

PN Series

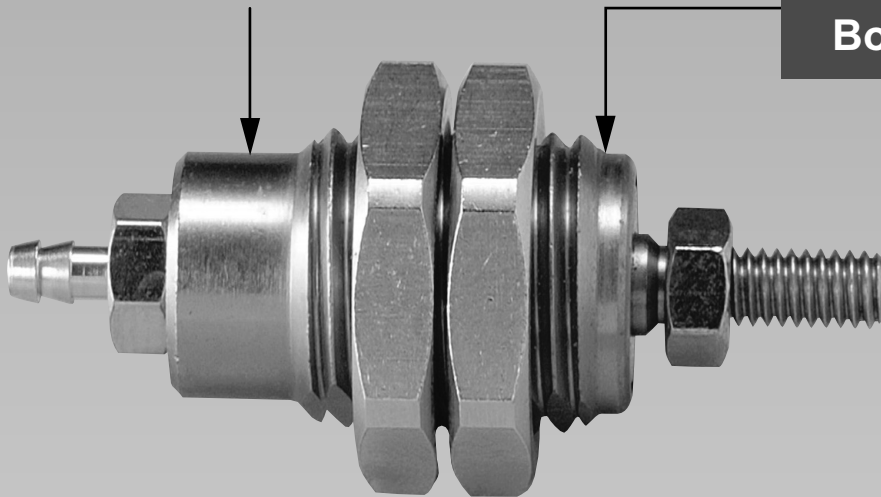
Panel Cylinders

Compact Cylinder

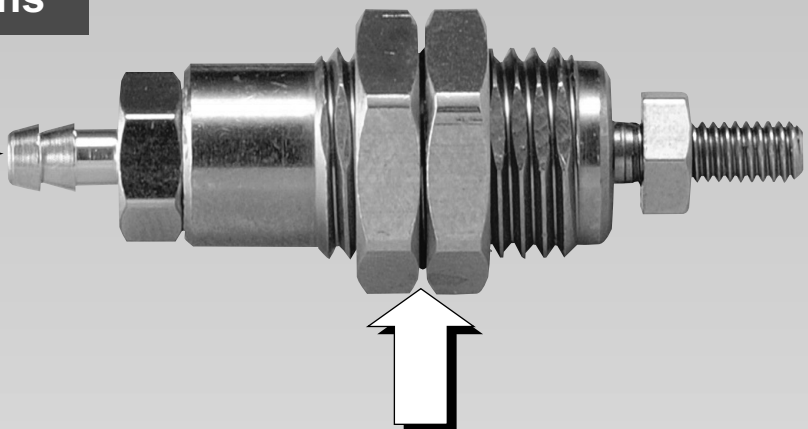
Selectable Bore Size & Stroke

- ◆ Bore Size : 6, 10, 16mm
- ◆ Stroke : 5, 10, 15mm

Threaded Body & Nuts



Rear Connections

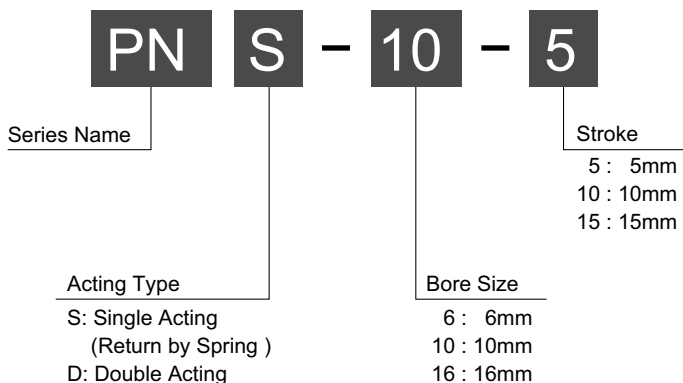


NOTE:

Consult New-Era Co., Ltd. or our representatives for Sealing Installation with O-ring.
Main body is available with O-ring for custom-made.

PN Series

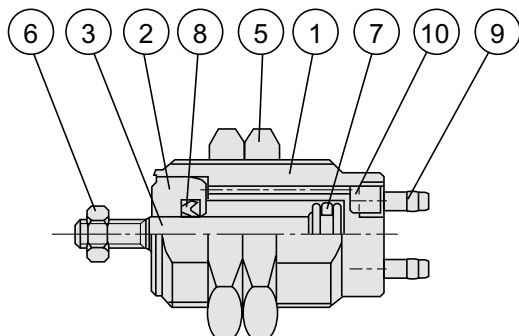
Model Code No.



