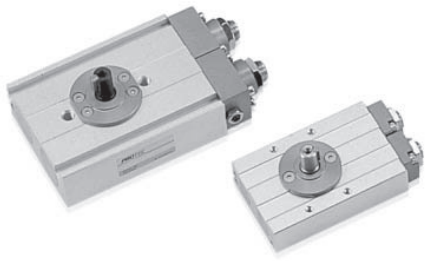
PRC Series

Features



- Rotary Cylinder by Rack & Pinion
- High-accuracy positioning by minimizing back lash on rotary end area with the application of double rack
- Easy control and piping handling by combining and mounting Air Cushion tools and Stopper function in the direction of air port
- Possible to adjust angle setting and cushion stroke equally
- Applied abrasion resistance synthetic resins at frictional surface
- Auto Switch for the detection of position can be attached
- Applicable to inverter separator, or valve switch of FA assembly and feed line

Order Form

PRC 20 - 180 - A1 S

① ② ③ ④ ⑤

① