Indexing Plungers

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

■**Feature:** Clearance of the pin is 0.035 or less.

■Pilot, Precision

RoHS

Load	Type: Return Type	Type: Rest Position	Thread Type	Knob: M Material	Main Body: M Material	Main Body: H Hardness	Main Body: S Surface Treatment	Pin: M Material	Pin: H Hardness	Pin: S Surface Treatment	Spring: M Material
Light Load	PMXSL	PMXYSL	Coarse Thread	Nylon 6	1045 Carbon Steel	33~38HRC	Black Oxide	1045 Carbon Steel	HV500~600	Black Oxide	304 Stainless Steel
Heavy Load	PMXSH	PMXYSH									
Light Load	PXSL	PXYSL	Fine Thread								
Heavy Load	PXSH	PXYSH									

-Return Type- -Rest Position-

Part Number Type	M	Pitch: Coarse Thread	Pitch: Fine Thread	Ph7		(D)	D1	S	B	L	L1	L2	L3	SW1	Light Load: Load (N) min.	Light Load: Load (N) max.	Heavy Load: Load (N) min.	Heavy Load: Load (N) max.	Unit Price: PMXSL PMXSH	Unit Price: PMXYSL PMXYSH	Unit Price: PXSL PXSH	Unit Price: PXYSL PXYSH
(Coarse Thread)	(Fine Thread)																					
PMXSL	PXSL	10	1.5	1	12	0 -0.018	18	16.2	5	5	38	10	5	3	14	4.5	7.3	5.7	11.9				
PMXSH	PXSH	12	1.75	1.5	14		20	19.6	6	6	46	12	6	3	17	5.3	8.8	6.7	13.2				
PMXYSL	PXYSL	16	2	1.5	18		26	25.4	8	8	56.5	16	6	4	22	5.7	10.1	7.4	17.2				
PMXYSH	PXYSH	20	2.5	1.5	22	0 -0.021	32	31.2	10	10	70	20	10	4	27	6.6	15.0	8.0	26.8				

Ordering Example: Part Number — PXSL20

Days to Ship: Configure Online

Price: Configure Online

■**Feature**

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

■Press Fit

RoHS

SXPP

① M Material: 440C Stainless Steel
H Hardness: 45~50HRC
② M Material: 440C Stainless Steel
H Hardness: 45~50HRC
③ M Material: 631 Stainless Steel J1
④ M Material: Special Bushing

Example

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

Part Number Type	M	Dm6		Smin	D1	B		L	L1	L2	M (Coarse)	R	Load (N) min.	Load (N) max.	Mass (g)	Unit Price
SXPP	8	+0.015		4	10	4	-0.010	32	19	4	3	2	3	9	9	
				6				34						12	9.2	
	10	+0.006		5	12	5	-0.022	34	20		5	2.5	5	11.5	15	
				8				37						16	15.5	
	12	+0.018		6	14	6	-0.010	42	24	5	6	3	6.5	14.5	26.5	
				10				46						20	27.5	
	15	+0.007		7	19	8	-0.025	52	32		8	4	7.15	18	54	
				12				57						25	55.5	

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

■Knobs for Press Fit Plungers

RoHS

NSXP

M Material: 2017 Aluminum Alloy
S Surface Treatment: Black Anodize

Part Number Type	M	Applicable Indexing Plunger Plungers	L	L1	t	D	D1	D2	D3	ℓ	Unit Price
NSXP	3	SXPP8	15	12	1.5	15	9.8	9	6	5	
	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 - 5 / NSXP8

Days to Ship: Configure Online

Price: Configure Online

Indexing Plungers

Knobless Standard / Knobless, Large Screw

■Knobless Standard

RoHS

Type	Main Body: M Material	Main Body: S Surface Treatment	Pin: M Material	Pin: H Hardness	Pin: S Surface Treatment	Spring: M Material	(Lock Nut): M Material	(Lock Nut): S Surface Treatment
PXNAN	1213 Carbon Steel	Black Oxide	1045 Carbon Steel	50~60HRC (Carburized)	Black Oxide	631 Stainless Steel	-	-
PXNKN							1018 Carbon Steel	Black Oxide
SXNAN	303 Stainless Steel	-	440C Stainless Steel	45HRC~	-		-	-
SXNKN							303 Stainless Steel	-

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	M	Pitch (Fine Thread)	D1	B	S	L	L1	L2	L3	L4	M2 (Coarse)	SW1	SW2	R1	Load (N) min.	Load (N) max.	Mass (g) PXNAN SXNAN	Mass (g) PXNKN SXNKN	Unit Price: PXNAN	Unit Price: SXNAN	Unit Price: PXNKN	Unit Price: SXNKN
PXNAN SXNAN PXNKN SXNKN	8	1.0	11.5	4	4	30	16	5	14	4	3	10	13	2	3	9	10	15				
	8L				6	32										12						
	10	1.0	13.8	5	5	32	17	5	15	5	4	12	17	2.5	5	11.5	15	22				
	10L				8	35										16						
	12	1.5	16.2	6	6	39	20	6	17	6	5	14	19	3	6.5	14.5	25	35				
	12L				10	44										20						
	16	1.5	21.9	8	7	49	26	8	23	8	6	19	24	4	7.5	18	57	77				
	16L				12	54										25						

M dimensions with "L" have longer strokes compared to the conventional products. kgf=Nx0.101972

Ordering Example: Part Number — PXNAN12L

Days to Ship: Configure Online

Price

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

■Knobless, Large Screw

RoHS

Type	Main Body: M Material	Main Body: S Surface Treatment	Pin: M Material	Pin: H Hardness	Pin: S Surface Treatment	Spring: M Material	(Lock Nut): M Material	(Lock Nut): S Surface Treatment
PXNK	12L13 Carbon Steel	Black Oxide	1045 Carbon Steel	50~60HRC	Black Oxide	SWP-B	1045 Carbon Steel	Black Oxide
SXNA	303 Stainless Steel	-	303 Stainless Steel	-	Nickel Plating	301 Stainless Steel	-	-
SXNK							303 Stainless Steel	-

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)	D1	B	S min.	L	L1	L2	L3	L4	M2 (Coarse)	SW1	SW2	Load (N) PXNK min.	Load (N) PXNK max.	Load (N) SXNA SXNK min.	Load (N) SXNA SXNK max.	Mass (g) SXNA	Mass (g) PXNK SXNK	Unit Price: SXNA	Unit Price: PXNK	Unit Price: SXNK
SXNA	10	1.0	13.8	5	5	33	17	5	15	5	5	12	17	7	17	6	15	15	22			
PXNK	12	1.5	16.2	6	6	42	20	6	17	6	6	14	18	9	24	8	21	25	35			
SXNK	16	1.5	21.9	8	8	54	26	8	23	8	8	19	24	24	30	9	26	57	77			

kgf=Nx0.101972

Ordering Example: Part Number — SXNA12 / PXNK16

Example

Days to Ship

Price: Configure Online

· Features of the Returning Type and Rest Position Type P.1515