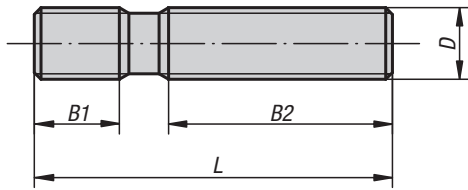


Machine and fixture components



Studs

DIN 6379



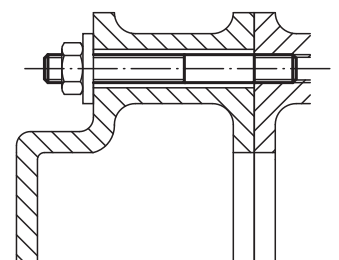
Material:
Carbon steel.

Version:
Thread rolled.
M6-M12 tempered to 10.9, black.
M14-M36 tempered to 8.8, black.

KIPP Studs DIN 6379

Order No.	D	L	B1	B2
K0697.0632	M6	32	9	16
K0697.0640	M6	40	9	20
K0697.0650	M6	50	9	30
K0697.0663	M6	63	9	40
K0697.0680	M6	80	9	50
K0697.06100	M6	100	9	63
K0697.0840	M8	40	11	20
K0697.0863	M8	63	11	40
K0697.0880	M8	80	11	50
K0697.08100	M8	100	11	63
K0697.08125	M8	125	11	75
K0697.08160	M8	160	11	100
K0697.1050	M10	50	13	25
K0697.1080	M10	80	13	50
K0697.10100	M10	100	13	75
K0697.10125	M10	125	13	75
K0697.10160	M10	160	13	100
K0697.10200	M10	200	13	125
K0697.1250	M12	50	15	25
K0697.1263	M12	63	15	32
K0697.1280	M12	80	15	50
K0697.12100	M12	100	15	63
K0697.12125	M12	125	15	75
K0697.12160	M12	160	15	100
K0697.12200	M12	200	15	125
K0697.1463	M14	63	17	32
K0697.1480	M14	80	17	50
K0697.14100	M14	100	17	63
K0697.14125	M14	125	17	75
K0697.14160	M14	160	17	100
K0697.14200	M14	200	17	125
K0697.14250	M14	250	17	160
K0697.1663	M16	63	19	32
K0697.1680	M16	80	19	50
K0697.16100	M16	100	19	63
K0697.16125	M16	125	19	75
K0697.16160	M16	160	19	100
K0697.16200	M16	200	19	125
K0697.16250	M16	250	19	160
K0697.16315	M16	315	19	180

Sample order:
K0697.12125

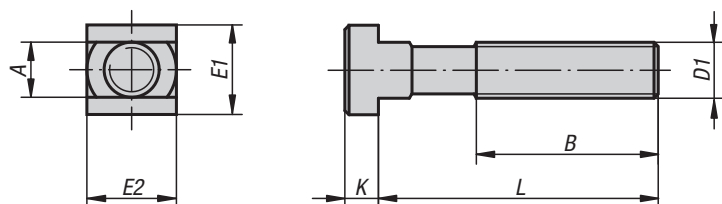


Order No.	D	L	B1	B2
K0697.16350	M16	350	19	200
K0697.16500	M16	500	20	315
K0697.1880	M18	80	23	50
K0697.18125	M18	125	23	75
K0697.18160	M18	160	23	100
K0697.18200	M18	200	23	125
K0697.18250	M18	250	23	150
K0697.18315	M18	315	23	180
K0697.2080	M20	80	27	32
K0697.20125	M20	125	27	70
K0697.20160	M20	160	27	100
K0697.20200	M20	200	27	125
K0697.20250	M20	250	27	160
K0697.20315	M20	315	27	200
K0697.20400	M20	400	27	250
K0697.20500	M20	500	27	315
K0697.22100	M22	100	31	45
K0697.22160	M22	160	31	100
K0697.22200	M22	200	31	125
K0697.22250	M22	250	31	160
K0697.22315	M22	315	31	180
K0697.22400	M22	400	31	250
K0697.24100	M24	100	35	45
K0697.24125	M24	125	35	63
K0697.24160	M24	160	35	100
K0697.24200	M24	200	35	125
K0697.24250	M24	250	35	160
K0697.24315	M24	315	35	200
K0697.24400	M24	400	35	250
K0697.24500	M24	500	35	315
K0697.24630	M24	630	35	315
K0697.27125	M27	125	39	56
K0697.27200	M27	200	39	125
K0697.27315	M27	315	39	200
K0697.27400	M27	400	39	250
K0697.27500	M27	500	39	315
K0697.30125	M30	125	43	56
K0697.30200	M30	200	43	125
K0697.30315	M30	315	43	200
K0697.30500	M30	500	43	315
K0697.30700	M30	700	43	400
K0697.301000	M30	1000	44	400
K0697.36160	M36	160	51	80
K0697.36200	M36	200	51	125
K0697.36250	M36	250	51	160
K0697.36315	M36	315	51	200
K0697.36400	M36	400	51	250
K0697.36500	M36	500	51	315
K0697.36700	M36	700	51	400



T-slot bolts

DIN 787



KIPP T-slot bolts DIN 787

Order No.	Nominal slot size	D1	L	A	B	E1/E2	K
K0698.0625	6	M6	25	5,7	15	10	4
K0698.0640	6	M6	40	5,7	28	10	4
K0698.0663	6	M6	63	5,7	40	10	4
K0698.0832	8	M8	32	7,7	22	13	6
K0698.0850	8	M8	50	7,7	35	13	6
K0698.0880	8	M8	80	7,7	50	13	6
K0698.1040	10	M10	40	9,7	30	15	6
K0698.1063	10	M10	63	9,7	45	15	6
K0698.10100	10	M10	100	9,7	60	15	6
K0698.1250	12	M12	50	11,7	35	18	7
K0698.1263	12	M12	63	11,7	40	18	7
K0698.1280	12	M12	80	11,7	55	18	7
K0698.12100	12	M12	100	11,7	65	18	7
K0698.12125	12	M12	125	11,7	75	18	7
K0698.12160	12	M12	160	11,7	100	18	7
K0698.12200	12	M12	200	11,7	120	18	7
K0698.1450	14	M12	50	13,7	35	22	8
K0698.1463	14	M12	63	13,7	45	22	8
K0698.1480	14	M12	80	13,7	55	22	8
K0698.14100	14	M12	100	13,7	65	22	8
K0698.14125	14	M12	125	13,7	75	22	8
K0698.14160	14	M12	160	13,7	100	22	8
K0698.14200	14	M12	200	13,7	120	22	8
K0698.16631	16	M14	63	15,7	45	25	9
K0698.16801	16	M14	80	15,7	55	25	9
K0698.161001	16	M14	100	15,7	65	25	9
K0698.161251	16	M14	125	15,7	75	25	9
K0698.161601	16	M14	160	15,7	100	25	9
K0698.162501	16	M14	250	15,7	150	25	9
K0698.1663	16	M16	63	15,7	45	25	9
K0698.1680	16	M16	80	15,7	55	25	9
K0698.16100	16	M16	100	15,7	65	25	9
K0698.16125	16	M16	125	15,7	85	25	9
K0698.16160	16	M16	160	15,7	100	25	9
K0698.16200	16	M16	200	15,7	125	25	9
K0698.16250	16	M16	250	15,7	150	25	9
K0698.1863	18	M16	63	17,7	45	28	10

Material:

Carbon steel.

Version:

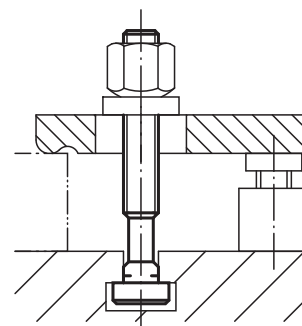
Forged and milled, rolled thread.

M6-M12 tempered to 10.9, black.

M14-M36 tempered to 8.8, black.

Sample order:

K0698.1263



T-slot bolts

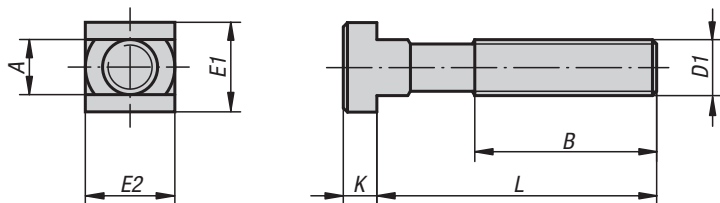
DIN 787

Order No.	Nominal slot size	D1	L	A	B	E1/E2	K
K0698.1880	18	M16	80	17,7	55	28	10
K0698.18100	18	M16	100	17,7	65	28	10
K0698.18125	18	M16	125	17,7	85	28	10
K0698.18160	18	M16	160	17,7	100	28	10
K0698.18200	18	M16	200	17,7	125	28	10
K0698.18250	18	M16	250	17,7	150	28	10
K0698.2080	20	M20	80	19,7	55	32	12
K0698.20100	20	M20	100	19,7	65	32	12
K0698.20125	20	M20	125	19,7	85	32	12
K0698.20160	20	M20	160	19,7	110	32	12
K0698.20200	20	M20	200	19,7	125	32	12
K0698.20250	20	M20	250	19,7	150	32	12
K0698.20315	20	M20	315	19,7	190	32	12
K0698.2280	22	M20	80	21,7	55	35	14
K0698.22100	22	M20	100	21,7	65	35	14
K0698.22125	22	M20	125	21,7	85	35	14
K0698.22160	22	M20	160	21,7	110	35	14
K0698.22200	22	M20	200	21,7	125	35	14
K0698.22250	22	M20	250	21,7	150	35	14
K0698.22315	22	M20	315	21,7	190	35	14
K0698.24100	24	M24	100	23,7	70	40	16
K0698.24125	24	M24	125	23,7	85	40	16
K0698.24160	24	M24	160	23,7	110	40	16
K0698.24200	24	M24	200	23,7	125	40	16
K0698.24250	24	M24	250	23,7	150	40	16
K0698.24315	24	M24	315	23,7	190	40	16
K0698.24400	24	M24	400	23,7	240	40	16
K0698.28100	28	M24	100	27,7	70	44	18
K0698.28125	28	M24	125	27,7	85	44	18
K0698.28160	28	M24	160	27,7	110	44	18
K0698.28200	28	M24	200	27,7	125	44	18
K0698.28250	28	M24	250	27,7	150	44	18
K0698.28315	28	M24	315	27,7	190	44	18
K0698.28400	28	M24	400	27,7	240	44	18
K0698.36125	36	M30	125	35,6	80	54	22
K0698.36160	36	M30	160	35,6	110	54	22
K0698.36200	36	M30	200	35,6	135	54	22
K0698.36250	36	M30	250	35,6	150	54	22
K0698.36315	36	M30	315	35,6	200	54	22
K0698.36500	36	M30	500	35,6	300	54	22
K0698.42160	42	M36	160	41,6	100	65	26
K0698.42250	42	M36	250	41,6	175	65	26
K0698.42400	42	M36	400	41,6	250	65	26



T-slot bolts

DIN 787, 12.9



KIPP T-slot bolts DIN 787, 12.9

Order No.	Nominal slot size	D1	L	A	B	E1/E2	K
K0699.11250	12	M12	50	11,7	35	18	7
K0699.11280	12	M12	80	11,7	55	18	7
K0699.112100	12	M12	100	11,7	65	18	7
K0699.112125	12	M12	125	11,7	75	18	7
K0699.112160	12	M12	160	11,7	100	18	7
K0699.112200	12	M12	200	11,7	120	18	7
K0699.11450	14	M12	50	13,7	35	22	8
K0699.11480	14	M12	80	13,7	55	22	8
K0699.114100	14	M12	100	13,7	65	22	8
K0699.114125	14	M12	125	13,7	75	22	8
K0699.114160	14	M12	160	13,7	100	22	8
K0699.114200	14	M12	200	13,7	120	22	8
K0699.11663	16	M16	63	15,7	45	25	9
K0699.116100	16	M16	100	15,7	65	25	9
K0699.116125	16	M16	125	15,7	85	25	9
K0699.116160	16	M16	160	15,7	100	25	9
K0699.116250	16	M16	250	15,7	150	25	9
K0699.11863	18	M16	63	17,7	45	28	10
K0699.118100	18	M16	100	17,7	65	28	10
K0699.118125	18	M16	125	17,7	85	28	10
K0699.118160	18	M16	160	17,7	100	28	10
K0699.118250	18	M16	250	17,7	150	28	10
K0699.12080	20	M20	80	19,7	55	32	12
K0699.120125	20	M20	125	19,7	85	32	12
K0699.120200	20	M20	200	19,7	125	32	12
K0699.120315	20	M20	315	19,7	190	32	12
K0699.12280	22	M20	80	21,7	55	35	14
K0699.122125	22	M20	125	21,7	85	35	14
K0699.122200	22	M20	200	21,7	125	35	14
K0699.122315	22	M20	315	21,7	190	35	14
K0699.124100	24	M24	100	23,7	70	40	16
K0699.124160	24	M24	160	23,7	110	40	16
K0699.124250	24	M24	250	23,7	150	40	16
K0699.124400	24	M24	400	23,7	240	40	16
K0699.128100	28	M24	100	27,7	70	44	18
K0699.128160	28	M24	160	27,7	110	44	18
K0699.128250	28	M24	250	27,7	150	44	18
K0699.128400	28	M24	400	27,7	240	44	18

Material:

Carbon steel.

Version:

Forged and milled, rolled thread, tempered to 12.9, black.

Sample order:

K0699.112125

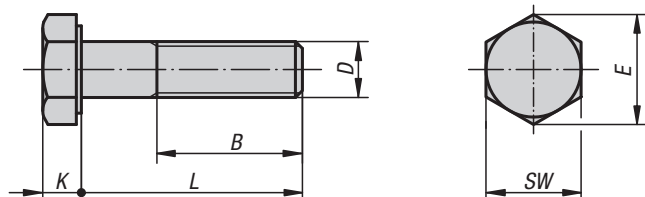


A large rectangular area filled with a light gray grid pattern, intended for handwritten notes.



Hexagon head bolts

DIN 931/DIN EN ISO 4014/DIN EN 24014

**Material:**

Steel or stainless steel (A 2)

Version:

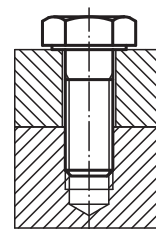
Steel grade 8.8, black or electro zinc-plated.
 Steel grade 10.9, black or electro zinc-plated.
 Steel grade 12.9, black.
 Stainless steel A 2-70, bright.

Sample order:

K0870.110X50 (include length L)

On request:

DIN ISO 272 spanner sizes.



KIPP Hexagon head bolts DIN 931/DIN EN ISO 4014/DIN EN 24014

Order No. steel Grade 8.8	Order No. steel Grade 10.9	Main colour	D	B	E	K	L	SW
K0870.04X	-	black	M4	14	7,66	2,8	25/30/35/40/45/50	7
K0870.05X	-	black	M5	16	8,79	3,5	25/30/35/40/45/50/60	8
K0870.06X	K0870.306X	black	M6	18	11,05	4	30/35/40/45/50/60/70	10
K0870.08X	K0870.308X	black	M8	22	14,38	5,3	35/40/45/50/60/70/80	13
K0870.10X	K0870.310X	black	M10	26	18,9	6,4	40/45/50/60/70/80/90/100	17
K0870.12X	K0870.312X	black	M12	30	21,1	7,5	45/50/60/70/80/90/100/110/120	19
K0870.16X	K0870.316X	black	M16	38	26,75	10	60/70/80/90/100/110/120	24
K0870.20X	K0870.320X	black	M20	46	33,53	12,5	70/80/90/100/110/120	30
K0870.404X	-	galvanised	M4	14	7,66	2,8	25/30/35/40/45/50	7
K0870.405X	-	galvanised	M5	16	8,79	3,5	25/30/35/40/45/50/60	8
K0870.406X	K0870.506X	galvanised	M6	18	11,05	4	30/35/40/45/50/60/70	10
K0870.408X	K0870.508X	galvanised	M8	22	14,38	5,3	35/40/45/50/60/70/80	13
K0870.410X	K0870.510X	galvanised	M10	26	18,9	6,4	40/45/50/60/70/80/90/100	17
K0870.412X	K0870.512X	galvanised	M12	30	21,1	7,5	45/50/60/70/80/90/100/110/120	19
K0870.416X	K0870.516X	galvanised	M16	38	26,75	10	60/70/80/90/100/110/120	24
K0870.420X	K0870.520X	galvanised	M20	46	33,53	12,5	70/80/90/100/110/120	30

Hexagon head bolts

DIN 931/DIN EN ISO 4014/DIN EN 24014



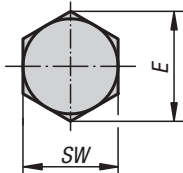
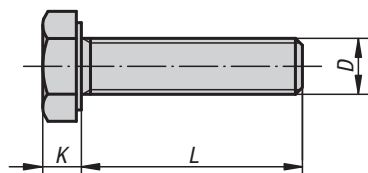
Order No.	Main material	Grade	D	B	E	K	L	SW
K0870.210X	steel	12.9	M10	26	18,9	6,4	40/45/50/60/70/80/90/100	17
K0870.212X	steel	12.9	M12	30	21,1	7,5	45/50/60/70/80/90/100/120	19
K0870.216X	steel	12.9	M16	38	26,75	10	60/70/80/90/100/120	24
K0870.220X	steel	12.9	M20	46	33,53	12,5	70/80/90/100/120	30

Order No.	Main material	D	B	E	K	L	SW
K0870.105X	stainless steel	M5	16	8,79	3,5	25/30/35/40/45/50/60	8
K0870.106X	stainless steel	M6	18	11,05	4	30/35/40/45/50/60/70	10
K0870.108X	stainless steel	M8	22	14,38	5,3	35/40/45/50/60/70/80	13
K0870.110X	stainless steel	M10	26	18,9	6,4	40/45/50/60/70/80/90/100	17
K0870.112X	stainless steel	M12	30	21,1	7,5	45/50/60/70/80/90/100/110/120	19
K0870.116X	stainless steel	M16	38	26,75	10	60/70/80/90/100/110/120	24



Hexagon head bolts

DIN 933

**Material:**

Steel or stainless steel (A 2)

Version:

Steel grade 8.8, black or electro zinc-plated.
 Steel grade 10.9, black or electro zinc-plated.
 Steel grade 12.9, black.
 Stainless steel A 2-70, bright.

Sample order:

K0871.05X40 (include length L)

KIPP Hexagon head bolts DIN 933

Order No. steel Grade 8.8	Order No. steel Grade 10.9	Main colour	D	E	K	L	SW
K0871.04X	-	black	M4	7,66	2,8	10/12/16/18/20/25	7
K0871.05X	-	black	M5	8,79	3,5	10/12/16/18/20/25/30/35/40	8
K0871.06X	K0871.306X	black	M6	11,05	4	10/12/16/18/20/25/30/35/40/45/50/55/60	10
K0871.08X	K0871.308X	black	M8	14,38	5,3	16/18/20/25/30/35/40/45/50/60/70/80/90/100	13
K0871.10X	K0871.310X	black	M10	18,9	6,4	16/18/20/25/30/35/40/45/50/60/70/80/90/100	17
K0871.12X	K0871.312X	black	M12	21,1	7,5	20/25/30/35/40/45/50/60/70/80/90/100/110/120	19
K0871.14X	-	black	M14	24,49	8,8	30/35/40/45/50/60/70/80/90/100/110/120	22
K0871.16X	K0871.316X	black	M16	26,75	10	30/35/40/45/50/60/70/80/90/100/110/120	24
K0871.20X	K0871.320X	black	M20	33,53	12,5	40/45/50/60/70/80/90/100/110/120	30
K0871.404X	-	-	M4	7,66	2,8	10/12/16/18/20/25	7
K0871.405X	-	-	M5	8,79	3,5	10/12/16/18/20/25/30/35/40	8
K0871.406X	K0871.506X	-	M6	11,05	4	10/12/16/18/20/25/30/35/40/45/50/55/60	10
K0871.408X	K0871.508X	-	M8	14,38	5,3	16/18/20/25/30/35/40/45/50/60/70/80/90/100	13
K0871.410X	K0871.510X	-	M10	18,9	6,4	16/18/20/25/30/35/40/45/50/60/70/80/90/100	17
K0871.412X	K0871.512X	-	M12	21,1	7,5	20/25/30/35/40/45/50/60/70/80/90/100/110/120	19
K0871.414X	-	-	M14	24,49	8,8	30/35/40/45/50/60/70/80/90/100/110/120	22
K0871.416X	K0871.516X	-	M16	26,75	10	30/35/40/45/50/60/70/80/90/100/110/120	24
K0871.420X	K0871.520X	-	M20	33,53	12,5	40/45/50/60/70/80/90/100/110/120	30

Hexagon head bolts

DIN 933



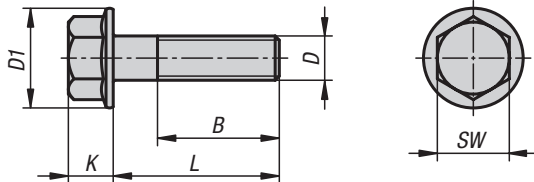
Order No.	Main material	Grade	D	E	K	L	SW
K0871.206X	steel	12.9	M6	11,05	4	12/16/20/25/30	10
K0871.208X	steel	12.9	M8	14,38	5,3	16/20/25/30/35/40/45/50/60	13
K0871.210X	steel	12.9	M10	18,9	6,4	20/25/30/35/40/45/50/60	17
K0871.212X	steel	12.9	M12	21,1	7,5	25/30/35/40/45/50/60	19
K0871.216X	steel	12.9	M16	26,75	10	30/35/40/45/50/60/70/80/90/100	24
K0871.220X	steel	12.9	M20	33,53	12,5	40/45/50/60/70/80/90/100	30

Order No.	Main material	D	E	K	L	SW
K0871.104X	stainless steel	M4	7,66	2,8	10/12/16/18/20/25	7
K0871.105X	stainless steel	M5	8,79	3,5	10/12/16/18/20/25/30/35/40	8
K0871.106X	stainless steel	M6	11,05	4	10/12/16/18/20/25/30/35/40/45/50/55/60	10
K0871.108X	stainless steel	M8	14,38	5,3	16/18/20/25/30/35/40/45/50/60/70/80/90/100	13
K0871.110X	stainless steel	M10	18,9	6,4	16/18/20/25/30/35/40/45/50/60/70/80/90/100	17
K0871.112X	stainless steel	M12	21,1	7,5	20/25/30/35/40/45/50/60/70/80/90/100/110/120	19
K0871.116X	stainless steel	M16	26,75	10	30/35/40/45/50/60/70/80/90/100/110/120	24
K0871.120X	stainless steel	M20	33,53	12,5	40/45/50/60/70/80/90/100/110/120	30



Hexagon head bolts with flange

EN 1665

**Material:**

Steel or stainless steel (A 2)

Version:

Steel grade 8.8, electro zinc-plated.
 Steel grade 10.9, electro zinc-plated.
 Bright stainless steel.

Sample order:

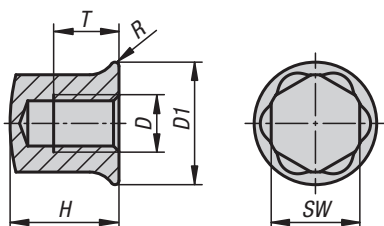
K1161.406X12 (include length L)

KIPP Hexagon head screws with flange EN 1665

Order No.	Main material	Grade	B	D	D1	K	SW	L
K1161.406X	steel	8.8	18	M6	14,2	6,6	10	12/16/20/25/30
K1161.408X	steel	8.8	22	M8	18	8,1	13	12/16/20/25/30/35/40/50/60
K1161.410X	steel	8.8	26	M10	22,3	10,4	16	20/25/30/35/40/50
K1161.412X	steel	8.8	30	M12	26,6	11,8	18	20/25/30/40/50
K1161.416X	steel	8.8	38	M16	35	15,4	24	30/35/40/45/50/70
K1161.506X	steel	10.9	18	M6	14,2	6,6	10	12/16/20/25/30
K1161.508X	steel	10.9	22	M8	18	8,1	13	12/16/20/25/30/35/40
K1161.510X	steel	10.9	26	M10	22,3	10,4	16	25/30/40
K1161.512X	steel	10.9	30	M12	26,6	11,8	18	20/35/40/45/50
K1161.516X	steel	10.9	38	M16	35	15,4	24	30/35/40/45/50/60
K1161.106X	stainless steel	-	18	M6	14,2	6,6	10	12/16/20/25/30
K1161.108X	stainless steel	-	22	M8	18	8,1	13	16/20/25/30/35/40/50
K1161.110X	stainless steel	-	26	M10	22,3	10,4	16	20/25/30/35/40/50/60

Stainless steel cap nuts with collar

for Hygienic USIT® seal and shim washers



A cavity-free seal can only be assured in combination with the Hygienic USIT® seal and shim washer.

The polished cap nuts have a surface finish of $Ra < 0.8 \mu m$.

Internal transition areas with a minimum radius of 3 mm are also provided, preventing dirt particles from adhering to the components and ensuring easy cleaning.

The cap nut with collar for Hygienic USIT® seal and shim washers is ideal for fastening in sterile areas and also conform to EHEDG regulations, something that is confirmed with the relevant certificate.

Material:

Stainless steel 1.4404.

Version:

Polished.

Sample order:

K1493.05

Note:

The EHEDG certificate is only valid when a specifically matched Hygienic USIT® seal and shim washer K1491 is used.

On request:

Special versions.

Accessories:

Hygienic USIT® seal and shim washer K1491.

Hexagon head bolts with collar K1492.

Sockets with plastic inserts K1361.

Ring/open-end spanner with protective caps K1362.

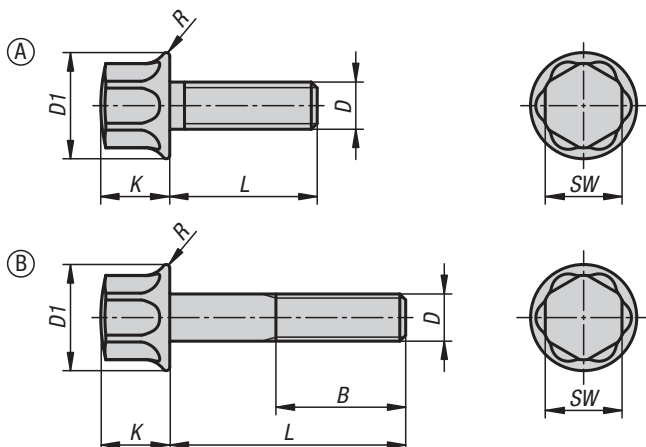


KIPP Stainless steel cap nuts with collar for Hygienic USIT® seal and shim washers

Order No.	D	D1	H	R	SW	T
K1493.04	M4	10,8	9	0,45	7	4,8
K1493.05	M5	11,8	11	0,5	8	6
K1493.06	M6	14	13	0,55	10	7,2
K1493.08	M8	18	16	0,6	13	9,6
K1493.10	M10	22	20	0,75	16	12
K1493.12	M12	26,6	23	0,9	18	14,4
K1493.16	M16	35	30	1,2	24	19,2

Stainless steel hexagon head screws with collar

for Hygienic USIT® seal and shim washers



A cavity-free seal can only be assured in combination with the Hygienic USIT® seal and shim washer.

The polished screws have a surface finish of $Ra < 0.8 \mu m$.

Internal transition areas with a minimum radius of 3 mm are also provided, preventing dirt particles from adhering to the components and ensuring easy cleaning.

Hexagon head bolts with collar for Hygienic USIT® seal and shim washers are ideal for fastening in sterile areas and also conform to EHEDG regulations, something that is confirmed with the relevant certificate.

Material:

Stainless steel 1.4404.

Version:

Polished.

Sample order:

K1492.05X12 (include length L)

Note:

The EHEDG certificate is only valid when a specifically matched Hygienic USIT® seal and shim washer K1491 is used.

On request:

Special versions.

Accessories:

Hygienic USIT® seal and shim washer K1491.

Hexagon cap nut with collar K1493.

Sockets with plastic inserts K1361.

Ring/open-end spanner with protective caps K1362.

Stainless steel hexagon head screws with collar

for Hygienic USIT® seal and shim washers

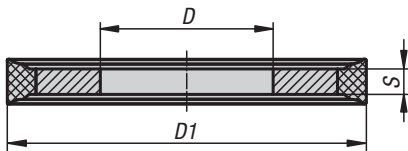
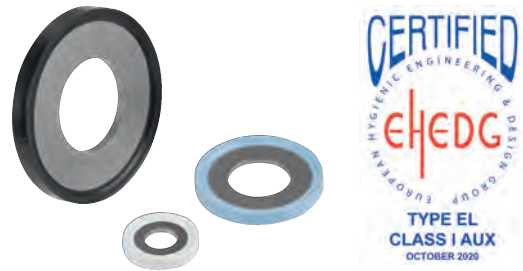


KIPP Stainless steel hexagon head screws with collar for Hygienic USIT® seal and shim washers

Order No.	Form	D	D1	K	L	R	SW
K1492.04X	A	M4	10,8	6,9	8/10/12/16/20	0,45	7
K1492.05X	A	M5	11,8	8,5	10/12/16/20	0,5	8
K1492.06X	A	M6	14	9,2	12/16/20/25	0,55	10
K1492.08X	A	M8	18	11,7	16/20/25/30/35	0,6	13
K1492.10X	A	M10	22	14	20/25/30/35/40	0,75	16
K1492.12X	A	M12	26,6	17	25/30/35/40/45	0,9	18
K1492.16X	A	M16	35	21,8	30/35/40/45/50/60	1,2	24

Order No.	Form	D	D1	B	K	L	R	SW
K1492.04X	B	M4	10,8	14	6,9	25/30/35/40	0,45	7
K1492.05X	B	M5	11,8	16	8,5	25/30/35/40/45/50	0,5	8
K1492.06X	B	M6	14	18	9,2	30/35/40/45/50/60	0,55	10
K1492.08X	B	M8	18	22	11,7	40/45/50/60/70/80	0,6	13
K1492.10X	B	M10	22	26	14	45/50/60/70/80	0,75	16
K1492.12X	B	M12	26,6	30	17	50/60/70/80	0,9	18
K1492.16X	B	M16	35	38	21,8	70/80	1,2	24

Hygienic USIT® seal and shim washers



With its highly reliable sealing and design that is compliant with hygiene requirements, the Hygienic USIT® seal and shim washer is setting new standards for cleanliness in the process industry. Many manufacturers of machinery and systems for the food and pharmaceutical industries often use standard shim washers or O-rings for screw connections in or on the product chamber. These are not EHEDG-compliant, however, as contamination and biofilms in the form of bacteria colonies and corrosion can form under the screw head, preventing the design from achieving maximum hygiene standards.

The metallic shim washer with a fixed sealing ring made from 70 EPDM 291 (black) or 70 EPDM 253815 (white) provides a secure, cavity-free seal. The Hygienic USIT® seal and shim washer, made from the fluorinated premium compound Fluoroprene® XP 45, is suitable for applications involving particularly aggressive CIP/SIP cleaning temperatures, high steam sterilisation temperatures and process media containing grease. This material has an even larger operating temperature range and is resistant to polar and non-polar media as well as flavouring substances.

Approvals such as FDA, EU1935/2004 and USP Class VI (121°C), plus EHEDG certification, confirm that the Hygienic USIT® washer represents the ideal choice for hygienically demanding applications in the food, beverage and pharmaceutical industries.

Material:

Washer:

Stainless steel 1.4404.

Sealing ring:

70 EPDM 291 (black)

70 EPDM 253815 (white)

75 Fluoroprene® XP 45 (blue)

Sample order:

K1491.051

Note:

The EHEDG certificate is only valid when a specifically matched hexagon head bolt K1492 or cap nut K1493 is used.

Attention:

The function of the Hygienic USIT® screw connection system has been tested in combination with stainless steel materials and standard cleaning materials.

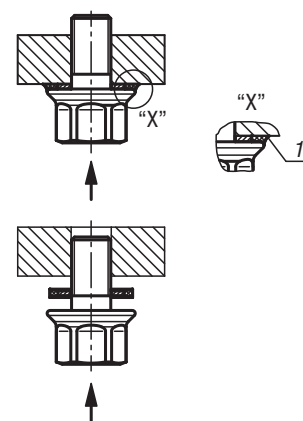
The user must check that it is suitable for the application in question.

Accessories:

The Hygienic USIT® seal and shim washers can be used with all other products of the Hygienic USIT® range.

Drawing reference:

1) Cavity free sealing

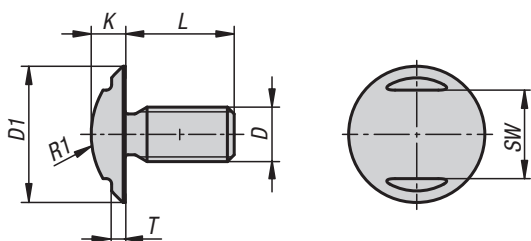


KIPP Hygienic USIT® seal and shim washers

Order No. 70 EPDM 291 black	Order No. 70 EPDM 253815 white	Order No. fluoroprene XP 45 blue	D	D1	S	Suitable for hexagon screws	Suitable cap nuts
K1491.041	K1491.042	K1491.044	4,1	9,7	1	M4	M4
K1491.051	K1491.052	K1491.054	5,1	10,7	1	M5	M5
K1491.061	K1491.062	K1491.064	6,1	13,1	1	M6	M6
K1491.081	K1491.082	K1491.084	8,1	16,9	1	M8	M8
K1491.101	K1491.102	K1491.104	10,1	21,2	1,5	M10	M10
K1491.121	K1491.122	K1491.124	12,1	25,5	1,5	M12	M12
K1491.161	K1491.162	K1491.164	16,1	33,9	1,5	M16	M16

Ball head screw

in Hygienic DESIGN


Material:

Stainless steel 1.4404.

Version:

Polished.

Sample order:

K1329.06X20 (include length L)

Note:

Ideal elements for fastening cladding panels, Plexiglas covers etc. The oversized flange and the thread undercut ensure a stress-free, uniform force distribution on the respective surfaces. Projecting edges are kept to a minimum by the head height being kept as low as possible. An open-end spanner is used to screw the fastener in.

The surface of the ball head screw is polished and, with regard to design optimised for the use in hygienic environments. The surface is polished to a surface finish of less than $Ra\ 0.8\ \mu m$. Dirt and residue from products or cleaners seldom adheres and easy cleaning is ensured.

Accessories:

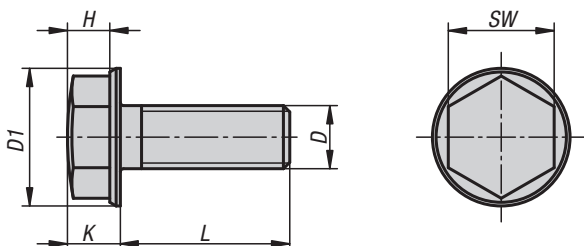
For damage-free tightening and loosening of the screw we recommend the open-end spanners together with the protective caps (K1362).

KIPP Ball head screw in Hygienic DESIGN

Order No.	D	D1	K	T	SW	R1	L
K1329.03X	M3	8	2	0,6	5	5,2	4/5/6/8/10
K1329.04X	M4	11	3	1	6	6,7	5/6/8/10/12
K1329.05X	M5	14	4	1	8	8,6	6/8/10/12/16
K1329.06X	M6	17	5	1,5	10	10	8/10/12/16/20
K1329.08X	M8	20	5	1,5	13	13	10/12/16/20/25
K1329.10X	M10	22	6	1,5	15	13,5	12/16/20/25/30/37
K1329.12X	M12	27	7,5	1,5	19	16,3	16/20/25/30/35
K1329.16X	M16	36	9	1,5	24	23	20/25/30/35/40

Hexagon head screws, stainless steel

in Hygienic DESIGN

**Material:**

Stainless steel 1.4404

Version:

Polished.

Sample order:

K1411.03X06

(include length L e.g. 06 for L = 6 mm.)

Note:

The surface of the hexagon head bolt is polished and, with regard to design optimised for the use in hygienic environments.

The bolt head is convex on the top face and the collar has a conical formed top surface.

Instead of troublesome embossing or indentations, the bolt head is smooth with a surface finish of Ra 0.8 µm. Dirt and residue from products or cleaners seldom adheres and easy cleaning is ensured.

