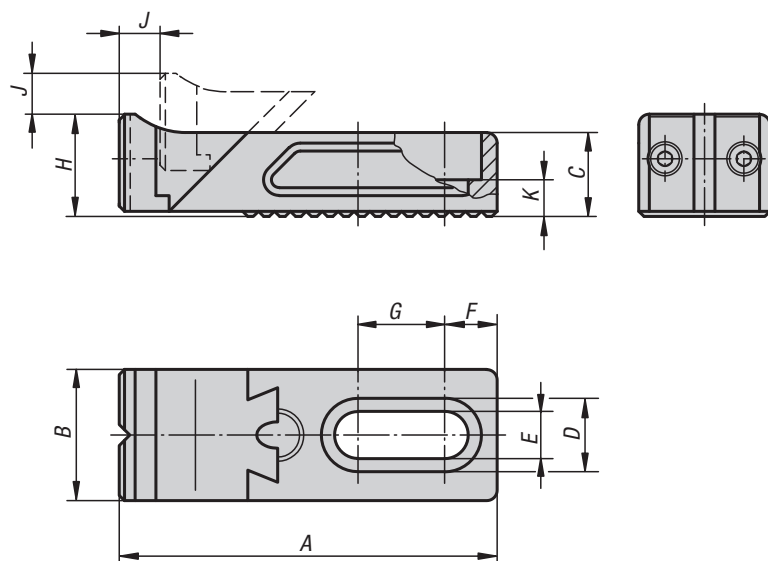
Note:

The adjustable toe clamp is used together with the rack plate CL.

KIPP Toe clamps

Order No.	A	B	C	D	E	F	G	H	J	K	F1 kN	M1 Nm
K0853.93008016	72	25	16	14	8,5	10	16,5	19,5	7	7	3,6	6,5
K0853.93012022	105	35	22	20	13	13,5	26,5	29	12	9	7,4	19
K0853.93016030	137	40	30	26	17	17,5	30	39	14	13	11,7	32

Toe clamps



Material, version:

Body carbon steel, black oxidised.

Jaw carbon steel, tempered and black oxidised.

The jaw surface is ground.

Sample order:

K0853.93108016

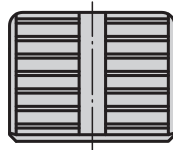
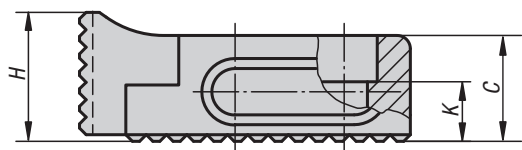
Note:

The adjustable toe clamp is used together with the rack plate CL.

KIPP Toe clamps

Order No.	A	B	C	D	E	F	G	H	J	K	F1 kN	M1 Nm
K0853.93108016	72	25	16	14	8,5	10	16,5	19,5	7	7	3,6	6,5
K0853.93112022	105	35	22	20	13	13,5	26,5	29	12	9	7,4	19
K0853.93116030	137	40	30	26	17	17,5	30	39	14	13	11,7	32

Toe stops



Material, version:

Body carbon steel, black oxidised.

Jaw carbon steel, tempered and black oxidised.

Sample order:

K0853.97008016

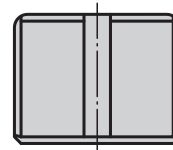
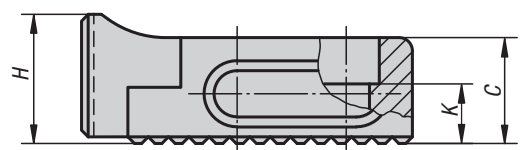
Note:

The adjustable stop is used together with the rack plate CL.

KIPP Toe stops

Order No.	A	B	C	D	E	F	G	H	K
K0853.97008016	50	25	16	14	8,5	16,5	10	19,5	7
K0853.97012022	75	35	22	20	13	20	13,5	29	10
K0853.97016030	95	40	30	26	17	30	17,5	39	13

Toe stops



Material, version:

Body carbon steel, black oxidised.

Jaw carbon steel, tempered and black oxidised.

The jaw surface is ground.

Sample order:

K0853.97108016

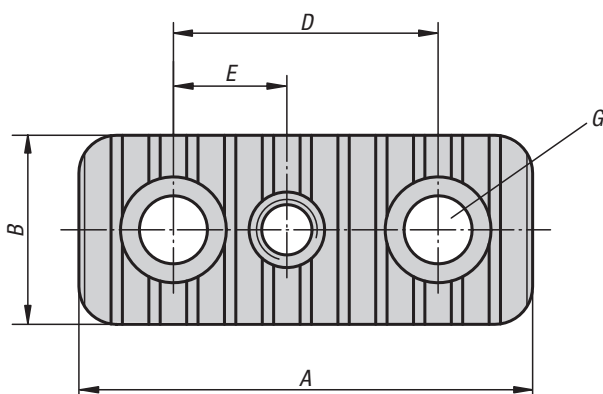
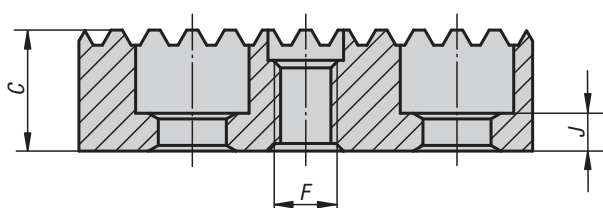
Note:

The adjustable stop is used together with the rack plate CL.

KIPP Toe stops

Order No.	A	B	C	D	E	F	G	H	K
K0853.97108016	50	25	16	14	8,5	10	16,5	19,5	7
K0853.97112022	75	35	22	20	13	13,5	26,5	29	10
K0853.97116030	95	40	30	26	17	17,5	30	39	13

Rack plates CL



Material:

Carbon steel.

Version:

Black oxidised.

Sample order:

K0853.94008116

Note:

Rack plates CL are used to position stepped and standard toe clamps.

The holes (G) for DIN 912 socket head screws is used

to fasten the rack plate CL to suitable base elements.

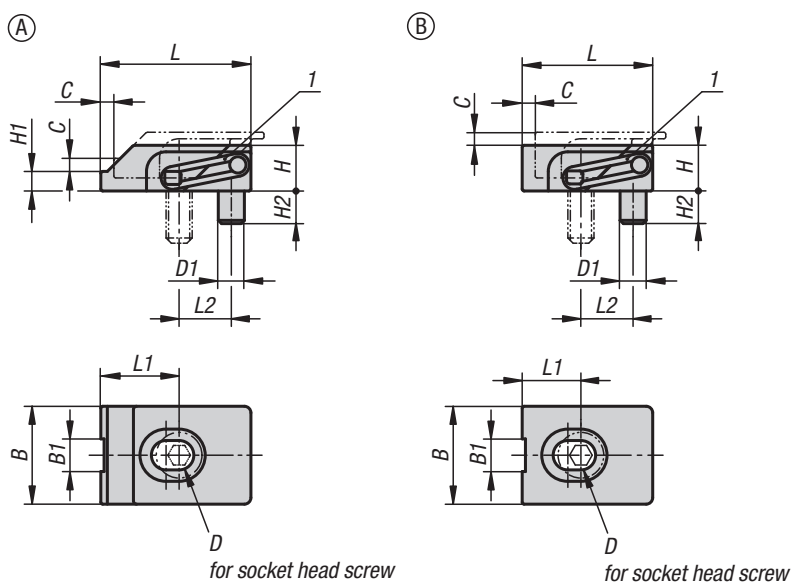
The tapped hole (F) is used to secure the toe clamps.



KIPP Rack plates CL

Order No.	A	B	C	D	E	F	G hole for DIN 912 cap screw	J
K0853.94008116	50	25	16	25	12,5	M8	M8	7
K0853.94008120	50	25	20	25	12,5	M8	M8	9
K0853.94008125	50	25	25	25	12,5	M8	M8	13
K0853.94008132	50	25	32	25	12,5	M8	M8	20
K0853.94008140	50	25	40	25	12,5	M8	M8	28
K0853.94012020	85	35	20	50	20	M12	M12	5
K0853.94012025	85	35	25	50	20	M12	M12	12
K0853.94012032	85	35	32	50	20	M12	M12	12
K0853.94012040	85	35	40	50	20	M12	M12	12
K0853.94012050	85	35	50	50	20	M12	M12	12
K0853.94016025	90	40	25	50	25	M16	M16	6
K0853.94016032	90	40	32	50	25	M16	M16	13
K0853.94016040	90	40	40	50	25	M16	M16	15
K0853.94016050	90	40	50	50	25	M16	M16	15
K0853.94016063	90	40	63	50	25	M16	M16	15

Flat clamps



Material:
Carbon steel.

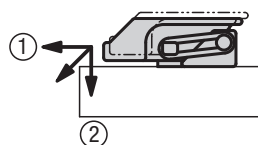
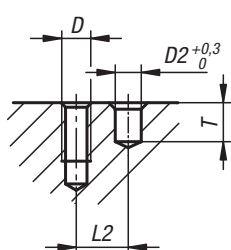
Version:
Hardened (33–39 HRC) and black oxidised.

Sample order:
K1168.204

Note:
Particularly low workpieces can be clamped using these flat clamps.
Clamping element with pull-down effect.
Clamping element and fixed block in one compact unit.

Drawing reference:
Dimension L1 refers to clamped state.

installation instructions



- (Jaws exert positive down force)
- ① Horizontal thrust against workpiece
 - ② Vertical thrust prevents the workpiece lifting

KIPP Flat clamps

Order No.	Form	B	B1	C	D	D1	D2	H	H1	H2	L	L1	L2	T	Clamping force kN	Tightening torque Nm
K1168.104	A	15	5	2	M4	4	4	7	3	5	23	12	8	6	2	2,7
K1168.105	A	19	7	2,5	M5	5	5	9	4	6	28	14	10	7	3	5,4
K1168.204	B	15	5	2	M4	4	4	7	-	5	20	9	8	6	2,5	2,7
K1168.205	B	19	7	2,5	M5	5	5	9	-	6	25	11	10	7	3,5	5,4

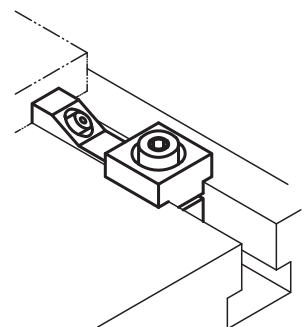
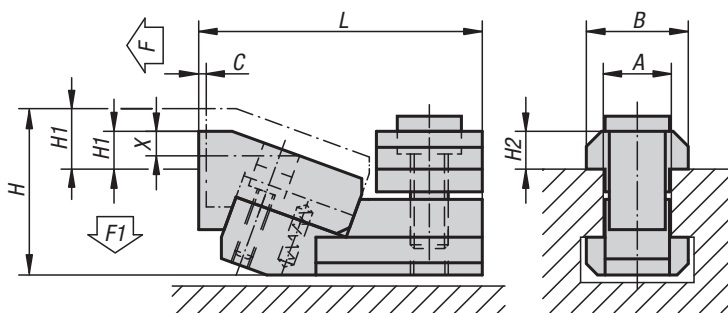
T-slot clamps



Material:
Steel.

Version:
Hardened, black oxidised.

