

Clamping devices



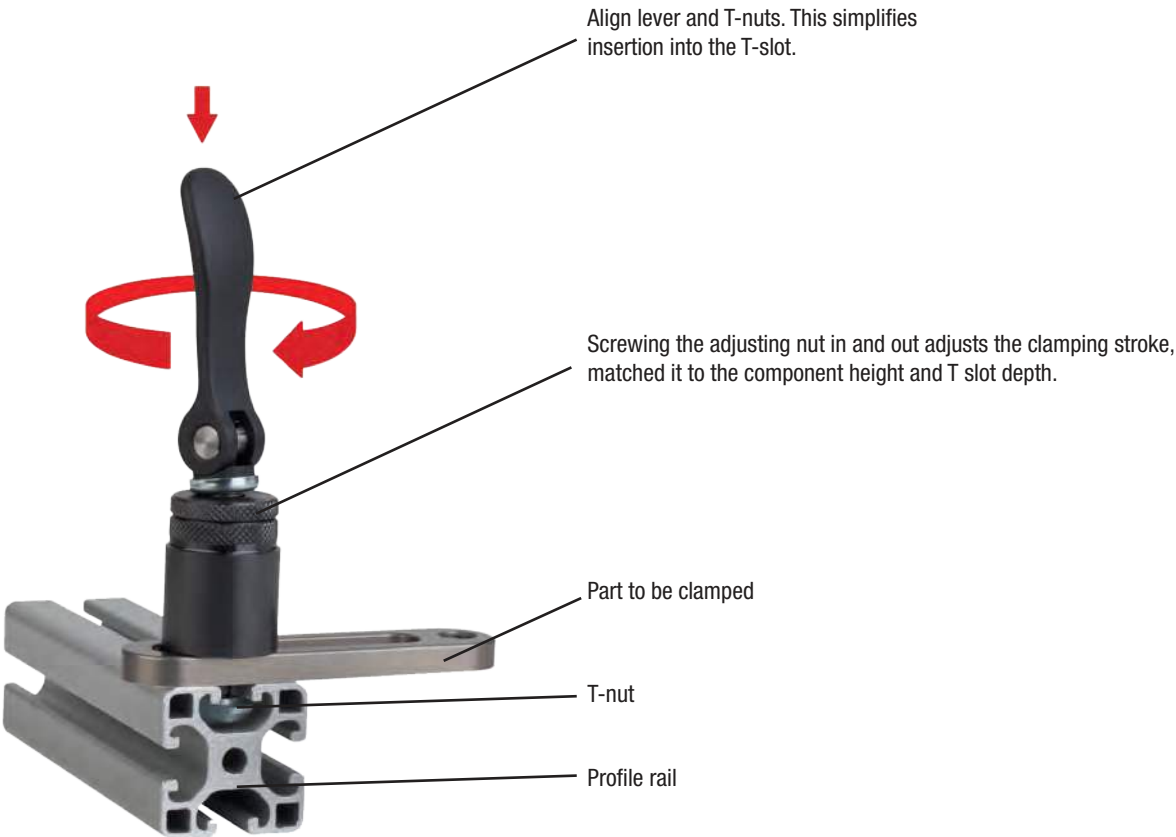


A large rectangular area filled with a light gray grid pattern, intended for taking notes or drawing.

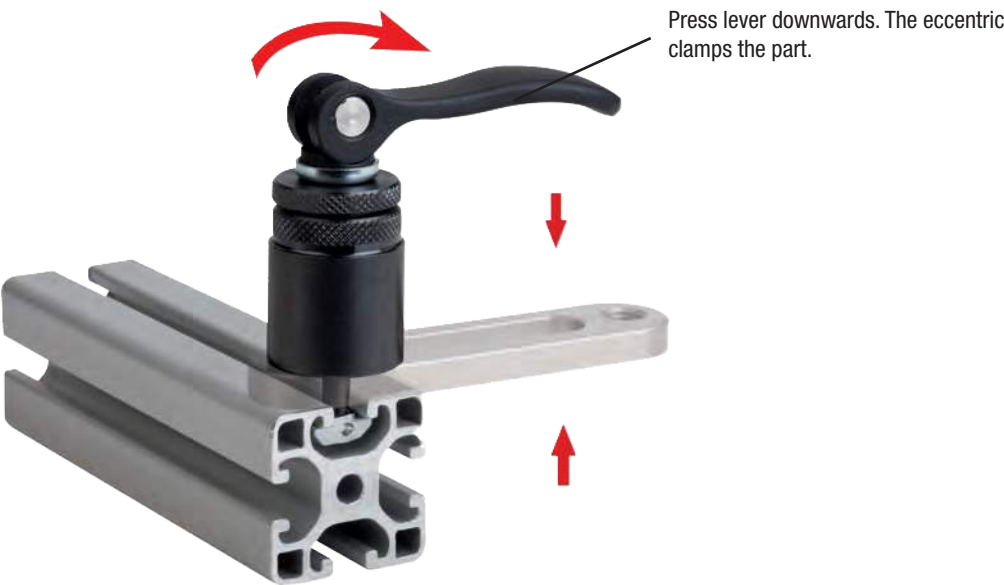
Mounting instructions for eccentric clamp module



Insert by pushing and turning



Clamping by swivelling



Eccentric clamp modules



Material, surface finish:

Body black oxide finished steel, T-nut galvanized, cam levers cast aluminium black powder coated.

Sample order:

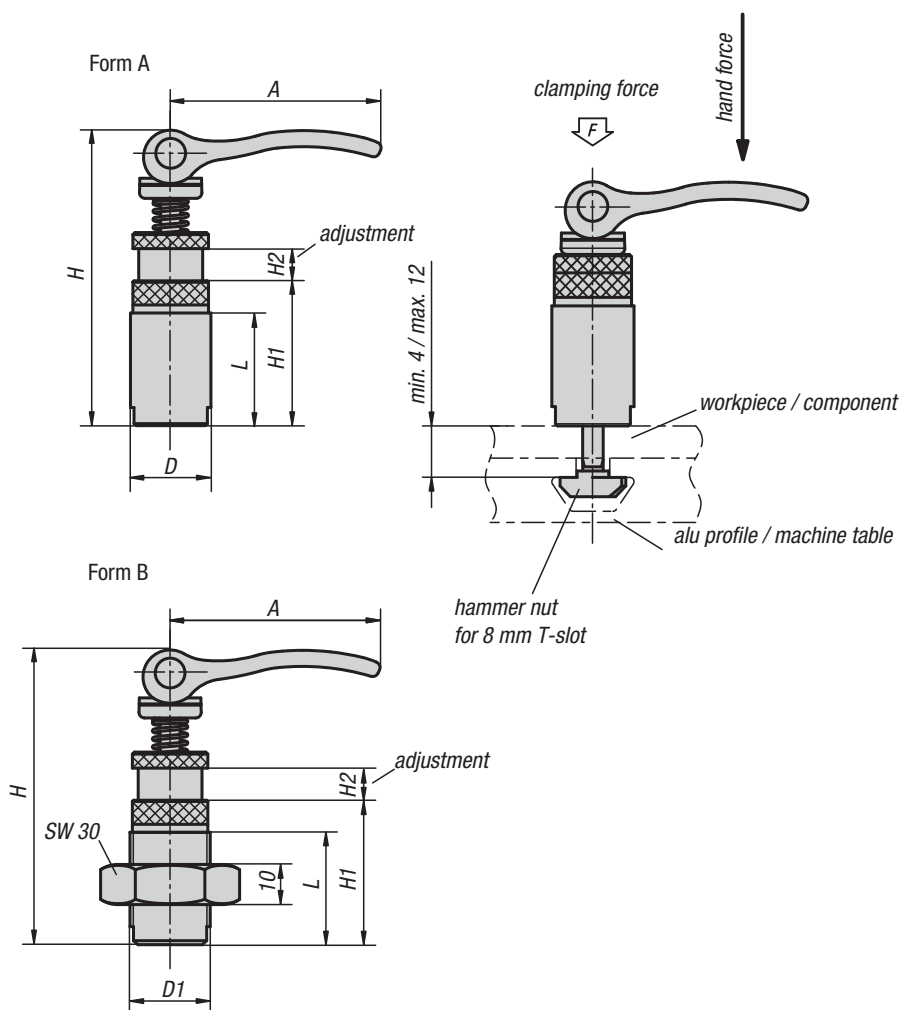
K0754.00200808

Note:

The clamping module is inserted into the T-slot from above and secured using the cam lever, no other tools required.

Advantages:

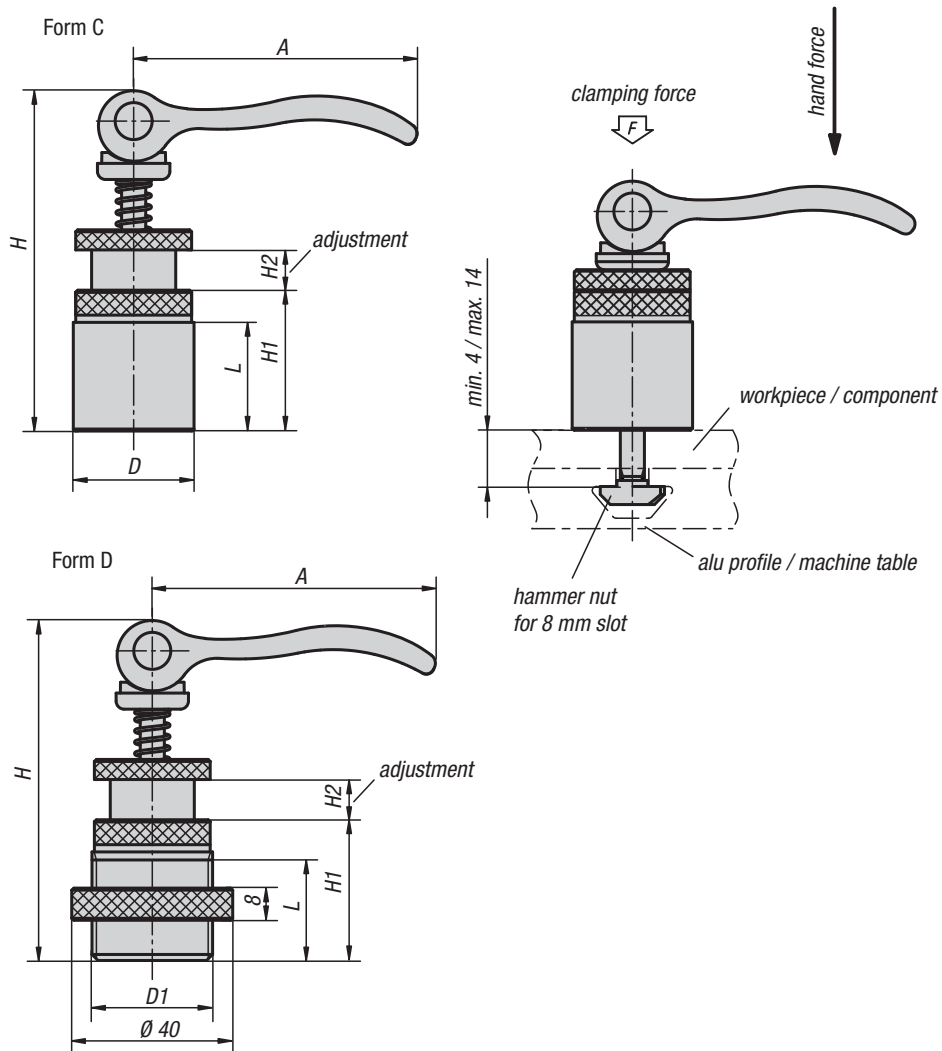
The eccentric clamping modules can be used on conventional aluminium profile systems or on T-slot tables as stops, fasteners or clamps for components and workpieces.



KIPP Eccentric clamp modules

Order No.	Form	D	D1	A	H	H1	H2	L	Clamping force F (kN)	Hand force N
K0754.00200808	A	20	-	52,3	73,5	36	8	28	2,5	100
K0754.10200808	B	-	M20x1,5	52,3	73,5	36	8	28	2,5	100

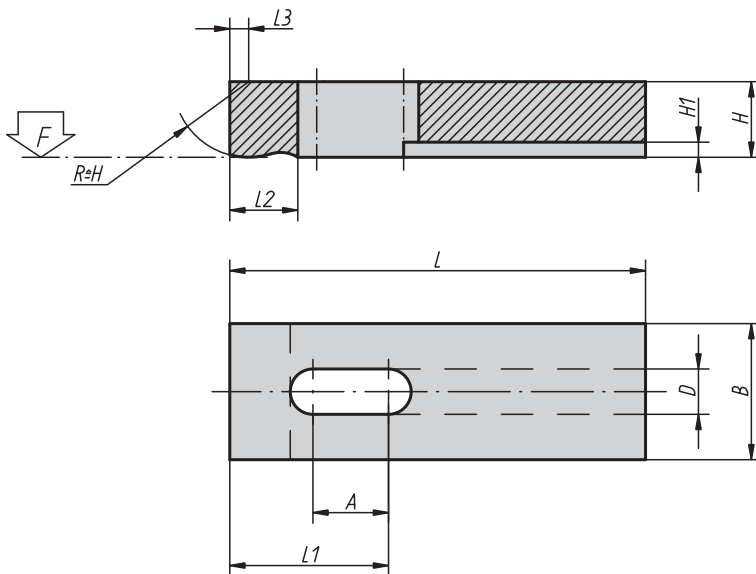
Eccentric clamp modules



KIPP Eccentric clamp modules

Order No.	Form	D	D1	A	H	H1	H2	L	Clamping force F (kN)	Hand force N
K0754.21301008	C	30	-	70,4	84,6	35	10	25	4	120
K0754.31301008	D	-	M30x2	70,4	84,6	35	10	25	4	120

Adjustable straps



Material:

Tempered steel 1.1191

Surface finish:

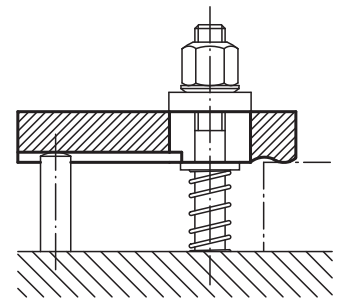
Black oxide finish

Sample order:

K0001.101

Note:

Suitable thrust pins and adjustable thrust bolts, see K0305 and K0306.



KIPP Adjustable straps

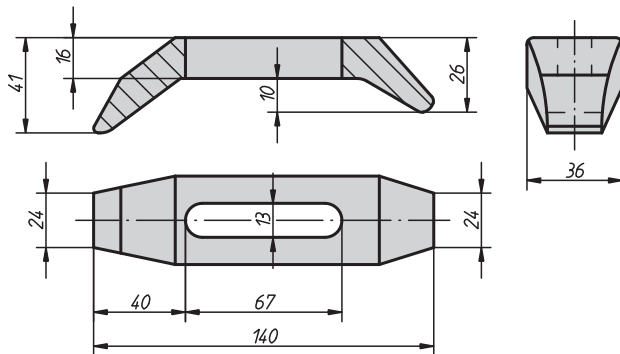
Order No.	A	B	D	H	H1	L	L1	L2	L3	F kN	Approx. weight kg
K0001.05	8	12	5,5	8	3	32	14	8	1,2	3,42	0,020
K0001.06	10	16	7	10	3	40	17	10	1,6	4,82	0,040
K0001.08	12	20	9	12	4	50	22	12	2	8,77	0,090
K0001.10	16	25	11	16	4,5	63	28	16	2,5	13,9	0,150
K0001.12	20	32	14	20	5	80	35	20	3	20,2	0,290
K0001.14	25	40	16	25	6	100	44	25	4	27,6	0,620
K0001.16	42	50	18	30	6	160	73	32	5	37,8	1,600
K0001.20	52	60	22	30	8	200	92	40	6	58,8	2,700
K0001.051	13	12	5,5	8	3	50	23	8	1,2	3,42	0,030
K0001.061	17	16	7	10	3	63	29	10	1,6	4,82	0,060
K0001.081	21	20	9	12	4	80	37	12	2	8,77	0,120
K0001.101	26	25	11	16	4,5	100	46	16	2,5	13,9	0,220
K0001.121	33	32	14	20	5	125	58	20	3	20,2	0,460
K0001.141	42	40	16	30	6	160	74	25	4	27,6	0,980

Goose-neck straps

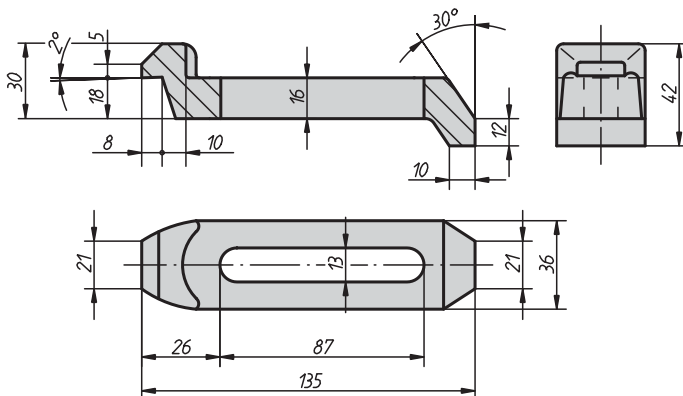
with long slot



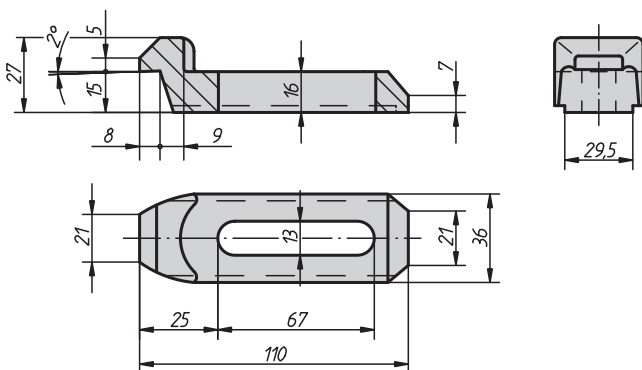
K0002.01 (0,5 kg)



K0002.05 (0,48 kg)



K0002.10 (0,35 kg)

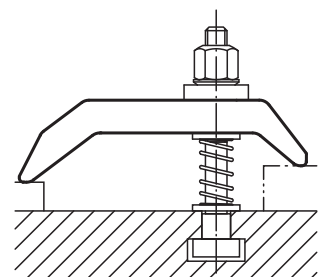


Material:
Tempered steel 1.7225

Surface finish:
Heat-treated at 1000 N/mm², black oxide finish

Sample order:
K0002.10

Note:
Goose-neck straps with long slot are also used for quick-acting clamps K0004.

