

Locating elements



Shoulder screws

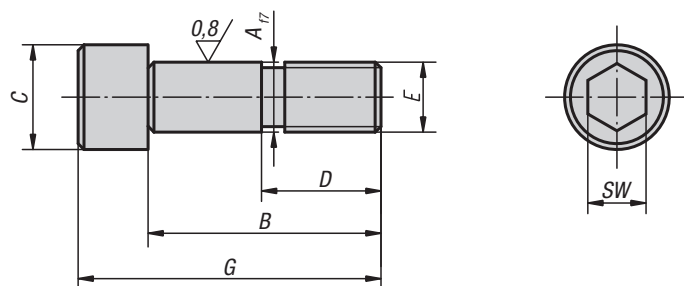
Form A



Material:
Carbon steel.

Version:
Tempered, black oxidised.
Precision diameters ground.

Sample order:
K0815.112045



KIPP Shoulder screws Form A

Order No.	A	B	C	D	E	G	SW
K0815.112045	12	45	18	22	M12	57	10
K0815.112055	12	55	18	22	M12	67	10
K0815.112065	12	65	18	22	M12	77	10
K0815.112075	12	75	18	22	M12	87	10
K0815.116055	16	55	24	25	M16	71	14
K0815.116065	16	65	24	25	M16	81	14
K0815.116075	16	75	24	25	M16	91	14

Shoulder screws

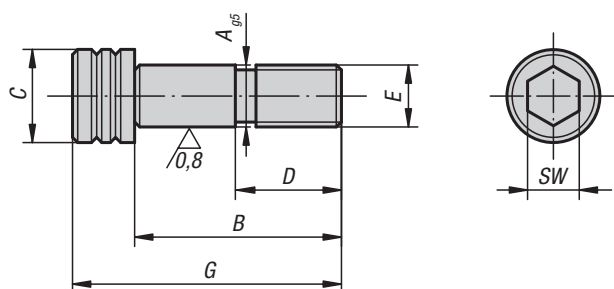
Form B



Material:
Carbon steel.

Version:
Tempered, black oxidised.
Precision diameters ground.

Sample order:
K0815.12065



KIPP Shoulder screws Form B

Order No.	A	B	C	D	E	G	SW
K0815.12045	12	45	18	22	M12	57	10
K0815.12055	12	55	18	22	M12	67	10
K0815.12065	12	65	18	22	M12	77	10
K0815.12075	12	75	18	22	M12	87	10
K0815.16055	16	55	24	25	M16	71	14
K0815.16065	16	65	24	25	M16	81	14
K0815.16075	16	75	24	25	M16	91	14

Removable locating pins Forms A and C



Material:

Tool steel.

Version:

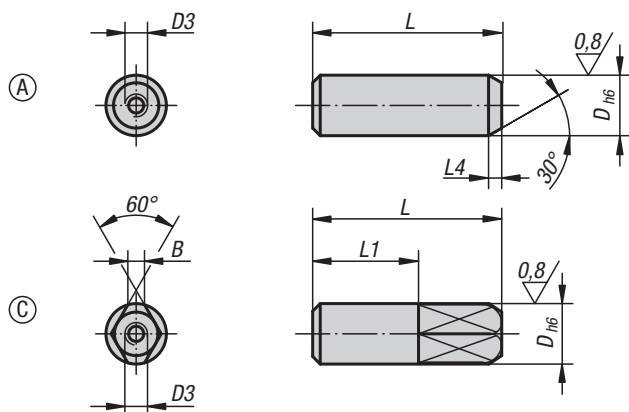
Hardened and ground (HRC 56 +2).

Sample order:

K0817.12

Note:

The locating pins can be easily removed with an extractor.