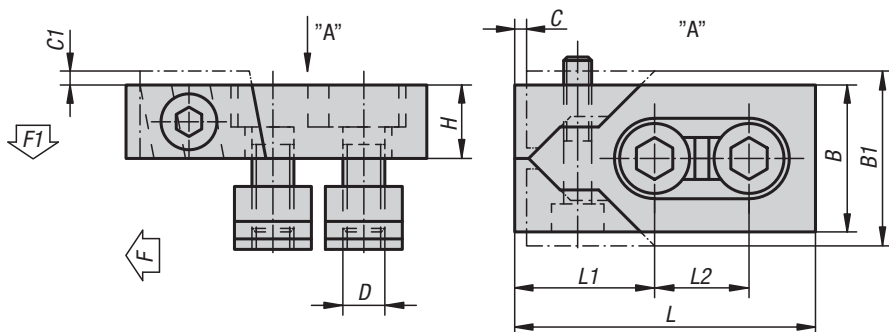
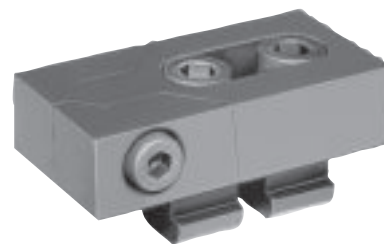
Note:
These T-slot clamps are especially useful for clamping low profile workpieces. The wedge operated jaws also provide positive down force.
Dimensions "H1" and "X" depend on the max. T-slot depth acc. to DIN 650.
To achieve the minimal clamping height by the minimal slot depth, the jaw can be ground down by the dimension "X".



KIPP T-slot clamps

Order No.	A	C	L max.	B	H	H1 min.	H1 max.	X	H2	F (N)	F1 (N)
K1230.12	12	1,8	52	18	31	3,5	8,5	5	7	5000	600
K1230.14	14	1,8	55	22	34	2,5	7,5	5	8	5500	700
K1230.16	16	2,5	68	25	41	4	11	6	9	8000	900
K1230.18	18	2,5	71	28	43	2	9	6	10	9000	1000
K1230.22	22	3	89	35	53	5	14	9	14	16000	1900

Low-profile clamps



Material:
Steel.

Version:
Hardened, black oxidised.

Note:
These handy low-profile clamp jaws are ideal for machining most workpiece sizes. The hardened wedge operated jaws also provide positive down force.

KIPP Low-profile clamps

Order No.	Slot width	L	L1	L2	B	B1	H	C	C1	D	F kN	F1 kN	Tightening torque max. Nm
K1229.12	12	80	39	26	40	47	20	3	2,5	M10	16	0,6	15
K1229.14	14	80	39	26	40	47	20	3	2,5	M12	22	0,9	18
K1229.16	16	80	39	26	40	47	20	3	3	M12	22	0,9	18
K1229.161	16	100	46	34	50	59	25	4	2,5	M14	32	1,2	25
K1229.18	18	100	46	34	50	60	25	4	3	M16	36	1,4	35
K1229.20	20	100	46	34	50	60	25	4	3	M16	36	1,4	35
K1229.22	22	140	65	50	78	95	30	5	4	M20	36	1,4	45

Wedge clamps

jaw face smooth or serrated


Material:

Wedge and jaw segments carbon steel.

Version:

Wedge and jaw segments hardened, black.

Sample order:

K0039.2208

Note:

The functioning principle make the wedge clamps ideal for series clamping. The wedge form can exert high clamping forces.

These wedge clamps can be mounted in grid holes or T-slots. Tightening the socket screw moves the wedge down and the jaws out pressing the workpieces against the fixtures fixed stops.

The wedge has a slightly elongated hole allowing for movement to compensate for tolerances.

Spread width:

M8 = ±0.5 mm

M10 = ±1.0 mm

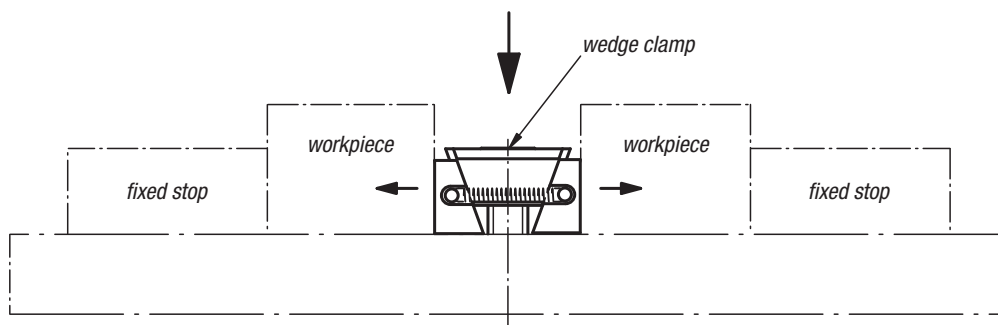
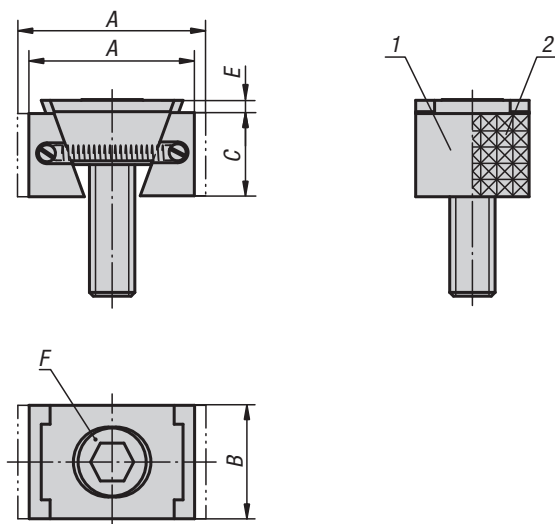
M12 = ±1.0 mm

M16 = ±1.5 mm

Drawing reference:

1) Jaw face smooth

2) Jaw face serrated



KIPP Wedge clamps, narrow version

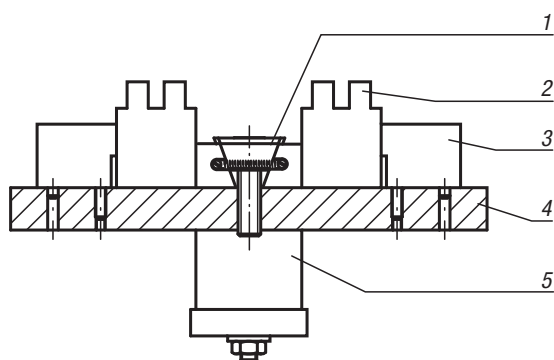
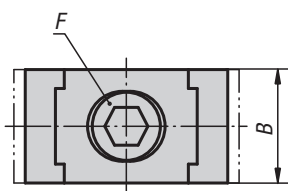
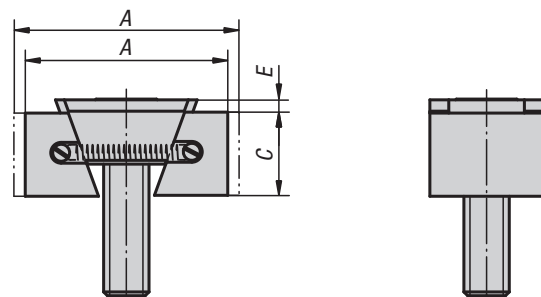
Order No. smooth version	Order No. serrated	A min.	A max.	B	C	E	F Socket head screw DIN 6912	Clamping force kN	Tightening torque Nm
K0039.1108	K0039.2108	30,5	33,5	24	15	2	M8x25	15	25
K0039.1110	K0039.2110	32	37	28	19	3,5	M10x25	20	49
K0039.1112	K0039.2112	44	49,5	30	22	3,5	M12x40	30	85
K0039.1116	K0039.2116	55	62	40	29	4	M16x60	50	210

KIPP Wedge clamps, wide version

Order No. smooth version	Order No. serrated	A min.	A max.	B	C	E	F Socket head screw DIN 6912	Clamping force kN	Tightening torque Nm
K0039.1208	K0039.2208	30,5	33,5	30	15	2	M8x25	15	25
K0039.1210	K0039.2210	32	37	38	19	3,5	M10x25	20	49
K0039.1212	K0039.2212	44	49,5	48	22	3,5	M12x40	30	85
K0039.1216	K0039.2216	55	62	48	29	4	M16x60	50	210

Wedge clamps

machinable



Material:

Wedge and jaw segments carbon steel.

Version:

Wedge and jaw segments hardened, black.

Sample order:

K0649.3110

Note:

These wedge clamps have extra long jaws. This extra material allows the jaws to be machined to suit the form of the workpiece.

The functioning principle makes the wedge clamps ideal for series clamping. The wedge form can exert high clamping forces.

These wedge clamps can be mounted in grid holes or T-slots. Tightening the socket screw moves the wedge down and the jaws out, pressing the workpieces against the fixtures' fixed stops.

The wedge has a slightly elongated hole allowing for movement to compensate for tolerances.

Spread width:

M8 = ± 0.5 mm

M10 = ± 1.0 mm

M12 = ± 1.0 mm

M16 = ± 1.5 mm

Drawing reference:

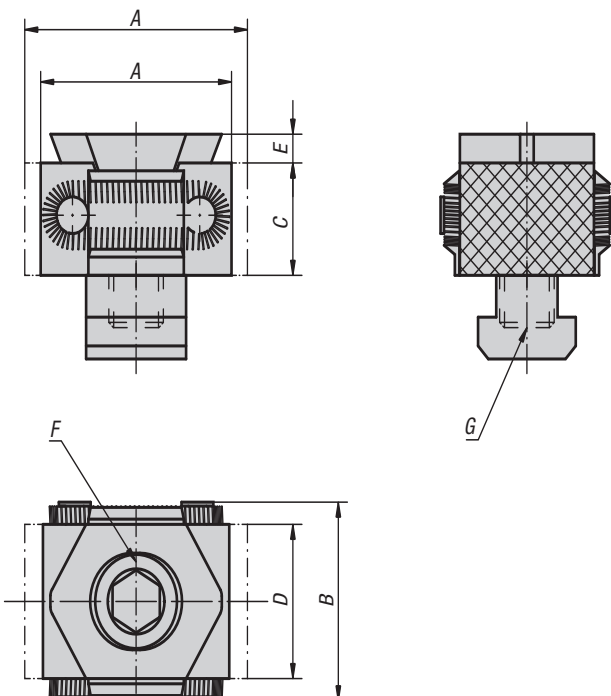
- 1) wedge clamps
- 2) workpiece
- 3) fixed stop
- 4) base plate
- 5) hydraulic/pneumatic cylinder

KIPP Wedge clamps machinable

Order No.	Version	A min.	A max.	B	C	E	F Socket head screw DIN 6912	Clamping force kN	Tightening torque Nm
K0649.3108	narrow	36,5	39,5	24	15	2	M8x25	11	19
K0649.3110	narrow	42	47	28	19	3,5	M10x25	15	37
K0649.3112	narrow	54	59,5	30	22	3,5	M12x40	23	65
K0649.3116	narrow	65	72	40	29	4	M16x60	38	160
K0649.3208	wide	36,5	39,5	30	15	2	M8x25	11	19
K0649.3210	wide	42	47	38	19	3,5	M10x25	15	37
K0649.3212	wide	54	59,5	48	22	3,5	M12x40	23	65
K0649.3216	wide	65	72	48	29	4	M16x60	38	160

Wedge clamps

jaw faces serrated



Material:

Body and clamping segments tool steel.

