

Press Fit Plungers / Ball Buttons

Standard / Roller

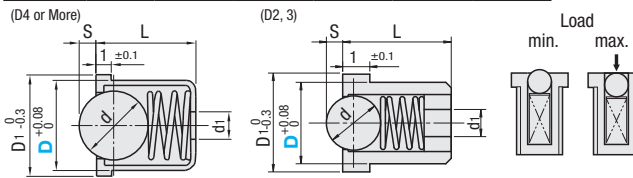
Tapped

Press Fit Plungers Standard

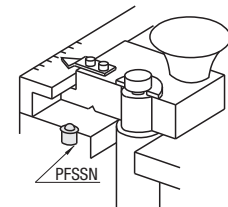


RoHS 10

Type	Body	Ball	Spring	Operating Temperature
Light Load	PFSSN	SUS303	SUS440C	55HRC~
Heavy Load	PFSSR	SUS303	SUS440C	55HRC~
Light Load	PFPSN	Polyacetal	-	-
Heavy Load	PFPPN	Polyacetal	-	-



Example



Part Number	Type	D	D1	L	S	d	d1	Light Load (N)				Heavy Load (N)		Unit Price			
								PFSSN	PFSSR	PFPSN	PFPPN	min.	max.	PFSSN	PFSSR	PFPSN	PFPPN
PFSSN PFSSR PFPSN PFPPN		2	2.5	3	-	0.3	1	0.54	0.78	0.54	0.78	-	-	-	-	-	-
		3	3.6	4	-	0.6	2	0.74	0.98	0.74	0.94	-	-	-	-	-	-
		4	4.6	5	6.5	0.8	3	0.65	5.6	1.3	6.4	3.1	8.7	-	-	-	-
		5	5.6	6	8	1	4	2	2.8	6.3	2.7	8	5.1	13.5	-	-	-
		6	6.6	7	9	1.6	5	2.95	9.6	1.15	10.2	5.3	16.5	-	-	-	-
		8	8.6	9	12	1.9	6.35	6.5	11.7	6.15	17.2	8	28	-	-	-	-
		10	10.6	11.5	14.5	2.4	8	9	15	2.1	18.8	13.5	30.5	-	-	-	-

Recommended Diameter of Mounting Hole D: $D_{+0.13}^{-0.08}$ Use adhesive to prevent loosening.

kgf=Nx0.101972

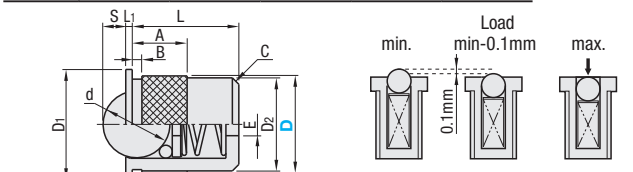
Ordering Example Part Number PFSSN4

Press Fit Plungers Roller

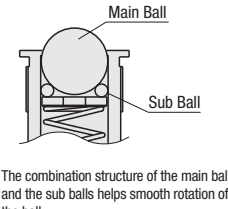


RoHS 10

Type	Body	Main Ball	Sub Balls	Spring	Operating Temperature
PFPR	Polyacetal	Polyacetal	SUS440C	SUS631J1	-30~80°C



Features



The combination structure of the main ball and the sub balls helps smooth rotation of the ball.

Part Number	Type	D	D1	D2	L	S	L1	d	A	B	E	C	Allowable Load (N)			Unit Price
													min.	min.-0.1mm	max.	
PFPR		7	9	-	7.5	1.5	-	4.76	7.5	1	1.5	0.8	0	0.1	2	-
		9	11	8.4	10	1.7	-	5.56	7	1.2	2.5	-	0	0.2	4	-
		13	15	12.4	15	2.8	-	8.73	-	-	3	-	0	0.3	7	-
		15	17	14.7	16.5	3.5	-	10.32	8.5	1.5	3.5	-	0	0.3	11	-
		20	22	19.4	22.5	5.2	-	15.88	10.5	-	5.3	-	0	0.3	14	-
		24	26	23.4	29	6.6	-	19.05	13.5	-	6.4	-	0	0.3	21	-

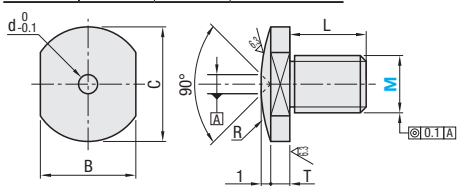
Recommended Diameter of Mounting Hole DH8

Ordering Example Part Number PFPR15

Ball Buttons - Tapped

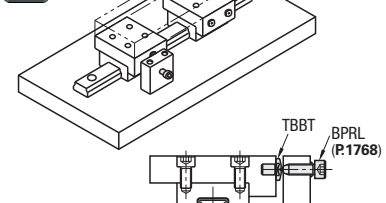


Type	Material	Hardness	Surface Treatment
TBBT	SK4	55~60HRC	Electroless Nickel Plating



When using it with a ball plunger, select the same M.

