

# Indexing Plungers

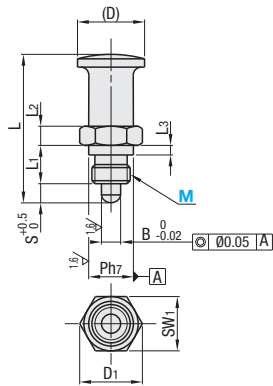
Pilot, Precision Grade / Press Fit / Knobs for Press Fit Plungers

■Features: Clearance of the pin is 0.035 or less.

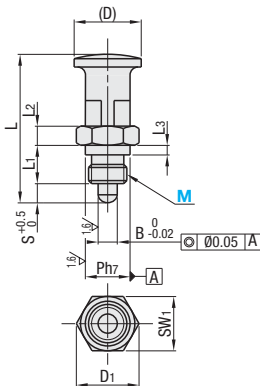
## ■Pilot, Precision

Load	Type		Thread Type	Knob	Main Body		Pin			Spring	
	Returning	Rest Position			M Material	H Hardness	S Surface Treatment	M Material	H Hardness		S Surface Treatment
Light Load	PMXSL	PMXYSL	Coarse Thread	Nylon 6	S45C	33-38HRC	Black Oxide	S45C	HV500-600	Black Oxide	SUS304-WPB
Heavy Load	PMXSH	PMXYSH									
Light Load	PXSL	PXYSL	Fine Thread	Nylon 6	S45C	33-38HRC	Black Oxide	S45C	HV500-600	Black Oxide	SUS304-WPB
Heavy Load	PXSH	PXYSH									

Returning



Rest Position



RoHS10

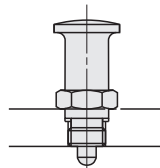
Part Number	Type	Pitch		Ph7	(D)	D1	S	B	L	L1	L2	L3	SW1	Light Load/Heavy Load				Unit Price			
		Coarse Thread	Fine Thread											min.	max.	min.	max.	PMXSL	PMXYSL	PXSL	PXYSL
(Coarse Thread)	10	1.5	1	12	18	16.2	5	5	38	10	5	3	14	4.5	7.3	5.7	11.9				
(Fine Thread)	12	1.75	1.5	14	20	19.6	6	6	46	12	6	3	17	5.3	8.8	6.7	13.2				
PMXSL	16	2	1.5	18	26	25.4	8	8	56.5	16	6	4	22	5.7	10.1	7.4	17.2				
PMXSH	20	2.5	1.5	22	32	31.2	10	10	70	20	10	4	27	6.6	15.0	8.0	26.8				

Ordering Example Part Number PXSL20

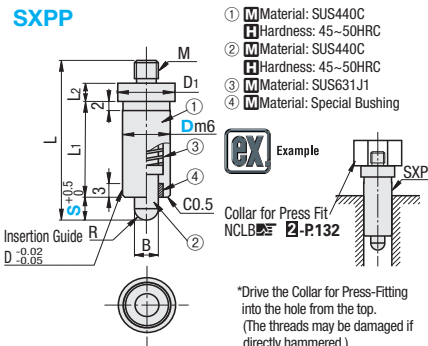
Example

## ■Features

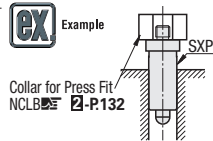
- h7 finished pilot ensures high repeatability.
- Clearance of the pin part is 0.035 or less, which helps to prevent backlash.



## ■Press Fit



- ① M Material: SUS440C
- ② H Hardness: 45-50HRC
- ③ M Material: SUS440C
- ④ H Hardness: 45-50HRC
- ⑤ M Material: SUS631J1
- ⑥ M Material: Special Bushing

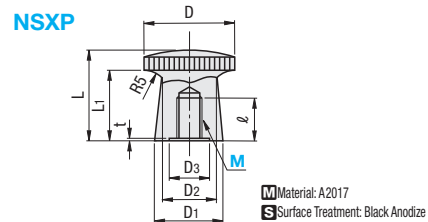


\*Drive the Collar for Press-Fitting into the hole from the top. (The threads may be damaged if directly hammered.)

Part Number	Type	D <sub>ms</sub>	S <sub>min</sub>	D1	B	L	L1	L2	M (Coarse)	R	Load (N)		Mass (g)	Unit Price
											min.	max.		
SXPP	8	+0.015	4	10	4	32	19	4	3	2	3	9	9	
	6	+0.006	5	12	5	34	20	4	5	2.5	5	11.5	15	
	5	+0.006	8	12	5	37	20	4	5	2.5	5	16	15.5	
SXPP	12	+0.018	6	14	6	42	24	5	6	3	6.5	14.5	26.5	
	10	+0.018	10	14	6	46	24	5	6	3	6.5	20	27.5	
	7	+0.007	7	19	8	52	32	8	4	7.15	8	18	54	
15	+0.007	12	19	8	57	32	8	4	7.15	8	25	55.5		

Recommended Tolerance of Mounting Hole : H7 kgf=Nx0.101972

## ■Knobs for Press Fit Plungers



M Material: A2017  
S Surface Treatment: Black Anodize

Part Number	Type	M	Applicable Indexing Plunger	L	L1	t	D	D1	D2	D3	ℓ	Unit Price
5	SXPP10	18	14	18	11.8	11	8	8				
6	SXPP12	22.5	17.5	21	13.8	13	9	9				
8	SXPP15	27	21	26	18.8	18	11	11				

Ordering Example Part Number SXPP10 NSXP8

# Indexing Plungers

Knobless Standard / Knobless Large Screws for Mounting Knobs

■Features: The most suitable knob for each purpose can be mounted.