Version:

Body hardened.

Jaw segments hardened (49-51 HRC) black oxidised.

Wedge faces ground.

Sample order:

K0040.1618

Note:

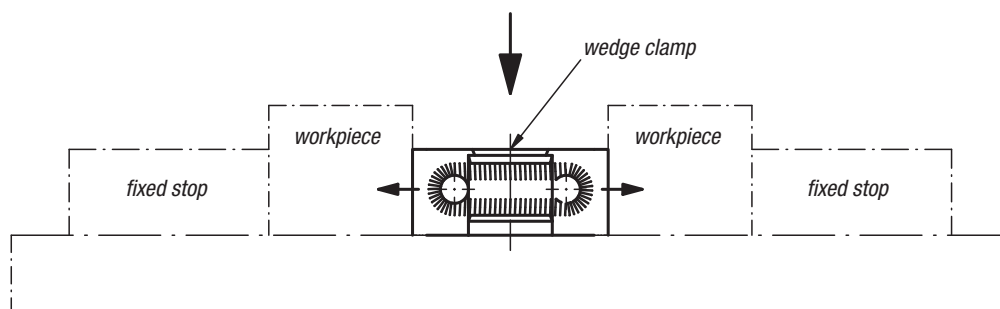
The compact design makes these wedge clamps ideal for horizontal and vertical series clamping. The hardened and ground wedge faces can exert high clamping forces.

These wedge clamps can be mounted in grid holes or T-slots. Tightening the DIN 912 socket screw moves the wedge down and the jaws out pressing the workpieces against the fixtures fixed stops. **The jaws of version K0040.08 and K0040.0810 are not serrated.** The wedge has a slightly elongated hole allowing for movement. Spread width:

K0040.08 = ± 0.5 mm

K0040.12 = ± 1.0 mm

K0040.16 = ± 1.5 mm.

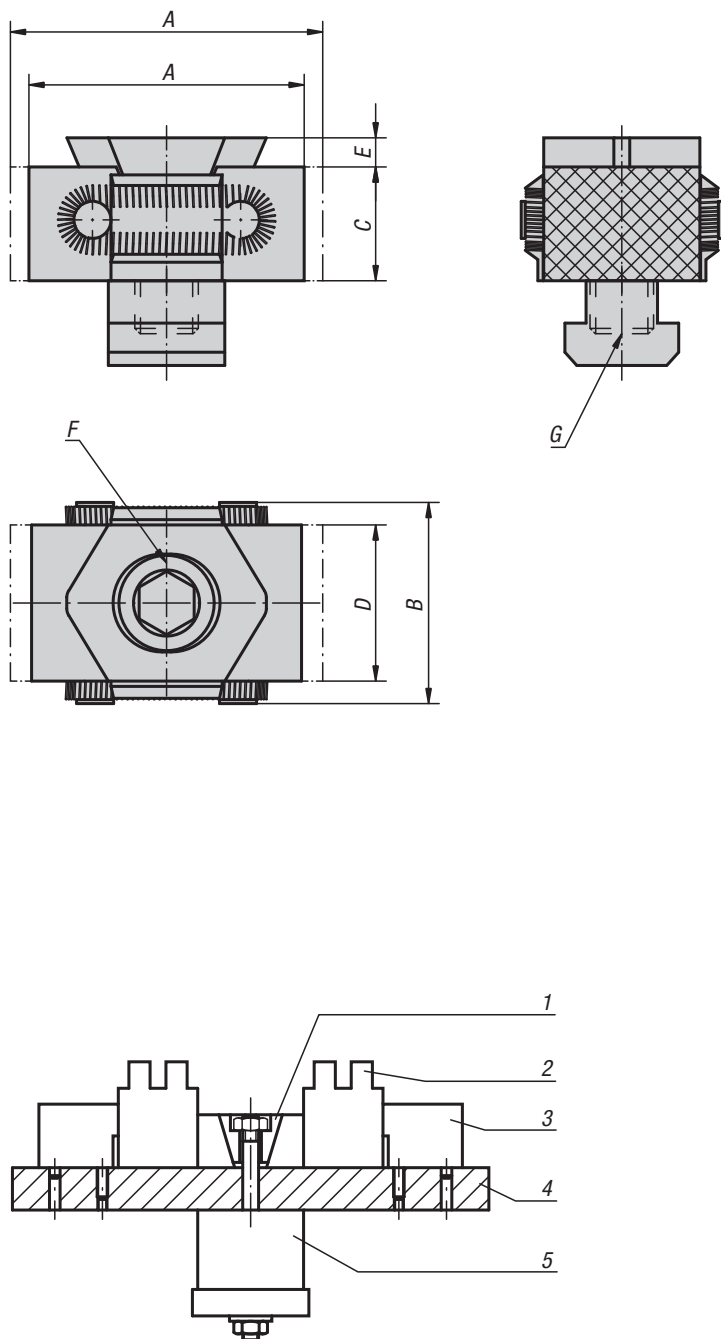


KIPP Wedge clamps, jaw faces serrated

Order No.	A min.	A max.	B	C	D	E	F Socket head screw DIN 912	G	Clamping force kN	Tightening torque Nm
K0040.08	27	31	29	15	21	2,5	M8x25	for tapped hole	15	25
K0040.0810	27	31	29	15	21	2,5	M8x25	for T-slot 10	15	25
K0040.12	42	49	41	22	30	4	M12x40	for tapped hole	30	85
K0040.1214	42	49	41	22	30	4	M12x30	for T-slot 14	30	85
K0040.16	57	66	56	29	42	5	M16x60	for tapped hole	50	210
K0040.1618	57	66	56	29	42	5	M16x50	for T-slot 18	50	210

Wedge clamps

machinable



Material:

Body tool steel.
Jaw segments tool steel (30 HRC).

Version:

Body hardened.
Jaw segments black oxidised.
Wedge faces ground.

Sample order:

K0041.12

Note:

These wedge clamps have a machining allowance per jaw of 3 mm for version K0041.08 and 5 mm for versions K0041.12 and K0041.16.
This extra material allows the jaws to be machined to suit the form of the workpiece.

The jaws version K0041.08 and K0041.0810 are not serrated.

Spread width:

K0041.08 = ± 0.5 mm
K0041.12 = ± 1.0 mm
K0041.16 = ± 1.5 mm

On request:

Pre-formed jaw segments or other hardness grades.

Drawing reference:

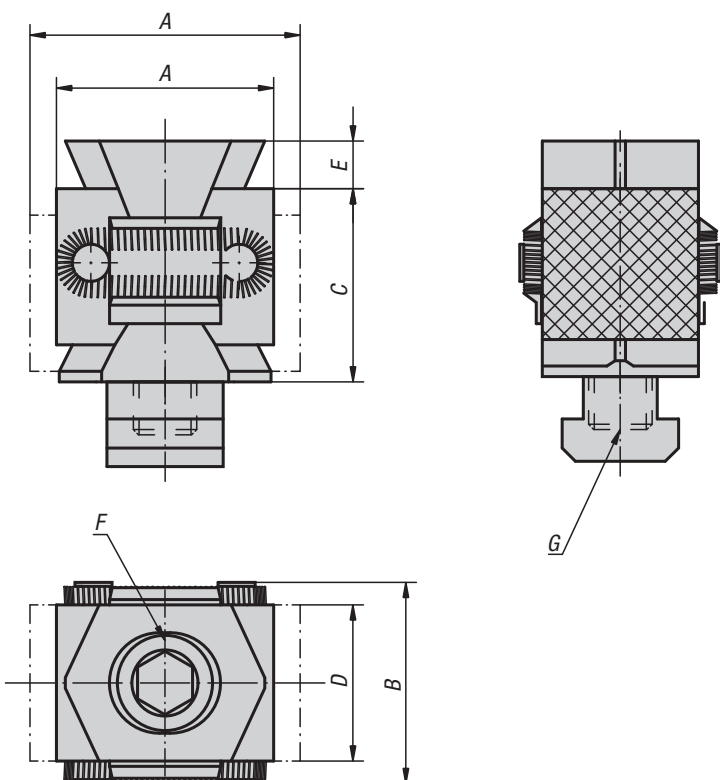
- 1) wedge clamps
- 2) workpiece
- 3) fixed stop
- 4) base plate
- 5) hydraulic/pneumatic cylinder

KIPP Wedge clamps machinable

Order No.	A min.	A max.	B	C	D	E	F Socket head screw DIN 912	G	Clamping force kN	Tightening torque Nm
K0041.08	33	37	29	15	21	2,5	M8x25	for tapped hole	15	25
K0041.0810	33	37	29	15	21	2,5	M8x25	for T-slot 10	15	25
K0041.12	52	59	41	22	30	4	M12x40	for tapped hole	30	85
K0041.1214	52	59	41	22	30	4	M12x30	for T-slot 14	30	85
K0041.16	67	76	56	29	42	5	M16x60	for tapped hole	50	210
K0041.1618	67	76	56	29	42	5	M16x50	for T-slot 18	50	210

Wedge clamps double

jaw faces serrated



Material:

Body and jaw segments tool steel.

Version:

Body hardened.

Jaw segments hardened (49-51 HRC) and black oxidised.

Wedge faces ground.

Sample order:

K0042.1214

Note:

The compact design makes these double wedge clamps ideal for horizontal and vertical series clamping. The hardened and ground wedge faces can exert high clamping forces.

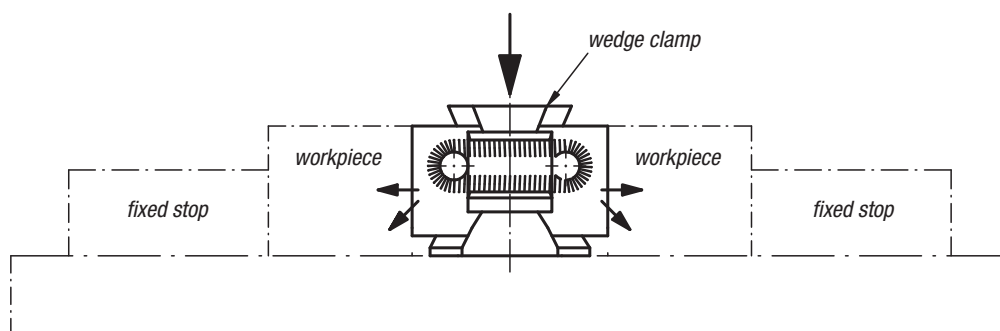
These wedge clamps can be mounted in grid holes or T-slots. Tightening the DIN 912 socket screw pulls the wedges together and the jaws out pressing the workpieces against the fixtures fixed stops.

The double wedges create a positive down force.