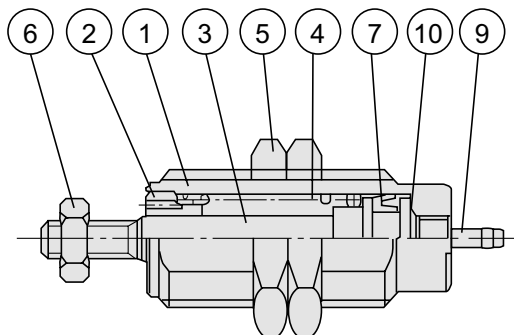
Inner Construction

(The cylinder cannot be disassembled.)

PND type



PNS type

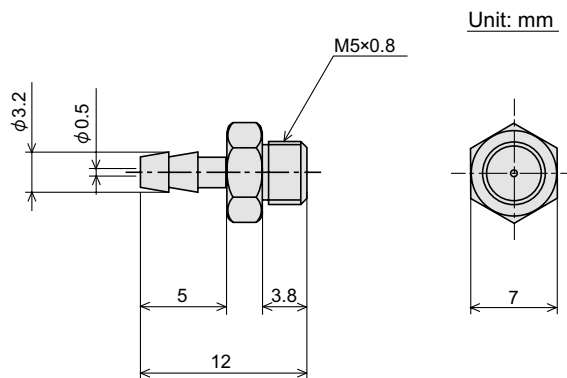


Parts List

No.	Parts Name	Materials
1	Main Body	Nickeled Plated Brass
2	Rod Cover	Phosphor Bronze
3	Piston Rod	Stainless Steel
4	Spring (PNS type only)	Piano Wire
5	Lock Nut	Nickel Plated Brass
6	Rod Nut	Soft Steel
7	Piston Sealing	Nitrile Rubber(NBR)
8	Rod Sealing	Nitrile Rubber(NBR)
9	Fitting (Barb type)	Nickel Plated Brass
10	Gasket	NBR Plated Mild Steel

Note:

- ① Fittings are threaded on air ports (M5×0.8) for all PNS and PND types except PND-6.
- ② Fittings for PND-6 are pressed-in at factory.



Fitting (Barb type)

■ Specifications

Item	Model (Acting Type)	Acting Type	
		PNS (Extension-Single Acting)	PND (Double Acting)
Bore Size	(mm)	6, 10 and 16	
Standard Stroke	(mm)	5, 10 and 15	
Operating Fluid		Air	
Operating pressure	(MPa)	0.3~0.7	0.1~0.7
Proof pressure	(MPa)	1.0	
Ambient temperature	(°C)	5~60	
Lubrication		Not Required	
Air port		φ4×φ2.5 (Barb type fitting)	

■ Theoretical Force

Unit: N

PN series	Bore Size (mm)	Rod Diameter (mm)	Effective Pressure Area (cm ²)	Operating Pressure (MPa)						
				0.2	0.3	0.4	0.5	0.6	0.7	
PND-6	6	3	Extend	0.28	0.054	0.082	0.109	0.137	0.164	0.192
			Retract	0.21	0.041	0.061	0.082	0.102	0.123	0.144
PND-10	10	5	Extend	0.78	0.152	0.229	0.305	0.382	0.458	0.535
			Retract	0.58	0.113	0.170	0.227	0.284	0.341	0.397
PND-16	16	6	Extend	2.0	0.392	0.586	0.784	0.980	1.176	1.372
			Retract	1.72	0.337	0.050	0.674	0.842	1.011	1.179
PNS-6	6	3	Extend	0.28	0.015	0.043	0.070	0.098	0.125	0.153
PNS-10	10	5	Extend	0.78	0.094	0.190	0.247	0.324	0.400	0.477
PNS-16	16	6	Extend	2.0	0.275	0.547	0.667	0.863	1.059	1.255

■ Weights

Unit: g

PN series	Cylinder Stroke (mm)	PNS (Single Acting)	PND (Double Acting)
PNS-6 PND-6	5	10	34
	10	15	42
	15	18	50
PNS-10 PND-10	5	30	82
	10	37	94
	15	42	106
PNS-16 PND-16	5	86	126
	10	93	138
	15	100	155