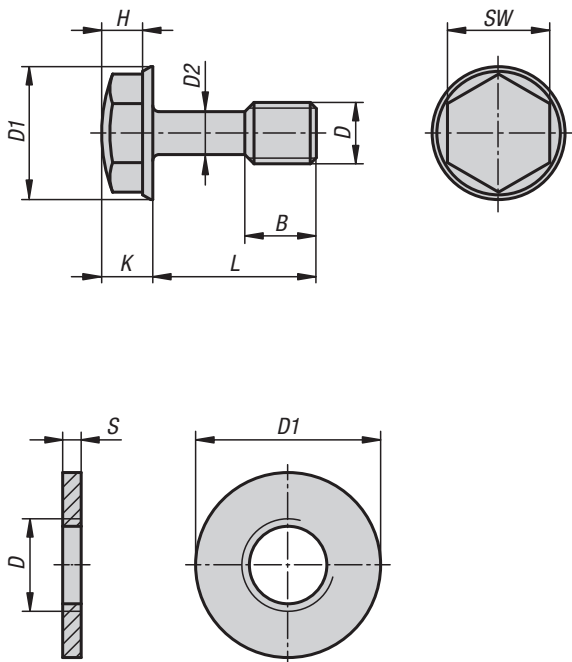


KIPP Hexagon head screws, stainless steel in Hygienic DESIGN

Order No.	D	D1	H	K	L	SW
K1411.03X	M3	7	3	3,8	6/8/12/16/20/25/30	5,5
K1411.04X	M4	9,2	3	4	8/12/16/20/25/30/35/40	7
K1411.05X	M5	10,5	3,7	4,7	12/16/20/25/30/35/40/45/50	8
K1411.06X	M6	13	4	5	12/16/20/25/30/35/40/45/50/55/60	10
K1411.08X	M8	16,8	5,5	6,5	16/20/25/30/35/40/45/50/55/60	13
K1411.10X	M10	20,6	7,3	8,3	20/25/30/35/40/45/50/55/60	16

Hexagon bolts with narrow shaft

in Hygienic DESIGN



Material:

Stainless steel 1.4404.

Version:

Polished.

Sample order:

K1330.06X30 (include length L)

Note:

Narrow shaft bolts are preferably secured against unintentional loss with a retaining element. This satisfies the EU standard 2006/42/EG. With the optionally available retaining washer the bolt is permanently combined with the component before screwing in. The washer is screwed over the threaded section and can then move freely on the narrow shaft. The shaft is not damaged by e.g. notching caused by a spring effect. By manual operation it is not possible that the washer screws itself out again. However, by careful manipulation the washer can be removed from the bolt without damaging either.

The surface of the hexagon head bolt is polished and, with regard to design optimised for the use in hygienic environments. The bolt head is convex on the top face and the collar has a conical formed top surface. Instead of troublesome embossing or indentations, the bolt head is smooth with a surface finish of less than $Ra\ 0.8\ \mu m$. Dirt and residue from products or cleaners seldom adheres and easy cleaning is ensured.

On request:

Inch threads, thread lengths, shaft lengths

Accessories:

Locking washer K1331.

Hexagon bolts with narrow shaft

in Hygienic DESIGN



KIPP Hexagon bolts with narrow shaft in Hygienic DESIGN

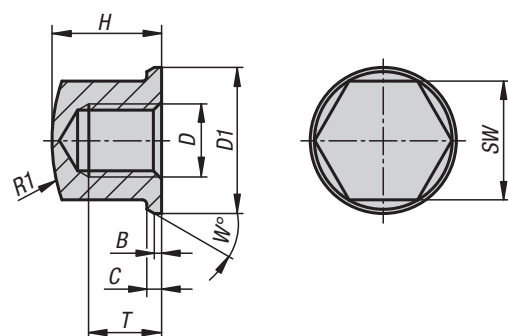
Order No.	D	D1	D2	B	H	K	L	SW
K1330.03X	M3	7	2,1	4,5	3	3,8	6/8/10/12	5,5
K1330.04X	M4	9,2	3,1	5	3	4	6/8/10/12/16	7
K1330.04X	M4	9,2	3,1	14	3	4	20	7
K1330.05X	M5	10,5	3,7	6	3,7	4,7	8/10/12/16/20	8
K1330.05X	M5	10,5	3,7	16	3,7	4,7	25	8
K1330.06X	M6	13	4,2	7	4	5	8/10/12/16/20	10
K1330.06X	M6	13	4,2	18	4	5	25/30/35/40/45/50/60	10
K1330.08X	M8	16,8	6	9	5,5	6,5	12/14/16/20/25	13
K1330.08X	M8	16,8	6	22	5,5	6,5	30/35/40/45/50/55/60/65/70	13
K1330.10X	M10	20,6	7,7	12	7,3	8,3	20/25/30/35	16
K1330.10X	M10	20,6	7,7	26	7,3	8,3	40/45/50/55/60/65/70/75/80	16

KIPP Retaining washers for narrow shank screws

Order No.	D	D1	S
K1331.03	M3	6	1,5
K1331.04	M4	8	1,5
K1331.05	M5	10	1,5
K1331.06	M6	12	1,5
K1331.08	M8	16	2
K1331.10	M10	20	2

Cap nut compact

in Hygienic DESIGN


Material:

Stainless steel 1.4404.

Version:

Polished.

Sample order:

K1332.08

Note:

The surface of the cap nut is polished and, with regard to design optimised for the use in hygienic environments. The top of the nut is spherical and the collar has a conical formed top face. The nut has been designed as a low version so as to keep troublesome corners as few as possible. Due to the extremely high quality surface finish of much less than Ra 0.8 µm, hardly any dirt particles adhere to the surface.

On request:

Inch threads, high versions.

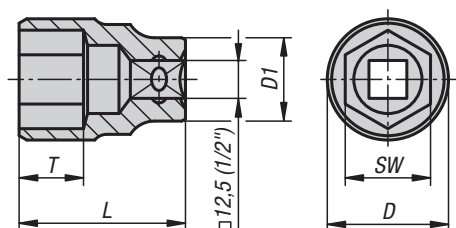
KIPP Cap nut compact in Hygienic DESIGN

Order No.	D	D1	B	C	H	R1	SW	T	W
K1332.03	M3	6,8	0,25	0,5	4,95	8,8	5,5	3	20
K1332.04	M4	9	0,3	0,8	6,5	10	7	4	30
K1332.05	M5	10	0,5	1	7	16	8	4	30
K1332.06	M6	12	0,8	1	9	16	10	6	30
K1332.08	M8	16	0,8	1,6	12	20	13	8	30
K1332.10	M10	20	1	2	14	32	16	10	30
K1332.12	M12	24	1	2,5	16	35	19	11	30

Sockets and plastic inserts



A



B



Material:

Socket tool steel.
Insert special PETP.

Version:

Socket chromium-plated.

Sample order:

K1361.1112 (Socket SW11)
K1361.0805 (Plastic insert SW8 for M5 hex head screw)

Note:

Socket:

Socket with 1/2" drive, made by Hazet. Specially modified, for holding the plastic inserts. The plastic inserts are securely held by the inner form and length of the socket. Optimal drive torque is transmitted to the screw head. By careful use, metallic contact between the socket and the hex head is prevented. Contact corrosion is eliminated.

Plastic insert:

Plastic inserts for tightening and loosening the screws and nuts of the KIPP product range NOVOnox hygienic. Polished and sensitive surfaces are protected and a later contact corrosion is avoided.

The plastic inserts are made from a specially manufactured PETP and have FDA approval. The inserts are pressed into the special socket manually. The form fit and locking device ensures an optimal hold in the socket. No special tools are required to exchange the worn out inserts.

By a tightening torque of μ 0.12 coefficient of friction (DIN for A4-70 for screws and nuts), the plastic inserts have a life expectancy of up to 1000 alternating cycles.

Drawing reference:

A) Socket
B) Plastic insert

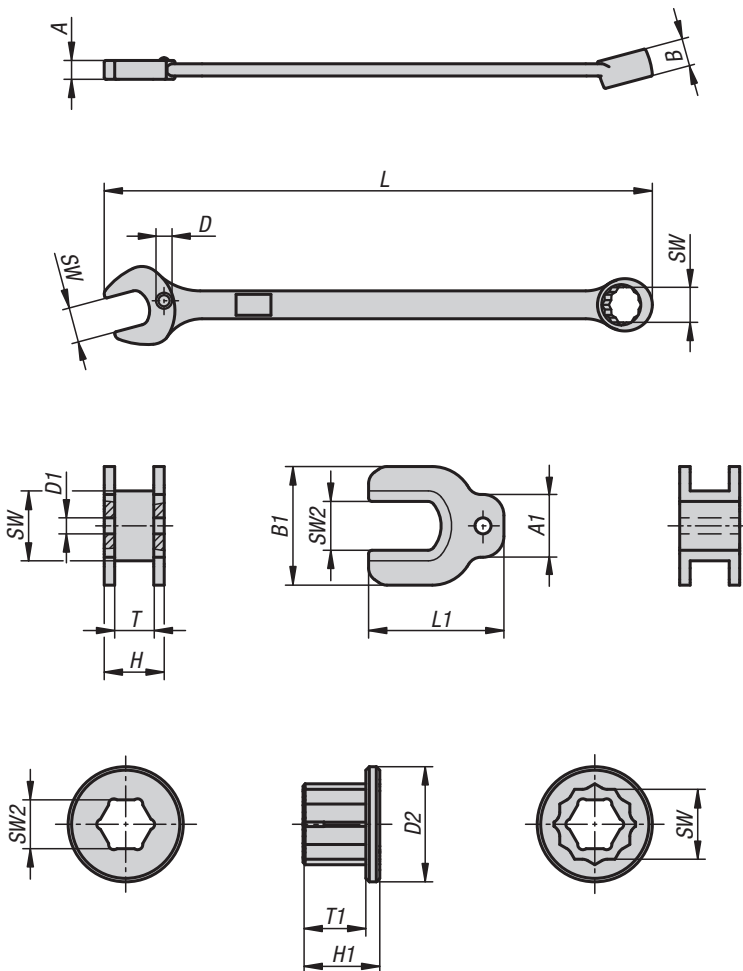
KIPP Sockets

Order No.	D	D1	L	T	SW
K1361.1012	15,3	22	36,6	10,6	10
K1361.1112	16,6	22	37,3	10,1	11
K1361.1312	19,1	22	37,3	10,6	13
K1361.1612	22,9	23,6	37,1	11,3	16
K1361.1912	26,6	23	37	13,2	19
K1361.2112	29	25	36,8	12,9	21
K1361.2712	35,2	25	44,4	18,1	27

KIPP Plastic inserts

Order No.	L	T	SW	SW1	Suitable for hexagon screws
K1361.0704	17,4	5,5	10	7	M4
K1361.0805	18	6	11	8	M5
K1361.1006	19,5	10	13	10	M6
K1361.1308	21,5	11	16	13	M8
K1361.1610	22	13,5	19	16	M10
K1361.1812	21,5	12	21	18	M12
K1361.2416	26,5	18	27	24	M16

Combination spanner with protective caps



Material:

Combination spanner tool steel.
Protective cap AlSi1MgMn.

Sample order:

K1362.10 combination spanner
K1362.1007 caps for open-end spanner
K1362.11007 caps for ring spanner

Note:

The protective cap was specially developed for tightening and loosening screw connections with sensitive surfaces. With normal tools, the surface of polished screws are so damaged from the first tightening, that cavities are created making easy and effective cleaning no longer possible.

The protective caps ensure damage free tightening and loosening of fasteners with outer contours. The soft aluminium leaves no scratches or other damage on sensitive surfaces. By correct and professional use the protective caps have a service life of ca. 1000 operating cycles.

Additionally, with the protective caps the risk of contact corrosion is reliably prevented on stainless steel fasteners. The projecting contour largely prevents unintentional contact points between spanner and stainless steel screw. The protective caps are made of the aluminium alloy EN AW 6082 and so comply with EN 602 - aluminium in contact with food.

The protective cap is held securely in the spanner by a special moulding or spring clip element. The cap cannot fall out on its own. Worn-out protective caps are changed manually.

On request:

Other sizes.

Combination spanner with protective caps



KIPP Combination spanner

Order No.	SW	A	B	L	D
K1362.10	10	5	8	154,5	5
K1362.11	11	5,5	8,4	168,5	5
K1362.13	13	6,3	10	193	6
K1362.16	16	7	11,4	230,5	6
K1362.19	19	8	13,5	268,5	7
K1362.21	21	8,5	13,7	292	7
K1362.27	27	10,5	16	380	9

KIPP Cap for open-end spanner

Order No.	SW	SW2	A1	B1	L1	D1	T	H
K1362.1007	10	7	9	17	19,4	2,3	5,6	8,6
K1362.1108	11	8	9	18	20,7	2,3	5,7	8,7
K1362.1310	13	10	10	22	23,2	3	6,7	10,7
K1362.1613	16	13	13	27	28,6	3	7,7	11,7
K1362.1916	19	16	13	30	32,5	4	8,6	12,6
K1362.2118	21	18	13	32	35	4	9	13
K1362.2724	27	24	14	40	43,8	4	10,8	15

KIPP Cap for ring spanner

Order No.	SW	SW2	D2	T1	H1
K1362.11007	10	7	16,5	8	11
K1362.11108	11	8	18	9,4	11,4
K1362.11310	13	10	21	11	13
K1362.11613	16	13	25	12,4	14,4
K1362.11916	19	16	30	14,5	16,5
K1362.12118	21	18	32	14,7	16,7
K1362.12724	27	24	41	17	19

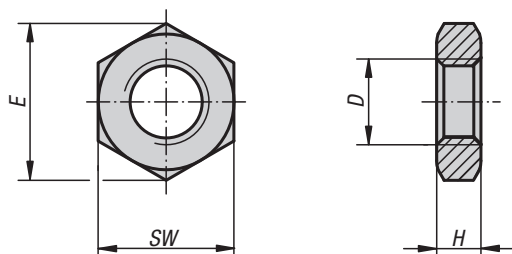




A large rectangular area filled with a fine grid of light gray lines, intended for handwritten notes.

Hexagon nuts thin

DIN 439

**Material:**

Steel or stainless steel (A 2)

Version:Steel grade 04, electro zinc-plated or black oxidised.
Stainless steel A2, bright.**Sample order:**

K0700.10

Note:

These hexagon nuts are used in screw connections exposed to limited loads, e.g. as a locknut for clevis joints or rod ends.

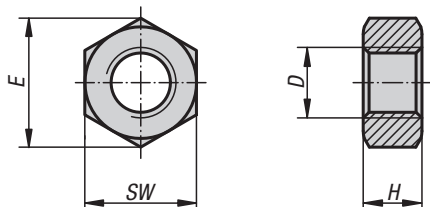
KIPP Hexagon nuts thin DIN 439

Order No. steel galvanised	Order No. stainless steel bright	Order No. steel black oxidised	Version 2	D	E	H	SW
K0700.05	K0700.105	K0700.205	rh thread	M5	8,79	2,7	8
K0700.06	K0700.106	K0700.206	rh thread	M6	11,05	3,2	10
K0700.006	K0700.1062	K0700.2063	rh thread	M6x0,75	11,05	3,2	10
K0700.08	K0700.108	K0700.208	rh thread	M8	14,38	4	13
K0700.008	K0700.1083	K0700.2083	rh thread	M8x1	14,38	4	13
K0700.10	K0700.110	K0700.210	rh thread	M10	18,9	5	17
K0700.103	K0700.1103	K0700.2103	rh thread	M10x1	18,9	5	17
K0700.104	K0700.1104	-	rh thread	M10x1,25	18,9	5	17
K0700.12	K0700.112	K0700.212	rh thread	M12	21,1	6	19
K0700.123	K0700.1123	-	rh thread	M12x1,25	21,1	6	19
K0700.124	K0700.1124	K0700.2124	rh thread	M12x1,5	21,1	6	19
K0700.14	K0700.114	-	rh thread	M14	24,49	7	22
K0700.16	K0700.116	K0700.216	rh thread	M16	26,76	8	24
K0700.163	K0700.1163	K0700.2163	rh thread	M16x1,5	26,76	8	24
K0700.183	-	-	rh thread	M18x1,5	29,56	9	27
K0700.20	K0700.120	-	rh thread	M20	32,95	10	30
K0700.203	K0700.1203	K0700.2203	rh thread	M20x1,5	32,95	10	30
K0700.223	K0700.1223	-	rh thread	M22x1,5	36,9	10	32
K0700.24	K0700.1244	-	rh thread	M24	39,55	12	36
-	K0700.1243	K0700.2243	rh thread	M24x2	39,6	12	36
K0700.30	-	-	rh thread	M30	50,85	15	46
K0700.061	K0700.1061	-	lh thread	M6	11,05	3,2	10
K0700.081	K0700.1081	-	lh thread	M8	14,38	4	13
K0700.101	K0700.1101	-	lh thread	M10	18,9	5	17
K0700.1031	K0700.11031	-	lh thread	M10x1	18,9	5	17
K0700.1041	K0700.11041	-	lh thread	M10x1,25	18,9	5	17
K0700.121	K0700.1121	-	lh thread	M12	21,1	6	19
K0700.1231	K0700.11231	-	lh thread	M12x1,25	21,1	6	19
K0700.1241	K0700.11241	-	lh thread	M12x1,5	21,1	6	19
K0700.161	K0700.1161	-	lh thread	M16	26,76	8	24
K0700.2031	K0700.12031	-	lh thread	M20x1,5	32,95	10	30
K0700.2231	K0700.12231	-	lh thread	M22x1,5	36,9	10	32



Hexagon nuts

DIN 934/DIN EN ISO 4032/DIN EN 24032



Material:

Steel or stainless steel (A 2)

Version:

Steel grade 8, bright or electro zinc-plated.
Steel grade 10, bright or electro zinc-plated.
Steel grade 12, bright.
Stainless steel A 2-70, bright.

Sample order:

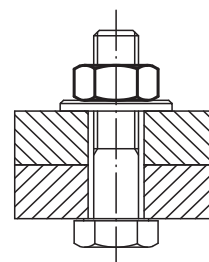
K1145.10

Note:

The nut grade must always be the same or higher than the bolt grade, i.e. bolts with grade 8.8 are always paired with nuts grade 8 or higher, but never less.

On request:

DIN ISO 272 spanner sizes.



Hexagon nuts

DIN 934/DIN EN ISO 4032/DIN EN 24032

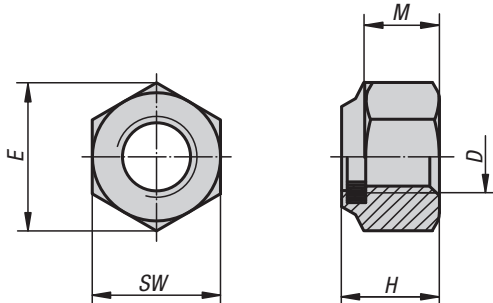
KIPP Hexagon nuts DIN 934/DIN EN ISO 4032/DIN EN 24032

Order No. steel Grade 8	Order No. steel Grade 10	Order No. steel Grade 12	Order No. stainless steel Grade 70	Surface finish body	D	E	H	SW
K1145.03	K1145.403	-	K1145.103	bright	M3	6,01	2,4	5,5
K1145.04	K1145.404	-	K1145.104	bright	M4	7,66	3,2	7
K1145.05	K1145.405	-	K1145.105	bright	M5	8,79	4	8
K1145.06	K1145.406	K1145.506	K1145.106	bright	M6	11,05	5	10
K1145.08	K1145.408	K1145.508	K1145.108	bright	M8	14,38	6,5	13
K1145.10	K1145.410	K1145.510	K1145.110	bright	M10	18,9	8	17
K1145.12	K1145.412	K1145.512	K1145.112	bright	M12	21,1	10	19
K1145.14	K1145.414	-	K1145.114	bright	M14	23,9	11	22
K1145.16	K1145.416	K1145.516	K1145.116	bright	M16	26,76	13	24
K1145.20	K1145.420	K1145.520	K1145.120	bright	M20	32,95	16	30
K1145.22	K1145.422	-	K1145.122	bright	M22	35	18	32
K1145.24	K1145.424	K1145.524	K1145.124	bright	M24	39,6	19	36
K1145.27	K1145.427	K1145.527	K1145.127	bright	M27	45,2	22	41
K1145.30	K1145.430	K1145.530	K1145.130	bright	M30	50,9	24	46
K1145.33	K1145.433	-	K1145.133	bright	M33	55,4	26	50
K1145.36	K1145.436	K1145.536	K1145.136	bright	M36	60,8	29	55
K1145.203	-	-	-	galvanised	M3	6,01	2,4	5,5
K1145.204	K1145.304	-	-	galvanised	M4	7,66	3,2	7
K1145.205	K1145.305	-	-	galvanised	M5	8,79	4	8
K1145.206	K1145.306	-	-	galvanised	M6	11,05	5	10
K1145.208	K1145.308	-	-	galvanised	M8	14,38	6,5	13
K1145.210	K1145.310	-	-	galvanised	M10	18,9	8	17
K1145.212	K1145.312	-	-	galvanised	M12	21,1	10	19
K1145.214	K1145.314	-	-	galvanised	M14	23,9	11	22
K1145.216	K1145.316	-	-	galvanised	M16	26,76	13	24
K1145.220	K1145.320	-	-	galvanised	M20	32,95	16	30
K1145.222	K1145.322	-	-	galvanised	M22	35	18	32
K1145.224	K1145.324	-	-	galvanised	M24	39,6	19	36
K1145.227	K1145.327	-	-	galvanised	M27	45,2	22	41
K1145.230	K1145.330	-	-	galvanised	M30	50,9	24	46
K1145.233	K1145.333	-	-	galvanised	M33	55,4	26	50
K1145.236	K1145.336	-	-	galvanised	M36	60,8	29	55



Hexagon nuts with polyamide thread lock

high type, DIN 982 / stainless steel similar to DIN 982


Material:

Steel or stainless steel (A 2)

Version:

Electro zinc-plated steel.
Bright stainless steel.

Sample order:

K1147.204

Note:

When screwing the nuts onto the thread, the thread lock is plastically and elastically deformed. The elastic deformation causes a radial frictional lock against the nuts being loosened.

The plastic thread lock is only effective when the nuts are fully screwed onto the male thread. The screw length must be selected so that at least two full threads protrude from the nut.

Due to the plastic deformation of the thread lock, these nuts should only be used once.

Temperature range:

-50°C to +120°C.

KIPP Hexagon nuts with polyamide thread lock, high type, DIN 982 / stainless steel similar to DIN 982

Order No.	Main material	DIN	Grade	D	E	H	M	SW
K1147.204	steel	DIN 982	6-8	M4	7,66	6	2,9	7
K1147.205	steel	DIN 982	8	M5	8,79	6,3	4,4	8
K1147.206	steel	DIN 982	8	M6	11,05	8	4,9	10
K1147.208	steel	DIN 982	8	M8	14,38	9,5	6,44	13
K1147.210	steel	DIN 982	8	M10	18,9	11,5	8,04	17
K1147.212	steel	DIN 982	8	M12	21,1	14	10,37	19
K1147.214	steel	DIN 982	8	M14	23,9	16	12,1	22
K1147.216	steel	DIN 982	8	M16	26,76	18	14,1	24
K1147.220	steel	DIN 982	8	M20	32,95	22	16,9	30
K1147.224	steel	DIN 982	8	M24	39,55	28	20,2	36
K1147.310	steel	DIN 982	10	M10	18,9	11,5	8,04	17
K1147.312	steel	DIN 982	10	M12	21,1	14	10,37	19
K1147.316	steel	DIN 982	10	M16	26,76	18	14,1	24
K1147.320	steel	DIN 982	10	M20	32,95	22	16,9	30
K1147.324	steel	DIN 982	10	M24	39,55	28	20,2	36
K1147.105	stainless steel	similar to DIN 982	-	M5	8,79	6,3	4,4	8
K1147.106	stainless steel	similar to DIN 982	-	M6	11,05	8	4,9	10
K1147.108	stainless steel	similar to DIN 982	-	M8	14,38	9,5	6,44	13
K1147.110	stainless steel	similar to DIN 982	-	M10	18,9	11,5	8,04	17
K1147.112	stainless steel	similar to DIN 982	-	M12	21,1	14	10,37	19
K1147.116	stainless steel	similar to DIN 982	-	M16	26,76	18	14,1	24
K1147.120	stainless steel	similar to DIN 982	-	M20	32,95	22	16,9	30

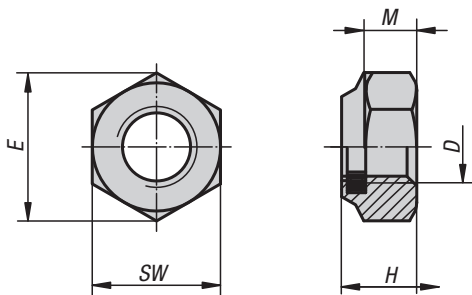


A large rectangular area filled with a light gray grid pattern, intended for taking notes.



Hexagon nuts with polyamide thread lock

thin type, DIN 985


Material:

Steel or stainless steel (A 2)

Version:

Electro zinc-plated steel.

Bright stainless steel.

Sample order:

K1148.203

Note:

When screwing the nuts onto the thread, the thread lock is plastically and elastically deformed. The elastic deformation causes a radial frictional lock against the nuts being loosened.

The plastic thread lock is only effective when the nuts are fully screwed onto the male thread. The screw length must be selected so that at least two full threads protrude from the nut.

Due to the plastic deformation of the thread lock, these nuts should only be used once.

Temperature range:

-50°C to +120°C.

KIPP Hexagon nuts with polyamide thread lock, thin type DIN 985

Order No. steel Grade 6-8	Order No. steel Grade 8	Order No. steel Grade 10	D	E	H	M	SW
K1148.203	-	-	M3	6,08	4	2,4	5,5
K1148.204	-	-	M4	7,66	5	2,9	7
K1148.205	-	-	M5	8,79	5	3,2	8
-	K1148.206	K1148.306	M6	11,05	6	4	10
-	K1148.208	K1148.308	M8	14,38	8	5,5	13
-	K1148.210	K1148.310	M10	18,9	10	6,5	17
-	K1148.212	K1148.312	M12	21,1	12	8	19
-	K1148.214	K1148.314	M14	23,9	14	9,5	22
-	K1148.216	K1148.316	M16	26,76	16	10,5	24
-	K1148.220	K1148.320	M20	32,95	20	14	30
-	K1148.224	-	M24	39,55	24	15	36
-	K1148.227	K1148.327	M27	45,2	27	17	41
-	K1148.230	K1148.330	M30	50,85	30	19	46
-	-	K1148.324	M24	35	24	15	36

Hexagon nuts with polyamide thread lock

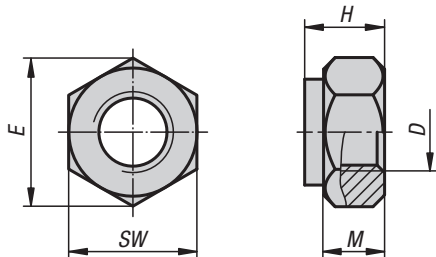
thin type, DIN 985



Order No.	Main material	D	E	H	M	SW
K1148.103	stainless steel	M3	6,08	4	2,4	5,5
K1148.104	stainless steel	M4	7,66	5	2,9	7
K1148.105	stainless steel	M5	8,79	5	3,2	8
K1148.106	stainless steel	M6	11,05	6	4	10
K1148.108	stainless steel	M8	14,38	8	5,5	13
K1148.110	stainless steel	M10	18,9	10	6,5	17
K1148.112	stainless steel	M12	21,1	12	8	19
K1148.114	stainless steel	M14	23,9	14	9,5	22
K1148.116	stainless steel	M16	26,76	16	10,5	24
K1148.120	stainless steel	M20	32,95	20	14	30
K1148.124	stainless steel	M24	39,55	24	15	36
K1148.127	stainless steel	M27	45,2	27	17	41
K1148.130	stainless steel	M30	50,85	30	19	46

Hexagon nuts with thread lock

DIN 980

**Material:**

Steel or stainless steel (A 2)

Version:

Electro zinc-plated steel.

Bright stainless steel.

Sample order:

K1146.204

Note:

Hexagon nuts with thread lock DIN 980, Form V (all-metal nut, one piece).

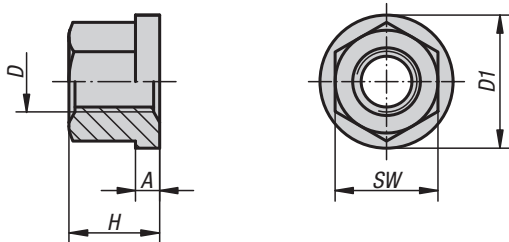
KIPP Hexagon nuts with thread lock DIN 980

Order No. steel Grade 8	Order No. steel Grade 10	D	E	H	M	SW
K1146.204	-	M4	7,66	4,2	2,2	7
K1146.205	-	M5	8,79	5,1	2,75	8
K1146.206	-	M6	11,05	6	3,3	10
K1146.208	K1146.308	M8	14,38	8	4,4	13
K1146.210	K1146.310	M10	18,9	10	5,5	17
K1146.212	K1146.312	M12	21,1	12	6,6	19
K1146.214	K1146.314	M14	23,9	14	7,7	22
K1146.216	K1146.316	M16	26,76	16	8,8	24
K1146.220	K1146.320	M20	32,95	20	11	30
K1146.224	K1146.324	M24	39,55/35	24	13,2	36
K1146.227	K1146.327	M27	45,2	27	14,8	41
K1146.230	K1146.330	M30	50,85	30	16,5	46

Order No.	Main material	D	E	H	M	SW
K1146.104	stainless steel	M4	7,66	4,2	2,2	7
K1146.105	stainless steel	M5	8,79	5,1	2,75	8
K1146.106	stainless steel	M6	11,05	6	3,3	10
K1146.108	stainless steel	M8	14,38	8	4,4	13
K1146.110	stainless steel	M10	18,9	10	5,5	17
K1146.112	stainless steel	M12	21,1	12	6,6	19
K1146.114	stainless steel	M14	23,9	14	7,7	22
K1146.116	stainless steel	M16	26,76	16	8,8	24
K1146.120	stainless steel	M20	32,95	20	11	30
K1146.124	stainless steel	M24	39,55	24	13,2	36

Hexagon nuts with collar

height 1.5xD, DIN 6331 enhanced



Material:

Carbon steel or stainless steel 1.4301.

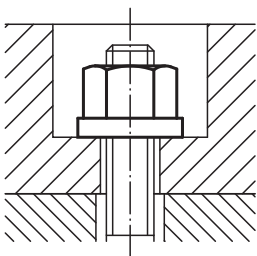
Version:

Steel grade 10, black.

Stainless steel bright.

Sample order:

K0701.16



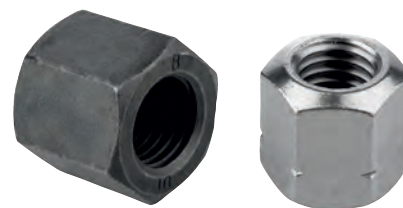
KIPP Hexagon nuts with collar height 1.5xD, DIN 6331 enhanced

Order No. high carbon steel -	Order No. stainless steel 1.4301	Order No. stainless steel 1.4401	D	H = 1,5 x D	A	D1	SW
K0701.05	-	-	M5	7,5	2	12	9
K0701.06	K0701.806	-	M6	9	3	14	10
K0701.08	K0701.808	K0701.908	M8	12	3,5	18	13
K0701.10	K0701.810	-	M10	15	4	22	16
K0701.101	K0701.811	K0701.910	M10	15	4	22	17
K0701.12	K0701.812	-	M12	18	4	25	18
K0701.121	K0701.8121	K0701.912	M12	18	4	25	19
K0701.14	-	-	M14	21	4,5	28	22
K0701.16	K0701.816	K0701.916	M16	24	5	31	24
K0701.18	-	-	M18	27	5	34	27
K0701.20	K0701.820	K0701.920	M20	30	6	37	30
K0701.22	-	-	M22	33	6	40	34
K0701.24	-	-	M24	36	6	45	36
K0701.30	-	-	M30	45	8	58	46
K0701.36	-	-	M36	54	10	68	55



Hexagon nuts

height 1.5xD, DIN 6330 enhanced


Material:

Carbon steel or stainless steel (A2).

Version:

Tempered to 10, black.

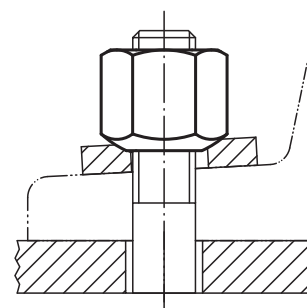
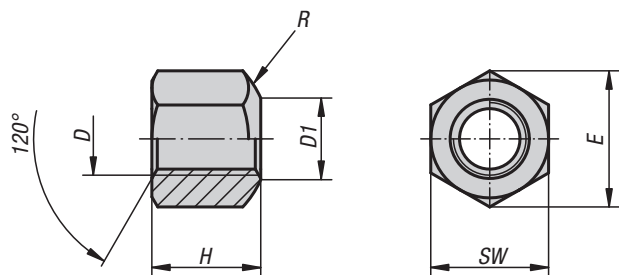
Stainless steel A 2-70, bright.

Sample order:

K0702.12

Note:

These hexagon nuts can be used with the conical seats K0729, Form D and G.



KIPP Hexagon nuts height 1.5xD, DIN 6330 enhanced

Order No.	Main material	D	H = 1,5 x D	D1	SW	E	R
K0702.05	high carbon steel	M5	7,5	6,5	9	10,4	7
K0702.06	high carbon steel	M6	9	7	10	11,5	9
K0702.08	high carbon steel	M8	12	9	13	15	11
K0702.10	high carbon steel	M10	15	11,5	16	18,4	15
K0702.101	high carbon steel	M10	15	11,5	17	19,6	15
K0702.12	high carbon steel	M12	18	14	18	20,7	17
K0702.121	high carbon steel	M12	18	14	19	21,9	17
K0702.14	high carbon steel	M14	21	16	22	25,4	20
K0702.16	high carbon steel	M16	24	18	24	27,7	22
K0702.18	high carbon steel	M18	27	20	27	31,2	24,5
K0702.20	high carbon steel	M20	30	22	30	34,6	27
K0702.22	high carbon steel	M22	33	24	32	36,9	29
K0702.24	high carbon steel	M24	36	26	36	41,6	32
K0702.30	high carbon steel	M30	45	32	46	53,1	41
K0702.36	high carbon steel	M36	54	38	55	63,5	50
K0702.806	stainless steel	M6	9	7	10	11,5	9
K0702.808	stainless steel	M8	12	9	13	15	11
K0702.810	stainless steel	M10	15	11,5	16	18,4	15
K0702.811	stainless steel	M10	15	11,5	17	19,6	15
K0702.812	stainless steel	M12	18	14	18	20,7	17
K0702.816	stainless steel	M16	24	18	24	27,7	22
K0702.820	stainless steel	M20	30	22	30	34,6	27

Hexagon nuts

with spherical seat


Material:

Carbon steel or stainless steel.

Version:

Steel version:

tempered to 900 N/mm², black oxidised.

Stainless steel version:

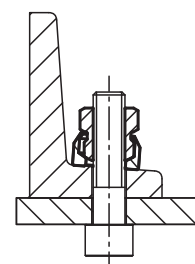
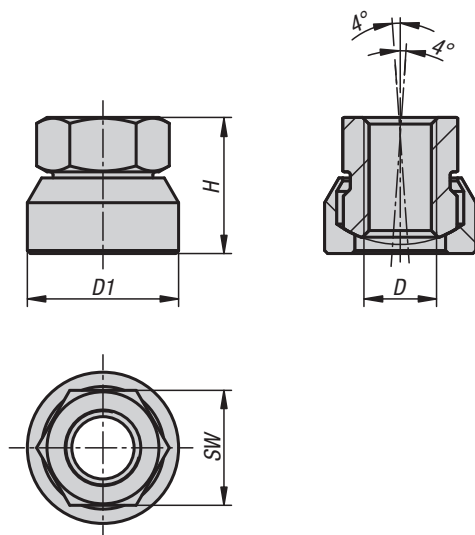
tempered to 900 N/mm², bright.

Sample order:

K0794.12

Note:

Captive components (one-piece).

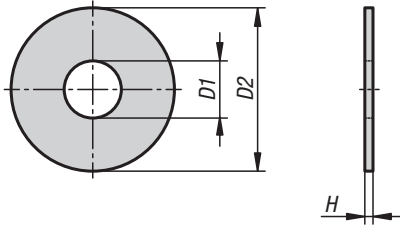


KIPP Hexagon nuts with spherical seat

Order No.	Main material	D	D1	H	SW
K0794.08	steel	M8	18	15	13
K0794.10	steel	M10	22	18,5	17
K0794.12	steel	M12	25	22,5	19
K0794.16	steel	M16	31	29	24
K0794.808	stainless steel	M8	18	15	13
K0794.810	stainless steel	M10	22	18,5	17
K0794.812	stainless steel	M12	25	22,5	19
K0794.816	stainless steel	M16	31	29	24

Washers with large OD

DIN 9021



Material:

Steel or stainless steel (A 2)

Version:

Electro zinc-plated steel.

Hardness

$D1 \leq 14 = 140 \text{ HV}$.

$D1 > 17 = 100 \text{ HV}$.

Stainless steel, bright.

Sample order:

K1150.03

Note:

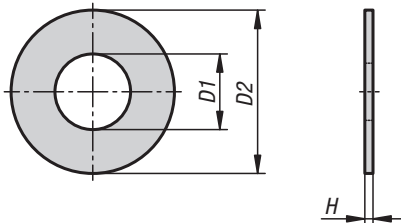
The pulleys have an OD of $D2 = \sim 3 \times D1$.

KIPP Washers with large OD DIN 9021

Order No. steel	Order No. stainless steel	for screws	D1	D2	H
K1150.03	K1150.103	M3	3,2	9	0,8
K1150.04	K1150.104	M4	4,3	12	1
K1150.05	K1150.105	M5	5,3	15	1,2
K1150.06	K1150.106	M6	6,4	18	1,6
K1150.08	K1150.108	M8	8,4	24	2
K1150.10	K1150.110	M10	10,5	30	2,5
K1150.12	K1150.112	M12	13	37	3
K1150.14	K1150.114	M14	15	44	3
K1150.16	K1150.116	M16	17	50	3
K1150.18	K1150.118	M18	20	56	4
K1150.20	K1150.120	M20	22	60	4
K1150.24	K1150.124	M24	26	72	5
K1150.30	-	M30	33	92	6

Shim washers

DIN 988

**Material:**

Steel.