Spread width:

K0042.12 = ± 1.0 mm

K0042.16 = ± 1.5 mm



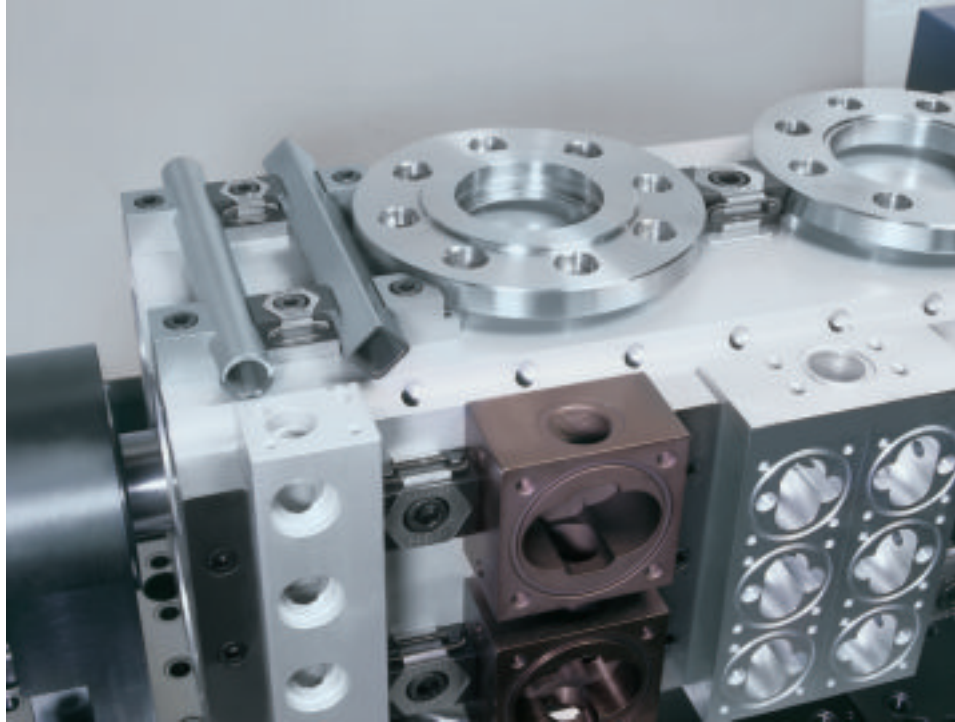
KIPP Wedge clamps double wedge, jaw faces serrated

Order No.	A min.	A max.	B	C	D	E	F Socket head screw DIN 912	G	Clamping force kN	Tightening torque Nm
K0042.12	42	49	41	36	30	5	M12x60	for tapped hole	40	85
K0042.1214	42	49	41	36	30	5	M12x50	for T-slot 14	40	85
K0042.16	57	67	56	50	42	5	M16x80	for tapped hole	60	210
K0042.1618	57	67	56	50	42	5	M16x70	for T-slot 18	60	210

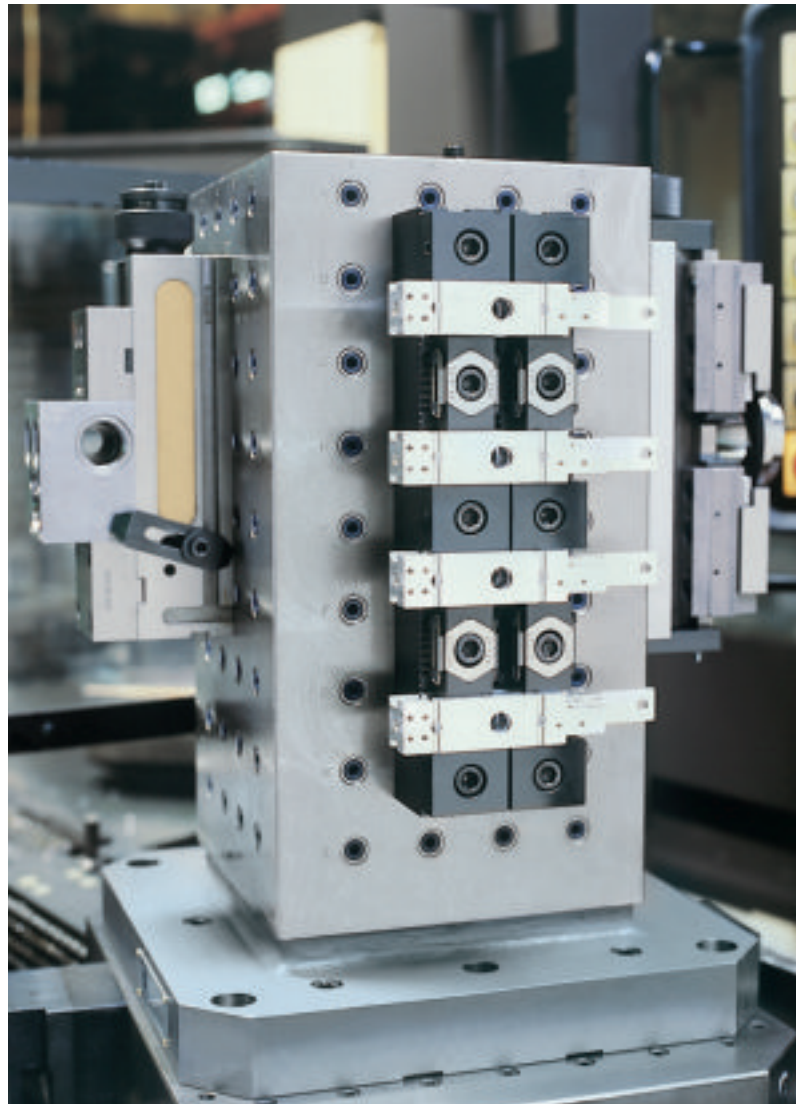
Example of wedge clamps in use



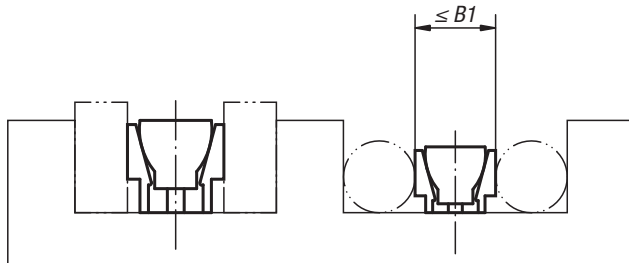
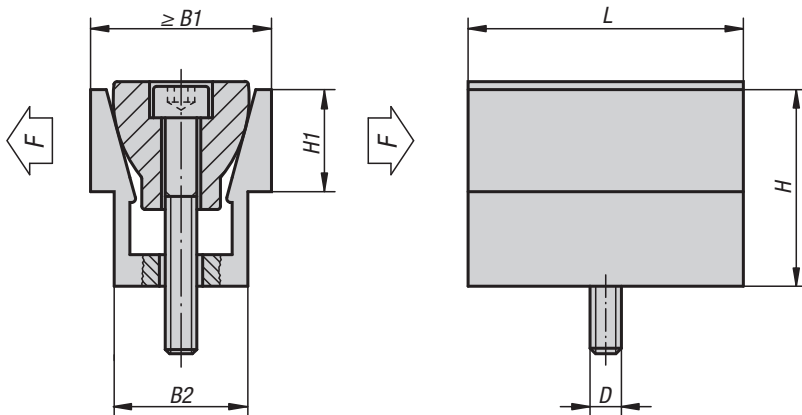
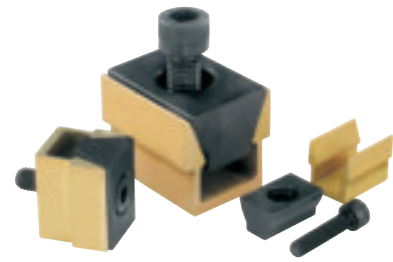
Wedge clamp



Double wedge clamps



Wedge clamps



Material:

Channel aluminium profile.
Wedge hardened steel.

Version:

Channel anodized.
Wedge black oxidised.

Sample order:

K0037.08

Note:

Two workpieces can be held simultaneously with the wedge clamp. They are ideal for clamping round or rectangular pieces. The compact design allows space-saving series clamping.

Drawing reference:

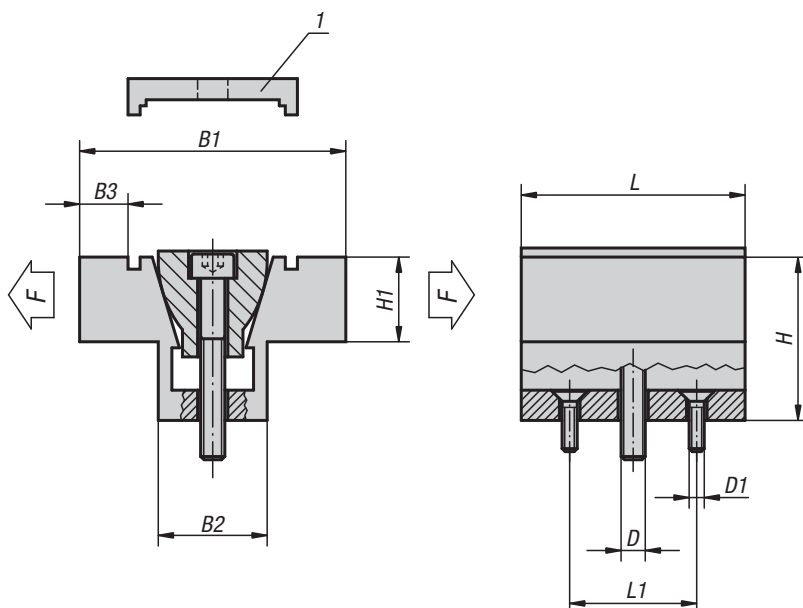
In clamped position dimension B1 max. given in the table should be achieved.

KIPP Wedge clamps

Order No.	D	L	B1 min. - max.	B2	H	H1	F kN	Tightening torque max. Nm
K0037.04	M4	15,9	12,3 - 13,1	10,4	12,7	5,6	2,2	3,4
K0037.06	M6	23,8	18,6 - 19,9	16,1	19	9,5	6,7	14,3
K0037.08	M8	31,7	24,8 - 26,6	20,8	25,4	12,7	8,9	14,5
K0037.12	M12	47,6	37,3 - 39,7	30,8	38,1	19	15,6	38,4
K0037.16	M16	63,5	49,7 - 52,8	41,2	50,8	25,4	26,7	74,6

Wedge clamps

machinable



Material:

Channel aluminium profile.
Wedge hardened steel.

Version:

Channel anodized.
Wedge black oxidised.

Sample order:

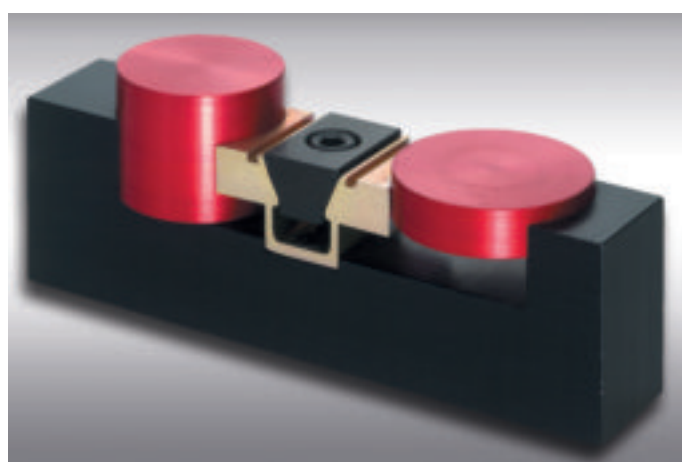
K0038.08

Note:

Two workpieces can be held simultaneously with the wedge clamp. The jaws have extra material allowing them to be machined to conform to the shape of the workpiece. The compact design allows space-saving series clamping.