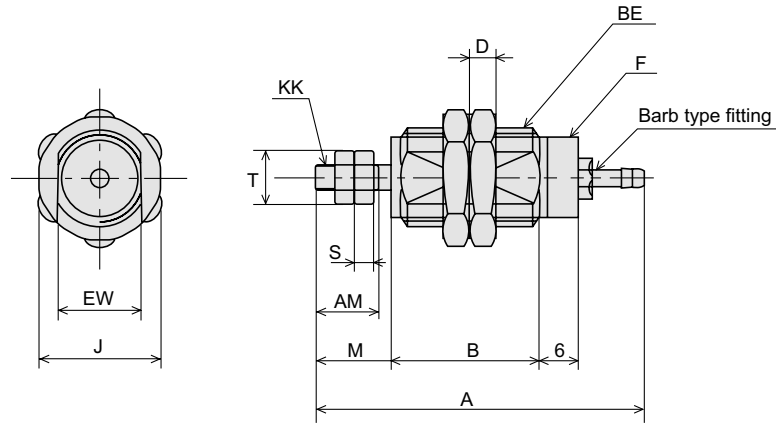
■ Spring Force

Unit: N

PNS type	at Retracted Position	at Extended Position
PNS-6	0.0186	0.0392
PNS-10	0.0294	0.0588
PNS-16	0.0566	0.1176

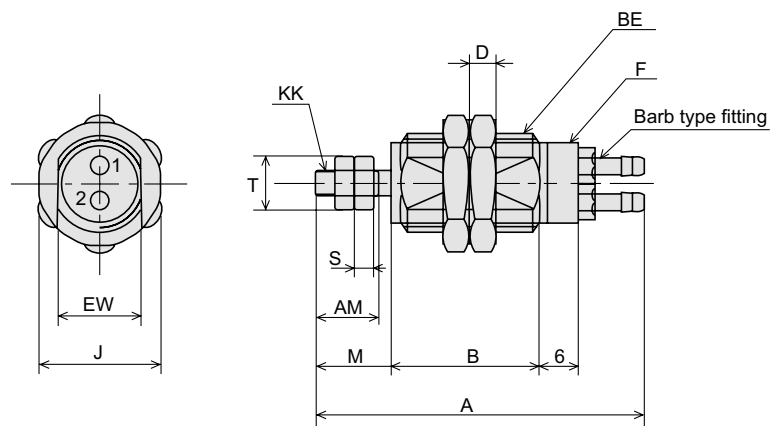
■ Dimensions

PNS (Single Acting Cylinder)



Bore Size	A			B			AM	BE	D	EW	F	J	KK	M	S	T
	Strokes			Strokes												
	5	10	15	5	10	15										
6	36	43	50	13.5	20.5	27.5	7	M10×1	3	9	8.5	12	M3	8.5	2.4	5.5
10	42	49	55	16	22.5	28.5	10	M15×1.5	4	13	12	19	M4	12	3.2	7
16	51	56	61	22.5	27.5	32.5	12	M22×1.5	5	20	18.5	27	M5	14	5	8

PND (Double Acting Cylinder)



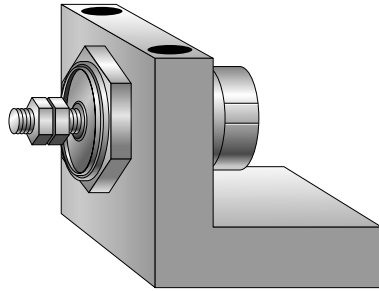
1: Port for retracting
2: Port for extending

Bore Size	A			B			AM	BE	D	EW	F	J	KK	M	S	T
	Strokes			Strokes												
	5	10	15	5	10	15										
6	39	44	49	19.0	24	29	7	M15×1.5	4	13	12	19	M3	8.5	2.4	5.5
10	45	50	55	19	23.5	28.5	10	M22×1.5	5	20	18.5	24	M4	12	3.2	7
16	48	53	58	19.5	24.5	29.5	12	M26×1.5	6	24	23	32	M5	14	5	8

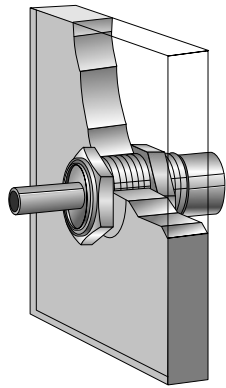
■ Mounting Examples

A versatile mounting is available for the equipment to minimize the size and weight by ultra short, super compact and very light weight.

Foot mounting



Panel mounting



Pulg-in mounting