KIPP Locating pins Form A and C

Order No. Form A	Order No. Form C	D	D3	L	L1	L4	B
K0817.08	K0817.082	8	M3	25	-/14	3/-	-/2,2
K0817.10	K0817.102	10	M3	30	-/17	3/-	-/3
K0817.12	K0817.122	12	M5	34	-/20	4/-	-/3,5
K0817.16	K0817.162	16	M5	42	-/26	4/-	-/5
K0817.20	K0817.202	20	M5	47	-/30	5/-	-/6
K0817.25	K0817.252	25	M5	49	-/30	5/-	-/8

K0818

Removable locating pins Forms B and D



Material:

Tool steel.

Version:

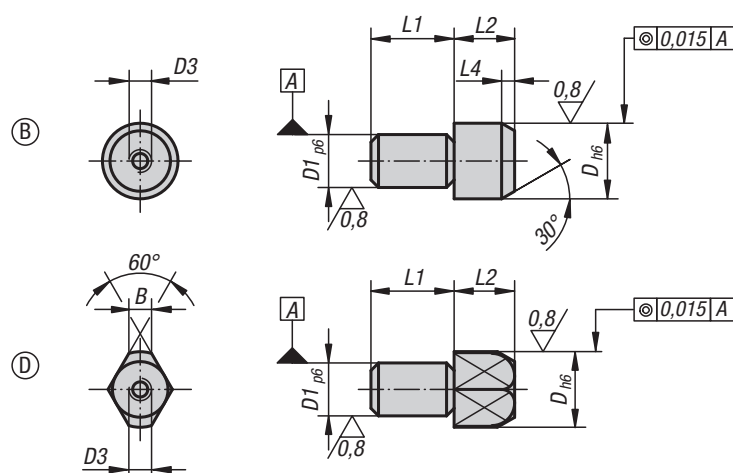
Hardened and ground (HRC 55-60).

Sample order:

K0818.20

Note:

Locating pins can be easily removed with an extractor.

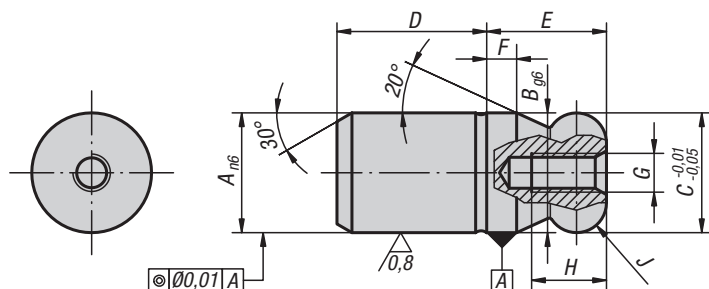


KIPP Locating pins Form B and D

Order No. Form B	Order No. Form D	D	D1	D3	L1	L2	L4	B
K0818.10	K0818.102	10	7	M3	11	11	3	-/3
K0818.12	K0818.122	12	8	M5	13	12	4	-/3,5
K0818.16	K0818.162	16	12	M5	18	14	4,5	-/5
K0818.20	K0818.202	20	14	M5	22	15	5	-/6
K0818.22	K0818.222	22	16	M5	22	17	5	-/7
K0818.25	K0818.252	25	18	M5	25	17	5	-/8

Locating pins

with ball-end Form A



Material:

Tool steel or stainless steel 1.4305.

Version:

Steel hardened and ground.
Stainless steel ground and kolsterised.

Sample order:

K0350.12

Note:

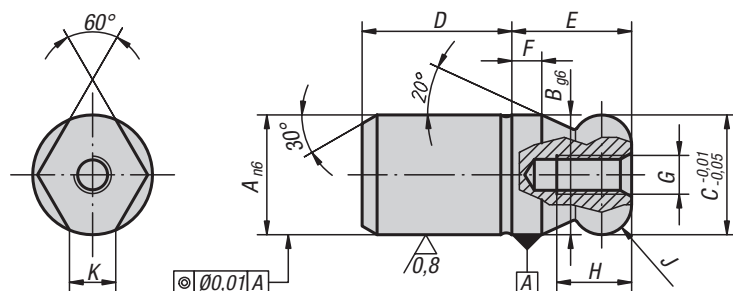
Ball end locating pins are specially designed to ease the locating process. The tendency to jam, caused by the locating hole not being at right angles to the pin or by the pushing force not being parallel to the pin axis, is minimized by the ball-end form (see illustration 1 for K0351 Form B)