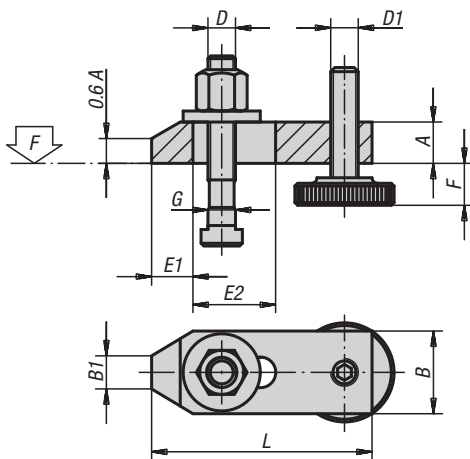


KIPP Goose-neck straps

Order No.	Approx. weight kg
K0002.01	0,5
K0002.05	0,48
K0002.10	0,355

Equipped clamps

straight



Material:

Tempered steel, screws heat-treated class 8.8

Surface finish:

Clamp painted; screws black oxide finish

Sample order:

K0003.1616

Note:

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

KIPP Equipped clamps straight

Order No.	L	A	B	B1	E1	E2	F	G for T-slot	D	D1	F kN	Approx. weight kg
K0003.1010	80	15	30	12	15	30	8-32	10	M10x80	M10	13,9	0,340
K0003.1212	100	20	40	14	21	40	10-40	12	M12x100	M12	20,2	0,700
K0003.1214	100	20	40	14	21	40	10-38	14	M12x100	M12	20,2	0,720
K0003.1616	125	25	50	18	26	45	13-49	16	M16x125	M16	37,8	1,400
K0003.1618	125	25	50	18	26	45	13-46	18	M16x125	M16	37,8	1,420
K0003.2020	160	30	60	22	30	60	16-65	20	M20x160	M20	58,8	2,750
K0003.2022	160	30	60	22	30	60	16-65	22	M20x160	M20	58,8	2,770

Quick-acting clamps



Material:

Base in spheroidal cast iron,
strap and clamping screw in tempered steel

Surface finish:

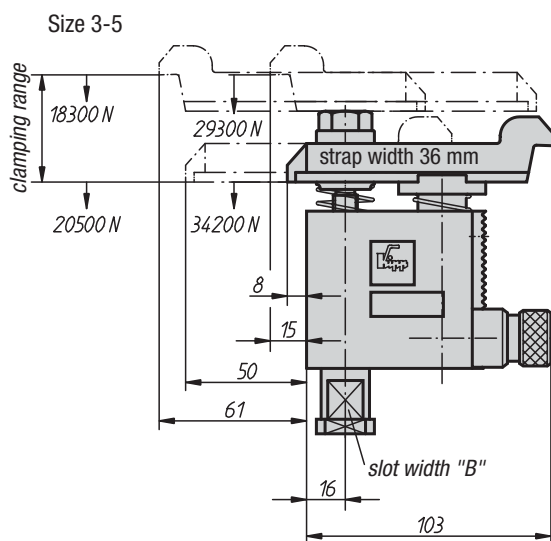
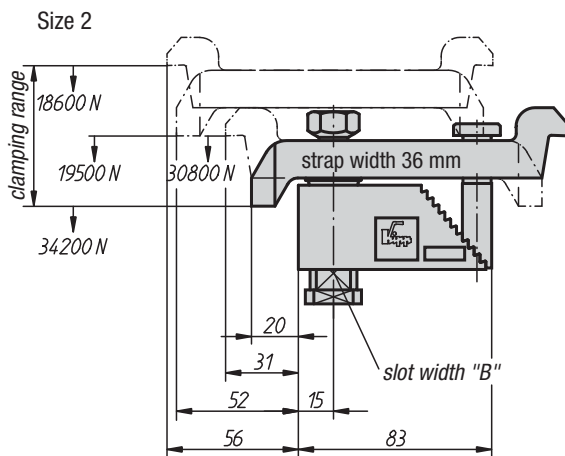
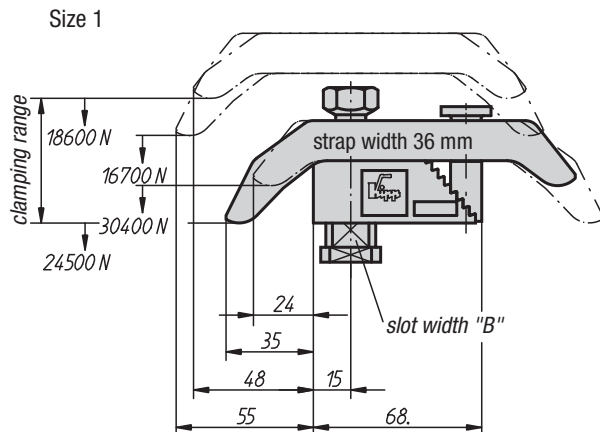
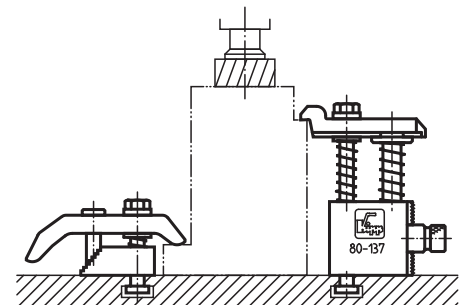
Black oxide finish

Sample order:

K0004.40X16 (please also indicate dimension B)

Note:

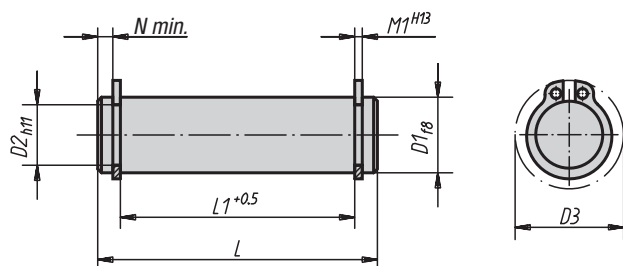
Quick-acting clamps are universal, flexible clamping devices which are reassembled from individual components and yet always make up a complete unit. There are no loose parts which first have to be put together for a clamping operation. Thanks to their compact design, these clamps can be placed very close to the workpiece, so that the full surface area of the machine table can be used.



KIPP Quick-acting clamps

Order No.	Size	Clamping range	Slot width B to DIN 650	Weight
K0004.10X	1	0-35	12/14/16/18	0,970
K0004.20X	2	25-85	12/14/16/18	1,210
K0004.30X	3	80-137	12/14/16/18	1,710
K0004.40X	4	125-224	12/14/16/18	2,470
K0004.50X	5	160-300	12/14/16/18	3,060

Hinge pins



Material:

Tempered steel 1.0503.07

Surface finish:

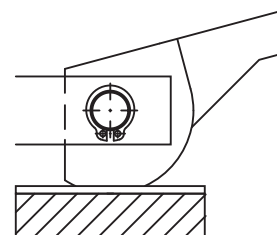
Heat-treated. Ground, natural finish

Sample order:

K0007.08

Note:

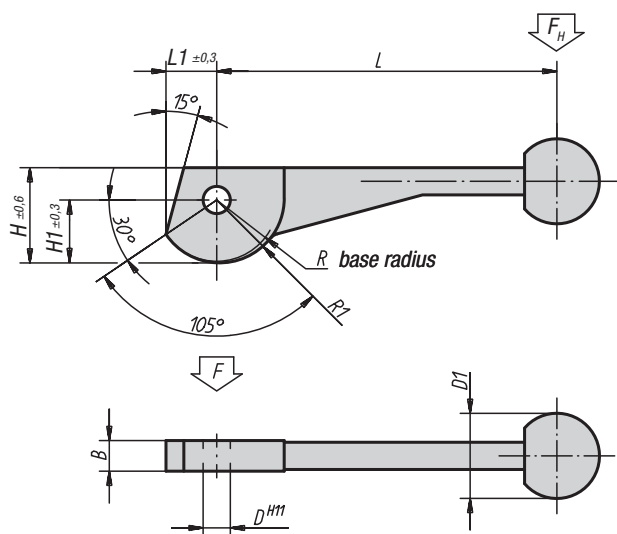
For use with:
Single cam levers, see K0008 and K0009.
Eye bolts K0396.
Fork pieces K0397.
Suitable circlips supplied.



KIPP Hinge pins

Order No.	D1	L	L1	M1	N min.	D2	D3	Approx. weight kg
K0007.05	5	18	13	0,7	1,8	4,8	10,7	0,003
K0007.06	6	22	17	0,8	1,7	5,7	12,2	0,005
K0007.08	8	30	25	0,9	1,5	7,6	15,2	0,012
K0007.081	8	20	16	0,9	1,1	7,6	15,2	0,008
K0007.082	8	27	21	0,9	2,1	7,6	15,2	0,011
K0007.10	10	37	32	1,1	1,3	9,6	17,6	0,023
K0007.101	10	25	20	1,1	1,3	9,6	17,6	0,015
K0007.102	10	35	29	1,1	1,9	9,6	17,6	0,018
K0007.12	12	46	40	1,1	1,5	11,5	19,6	0,040
K0007.121	12	31	25	1,1	1,7	11,5	19,6	0,027
K0007.122	12	37	31	1,1	1,9	11,5	19,6	0,033
K0007.14	14	44	37	1,1	2,4	13,4	22	0,053
K0007.16	16	48	41	1,1	2,4	15,2	24,4	0,075
K0007.18	18	58	51	1,3	2,2	17	26,8	0,115

Single cam levers



Material:

Tempered steel 1.7220, plastic ball

Surface finish:

Heat-treated and black oxide finish

Sample order:

K0008.10

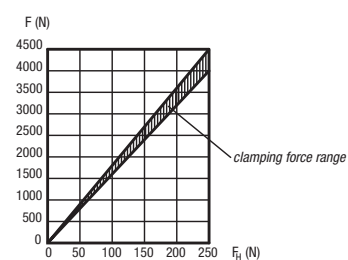
Note:

Suitable hinge pin, see K0007.

The cam lever is an eccentric lever that moves along a logarithmic spiral. Its clamping properties are even over the entire contact surface of the cam.



Force diagram



KIPP Single cam levers

Order No.	L	L1	B	H	H1	D	D1	R	R1	Approx. weight kg
K0008.08	104±2	14,9	9	28	18,5	8	25	17,5	19,2	0,100
K0008.10	123±2	18,7	12	35	23,3	10	30	21,5	24	0,210
K0008.12	146±3	24,3	14	44	30,2	12	30	28	31,2	0,335

Double cam levers



Material:

Tempered steel 1.7220, plastic ball

Surface finish:

Heat-treated and black oxide finish

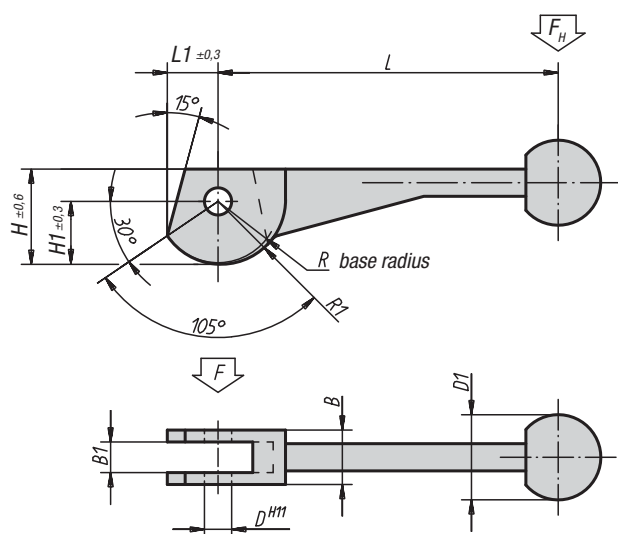
Sample order:

K0009.12

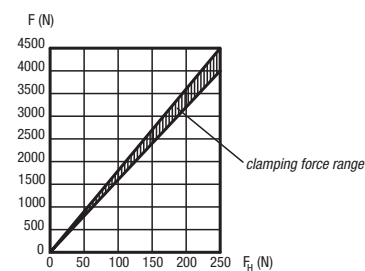
Note:

Suitable hinge pin, see K0007.

The cam lever is an eccentric lever that moves along a logarithmic spiral. Its clamping properties are even over the entire contact surface of the cam.



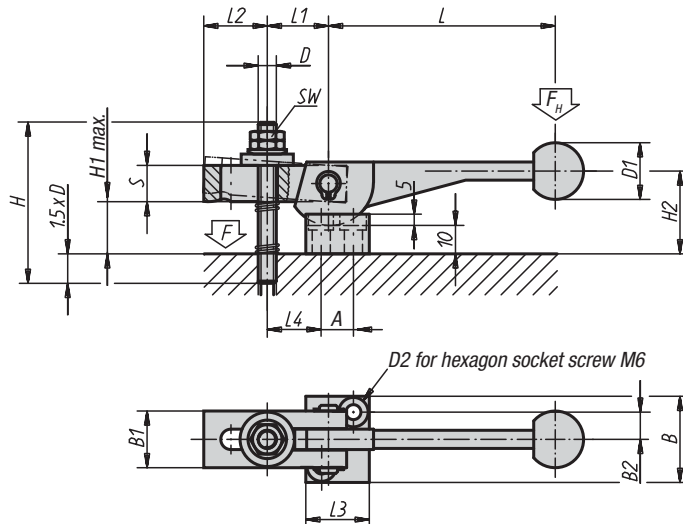
Force diagram



KIPP Double cam levers

Order No.	L	L1	B	B1	H	H1	D	D1	R	R1	Approx. weight kg
K0009.08	104±2	14,9	16	9	28	18,5	8	25	17,5	19,2	0,100
K0009.10	123±2	18,7	20	12	35	23,3	10	30	21,5	24	0,205
K0009.12	146±3	24,3	25	14	44	30,2	12	30	28	31,2	0,330

Single cam clamps



Material:

Eccentric lever tempered steel 1.7220,
strap tempered steel 1.1191

Surface finish:

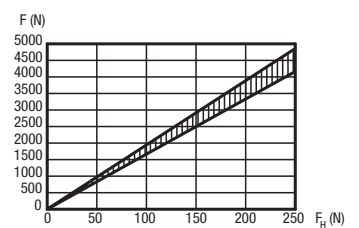
Black oxide finish

Sample order:

K0010.10



Force diagram



KIPP Single cam clamps

Order No.	L	L1	L2	L3	L4	B	B1	B2	S	H	H1 max.	H2	D	D1	D2	A	SW	Approx. weight kg
K0010.08	104±2	27	28	28	27	38	25	12	16	70	25	34	M8	25	7	14	13	0,195
K0010.10	123±2	34	36	32	35	41	32	13,5	20	80	24	40	M10	30	7	16	17	0,720
K0010.12	146±3	43	45	37	45	43	40	14,5	25	100	31	48	M12	30	7	19	19	1,215

Double cam clamps



Material:

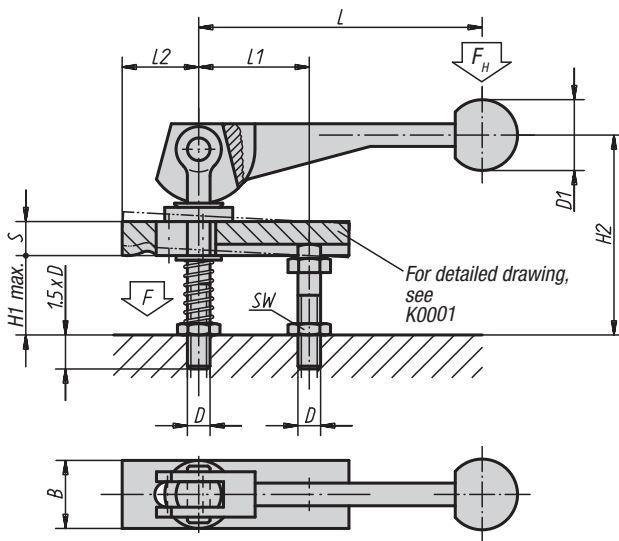
Eccentric lever tempered steel 1.7220,
strap tempered steel 1.1191

Surface finish:

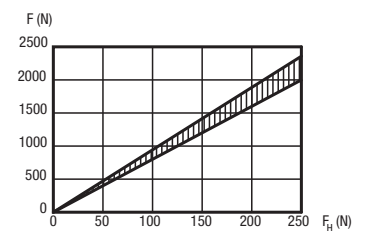
Black oxide finish

Sample order:

K0011.12



Force diagram



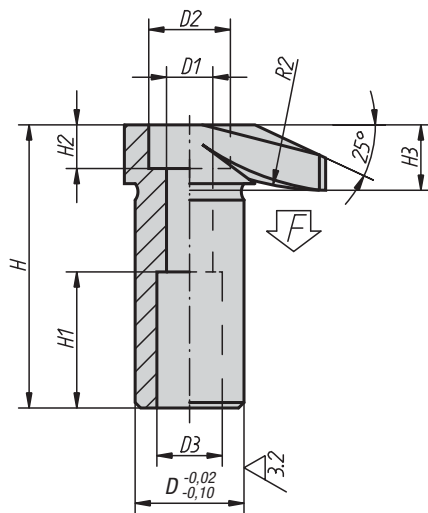
KIPP Double cam clamps

Order No.	L	L1	L2	B	S	H1 max.	H2	D	D1	SW	Approx. weight kg
K0011.08	104±2	39	37	20	12	28	74	M8	25	13	0,300
K0011.10	123±2	49	46	25	16	39	92	M10	30	17	0,600
K0011.12	146±3	61	58	32	20	49	120	M12	30	19	1,100

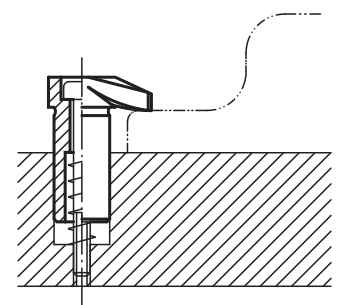
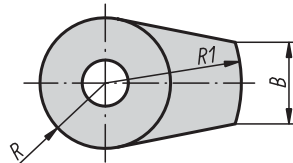
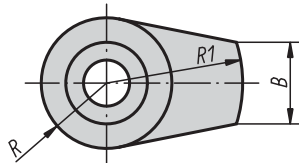
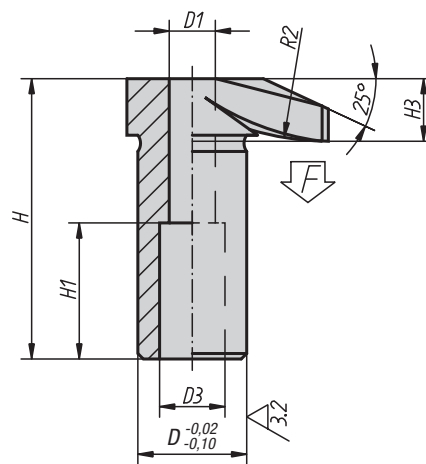
Hook clamps



Form A



Form B



Material:

Tempered steel, heat-treated

Surface finish:

Black oxide finish

Sample order:

K0012.10

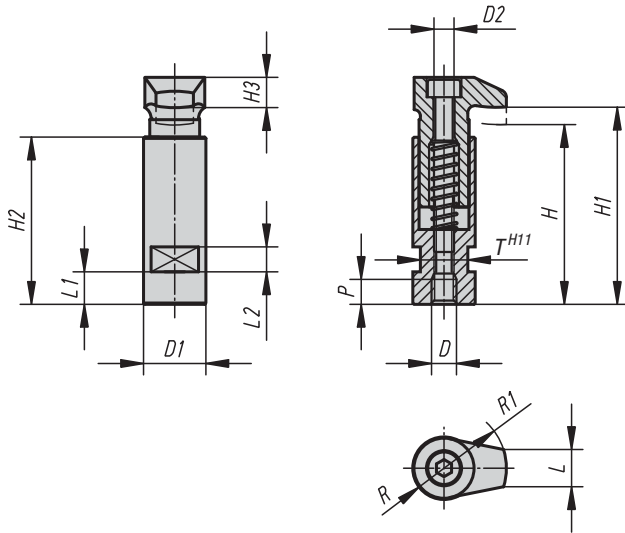
KIPP Hook clamps

Order No.	Form	D	D1	D2	D3	H	H1	H2	H3	B	R	R1	R2	F max. kN	Approx. weight kg
K0012.06	A	16	6,5	11	10	42	20	6	10	11	9	20	30	4,8	0,052
K0012.08	A	20	8,5	15	12	52	25	8	12	15	12	25	50	8,8	0,111
K0012.10	A	25	10,5	18	14	66	32	10	16	17	14	32	60	13,9	0,230
K0012.12	A	32	12,5	20	17	83	40	12	20	20	18	40	80	20,2	0,472

Order No.	Form	D	D1	D3	H	H1	H3	B	R	R1	R2	F max. kN	Approx. weight kg
K0012.106	B	16	6,5	10	41,5	20	9,5	11	9	20	30	4,8	0,060
K0012.108	B	20	8,5	12	51,5	25	11,5	15	12	25	50	8,8	0,119
K0012.110	B	25	10,5	14	65,5	32	15,5	17	14	32	60	13,9	0,238
K0012.112	B	32	12,5	17	82,5	40	19,5	20	18	40	80	20,2	0,492

Hook clamps

with collar



Material:

Tempered steel

Surface finish:

Heat-treated and black oxide finish

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

Ground hook clamps

Form A/B/C



Material:

Tempered steel, heat-treated

Surface finish:

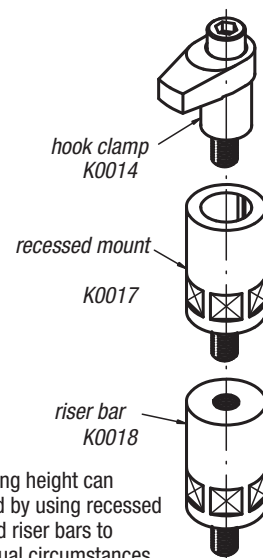
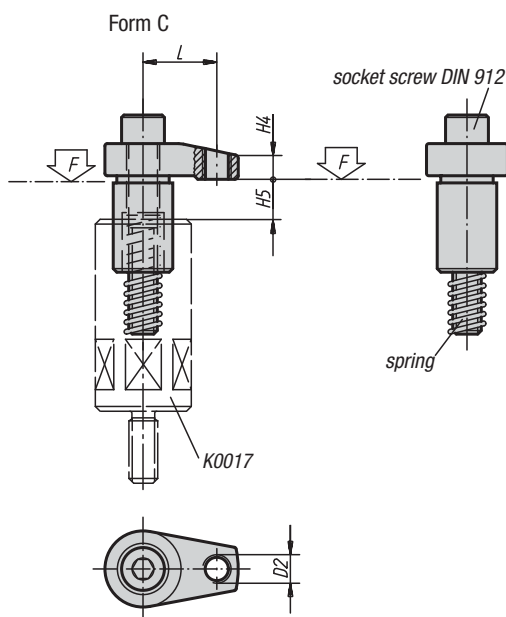
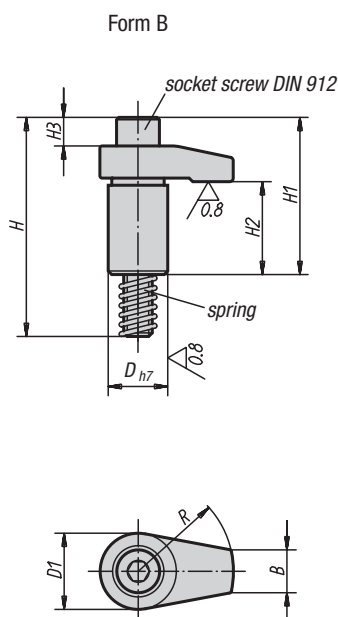
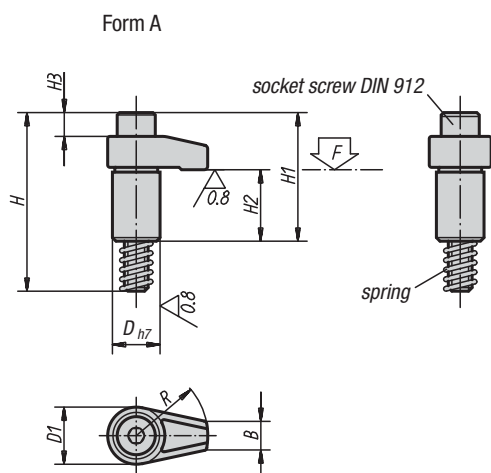
Black oxide finish, shaft diameter ground

Sample order:

K0014.216040

Note:

The stated clamping forces and tightening torques are valid within the stated clamping range (H5).



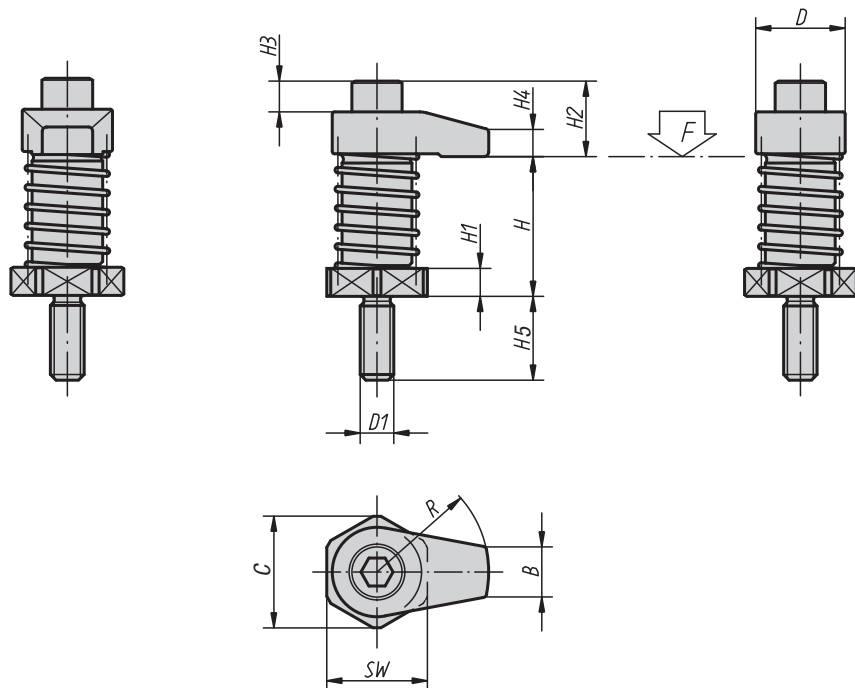
The clamping height can be adjusted by using recessed mounts and riser bars to suit individual circumstances.

KIPP Ground hook clamps 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	Approx. weight kg
K0014.110030	A	20	25	-	75	54	30	9	10	12	12	-	30	M10x65	37,2	13	0,162
K0014.110040	A	20	25	-	75	54	30	9	10	12	12	-	40	M10x65	31,4	9,8	0,173
K0014.208020	B	18	22	-	58	37	23	2	7	10	10	-	20	M8x50	37,2	13,6	0,090
K0014.208025	B	18	22	-	58	37	23	2	7	10	10	-	25	M8x50	32,3	10,9	0,095
K0014.208030	B	18	22	-	58	37	23	2	7	10	10	-	30	M8x50	29,4	9	0,105
K0014.212040	B	25	32	-	92	66	39	11	12	15	18	-	40	M12x80	58,8	17,5	0,300
K0014.212050	B	25	32	-	92	68	39	11	12	15	18	-	50	M12x80	49	14	0,365
K0014.212060	B	25	32	-	92	68	39	11	12	15	18	-	60	M12x80	45,1	11,6	0,395
K0014.216040	B	32	36	-	101	75	39	15	15	15	22	-	40	M16x85	166,6	37,9	0,505
K0014.216050	B	32	36	-	101	75	39	15	15	15	22	-	50	M16x85	147	30,4	0,575
K0014.216060	B	32	36	-	101	75	39	15	15	15	22	-	60	M16x85	127,4	25,2	0,619
K0014.312140	C	25	32	M12	92	66	39	11	10	15	18	31	40	M12x80	58,8	22,6	0,295
K0014.312150	C	25	32	M12	92	68	39	11	13	15	18	38	50	M12x80	49	18,5	0,353
K0014.312160	C	25	32	M12	92	68	39	11	13	15	18	46	60	M12x80	45,1	15,2	0,390
K0014.316150	C	32	36	M12	101	75	39	15	16	15	22	38	50	M16x85	147	38	0,558
K0014.316160	C	32	36	M12	101	75	39	15	16	15	22	46	60	M16x85	127,4	33	0,600

Hook clamps

with collar



Material:

Hook clamps and hook joints in tempered, heat-treated steel

Surface finish:

Black oxide finish

Sample order:

K0015.12060

Note:

Hook clamps with collar can be screwed directly into an M.T.P. hole or similar, even without counterbore. For suitable height adjustment elements, see Joint 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	Approx. weight kg
K0015.08020	22	M8	35 - 45	6	14	2	7	19	10	25	20	22	20	7,9	0,130
K0015.08025	22	M8	35 - 45	6	14	2	7	19	10	25	25	22	20	7,3	0,135
K0015.08030	22	M8	35 - 45	6	14	2	7	19	10	25	30	22	20	6,7	0,145
K0015.08120	22	M8	45 - 55	16	14	2	7	19	10	25	20	22	20	7,9	0,160
K0015.08125	22	M8	45 - 55	16	14	2	7	19	10	25	25	22	20	7,3	0,165
K0015.08130	22	M8	45 - 55	16	14	2	7	19	10	25	30	22	20	6,7	0,175
K0015.12040	32	M12	50 - 65	10	27	11	10	30	18	40	40	36	45	13,5	0,430
K0015.12050	32	M12	50 - 65	10	29	11	12	30	18	40	50	36	45	12,6	0,495
K0015.12060	32	M12	50 - 65	10	29	11	12	30	18	40	60	36	45	11,7	0,535
K0015.12140	32	M12	65 - 80	25	27	11	10	30	18	40	40	36	45	13,5	0,560
K0015.12150	32	M12	65 - 80	25	29	11	12	30	18	40	50	36	45	12,6	0,620
K0015.12160	32	M12	65 - 80	25	29	11	12	30	18	40	60	36	45	11,7	0,660
K0015.16040	36	M16	50 - 65	10	36	15	15	30	22	40	40	36	60	13,4	0,635
K0015.16050	36	M16	50 - 65	10	36	15	15	30	22	40	50	36	60	12,4	0,695
K0015.16060	36	M16	50 - 65	10	36	15	15	30	22	40	60	36	60	12	0,735
K0015.16140	36	M16	65 - 80	25	36	15	15	30	22	40	40	36	60	13,4	0,765
K0015.16150	36	M16	65 - 80	25	36	15	15	30	22	40	50	36	60	12,4	0,825
K0015.16160	36	M16	65 - 80	25	36	15	15	30	22	40	60	36	60	12	0,865

Hook clamps

with mounting bracket



Material:

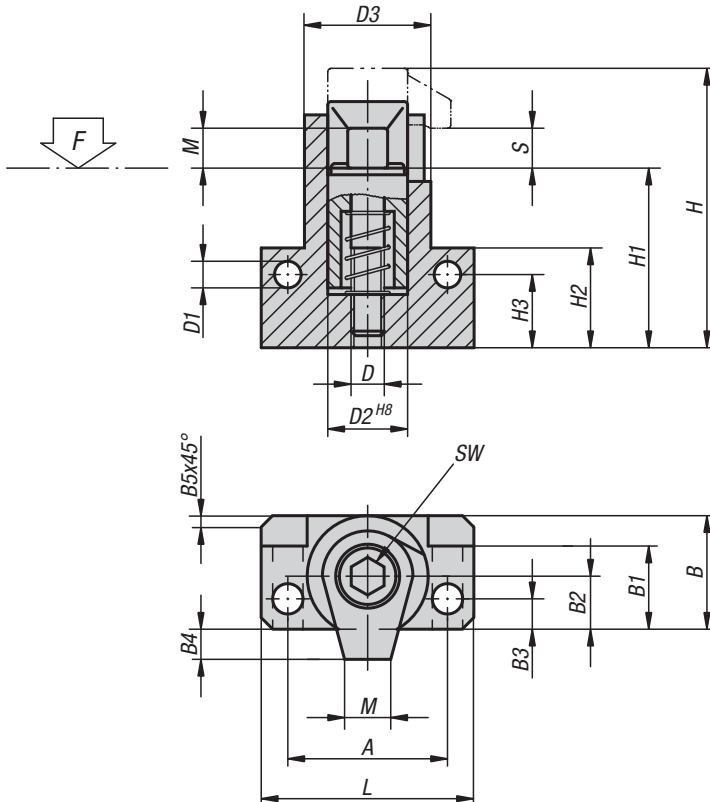
Hook clamps and clamping screw in tempered, heat-treated steel

Surface finish:

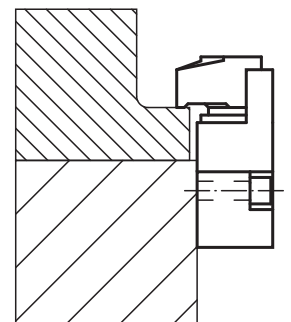
Black oxide finish

Sample order:

K0016.12



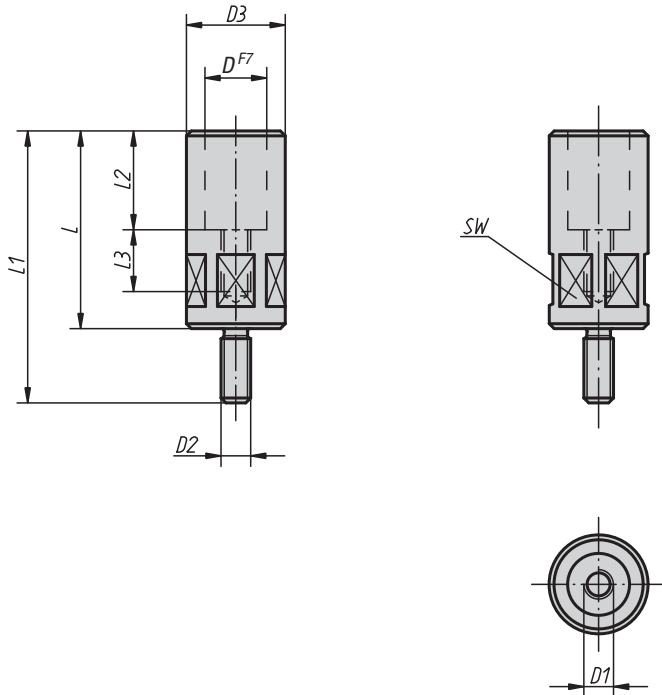
example:



KIPP Hook clamps with mounting bracket

Order No.	D	D1	D2	D3	A	B	B1	B2	B3	B4	B5	H	H1	H2	H3	L	M	S	SW	Tightening torque max. Nm	F max. kN	Approx. weight kg
K0016.08	M8	6,4	20	28	38	26	19,5	12	6	6	2,5	62	47,5	25	18	50	10	4	6	30	17	0,330
K0016.10	M10	8,4	24	34	48	31	22,5	14	7,5	9	3	74	57,5	30	21	64	12	5	8	50	18	0,555
K0016.12	M12	10,5	28	40	55	36,5	26	16,5	9	10,5	3,5	87	67	35	24	75	15	5	10	60	20	0,810
K0016.16	M16	12,8	34	48	65	43,5	31	19,5	10	16,5	4	112	87	45	32	88	20	5	14	120	24	1,590

Hook holders



Material:

Tempered steel

Surface finish:

Black oxide finish

Sample order:

K0017.12080

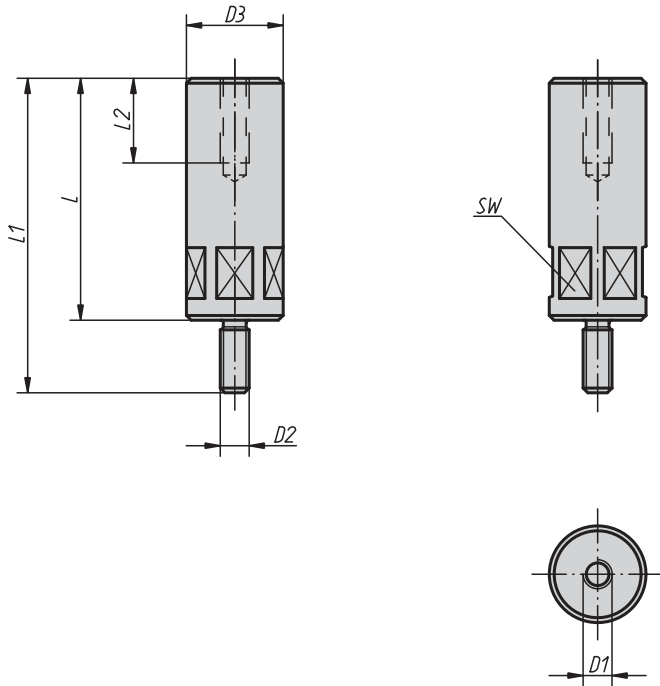
Note:

Hook holders serve to guide and raise hook clamps.

KIPP Hook holders

Order No.	D	D1	D2	D3	L	L1	L2	L3	SW	Tightening torque max. Nm	Approx. weight kg
K0017.08055	18	M8	M8	24	55	74	25	20	22	29,4	0,135
K0017.10063	20	M10	M12	32	63	93	30	21	30	39,2	0,400
K0017.10080	20	M10	M12	32	80	110	30	23	30	39,2	0,500
K0017.12080	25	M12	M12	40	80	110	40	25	36	49	1,080
K0017.12100	25	M12	M12	40	100	130	40	28	36	49	1,280
K0017.16080	32	M16	M16	50	80	110	40	25	46	78,4	1,690
K0017.16100	32	M16	M16	50	100	130	40	28	46	78,4	2,000

Joint bars



Material:

Tempered steel

Surface finish:

Black oxide finish

Sample order:

K0018.16050

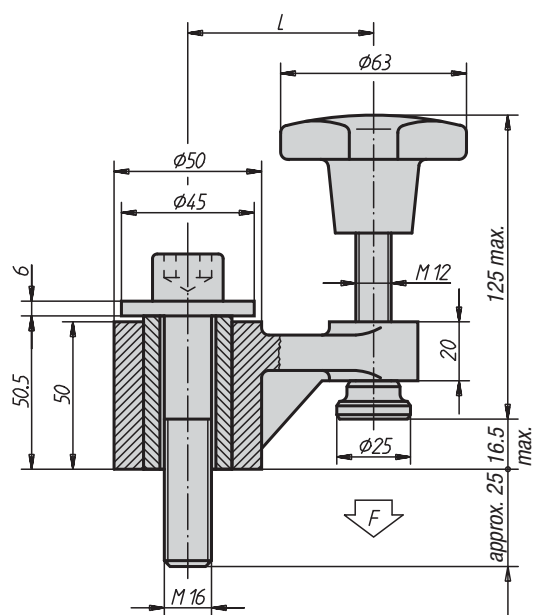
Note:

The height of the hook holders and hook clamps can be raised with joint bars.

KIPP Joint bars

Order No.	D1	D2	D3	L	L1	L2	SW	Tightening torque max. Nm	Approx. weight kg
K0018.08032	M8	M8	24	32	51	20	22	29,4	0,105
K0018.08040	M8	M8	24	40	59	20	22	29,4	0,135
K0018.08050	M8	M8	24	50	69	20	22	29,4	0,170
K0018.08065	M8	M8	24	65	84	20	22	29,4	0,225
K0018.12050	M12	M12	40	50	80	35	36	49	0,455
K0018.12065	M12	M12	40	65	95	35	36	49	0,585
K0018.12080	M12	M12	40	80	110	35	36	49	0,725
K0018.12100	M12	M12	40	100	130	35	36	49	0,950
K0018.12125	M12	M12	40	125	155	35	36	49	1,190
K0018.12160	M12	M12	40	160	190	35	36	49	1,530
K0018.12200	M12	M12	40	200	230	35	36	49	1,924
K0018.16050	M16	M16	50	50	80	35	46	78,4	0,710
K0018.16065	M16	M16	50	65	95	35	46	78,4	0,918
K0018.16080	M16	M16	50	80	110	35	46	78,4	1,140
K0018.16100	M16	M16	50	100	130	35	46	78,4	1,470
K0018.16125	M16	M16	50	125	155	35	46	78,4	1,845
K0018.16160	M16	M16	60	160	190	35	55	78,4	3,470
K0018.16200	M16	M16	60	200	230	35	55	78,4	4,345

Swing latch clamps



Material:

Malleable cast iron body,
tempered steel ring 1.1191,
tempered steel screw 1.1181,
hardened steel clamping pad 1.0301

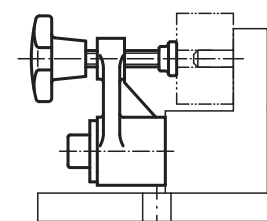
Surface finish:

Paint, clamping pad case-hardened

Sample order:

K0019.01

example:



KIPP Swing latch clamps

Order No.	L	F kN	Approx. weight kg
K0019.01	63	5	1,400
K0019.02	100	3	1,600



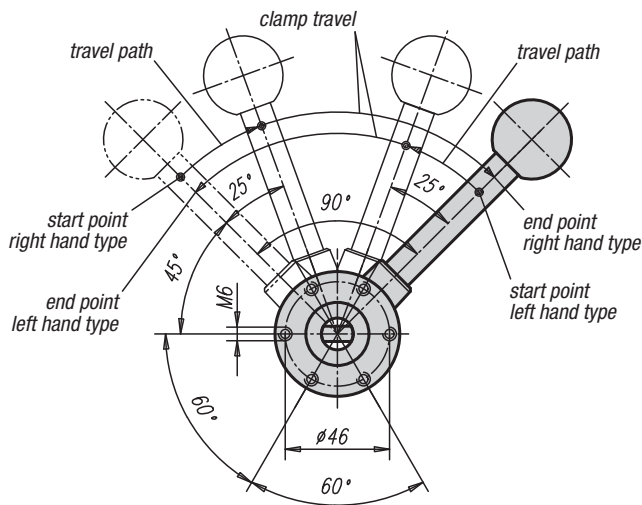
A large grid of graph paper for taking notes.