## ■Knobless Standard

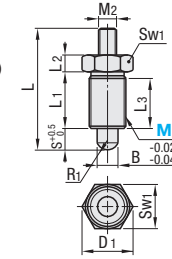


RoHS10

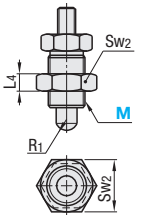
Type	Main Body		Pin			Spring		Lock Nut	
	M Material	S Surface Treatment	M Material	H Hardness	S Surface Treatment	M Material	M Material	S Surface Treatment	S Surface Treatment
PXNAN	SUM22	Black Oxide	S45C	50-60HRC (Carburized)	Black Oxide	SUS631J1	-	-	-
PXNKN	-	-	-	-	-		SS400	Black Oxide	-
SXNAN	SUS303	-	SUS440C	45HRC~	-	-	-	-	-
SXNKN	-	-	-	-	-	SUS303	-	-	-

For M=8 and 8L, the pin hardness is 40-45HRC.

PXNAN  
SXNAN (Stainless Steel)



With Lock Nut  
PXNKN  
SXNKN (Stainless Steel)



Part Number	Type	Pitch (Fine Thread)	D1	B	S	L	L1	L2	L3	L4	M2 (Coarse)	Sw1	Sw2	R1	Load (N)		Mass (g)		Unit Price					
															min.	max.	PXNAN	SXNAN	PXNKN	SXNKN				
PXNAN	8	1.0	11.5	4	4	30	16	5	14	4	3	10	13	2	3	9	10	15						
																			6	32				
																			12	32				
SXNAN	10	1.0	13.8	5	5	32	17	5	15	5	4	12	17	2.5	5	11.5	15	22						
																			8	35				
																			12	35				
PXNKN	12	1.5	16.2	6	6	39	20	6	17	6	5	14	19	3	6.5	14.5	25	35						
																			10	44				
																			16	49				
SXNKN	16L	1.5	21.9	8	7	54	26	8	23	8	6	19	24	4	7.5	18	57	77						
																			12	54				
																			18	54				

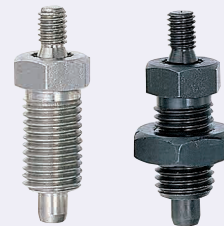
M dimensions with "L" have longer strokes compared to the conventional products.

kgf=Nx0.101972

Ordering Example Part Number PXNAN12L

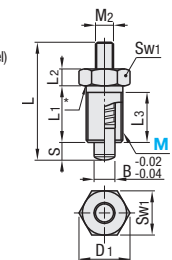
■Features: Screws for mounting knobs (M2) are larger by 1 size than the Standard Type.

## ■Knobless Large Screws for Mounting Knobs

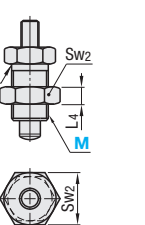


Type	Main Body		Pin			Spring		Lock Nut	
	M Material	S Surface Treatment	M Material	H Hardness	S Surface Treatment	M Material	M Material	S Surface Treatment	S Surface Treatment
PXNK	SUM22L	Black Oxide	S45C	50-60HRC	Black Oxide	SWP-B	S45C	Black Oxide	-
SXNA	-	-	-	-	-	Nickel Plating	-	-	-
SXNK	SUS303	-	SUS303	-	Nickel Plating	SUS301	-	-	SUS303

SXNA (Stainless Steel)



With Lock Nut  
PXNK  
SXNK (Stainless Steel)



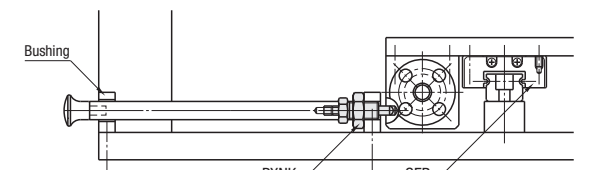
\*The Nut does not closely contact under the neck because of the radius.

Part Number	Type	Pitch (Fine Thread)	D1	B	S <sub>min</sub>	L	L1	L2	L3	L4	M2 (Coarse)	Sw1	Sw2	Load (N)		Mass (g)		Unit Price					
														min.	max.	PXNK	SXNA	PXNK	SXNK	SXNA	PXNK	SXNK	
SXNA	10	1.0	13.8	5	5	33	17	5	15	5	5	12	17	7	17	6	15	15	22				
																				6	42	8	24
PXNK	12	1.5	16.2	6	6	42	20	6	17	6	6	14	18	9	24	8	25	35					
																			7	24	9	26	57
SXNK	16	1.5	21.9	8	8	54	26	8	23	8	8	19	24	24	30	9	26	57	77				
																				9	26	57	77

kgf=Nx0.101972

Ordering Example Part Number SXNA12 PXNK16

Example



Features of the Returning Type and Rest Position Type P.1779