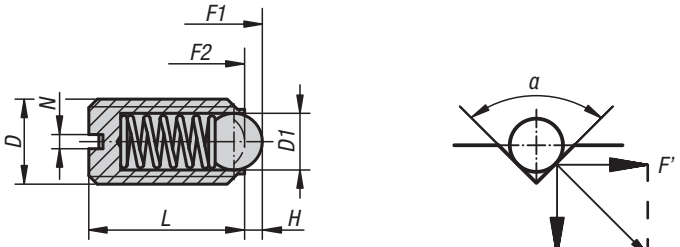
Spring plungers, indexing plungers, ball lock pins

Spring plungers

with slot and ball, steel



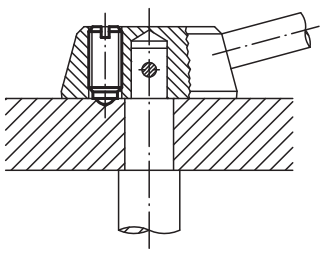
a = 60°, F' = 1,732 x F
a = 90°, F' = F
a = 120°, F' = 0,577 x F

Material:
Sleeve steel grade 5.8.
Ball steel.
Spring in spring steel class D.

Version:
Black oxidised.
Ball hardened.

Sample order:
K0309.203

handle indexing



Spring plungers

with slot and ball, steel

KIPP Spring plungers with slot and ball, standard spring

Order No.	D	D1	L	H	N	Spring force initial pressure F1 approx. N	Spring force final pressure F2 approx. N
K0309.03	M3	1,5	7	0,4	0,4	1,5	3
K0309.04	M4	2,5	9	0,8	0,6	4	10
K0309.05	M5	3	12	0,9	0,8	6	11
K0309.06	M6	3,5	14	1	1	9	13
K0309.08	M8	5	16	1,5	1,2	15	30
K0309.10	M10	6	19	2	1,6	20	35
K0309.12	M12	8	22	2,5	2	30	55
K0309.16	M16	10	24	3,5	2,5	65	125
K0309.20	M20	12	30	4,5	2,5	80	160

KIPP Spring plungers with slot and ball, reinforced spring

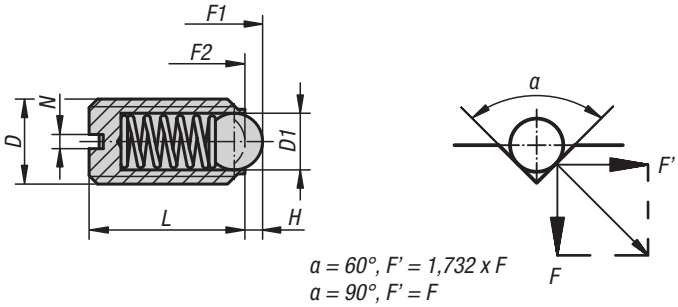
Order No.	D	D1	L	H	N	Spring force initial pressure F1 approx. N	Spring force final pressure F2 approx. N
K0309.203	M3	1,5	7	0,4	0,4	5	7
K0309.204	M4	2,5	9	0,8	0,6	12	22
K0309.205	M5	3	12	0,9	0,8	19	30
K0309.206	M6	3,5	14	1	1	28	40
K0309.208	M8	5	16	1,5	1,2	47	73
K0309.210	M10	6	19	2	1,6	66	100
K0309.212	M12	8	22	2,5	2	66	120
K0309.216	M16	10	24	3,5	2,5	90	180
K0309.220	M20	12	30	4,5	2,5	115	240

KIPP Spring plungers with slot and ball, long version, standard spring

Order No.	D	D1	L	H	N	Spring force initial pressure F1 approx. N	Spring force final pressure F2 approx. N
K0309.404	M4	2,5	16	0,8	0,6	4	10
K0309.405	M5	3	20	0,9	0,8	6	11
K0309.406	M6	3,5	25	1	1	9	13
K0309.408	M8	5	30	1,5	1,2	15	30
K0309.410	M10	6	35	2	1,6	20	35
K0309.412	M12	8	40	2,5	2	30	55
K0309.416	M16	10	45	3,5	2,5	65	125

Spring plungers

with slot and ball, stainless steel



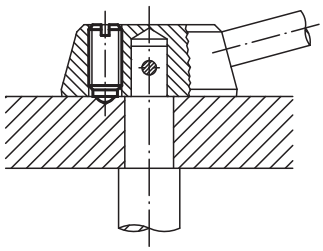
a = 60°, F' = 1,732 x F
a = 90°, F' = F
a = 120°, F' = 0,577 x F

Material:
Sleeve 1.4305.
Ball 1.4034.
Spring 1.4310.

Version:
Bright. Ball hardened.

Sample order:
K0310.203

handle indexing



Spring plungers

with slot and ball, stainless steel

KIPP Spring plungers with slot and ball, standard spring

Order No.	D	D1	L	H	N	Spring force initial pressure F1 approx. N	Spring force final pressure F2 approx. N
K0310.03	M3	1,5	7	0,4	0,4	1,5	3
K0310.04	M4	2,5	9	0,8	0,6	4	10
K0310.05	M5	3	12	0,9	0,8	6	11
K0310.06	M6	3,5	14	1	1	9	13
K0310.08	M8	5	16	1,5	1,2	15	30
K0310.10	M10	6	19	2	1,6	20	35
K0310.12	M12	8	22	2,5	2	30	55
K0310.16	M16	10	24	3,5	2,5	65	125
K0310.20	M20	12	30	4,5	2,5	80	160

KIPP Spring plungers with slot and ball, reinforced spring

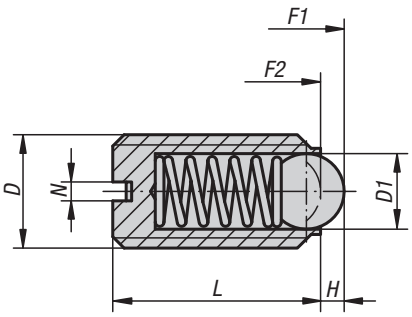
Order No.	D	D1	L	H	N	Spring force initial pressure F1 approx. N	Spring force final pressure F2 approx. N
K0310.203	M3	1,5	7	0,4	0,4	5	7
K0310.204	M4	2,5	9	0,8	0,6	12	22
K0310.205	M5	3	12	0,9	0,8	19	30
K0310.206	M6	3,5	14	1	1	28	40
K0310.208	M8	5	16	1,5	1,2	47	73
K0310.210	M10	6	19	2	1,6	66	100
K0310.212	M12	8	22	2,5	2	66	120
K0310.216	M16	10	24	3,5	2,5	90	180
K0310.220	M20	12	30	4,5	2,5	115	240

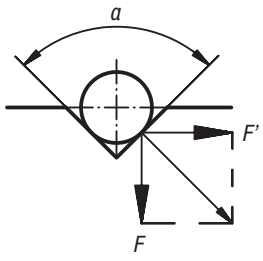
KIPP Spring plungers with slot and ball, long version, standard spring

Order No.	D	D1	L	H	N	Spring force initial pressure F1 approx. N	Spring force final pressure F2 approx. N
K0310.404	M4	2,5	16	0,8	0,6	4	10
K0310.405	M5	3	20	0,9	0,8	6	11
K0310.406	M6	3,5	25	1	1	9	13
K0310.408	M8	5	30	1,5	1,2	15	30
K0310.410	M10	6	35	2	1,6	20	35
K0310.412	M12	8	40	2,5	2	30	55
K0310.416	M16	10	45	3,5	2,5	65	125

Spring plungers

plastic, with slot and POM ball





α = 60°, F' = 1,732 x F
α = 90°, F' = F
α = 120°, F' = 0,577 x F

Material:
Sleeve, plastic.
Ball POM.
Spring 1.4310.

Version:
Ball, white.

Sample order:
K0311.10

Note:
Spring plungers are used for indexing and positioning. They can also be used as ejectors.

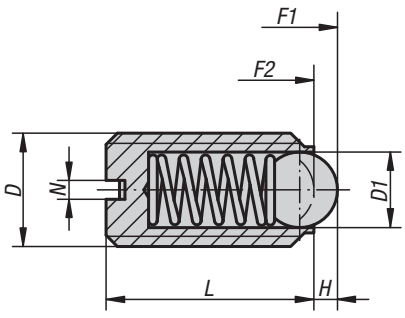
KIPP Spring plungers with slot and POM ball

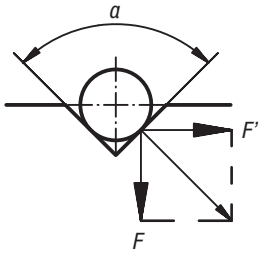
Order No.	D	D1	L	H	N	Spring force initial pressure F1 approx. N	Spring force final pressure F2 approx. N
K0311.06	M6	3,5	14	1	1	9	13
K0311.08	M8	5	16	1,5	1,2	15	30
K0311.10	M10	6	19	2	1,6	20	40

K0312

Spring plungers

plastic, with slot and stainless steel ball





α = 60°, F' = 1,732 x F
α = 90°, F' = F
α = 120°, F' = 0,577 x F

Material:
Sleeve plastic.
Ball stainless steel 1.4034.
Spring 1.4310.

Version:
Ball, hardened.

Sample order:
K0312.10

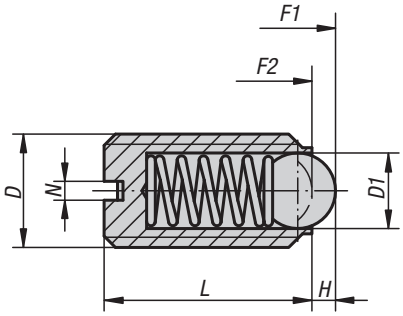
Note:
Spring plungers are used for indexing and positioning. They can also be used as ejectors.

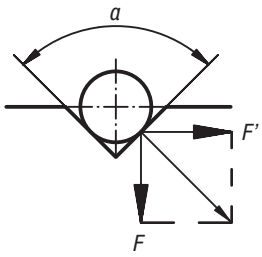
KIPP Spring plungers with slot and stainless steel ball

Order No.	D	D1	L	H	N	Spring force initial pressure F1 approx. N	Spring force final pressure F2 approx. N
K0312.06	M6	3,5	14	1	1	9	13
K0312.08	M8	5	16	1,5	1,2	15	30
K0312.10	M10	6	19	2	1,6	20	40

Spring plungers

with slot and ceramic ball, stainless steel





α = 60°, F' = 1,732 x F
α = 90°, F' = F
α = 120°, F' = 0,577 x F

Material:
Sleeve 1.4305.
Ceramic ball Si_3N_4.
Spring 1.4310.

Version:
Bright.

Sample order:
K0609.05

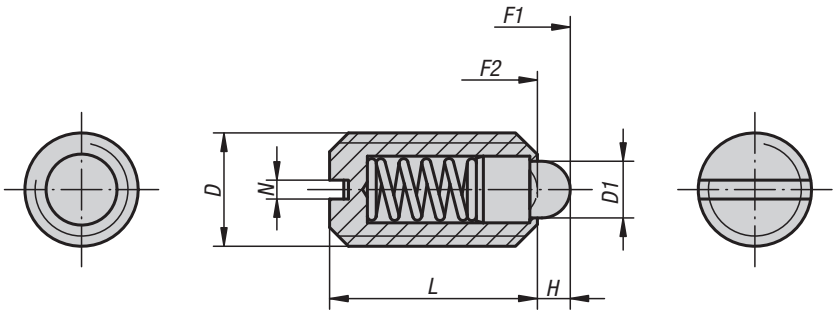
Note:
The combination of excellent material properties is a special feature of silicon nitride (Si_3N_4). These include, for example, high tenacity and stability, excellent wear resistance and efficient chemical resistance.

KIPP Spring plungers with slot and ceramic ball, stainless steel

Order No.	D	D1	L	H	N	Spring force initial pressure F1 approx. N	Spring force final pressure F2 approx. N
K0609.05	M5	3	12	0,9	0,8	6	11
K0609.06	M6	3,5	14	1	1	9	13
K0609.08	M8	5	16	1,5	1,2	15	30
K0609.10	M10	6	19	2	1,6	20	35
K0609.12	M12	8	22	2,5	2	30	55
K0609.16	M16	10	24	3,5	2,5	65	125

Spring plungers

with slot and thrust pin, steel



Material:
Sleeve steel grade 5.8.
Thrust pin steel.
Spring spring steel grade D.

Version:
Black oxidised.
Thrust pin hardened.

Sample order:
K0313.10

KIPP Spring plungers with slot and thrust pin, standard spring force

Order No.	D	D1	L	H	N	Spring force initial pressure F1 approx. N	Spring force final pressure F2 approx. N
K0313.04	M4	1,8	9	1,5	0,6	6	20
K0313.05	M5	2,4	12	2	0,8	6	20
K0313.06	M6	2,7	14	2	1	7	20
K0313.08	M8	4	16	2	1,2	15	30
K0313.10	M10	4,5	19	2,5	1,6	20	35
K0313.12	M12	6	22	3,5	2	30	55
K0313.16	M16	8,5	24	4,5	2,5	45	100
K0313.20	M20	10	30	6,5	2,5	60	120

KIPP Spring plungers with slot and thrust pin, light spring force

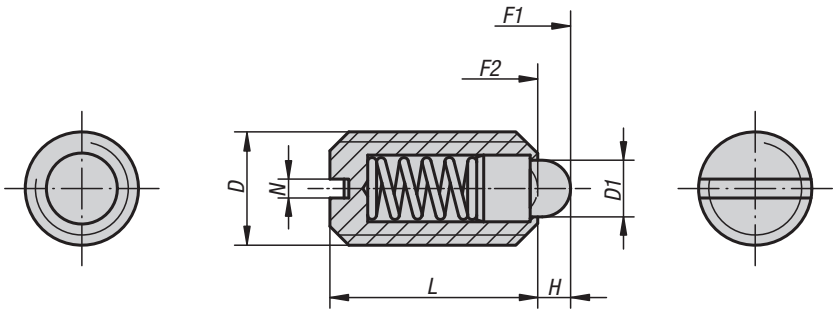
Order No.	D	D1	L	H	N	Spring force initial pressure F1 approx. N	Spring force final pressure F2 approx. N
K0313.104	M4	1,8	9	1,5	0,6	3	10
K0313.105	M5	2,4	12	2	0,8	3	10
K0313.106	M6	2,7	14	2	1	4	10
K0313.108	M8	4	16	2	1,2	7	15
K0313.110	M10	4,5	19	2,5	1,6	9	16
K0313.112	M12	6	22	3,5	2	14	26
K0313.116	M16	8,5	24	4,5	2,5	22	50
K0313.120	M20	10	30	6,5	2,5	30	60

KIPP Spring plungers with slot and thrust pin, reinforced spring force

Order No.	D	D1	L	H	N	Spring force initial pressure F1 approx. N	Spring force final pressure F2 approx. N
K0313.205	M5	2,4	12	2	0,8	9	25
K0313.206	M6	2,7	14	2	1	11	25
K0313.208	M8	4	16	2	1,2	22	43
K0313.210	M10	4,5	19	2,5	1,6	20	54
K0313.212	M12	6	22	3,5	2	36	94
K0313.216	M16	8,5	24	4,5	2,5	60	110

Spring plungers

with slot and thrust pin, stainless steel



Material:
Sleeve 1.4305.
Thrust pin 1.4034.
Spring 1.4310.

Version:
Bright.
Thrust pin hardened.

Sample order:
K0314.10

KIPP Spring plungers with slot and thrust pin, standard spring force

Order No.	D	D1	L	H	N	Spring force initial pressure F1 approx. N	Spring force final pressure F2 approx. N
K0314.04	M4	1,8	9	1,5	0,6	6	20
K0314.05	M5	2,4	12	2	0,8	6	20
K0314.06	M6	2,7	14	2	1	7	20
K0314.08	M8	4	16	2	1,2	15	30
K0314.10	M10	4,5	19	2,5	1,6	20	35
K0314.12	M12	6	22	3,5	2	30	55
K0314.16	M16	8,5	24	4,5	2,5	45	100
K0314.20	M20	10	30	6,5	2,5	60	120

KIPP Spring plungers with slot and thrust pin, light spring force

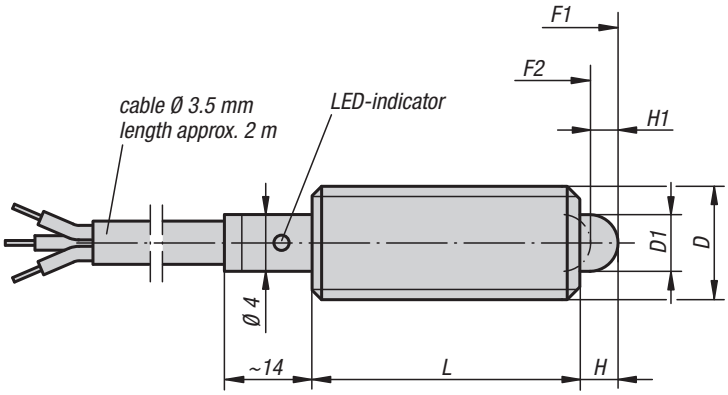
Order No.	D	D1	L	H	N	Spring force initial pressure F1 approx. N	Spring force final pressure F2 approx. N
K0314.104	M4	1,8	9	1,5	0,6	3	10
K0314.105	M5	2,4	12	2	0,8	3	10
K0314.106	M6	2,7	14	2	1	4	10
K0314.108	M8	4	16	2	1,2	7	15
K0314.110	M10	4,5	19	2,5	1,6	9	16
K0314.112	M12	6	22	3,5	2	14	26
K0314.116	M16	8,5	24	4,5	2,5	22	50
K0314.120	M20	10	30	6,5	2,5	30	60

KIPP Spring plungers with slot and thrust pin, reinforced spring force

Order No.	D	D1	L	H	N	Spring force initial pressure F1 approx. N	Spring force final pressure F2 approx. N
K0314.205	M5	2,4	12	2	0,8	9	25
K0314.206	M6	2,7	14	2	1	11	25
K0314.208	M8	4	16	2	1,2	22	43
K0314.210	M10	4,5	19	2,5	1,6	20	54
K0314.212	M12	6	22	3,5	2	36	94
K0314.216	M16	8,5	24	4,5	2,5	60	110

Spring plungers

with end position feedback



Material:
Sleeve, thrust pin and spring steel.
Inductive proximity switch.

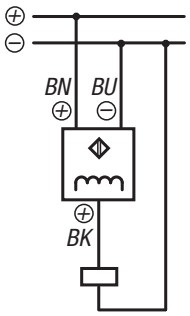
Version:
Black oxidised.
Thrust pin hardened.

Sample order:
K0656.5081

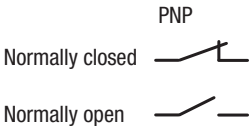
Note:
An electrical control signal can be sent via the built-in end switch.
Voltage: U = 10 – 30 V DC
Electricity: I max. = 200 mA
Temperature range: -25 °C – +70 °C
Protection class: IP 67

Safety:
The use of spring plungers with end position feedback is not suitable for safeguarding persons.

