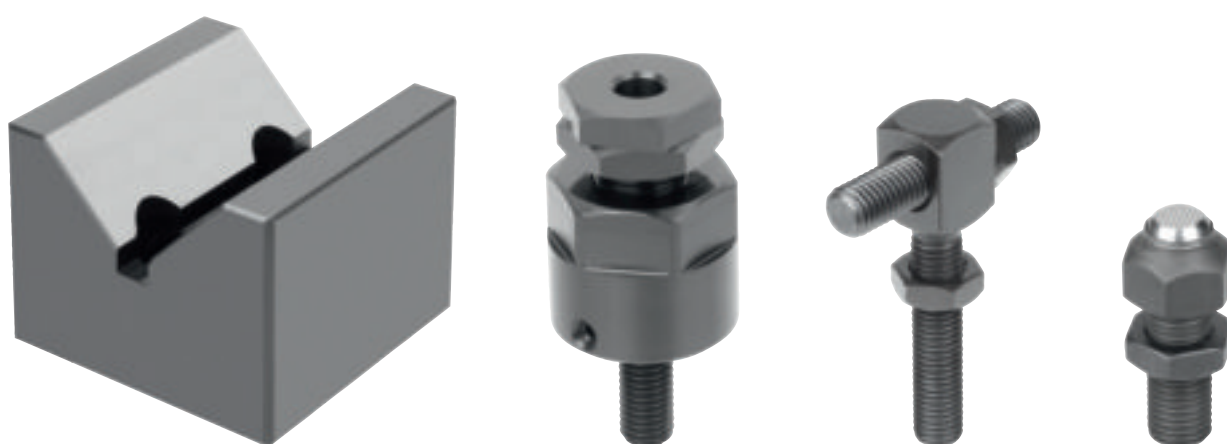


Rest and stop elements



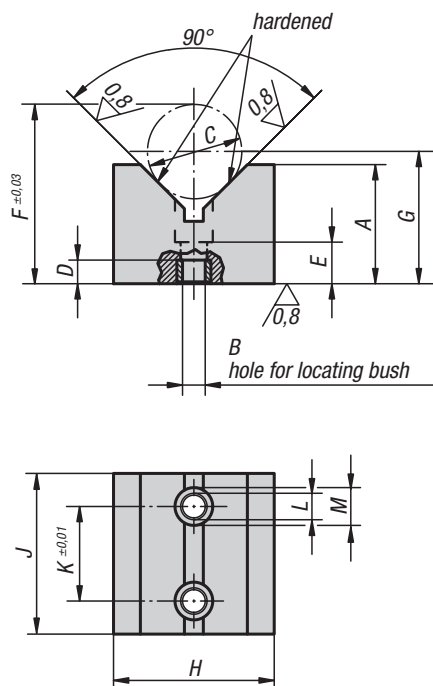
V-blocks, vertical



Material:
Carbon steel.

Version:
Black oxidised.
Prism and contact faces ground.

Sample order:
K0819.60008032



KIPP V-blocks vertical

Order No.	A	B Ø for locating bush	C min.	C max.	C Test-Ø	D	E	F	G	H	J	K	L	M
K0819.60008032	32	12 H6	10	25	15±0,003	8,5	13	40,1	C/2 x√ 2+22	25	45	25	9	14

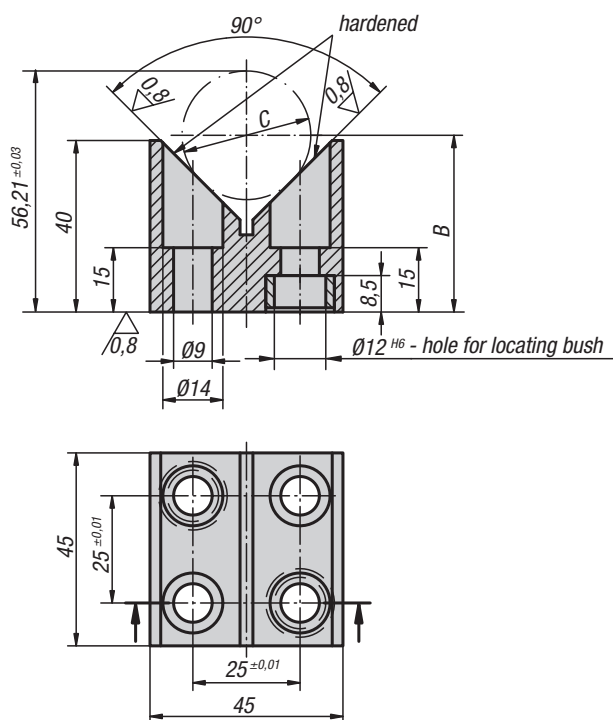
V-blocks, vertical



Material:
Carbon steel.

Version:
Black oxidised.
Prism and contact faces ground.

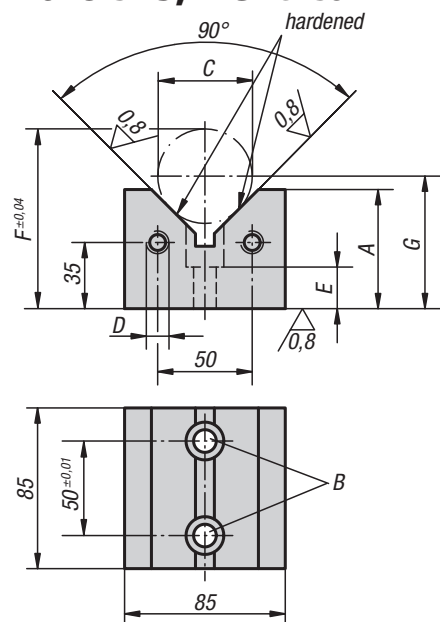
Sample order:
K0819.60008040



KIPP V-blocks vertical

Order No.	C min.	C max.	C Test-Ø	B
K0819.60008040	15	50	30±0,003	C/2x√2+20

V-blocks, vertical



Material:
Carbon steel.

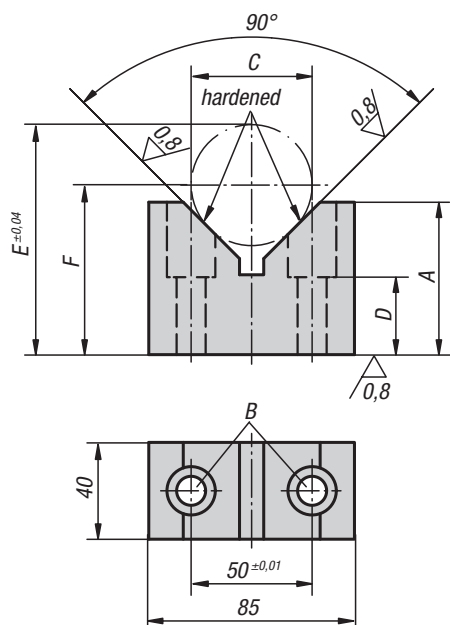
Version:
Black oxidised.
Prism and contact faces ground.

Sample order:
K0819.60012063

KIPP V-blocks vertical

Order No.	A	B Ø for shoulder screw	C min.	C max.	C Test-Ø	D	E	F	G	Suitable shoulder screw
K0819.60012063	63	12 F7	15	80	50±0,003	M12	22	95,071	C/2 x√ 2+34,716	K0815.112055
K0819.60012075	75	12 F7	15	100	70±0,003	M12	22	124,142	C/2 x√ 2+39,645	K0815.112055
K0819.60016063	63	16 F7	15	80	50±0,003	M16	25	95,071	C/2 x√ 2+34,716	K0815.116065
K0819.60016075	75	16 F7	15	100	70±0,003	M16	25	124,142	C/2 x√ 2+39,645	K0815.116065

V-blocks, vertical



Material:
Carbon steel.

Version:
Black oxidised.
Prism and contact faces ground.

Sample order:
K0819.60512063

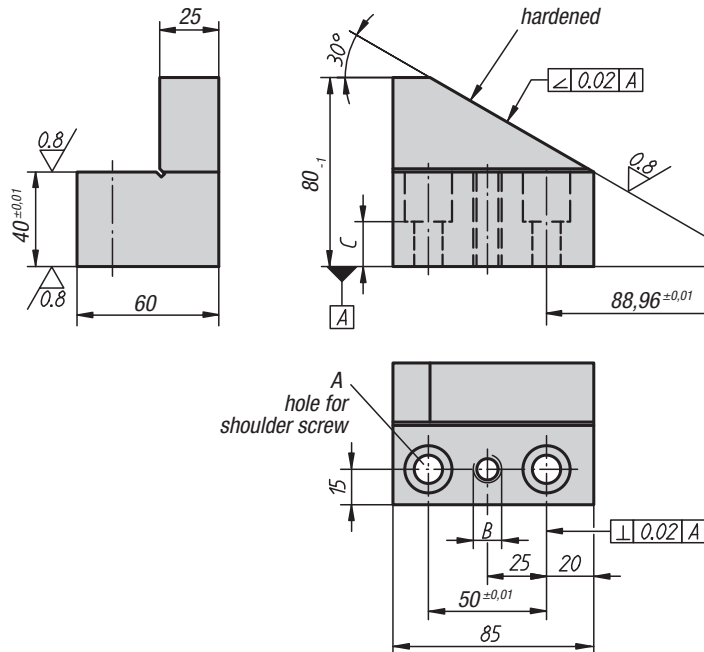
KIPP V-blocks, vertical

Order No.	A	B Ø for shoulder screw	C min.	C max.	C Test-Ø	D	E	F	Suitable shoulder screw
K0819.60512063	63	12 F7	15	80	50±0,003	32	95,071	C/2x√2+34,716	K0815.112065
K0819.60512075	75	12 F7	15	100	70±0,003	32	124,142	C/2x√2+39,645	K0815.112065
K0819.60516063	63	16 F7	15	80	50±0,003	25	95,071	C/2x√2+34,716	K0815.116065
K0819.60516075	75	16 F7	15	100	70±0,003	25	124,142	C/2x√2+39,645	K0815.116065

V-blocks split



left hand



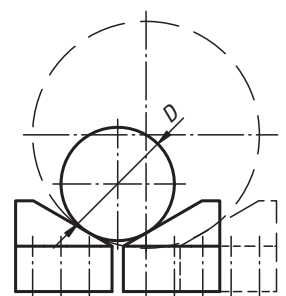
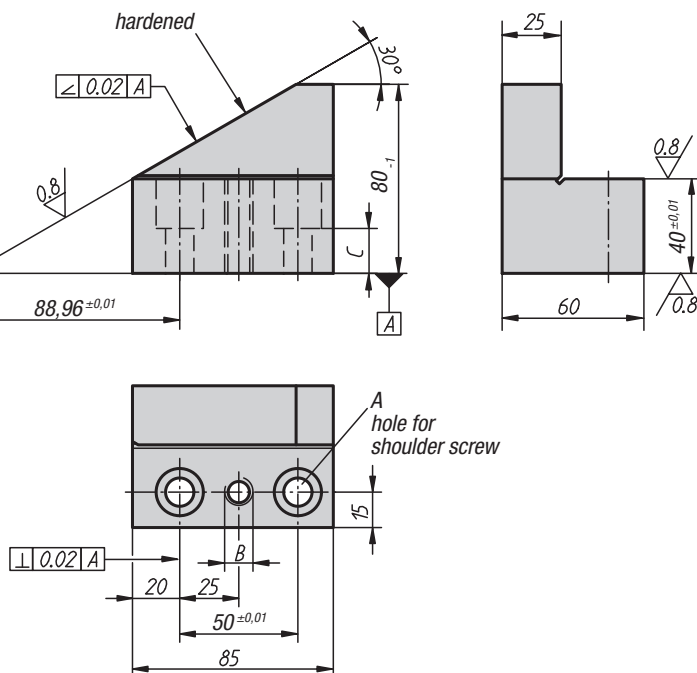
Material:
Carbon steel.

Version:
Black oxidised.
Half prism (30°) and contact faces ground.

Sample order:
K0819.6301230

Note:
Right-hand and left-hand split V-blocks are used for positioning round parts. Split V-blocks permit adjustment to the respective workpiece diameter.

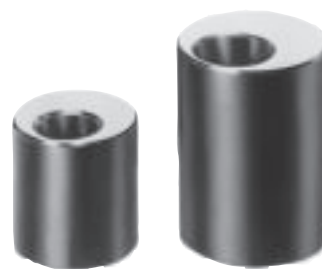
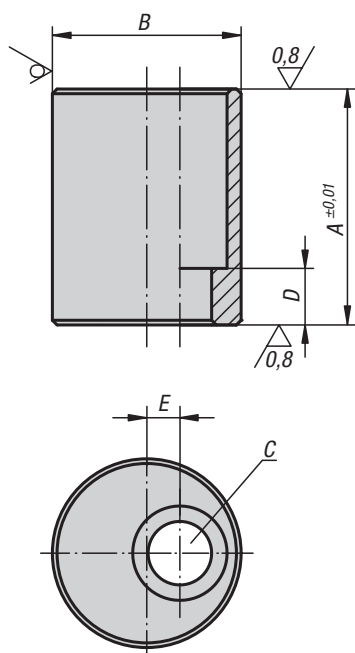
right hand



KIPP V-blocks split

Order No. right	Order No. left	A	B	C	D min.	D max.	Suitable shoulder screw
K0819.6301230	K0819.6311230	12 F7	M12	23	50	600	K0815.112055
K0819.6301630	K0819.6311630	16 F7	M16	20	50	600	K0815.116055

Eccentric supports



Material:
Special steel alloy.

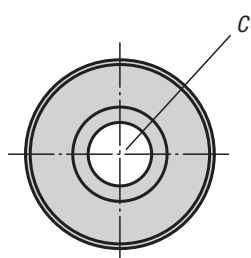
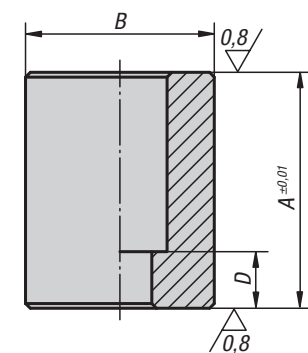
Version:
Tempered, black oxidised.
Contact faces ground.

Sample order:
K0822.10040

KIPP Eccentric supports

Order No.	A	B	C hole for DIN 912 cap screw	D	E
K0822.08016	16	25	M8	7	3,5
K0822.08020	20	25	M8	7	3,5
K0822.08025	25	25	M8	7	3,5
K0822.08032	32	25	M8	7	3,5
K0822.08040	40	25	M8	7	3,5
K0822.08050	50	25	M8	7	3,5
K0822.10020	20	32	M10	9	5
K0822.10025	25	32	M10	9	5
K0822.10032	32	32	M10	9	5
K0822.10040	40	32	M10	9	5
K0822.10050	50	32	M10	9	5
K0822.10063	63	32	M10	9	5
K0822.12020	20	40	M12	7	7
K0822.12025	25	40	M12	12	7
K0822.12032	32	40	M12	12	7
K0822.12040	40	40	M12	12	7
K0822.12050	50	40	M12	12	7
K0822.12063	63	40	M12	12	7
K0822.12080	80	40	M12	22	7
K0822.12100	100	40	M12	22	7
K0822.12125	125	40	M12	22	7
K0822.16025	25	50	M16	8	10
K0822.16032	32	50	M16	15	10
K0822.16040	40	50	M16	15	10
K0822.16050	50	50	M16	15	10
K0822.16063	63	50	M16	15	10
K0822.16080	80	50	M16	35	10
K0822.16100	100	50	M16	35	10
K0822.16125	125	50	M16	35	10

Supports



Material:
Carbon steel.

Version:
Tempered, black oxidised.
Contact faces ground.

Sample order:
K0823.08016

KIPP Supports

Order No.	A	B	C hole for DIN 912 cap screw	D
K0823.08016	16	25	M8	7
K0823.08020	20	25	M8	7
K0823.08025	25	25	M8	7
K0823.08032	32	25	M8	7
K0823.08040	40	25	M8	7
K0823.08050	50	25	M8	7
K0823.10020	20	32	M10	9
K0823.10025	25	32	M10	9
K0823.10032	32	32	M10	9
K0823.10040	40	32	M10	9
K0823.10050	50	32	M10	9
K0823.10063	63	32	M10	9
K0823.12020	20	40	M12	7
K0823.12025	25	40	M12	12
K0823.12032	32	40	M12	12
K0823.12040	40	40	M12	12
K0823.12050	50	40	M12	12
K0823.12063	63	40	M12	12
K0823.12080	80	40	M12	22
K0823.12100	100	40	M12	22
K0823.16025	25	50	M16	8
K0823.16032	32	50	M16	15
K0823.16040	40	50	M16	15
K0823.16050	50	50	M16	15
K0823.16063	63	50	M16	15
K0823.16080	80	50	M16	35
K0823.16100	100	50	M16	35
K0823.16125	125	50	M16	35

Locating supports

**Material:**

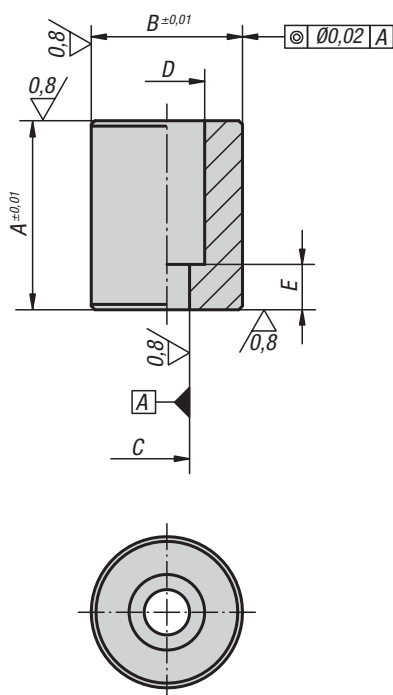
Carbon steel.

Version:Tempered.
OD and support faces ground.**Sample order:**

K0816.08020

Note:

Depending on the system (M8, M12, M16), the locating supports are positioned and secured using shoulder screws or locating sleeves with socket head screw.



KIPP Locating supports

Order No.	A	B	C Ø for shoulder screw	D	E	Suitable shoulder screw
K0816.12025	25	40	12 H7	20	12	K0815.12045
K0816.12050	50	40	12 H7	20	12	K0815.12045
K0816.12075	75	40	12 H7	20	12	K0815.12045
K0816.12100	100	50	12 H7	20	22	K0815.12055
K0816.16050	50	50	16 H7	26	15	K0815.16055
K0816.16075	75	50	16 H7	26	15	K0815.16055
K0816.16100	100	50	16 H7	26	25	K0815.16065
K0816.16125	125	50	16 H7	26	25	K0815.16065

Support blocks

**Material:**

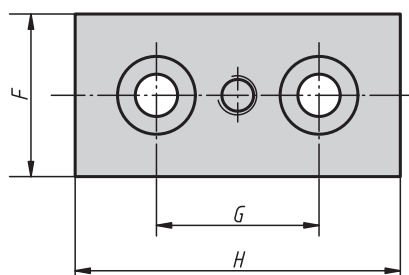
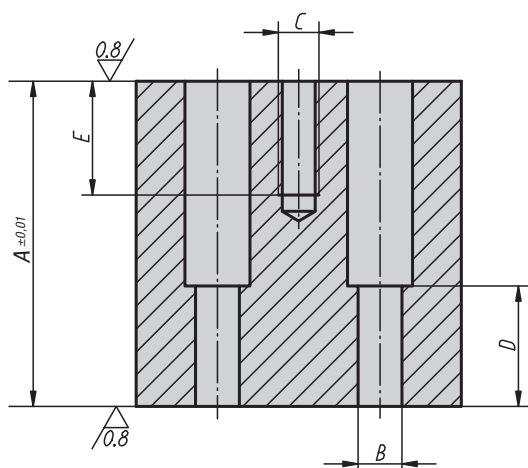
Carbon steel.

Version:Tempered, black oxidised.
Contact faces ground.**Sample order:**

K0827.36012020

Note:

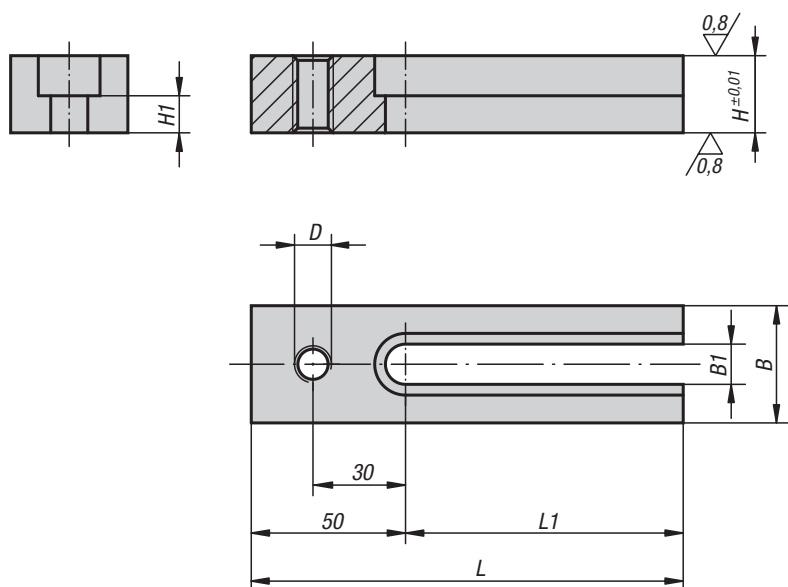
Support blocks are for placing under long workpieces to prevent bending during machining or clamping. The tapped hole is for mounting fixture elements between the grid holes.



KIPP Support blocks

Order No.	A	B hole for DIN 912 screw	C	D	E	F	G	H
K0827.36012020	20	M12	M12	7	20	50	50	100
K0827.36012025	25	M12	M12	12	25	50	50	100
K0827.36012032	32	M12	M12	19	32	50	50	100
K0827.36012040	40	M12	M12	27	40	50	50	100
K0827.36012050	50	M12	M12	37	35	50	50	100
K0827.36012063	63	M12	M12	37	35	50	50	100
K0827.36012080	80	M12	M12	37	35	50	50	100
K0827.36012100	100	M12	M12	37	35	50	50	100
K0827.36012125	125	M12	M12	37	35	50	50	100
K0827.36016025	25	M16	M16	8	25	50	50	100
K0827.36016032	32	M16	M16	15	32	50	50	100
K0827.36016040	40	M16	M16	23	40	50	50	100
K0827.36016050	50	M16	M16	33	35	50	50	100
K0827.36016063	63	M16	M16	46	35	50	50	100
K0827.36016080	80	M16	M16	46	35	50	50	100
K0827.36016100	100	M16	M16	46	35	50	50	100

Seating blocks adjustable

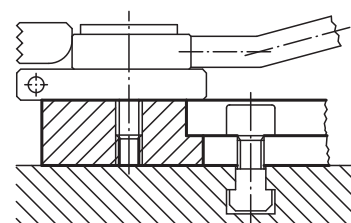


Material:
Carbon steel.