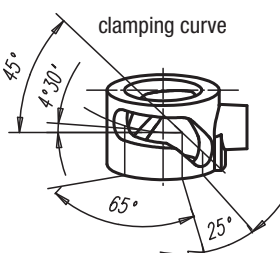
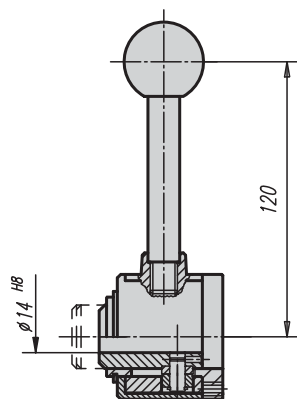
„actima“ clamping device



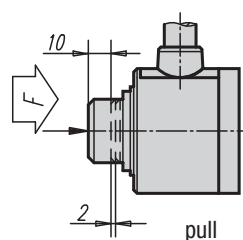
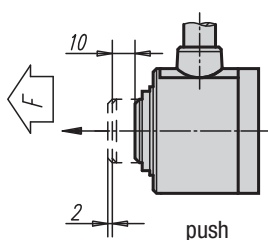
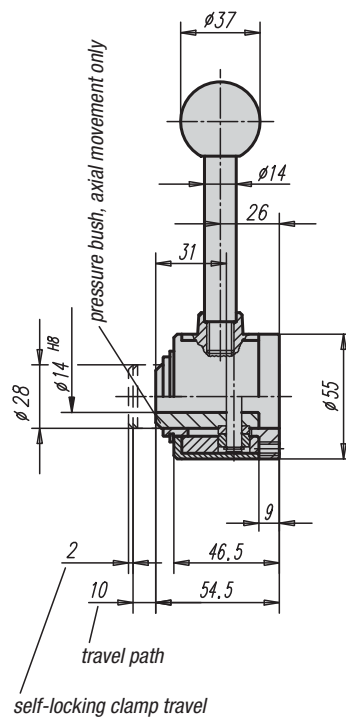
View from below



drilled through



with transverse axis in bore

**Material, surface finish:**

Steel black oxide finish;
housing in black thermoplastic;
ball knob in red duroplastic PF 31;
accessories in steel black oxide finish

Sample order:

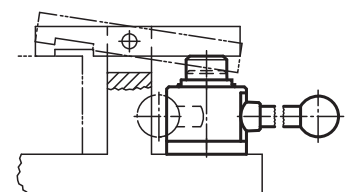
K0020.10

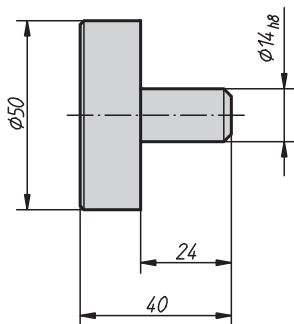
Note:

The travel path is 10 mm. Self-locking occurs in any position within only 2 mm of clamp travel. Thus workpieces with tolerances of up to 1.5 mm can be safely clamped. The „actima“ clamping device can be fitted in any horizontal or vertical position. Standard parts allow further applications. They are available as optional accessories.

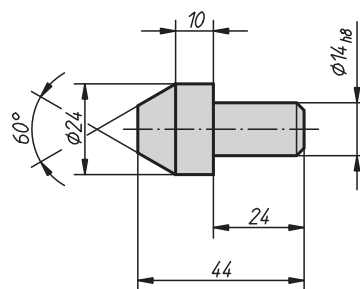
All parts of the cam system subject to heavy loads are case-hardened (pressure sleeve and accessories only if specified).

The maximum permissible clamping force is approximately 4905 N.

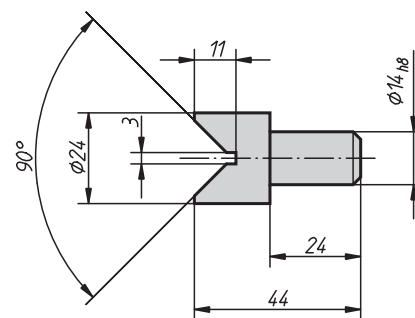




disc



taper



prism

KIPP „actima“ clamping device with transverse axis in the hole

Order No.	Surface finish	Approx. weight kg
K0020.10	right-hand / push	0,865
K0020.15	right-hand / pull	0,865
K0020.20	left-hand / push	0,865
K0020.25	left-hand / pull	0,865

KIPP „actima“ clamping device with through hole

Order No.	Surface finish	Approx. weight kg
K0020.30	right-hand / push	0,855
K0020.35	right-hand / pull	0,855
K0020.40	left-hand / push	0,855
K0020.45	left-hand / pull	0,855

KIPP „actima“ accessories

Order No.	Product	Approx. weight kg
K0020.02	disc	0,275
K0020.03	taper	0,085
K0020.04	vee-block	0,080

„arness“ clamping device



Material:

Steel, ball knob in duroplastic PF 31

Surface finish:

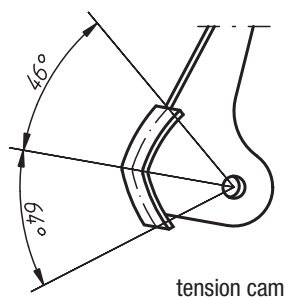
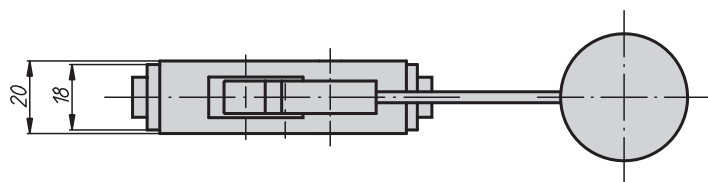
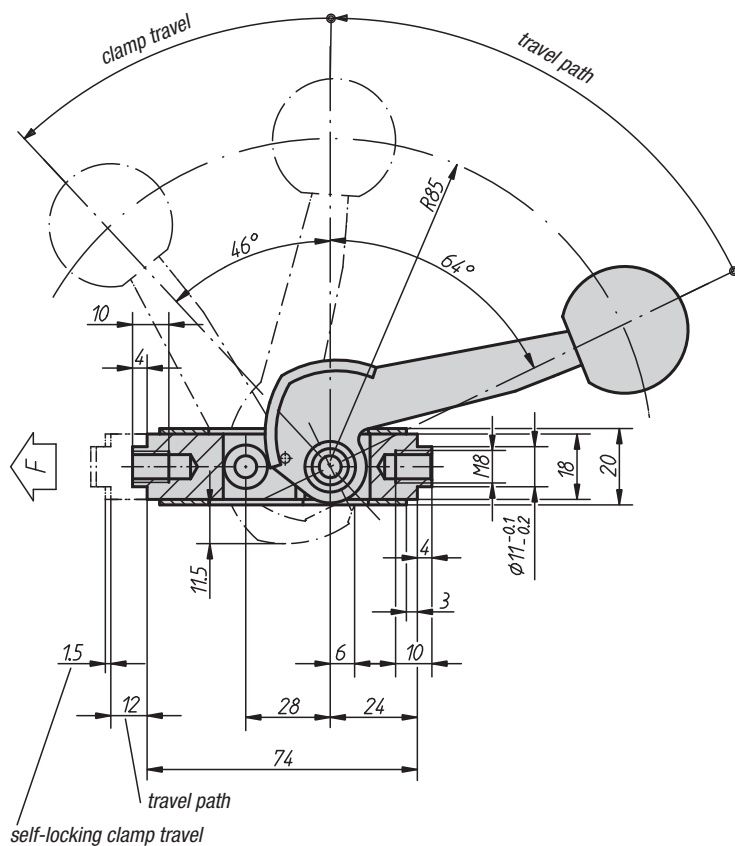
Housing in silver-grey hammertone finish, all other parts including accessories in black oxide finish, red ball knob

Sample order:

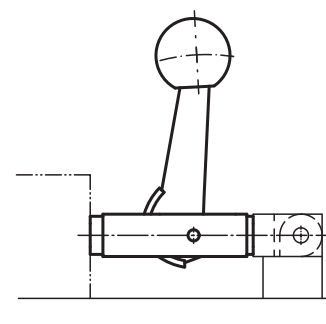
K0021.01

Note:

The travel path is 12 mm. Self-locking occurs in any position within only 1.5 mm of clamp travel. Thus workpieces with tolerances of up to 1 mm can be safely clamped. The „arness“ clamping device can be fitted in any horizontal or vertical position. In order to achieve an individual adaptation for various circumstances, several standard parts have been developed and are available as optional accessories. The pressure button and all parts of the cam system subject to heavy loads are case-hardened. The maximum permissible clamping force is approximately 4905 N.

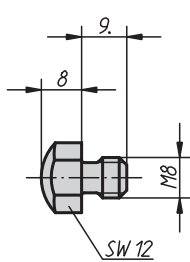


tension cam

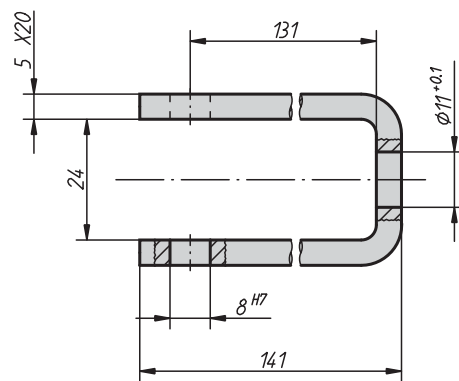


KIPP „arness“ clamping device

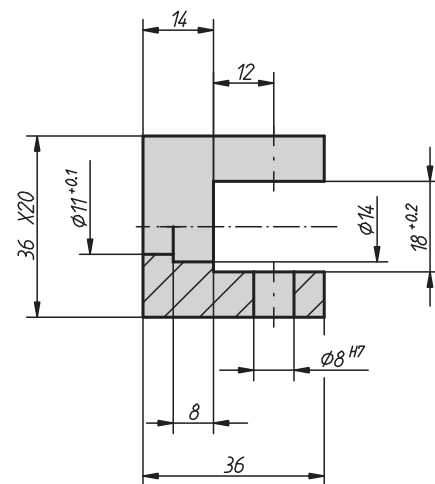
Order No.	Dimensions	Approx. weight kg
K0021.01	see drawing	0,250



thrust pad



tension bracket

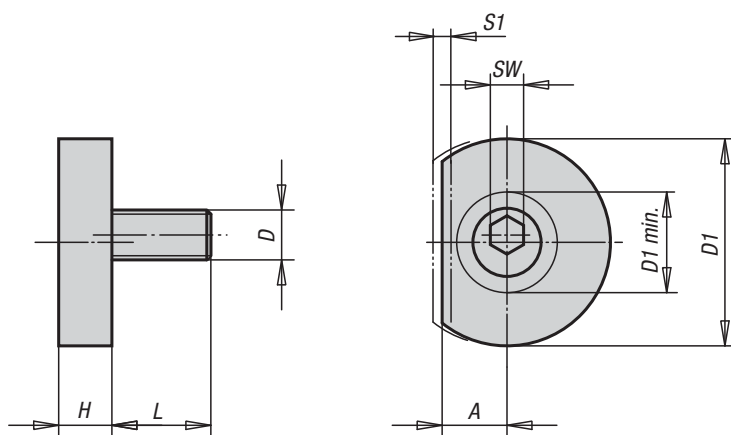


clevis

KIPP „arness“ accessories

Order No.	Product	Approx. weight kg
K0021.02	clevis	0,120
K0021.03	tension bracket	0,250
K0021.04	thrust pad	0,010

Positive clamping eccentric

**Material, surface finish:**

Hex cam hardened steel, black oxide finish;
clamping disc steel, black oxide finish

Sample order:

K0022.06

Note:

The clamping eccentric has a washer that can be milled to match the contour of the workpiece to be clamped. This results in positive clamping for round, contoured or unstable workpieces. The flattened edge has the same distance from the screw centre as the low-profile equal hexagonal cam clamp K0026, so that the disc can be exchanged if needed.

„A“ = distance from workpiece to the centre of the thread (clamping screw).

„D1 min.“ = dimension available for contour milling.

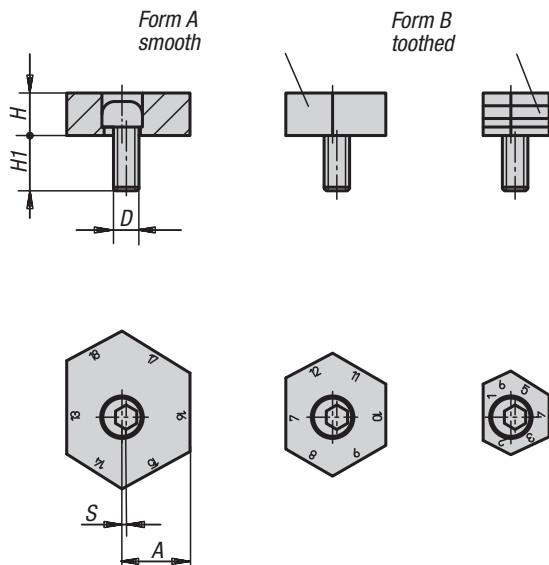
On request:

Spare eccentric screws.

KIPP Positive clamping eccentric

Order No.	A	D	D1	D1 min.	H	L	SW	S1 (Clamping travel)	Clamping force kN	Approx. weight kg
K0022.06	7,8	M6	24,9	12,1	6,4	11,9	4	1,01	3,6	0,025
K0022.10	10,2	M10	31,2	17,2	8,9	18	7	1,52	9	0,055
K0022.12	12,7	M12	37,6	22,4	11,4	22,9	8	2,03	18	0,080
K0022.16	15	M16	43,9	26,1	14	28,6	12	2,54	27	0,180

Unequal hexagonal cam clamps



Material, surface finish:

Eccentric screw heat-treated class 10.9, black oxide finish; hexagonal cam hardened steel, hardened and black oxide finish

Sample order:

K0023.13

Note:

The unequal hexagonal cam clamps are used to minimise the cost of clamping systems. The fastening range can be adjusted within a 17 mm diameter without moving the bore, simply by rotating the variable hexagonal element.

The clamps are available with flat edges for machined pieces and with notched edges for rough pieces.

On request:

Spare eccentric screws.

KIPP Unequal hexagonal cam clamps

Order No. Form A	Order No. Form B	dimension A by edge No.	D	H	H1	S (Eccentric path)	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

Spiral edge clamping screws



Material:
Hardened steel

Surface finish:
Case-hardened (56 ± 1 HRC) and blue galvanized

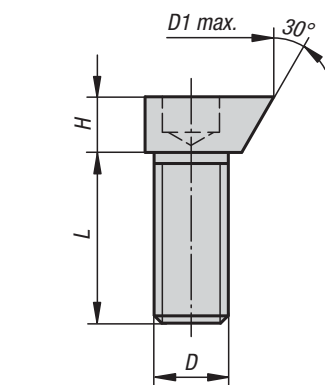
Sample order:
K0024.04012

Note:
Strong and tight spiral edge clamping screws that afford downward-pressure clamping on the most diverse types of workpieces.

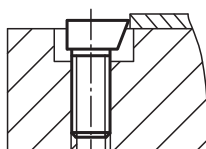
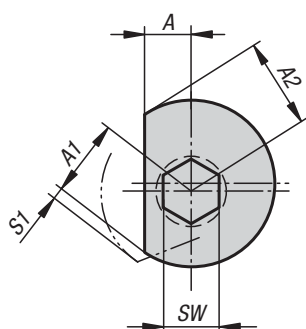
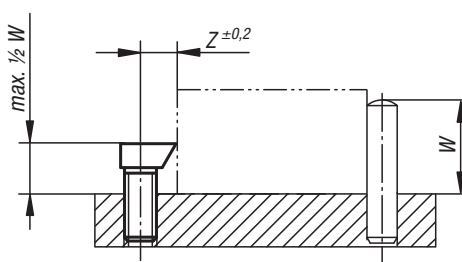
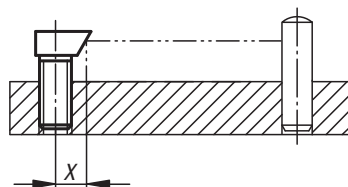
Assembly:
Make one or more thread holes in space X or Z as suggested. Screw clamping screw to the required height and place with the flat side to the workpiece. Place the workpiece and tighten clamping screw at the hexagon socket. With an approximately 1/3 turn the clamping is done. The threaded hole is to be greased regularly.

During clamping, circular motion must always be actioned in the direction of the stops in order to prevent the workpiece from turning away from the stops.

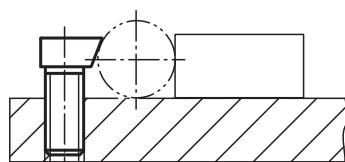
On request:
Spiral edge clamping screws with left-hand thread



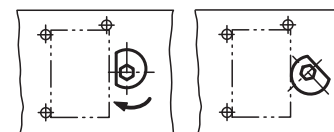
mounting dimensions



clamping sheet metal



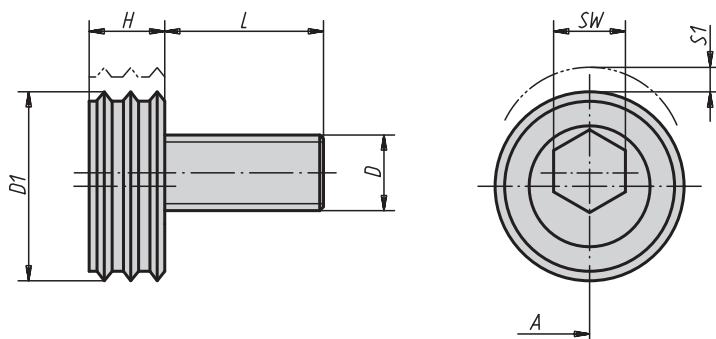
clamping round parts



KIPP Spiral edge clamping screws

Order No.	A	A1	A2	D	D1 max.	H	L	SW	S1 (Clamping travel)	X	Z	Clamping force kN	Tightening torque max. Nm	Approx. weight kg
K0024.04012	2,6	4,8	5,5	M4	11	4	12	3	0,7	4	5	0,1	2	0,002
K0024.06016	5	6,7	7,8	M6	15,6	5,5	16	5	1,1	5,9	7	0,4	6	0,006
K0024.08020	5,8	8,3	9,6	M8	19,1	6,5	20	6	1,3	7,1	8,6	3	25	0,012
K0024.10024	6,3	9,8	11,8	M10	23,7	8	24	8	2	8,5	10,3	4,5	40	0,021
K0024.12018	8,5	11,7	13,6	M12	27,3	9	18	10	1,9	10,1	12,2	6	55	0,030
K0024.12030	8,5	11,7	13,6	M12	27,3	9	30	10	1,9	10,1	12,2	5	45	0,043
K0024.16024	10,7	15,6	17,7	M16	35,4	12	24	14	2,1	13,2	16,2	10	90	0,078
K0024.16040	10,7	15,6	17,7	M16	35,4	12	40	14	2,1	13,2	16,2	7,5	70	0,085

Knife edge cam clamps


Material:

Case hardened steel notched ring,
eccentric screw treated steel

Surface finish:

Eccentric screw heat-treated quality class 10.9,
black oxide finish; hardened anodized notched ring

Sample order:

K0025.16

Note:

The notched ring is fully suitable for fastening rough
pieces (mouldings or rough forging).

„A“ = distance from workpiece to the centre of the
thread (clamping screw).

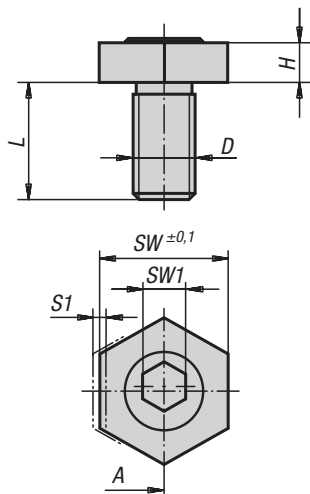
On request:

Spare eccentric screws.