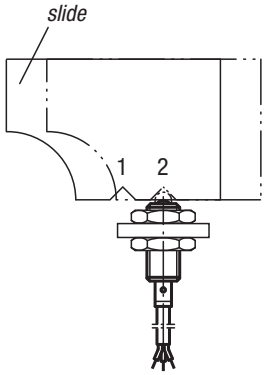
Connection diagram:



BN = brown
BK = black
BU = blue



Application, position feedback:
Pos. 1: slide engaged
Pos. 2: slide disengaged



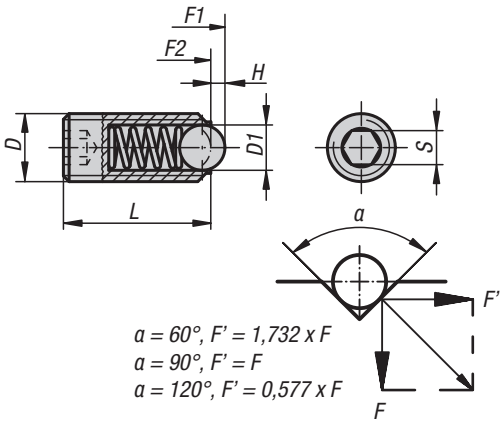
KIPP Spring plungers with end position feedback

Order No.	Version	D	D1	L	H	H1	Switching contact from stroke H1	Spring force initial pressure F1 approx. N	Spring force final pressure F2 approx. N
K0656.5061	normally closed	M6	2,7	27	3	2	1,2 - 1,6	7	20
K0656.5081	normally closed	M8	4	29	3	2	1,2 - 1,8	15	30
K0656.5101	normally closed	M10	4,5	36	4	3	2,2 - 2,8	26	44
K0656.5062	normally open	M6	2,7	27	3	2	1,2 - 1,6	7	20
K0656.5082	normally open	M8	4	29	3	2	1,2 - 1,8	15	30
K0656.5102	normally open	M10	4,5	36	4	3	2,2 - 2,8	26	44

Notes

Spring plungers

with hexagon socket and ball, steel

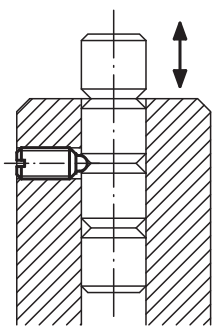


Material:
Sleeve steel grade 5.8.
Ball steel.
Spring in spring steel class D.

Version:
Black oxidised.
Ball hardened.

Sample order:
K0315.210

column indexing



Spring plungers

with hexagon socket and ball, steel

KIPP Spring plungers with hexagon socket and ball, standard spring

Order No.	D	D1	L	H	S	Spring force initial pressure F1 approx. N	Spring force final pressure F2 approx. N
K0315.03	M3	1,5	9	0,4	1,5	1,5	3
K0315.04	M4	2,5	10	0,8	2	4	10
K0315.05	M5	3	14	0,9	2,5	6	11
K0315.06	M6	3,5	15	1	3	9	13
K0315.08	M8	5	18	1,5	4	15	30
K0315.10	M10	6	23	2	5	20	35
K0315.12	M12	8	26	2,5	6	30	55
K0315.16	M16	10	33	3,5	8	65	125
K0315.20	M20	12	43	4,5	10	80	160
K0315.24	M24	15	48	5,5	12	90	180

KIPP Spring plungers with hexagon socket and ball, reinforced spring

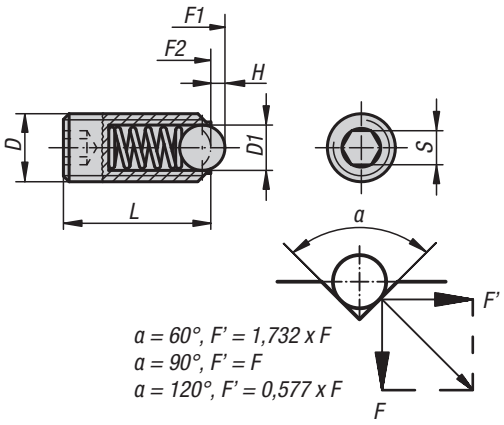
Order No.	D	D1	L	H	S	Spring force initial pressure F1 approx. N	Spring force final pressure F2 approx. N
K0315.203	M3	1,5	9	0,4	1,5	5	7
K0315.204	M4	2,5	10	0,8	2	12	22
K0315.205	M5	3	14	0,9	2,5	19	30
K0315.206	M6	3,5	15	1	3	28	40
K0315.208	M8	5	18	1,5	4	47	73
K0315.210	M10	6	23	2	5	66	100
K0315.212	M12	8	26	2,5	6	66	120
K0315.216	M16	10	33	3,5	8	90	180
K0315.220	M20	12	43	4,5	10	115	240
K0315.224	M24	15	48	5,5	12	130	270

KIPP Spring plungers with hexagon socket and ball, long version, standard spring

Order No.	D	D1	L	H	S	Spring force initial pressure F1 approx. N	Spring force final pressure F2 approx. N
K0315.404	M4	2,5	16	0,8	2	4	10
K0315.405	M5	3	20	0,9	2,5	6	11
K0315.406	M6	3,5	25	1	3	9	13
K0315.408	M8	5	30	1,5	4	15	30
K0315.410	M10	6	35	2	5	20	35
K0315.412	M12	8	40	2,5	6	30	55
K0315.416	M16	10	45	3,5	8	65	125

Spring plungers

with hexagon socket and ball, stainless steel

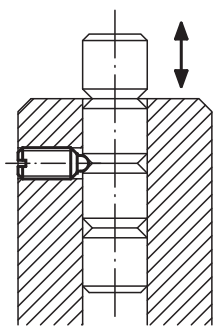


Material:
Sleeve 1.4305.
Ball 1.4034.
Spring 1.4310.

Version:
Bright. Ball hardened.

Sample order:
K0316.210

column indexing



Spring plungers

with hexagon socket and ball, stainless steel

KIPP Spring plungers with hexagon socket and ball, standard spring

Order No.	D	D1	L	H	S	Spring force initial pressure F1 approx. N	Spring force final pressure F2 approx. N
K0316.03	M3	1,5	9	0,4	1,5	1,5	3
K0316.04	M4	2,5	10	0,8	2	4	10
K0316.05	M5	3	14	0,9	2,5	6	11
K0316.06	M6	3,5	15	1	3	9	13
K0316.08	M8	5	18	1,5	4	15	30
K0316.10	M10	6	23	2	5	20	35
K0316.12	M12	8	26	2,5	6	30	55
K0316.16	M16	10	33	3,5	8	65	125
K0316.20	M20	12	43	4,5	10	80	160
K0316.24	M24	15	48	5,5	12	90	180

KIPP Spring plungers with hexagon socket and ball, reinforced spring

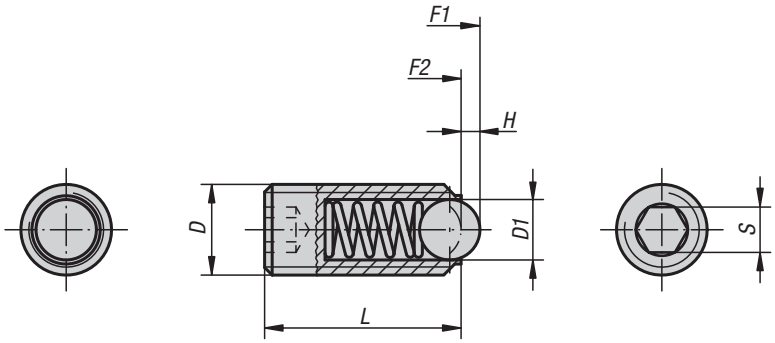
Order No.	D	D1	L	H	S	Spring force initial pressure F1 approx. N	Spring force final pressure F2 approx. N
K0316.203	M3	1,5	9	0,4	1,5	5	7
K0316.204	M4	2,5	10	0,8	2	12	22
K0316.205	M5	3	14	0,9	2,5	19	30
K0316.206	M6	3,5	15	1	3	28	40
K0316.208	M8	5	18	1,5	4	47	73
K0316.210	M10	6	23	2	5	66	100
K0316.212	M12	8	26	2,5	6	66	120
K0316.216	M16	10	33	3,5	8	90	180
K0316.220	M20	12	43	4,5	10	115	240
K0316.224	M24	15	48	5,5	12	130	270

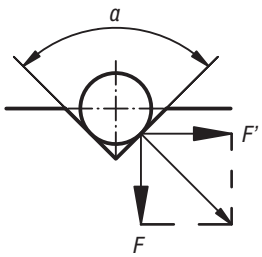
KIPP Spring plungers with hexagon socket and ball, long version, standard spring

Order No.	D	D1	L	H	S	Spring force initial pressure F1 approx. N	Spring force final pressure F2 approx. N
K0316.404	M4	2,5	16	0,8	2	4	10
K0316.405	M5	3	20	0,9	2,5	6	11
K0316.406	M6	3,5	25	1	3	9	13
K0316.408	M8	5	30	1,5	4	15	30
K0316.410	M10	6	35	2	5	20	35
K0316.412	M12	8	40	2,5	6	30	55
K0316.416	M16	10	45	3,5	8	65	125

Spring plungers

with hexagon socket and ceramic ball





a = 60°, F' = 1,732 x F
a = 90°, F' = F
a = 120°, F' = 0,577 x F

Material:
Sleeve 1.4305.
Ceramic ball Si_3N_4.
Spring 1.4310.

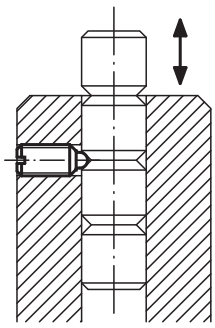
Version:
Bright.

Sample order:
K0610.05

Note:
The combination of excellent material properties is a special feature of silicon nitride (Si_3N_4). These include, for example, high tenacity and stability, excellent wear resistance and efficient chemical resistance.

Advantages:
High temperature resistance.

column indexing

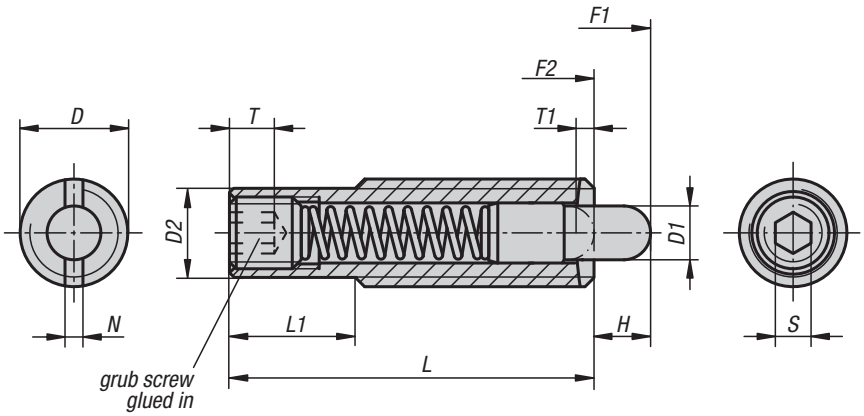


KIPP Spring plungers with hexagon socket and ceramic ball

Order No.	D	D1	L	H	S	Spring force initial pressure F1 approx. N	Spring force final pressure F2 approx. N
K0610.05	M5	3	14	0,9	2,5	6	11
K0610.06	M6	3,5	15	1	3	9	13
K0610.08	M8	5	18	1,5	4	15	30
K0610.10	M10	6	23	2	5	20	35
K0610.12	M12	8	26	2,5	6	30	55
K0610.16	M16	10	33	3,5	8	65	125

Spring plungers

with hexagon socket and thrust pin, long version



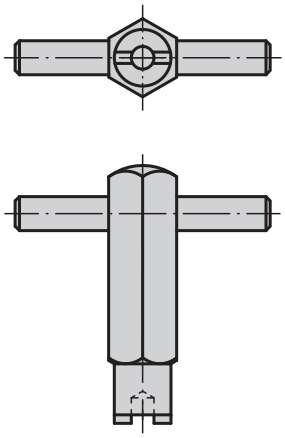
Material:
Sleeve steel grade 5.8.
Thrust pin steel.
Spring steel grade D.

Version:
Black oxidised.
Thrust pin hardened.

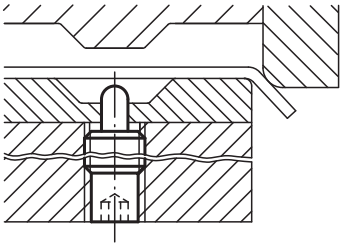
Sample order:
K0657.616

Note:
These spring plungers are chiefly used as ejectors and spring stops in machine construction.

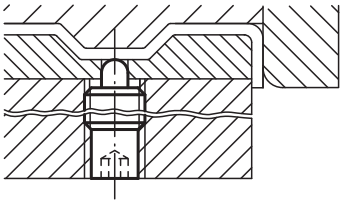
assembly key



bending the shank



forming

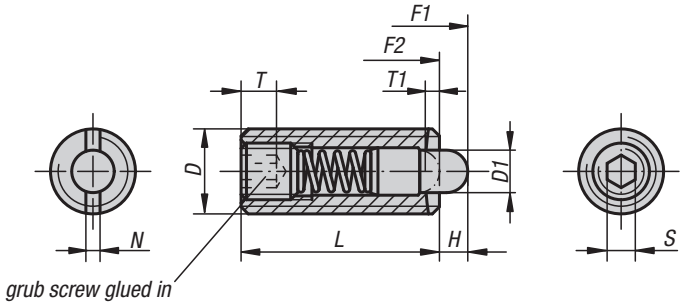


KIPP Spring thrust pin with hexagon socket and thrust pin, long version

Order No.	D	D1	D2	L	L1	H	T	T1	N	S	Spring force initial pressure F1 approx. N	Spring force final pressure F2 approx. N	Order No. assembly key
K0657.608X30	M8	3,5	6,2	30	10	6	2	1,4	1,2	2,5	8	20	K0317.908
K0657.608X40	M8	3,5	6,2	40	20	8	2	1,4	1,2	2,5	10	28	K0317.908
K0657.608X50	M8	3,5	6,2	50	30	10	2	1,4	1,2	2,5	12	38	K0317.908
K0657.608X60	M8	3,5	6,2	60	40	15	2	1,4	1,2	2,5	15	48	K0317.908
K0657.610X40	M10	4	8	40	10	8	2	1,4	1,6	3	12	30	K0317.910
K0657.610X50	M10	4	8	50	20	10	2	1,4	1,6	3	16	46	K0317.910
K0657.610X60	M10	4	8	60	30	15	2	1,4	1,6	3	20	55	K0317.910
K0657.610X80	M10	4	8	80	50	20	2	1,4	1,6	3	25	65	K0317.910
K0657.612X50	M12	6	9,6	50	20	10	3	2	2	4	20	50	K0317.912
K0657.612X60	M12	6	9,6	60	30	15	3	2	2	4	25	76	K0317.912
K0657.612X80	M12	6	9,6	80	50	20	3	2	2	4	35	102	K0317.912
K0657.612X100	M12	6	9,6	100	70	25	3	2	2	4	40	102	K0317.912
K0657.616X60	M16	7,5	13,4	60	30	12	6	2,5	2,5	5	30	64	K0317.916
K0657.616X80	M16	7,5	13,4	80	50	10	6	2,5	2,5	5	30	110	K0317.916
K0657.616X100	M16	7,5	13,4	100	70	30	6	2,5	2,5	5	30	120	K0317.912
K0657.616X120	M16	7,5	13,4	120	90	40	6	2,5	2,5	5	20	130	K0317.916

Spring plungers

with hexagon socket and thrust pin, steel

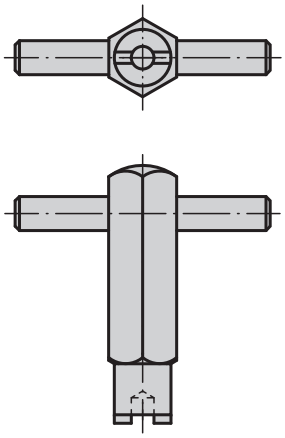


Material:
Sleeve steel grade 5.8.
Thrust pin steel.
Spring steel grade D.

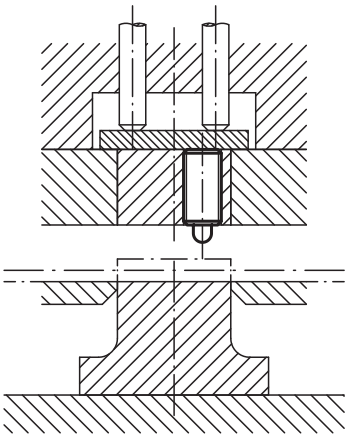
Version:
Black oxidised.
Thrust pin hardened.

Sample order:
K0317.16

assembly key



Spring plunger
cutaway view



Spring plungers

with hexagon socket and thrust pin, steel

KIPP Spring plungers with hexagon socket and thrust pin, standard spring force

Order No.	D	D1	L	H	T	T1	N	S	Spring force initial pressure F1 approx. N	Spring force final pressure F2 approx. N	Order No. assembly key
K0317.03	M3	1	10	1,5	1,5	1	0,4	0,7	0,5	3	K0317.903
K0317.04	M4	1,5	15	1,5	2	0,6	0,6	1,3	5	16	K0317.904
K0317.05	M5	2,4	18	2,3	2	0,8	0,8	1,5	6	20	K0317.905
K0317.06	M6	2,7	20	2,5	2,5	1	1	2	7	20	K0317.906
K0317.08	M8	3,5	22	3	3	1,4	1,2	2,5	9	35	K0317.908
K0317.10	M10	4	22	3	3,5	1,4	1,6	3	9	35	K0317.910
K0317.12	M12	6	28	4	5	2	2	4	12	55	K0317.912
K0317.16	M16	7,5	32	5	6	2,5	2,5	5	45	100	K0317.916
K0317.20	M20	10	40	7	8	3	2,5	6	60	120	-
K0317.24	M24	12	52	10	10	3	2,5	8	80	160	-

KIPP Spring plungers with hexagon socket and thrust pin, light spring force

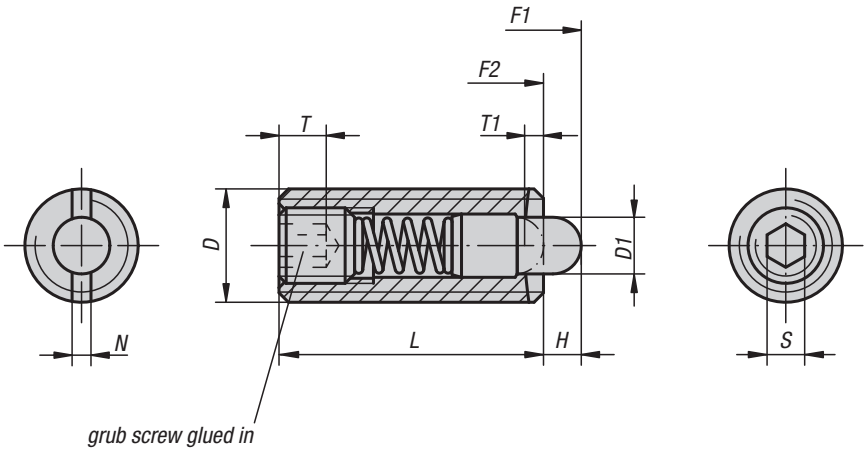
Order No.	D	D1	L	H	T	T1	N	S	Spring force initial pressure F1 approx. N	Spring force final pressure F2 approx. N	Order No. assembly key
K0317.104	M4	1,5	15	1,5	2	0,6	0,6	1,3	2	7	K0317.904
K0317.105	M5	2,4	18	2,3	2	0,8	0,8	1,5	3	10	K0317.905
K0317.106	M6	2,7	20	2,5	2,5	1	1	2	3	9	K0317.906
K0317.108	M8	3,5	22	3	3	1,4	1,2	2,5	4	16	K0317.908
K0317.110	M10	4	22	3	3,5	1,4	1,6	3	4	16	K0317.910
K0317.112	M12	6	28	4	5	2	2	4	5	27	K0317.912
K0317.116	M16	7,5	32	5	6	2,5	2,5	5	20	45	K0317.916

KIPP Spring plungers with hexagon socket and thrust pin, reinforced spring force

Order No.	D	D1	L	H	T	T1	N	S	Spring force initial pressure F1 approx. N	Spring force final pressure F2 approx. N	Order No. assembly key
K0317.205	M5	2,4	18	2,3	2	0,8	0,8	1,5	11	29	K0317.905
K0317.206	M6	2,7	20	2,5	2,5	1	1	2	14	37	K0317.906
K0317.208	M8	3,5	22	3	3	1,4	1,2	2,5	22	65	K0317.908
K0317.210	M10	4	22	3	3,5	1,4	1,6	3	19	70	K0317.910
K0317.212	M12	6	28	4	5	2	2	4	25	85	K0317.912
K0317.216	M16	7,5	32	5	6	2,5	2,5	5	60	150	K0317.916
K0317.220	M20	10	40	7	8	3	2,5	6	75	190	-
K0317.224	M24	12	52	10	10	3	2,5	8	95	240	-

Spring plungers

with hexagon socket and POM thrust pin, steel

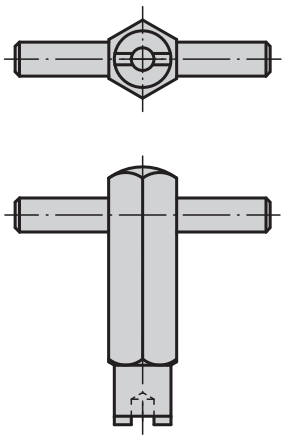


Material:
Sleeve steel grade 5.8.
Thrust pin POM.
Spring steel grade D.