Version:
Tempered, black oxidised.
Contact faces ground.

Sample order:
K0824.12125

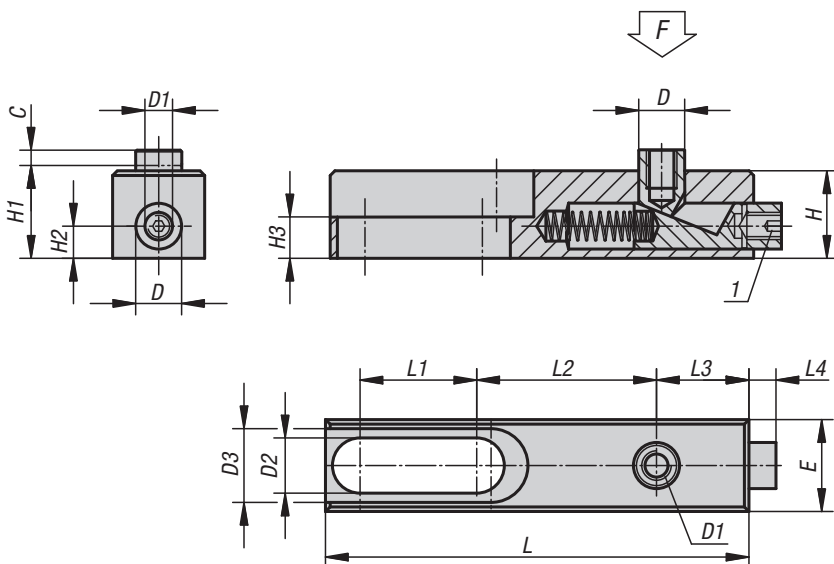
Note:
The tapped hole is for mounting fixture components.
The slot allows the riser to be set in any desired position.



KIPP Seating blocks adjustable

Order No.	D	L	L1	B	B1	H	H1
K0824.12025	M12	90	40	38	13	25	12
K0824.12032	M12	90	40	38	13	32	19
K0824.12040	M12	90	40	38	13	40	27
K0824.12050	M12	90	40	38	13	50	37
K0824.12125	M12	140	90	38	13	25	12
K0824.12132	M12	140	90	38	13	32	19
K0824.12140	M12	140	90	38	13	40	27
K0824.12150	M12	140	90	38	13	50	37
K0824.16032	M16	90	40	50	17	32	15
K0824.16040	M16	90	40	50	17	40	23
K0824.16050	M16	90	40	50	17	50	33
K0824.16132	M16	140	90	50	17	32	15
K0824.16140	M16	140	90	50	17	40	23
K0824.16150	M16	140	90	50	17	50	33

Workpiece supports

**Material:**

Steel.

Version:

Case-hardened, black oxidised and ground

Sample order:

K0889.006

Note:

These supports are placed under long or thin workpieces to prevent vibration or bending during milling, drilling, grinding or shaping operations.

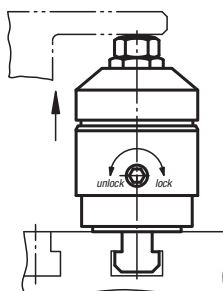
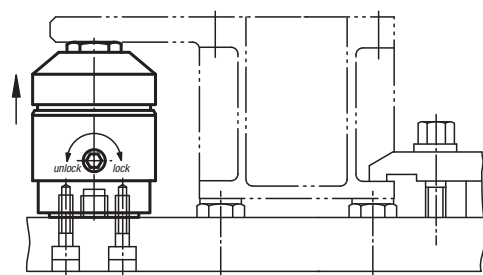
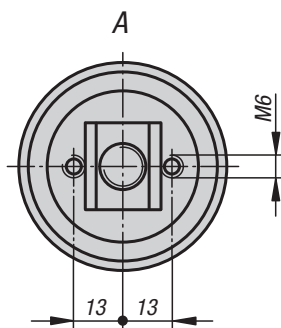
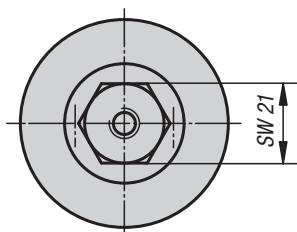
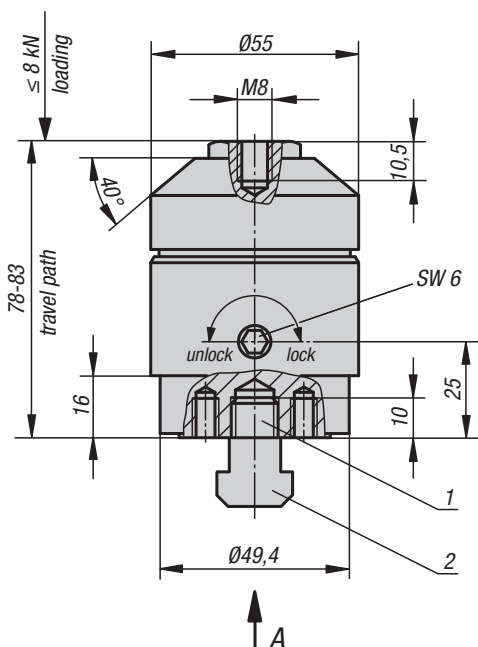
Drawing reference:

1) set screw

KIPP Workpiece supports

Order No.	C	D	D1	D2	D3	E	H	H1	H2	H3	L	L1	L2	L3	L4	F kN
K0889.006	4	10	M6	8,2	16,2	20	19	19,5	7	9	92	25,5	39	20	6	3
K0889.010	6	16	M10	12,5	24,4	30	30	31	10	10	149	44	61	32	11	15

Support elements

**Material:**

Main body hardened steel.
Housing aluminium.

Version:

Main body nitrated, manganese phosphated and ground.
Housing red anodized.

Note:

The support element is for supporting overhanging workpiece parts. It prevents vibration and bending during machining.

Method of operation:

1. Turn the cam screw (hex. socket SW 6) on the side of the housing, the support bolt will move out under light spring load until it makes contact with the workpiece.
2. Continue to turn to "lock" position. The support bolt locks without changing position.
3. Turn the cam screw in the opposite direction and the support bolt will unlock. Continue turning to the "unlock" position and the support bolt will slide back into the body.

Assembly:

Mount the support element to the fixture using the two M6 tapped holes.

Alternatively: Exchange the M12x10 plug screw for a M12x30 grub screw and mount the support directly onto the machine table with a T-nut.

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

It is possible to countersink the support element by 16 mm. Various rest pads can be mounted into the M8 tapped hole on the support bolt.

Supplied with M12x30 grub screw and M12 nut for T-slots (DIN 508).

Drawing reference:

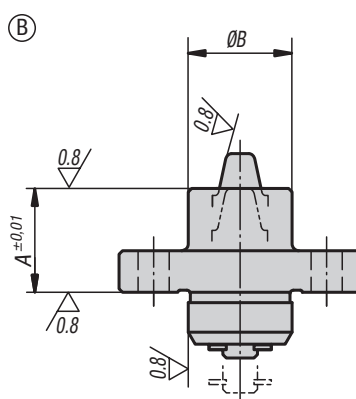
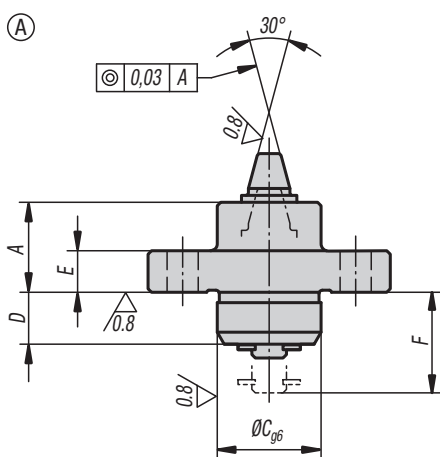
- 1) grub screw M12x30 DIN 913 (exchangeable)
- 2) nut for T-slots M12x14 DIN 508

KIPP Support element

Order No.	Load capacity N	Travel path
K1224.0508	8000	5

Positioning units

spring-loaded



Material, version:

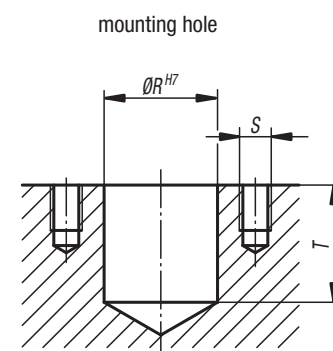
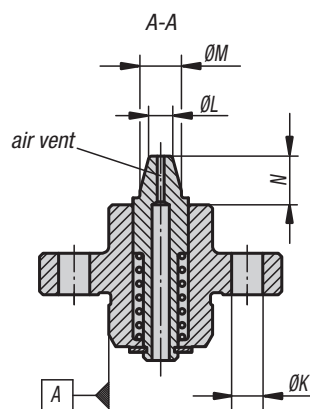
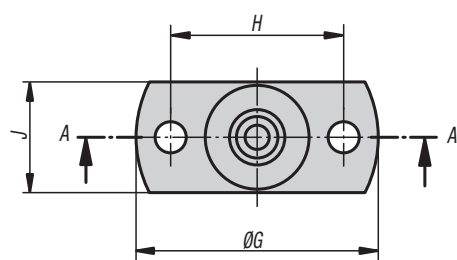
Body carbon steel, hardened and black oxidised.
Locating pin hardened tool steel.

Sample order:

K0917.15060

Note:

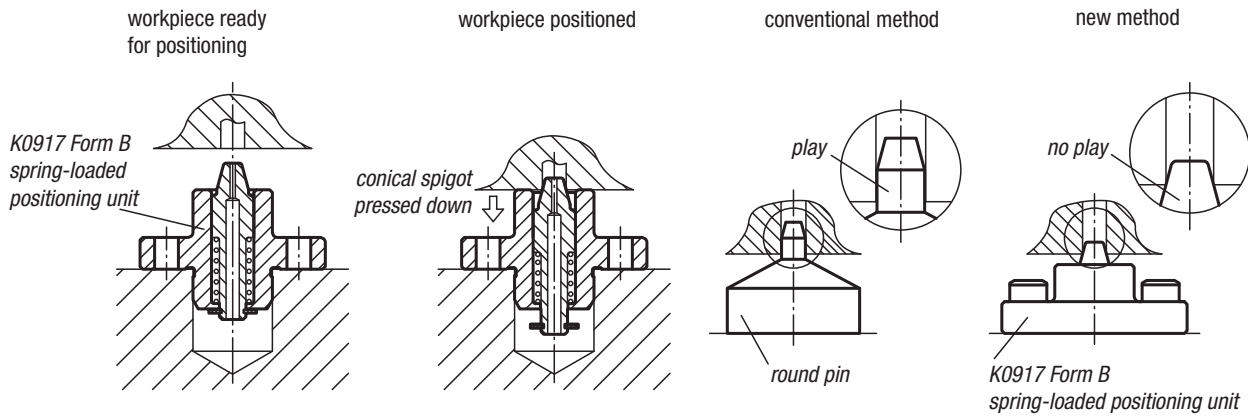
* The conical spigot can position holes within these limits.



KIPP Positioning units, spring-loaded

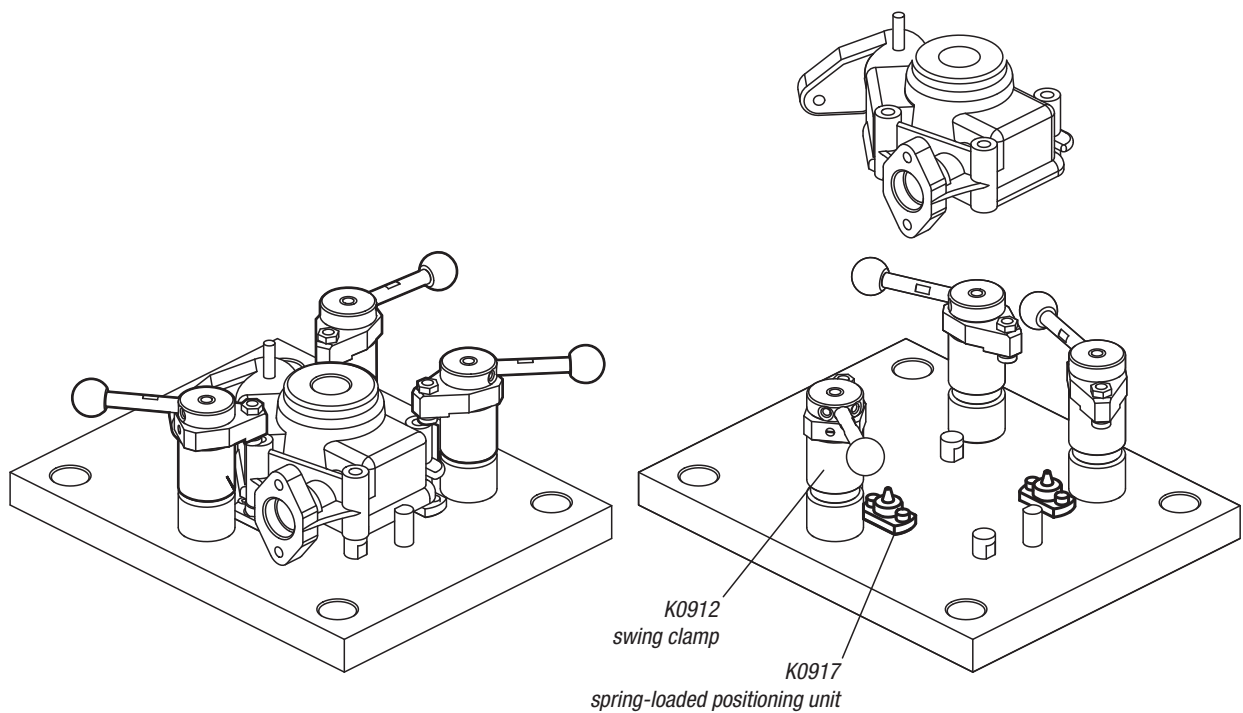
Order No.	Form	A	B	C	D	E	F	G	H	J	K	L	M	N	R	S	T	Receiving hole	Spring force cone N
K0917.15060	A	13	15	15	7,5	6	15	35	25	16	4,5	3,5	6	7,4	15	M4	16	ø3,8 - ø5,2*	6,4 - 19,3
K0917.15070	A	13	15	15	7,5	6	15	35	25	16	4,5	4,5	7	7,4	15	M4	16	ø4,8 - ø6,2*	6,4 - 19,3
K0917.20090	A	18	20	20	10	8	20	40	30	22	4,5	5,5	9	9,3	20	M4	21	ø5,8 - ø8,2*	5,5 - 20,5
K0917.20110	A	18	20	20	10	8	20	40	30	22	4,5	7,5	11	9,3	20	M4	21	ø7,8 - ø10,2*	5,5 - 20,5

Order No.	Form	A	B	C	D	E	F	G	H	J	K	L	M	N	R	S	T	Receiving hole	Spring force cone N
K0917.15061	B	15	15	15	7,5	6	15	35	25	16	4,5	3,5	6	5,4	15	M4	16	ø3,8 - ø5,2*	6,4 - 19,3
K0917.15071	B	15	15	15	7,5	6	15	35	25	16	4,5	4,5	7	5,4	15	M4	16	ø4,8 - ø6,2*	6,4 - 19,3
K0917.20091	B	20	20	20	10	8	20	40	30	22	4,5	5,5	9	7,3	20	M4	21	ø5,8 - ø8,2*	5,5 - 20,5
K0917.20111	B	20	20	20	10	8	20	40	30	22	4,5	7,5	11	7,3	20	M4	21	ø7,8 - ø10,2*	5,5 - 20,5



The conical spigot is pushed down when the workpiece is mounted on the positioning unit.

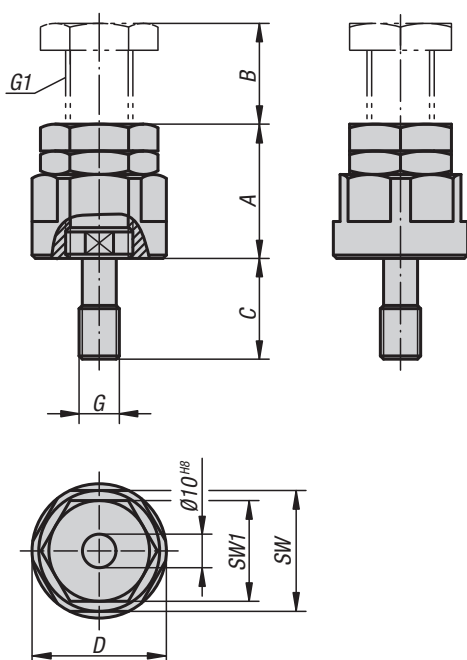
The conical spigot ensures precise positioning.



Note:

To prevent the positioning unit lifting the workpiece, hold it down by hand when loosening the swing clamp.

Adjustable supports



Material:

Carbon steel.

Version:

Black oxidised.
Adjustment spindle tempered.

Sample order:

K0825.16100

Note:

Inserts K0826 can be mounted in the top to suit the application.

KIPP Adjustable supports

Order No.	A min.	B max.	C	D	SW	SW1	G	G1
K0825.12040	40	10	30	40	36	30	M12	M20x1,5
K0825.12050	50	20	30	40	36	30	M12	M20x1,5
K0825.12070	70	40	30	40	36	30	M12	M20x1,5
K0825.12100	100	50	30	50	46	36	M12	M24x2
K0825.12150	150	100	30	50	46	36	M12	M24x2
K0825.16040	40	10	30	40	36	30	M16	M20x1,5
K0825.16050	50	20	30	40	36	30	M16	M20x1,5
K0825.16070	70	40	30	40	36	30	M16	M20x1,5
K0825.16100	100	50	30	50	46	36	M16	M24x2
K0825.16150	150	100	30	50	46	36	M16	M24x2

Inserts

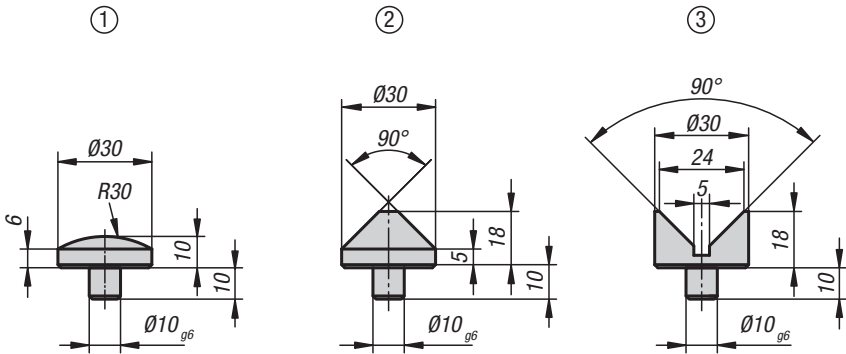


Material:
Carbon steel.

Version:
Tempered to 1100-1200 N/mm², black oxidised.

Sample order:
K0826.02

Drawing reference:
1) rounded insert
2) cone insert
3) prism insert



KIPP Inserts

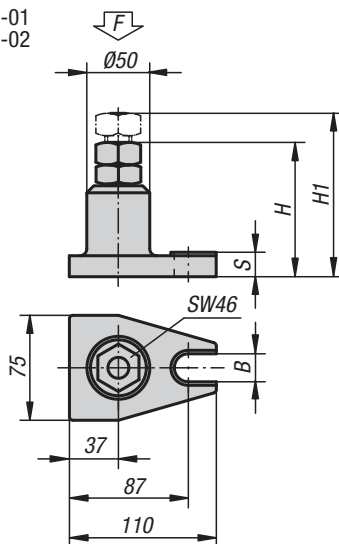
Order No.	Version
K0826.01	rounded insert
K0826.02	cone insert
K0826.03	prism insert

Atlas jack

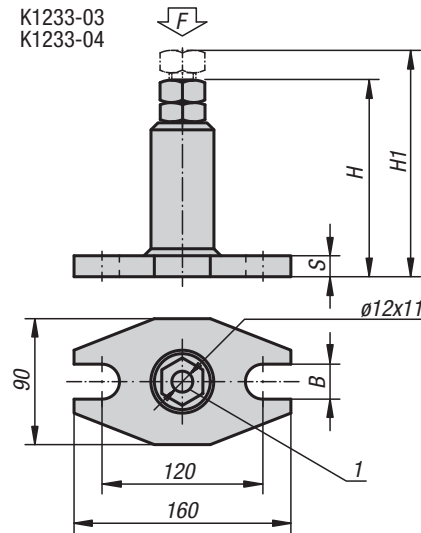
with locknut



K1233-01
K1233-02



K1233-03
K1233-04

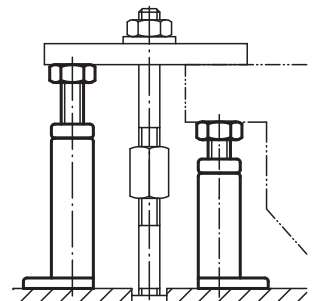


Material:

Carbon steel.

Version:

Hammertone, spindle with 30 x 6 trapezoidal thread.



KIPP Atlas jack with locknut

Order No.	Adjustment range	base plate	H	H1	B	S	F kN
K1233.01	100 - 140	76x111	100	140	18	17	60
K1233.02	140 - 200	76x111	140	200	18	17	60
K1233.03	200 - 320	90x160	200	320	22	22	40
K1233.04	320 - 540	90x160	320	540	22	25	25

Workpiece supports

adjustable



Material:

Carbon steel 1.0503.

Version:

Black oxidised.

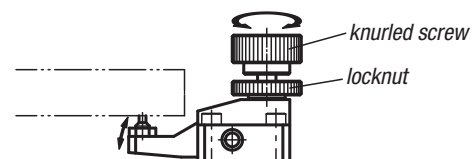
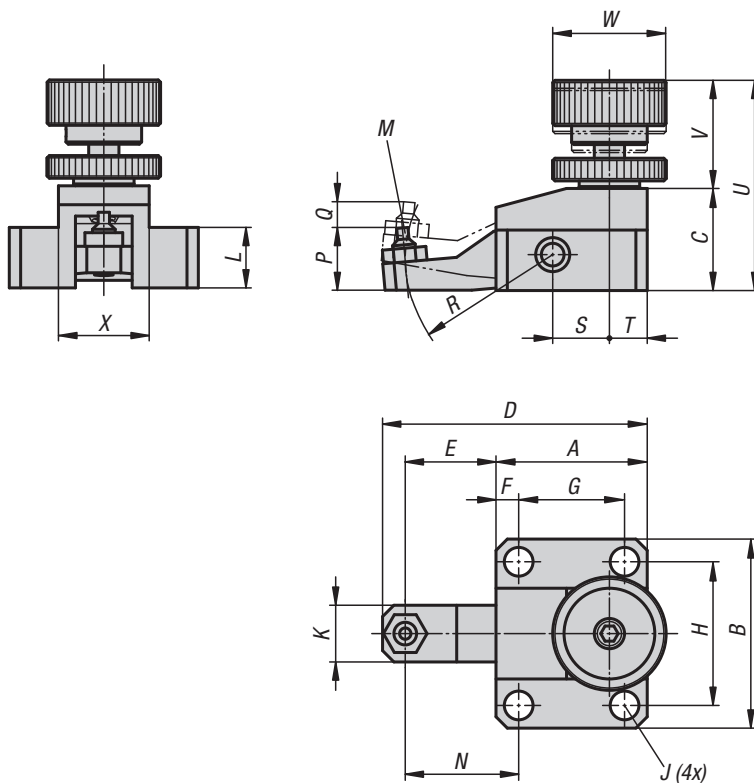
Sample order:

K0919.08020

Note:

Workpiece supports are for supporting overhanging workpiece parts to prevent vibrations and bending during machining.