KIPP Knife edge cam clamps

Order No.	A	D	D1	L	H	SW	S1 (Clamping travel)	Clamping force kN	Tightening torque max. Nm	Approx. weight kg
K0025.12	12,7	M12	25,4	22,5	9,6	8	2	17,8	88	0,045
K0025.16	15	M16	30,1	26,8	12,7	12	2,5	26,7	135	0,090

Low-profile equal hex cam clamps



Material:

Eccentric screw tempered steel,
brass hexagonal nut

Surface finish:

Eccentric screw heat-treated class 10.9,
black oxide finish

Sample order:

K0026.12

Note:

The very small height of the cam clamp makes it possible to solve a large number of problems with small pieces and nesting. The brass fastening nut offers extremely safe and stable fastening, at the same time keeping the surface protected. The simultaneous use of several cam clamps makes it possible to fit out whole pallets.

„A“ = distance from workpiece to the centre of the thread (clamping screw).

On request:

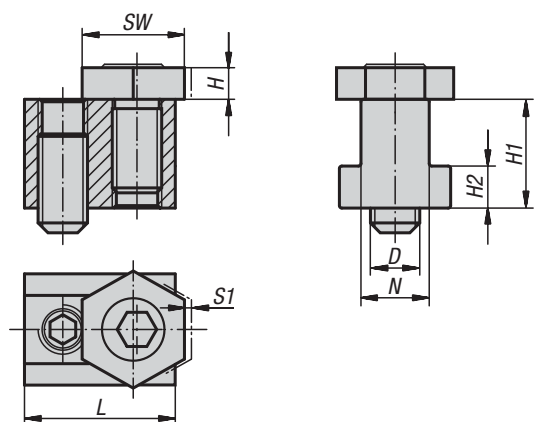
Spare eccentric screws.



KIPP Low-profile equal hex cam clamps

Order No.	A	D	H	L	SW	SW1	S1 (Clamping travel)	Clamping force kN	Tightening torque max. Nm	Approx. weight kg
K0026.04	3,8	M4	2,8	9,5	7,93	3	0,8	0,9	2,2	0,003
K0026.06	7,8	M6	4,8	11	15,86	4	1,3	3,4	8,5	0,011
K0026.08	10,2	M8	4,8	15	20,61	5	1	3,4	11,3	0,018
K0026.10	10,2	M10	6,4	19	20,61	7	1,4	8,9	28,06	0,027
K0026.12	12,7	M12	9,5	23	25,38	8	2	17,8	88	0,053
K0026.16	15	M16	12,7	27	30,13	12	2,5	27,7	135	0,103

Low-profile T-slot cam clamps



Material:

Tempered steel, brass hexagonal nut

Surface finish:

Heat-treated class 10.9, black oxide finish

Sample order:

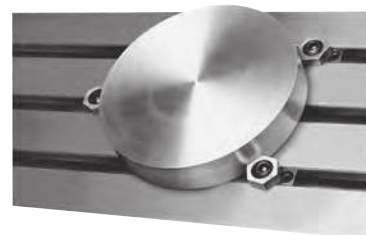
K0027.12

Note:

The low-profile T-slot cam clamps can be used directly on machine tables or tables with T-slots. The through threaded rod is used to fix the element in the T-slot. In order to avoid the formation of marks at the bottom of the T-slot, we recommend using fine support elements.

On request:

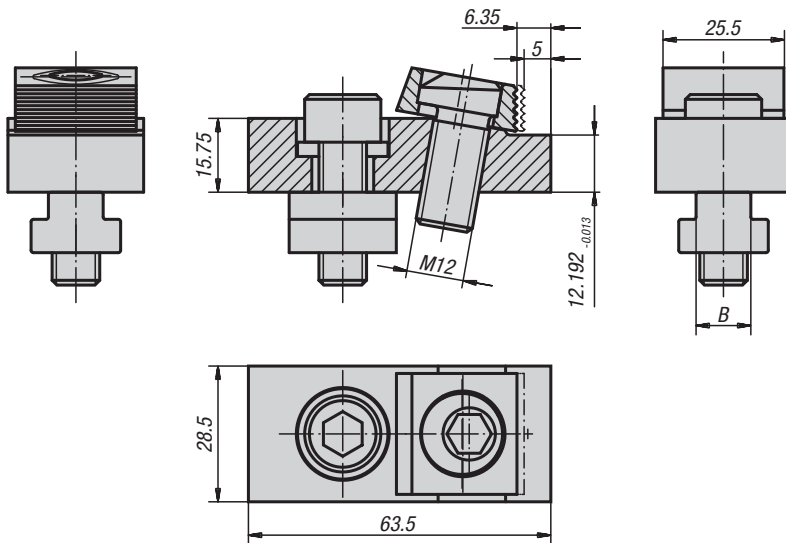
Spare eccentric screws.



KIPP Low-profile T-slot cam clamps

Order No.	D	N	H	H1	H2	L	SW	S1 (Clamping travel)	Clamping force kN	Approx. weight kg
K0027.08	M6	8	4,8	9,6	3,3	23	16	1,3	3,4	0,025
K0027.10	M6	10	4,8	14	4,5	23	16	1,3	3,4	0,035
K0027.12	M8	12	4,8	15,5	6,5	28	21	1	3,6	0,058
K0027.14	M10	14	6,4	22	8,5	30,5	21	1,6	9	0,090
K0027.16	M12	16	9,5	22,5	9	30,5	25	2	18	0,125
K0027.18	M12	18	9,5	28,5	10	34,5	25	2	18	0,192
K0027.20	M16	20	12,7	32	12	39	30	2,5	27	0,290
K0027.22	M16	22	12,7	38,2	14	44	30	2,5	27	0,395

Edge clamps with support



Material:

Steel

Surface finish:

Body heat-treated and black oxide finish, clamping disc case hardened and brass-coated

Sample order:

K0028.16

Note:

The edge clamps with support can be used directly on machine tables or on adapter plates. In addition to clamping, they offer a powerful downward pressure.

On request:

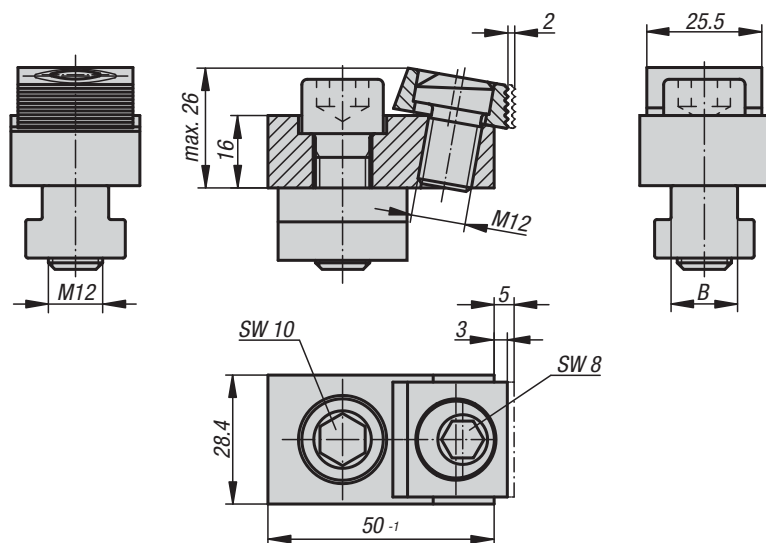
Spare eccentric screws.



KIPP Edge clamps with support

Order No.	B Slot width	Clamping force kN	Approx. weight kg
K0028.12	12	12	0,284
K0028.14	14	12	0,320
K0028.16	16	12	0,334
K0028.18	18	12	0,370

Edge clamps



Material:

Steel

Surface finish:

Body heat-treated and black oxide finish, clamping disc case hardened and brass-coated

Sample order:

K0029.14

Note:

The edge clamps can be used directly on machine tables or on adapter plates. The downward pressure keeps the workpiece immobile on the support. The clamping disc adapts to the angular position of the piece, i.e. the workpiece does not have to be orthogonal. The clamping disc has a smooth surface for machined pieces and a notched surface for rough pieces.

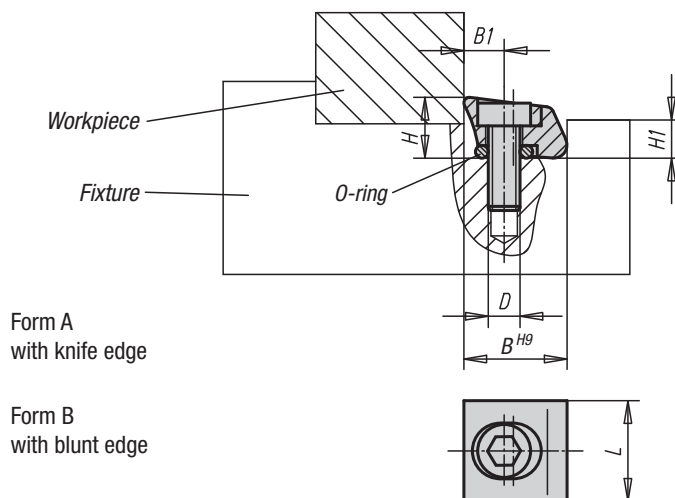
On request:

Spare eccentric screws.

KIPP Edge clamps

Order No.	B Slot width	Clamping force kN	Approx. weight kg
K0029.00	without T-nut and fastening screw	18	0,180
K0029.14	14	18	0,270
K0029.16	16	18	0,279
K0029.18	18	18	0,316

Clamps



Material:

Clamp disc in steel or brass

Surface finish:

Hardened steel

Sample order:

K0030.113

Note:

Extremely space-saving design. No interfering edges thanks to lateral tension.

Side clamping effect (downward pressure).

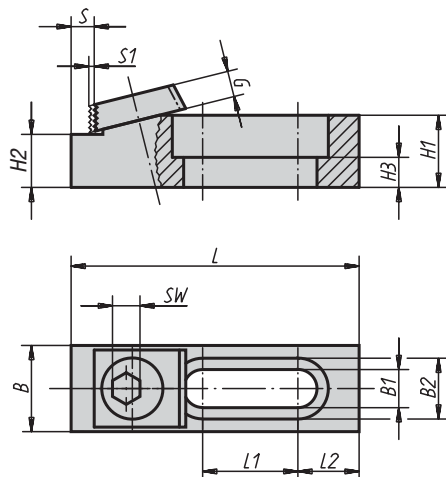
KIPP Clamps

Order No.	Form	Material	D	B	B1	H	H1	L	Clamping width	Clamping travel	Clamping force kN	Tightening torque max. Nm	Approx. weight g
K0030.110	A	steel	M2,5x8	9,5	3,8	6	3,6	9,5	9,5	0,15	2,8	1,8	4
K0030.113	A	steel	M4x12	12,7	5,1	8	4,8	13	12,7	0,4	6,6	5,6	7
K0030.119	A	steel	M6x16	19,05	7,6	11,5	7,2	19	19,1	0,6	16	22,5	15
K0030.210	B	steel	M2,5x8	9,5	3,8	6	3,6	9,5	9,5	0,15	2,8	1,8	4
K0030.213	B	steel	M4x12	12,7	5,1	8	4,8	13	12,7	0,4	6,6	5,6	7
K0030.219	B	steel	M6x16	19,05	7,6	11,5	7,2	19	19,1	0,6	16	22,5	22
K0030.310	B	brass	M2,5x8	9,5	3,8	6	3,6	9,5	9,5	0,15	0,9	0,56	6
K0030.313	B	brass	M4x12	12,7	5,1	8	4,8	13	12,7	0,4	1,8	2,8	8
K0030.319	B	brass	M6x16	19,05	7,6	11,5	7,2	19	19,1	0,6	4,2	5,6	25

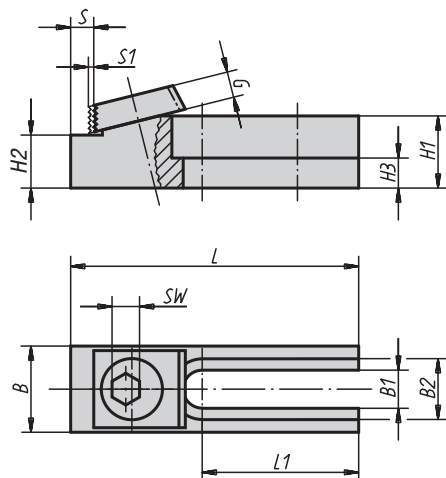
Adjustable eccentric type edge clamps



K0031.08, K0031.12



K0031.16



Material:

Steel

Surface finish:

Body heat-treated, black oxide finish, ground support surface; clamping disc case hardened and brass-coated

Sample order:

K0031.12

Note:

Two stops used with one or two adjustable eccentric type edge clamps can be used to make up a tailored cost-effective clamping system.

On request:

Spare eccentric screws.

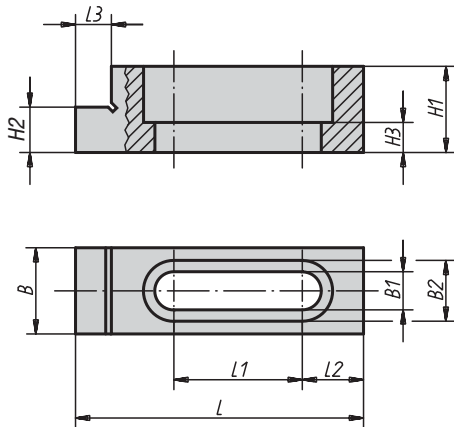
KIPP Adjustable eccentric type edge clamps

Order No.	suitable fastening screw	L	L1	L2	B	B1	B2	H1	H2	H3	S	S1	G	SW	Oblong hole	Clamping force kN	Tightening torque max. Nm	Approx. weight kg
K0031.08	M8	63,5	21	13,5	19	8,4	13,4	15,9	11,684 -0,013	6,6	6,3	1,2	5,3	7	closed	8,9	28	0,120
K0031.12	M12	95,1	42,7	12,7	28,5	13	19,8	15,9	12,192 -0,013	6,9	7,1	2	9,5	8	closed	17,8	88	0,260
K0031.16	M16	107	46,3	-	38	17	24,8	41	35,001 ±0,006	21	8,3	2,5	12,7	12	open	26,7	135	1,000

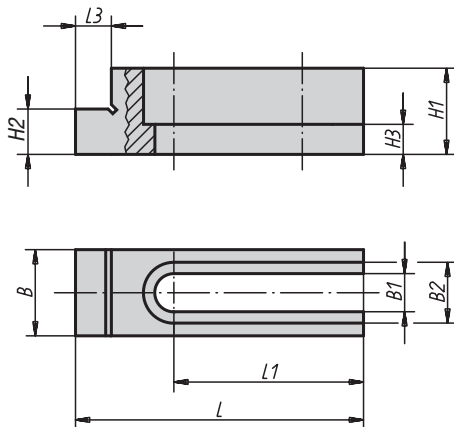
Adjustable stops



K0032.08, K0032.12



K0032.16



Material:
Steel

Surface finish:
Heat-treated, black oxide finish;
ground support surfaces and stops

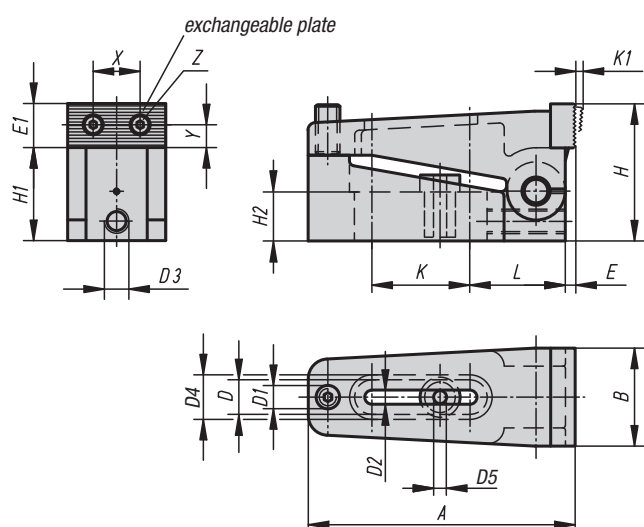
Sample order:
K0032.12

Note:
Two stops used with one or two adjustable eccentric
type edge clamps can be used to make up a tailored
cost-effective clamping system.

KIPP Adjustable stops

Order No.	suitable fastening screw	L	L1	L2	L3	B	B1	B2	H1	H2	H3	Oblong hole	Approx. weight kg
K0032.08	M8	63,5	28,3	13,5	7,9	19	8,4	13,4	19	11,684 -0,013	6,6	closed	0,090
K0032.12	M12	95,2	42,7	12,7	7,9	28,5	13,4	19,8	22	12,192 -0,013	6,9	closed	0,280
K0032.16	M16	107	46,2	-	9,5	38	17	24,8	50,7	35,001 ±0,006	21,3	open	1,000

Narrow edge clamps



Material:

Base body in steel; clamping jaw in hardened steel; centring bush with collar in tempered steel

Surface finish:

Black oxide finish; clamping jaw case-hardened

Sample order:

K0033.006

Note:

Because of their low design, narrow edge clamps are perfect for machining pieces with small heights. The hardened steel jaws exert forward and downward pressure on the workpiece at the same time.

KIPP Narrow edge 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	Approx. weight kg
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	0,240
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	0,970
K0033.016	170	58	26,2	M16	17	M10	35	17	7	27	85	60	30	60,5	7	61	32	13	M8	100	3,800

Cam-operated edge clamps adjustable

**Material:**

Steel

Surface finish:

Case-hardened with black oxide finish

Sample order:

K0034.006010

Note:

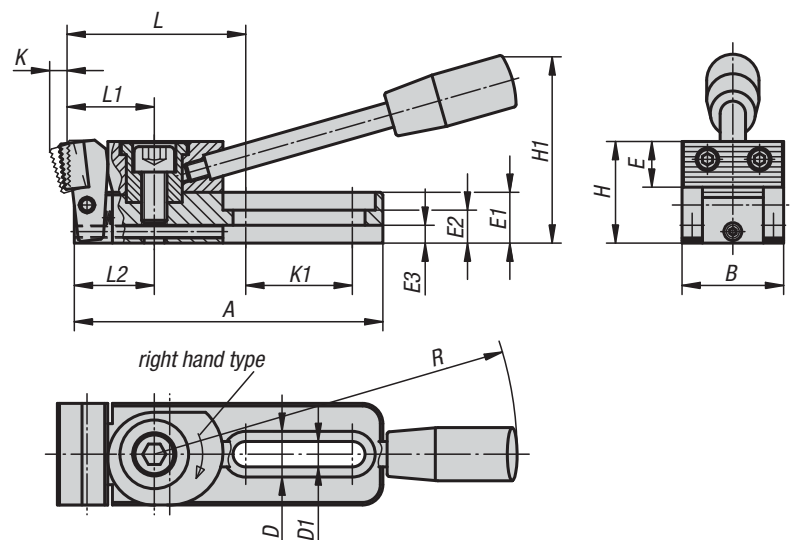
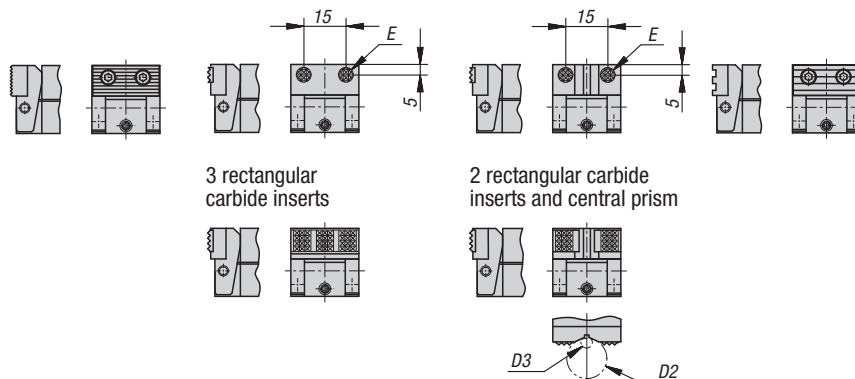
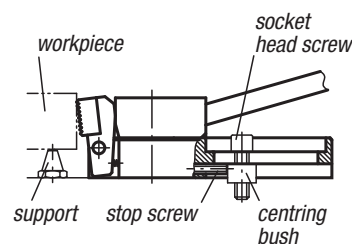
Cam type edge clamps are used for rapid clamping, to fasten the workpiece by means of a cam lever effect. The cam type edge clamp is positioned and fixed with the centring bush and stop screw (see drawing). The stop screw is used to stop the clamp from moving back after the adjustment, by transferring the clamping force directly to the centring bush.