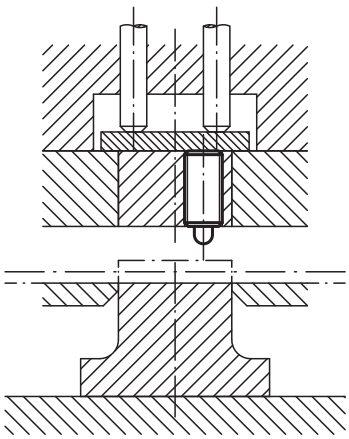
Version:
Black oxidised.

Sample order:
K0318.16

assembly key



Spring plunger
cutaway view



Spring plungers

with hexagon socket and POM thrust pin, steel

KIPP Spring plungers with hexagon socket and thrust pin, standard spring force

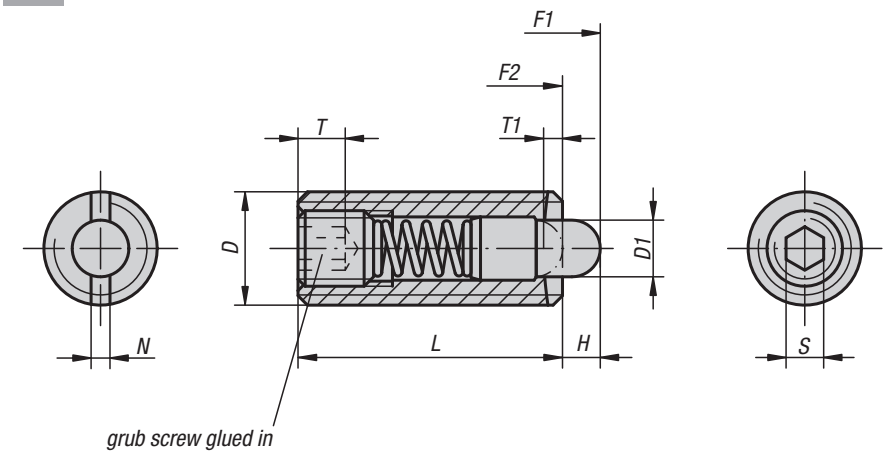
Order No.	D	D1	L	H	T	T1	N	S	Spring force initial pressure F1 approx. N	Spring force final pressure F2 approx. N	Order No. assembly key
K0318.03	M3	1	10	1,5	1,5	1	0,4	0,7	0,5	3	K0317.903
K0318.04	M4	1,5	15	1,5	2	0,6	0,6	1,3	5	16	K0317.904
K0318.05	M5	2,4	18	2,3	2	0,8	0,8	1,5	6	20	K0317.905
K0318.06	M6	2,7	20	2,5	2,5	1	1	2	7	20	K0317.906
K0318.08	M8	3,5	22	3	3	1,4	1,2	2,5	9	35	K0317.908
K0318.10	M10	4	22	3	3,5	1,4	1,6	3	9	35	K0317.910
K0318.12	M12	6	28	4	5	2	2	4	12	55	K0317.912
K0318.16	M16	7,5	32	5	6	2,5	2,5	5	45	100	K0317.916

KIPP Spring plungers with hexagon socket and thrust pin, light spring force

Order No.	D	D1	L	H	T	T1	N	S	Spring force initial pressure F1 approx. N	Spring force final pressure F2 approx. N	Order No. assembly key
K0318.104	M4	1,5	15	1,5	2	0,6	0,6	1,3	2	7	K0317.904
K0318.105	M5	2,4	18	2,3	2	0,8	0,8	1,5	3	10	K0317.905
K0318.106	M6	2,7	20	2,5	2,5	1	1	2	3	9	K0317.906
K0318.108	M8	3,5	22	3	3	1,4	1,2	2,5	4	16	K0317.908
K0318.110	M10	4	22	3	3,5	1,4	1,6	3	4	16	K0317.910
K0318.112	M12	6	28	4	5	2	2	4	5	27	K0317.912
K0318.116	M16	7,5	32	5	6	2,5	2,5	5	20	45	K0317.916

Spring plungers

with hexagon socket and thrust pin, stainless steel

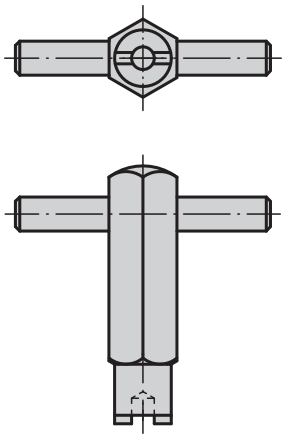


Material:
Sleeve 1.4305.
Thrust pin 1.4034.
Spring 1.4310.

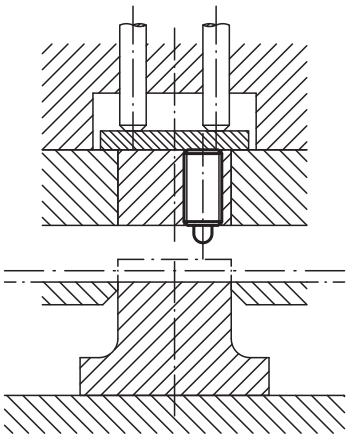
Version:
Bright.
Thrust pin hardened.

Sample order:
K0319.16

assembly key



Spring plunger
cutaway view



KIPP Spring plungers with hexagon socket and thrust pin, standard spring force

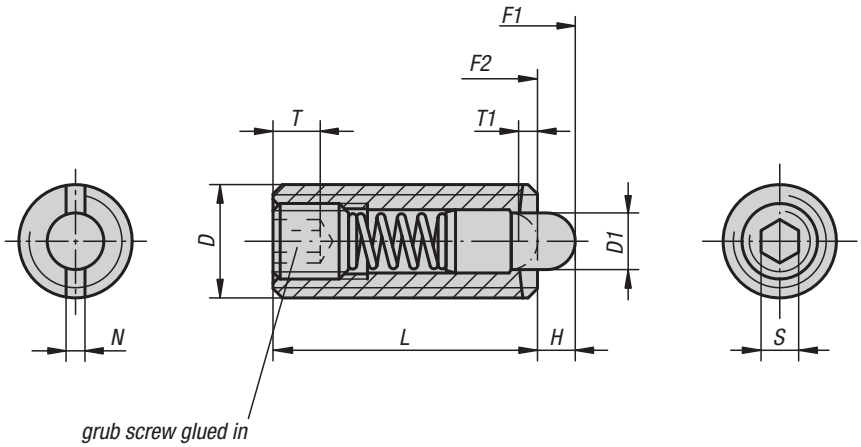
Order No.	D	D1	L	H	T	T1	N	S	Spring force initial pressure F1 approx. N	Spring force final pressure F2 approx. N	Order No. assembly key
K0319.03	M3	1	10	1,5	1,5	1	0,4	0,7	0,5	3	K0317.903
K0319.04	M4	1,5	15	1,5	2	0,6	0,6	1,3	5	16	K0317.904
K0319.05	M5	2,4	18	2,3	2	0,8	0,8	1,5	5	17	K0317.905
K0319.06	M6	2,7	20	2,5	2,5	1	1	2	6	17	K0317.906
K0319.08	M8	3,5	22	3	3	1,4	1,2	2,5	7	29	K0317.908
K0319.10	M10	4	22	3	3,5	1,4	1,6	3	8	31	K0317.910
K0319.12	M12	6	28	4	5	2	2	4	10	47	K0317.912
K0319.16	M16	7,5	32	5	6	2,5	2,5	5	45	100	K0317.916

KIPP Spring plungers with hexagon socket and thrust pin, reinforced spring force

Order No.	D	D1	L	H	T	T1	N	S	Spring force initial pressure F1 approx. N	Spring force final pressure F2 approx. N	Order No. assembly key
K0319.205	M5	2,4	18	2,3	2	0,8	0,8	1,5	9	26	K0317.905
K0319.206	M6	2,7	20	2,5	2,5	1	1	2	11	35	K0317.906
K0319.208	M8	3,5	22	3	3	1,4	1,2	2,5	15	48	K0317.908
K0319.210	M10	4	22	3	3,5	1,4	1,6	3	15	58	K0317.910
K0319.212	M12	6	28	4	5	2	2	4	19	74	K0317.912

Spring plungers

with hexagon socket and POM thrust pin, stainless steel

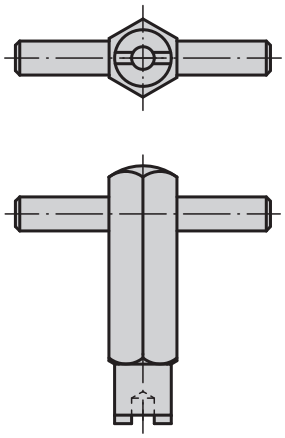


Material:
Stainless steel sleeve 1.4305.
Thrust pin POM.
Stainless steel spring 1.4310.

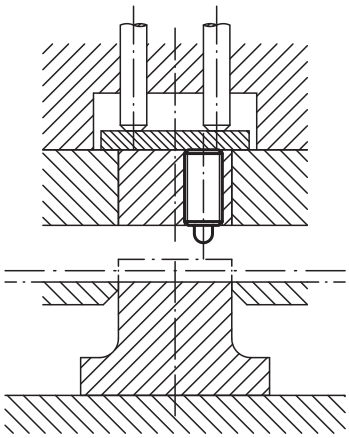
Version:
Bright.

Sample order:
K0320.16

assembly key



Spring plunger
cutaway view



KIPP Spring plungers with hexagon socket and POM thrust pin, stainless steel

Order No.	D	D1	L	H	T	T1	N	S	Spring force initial pressure F1 approx. N	Spring force final pressure F2 approx. N	Order No. assembly key
K0320.03	M3	1	10	1,5	1,5	1	0,4	0,7	0,5	3	K0317.903
K0320.04	M4	1,5	15	1,5	2	0,6	0,6	1,3	5	16	K0317.904
K0320.05	M5	2,4	18	2,3	2	0,8	0,8	1,5	5	17	K0317.905
K0320.06	M6	2,7	20	2,5	2,5	1	1	2	6	17	K0317.906
K0320.08	M8	3,5	22	3	3	1,4	1,2	2,5	7	29	K0317.908
K0320.10	M10	4	22	3	3,5	1,4	1,6	3	8	31	K0317.910
K0320.12	M12	6	28	4	5	2	2	4	10	47	K0317.912
K0320.16	M16	7,5	32	5	6	2,5	2,5	5	45	100	K0317.916

Spring plungers with LONG-LOK thread lock

LONG-LOK, the most advanced thread locking mechanism

With the following crucial advantages:

1. Vibration resistant.

The integrated LONG-LOK thread lock secures spring plungers rationally and economically. No loosening or falling out after impacts, knocks or vibrations.

2. Extremly high loosening torque.

The elastic nylon insert is squeezed like a wedge between the internal and external threads. The nylon locking system pushes the play between the threads to one side causing surface pressure on the thread flanks. The resulting loosening torque is higher than that by most conventional mechanical methods.

3. Secure in every position.

The LONG-LOK thread lock requires neither initial tension nor any defined position. This is ideal for the positioning of the spring plungers.

4. Saves assembly time and stocking space.

The LONG-LOK thread lock is integrated into spring plungers. There are no additional components. No circlips, no spring washers, no locking nuts. As a result, assembly and stocking costs are reduced considerably.

5. For repeated use.

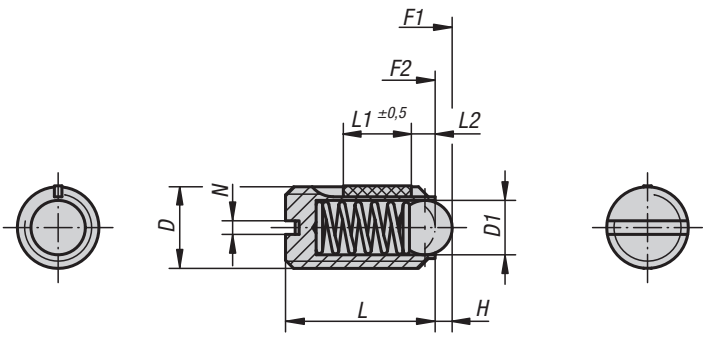
When using the LONG-LOK thread lock for the first time, it requires a slightly higher tightening torque. After third or fourth use, the last reached value remains nearly constant for about 20 times.

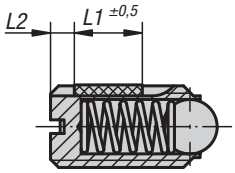
6. Problem solver from M3 to M16.

Light-weight or heavy-weight: name your requirements! We will supply you with the suitable spring plungers with integrated LONG-LOK thread lock.

Spring plungers

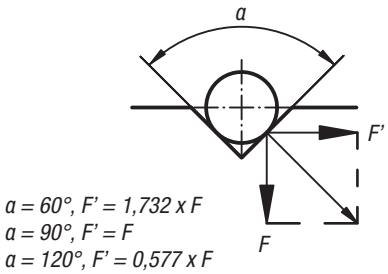
with slot and ball, LONG-LOK secured, steel





applies to models with
D = M3, M4, M5 and M6

L2 = approx. 2x thread pitch



α = 60°, F' = 1,732 x F
α = 90°, F' = F
α = 120°, F' = 0,577 x F

Material:
Sleeve steel grade 5.8.
Ball steel.
Spring in spring steel class D.

LONG-LOK thread lock nylon.

Version:
Black oxidised.
Ball hardened.

Sample order:
K0321.12

KIPP Spring plungers with slot and ball, standard spring, LONG-LOK secured

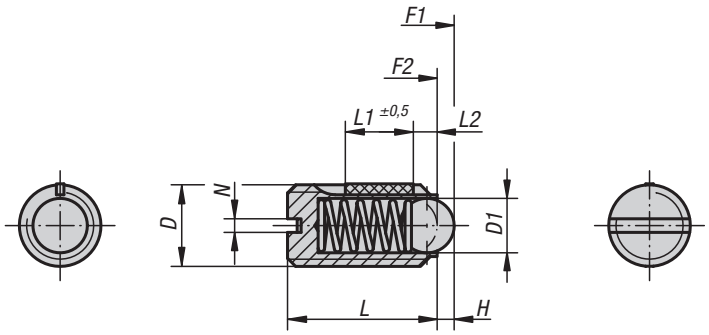
Order No.	D	D1	L	L1	H	N	Spring force initial pressure F1 approx. N	Spring force final pressure F2 approx. N	Tightening torque approx. Nm	Loosening torque, after third unscrewing approx. Nm
K0321.03	M3	1,5	7	4	0,4	0,4	1,5	3	0,10	0,07
K0321.04	M4	2,5	9	5	0,8	0,6	4	10	0,18	0,12
K0321.05	M5	3	12	6	0,9	0,8	6	11	0,12	0,08
K0321.06	M6	3,5	14	7	1	1	9	13	0,43	0,21
K0321.08	M8	5	16	8	1,5	1,2	15	30	1,09	0,37
K0321.10	M10	6	19	9	2	1,6	20	35	1,36	0,62
K0321.12	M12	8	22	10	2,5	2	30	55	2,03	1,36
K0321.16	M16	10	24	14	3,5	2,5	65	125	3,95	2,95

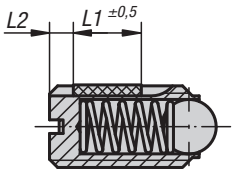
KIPP Spring plungers with slot and ball, reinforced spring, LONG-LOK secured

Order No.	D	D1	L	L1	H	N	Spring force initial pressure F1 approx. N	Spring force final pressure F2 approx. N	Tightening torque approx. Nm	Loosening torque, after third unscrewing approx. Nm
K0321.203	M3	1,5	7	4	0,4	0,4	5	7	0,10	0,07
K0321.204	M4	2,5	9	5	0,8	0,6	12	22	0,18	0,12
K0321.205	M5	3	12	6	0,9	0,8	19	30	0,12	0,08
K0321.206	M6	3,5	14	7	1	1	28	40	0,43	0,21
K0321.208	M8	5	16	8	1,5	1,2	47	73	1,09	0,37
K0321.210	M10	6	19	9	2	1,6	66	100	1,36	0,62
K0321.212	M12	8	22	10	2,5	2	66	120	2,03	1,36
K0321.216	M16	10	24	14	3,5	2,5	90	180	3,95	2,95

Spring plungers

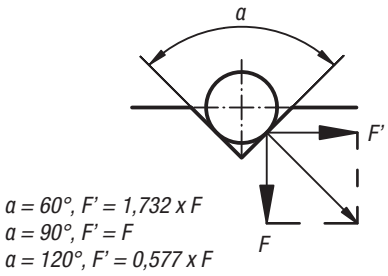
with slot and ball, LONG-LOK secured, stainless steel





applies to models with
D = M3, M4, M5 and M6

L2 = approx. 2x thread pitch



α = 60°, F' = 1,732 x F
α = 90°, F' = F
α = 120°, F' = 0,577 x F

Material:
Sleeve 1.4305.
Ball 1.4034.
Spring 1.4310.

LONG-LOK thread lock in nylon.

Version:
Bright. Ball hardened.