Version:

Bright.

Sample order:

K1151.0306010

(include dimension H e.g. 010 for H = 0,1 mm)

Note:

With shim washers, an existing axial backlash can be significantly reduced. They are available with a thicknesses from 0.1 mm. Any thicknesses can be made by combining several shim washers.

KIPP Shim washers DIN 988

Order No.	Main material	D1	D2	H
K1151.0306***	steel	3	6	0,1/0,15/0,2/0,25/0,3/0,5/1
K1151.0408***	steel	4	8	0,1/0,15/0,2/0,3/0,5/1
K1151.0510***	steel	5	10	0,1/0,15/0,2/0,25/0,3/0,5/1
K1151.0612***	steel	6	12	0,1/0,2/0,25/0,3/0,5/1
K1151.0713***	steel	7	13	0,1/0,2/0,3/0,5/1
K1151.0814***	steel	8	14	0,1/0,15/0,2/0,25/0,3/0,5/1
K1151.0915***	steel	9	15	0,1/0,15/0,2/0,3/0,5/1
K1151.1016***	steel	10	16	0,1/0,15/0,2/0,25/0,3/0,5/1
K1151.1117***	steel	11	17	0,1/0,2/0,25/0,3/0,5/1
K1151.1218***	steel	12	18	0,1/0,15/0,2/0,25/0,3/0,5/1
K1151.1319***	steel	13	19	0,1/0,15/0,2/0,25/0,3/0,5/1
K1151.1420***	steel	14	20	0,1/0,15/0,2/0,25/0,3/0,5/1
K1151.1521***	steel	15	21	0,1/0,15/0,2/0,25/0,3/0,5/1/1,2
K1151.1622***	steel	16	22	0,15/0,2/0,25/0,3/0,5/1/1,2
K1151.1724***	steel	17	24	0,1/0,15/0,2/0,25/0,3/0,5/1/1,2
K1151.1825***	steel	18	25	0,1/0,15/0,2/0,25/0,3/0,5/1/1,2
K1151.1926***	steel	19	26	0,1/0,15/0,2/0,25/0,3/0,5/1/1,2
K1151.2028***	steel	20	28	0,1/0,15/0,2/0,25/0,3/0,5/1/1,2/1,5
K1151.2230***	steel	22	30	0,1/0,15/0,2/0,25/0,3/0,5/1/1,2/1,5
K1151.2535***	steel	25	35	0,1/0,15/0,2/0,25/0,3/0,5/1/1,2/1,5
K1151.2637***	steel	26	37	0,1/0,15/0,2/0,25/0,3/0,5/1/1,2/1,5
K1151.2840***	steel	28	40	0,1/0,15/0,2/0,25/0,3/0,5/1/1,2/1,5
K1151.3042***	steel	30	42	0,1/0,15/0,2/0,25/0,3/0,5/1/1,2/1,5/2
K1151.3245***	steel	32	45	0,1/0,15/0,2/0,25/0,3/0,5/1/1,2/1,5/2
K1151.3545***	steel	35	45	0,1/0,15/0,2/0,25/0,3/0,5/1/1,2/1,5/2
K1151.3645***	steel	36	45	0,1/0,15/0,2/0,25/0,3/0,5/1/1,2/1,5/2
K1151.3747***	steel	37	47	0,1/0,15/0,2/0,25/0,3/0,5/1/1,2/1,5/2
K1151.4050***	steel	40	50	0,1/0,15/0,2/0,25/0,3/0,5/1/1,2/1,5/2
K1151.4252***	steel	42	52	0,1/0,15/0,2/0,25/0,3/0,5/1/1,2/1,5/2
K1151.4555***	steel	45	55	0,1/0,15/0,2/0,25/0,3/0,5/1/1,2/1,5/2
K1151.4860***	steel	48	60	0,1/0,15/0,2/0,25/0,3/0,5/1/1,2/1,5/2
K1151.5062***	steel	50	62	0,1/0,15/0,2/0,25/0,3/0,5/1/1,2/1,5/2



Washers plastic

captive



Material:
Polyamide

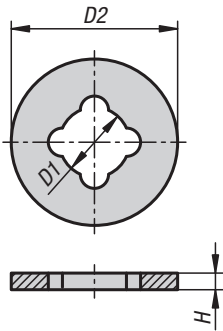
Version:
white

Sample order:
K1526.05

Note:
The washers are vibration dampers and protect the screw connection during e.g. pre-assembly.
The washers also protect the surface from damage.
Only suitable for threads with undercut i.e. ring bolts

Application:
Press or twist the washers over the thread.

Attention:
When shim washers with rings bolts are used, the forces specified for the ring bolts cannot be guaranteed.



KIPP Captive washers, plastic

Order No.	D1	D2	G	H
K1526.05	4,3	10	M5	0,5
K1526.06	5,1	12	M6	0,5
K1526.08	6,2	14	M8	0,5
K1526.10	8,4	20	M10	1
K1526.12	9,8	20	M12	1
K1526.16	13,5	28	M16	1

C-washers

DIN 6372 enhanced

**Material:**

Carbon steel.

Version:

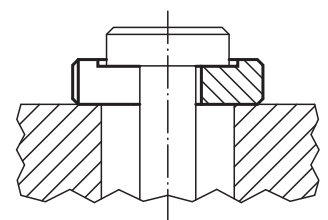
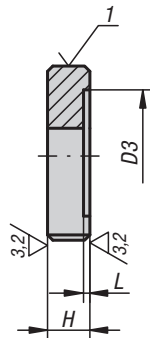
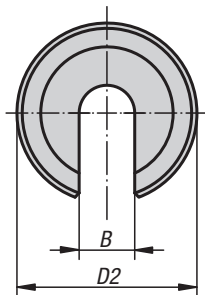
Tempered and black oxidised.

Sample order:

K0730.12

Drawing reference:

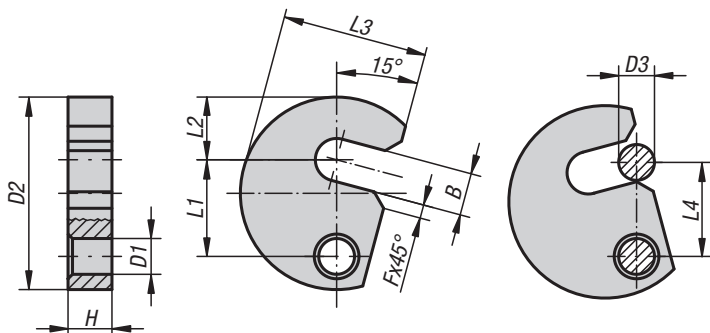
1) cross knurl

**KIPP C-washers for fixtures DIN 6372 enhanced**

Order No.	B	D2	D3	H	L
K0730.05	5,25	17	12	5	0,75
K0730.06	6,4	22	16	6	0,8
K0730.08	8,4	28	21	7	1
K0730.10	10,5	34	25	8	1,2
K0730.12	13	40	30	9	1,8
K0730.14	14,5	48	33	12	1,8
K0730.16	17	56	37	12	1,8
K0730.20	21	64	45	14	2
K0730.24	25	75	52	16	2
K0730.30	31	90	65	18	2
K0730.36	37	100	75	20	2,5

C-washers captive

DIN 6371



Material:
Carbon steel 1.0760.

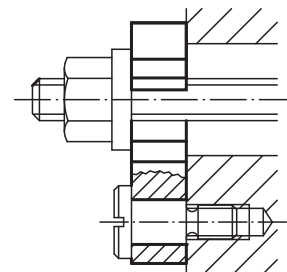
Version:
Nitrided and black oxidised.

Sample order:
K0703.12

Note:
K0703.14 is not standard. Suitable shoulder screws see K0704.

KIPP C-washers captive DIN 6371

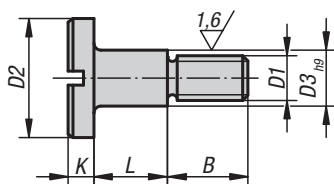
Order No.	B	D1	D2	D3	F	H	L1	L2	L3	L4
K0703.06	7,5	9	38	6	3	9,8	19,6	11	29	19
K0703.08	9,5	9	43	8	3	9,8	21,6	14	32,5	21
K0703.10	11,5	9	48	10	3	9,8	23,6	17	36,5	23
K0703.12	13,5	11	61	12	3	11,8	29,6	22	45	29
K0703.14	15,5	11	65	14	3	11,8	31,6	23	49	31
K0703.16	17,5	11	68	16	3	11,8	33,6	25	50	33
K0703.20	21,5	11	74	20	4	11,8	36,6	28	55	36



K0704

Shoulder screws with slotted flat head

DIN 923



Material:
Steel.

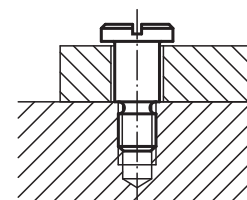
Version:
Black oxidised, grade 5.8.

Sample order:
K0704.08

Note:
For use with captive C-washers K0703.

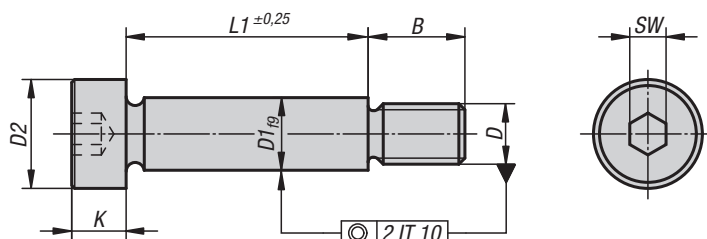
KIPP Shoulder screws with slotted flat head DIN 923

Order No.	D1	D2	D3	L	B	K
K0704.06	M6	13	8	10 +0,15/+0,07	9	3,1
K0704.08	M8	16	10	12 +0,2/+0,1	11	3,8
K0704.10	M10	20	13	16 +0,2/+0,1	13,5	4,6



Shoulder screws

similar to DIN ISO 7379



Material:

Steel or stainless steel (A 2)

Version:

Grade 12.9. Shaft OD ground and bright.
Bright stainless steel or tempered steel.

Sample order:

K0705.06X20 (include length L1)

Note:

Hexagon socket head shoulder screws are precision construction elements for many applications. As they can simplify complicated constructions, they are frequently chosen as the most cost-effective solution. Shoulder screws provide the decisive rationalising effect required today.

KIPP Shoulder screws similar to DIN ISO 7379

Order No.	Main material	D1	D	D2	B	K	SW	L1
K0705.04X	steel	4	M3	7	7	3	2	6/8/10/12/16/20
K0705.05X	steel	5	M4	9	8	4	2,5	8/10/16/20/30/40
K0705.06X	steel	6	M5	10	9,5	4,5	3	16/20/25/30/40/50/60
K0705.08X	steel	8	M6	13	11	5,5	4	16/20/25/30/40/50/60
K0705.10X	steel	10	M8	16	13	7	5	16/20/25/30/40/50/60/70/80
K0705.12X	steel	12	M10	18	16	9	6	16/20/25/30/40/50/60/70/80/90/100
K0705.16X	steel	16	M12	24	18	11	8	30/40/50/60/70/80/90/100/120
K0705.20X	steel	20	M16	30	22	14	10	30/40/50/60/70/80/90/100/120
K0705.104X	stainless steel	4	M3	7	7	3	2	6/8/10/16/20
K0705.105X	stainless steel	5	M4	9	8	4	2,5	8/10/16/20/30/40
K0705.106X	stainless steel	6	M5	10	9,5	4,5	3	16/20/25/30/40/50/60
K0705.108X	stainless steel	8	M6	13	11	5,5	4	16/20/25/30/40/50/60
K0705.110X	stainless steel	10	M8	16	13	7	5	16/20/25/30/40/50/60/70/80
K0705.112X	stainless steel	12	M10	18	16	9	6	16/20/25/30/40/50/60/70/80/90/100
K0705.116X	stainless steel	16	M12	24	18	11	8	30/40/50/60/70/80/90/100/120
K0705.120X	stainless steel	20	M16	30	22	14	10	30/40/50/60/70/80/90/100/120



Shoulder screws

with hexagon head similar to DIN 609


Material:

Steel.

Version:

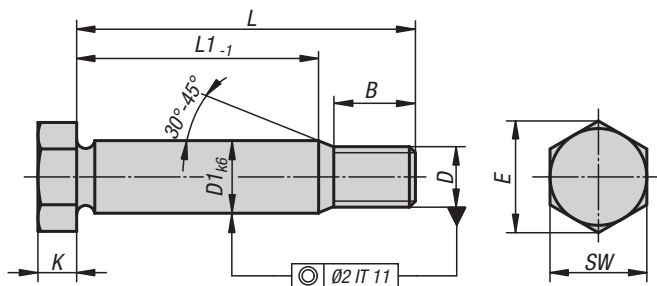
Grade 8.8, black oxidised.
Shaft OD ground.

Sample order:

K0706.09X40 (include length L)

Note:

Shoulder screws are used if the screw connection is subjected to transverse forces or if workpieces must be positioned relative to each other.



KIPP Shoulder screws with hexagon head, similar to DIN 609

Order No.	B	D1	D	E	K	L	L1	SW
K0706.09X25	14,5	9	M8	14,38	5,3	25	8	13
K0706.09X30	14,5	9	M8	14,38	5,3	30	13	13
K0706.09X35	14,5	9	M8	14,38	5,3	35	18	13
K0706.09X40	14,5	9	M8	14,38	5,3	40	23	13
K0706.09X45	14,5	9	M8	14,38	5,3	45	28	13
K0706.09X50	14,5	9	M8	14,38	5,3	50	33	13
K0706.09X60	16,5	9	M8	14,38	5,3	60	41	13
K0706.11X30	17,5	11	M10	17,77	6,4	30	10	17
K0706.11X35	17,5	11	M10	17,77	6,4	35	15	17
K0706.11X40	17,5	11	M10	17,77	6,4	40	20	17
K0706.11X45	17,5	11	M10	17,77	6,4	45	25	17
K0706.11X50	17,5	11	M10	17,77	6,4	50	30	17
K0706.11X60	19,5	11	M10	17,77	6,4	60	38	17
K0706.11X70	19,5	11	M10	17,77	6,4	70	48	17
K0706.11X80	19,5	11	M10	17,77	6,4	80	58	17
K0706.11X90	19,5	11	M10	17,77	6,4	90	68	17
K0706.11X100	19,5	11	M10	17,77	6,4	100	78	17

Shoulder screws

with hexagon head similar to DIN 609

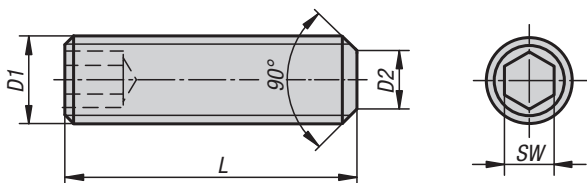
KIPP Shoulder screws with hexagon head, similar to DIN 609

Order No.	B	D1	D	E	K	L	L1	SW
K0706.13X35	20,5	13	M12	19,85	7,5	35	11,5	19
K0706.13X40	20,5	13	M12	19,85	7,5	40	16,5	19
K0706.13X45	20,5	13	M12	19,85	7,5	45	21,5	19
K0706.13X50	20,5	13	M12	19,85	7,5	50	26,5	19
K0706.13X60	22,5	13	M12	19,85	7,5	60	34,5	19
K0706.13X70	22,5	13	M12	19,85	7,5	70	44,5	19
K0706.13X80	22,5	13	M12	19,85	7,5	80	54,5	19
K0706.13X90	22,5	13	M12	19,85	7,5	90	64,5	19
K0706.13X100	22,5	13	M12	19,85	7,5	100	74,5	19
K0706.17X40	25	17	M16	26,17	10	40	11,5	24
K0706.17X45	25	17	M16	26,17	10	45	16,5	24
K0706.17X50	25	17	M16	26,17	10	50	21,5	24
K0706.17X60	27	17	M16	26,17	10	60	29,5	24
K0706.17X70	27	17	M16	26,17	10	70	39,5	24
K0706.17X80	27	17	M16	26,17	10	80	49,5	24
K0706.17X90	27	17	M16	26,17	10	90	59,5	24
K0706.17X100	27	17	M16	26,17	10	100	69,5	24
K0706.21X50	28,5	21	M20	32,95	12,5	50	17,5	30
K0706.21X60	30,5	21	M20	32,95	12,5	60	25,5	30
K0706.21X70	30,5	21	M20	32,95	12,5	70	35,5	30
K0706.21X80	30,5	21	M20	32,95	12,5	80	45,5	30
K0706.21X90	30,5	21	M20	32,95	12,5	90	55,5	30
K0706.21X100	30,5	21	M20	32,95	12,5	100	65,5	30
K0706.21X120	30,5	21	M20	32,95	12,5	120	85,5	30
K0706.25X60	36,5	25	M24	39,35	15	60	19	36
K0706.25X70	36,5	25	M24	39,35	15	70	29	36
K0706.25X80	36,5	25	M24	39,35	15	80	39	36
K0706.25X90	36,5	25	M24	39,35	15	90	49	36
K0706.25X100	36,5	25	M24	39,35	15	100	59	36
K0706.25X120	36,5	25	M24	39,35	15	120	79	36

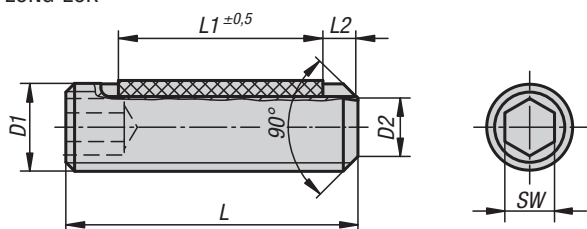


Grub screws with flat point

hexagon socket DIN 913



LONG-LOK



Material:

Steel or stainless steel (A 2).

LONG-LOK thread lock nylon.

Version:

Steel class 45 H, black.

Stainless steel A 2-70, bright.

Sample order:

K0707.110X20 (include length L)

Drawing reference:

L2 = approx. 2x thread pitch

KIPP Grub screws with flat point, hexagon socket DIN 913

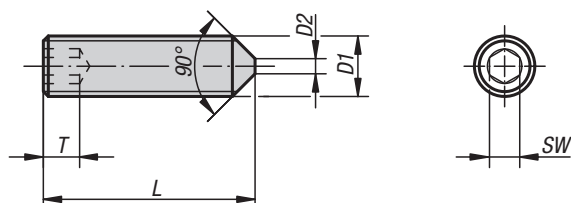
Order No.	Main material	D1	D2	L	SW
K0707.03X	steel	M3	2	5/6/8/10/12/16/20	1,5
K0707.04X	steel	M4	2,5	5/6/8/10/12/16/20/25	2
K0707.05X	steel	M5	3,5	5/6/8/10/12/16/20/25/30	2,5
K0707.06X	steel	M6	4	6/8/10/12/16/20/25/30/35/40/45/50/60	3
K0707.08X	steel	M8	5,5	8/10/12/16/20/25/30/35/40/45/50/60/70/80	4
K0707.10X	steel	M10	7	10/12/16/20/25/30/35/40/45/50/60/70/80/90/100	5
K0707.103X	stainless steel	M3	2	5/6/8/10/12	1,5
K0707.104X	stainless steel	M4	2,5	5/6/8/10/12/16/20	2
K0707.105X	stainless steel	M5	3,5	5/6/8/10/12/16/20/25/30	2,5
K0707.106X	stainless steel	M6	4	6/8/10/12/16/20/25/30/35/40	3
K0707.108X	stainless steel	M8	5,5	8/10/12/16/20/25/30/35/40/45/50	4
K0707.110X	stainless steel	M10	7	10/12/16/20/25/30/35/40/45/50	5

KIPP Grub screws with flat point, hexagon socket DIN 913, LONG-LOK secured

Order No.	Version 2	Main material	D1	D2	L	L1	SW
K0707.203X	long-lok	steel	M3	2	5/6/8/10/12	2/3/4/4/4	1,5
K0707.204X	long-lok	steel	M4	2,5	5/6/8/10/12/16	2/2,5/3,5/5/5/5	2
K0707.205X	long-lok	steel	M5	3,5	5/6/8/10/12/16	2/3/3,5/3,5/5/6	2,5
K0707.206X	long-lok	steel	M6	4	6/8/10/12/16/20	2,5/3/3,5/5/7/7	3
K0707.208X	long-lok	steel	M8	5,5	8/10/12/16/20	3/3,5/5/8/8	4
K0707.210X	long-lok	steel	M10	7	10/12/16/20	5/5/9/9	5
K0707.303X	long-lok	stainless steel	M3	2	5/6/8/10/12	2/3/4/4/4	1,5
K0707.304X	long-lok	stainless steel	M4	2,5	5/6/8/10/12/16	2/2,5/3,5/5/5/5	2
K0707.305X	long-lok	stainless steel	M5	3,5	5/6/8/10/12/16	2/3/3,5/3,5/5/6	2,5
K0707.306X	long-lok	stainless steel	M6	4	6/8/10/12/16/20	2,5/3/3,5/5/7/7	3
K0707.308X	long-lok	stainless steel	M8	5,5	8/10/12/16/20	3/3,5/5/8/8	4
K0707.310X	long-lok	stainless steel	M10	7	10/12/16/20	5/5/9/9	5

Grub screw with hexagon socket and pointed end

DIN 914 / DIN EN ISO 4027

**Material:**

Steel or stainless steel (A 2)

Version:

Steel class 45 H, black.

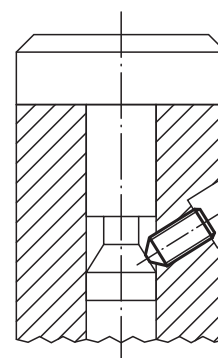
Stainless steel A 2-70, bright.

Sample order:

K0797.110X12 (include length L)

Note:

By M4x5, M5x5, M5x6, M6x6, M8x8, M10x10 the point angle is 120°.

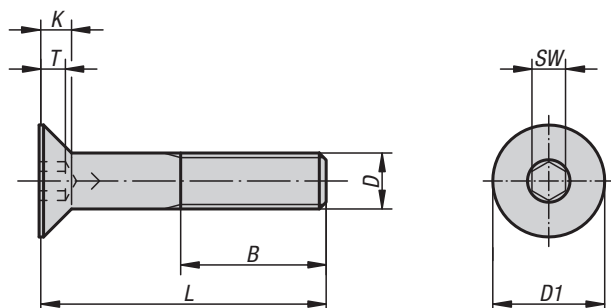


KIPP Grub screw with hexagon socket and pointed end DIN 914 / DIN EN ISO 4027

Order No. steel	Order No. stainless steel	D1	D2	L	T	SW
K0797.03X	K0797.103X	M3	-	5/6/8/10/12/16/20	1,2	1,5
K0797.04X	K0797.104X	M4	-	5/6/8/10/12/16/20/25	1,5	2
K0797.05X	K0797.105X	M5	-	5/6/8/10/12/14/16/20/25/30	2	2,5
K0797.06X	K0797.106X	M6	1,5	6/8/10/12/16/20/25/30/35/40/45/50/60	2	3
K0797.08X	K0797.108X	M8	2	8/10/12/14/16/20/25/30/35/40/45/50/60	3	4
K0797.10X	K0797.110X	M10	2,5	10/12/16/20/25/30/35/40/45/50/60/70/80	4	5

Screws with countersunk head

hexagon socket DIN EN ISO 10642

**Material:**

Steel or stainless steel (A 2)

Version:

Steel grade 8.8, black or electro zinc-plated.

Steel grade 10.9, black.

Stainless steel A 2-70, bright.

Sample order:

K0708.106X20 (include length L)

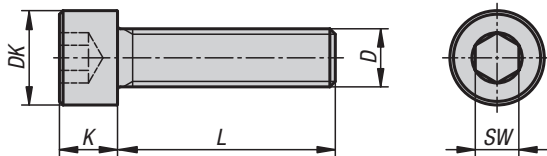
KIPP Screws with countersunk head, hexagon socket DIN 7991

Order No. steel Grade 8.8	Order No. steel Grade 10.9	Main colour	B	D	L	D1	K	T	SW
K0708.04X	K0708.304X	black	14	M4	10/12/16/20/25	8	2,3	1,8	2,5
K0708.05X	K0708.305X	black	16	M5	10/12/16/20/25/30	10	2,8	2,3	3
K0708.06X	K0708.306X	black	18	M6	10/12/16/20/25/30/35/40/45/50/60	12	3,3	2,5	4
K0708.08X	K0708.308X	black	22	M8	16/20/25/30/35/40/45/50/60	16	4,4	3,5	5
K0708.10X	K0708.310X	black	26	M10	16/20/25/30/35/40/45/50/60/70	20	5,5	4,4	6
K0708.12X	K0708.312X	black	30	M12	20/25/30/35/40/45/50/60/70/80	24	6,5	4,6	8
K0708.16X	K0708.316X	black	38	M16	30/35/40/45/50/60/70/80	30	7,5	5,3	10
K0708.404X	-	-	14	M4	10/12/16/20/25	8	2,3	1,8	2,5
K0708.405X	-	-	16	M5	10/12/16/20/25/30	10	2,8	2,3	3
K0708.406X	-	-	18	M6	10/12/16/20/25/30/35/40/45/50/60	12	3,3	2,5	4
K0708.408X	-	-	22	M8	16/20/25/30/35/40/45/50/60	16	4,4	3,5	5
K0708.410X	-	-	26	M10	16/20/25/30/35/40/45/50/60/70	20	5,5	4,4	6
K0708.412X	-	-	30	M12	20/25/30/35/40/45/50/60/70/80	24	6,5	4,6	8
K0708.416X	-	-	38	M16	30/35/40/45/50/60/70/80	30	7,5	5,3	10

Order No.	Main material	D	L	B	K	T	D1	SW
K0708.104X	stainless steel	M4	10/12/16/20/25	14	2,3	1,8	8	2,5
K0708.105X	stainless steel	M5	10/12/16/20/25/30	16	2,8	2,3	10	3
K0708.106X	stainless steel	M6	10/12/16/20/25/30/35/40/45/50/60	18	3,3	2,5	12	4
K0708.108X	stainless steel	M8	16/20/25/30/35/40/45/50/60	22	4,4	3,5	16	5
K0708.110X	stainless steel	M10	16/20/25/30/35/40/45/50/60/70	26	5,5	4,4	20	6
K0708.112X	stainless steel	M12	20/25/30/35/40/45/50/60/70/80	30	6,5	4,6	24	8
K0708.116X	stainless steel	M16	30/35/40/45/50/60/70/80	38	7,5	5,3	30	10

Socket head screws

full thread, DIN 912 / DIN EN ISO 4762


Material:

Steel.

Version:

Grade 8.8, black or electro zinc-plated.

Sample order:

K1159.05X40 (include length L)

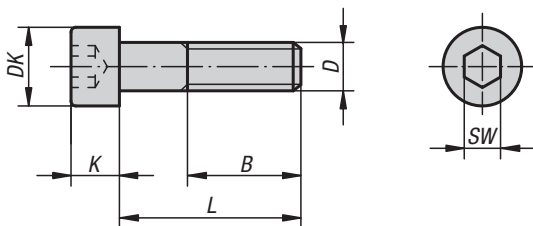


KIPP Socket head screws full thread, DIN 912 / DIN EN ISO 4762

Order No.	Main colour	D	DK	K	L	SW
K1159.05X	black	M5	8,5	5	40/50/60/80	4
K1159.06X	black	M6	10	6	40/50/60/70/90/100	5
K1159.08X	black	M8	13	8	50/60/70/80/90	6
K1159.10X	black	M10	16	10	50/60/70/80/90/100	8
K1159.12X	black	M12	18	12	80/90/100	10
K1159.405X	-	M5	8,5	5	40/70/80	4
K1159.406X	-	M6	10	6	40/50/60/70/80/90/100	5
K1159.408X	-	M8	13	8	50/60/70/80/90/100	6
K1159.410X	-	M10	16	10	50/60/70/80/90/100	8
K1159.412X	-	M12	18	12	70/80/90/100	10

Socket head screws

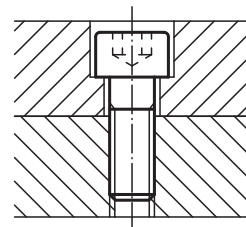
DIN 912/DIN EN ISO 4762



Material:
Steel.

Version:
Steel grade 12.9, black.

Sample order:
K0869.206X40 (include length L)

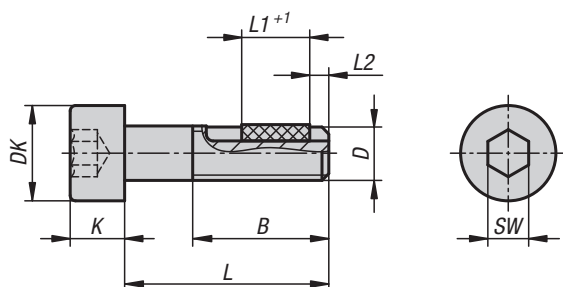


KIPP Socket head screws DIN 912/DIN EN ISO 4762

Order No.	D	B	DK	K	L	SW
K0869.206X	M6	24	10	6	18/20/25/30/35/40/45/50/55/60/65/70/80/90/100	5
K0869.208X	M8	28	13	8	20/25/30/35/40/45/50/55/60/65/70/80/90/100/120	6
K0869.210X	M10	32	16	10	30/35/40/45/50/55/60/65/70/75/80/90/100/110/120/130/140	8
K0869.212X	M12	36	18	12	30/35/40/45/50/55/60/65/70/75/80/90/100/110/120/130/140	10
K0869.216X	M16	44	24	16	35/40/45/50/55/60/65/70/75/80/90/100/110/120/130/140/150/160/170/180/200	14
K0869.218X	M18	48	27	18	35/40/45/50/55/60/65/70/75/80/90/100/110/120/130/140/150/160/170/180/200	14
K0869.220X	M20	52	30	20	40/45/50/55/60/65/70/75/80/90/100/110/120/130/140/150/160/170/180/200	17

Socket head screws

DIN 912 / EN ISO 4762, LONG-LOK secured



Material:

Steel or stainless steel (A 2).

LONG-LOK thread lock nylon.

Version:

Steel grade 8.8, black.

Stainless steel A 2-70, bright.

Sample order:

K0869.806X20 (include length L)

Drawing reference:

L2 = approx. 2x thread pitch

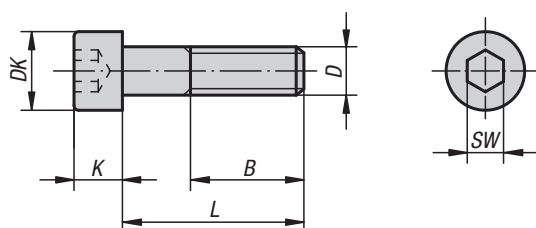


KIPP Socket head screws DIN 912 / DIN EN ISO 4762, LONG-LOK secured

Order No. steel	Order No. stainless steel	D	B	DK	K	L	L1	SW	Tightening torque approx. Nm	Loosening torque approx. Nm
K0869.804X	K0869.904X	M4	-	7	4	10/12/16/20/25	5/5/6/7/7	3	0,15	0,22
K0869.805X	K0869.905X	M5	-/22	8,5	5	10/12/16/20/25/30/40	5/6/7/7/8/8/8	4	0,25	0,1
K0869.806X	K0869.906X	M6	-/24	10	6	10/12/16/20/25/30/35/40/45/50	5/6/7/7/8/8/8/8/8	5	0,45	0,25
K0869.808X	K0869.908X	M8	-/28	13	8	16/20/25/30/35/40/45	7/8/8/8/10/10/10	6	0,8	0,4
K0869.810X	K0869.910X	M10	-/32	16	10	25/30/40/50	10/10/12/12	8	1,7	0,9
K0869.812X	K0869.912X	M12	-	18	12	30/40/50	10/12/12	10	1,8	0,9

Socket head screws

DIN 912 / DIN EN ISO 4762, steel or stainless steel



Material:

Steel or stainless steel (A 2)

Version:

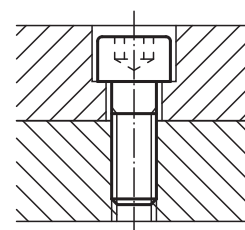
Steel grade 8.8, black or electro zinc-plated.

Steel grade 10.9, black or electro zinc-plated.

Stainless steel A 2-70, bright.

Sample order:

K0869.08X40 (include length L)



KIPP Socket head screws DIN 912 / EN ISO 4762, steel or stainless steel

Order No. Grade 8.8 black	Order No. Grade 8.8	D	L	B	DK	K	SW
K0869.04X	K0869.404X	M4	10/12/16/18/20/25	20	7	4	3
K0869.05X	K0869.405X	M5	10/12/16/18/20/25/30/40	22	8,5	5	4
K0869.06X	K0869.406X	M6	10/12/16/18/20/25/30/35/40/45/50/55/60	24	10	6	5
K0869.08X	K0869.408X	M8	16/18/20/25/30/35/40/45/50/60/70/80	28	13	8	6
K0869.10X	K0869.410X	M10	16/18/20/25/30/35/40/45/50/60/70/80/90/100	32	16	10	8
K0869.12X	K0869.412X	M12	20/25/30/35/40/45/50/60/70/80/90/100/110/120	36	18	12	10
K0869.14X	K0869.414X	M14	50/80/120	40	21	14	12
K0869.16X	K0869.416X	M16	30/35/40/45/50/60/70/80/90/100/110/120	44	24	16	14
K0869.20X	K0869.420X	M20	40/45/50/60/70/80/90/100/110/120	52	30	20	17

Socket head screws

DIN 912 / DIN EN ISO 4762, steel or stainless steel



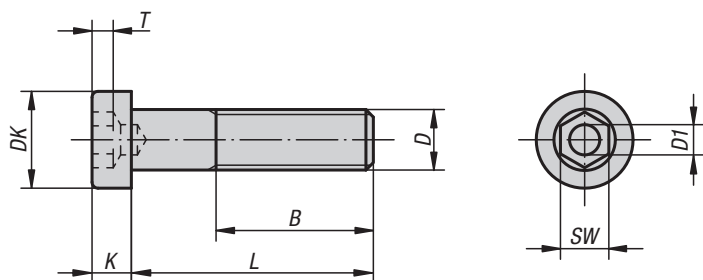
Order No.	Grade	Main colour	D	L	B	DK	K	SW
K0869.304X	10.9	black	M4	10/12/16/18/20/25/10/12/16/18/20/25	20	7	4	3
K0869.305X	10.9	black	M5	10/12/16/18/20/25/30/40/10/12/16/18/20/25/30/40	22	8,5	5	4
K0869.306X	10.9	black	M6	10/12/16/18/20/25/30/35/40/55/45/50/60/10/12/16/18/20/25/30/35/40/45/50/55/60	24	10	6	5
K0869.308X	10.9	black	M8	16/18/20/25/30/35/40/45/50/60/70/80/16/20/25/30/35/40/45/50/60/70/80	28	13	8	6
K0869.310X	10.9	black	M10	16/18/20/25/30/35/40/45/50/60/70/80/90/100/16/18/20/25/30/35/40/45/50/60/70/80/90/100	32	16	10	8
K0869.312X	10.9	black	M12	20/25/30/35/40/45/50/60/70/80/90/100/110/120/20/25/30/35/40/45/50/60/70/80/90/100/110/120	36	18	12	10
K0869.314X	10.9	black	M14	50/80/120/50/80/120	40	21	14	12
K0869.316X	10.9	black	M16	30/35/40/45/50/60/70/80/90/100/110/120/30/35/40/45/50/60/70/80/90/100/110/120	44	24	16	14
K0869.320X	10.9	black	M20	40/45/50/60/70/80/90/100/110/120/40/45/50/60/70/80/90/100/110/120	52	30	20	17

Order No.	Main material	D	L	B	DK	K	SW
K0869.104X	stainless steel	M4	10/12/16/18/20/25	20	7	4	3
K0869.105X	stainless steel	M5	10/12/16/18/20/25/30/40	22	8,5	5	4
K0869.106X	stainless steel	M6	10/12/16/18/20/25/30/35/40/45/50/60/55	24	10	6	5
K0869.108X	stainless steel	M8	16/18/20/25/30/35/40/45/50/60/70/80	28	13	8	6
K0869.110X	stainless steel	M10	18/16/20/25/30/35/40/45/50/60/70/80/90/100	32	16	10	8
K0869.112X	stainless steel	M12	20/25/30/35/40/45/50/60/70/80/90/100/110/120	36	18	12	10



Socket head screws with low head

DIN 6912

**Material:**

Steel or stainless steel (A 2)

Version:

Steel grade 8.8, black or electro zinc-plated.

Steel grade 10.9, black.

Stainless steel A 2-70, bright.