Example



Part Number	Type	M (Coarse)	B	L	C	T	R	d	Unit Price
TBBT		4	7	5	8	2	8.4	1.5	-
		5	8	6	9	2	10.2	2	-
		6	10	8	12	2	18	2	-
		8	13	10	15	3	27.6	3	-
		10	17	12	20	3	48.5	4	-
		12	19	15	22	3	57.8	5	-

Ordering Example Part Number TBBT6

Roller Plungers

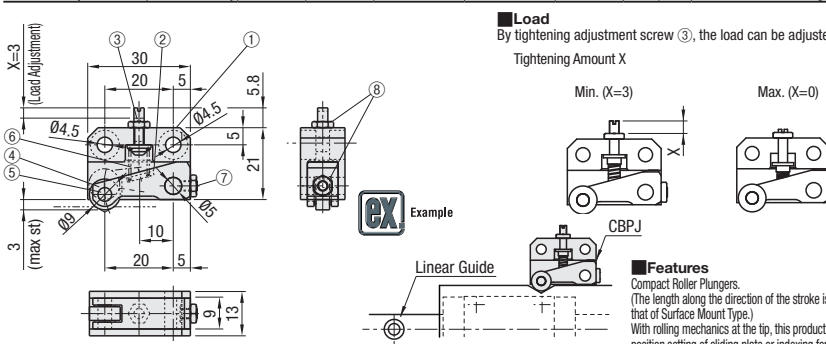
Compact / Surface Mount / Hex Screw

Features: Has a ball bearing on the tip.

Compact Load Adjusting Function



Type	①②③ Main Body, Arm, Adjustment Screw	④ Bearing	⑤ Bearing Shaft	⑥ Spring	⑦ Set Screw	⑧ Nut
CBPJ	S45C Electroless Nickel Plating	SUS440	SUJ2 58HRC~	SUS304-WPB	SCM435	SWCH Equivalent Electroless Nickel Plating



Load By tightening adjustment screw ③, the load can be adjusted freely. Tightening Amount X

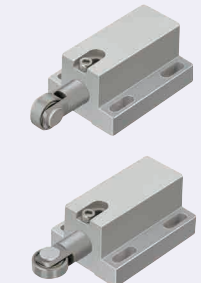
Min. (X=3) Max. (X=0)

Features Compact Roller Plungers. (The length along the direction of the stroke is approx. 1/3 of that of Surface Mount Type.) With rolling mechanics at the tip, this product is suitable for the position setting of sliding plate or indexing for rotating table.

Part Number		Min. Tightening (X=3)		Max. Tightening (X=0)		Unit Price
Type	No.	Load (N)		Load (N)		
		min	max	min	max	
CBPJ	9	0.4	4.2	6.6	10.2	

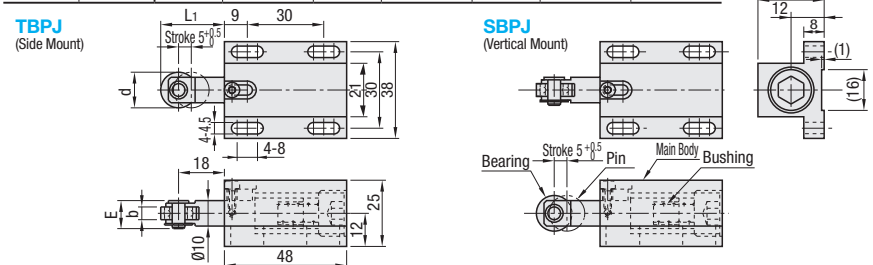
Ordering Example Part Number CBJ9

Surface Mount



RoHS 10

Type	Main Body	Pin	Bearing	Bushing	Spring
Side Mount TBPJ	S45C Electroless Nickel Plating	S45C Electroless Nickel Plating	SUJ2	High-Tensile Brass Alloy	SUS304-WPB
Vertical Mount SBPJ	S45C Electroless Nickel Plating	S45C Electroless Nickel Plating	SUJ2	High-Tensile Brass Alloy	SUS304-WPB



Part Number	Type	No.	d	b	E	L1	Load (N)		Unit Price
							min.	max.	
Light Load	TBPJ (Side Mount)	1	14	5	11	25	3	5.1	-
		1A	19	6	12.8	27.5	6.1	10.4	-
		2	14	5	11	25	3	5.1	-
		2A	19	6	12.8	27.5	6.1	10.4	-
Heavy Load	SBPJ (Vertical Mount)	1	14	5	11	25	3	5.1	-
		1A	19	6	12.8	27.5	6.1	10.4	-
		2	14	5	11	25	3	5.1	-
		2A	19	6	12.8	27.5	6.1	10.4	-

No. 1A and 2A have larger bearing dia. than that of conventional products.

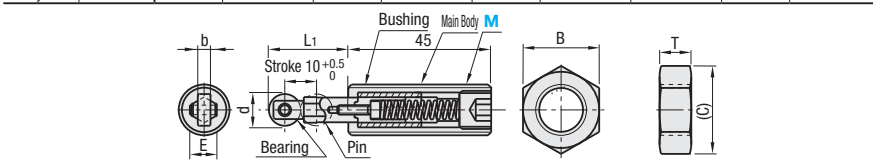
Ordering Example Part Number TBPJ2A

Hex Screw



RoHS 10

Type	Main Body	Pin	Bearing	Bushing	Spring	Accessory (Nut x2 pcs.)
Light Load RBPJ	S45C Electroless Nickel Plating	S45C Electroless Nickel Plating	SUJ2	High-Tensile Brass Alloy	SUS304-WPB	SS400 Electroless Nickel Plating
Heavy Load RBSJ	S45C Electroless Nickel Plating	S45C Electroless Nickel Plating	SUJ2	High-Tensile Brass Alloy	SUS304-WPB	SS400 Electroless Nickel Plating



Part Number	Type	M (Coarse)	d	b	E	L1	M (Coarse)	B	Nut (C)	T	Load (N)		Unit Price
											min.	max.	
Light Load	RBPJ	16	10	4	9	25	16x2.0	24	27.7	10	1.6	4.8	-
		20	19	6	11.5	30	20x2.5	30	34.6	12	-	-	-
		16	10	4	9	25	16x2.0	24	27.7	10	-	-	-
Heavy Load	RBSJ	20	19	6	11.5	30	20x2.5	30	34.6	12	2.9	8.4	-

Ordering Example Part Number RBPJ20