Sample order:
K0322.12

KIPP Spring plungers with slot and ball, standard spring, LONG-LOK secured

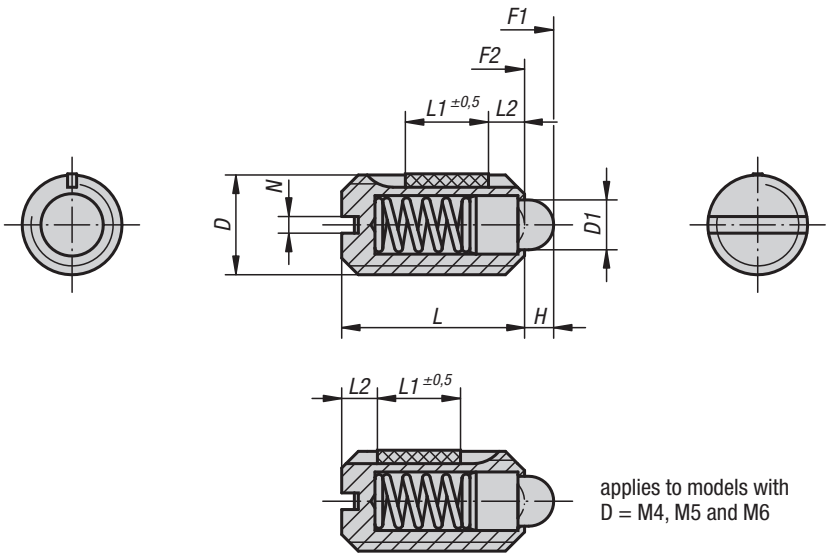
Order No.	D	D1	L	L1	H	N	Spring force initial pressure F1 approx. N	Spring force final pressure F2 approx. N	Tightening torque approx. Nm	Loosening torque, after third unscrewing approx. Nm
K0322.03	M3	1,5	7	4	0,4	0,4	1,5	3	0,10	0,07
K0322.04	M4	2,5	9	5	0,8	0,6	4	10	0,18	0,12
K0322.05	M5	3	12	6	0,9	0,8	6	11	0,12	0,08
K0322.06	M6	3,5	14	7	1	1	9	13	0,43	0,21
K0322.08	M8	5	16	8	1,5	1,2	15	30	1,09	0,37
K0322.10	M10	6	19	9	2	1,6	20	35	1,36	0,62
K0322.12	M12	8	22	10	2,5	2	30	55	2,03	1,36
K0322.16	M16	10	24	14	3,5	2,5	65	125	3,95	2,95

KIPP Spring plungers with slot and ball, reinforced spring, LONG-LOK secured

Order No.	D	D1	L	L1	H	N	Spring force initial pressure F1 approx. N	Spring force final pressure F2 approx. N	Tightening torque approx. Nm	Loosening torque, after third unscrewing approx. Nm
K0322.203	M3	1,5	7	4	0,4	0,4	5	7	0,10	0,07
K0322.204	M4	2,5	9	5	0,8	0,6	12	22	0,18	0,12
K0322.205	M5	3	12	6	0,9	0,8	19	30	0,12	0,08
K0322.206	M6	3,5	14	7	1	1	28	40	0,43	0,21
K0322.208	M8	5	16	8	1,5	1,2	47	73	1,09	0,37
K0322.210	M10	6	19	9	2	1,6	66	100	1,36	0,62
K0322.212	M12	8	22	10	2,5	2	66	120	2,03	1,36
K0322.216	M16	10	24	14	3,5	2,5	90	180	3,95	2,95

Spring plungers

with slot and thrust pin, LONG-LOK secured, steel



applies to models with
D = M4, M5 and M6

L2 = approx. 2x thread pitch

Material:
Sleeve steel grade 5.8.
Thrust pin steel.
Spring steel Grade D.

LONG-LOK thread lock nylon.

Version:
Black oxidised.
Thrust pin hardened.

Sample order:
K0323.10

KIPP Spring plungers with slot and thrust pin, standard spring force, LONG-LOK secured

Order No.	D	D1	L	L1	H	N	Spring force initial pressure F1 approx. N	Spring force final pressure F2 approx. N	Tightening torque approx. Nm	Loosening torque, after third unscrewing approx. Nm
K0323.04	M4	1,8	9	5	1,5	0,6	6	20	0,18	0,12
K0323.05	M5	2,4	12	6	2	0,8	6	20	0,12	0,08
K0323.06	M6	2,7	14	7	2	1	7	20	0,44	0,21
K0323.08	M8	4	16	8	2	1,2	15	30	1,10	0,38
K0323.10	M10	4,5	19	9	2,5	1,6	20	35	1,36	0,62
K0323.12	M12	6	22	10	3,5	2	30	55	2,11	1,41
K0323.16	M16	8,5	24	14	4,5	2,5	45	100	3,95	3,05

KIPP Spring plungers with slot and thrust pin, light spring force, LONG-LOK secured

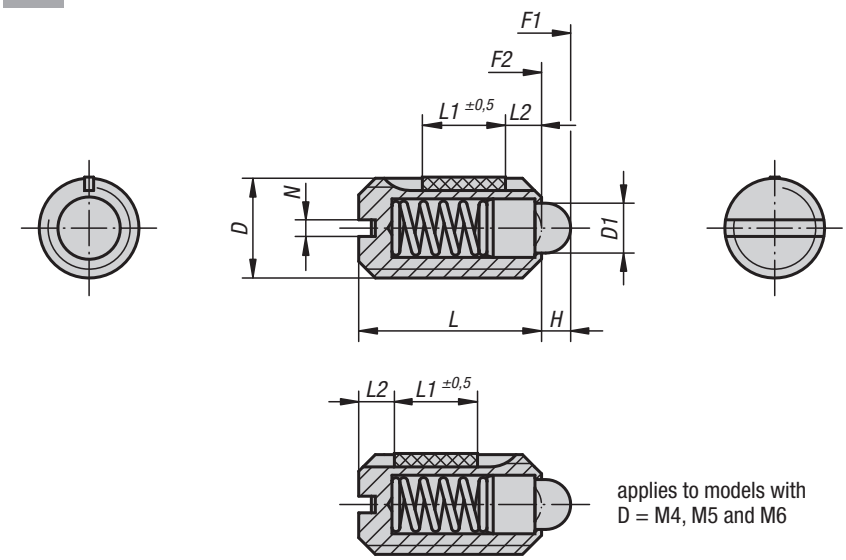
Order No.	D	D1	L	L1	H	N	Spring force initial pressure F1 approx. N	Spring force final pressure F2 approx. N	Tightening torque approx. Nm	Loosening torque, after third unscrewing approx. Nm
K0323.104	M4	1,8	9	5	1,5	0,6	3	10	0,18	0,12
K0323.105	M5	2,4	12	6	2	0,8	3	10	0,12	0,08
K0323.106	M6	2,7	14	7	2	1	4	10	0,44	0,21
K0323.108	M8	4	16	8	2	1,2	7	15	1,10	0,38
K0323.110	M10	4,5	19	9	2,5	1,6	9	16	1,36	0,62
K0323.112	M12	6	22	10	3,5	2	14	26	2,11	1,41
K0323.116	M16	8,5	24	14	4,5	2,5	22	50	3,95	3,05

KIPP Spring plungers with slot and thrust pin, reinforced spring force, LONG-LOK secured

Order No.	D	D1	L	L1	H	N	Spring force initial pressure F1 approx. N	Spring force final pressure F2 approx. N	Tightening torque approx. Nm	Loosening torque, after third unscrewing approx. Nm
K0323.205	M5	2,4	12	6	2	0,8	9	25	0,12	0,08
K0323.206	M6	2,7	14	7	2	1	11	25	0,44	0,21
K0323.208	M8	4	16	8	2	1,2	22	43	1,1	0,38
K0323.210	M10	4,5	19	9	2,5	1,6	20	54	1,36	0,62
K0323.212	M12	6	22	10	3,5	2	36	94	2,11	1,41
K0323.216	M16	8,5	24	14	4,5	2,5	60	110	3,99	3,05

Spring plungers

with slot and thrust pin, LONG-LOK secured, stainless steel



applies to models with
D = M4, M5 and M6

L2 = approx. 2x thread pitch

Material:
Sleeve 1.4305.
Thrust pin 1.4034.
Spring 1.4310.

LONG-LOK thread lock in nylon.

Version:
Bright.
Thrust pin hardened.

Sample order:
K0324.10

KIPP Spring plungers with slot and thrust pin, standard spring force, LONG-LOK secured

Order No.	D	D1	L	L1	H	N	Spring force initial pressure F1 approx. N	Spring force final pressure F2 approx. N	Tightening torque approx. Nm	Loosening torque, after third unscrewing approx. Nm
K0324.04	M4	1,8	9	5	1,5	0,6	6	20	0,18	0,12
K0324.05	M5	2,4	12	6	2	0,8	6	20	0,12	0,08
K0324.06	M6	2,7	14	7	2	1	7	20	0,44	0,21
K0324.08	M8	4	16	8	2	1,2	15	30	1,10	0,38
K0324.10	M10	4,5	19	9	2,5	1,6	20	35	1,36	0,62
K0324.12	M12	6	22	10	3,5	2	30	55	2,11	1,41
K0324.16	M16	8,5	24	14	4,5	2,5	45	100	3,95	3,05

KIPP Spring plungers with slot and thrust pin, light spring force, LONG-LOK secured

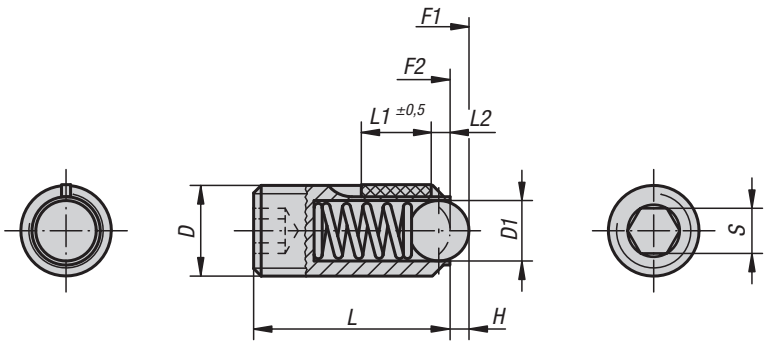
Order No.	D	D1	L	L1	H	N	Spring force initial pressure F1 approx. N	Spring force final pressure F2 approx. N	Tightening torque approx. Nm	Loosening torque, after third unscrewing approx. Nm
K0324.104	M4	1,8	9	5	1,5	0,6	3	10	0,18	0,12
K0324.105	M5	2,4	12	6	2	0,8	3	10	0,12	0,08
K0324.106	M6	2,7	14	7	2	1	4	10	0,44	0,21
K0324.108	M8	4	16	8	2	1,2	7	15	1,10	0,38
K0324.110	M10	4,5	19	9	2,5	1,6	9	16	1,36	0,62
K0324.112	M12	6	22	10	3,5	2	14	26	2,11	1,41
K0324.116	M16	8,5	24	14	4,5	2,5	22	50	3,95	3,05

KIPP Spring plungers with slot and thrust pin, reinforced spring force, LONG-LOK secured

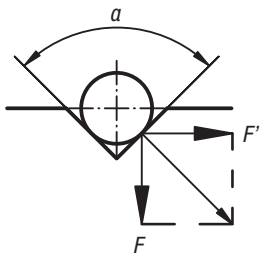
Order No.	D	D1	L	L1	H	N	Spring force initial pressure F1 approx. N	Spring force final pressure F2 approx. N	Tightening torque approx. Nm	Loosening torque, after third unscrewing approx. Nm
K0324.205	M5	2,4	12	6	2	0,8	9	25	0,12	0,08
K0324.206	M6	2,7	14	7	2	1	11	25	0,44	0,21
K0324.208	M8	4	16	8	2	1,2	22	43	1,1	0,38
K0324.210	M10	4,5	19	9	2,5	1,6	20	54	1,36	0,62
K0324.212	M12	6	22	10	3,5	2	36	94	2,11	1,41
K0324.216	M16	8,5	24	14	4,5	2,5	60	110	3,99	3,05

Spring plungers

with hexagon socket and ball, LONG-LOK secured, steel



L2 = approx. 2x thread pitch



a = 60°, F' = 1,732 x F
a = 90°, F' = F
a = 120°, F' = 0,577 x F

Material:
Sleeve steel grade 5.8.
Ball steel.
Spring in spring steel class D.

LONG-LOK thread lock nylon.

Version:
Black oxidised.
Ball hardened.

Sample order:
K0325.08

KIPP Spring plungers with hexagon socket and ball, standard spring, LONG-LOK secured

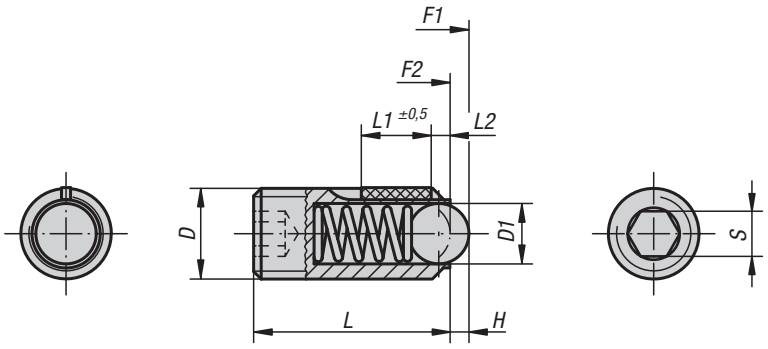
Order No.	D	D1	L	L1	H	S	Spring force initial pressure F1 approx. N	Spring force final pressure F2 approx. N	Tightening torque approx. Nm	Loosening torque, after third unscrewing approx. Nm
K0325.03	M3	1,5	9	4	0,4	1,5	1,5	3	0,10	0,07
K0325.04	M4	2,5	10	5	0,8	2	4	10	0,18	0,12
K0325.05	M5	3	14	6	0,9	2,5	6	11	0,12	0,08
K0325.06	M6	3,5	15	7	1	3	9	13	0,44	0,21
K0325.08	M8	5	18	8	1,5	4	15	30	1,10	0,38
K0325.10	M10	6	23	9	2	5	20	35	1,30	0,60
K0325.12	M12	8	26	10	2,5	6	30	55	2,00	1,30
K0325.16	M16	10	33	14	3,5	8	65	125	3,90	3,00

KIPP Spring plungers with hexagon socket and ball, reinforced spring, LONG-LOK secured

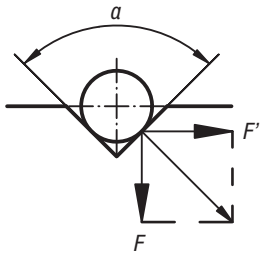
Order No.	D	D1	L	L1	H	S	Spring force initial pressure F1 approx. N	Spring force final pressure F2 approx. N	Tightening torque approx. Nm	Loosening torque, after third unscrewing approx. Nm
K0325.203	M3	1,5	9	4	0,4	1,5	5	7	0,10	0,07
K0325.204	M4	2,5	10	5	0,8	2	12	22	0,18	0,12
K0325.205	M5	3	14	6	0,9	2,5	19	30	0,12	0,08
K0325.206	M6	3,5	15	7	1	3	28	40	0,44	0,21
K0325.208	M8	5	18	8	1,5	4	47	73	1,10	0,38
K0325.210	M10	6	23	9	2	5	66	100	1,30	0,60
K0325.212	M12	8	26	10	2,5	6	66	120	2,00	1,30
K0325.216	M16	10	33	14	3,5	8	90	180	3,90	3,00

Spring plungers

with hexagon socket and ball, LONG-LOK secured stainless steel



L2 = approx. 2x thread pitch



a = 60°, F' = 1,732 x F
a = 90°, F' = F
a = 120°, F' = 0,577 x F

Material:
Sleeve 1.4305.
Ball 1.4034.
Spring 1.4310.

LONG-LOK thread lock in nylon.

Version:
Bright. Ball hardened.

Sample order:
K0326.08

KIPP Spring plungers with hexagon socket and ball, standard spring, LONG-LOK secured

Order No.	D	D1	L	L1	H	S	Spring force initial pressure F1 approx. N	Spring force final pressure F2 approx. N	Tightening torque approx. Nm	Loosening torque, after third unscrewing approx. Nm
K0326.03	M3	1,5	9	4	0,4	1,5	1,5	3	0,10	0,07
K0326.04	M4	2,5	10	5	0,8	2	4	10	0,18	0,12
K0326.05	M5	3	14	6	0,9	2,5	6	11	0,12	0,08
K0326.06	M6	3,5	15	7	1	3	9	13	0,44	0,21
K0326.08	M8	5	18	8	1,5	4	15	30	1,10	0,38
K0326.10	M10	6	23	9	2	5	20	35	1,30	0,60
K0326.12	M12	8	26	10	2,5	6	30	55	2,00	1,30
K0326.16	M16	10	33	14	3,5	8	65	125	3,90	3,00

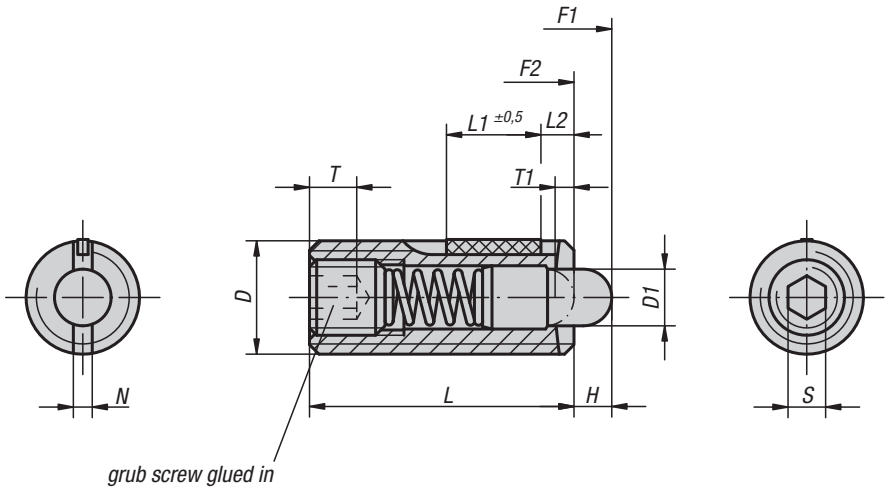
KIPP Spring plungers with hexagon socket and ball, reinforced spring, LONG-LOK secured

Order No.	D	D1	L	L1	H	S	Spring force initial pressure F1 approx. N	Spring force final pressure F2 approx. N	Tightening torque approx. Nm	Loosening torque, after third unscrewing approx. Nm
K0326.203	M3	1,5	9	4	0,4	1,5	5	7	0,10	0,07
K0326.204	M4	2,5	10	5	0,8	2	12	22	0,18	0,12
K0326.205	M5	3	14	6	0,9	2,5	19	30	0,12	0,08
K0326.206	M6	3,5	15	7	1	3	28	40	0,44	0,21
K0326.208	M8	5	18	8	1,5	4	47	73	1,10	0,38
K0326.210	M10	6	23	9	2	5	66	100	1,30	0,60
K0326.212	M12	8	26	10	2,5	6	66	120	2,00	1,30
K0326.216	M16	10	33	14	3,5	8	90	180	3,90	3,00

Notes

Spring plungers

with hexagon socket and thrust pin, LONG-LOK secured, steel



Material:
Sleeve steel grade 5.8.
Thrust pin steel.
Spring steel grade D.

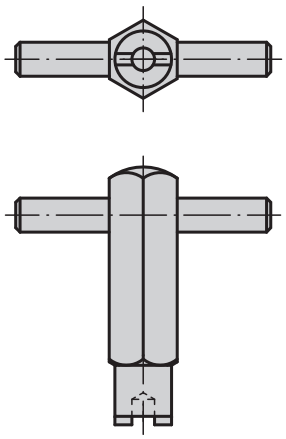
LONG-LOK thread lock nylon.

