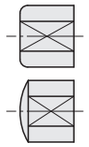
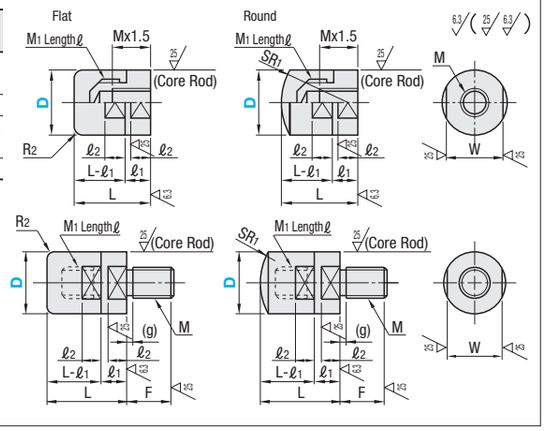
Resin Pushers
Standard Type

■**Features:** MC nylon used pushers. For maintenance, resin for replacement is provided.

Type		Shape Flat	Shape Round	Material
MC Nylon	Tapped	PSHMC	RSHMC	MC Nylon
	Threaded	PSHMMC	RSHMMC	Material: SUS304
	Replacement Resin	MCKK	MCRKK	MC Nylon
Polyacetal	Tapped	PSHPA	RSHPA	Polyacetal
	Threaded	PSHMPA	RSHMPA	Material: SUS304
	Replacement Resin	PAKK	PARKK	Polyacetal

ℓ2 (resin with wrench flats) for D6 and D8 is as follows.





■**Tapped** Positions of the flats on resin and core rod may not coincide. Tap depth for replacement resin is ℓ.

Part Number Type	D	L	MxPitch	M1xPitch	ℓ	SR1	R2	ℓ1	ℓ2	W	Unit Price MC Nylon Set PSHMC	MC Nylon Set RSHMC	MC Nylon Replacement Resin MCKK	MC Nylon Replacement Resin MCRKK	Polyacetal Set PSHPA	Polyacetal Set RSHPA	Polyacetal Replacement Resin PAKK	Polyacetal Replacement Resin PARKK
Set Flat PSHMC PSHPA / Replacement Resin Flat MCKK PAKK	8	12	M3x0.5	M5x0.8	4.5	8	1	5	4	7								
	10	15	M4x0.7	M6x1.0	7	10				8								
	12	16	M5x0.8	M8x1.25	8	12	2			10								
	15	20	M6x1.0	M10x1.5	10	16		6	5	14								
	16																	
Round RSHMC RSHPA / Round MCRKK PARKK	20	25	M8x1.25	M12x1.75	12	20	3	8	6	17								
	25	30	M10x1.5	M16x2.0	14	25		10	8	22		-		-		-	-	-
	30	35	M12x1.75	M16x2.0	18	30				27		-		-		-	-	-

■**Threaded**

Part Number Type	D	L	MxPitch (Coarse)	MxPitch (Coarse)	ℓ	SR1	R2	F	(g)	ℓ1	ℓ2	W	Unit Price MC Nylon Set PSHMMC	MC Nylon Set RSHMMC	MC Nylon Replacement Resin MCKK	MC Nylon Replacement Resin MCRKK	Polyacetal Set PSHMPA	Polyacetal Set RSHMPA	Polyacetal Replacement Resin PAKK	Polyacetal Replacement Resin PARKK
Set Flat PSHMMC PSHMPA / Replacement Resin Flat MCKK PAKK	6	10	M3x0.5	M3x0.5	3	6	1	4.5	1.5	5	4	5								
	8	12	M4x0.7	M5x0.8	4.5	8		6				7								
	10	15	M5x0.8	M6x1.0	7	10		7	2			8								
	12	16	M6x1.0	M8x1.25	8	12	2	10				10								
Round RSHMMC RSHMPA / Round MCRKK PARKK	15	20	M8x1.25	M10x1.5	10	16		12	2.5	6	5	14								
	16																			
	20	25	M10x1.5	M12x1.75	12	20	3	14		8	6	17								

Ordering Example: Part Number — PSHMC20, MCRKK12

Specifications

■**Properties of MC nylon and polyacetal**

- MC nylon: Excels in abrasion resistance compared with polyacetal.
- Polyacetal: Excels in mechanical strength compared with MC nylon.