Sample order:

K1160.110X20 (include length L)

KIPP Socket head screws with low head DIN 6912, stainless steel

Order No.	Main material	D	D1	DK	K	SW	T
K1160.104X	stainless steel	M4	2	7	2,8	3	1,48
K1160.105X	stainless steel	M5	2,5	8,5	3,5	4	1,88
K1160.106X	stainless steel	M6	3	10	4	5	2,38
K1160.108X	stainless steel	M8	4	13	5	-	2,88
K1160.108X	stainless steel	M8	4	13	5	6	2,88
K1160.110X	stainless steel	M10	5	16	6,5	8	3,35
K1160.112X	stainless steel	M12	6	18	7,5	10	3,85

Order No.	Main material	D	B	L
K1160.104X	stainless steel	M4	6,5/8,5/12.5/14/14	10/12/16/20/25
K1160.105X	stainless steel	M5	5,8/7,8/11,8/15,8/16/16	10/12/16/20/25/30
K1160.106X	stainless steel	M6	4,5/6,5/10,5/14,5/19,5/18/18/18/18/18	10/12/16/20/25/30/35/40/45/50/60
K1160.108X	stainless steel	M8	/5/9/22/22/22/22/22/22/22/22	10/12/16/20/25/30/35/40/45/50/60/70
K1160.110X	stainless steel	M10	8/12/17/22/27/26/26/26/26/26	16/20/25/30/35/40/45/50/60/70
K1160.112X	stainless steel	M12	10,5/15,5/30/25,5/30,5/30/30/30/30	20/25/30/35/40/45/50/60/70

Socket head screws with low head

DIN 6912



KIPP Socket head screws with low head DIN 6912, steel

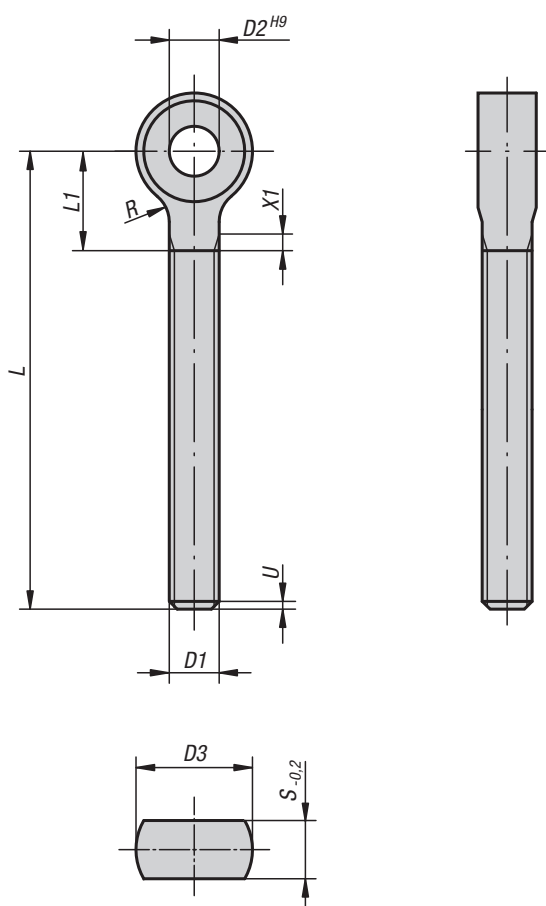
Order No. Grade 8.8 black	Order No. Grade 10.9 black	Order No. Grade 8.8	D	D1	DK	K	SW	T
K1160.04X	-	K1160.404X	M4	2	7	2,8	3	1,48
K1160.05X	-	K1160.405X	M5	2,5	8,5	3,5	4	1,88
K1160.06X	K1160.306X	K1160.406X	M6	3	10	4	5	2,38
K1160.08X	-	K1160.408X	M8	4	13	5	-	2,88
K1160.08X	K1160.308X	K1160.408X	M8	4	13	5	6	2,88
K1160.10X	K1160.310X	K1160.410X	M10	5	16	6,5	8	3,35
K1160.12X	K1160.312X	K1160.412X	M12	6	18	7,5	10	3,85
K1160.16X	K1160.316X	K1160.416X	M16	8	24	10	14	5,35
K1160.20X	K1160.320X	K1160.420X	M20	10	30	12	17	6,32

Order No.	Main material	Main colour	Grade	D	B	L
K1160.04X	steel	black	8.8	M4	6,5/8,5/12.5/14/14	10/12/16/20/25
K1160.05X	steel	black	8.8	M5	5,8/7,8/11,8/15,8/16/16	10/12/16/20/25/30
K1160.06X	steel	black	8.8	M6	4,5/6,5/10,5/14,5/19,5/18/18/18/18/18	10/12/16/20/25/30/35/40/45/50/60
K1160.08X	steel	black	8.8	M8	/5/9/13/22/22/22/22/22/22/22/22	10/12/16/20/25/30/35/40/45/50/60/70/80
K1160.308X	steel	black	10.9	M8	22/9/13/22/22/22/22/22/22	25/16/20/30/35/40/45/50/60
K1160.10X	steel	black	8.8	M10	26/12/17/22/27/26/26/26/26/26/26	100/20/25/30/35/40/45/50/60/70/80/90
K1160.310X	steel	black	10.9	M10	22/12/17/27/26/26/26/26	30/20/25/35/40/45/50/60
K1160.12X	steel	black	8.8	M12	30/30/30/10,5/15,5/20,5/25,5/30,5/30/30/30/30/30	100/110/120/20/25/30/35/40/45/50/60/70/80/90
K1160.312X	steel	black	10.9	M12	20,5/30,5/15,5/25,5/30/30/30	30/40/25/35/45/50/60
K1160.16X	steel	black	8.8	M16	38/38/38/19/24/38/38/38/38/38/38	100/110/120/30/35/40/45/50/60/70/80/90
K1160.316X	steel	black	10.9	M16	38/38/24/19/38/38/38/38	40/60/35/30/45/50/70/80
K1160.20X	steel	black	8.8	M20	46/46/46/26/26/36/46/46/46/46	100/110/120/40/45/50/60/70/80/90
K1160.404X	steel	-	8.8	M4	12.5/6,5/8,5/14/14	16/10/12/20/25
K1160.405X	steel	-	8.8	M5	5,8/7,8/11,8/15,8/16/16	10/12/16/20/25/30
K1160.406X	steel	-	8.8	M6	4,5/6,5/10,5/14,5/19,5/18/18/18/18/18	10/12/16/20/25/30/35/40/45/50/60
K1160.408X	steel	-	8.8	M8	/5/9/13/22/22/22/22/22/22/22/22	10/12/16/20/25/30/35/40/45/50/60/70/80
K1160.410X	steel	-	8.8	M10	12/17/22/27/26/26/26/26/26/26/26	20/25/30/35/40/45/50/60/70/80/90/100
K1160.412X	steel	-	8.8	M12	10,5/15,5/20,5/25,5/30,5/30/30/30/30/30/30/30	20/25/30/35/40/45/50/60/70/80/90/100/110/120
K1160.416X	steel	-	8.8	M16	19/24/38/38/38/38/38/38/38/38/38	30/35/40/45/50/60/70/80/90/100/110/120
K1160.420X	steel	-	8.8	M20	26/26/36/46/46/46/46/46/46/46	40/45/50/60/70/80/90/100/110/120
K1160.306X	steel	black	10.9	M6	4,5/6,5/10,5/14,5/19,5/18/18/18	10/12/16/20/25/30/35/40
K1160.320X	steel	black	10.9	M20	26/36/46/46	40/50/60/70



Eye bolts DIN 444, Form B

with long thread



Material:

Steel or 1.4305 stainless steel

Version:

Steel grade 8.8, black oxidised.

Stainless steel bright.

Sample order:

K1418.0850

Note:

Eye bolts, threaded up to the eye.

See K0007 for suitable hinge pins.

Drawing reference:

U = max. 2 P (incomplete thread)

$X1$ = to DIN 76 part 1

Eye bolts DIN 444, Form B

with long thread



KIPP Eye bolts DIN 444, Form B with long thread

Order No. steel	Order No. stainless steel	D1	D2	D3	L	L1 max.	R	S
K1418.0650	K1418.10650	M6	6	14	50	14	4	7
K1418.0660	K1418.10660	M6	6	14	60	14	4	7
K1418.0670	K1418.10670	M6	6	14	70	14	4	7
K1418.0680	K1418.10680	M6	6	14	80	14	4	7
K1418.0850	K1418.10850	M8	8	18	50	16	4	9
K1418.0860	K1418.10860	M8	8	18	60	16	4	9
K1418.0870	K1418.10870	M8	8	18	70	16	4	9
K1418.0880	K1418.10880	M8	8	18	80	16	4	9
K1418.08100	K1418.108100	M8	8	18	100	16	4	9
K1418.1050	K1418.11050	M10	10	20	50	18	4	12
K1418.1060	K1418.11060	M10	10	20	60	18	4	12
K1418.1070	K1418.11070	M10	10	20	70	18	4	12
K1418.1080	K1418.11080	M10	10	20	80	18	4	12
K1418.10100	K1418.110100	M10	10	20	100	18	4	12
K1418.10120	K1418.110120	M10	10	20	120	18	4	12
K1418.1250	K1418.11250	M12	12	25	50	23	6	14
K1418.1260	K1418.11260	M12	12	25	60	23	6	14
K1418.1270	K1418.11270	M12	12	25	70	23	6	14
K1418.1280	K1418.11280	M12	12	25	80	23	6	14
K1418.12100	K1418.112100	M12	12	25	100	23	6	14
K1418.12120	K1418.112120	M12	12	25	120	23	6	14
K1418.12130	K1418.112130	M12	12	25	130	23	6	14
K1418.1670	K1418.11670	M16	16	32	70	27	6	17
K1418.1680	K1418.11680	M16	16	32	80	27	6	17
K1418.16100	K1418.116100	M16	16	32	100	27	6	17
K1418.16120	K1418.116120	M16	16	32	120	27	6	17
K1418.16140	K1418.116140	M16	16	32	140	27	6	17
K1418.16160	K1418.116160	M16	16	32	160	27	6	17
K1418.20100	K1418.120100	M20	18	40	100	32	6	22
K1418.20120	K1418.120120	M20	18	40	120	32	6	22
K1418.20140	K1418.120140	M20	18	40	140	32	6	22
K1418.20160	K1418.120160	M20	18	40	160	32	6	22
K1418.24160	-	M24	22	45	160	40	10	25
K1418.24240	-	M24	22	45	240	40	10	25



Eye bolts

DIN 444, Form B



Material:

Steel, grade 8.8 or stainless steel.

Version:

Steel black oxidised.

Stainless steel bright.

Sample order:

K0396.12100

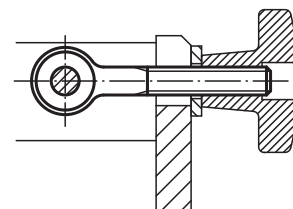
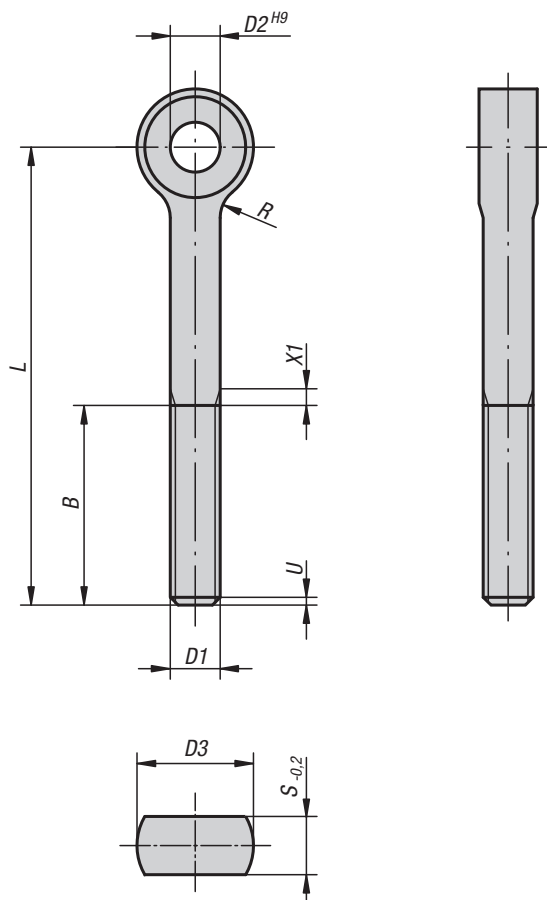
Note:

Suitable hinge pin, see K0007.

Drawing reference:

U = max. 2 P (incomplete thread)

X1 = to DIN 76 part 1



KIPP Eye bolts DIN 444

Order No. steel	Order No. stainless steel	B	D1	D2	D3	L	R	S
K0396.0550	K0396.10550	16	M5	5	12	50	2,5	6
K0396.0575	-	16	M5	5	12	75	2,5	6
K0396.0650	K0396.10650	18	M6	6	14	50	4	7
K0396.0675	K0396.10675	18	M6	6	14	75	4	7
K0396.0850	K0396.10850	22	M8	8	18	50	4	9
K0396.0875	K0396.10875	22	M8	8	18	75	4	9
K0396.1075	K0396.11075	26	M10	10	20	75	4	12
K0396.10100	K0396.110100	26	M10	10	20	100	4	12
K0396.1275	K0396.11275	30	M12	12	25	75	6	14
K0396.12100	K0396.112100	30	M12	12	25	100	6	14
K0396.12120	K0396.112120	30	M12	12	25	120	6	14
K0396.12130	K0396.112130	36	M12	12	25	130	6	14
K0396.1475	K0396.11475	36	M14	14	28	75	6	16
K0396.14130	K0396.114130	36	M14	14	28	130	6	16
K0396.16130	K0396.116130	44	M16	16	32	130	6	17
K0396.20140	K0396.120140	52	M20	18	40	140	6	22

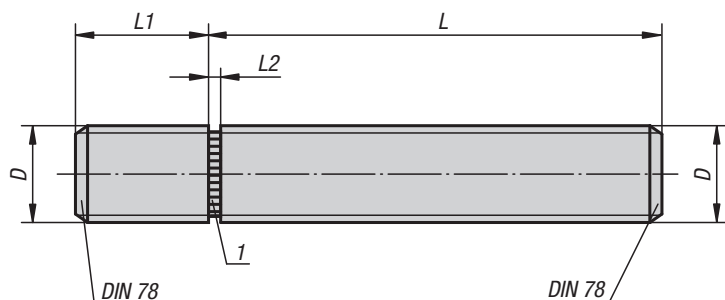


A large rectangular area filled with a light gray grid pattern, intended for taking notes.



Studs

with screw-in stop for gluing in


Material:

Steel or 1.4305 stainless steel

Version:

Steel trivalent blue passivated.
Stainless steel, bright.

Sample order:

K0404.1040201

Note:

Studs with screw-in stop have been designed especially for gluing-in. They allow mechanical connecting elements with external thread to be made cost-effectively for small and medium-sized series. The LOCTITE products 638 and 648 (see K0655) have proven themselves in practice as successful bonding agents.

Drawing reference:

1) screw-in stop

KIPP Studs with screw-in stop

Order No. steel	Order No. stainless steel	D	L	L1	L2
K0404.1040201	K0404.1040202	M4	20	6	1
K0404.1040301	K0404.1040302	M4	30	6	1
K0404.1040401	K0404.1040402	M4	40	6	1
K0404.1040501	K0404.1040502	M4	50	6	1
K0404.1050201	K0404.1050202	M5	20	8	1
K0404.1050301	K0404.1050302	M5	30	8	1
K0404.1050401	K0404.1050402	M5	40	8	1
K0404.1050501	K0404.1050502	M5	50	8	1
K0404.1050601	K0404.1050602	M5	60	8	1
K0404.1060201	K0404.1060202	M6	20	9	1,5
K0404.1060301	K0404.1060302	M6	30	9	1,5
K0404.1060401	K0404.1060402	M6	40	9	1,5
K0404.1060501	K0404.1060502	M6	50	9	1,5
K0404.1060601	K0404.1060602	M6	60	9	1,5
K0404.1080201	K0404.1080202	M8	20	12	1,5
K0404.1080301	K0404.1080302	M8	30	12	1,5
K0404.1080401	K0404.1080402	M8	40	12	1,5
K0404.1080501	K0404.1080502	M8	50	12	1,5
K0404.1080601	K0404.1080602	M8	60	12	1,5
K0404.1080801	K0404.1080802	M8	80	12	1,5
K0404.1100201	K0404.1100202	M10	20	14	2
K0404.1100301	K0404.1100302	M10	30	14	2
K0404.1100401	K0404.1100402	M10	40	14	2
K0404.1100501	K0404.1100502	M10	50	14	2
K0404.1100601	K0404.1100602	M10	60	14	2
K0404.1100801	K0404.1100802	M10	80	14	2
K0404.1120301	K0404.1120302	M12	30	17	2
K0404.1120401	K0404.1120402	M12	40	17	2
K0404.1120501	K0404.1120502	M12	50	17	2
K0404.1120601	K0404.1120602	M12	60	17	2
K0404.1120801	K0404.1120802	M12	80	17	2
K0404.1160301	K0404.1160302	M16	30	22	2
K0404.1160401	K0404.1160402	M16	40	22	2
K0404.1160501	K0404.1160502	M16	50	22	2
K0404.1160601	K0404.1160602	M16	60	22	2
K0404.1160801	K0404.1160802	M16	80	22	2

Stud sets

with screw-in stop for gluing in


Material:

Steel or 1.4305 stainless steel

Version:

Steel trivalent blue passivated.
Stainless steel, bright.

Sample order:

K0405.01

Note:

Studs with screw-in stop have been designed especially for gluing-in. They allow mechanical connecting elements with external thread to be made cost-effectively for small and medium-sized series. The LOCTITE products 638 and 648 have proven themselves in practice as a successful bonding agent. Technical data see K0404.

Safety:

Safety information is available on our internet site.

KIPP Stud sets with screw-in stop

Order No. steel	Order No. stainless steel	Content (pcs.) (LOCTITE adhesives 638 and 648 not included)
K0405.01	K0405.02	M5x20 (x20), M5x40 (x20), M5x60 (x10), M6x20 (x20), M6x40 (x20), M6x60 (x10), M8x20 (x10), M8x40 (x10), M8x60 (x6), M10x20 (x10), M10x40 (x10), M10x60 (x6), M12x40 (x6), M12x60 (x6)

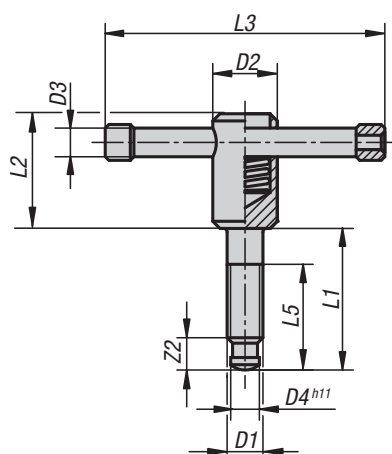
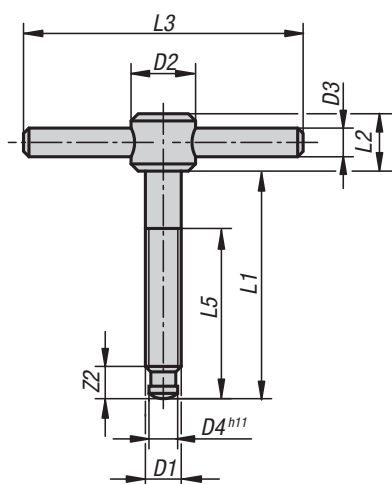
KIPP LOCTITE adhesives (accessories)

Order No.	Version	Container	Shearing strength N/mm ²	Break-away torque Nm	Temperature resistance
K0655.6380010	LOCTITE 638	10 ml bottle	20-35	35-60	-55 °C - +150 °C
K0655.6480010	LOCTITE 648	10 ml bottle	16-30	30-55	-55 °C - +175 °C



T-thrust screws

with fixed or sliding T-bar, DIN 6304 or DIN 6306

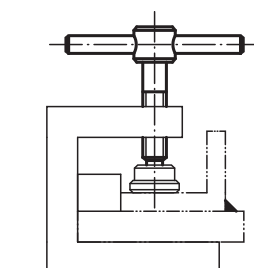
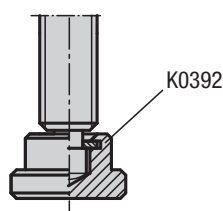


Material:
Steel.

Version:
Black oxidised. Thrust pin hardened.

Sample order:
K0756.106X40

Note:
By the thrust screws with sliding T-bar the bar is held in any desired position by a spring in the body. End stops prevent the bar falling out. By the fixed handles the T-bar is pressed in.

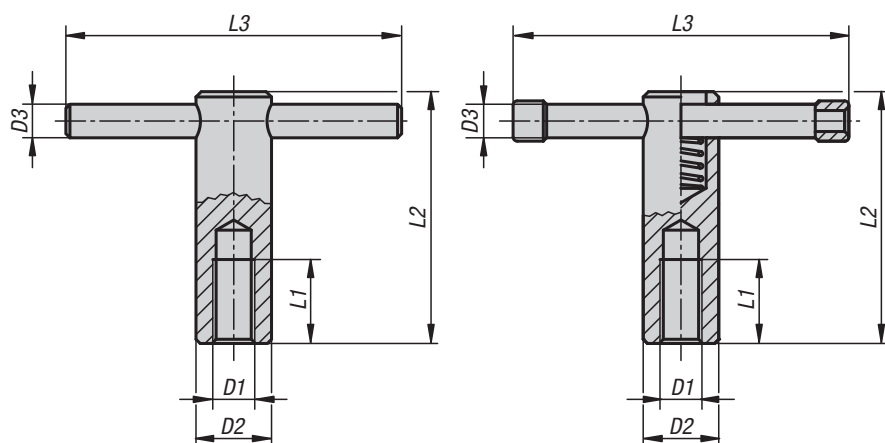


KIPP T-thrust screws with fixed or sliding T-bar, DIN 6304 or DIN 6306

Order No.	Version 1	D1	D2	D3	D4	L1	L2	L3	L5	Z2
K0756.106X40	fixed t-bar	M6	12	5	4,5	40	10	50	30	6
K0756.106X50	fixed t-bar	M6	12	5	4,5	50	10	50	40	6
K0756.108X50	fixed t-bar	M8	14	6	6	50	12	60	35	7,5
K0756.108X60	fixed t-bar	M8	14	6	6	60	12	60	45	7,5
K0756.110X60	fixed t-bar	M10	18	8	8	60	14	80	40	9
K0756.110X70	fixed t-bar	M10	18	8	8	70	14	80	50	9
K0756.112X70	fixed t-bar	M12	20	10	8	70	18	100	50	10
K0756.112X80	fixed t-bar	M12	20	10	8	80	18	100	60	10
K0756.116X75	fixed t-bar	M16	24	12	12	75	20	120	55	12
K0756.116X90	fixed t-bar	M16	24	12	12	90	20	120	70	12
K0756.116X110	fixed t-bar	M16	24	12	12	110	20	120	90	12
K0756.120X75	fixed t-bar	M20	30	16	15,5	75	28	140	55	14
K0756.120X90	fixed t-bar	M20	30	16	15,5	90	28	140	70	14
K0756.120X110	fixed t-bar	M20	30	16	15,5	110	28	140	90	14
K0756.210X40	sliding t-bar	M10	18	8	8	40	32	80	30	9
K0756.210X50	sliding t-bar	M10	18	8	8	50	32	80	40	9
K0756.212X50	sliding t-bar	M12	20	10	8	50	35	100	40	10
K0756.212X60	sliding t-bar	M12	20	10	8	60	35	100	50	10
K0756.216X55	sliding t-bar	M16	24	13	12	55	40	120	45	12
K0756.216X70	sliding t-bar	M16	24	13	12	70	40	120	60	12
K0756.216X90	sliding t-bar	M16	24	13	12	90	40	120	80	12
K0756.220X55	sliding t-bar	M20	30	16	15,5	55	45	140	45	14
K0756.220X70	sliding t-bar	M20	30	16	15,5	70	45	140	60	14
K0756.220X90	sliding t-bar	M20	30	16	15,5	90	45	140	80	14

Tommy bars

with fixed or sliding T-bar, DIN 6305 or DIN 6307

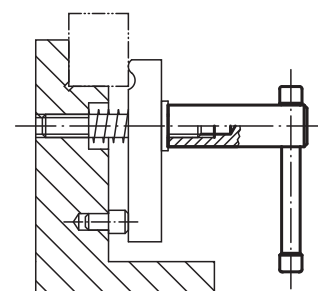


Material:
Steel.

Version:
Black oxidised.

Sample order:
K0755.210

Note:
By the version with sliding T-bar the bar is held in any desired position by a spring in the body. End stops prevent the bar falling out.
By the version with fixed T-bar the bar is pressed in.



KIPP Tommy bars with fixed or sliding T-bar, DIN 6305 or DIN 6307

Order No.	Version 1	D1	D2	D3	L1	L2	L3
K0755.110	fixed t-bar	M10	18	8	20	60	80
K0755.112	fixed t-bar	M12	20	10	25	70	100
K0755.116	fixed t-bar	M16	24	12	35	85	120
K0755.120	fixed t-bar	M20	30	16	40	95	140
K0755.210	sliding t-bar	M10	18	8	20	60	80
K0755.212	sliding t-bar	M12	20	10	25	70	100
K0755.216	sliding t-bar	M16	24	13	35	85	120
K0755.220	sliding t-bar	M20	30	16	40	95	140

Clamping force intensifiers

**Material:**

Bearing housing steel.

Version:

Black oxidised.

Sample order:

K0584.06

Note:

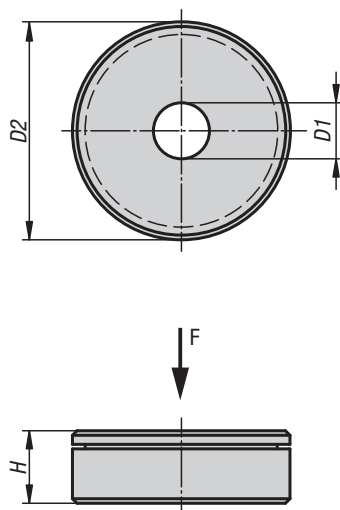
As a rule, the clamping force intensifier is used together with tightening or clamping elements. The integrated axial needle roller thrust bearing unit can achieve ca. twice the clamping force by the same lever length.

Advantages:

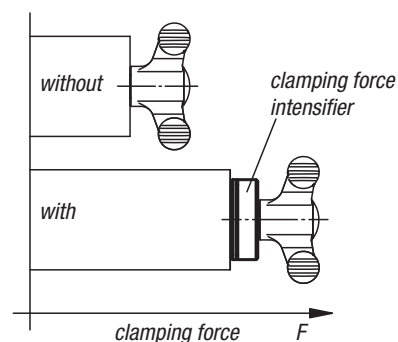
The component surface is protected by the stationary lower ring.

The higher preload force causes a lower tendency for material relaxation in the thread.

Clamping levers, wing and star grips, knurled knobs or hexagonal and socket head screws etc. can be used as tightening or clamping elements.



With constant torque

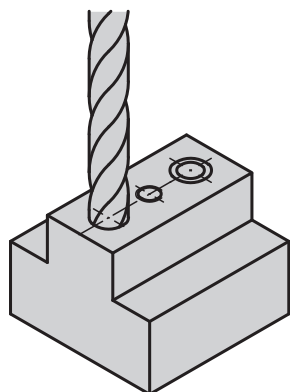
**KIPP Clamping force intensifiers**

Order No.	D1	D2	H	Dynamic load rating N	Static load rating N
K0584.06	6	24	8	6800	15500
K0584.08	8	25	8	7800	19400
K0584.10	10	30	8	9200	25500
K0584.12	12	35	8	9900	29000

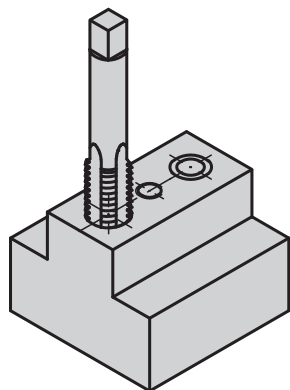
Installing and removing threaded inserts



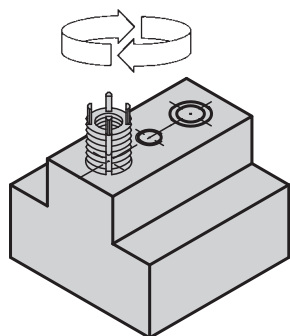
Fitting instructions



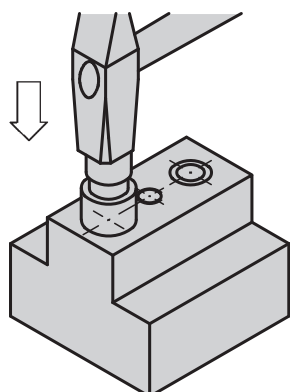
- 1.*
Rebore the old thread and
countersink it ($82^\circ - 100^\circ$).



- 2.*
Tap thread with a
standard screw tap.



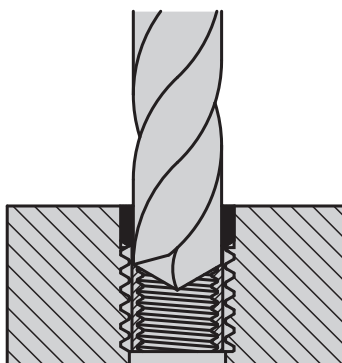
3.
Screw in the insert to just
below the surface
(0.3 – 0.7 mm).



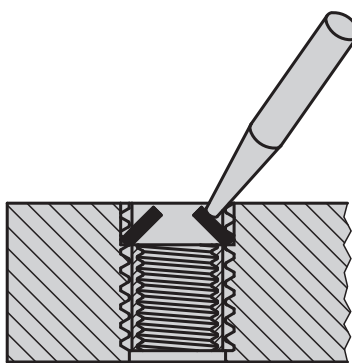
4.
Drive in the locking pins by
striking the assembly tool
lightly with a hammer.

* For steps 1 and 2
see table under installation
of threaded inserts.

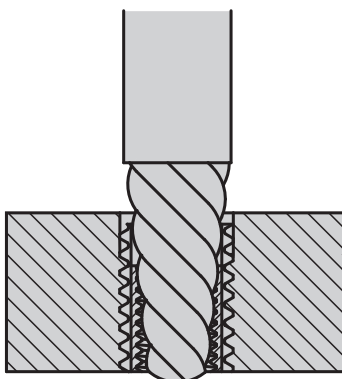
Removal instructions



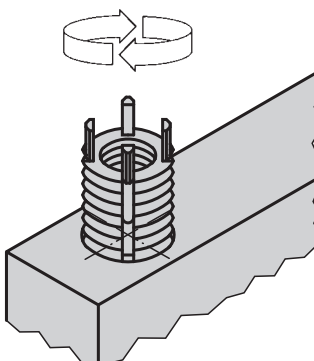
- 1.*
Rebore the material
between the locking pins
and the internal thread to
the specified depth.



2.
Bend the locking pins
inwards and break them off.



3.
Remove the old insert with a
screw extractor.

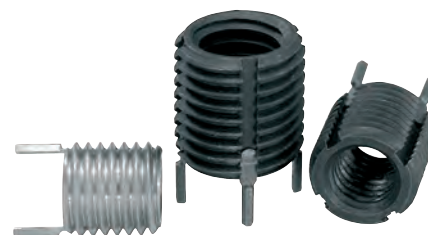


4.
Install a new threaded insert
in the original threaded hole.

* For step 1
see tables under
"removal drilling depth"



Threaded inserts



Material:

Threaded insert in steel or stainless steel.

Version:

Passivated.

Sample order:

Threaded Insert K0398.12

Assembly tool K0398.812

Note:

Threaded inserts allow threaded holes which have been damaged, torn out or jammed to be used again or to be repaired, enabling expensive products to be saved from the scrap heap.

Threaded inserts are suitable for use in various materials, including light metals and castings.

Inserts with internal threads larger than M6 are supplied with four locking pins instead of two.

Permissible deviations:

The medium tolerance class applies to the threads listed, i.e. 6H for nut threads and 6g for bolt threads. Other dimensions ± 0.25 mm.

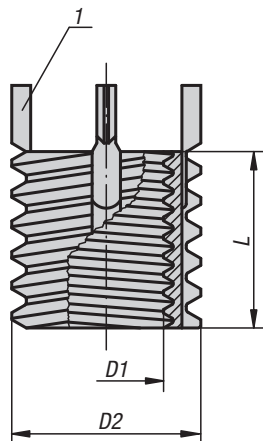
Technical information see operating instructions for threaded inserts.

Advantages:

- Quick and easy installation.
- The insert is fixed with pins in order to prevent torsion due to twisting or vibrations.
- No other special tools are required besides the assembly tool.

Drawing reference:

1) locking pin



KIPP Threaded inserts and assembly tools

Order No. steel	Order No. stainless steel	D1 internal thread	D2 external thread	L length	Core drill Ø	Counter- sink Ø +0.25	Tap size	Min. thread depth	Removal drill Ø	Removal drilling depth	Order No. assembly tools
K0398.05	K0398.105	M5	M8	8	6,9	8,3	M8	9,5	5,5	4	K0398.805
K0398.06	K0398.106	M6	M10x1,25	10	8,8	10,3	M10x1,25	11,5	7,5	4,8	K0398.806
K0398.08	K0398.108	M8	M12x1,25	12	10,8	12,3	M12x1,25	13,5	9,5	4,8	K0398.808
K0398.08X1	K0398.108X1	M8x1	M12x1,25	12	10,8	12,3	M12x1,25	13,5	9,5	4,8	K0398.808
K0398.10	K0398.110	M10	M14x1,5	14	12,8	14,3	M14x1,5	15,5	11,5	4,8	K0398.810
K0398.10X125	K0398.110X125	M10x1,25	M14x1,5	14	12,8	14,3	M14x1,5	15,5	11,5	4,8	K0398.810
K0398.12	K0398.112	M12	M16x1,5	16	14,8	16,3	M16x1,5	17,5	13,5	4,8	K0398.812
K0398.12X125	K0398.112X125	M12x1,25	M16x1,5	16	14,8	16,3	M16x1,5	17,5	13,5	4,8	K0398.812

Threaded inserts reinforced

**Material:**

Threaded insert in steel or stainless steel.

Version:

Passivated.

Sample order:

Reinforced threaded insert K0399.12

Assembly tool K0399.812

Note:

Reinforced threaded inserts allow threaded holes which have been damaged, torn out or jammed to be used again or to be repaired. This makes it possible to recover scrap and rejects of expensive products.

Reinforced threaded inserts are suitable for use in various materials, including light metals and casting.

Inserts with internal threads larger than M6 are supplied with four locking pins instead of two.

Permissible deviations:

The medium tolerance class applies to the threads listed, i.e. 6H for nut threads and 6g for bolt threads. Other dimensions ± 0.25 mm.

With reinforced threaded inserts we also offer a version with a stronger cross-section for use in applications with greater stress.

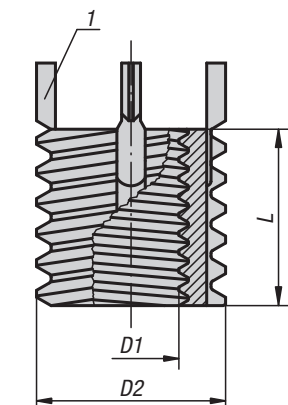
Technical information see operating instructions for threaded inserts.

Advantages:

- Quick and easy installation.
- The insert is fixed with pins in order to prevent torsion due to twisting or vibrations.
- No other special tools are required besides the assembly tool.

Drawing reference:

1) locking pin

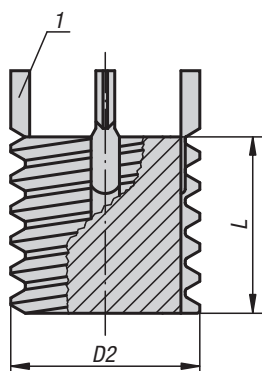


KIPP Threaded inserts reinforced and assembly tools

Order No. steel	Order No. stainless steel	D1 internal thread	D2 external thread	L length	Core drill Ø	Counter- sink Ø +0.25	Tap size	Min. thread depth	Removal drill Ø	Removal drilling depth	Order No. assembly tools
K0399.04	K0399.104	M4	M8	8	6,9	8,3	M8	9,5	5,5	4	K0399.804
K0399.05	K0399.105	M5	M10x1,25	10	8,8	10,3	M10x1,25	12,5	7,5	4,8	K0399.805
K0399.06	K0399.106	M6	M12x1,25	12	10,8	12,3	M12x1,25	14,5	9,5	4,8	K0399.806
K0399.08	K0399.108	M8	M14x1,5	14	12,8	14,3	M14x1,5	16,5	11,5	4,8	K0399.808
K0399.08X1	K0399.108X1	M8x1	M14x1,5	14	12,8	14,3	M14x1,5	16,5	11,5	4,8	K0399.808
K0399.10	K0399.110	M10	M16x1,5	16	14,8	16,3	M16x1,5	18,5	13,5	4,8	K0399.810
K0399.10X125	K0399.110X125	M10x1,25	M16x1,5	16	14,8	16,3	M16x1,5	18,5	13,5	4,8	K0399.810
K0399.12	K0399.112	M12	M18x1,5	18	16,8	18,3	M18x1,5	20,5	15,5	4,8	K0399.812
K0399.12X125	K0399.112X125	M12x1,25	M18x1,5	18	16,8	18,3	M18x1,5	20,5	15,5	4,8	K0399.812
K0399.14	K0399.114	M14	M20x1,5	20	18,8	20,3	M20x1,5	22,5	17,5	4,8	K0399.814
K0399.14X15	K0399.114X15	M14x1,5	M20x1,5	20	18,8	20,3	M20x1,5	22,5	17,5	4,8	K0399.814
K0399.16	K0399.116	M16	M22x1,5	22	20,7	22,3	M22x1,5	24,5	17,8	6,4	K0399.816
K0399.16X15	K0399.116X15	M16x1,5	M22x1,5	22	20,7	22,3	M22x1,5	24,5	17,8	6,4	K0399.816
K0399.18X15	K0399.118X15	M18x1,5	M24x1,5	24	22,5	24,3	M24x1,5	26,5	19,8	6,4	K0399.818
K0399.20	K0399.120	M20	M30x2	30	28	30,3	M30x2	34,5	25,8	6,4	K0399.820
K0399.20X15	K0399.120X15	M20x1,5	M30x2	30	28	30,3	M30x2	34,5	25,8	6,4	K0399.820
K0399.22X15	K0399.122X15	M22x1,5	M32x2	32	30	32,3	M32x2	36,5	27,8	6,4	K0399.822
K0399.24	K0399.124	M24	M33x2	33	31	33,3	M33x2	37,5	28,8	6,4	K0399.824
K0399.24X2	K0399.124X2	M24x2	M33x2	33	31	33,3	M33x2	37,5	28,8	6,4	K0399.824



Threaded inserts solid body



Material:

Threaded insert in steel.