KIPP Locating pins with ball-end Form A

Order No. Tool steel	Order No. Stainless steel	A	B	C	D	E	F	G	H	J
K0350.05	K0350.505	5	5	5	6	5	2	M2,5	4,5	R 1
K0350.06	K0350.506	6	6	6	8	6	2	M3	5	R 1
K0350.08	K0350.508	8	8	8	10	8	2	M3	6	R 2
K0350.10	K0350.510	10	10	10	13	10	2,5	M3	6	R 2,5
K0350.12	K0350.512	12	12	12	15	12	3	M4	8	R 3
K0350.14	K0350.514	14	14	14	17	14	3,5	M4	8	R 3,5
K0350.16	K0350.516	16	16	16	20	16	4	M5	10	R 4
K0350.20	K0350.520	20	20	20	25	20	5	M5	10	R 5
K0350.25	-	25	25	25	25	25	6	M5	10	R 6
K0350.30	-	30	30	30	30	30	8	M6	12	R 8
K0350.40	-	40	40	40	40	40	10	M6	12	R 10
K0350.50	-	50	50	50	50	50	12	M6	12	R 12

Locating pins

with flattened ball-end Form C



Material:

Tool steel or stainless steel 1.4305.

Version:

Steel hardened and ground.

Stainless steel ground and kolsterised.

Sample order:

K0350.162

Note:

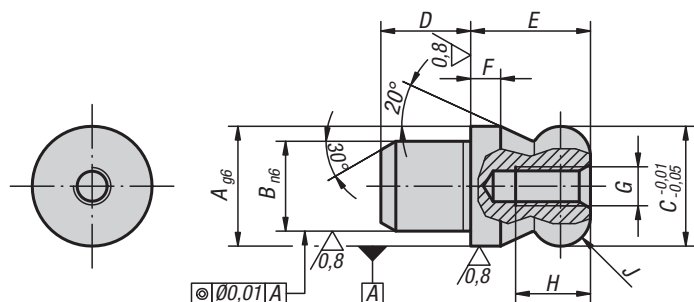
Ball end locating pins are specially designed to ease the locating process. The tendency to jam, caused by the locating hole not being at right angles to the pin or by the pushing force not being parallel to the pin axis, is minimized by the ball-end form (see illustration 1 for K0351 Form B)

KIPP Locating pins with flattened ball-end Form C

Order No. Tool steel	Order No. Stainless steel	A	B	C	D	E	F	G	H	J	K
K0350.052	K0350.5052	5	5	5	6	5	2	M2,5	4,5	R 1	1,5
K0350.062	K0350.5062	6	6	6	8	6	2	M3	5	R 1	1,8
K0350.082	K0350.5082	8	8	8	10	8	2	M3	6	R 2	1,9
K0350.102	K0350.5102	10	10	10	13	10	2,5	M3	6	R 2,5	2,5
K0350.122	K0350.5122	12	12	12	15	12	3	M4	8	R 3	2,5
K0350.142	K0350.5142	14	14	14	17	14	3,5	M4	8	R 3,5	3,9
K0350.162	K0350.5162	16	16	16	20	16	4	M5	10	R 4	4,3
K0350.202	K0350.5202	20	20	20	25	20	5	M5	10	R 5	5
K0350.252	-	25	25	25	25	25	6	M5	10	R 6	5,6
K0350.302	-	30	30	30	30	30	8	M6	12	R 8	8,8
K0350.402	-	40	40	40	40	40	10	M6	12	R 10	12,8
K0350.502	-	50	50	50	50	50	12	M6	12	R 12	16,7

Locating pins

with ball-end Form B



Material:

Tool steel or stainless steel 1.4305.

Version:

Steel hardened and ground.