The types K0034.006010, K0034.006015, K0034.006030 and K0034.006035 have 2 round carbide serrations.

Clamping force:

K0034.006... = 3800 N

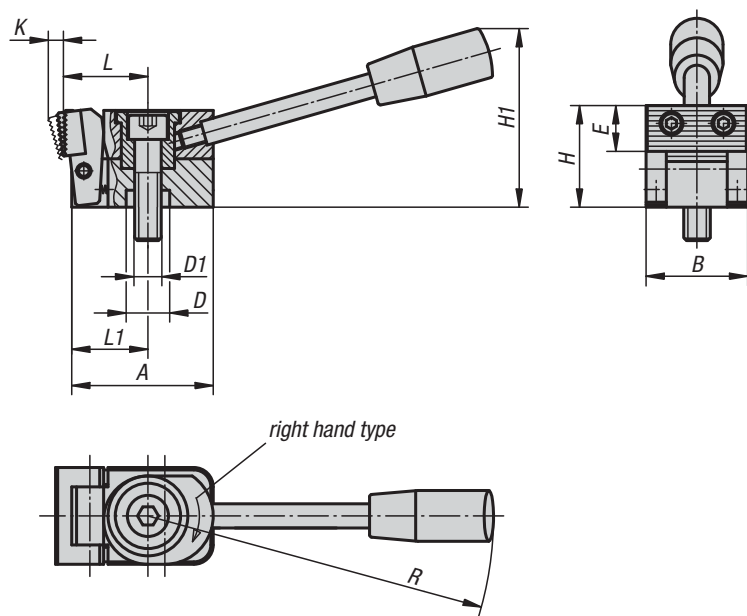
K0034.010... = 7200 N

Form A
steel jaw
serratedForm B
jaw with 2 round
carbide insertsForm C
jaw with 2 round
carbide inserts
and central prismForm D
POM jaw
serrated3 rectangular
carbide inserts2 rectangular carbide
inserts and central prism

KIPP Cam-operated edge clamps adjustable

Order No.	Form	Surface finish	A	B	D	D1	D2 max.	D3 min.	E	E1	E2	E3	H	H1	K	K1	L	L1	L2	R	Clamping force kN	Approx. weight kg
K0034.006005	A	right-hand type	78	25	12	6,2	-	-	11	12	8	4	25	45	4	26	46,5	22	20	110	3,8	0,230
K0034.010005	A	right-hand type	121,5	40	18	10,2	-	-	18	20	13	7	40	74	6	42	71	35	31,5	143	7,2	0,900
K0034.006025	A	left-hand type	78	25	12	6,2	-	-	11	12	8	4	25	45	4	26	46,5	22	20	110	3,8	0,230
K0034.010025	A	left-hand type	121,5	40	18	10,2	-	-	18	20	13	7	40	74	6	42	71	35	31,5	143	7,2	0,900
K0034.006010	B	right-hand type	78	25	12	6,2	-	-	11	12	8	4	24	45	3,5	26	46,5	22	20	110	3,8	0,230
K0034.010010	B	right-hand type	121,5	40	18	10,2	-	-	12,7	20	13	7	39	74	5,5	42	73	35	31,5	143	7,2	0,900
K0034.006030	B	left-hand type	78	25	12	6,2	-	-	11	12	8	4	24	45	3,5	26	46,5	22	20	110	3,8	0,230
K0034.010030	B	left-hand type	121,5	40	18	10,2	-	-	12,7	20	13	7	39	74	5,5	42	73	35	31,5	143	7,2	0,900
K0034.006015	C	right-hand type	78	25	12	6,2	9,5	2,5	11	12	8	4	24	45	3,5	26	46,5	22	20	110	3,8	0,230
K0034.010015	C	right-hand type	121,5	40	18	10,2	27	4,5	12,7	20	13	7	39	74	5,5	42	73	35	31,5	143	7,2	0,900
K0034.006035	C	left-hand type	78	25	12	6,2	9,5	2,5	11	12	8	4	24	45	3,5	26	46,5	22	20	110	3,8	0,230
K0034.010035	C	left-hand type	121,5	40	18	10,2	27	4,5	12,7	20	13	7	39	74	5,5	42	73	35	31,5	143	7,2	0,900
K0034.006020	D	right-hand type	78	25	12	6,2	-	-	11	12	8	4	25	45	4,5	26	46,5	22	20	110	3,8	0,230
K0034.010020	D	right-hand type	121,5	40	18	10,2	-	-	18	20	13	7	40	74	7	42	70,5	35	31,5	143	7,2	0,900
K0034.006040	D	left-hand type	78	25	12	6,2	-	-	11	12	8	4	25	45	4,5	26	46,5	22	20	110	3,8	0,230
K0034.010040	D	left-hand type	121,5	40	18	10,2	-	-	18	20	13	7	40	74	7	42	70,5	35	31,5	143	7,2	0,900

Cam-operated edge clamps



Material:
Steel

Surface finish:
Case-hardened with black oxide finish

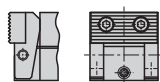
Sample order:
K0035.006005

Note:
Cam type edge clamps are used for rapid clamping, to fasten the workpiece by means of a cam lever effect. The cam type edge clamp is positioned and fixed with the centring bush (see drawing).

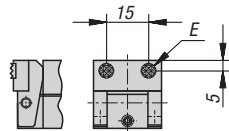
The types K0035.006010, K0035.006015, K0035.006030 and K0035.006035 have 2 round carbide serrations.

Clamping force:
K0035.006... = 3800 N
K0035.010... = 7200 N

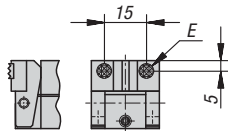
Form A
steel jaw
serrated



Form B
jaw with 2 round
carbide inserts



Form C
jaw with 2 round
carbide inserts
and central prism



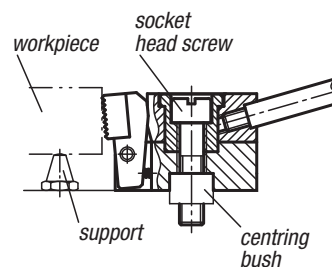
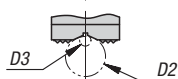
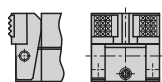
Form D
POM jaw
serrated



3 rectangular
carbide inserts



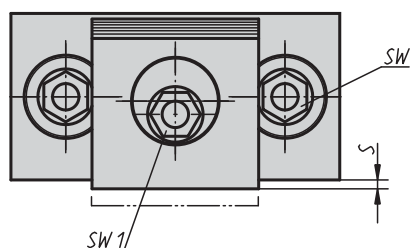
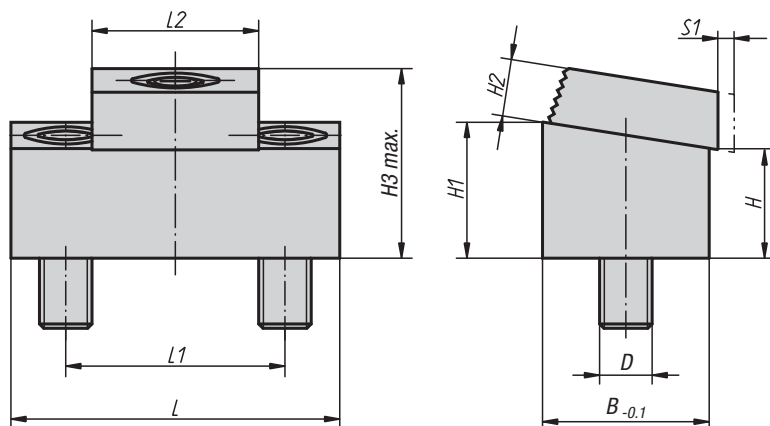
2 rectangular carbide
inserts and central prism



KIPP Cam-operated edge clamps

Order No.	Form	Surface finish	A	B	D	D1	D2 max.	D3 min.	E	H	H1	K	L	L1	R	Clamping force kN	Approx. weight kg
K0035.006005	A	right-hand type	38,5	25	12	M6	-	-	11	25	45	4	22	20	110	3,8	0,175
K0035.010005	A	right-hand type	58,5	40	18	M10	-	-	18	40	74	6	35	31,5	143	7,2	0,650
K0035.006025	A	left-hand type	38,5	25	12	M6	-	-	11	25	45	4	22	20	110	3,8	0,175
K0035.010025	A	left-hand type	58,5	40	18	M10	-	-	18	40	74	6	35	31,5	143	7,2	0,650
K0035.006010	B	right-hand type	38,5	25	12	M6	-	-	∅ 8	24	45	3,5	22	20	110	3,8	0,175
K0035.010010	B	right-hand type	58,5	40	18	M10	-	-	12,7	39	74	5,5	37	31,5	143	7,2	0,650
K0035.006030	B	left-hand type	38,5	25	12	M6	-	-	∅ 8	24	45	3,5	22	20	110	3,8	0,175
K0035.010030	B	left-hand type	58,5	40	18	M10	-	-	12,7	39	74	5,5	37	31,5	143	7,2	0,650
K0035.006015	C	right-hand type	38,5	25	12	M6	9,5	2,5	∅ 8	24	45	3,5	22	20	110	3,8	0,175
K0035.010015	C	right-hand type	58,5	40	18	M10	27	4,5	12,7	39	74	5,5	37	31,5	143	7,2	0,650
K0035.006035	C	left-hand type	38,5	25	12	M6	9,5	2,5	∅ 8	24	45	3,5	22	20	110	3,8	0,175
K0035.010035	C	left-hand type	58,5	40	18	M10	27	4,5	12,7	39	74	5,5	37	31,5	143	7,2	0,650
K0035.006020	D	right-hand type	38,5	25	12	M6	-	-	11	25	45	4,5	22	20	110	3,8	0,175
K0035.010020	D	right-hand type	58,5	40	18	M10	-	-	18	40	74	7	34,5	31,5	143	7,2	0,650
K0035.006040	D	left-hand type	38,5	25	12	M6	-	-	11	25	45	4,5	22	20	110	3,8	0,175
K0035.010040	D	left-hand type	58,5	40	18	M10	-	-	18	40	74	7	34,5	31,5	143	7,2	0,650

Sliding edge clamps



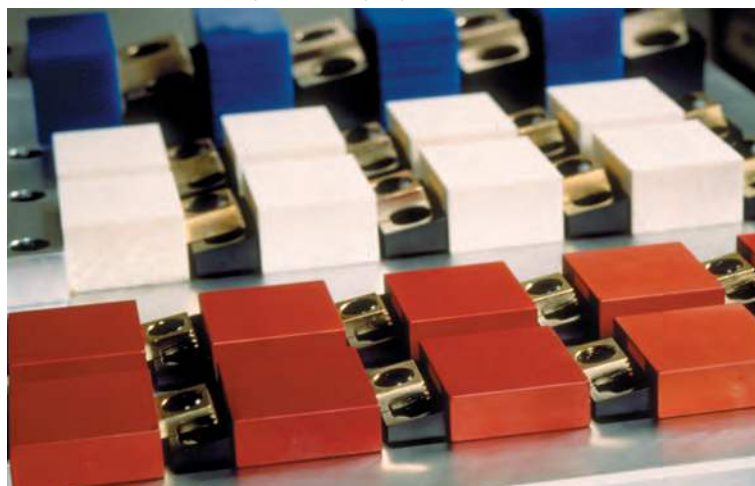
Material:
Steel

Surface finish:
Body heat-treated and black oxide finish, clamping disc case-hardened and brass-coated

Sample order:
K0036.10

Note:
Sliding edge clamps allow space-saving and economical clamping of multiple workpieces. When clamping multiple workpieces the rear side of the body can be used as a stop. Mounting preferably in slots with $B + 0.05$ mm. The contact height of the clamping disc can be varied with the depth of the slot.

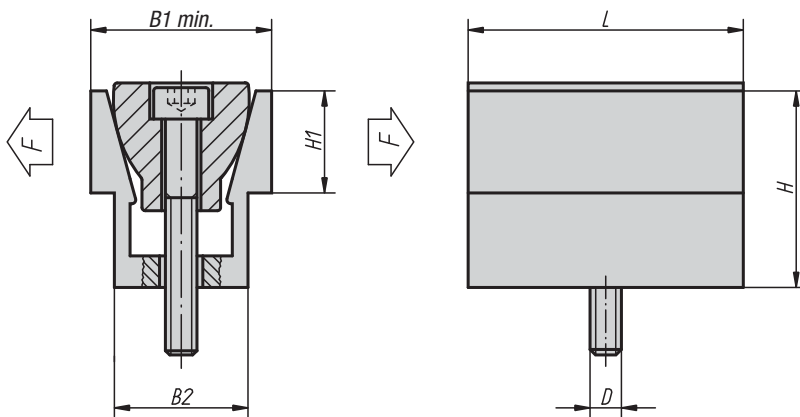
Example for multiple clampings with sliding edge clamps



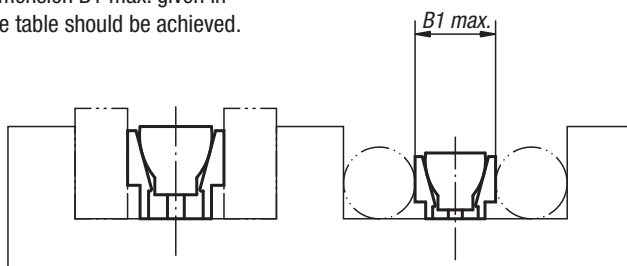
KIPP Sliding edge clamps

Order No.	L	L1	L2	B	H	H1	H2	H3 max.	S	D	S1 (Clamping travel)	SW	SW1	Clamping force kN	Tightening torque max. Nm	Approx. weight kg
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	0,100
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	0,178
K0036.12	75	50,8	38	38,1	25,5	31,5	13	43	2,05	M12	2,5	10	12	26,7	135	0,720

Double edge clamps



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



Material:

Exterior part in aluminium profile,
taper in hardened steel

Surface finish:

Exterior part anodized, taper black oxide finish

Sample order:

K0037.08

Note:

A double edge clamp clamps two workpieces simultaneously. It is perfectly suited to clamp both round and rectangular pieces. Due to its compact construction, space-saving multiple clamping is possible.

KIPP Double edge clamps

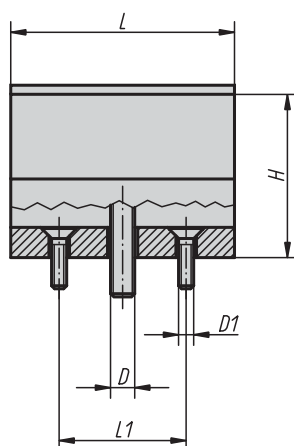
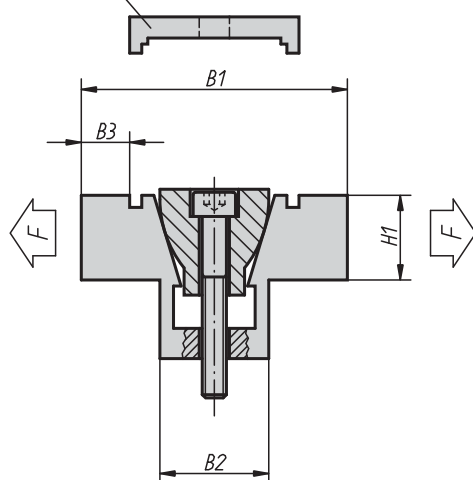
Order No.	D	L	B1 min. - max.	B2	H	H1	F kN	Tightening torque max. Nm	Approx. weight kg
K0037.04	M4	15,9	12,3 - 13,1	10,4	12,8	5,6	2,2	3,4	0,012
K0037.06	M6	23,5	18,6 - 19,9	15,8	19	9,5	6,7	14,3	0,040
K0037.08	M8	32	24,8 - 26,6	20,8	25,4	12,7	8,9	14,5	0,090
K0037.12	M12	47,6	37,3 - 39,7	31,1	38,2	19	15,6	38,4	0,300
K0037.16	M16	63,5	49,7 - 52,8	41,5	50,8	25,4	26,7	74,6	0,710

Double edge clamps

with machining allowance



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



Material:

Exterior part in aluminium profile, taper in hardened steel

Surface finish:

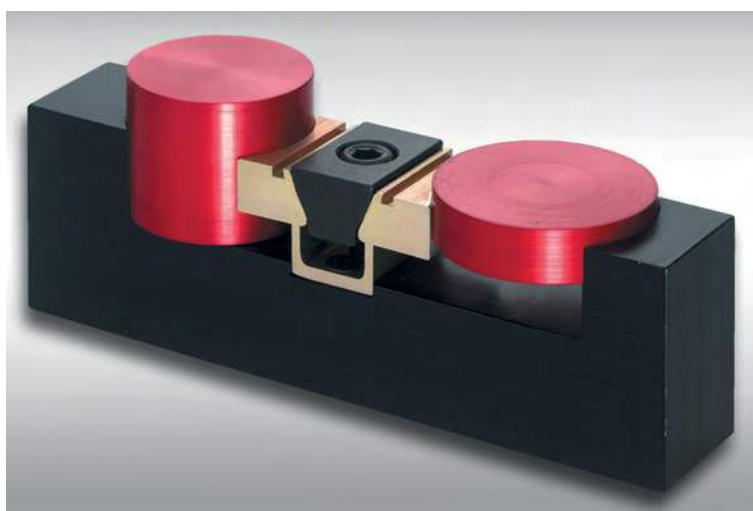
Exterior part anodized, taper black oxide finish

Sample order:

K0038.08

Note:

A double edge clamp clamps two workpieces simultaneously. By means of appropriate countersinking workpieces can be clamped with form-fit and thus absolutely safely and free of torsion. Due to its compact construction, space-saving multiple clamping is possible.



KIPP Double edge clamps with machining allowance

Order No.	D	D1	L	L1	B1 min. - max.	B2	B3	H	H1	F kN	Tightening torque max. Nm	Approx. weight kg
K0038.04	M4	M2	15,9	10,2	28,6 - 29,1	10,6	4,6	12,7	6,3	2,2	3,4	0,018
K0038.06	M6	M4	23,9	15,9	38,1 - 39	16,1	6,6	19	9,5	6,7	14,3	0,056
K0038.08	M8	M4	31,8	20,6	50,8 - 52	20,8	9,4	25,4	12,7	8,9	14,5	0,123
K0038.12	M12	M5	47,6	30,5	76,2 - 78	30,9	14,8	38,1	19	15,6	38,4	0,420
K0038.16	M16	M6	63,5	40	101,6 - 103,9	41,3	20,3	50,8	25,4	26,7	74,6	1,008

Taper clamps

clamping surface smooth or serrated



Material, surface finish:

Double edge and clamping segments tempered steel, hardened and black

Sample order:

K0039.2208

Note:

Their compact design makes the taper clamps especially suitable for multiple clamping. The hardened and ground taper surfaces make high clamping forces possible.

The appropriate taper clamps can be mounted either in a M.T.P. hole or a T-slot. Inserting a socket head screw moves the two clamping segments outwards and presses the workpieces against the fixed stop of the machining device.

Via the incorporated longhole the taper clamps can be displaced or balance tolerances.