Drawing reference:

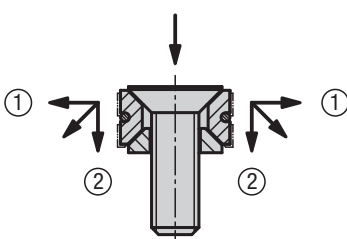
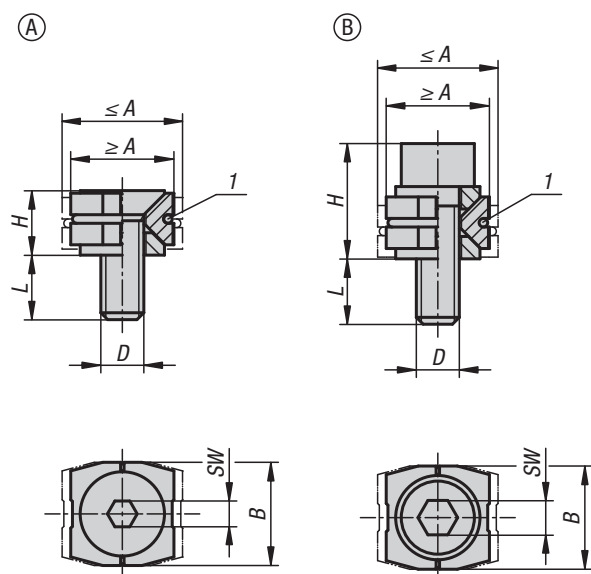
1) The locking plate is only used for machining the form, not for clamping the workpiece.



KIPP Wedge clamps machinable

Order No.	D	D1	L	L1	B1 min. - max.	B2	B3	H	H1	F kN	Tightening torque max. Nm
K0038.04	M4	M2	15,7	10,16	28,6 - 29,1	10,6	4,6	12,7	6,3	2,2	3,4
K0038.06	M6	M4	23,9	15,9	38,1 - 39	16,1	6,6	19,1	9,4	6,7	14,3
K0038.08	M8	M4	31,8	20,6	50,8 - 52	20,8	9,9	25,4	12,7	8,9	14,5
K0038.12	M12	M5	47,5	30,5	76,2 - 78	30,9	15,7	38,1	19	15,6	38,4
K0038.16	M16	M6	63,5	41,28	101,6 - 103,9	41,3	20,3	50,8	25,4	26,7	74,6

Wedge clamps



- (Jaws exert positive down force)
- ① Horizontal thrust against workpiece
 - ② Vertical thrust prevents the workpiece lifting

Material:

Carbon steel.

Version:

Jaw plate hardened (33–39 HRC) and black oxidised.

Sample order:

K1167.11205

Note:

Due to the functioning principle, wedge clamps are suitable for clamping in series.

The wedges generate higher clamping forces.

The wedge clamps are available with cap screws or countersunk screws.

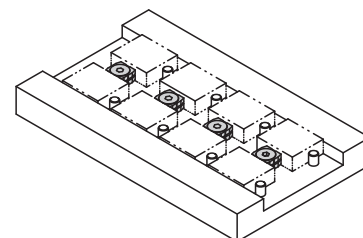
Wedge clamps with pull-down effect.

Drawing reference:

Dimension L refers to $\leq A$.

Dimension H refers to $\geq A$.

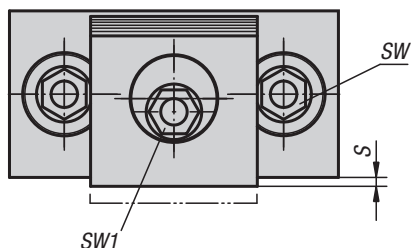
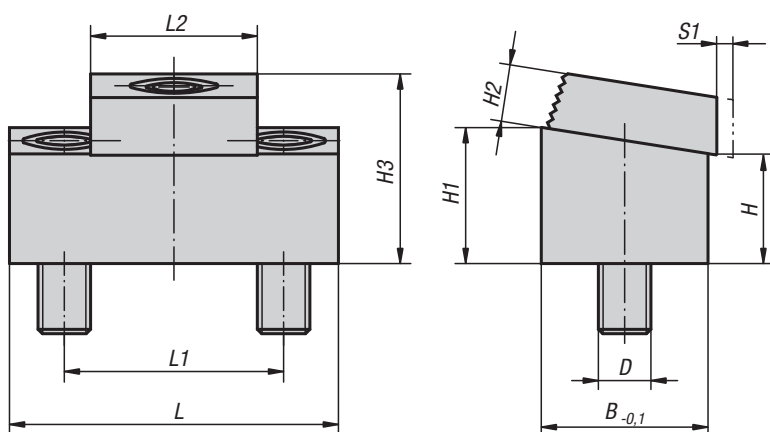
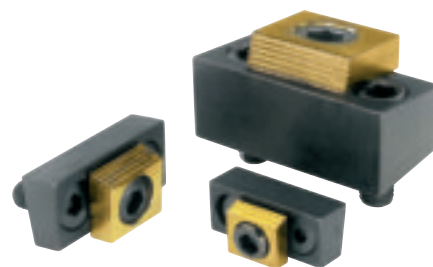
1) O-ring



KIPP Wedge clamps

Order No.	Version	Form	A min.	A max.	B	D	H	L	SW	Clamping force kN	Tightening torque Nm
K1167.11205	with countersunk screw	A	12	14	12	M5	7,5	9,5	3	2	4,3
K1167.11506	with countersunk screw	A	15	17	14,8	M6	8,7	9,3	4	3,5	7,3
K1167.11808	with countersunk screw	A	18,5	21,5	18,4	M8	11,8	11,3	5	5	18
K1167.21205	with socket head screw	B	12	14	12	M5	13,4	9,6	4	3	5,4
K1167.21506	with socket head screw	B	15	17	14,8	M6	15,8	10,2	5	4,5	9,1
K1167.21808	with socket head screw	B	18,5	21,5	18,4	M8	21,2	14,9	6	9	22

Toe clamps compact



Material:

Steel.

Version:

Body tempered and black oxidised.

Square washer case-hardened and brass-plated.

Sample order:

K0036.10

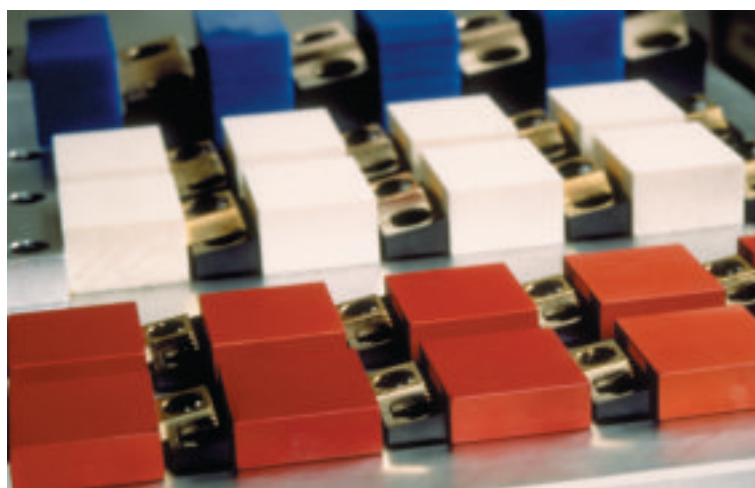
Note:

This cam action compact toe clamp requires very little space to produce multi-fixture clamping.

Workpieces can be clamped in series by using the back side of a clamp as a stop for the next row.

Mount preferably in slots with $B + 0.05$ mm. The height of the clamp can be adjusted by altering the slot depth.

Example of series clamping using compact toe clamps

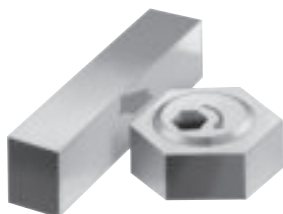
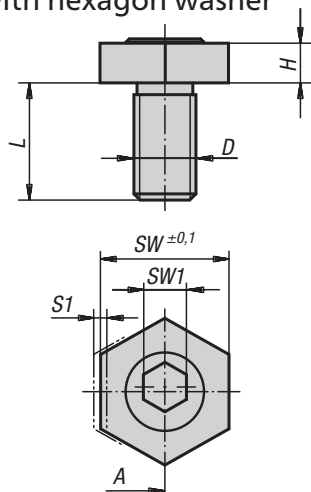


KIPP Toe clamps compact

Order No.	L	L1	L2	B	H	H1	H2	H3 max.	S	D	S1 (travel)	SW	SW1	Clamping force kN	Tightening torque max. Nm
K0036.08	43,2	25,4	19	19	12,7	15,7	6,4	21,4	1,5	M8	1,6	5	7	8,9	28
K0036.10	54	33,5	25,4	25,4	11,4	15,4	9,7	24,5	1,8	M10	2	7	8	17,8	88
K0036.12	75	50,8	38	38,1	25,5	31,5	13	43	2,05	M12	2,5	10	12	26,7	135

Cam screws

with hexagon washer



Material:

Cam screw carbon steel.
Hex washer brass.

Version:

Cam screw tempered to 10.9 and black oxidised.

Sample order:

K0026.12

Note:

Also called fixture clamps.

The minimal height of this fixture clamp allows numerous clamping problems in fixture and equipment construction to be solved. The brass hex washer offers a gentle yet extremely stable and safe clamping of workpieces. By using several fixture clamps entire pallets can be set-up.

"A" = distance from workpiece to screw centre (cam screw).

On request:

Replacement cam screws.

KIPP Cam screws with hexagon washer

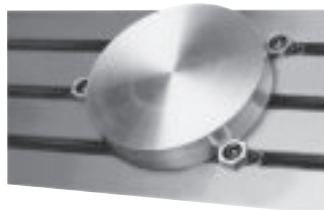
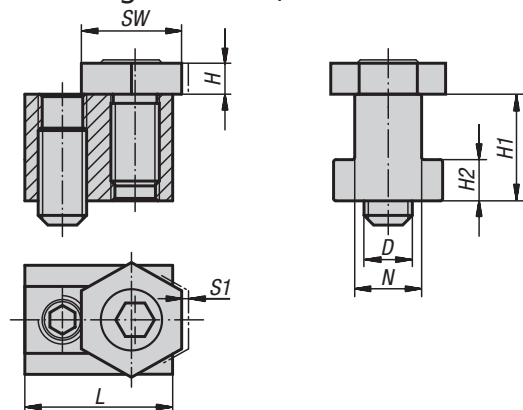
Order No.	A	D	H	L	SW	SW1	S1 (travel)	Clamping force kN	Tightening torque max. Nm
K0026.04	3,8	M4	2,8	10	8	3	0,8	0,9	2,2
K0026.06	7,8	M6	4,8	12	16	4	1	3,4	8,5
K0026.08	10,2	M8	4,8	15	20,6	5	1	3,6	11,3
K0026.10	10,2	M10	6,4	20	20,6	7	1,6	9,0	28,06
K0026.12	12,7	M12	9,5	25	25,4	8	2	18,0	88
K0026.16	15	M16	12,7	30	30,2	12	2,5	27,0	135

Application using fixture clamps



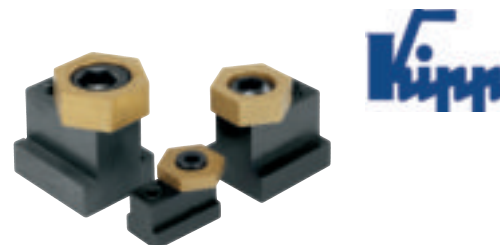
Cam screws

with hexagon washer, for T-slots



KIPP Cam screws with hexagon washer, for T-slots

Order No.	D	N	H	H1	H2	L	SW	S1 (travel)	Clamping force kN
K0027.08	M6	8	4,8	9,6	4,5	23	16	1	3,4
K0027.10	M6	10	4,8	14	4,5	23	16	1	3,4
K0027.12	M8	12	4,8	15,5	6,5	28	21	1	3,6
K0027.14	M10	14	6,4	22	8,5	30,5	21	1,6	9
K0027.16	M12	16	9,5	22,5	9	30,5	25	2	18
K0027.18	M12	18	9,5	28,5	10	34,5	25	2	18
K0027.20	M16	20	12,7	32	12	39	30	2,5	27
K0027.22	M16	22	12,7	38,2	14	44	30	2,5	27



Material:
Carbon steel.
Hex washer brass.

Version:
Tempered to 10.9 and black oxidised.

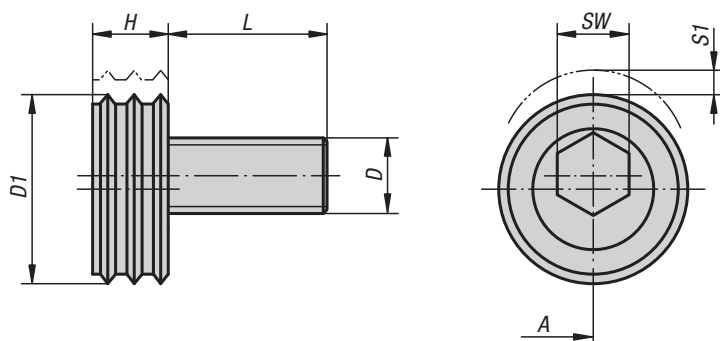
Sample order:
K0027.12

Note:
Also called fixture clamps for T-slots.
These fixture clamps can be used directly on machine tables or other tables with T-slots. The grub screw at the rear locks the T-nut in the slot. Thin shims are recommended to prevent marking the bottom of the T-slot.

On request:
Replacement cam screws.

Cam screws

with knife edge washer



Material:
Knife edge washer.
Cam screw carbon steel.

Version:
Cam screw tempered to 10.9 and black oxidised.
Knife edge washer hardened and anodized.

Sample order:
K0025.16

Note:
Also called knife edge clamps.
The hardened knife edge washer is suitable for clamping rough cut stock, castings, forgings etc.

"A" = distance from workpiece to screw centre (cam screw).

On request:
Replacement cam screws.

KIPP Cam screws with knife edge washer

Order No.	A	D	D1	L	H	SW	S1 (travel)	Clamping force kN	Tightening torque max. Nm
K0025.12	12,7	M12	25,4	22,5	9,6	8	2	18	88
K0025.16	15	M16	30,1	26,8	12,7	12	2,5	27	135

Fixture clamps machinable


Material:

Cam screw alloyed steel.
Clamping disc steel.

Version:

Cam screw and clamping disc black oxidised.

Sample order:

K0022.06

Note:

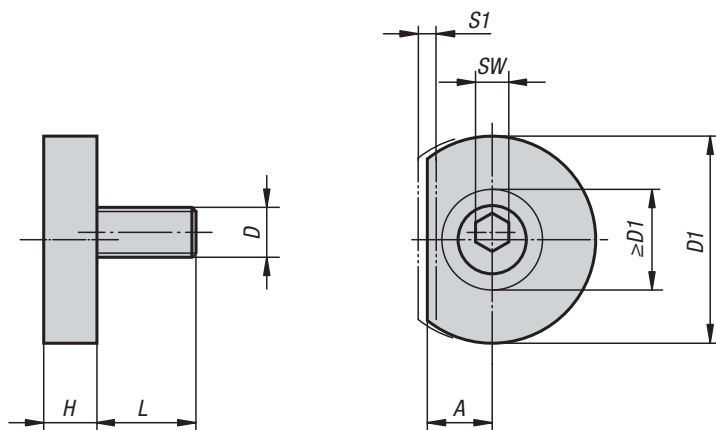
These fixture clamps have a round washer that can be machined to suit the contour of the workpiece being clamped. This allows positive clamping for round, contoured or fragile workpieces. The flat edge is the same distance from the screw centre as our hexagonal fixture clamps K0026 allowing an interchange between the two.

"A" = distance from workpiece to screw centre (cam screw).

"D1 min." = maximum depth of contour.

On request:

Replacement cam screws.



KIPP Fixture clamps machinable

Order No.	A	D	D1	D1 min.	H	L	SW	S1 (travel)	Clamping force kN
K0022.06	7,8	M6	24,9	12,1	6,4	11,9	4	1,01	3,3
K0022.10	10,2	M10	31,2	17,2	8,9	18	7	1,52	8,9
K0022.12	12,7	M12	37,6	22,4	11,4	22,9	8	2,03	17,8
K0022.16	15	M16	43,9	26,1	14	28,6	12	2,54	26,7

Fixture clamps unequal hexagon


Material:

Cam screw steel tempered to 10.9.
Hexagon washer mild steel.

Version:

Cam screw black oxidised.
Hexagon washer hardened and black oxidised.

Sample order:

K0023.13

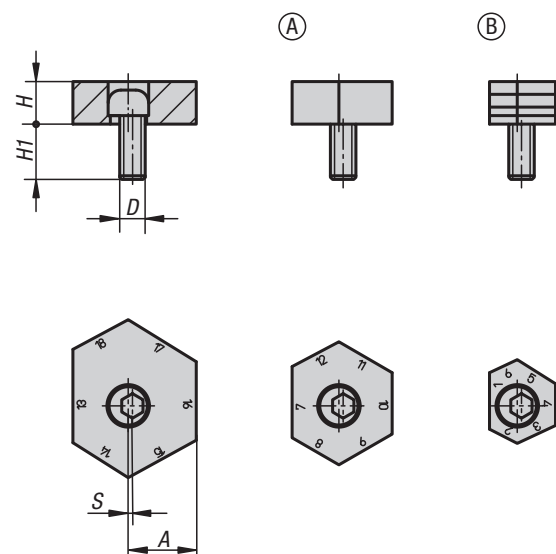
Note:

These unequal hexagon fixture clamps can minimise the cost of clamping in fixtures. The clamping range can be altered up to 17 mm from the same tapped hole. Simply rotate the hexagon washer.

The washers are available with smooth edges for machined faces or with serrated edges for rough faces.

On request:

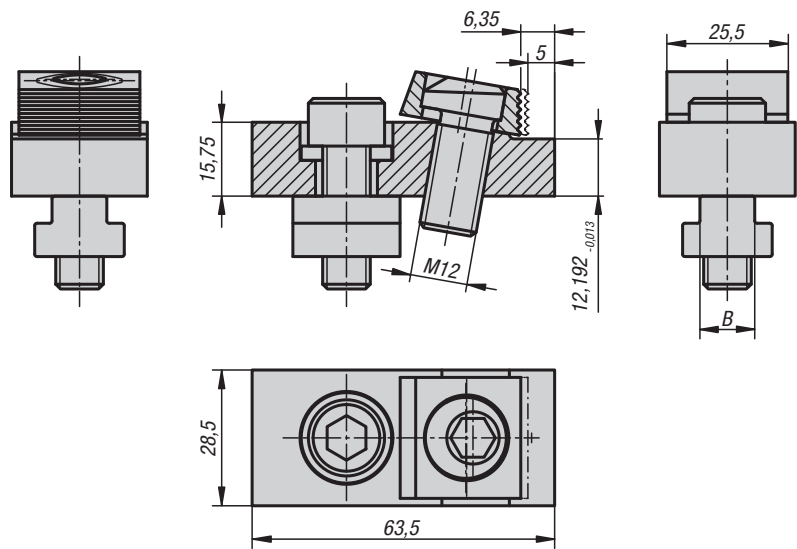
Replacement cam screws.



KIPP Fixture clamps unequal hexagon

Order No. Form A smooth finish	Order No. Form B notched finish	Distance A by face No.	D	H	H1	S (cam travel)	Clamping force kN
K0023.09	K0023.13	1/12, 2/13, 3/14, 4/15, 5/16, 6/17	M12	10	22	1	18
K0023.10	K0023.14	7/18, 8/19, 9/20, 10/21, 11/22, 12/23	M12	10	22	1	18
K0023.11	K0023.15	13/24, 14/25, 15/26, 16/27, 17/28, 18/29	M12	10	22	1	18

Cam clamps with riser



Material:
Steel.

Version:
Body tempered and black oxidised.
Square washer case hardened and brass-plated.

Sample order:
K0028.16

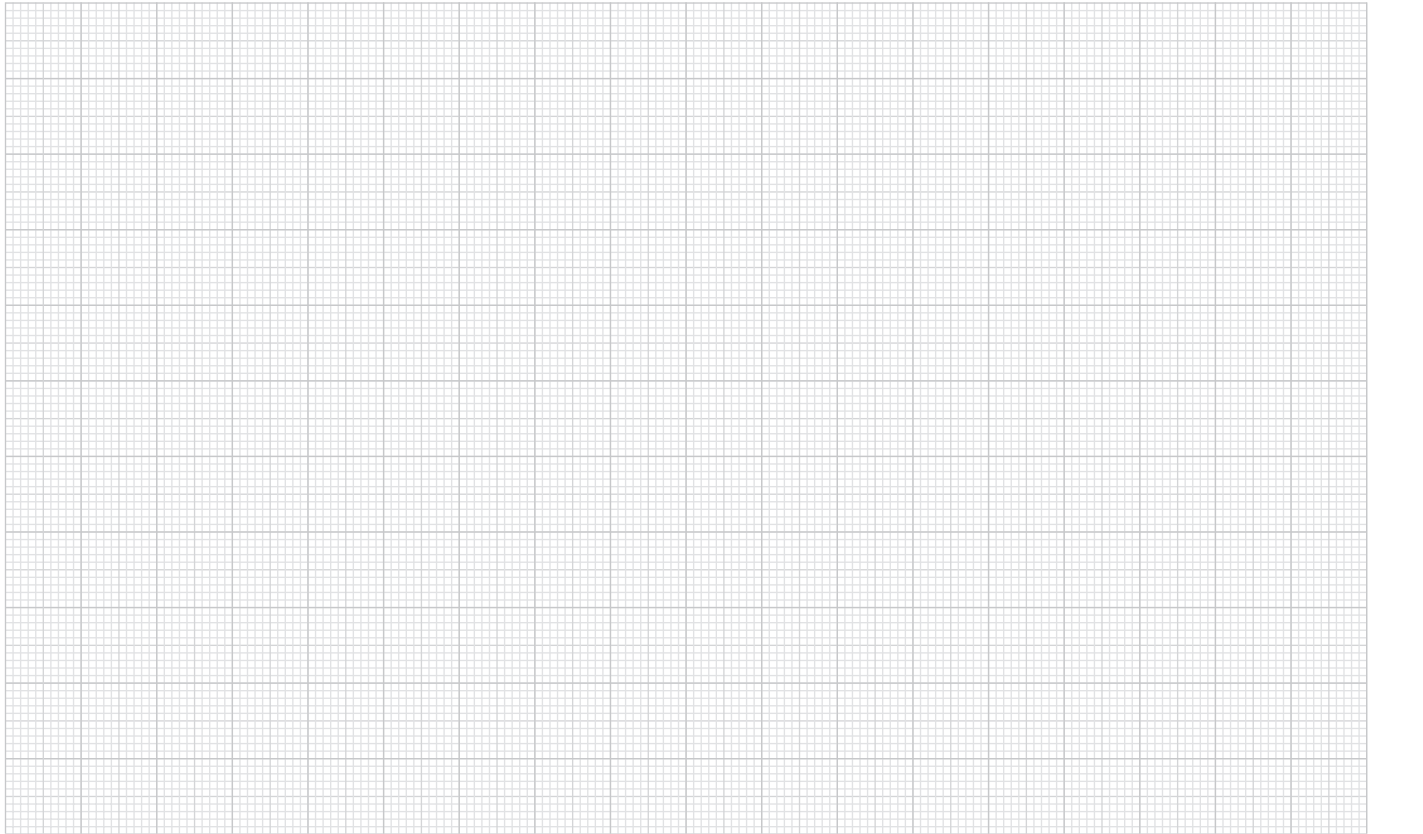
Note:
Also called riser clamps.
These cam clamps with riser can be used directly
on machine tables. A positive down force is exerted
during clamping.