Version:

Passivated.

Sample order:

Solid body threaded insert K0400.10X125

Assembly tool K0400.810

Note:

Solid body threaded inserts allow threaded holes which have been damaged, torn out or jammed to be used again or to be repaired. This makes it possible to recover scrap and rejects of expensive products.

Solid body threaded inserts are suitable for use in various materials, including light metals and castings.

Permissible deviations:

The medium tolerance class applies to the threads listed, i.e. 6g for bolt threads.

Other dimensions ± 0.25 mm.

Solid body threaded inserts are used where threaded holes that have been drilled too large or drill hole spacings that have not been observed in workpieces need to be redone.

Technical information see operating instructions for threaded inserts.

Advantages:

- Quick and easy installation.
- The insert is fixed with pins in order to prevent torsion due to twisting or vibrations.
- No other special tools are required besides the assembly tool.

Drawing reference:

1) locking pin

KIPP Threaded inserts solid body and assembly tools

Order No.	D2 external thread	L length	Core drill Ø	Counter- sink Ø +0.25	Tap size	Min. thread depth	Removal drill Ø	Removal drilling depth	Order No. assembly tools
K0400.08	M8	8	6,9	8,3	M8	9,5	5,5	4	K0400.808
K0400.10X125	M10x1,25	10	8,8	10,3	M10x1,25	12,5	7,5	4,8	K0400.810
K0400.12X125	M12x1,25	12	10,8	12,3	M12x1,25	14,5	9,5	4,8	K0400.812
K0400.14X15	M14x1,5	14	12,8	14,3	M14x1,5	16,5	11,5	4,8	K0400.814
K0400.16X15	M16x1,5	16	14,8	16,3	M16x1,5	18,5	13,5	4,8	K0400.816
K0400.18X15	M18x1,5	18	16,8	18,3	M18x1,5	20,5	15,5	4,8	K0400.818
K0400.20X15	M20x1,5	20	18,8	20,3	M20x1,5	22,5	17,5	4,8	K0400.820
K0400.22X15	M22x1,5	22	20,7	22,3	M22x1,5	24,5	17,8	6,4	K0400.822
K0400.24X15	M24x1,5	24	22,5	24,3	M24x1,5	26,5	19,8	6,4	K0400.824
K0400.30X2	M30x2	30	28	30,3	M30x2	34,5	25,8	6,4	K0400.830

Threaded inserts

with internal thread, self-locking


Material:

Threaded insert in stainless steel.

Version:

Passivated.

Sample order:

Threaded Insert K0401.112

Assembly tool K0398.812

Note:

Threaded inserts allow threaded holes which have been damaged, torn out or jammed to be used again or to be repaired. This makes it possible to recover scrap and rejects of expensive products.

Threaded inserts are suitable for use in various materials, including light metals and casting. Inserts with internal threads larger than M6 are supplied with four locking pins instead of two.

Permissible deviations:

the medium tolerance class applies to the threads listed, i.e. 6H for nut threads and 6g for bolt threads. Other dimensions ± 0.25 mm.

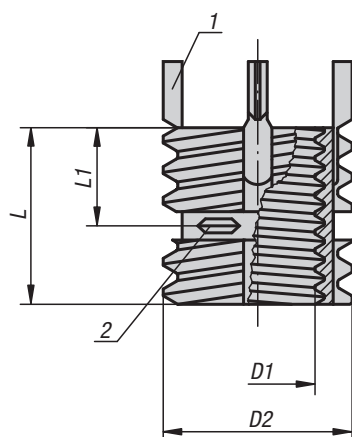
Technical information see operating instructions for threaded inserts.

Advantages:

- Quick and easy installation.
- The insert is fixed with pins in order to prevent torsion due to twisting or vibrations.
- No other special tools are required besides the assembly tool.

Drawing reference:

- 1) locking pin
- 2) self-locking part of internal thread



KIPP Threaded inserts with internal thread, self-locking and assembly tools

Order No.	D1 internal thread	D2 external thread	L1 length	L length	Core drill Ø	Counter- sink Ø +0.25	Tap size	Min. thread depth	Removal drill Ø	Removal drilling depth	Order No. assembly tools
K0401.105	M5	M8	4	8	6,9	8,3	M8	9,5	5,5	4	K0398.805
K0401.106	M6	M10x1,25	5	10	8,8	10,3	M10x1,25	11,5	7,5	4,8	K0398.806
K0401.108	M8	M12x1,25	6	12	10,8	12,3	M12x1,25	13,5	9,5	4,8	K0398.808
K0401.110	M10	M14x1,5	7	14	12,8	14,3	M14x1,5	15,5	11,5	4,8	K0398.810
K0401.112	M12	M16x1,5	8	16	14,8	16,3	M16x1,5	17,5	13,5	4,8	K0398.812



Threaded inserts reinforced

internal thread, self-locking



Material:

Threaded insert in stainless steel.

Version:

Passivated.

Sample order:

Reinforced threaded insert K0402.110

Assembly tool K0399.812

Note:

Reinforced threaded inserts allow threaded holes which have been damaged, torn out or jammed to be used again or to be repaired. This makes it possible to recover scrap and rejects of expensive products. Reinforced threaded inserts are suitable for use in various materials, including light metals and casting. Inserts with internal threads larger than M6 are supplied with four locking pins instead of two.

Permissible deviations:

The medium tolerance class applies to the threads listed, i.e. 6H for nut threads and 6g for bolt threads. Other dimensions ± 0.25 mm.

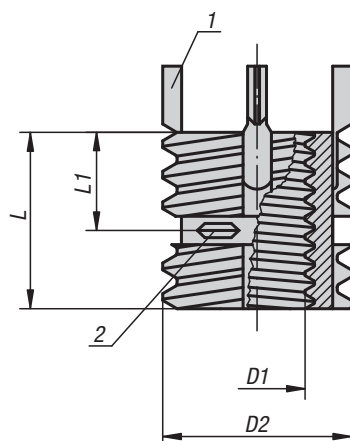
Technical information see operating instructions for threaded inserts.

Advantages:

- Quick and easy installation.
- The insert is fixed with pins in order to prevent torsion due to twisting or vibrations.
- No other special tools are required besides the assembly tool.

Drawing reference:

- 1) locking pin
- 2) self-locking part of internal thread



KIPP Threaded inserts reinforced with internal thread, self-locking and assembly tools

Order No.	D1 internal thread	D2 external thread	L1 length	L length	Core drill Ø	Counter- sink Ø +0.25	Tap size	Min. thread depth	Removal drill Ø	Removal drilling depth	Order No. assembly tools
K0402.104	M4	M8	4	8	6,9	8,3	M8	9,5	5,5	4	K0399.804
K0402.105	M5	M10x1,25	5	10	8,8	10,3	M10x1,25	12,5	7,5	4,8	K0399.805
K0402.106	M6	M12x1,25	6	12	10,8	12,3	M12x1,25	14,5	9,5	4,8	K0399.806
K0402.108	M8	M14x1,5	7	14	12,8	14,3	M14x1,5	16,5	11,5	4,8	K0399.808
K0402.110	M10	M16x1,5	8	16	14,8	16,3	M16x1,5	18,5	13,5	4,8	K0399.810
K0402.112	M12	M18x1,5	9	18	16,8	18,3	M18x1,5	20,5	15,5	4,8	K0399.812
K0402.114	M14	M20x1,5	10	20	18,8	20,3	M20x1,5	22,5	17,5	4,8	K0399.814
K0402.116	M16	M22x1,5	11	22	20,7	22,3	M22x1,5	24,5	17,8	6,4	K0399.816
K0402.116X15	M16x1,5	M22x1,5	11	22	20,7	22,3	M22x1,5	24,5	17,8	6,4	K0399.816
K0402.118X15	M18x1,5	M24x1,5	12	24	22,5	24,3	M24x1,5	26,5	19,8	6,4	K0399.818
K0402.120	M20	M30x2	15	30	28	30,3	M30x2	34,5	25,8	6,4	K0399.820

**Material:**

Threaded insert in steel.

Version:

Passivated.

Sample order:

K0653.01

Note:

The repair kit allows threaded holes which have been damaged, torn out or jammed to be used again or to be repaired. This makes it possible to recover scrap and rejects of expensive products.

Threaded inserts are suitable for use in various materials, including light metals and casting.

Inserts with internal threads larger than M6 are supplied with four locking pins instead of two.

Permissible deviations:

the medium tolerance class applies to the threads listed, i.e. 6H for nut threads and 6g for bolt threads. Other dimensions ± 0.25 mm.

Technical information see operating instructions for threaded inserts.

Advantages:

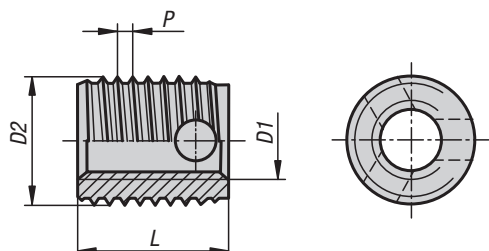
- Quick and easy installation.
- The insert is fixed with pins in order to prevent torsion due to twisting or vibrations.
- No other special tools are required besides the assembly tool.

**KIPP Repair kit**

Order No.	Female threads	Male threads	Insert length	Number of inserts	Number of assembly tools	Order No. of individual insert
K0653.01	M5	M8	8	8	1	K0398.05
	M6	M10X1,25	10	8	1	K0398.06
	M8	M12X1,25	12	6	1	K0398.08
	M8X1	M12X1,25	12	6	-	K0398.08X1
	M10	M14X1,5	14	4	1	K0398.10
	M10X1,25	M14X1,5	14	4	-	K0398.10X125
	M12	M16X1,5	16	3	1	K0398.12
	M12X1,25	M16X1,5	16	3	-	K0398.12X125

Threaded inserts self-tapping

with cutting bores


Material:

Steel or 1.4305 stainless steel

Version:

Steel case hardened, electro zinc-plated.
Stainless steel bright.

Sample order:

K0979.03

Note:

Self-tapping threaded inserts for making high-strength, wear-free, vibration resistant screw connections in materials with low shear strength such as aluminium and aluminium alloys, brass, bronze, cast iron, duro and thermoplastics.

The threaded inserts are tapered at the bottom and have three cutting bores. They cut their own threads inside a receiver hole. This guarantees a completely secure and firm anchoring in the host material.

Internal thread D1 acc. to ISO 6H.

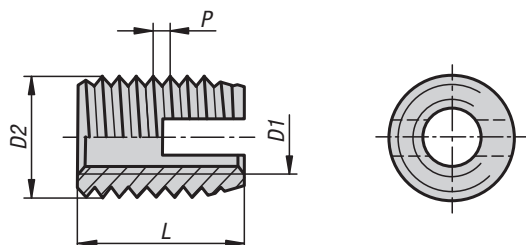
The threaded inserts with cutting bores are designed especially for materials difficult to machine. Due to the thicker wall, it can withstand greater force during cutting, which is also distributed over three cutting bores.

KIPP Threaded inserts self-tapping with cutting bores

Order No.	Main material	D1 internal thread	D2	L length	P	T min.	R min. light metal	R min. cast iron	R min. plastics	Order No. Hand ass. tool	Order No. M/C ass. tool
K0979.03	steel	M3	5	4	0,6	6	1	1,5	1,25	K0978.803	K0978.903
K0979.04	steel	M4	6,5	6	0,8	8	1,3	1,95	1,6	K0978.804	K0978.904
K0979.05	steel	M5	8	7	1	9	1,6	2,4	2	K0978.805	K0978.905
K0979.06	steel	M6	10	8	1,25	10	2	3	2,5	K0978.806	K0978.906
K0979.08	steel	M8	12	9	1,5	11	2,4	3,6	3	K0978.808	K0978.908
K0979.10	steel	M10	14	10	1,5	13	2,8	4,2	3,5	K0978.810	K0978.910
K0979.12	steel	M12	16	12	1,75	15	3,2	4,8	4	K0978.812	K0978.912
K0979.103	stainless steel	M3	5	4	0,6	6	1	1,5	1,25	K0978.803	K0978.903
K0979.104	stainless steel	M4	6,5	6	0,8	8	1,3	1,95	1,6	K0978.804	K0978.904
K0979.105	stainless steel	M5	8	7	1	9	1,6	2,4	2	K0978.805	K0978.905
K0979.106	stainless steel	M6	10	8	1,25	10	2	3	2,5	K0978.806	K0978.906
K0979.108	stainless steel	M8	12	9	1,5	11	2,4	3,6	3	K0978.808	K0978.908
K0979.110	stainless steel	M10	14	10	1,5	13	2,8	4,2	3,5	K0978.810	K0978.910
K0979.112	stainless steel	M12	16	12	1,75	15	3,2	4,8	4	K0978.812	K0978.912

Threaded inserts self-tapping

with cutting slot



Material:

Steel or 1.4305 stainless steel Steel or 1.4305 stainless steel

Version:

Steel case hardened, electro zinc-plated.
Stainless steel bright.

Sample order:

K0978.03

Note:

Self-tapping threaded inserts for making high-strength, wear-free, vibration resistant screw connections in materials with low shear strength such as aluminium and aluminium alloys, brass, bronze, cast iron, duro and thermoplastics.

The threaded inserts are tapered at the bottom and have a cutting slot. By screwing in they cut their own threads inside a receiver hole. This guarantees a completely secure and firm anchoring in the host material.

Internal thread D1 acc. to ISO 6H.

The threaded inserts with cutting slot spring slightly inwards in the slot region in some materials. This results in a screw locking effect. If this is not desired, we recommend the threaded inserts with a cutting bore.

KIPP Threaded inserts self-tapping with cutting slot

Order No.	Main material	D1 internal thread	D2	L length	P	T min.	R min. light metal	R min. cast iron	R min. plastics	Order No. Hand ass. tool	Order No. M/C ass. tool
K0978.03	steel	M3	5	6	0,5	8	1	1,5	1,25	K0978.803	K0978.903
K0978.04	steel	M4	6,5	8	0,75	10	1,3	1,95	1,6	K0978.804	K0978.904
K0978.05	steel	M5	8	10	1	13	1,6	2,4	2	K0978.805	K0978.905
K0978.06	steel	M6	10	14	1,5	17	2	3	2,5	K0978.806	K0978.906
K0978.08	steel	M8	12	15	1,5	18	2,4	3,6	3	K0978.808	K0978.908
K0978.10	steel	M10	14	18	1,5	22	2,8	4,2	3,5	K0978.810	K0978.910
K0978.12	steel	M12	16	22	1,5	26	3,2	4,8	4	K0978.812	K0978.912
K0978.16	steel	M16	20	22	1,5	27	4	6	5	-	K0978.916
K0978.103	stainless steel	M3	5	6	0,5	8	1	1,5	1,25	K0978.803	K0978.903
K0978.104	stainless steel	M4	6,5	8	0,75	10	1,3	1,95	1,6	K0978.804	K0978.904
K0978.105	stainless steel	M5	8	10	1	13	1,6	2,4	2	K0978.805	K0978.905
K0978.106	stainless steel	M6	10	14	1,5	17	2	3	2,5	K0978.806	K0978.906
K0978.108	stainless steel	M8	12	15	1,5	18	2,4	3,6	3	K0978.808	K0978.908
K0978.110	stainless steel	M10	14	18	1,5	22	2,8	4,2	3,5	K0978.810	K0978.910
K0978.112	stainless steel	M12	16	22	1,5	26	3,2	4,8	4	K0978.812	K0978.912
K0978.116	stainless steel	M16	20	22	1,5	27	4	6	5	-	K0978.916



Drill bushes cylindrical

DIN 179



Material:

Special low carbon steel

Version:

Hardened to 740 ±80 HV 10 and ground.

Sample order:

K1021.A0120X06
(cylindrical drill bush, Form A with
D1 = 1.2 mm and L1 = 6 mm)

Note:

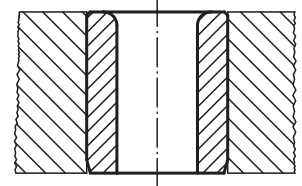
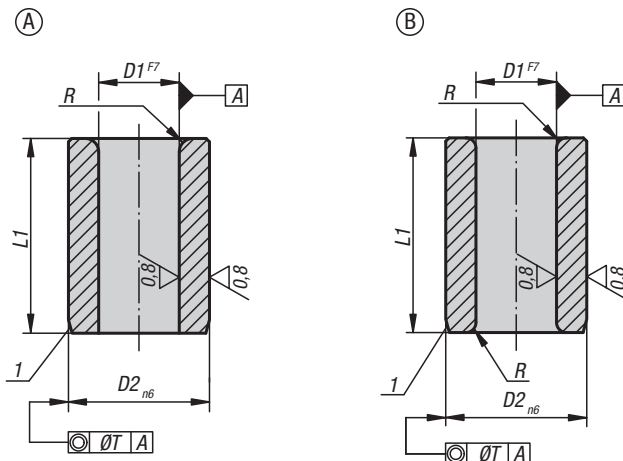
From diameter D1 over 15 mm size increases are
0.5 mm.

Drawing reference:

Form A: hole rounded one end

Form B: hole rounded both ends

1) Chamfer for insert

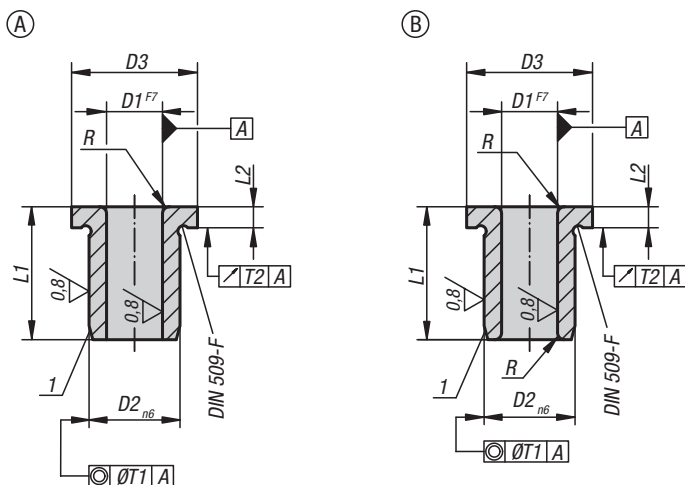


KIPP Drill bushes cylindrical DIN 179

D1	D2	L1	Product type	R	T
from 0.4 to 0.8	3	6	short	1	0,01
from 0.9 to 1.0	3	6/9	short/medium	1	0,01
from 1.1 to 1.8	4	6/9	short/medium	1	0,01
from 1.9 to 2.6	5	6/9	short/medium	1	0,01
from 10.1 to 12.0	18	12/20/25	short/medium/long	2	0,02
from 8.1 to 10.0	15	12/20/25	short/medium/long	2	0,02
from 12.1 to 15.0	22	16/28/36	short/medium/long	2	0,02
from 15.5 to 18.0	26	16/28/36	short/medium/long	2	0,02
from 18.5 to 22.0	30	20/36/45	short/medium/long	3	0,02
from 2.7 to 3.3	6	12/16/8	medium/long/short	1	0,01
from 22.5 to 26.0	35	20/36/45	short/medium/long	3	0,02
from 26.5 to 30.0	42	25/45/56	short/medium/long	3	0,02
from 3.4 to 4.0	7	12/16/8	medium/long/short	1	0,01
from 30.5 to 35.0	48	25/45/56	short/medium/long	3	0,04
from 35.5 to 42.0	55	30/56/67	short/medium/long	3,5	0,04
from 4.1 to 5.0	8	12/16/8	medium/long/short	1	0,01
from 42.5 to 48.0	62	30/56/67	short/medium/long	3,5	0,04
from 5.1 to 6.0	10	10/16/20	short/medium/long	1,5	0,02
from 6.1 to 8.0	12	10/16/20	short/medium/long	1,5	0,02

Drill bushes flanged

DIN 172



Material:

Special steel.

Version:

Hardened and ground.

Hardness 740 ±80 HV 10

Sample order:

K1022.A0120X09

(flanged drill bush, Form A with
D1 = 1.2 mm and L1 = 9 mm)

Note:

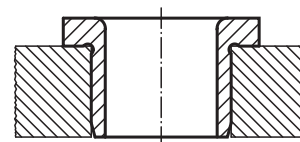
From diameter D1 over 15 mm size increases are
0.5 mm.

Drawing reference:

Form A: hole rounded one end

Form B: hole rounded both ends

1) Chamfer for insert



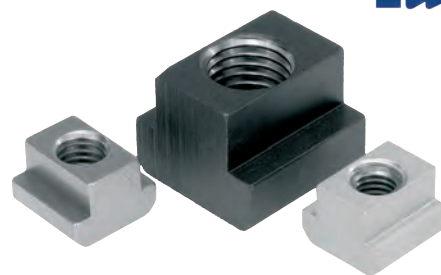
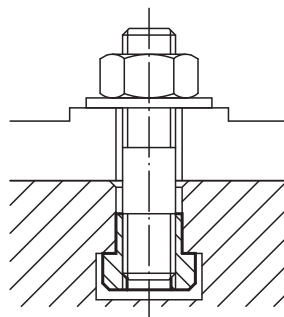
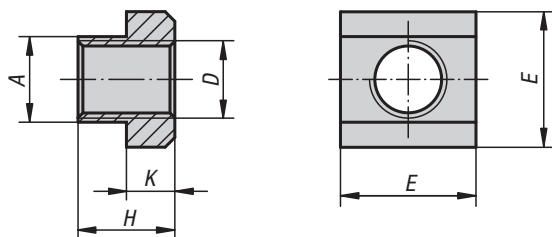
KIPP Drill bushes flanged DIN 172

D1	D2	D3	L1	Product type	L2	R	T1	T2
from 6.1 to 8.0	12	15	20/16/10	long/medium/short	3	1,5	0,02	0,03
from 18.5 to 22.0	30	34	20/45/36	short/long/medium	5	3	0,02	0,03
from 8.1 to 10.0	15	18	20/12/25	medium/short/long	3	2	0,02	0,03
from 10.1 to 12.0	18	22	20/12/25	medium/short/long	4	2	0,02	0,03
from 30.5 to 35.0	48	52	56/45/25	long/medium/short	5	3	0,04	0,05
from 15.5 to 18.0	26	30	16/36/28	short/long/medium	4	2	0,02	0,03
from 2.7 to 3.3	6	9	12/16/8	medium/long/short	2,5	1	0,01	0,03
from 12.1 to 15.0	22	26	28/36/16	medium/long/short	4	2	0,02	0,03
from 42.5 to 48.0	62	66	56/30/67	medium/short/long	6	3,5	0,04	0,05
from 5.1 to 6.0	10	13	16/20/10	medium/long/short	3	1,5	0,02	0,03
from 4.1 to 5.0	8	11	12/16/8	medium/long/short	2,5	1	0,01	0,03
from 26.5 to 30.0	42	46	25/45/56	short/medium/long	5	3	0,02	0,05
from 35.5 to 42.0	55	59	67/56/30	long/medium/short	5	3,5	0,04	0,05
from 22.5 to 26.0	35	39	45/20/36	long/short/medium	5	3	0,02	0,05
from 1.1 to 1.8	4	7	9/6	medium/short	2	1	0,01	0,03
from 1.9 to 2.6	5	8	6/9	short/medium	2	1	0,01	0,03
from 3.4 to 4.0	7	10	8/12/16	short/medium/long	2,5	1	0,01	0,03
from 0.4 to 0.8	3	6	6	short	2	1	0,01	0,03
from 0.9 to 1.0	3	6	9/6	medium/short	2	1	0,01	0,03



Nuts for T-slots

DIN 508 enhanced



Material:

Carbon steel grade 10, EN AW-7075 or stainless steel 1.4305.

Version:

Steel black.
Aluminium and stainless steel bright.

Sample order:

K0377.20

Note:

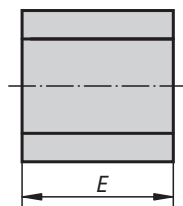
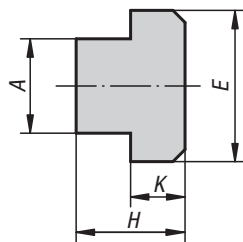
Nuts for T-slots in aluminium have threaded steel inserts.

KIPP Nuts for T-slots to DIN 508 enhanced

Order No. high carbon steel	Order No. aluminium	Order No. stainless steel	Slot width	D	A	E	H	K
K0377.05	K0377.204	-	6	M5/M4	5,6	10	8	4
K0377.06	K0377.206	K0377.806	8	M6	7,6	13	10	6
K0377.061	K0377.2061	-	10	M6	9,6	15	12	6
K0377.081	K0377.208	-	12	M8	11,6	18	14	7
K0377.08	-	K0377.808	10	M8	9,6	15	12	6
K0377.082	-	-	14	M8	13,6	22	16	8
K0377.10	-	K0377.810	12	M10	11,6	18	14	7
K0377.101	K0377.210	-	14	M10	13,6	22	16	8
K0377.124	K0377.216	-	22	M12/M16	21,6	35	28	14
K0377.12	-	K0377.812	14	M12	13,6	22	16	8
K0377.123	-	-	20	M12	19,6	32	24	12
K0377.121	-	-	16	M12	15,6	25	18	9
K0377.122	-	-	18	M12	17,6	28	20	10
K0377.14	-	K0377.814	16	M14	15,6	25	18	9
K0377.141	-	-	18	M14	17,6	28	20	10
K0377.16	-	K0377.816	18	M16	17,6	28	20	10
K0377.161	-	-	20	M16	19,6	32	24	12
K0377.164	-	-	28	M16	27,6	44	36	18
K0377.163	-	-	24	M16	23,6	40	32	16
K0377.18	-	-	20	M18	19,6	32	24	12
K0377.181	-	-	22	M18	21,6	35	28	14
K0377.202	-	-	28	M20	27,6	44	36	18
K0377.201	-	-	24	M20	23,6	40	32	16
K0377.20	-	-	22	M20	21,6	35	28	14
K0377.22	-	-	24	M22	23,6	40	32	16
K0377.24	-	-	28	M24	27,6	44	36	18
K0377.241	-	-	36	M24	35,5	54	44	22
K0377.27	-	-	32	M27	31,5	50	40	20
K0377.30	-	-	36	M30	35,5	54	44	22
K0377.36	-	-	42	M36	41,5	65	52	26

Nuts for T-slots

blanks

**Material:**

High carbon steel or stainless steel 1.4305.

Sample order:

K0378.16

Note:

These blank nuts are used to make nuts for T-slots with all sorts of thread sizes cost-effectively.

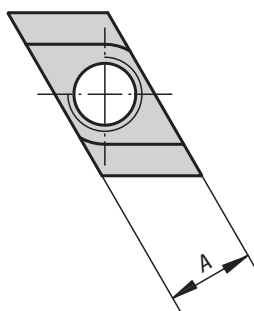
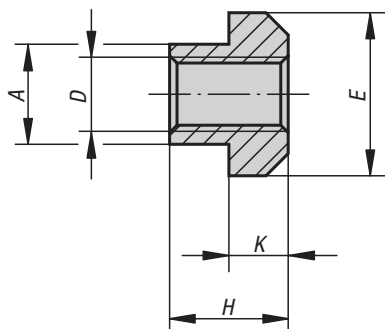
KIPP Nuts for T-slots, blanks

Order No. high carbon steel	Order No. stainless steel	Slot width	A	E	H	K
K0378.06	-	6	5,6	10	8	4
K0378.08	K0378.808	8	7,6	13	10	6
K0378.10	K0378.810	10	9,6	15	12	6
K0378.12	K0378.812	12	11,5	18	14	7
K0378.14	K0378.814	14	13,5	22	16	8
K0378.16	-	16	15,6	25	18	9
K0378.18	-	18	17,5	28	20	10
K0378.20	-	20	19,6	32	24	12
K0378.22	-	22	21,6	35	28	14
K0378.24	-	24	23,6	40	32	16
K0378.28	-	28	27,6	44	36	18
K0378.36	-	36	35,5	54	44	22
K0378.42	-	42	41,6	65	52	26



Nuts for T-slots

rhombic form



Material:

Carbon steel.

Version:

Tempered to 8 and black oxidised.

Sample order:

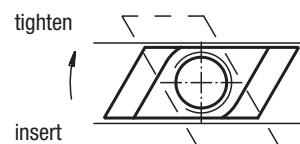
K0379.114

Note:

The benefit of rhombic nuts for T-slots is that they can be fitted in the slot from the top. They are particularly useful for long T-slots, or when the configuration on the machine table does not permit clamping screws or nuts for T-slots to be inserted from the side.

Application:

Insert from above then twist in the slot until it stops.

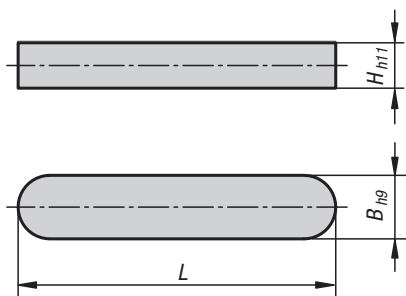


KIPP Nuts for T-slots, rhombic form

Order No.	Slot width	D	A	E	H	K
K0379.105	6	M5	5,6	10	8	4
K0379.106	8	M6	7,6	13	10	6
K0379.108	10	M8	9,7	15	12	6
K0379.110	12	M10	11,7	18	14	7
K0379.210	14	M10	13,5	22	16	8
K0379.310	18	M10	17,5	28	20	10
K0379.112	14	M12	13,7	22	16	8
K0379.114	16	M14	15,7	25	18	9
K0379.116	18	M16	17,7	28	20	10
K0379.216	20	M16	19,7	32	24	12
K0379.316	22	M16	21,5	35	28	14
K0379.416	28	M16	27,5	44	36	18
K0379.118	20	M18	19,7	32	24	12
K0379.120	22	M20	21,7	35	28	14
K0379.124	28	M24	27,7	44	36	18
K0379.130	36	M30	35,6	54	44	22
K0379.136	42	M36	41,5	65	52	26

Parallel keys

DIN 6885 A

**Material:**

Steel 1.1192 or stainless steel 1.4571.

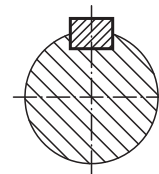
Version:

Bright.

Sample order:

K0696.04X12 (include length L)

Application example:



KIPP Parallel keys DIN 6885 A

Order No.	Main material	B	H	L = length
K0696.03X	steel	3	3	8/10/12/14/16/18/20/22/25/28
K0696.04X	steel	4	4	8/10/12/14/16/18/20/22/25/28
K0696.05X	steel	5	5	12/14/16/18/20/22/25/28/32/36/40
K0696.06X	steel	6	6	12/14/16/18/20/22/25/28/32/36/40/45
K0696.08X	steel	8	7	14/16/18/20/22/25/28/32/36/40/45/50/70
K0696.10X	steel	10	8	22/25/28/32/36/40/45/50/56/70/80
K0696.12X	steel	12	8	25/28/32/36/40/45/50/56/70/80
K0696.14X	steel	14	9	25/28/32/36/40/45/50/56/70/80
K0696.16X	steel	16	10	50/56/63/70/80/90/100
K0696.103X	stainless steel	3	3	10/12/16/20
K0696.104X	stainless steel	4	4	10/12/14/16/18/20/22
K0696.105X	stainless steel	5	5	12/14/16/18/20/22/25/28/36/40
K0696.106X	stainless steel	6	6	12/14/16/18/20/22/25/28/32/36/40
K0696.108X	stainless steel	8	7	16/18/20/22/25/28/32/36/40/45/50/70
K0696.110X	stainless steel	10	8	22/25/28/32/36/40/45/50/56/70/80
K0696.112X	stainless steel	12	8	28/32/36/40/45/50/56/70/80
K0696.114X	stainless steel	14	9	32/40/45/50/56/80/70
K0696.116X	stainless steel	16	10	50/63/70/80/90/100



Slot nuts

twist-in Type I



Material:

Steel.

Version:

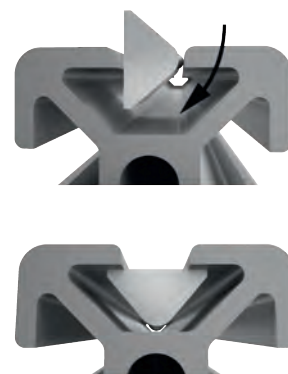
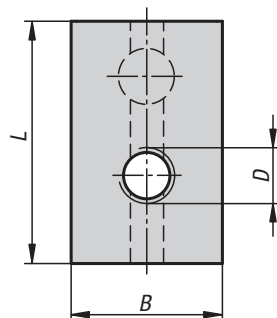
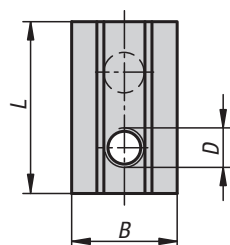
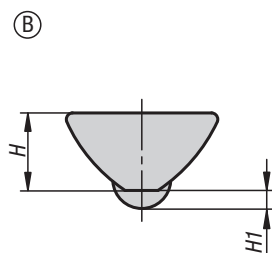
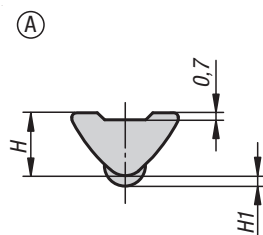
Electro zinc-plated.

Sample order:

K1023.0604

Note:

The slot nut is twisted into the profile slot and so can be subsequently inserted into existing systems. The spring-loaded ball allows the nut to be fixated anywhere in the profile slot.



KIPP Slot nuts twist-in Type I

Order No.	Type	Slot width	Form	D	B	H	H1	L
K1023.0604	I	6	A	M4	10,5	6,3	1	17
K1023.0605	I	6	A	M5	10,5	6,3	1	17
K1023.0606	I	6	A	M6	10,5	6,3	1	17
K1023.0804	I	8	B	M4	13,7	7	1,7	22
K1023.0805	I	8	B	M5	13,7	7	1,7	22
K1023.0806	I	8	B	M6	13,7	7	1,7	22
K1023.0808	I	8	B	M8	13,7	7	1,7	22

Slot nuts

twist-in, keyed Type I

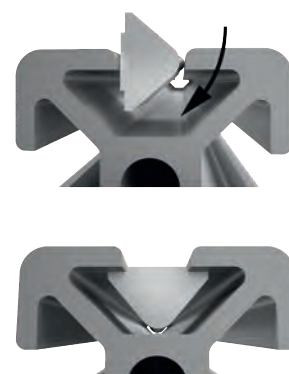
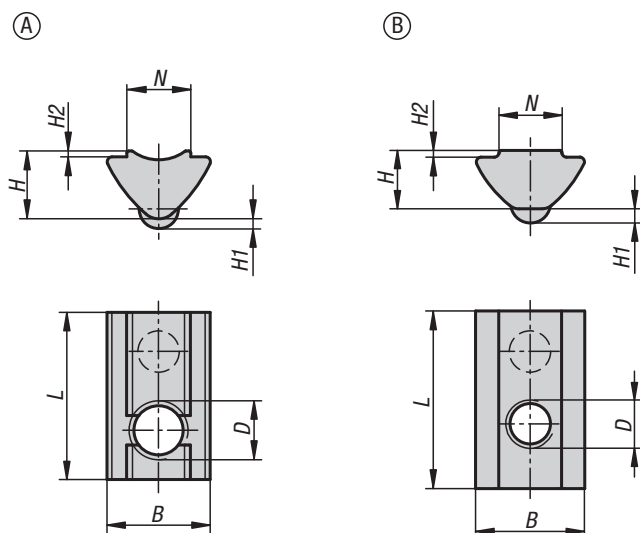


Material:
Steel.

Version:
Electro zinc-plated.

Sample order:
K1024.0604

Note:
The slot nut is twisted into the profile slot and so can be subsequently inserted into existing systems. The spring-loaded ball allows the nut to be fixated anywhere in the profile slot. The key centres the nut in the profile slot and keeps it neatly seated.