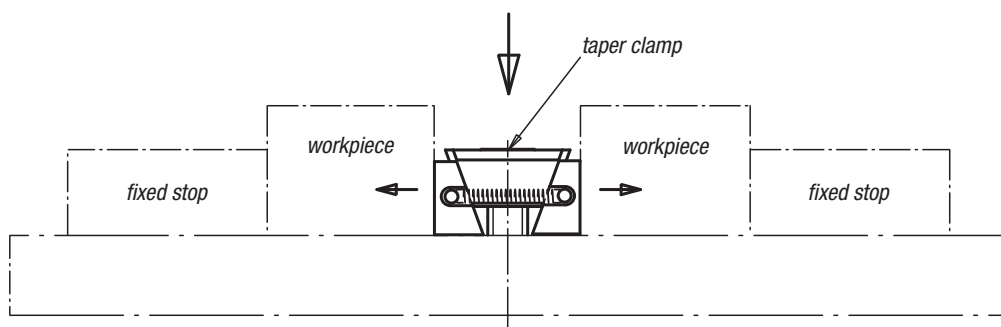
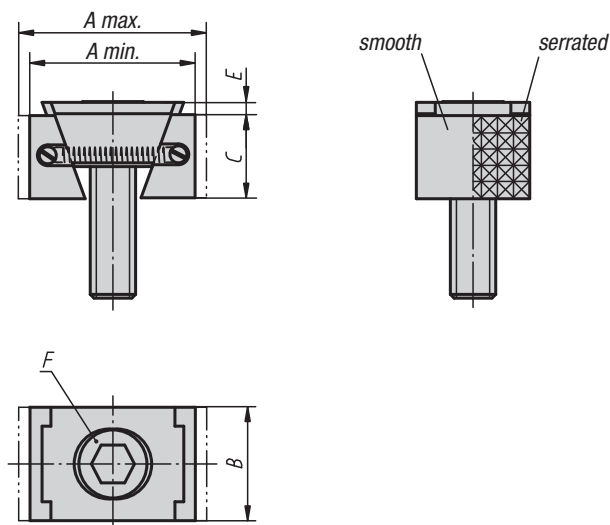
Travel path according:

M8 = ±0.5 mm

M10 = ±1.0 mm

M12 = ±1.0 mm

M16 = ±1.5 mm



KIPP Taper clamps, narrow type

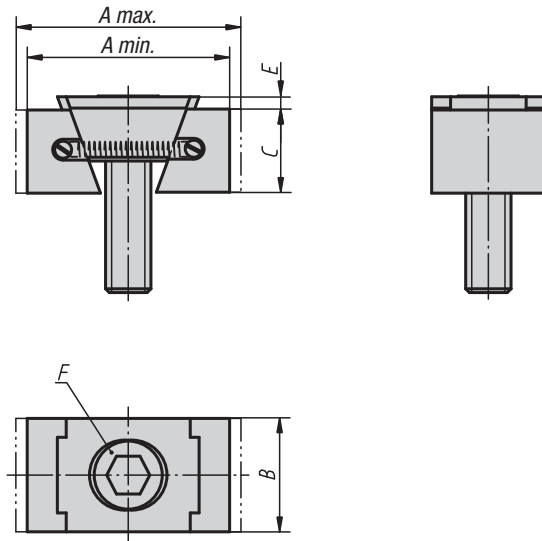
Order No. clamping surface smooth	Order No. clamping surface serrated	A min.	A max.	B	C	E	F Socket head screw DIN 6912	Clamping force kN	Tightening torque Nm
K0039.1108	K0039.2108	30,5	33,5	24	15	2	M8x25	15	25
K0039.1110	K0039.2110	32	37	28	19	3,5	M10x25	20	49
K0039.1112	K0039.2112	44	49,5	30	22	3,5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

KIPP Taper clamps, wide type

Order No. clamping surface smooth	Order No. clamping surface 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

Taper clamps

with machining allowance



Material, surface finish:

Double edge and clamping segments tempered steel, heat-treated and black

Sample order:

K0649.3110

Note:

The special feature of the taper clamps is the added length. This extra length allows forms adjusted to the workpiece geometry to be incorporated. Their compact design makes the taper clamps especially suitable for multiple clamping. The hardened and ground taper surfaces make high clamping forces possible.

The appropriate taper clamps can be mounted either in a M.T.P. hole or a T-slot. Inserting a socket head screw moves the two clamping segments outwards and presses the workpieces against the fixed stop of the machining device.

Via the incorporated longhole the taper clamps can be displaced or balance tolerances.

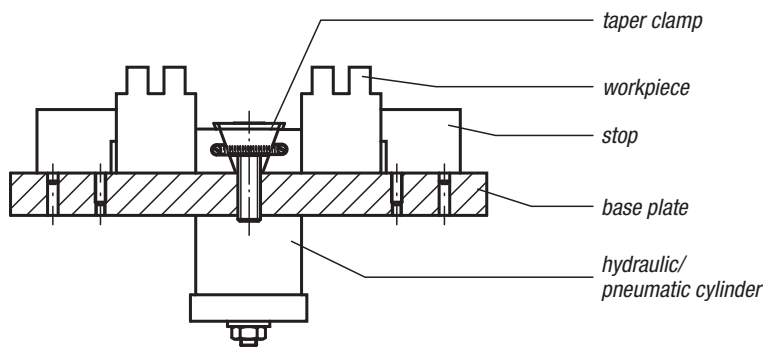
Travel path according:

M8 = ±0.5 mm

M10 = ±1.0 mm

M12 = ±1.0 mm

M16 = ±1.5 mm



KIPP Taper clamps with machining allowance

Order No.	Surface finish	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

Taper clamping units

Form A



Material, surface finish:

Body in hardened tool steel, clamping segments in hardened tool steel (49-51 HRC) with black oxide finish, taper surfaces ground

Sample order:

K0040.1618

Note:

Because of their compact design, the taper clamping units are especially suitable for horizontal and vertical multiple clamping. The hardened and ground taper surfaces make high clamping forces possible. The appropriate taper clamping units can be mounted either in a M.T.P. hole or a T-slot. Inserting a socket head screw to DIN 912 moves the two clamping segments outwards and presses the workpieces against a fixed stop.

The clamping jaws with Order No. K0040.08 are not serrated.

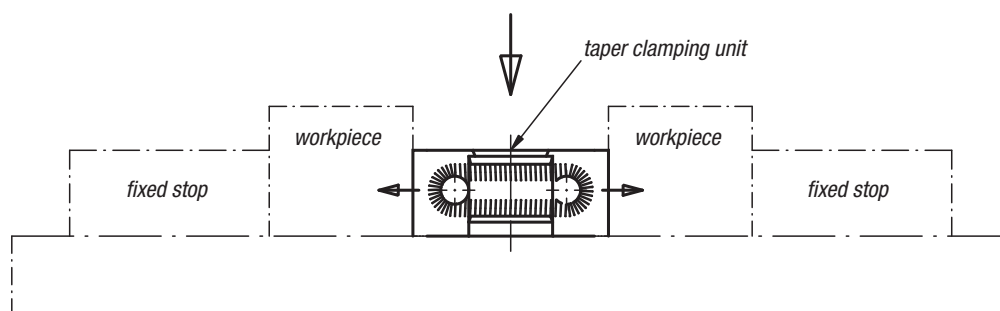
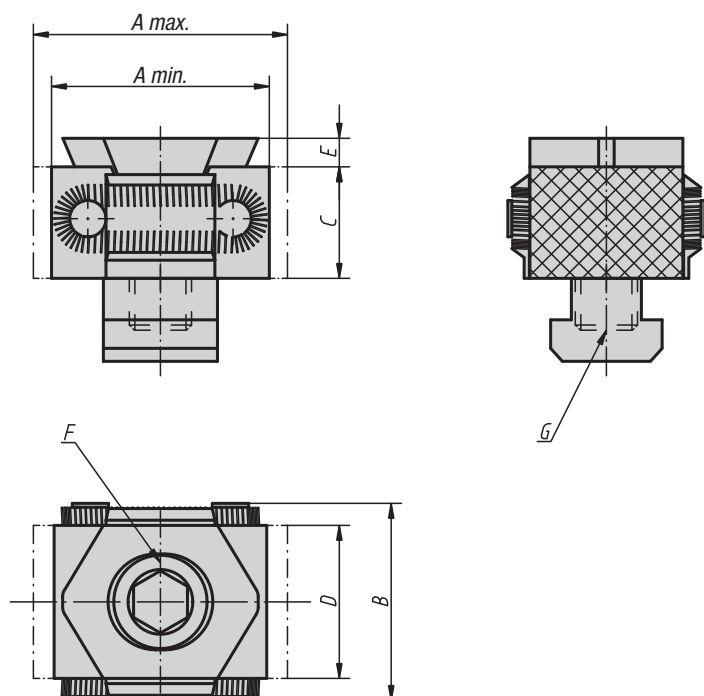
Via the incorporated longhole the taper clamping unit can be displaced.

Travel path according to Order No.:

K0040.08 = ± 0.5 mm

K0040.12 = ± 1.0 mm

K0040.16 = ± 1.5 mm

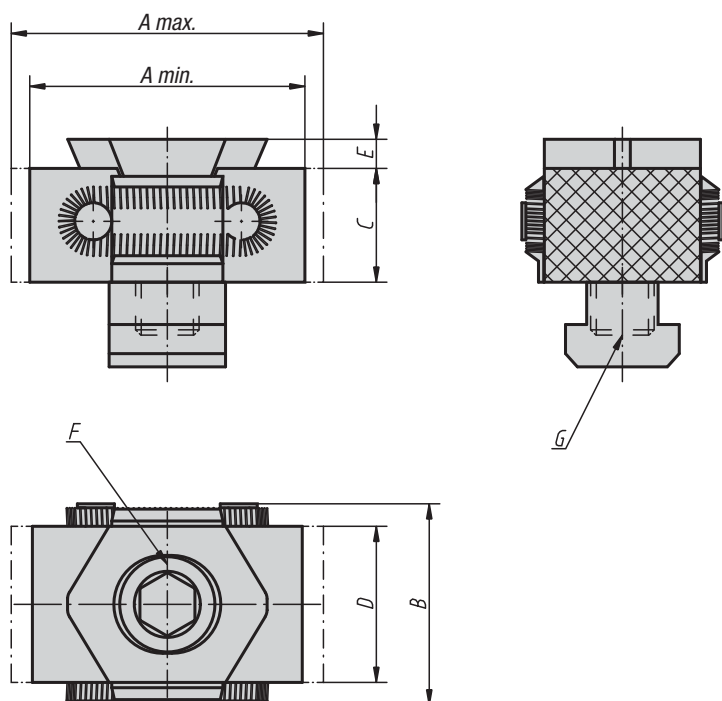


KIPP Taper clamping units Form A

Order No.	A min.	A max.	B	C	D	E	F Socket head screw DIN 912	G	Clamping force kN	Tightening torque Nm	Approx. weight kg
K0040.08	27	31	29	15	21	2,5	M8x25	for threaded hole	15	25	0,068
K0040.0810	27	31	29	15	21	2,5	M8x25	for T-slot 10	15	25	0,080
K0040.12	42	49	41	22	30	4	M12x40	for threaded hole	30	85	0,224
K0040.1214	42	49	41	22	30	4	M12x30	for T-slot 14	30	85	0,251
K0040.16	57	66	56	29	42	5	M16x60	for threaded hole	50	210	0,583
K0040.1618	57	66	56	29	42	5	M16x50	for T-slot 18	50	210	0,638

Taper clamping units

Form A and L with extra length for customer specific forms



Material, surface finish:

Body in hardened tool steel, clamping segments in tool steel (30 HRC) with black oxide finish, taper surfaces ground; specially designed clamping ends to suit your application or other hardness values available on request

Sample order:

K0041.12

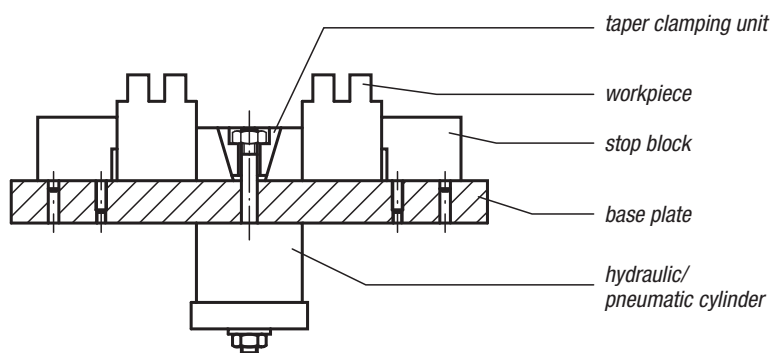
Note:

The special feature of the taper clamping units „Form A+L“ is in the added length of 3 mm per clamping jaw for version K0041.08 and 5 mm for versions K0041.12 and K0041.16. This extra length allows forms adjusted to the workpiece geometry to be incorporated (see illustration). **The clamping jaws with Order No. K0041.08 are not serrated.** Travel path according to Order No.:

K0041.08 = ± 0.5 mm

K0041.12 = ± 1.0 mm

K0041.16 = ± 1.5 mm

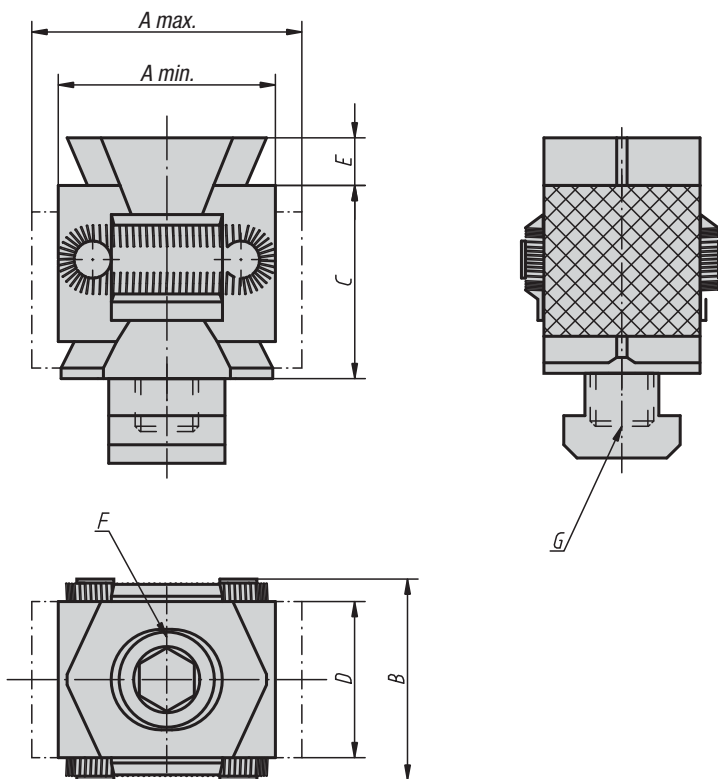


KIPP Taper clamping units Form A+L

Order No.	A min.	A max.	B	C	D	E	F Socket head screw DIN 912	G	Clamping force kN	Tightening torque Nm	Approx. weight kg
K0041.08	33	37	29	15	21	2,5	M8x25	for threaded hole	15	25	0,084
K0041.0810	33	37	29	15	21	2,5	M8x25	for T-slot 10	15	25	0,096
K0041.12	52	59	41	22	30	4	M12x40	for threaded hole	30	85	0,276
K0041.1214	52	59	41	22	30	4	M12x30	for T-slot 14	30	85	0,303
K0041.16	67	76	56	29	42	5	M16x60	for threaded hole	50	210	0,668
K0041.1618	67	76	56	29	42	5	M16x50	for T-slot 18	50	210	0,722

Taper clamping units

Form B



Material, surface finish:

Body in hardened tool steel, clamping segments in hardened tool steel (49-51 HRC) with black oxide finish, taper surfaces ground

Sample order:

K0042.1214

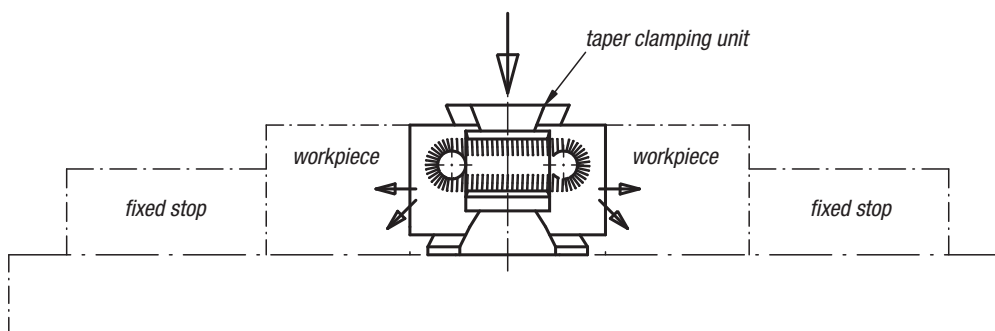
Note:

Because of their compact design, the taper clamping units are especially suitable for horizontal and vertical multiple clamping. The hardened and ground taper surfaces make high clamping forces possible. The appropriate taper clamping units can be mounted either in a M.T.P. hole or a T-slot. Inserting a socket head screw to DIN 912 moves the two clamping segments outwards and presses the workpieces against a fixed stop. The so-called „hold-down effect“ is caused by the double tapers of this version.

Travel path according to Order No.:

K0042.12 = ± 1.0 mm

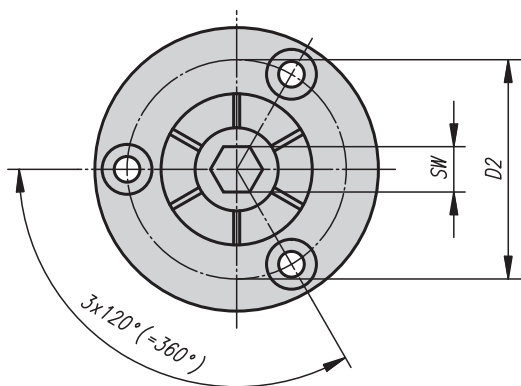
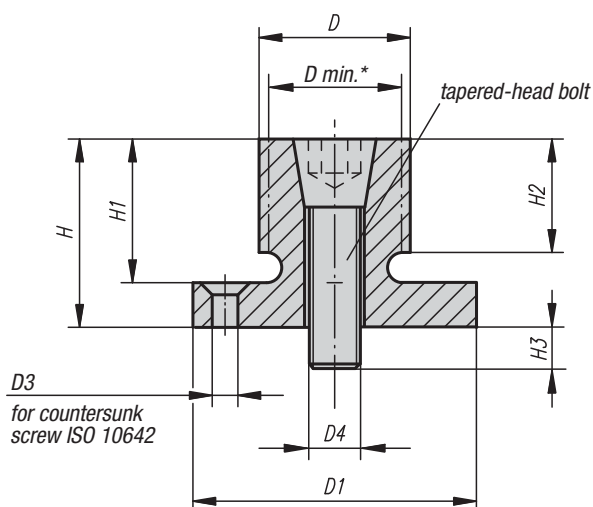
K0042.16 = ± 1.5 mm



KIPP Taper clamping units Form B

Order No.	A min.	A max.	B	C	D	E	F Socket head screw DIN 912	G	Clamping force kN	Tightening torque Nm	Approx. weight kg
K0042.12	42	49	41	36	30	5	M12x60	for threaded hole	40	85	0,318
K0042.1214	42	49	41	36	30	5	M12x50	for T-slot 14	40	85	0,353
K0042.16	57	67	56	50	42	5	M16x80	for threaded hole	60	210	0,843
K0042.1618	57	67	56	50	42	5	M16x70	for T-slot 18	60	210	0,912

Clamping plugs



Material:

Housing mild steel, tapered-head bolt hardened steel

Surface finish:

Housing, black oxide finish;
tapered-head bolt case-hardened,

Sample order:

K0357.081420

Note:

The clamping plug is ideal for second machining of turned parts. The diameter D can be adapted to the diameter of the workpiece to be clamped by turning or milling.

Low construction - no clamps in the way.
Clamping movement with hexagon socket wrench or hydraulically.

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

Assembly:

Widen the clamping plug to about 0.1 mm (clamp travel) more than the diameter at rest. Machine to the internal diameter of the workpiece by turning or milling. The base can be centred in a hole or with locating pins as required.