They should not be subjected to strong forces from a clamping element and are not intended as supports under a clamping point.



- 1.) Turning the knurled screw moves the support arm up or down.
- 2.) Once the rest is in contact with the workpiece, the screw can be locked with the locknut.

KIPP Workpiece supports, adjustable

Order No.	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	U	V	W	X	Clamping force N	Tightening torque max. Nm
K0919.08020	40	50	27	70	24	6	28	38	6,6	15	16	M6x16	30	17	6	39	15	10	56	29	30	24	300	1,5
K0919.10027	55	65	34	95	31,5	8,5	38	48	9	18	20	M8x22	40	23	8	51,5	20	15	68	34	36	29	350	2

Workpiece supports

adjustable



Material:

Carbon steel.

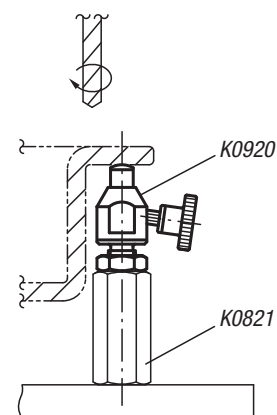
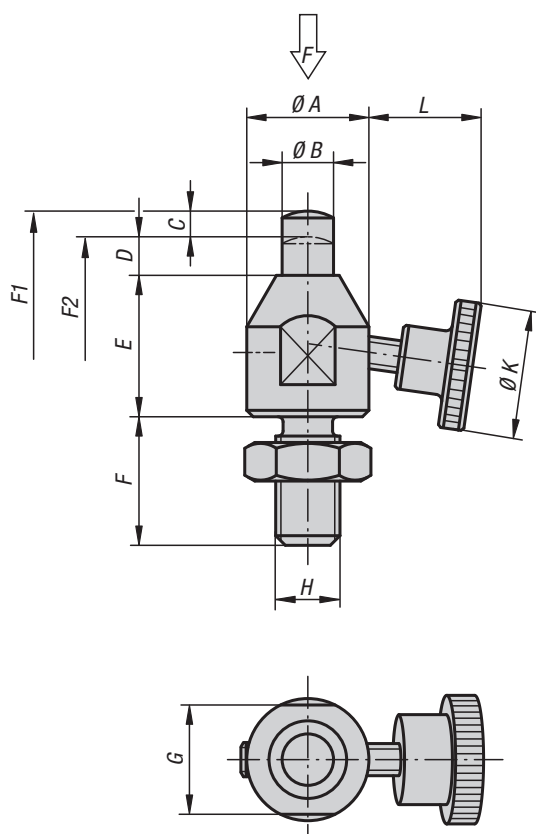
Version:

Body black oxidised.

Rest pad hardened and black oxidised.

Sample order:

K0920.08023



KIPP Workpiece supports, adjustable

Order No.	A	B	C (travel)	D	E	F	G	H	K	L	F N	Spring force initial pressure F1 approx. N	Spring force final pressure F2 approx. N
K0920.08023	15	6	3	5	18	16	13	M8	20	13,2	200	1,5	3
K0920.10028	19	8	4	6	22	20	17	M10	25	16,3	300	1,8	3
K0920.12031	22	10	4	6	25	24	19	M12	28	22,3	400	1,8	3



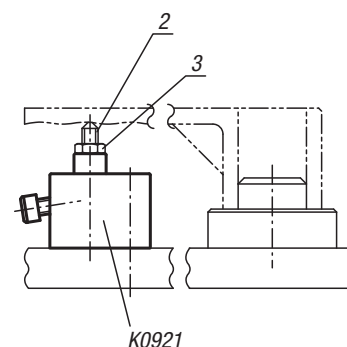
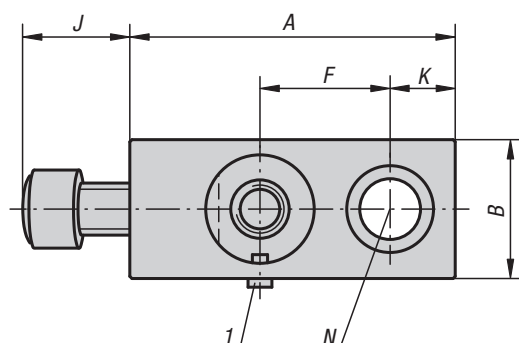
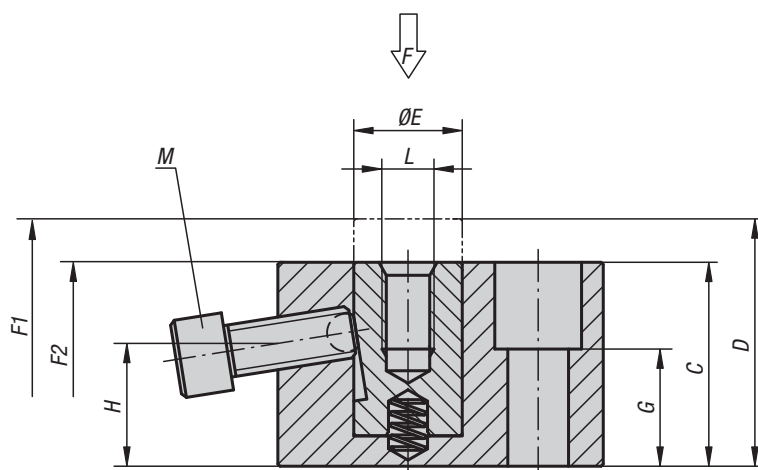
Material:
Carbon steel.

Version:
Body black oxidised.
Thrust pin tempered and black oxidised.

Sample order:
K0921.06029

Drawing reference:
M = ball pressure screw
N = through hole for socket head screw DIN 912

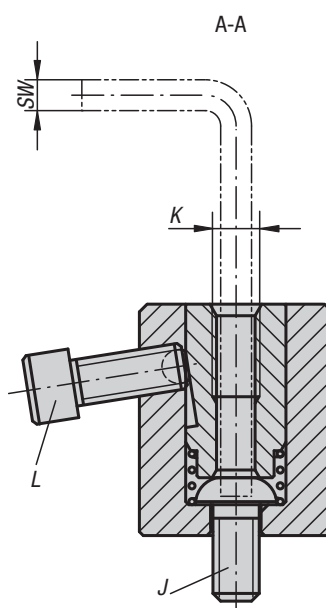
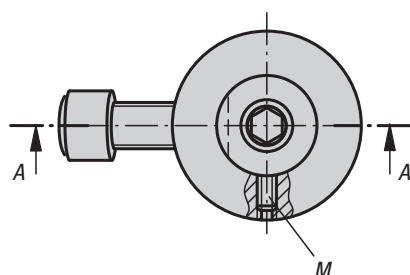
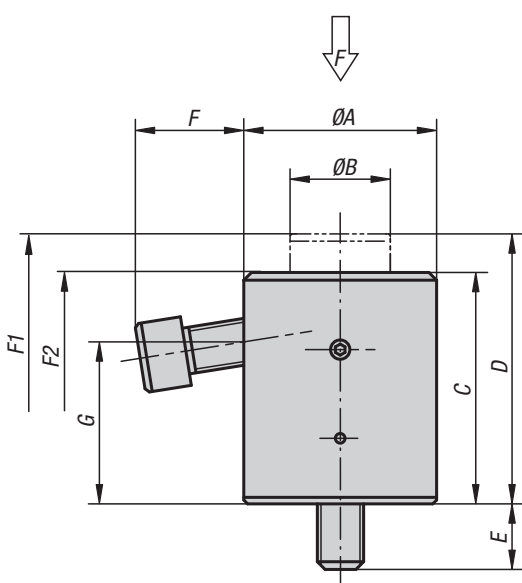
- 1) rotation lock
- 2) screw rest
- 3) hexagonal nut



KIPP Workpiece supports

Order No.	A	B	C	D	E	F	G	H	J	K	L	M	N	F N	Spring force initial pressure F1 approx. N	Spring force final pressure F2 approx. N
K0921.06029	38	19	29	35	12	15	15	17,6	13	8	M6x10	M6x16	M6	4000	0	6
K0921.08037	50	22	37	47	16	20	20	21,1	16	10	M8x15	M8x20	M8	6000	0	7
K0921.12047	75	32	47	57	25	30	27	28,3	25	15	M12x20	M12x30	M12	9000	1	11

Workpiece support cylinders



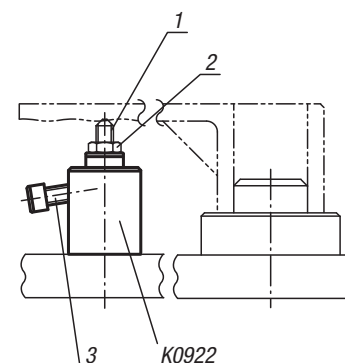
Material:
Carbon steel.

Version:
Body black oxidised.
Thrust pin hardened and black oxidised.

Sample order:
K0922.06039

Drawing reference:
J = mounting screw
L = ball-end thrust screw
M = grub screw

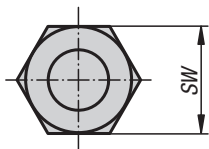
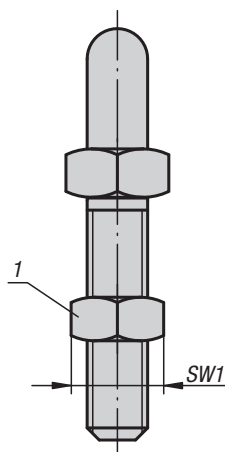
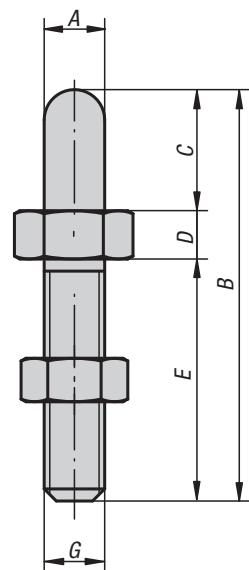
- 1) screw rest
- 2) hexagonal nut
- 3) ball-end thrust screw



KIPP Workpiece support cylinders

Order No.	A	B	C	D	E	F	G	J	K	L	M	SW	F N	Spring force initial pressure F1 approx. N	Spring force final pressure F2 approx. N
K0922.06039	28	14	33	39	10	13,1	22,2	M6	M6x12	M6x16	M4x8	4	4000	10	22
K0922.08052	35	19	42	52	14	17,2	27,5	M8	M8x16	M8x20	M4x8	5	6000	10	27
K0922.12070	50	26	60	70	16	28,1	42,1	M12	M12x24	M12x30	M5x12	8	9000	15	30
K0922.16080	60	33	70	80	22	26,6	47,4	M16	M16x32	M12x30	M5x15	10	9000	15	35

Support bolts

**Material:**

Carbon steel, tempered.

Version:

Black oxidised.

Sample order:

K0297.16016

Note:

The rounded nose also allows support bolts to be used as positioning elements for workpieces with matching holes.

The versions K0297.08016 and K0297.20040 have a hex collar.

Drawing reference:

1) locknut

KIPP Support bolts

Order No.	A	B	C	D	E	G	SW	SW1
K0297.06006	6	37	6	6	25	M6	13	10
K0297.06012	6	43	12	6	25	M6	13	10
K0297.08008	8	45	8	7	30	M8	13	13
K0297.08016	8	53	16	7	30	M8	13	13
K0297.10010	10	58	10	8	40	M10	17	17
K0297.10020	10	68	20	8	40	M10	17	17
K0297.12012	12	72	12	10	50	M12	19	19
K0297.12024	12	84	24	10	50	M12	19	19
K0297.16016	16	89	16	13	60	M16	24	24
K0297.16032	16	105	32	13	60	M16	24	24
K0297.20020	20	115	20	15	80	M20	36	30
K0297.20040	20	135	40	15	80	M20	36	30

Support bolts

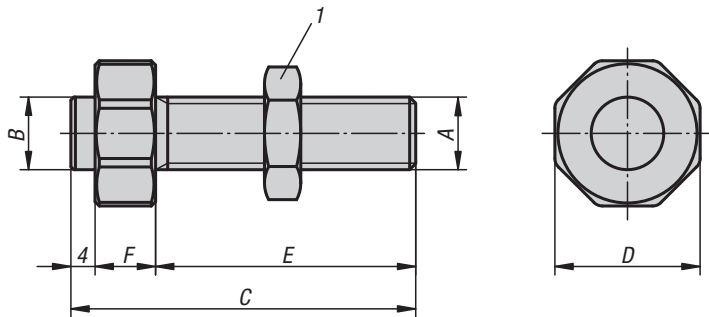


Material:
Carbon steel.

Version:
Tempered and black oxidised.

Sample order:
K0828.08041

Drawing reference:
1) locknut



KIPP Support bolts

Order No.	A	B	C	D	E	F
K0828.08041	M8	8	41	17	30	7
K0828.08051	M8	8	51	17	40	7
K0828.12057	M12	12	57	24	43	10
K0828.12072	M12	12	72	24	58	10
K0828.16057	M16	16	57	30	43	10
K0828.16072	M16	16	72	30	58	10

Rest pads

**Material:**

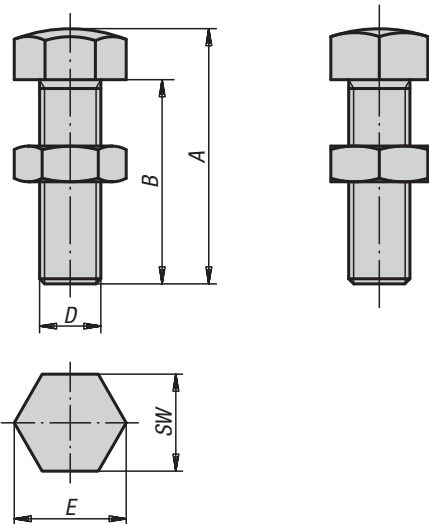
Carbon steel or brass

Version:

Tempered and black oxidised.

Sample order:

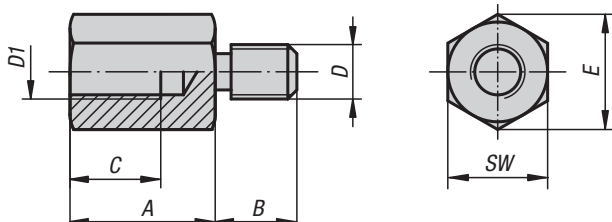
K0307.16055



KIPP Rest pads

Order No.	Material	A	B	D	E	SW
K0307.06030	carbon steel	30	25	M6	11,5	10
K0307.06040	carbon steel	40	35	M6	11,5	10
K0307.06050	carbon steel	50	45	M6	11,5	10
K0307.08036	carbon steel	36	30	M8	15	13
K0307.08046	carbon steel	46	40	M8	15	13
K0307.08056	carbon steel	56	50	M8	15	13
K0307.10042	carbon steel	42	35	M10	19,6	17
K0307.10048	carbon steel	48	40	M10	19,6	17
K0307.10058	carbon steel	58	50	M10	19,6	17
K0307.10068	carbon steel	68	60	M10	19,6	17
K0307.12048	carbon steel	50	42	M12	21,9	19
K0307.12070	carbon steel	70	60	M12	21,9	19
K0307.12080	carbon steel	80	70	M12	21,9	19
K0307.16055	carbon steel	55	45	M16	27,7	24
K0307.16075	carbon steel	75	65	M16	27,7	24
K0307.16085	carbon steel	85	75	M16	27,7	24
K0307.12148	brass	50	42	M12	21,9	19
K0307.16155	brass	55	45	M16	27,7	24

Extension pieces

**Material:**

Carbon steel.

Version:

Black oxidised.

Sample order:

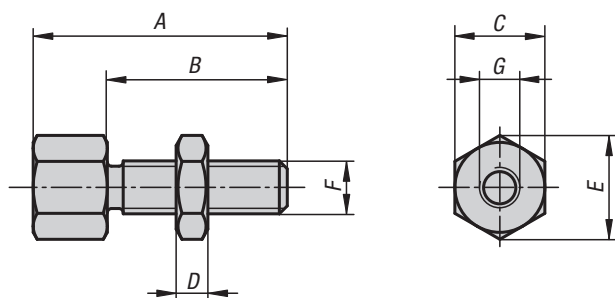
K0821.120750

Note:

Extension pieces are used to extend self-aligning pads, spring plungers, positioning feet, rest pads etc.

KIPP Extension pieces

Order No.	A	B	C	D	D1	E	SW
K0821.08025	25	13	15	M8	M8	15	13
K0821.08032	32	13	15	M8	M8	15	13
K0821.08040	40	13	15	M8	M8	15	13
K0821.10025	25	15	17	M10	M10	19,6	17
K0821.10032	32	15	17	M10	M10	19,6	17
K0821.10040	40	15	17	M10	M10	19,6	17
K0821.10050	50	16	20	M10	M10	19,6	17
K0821.10075	75	16	20	M10	M10	19,6	17
K0821.120320	32	18	20	M12	M12	25,4	22
K0821.120500	50	18	20	M12	M12	25,4	22
K0821.120750	75	18	20	M12	M12	25,4	22
K0821.160320	32	25	20	M16	M16	31,2	27
K0821.160500	50	25	30	M16	M16	31,2	27
K0821.160750	75	25	30	M16	M16	31,2	27
K0821.108025	25	19	15	M8	M8	15	13
K0821.108032	32	19	15	M8	M8	15	13
K0821.108040	40	19	15	M8	M8	15	13
K0821.112032	32	30	20	M12	M12	25,4	22
K0821.112050	50	30	20	M12	M12	25,4	22
K0821.112075	75	30	20	M12	M12	25,4	22
K0821.116032	32	30	20	M16	M16	31,2	27
K0821.116050	50	30	30	M16	M16	31,2	27
K0821.116075	75	30	30	M16	M16	31,2	27



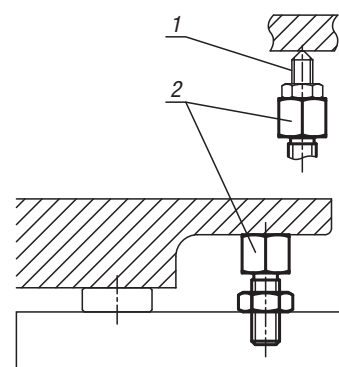
Material:
Carbon steel.

Version:
Black oxidised.

Sample order:
K0308.0803006

Drawing reference:
1) screw rest
2) jack screw

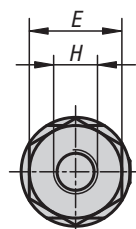
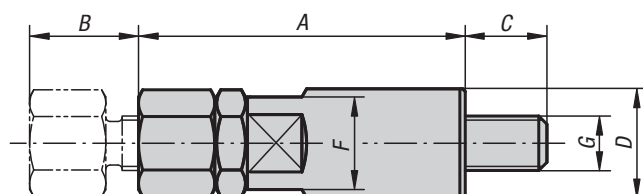
Jack screw for mounting various rests



KIPP Jack screws

Order No.	A	B	C	D	E	F	G
K0308.0803006	30	20	13	5	14,4	M8	M6x6
K0308.0804006	40	30	13	5	14,4	M8	M6x6
K0308.1003808	38	24	17	6	18,9	M10	M8x8
K0308.1004808	48	34	17	6	18,9	M10	M8x8
K0308.1205110	51	33	22	7	24,5	M12	M10x10
K0308.1206610	66	48	22	7	24,5	M12	M10x10
K0308.1606212	62	40	27	10	30,1	M16	M12x12
K0308.1607712	77	55	27	10	30,1	M16	M12x12

Jack screws extended

**Material:**

Carbon steel.

Version:

Black oxidised.

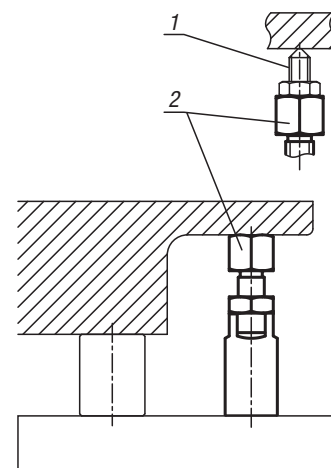
Sample order:

K0923.08040

Drawing reference:

- 1) screw rest
- 2) jack screw

Jack screw for mounting various rests

**KIPP Jack screws extended**

Order No.	A	B	C	D	E	F	G	H
K0923.08040	40	10	12	16	13	13	M8	M6x6
K0923.08050	50	20	12	16	13	13	M8	M6x6
K0923.10050	50	10	14	20	17	17	M10	M8x8
K0923.10060	60	20	14	20	17	17	M10	M8x8
K0923.12065	65	15	19	24	22	22	M12	M10x10
K0923.12080	80	30	19	24	22	22	M12	M10x10
K0923.16080	80	15	24	32	27	27	M16	M12x12
K0923.16095	95	30	24	32	27	27	M16	M12x12

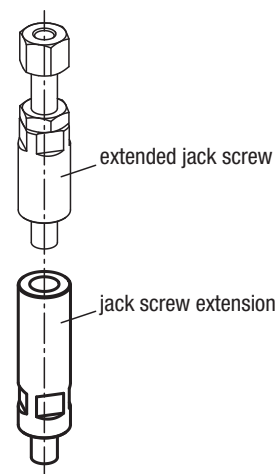
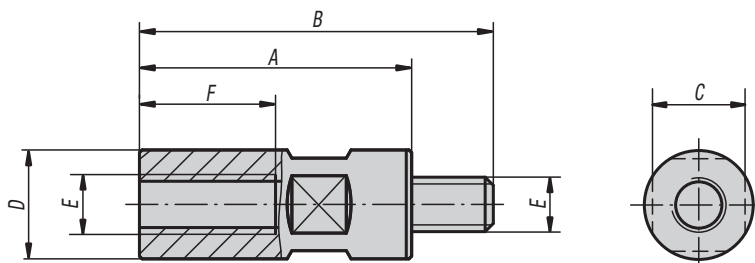
Extensions for jack screws



Material:
Carbon steel.