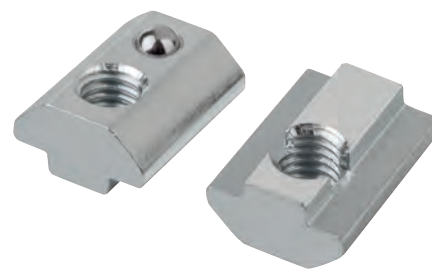


KIPP Slot nuts twist-in, keyed Type I

Order No.	Type	Slot width	Form	D	N	B	H	H1	H2	L
K1024.0604	I	6	A	M4	6,5	10,5	6,9	1	0,6	17
K1024.0605	I	6	A	M5	6,5	10,5	6,9	1	0,6	17
K1024.0606	I	6	A	M6	6,5	10,5	6,9	1	0,6	17
K1024.0803	I	8	B	M3	7,8	13,5	7,2	1,75	0,8	22
K1024.0804	I	8	B	M4	7,8	13,5	7,2	1,75	0,8	22
K1024.0805	I	8	B	M5	7,8	13,5	7,2	1,75	0,8	22
K1024.0806	I	8	B	M6	7,8	13,5	7,2	1,75	0,8	22
K1024.0808	I	8	B	M8	7,8	13,5	7,2	1,75	0,8	22

Slot keys

heavy duty Type I


Material:

Steel.

Version:

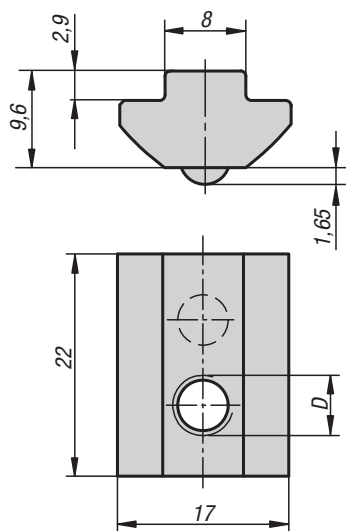
Electro zinc-plated.

Sample order:

K1025.0804

Note:

Suitable for high load connections. Since the key passes to the slot form of the profile, forces are transferred to the profile. The total height allows more threads to be engaged. The slot key can only be inserted into the profile slot from the end. The spring-loaded ball allows the slot key to be fixated anywhere in the profile slot.

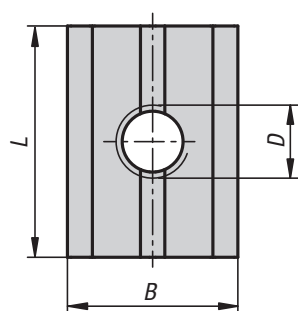
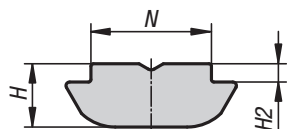


KIPP Slot keys heavy duty Type I

Order No.	Type	Slot width	D
K1025.0804	I	8	M4
K1025.0805	I	8	M5
K1025.0806	I	8	M6
K1025.0808	I	8	M8

Slot nuts

twist-in Type B

**Material:**

Steel.

Version:

Electro zinc-plated.

Sample order:

K1026.1004

Note:

The slot nut is twisted into the profile slot and so can be subsequently inserted into existing systems.



KIPP Slot nuts twist-in Type B

Order No.	Type	Slot width	B	D	H	H2	L	N
K1026.0804	B	8	11,6	M4	4,6	1	16	7,9
K1026.0805	B	8	11,6	M5	4,6	1	16	7,9
K1026.0806	B	8	11,6	M6	4,6	1	16	7,9
K1026.0808	B	8	11,6	M8	4,6	1	16	7,9
K1026.1004	B	10	14	M4	5,2	1,5	19	9,9
K1026.1005	B	10	14	M5	5,2	1,5	19	9,9
K1026.1006	B	10	14	M6	5,2	1,5	19	9,9
K1026.1008	B	10	14	M8	5,2	1,5	19	9,9

Slot nuts

twist-in with spring Type B

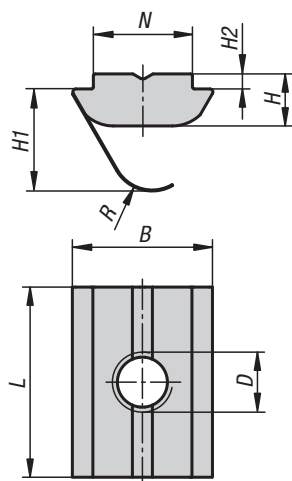


Material:
Steel.

Version:
Electro zinc-plated.

Sample order:
K1027.1004

Note:
The slot nut is twisted into the profile slot and so can be subsequently inserted into existing systems. The spring allows the nut to be fixated anywhere in the profile slot.



KIPP Slot nuts twist-in with spring Type B

Order No.	Type	Slot width	B	D	H	H1	H2	L	N	R
K1027.0804	B	8	11,6	M4	4,6	8,8	1	16	7,9	3
K1027.0805	B	8	11,6	M5	4,6	8,8	1	16	7,9	3
K1027.0806	B	8	11,6	M6	4,6	8,8	1	16	7,9	3
K1027.0808	B	8	11,6	M8	4,6	8,8	1	16	7,9	3
K1027.1004	B	10	14	M4	5,2	10,2	1,5	19	9,9	4
K1027.1005	B	10	14	M5	5,2	10,2	1,5	19	9,9	4
K1027.1006	B	10	14	M6	5,2	10,2	1,5	19	9,9	4
K1027.1008	B	10	14	M8	5,2	10,2	1,5	19	9,9	4

T-nuts

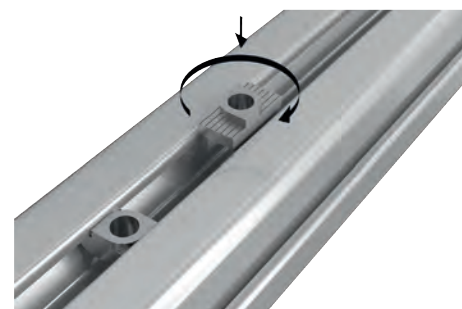
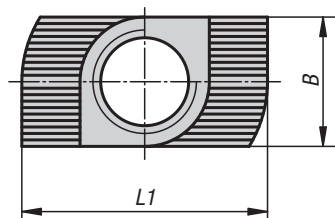
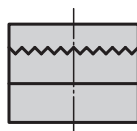
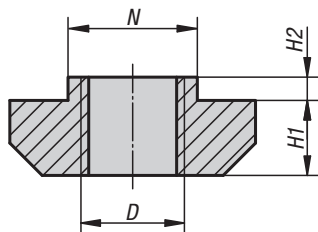


Material:
Steel.

Version:
Electro zinc-plated.

Sample order:
K1028.0804015

Note:
Universal fastening element. The T-nut is twisted into the profile slot and so can be subsequently inserted into existing systems. The serrations break through the anodised film and creates a secure, electrical conductive connection.



KIPP T-nuts

Order No.	Type	Slot width	B	D	H1	H2	L1	N
K1028.0804015	B	8	7,7	M4	4,5	1,5	16	7,7
K1028.0805015	B	8	7,7	M5	4,5	1,5	16	7,7
K1028.0806015	B	8	7,7	M6	4,5	1,5	16	7,7
K1028.1004030	B	10	9,7	M4	5,8	3	19	9,7
K1028.1005017	-	10	9,7	M5	5,8	1,5	19	9,7
K1028.1005030	B	10	9,7	M5	5,8	3	19	9,7
K1028.1006017	-	10	9,7	M6	5,8	1,5	19	9,7
K1028.1006030	B	10	9,7	M6	5,8	3	19	9,7
K1028.1008017	-	10	9,7	M8	5,8	1,5	19	9,7
K1028.1008030	B	10	9,7	M8	5,8	3	19	9,7

Hammer-head screws

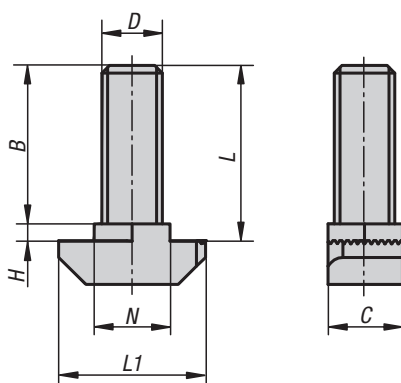


Material:
Steel.

Version:
Electro zinc-plated.

Sample order:
K1029.0806015X16

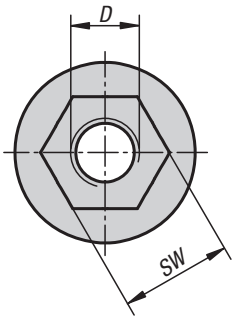
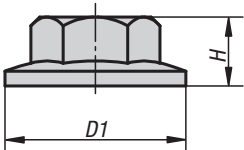
Note:
Universal fastening element. The hammer-headed screw is twisted into the profile slot and so can be mounted into an existing system at a later date. The serrations break through the anodised film and create a secure, electrical conductive connection.



KIPP Hammer-head screws

Order No.	Type	Slot width	B	C	D	H	L	L1	N
K1029.0806015X16	B	8	14,5	7,7	M6	1,5	16	16	7,7
K1029.0806015X20	B	8	18,5	7,7	M6	1,5	20	16	7,7
K1029.0806015X25	B	8	23,5	7,7	M6	1,5	25	16	7,7
K1029.1008030X20	B	10	17	8,5	M8	3	20	19	9,7
K1029.1008030X25	B	10	22	8,5	M8	3	25	19	9,7
K1029.1008030X30	B	10	27	8,5	M8	3	30	19	9,7
K1029.1008030X40	B	10	37	8,5	M8	3	40	19	9,7
K1029.1008030X60	B	10	57	8,5	M8	3	60	19	9,7

Hexagon nuts with flange



Material:
Steel.

Version:
Electro zinc-plated.

Sample order:
K1030.08

Note:
Nut with a large collar. Ideal together with a hammer-head screw.

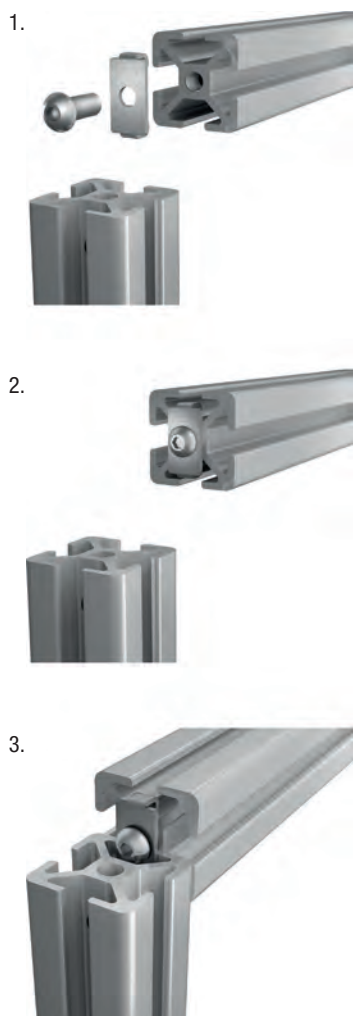
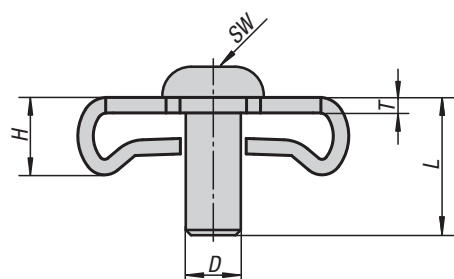
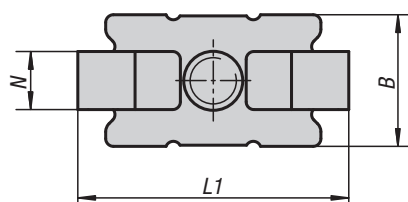


KIPP Hexagon nuts with flange

Order No.	Type	Slot width	D	D1	H	SW
K1030.08	B	10	M8	21	8	13

Connecting sets standard

Type I



Material:
Steel.

Version:
Electro zinc-plated.

Sample order:
K1031.06

Note:
The connecting sets are used for connecting two aluminium profiles at right angles. The connection is non-rotating. For larger profiles several connecting sets can be mounted on the end for greater strength.

Low workload. Cut a thread in the end face core hole. Drill a through hole for tightening the screw in the opposing profile.

KIPP Connecting sets standard Type I

Order No.	Type	Slot width	D	B	H	L	L1	N	T	SW
K1031.06	I	6	M6	13	7,3	14	27,5	6	2	4
K1031.08	I	8	M8	17	9,5	20	35	8	2	5

Central screw

Type B

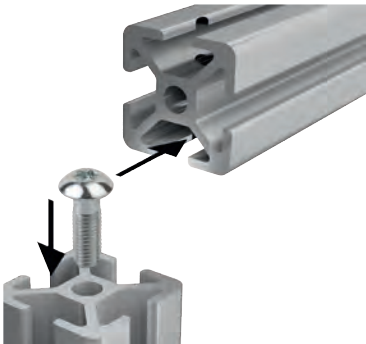
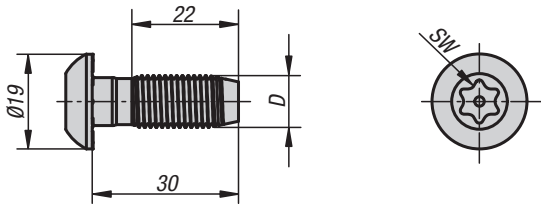


Material:
Steel.

Version:
Electro zinc-plated.

Sample order:
K1040.1012

Note:
Self-tapping screw for end face core hole. Ideal for fastenings without an angle or additional connectors not exposed to high loads.



KIPP Central screw Type B

Order No.	Type	Slot width	D	SW
K1040.1012	B	10	S12	T50

Connecting sets universal

Type I



Material:

Connector die-cast zinc.
Screw and slot nuts steel.

Version:

Electro zinc-plated.

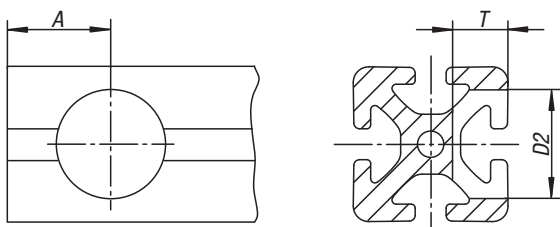
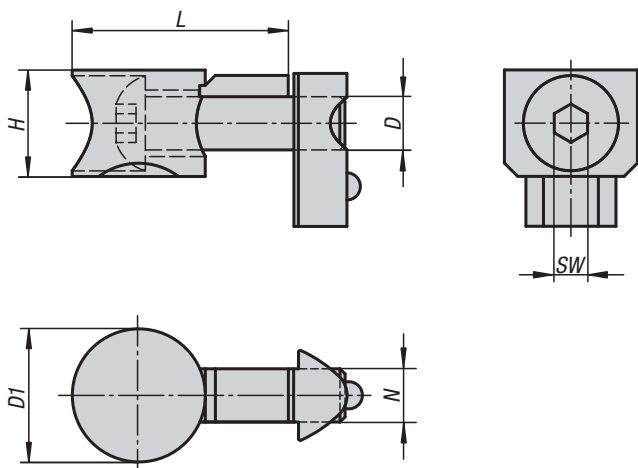
Sample order:

K1032.06

Note:

The connecting sets are used for connecting two aluminium profiles at right angles. They allow a free positioning of profiles. The connection is non-rotating (the rotation lock can be broken off). For larger profiles several connecting sets can be mounted on the end for greater strength. Retrofitting into existing constructions is possible.

Low workload. The connecting set requires only one hole drilled in one end.



KIPP Connecting sets universal Type I

Order No.	Type	Slot width	D	D1	H	L	N	SW	A	D2	T
K1032.06	I	6	M6	16	12,5	25,2	6,2	4	15	16	12,7
K1032.08	I	8	M8	20	16	33,5	8	5	20	20	16

Connecting sets central

Type I



Material:
Steel.

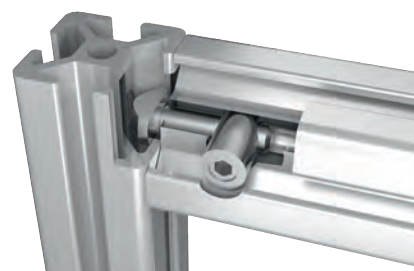
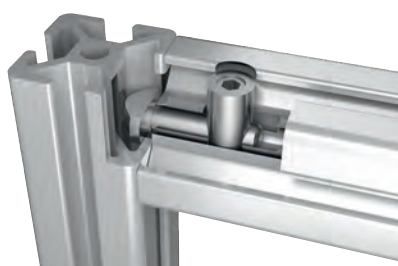
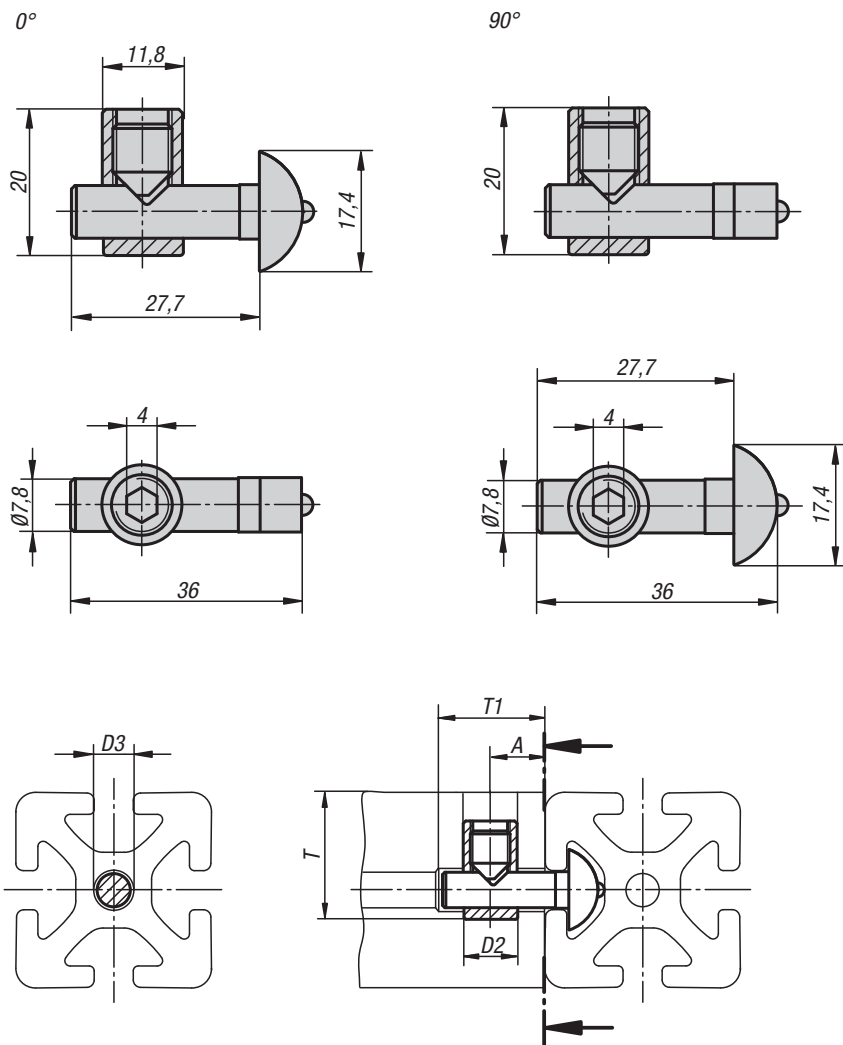
Version:
Electro zinc-plated.

Sample order:
K1033.0800

Note:
The connecting sets are used to connect two aluminium profiles at right angles. They allow free position of the profiles. The profile slots positioned at right-angles to each other remain free. Panel elements can be positioned in the profile grooves without additional machining.

Due to the reduced clamping force and omitted rotation locks, these connecting sets should only be used in combination with panel elements and lightly loaded constructions.

Low workload. To assemble a hole must be drilled into one of the profiles and the core hole must be drilled out.



KIPP Connecting sets central Type I

Order No.	Type	Slot width	Version	A	D2	D3	T	T1
K1033.0800	I	8	0°	15	12	8	28	28
K1033.0890	I	8	90°	15	12	8	28	28

Connecting sets central

Type B



Material:
Steel.

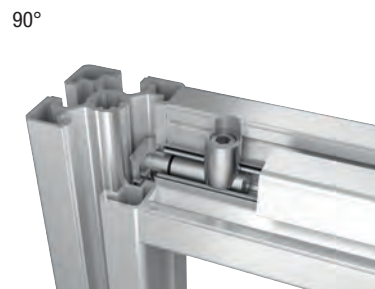
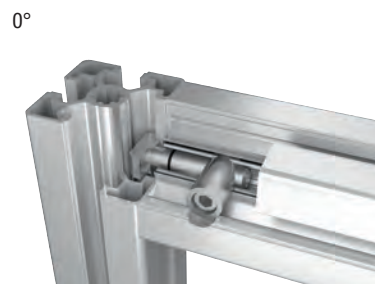
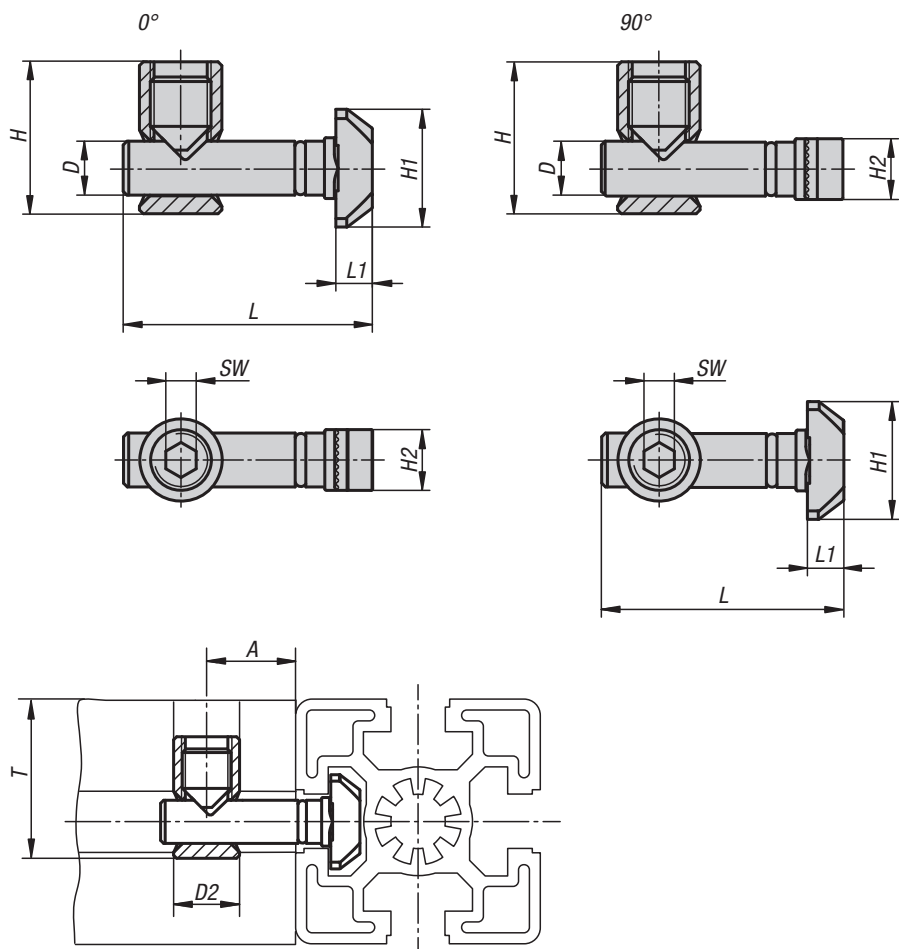
Version:
Electro zinc-plated.

Sample order:
K1034.1000

Note:
The connecting sets are used to connect two aluminium profiles at right angles. They allow free position of the profiles. The profile slots positioned at right-angles to each other remain free. Panel elements can be positioned in the profile slots without additional machining.

Due to the reduced clamping force and omitted rotation locks, these connecting sets should only be used in combination with panel elements and lightly loaded constructions.

Low workload. To assemble a hole must be drilled into one of the profiles. The D2 hole can also be drilled through.

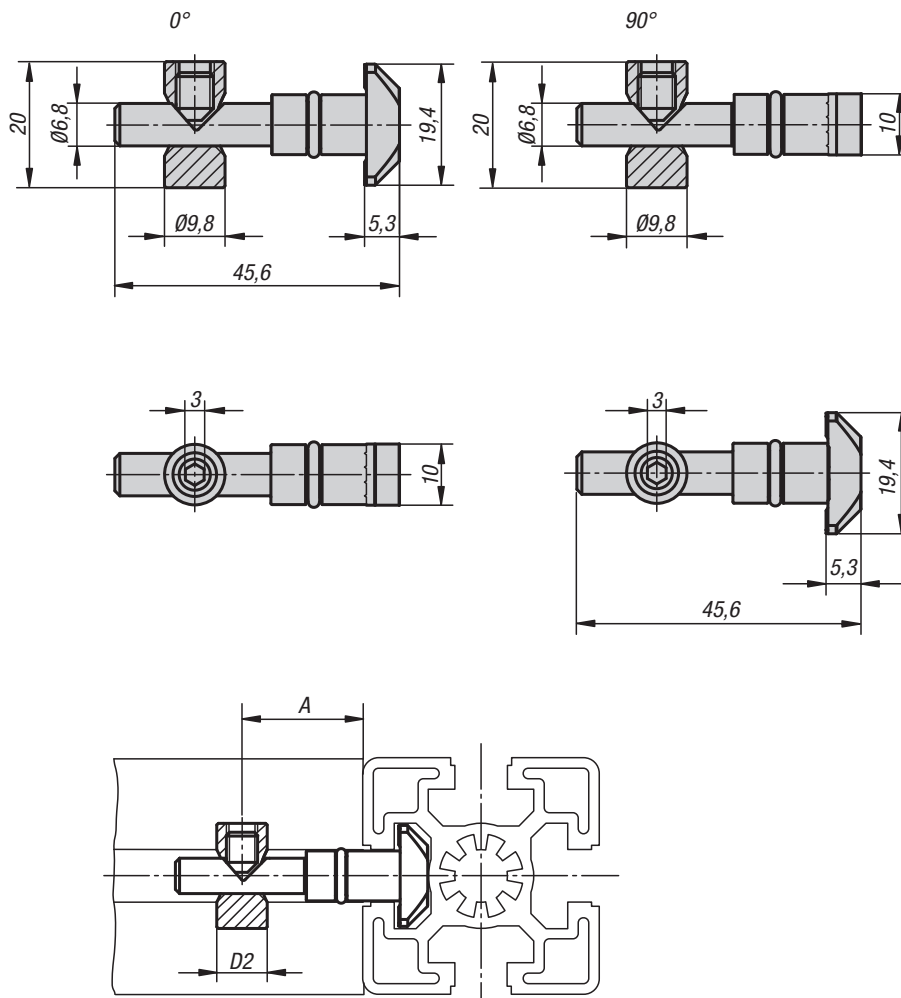


KIPP Connecting sets central Type B

Order No.	Type	Slot width	Version	A	D	D2	H	H1	H2	L	L1	SW	T for profile 30	T for profile 40	T for profile 45	T for profile 50	T for profile 60
K1034.0800	B	8	0°	18	7,1	11	20	15,5	8	33	4,8	4	22	-	-	-	-
K1034.0890	B	8	90°	18	7,1	11	20	15,5	8	33	4,8	4	22	-	-	-	-
K1034.1000	B	10	0°	22,5	9,7	17	28	19,5	10	45,5	5,5	6	-	31	34	36	41
K1034.1090	B	10	90°	22,5	9,7	17	28	19,5	10	45,5	5,5	6	-	31	34	36	41

Connecting sets central

Type B



Material:
Steel.

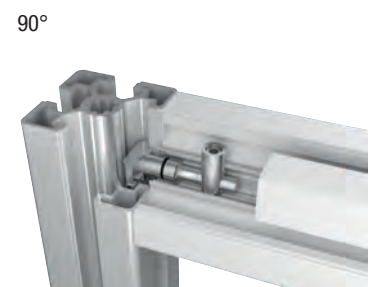
Version:
Electro zinc-plated.

Sample order:
K1035.1000

Note:
The connecting sets are used to connect two aluminium profiles at right angles. They allow free position of the profiles. The profile slots positioned at right-angles to each other remain free. Panel elements can be positioned in the profile slots without additional machining.

Due to the reduced clamping force and omitted rotation locks, these connecting sets should only be used in combination with panel elements and lightly loaded constructions.

Low workload. To assemble a hole must be drilled into one of the profiles. Due to the reduced pin diameter the slot is not damaged and can be completely covered with a cover profile.



KIPP Connecting sets central Type B

Order No.	Type	Slot width	Version	A	D2
K1035.1000	B	10	0°	22,5	9,8
K1035.1090	B	10	90°	22,5	9,8

Connecting sets automatic

Type I

**Material:**

Steel.

Version:

Electro zinc-plated.

Sample order:

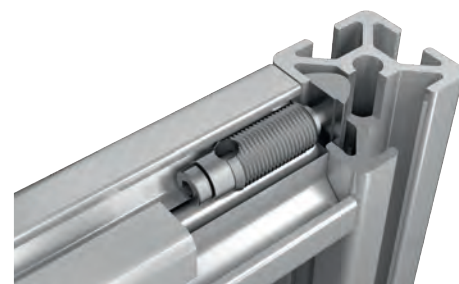
K1036.06

Note:

The connecting sets are used to connect two aluminium profiles at right angles. They allow free position of the profiles.

No profile machining is necessary. The connector is screwed into the profile slot from the front (left-hand thread). The connector has a self-tapping thread. The use of lubricants is recommended.

Connecting sets automatic should always be used opposite each other in pairs.

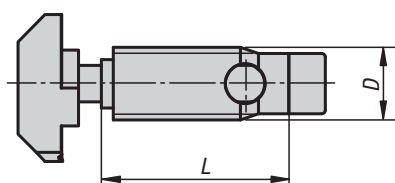
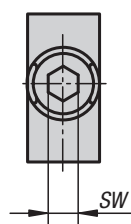


KIPP Connecting sets automatic Type I

Order No.	Type	Slot width	D	L	SW
K1036.06	I	6	10	27	4
K1036.08	I	8	12	31	5

Connecting sets automatic

Type B

**Material:**

Steel.

Version:

Electro zinc-plated.

Sample order:

K1037.1012

Note:

The connecting sets are used to connect two aluminium profiles at right angles. They allow free position of the profiles.

No profile machining is necessary. The connector is screwed into the profile slot from the front (left-hand thread). The connector has a self-tapping thread. The use of lubricants is recommended.

Connecting sets automatic should always be used opposite each other in pairs.



KIPP Connecting sets automatic Type B

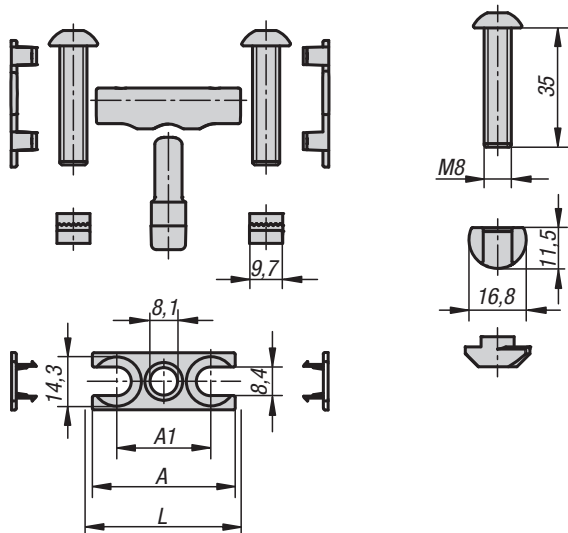
Order No.	Type	Slot width	D	L	SW
K1037.0810	B	8	10,7	24	4
K1037.1012	B	10	12	35	5
K1037.1013	B	10 light	13	35	5

Pin connector sets

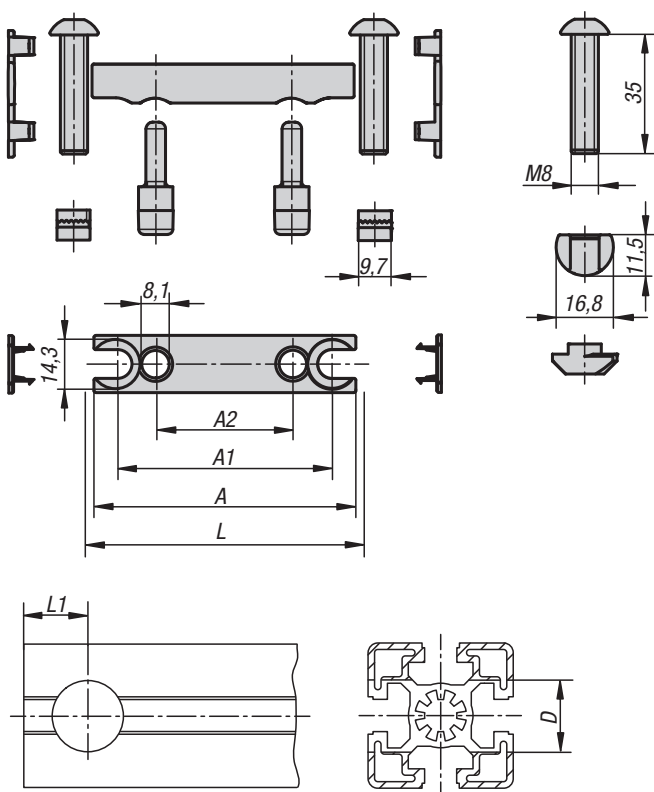
Type B



-1040 / -1045 / -1060



-1080 / -1090



Material:

Pins, screws and T-nuts steel.
Locating pin and end caps polyamide, fibreglass reinforced.

Version:

Pins, screws and T-nuts electro zinc-plated.
Locating pin and end caps black.

Sample order:

K1038.1040

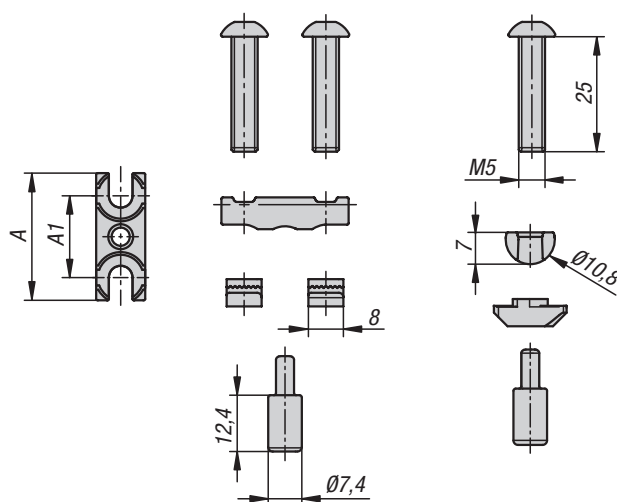
Note:

The connecting sets are used to connect two aluminium profiles at right angles. They allow free position of the profiles. Suitable for high loads and torsional forces.

Low processing workload. The connecting set requires only one Ø17 mm hole drilled in one end for installation.

The connecting set K1038.0828 requires only one Ø11 mm hole drilled in one end for installation.

-0828



KIPP Pin connector sets Type B

Order No.	Type	Slot width	A	A1	A2	D	L	L1
K1038.0828	B	8	28	18	-	11	-	18
K1038.1040	B	10	37	23	-	17	40	22,5
K1038.1045	B	10	42	28	-	17	45	22,5
K1038.1060	B	10	57	43	-	17	60	22,5
K1038.1080	B	10	77	63	40	17	80	22,5
K1038.1090	B	10	87	73	45	17	90	22,5

Cube connector sets

Type B



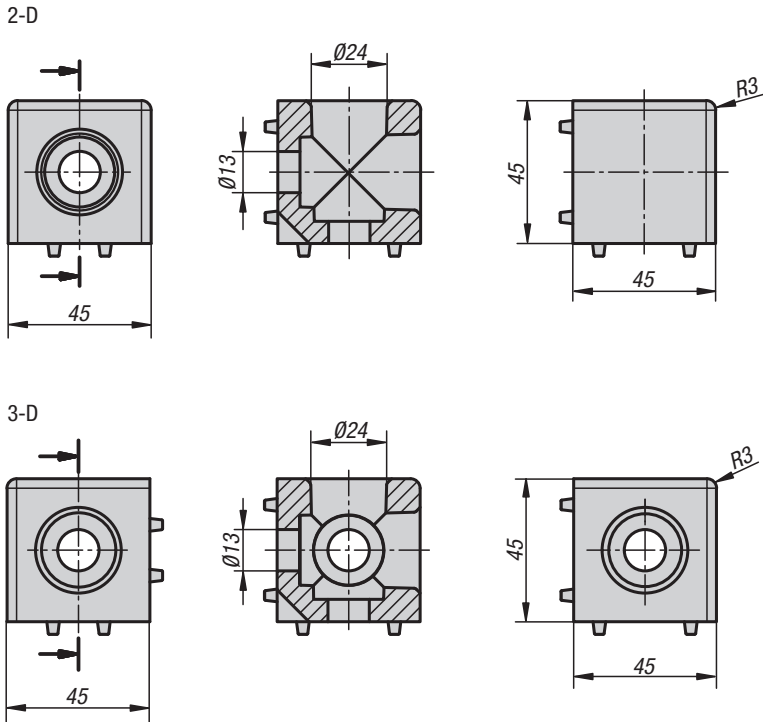
Material:
Cube die-cast aluminium.
Screws steel.
End caps polyamide.