On request:
Replacement cam screws.

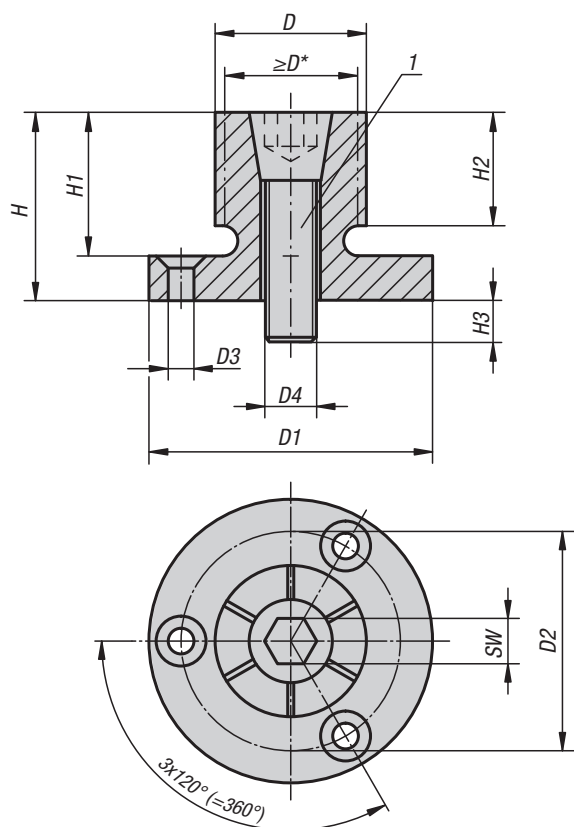
KIPP Cam clamps with riser

Order No.	B Slot width	Clamping force kN
K0028.12	12	12
K0028.14	14	12
K0028.16	16	12
K0028.18	18	12

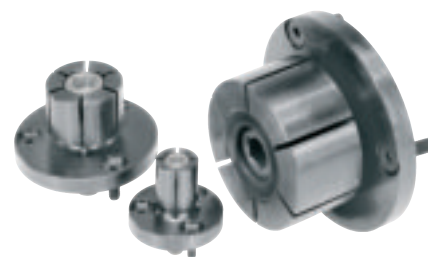
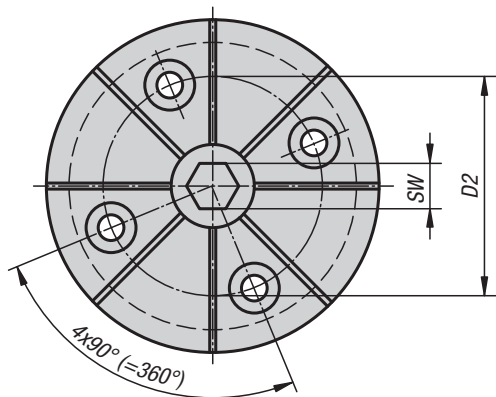
Notes



Mandrel collets



K0357.1630175



Material:
Mandrel mild steel.
Taper-head screw low-carbon steel

Version:
Mandrel black oxidised.
Taper-head screw case-hardened.

Sample order:
K0357.081420

Note:
The mandrel collet is ideal for finish machining turned parts. The diameter D can be turned or milled to suit the workpiece ID.
Low design - no interfering clamp straps.
Tightened using a hex socket wrench or hydraulics.

* D min. = smallest diameter to which „D“ may be turned or milled.

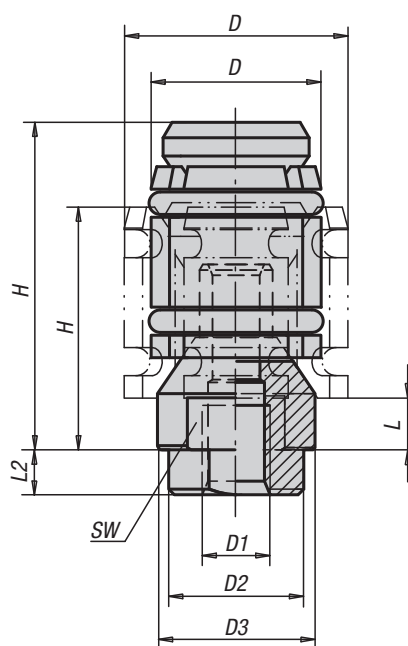
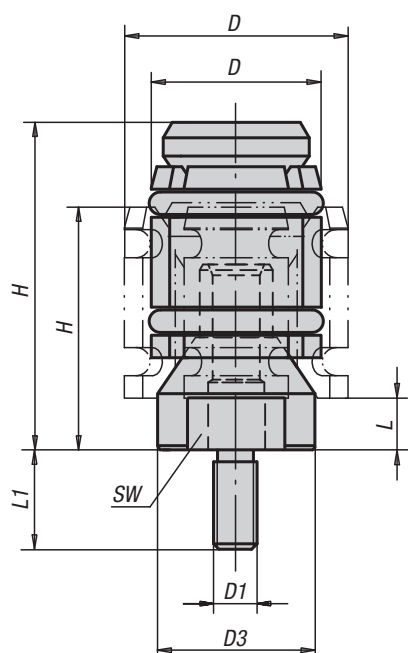
Assembly:
Expand the mandrel approx. 0.1 mm over the relaxed diameter. Turn or mill the mandrel to suit the internal diameter of the workpiece. The base flange can be centred in a pocket or using dowel pins.

Drawing reference:
1) taper-head screw

KIPP Mandrel collets

Order No.	D	D min.	D1	D2	D3 for screw ISO 10642	D4 Tapered-head bolt	H	H1	H2	H3	SW Tapered-head bolt	Tightening torque max. Nm	Clamping force max. kN
K0357.020407	7,4	4,1	20 h9	13,7	M2	M2	10,7	7,6	6,1	4,1	1,5	0,7	1,1
K0357.040812	12,4	8	29,72 h9	21	M3	M4	21,8	16	15	8	3	5	4,2
K0357.061214	14,2	12,2	31,5 h9	23,1	M3	M6	24,9	19	15	12	5	17	8,5
K0357.081420	20	13,5	37,5 h9	29	M3	M8	24,9	19	15	14	6	34	11,1
K0357.062027	27	18	50 h9	39,4	M4	M10	28,6	22,2	17,5	17	8	60	20
K0357.102535	35,3	23	56 h9	45,5	M4	M12	31,8	25,4	20,6	21	10	150	26,3
K0357.123442	42	29,3	69,5 h8	55,9	M5	M16	39,6	31,8	27	22	14	280	44,5
K0357.123452	51,5	29,3	75,5 h9	63,9	M5	M16	39,6	31,8	27	22	14	280	44,5
K0357.163077	77,7	29,3	107,5 h9	92,5	M6	M16	45,5	37,6	32,3	20	14	280	44,5
K0357.1630103	103	29,3	132,9 h9	118	M6	M16	45,5	37,6	32,3	20	14	280	44,5
K0357.1630175	175	29,3	132,9 h9	118	M6	M16	45,5	37,6	32,3	20	14	280	44,5

Centring clamps

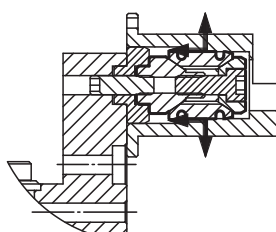
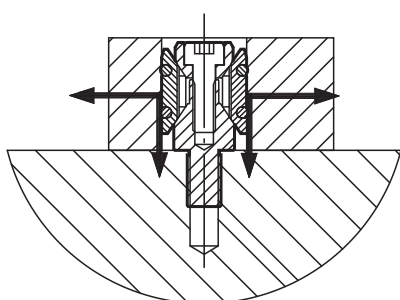
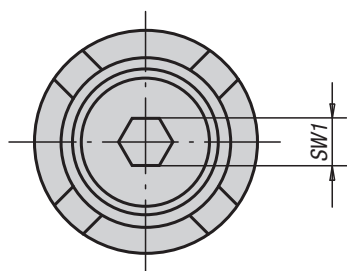


Material:
Body steel.
Bushes carbon steel.

Version:
Black oxidised.

Sample order:
K0893.0615

Note:
These centring clamps allow workpieces to be centred on and clamped in a bore. The clamps have a wide expansion range. The series covers a bore range of Ø12 to Ø30 mm. To increase the centring accuracy the clamps with internal thread have a centring spigot (D2) for a locating hole. These are also suitable for M6 grid systems (see application example).

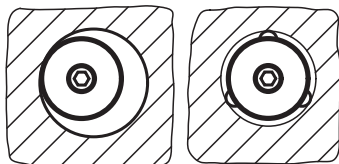
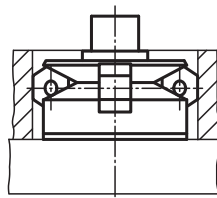
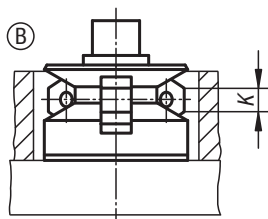
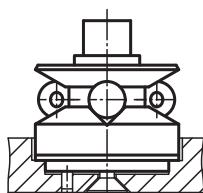
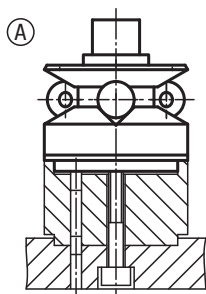
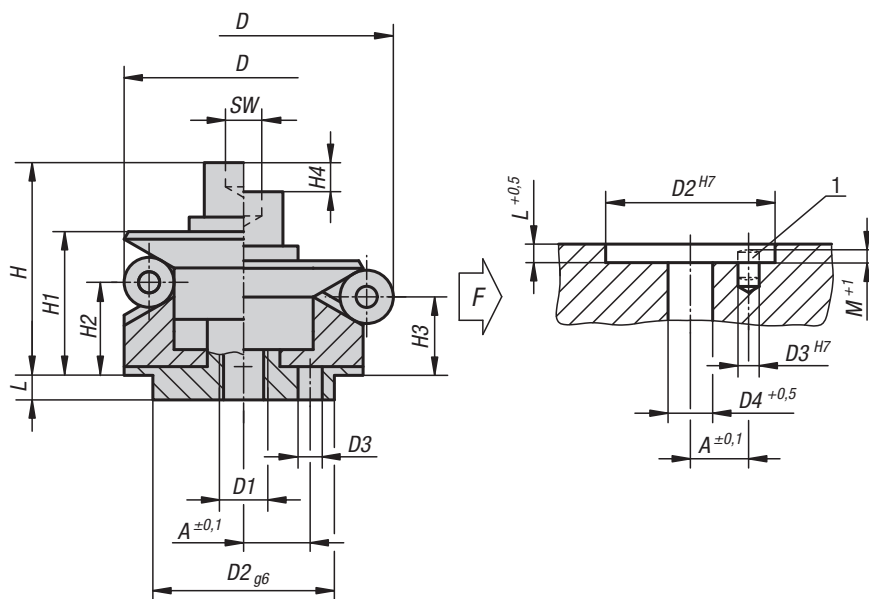


