

Indexing Plungers

With Precision Pilot / Press-Fit / Knob for Press-Fit

Indexing Plungers with Precision Pilot

Load	Type		Thread Type	Knob Material	Main Body			Pin			Spring Material
	Return Type	Rest Position			Material	Hardness	Surface Treatment	Material	Hardness	Surface Treatment	
Light Load	PMXSL	PMXYSL	Coarse Thread	Nylon 6	1045 Carbon Steel or Equivalent	33~38 HRC min.	Black Oxide	1045 Carbon Steel or Equivalent	HV min. 500~600	Black Oxide	304 Stainless Steel
Heavy Load	PMXSH	PMXYSH									
Light Load	PXSL	PXYSL	Fine Thread								
Heavy Load	PXSH	PXYSH									

Return Type

Rest Position Type

RoHS 10

Part Number		Pitch		P _{h7}	(d)	D ₁	S	B	L	L ₁	L ₂	L ₃	S _{w1}	Load (N)		Heavy Load			
Type	M	Coarse Thread	Fine Thread											min.	max.	min.	max.		
Coarse Thread	Fine Thread	10	1.5	1	12	18	16.2	5	5	38	10	5	3	14	4.5	7.3	5.7	11.9	
		12	1.75	1.5	14	20	19.6	6	6	46	12	6	3	17	5.3	8.8	6.7	13.2	
		16	2	1.5	18	26	25.4	8	8	56.5	16	6	4	22	5.7	10.1	7.4	17.2	
PMXSL	PXSL	10	1.5	1	12	32	31.2	10	10	70	20	10	4	27	6.6	15.0	8.0	26.8	
		12	1.75	1.5	14														
		16	2	1.5	18														
PMXSH	PXSH	20	2.5	1.5	22														
PMXYSL	PXYSL																		
PMXYSH	PXYSH																		

Part Number Example Part Number: **PXSL20**

Application Example

Features

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

Indexing Plungers - Press-Fit

SXPP

kgf=Nx0.101972

Part Number Type	D _{m6}	S _{min}	D ₁	B	L	L ₁	L ₂	M (Coarse)	R	Load (N)		Mass (g)		
										min.	max.			
SXPP	8	+0.015	4	10	4	-0.010	32	19	4	3	2	3	9	9
	10	+0.006	5	12	5	-0.022	34	20	4	5	2.5	5	11.5	15
			6	14	6	-0.010	37	24	5	6	3	6.5	14.5	26.5
	12	+0.018	7	17	7	-0.025	42	27	6	4	7.15	4	18	54
			12	19	8	-0.025	46	32	8	4	7.15	4	25	55.5

Recommended tolerance of mounting hole: H₇.

Application Example

Collar for Press Fit NCLB P.1883

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

Indexing Plungers - Knob for Press-Fit

NSXP

Material: 2017 Aluminum Alloy
Surface Treatment: Black Anodize

Part Number Example Part Number: **SXPP10** - **S**
NSXP8 - **5**

Indexing Plungers

Knobless Standard / Large Screws for Mounting Knobs

Knobless Indexing Plunger

Type	Main Body		Pin			Spring Material	(Lock Nut)	
	Material	Surface Treatment	Material	Hardness	Surface Treatment		Material	Surface Treatment
PXNAN	1213 Carbon Steel	Black Oxide	1045 Carbon Steel or Equivalent	50~60 HRC min. (Carburized)	Black Oxide	631 Stainless Steel	1018 Carbon Steel or Equivalent	Black Oxide
PXNKN							303 Stainless Steel	—
SXNAN	303 Stainless Steel	—	440C Stainless Steel	45 HRC min.	—		303 Stainless Steel	—
SXNKN							—	—

RoHS 10

kgf=Nx0.101972

PXNAN
SXNAN
(Stainless Steel)

With Lock Nut
PXNKN
SXNKN
(Stainless Steel)

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

Part Number Type	M	Pitch (Fine Thread)	D ₁	B	S	L	L ₁	L ₂	L ₃	L ₄	M ₂ (Coarse)	S _{w1}	S _{w2}	R ₁	Load (N)		Mass (g)	
															min.	max.	PXNAN	SXNAN
PXNAN	8	1.0	11.5	4	4	30	16	5	14	4	3	10	13	2	3	9	10	15
																12	15	22
																16	16	25
																20	17.5	35
																25	18.5	45
																30	19.5	55
PXNKN	10	1.0	13.8	5	5	32	17	5	15	5	4	12	17	2.5	5	11.5	15	22
																15	16	25
																20	17.5	35
																25	18.5	45
																30	19.5	55
																35	20.5	65
SXNAN	12	1.5	16.2	6	6	39	20	6	17	6	5	14	19	3	6.5	14.5	25	35
																20	16	25
																25	17.5	35
																30	18.5	45
																35	19.5	55
																40	20.5	65
SXNKN	16	1.5	21.9	8	8	54	26	8	23	8	6	19	24	4	7.5	18	25	77
																25	18	25
																30	19	25
																35	20	25
																40	21	25
																45	22	25

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

Indexing Plungers - Large Screws for Mounting Knobs

Type	Main Body		Pin			Spring Material	(Lock Nut)	
	Material	Surface Treatment	Material	Hardness	Surface Treatment		Material	Surface Treatment
PXNK	12L13 Carbon Steel	Black Oxide	1045 Carbon Steel or Equivalent	50~60 HRC min.	Black Oxide	JIS SWP-B Spring Steel	1045 Carbon Steel or Equivalent	Black Oxide
SXNA	303 Stainless Steel	—	303 Stainless Steel	—	Nickel Plating	301 Stainless Steel	—	—
SXNK							303 Stainless Steel	—

RoHS 10

kgf=Nx0.101972

SXNA
(Stainless Steel)

With Lock Nut
PXNK
SXNK
(Stainless Steel)

*The nut does not touch the neck because of the radius.

Part Number Type	M	Pitch (Fine Thread)	D ₁	B	S min.	L	L ₁	L ₂	L ₃	L ₄	M ₂ (Coarse)	S _{w1}	S _{w2}	Load (N)		Mass (g)	
														min.	max.	SXNA	PXNK
SXNA	10	1.0	13.8	5	5	33	17	5	15	5	5	12	17	7	17	15	22
														9	24	8	25
														24	30	9	26
PXNK	12	1.5	16.2	6	6	42	20	6	17	6	6	14	19	9	24	8	35
														24	30	9	26
SXNK	16	1.5	21.9	8	8	54	26	8	23	8	8	19	24	24	30	9	77
														25	30	9	77

kgf=Nx0.101972

Part Number Example Part Number: **SXNA12**
PXNK16

Application Example

Features of the Return Type and Rest Position Type P.1764.