Version:
Aluminium bright.
Screws with self-tapping thread.
End cap black.

Sample order:
K1039.102

Note:
The cube connector can be used to connect two or three profiles to each other by the end faces. The cube connectors have guide lugs that ensure a perfect and secure installation. Fastening to the profile is carried out by self-tapping screws. The open holes can be closed off with the end caps.

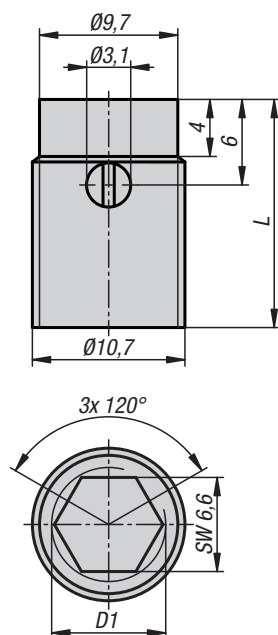
The profile slots positioned at right-angles to each other remain free. Panel elements can be positioned in the profile slots without additional machining.



KIPP Cube connector sets Type B

Order No.	Type	Slot width	Version
K1039.102	B	10	2-D
K1039.103	B	10	3-D

Threaded insert, steel, self-tapping, type B

**Material:**

Steel.

Version:

Steel, case hardened, electro zinc-plated.

Sample order:

K1538.08

Note:

Self-tapping threaded inserts for making high-strength, wear-free, vibration-resistant fastenings in aluminium profiles.

To reduce the thread size from M10 to M8.

Only suitable for aluminium profiles with a core hole diameter of 10 mm.

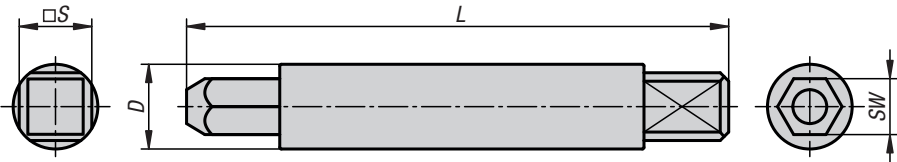
Accessories:

Assembly tool K1538.808.

KIPP Threaded insert, steel, self-tapping, type B

Order No.	D1	L length	for Art. No.
K1538.08	M8	16	K1538.808

Assembly tool, steel,
for self-tapping threaded inserts type B



Material:
Steel.

Version:
Manual assembly tool, electro zinc-plated.

Sample order:
K1538.808

Note:
Inserts are screwed in using this manual assembly tool together with a tap wrench, socket set, cordless screwdriver etc.



KIPP Assembly tool, steel, for self-tapping threaded inserts type B

Order No.	SW	L length	S	D
K1538.808	6,6	64	8	10

Butt connector sets automatic

Type I



Material:
Steel.

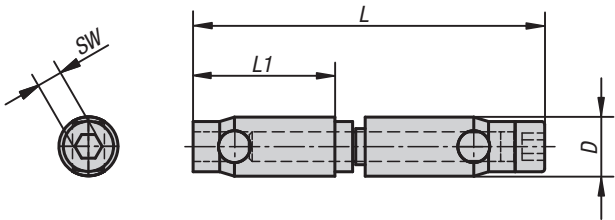
Version:
Electro zinc-plated.

Sample order:
K1041.06

Note:
The connecting sets are used to connect two aluminum profiles of the same series from the front.

No machining of the profile is necessary. The connector is screwed into the profile slot from the front (connector with through hole left-hand thread. Connector with internal thread right-hand thread). The connector has a self-tapping thread. The use of lubricants is recommended.

Automatic connecting sets should always be used in pairs. More pairs are required for large profiles and loads.



KIPP Butt connector sets, automatic, Type I

Order No.	Type	Slot width	D	L	L1	SW
K1041.06	I	6	10	60	24	4
K1041.08	I	8	12	69	27	5

Fastening sets

for straps and angles

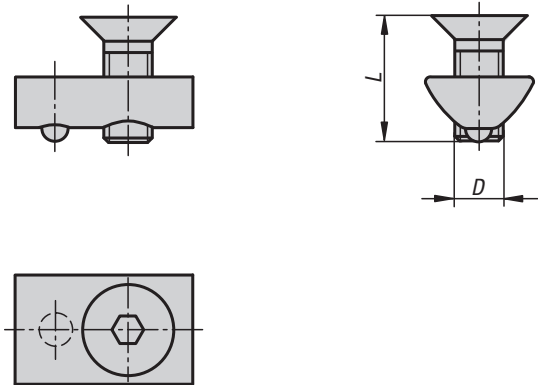


Material:
Steel.

Version:
Electro zinc-plated.

Sample order:
K1044.06

Note:
Consists of two DIN 7991 countersunk screws and two slot nuts.

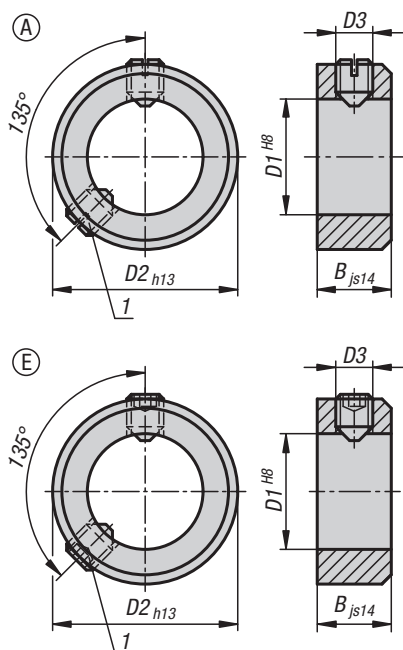


KIPP Fastening sets for straps and angles

Order No.	Type	Slot width	Version	D	L
K1044.06	I	6	Slot key without step	M6	10
K1044.08	I	8	Slot key without step	M8	14

Shaft collars set screw

DIN 705, steel



Material:
Steel.

Version:
Bright or trivalent blue passivated.

Sample order:
K0406.100301

Note:
Form A: with grub screw DIN 553 (recess)
Form E: with grub screw DIN 914 (hexagon socket)

Drawing reference:
1) Second grub screw from $D1 \geq 75$

KIPP Shaft collars set screw DIN 705, steel

Order No. Form A bright	Order No. Form E bright	Order No. Form E blue-passivated	D1	B	D2	D3 grub screw
K0406.100301	K0406.300301	K0406.300303	3	5	7	M2x3
K0406.100401	K0406.300401	K0406.300403	4	5	8	M2,5x3
K0406.100501	K0406.300501	K0406.300503	5	6	10	M3x4
K0406.100601	K0406.300601	K0406.300603	6	8	12	M4x5
K0406.100701	K0406.300701	K0406.300703	7	8	12	M4x5
K0406.100801	K0406.300801	K0406.300803	8	8	16	M4x6
K0406.100901	K0406.300901	K0406.300903	9	10	18	M5x8
K0406.101001	K0406.301001	K0406.301003	10	10	20	M5x8
K0406.101101	K0406.301101	K0406.301103	11	10	20	M5x8
K0406.101201	K0406.301201	K0406.301203	12	12	22	M6x8
K0406.101401	K0406.301401	K0406.301403	14	12	25	M6x8
K0406.101501	K0406.301501	K0406.301503	15	12	25	M6x8
K0406.101601	K0406.301601	K0406.301603	16	12	28	M6x8
K0406.101801	K0406.301801	K0406.301803	18	14	32	M6x8
K0406.102001	K0406.302001	K0406.302003	20	14	32	M6x8

Shaft collars set screw

DIN 705, steel



Order No. Form A bright	Order No. Form E bright	Order No. Form E blue-passivated	D1	B	D2	D3 grub screw
K0406.102401	K0406.302401	K0406.302403	24	16	40	M8x12
K0406.102501	K0406.302501	K0406.302503	25	16	40	M8x10
K0406.102601	K0406.302601	K0406.302603	26	16	40	M8x10
K0406.102801	K0406.302801	K0406.302803	28	16	45	M8x12
K0406.103001	K0406.303001	K0406.303003	30	16	45	M8x10
K0406.103201	K0406.303201	K0406.303203	32	16	50	M8x12
K0406.103501	K0406.303501	K0406.303503	35	16	56	M8x12
K0406.103601	K0406.303601	K0406.303603	36	16	56	M8x12
K0406.103801	K0406.303801	K0406.303803	38	16	56	M8x12
K0406.104001	K0406.304001	K0406.304003	40	18	63	M10x16
K0406.104201	K0406.304201	K0406.304203	42	18	63	M10x16
K0406.104501	K0406.304501	K0406.304503	45	18	70	M10x16
K0406.104801	K0406.304801	K0406.304803	48	18	70	M10x16
K0406.105001	K0406.305001	K0406.305003	50	18	80	M10x16
K0406.105201	K0406.305201	K0406.305203	52	18	80	M10x16
K0406.105501	K0406.305501	K0406.305503	55	18	80	M10x16
K0406.105601	K0406.305601	K0406.305603	56	18	80	M10x16
K0406.105801	K0406.305801	K0406.305803	58	20	90	M10x16
K0406.106001	K0406.306001	K0406.306003	60	20	90	M10x16
K0406.106301	K0406.306301	K0406.306303	63	20	90	M10x16
K0406.106501	K0406.306501	K0406.306503	65	20	100	M10x20
K0406.106801	K0406.306801	K0406.306803	68	20	100	M10x20
K0406.107001	K0406.307001	K0406.307003	70	20	100	M10x20
K0406.107201	K0406.307201	K0406.307203	72	20	100	M10x20
K0406.107501	K0406.307501	K0406.307503	75	22	110	M12x20
K0406.108001	K0406.308001	K0406.308003	80	22	110	M12x20
K0406.108501	K0406.308501	K0406.308503	85	22	125	M12x25
K0406.109001	K0406.309001	K0406.309003	90	22	125	M12x20
K0406.110001	K0406.310001	K0406.310003	100	25	140	M12x25



Shaft collars set screw

DIN 705, stainless steel



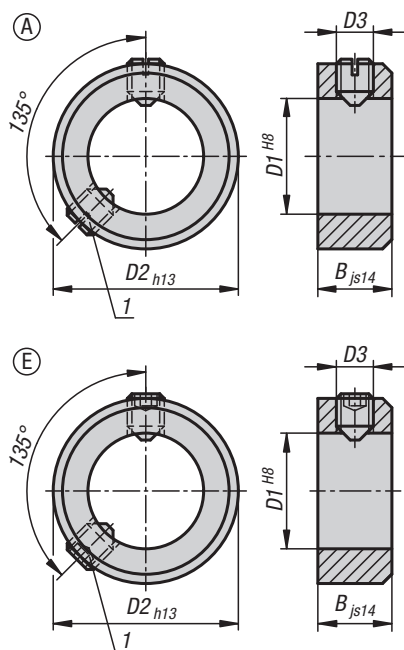
Material:
Stainless steel 1.4305.

Version:
Bright.

Sample order:
K0406.100302

Note:
Form A: with grub screw DIN 553 (recess)
Form E: with grub screw DIN 914 (hexagon socket)

Drawing reference:
1) Second grub screw from $D1 \geq 75$



KIPP Shaft collars set screw DIN 705, stainless steel

Order No. Form A	Order No. Form E	D1	B	D2	D3 grub screw
K0406.100302	K0406.300302	3	5	7	M2x3
K0406.100402	K0406.300402	4	5	8	M2,5x3
K0406.100502	K0406.300502	5	6	10	M3x4
K0406.100602	K0406.300602	6	8	12	M4x5
K0406.100702	K0406.300702	7	8	12	M4x5
K0406.100802	K0406.300802	8	8	16	M4x6
K0406.100902	K0406.300902	9	10	18	M5x8
K0406.101002	K0406.301002	10	10	20	M5x8
K0406.101102	K0406.301102	11	10	20	M5x8
K0406.101202	K0406.301202	12	12	22	M6x8
K0406.101402	K0406.301402	14	12	25	M6x8
K0406.101502	K0406.301502	15	12	25	M6x8
K0406.101602	K0406.301602	16	12	28	M6x8
K0406.101802	K0406.301802	18	14	32	M6x8
K0406.102002	K0406.302002	20	14	32	M6x8

Shaft collars set screw

DIN 705, stainless steel



Order No. Form A	Order No. Form E	D1	B	D2	D3 grub screw
K0406.102402	K0406.302402	24	16	40	M8x12
K0406.102502	K0406.302502	25	16	40	M8x10
K0406.102602	K0406.302602	26	16	40	M8x10
K0406.102802	K0406.302802	28	16	45	M8x12
K0406.103002	K0406.303002	30	16	45	M8x10
K0406.103202	K0406.303202	32	16	50	M8x12
K0406.103502	K0406.303502	35	16	56	M8x12
K0406.103602	K0406.303602	36	16	56	M8x12
K0406.103802	K0406.303802	38	16	56	M8x12
K0406.104002	K0406.304002	40	18	63	M10x16
K0406.104202	K0406.304202	42	18	63	M10x16
K0406.104502	K0406.304502	45	18	70	M10x16
K0406.104802	K0406.304802	48	18	70	M10x16
K0406.105002	K0406.305002	50	18	80	M10x16
K0406.105202	K0406.305202	52	18	80	M10x16
K0406.105502	K0406.305502	55	18	80	M10x16
K0406.105602	K0406.305602	56	18	80	M10x16
K0406.105802	K0406.305802	58	20	90	M10x16
K0406.106002	K0406.306002	60	20	90	M10x16
K0406.106302	K0406.306302	63	20	90	M10x16
K0406.106502	K0406.306502	65	20	100	M10x20
K0406.106802	K0406.306802	68	20	100	M10x20
K0406.107002	K0406.307002	70	20	100	M10x20
K0406.107202	K0406.307202	72	20	100	M10x20
K0406.107502	K0406.307502	75	22	110	M12x20
K0406.108002	K0406.308002	80	22	110	M12x20
K0406.108502	K0406.308502	85	22	125	M12x25
K0406.109002	K0406.309002	90	22	125	M12x20
K0406.110002	K0406.310002	100	25	140	M12x25



Shaft collars with wing grip

similar to DIN 705, steel



Material:

Shaft collar steel.
Wing grip thermoplastic.
Threaded pin steel grade 5.8.

Version:

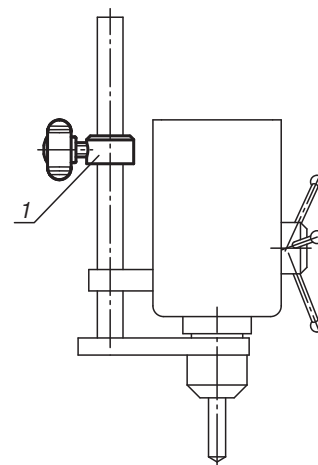
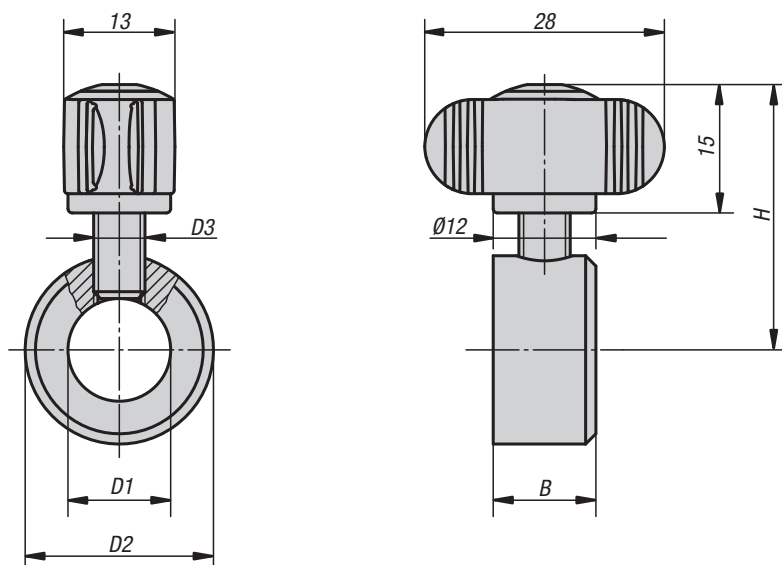
Shaft collar bright.
Wing grip black grey.
Screw blue passivated.

Sample order:

K0407.100601

Drawing reference:

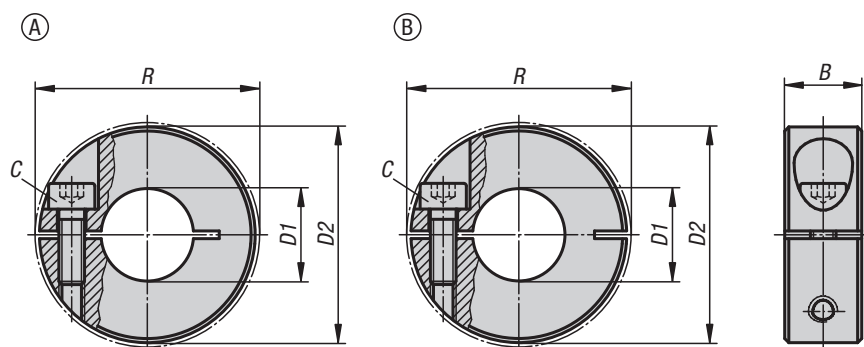
1) variable stop



KIPP Shaft collars with wing grip similar to DIN 705, steel

Order No.	B	D1	D2	D3	H
K0407.100601	8	6	12	M4	26
K0407.100801	8	8	16	M4	27
K0407.101001	10	10	20	M5	30
K0407.101201	12	12	22	M6	31
K0407.101601	12	16	28	M6	33
K0407.102001	14	20	32	M6	35
K0407.102501	16	25	40	M8	37,5
K0407.103201	16	32	50	M8	46

Shaft collars one-piece


Material:

Steel 1.0718
Stainless steel 1.4305.
Aluminium.

Version:

Steel black oxidised, screw steel 12.9.
Stainless steel bright, screw stainless steel A2-70.
Aluminium bright, screw stainless steel A2-70.

Sample order:

K0611.01001

Note:

One-piece shaft collars surround the shaft with a uniformly distributed clamping force. This leads to a dimensionally precise fit and very high retaining forces without damaging the shaft.

The shaft tolerance should lie within h11.

Form A: Standard shaft collar.

Form B: Shaft collar with a ca. 15% higher clamping force than the standard version by the same tightening torque on the locking screw. The bore remains cylindrical which means that the shaft is precisely enclosed. Less imbalance.

Temperature range:

-40 °C to +175 °C.

On request:

Other dimensions.

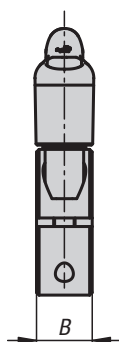
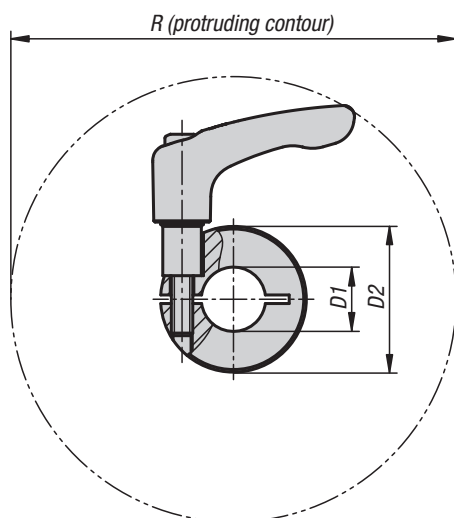
KIPP Shaft collars one-piece

Order No. steel	Order No. stainless steel	Order No. aluminium	Form	B	C (DIN 912)	D1	D2	R
K0611.00401	K0611.00402	K0611.00403	A	9	M3x8	4	16	20,7
K0611.00501	K0611.00502	K0611.00503	A	9	M3x8	5	16	20,7
K0611.00601	K0611.00602	K0611.00603	A	9	M3x8	6	16	20,7
K0611.00801	K0611.00802	K0611.00803	A	9	M3x8	8	18	22,4
K0611.01001	K0611.01002	K0611.01003	A	9	M3x10	10	24	26
K0611.01201	K0611.01202	K0611.01203	A	11	M4x12	12	28	31,8
K0611.01501	K0611.01502	K0611.01503	A	13	M5x16	15	34	39,4
K0611.01601	K0611.01602	K0611.01603	A	13	M5x16	16	34	39,4
K0611.01801	K0611.01802	K0611.01803	A	13	M5x16	18	36	41,1
K0611.02001	K0611.02002	K0611.02003	A	15	M6x18	20	40	46,4
K0611.02201	K0611.02202	K0611.02203	A	15	M6x18	22	42	48,1
K0611.02501	K0611.02502	K0611.02503	A	15	M6x18	25	45	50,8
K0611.02801	K0611.02802	K0611.02803	A	15	M6x18	28	48	53,7
K0611.03001	K0611.03002	K0611.03003	A	15	M6x18	30	54	58,6
K0611.04001	K0611.04002	K0611.04003	A	15	M6x18	40	60	65
K0611.05001	K0611.05002	K0611.05003	A	19	M8x25	50	78	87
K0611.100401	K0611.100402	K0611.100403	B	9	M3x8	4	16	20,7
K0611.100501	K0611.100502	K0611.100503	B	9	M3x8	5	16	20,7
K0611.100601	K0611.100602	K0611.100603	B	9	M3x8	6	16	20,7
K0611.100801	K0611.100802	K0611.100803	B	9	M3x8	8	18	22,4
K0611.101001	K0611.101002	K0611.101003	B	9	M3x10	10	24	26
K0611.101201	K0611.101202	K0611.101203	B	11	M4x12	12	28	31,8
K0611.101501	K0611.101502	K0611.101503	B	13	M5x16	15	34	39,4
K0611.101601	K0611.101602	K0611.101603	B	13	M5x16	16	34	39,4
K0611.101801	K0611.101802	K0611.101803	B	13	M5x16	18	36	41,1
K0611.102001	K0611.102002	K0611.102003	B	15	M6x18	20	40	46,4
K0611.102201	K0611.102202	K0611.102203	B	15	M6x18	22	42	48,1
K0611.102501	K0611.102502	K0611.102503	B	15	M6x18	25	45	50,8
K0611.102801	K0611.102802	K0611.102803	B	15	M6x18	28	48	53,7
K0611.103001	K0611.103002	K0611.103003	B	15	M6x18	30	54	58,6
K0611.104001	K0611.104002	K0611.104003	B	15	M6x18	40	60	65
K0611.105001	K0611.105002	K0611.105003	B	19	M8x25	50	78	87



Shaft collars

one-piece, with clamping lever



Material:

Steel 1.0718.
Stainless steel 1.4305.

Version:

Steel black oxidised.
Stainless steel bright.
Insert stainless-steel.

Sample order:

K0611.11001

Note:

One-piece shaft collars surround the shaft with an equal distribution of the clamping force. This leads to a very precise fit and high retaining force without damaging the shaft.

The shaft tolerance should lie within h11.

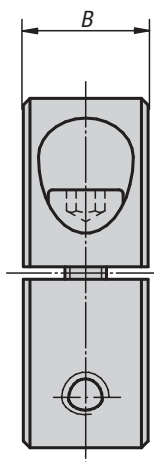
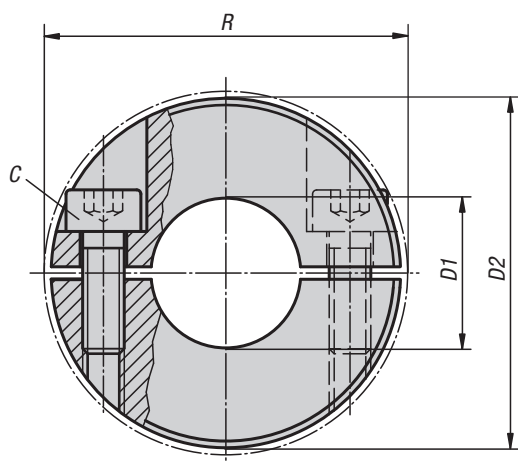
On request:

Other dimensions.

KIPP Shaft collars, one-piece, with clamping lever

Order No. steel	Order No. stainless steel	B	D1	D2	R
K0611.11001	K0611.11002	9	10	24	44,1
K0611.11201	K0611.11202	11	12	28	90,4
K0611.11501	K0611.11502	13	15	34	105
K0611.11601	K0611.11602	13	16	34	105
K0611.11801	K0611.11802	13	18	36	105,7
K0611.12001	K0611.12002	15	20	40	103,8
K0611.12201	K0611.12202	15	22	42	104,2
K0611.12501	K0611.12502	15	25	45	104,8
K0611.12801	K0611.12802	15	28	48	106,8
K0611.13001	K0611.13002	15	30	54	112,6
K0611.14001	K0611.14002	15	40	60	113,2
K0611.15001	K0611.15002	19	50	78	150,2

Shaft collars two-piece

**Material:**

Steel 1.0718
Stainless steel 1.4305.
Aluminium.

Version:

Steel black oxidised, screw steel 12.9.
Stainless steel bright, screw stainless steel A2-70.
Aluminium bright, screw stainless steel A2-70.

Sample order:

K0612.01001

Note:

Two-piece shaft collars surround the shaft with a uniformly distributed clamping force. This leads to a dimensionally precise fit and very high retaining forces without damaging the shaft.

The shaft tolerance should lie within h11.

Two-piece shaft collars can be quickly and easily mounted or removed without dismantling other components.

Temperature range:

-40 °C to +175 °C.

On request:

Other dimensions.

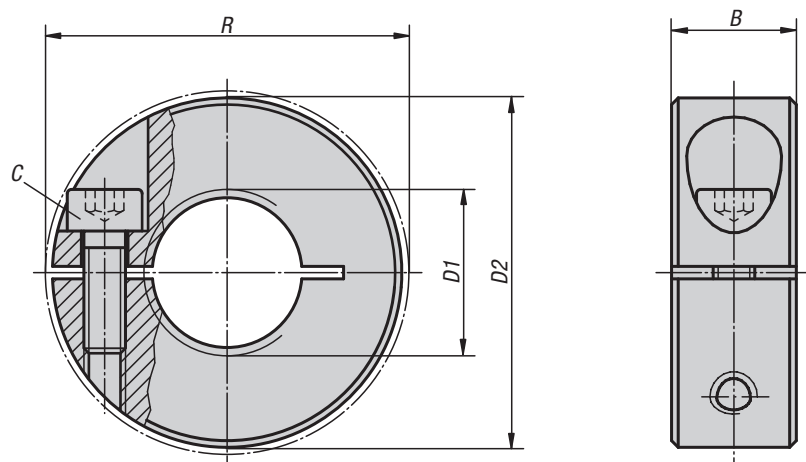
KIPP Shaft collars two-piece

Order No. steel	Order No. stainless steel	Order No. aluminium	B	C (DIN 912)	D1	D2	R
K0612.00401	K0612.00402	K0612.00403	9	M3x8	4	16	20,7
K0612.00501	K0612.00502	K0612.00503	9	M3x8	5	16	20,7
K0612.00601	K0612.00602	K0612.00603	9	M3x8	6	16	20,7
K0612.00801	K0612.00802	K0612.00803	9	M3x8	8	18	22,4
K0612.01001	K0612.01002	K0612.01003	9	M3x10	10	24	26
K0612.01201	K0612.01202	K0612.01203	11	M4x12	12	28	31,8
K0612.01501	K0612.01502	K0612.01503	13	M5x16	15	34	39,4
K0612.01601	K0612.01602	K0612.01603	13	M5x16	16	34	39,4
K0612.01801	K0612.01802	K0612.01803	13	M5x16	18	36	41,1
K0612.02001	K0612.02002	K0612.02003	15	M6x18	20	40	46,4
K0612.02201	K0612.02202	K0612.02203	15	M6x18	22	42	48,1
K0612.02501	K0612.02502	K0612.02503	15	M6x18	25	45	50,8
K0612.02801	K0612.02802	K0612.02803	15	M6x18	28	48	53,7
K0612.03001	K0612.03002	K0612.03003	15	M6x18	30	54	58,6
K0612.04001	K0612.04002	K0612.04003	15	M6x18	40	60	65
K0612.05001	K0612.05002	K0612.05003	19	M8x25	50	78	87



Shaft collars

tapped

**Material:**

Steel 1.0718.
Stainless steel 1.4305.

Version:

Steel black oxidised.
Screw 12.9 steel.
Stainless steel bright.
Screw A2-70 stainless steel.

Sample order:

K0986.0601

Note:

Shaft collars with thread surround the shaft with an equal distribution of clamping forces.
The shaft collars can be used on threaded rods or shafts with a thread tolerance of 6g.

Temperature range:

-40 °C to +175 °C.

KIPP Shaft collars tapped

Order No. steel	Order No. stainless steel	B	C	D1	D2	R
K0986.0401	K0986.0402	9	M3x8	M4	16	20,7
K0986.0501	K0986.0502	9	M3x8	M5	16	20,7
K0986.0601	K0986.0602	9	M3x8	M6	16	20,7
K0986.0801	K0986.0802	9	M3x8	M8	18	22,4
K0986.1001	K0986.1002	9	M3x10	M10	24	26
K0986.1201	K0986.1202	11	M4x12	M12	28	31,8
K0986.1601	K0986.1602	13	M5x16	M16	34	39,4
K0986.2001	K0986.2002	15	M6x18	M20	40	46,4

Clamp hubs

**Material:**

Carbon steel 1.1206.

Version:

Black oxidised.

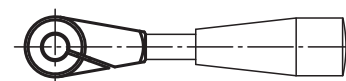
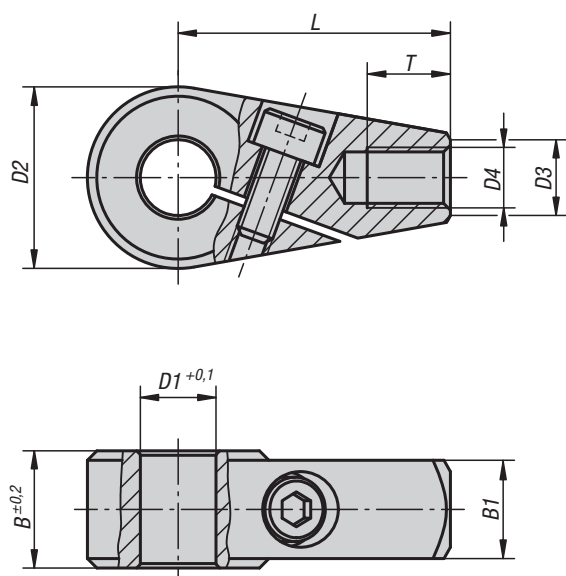
Sample order:

K0376.1012

Note:

Clamp hubs can be quickly and easily attached to shafts, adjusted in the proper operating position and then locked. For secure transmission of torque, shaft tolerance should not exceed h11.

At fastening thread (D2), handles can be screwed on.

**KIPP Clamp hubs**

Order No.	D1	D2	D3	D4	B	B1	L	T
K0376.0810	10	24	10	M8	15,5	13	36	11
K0376.0812	12	24	10	M8	15,5	13	36	11
K0376.1012	12	28	12	M10	17,5	15	41	14
K0376.1014	14	28	12	M10	17,5	15	41	14
K0376.1214	14	32	14	M12	19,5	17	45	16
K0376.1216	16	32	14	M12	19,5	17	45	16

Clevis

with external thread

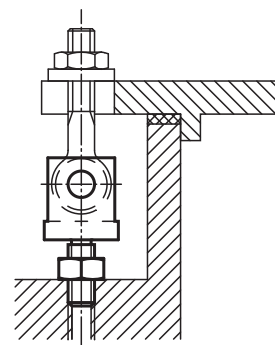
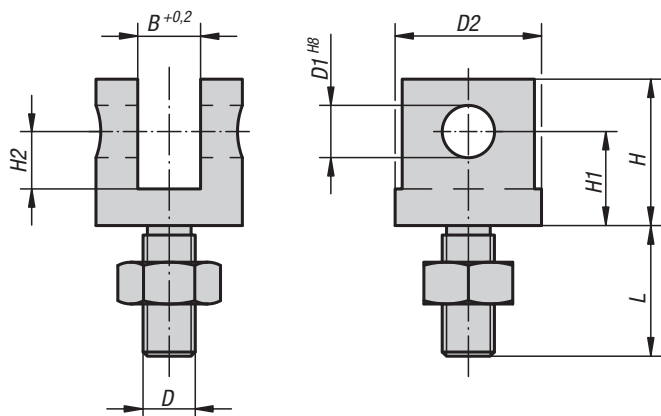


Material:
Carbon steel 1.1191

Version:
Tempered and black oxidised.

Sample order:
K0397.05

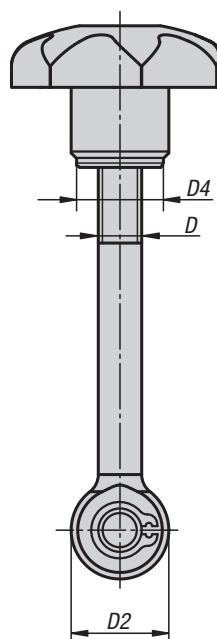
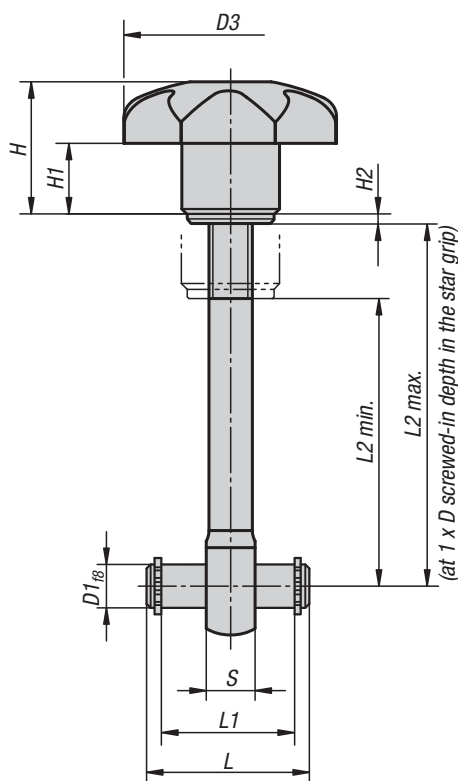
Note:
Suitable clevis pin see K0007.



KIPP Clevis with external thread

Order No.	D	D1	D2	B	H	H1	H2	L
K0397.05	M5	5	12	6	16	10	7	14,5
K0397.06	M6	6	16	7	19	12	8	15
K0397.08	M8	8	20	9	23	15	10	20
K0397.10	M10	10	28	12	28	18	11	25
K0397.12	M12	12	30	14	34	21	13,5	30
K0397.14	M14	14	36	16	37	23	15	35
K0397.16	M16	16	40	17	42	26	17	40
K0397.20	M20	18	50	22	52	32	21	50

Swing screws



Material:

Star grip thermoplastic.

Bush steel.

Washer steel 140 HV.

Eye bolt steel grade 8.8.

Hinge pin steel 1.1181.

Version:

Star grip black.

Bush trivalent blue passivated

Washer bright.

Eye bolt black oxidised.

Hinge pins tempered, ground and bright.

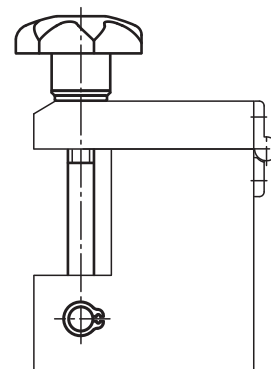
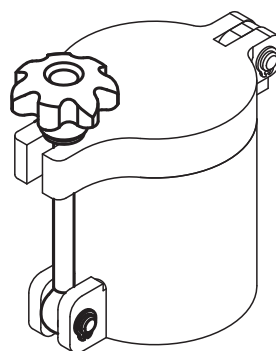
Sample order:

K0053.06050

Note:

The swing screws are supplied unassembled.

Suitable circlips are enclosed.



KIPP Swing screws

Order No.	D	D1	D2	D3	D4	H	H1	H2	L	L1	L2 min.	L2 max.	S
K0053.06050	M6	6	14	32	12	20	10	1,6	22	17	32	44	7
K0053.06075	M6	6	14	32	12	20	10	1,6	22	17	57	69	7
K0053.08050	M8	8	18	40	16	24	13	1,6	30	25	28	42	9
K0053.08075	M8	8	18	40	16	24	13	1,6	30	25	53	67	9
K0053.10075	M10	10	20	50	20	31	17	2	37	32	49	65	12
K0053.10100	M10	10	20	50	20	31	17	2	37	32	74	90	12

Clamping joints



Material:

Clamping lever:
Handle fibreglass reinforced thermoplastic, black grey.
Steel parts:
grade 5.8.
Remaining components:
high-strength aluminium.

Version:

Steel parts black oxidised.
Aluminium nickel silver anodised.