Version:
Black oxidised.

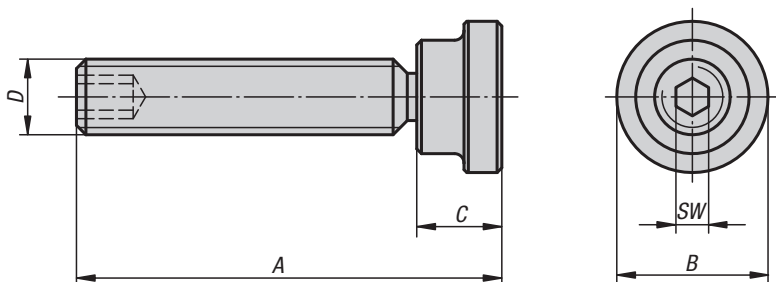
Sample order:
K0924.08032



KIPP Extensions for jack screws

Order No.	A	B	C	D	E	F
K0924.08032	32	44	13	16	M8	20
K0924.08040	40	52	13	16	M8	20
K0924.08050	50	62	13	16	M8	20
K0924.08065	65	77	13	16	M8	20
K0924.08080	80	92	13	16	M8	20
K0924.08100	100	112	13	16	M8	20
K0924.10040	40	54	17	20	M10	25
K0924.10050	50	64	17	20	M10	25
K0924.10065	65	79	17	20	M10	25
K0924.10080	80	94	17	20	M10	25
K0924.10100	100	114	17	20	M10	25
K0924.12050	50	69	22	24	M12	30
K0924.12065	65	84	22	24	M12	30
K0924.12080	80	99	22	24	M12	30
K0924.12100	100	119	22	24	M12	30
K0924.12125	125	144	22	24	M12	30
K0924.12160	160	179	22	24	M12	30
K0924.16050	50	74	27	32	M16	32
K0924.16065	65	89	27	32	M16	40
K0924.16080	80	104	27	32	M16	40
K0924.16100	100	124	27	32	M16	40
K0924.16125	125	149	27	32	M16	40
K0924.16160	160	184	27	32	M16	40

Grub screws with thrust pad

**Material, version:**

Thrust pad: carbon steel, tempered, black oxidised.
Grub screw: carbon steel, tempered.

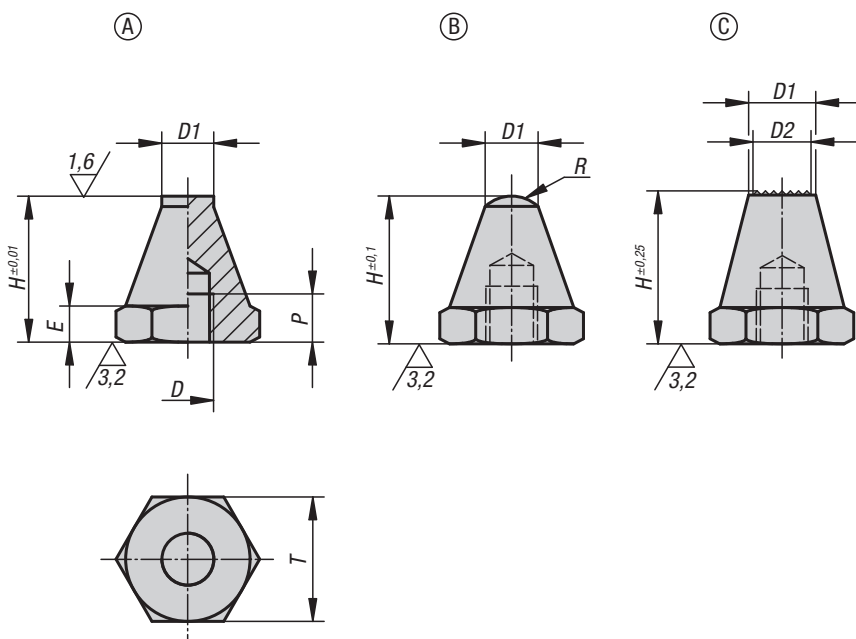
Sample order:

K0829.08X43

KIPP Grub screws with thrust pad

Order No.	A	B	C	D	SW
K0829.08X43	43	16	9	M8	4
K0829.08X63	63	16	9	M8	4
K0829.10X64	64	20	11	M10	5
K0829.10X84	84	20	11	M10	5
K0829.12X65	65	25	13	M12	6
K0829.12X85	85	25	13	M12	6
K0829.12X105	105	25	13	M12	6
K0829.16X85	85	32	15	M16	8
K0829.16X105	105	32	15	M16	8
K0829.16X130	130	32	15	M16	8
K0829.20X105	105	40	16	M20	10
K0829.20X130	130	40	16	M20	10
K0829.20X155	155	40	16	M20	10

Rest pads



Material:
Body carbon steel.

Version:
Body tempered and black oxidised.

Sample order:
K0294.106012

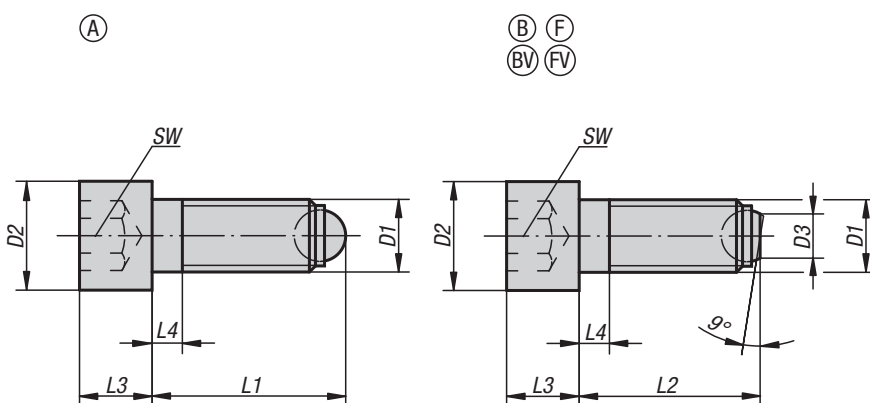
Note:
Rest pads are for supporting machined and non-machined parts. They can also be used as stops and thrust pads in fixtures and toolmaking. Studs or grub screws can be screwed and glued into the tapped hole D to make a rest pad with external thread.

Drawing reference:
Form A: flat face
Form B: ball end
Form C: diamond grip

KIPP Rest pads

Order No. Form A	Order No. Form B	Order No. Form C	D	D1	D2	E	H	P	R	T
K0294.106012	K0294.206012	K0294.306012	M6	6	-/-/5	3	12,5	4	-/5/-	11
K0294.106025	K0294.206025	K0294.306025	M6	6	-/-/5	3	25	7	-/5/-	11
K0294.108015	K0294.208015	K0294.308015	M8	8	-/-/6	4	15	6	-/8,5/-	13
K0294.108030	K0294.208030	K0294.308030	M8	8	-/-/6	4	30	9	-/8,5/-	13
K0294.110020	K0294.210020	K0294.310020	M10	10	-/-/8	5	20	9	-/9/-	17
K0294.110040	K0294.210040	K0294.310040	M10	10	-/-/8	5	40	13	-/9/-	17
K0294.112025	K0294.212025	K0294.312025	M12	12	-/-/9,5	6	25	11	-/12,75/-	19
K0294.112050	K0294.212050	K0294.312050	M12	12	-/-/9,5	6	50	16	-/12,75/-	19
K0294.116030	K0294.216030	K0294.316030	M16	16	-/-/13	8	30	12	-/17/-	24
K0294.116060	K0294.216060	K0294.316060	M16	16	-/-/13	8	60	20	-/17/-	24

Ball-end thrust screws with head



Material:

Screw carbon steel.
Ball ball-bearing steel.

Version:

Screw, grade 10.9, black.
Ball hardened, bright.

Sample order:

K0380.10820

Note:

Form A with full ball is used when a clean, polished contact surface is required. Surfaces which are not flat and parallel can be firmly clamped or supported with Form B with flattened ball, the movable ball can adapt itself up to 9°.

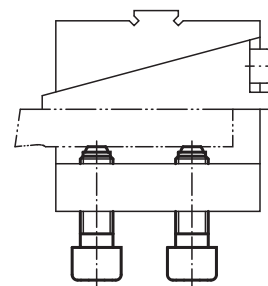
Drawing reference:

Form A: full ball
Form B: flattened ball
Form BV: flattened ball non-rotating
Form F: flattened ball diamond grip
Form FV: flattened ball diamond grip non-rotating

KIPP Ball-end thrust screws with head

Order No.	Form	D1	L1	D2	L3	L4	Ball-Ø	SW	Load rating max. kN (static load only)
K0380.10620	A	M6	20,8	10	6	3	4	5	9
K0380.10630	A	M6	30,8	10	6	3	4	5	9
K0380.10640	A	M6	40,8	10	6	16	4	5	9
K0380.10820	A	M8	21,2	13	8	3,5	5,5	6	15
K0380.10835	A	M8	36,2	13	8	3,5	5,5	6	15
K0380.10850	A	M8	51,2	13	8	22	5,5	6	15
K0380.11025	A	M10	26,7	16	10	4,5	7	8	20
K0380.11040	A	M10	41,7	16	10	4,5	7	8	20
K0380.11060	A	M10	61,7	16	10	28	7	8	20
K0380.11230	A	M12	32	18	12	5	8,5	10	30
K0380.11250	A	M12	52	18	12	5	8,5	10	30
K0380.11280	A	M12	82	18	12	44	8,5	10	30
K0380.11640	A	M16	43,3	24	16	6	12	14	60
K0380.11660	A	M16	63,3	24	16	6	12	14	60
K0380.11680	A	M16	83,3	24	16	36	12	14	60
K0380.12050	A	M20	54,2	30	20	7,5	15	17	90
K0380.12080	A	M20	84,2	30	20	28	15	17	90
K0380.120100	A	M20	104,2	30	20	48	15	17	90
K0380.12460	A	M24	64,7	36	24	9	18	19	120
K0380.12490	A	M24	94,7	36	24	30	18	19	120
K0380.124120	A	M24	124,7	36	24	60	18	19	120

Ball-end thrust screws with head

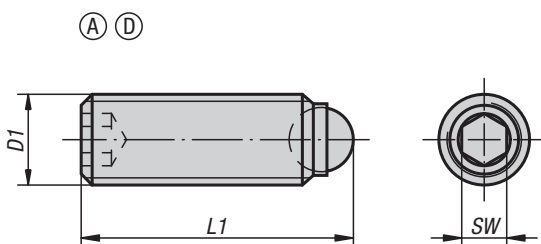


Order No. Form B	Order No. Form F	D1	D2	D3	L2	L3	L4	Ball-Ø	SW	Load rating max. kN (static load only)
K0380.20620	-	M6	10	3,2	20	6	3	4	5	9
K0380.20630	-	M6	10	3,2	30	6	3	4	5	9
K0380.20640	-	M6	10	3,2	40	6	16	4	5	9
K0380.20820	-	M8	13	4,5	20	8	3,5	5,5	6	15
K0380.20835	-	M8	13	4,5	35	8	3,5	5,5	6	15
K0380.20850	-	M8	13	4,5	50	8	22	5,5	6	15
K0380.21025	K0380.31025	M10	16	6	25	10	4,5	7	8	20
K0380.21040	K0380.31040	M10	16	6	40	10	4,5	7	8	20
K0380.21060	K0380.31060	M10	16	6	60	10	28	7	8	20
K0380.21230	K0380.31230	M12	18	7,2	30	12	5	8,5	10	30
K0380.21250	K0380.31250	M12	18	7,2	50	12	5	8,5	10	30
K0380.21280	K0380.31280	M12	18	7,2	80	12	44	8,5	10	30
K0380.21640	K0380.31640	M16	24	10,7	40	16	6	12	14	60
K0380.21660	K0380.31660	M16	24	10,7	60	16	6	12	14	60
K0380.21680	K0380.31680	M16	24	10,7	80	16	36	12	14	60
K0380.22050	-	M20	30	13,5	50	20	7,5	15	17	90
K0380.22080	-	M20	30	13,5	80	20	28	15	17	90
K0380.220100	-	M20	30	13,5	100	20	48	15	17	90
K0380.22460	-	M24	36	15,8	60	24	9	18	19	120
K0380.22490	-	M24	36	15,8	90	24	30	18	19	120
K0380.224120	-	M24	36	15,8	120	24	60	18	19	120

Order No. Form BV	Order No. Form FV	D1	D2	D3	L2	L3	L4	Ball-Ø	SW	Load rating max. kN (static load only)
K0380.40820	-	M8	13	4,5	20	8	3,5	5,5	6	9
K0380.40835	-	M8	13	4,5	35	8	3,5	5,5	6	9
K0380.40850	-	M8	13	4,5	50	8	22	5,5	6	9
K0380.41025	K0380.51025	M10	16	6	25	10	4,5	7	8	12
K0380.41040	K0380.51040	M10	16	6	40	10	4,5	7	8	12
K0380.41060	K0380.51060	M10	16	6	60	10	28	7	8	12
K0380.41230	K0380.51230	M12	18	7,2	30	12	5	8,5	10	18
K0380.41250	K0380.51250	M12	18	7,2	50	12	5	8,5	10	18
K0380.41280	K0380.51280	M12	18	7,2	80	12	44	8,5	10	18
K0380.41640	K0380.51640	M16	24	10,7	40	16	6	12	14	36
K0380.41660	K0380.51660	M16	24	10,7	60	16	6	12	14	36
K0380.41680	K0380.51680	M16	24	10,7	80	16	36	12	14	36

Ball-end thrust screws without head

with full ball


Material:

Screw carbon steel, grade 10.9
Ball, ball-bearing steel or POM.

Version:

Screw black.
Ball hardened bright or POM.

Sample order:

K0383.10810

Note:

Ball-end thrust screws with full ball are used when a clean, polished contact surface is required.
Longer versions have been specially designed to be glued in, allowing mechanical connecting elements with external thread to be made cost-effectively for small and medium-sized series.

Drawing reference:

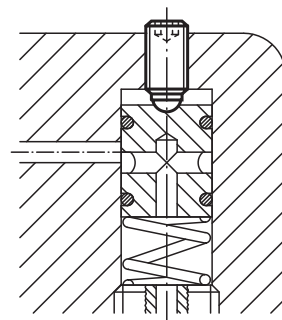
Form A: steel ball
Form D: POM ball

KIPP Ball-end thrust screws without head with full ball

Order No. Form A	Order No. Form D	D1	L1	Ball-Ø	SW	Load rating max. kN (static load only)
K0383.1046	K0383.3046	M4	6	2,5	2	3,5/0,3
K0383.1048	K0383.3048	M4	8	2,5	2	3,5/0,3
K0383.10410	K0383.30410	M4	10	2,5	2	3,5/0,3
K0383.10412	K0383.30412	M4	12	2,5	2	3,5/0,3
K0383.10416	K0383.30416	M4	16	2,5	2	3,5/0,3
K0383.1058	K0383.3058	M5	8	3	2,5	4,5/0,5
K0383.10510	K0383.30510	M5	10	3	2,5	4,5/0,5
K0383.10512	K0383.30512	M5	12	3	2,5	4,5/0,5
K0383.10516	K0383.30516	M5	16	3	2,5	4,5/0,5
K0383.10520	K0383.30520	M5	20	3	2,5	4,5/0,5
K0383.10525	K0383.30525	M5	25	3	2,5	4,5/0,5
K0383.10610	K0383.30610	M6	10,8	4	3	9/0,9
K0383.10612	K0383.30612	M6	12,8	4	3	9/0,9
K0383.10616	K0383.30616	M6	16,8	4	3	9/0,9
K0383.10620	K0383.30620	M6	20,8	4	3	9/0,9
K0383.10625	K0383.30625	M6	25,8	4	3	9/0,9
K0383.10650	-	M6	50,8	4	3	9
K0383.10660	-	M6	60,8	4	3	9
K0383.10680	-	M6	80,8	4	3	9

Ball-end thrust screws without head

with full ball

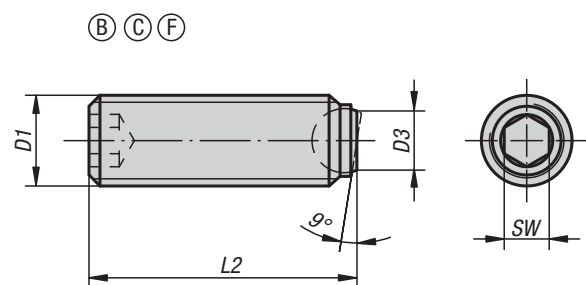


KIPP Ball-end thrust screws without head with full ball

Order No. Form A	Order No. Form D	D1	L1	Ball-Ø	SW	Load rating max. kN (static load only)
K0383.10810	K0383.30810	M8	11,2	5,5	4	10/1,5
K0383.10812	K0383.30812	M8	13,2	5,5	4	10/1,5
K0383.10816	K0383.30816	M8	17,2	5,5	4	15/1,5
K0383.10820	K0383.30820	M8	21,2	5,5	4	15/1,5
K0383.10825	K0383.30825	M8	26,2	5,5	4	15/1,5
K0383.10830	K0383.30830	M8	31,2	5,5	4	15/1,5
K0383.10850	-	M8	51,2	5,5	4	15
K0383.10860	-	M8	61,2	5,5	4	15
K0383.10880	-	M8	81,2	5,5	4	15
K0383.11012	K0383.31012	M10	13,7	7	5	20/2
K0383.11016	K0383.31016	M10	17,7	7	5	20/2
K0383.11020	K0383.31020	M10	21,7	7	5	20/2
K0383.11025	K0383.31025	M10	26,7	7	5	20/2
K0383.11035	K0383.31035	M10	36,7	7	5	20/2
K0383.11216	K0383.31216	M12	18	8,5	6	30/3
K0383.11220	K0383.31220	M12	22	8,5	6	30/3
K0383.11225	-	M12	27	8,5	6	30
K0383.11230	K0383.31230	M12	32	8,5	6	30/3
K0383.11232	-	M12	34	8,5	6	30
K0383.11240	K0383.31240	M12	42	8,5	6	30/3
K0383.11620	-	M16	23,3	12	8	60
K0383.11625	-	M16	28,3	12	8	60
K0383.11635	-	M16	38,3	12	8	60
K0383.11650	-	M16	53,3	12	8	60
K0383.12030	-	M20	34,2	15	10	90
K0383.12040	-	M20	44,2	15	10	90
K0383.12060	-	M20	64,2	15	10	90
K0383.12435	-	M24	39,7	18	12	120
K0383.12450	-	M24	54,7	18	12	120
K0383.12480	-	M24	84,7	18	12	120

Ball-end thrust screws without head

with flattened ball



Material:

Screw carbon steel, grade 10.9
Ball, ball-bearing steel or POM.

Version:

Screw black.
Ball hardened bright or POM.

Sample order:

K0383.41012

Note:

Surfaces which are not flat and parallel can be firmly clamped or supported with Form B, C or F with flattened ball, the movable ball can adapt itself up to 9°.

Longer versions have been specially designed to glue in, allowing mechanical connecting elements with external thread to be made cost-effectively for small and medium-sized series.

Drawing reference:

Form B: steel ball
Form C: POM ball
Form F: steel ball diamond grip

KIPP Ball-end thrust screws without head with flattened POM ball

Order No.	Form	D1	D3	L2	Ball-Ø	SW	Load rating max. kN (static load only)
K0383.7046	C	M4	1,8	5,9	2,5	2	0,3
K0383.7048	C	M4	1,8	7,9	2,5	2	0,3
K0383.70410	C	M4	1,8	9,9	2,5	2	0,3
K0383.70412	C	M4	1,8	11,9	2,5	2	0,3
K0383.70416	C	M4	1,8	15,9	2,5	2	0,3
K0383.7058	C	M5	2,1	7,8	3	2,5	0,5
K0383.70510	C	M5	2,1	9,8	3	2,5	0,5
K0383.70512	C	M5	2,1	11,8	3	2,5	0,5
K0383.70516	C	M5	2,1	15,8	3	2,5	0,5
K0383.70520	C	M5	2,1	19,8	3	2,5	0,5
K0383.70525	C	M5	2,1	24,8	3	2,5	0,5
K0383.70610	C	M6	3	10,3	4	3	0,9
K0383.70612	C	M6	3	12,3	4	3	0,9
K0383.70616	C	M6	3	16,3	4	3	0,9
K0383.70620	C	M6	3	20,3	4	3	0,9
K0383.70625	C	M6	3	25,3	4	3	0,9
K0383.70810	C	M8	4,2	10,4	5,5	4	1,5
K0383.70812	C	M8	4,2	12,4	5,5	4	1,5
K0383.70816	C	M8	4,2	16,4	5,5	4	1,5
K0383.70820	C	M8	4,2	20,4	5,5	4	1,5
K0383.70825	C	M8	4,2	25,4	5,5	4	1,5
K0383.70830	C	M8	4,2	30,4	5,5	4	1,5

KIPP Ball-end thrust screws without head with flattened serrated steel ball

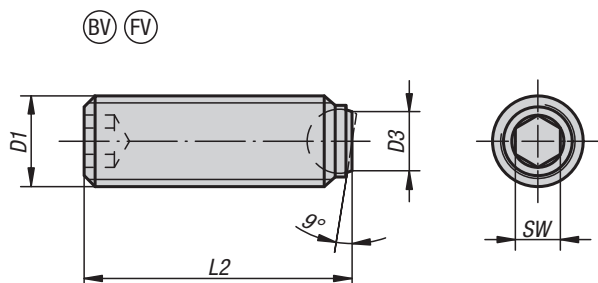
Order No.	Form	D1	D3	L2	Ball-Ø	SW	Load rating max. kN (static load only)
K0383.41012	F	M10	6	12	7	5	20
K0383.41016	F	M10	6	16	7	5	20
K0383.41025	F	M10	6	25	7	5	20
K0383.41035	F	M10	6	35	7	5	20
K0383.41216	F	M12	7,2	16	8,5	6	30
K0383.41220	F	M12	7,2	20	8,5	6	30
K0383.41230	F	M12	7,2	30	8,5	6	30
K0383.41240	F	M12	7,2	40	8,5	6	30
K0383.41620	F	M16	10,7	20	12	8	60
K0383.41625	F	M16	10,7	25	12	8	60
K0383.41635	F	M16	10,7	35	12	8	60
K0383.41650	F	M16	10,7	50	12	8	60

KIPP Ball-end thrust screws without head with flattened steel ball

Order No.	Form	D1	D3	L2	Ball-Ø	SW	Load rating max. kN (static load only)
K0383.2046	B	M4	1,4	5,8	2,5	2	3,5
K0383.2048	B	M4	1,4	7,8	2,5	2	3,5
K0383.20410	B	M4	1,4	9,8	2,5	2	3,5
K0383.20412	B	M4	1,4	11,8	2,5	2	3,5
K0383.20416	B	M4	1,4	15,8	2,5	2	3,5
K0383.2058	B	M5	2	7,6	3	2,5	4,5
K0383.20510	B	M5	2	9,6	3	2,5	4,5
K0383.20512	B	M5	2	11,6	3	2,5	4,5
K0383.20516	B	M5	2	15,6	3	2,5	4,5
K0383.20520	B	M5	2	19,6	3	2,5	4,5
K0383.20525	B	M5	2	24,6	3	2,5	4,5
K0383.20610	B	M6	3	10,1	4	3	9
K0383.20612	B	M6	3	12,1	4	3	9
K0383.20616	B	M6	3	16,1	4	3	9
K0383.20620	B	M6	3	20,1	4	3	9
K0383.20625	B	M6	3	25,1	4	3	9
K0383.20650	B	M6	3	50,1	4	3	9
K0383.20660	B	M6	3	60,1	4	3	9
K0383.20680	B	M6	3	80,1	4	3	9
K0383.20810	B	M8	4,1	10,3	5,5	4	10
K0383.20812	B	M8	4,1	12,3	5,5	4	10
K0383.20816	B	M8	4,1	16,3	5,5	4	15
K0383.20820	B	M8	4,1	20,3	5,5	4	15
K0383.20825	B	M8	4,1	25,3	5,5	4	15
K0383.20830	B	M8	4,1	30,3	5,5	4	15
K0383.20850	B	M8	4,1	50,3	5,5	4	15
K0383.20860	B	M8	4,1	60,3	5,5	4	15
K0383.20880	B	M8	4,1	80,3	5,5	4	15
K0383.21012	B	M10	5,6	12,3	7	5	20
K0383.21016	B	M10	5,6	16,3	7	5	20
K0383.21020	B	M10	5,6	20,3	7	5	20
K0383.21025	B	M10	5,6	25,3	7	5	20
K0383.21035	B	M10	5,6	35,3	7	5	20
K0383.21216	B	M12	7	16,2	8,5	6	30
K0383.21220	B	M12	7	20,2	8,5	6	30
K0383.21230	B	M12	7	30,2	8,5	6	30
K0383.21240	B	M12	7	40,2	8,5	6	30
K0383.21620	B	M16	10,7	20	12	8	60
K0383.21625	B	M16	10,7	25	12	8	60
K0383.21635	B	M16	10,7	35	12	8	60
K0383.21650	B	M16	10,7	50	12	8	60
K0383.22030	B	M20	13,5	30	15	10	90
K0383.22040	B	M20	13,5	40	15	10	90
K0383.22060	B	M20	13,5	60	15	10	90
K0383.22435	B	M24	15,8	35	18	12	120
K0383.22450	B	M24	15,8	50	18	12	120
K0383.22480	B	M24	15,8	80	18	12	120

Ball-end thrust screws without head

with flattened ball and rotation lock



Material:

Screw carbon steel, grade 10.9
Ball, ball-bearing steel.

