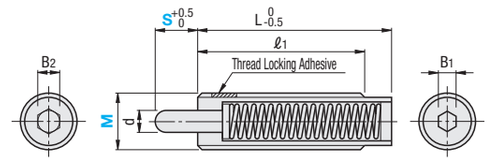
For **Pricing** and **Days to Ship**,Please Configure Online.

Spring Plungers
Hex Socket / Hex Nose

■Hex Socket Body Type

RoHS10

Type	Body			Pin			Spring	Operating
	M Material	H Hardness	S Surface Treatment	M Material	H Hardness	S Surface Treatment	M Material	Temperature
PJLH (Light Load)	1045 Carbon Steel	29~35HRC	Black Oxide	1045 Carbon Steel	57~63HRC (Carburized)	Trivalent Chromate	SWP-B	-30~80°C

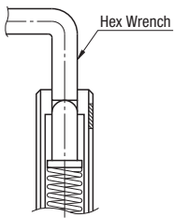


(P) To fix position of the ball plunger microencapsulated anaerobic adhesive is applied. Once parts have been loosened, adhesion is lost. Use an anaerobic thread locking compound when reassembling.
(P) The adhesive is most effective if left on the part for 72 hours or more in 25°C. It should be noted if the parts are left for short period of time and in low temperature, the thread locking adhesive will be less-effective.

Part Number Type	M	S	d	ℓ1	L	B1	B2	For Light Load N {kgf} min.	For Light Load N {kgf} max.	Unit Price
PJLH	8	3	3	25	25	2.5	3	5.8 {0.6}	9.8 {1.0}	
		5						2.7 {0.3}	9.8 {1.0}	
	10	5	4	30	34	3	4	5.8 {0.6}	14.7 {1.5}	
		10			38			2.6 {0.3}	14.7 {1.5}	
	12	5	5	35	35	4	5	5.6 {0.6}	14.7 {1.5}	
		10			40			3.0 {0.3}	19.7 {2.0}	

kgf=Nx0.101972

Ex. Example



Ordering Example: Part Number - S → PJLH 8 - 3

Days to Ship: Configure Online

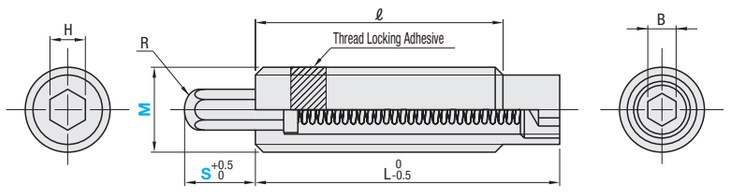
Price: Configure Online

■Feature: The hex shape of pin allow this spring plunger to be installed with socket wrench or spanner.

■Hex Nose

RoHS10

Type		Body			Pin			Spring	Operating
		M Material	H Hardness	S Surface Treatment	M Material	H Hardness	S Surface Treatment	M Material	Temperature
Light Load	PJLR	1045 Carbon Steel	29~35HRC	Black Oxide	1045 Carbon Steel	57~63HRC (Carburized)	Trivalent Chromate	SWP-B	-30~0°C
Heavy Load	PJHR						Black Oxide		



(P) To fix position of the ball plunger microencapsulated anaerobic adhesive is applied. Once parts have been loosened, adhesion is lost. Use an anaerobic thread locking compound when reassembling.
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Part Number Type	M	S	MxPitch (Coarse)	H	R	ℓ	L	B	Light Load Load N {kgf} min.	Light Load Load N {kgf} max.	Heavy Load Load N {kgf} min.	Heavy Load Load N {kgf} max.	Unit Price
PJLR PJHR	10	5	10x1.5	4	2.2	30	30	3	5.9 {0.6}	14.7 {1.5}	8.8 {0.9}	49.0 {5.0}	
		10					43		2.9 {0.3}	14.7 {1.5}	7.8 {0.8}	49.0 {5.0}	
	12	5	12x1.75	5	2.9		30		5.9 {0.6}	14.7 {1.5}	18.6 {1.9}	49.0 {5.0}	
		10				35	43	4	2.9 {0.3}	19.6 {2.0}	7.8 {0.8}	49.0 {5.0}	
		15					51		2.9 {0.3}	19.6 {2.0}	4.9 {0.5}	49.0 {5.0}	
	16	10	16x2.0	7	4.1		60	5	5.9 {0.6}	39.2 {4.0}	12.7 {1.3}	78.5 {8.0}	
		15					60		3.9 {0.4}	39.2 {4.0}	12.7 {1.3}	78.5 {8.0}	
		20					85		4.9 {0.5}	39.2 {4.0}	9.8 {1.0}	78.5 {8.0}	