KIPP Centring clamps

Order No.	Version	D1	L1	L2	D min.	D max.	D2	D3	H min.	H max.	L min.	SW	SW1
K0893.0615	internal thread	M6	-	4	12	15	12	11,4	22	27,5	4,8	9	2,5
K0893.0619	internal thread	M6	-	4	15	19	12	14	24,5	32	4,8	12	4
K0893.0624	internal thread	M6	-	4	19	24	12	17,8	26	35	4,5	15	5
K0893.0630	internal thread	M6	-	4	24	30	12	23	32	44,5	7	19	5
K0893.061215	external thread	M6	12	-	12	15	-	11,4	22	27,5	4,8	9	2,5
K0893.061219	external thread	M6	12	-	15	19	-	14	24,5	32	4,8	12	4
K0893.081624	external thread	M8	16	-	19	24	-	17,8	26	35	4,5	15	5
K0893.081630	external thread	M8	16	-	24	30	-	23	32	44,5	7	19	5

Centring clamps

with ball or hexagon segments



Material:

Body 1.2842.
Ball and hex segments 1.4112.
Tension spring 1.4310.

Version:

Body hardened and black oxidised.
Ball and hex segments hardened and ground.

Sample order:

K0358.101203

Note:

Form A: With balls for holes where light marking is acceptable.
Form B: With hexagons for sensitive hole surfaces.

Application:

To position and centre existing bores on the machining surface.

Advantages:

- Precise self-centring.
- Distortion free clamping.
- Large spread range.
- Low overall height.

Technical data:

Repetitive accuracy ± 0.025
Concentric accuracy ± 0.05

Drawing reference:

Form A: With balls for holes where light marking is acceptable.
Form B: With hexagons for sensitive hole surfaces.

1) Mounting aid:

pin to accurately position the mandrel segments.

Centring clamps

with ball or hexagon segments



KIPP Centring clamps with ball segments

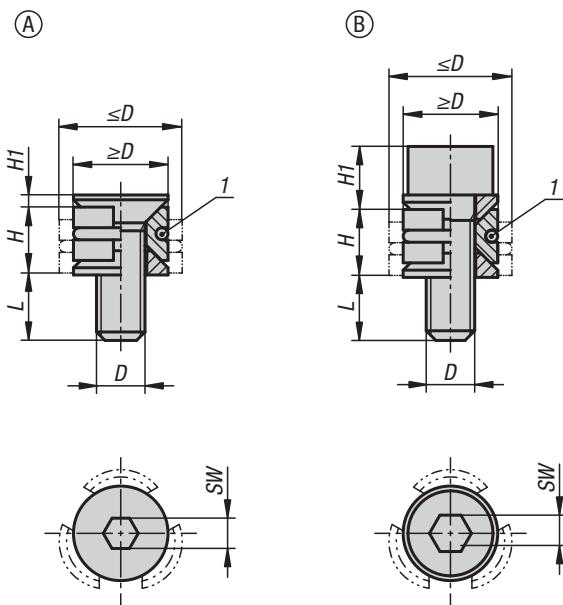
Order No.	Form	A	D min.	D max.	D1	D2	D3	D4	H	H1	H2	H3	H4	L	M	SW	Ball-Ø	No. of balls	F kN
K0358.101203	A	3,5	11,7	14,2	M4	10	1,5	4,3	15	10	4,2	3	1,5	3,5	2,5	3	2,5	3	0,5
K0358.101504	A	4,5	14,5	18,5	M4	12	2	4,3	19,5	14,5	9,8	8,6	2,3	5,5	3	3	4	3	3,5
K0358.101905	A	5,5	18,5	22,5	M5	15	2,5	5,3	23,5	16,5	11,6	10,4	2,3	7,5	3	4	4	3	4
K0358.102306	A	7	22,5	26,5	M6	20	3	6,4	28,8	19,8	14,2	13	2,3	6	4	5	4	3	4,5
K0358.102706	A	7	26,5	30,5	M6	20	3	6,4	28,8	19,8	14,2	13	2,3	6	4,5	5	4	3	4,5
K0358.103106	A	9	30,5	38,5	M6	25	4	6,4	32,7	23,1	14,2	11,9	4,6	7	4,5	5	8	3	4,5
K0358.103908	A	11	38,5	46,5	M8	30	4	8,4	39,2	27,2	17,8	15,5	4,6	7,5	4,5	6	8	6	6,5
K0358.104708	A	11	46,5	54,5	M8	30	4	8,4	39,2	27,2	18	15,7	4,6	7,5	4,5	6	8	6	6,5
K0358.105510	A	15	54,5	70,5	M10	45	5	10,5	54,6	40,6	23,7	19,1	9,3	9	5,5	8	16	6	8
K0358.107112	A	17	70,5	86,5	M12	60	5	13	63,1	46,1	28,3	23,7	9,3	10	5,5	10	16	6	10
K0358.108712	A	25	86,5	102,5	M16	60	5	17	73	51	30,2	25,7	9,3	10	5,5	14	16	6	12,5

KIPP Centring clamps with hexagon segments

Order No.	Form	A	D min.	D max.	D1	D2	D3	D4	H	H1	H2	H3	H4	L	M	K	SW	No. of hex	F kN
K0358.201504	B	4,5	14,5	18,5	M4	12	2	4,3	19,5	14,5	9,8	8,6	2,3	5,5	3	4	3	3	3,5
K0358.201905	B	5,5	18,5	22,5	M5	15	2,5	5,3	23,5	16,5	11,6	10,4	2,3	7,5	3	4	4	3	4
K0358.202306	B	7	22,5	26,5	M6	20	3	6,4	28,8	19,8	14,2	13	2,3	6	4	4	5	3	4,5
K0358.202706	B	7	26,5	30,5	M6	20	3	6,4	28,8	19,8	14,2	13	2,3	6	4,5	4	5	3	4,5
K0358.203106	B	9	30,5	38,5	M6	25	4	6,4	32,7	23,1	14,2	11,9	4,6	7	4,5	8	5	3	4,5
K0358.203908	B	11	38,5	46,5	M8	30	4	8,4	39,2	27,2	17,8	15,5	4,6	7,5	4,5	8	6	6	6,5
K0358.204708	B	11	46,5	54,5	M8	30	4	8,4	39,2	27,2	18	15,7	4,6	7,5	4,5	8	6	6	6,5
K0358.205510	B	15	54,5	70,5	M10	45	5	10,5	54,6	40,6	23,7	19,1	9,3	9	5,5	16	8	6	8
K0358.207112	B	17	70,5	86,5	M12	60	5	13	63,1	46,1	28,3	23,7	9,3	10	5,5	16	10	6	10
K0358.208712	B	25	86,5	102,5	M16	60	5	17	73	51	30,2	25,7	9,3	10	5,5	16	14	6	12,5

Centring clamps

round



Material:
Carbon steel.

Version:
Hardened (33–39 HRC) and black oxidised.

Sample order:
K1166.10804

Note:
The centring clamp enables a workpiece to be centred and clamped in the bore.
The wedges generate higher clamping forces.
The centring clamp is available with a cap screw or countersunk screw.
Centring clamp with pull-down effect.

Drawing reference:
Form A: with countersunk screw
Form B: with cap screw

Dimension H refers to the height at $\geq D$.
1) O-ring

Dimension L refers to the length at $\leq D$

KIPP Centring clamp round

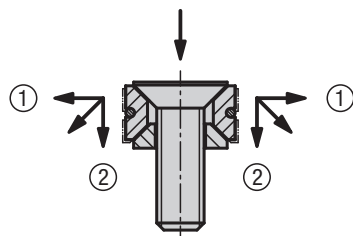
Order No.	Form	D	D min.	D max.	H	H1	L	SW	Clamping force kN	Tightening torque Nm
K1166.10804	A	M4	8	10,3	5,5	0,9	7,3	2,5	0,9	2,1
K1166.11005	A	M5	10	12,3	6,4	1,1	9,1	3	1,5	4,3
K1166.11206	A	M6	12	16,3	8,6	1,3	11,2	4	2,1	7,3
K1166.11608	A	M8	16	22	11,5	1,6	16,2	5	4	18
K1166.20804	B	M4	8	10,3	5,5	5,1	7,1	3	1,5	2,7
K1166.21005	B	M5	10	12,3	6,4	6,2	9	4	2,5	5,4
K1166.21206	B	M6	12	16,3	8,6	7,9	10,6	5	5	9,1
K1166.21608	B	M8	16	22	11,5	10,4	15,4	6	9	25

Centring clamps

round

Technical information:

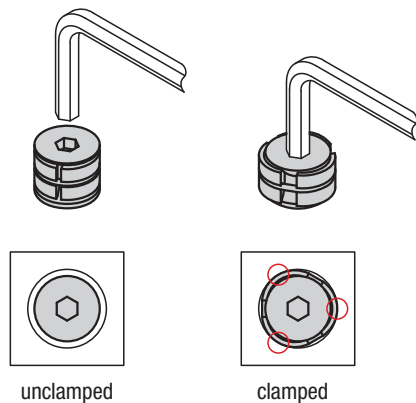
- These clamps grip the inside diameter of a workpiece.
- The wedge shape enables high clamping forces on the workpiece.



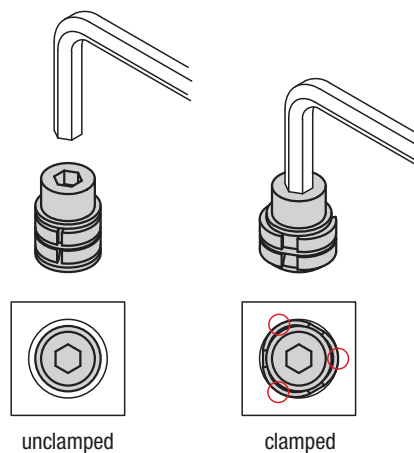
(Jaws exert positive down force)

- ① Horizontal thrust against workpiece
- ② Vertical thrust prevents the workpiece lifting

Form A:

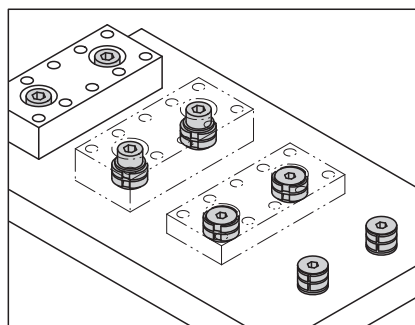


Form B:



Note:

The clamp makes point contact with the bore wall when clamped.



For accurate repeat positioning use these clamps together with a positioning unit. Clamping is carried out with the centring clamp.