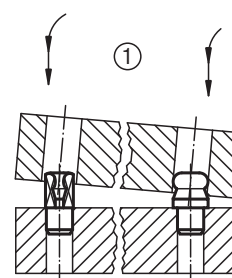
Stainless steel ground and kolsterised.

Sample order:

K0351.20

Note:

Ball end locating pins are specially designed to ease the locating process. The tendency to jam, caused by the locating hole not being at right angles to the pin or by the pushing force not being parallel to the pin axis, is minimized by the ball-end form (see illustration 1).

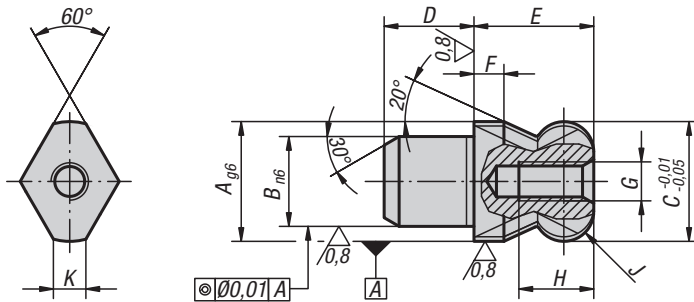


KIPP Locating pins with ball-end Form B

Order No. Tool steel	Order No. Stainless steel	A	B	C	D	E	F	G	H	J
K0351.06	K0351.506	6	4	6	4	6	2	M2,5	4,5	R 1
K0351.08	K0351.508	8	6	8	6	8	2	M3	6	R 2
K0351.10	K0351.510	10	7	10	7	10	2,5	M3	6	R 2,5
K0351.12	K0351.512	12	8	12	8	12	3	M4	8	R 3
K0351.14	K0351.514	14	10	14	10	14	3,5	M4	8	R 3,5
K0351.16	K0351.516	16	12	16	12	16	4	M5	10	R 4
K0351.20	K0351.520	20	14	20	14	20	5	M5	10	R 5
K0351.22	-	22	16	22	16	22	5,5	M5	10	R 5,5
K0351.25	-	25	18	25	18	25	6	M5	10	R 6

Locating pins

with flattened ball-end Form D



Material:

Tool steel or stainless steel 1.4305.

Version:

Steel hardened and ground.

Stainless steel ground and kolsterised.

Sample order:

K0351.162

Note:

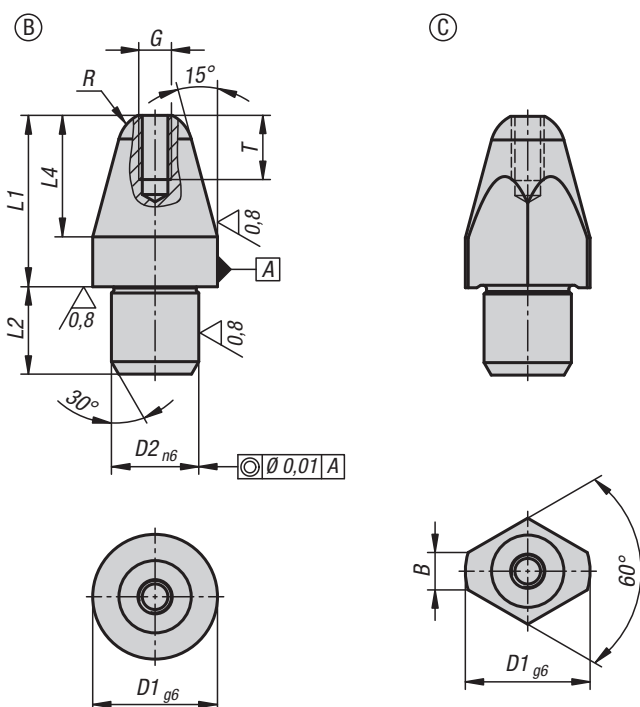
Ball end locating pins are specially designed to ease the locating process. The tendency to jam, caused by the locating hole not being at right angles to the pin or by the pushing force not being parallel to the pin axis, is minimized by the ball-end form (see illustration 1 for K0351 Form B)

