

Indexing Plungers

Short Aluminum Thread / Short Plastic Thread

Short Aluminum Thread

Type		Knob	Main Body		Pin			Spring	(Lock Nut)		
Return Type	Rest Position	Material	Material	Surface Treatment	Material	Hardness	Surface Treatment	Material	Material	Surface Treatment	
PXSAN	PXKAN	2017 Aluminum Alloy (Black Anodize)	1213 Carbon Steel	Black Oxide	1045 Carbon Steel or Equivalent	50-60 HRC min. (Carburized)	Black Oxide	631 Stainless Steel	—	—	
PXSKN	PXKRN		—	—	440C Stainless Steel	45 HRC min.	—		1018 Carbon Steel or Equivalent	Black Oxide	
PXSAS	PXKRS		—	—	—	—	—		—	—	—
PXSAS	PXKRS		—	—	—	—	—		—	303 Stainless Steel	—

Return Type

PXSAN
PXSKN
PXSAS
PXSKS

Rest Position

PXKAN
PXKRN
PXKRS
PXKRS

ⓘ Feature of the Returning Type and Rest Position Type P.1764.

kgf=Nx0.101972

Part Number		Pitch (Fine Thread)	D	D ₁	B	S	L	L ₁	L ₂	L ₃	S _{w1}	S _{w2}	R ₁	Load (N)		Mass (g)				
Type	M													min.	max.	PXSAN	PXSKN	PXKRN	PXKRS	
Return Type	Rest Position	12	1.5	21	19.6	6	6	48	10	5	6	17	18	3	6.5	14.5	40	49	43	53
PXSAN	PXKAN																			
PXSKN	PXKRN	16	1.5	26	21.9	8	7	56	12	6	8	19	24	4	7.5	18	69	87	71	89
PXSAS	PXKRS																			
PXSAS	PXKRS																			

Part Number Example: PXSA16, PXRK12

Short Plastic Thread

Type		Knob	Main Body		Pin			Spring	(Lock Nut)	
Return Type	Rest Position	Material	Material	Surface Treatment	Material	Hardness	Surface Treatment	Material	Material	Surface Treatment
PXSA	PXRA	Nylon 6 (Mat Black)	12L13 Carbon Steel	Black Oxide	1045 Carbon Steel or Equivalent	50-60 HRC min.	Black Oxide	JIS SWP-B Spring Steel	—	—
PXSK	PXRK		—	—	—	—	—		1045 Carbon Steel or Equivalent	Black Oxide

Return Type

PXSA
PXSK

Rest Position

PXRA
PXRK

ⓘ Feature of the Returning Type and Rest Position Type P.1764.

kgf=Nx0.101972

Part Number		Pitch (Fine Thread)	D	D ₁	B	S	L	L ₁	L ₂	L ₃	S _{w1}	S _{w2}	R	Load (N)		Mass (g)	
Type	M													min.	max.	PXSA	PXSK
Return Type	Rest Position Type	12	1.5	25	19.6	6	6	45	10	5	6	17	18	7	18	35	45
PXSA	PXRA																
PXSK	PXRK	16	1.5	31	21.9	8	8	54	12	6	8	19	24	14	24	60	80
PXSA	PXRA																

Part Number Example: PXSA16, PXRK12

Indexing Plungers

Compact / Long Indexing Plunger

Compact Indexing Plunger

Type		Screw	Knob	Main Body		Pin	Spring
Return Type	Rest Position Type	Material	Material	Surface Treatment	Material	Hardness	Surface Treatment
PMXSB	PMXYSB	Coarse Thread	Nylon 6	1045 Carbon Steel or Equivalent	Black Oxide	50-60 HRC min.	Black Oxide
PMXSM	PMXYSM						

Return Type

PMXSB
PMXSM

Rest Position Type

PMXYSB
PMXYSM

ⓘ Feature of the Returning Type and Rest Position Type P.1764.

Part Number		Pitch (Coarse)	D	D ₁	S	B	L	L ₁	S _w	R	Load (N)		
Type	M										min.	max.	
Return Type	Rest Position Type	8	1.25	20	14.5	5	5	25	5	13	3	2.5	6.0
PMXSB	PMXYSB												
PMXSM	PMXYSM	10	1.5	24	19	6	6	31	7	17	3.5	4.5	9.5

Part Number Example: PMXSB10

Long Indexing Plunger

Screw	Type	Knob	Main Body		Pin			Spring	(Lock Nut)	
		Material	Material	Surface Treatment	Material	Hardness	Surface Treatment	Material	Material	Surface Treatment
Fine Thread	PXAL	2017 Aluminum Alloy (Black Anodize)	1213 Carbon Steel	Black Oxide	1045 Carbon Steel or Equivalent	50-60 HRC min.	Black Oxide	631 Stainless Steel	—	—
	PXKL		—	—	440C Stainless Steel	45 HRC min.	—		1018 Carbon Steel or Equivalent	Black Oxide
	SXPAL		—	—	—	—	—		—	—
	SXPKL		—	—	—	—	—		—	303 Stainless Steel

Return Type

PXAL
PXKL
SXPAL
SXPKL

Rest Position Type

PXKAL
PXKKL
SXPKAL
SXPKL

Mass (g)		PXAL	PXKL
M		SXPAL	SXPKL
8		13	18
10		22	29
12		35	45
16		78	98

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

kgf=Nx0.101972

Part Number		Pitch (Fine Thread)	D	D ₁	S	B	L	L ₁	L ₂	L ₃	L ₄	S _{w1}	S _{w2}	R	Load (N)	
Type	M														min.	max.
PXAL PXKL SXPAL SXPKL	8	1.0	15	11.5	4	4	46	22	5	20	4	10	13	2	3	9
	8L				6	4	48	22	5	20	4	10	13	2	3	12
	10	1.0	18	13.8	5	5	53	25	5	23	5	12	17	2.5	5	11.5
	10L				8	5	56	25	5	23	5	12	17	2.5	5	16
	12	1.5	21	16.2	6	6	64.5	30	6	27	6	14	19	3	6.5	14.5
	12L				10	6	68.5	30	6	27	6	14	19	3	6.5	20
	16	1.5	26	21.9	7	8	80	38	8	34.5	8	19	24	4	7.15	18
	16L				12	8	85	38	8	34.5	8	19	24	4	7.15	25

Part Number Example: PXAL8, SXPKL16L