Version:

Screw black.
Ball hardened, bright.

Sample order:

K0383.50820

Note:

Surfaces which are not flat and parallel can be firmly clamped or supported with a flattened ball, the movable ball can adapt itself up to 9°.

Longer versions have been designed especially to be glued in. This allows mechanical connecting elements with external thread to be made cost-effectively for small and medium-sized series.

Drawing reference:

Form BV: flattened ball non-rotating

Form FV: flattened ball diamond grip non-rotating

KIPP Ball-end thrust screws without head, with flattened ball and rotation lock

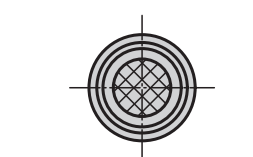
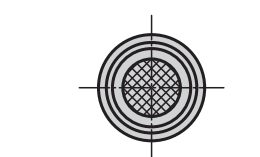
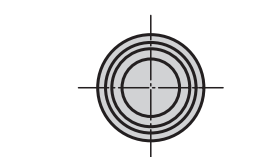
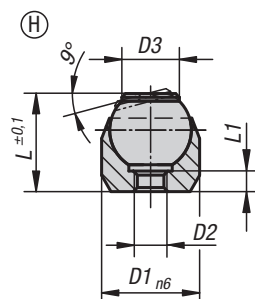
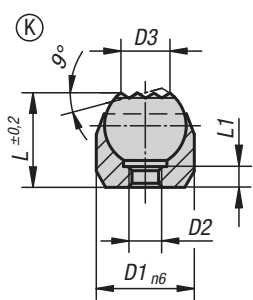
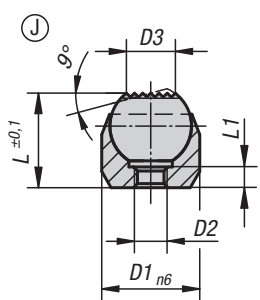
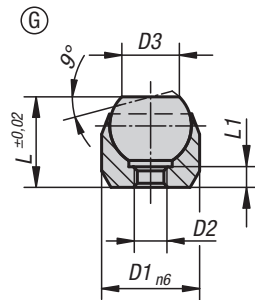
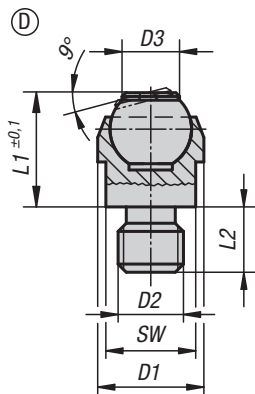
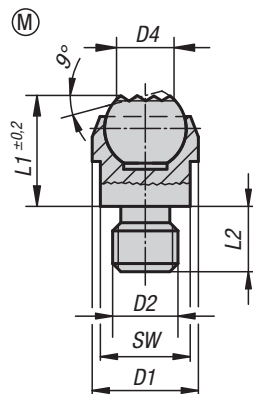
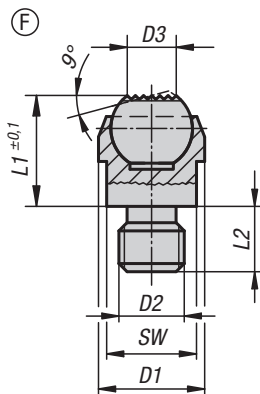
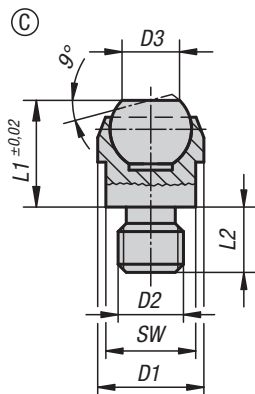
Order No. Form BV	Order No. Form FV	D1	D3	L2	Ball-Ø	SW	Load rating max. kN (static load only)
K0383.50612	-	M6	3	12,1	4	3	6
K0383.50616	-	M6	3	16,1	4	3	6
K0383.50620	-	M6	3	20,1	4	3	6
K0383.50625	-	M6	3	25,1	4	3	6
K0383.50816	K0383.60816	M8	4,1	16,3	5,5	4	9
K0383.50820	K0383.60820	M8	4,1	20,3	5,5	4	9
K0383.50825	K0383.60825	M8	4,1	25,3	5,5	4	9
K0383.50830	K0383.60830	M8	4,1	30,3	5,5	4	9
K0383.51020	K0383.61020	M10	5,6	20,3	7	5	12
K0383.51025	K0383.61025	M10	5,6	25,3	7	5	12
K0383.51035	K0383.61035	M10	5,6	35,3	7	5	12
K0383.51040	K0383.61040	M10	5,6	40,2	7	5	12
K0383.51220	K0383.61220	M12	7	20,2	8,5	6	18
K0383.51230	K0383.61230	M12	7	30,2	8,5	6	18
K0383.51240	K0383.61240	M12	7	40,2	8,5	6	18
K0383.51250	K0383.61250	M12	7	50	8,5	6	18
K0383.51635	K0383.61635	M16	10,7	35	12	8	36
K0383.51650	K0383.61650	M16	10,7	50	12	8	36
K0383.52030	K0383.62030	M20	13,5	30	15	10	60
K0383.52040	K0383.62040	M20	13,5	40	15	10	60
K0383.52050	K0383.62050	M20	13,5	50	15	10	60
K0383.52060	K0383.62060	M20	13,5	60	15	10	60
K0383.52435	K0383.62435	M24	15,8	35	18	12	80
K0383.52450	K0383.62450	M24	15,8	50	18	12	80
K0383.52480	K0383.62480	M24	15,8	80	18	12	80



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



Self-aligning pads

**Material:**

Body carbon steel.

Ball, ball bearing steel 1.2067.

Form D: Ball with POM insert.

Form H: Ball with POM insert.

Form K: Ball with carbide insert.

Form M has a carbide ball.

Version:

Body tempered and phosphated.

Ball hardened.

Form M ball nickel plated.

Sample order:

K0282.120

Note:

Self-aligning pads serve as stops, supports and thrust pads in fixture constructions.

Ball secured against rotation.

* Valid only if the minimum bore depth is observed.

Drawing reference:

Form C: with external thread, flattened ball, smooth.

Form D: with external thread, flattened ball, with POM insert.

Form F: with external thread, flattened ball, diamond grip.

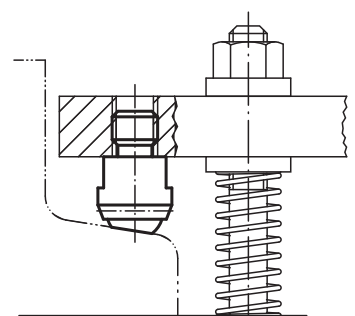
Form M: with external thread, flattened ball, diamond grip.

Form G: press fit, flattened ball, smooth.

Form H: press fit, flattened ball, with POM insert.

Form J: press fit, flattened ball, diamond grip.

Form K: press fit, flattened ball, with carbide insert.



Self-aligning pads



KIPP Self-aligning pads

Order No.	Form	D1	D2	D3	L1	L2	Ball-Ø	SW	Load rating max. kN (static load only)
K0282.108	C	13	M8	7,2	13	8	10	11	10
K0282.110	C	20	M10	10,5	18	10	16	17	25
K0282.112	C	20	M12	10,5	18	12	16	17	25
K0282.116	C	30	M16	20	27	16	25	27	90
K0282.120	C	50	M20	34,5	35	20	40	41	165
Order No.	Form	D1	D2	D3	L1	L2	Ball-Ø	SW	Load rating max. kN (static load only)
K0282.208	D	13	M8	7,9	13	8	10	11	10
K0282.210	D	20	M10	12,7	18	10	16	17	25
K0282.212	D	20	M12	12,7	18	12	16	17	25
Order No.	Form	D1	D2	D3	L1	L2	Ball-Ø	SW	Load rating max. kN (static load only)
K0282.308	F	13	M8	7,2	13	8	10	11	10
K0282.310	F	20	M10	10,5	18	10	16	17	25
K0282.312	F	20	M12	10,5	18	12	16	17	25
K0282.316	F	30	M16	20	27	16	25	27	90
K0282.320	F	50	M20	34,5	35	20	40	41	165
Order No.	Form	D1	D2	D4	L1	L2	SW	Ball-Ø	Load rating max. kN (static load only)
K0282.908	M	13	M8	7,7	13,3	8	11	10	10
K0282.910	M	20	M10	12	18	10	17	16	25
K0282.912	M	20	M12	12	18	12	17	16	25
Order No.	Form	D1	D2	D3	L	L1	Ball-Ø	Receiving hole	Load rating max. kN (static load only)
K0282.403	G	12	M3	7,2	11	3,5	10	Ø 12 H7 x 6 min.	10*
K0282.404	G	18	M4	10,5	17	4,4	16	Ø 18 H7 x 8 min.	25*
K0282.405	G	28	M5	20	25	6,3	25	Ø 28 H7 x 13 min.	90*
Order No.	Form	D1	D2	D3	L	L1	Ball-Ø	Receiving hole	Load rating max. kN (static load only)
K0282.503	H	12	M3	7,9	11	3	10	Ø 12 H7 x 6 min.	10*
K0282.504	H	18	M4	12,7	17	4	16	Ø 18 H7 x 8 min.	25*
K0282.505	H	28	M5	19,05	25	6	25	Ø 28 H7x13 min.	90*
Order No.	Form	D1	D2	D3	L	L1	Ball-Ø	Receiving hole	Load rating max. kN (static load only)
K0282.603	J	12	M3	7,2	11	3,5	10	Ø 12 H7 x 6 min.	10*
K0282.604	J	18	M4	10,5	17	4,4	16	Ø 18 H7 x 8 min.	25*
K0282.605	J	28	M5	20	25	6,3	25	Ø 28 H7 x 13 min.	90*
Order No.	Form	D1	D2	D3	L	L1	Ball-Ø	Receiving hole	Load rating max. kN (static load only)
K0282.803	K	12	M3	7,9	11	3	10	Ø 12 H7 x 6 min.	10*
K0282.804	K	18	M4	12,7	17	4	16	Ø 18 H7 x 8 min.	25*
K0282.805	K	28	M5	19,05	25	6	25	Ø 28 H7x13 min.	90*

Self-aligning pads

swivel angle 12°



Material:

Body carbon steel.

Ball, ball-bearing steel 1.3505.

Version:

Body tempered.

Ball hardened (50 - 55 HRC).

Sample order:

K0302.106

Note:

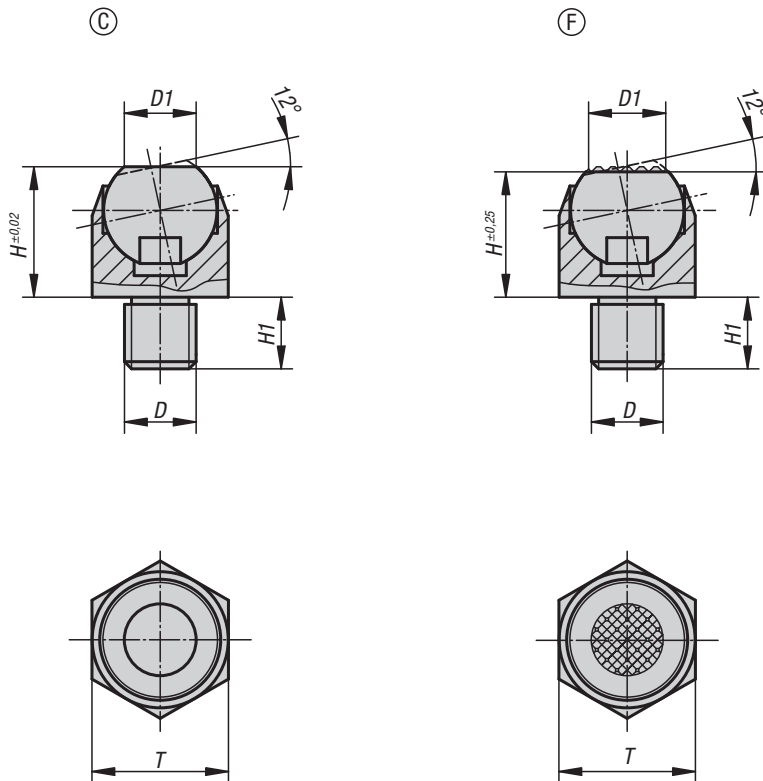
Self-aligning pads serve as stops, supports and thrust pads in fixture construction.

Ball secured against rotation.

Drawing reference:

Form C: male thread, smooth flattened ball

Form F: male thread, serrated flattened ball



KIPP Self-aligning pads swivel angle 12°

Order No. Form C	Order No. Form F	D	D1	H	H1	Ball-Ø	T	Load rating max. kN (static load only)
K0302.106	K0302.306	M6	6,7	13	7	10	13	10
K0302.108	K0302.308	M8	6,7	13	8	10	13	10
K0302.110	K0302.310	M10	10	18	10	16	19	25
K0302.112	K0302.312	M12	10	18	12	16	19	25
K0302.116	K0302.316	M16	20	27	16	24	30	90
K0302.120	K0302.320	M20	20	27	20	24	30	90

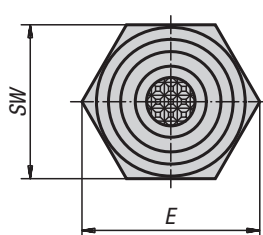
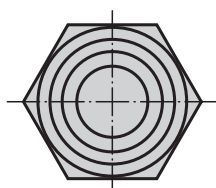
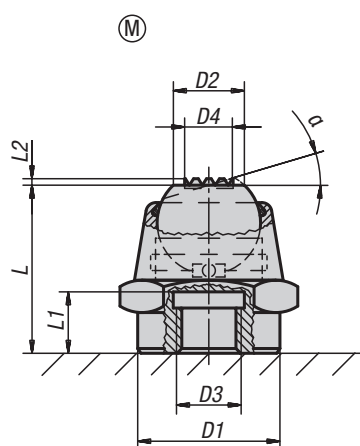
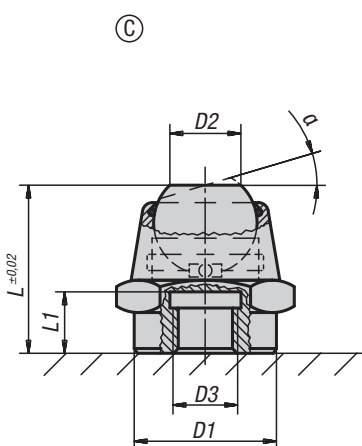


A large rectangular area filled with a fine grid of light gray lines, intended for taking notes or drawing.

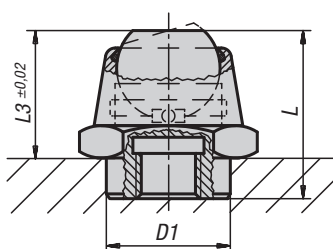


Self-aligning pads

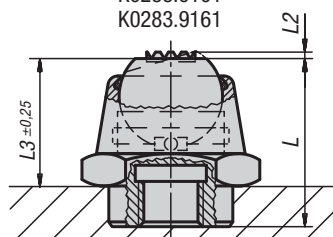
swivel angle 14° and 20°



K0283.1061
K0283.1101
K0283.1161



K0283.9061
K0283.9101
K0283.9161



Material:

Body steel.
Ball rust and acid resistant steel.
Form M with carbide insert.

Version:

Body black oxidised.
Ball bright.

Sample order:

K0283.108

Note:

Self-aligning pads are used to support and clamp unmachined and machined workpieces. They also serve as stops, supports and thrust pads in fixture and toolmaking.

Grub screws or threaded studs can be screwed and glued into thread D3 making a self-aligning pad with external thread.

Ball secured against rotation.

Advantages:

- Self-aligning pads can be swiveled.
- High load forces can be absorbed.
- The built-in o-ring keeps dirt and foreign particles out, which in turn guarantees reliable operation.

Self-aligning pads

swivel angle 14° and 20°



KIPP Form C, flattened ball, flat face

Order No.	Form	α	D1	D2	D3	L	L1	L3	E	SW	Ball-Ø	Load rating max. kN (static load only)
K0283.1061	C	14°	12	7	M6	17,5	6	12,5	19,6	17	10	14
K0283.106	C	14°	16	7	M6	17,5	6	-	19,6	17	10	14
K0283.108	C	20°	22	11	M8	26	9	-	27,7	24	16	34
K0283.1101	C	20°	18	11	M10	26	9	20	27,7	24	16	34
K0283.110	C	20°	22	11	M10	26	9	-	27,7	24	16	34
K0283.112	C	20°	22	11	M12	26	9	-	27,7	24	16	34
K0283.1161	C	20°	26	18	M16	40	15	30	41,6	36	25	90
K0283.116	C	20°	34	18	M16	40	15	-	41,6	36	25	90
K0283.120	C	20°	34	18	M20	40	15	-	41,6	36	25	90

KIPP Form M, flattened ball, carbide steel diamond grip

Order No.	Form	α	D1	D2	D3	D4	L	L1	L2	L3	E	SW	Ball-Ø	Load rating max. kN (static load only)
K0283.9061	M	14°	12	7	M6	5	17,5	6	0,6	12,5	19,6	17	10	14
K0283.906	M	14°	16	7	M6	5	17,5	6	0,6	-	19,6	17	10	14
K0283.908	M	20°	22	11	M8	7,5	26	9	0,8	-	27,7	24	16	34
K0283.9101	M	20°	18	11	M10	7,5	26	9	0,8	20	27,7	24	16	34
K0283.910	M	20°	22	11	M10	7,5	26	9	0,8	-	27,7	24	16	34
K0283.912	M	20°	22	11	M12	7,5	26	9	0,8	-	27,7	24	16	34
K0283.9161	M	20°	26	18	M16	13	40	15	0,9	30	41,6	36	25	90
K0283.916	M	20°	34	18	M16	13	40	15	0,9	-	41,6	36	25	90
K0283.920	M	20°	34	18	M20	13	40	15	0,9	-	41,6	36	25	90

Self-aligning pads

with o-ring



Material:

Body carbon steel.

Ball:

Form C, F tool steel.

Form K POM.

Form O stainless steel diamond impregnated.

Form P stainless steel with polyurethane face.

Version:

Body tempered, black oxidised.

Ball:

Form C, F hardened, black oxidised.

Form K POM ball, white.

Form O surface comparable to 100 grade abrasive grit.

Form P polyurethane, hardness 60 Shore.

Sample order:

K0284.704X012

Note:

Self-aligning pads are used to support and clamp unmachined and machined workpieces.

They also serve as stops, supports and thrust pads in fixtures and toolmaking.

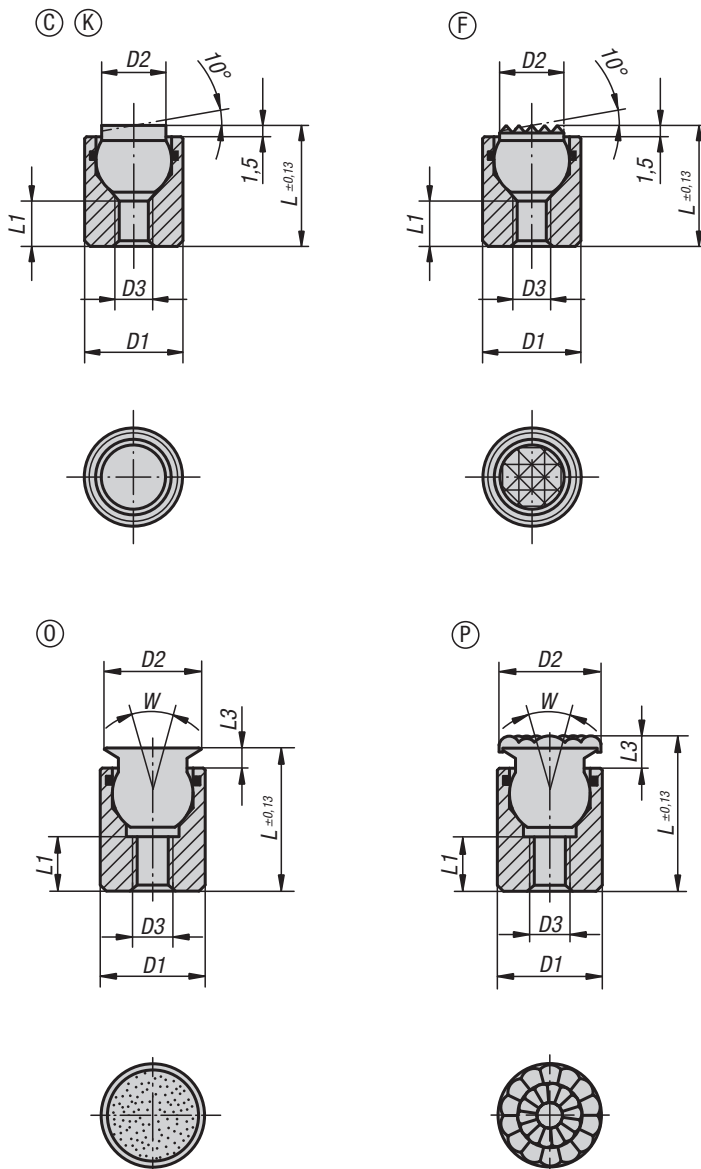
Ball secured against rotation.