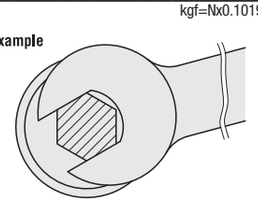
kgf=Nx0.101972

Ordering Example: Part Number - S → PJHR 10 - 10

Days to Ship: Configure Online

Price: Configure Online

Ex. Example

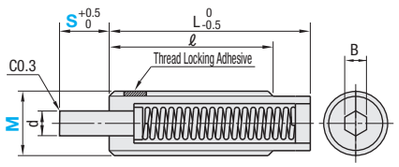


Spring Plungers
Flat Tip / For Inclined Surface / Flanged

■Flat Tip

RoHS10

Type	Body	Pin	Spring	Operating
	M H S	M H S	M Material	Temperature
PJLF (Light Load)	M 1045 Carbon Steel H 29~35HRC S Black Oxide	M 1045 Carbon Steel H 57~63HRC (Carburized) S Trivalent Chromate	SWP-B	-30~80°C



Part Number Type	M (Coarse)	S	d	ℓ	L	B	Load N min.	Load N max.	Unit Price
PJLF	5	3	2.0	20	20	1.5	2.0	9.8	
		5	2.0	27	27	1.5	2.0	9.8	
	6	3	2.5	25	25	2	5.9	9.8	
		5	2.5	30	30	2	2.0	9.8	
	8	3	3.1	25	25	2.5	5.9	9.8	
		5	3.1	27	27	2.5	2.9	9.8	
	10	5	3.8	30	30	3	5.9	14.7	
		10	3.8	30	43	3	2.9	14.7	
	12	10	5.5	35	43	4	2.9	19.6	

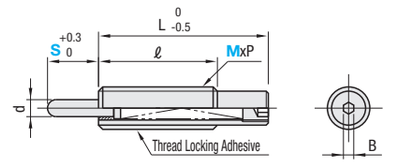
kgf=Nx0.101972

(P) To fix position of the ball plunger microencapsulated anaerobic adhesive is applied. Once parts have been loosened, adhesion is lost. Use an anaerobic thread locking compound when reassembling.
(P) The adhesive is most effective if left on the part for 72 hours or more in 25°C. It should be noted if the parts are left for short period of time and in low temperature, the thread locking compound will be less-effective.

■For Inclined Surface

RoHS10

Type	Body	Pin	Spring	Operating
	M H S	M H S	M Material	Temperature
PJHZ	M 1045 Carbon Steel H 29~35HRC S Black Oxide	M 1045 Carbon Steel H 50HRC~ (Carburized) S Electroless Nickel Plating	SWP-B	-30~80°C



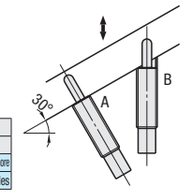
Part Number Type	M (Coarse)	S	d	S	ℓ	L	B	Load N min.	Load N max.	Unit Price
PJHZ	10	10	4	10	30	43	3	7.8	49.0	
	12	10	5		35	43	4	7.8	49.0	
		15			15	35	51	4.9	49.0	
	16	10	8	10	35	60	5	12.7	78.5	
		15		15	35	60		12.7	78.5	
		20		20	35	85		9.8	78.5	
		30		30	35	125		6.9	78.5	

kgf=Nx0.101972

■Features of PJHZ

①Special structure with high abrasion resistance and seizing resistance enables the use on inclines.
(For conventional spring plungers, use 0°, under oil free condition; 5° or less with oil lubrication.)
②Oil free use is possible.
③Angle: 0~30°