KIPP Locating pins with flattened ball-end Form D

Order No. Tool steel	Order No. Stainless steel	A	B	C	D	E	F	G	H	J	K
K0351.062	K0351.5062	6	4	6	4	6	2	M2,5	4,5	R 1	1,7
K0351.082	K0351.5082	8	6	8	6	8	2	M3	6	R 2	2
K0351.102	K0351.5102	10	7	10	7	10	2,5	M3	6	R 2,5	2,5
K0351.122	K0351.5122	12	8	12	8	12	3	M4	8	R 3	2,5
K0351.142	K0351.5142	14	10	14	10	14	3,5	M4	8	R 3,5	3,76
K0351.162	K0351.5162	16	12	16	12	16	4	M5	10	R 4	4,3
K0351.202	K0351.5202	20	14	20	14	20	5	M5	10	R 5	5
K0351.222	-	22	16	22	16	22	5,5	M5	10	R 5,5	5
K0351.252	-	25	18	25	18	25	6	M5	10	R 6	5,6

Locating pins

with internal thread



Material:

Steel.

Version:

Hardened and ground (HRC 60 ±2).

Sample order:

K1094.208

Note:

Locating pins are specially designed to ease the locating process. When used in conjunction with the hardened locating bushes K1095, they allow for a rapid, precise and low-wear workpiece exchange.

Drawing reference:

Form B: cylindrical pin

Form C: rhomboid pin

KIPP Locating pins, short

Order No. Form B	Order No. Form C	Version	D1	D2	G	L1	L2	L4	R	B	T
K1094.208	K1094.408	short	8	6	M2,5	11,4	6	7,4	2,5	-/2,5	5
K1094.210	K1094.410	short	10	7	M2,5	13,7	7	9,7	3	-/3,0	5
K1094.212	K1094.412	short	12	8	M3	16	8	12	3,5	-/3,5	6
K1094.216	K1094.416	short	16	12	M4	20	12	15	5	-/5	8
K1094.220	K1094.420	short	20	14	M5	25,5	14	19,5	6	-/6	10

KIPP Locating pins, long

Order No. Form B	Order No. Form C	Version	D1	D2	G	L1	L2	L4	R	B	T
K1094.308	K1094.508	long	8	6	M2,5	17,4	6	7,4	2,5	-/2,5	5
K1094.310	K1094.510	long	10	7	M2,5	21,7	7	9,7	3	-/3,0	5
K1094.312	K1094.512	long	12	8	M3	24	8	12	3,5	-/3,5	6
K1094.316	K1094.516	long	16	12	M4	29	12	15	5	-/5	8
K1094.320	K1094.520	long	20	14	M5	35,5	14	19,5	6	-/6	10

Locating bushes

for locating pins



Material:

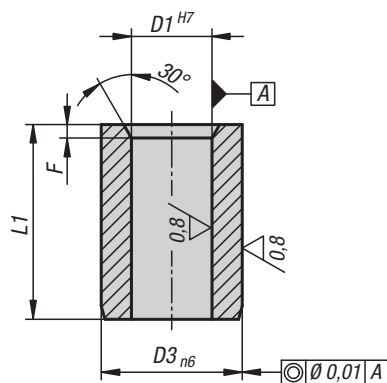
Steel.

Version:

Hardened and ground (HRC 60 ±2).