Sample order:

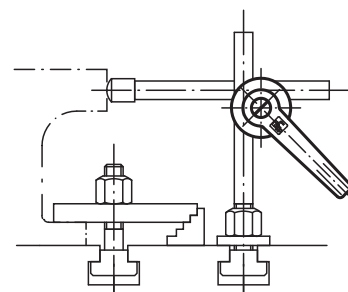
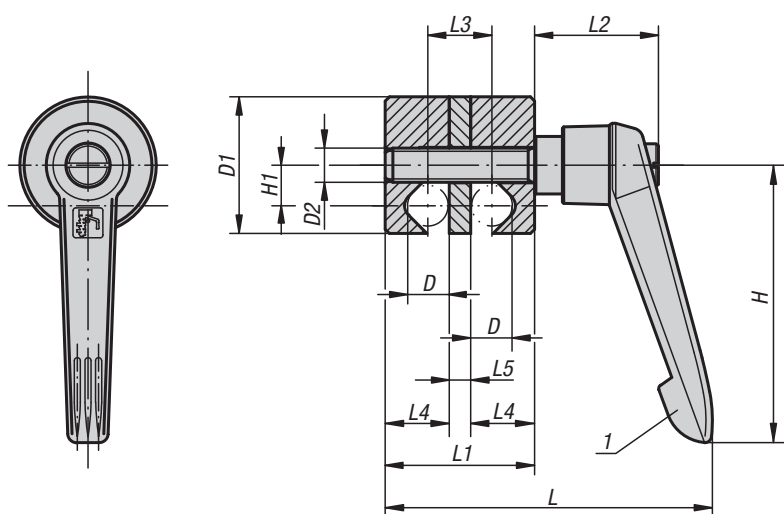
K0133.03

Note:

Clamping joints are used to clamp round cross sections (bars, tubes, etc.) and are infinitely adjustable.
The simple design together with the adjustable clamping lever permits rapid clamping.

Drawing reference:

1) Clamping lever

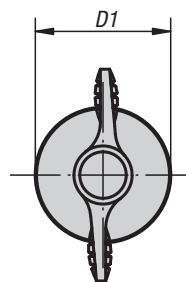
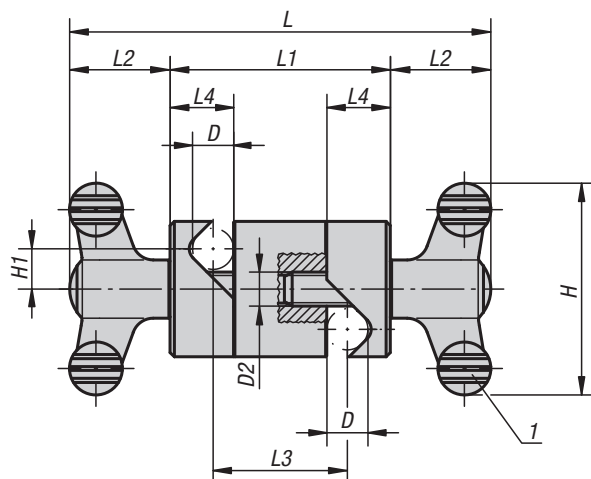


KIPP Clamping joints

Order No.	D	D1	D2	H	H1	L	L1	L2	L3	L4	L5
K0133.01	8	28	M8	65	8,5	72	31	29	13	13	5
K0133.02	10	32	M8	65	9,5	76	35	29	15	15	5
K0133.03	12	36	M8	65	10,5	81	40	29	18	17	6
K0133.04	16	45	M10	80	13,5	103	50	37,5	22	22	6
K0133.05	20	74	M10	95	22	131	70	42,5	30	30	10

Clamping joints

individually adjustable



Material:

Wing grip:
grip black grey thermoplastic.
Screw steel 5.8.
Remaining components:
high-strength aluminium.

Version:

Steel parts trivalent blue-passivated.
Aluminium nickel silver anodised.

Sample order:

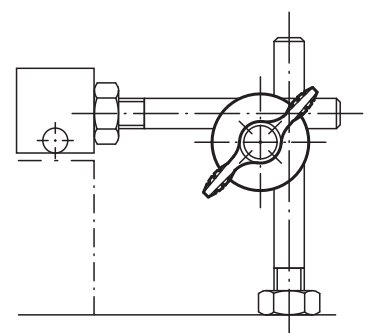
K0134.02

Note:

Clamping joints are used to clamp round cross sections (bars, tubes, etc.) and are individually and infinitely adjustable.
The simple design together with the wing grip permits rapid clamping.

Drawing reference:

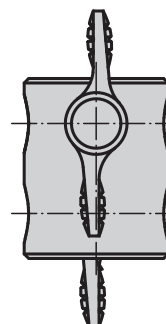
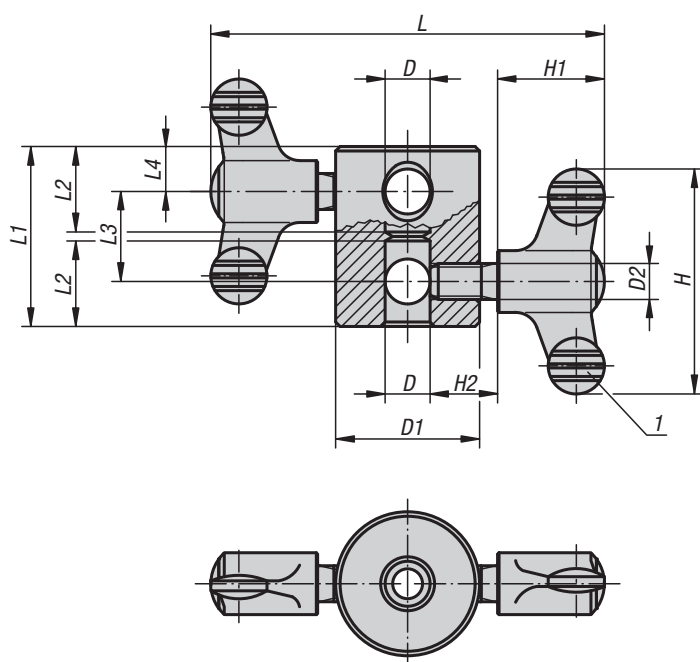
1) wing grip



KIPP Clamping joints individually adjustable

Order No.	D	D1	D2	H	H1	L	L1	L2	L3	L4
K0134.01	8	28	M8	50	8,5	90	42	24	24	13
K0134.02	10	32	M8	50	9,5	100	52	24	32	15
K0134.03	12	36	M8	50	10,5	104	56	24	34	17
K0134.04	16	45	M10	75	13,5	143,2	72	35,6	44	22
K0134.05	20	74	M10	75	22	173,2	102	35,6	62	30

Multiple connectors


Material:

Wing grip:
grip black grey thermoplastic.
Screw steel 5.8.
Body:
high-strength aluminium.

Version:

Steel parts trivalent blue-passivated.
Aluminium nickel silver anodised.

Sample order:

K0135.04

Note:

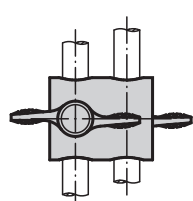
Multiple connectors are used to extend round cross sections (bars, tubes, etc.) in a coaxial or parallel arrangement.

By a parallel arrangement, a strengthening or stiffening of the construction can be achieved. The bore system in the body also allows for the production of right-angled connections.

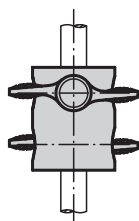
Drawing reference:

1) wing grip

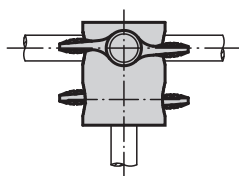
Arrangement:



parallel



coaxial

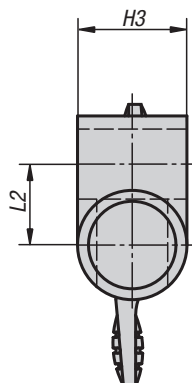
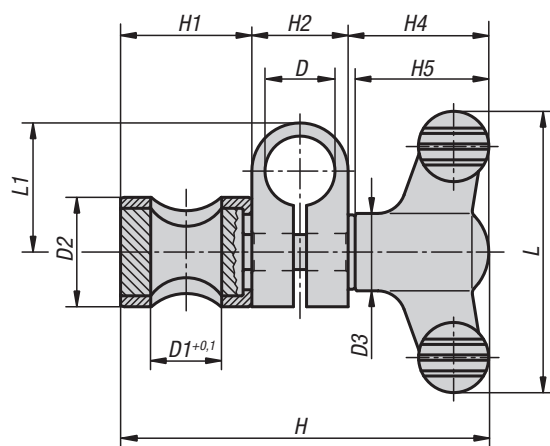


right-angled

KIPP Multiple connectors

Order No.	D	D1	D2	H	H1	H2	L	L1	L2	L3	L4
K0135.01	8	28	M8	50	24	15	86	36	17	20	8
K0135.02	10	32	M8	50	24	15	88	40	19	20	10
K0135.03	12	36	M8	50	24	15	90	44	21	20	12
K0135.04	16	45	M10	75	35,6	20	127,2	56	27	24	16

Clamping joints



Material:

Sleeve and pin steel.
Clamp block high-strength aluminium.
Wing grip black grey thermoplastic.

Version:

Sleeve and pin high-gloss chromed.
Clamp block black anodised.

Sample order:

K0136.1616

Note:

Infinitely adjustable.
Wing grip for rapid clamping.

On request:

Different combinations diameters D and D1.

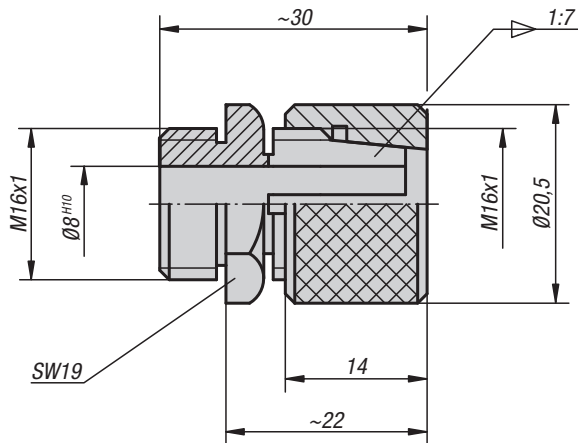
KIPP Clamping joints

Order No.	Size	D	D1	D2	D3	H	H1	H2	H3	H4	H5	L	L1	L2
K0136.0606	1	6	6	14	12	43,6	15	9	14	19,6	18	38	13	8,5
K0136.0808	2	8	8	16	14	54,6	17	12	16	25,6	24	50	18	12
K0136.1010	3	10	10	18	14	60,6	20	15	18	25,6	24	50	22	14,5
K0136.1212	4	12	12	20	21	77,2	23	17	20	37,2	35,6	75	24	15,5
K0136.1616	5	16	16	25	21	90,2	31	22	25	37,2	35,6	75	29,5	18,5
K0136.2020	6	20	20	30	21	98,2	36	25	30	37,2	35,6	75	30	17,5



Dial gauge collets

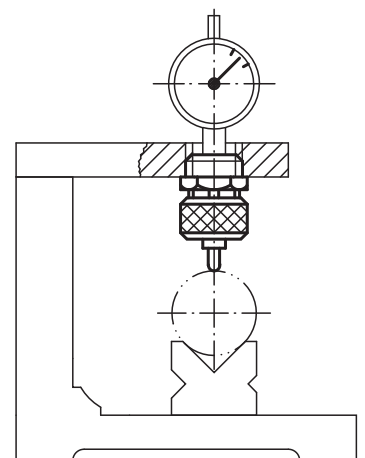
for Ø8 shafts



Material:
Carbon steel.

Version:
Black oxidised.
Collet tempered.

Sample order:
K0629.08



KIPP Dial gauge collets for Ø8 shafts

Order No.

Dimensions

K0629.08

see drawing

Technical information for sliding clamps K1070 and K1072



Note:

The items are used as movable clamping elements on applications such as measuring scales.

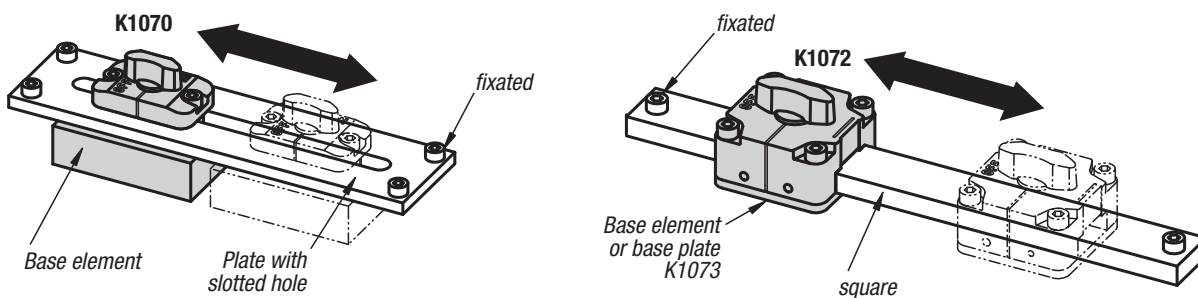
Turning the knob to "ON", operates the clamping mechanism. In the "OFF" position the element is movable. The switch must be in the "OFF" position during assembly.

If the sliding clamp is mounted directly on a base plate and the plate with slotted hole or square bar is secured, the sliding clamp and the base plate can be moved.

If the sliding clamp is mounted directly on a base plate and the base plate is secured, the plate with slotted hole or square bar can be moved.

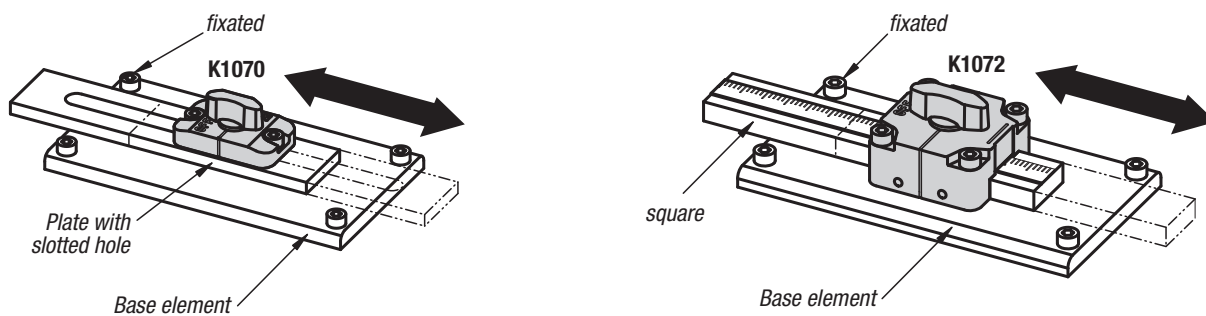
Operating mode 1:

Sliding clamp with base element moveable – plates with slotted hole or square fixed

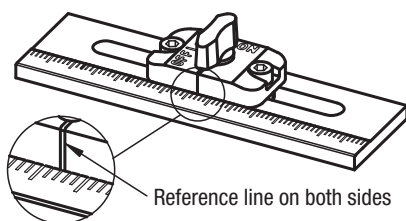


Operating mode 2:

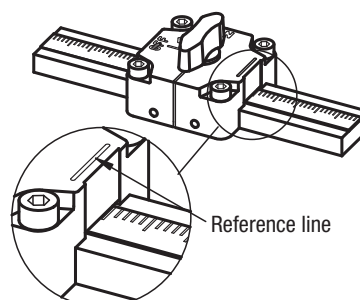
Plates with slotted hole or square bar moveable - Sliding clamp with base element fixated



Application example K1070

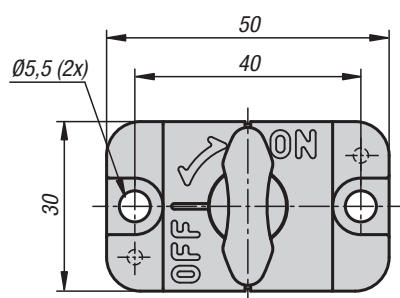
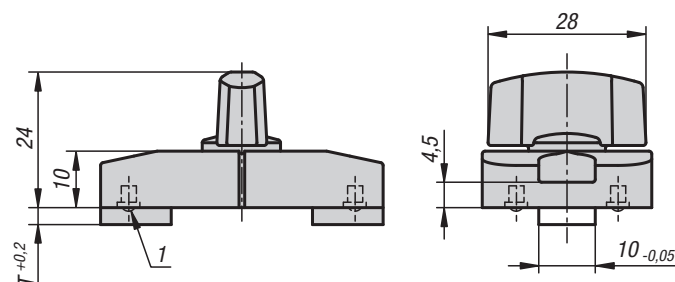


Application example K1072

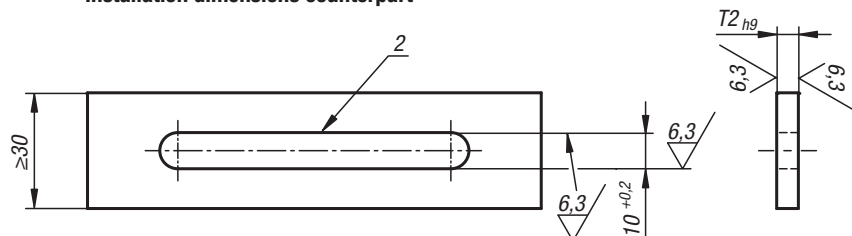


Sliding clamps

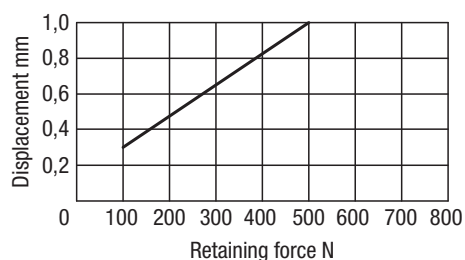
for slotted holes



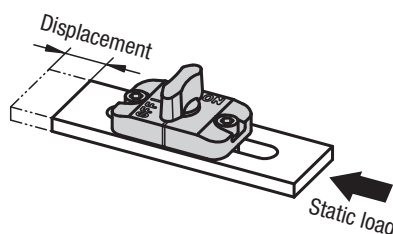
Installation dimensions counterpart



Displacement on static load from one direction



The forces apply to steel or stainless steel plates



Material:

Housing die-cast zinc.
Knob thermoplastic PA (polyamide).

Pins and wedge stainless steel.
Thrust pad POM.

Version:

Housing chromed.
Knob black or orange, glass-bead reinforced.

Sample order:

K1070.32

Note:

Sliding clamps for slotted holes are inserted into an upper plate with an 10-mm-wide slotted hole and then fixed to the base plate. The knob must be turned to the "OFF" position while the component is being installed. The sliding clamps are used for precision plates with a thickness of 3 mm or 6 mm. For other thicknesses shim plates K1071 must be used.

By turning the knob, the pins mounted in the bottom section of sliding clamp are drawn together by the springs and forced downwards. The two pins press against the surface and clamp the sliding clamp. Two spring plungers lift the sliding clamp in the “ON” position allowing easier movement.

Accessories:

Base plates K1071.

Functional principle:

The sliding clamps have 2 different operating principles.

Operating principle 1:

The sliding clamp is movable.

The sliding clamp is bolted onto a loose plate or block placed under a fixated slotted plate. The sliding clamp together with the plate or block can be slid up and down the fixated slotted plate.

Operating principle 2:

The sliding clamp is fixated.

The sliding clamp is bolted onto a fixated plate or block placed under a loose slotted plate. The sliding clamp cannot move but the slotted plate can be slid up and down over the fixated plate or block.

Drawing reference:

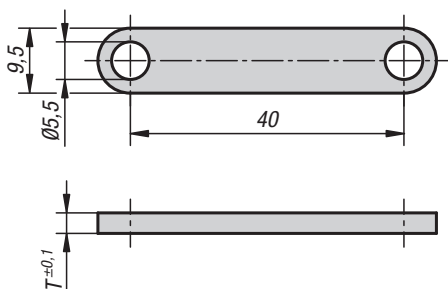
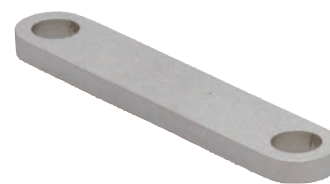
- 1) Spring plungers (2x)
2) Chamfer ~ 0.3

KIPP Sliding clamps for slotted holes

Order No. black	Order No. orange	T	T2	Holding force N	Temperature resistance
K1070.31	K1070.32	3	3	500	≤90 °C
K1070.61	K1070.62	6	6	500	≤90 °C

Shim plates

for sliding clamps for slotted hole


Material:

Stainless steel

Version:

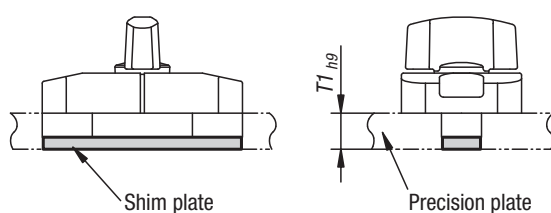
Bright.

Sample order:

K1071.2

Note:

Shim plates are required for sliding clamps for slotted holes with a plate thickness more than 3 mm or 6 mm.



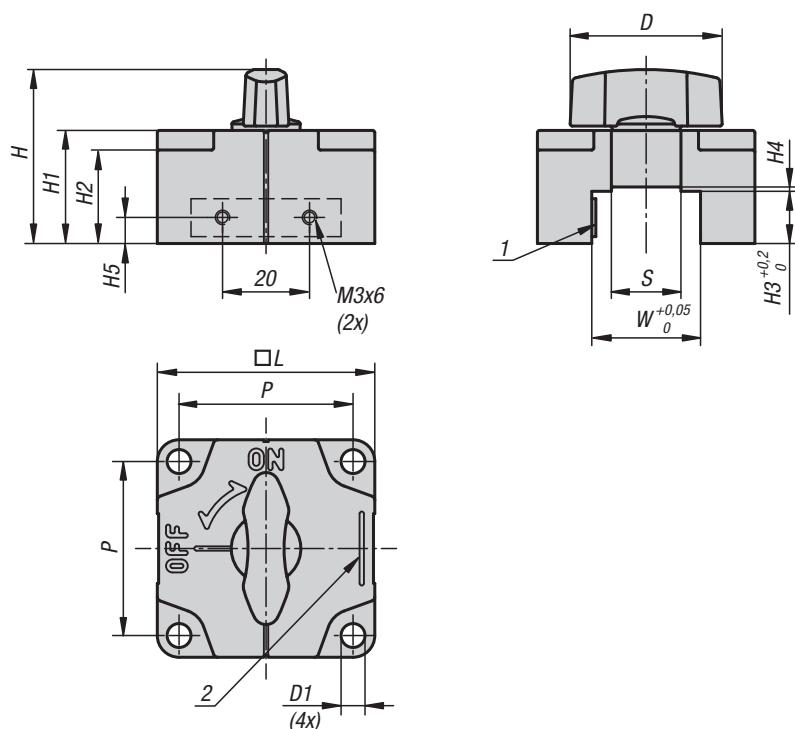
Sliding clamp for slotted holes	Suitable shim plate	Precision plate T1 (mm)
K1070.31	-	3 _{-0,25}
K1070.32	K1071.2	5 _{-0,3}
K1070.61	-	6 _{-0,3}
K1070.62	K1071.2	8 _{-0,36}
	K1071.3	9 _{-0,36}

KIPP Shim plates for sliding clamps for slotted hole

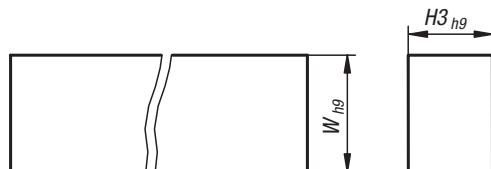
Order No.	T
K1071.2	2
K1071.3	3

Sliding clamps

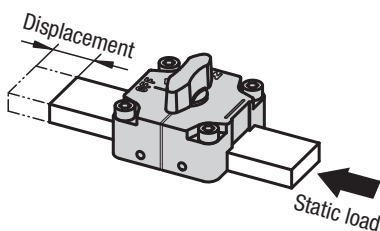
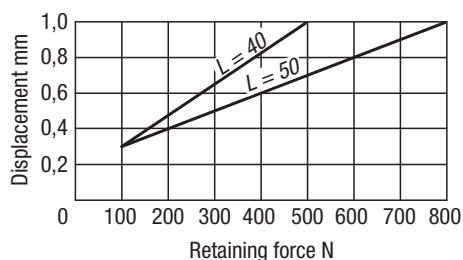
for square bars



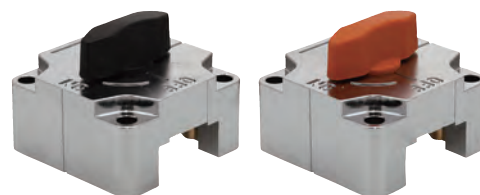
Installation dimensions counterpart square bar



Displacement on static load from one direction



The forces apply to steel or stainless steel square material



Material:

Housing die-cast zinc.
Knob thermoplastic PA (polyamide).
Pins and wedge stainless steel.
Leaf spring phosphated bronze.

Version:

Housing chromed.
Knob black or orange, glass-bead reinforced.
Pins and wedge bright.

Sample order:

K1072.16162

Note:

By turning the knob, the pins mounted in the bottom section of the sliding clamp are drawn together by the springs and forced downwards. The two pins press against the surface and fixate the sliding clamp.

Accessories:

Base plates K1073.
Scales stainless steel K0759.

Functional principle:

The sliding clamps have 2 different operating principles.

Operating principle 1:

The sliding clamp is movable.
The sliding clamp is bolted onto a base plate (K1073), loose plate or block placed under a fixated rectangular bar. The sliding clamp together with the plate or block can be slid up and down the fixated bar.

Operating principle 2:

The sliding clamp is fixated.
The sliding clamp is bolted onto a fixated plate or block placed under a loose rectangular bar. The sliding clamp cannot move but the bar can be slid up and down over the fixated plate or block.

Drawing reference:

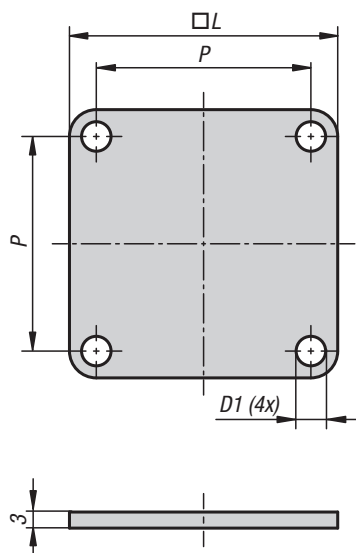
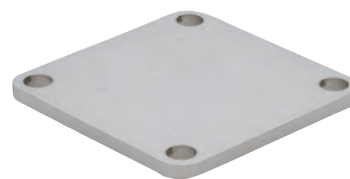
- 1) Leaf spring
- 2) Reading line for scales

KIPP Sliding clamp for square bars

Order No. black	Order No. orange	L	D	D1	H	H1	H2	H3	H4	H5	P	W	S	Holding force N	Temperature resistance
K1072.12121	K1072.12122	40	28	4,5	36	22	18,5	12	-	6	32	12	-	500	≤90 °C
K1072.16161	K1072.16162	40	28	4,5	40	26	22,5	16	-	8	32	16	-	500	≤90 °C
K1072.2591	K1072.2592	50	35	5,5	37	23	18,5	9	1	4,5	40	25	16	800	≤90 °C
K1072.25121	K1072.25122	50	35	5,5	40	26	21,5	12	1	6	40	25	16	800	≤90 °C
K1072.32121	K1072.32122	50	35	5,5	40	26	21,5	12	1	6	40	32	16	800	≤90 °C
K1072.32161	K1072.32162	50	35	5,5	44	30	25,5	16	1	8	40	32	16	800	≤90 °C

Base plates

for sliding clamp for square bars



Material:
Stainless steel

Version:
Bright.

Sample order:
K1073.40

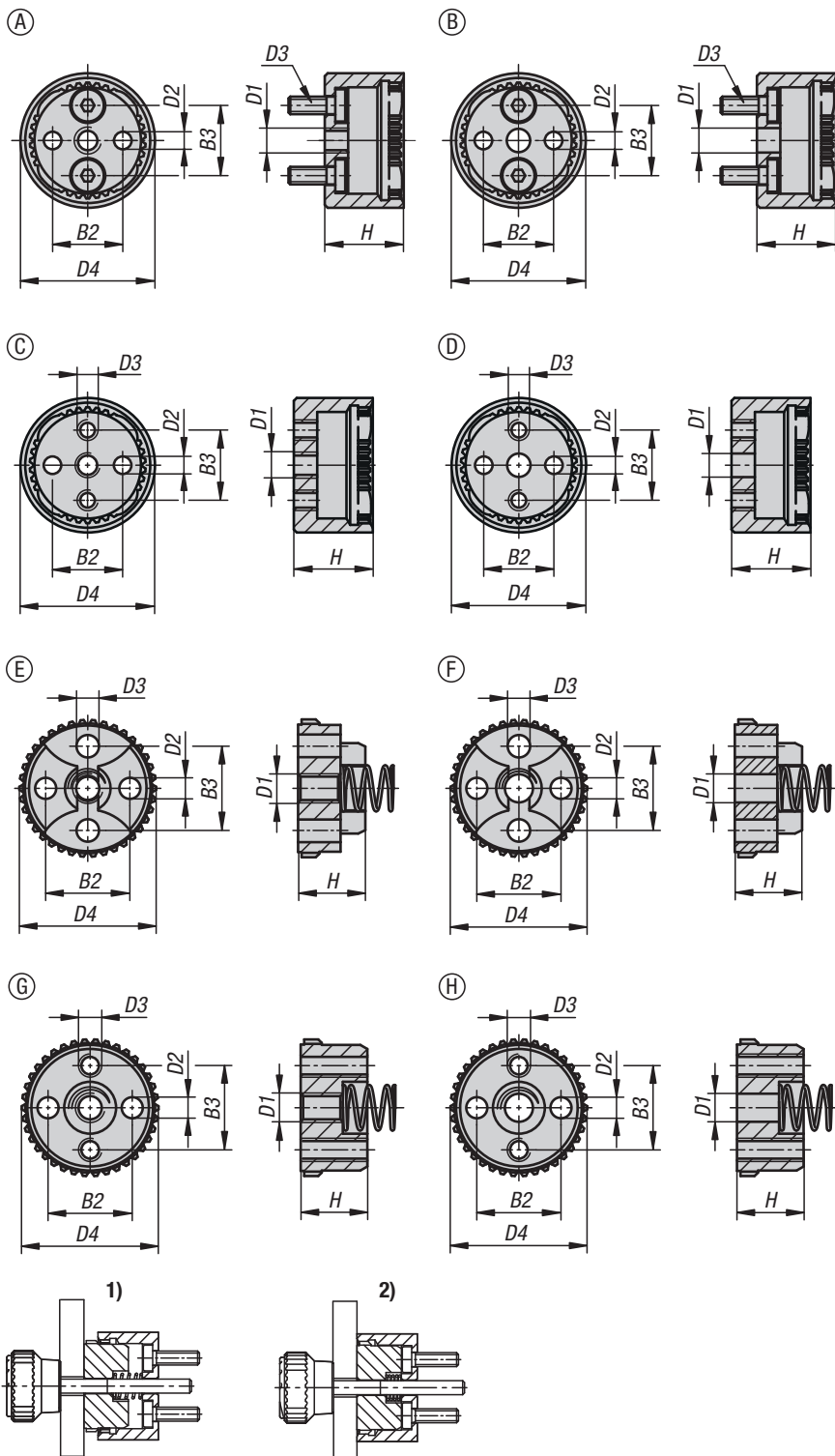
Note:
Base plates raise the sliding clamp by 3 mm.
It is used to mount the sliding clamp to a fixated square bar.



KIPP Base plate for sliding clamps for square bars

Order No.	L	D1	P
K1073.40	40	4,5	32
K1073.50	50	5,5	40

Ratchet elements steel or stainless steel



Ratchet elements are used to connect two components together in any angular position with a positive fit. The ratchet elements with internal tothing (Forms A–D) can be combined with the ratchet elements with external tothing (Forms E–H) in any way depending on the application and installation possibilities. The springs mean that a new angular position can be quickly implemented.

Material:

Ratchet element steel 1.0718 or stainless steel 1.4305.
Spring stainless steel 1.4310.
Cap screws steel or stainless steel A 2.

Version:

Ratchet element black oxidised steel or bright stainless steel.
Spring bright.
Cap screw blackened steel grade 8.8 or bright A 2-70 stainless steel.

Sample order:

K1446.12338

Note for ordering:

2 cap screws M3x8 or M5x10 are supplied with the internal toothed ratchet elements Forms A and B.
A stainless steel spring is supplied with the external toothed ratchet elements Forms E to H.

Note:

Use DIN 7984 low headed cap screws for fastening the Form A and B ratchet elements.

Function:

The ratchet elements are used for rotary adjustment of components. Fastening options can be arranged according to the application.

Accessories:

DIN 912/DIN EN ISO 4762 cap screws
DIN 6912 cap screws

Drawing reference:

Form A: internal tothing, centre tapped hole, 2x counterbores for low headed cap screws, 2x reamed holes
Form B: internal tothing, centre through bore, 2x counterbores for low headed cap screws, 2x reamed holes
Form C: internal tothing, centre tapped hole, 2x tapped holes for fastening, 2x reamed holes
Form D: internal tothing, centre through bore, 2x tapped holes for fastening, 2x reamed holes
Form E: external tothing, centre tapped hole, 2x counterbores for cap screws, 2x reamed holes
Form F: external tothing, centre through bore, 2x counterbores for cap screws, 2x reamed holes
Form G: external tothing, centre tapped hole, 2x tapped holes, 2x reamed holes
Form H: external tothing, centre through bore, 2x tapped holes, 2x reamed holes

1) disengaged
2) engaged

KIPP Ratchet elements steel or stainless steel

Order No.	Form	Main material	B2	B3	D1	D2	D3 Cap screw DIN 7984	D4	H	No. of teeth
K1446.12338	A	steel	12	12	M4	3H8	M3	23	13,5	38
K1446.13346	A	steel	18	18	M6	5H8	M5	33	19,5	46
K1446.112338	A	stainless steel	12	12	M4	3H8	M3	23	13,5	38
K1446.113346	A	stainless steel	18	18	M6	5H8	M5	33	19,5	46
Order No.	Form	Main material	B2	B3	drill Ø D1	D2	D3 Cap screw DIN 7984	D4	H	No. of teeth
K1446.22338	B	steel	12	12	4,2	3H8	M3	23	13,5	38
K1446.23346	B	steel	18	18	6,2	5H8	M5	33	19,5	46
K1446.122338	B	stainless steel	12	12	4,2	3H8	M3	23	13,5	38
K1446.123346	B	stainless steel	18	18	6,2	5H8	M5	33	19,5	46
Order No.	Form	Main material	B2	B3	D1	D2	D3	D4	H	No. of teeth
K1446.32338	C	steel	12	12	M4	3H8	M3	23	13,5	38
K1446.33346	C	steel	18	18	M6	5H8	M5	33	19,5	46
K1446.132338	C	stainless steel	12	12	M4	3H8	M3	23	13,5	38
K1446.133346	C	stainless steel	18	18	M6	5H8	M5	33	19,5	46
Order No.	Form	Main material	B2	B3	drill Ø D1	D2	D3	D4	H	No. of teeth
K1446.42338	D	steel	12	12	4,2	3H8	M3	23	13,5	38
K1446.43346	D	steel	18	18	6,2	5H8	M5	33	19,5	46
K1446.142338	D	stainless steel	12	12	4,2	3H8	M3	23	13,5	38
K1446.143346	D	stainless steel	18	18	6,2	5H8	M5	33	19,5	46
Order No.	Form	Main material	B2	B3	D1	D2	D3	D4	H	No. of teeth
K1446.52338	E	steel	12	12	M4	3H8	3,2	23	9,5	38
K1446.53346	E	steel	18	18	M6	5H8	5,3	33	13	46
K1446.152338	E	stainless steel	12	12	M4	3H8	3,2	23	9,5	38
K1446.153346	E	stainless steel	18	18	M6	5H8	5,3	33	13	46
Order No.	Form	Main material	B2	B3	drill Ø D1	D2	D3	D4	H	No. of teeth
K1446.62338	F	steel	12	12	4,2	3H8	3,2	23	9,5	38
K1446.63346	F	steel	18	18	6,2	5H8	5,3	33	13	46
K1446.162338	F	stainless steel	12	12	4,2	3H8	3,2	23	9,5	38
K1446.163346	F	stainless steel	18	18	6,2	5H8	5,3	33	13	46
Order No.	Form	Main material	B2	B3	D1	D2	D3	D4	H	No. of teeth
K1446.72338	G	steel	12	12	M4	3H8	M3	23	9,5	38
K1446.73346	G	steel	18	18	M6	5H8	M5	33	13	46
K1446.172338	G	stainless steel	12	12	M4	3H8	M3	23	9,5	38
K1446.173346	G	stainless steel	18	18	M6	5H8	M5	33	13	46
Order No.	Form	Main material	B2	B3	drill Ø D1	D2	D3	D4	H	No. of teeth
K1446.82338	H	steel	12	12	4,2	3H8	M3	23	9,5	38
K1446.83346	H	steel	18	18	6,2	5H8	M5	33	13	46
K1446.182338	H	stainless steel	12	12	4,2	3H8	M3	23	9,5	38
K1446.183346	H	stainless steel	18	18	6,2	5H8	M5	33	13	46