Form O: The abrasive diamond surface is fused firmly to the ball. It is ideally suited to supporting smooth or slippery applications with a minimum of clamping pressure. This allows the diamond particles to get a firm grip on a very small area with minimum damage to the surface. The diamond surface offers excellent wear resistance.

Form P: The polyurethane surface is permanently vulcanised on the ball. It is abrasion-resistant and does not discolour. Offers optimum protection against damage to delicate surfaces. The pearl-like surface gives a firm grip and allows air to escape so as to prevent any suction effect between the contact surface and the self-aligning pads.

Advantages:

The built-in O-ring holds the ball in place and keeps dirt and foreign particles out ensuring smooth and even movement.



Self-aligning pads

with o-ring



KIPP Form C, flattened steel ball, smooth

Order No.	Form	D1	D2	D3	L	L1	Ball-Ø	Load rating max. kN (static load only)
K0284.104X012	C	10	6	M4	12	4,5	7	12
K0284.104X025	C	10	6	M4	25	12	7	12
K0284.105X016	C	13	8,5	M5	16	5	10	20
K0284.105X025	C	13	8,5	M5	25	12	10	20

KIPP Form F, flattened steel ball, diamond grip

Order No.	Form	D1	D2	D3	L	L1	Ball-Ø	Load rating max. kN (static load only)
K0284.304X012	F	10	6	M4	12	4,5	7	12
K0284.304X025	F	10	6	M4	25	12	7	12
K0284.305X016	F	13	8,5	M5	16	5	10	20
K0284.305X025	F	13	8,5	M5	25	12	10	20

KIPP Form K, flattened POM ball, smooth

Order No.	Form	D1	D2	D3	L	L1	Ball-Ø	Load rating max. kN (static load only)
K0284.704X012	K	10	6	M4	12	4,5	7	2
K0284.704X025	K	10	6	M4	25	12	7	2
K0284.705X016	K	13	8,5	M5	16	5	10	4
K0284.705X025	K	13	8,5	M5	25	12	10	4

KIPP Form O, stainless-steel ball, diamond impregnated

Order No.	Form	D1	D2	D3	L	L1	L3	W	Ball-Ø	Load rating max. kN (static load only)
K0284.504X012	O	10	8	M4	12,5	3,5	2	28	7	11,5
K0284.504X025	O	10	8	M4	25,5	9	2	28	7	11,5
K0284.505X017	O	13	11	M5	17,5	6,5	3	28	10	19,8
K0284.505X026	O	13	11	M5	26,5	9	3	28	10	19,8
K0284.506X021	O	17	14	M6	21	7,5	3	28	13	27,4
K0284.508X024	O	19	19	M8	24	8,5	4	24	15	38,6
K0284.510X028	O	24	21	M10	28	9	4	24	20	58,3

KIPP Form P, stainless-steel ball with polyurethane face

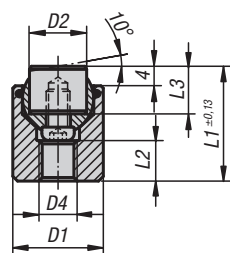
Order No.	Form	D1	D2	D3	L	L1	L3	W	Ball-Ø
K0284.604X014	P	10	10	M4	14,5	3,5	4	28	7
K0284.604X027	P	10	10	M4	27,5	9	4	28	7
K0284.605X019	P	13	13	M5	19,5	6,5	5	28	10
K0284.605X028	P	13	13	M5	28,5	9	5	28	10
K0284.606X023	P	17	16	M6	23	7,5	5	28	13
K0284.608X026	P	19	21	M8	26	8,5	6	24	15
K0284.610X030	P	24	23	M10	30	9	6	24	20

Self-aligning pads

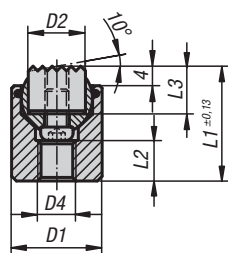
with O-ring and exchangeable inserts



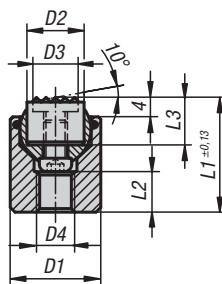
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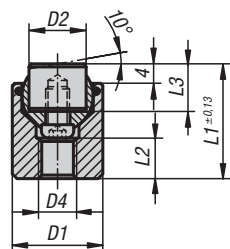
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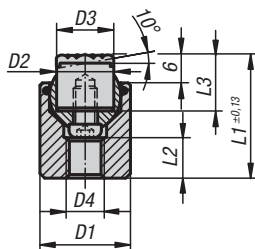
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Material:

Body carbon steel.

Ball rust and acid resistant steel.

Inserts:

Form C, F, M tool steel

Form K POM

Form E stainless steel.

Form O stainless steel diamond impregnated.

Form P stainless steel with polyurethane surface.

Version:

Body tempered, black oxidised.

Ball hardened, bright.

Inserts:

Form C, F hardened, black oxidised.

Form M with carbide serrations, black oxidised.

Form K white.

Form E hardened, bright.

Form O diamond impregnated surface comparable to 100 grade abrasive grit.

Form P polyurethane surface, hardness 60 Shore.

Sample order:

K0285.736X036

Note:

Self-aligning pads are used to support and clamp unmachined and machined workpieces.

They can also be used as stops, supports and thrust pads in fixtures and toolmaking.

The ball can be removed from the housing by applying light pressure to the socket head screw.

Ball secured against rotation.

Advantages:

Highly cost-effective as inserts can be exchanged.

The built-in O-ring holds the ball in place and keeps dirt and foreign particles out, ensuring uniform movement.

KIPP Form C, flattened steel insert, smooth

Order No.	Form	D1	D2	D4	L1	L2	L3	Ball-Ø	Load rating max. kN (static load only)	Order No. steel insert
K0285.117X022	C	17	10	M6	22	7	10	13	28	K0385.10108
K0285.119X024	C	19	12	M8	24	8	10	15	39	K0385.12108
K0285.124X028	C	24	16	M10	28	8	10	20	58	K0385.16108
K0285.130X030	C	30	20	M12	30	9	10	23	95	K0385.20108
K0285.136X036	C	36	25	M12	36	11	10	28	136	K0385.25108

KIPP Form E, flattened stainless steel insert, smooth

Order No.	Form	D1	D2	D4	L1	L2	L3	Ball-Ø	Load rating max. kN (static load only)	Order No. stainless steel insert
K0285.236X036	E	36	25	M12	36	11	10	28	136	K0385.25102
K0285.219X024	E	19	12	M8	24	8	10	15	39	K0385.12102
K0285.217X022	E	17	10	M6	22	7	10	13	28	K0385.10102
K0285.224X028	E	24	16	M10	28	8	10	20	58	K0385.16102
K0285.230X030	E	30	20	M12	30	9	10	23	95	K0385.20102

KIPP Form F, flattened, diamond grip

Order No.	Form	D1	D2	D4	L1	L2	L3	Ball-Ø	Load rating max. kN (static load only)	Order No. gripper
K0285.317X022	F	17	10	M6	22	7	10	13	28	K0385.1010
K0285.319X024	F	19	12	M8	24	8	10	15	39	K0385.1210
K0285.324X028	F	24	16	M10	28	8	10	20	58	K0385.1610
K0285.330X030	F	30	20	M12	30	9	10	23	95	K0385.2010
K0285.336X036	F	36	25	M12	36	11	10	28	136	K0385.2510

KIPP Form K, flattened POM insert, smooth

Order No.	Form	D1	D2	D4	L1	L2	L3	Ball-Ø	Load rating max. kN (static load only)	Order No. POM insert
K0285.717X022	K	17	10	M6	22	7	10	13	4	K0385.10109
K0285.719X024	K	19	12	M8	24	8	10	15	7	K0385.12109
K0285.724X028	K	24	16	M10	28	8	10	20	14	K0385.16109
K0285.730X030	K	30	20	M12	30	9	10	23	27	K0385.20109
K0285.736X036	K	36	25	M12	36	11	10	28	47	K0385.25109

KIPP Form M, flattened, with carbide serrations

Order No.	Form	D1	D2	D3	D4	L1	L2	L3	Ball-Ø	Load rating max. kN (static load only)	Order No. gripper
K0285.930X030	M	30	20	15,9	M12	30	9	10	23	95	K0385.20107
K0285.917X022	M	17	10	7,9	M6	22	7	10	13	28	K0385.10107
K0285.924X028	M	24	16	12,7	M10	28	8	10	20	58	K0385.16107
K0285.919X024	M	19	12	9,5	M8	24	8	10	15	39	K0385.12107
K0285.936X036	M	36	25	19	M12	36	11	10	28	136	K0385.25107

KIPP Form O, stainless-steel insert, diamond impregnated

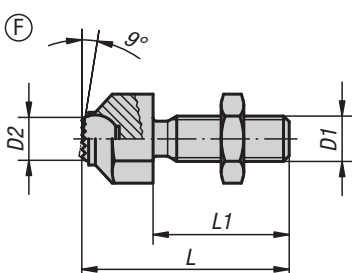
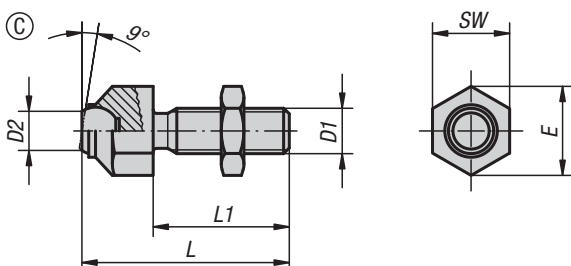
Order No.	Form	D1	D2	D4	L1	L2	L3	Ball-Ø	Load rating max. kN (static load only)	Order No. stainless steel insert, diamond surface
K0285.517X022	O	17	10	M6	22	7	10	13	28	K0385.10105
K0285.519X024	O	19	12	M8	24	8	10	15	39	K0385.12105
K0285.524X028	O	24	16	M10	28	8	10	20	58	K0385.16105
K0285.530X030	O	30	20	M12	30	9	10	23	95	K0385.20105
K0285.536X036	O	36	25	M12	36	11	10	28	136	K0385.25105

KIPP Form P, stainless-steel insert with polyurethane face

Order No.	Form	D1	D2	D3	D4	L1	L2	L3	Ball-Ø	Order No. stainless steel insert, polyurethane surface
K0285.617X024	P	17	10	10	M6	24	7	12	13	K0385.10126
K0285.619X026	P	19	12	13	M8	26	8	12	15	K0385.12126
K0285.624X030	P	24	16	16	M10	30	8	12	20	K0385.16126
K0285.630X032	P	30	20	21	M12	32	9	12	23	K0385.20126
K0285.636X038	P	36	25	27	M12	38	11	12	28	K0385.25126

Self-aligning pads

adjustable



Material:

Steel.

Version:

Housing tempered and manganese phosphated.
Ball hardened, bright.
Nut black oxidised.

Sample order:

K0287.316

Note:

Ball secured against rotation.

KIPP Form C, flattened ball, flat face

Order No.	Form	D1	D2	L	L1	E	SW	Ball-Ø	Load rating max. kN (static load only)
K0287.108	C	M8	5,8	36,6	25	14,5	13	8,5	8
K0287.110	C	M10	8,6	45,7	30	19	17	12	8
K0287.112	C	M12	8,6	50,7	35	19	17	12	15
K0287.116	C	M16	10,5	60,7	40	27	24	16	25
K0287.120	C	M20	20	77,3	50	33	30	25	90

KIPP Form F, flattened ball, diamond grip

Order No.	Form	D1	D2	L	L1	E	SW	Ball-Ø	Load rating max. kN (static load only)
K0287.308	F	M8	5,8	36,6	25	14,5	13	8,5	8
K0287.310	F	M10	8,6	45,7	30	19	17	12	8
K0287.312	F	M12	8,6	50,7	35	19	17	12	15
K0287.316	F	M16	10,5	60,7	40	27	24	16	25
K0287.320	F	M20	20	77,3	50	33	30	25	90



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

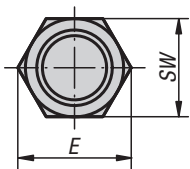
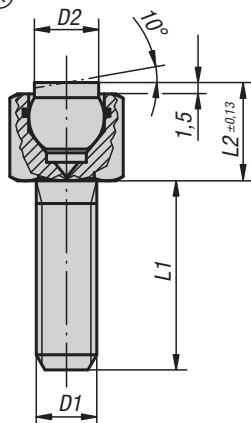


Self-aligning pads adjustable

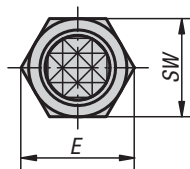
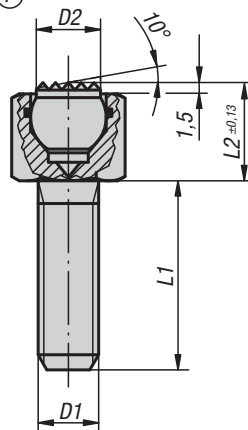
with o-ring



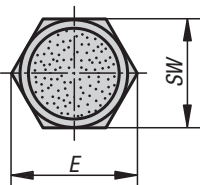
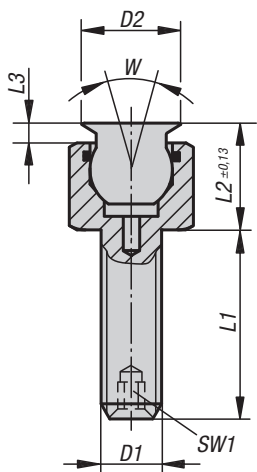
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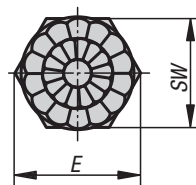
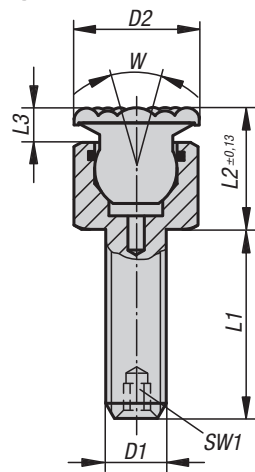
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Material:

Body carbon steel.

Ball:

Form C, F, tool steel.

Form K POM.

Form O stainless steel diamond impregnated.

Form P stainless steel with polyurethane surface.

Version:

Body tempered, black oxidised.

Ball:

Form C, F hardened, black oxidised.

Form K POM ball white.

Form O surface comparable to 100 grade abrasive grit.

Form P polyurethane hardness 60 Shore.

Sample order:

K0288.506X012

(include length L1)

Note:

Self-aligning pads are used to support and clamp unmachined and machined workpieces.

They also serve as stops, supports and thrust pads in fixtures and toolmaking.

Ball secured against rotation.

Form O: The abrasive diamond surface is bonded firmly to the ball. It is ideally suited to supporting smooth or slippery applications with a minimum of clamping pressure. This allows the diamond particles to get a firm grip on a very small area with minimum damage to the surface.

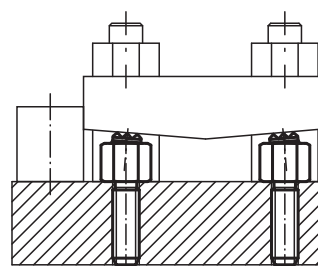
The diamond surface offers excellent wear resistance.

Form P: The polyurethane surface is vulcanised firmly to the ball. It is abrasion-resistant and does not discolour.

It offers optimum protection against damage to delicate surfaces. The pearl-like surface gives a firm grip and allows air to escape so as to prevent any suction effect between the contact surface and the self-aligning pads.

Advantages:

The built-in O-ring holds the ball in place and keeps dirt and foreign particles out, ensuring uniform movement.



Self-aligning pads adjustable

with o-ring



KIPP Form C, flattened steel ball, smooth

Order No.	Form	D1	D2	L1	L2	E	SW	Ball-Ø	Load rating max. kN (static load only)
K0288.106X012	C	M6	6	12	9,5	11,5	10	7	9
K0288.106X025	C	M6	6	25	9,5	11,5	10	7	9
K0288.106X040	C	M6	6	40	9,5	11,5	10	7	9
K0288.108X012	C	M8	8,5	12	13	15	13	10	15
K0288.108X025	C	M8	8,5	25	13	15	13	10	15
K0288.108X040	C	M8	8,5	40	13	15	13	10	15

KIPP Form F, flattened steel ball, diamond grip

Order No.	Form	D1	D2	L1	L2	E	SW	Ball-Ø	Load rating max. kN (static load only)
K0288.306X012	F	M6	6	12	9,5	11,5	10	7	9
K0288.306X025	F	M6	6	25	9,5	11,5	10	7	9
K0288.306X040	F	M6	6	40	9,5	11,5	10	7	9
K0288.308X012	F	M8	8,5	12	13	15	13	10	15
K0288.308X025	F	M8	8,5	25	13	15	13	10	15
K0288.308X040	F	M8	8,5	40	13	15	13	10	15

KIPP Form K, flattened POM ball, smooth

Order No.	Form	D1	D2	L1	L2	E	SW	Ball-Ø	Load rating max. kN (static load only)
K0288.706X012	K	M6	6	12	9,5	11,5	10	7	2
K0288.706X025	K	M6	6	25	9,5	11,5	10	7	2
K0288.706X040	K	M6	6	40	9,5	11,5	10	7	2
K0288.708X012	K	M8	8,5	12	13	15	13	10	4
K0288.708X025	K	M8	8,5	25	13	15	13	10	4
K0288.708X040	K	M8	8,5	40	13	15	13	10	4

KIPP Form O, stainless-steel ball, diamond impregnated

Order No.	Form	D1	D2	L1	L2	L3	E	SW	SW1	W	Ball-Ø	Load rating max. kN (static load only)
K0288.506X	O	M6	8	12/25/40	10	2	11,5	10	-	28	7	9,2
K0288.508X	O	M8	11	12/25/40	14,5	3	15	13	-	28	10	15,5
K0288.512X	O	M12	19	20/40/60	19	4	21,9	19	5	24	15	29,8
K0288.510X	O	M10	14	15/30/50	16	3	19,6	17	3	28	13	18,8
K0288.516X	O	M16	21	25/50/80	23	4	27,7	24	6	24	20	50,3

KIPP Form P, stainless-steel ball with polyurethane face

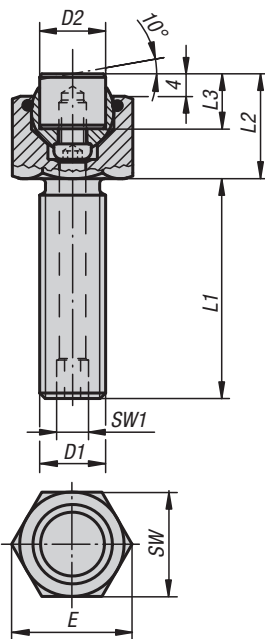
Order No.	Form	D1	D2	L1	L2	L3	E	SW	SW1	W	Ball-Ø
K0288.612X	P	M12	21	20/40/60	21	6	21,9	19	5	24	15
K0288.610X	P	M10	16	15/30/50	18	5	19,6	17	3	28	13
K0288.608X	P	M8	13	12/25/40	16,5	5	15	13	-	28	10
K0288.606X	P	M6	10	12/25/40	12	4	11,5	10	-	28	7
K0288.616X	P	M16	23	25/50/80	25	6	27,7	24	6	24	20

Self-aligning pads adjustable

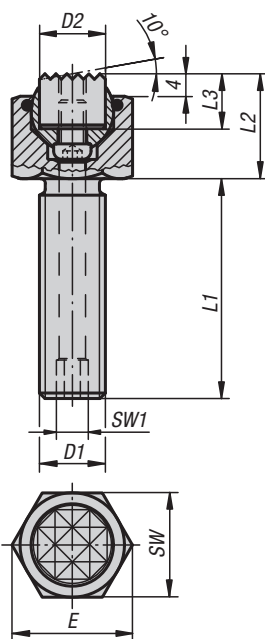
with O-ring and exchangeable inserts



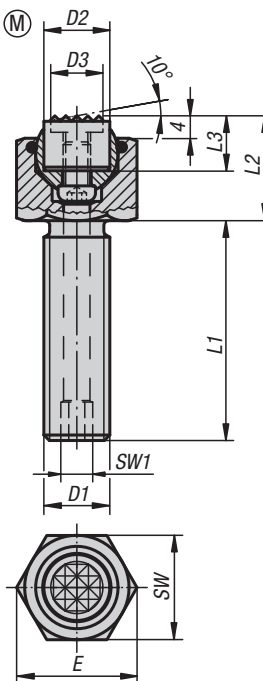
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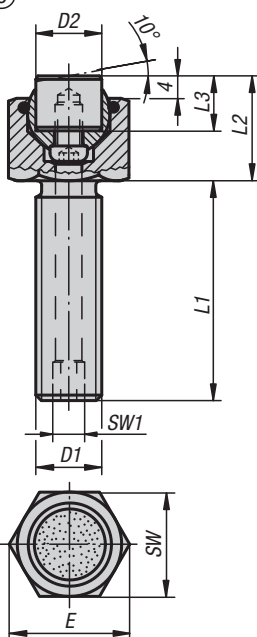
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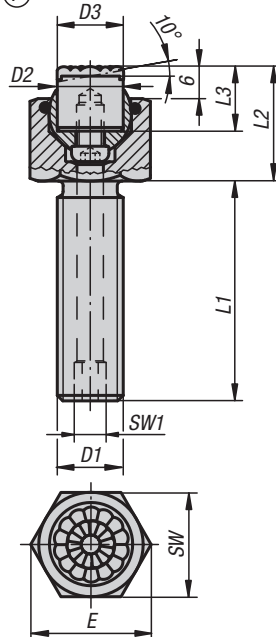
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Material:

Body carbon steel.