KIPP Clamping plugs

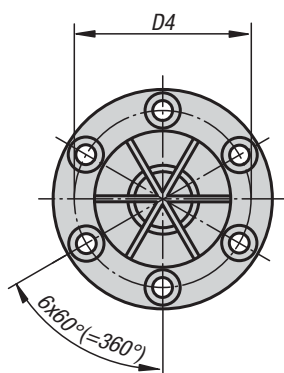
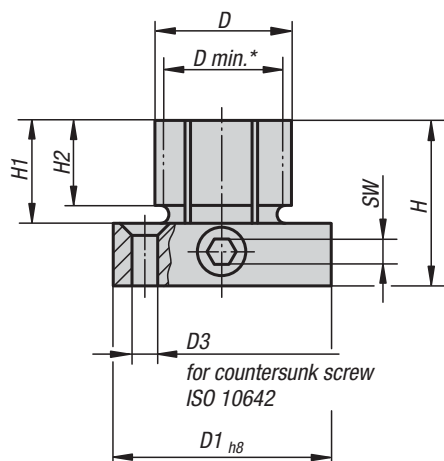
Order No.	D	D min.	D1	D2	D3 for countersunk screw	D4 Tapered-head bolt	H	H1	H2	H3	SW Tapered-head bolt	Tightening torque max. Nm	Clamping force max. kN	Approx. weight kg
K0357.020407	7,4	4,1	20 h9	13,7	M2	M2	10,7	7,6	6,1	4,1	1,5	0,7	1,1	0,010
K0357.040812	12,4	7,2	29,72 h9	21	M3	M4	21,8	16	15	8	3	5	4,2	0,040
K0357.061214	14,2	12,2	31,5 h9	23,1	M3	M6	24,9	19	15	12	5	17	8,5	0,070
K0357.081420	20	13,5	37,5 h9	29	M3	M8	24,9	19	15	14	6	34	11,1	0,100
K0357.062027	27	20	50 h8	39,4	M4	M10	28,6	22,2	17,5	17	8	60	20	0,180
K0357.102535	35,3	25,4	56 h8	45,5	M4	M12	31,8	25,4	20,6	21	10	150	26,3	0,320
K0357.123442	42	30	69,5 h8	55,9	M5	M16	39,6	31,8	27	22	14	280	44,5	0,600
K0357.123452	51	30	75,5 h8	63,9	M5	M16	39,6	31,8	27	22	14	280	44,5	0,700
K0357.163077	77	30	107,5 h8	92,5	M6	M16	45,5	37,6	32,3	20	14	280	44,5	1,730
K0357.1630103	103	30	132,9 h8	118	M6	M16	46	38	32	20	14	280	44,5	2,860
K0357.1630175	175	30	132,9 h8	118	M6	M16	45,5	37,6	32,3	20	14	280	44,5	6,500

Clamping plugs

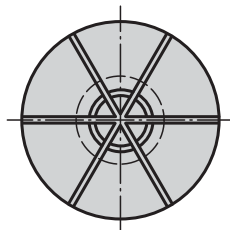
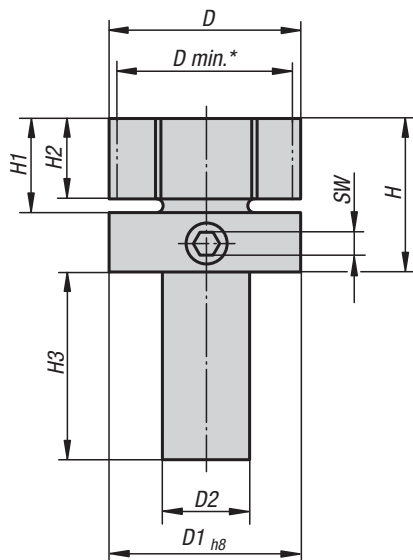
with lateral clamping



Form A
for machining centres,
drilling and milling machines



Form B
with shaft for holding
in lathe chucks



Material:

Housing mild steel;
clamping screw in tempered steel

Surface finish:

Housing, black oxide finish;
clamping screw, heat-treated class 10.9,
hardened and PTFE coated

Sample order:

K0643.118029

Note:

Due to the lateral clamping the clamping plug is ideal for second machining of turned and milled parts with blind hole. The diameter D can be adapted to the diameter of the workpiece to be clamped by turning or milling.

The clamping movement is carried out manually with hexagon socket wrench.

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

Assembly:

Widen the clamping plug to about 0.1 mm (clamp travel) more than the diameter at rest. The clamping plug can now be lathed and milled to the requisite diameter. An interlocking ring is included for machining.

The base can be centred in a locating hole or with locating pins as required.

Version A is delivered with 6 fastening screws.

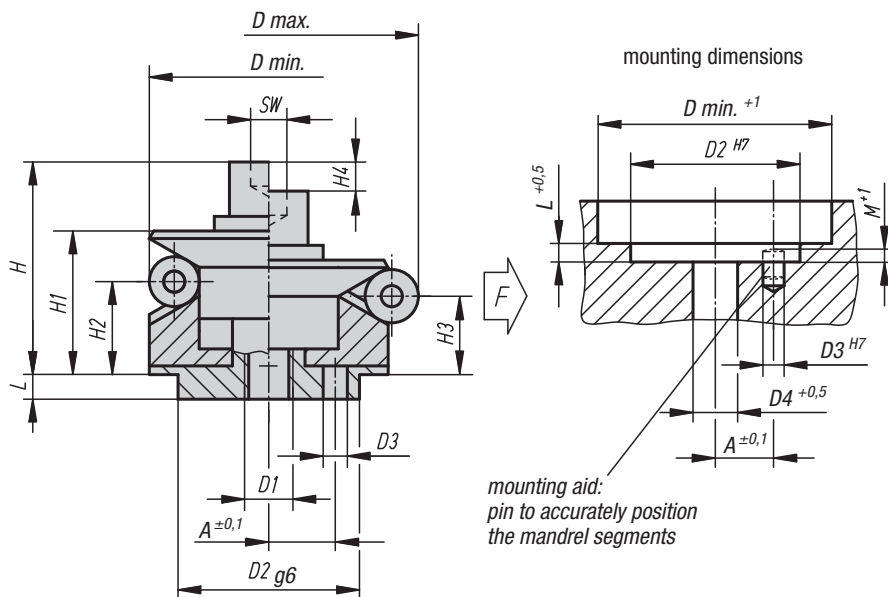


KIPP Clamping plugs with lateral clamping

Order No.	Form	D	D min.	D1	D2	D3 for countersunk screw	D4	H	H1	H2	H3	SW	Tightening torque max. Nm	Clamping force max. kN	Approx. weight kg
K0643.118029	A	28,7	17,8	50	-	M4	39,4	41	22	17,5	-	6	66	20	0,425
K0643.218053	B	53,3	18	53,3	25	-	-	44,4	25	21	45	6	66	20	0,810

Centring tension jack

with and without protection



Material:

Body 1.2842;
balls and hexagonal 1.4112;
tension spring 1.4310

Surface finish:

Body hardened and black oxide finished;
balls and hexagonal hardened and ground

Sample order:

K0358.101203

Note:

Form A: With ball suitable for tensioning in holes where slight impressions are acceptable.

Form B: With hexagonal for surface-sensitive holes.

Application:

To position and self-centre round holes from inside to outside.

Advantages:

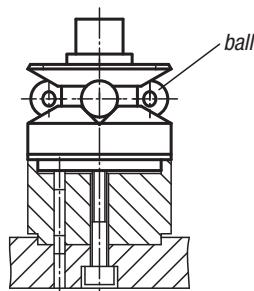
- Precise self-centring.
- No-warp tensioning.
- Large travels.
- Low height.

Technical data:

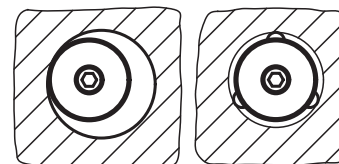
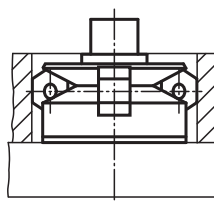
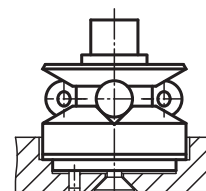
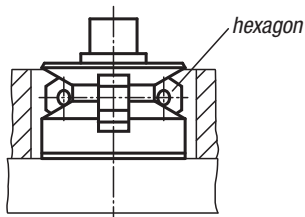
Repeat accuracy ± 0.025

Truth of running ± 0.05

Form A
spherical, point contact



Form B
flat, non-marking

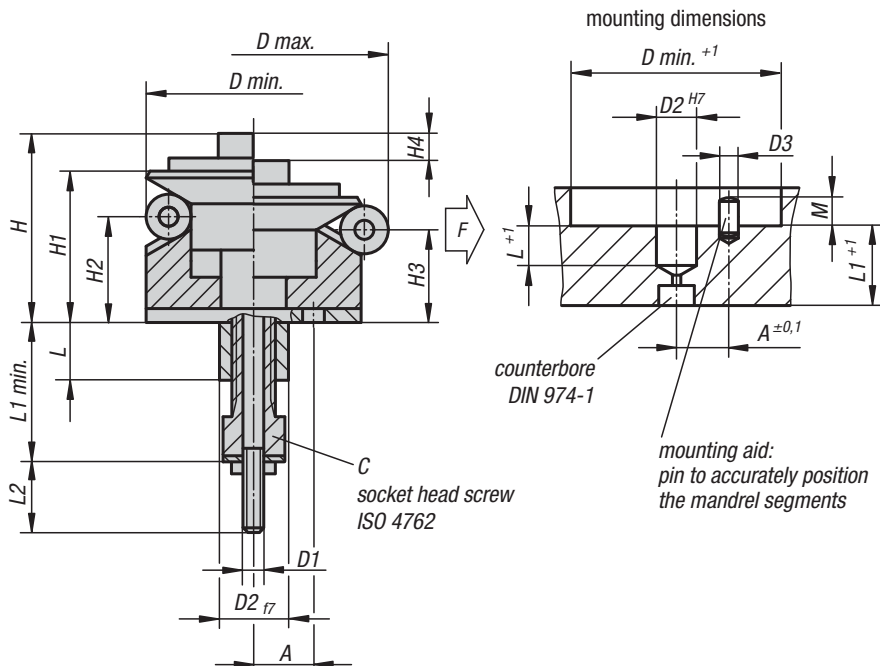


KIPP Centring tension jack with and without protection

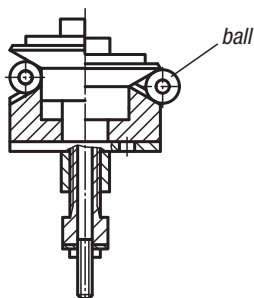
Order No. Form A	Order No. Form B	A	D min.	D max.	D1	D2	D3	D4	H	H1	H2	H3	H4	L	M	SW	Ball-Ø	hexagon	Number of balls/ hexagon	F kN	Approx. weight kg
K0358.101203	-	3,5	11,7	14,2	M3	10	1,5	3,3	15,9	12	9,2	8,6	1,5	3,5	2,5	2,5	2,5	-	3	0,5	0,018
K0358.101504	K0358.201504	4,5	14,5	18,5	M4	12	2	4,3	19,6	14,1	9,1	7,9	2,3	5,5	3,5	3	4/-	-/4	3	3,5	0,020
K0358.101905	K0358.201905	5,5	18,5	22,5	M5	15	2,5	5,3	23,6	16,6	11,6	10,4	2,3	7,5	3	4	4/-	-/4	3	4,5	0,039
K0358.102306	K0358.202306	7	22,5	26,5	M6	15	3	6,4	29,1	20,1	15,1	13,9	2,3	6	4	5	4/-	-/4	3	5	0,060
K0358.102706	K0358.202706	7	26,5	30,5	M6	20	3	6,4	29,1	20,1	15,1	13,9	2,3	6	4,5	5	4/-	-/4	3	5	0,086
K0358.103106	K0358.203106	9	30,5	38,5	M6	25	4	6,4	33,2	24,2	15,2	12,8	4,6	7	4,5	5	8/-	-/8	3	5	0,125
K0358.103908	K0358.203908	11	38,5	46,5	M8	30	4	8,4	38,6	27,1	18,1	15,7	4,6	7,5	4,5	6	8/-	-/8	6	6,5	0,233
K0358.104708	K0358.204708	11	46,5	54,5	M8	30	4	8,4	38,6	27,1	18,1	15,7	4,6	7,5	4,5	6	8/-	-/8	6	6,5	0,323
K0358.105510	K0358.205510	15	54,5	70,5	M10	45	5	10,5	54,7	40,7	23,7	19	9,3	9	5,5	8	16/-	-/16	6	8	0,653
K0358.107112	K0358.207112	17	70,5	86,5	M12	60	5	13	62,1	45,6	28,3	23,6	9,3	10	5,5	10	16/-	-/16	6	10	1,271
K0358.108712	K0358.208712	17	86,5	102,5	M12	60	5	13	62,1	45,6	28,3	23,6	9,3	10	5,5	10	16/-	-/16	6	10	1,783

Centring tension jack

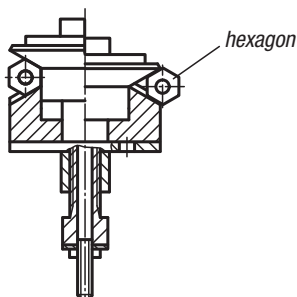
with and without protection



Form A
spherical, point contact



Form B
flat, non-marking



Material:

Body 1.2842;
balls and hexagonal 1.4112;
tension spring 1.4310

Surface finish:

Body hardened and black oxide finished; balls and hexagonal hardened and ground

Sample order:

K0644.0101203

Note:

Form A: with ball suitable for tensioning in holes, where slight impressions are acceptable.
Form B: with hexagon for surface-sensitive holes.

Application:

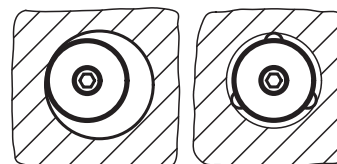
For central positioning and tightening in blind holes. Operated from below, either manual or automated via pneumatic or hydraulic systems.

Advantages:

- Precise self-centring.
- No-warp tensioning.
- Large travels.
- Low height.
- Side clamping effect (downward pressure).

Technical data:

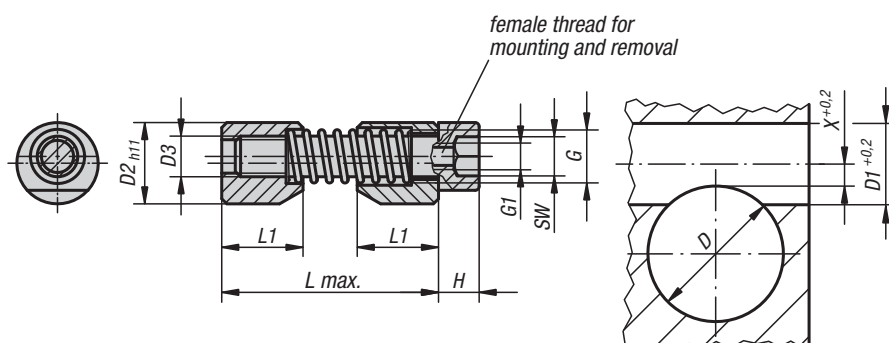
Repeat accuracy ± 0.025
Truth of running ± 0.05



KIPP Centring tension jack with and without protection

Order No. Form A	Order No. Form B	A	D min.	D max.	D1	D2	D3	H	H1	H2	H3	H4	L	L1 min.	L2	M	Ball-Ø	hexagon	Number of balls/ hexagon	C (DIN 912)	F kN
K0644.0101203	-	5,2	11,7	14,2	M3	8	1,5	15	11,9	9,2	8,6	1,5	7,5	19,5	10	1	2,5	-	3	M6x10	2
K0644.0101503	K0644.0201503	6	14,5	18,5	M3	8	2	17	14,1	9,1	7,9	2,3	7,5	19,5	10	1,5	4/-	-/4	3	M6x10	2
K0644.0101904	K0644.0201904	7,8	18,5	22,5	M4	12	2,5	20,6	16,6	11,6	10,4	2,3	11,5	28	16	1,5	4/-	-/4	3	M8x16	3,5
K0644.0102305	K0644.0202305	9,4	22,5	26,5	M5	15	3	27,1	20,1	15,1	13,9	2,3	11,5	30	14	2	4/-	-/4	3	M10x16	6
K0644.0102705	K0644.0202705	10,5	26,5	30,5	M5	15	3	27,1	20,1	15,1	13,9	2,3	11,5	30	14	2	4/-	-/4	3	M10x16	6
K0644.0103106	K0644.0203106	12,5	30,5	38,5	M6	20	4	32,7	24,2	15,2	12,8	4,6	15,5	36	16	2	8/-	-/8	3	M12x20	8,5
K0644.0103906	K0644.0203906	12,5	38,5	46,5	M6	20	4	35,6	27,1	18,1	15,7	4,6	15,5	36	16	2,5	8/-	-/8	6	M12x20	8,5
K0644.0104706	K0644.0204706	12,5	46,5	54,5	M6	20	4	35,6	27,1	18,1	15,7	4,6	15,5	36	16	2,5	8/-	-/8	6	M12x20	8,5
K0644.0105508	K0644.0205508	20	54,5	70,5	M8	30	5	50,2	40,7	23,7	19	9,3	16,5	43	16	2,5	16/-	-/16	6	M16x20	16
K0644.0107108	K0644.0207108	25	70,5	86,5	M8	40	5	55,1	45,6	28,3	23,6	9,3	16,5	43	16	2,5	16/-	-/16	6	M16x20	16
K0644.0108708	K0644.0208708	36,5	86,5	102,5	M8	60	5	55,1	45,6	28,3	23,6	9,3	16,5	43	16	2,5	16/-	-/16	6	M16x20	16

Cylindrical clamping elements



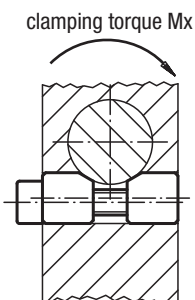
Material:
Clamping jaw: steel;
pressure spring 1.4310;
clamping screw: quality class 8.8

Surface finish:
Clamping jaw black oxide finish;
clamping screw blue galvanised

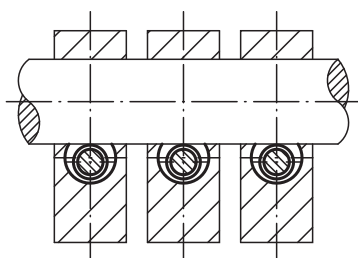
Sample order:
K0375.04

Application:

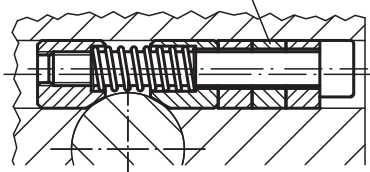
axial and radial clamping



adjusting and clamping



spacer rings K
for deep holes



Shafts situated away from the outer edge
can also be clamped using spacer rings
and longer screws (without mounting thread).

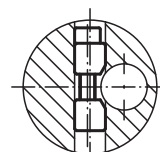
assembly tool



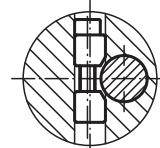
Special hex key with a threaded pin.
The pin is screwed into the hole G1 in
the head of the cap screw to aid in
positioning or removing the clamping unit.

Mounting instructions:

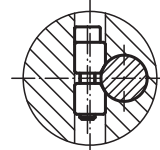
Insert clamping unit



Insert shaft or tube



Clamp shaft or tube



KIPP Cylindrical clamping elements

Order No.	D	D1	D2	D3	L max.	L1	X	G	G1	H	K	SW	Mx Nm	Approx. weight g	Order No. assembly tool
K0375.04	6-10	8	8	M4	27	8	2,8	M5	M2,5	4	10	3	max. 20	6	K0375.904
K0375.05	10-15	10	10	M5	33	10	3,3	M6	M3	5	10	4	max. 45	12	K0375.905
K0375.06	15-20	12	12	M6	39	12	3,5	M7	M4	6	10	5	max. 100	21	K0375.906
K0375.08	20-30	16	16	M8	46	16	4	M10	M5	8	10	6	max. 170	52	K0375.908
K0375.10	30-40	20	20	M10	53	20	4,8	M12	M6	10	15	8	max. 290	98	K0375.910
K0375.12	40-60	25	25	M12	70	25	5,6	M14	M8	12	15	10	max. 450	183	K0375.912
K0375.16	60-125	30	30	M16	81	30	7,9	M18	M10	16	15	14	max. 650	344	K0375.916

The standard terms and conditions of sale, delivery and payment that you can

Heinrich Kipp Werk KG