

# Press Fit Plungers / Ball Buttons

Standard / Roller

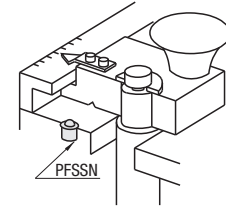
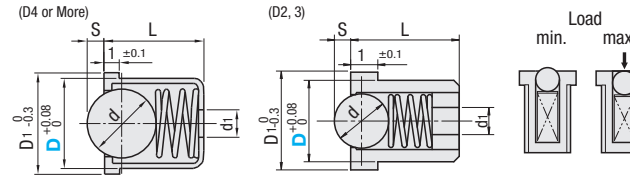
Tapped

## Press Fit Plungers Standard



RoHS 10

Type	Body	Ball	Spring	Operating Temperature	
	Material	Material	Material		
Light Load	PFSSN	SUS303	SUS440C	55HRC~	-20~120°C
Heavy Load	PFSSR	SUS303	SUS440C	55HRC~	-20~120°C
Light Load	PFPSN	Polyacetal	-	-	-30~80°C
Heavy Load	PFPFN	Polyacetal	-	-	-30~80°C



Part Number	Type	D	D1	L	S	d	Light Load (N)				Heavy Load (N)		Unit Price				
							PFSSN	PFSSR	PFPSN	PFPFN	PFSSN	PFSSR	PFSSN	PFSSR	PFPSN	PFPFN	
2	2	2.5	3	-	0.3	1	0.5	0.54	0.78	0.54	0.78	-	-	-	-	-	-
3	3	3.6	4	-	0.6	2	1	0.74	0.98	0.74	0.94	-	-	-	-	-	-
4	4	4.6	5	6.5	0.8	3	1.5	0.65	5.6	1.3	6.4	3.1	8.7	-	-	-	-
5	5	5.6	6	8	1	4	2	2.8	6.3	2.7	8	5.1	13.5	-	-	-	-
6	6	6.6	7	9	1.6	5	2.5	2.95	9.6	1.15	10.2	5.3	16.5	-	-	-	-
8	8	8.6	9	12	1.9	6.35	3	6.5	11.7	6.15	17.2	8	28	-	-	-	-
10	10	10.6	11.5	14.5	2.4	8	3	9	15	2.1	18.8	13.5	30.5	-	-	-	-

Recommended Diameter of Mounting Hole D:  $\pm 0.03$

Use adhesive to prevent loosening.

kgf=Nx0.101972

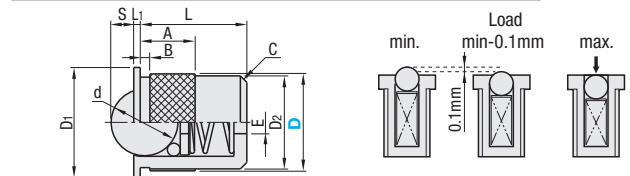


## Press Fit Plungers Roller

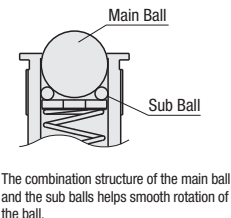


RoHS 10

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



### Features



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

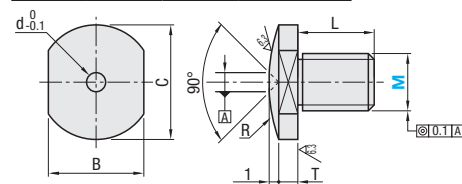
Recommended Diameter of Mounting Hole DH8