Item	Abrasion Resistance	Slip Property	Dimensional Stability	Impact Resistance	Flame Resistance	Chemical Resistance. Oil	Acid	Alkali	Organic Solvents
MC Nylon	○	○	△	○	-	○	×	○~△	○
MC Nylon Electrical Conductivity CDR2	○	○	△	○	-	○	×	○~△	○
Polyacetal	△	○	○	○	[UL94] HB Equivalent	○	△~×	○	○

Item	Tensile Strength (at ambient temperature)	Elongation	Bending Strength	Compressive Strength Yielding Point	Compressive Strength 5% Deformation	Rockwell Hardness (R Scale)	Continuous Operating Temperature	Volume Specific Resistivity (Ω · cm)	Density	Moisture Absorption Water, Balanced	Moisture Absorption Water, 24hs
Test Method ASTM	D-638		D-790	D-695		D-785	-	D-257	D-792	D-570	
MC Nylon	96MPa	30%	110MPa	103MPa	95MPa	120	-40 ~ 120°C	$4.2x10^{15}$	1.16	6	0.8
MC Nylon Electrical Conductivity CDR2	68MPa	10%	117MPa	-	98MPa	119	Room Temperature ~120°C	10^2x10^4	1.20	-	-
Polyacetal	61MPa	40%	89MPa	-	103MPa	119	-45 ~ 95°C	$>10^{14}$	1.41	0.7	0.22

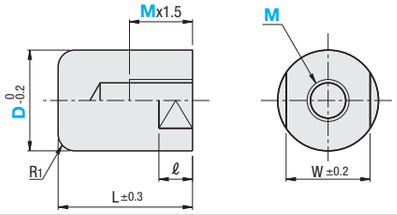
For detailed Properties, see **P.953**.

Resin Pushers
Thread Insert

■**L Fixed**

Type	Material	Color	Thread
JPHJ	Polyacetal	White	Thread Insert (SUS304)
JPHM	MC Nylon Electrical Conductivity CDR2	Black	
JPHMC	MC Nylon	Blue	

Properties of polyacetal and MC nylon, see **P.1557**.



Part Number Type	D	M Selection	L	R1	ℓ	W	Unit Price JPHJ	JPHM	JPHMC
JPHJ JPHM JPHMC	8	3 4	12	1	8	7			
	10	3 4 5	15			8			
	12	4 5 6	16	2		10			
	15	5 6 8S 8	20		10	14			
	16	6 8S 8							
	18	6 8S 8 10S 10 12S 12	25			17			
	20	8S 8 10S 10 12S 12 12M		3					
	30	10S 10 12S 12 12M 14S 18S	35		15	27			
	40	10S 10 12S 12 12M 14S 18S	45		20	37			

8S, 10S, 12, 12S, 14S and 18S are fine thread pitch. For thread details, refer to the right. 12M is course thread pitch.

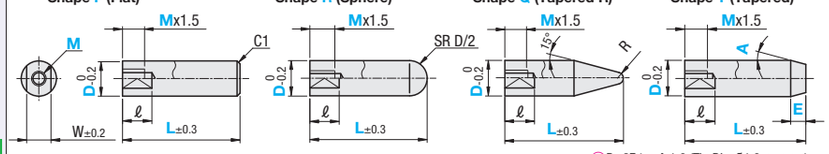
Ordering Example: Part Number JPHJ10 - M 4

■**Shape Selectable and L Configurable**

Type	Material	Color	Thread
JPFJ	Polyacetal	White	Thread Insert (SUS304)
JPFM	MC Nylon Conductive CDR2	Black	
JPFMC	MC Nylon	Blue	

Properties of polyacetal and MC nylon, see **P.953**.

Shape F (Flat) / Shape R (Sphere) / Shape Q (Tapered R) / Shape T (Tapered)



D−2E tan A 1.0 (Tip Dia. Ø1.0 or more)

Part Number Type	Shape	D	L 1mm Increment	M Selection	Tapered Type only E 0.5mm Increment	Tapered Type only A 1° Increment	R	ℓ	W
JPFJ (Polyacetal)	F	6	10(17)~50	3	5.0≤E E≤Mx3	1~45°	1	8	5
JPFM (MC Nylon Conductive CDR2)	R	8	12(19)~50	3 4			1.5		7
	Q*	10	15(22)~50	3 4 5			2	10	8
JPFMC (MC Nylon)	T	12	16(27)~100	4 5 6					10
		15	20(35)~100	5 6 8S 8					14
		16		6 8S 8					
		18	25(40)~100	6 8S 8 10S 10					17
		20		8S 8 10S 10 12S 12 12M			3		
		30	35(63)~100	10S 10 12S 12 12M 14S 18S				15	27
		40	45(87)~100	10S 10 12S 12 12M 14S 18S				20	37

* Dimensions in ( ) are the minimum L dimensions when shape Q is selected. 8S, 10S, 12, 12S, 14S and 18S are fine thread pitch. For thread details, refer to the right. 12M is course thread pitch.

Ordering Example

Part Number - L - M - E - A

Type	Shape	D	L	M	E	A
JPFJ	R	12	40	6		
JPFMC	T	12	35	5	E8	A15

D	Unit Price L Min. ~ 59 JPFJ	JPFM	JPFMC	L60~100 JPFJ	JPFM	JPFMC	Machining Charge (Body Price +) F Shape	R Shape	Q Shape	T Shape
6										
8				-	-	-				
10										
12										
15										
16										
18										
20										
30										
40										

• Thread

M	MxPitch
3	M3x0.5
4	M4x0.7
5	M5x0.8
6	M6x1.0
8S	M8x1.0
8	M8x1.25
10S	M10x1.25
10	M10x1.5
12S	M12x1.25
12	M12x1.5
12M	M12x1.75
14S	M14x1.5
18S	M18x1.5