Version:
Black oxidised.
Thrust pin hardened.

Sample order:
K0327.12

L2 = approx. 2x thread pitch

assembly key



Spring plungers

with hexagon socket and thrust pin, LONG-LOK secured, steel

KIPP Spring plungers with hexagon socket and thrust pin, standard spring force, LONG-LOK secured

Order No.	D	D1	L	L1	H	T	T1	N	S	Spring force initial pressure F1 approx. N	Spring force final pressure F2 approx. N	Tightening torque approx. Nm	Loosening torque, after third unscrewing approx. Nm	Order No. assembly key
K0327.05	M5	2,4	18	7	2,3	2	0,8	0,8	1,5	6	20	0,12	0,08	K0317.905
K0327.06	M6	2,7	20	7	2,5	2,5	1	1	2	7	20	0,45	0,22	K0317.906
K0327.08	M8	3,5	22	8	3	3	1,4	1,2	2,5	9	35	1,05	0,37	K0317.908
K0327.10	M10	4	22	9	3	3,5	1,4	1,6	3	9	35	1,30	0,60	K0317.910
K0327.12	M12	6	28	10	4	5	2	2	4	12	55	2,00	1,30	K0317.912
K0327.16	M16	7,5	32	14	5	6	2,5	2,5	5	45	100	3,90	3,00	K0317.916

KIPP Spring plungers with hexagon socket and thrust pin, light spring force, LONG-LOK secured

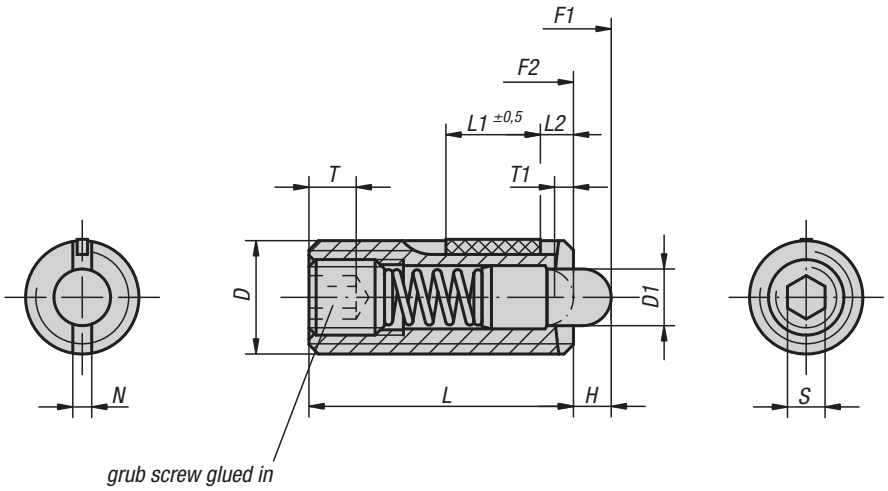
Order No.	D	D1	L	L1	H	T	T1	N	S	Spring force initial pressure F1 approx. N	Spring force final pressure F2 approx. N	Tightening torque approx. Nm	Loosening torque, after third unscrewing approx. Nm	Order No. assembly key
K0327.105	M5	2,4	18	7	2,3	2	0,8	0,8	1,5	3	10	0,12	0,08	K0317.905
K0327.106	M6	2,7	20	7	2,5	2,5	1	1	2	3	9	0,45	0,22	K0317.906
K0327.108	M8	3,5	22	8	3	3	1,4	1,2	2,5	4	16	1,05	0,37	K0317.908
K0327.110	M10	4	22	9	3	3,5	1,4	1,6	3	4	16	1,30	0,60	K0317.910
K0327.112	M12	6	28	10	4	5	2	2	4	5	27	2,00	1,30	K0317.912
K0327.116	M16	7,5	32	14	5	6	2,5	2,5	5	20	45	3,90	3,00	K0317.916

KIPP Spring plungers with hexagon socket and thrust pin, reinforced spring force, LONG-LOK secured

Order No.	D	D1	L	L1	H	T	T1	N	S	Spring force initial pressure F1 approx. N	Spring force final pressure F2 approx. N	Tightening torque approx. Nm	Loosening torque, after third unscrewing approx. Nm	Order No. assembly key
K0327.205	M5	2,4	18	7	2,3	2	0,8	0,8	1,5	11	29	0,12	0,08	K0317.905
K0327.206	M6	2,7	20	7	2,5	2,5	1	1	2	14	37	0,45	0,22	K0317.906
K0327.208	M8	3,5	22	8	3	3	1,4	1,2	2,5	22	65	1,05	0,37	K0317.908
K0327.210	M10	4	22	9	3	3,5	1,4	1,6	3	19	70	1,30	0,60	K0317.910
K0327.212	M12	6	28	10	4	5	2	2	4	25	85	2,00	1,30	K0317.912
K0327.216	M16	7,5	32	14	5	6	2,5	2,5	5	60	150	3,90	3,00	K0317.916

Spring plungers

with hexagon socket and POM thrust pin, LONG-LOK secured, steel



L2 = approx. 2x thread pitch

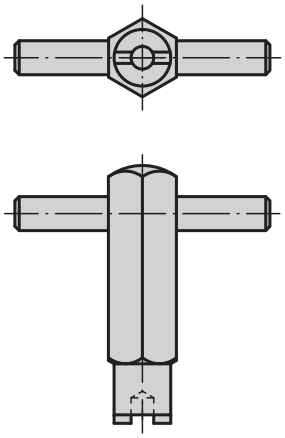
Material:
Sleeve steel grade 5.8.
Thrust pin POM.
Spring steel grade D.

LONG-LOK thread lock nylon.

Version:
Black oxidised.

Sample order:
K0328.12

assembly key



KIPP Spring plungers with hexagon socket and thrust pin, standard spring force, LONG-LOK secured

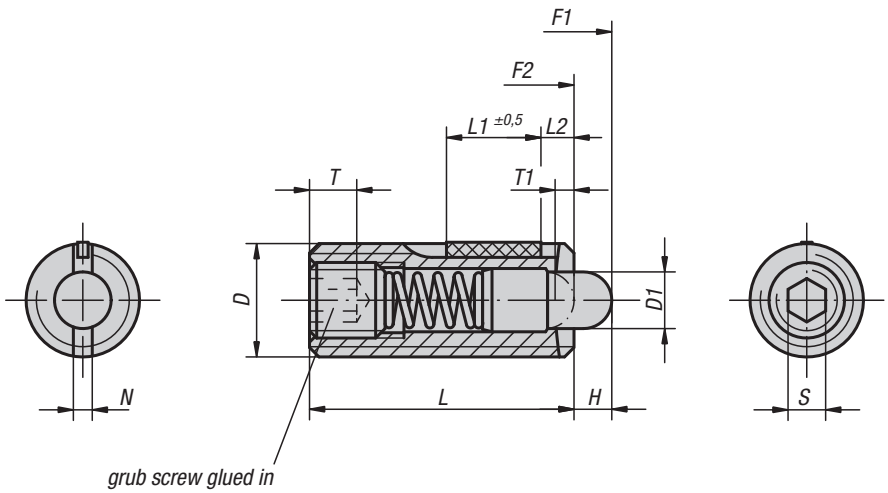
Order No.	D	D1	L	L1	H	T	T1	N	S	Spring force initial pressure F1 approx. N	Spring force final pressure F2 approx. N	Tightening torque approx. Nm	Loosening torque, after third unscrewing approx. Nm	Order No. assembly key
K0328.05	M5	2,4	18	7	2,3	2	0,8	0,8	1,5	6	20	0,12	0,08	K0317.905
K0328.06	M6	2,7	20	7	2,5	2,5	1	1	2	7	20	0,45	0,22	K0317.906
K0328.08	M8	3,5	22	8	3	3	1,4	1,2	2,5	9	35	1,05	0,37	K0317.908
K0328.10	M10	4	22	9	3	3,5	1,4	1,6	3	9	35	1,30	0,60	K0317.910
K0328.12	M12	6	28	10	4	5	2	2	4	12	55	2,00	1,30	K0317.912
K0328.16	M16	7,5	32	14	5	6	2,5	2,5	5	45	100	3,90	3,00	K0317.916

KIPP Spring plungers with hexagon socket and thrust pin, light spring force, LONG-LOK secured

Order No.	D	D1	L	L1	H	T	T1	N	S	Spring force initial pressure F1 approx. N	Spring force final pressure F2 approx. N	Tightening torque approx. Nm	Loosening torque, after third unscrewing approx. Nm	Order No. assembly key
K0328.105	M5	2,4	18	7	2,3	2	0,8	0,8	1,5	3	10	0,12	0,08	K0317.905
K0328.106	M6	2,7	20	7	2,5	2,5	1	1	2	3	9	0,45	0,22	K0317.906
K0328.108	M8	3,5	22	8	3	3	1,4	1,2	2,5	4	16	1,05	0,37	K0317.908
K0328.110	M10	4	22	9	3	3,5	1,4	1,6	3	4	16	1,30	0,60	K0317.910
K0328.112	M12	6	28	10	4	5	2	2	4	5	27	2,00	1,30	K0317.912
K0328.116	M16	7,5	32	14	5	6	2,5	2,5	5	20	45	3,90	3,00	K0317.916

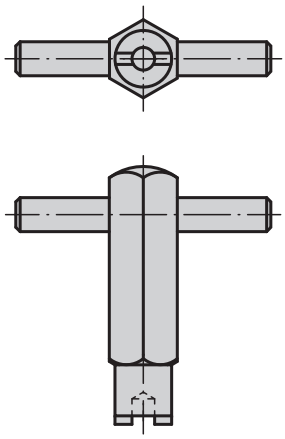
Spring plungers

with hexagon socket and thrust pin, LONG-LOK secured, stainless steel



L2 = approx. 2x thread pitch

assembly key



Material:
Sleeve 1.4305.
Thrust pin 1.4034.
Spring 1.4310.

LONG-LOK thread lock in nylon.

Version:
Bright.
Thrust pin hardened.

Sample order:
K0329.12

KIPP Spring plungers with hexagon socket and thrust pin, standard spring force, LONG-LOK secured

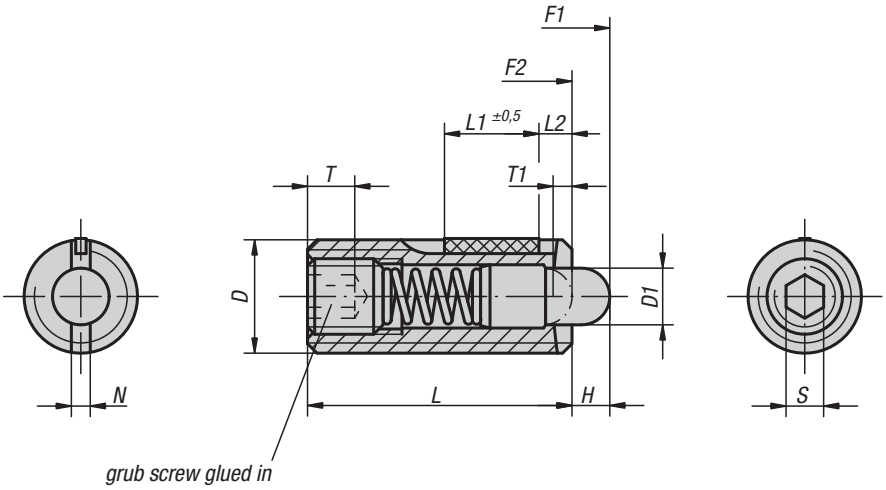
Order No.	D	D1	L	L1	H	T	T1	N	S	Spring force initial pressure F1 approx. N	Spring force final pressure F2 approx. N	Tightening torque approx. Nm	Loosening torque, after third unscrewing approx. Nm	Order No. assembly key
K0329.05	M5	2,4	18	7	2,3	2	0,8	0,8	1,5	5	17	0,12	0,08	K0317.905
K0329.06	M6	2,7	20	7	2,5	2,5	1	1	2	6	17	0,45	0,22	K0317.906
K0329.08	M8	3,5	22	8	3	3	1,4	1,2	2,5	7	29	1,05	0,37	K0317.908
K0329.10	M10	4	22	9	3	3,5	1,4	1,6	3	8	31	1,30	0,60	K0317.910
K0329.12	M12	6	28	10	4	5	2	2	4	10	47	2,00	1,30	K0317.912
K0329.16	M16	7,5	32	14	5	6	2,5	2,5	5	45	100	3,90	3,00	K0317.916

KIPP Spring plungers with hexagon socket and thrust pin, reinforced spring force, LONG-LOK secured

Order No.	D	D1	L	L1	H	T	T1	N	S	Spring force initial pressure F1 approx. N	Spring force final pressure F2 approx. N	Tightening torque approx. Nm	Loosening torque, after third unscrewing approx. Nm	Order No. assembly key
K0329.205	M5	2,4	18	7	2,3	2	0,8	0,8	1,5	9	26	0,12	0,08	K0317.905
K0329.206	M6	2,7	20	7	2,5	2,5	1	1	2	11	35	0,45	0,22	K0317.906
K0329.208	M8	3,5	22	8	3	3	1,4	1,2	2,5	15	48	1,05	0,37	K0317.908
K0329.210	M10	4	22	9	3	3,5	1,4	1,6	3	15	58	1,30	0,60	K0317.910
K0329.212	M12	6	28	10	4	5	2	2	4	19	74	2,00	1,30	K0317.912

Spring plungers

with hexagon socket and POM thrust pin, LONG-LOK secured, stainless steel



Material:
Stainless steel sleeve 1.4305.
Thrust pin POM.
Stainless steel spring 1.4310.

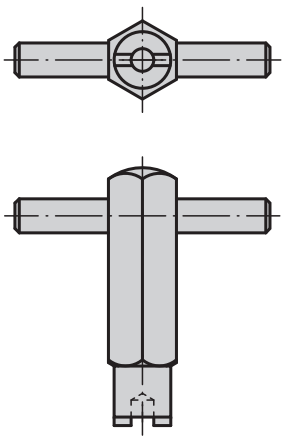
LONG-LOK thread lock nylon.

Version:
Bright.

Sample order:
K0330.12

L2 = approx. 2x thread pitch

assembly key

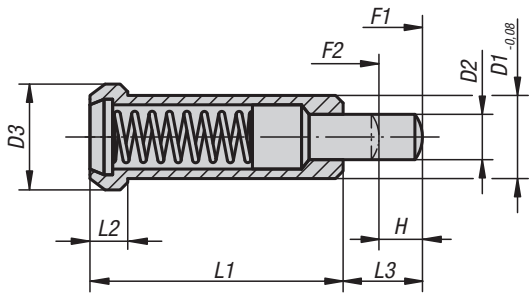


KIPP Spring plungers with hexagon socket and thrust pin, standard spring force, LONG-LOK secured

Order No.	D	D1	L	L1	H	T	T1	N	S	Spring force initial pressure F1 approx. N	Spring force final pressure F2 approx. N	Tightening torque approx. Nm	Loosening torque, after third unscrewing approx. Nm	Order No. assembly key
K0330.05	M5	2,4	18	7	2,3	2	0,8	0,8	1,5	5	17	0,12	0,08	K0317.905
K0330.06	M6	2,7	20	7	2,5	2,5	1	1	2	6	17	0,45	0,22	K0317.906
K0330.08	M8	3,5	22	8	3	3	1,4	1,2	2,5	7	29	1,05	0,37	K0317.908
K0330.10	M10	4	22	9	3	3,5	1,4	1,6	3	8	31	1,30	0,60	K0317.910
K0330.12	M12	6	28	10	4	5	2	2	4	10	47	2,00	1,30	K0317.912
K0330.16	M16	7,5	32	14	5	6	2,5	2,5	5	45	100	3,90	3,00	K0317.916

Spring plungers

with head

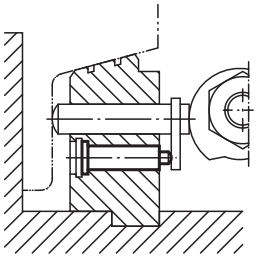


Material:
Free cutting steel.

Version:
Black oxidised.
Thrust pin hardened.

Sample order:
K0331.10

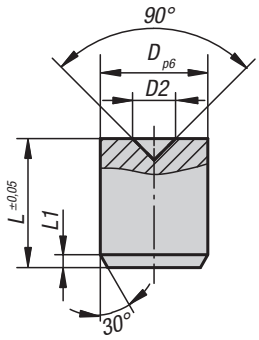
Note:
These spring plungers are chiefly used as ejectors and spring stops in machine construction.

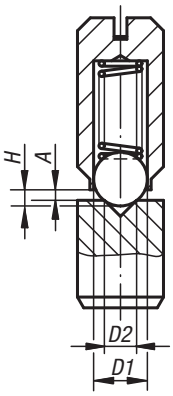


KIPP Spring plungers with head

Order No.	D1	D2	D3	L1	L2	L3	H	Spring force initial pressure F1 approx. N	Spring force final pressure F2 approx. N
K0331.06	6	2,95	8	20	3,2	6	3,5	10	22
K0331.08	8	3,95	10	24	3,2	8	4,5	30	90
K0331.10	10	5,95	13	30	4	10	5,5	42	110
K0331.12	12	7,95	16	36	5	12	6,5	50	130

Locators





$$A = H - \left(\frac{D1 + D2}{2} - \frac{\sqrt{2}}{2} \times D1 \right)$$

Material:
Free-cutting steel

Version:
Bright, hardened.

Sample order:
K0332.05020

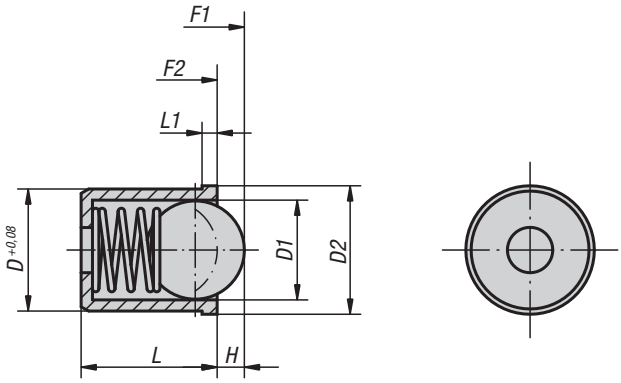
Note:
If abrasion-resistant and exact locking is necessary, locators can be used together with spring plungers, especially with strong spring force.

KIPP Locators

Order No.	Suitable for Spring Plunger D	D	D1	D2	H	L	L1
K0332.04015	- / M4	4	see relevant product page for dimensions	1,5	see relevant product page for dimensions	5	0,5
K0332.05020	ø 4 / M5	5	see relevant product page for dimensions	2	see relevant product page for dimensions	6	0,5
K0332.06020	ø 5 / M6	6	see relevant product page for dimensions	2	see relevant product page for dimensions	8	0,7
K0332.08030	ø 6 / M8	8	see relevant product page for dimensions	3	see relevant product page for dimensions	10	1
K0332.10040	ø 8 / M10	10	see relevant product page for dimensions	4	see relevant product page for dimensions	12	1,2
K0332.12060	ø 10 / M12	12	see relevant product page for dimensions	6	see relevant product page for dimensions	14	1,5
K0332.16080	ø 12 / M16	16	see relevant product page for dimensions	8	see relevant product page for dimensions	18	2

Spring plungers

smooth version, stainless steel

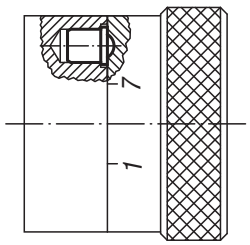


Material:
Sleeve and spring stainless steel.
Ball stainless steel or POM.

Version:
Sleeve bright.
Ball hardened, bright.

Sample order:
K0333.05

example:

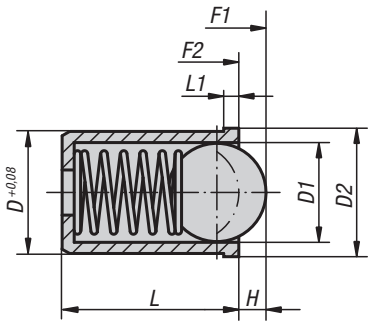


KIPP Spring plungers smooth version, stainless steel

Order No.	Version	D	D1	D2	L	L1	H	Spring force initial pressure F1 approx. N	Spring force final pressure F2 approx. N
K0333.03	stainless steel ball	3	2,5	3,5	4	0,8	0,65	1,7	3,4
K0333.04	stainless steel ball	4	3	4,6	5	1	0,8	3	7
K0333.05	stainless steel ball	5	4	5,6	6	1	1	4	7
K0333.06	stainless steel ball	6	5	6,5	7	1	1,5	6	12
K0333.08	stainless steel ball	8	6,5	8,5	9	1	1,8	6	12
K0333.10	stainless steel ball	10	8	12	13,5	2,5	2,7	10	20
K0333.12	stainless steel ball	12	10	14	16	2,5	3,5	15	25
K0333.304	POM ball	4	3	4,6	5	1	0,6	3	7
K0333.305	POM ball	5	4	5,6	6	1	0,8	4	7
K0333.306	POM ball	6	5	6,5	7	1	1,3	6	12
K0333.308	POM ball	8	6,5	8,5	9	1	1,6	6	12
K0333.310	POM ball	10	8	12	13,5	2,5	2,6	10	20
K0333.312	POM ball	12	10	14	16	2,5	3,3	15	25

Spring plungers

smooth version, extended, stainless steel



Material:
Sleeve and spring stainless steel.
Ball stainless steel or POM.

Version:
Sleeve bright.
Ball hardened, bright.

Sample order:
K0333.104

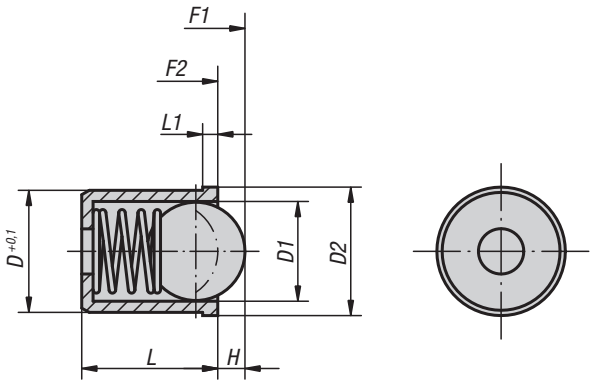
KIPP Spring plungers smooth version, extended, stainless steel

Order No.	Version	D	D1	D2	L	L1	H	Spring force initial pressure F1 approx. N	Spring force final pressure F2 approx. N
K0333.104	stainless steel ball	4	3	4,6	9	1	0,8	12	22
K0333.105	stainless steel ball	5	4	5,6	12	1	1	19	30
K0333.106	stainless steel ball	6	5	6,5	14	1	1,5	22	40
K0333.108	stainless steel ball	8	6	8,5	16	1	1,8	42	73
K0333.110	stainless steel ball	10	8	12	22	2,5	2,7	54	100
K0333.112	stainless steel ball	12	10	14	24	2,5	3,2	54	122
K0333.404	POM ball	4	3	4,6	9	1	0,8	12	22
K0333.405	POM ball	5	4	5,6	12	1	1	19	30
K0333.406	POM ball	6	5	6,5	14	1	1,5	22	40
K0333.408	POM ball	8	6	8,5	16	1	1,8	42	73
K0333.410	POM ball	10	8	12	22	2,5	2,7	54	100
K0333.412	POM ball	12	10	14	24	2,5	3,2	54	122

Notes

Spring plungers

smooth version, plastic



Material:
Sleeve thermoplastic.
Spring stainless steel.
Ball in stainless steel or in POM.

Version:
Sleeve black.
Ball hardened, bright.

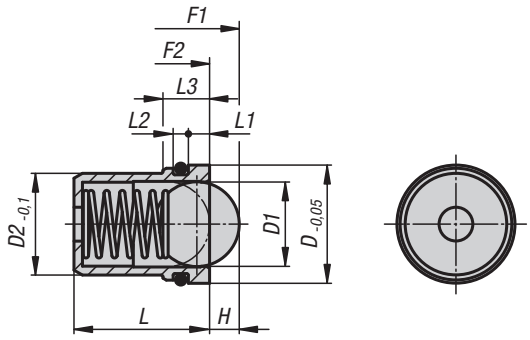
Sample order:
K0334.05

KIPP Spring plungers smooth version, plastic

Order No.	Version	D	D1	D2	L	L1	H	Spring force initial pressure F1 approx. N	Spring force final pressure F2 approx. N
K0334.04	stainless steel ball	4	3	4,6	5	1	0,7	3	7
K0334.05	stainless steel ball	5	4	5,6	6	1	1	4	7
K0334.06	stainless steel ball	6	5	6,5	7	1	1,5	6	12
K0334.08	stainless steel ball	8	6,5	8,5	9	1	1,8	6	12
K0334.10	stainless steel ball	10	8	12	13,5	2,5	2,7	10	20
K0334.12	stainless steel ball	12	10	14	16	2,5	3,5	15	25
K0334.204	POM ball	4	3	4,6	5	1	0,7	3	7
K0334.205	POM ball	5	4	5,6	6	1	1	4	7
K0334.206	POM ball	6	5	6,5	7	1	1,5	6	12
K0334.208	POM ball	8	6,5	8,5	9	1	1,8	6	12
K0334.210	POM ball	10	8	12	13,5	2,5	2,7	10	20
K0334.212	POM ball	12	10	14	16	2,5	3,5	15	25

Spring plungers

with detent ring



Material:
Sleeve, spring and ball in stainless steel.
O-ring NBR.

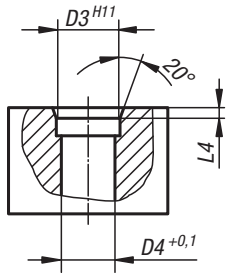
Version:
Sleeve bright.
Ball hardened, bright.
O-ring black.

Sample order:
K0582.05

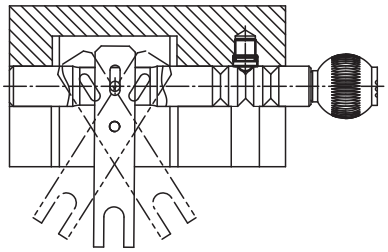
Note:
These spring plungers with o-ring are suitable for overhead installation or for installating in difficult to access positions.

They can be pressed into the location hole by hand or using simple assembly tools. The o-ring holds the plunger in place and prevents it falling out. Other components can be easily installed without the need for further assembly aids.

Assembly dimensions



Application example:

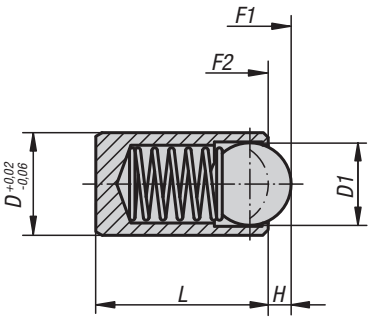


KIPP Spring plungers with detent ring

Order No.	D	D1	D2	D3	D4	H	L	L1	L2	L3	L4	Spring force initial pressure F1 approx. N	Spring force final pressure F2 approx. N
K0582.05	4,95	3	4	5	4,1	0,8	5	1	0,7	2,3	0,7	3	7
K0582.06	5,95	4	5	6	5,1	1	6	1	0,7	2,3	0,7	4	7
K0582.08	7,95	5	6	8	6,1	1,5	7	1,5	1,2	3,7	1	6	12
K0582.10	9,95	6,5	8	10	8,1	1,8	9	2	1,2	4,2	1,5	6	12
K0582.12	11,95	8	10	12	10,1	2,7	13,5	2,5	1,8	5,3	2	10	20
K0582.14	13,95	10	12	14	12,1	3,5	16	2,5	1,8	5,5	2	15	25

Spring plungers

smooth version without collar, stainless steel



Material:
Sleeve and spring stainless steel.
Ball stainless steel or POM.

Version:
Ball hardened, bright.

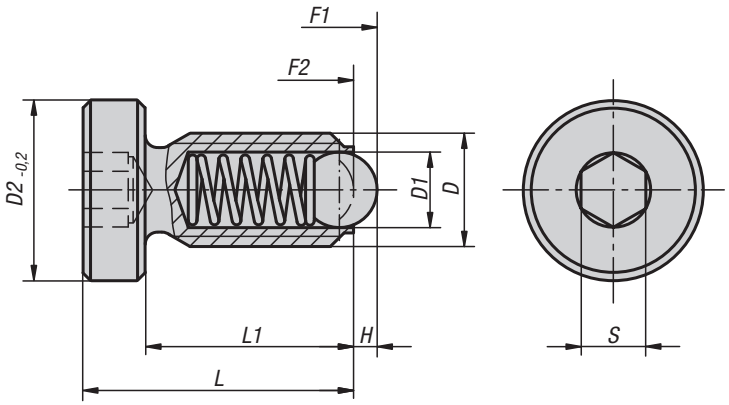
Sample order:
K0335.208

KIPP Spring plungers smooth version, without collar, stainless steel

Order No.	Version	D	D1	L	H	Spring force initial pressure F1 approx. N	Spring force final pressure F2 approx. N
K0335.203	Ball stainless steel	3	2	7	0,65	5	7
K0335.204	Ball stainless steel	4	3	9	0,8	12	22
K0335.205	Ball stainless steel	5	4	12	1	19	30
K0335.206	Ball stainless steel	6	5	14	1,5	22	40
K0335.208	Ball stainless steel	8	6	16	1,8	42	73
K0335.210	Ball stainless steel	10	8	22	2,7	54	100
K0335.212	Ball stainless steel	12	10	24	3,2	54	122
K0335.304	Ball POM	4	3	9	0,6	12	22
K0335.305	Ball POM	5	4	12	0,9	19	30
K0335.306	Ball POM	6	5	14	1,3	22	40
K0335.308	Ball POM	8	6	16	1,7	42	73
K0335.310	Ball POM	10	8	22	2,6	54	100
K0335.312	Ball POM	12	10	24	3,1	54	122

Spring plungers

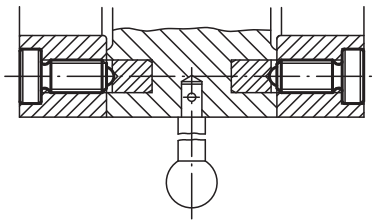
with head



Material:
Free cutting steel or stainless steel.

Version:
Steel black oxidised.
Stainless steel bright.
Ball steel or stainless steel, hardened, bright.

Sample order:
K0336.10



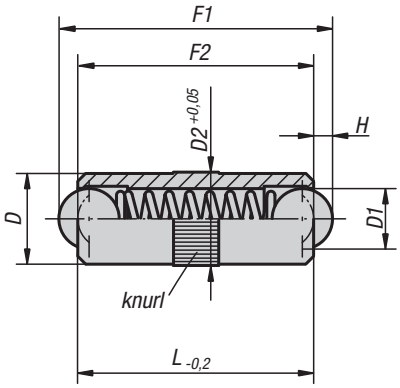
KIPP Spring plungers with head

Order No. steel	Order No. stainless steel	D	D1	D2	L	L1	H	S	Spring force initial pressure F1 approx. N	Spring force final pressure F2 approx. N
K0336.06	**K0336.061**	M6	3,5	10	16	12	1	3	9	13
K0336.08	**K0336.081**	M8	5	13	21	16	1,5	4	15	30
K0336.10	**K0336.101**	M10	6	16	26	20	2	5	20	35
K0336.12	**K0336.121**	M12	8	18	32	25	2,5	6	30	55

K0337

Spring plungers

smooth version, double-sided



Material:
Sleeve brass. Ball and spring stainless steel.

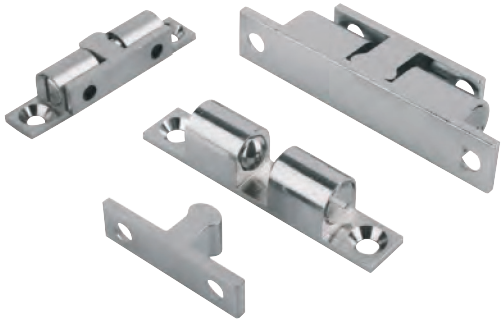
Version:
Balls hardened, bright.

Sample order:
K0337.05

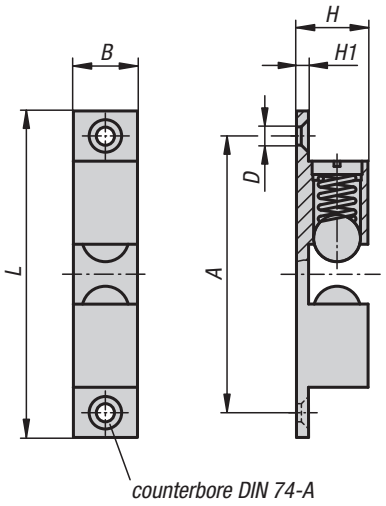
KIPP Spring plungers smooth version, double-sided

Order No.	D	D1	D2	L	H	Spring force initial pressure F1 approx. N	Spring force final pressure F2 approx. N
K0337.025	2,5	2	2,55	6	0,65	1,5	2,8
K0337.03	3	2,5	3,05	8	0,8	2,5	6
K0337.04	4	3	4,05	10	0,9	3	7
K0337.05	5	4	5,05	12	1,2	4	8
K0337.06	6	5	6,05	16	1,6	6	10
K0337.08	8	6	8,05	20	2	8	12
K0337.10	10	8	10,05	24	2,9	10	16

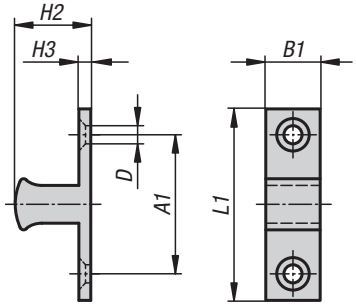
Double ball catch



housing



latch bracket

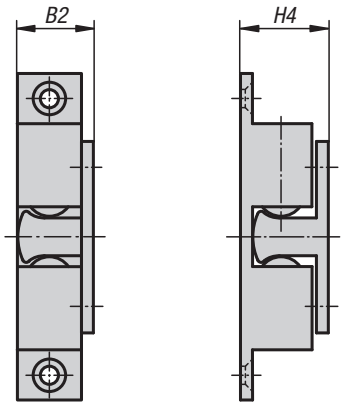


Material, version:
Housing and latch chrome plated brass.
Balls and springs stainless steel.

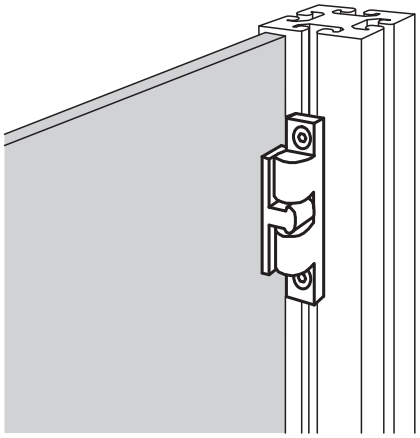
Sample order:
K0583.50

Note:
Quick catch for various applications such as holding doors, hatches, screens etc. closed. The double ball catch consists of a housing and a latch bracket that engages between the two balls. The latch bracket can engage from the front or the side. The engagement pressure is adjustable.

catch



from side from front

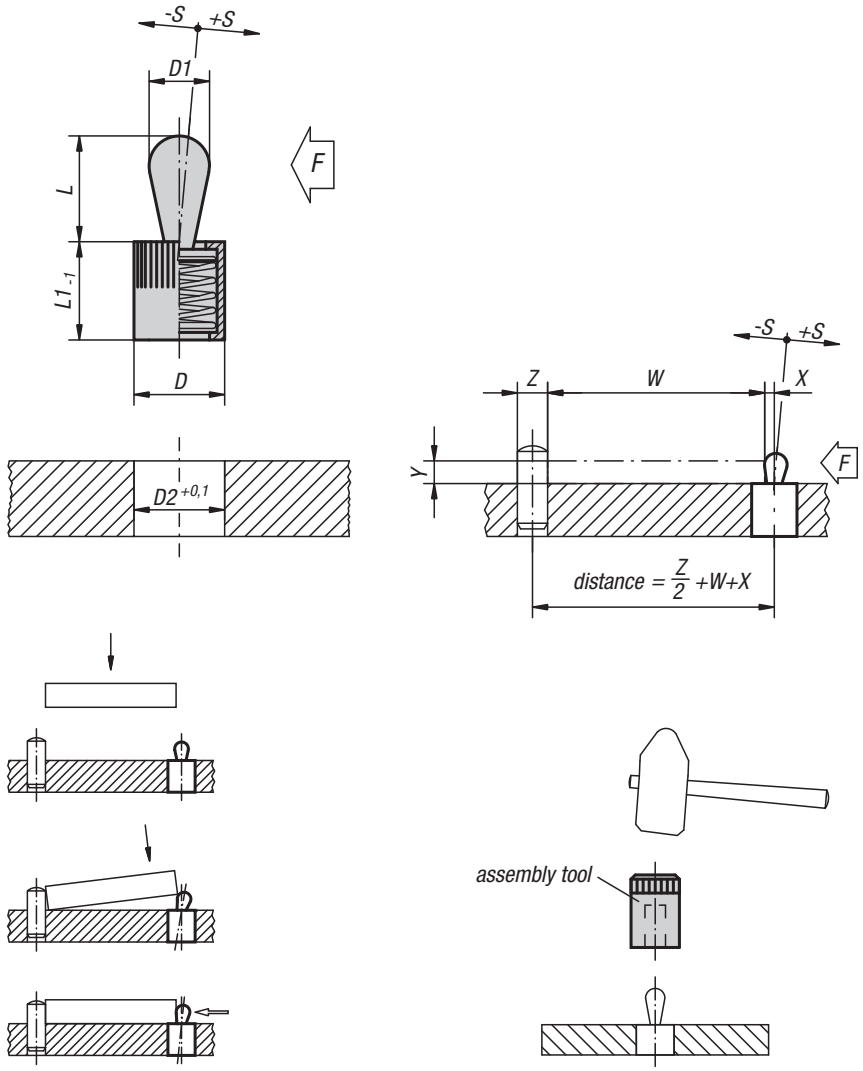


KIPP Double ball catch

Order No.	A	A1	B	B1	B2	D	H	H1	H2	H3	H4	L	L1
K0583.50	39,8	19,8	8,8	7,6	10,8	3,8	10,6	2	11,2	2	13,2	49	28,8
K0583.60	50	23,5	11	9	13,5	4,8	13,2	2,4	13,5	2,2	15,5	60	35
K0583.70	58	30	13	12	15,2	4,8	15	2,4	15,7	2,2	18,1	68,4	40,2

Notes

Lateral spring plungers



Material:
Sleeve aluminium.
Spring steel.
Thrust pin steel or POM.