Ball rust and acid resistant steel.

Inserts:

Form C, F, M tool steel

Form K POM

Form E stainless steel.

Form O stainless steel diamond impregnated.

Form P stainless steel with polyurethane surface.

Version:

Body tempered, black oxidised.

Ball hardened, bright.

Inserts:

Form C, F hardened, black oxidised.

Form M with carbide serrations, black oxidised.

Form K white.

Form E hardened, bright.

Form O diamond impregnated surface comparable to 100 grade abrasive grit.

Form P polyurethane surface, hardness 60 Shore.

Sample order:

K0289.124X100

Note:

Self-aligning pads are used to support and clamp unmachined and machined workpieces.

They also serve as stops, supports and thrust pads in fixtures and toolmaking.

The ball can be removed from the housing by applying light pressure to the socket head screw.

Ball secured against rotation.

Advantages:

Highly cost-effective as inserts can be exchanged.

The built-in O-ring holds the ball in place and keeps dirt and foreign particles out, ensuring uniform movement.

KIPP Form C, flattened steel insert, smooth

Order No.	Form	D1	D2	L1	L2	L3	E	SW	SW1	Ball-Ø	Load rating max. kN (static load only)	Order No. steel insert
K0289.110X015	C	M10	10	15	17	10	19,6	17	3	13	19	K0385.10108
K0289.110X030	C	M10	10	30	17	10	19,6	17	3	13	19	K0385.10108
K0289.110X050	C	M10	10	50	17	10	19,6	17	3	13	19	K0385.10108
K0289.112X020	C	M12	12	20	19	10	21,9	19	5	15	30	K0385.12108
K0289.112X040	C	M12	12	40	19	10	21,9	19	5	15	30	K0385.12108
K0289.112X060	C	M12	12	60	19	10	21,9	19	5	15	30	K0385.12108
K0289.116X025	C	M16	16	25	23	10	27,7	24	6	20	50	K0385.16108
K0289.116X050	C	M16	16	50	23	10	27,7	24	6	20	50	K0385.16108
K0289.116X080	C	M16	16	80	23	10	27,7	24	6	20	50	K0385.16108
K0289.120X030	C	M20	20	30	24	10	34,6	30	8	23	85	K0385.20108
K0289.120X060	C	M20	20	60	24	10	34,6	30	8	23	85	K0385.20108
K0289.120X100	C	M20	20	100	24	10	34,6	30	8	23	85	K0385.20108
K0289.124X040	C	M24	25	40	30	10	41,6	36	10	28	121	K0385.25108
K0289.124X100	C	M24	25	100	30	10	41,6	36	10	28	121	K0385.25108

KIPP Form E, flattened stainless steel insert, smooth

Order No.	Form	D1	D2	L1	L2	L3	E	SW	SW1	Ball-Ø	Load rating max. kN (static load only)	Order No. stainless steel insert
K0289.210X015	E	M10	10	15	17	10	19,6	17	3	13	19	K0385.10102
K0289.210X030	E	M10	10	30	17	10	19,6	17	3	13	19	K0385.10102
K0289.210X050	E	M10	10	50	17	10	19,6	17	3	13	19	K0385.10102
K0289.212X020	E	M12	12	20	19	10	21,9	19	5	15	30	K0385.12102
K0289.212X040	E	M12	12	40	19	10	21,9	19	5	15	30	K0385.12102
K0289.212X060	E	M12	12	60	19	10	21,9	19	5	15	30	K0385.12102
K0289.216X025	E	M16	16	25	23	10	27,7	24	6	20	50	K0385.16102
K0289.216X050	E	M16	16	50	23	10	27,7	24	6	20	50	K0385.16102
K0289.216X080	E	M16	16	80	23	10	27,7	24	6	20	50	K0385.16102
K0289.220X030	E	M20	20	30	24	10	34,6	30	8	23	85	K0385.20102
K0289.220X060	E	M20	20	60	24	10	34,6	30	8	23	85	K0385.20102
K0289.220X100	E	M20	20	100	24	10	34,6	30	8	23	85	K0385.20102
K0289.224X040	E	M24	25	40	30	10	41,6	36	10	28	121	K0385.25102
K0289.224X100	E	M24	25	100	30	10	41,6	36	10	28	121	K0385.25102

KIPP Form F, flattened, diamond grip

Order No.	Form	D1	D2	L1	L2	L3	E	SW	SW1	Ball-Ø	Load rating max. kN (static load only)	Order No. gripper
K0289.310X015	F	M10	10	15	17	10	19,6	17	3	13	19	K0385.1010
K0289.310X030	F	M10	10	30	17	10	19,6	17	3	13	19	K0385.1010
K0289.310X050	F	M10	10	50	17	10	19,6	17	3	13	19	K0385.1010
K0289.312X020	F	M12	12	20	19	10	21,9	19	5	15	30	K0385.1210
K0289.312X040	F	M12	12	40	19	10	21,9	19	5	15	30	K0385.1210
K0289.312X060	F	M12	12	60	19	10	21,9	19	5	15	30	K0385.1210
K0289.316X025	F	M16	16	25	23	10	27,7	24	6	20	50	K0385.1610
K0289.316X050	F	M16	16	50	23	10	27,7	24	6	20	50	K0385.1610
K0289.316X080	F	M16	16	80	23	10	27,7	24	6	20	50	K0385.1610
K0289.320X030	F	M20	20	30	24	10	34,6	30	8	23	85	K0385.2010
K0289.320X060	F	M20	20	60	24	10	34,6	30	8	23	85	K0385.2010
K0289.320X100	F	M20	20	100	24	10	34,6	30	8	23	85	K0385.2010
K0289.324X040	F	M24	25	40	30	10	41,6	36	10	28	121	K0385.2510
K0289.324X100	F	M24	25	100	30	10	41,6	36	10	28	121	K0385.2510

Self-aligning pads adjustable

with O-ring and exchangeable inserts



KIPP Form K, flattened POM insert, smooth

Order No.	Form	D1	D2	L1	L2	L3	E	SW	SW1	Ball-Ø	Load rating max. kN (static load only)	Order No. POM insert
K0289.710X015	K	M10	10	15	17	10	19,6	17	3	13	4	K0385.10109
K0289.710X030	K	M10	10	30	17	10	19,6	17	3	13	4	K0385.10109
K0289.710X050	K	M10	10	50	17	10	19,6	17	3	13	4	K0385.10109
K0289.712X020	K	M12	12	20	19	10	21,9	19	5	15	7	K0385.12109
K0289.712X040	K	M12	12	40	19	10	21,9	19	5	15	7	K0385.12109
K0289.712X060	K	M12	12	60	19	10	21,9	19	5	15	7	K0385.12109
K0289.716X025	K	M16	16	25	23	10	27,7	24	6	20	14	K0385.16109
K0289.716X050	K	M16	16	50	23	10	27,7	24	6	20	14	K0385.16109
K0289.716X080	K	M16	16	80	23	10	27,7	24	6	20	14	K0385.16109
K0289.720X030	K	M20	20	30	24	10	34,6	30	8	23	27	K0385.20109
K0289.720X060	K	M20	20	60	24	10	34,6	30	8	23	27	K0385.20109
K0289.720X100	K	M20	20	100	24	10	34,6	30	8	23	27	K0385.20109
K0289.724X040	K	M24	25	40	30	10	41,6	36	10	28	47	K0385.25109
K0289.724X100	K	M24	25	100	30	10	41,6	36	10	28	47	K0385.25109

KIPP Form M, flattened, with carbide serrations

Order No.	Form	D1	D2	D3	L1	L2	L3	E	SW	SW1	Ball-Ø	Load rating max. kN (static load only)	Order No. gripper
K0289.910X015	M	M10	10	7,9	15	17	10	19,6	17	3	13	19	K0385.10107
K0289.910X030	M	M10	10	7,9	30	17	10	19,6	17	3	13	19	K0385.10107
K0289.910X050	M	M10	10	7,9	50	17	10	19,6	17	3	13	19	K0385.10107
K0289.912X020	M	M12	12	9,5	20	19	10	21,9	19	5	15	30	K0385.12107
K0289.912X040	M	M12	12	9,5	40	19	10	21,9	19	5	15	30	K0385.12107
K0289.912X060	M	M12	12	9,5	60	19	10	21,9	19	5	15	30	K0385.12107
K0289.916X025	M	M16	16	12,7	25	23	10	27,7	24	6	20	50	K0385.16107
K0289.916X050	M	M16	16	12,7	50	23	10	27,7	24	6	20	50	K0385.16107
K0289.916X080	M	M16	16	12,7	80	23	10	27,7	24	6	20	50	K0385.16107
K0289.920X030	M	M20	20	15,9	30	24	10	34,6	30	8	23	85	K0385.20107
K0289.920X060	M	M20	20	15,9	60	24	10	34,6	30	8	23	85	K0385.20107
K0289.920X100	M	M20	20	15,9	100	24	10	34,6	30	8	23	85	K0385.20107
K0289.924X040	M	M24	25	19	40	30	10	41,6	36	10	28	121	K0385.25107
K0289.924X100	M	M24	25	19	100	30	10	41,6	36	10	28	121	K0385.25107

Self-aligning pads adjustable

with O-ring and exchangeable inserts



KIPP Form O, stainless-steel insert, diamond impregnated

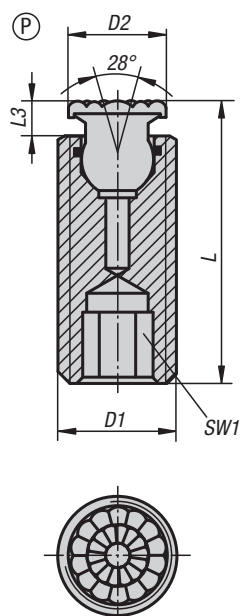
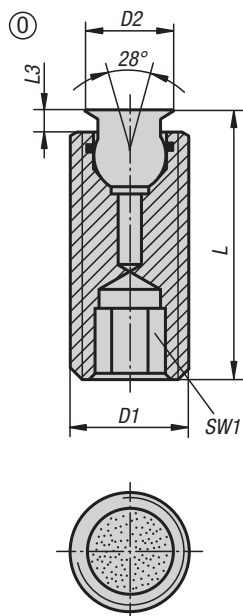
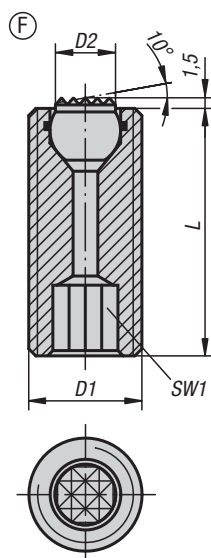
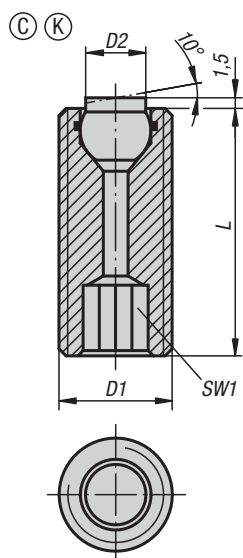
Order No.	Form	D1	D2	L1	L2	L3	E	SW	SW1	Ball-Ø	Load rating max. kN (static load only)	Order No. stainless steel insert, diamond surface
K0289.510X015	O	M10	10	15	17	10	19,6	17	3	13	19	K0385.10105
K0289.510X030	O	M10	10	30	17	10	19,6	17	3	13	19	K0385.10105
K0289.510X050	O	M10	10	50	17	10	19,6	17	3	13	19	K0385.10105
K0289.512X020	O	M12	12	20	19	10	21,9	19	5	15	30	K0385.12105
K0289.512X040	O	M12	12	40	19	10	21,9	19	5	15	30	K0385.12105
K0289.512X060	O	M12	12	60	19	10	21,9	19	5	15	30	K0385.12105
K0289.516X025	O	M16	16	25	23	10	27,7	24	6	20	50	K0385.16105
K0289.516X050	O	M16	16	50	23	10	27,7	24	6	20	50	K0385.16105
K0289.516X080	O	M16	16	80	23	10	27,7	24	6	20	50	K0385.16105
K0289.520X030	O	M20	20	30	24	10	34,6	30	8	23	85	K0385.20105
K0289.520X060	O	M20	20	60	24	10	34,6	30	8	23	85	K0385.20105
K0289.520X100	O	M20	20	100	24	10	34,6	30	8	23	85	K0385.20105
K0289.524X040	O	M24	25	40	30	10	41,6	36	10	28	121	K0385.25105
K0289.524X100	O	M24	25	100	30	10	41,6	36	10	28	121	K0385.25105

KIPP Form P, stainless-steel insert with polyurethane face

Order No.	Form	D1	D2	D3	L1	L2	L3	E	SW	SW1	Ball-Ø	Order No. stainless steel insert, polyurethane surface
K0289.610X015	P	M10	10	10	15	19	12	19,6	17	3	13	K0385.10126
K0289.610X030	P	M10	10	10	30	19	12	19,6	17	3	13	K0385.10126
K0289.610X050	P	M10	10	10	50	19	12	19,6	17	3	13	K0385.10126
K0289.612X020	P	M12	12	13	20	21	12	21,9	19	5	15	K0385.12126
K0289.612X040	P	M12	12	13	40	21	12	21,9	19	5	15	K0385.12126
K0289.612X060	P	M12	12	13	60	21	12	21,9	19	5	15	K0385.12126
K0289.616X025	P	M16	16	16	25	25	12	27,7	24	6	20	K0385.16126
K0289.616X050	P	M16	16	16	50	25	12	27,7	24	6	20	K0385.16126
K0289.616X080	P	M16	16	16	80	25	12	27,7	24	6	20	K0385.16126
K0289.620X030	P	M20	20	21	30	26	12	34,6	30	8	23	K0385.20126
K0289.620X060	P	M20	20	21	60	26	12	34,6	30	8	23	K0385.20126
K0289.620X100	P	M20	20	21	100	26	12	34,6	30	8	23	K0385.20126
K0289.624X040	P	M24	25	27	40	32	12	41,6	36	10	28	K0385.25126
K0289.624X100	P	M24	25	27	100	32	12	41,6	36	10	28	K0385.25126

Self-aligning pads adjustable

with O-ring and hexagon socket



Material:

Body carbon steel.

Ball tool steel, Form K POM

Version:

Body tempered.

Ball hardened, black oxidised.

POM ball white.

Sample order:

K0290.510X026

(include length L)

Note:

Self-aligning pads are used to support and clamp unmachined and machined workpieces.

They can also be used as stops, supports and thrust pads in fixtures and toolmaking.

Ball secured against rotation.

Advantages:

The built-in O-ring holds the ball in place and keeps dirt and foreign particles out, ensuring uniform movement.

The hexagon socket allows easy adjustment and positioning in through holes.

Self-aligning pads adjustable

with O-ring and hexagon socket

KIPP Form C, flattened steel ball, smooth

Order No.	Form	D1	D2	L	SW1	Ball-Ø	Load rating max. kN (static load only)
K0290.112X025	C	M12	6	25	6	7	15
K0290.112X035	C	M12	6	35	6	7	15
K0290.112X050	C	M12	6	50	6	7	15
K0290.116X025	C	M16	8,5	25	8	10	23
K0290.116X035	C	M16	8,5	35	8	10	23
K0290.116X050	C	M16	8,5	50	8	10	23

KIPP Form F, flattened steel ball, diamond grip

Order No.	Form	D1	D2	L	SW1	Ball-Ø	Load rating max. kN (static load only)
K0290.312X025	F	M12	6	25	6	7	15
K0290.312X035	F	M12	6	35	6	7	15
K0290.312X050	F	M12	6	50	6	7	15
K0290.316X025	F	M16	8,5	25	8	10	23
K0290.316X035	F	M16	8,5	35	8	10	23
K0290.316X050	F	M16	8,5	50	8	10	23

KIPP Form K, flattened POM ball, smooth

Order No.	Form	D1	D2	L	SW1	Ball-Ø	Load rating max. kN (static load only)
K0290.712X025	K	M12	6	25	6	7	2
K0290.712X035	K	M12	6	35	6	7	2
K0290.712X050	K	M12	6	50	6	7	2
K0290.716X025	K	M16	8,5	25	8	10	4
K0290.716X035	K	M16	8,5	35	8	10	4
K0290.716X050	K	M16	8,5	50	8	10	4

KIPP Form O, stainless-steel ball, diamond impregnated

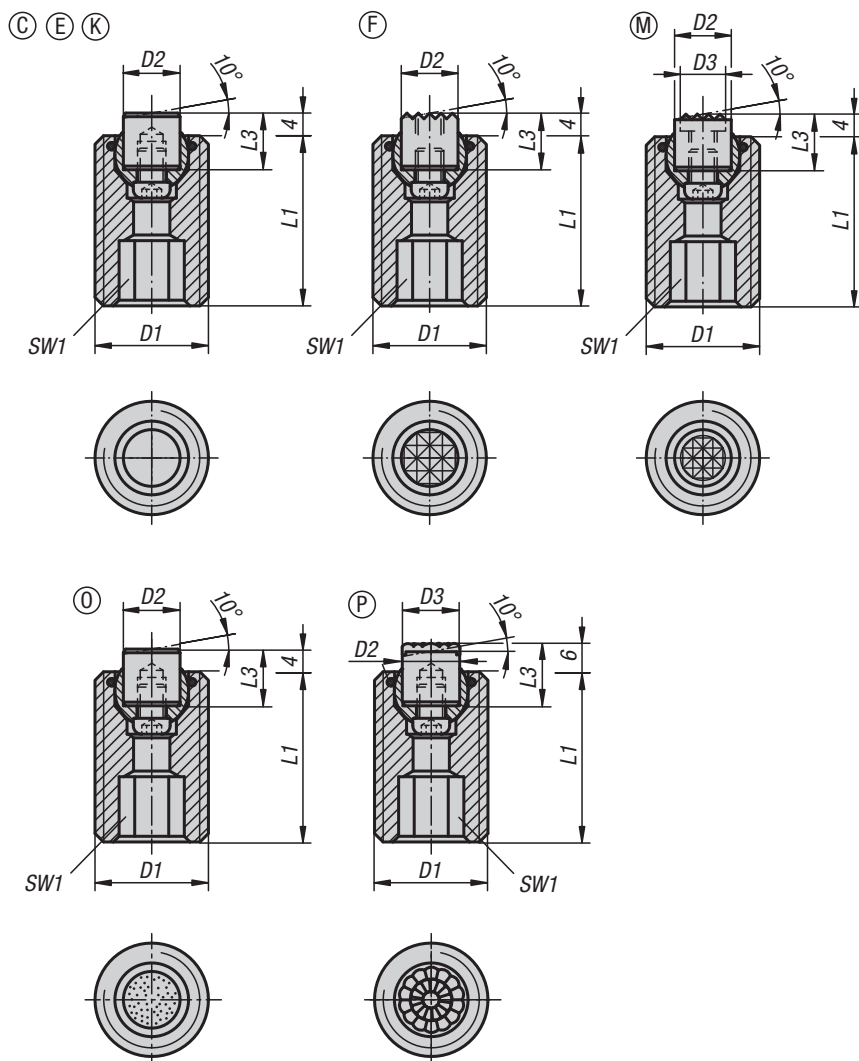
Order No.	Form	D1	D2	L	L3	SW1	Ball-Ø	Load rating max. kN (static load only)
K0290.510X	O	M10	6	26,5/36,5/51,5	1,5	5	5	-
K0290.512X	O	M12	8	27/37/52	2	6	7	15,4
K0290.516X	O	M16	11	28/38/53	3	8	10	23,3
K0290.520X	O	M20	14	33/53/73	3	10	13	37,7

KIPP Form P, stainless-steel ball with polyurethane face

Order No.	Form	D1	D2	L	L3	SW1	Ball-Ø
K0290.610X	P	M10	8	28,5/38,5/53,5	3,5	5	5
K0290.612X	P	M12	10	29/39/54	4	6	7
K0290.616X	P	M16	13	30/40/55	5	8	10
K0290.620X	P	M20	16	35/55/75	5	10	13

Self-aligning pads adjustable

with O-ring, exchangeable inserts and hexagon socket



Material:

Body carbon steel.

Ball rust and acid resistant steel.

Inserts:

Form C, F, M tool steel

Form K POM

Form E stainless steel.

Form O stainless steel diamond impregnated.

Form P stainless steel with polyurethane surface.

Version:

Body tempered, black oxidised.

Ball hardened, bright.

Inserts:

Form C, F hardened, black oxidised.

Form M with carbide serrations, black oxidised.

Form K white.

Form E hardened, bright.

Form O diamond impregnated surface comparable to 100 grade abrasive grit.

Form P polyurethane surface, hardness 60 Shore.

Sample order:

K0291.720X070

Note:

Self-aligning pads are used to support and clamp unmachined and machined workpieces.

They also serve as stops, supports and thrust pads in fixtures and toolmaking.

The ball can be removed from the housing by applying light pressure to the socket head screw.

Ball secured against rotation.

Advantages:

Highly cost-effective as inserts can be exchanged.

The built-in O-ring holds the ball in place and keeps dirt and foreign particles out, ensuring uniform movement.