Test Conditions
Press Machine: 20 TON Crank Press
Cyclic Speed: 130SPM
Inclination Angle: 30°
Lubrication: Oil-Free



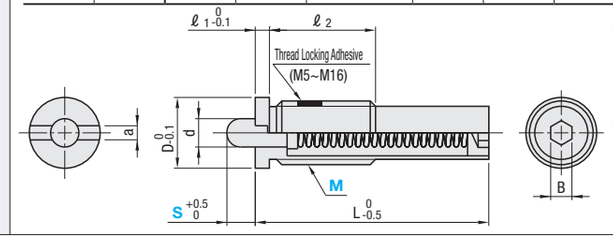
Type	Operating Life A	Operating Life B
PJHZ16-30	Over 300 thousand times or more	Over 300 thousand times or more
PJH16-30	Gouging at 17,000 cycles	Gouging at 50,000 cycles

(Note) This test result was obtained in conditions specified above. The service life changes according to the usage condition.

■Flanged

RoHS10

Type		Body			Pin			Spring	Operating
		M Material	H Hardness	S Surface Treatment	M Material	H Hardness	S Surface Treatment	M Material	Temperature
Light Load	FPJL	1045 Carbon Steel	29~35HRC	Black Oxide	1045 Carbon Steel	57~63HRC (Carburized)	Trivalent Chromate	SWP-B	-30~80°C
Heavy Load	FPJH						Black Oxide		



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(P) The adhesive is most effective if left on the part for 72 hours or more in 25°C. It should be noted if the parts are left for short period of time and in low temperature, the thread locking compound will be less-effective.

Part Number Type	M (Coarse)	S	d	L	B	D	ℓ1	ℓ2	a	FPJL Load (N) min.	FPJL Load (N) max.	FPJH Load (N) min.	FPJH Load (N) max.	Applicable Wrench	Unit Price
FPJL FPJH	3	1.5	1.1	10	0.9	5	1.5	5	0.5	0.5	1	0.8	2.9	-	
		3		15						0.3	1	0.8	2.9		
	4	2	1.6	15	1.3	6	1.8	6	0.7	1	2	2.9	8.8		
		4		24						0.6	2	2	8.8		
	5	3	2	20	1.5	7	2	8	1.2	2	9.8	4.9	19.6	PJG1	
		5		27						2	9.8	2.9	19.6		
	6	3	2.5	25	2	8	2.5	9	1.5	5.9	9.8	7.8	29.4		
		5		30						2	9.8	4.9	29.4		
	8	3	3.1	25	2.5	10		12		5.9	9.8	14.7	29.4	PJG2A	
		5		27						2.9	9.8	7.8	29.4		
	10	5	3.8	30	3	12		15		5.9	14.7	8.8	49		
		10		43						2.9	14.7	7.8	49		
	12	5	5.5	30	4	14		20		5.9	14.7	18.6	49	PJG3	
		10		43						2.9	19.6	7.8	49		
		15		51						2.9	19.6	4.9	49		
	16	10	8	60	5	18	3.0	25	2.0	5.9	39.2	12.7	78.5	PJG4	
		15		60						3.9	39.2	12.7	78.5		
		20		85						4.9	39.2	9.8	78.5		
		30		125						2.9	39.2	6.9	78.5		
		40		125						4.9	39.2	6.9	78.5		

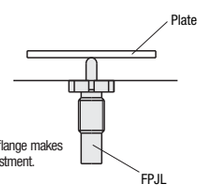
(P) M3 and M4 can be fixed with a flat blade screwdriver.

kgf=Nx0.101972

Ordering Example: Part Number - S → PJLF6 - 3, PJHZ16 - 20, FPJL3 - 1.5

Days to Ship: Configure Online

Price: Configure Online



■Feature: The flange makes easier height adjustment.