Version:
Thrust pin (steel) hardened and galvanized.
Sleeve blue galvanized.

Sample order:
K0368.72064

Note:
Lateral spring plungers are for positioning, clamping, holding and securing workpieces and parts for engraving, labelling, drilling, reaming, tapping, honing, grinding, welding, soldering, assembling, mounting etc.
Suitable eccentric adjustment bush see K0369.
W and Z are customer specified.

KIPP Lateral spring plungers without seal, thrust pin and spring steel

Order No.	D	D1	L	L1	D2	±S	F approx. N	X if Y = 1	X if Y = 2	X if Y = 3	X if Y = 4.5	X if Y = 6	X if Y = 8	Order No. assembly tool
K0368.21034	6	3	4	7	6	0,5	10	0,8	1	1	1	1	1	K0369.03
K0368.21036	6	3	4	7	6	0,5	20	0,8	1	1	1	1	1	K0369.03
K0368.21038	6	3	4	7	6	0,5	40	0,8	1	1	1	1	1	K0369.03
K0368.21054	10	5	6,7	11	10	0,8	20	-	1,5	1,7	1,7	1,7	1,7	K0369.05
K0368.21056	10	5	6,7	11	10	0,8	50	-	1,5	1,7	1,7	1,7	1,7	K0369.05
K0368.21058	10	5	6,7	11	10	0,8	100	-	1,5	1,7	1,7	1,7	1,7	K0369.05
K0368.21064	10	6	10,7	11	10	1	40	-	-	-	1,7	1,9	1,9	K0369.05
K0368.21066	10	6	10,7	11	10	1	75	-	-	-	1,7	1,9	1,9	K0369.05
K0368.21068	10	6	10,7	11	10	1	150	-	-	-	1,7	1,9	1,9	K0369.05
K0368.21084	12	8	13,9	13	12	1,3	50	-	-	-	-	2,5	2,7	K0369.08
K0368.21086	12	8	13,9	13	12	1,3	100	-	-	-	-	2,5	2,7	K0369.08
K0368.21088	12	8	13,9	13	12	1,3	200	-	-	-	-	2,5	2,7	K0369.08
K0368.21104	16	10	16,7	17	16	1,6	100	-	-	-	-	-	3,1	K0369.10
K0368.21106	16	10	16,7	17	16	1,6	200	-	-	-	-	-	3,1	K0369.10
K0368.21108	16	10	16,7	17	16	1,6	300	-	-	-	-	-	3,1	K0369.10

Lateral spring plungers

KIPP Lateral spring plungers with seal, thrust pin and spring steel

Order No.	D	D1	L	L1	D2	±S	F approx. N	X if Y = 1	X if Y = 2	X if Y = 3	X if Y = 4.5	X if Y = 6	X if Y = 8	Order No. assembly tool
K0368.22034	6	3	4	7	6	0,5	10	0,8	1	1	1	1	1	K0369.03
K0368.22036	6	3	4	7	6	0,5	20	0,8	1	1	1	1	1	K0369.03
K0368.22038	6	3	4	7	6	0,5	40	0,8	1	1	1	1	1	K0369.03
K0368.22054	10	5	6	12	10	0,8	20	-	1,5	1,7	1,7	1,7	1,7	K0369.05
K0368.22056	10	5	6	12	10	0,8	50	-	1,5	1,7	1,7	1,7	1,7	K0369.05
K0368.22058	10	5	6	12	10	0,8	100	-	1,5	1,7	1,7	1,7	1,7	K0369.05
K0368.22064	10	6	10	12	10	1	40	-	-	-	1,7	1,9	1,9	K0369.05
K0368.22066	10	6	10	12	10	1	75	-	-	-	1,7	1,9	1,9	K0369.05
K0368.22068	10	6	10	12	10	1	150	-	-	-	1,7	1,9	1,9	K0369.05
K0368.22084	12	8	13	14	12	1,3	50	-	-	-	-	2,5	2,7	K0369.08
K0368.22086	12	8	13	14	12	1,3	100	-	-	-	-	2,5	2,7	K0369.08
K0368.22088	12	8	13	14	12	1,3	200	-	-	-	-	2,5	2,7	K0369.08
K0368.22104	16	10	16	18	16	1,6	100	-	-	-	-	-	3,1	K0369.10
K0368.22106	16	10	16	18	16	1,6	200	-	-	-	-	-	3,1	K0369.10
K0368.22108	16	10	16	18	16	1,6	300	-	-	-	-	-	3,1	K0369.10

KIPP Lateral spring plungers without seal, thrust pin POM, spring steel

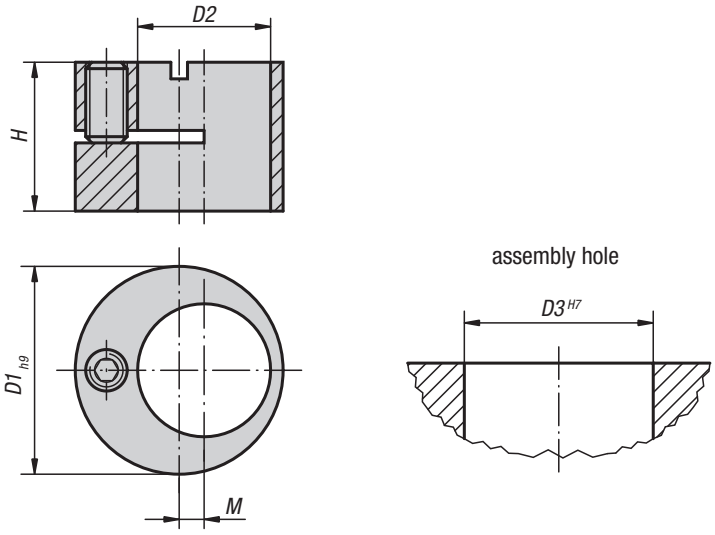
Order No.	D	D1	L	L1	D2	±S	F approx. N	X if Y = 1	X if Y = 2	X if Y = 3	X if Y = 4.5	X if Y = 6	X if Y = 8	Order No. assembly tool
K0368.71034	6	3	4	7	6	0,5	10	0,8	1	1	1	1	1	K0369.03
K0368.71036	6	3	4	7	6	0,5	20	0,8	1	1	1	1	1	K0369.03
K0368.71054	10	5	6,7	11	10	0,8	20	-	1,5	1,7	1,7	1,7	1,7	K0369.05
K0368.71056	10	5	6,7	11	10	0,8	50	-	1,5	1,7	1,7	1,7	1,7	K0369.05
K0368.71064	10	6	10,7	11	10	1	40	-	-	-	1,7	1,9	1,9	K0369.05
K0368.71066	10	6	10,7	11	10	1	75	-	-	-	1,7	1,9	1,9	K0369.05
K0368.71084	12	8	13,9	13	12	1,3	50	-	-	-	-	2,5	2,7	K0369.08
K0368.71086	12	8	13,9	13	12	1,3	100	-	-	-	-	2,5	2,7	K0369.08
K0368.71104	16	10	16,7	17	16	1,6	100	-	-	-	-	-	3,1	K0369.10
K0368.71106	16	10	16,7	17	16	1,6	200	-	-	-	-	-	3,1	K0369.10

KIPP Lateral spring plungers with seal, thrust pin POM, spring steel

Order No.	D	D1	L	L1	D2	±S	F approx. N	X if Y = 1	X if Y = 2	X if Y = 3	X if Y = 4.5	X if Y = 6	X if Y = 8	Order No. assembly tool
K0368.72034	6	3	4	7	6	0,5	10	0,8	1	1	1	1	1	K0369.03
K0368.72036	6	3	4	7	6	0,5	20	0,8	1	1	1	1	1	K0369.03
K0368.72054	10	5	6	12	10	0,8	20	-	1,5	1,7	1,7	1,7	1,7	K0369.05
K0368.72056	10	5	6	12	10	0,8	50	-	1,5	1,7	1,7	1,7	1,7	K0369.05
K0368.72064	10	6	10	12	10	1	40	-	-	-	1,7	1,9	1,9	K0369.05
K0368.72066	10	6	10	12	10	1	75	-	-	-	1,7	1,9	1,9	K0369.05
K0368.72084	12	8	13	14	12	1,3	50	-	-	-	-	2,5	2,7	K0369.08
K0368.72086	12	8	13	14	12	1,3	100	-	-	-	-	2,5	2,7	K0369.08
K0368.72104	16	10	16	18	16	1,6	100	-	-	-	-	-	3,1	K0369.10
K0368.72106	16	10	16	18	16	1,6	200	-	-	-	-	-	3,1	K0369.10

Eccentric bushes and assembly tool

for lateral spring plungers.

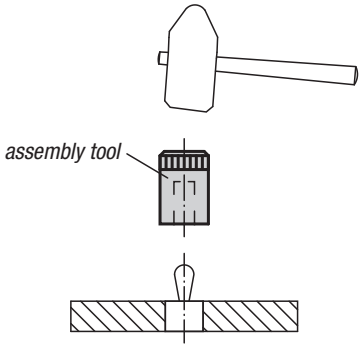


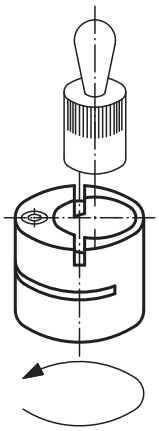
Material:
Steel.

Version:
Black oxidised.

Sample order:
K0369.180

Note:
Eccentric bushes enable lateral spring plungers to be positioned exactly to the workpiece.





KIPP Assembly tools

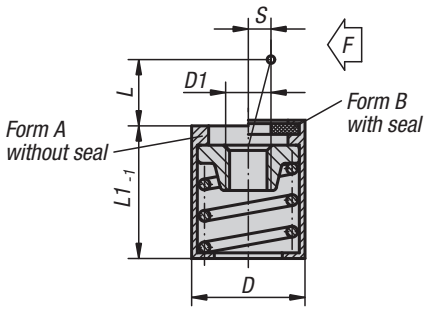
Order No.	Suitable for lateral spring plungers with D =
K0369.03	6
K0369.05	10
K0369.08	12
K0369.10	16

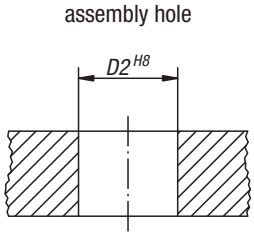
KIPP Eccentric bushes for lateral spring plungers

Order No.	D1	D2	D3	H	M	Suitable for lateral spring plungers with D =
K0369.120	12	6	12	9,9	2	6
K0369.160	16	10	16	11,9	2	10
K0369.180	18	12	18	13,9	2	12
K0369.250	25	16	25	17,9	3	16

Lateral spring plungers

without thrust pin





KIPP Lateral spring plungers without thrust pin

Order No. Form A	Order No. Form B	D	D1	D2	L	L1	S	F approx.N
K0370.31054	K0370.32054	10	M4	10	4	12	1,6	20
K0370.31056	K0370.32056	10	M4	10	4	12	1,6	50
K0370.31058	K0370.32058	10	M4	10	4	12	1,6	100
K0370.31064	K0370.32064	10	M4	10	7,5	12	2	40
K0370.31066	K0370.32066	10	M4	10	7,5	12	2	75
K0370.31068	K0370.32068	10	M4	10	7,5	12	2	150
K0370.31104	K0370.32104	16	M6	16	11,5	18	3,2	100
K0370.31106	K0370.32106	16	M6	16	11,5	18	3,2	200
K0370.31108	K0370.32108	16	M6	16	11,5	18	3,2	300

Material:
Sleeve aluminium.
Receiving washer steel.
Spring steel.

Version:
Sleeve blue galvanized.
Receiving washer, hardened and burnished.

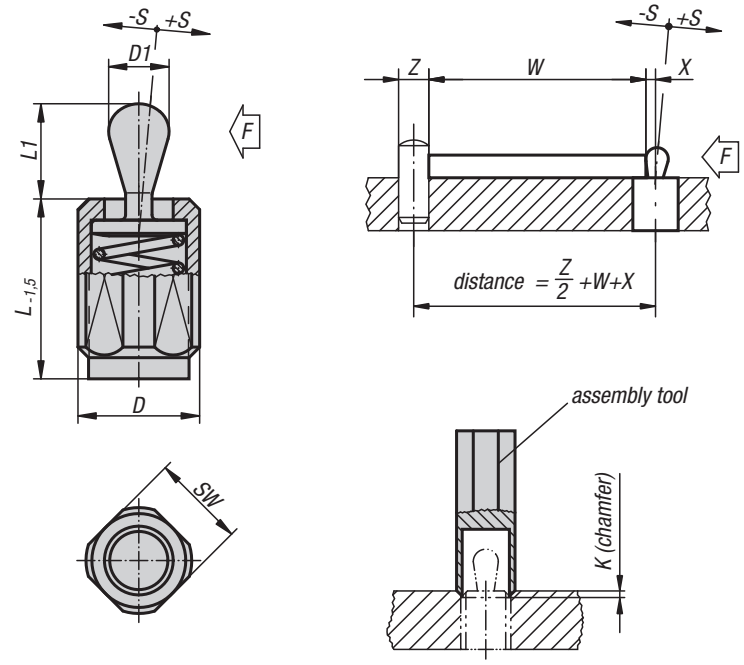
Sample order:
K0370.31058

Note:
The thrust pin can be made to suit the required circumstances and screwed into the tapped hole in the locating washer.
The required lateral thrust (F) can be achieved through the stroke (S) and length (L).
Form B has a seal to keep swarf and dirt out.

Notes

Lateral spring plungers

with threaded sleeve



Material:
Steel.

Version:
Thrust pin steel, hardened and galvanized.
Sleeve blue galvanized.

Sample order:
K0371.1020X12

Note:
Lateral spring plungers with threaded sleeve can be individually adjusted to suit the the part being held. The threaded sleeve is also suitable for screwing into thin sheet metal as it can be fastened with one or two nuts. W and Z are customer specified.

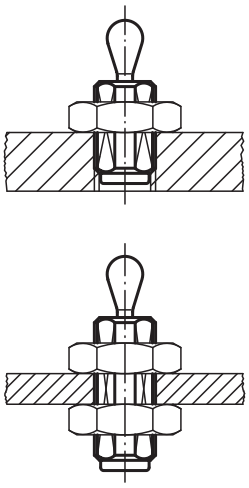
KIPP Lateral spring plungers without seal

Order No. thrust pin steel	L	L1	D	D1	±S	F approx.N	X	SW	K	Order No. assembly tool
K0371.1020X12	11,5	6,7	M12	5	0,8	20	1,6	10	2x60°	K0371.06
K0371.1020X20	19	6,7	M12	5	0,8	20	1,6	10	2x60°	K0371.06
K0371.1020X27	26,5	6,7	M12	5	0,8	20	1,6	10	2x60°	K0371.06
K0371.1040X12	11,5	10,7	M12	6	1	40	1,8	10	2x60°	K0371.06
K0371.1040X20	19	10,7	M12	6	1	40	1,8	10	2x60°	K0371.06
K0371.1040X27	26,5	10,7	M12	6	1	40	1,8	10	2x60°	K0371.06
K0371.1050X12	11,5	6,7	M12	5	0,8	50	1,6	10	2x60°	K0371.06
K0371.1050X20	19	6,7	M12	5	0,8	50	1,6	10	2x60°	K0371.06
K0371.1050X27	26,5	6,7	M12	5	0,8	50	1,6	10	2x60°	K0371.06
K0371.1075X12	11,5	10,7	M12	6	1	75	1,8	10	2x60°	K0371.06
K0371.1075X20	19	10,7	M12	6	1	75	1,8	10	2x60°	K0371.06
K0371.1075X27	26,5	10,7	M12	6	1	75	1,8	10	2x60°	K0371.06
K0371.1100X12	11,5	6,7	M12	5	0,8	100	1,6	10	2x60°	K0371.06
K0371.1100X16	18	16,7	M18x1,5	10	1,6	100	3,2	16	2,5x60°	K0371.10
K0371.1100X20	19	6,7	M12	5	0,8	100	1,6	10	2x60°	K0371.06
K0371.1100X27	26,5	6,7	M12	5	0,8	100	1,6	10	2x60°	K0371.06
K0371.1100X29	31,5	16,7	M18x1,5	10	1,6	100	3,2	16	2,5x60°	K0371.10
K0371.1100X43	45	16,7	M18x1,5	10	1,6	100	3,2	16	2,5x60°	K0371.10
K0371.1150X12	11,5	10,7	M12	6	1	150	1,8	10	2x60°	K0371.06
K0371.1150X20	19	10,7	M12	6	1	150	1,8	10	2x60°	K0371.06
K0371.1150X27	26,5	10,7	M12	6	1	150	1,8	10	2x60°	K0371.06
K0371.1200X16	18	16,7	M18x1,5	10	1,6	200	3,2	16	2,5x60°	K0371.10
K0371.1200X29	31,5	16,7	M18x1,5	10	1,6	200	3,2	16	2,5x60°	K0371.10
K0371.1200X43	45	16,7	M18x1,5	10	1,6	200	3,2	16	2,5x60°	K0371.10
K0371.1300X16	18	16,7	M18x1,5	10	1,6	300	3,2	16	2,5x60°	K0371.10
K0371.1300X29	31,5	16,7	M18x1,5	10	1,6	300	3,2	16	2,5x60°	K0371.10
K0371.1300X43	45	16,7	M18x1,5	10	1,6	300	3,2	16	2,5x60°	K0371.10

Lateral spring plungers

with threaded sleeve

mounting example

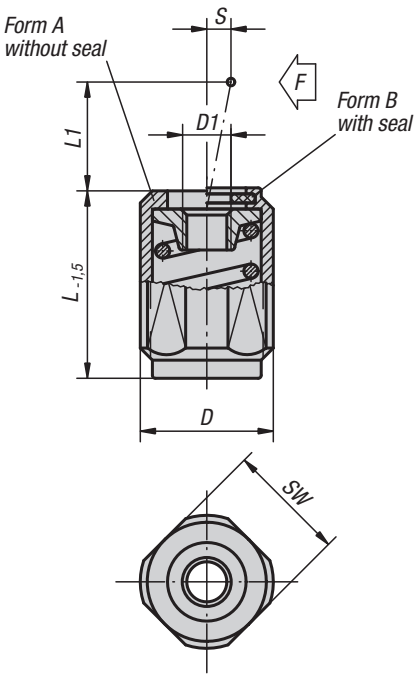


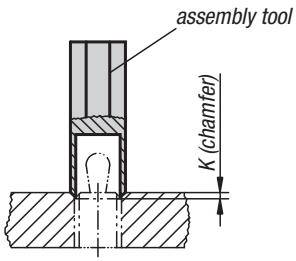
KIPP Lateral spring plungers with seal

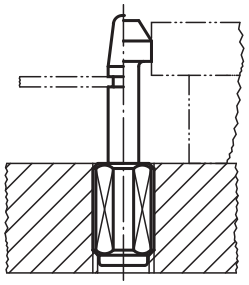
Order No. thrust pin steel	L	L1	D	D1	±S	F approx.N	X	SW	K	Order No. assembly tool
K0371.3020X12	11,5	6	M12	5	0,8	20	1,6	10	2x60°	K0371.06
K0371.3020X20	19	6	M12	5	0,8	20	1,6	10	2x60°	K0371.06
K0371.3020X27	26,5	6	M12	5	0,8	20	1,6	10	2x60°	K0371.06
K0371.3040X12	11,5	10	M12	6	1	40	1,8	10	2x60°	K0371.06
K0371.3040X20	19	10	M12	6	1	40	1,8	10	2x60°	K0371.06
K0371.3040X27	26,5	10	M12	6	1	40	1,8	10	2x60°	K0371.06
K0371.3050X12	11,5	6	M12	5	0,8	50	1,6	10	2x60°	K0371.06
K0371.3050X20	19	6	M12	5	0,8	50	1,6	10	2x60°	K0371.06
K0371.3050X27	26,5	6	M12	5	0,8	50	1,6	10	2x60°	K0371.06
K0371.3075X12	11,5	10	M12	6	1	75	1,8	10	2x60°	K0371.06
K0371.3075X20	19	10	M12	6	1	75	1,8	10	2x60°	K0371.06
K0371.3075X27	26,5	10	M12	6	1	75	1,8	10	2x60°	K0371.06
K0371.3100X12	11,5	6	M12	5	0,8	100	1,6	10	2x60°	K0371.06
K0371.3100X16	18	16	M18x1,5	10	1,6	100	3,2	16	2,5x60°	K0371.10
K0371.3100X20	19	6	M12	5	0,8	100	1,6	10	2x60°	K0371.06
K0371.3100X27	26,5	6	M12	5	0,8	100	1,6	10	2x60°	K0371.06
K0371.3100X29	31,5	16	M18x1,5	10	1,6	100	3,2	16	2,5x60°	K0371.10
K0371.3100X43	45	16	M18x1,5	10	1,6	100	3,2	16	2,5x60°	K0371.10
K0371.3150X12	11,5	10	M12	6	1	150	1,8	10	2x60°	K0371.06
K0371.3150X20	19	10	M12	6	1	150	1,8	10	2x60°	K0371.06
K0371.3150X27	26,5	10	M12	6	1	150	1,8	10	2x60°	K0371.06
K0371.3200X16	18	16	M18x1,5	10	1,6	200	3,2	16	2,5x60°	K0371.10
K0371.3200X29	31,5	16	M18x1,5	10	1,6	200	3,2	16	2,5x60°	K0371.10
K0371.3200X43	45	16	M18x1,5	10	1,6	200	3,2	16	2,5x60°	K0371.10
K0371.3300X16	18	16	M18x1,5	10	1,6	300	3,2	16	2,5x60°	K0371.10
K0371.3300X29	31,5	16	M18x1,5	10	1,6	300	3,2	16	2,5x60°	K0371.10
K0371.3300X43	45	16	M18x1,5	10	1,6	300	3,2	16	2,5x60°	K0371.10

Lateral spring plungers

with threaded sleeve, without thrust pin







Material:
Steel.