KIPP Form C, flattened steel insert, smooth

Order No.	Form	D1	D2	L1	L3	SW1	Ball-Ø	Load rating max. kN (static load only)	Order No. steel insert
K0291.120X030	C	M20	10	30	10	10	13	37	K0385.10108
K0291.120X050	C	M20	10	50	10	10	13	37	K0385.10108
K0291.120X070	C	M20	10	70	10	10	13	37	K0385.10108
K0291.124X040	C	M24	12	40	10	10	15	55	K0385.12108
K0291.124X080	C	M24	12	80	10	10	15	55	K0385.12108

KIPP Form E, flattened stainless steel insert, smooth

Order No.	Form	D1	D2	L1	L3	SW1	Ball-Ø	Load rating max. kN (static load only)	Order No. stainless steel insert
K0291.220X030	E	M20	10	30	10	10	13	37	K0385.10102
K0291.220X050	E	M20	10	50	10	10	13	37	K0385.10102
K0291.220X070	E	M20	10	70	10	10	13	37	K0385.10102
K0291.224X040	E	M24	12	40	10	10	15	55	K0385.12102
K0291.224X080	E	M24	12	80	10	10	15	55	K0385.12102

KIPP Form F, flattened, diamond grip

Order No.	Form	D1	D2	L1	L3	SW1	Ball-Ø	Load rating max. kN (static load only)	Order No. gripper
K0291.320X030	F	M20	10	30	10	10	13	37	K0385.1010
K0291.320X050	F	M20	10	50	10	10	13	37	K0385.1010
K0291.320X070	F	M20	10	70	10	10	13	37	K0385.1010
K0291.324X040	F	M24	12	40	10	10	15	55	K0385.1210
K0291.324X080	F	M24	12	80	10	10	15	55	K0385.1210

KIPP Form K, flattened POM insert, smooth

Order No.	Form	D1	D2	L1	L3	SW1	Ball-Ø	Load rating max. kN (static load only)	Order No. POM insert
K0291.720X030	K	M20	10	30	10	10	13	4	K0385.10109
K0291.720X050	K	M20	10	50	10	10	13	4	K0385.10109
K0291.720X070	K	M20	10	70	10	10	13	4	K0385.10109
K0291.724X040	K	M24	12	40	10	10	15	7	K0385.12109
K0291.724X080	K	M24	12	80	10	10	15	7	K0385.12109

KIPP Form M, flattened, with carbide serrations

Order No.	Form	D1	D2	D3	L1	L3	SW1	Ball-Ø	Load rating max. kN (static load only)	Order No. gripper
K0291.920X030	M	M20	10	7,9	30	10	10	13	37	K0385.10107
K0291.920X050	M	M20	10	7,9	50	10	10	13	37	K0385.10107
K0291.920X070	M	M20	10	7,9	70	10	10	13	37	K0385.10107
K0291.924X040	M	M24	12	9,5	40	10	10	15	55	K0385.12107
K0291.924X080	M	M24	12	9,5	80	10	10	15	55	K0385.12107

KIPP Form O, stainless-steel insert, diamond impregnated

Order No.	Form	D1	D2	L1	L3	SW1	Ball-Ø	Load rating max. kN (static load only)	Order No. stainless steel insert, diamond surface
K0291.520X050	O	M20	10	50	10	10	13	37	K0385.10105
K0291.520X070	O	M20	10	70	10	10	13	37	K0385.10105
K0291.524X040	O	M24	12	40	10	10	15	55	K0385.12105
K0291.520X030	O	M20	10	30	10	10	13	37	K0385.10105
K0291.524X080	O	M24	12	80	10	10	15	55	K0385.12105

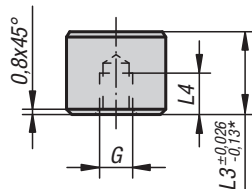
KIPP Form P, stainless-steel insert with polyurethane face

Order No.	Form	D1	D2	D3	L1	L3	SW1	Ball-Ø	Load rating max. kN (static load only)	Order No. stainless steel insert, polyurethane surface
K0291.620X030	P	M20	10	10	30	12	10	13	37	K0385.10126
K0291.620X050	P	M20	10	10	50	12	10	13	37	K0385.10126
K0291.620X070	P	M20	10	10	70	12	10	13	37	K0385.10126
K0291.624X040	P	M24	12	13	40	12	10	15	55	K0385.12126
K0291.624X080	P	M24	12	13	80	12	10	15	55	K0385.12126

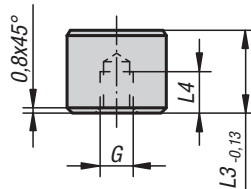
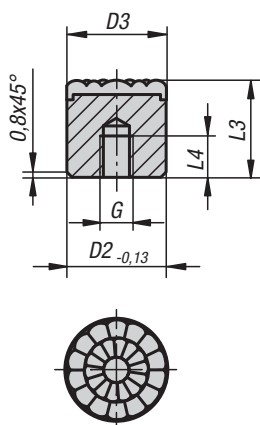
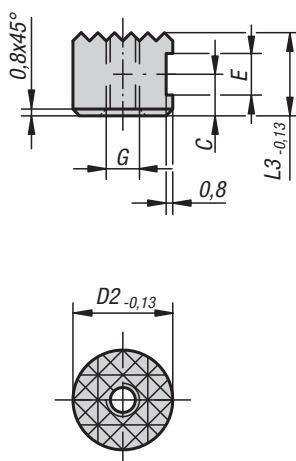
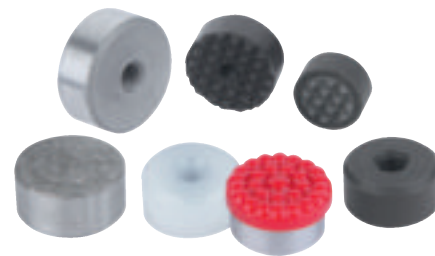
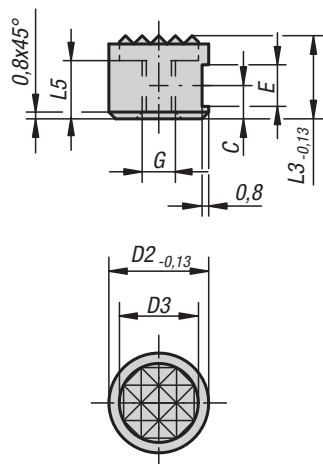
Grippers and inserts round



Form C, E, K



* Applies to Form K

Form O
stainless steel insert
diamond impregnatedForm P
stainless steel insert,
PUR surfaceForm F
diamond grip insertForm M
carbide steel
diamond grip insert

Material:

Form C, F, M tool steel
Form E, O, P stainless steel
Form K POM

Version:

Form C hardened and black oxidised.
Form E hardened, bright.
Form K white.
Form O with diamond impregnated surface comparable to 100 grade abrasive grit.
Form P with polyurethane surface, hardness 60 Shore.
Form F, hardened and black oxidised.
Form M with carbide serrations, black oxidised.

Sample order:

K0385.2510

Note:

Grippers and inserts are ideal for use in clamping arms, gripping systems, clamping fixtures, clamping jaws and self-aligning pads. The use of grippers allows the transfer of very high torque values and above average grip, even with hard materials and surface irregularities.

Form O: The abrasive diamond surface is bonded firmly to the base. It is ideally suited to supporting smooth or slippery applications with a minimum of clamping pressure. This allows the diamond particles to get a firm grip on a very small area with minimum damage to the surface.

The diamond surface offers excellent wear resistance.

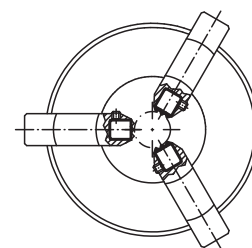
Form P: The polyurethane surface is vulcanised firmly to the ball. It is abrasion-resistant and does not discolour. It offers optimum protection against damage to delicate surfaces. The pearl-like surface gives a firm grip and allows air to escape so as to prevent any suction effect between the contact surface and the self-aligning pads.

Grippers and inserts can be fitted in the following self-aligning pads:

Order No. K0285.117X022 up to K0285.936X036

Order No. K0289.110X015 up to K0289.924X100

Order No. K0291.120X030 up to K0291.924X080



KIPP Round inserts Form C, E, K, O

Order No. Form C	Order No. Form E	Order No. Form K	Order No. Form O	D2	L3	L4	G
K0385.10108	K0385.10102	K0385.10109	K0385.10105	10	10	5	M5
K0385.10128	K0385.10122	K0385.10129	K0385.10125	10	12	6,4	M5
K0385.12108	K0385.12102	K0385.12109	K0385.12105	12	10	5	M5
K0385.12128	K0385.12122	K0385.12129	K0385.12125	12	12	6,4	M5
K0385.16108	K0385.16102	K0385.16109	K0385.16105	16	10	5	M6
K0385.16128	K0385.16122	K0385.16129	K0385.16125	16	12	6,4	M6
K0385.20108	K0385.20102	K0385.20109	K0385.20105	20	10	5	M6
K0385.20128	K0385.20122	K0385.20129	K0385.20125	20	12	6,4	M6
K0385.25108	K0385.25102	K0385.25109	K0385.25105	25	10	5	M6
K0385.25128	K0385.25122	K0385.25129	K0385.25125	25	12	6,4	M6

KIPP Round inserts Form P

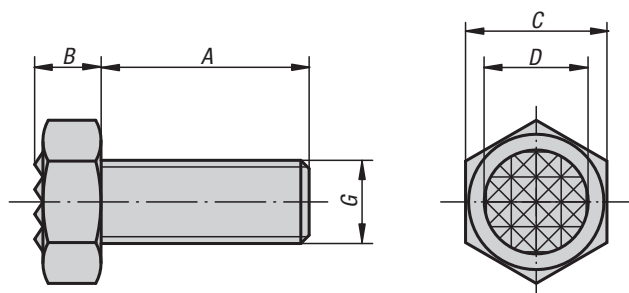
Order No.	Form	D2	D3	L3	L4	G
K0385.08126	P	8	8	12	6	M4
K0385.10126	P	10	10	12	6	M5
K0385.12126	P	12	13	12	6	M5
K0385.16126	P	16	16	12	6	M6
K0385.20126	P	20	21	12	6	M6
K0385.25126	P	25	27	12	6	M6

KIPP Grippers Form F, M

Order No. Form F	Order No. Form M	D2	D3	L3	L5	C	E	G
K0385.1010	K0385.10107	10	-7,9	10	-6	4,5	4,75	M5
K0385.1210	K0385.12107	12	-9,5	10	-6	4,5	4,75	M5
K0385.1212	K0385.12127	12	-9,5	12	-7	6	4,75	M5
K0385.1610	K0385.16107	16	-12,7	10	-6	4,5	4,75	M6
K0385.2010	K0385.20107	20	-15,9	10	-6	4,5	4,75	M6
K0385.2510	K0385.25107	25	-19	10	-6	4,5	4,75	M6

Gripper screws

hexagonal


Material:

Hex head screw, grade 10.9.
Serrations carbide, hardness 72-74 HRC.

Version:

Black oxidised.

Sample order:

K0386.1710

Note:

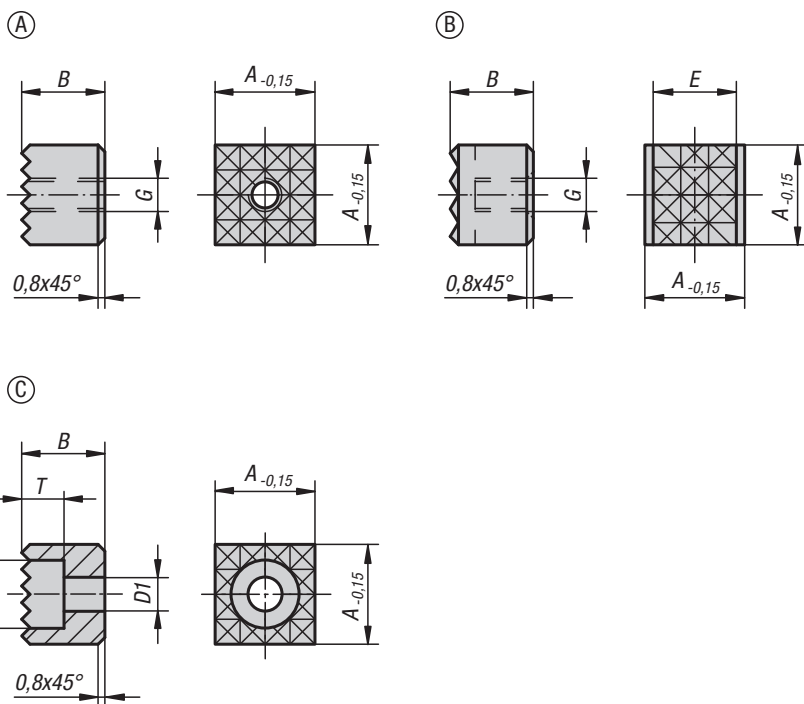
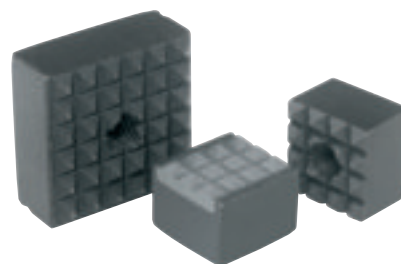
The serrated carbide tips are soldered in.

KIPP Grippers hexagonal

Order No.	A	B	C	D	G	Serration
K0386.1006	25	5	10	7,9	M6	extra fine
K0386.1308	25	6,4	13	9,5	M8	fine
K0386.1710	25	8,3	17	12,7	M10	fine
K0386.17102	40	8,3	17	12,7	M10	fine
K0386.1912	25	8,7	19	15,9	M12	fine
K0386.19122	40	8,7	19	15,9	M12	fine
K0386.2416	35	11	24	19	M16	fine
K0386.24162	50	11	24	19	M16	fine
K0386.3020	40	13,7	30	25,4	M20	extra fine
K0386.30202	60	13,7	30	25,4	M20	extra fine

Gripper pads

square



Material:

Hardened tool steel or carbide.

Version:

Black oxidised.

Sample order:

K0387.2506

Note:

Grippers and inserts are ideal for use in clamping arms, gripping systems, clamping fixtures, clamping jaws and self-aligning pads.

Grippers transfer very high torque values, even with hard materials and surface irregularities. Grippers guarantee above average holding forces at high cutting forces.

The serrated carbide tips are soldered in.

Drawing reference:

Form A: tool steel

Form B: tool steel, carbide diamond grip

Form C: tool steel

KIPP Grippers square

Order No.	Form	A	B	D1	D2	E	G	T	Serration
K0387.101205	A	10	12	-	-	-	M5	-	extra fine
K0387.121205	A	12	12	-	-	-	M5	-	fine
K0387.2005	A	20	10	-	-	-	M5	-	fine
K0387.2506	A	25	10	-	-	-	M6	-	fine
K0387.1005	A	10	10	-	-	-	M5	-	extra fine
K0387.1606	A	16	10	-	-	-	M6	-	fine
K0387.161206	A	16	12	-	-	-	M6	-	fine
K0387.251206	A	25	12	-	-	-	M6	-	fine
K0387.201205	A	20	12	-	-	-	M5	-	fine
K0387.1205	A	12	10	-	-	-	M5	-	fine
K0387.12057	B	12	10	-	-	10,3	M5	-	fine
K0387.2012058	C	20	12	5,5	10	-	-	6,6	fine
K0387.1210048	C	12	10	4,5	8	-	-	5,6	fine
K0387.1610048	C	16	10	4,5	8	-	-	5,6	fine
K0387.2010058	C	20	10	5,5	10	-	-	6,6	fine
K0387.1212048	C	12	12	4,5	8	-	-	5,6	fine
K0387.2510068	C	25	10	6,6	11	-	-	7,6	fine
K0387.2512068	C	25	12	6,6	11	-	-	7,6	fine
K0387.1612048	C	16	12	4,5	8	-	-	5,6	fine

Gripper studs



Material:
Hardened tool steel or carbide.

Version:
Black oxidised.

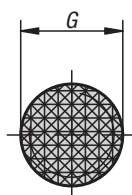
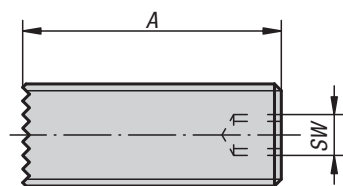
Sample order:
K0388.5012

Note:
The full thread on the grippers allows exact adjustment to the clamping application.
The carbide tips are soldered in.

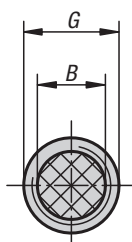
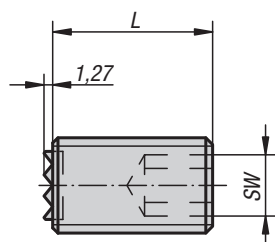
Drawing reference:
Form A: tool steel
Form B: tool steel, carbide diamond grip
Form C: 4-point carbide insert



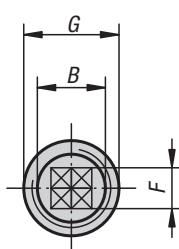
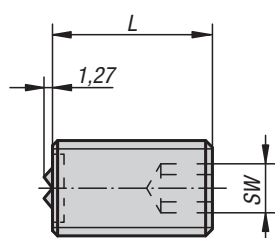
(A)



(B)



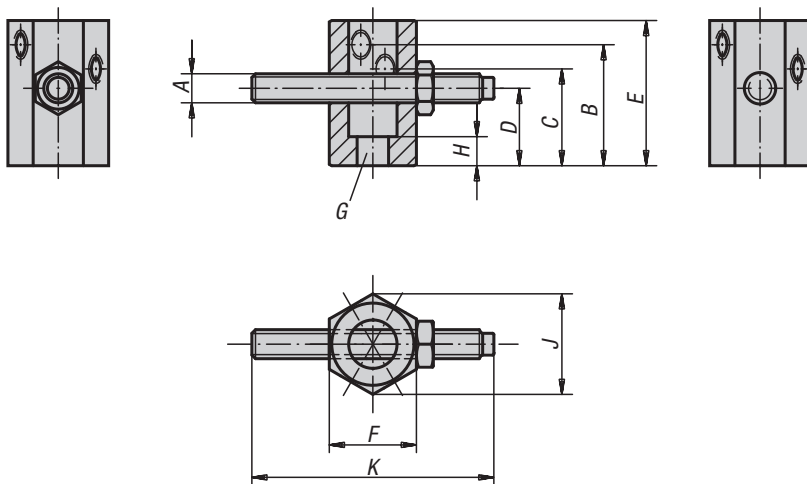
(C)



KIPP Gripper studs

Order No.	Form	A	L	B	G	F	SW
K0388.4010	A	40	-	-	M10	-	3
K0388.4012	A	40	-	-	M12	-	5
K0388.4016	A	40	-	-	M16	-	6
K0388.4020	A	40	-	-	M20	-	8
K0388.2510	B	-	25	6,4	M10	-	5
K0388.5010	B	-	50	6,4	M10	-	5
K0388.2512	B	-	25	7,9	M12	-	6
K0388.5012	B	-	50	7,9	M12	-	6
K0388.2516	B	-	25	11,2	M16	-	8
K0388.5016	B	-	50	11,2	M16	-	8
K0388.2520	B	-	25	12,7	M20	-	10
K0388.5020	B	-	50	12,7	M20	-	10
K0388.25124	C	-	25	7,9	M12	6,5	6
K0388.50124	C	-	50	7,9	M12	6,5	6
K0388.25164	C	-	25	11,2	M16	8	8
K0388.50164	C	-	50	11,2	M16	8	8
K0388.25204	C	-	25	12,7	M20	8	10
K0388.50204	C	-	50	12,7	M20	8	10

Adjustable stops



Material:

Body and set screw carbon steel.

Version:

Body black oxidised.

Set screw tempered and black oxidised.

Sample order:

K0813.16063

Note:

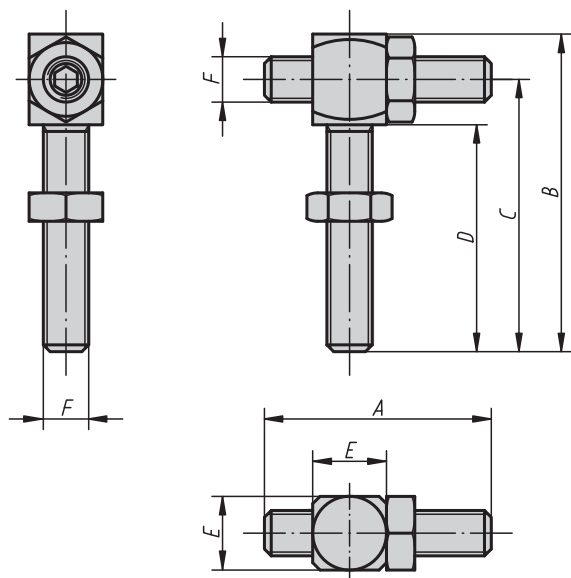
The adjustable stops have three tapped holes to accept the set screws.

KIPP Adjustable stops

Order No.	A	B	C	D	E	F	G hole for DIN 912 cap screw	H	J	K
K0813.08032	M8	32	25	20	40	21	M8	7	24,3	50
K0813.12050	M12	50	40	32	60	36	M12	12	41,6	100
K0813.16063	M16	63	50	40	80	46	M16	16	53,1	100

Screw stop

adjustable


Material:

Carbon steel, tempered.

Version:

Black oxidised.

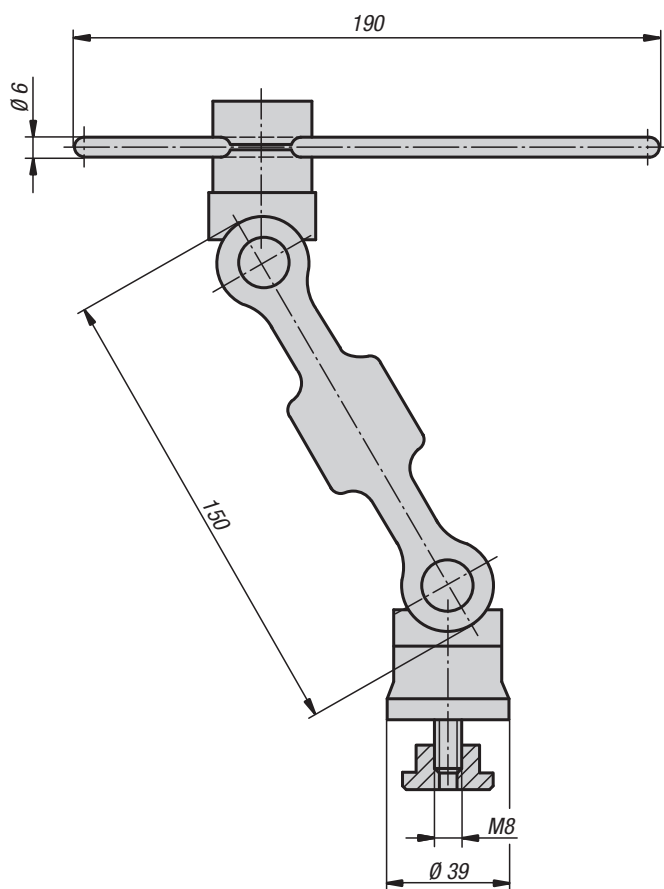
Sample order:

K0820.10

KIPP Screw stop adjustable

Order No.	A	B	C	D	E	F
K0820.06	30	44	37	30	10	M6
K0820.08	40	56	48	40	13	M8
K0820.10	50	70	60	50	17	M10
K0820.12	60	84	72	60	19	M12
K0820.16	80	112	96	80	24	M16

5D workpiece stops

**Material:**

Clamping joint high-tensile aluminium.
Hinge pin, support plate and stop bar, steel.

Version:

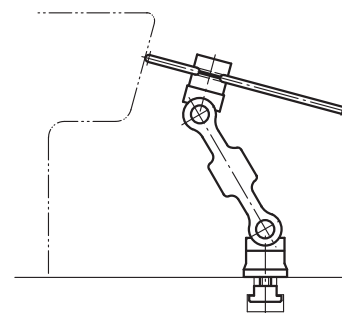
Clamping joint anodized blue and black.
Hinge pins, support plate and stop bar black oxidised.

Note:

The 5D-swivelling stop serves, among other things, as a versatile instrument for positioning on machining tools or for assembly work. It is infinitely adjustable, quickly and flexibly in 5 axes.
Supplied complete with M8x12 T-slot nut and hex key.

On request:

Connecting element for combining several 5D-swivelling stops.



KIPP 5D workpiece stops

Order No.	Size
K1234.15012	150