Sample order:

K1095.0812



KIPP Locating bushes for locating pins

Order No.	Version	D1	D3	L1	F
K1095.0812	short	8	12	12	1,2
K1095.1014	short	10	15	14	1,5
K1095.1216	short	12	18	16	1,5
K1095.1620	short	16	26	20	1,5
K1095.2026	short	20	30	26	2,5
K1095.0818	long	8	12	18	1,2
K1095.1022	long	10	15	22	1,5
K1095.1224	long	12	18	24	1,5
K1095.1630	long	16	26	30	1,5
K1095.2036	long	20	30	36	2,5

Locating pins expanding



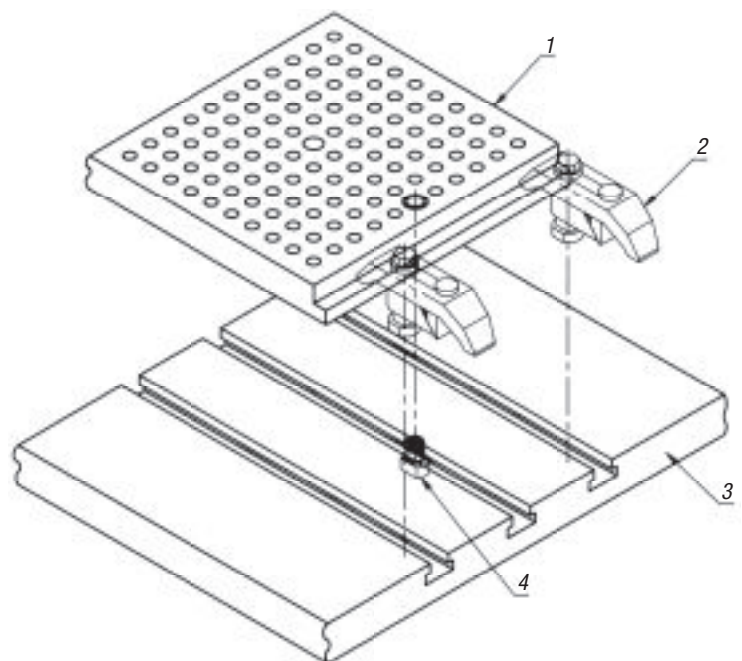
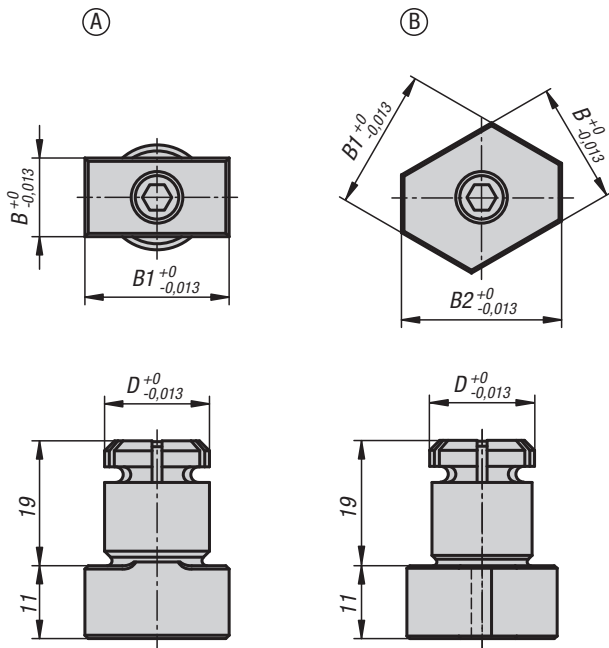
Material:
Carbon steel.

Version:
Tempered and black oxidised.
Locating diameter and guide faces ground.

Sample order:
K0356.1610

Note:
These expanding locating pins enable e.g. tooling plates to be positioned in the T-slots of machine tables (see illustration).
The plates to be positioned must have two holes matching the expanding pin diameter.
The expansion screw has a broached through hexagonal hole allowing the pin to be tightened or loosened from two sides.