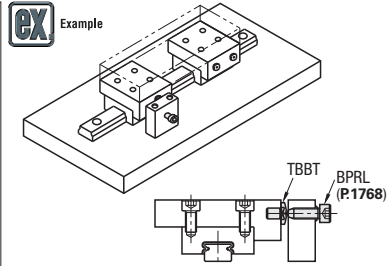
## Ball Buttons - Tapped



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



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



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



# Roller Plungers

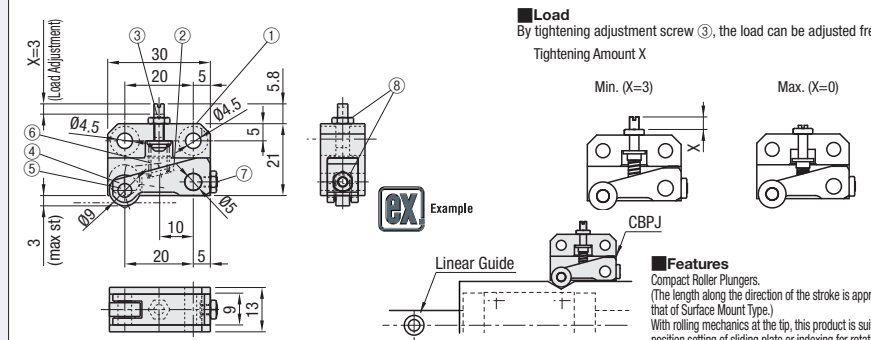
Compact / Surface Mount / Hex Screw

Features: Has a ball bearing on the tip.

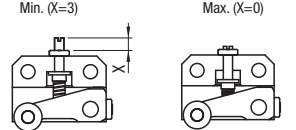
## Compact Load Adjusting Function



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



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

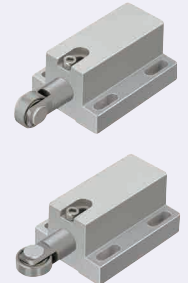


Features: Compact Roller Plungers. (The length along the direction of the stroke is approx. 1/3 of that of Surface Mount Type.) With rolling mechanics at the tip, this product is suitable for the position setting of sliding plate or indexing for rotating table.

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

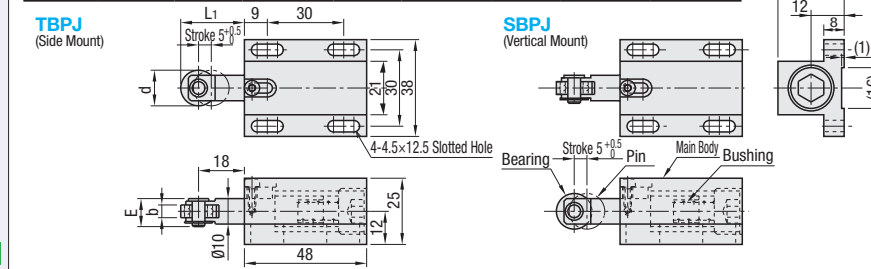


## Surface Mount

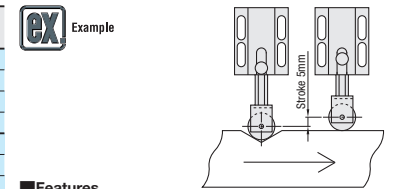


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Type	Main Body	Pin	Bearing	Bushing	Spring
	Material	Material	Material	Material	Material
Side Mount	TBPJ	S45C	Electroless Nickel Plating	S45C	Electroless Nickel Plating
Vertical Mount	SBPJ	S45C	Electroless Nickel Plating	SUJ2	High-Tensile Brass Alloy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



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	-
Heavy Load	TBPJ (Side Mount)	2A	19	6	12.8	27.5	6.1	10.4	-
		1	14	5	11	25	3	5.1	-
		1A	19	6	12.8	27.5	6.1	10.4	-
Light 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	-
Heavy Load	SBPJ (Vertical Mount)	2A	19	6	12.8	27.5	6.1	10.4	-



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

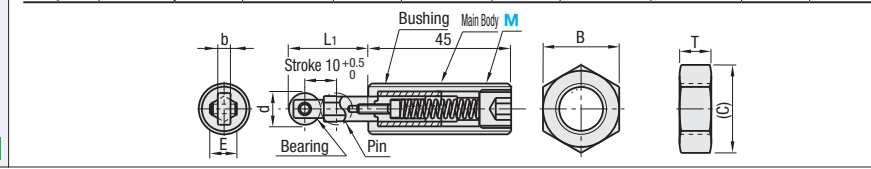


## Hex Screw



RoHS 10

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



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	-	-	-
Heavy Load	RBSJ	16	10	4	9	25	16x2.0	24	27.7	10	2.9	8.4	-
		20	19	6	11.5	30	20x2.5	30	34.6	12	-	-	-