Version:
Sleeve blue galvanized.
Receiving washer, hardened and burnished.

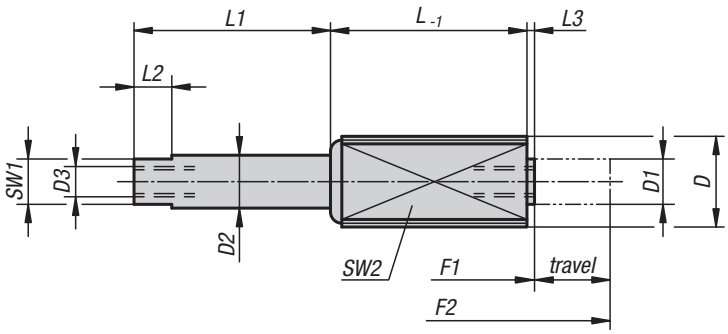
Sample order:
K0372.1100X20

Note:
The thrust pin can be made to suit the required circumstances and screwed into the tapped hole in the locating washer.
The required lateral thrust (F) can be achieved through the stroke (S) and length (L).
Form B has a seal to keep swarf and dirt out.

KIPP Lateral spring plungers with threaded sleeve, without thrust pin

Order No. Form A	Order No. Form B	L	L1	D	D1	±S	F approx.N	SW	K	Order No. assembly tool
K0372.1020X12	K0372.2020X12	11,5	4	M12	M4	1,6	20	10	2x60°	K0371.06
K0372.1020X20	K0372.2020X20	19	4	M12	M4	1,6	20	10	2x60°	K0371.06
K0372.1020X27	K0372.2020X27	26,5	4	M12	M4	1,6	20	10	2x60°	K0371.06
K0372.1040X12	K0372.2040X12	11,5	7,5	M12	M4	2	40	10	2x60°	K0371.06
K0372.1040X20	K0372.2040X20	19	7,5	M12	M4	2	40	10	2x60°	K0371.06
K0372.1040X27	K0372.2040X27	26,5	7,5	M12	M4	2	40	10	2x60°	K0371.06
K0372.1050X12	K0372.2050X12	11,5	4	M12	M4	1,6	50	10	2x60°	K0371.06
K0372.1050X20	K0372.2050X20	19	4	M12	M4	1,6	50	10	2x60°	K0371.06
K0372.1050X27	K0372.2050X27	26,5	4	M12	M4	1,6	50	10	2x60°	K0371.06
K0372.1075X12	K0372.2075X12	11,5	7,5	M12	M4	2	75	10	2x60°	K0371.06
K0372.1075X20	K0372.2075X20	19	7,5	M12	M4	2	75	10	2x60°	K0371.06
K0372.1075X27	K0372.2075X27	26,5	7,5	M12	M4	2	75	10	2x60°	K0371.06
K0372.1100X12	K0372.2100X12	11,5	4	M12	M4	1,6	100	10	2x60°	K0371.06
K0372.1100X16	K0372.2100X16	18	11,5	M18x1,5	M6	3,2	100	16	2,5x60°	K0371.10
K0372.1100X20	K0372.2100X20	19	4	M12	M4	1,6	100	10	2x60°	K0371.06
K0372.1100X27	K0372.2100X27	26,5	4	M12	M4	1,6	100	10	2x60°	K0371.06
K0372.1100X29	K0372.2100X29	31,5	11,5	M18x1,5	M6	3,2	100	16	2,5x60°	K0371.10
K0372.1100X43	K0372.2100X43	45	11,5	M18x1,5	M6	3,2	100	16	2,5x60°	K0371.10
K0372.1150X12	K0372.2150X12	11,5	7,5	M12	M4	2	150	10	2x60°	K0371.06
K0372.1150X20	K0372.2150X20	19	7,5	M12	M4	2	150	10	2x60°	K0371.06
K0372.1150X27	K0372.2150X27	26,5	7,5	M12	M4	2	150	10	2x60°	K0371.06
K0372.1200X16	K0372.2200X16	18	11,5	M18x1,5	M6	3,2	200	16	2,5x60°	K0371.10
K0372.1200X29	K0372.2200X29	31,5	11,5	M18x1,5	M6	3,2	200	16	2,5x60°	K0371.10
K0372.1200X43	K0372.2200X43	45	11,5	M18x1,5	M6	3,2	200	16	2,5x60°	K0371.10
K0372.1300X16	K0372.2300X16	18	11,5	M18x1,5	M6	3,2	300	16	2,5x60°	K0371.10
K0372.1300X29	K0372.2300X29	31,5	11,5	M18x1,5	M6	3,2	300	16	2,5x60°	K0371.10
K0372.1300X43	K0372.2300X43	45	11,5	M18x1,5	M6	3,2	300	16	2,5x60°	K0371.10

Spring plungers push-pull



Material:
Steel.

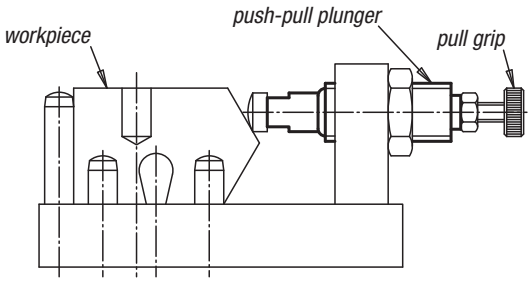
Version:
Sleeve blue galvanized.
Spring pins black oxidised.

Sample order:
K0373.1202004

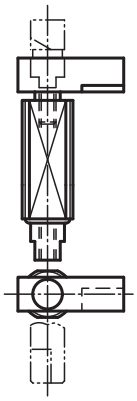
Note:
The tapped hole in both ends of the spring pin allow various inserts to be attached e.g. prisms, thrust pins, self-aligning pads, knobs, grips etc.

Assembly:
LOCTITE threadlocker K0655.243.... is recommended for gluing the threaded sleeve in position.

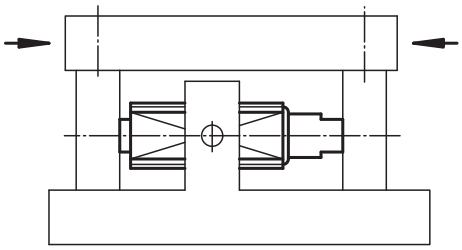
Push-Pull plunger



pull plunger as lock

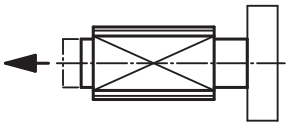


push-pull plunger as carrier

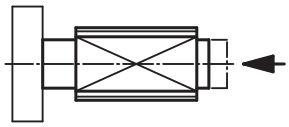


Application:

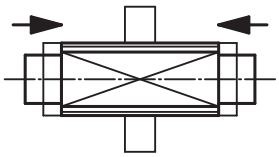
As **push plunger:**
The spring force pushes the object.



As **pull plunger:**
The spring force pulls the object.



As **push-pull plunger**:
In this case the internal pin has a fixed position. The threaded sleeve acts as carrier.
The spring force pushes or pulls the object in both directions.

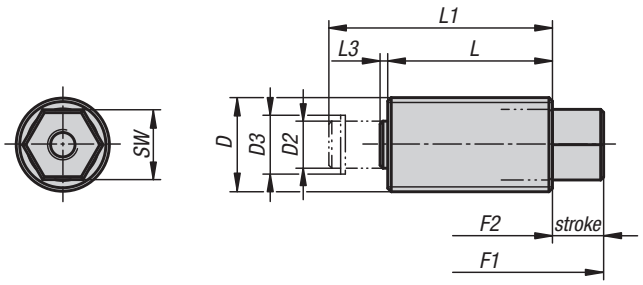


KIPP Push-Pull spring plungers

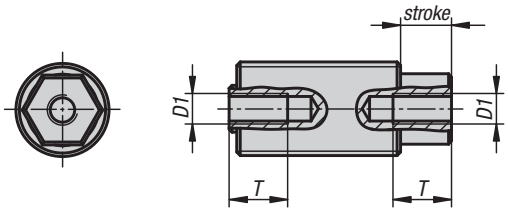
Order No.	D	D1	D2	D3	F1 (N)	F2 (N)	Travel	L	L1	L2	L3	SW1	SW2 square
K0373.1202004	M12	6	7	M4x8	5	20	3,5	11	4,5	5	1	6	10
K0373.1202006	M12	6	7	M4x8	5	20	6	18,5	7	5	1	6	10
K0373.1202010	M12	6	7	M4x8	5	20	10	26	11	5	1	6	10
K0373.1206003	M12	6	7	M4x8	12	40	3	11	4,5	5	1	6	10
K0373.1206005	M12	6	7	M4x8	12	40	5	18,5	7	5	1	6	10
K0373.1206008	M12	6	7	M4x8	12	40	8	26	11	5	1	6	10
K0373.1212503	M12	6	7	M4x8	20	100	3	11	4,5	5	1	6	10
K0373.1212505	M12	6	7	M4x8	20	100	5	18,5	7	5	1	6	10
K0373.1212508	M12	6	7	M4x8	20	100	8	26	11	5	1	6	10
K0373.1815004	M18x1,5	10	11	M6x12	50	150	4	17	6	6	2,5	9	16
K0373.1815007	M18x1,5	10	11	M6x12	50	150	7	29,5	11,5	6	2,5	9	16
K0373.1815013	M18x1,5	10	11	M6x12	50	150	12,5	45,5	16	6	2,5	9	16

Spring plungers push-pull

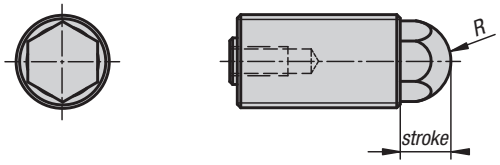
with rotation lock



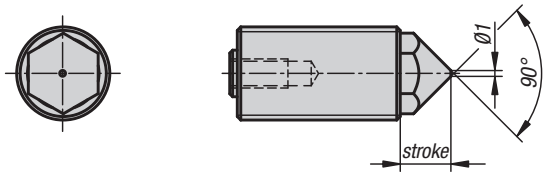
Form I



Form H



Form K



Material:
Steel.

Version:
Threaded sleeve galvanized, blue chromed.
Threaded pin case-hardened, black-oxidised.
Standard spring force, reinforced spring force.

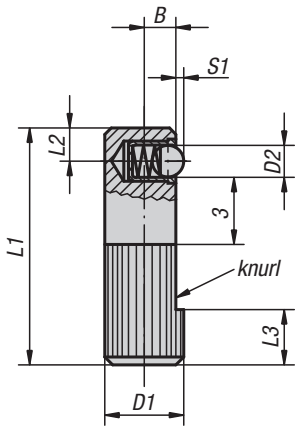
Sample order:
K0997.1112

Note:
The push-pull spring plungers, also called two-way spring plungers are used to engage, position or clamp various components. The threaded pin, which is locked against rotation by the hexagonal form can be used for traction or thrust.

KIPP Push-Pull spring plungers with rotation lock

Order No.	Form	Version	D	SW	D1	D2	D3	F1 (N)	F2 (N)	Travel	L	L1	L3	R	T min.
K0977.1112	I	standard spring force	M12x1,5	8	M4	5,5	6,78	16	38	6,12	20	27,5	1,38	-	8
K0977.1212	I	strong spring force	M12x1,5	8	M4	5,5	6,78	20	60	6,12	20	27,5	1,38	-	8
K0977.1116	I	standard spring force	M16x1,5	12	M5	8	10	25	71	8,7	28	38	1,3	-	10
K0977.1216	I	strong spring force	M16x1,5	12	M5	8	10	35	103	8,7	28	38	1,3	-	10
K0977.1120	I	standard spring force	M20x1,5	15	M6	10	12,2	40	140	10,3	34	47	2,7	-	12
K0977.1220	I	strong spring force	M20x1,5	15	M6	10	12,2	60	175	10,3	34	47	2,7	-	12
K0977.2112	H	standard spring force	M12x1,5	8	M4	5,5	6,78	16	38	6,12	20	27,5	1,38	5,5	8
K0977.2212	H	strong spring force	M12x1,5	8	M4	5,5	6,78	20	60	6,12	20	27,5	1,38	5,5	8
K0977.2116	H	standard spring force	M16x1,5	12	M5	8	10	25	71	8,7	28	38	1,3	7	10
K0977.2216	H	strong spring force	M16x1,5	12	M5	8	10	35	103	8,7	28	38	1,3	7	10
K0977.2120	H	standard spring force	M20x1,5	15	M6	10	12,2	40	140	10,3	34	47	2,7	9	12
K0977.2220	H	strong spring force	M20x1,5	15	M6	10	12,2	60	175	10,3	34	47	2,7	9	12
K0977.3112	K	standard spring force	M12x1,5	8	M4	5,5	6,78	16	38	6,12	20	27,5	1,38	-	8
K0977.3212	K	strong spring force	M12x1,5	8	M4	5,5	6,78	20	60	6,12	20	27,5	1,38	-	8
K0977.3116	K	standard spring force	M16x1,5	12	M5	8	10	25	71	8,7	28	38	1,3	-	10
K0977.3216	K	strong spring force	M16x1,5	12	M5	8	10	35	103	8,7	28	38	1,3	-	10
K0977.3120	K	standard spring force	M20x1,5	15	M6	10	12,2	40	140	10,3	34	47	2,7	-	12
K0977.3220	K	strong spring force	M20x1,5	15	M6	10	12,2	60	175	10,3	34	47	2,7	-	12

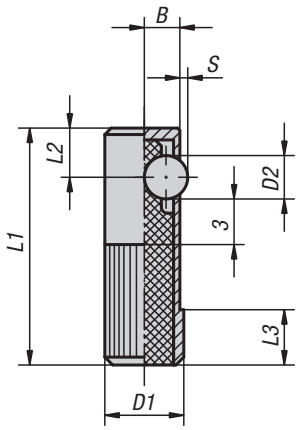
Lateral spring plungers



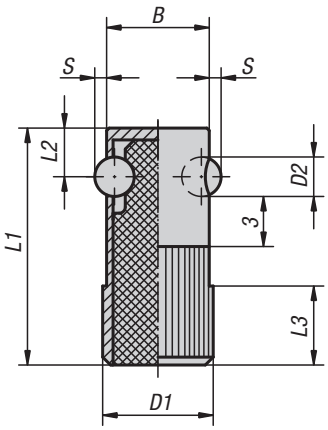
Form A
stainless steel ball,
one side

Form B
POM ball,
one side

Form C
steel ball,
plastic spring, one side



Form D
steel ball,
plastic spring, both sides



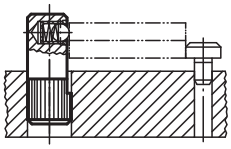
Material:
Body mild steel.
Ball steel or stainless steel hardened or POM.
Spring stainless steel or plastic.

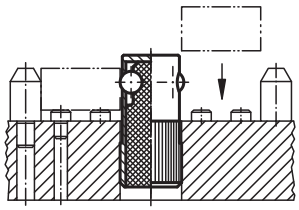
Version:
Body black oxidised.
Ball bright.

Sample order:
K0374.410

Note:
The lateral spring plunger must be pressed into the hole to at least depth L3. These plungers are for positioning and holding small parts in fixtures. If mechanical machining of the workpiece is to be carried out, other clamps may be necessary. When the fixture is not in use it should be ensured that plastic springs are not under stress.

Spring force refers to a mean value.





light holding $D1_{-0.2}$

KIPP Lateral spring plungers

Order No.	Form	D1	D2	L1	L2	L3	B	S	S1	Receiving hole H8	Spring force initial N	Spring force final N
K0374.008	A	8	3	25	3,6	6	3,2	-	0,7	8	2,5	6,5
K0374.010	A	10	4	30	4,2	7	4	-	1	10	4,5	9
K0374.012	A	12	5	35	4,8	9	5	-	1,5	12	6,5	13
K0374.014	A	14	6,5	40	5,8	10	5,4	-	1,8	14	8	18
K0374.108	B	8	3	25	3,6	6	3,2	-	0,7	8	2,5	6,5
K0374.110	B	10	4	30	4,2	7	4	-	1,0	10	4,5	9
K0374.112	B	12	5	35	4,8	9	5	-	1,5	12	6,5	13
K0374.114	B	14	6,5	40	5,8	10	5,4	-	1,8	14	8	18
K0374.410	C	10	5,5	30	7	8	4,5	1	-	10	60	170
K0374.412	C	12	6,5	35	8	9	5,5	1,5	-	12	80	260
K0374.414	C	14	8	40	9	10	6,5	2	-	14	120	480
K0374.616	D	16	5,5	35	7	11	15	1,5	-	16	110	220
K0374.618	D	18	6,5	40	8	12	17	1,8	-	18	120	330
K0374.622	D	22	8	45	9	15	21	2,5	-	22	130	540