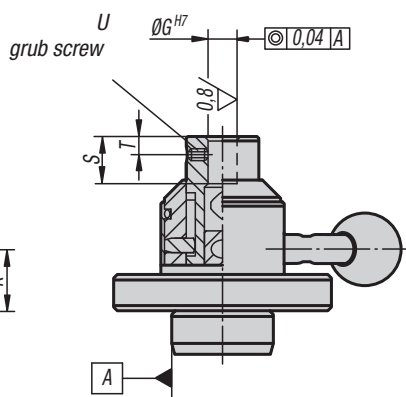
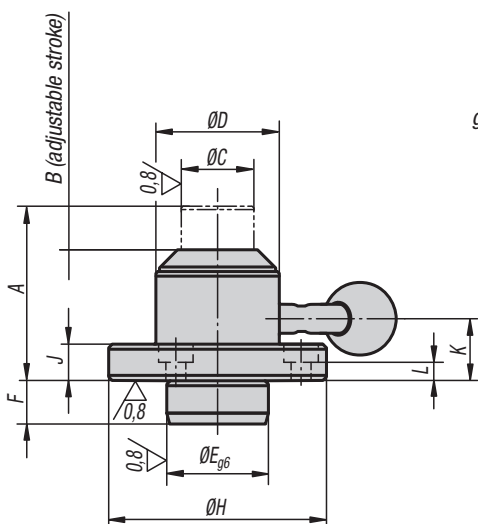
Drawing reference:
1) tooling plate
2) clamp straps
3) machine table
4) expanding locating pin



KIPP Locating pins, expanding

Order No.	Form	D	B	B1	B2	Recommended $\emptyset$
K0356.1610	A	16	10	20	-	16,01 $\pm$ 0,01
K0356.1612	A	16	12	22	-	16,01 $\pm$ 0,01
K0356.1614	B	16	14	16	18	16,01 $\pm$ 0,01
K0356.2024	B	20	24	28	32	20,01 $\pm$ 0,01

Positioning units



Material, version:

Body and locating pin carbon steel, tempered and black oxidised.

Handle carbon steel, tempered.

Ball knob black Duroplast PF 31.

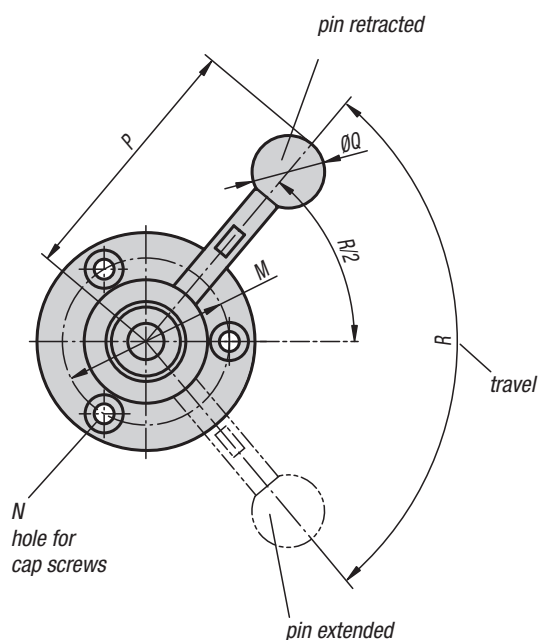
Sample order:

K0918.2808

Note:

* Admissible hand force for the handle.

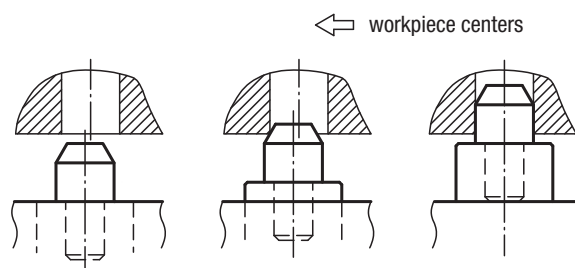
** Workpieces up to this weight can be located.



1. roughly position

2. raise pin

3. located



KIPP Positioning units

Order No.	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	U	Hand force FH N	Max. workpiece weight kg
K0918.2808	48	12	20	34	28	12	8	60	10	17	5	46	M5	71	20	100	13	5	M4x5	150*	250**
K0918.4212	61	15	30	48	42	14	12	80	13	23	7	63	M6	94	25	90	15	8	M6x8	200*	300**

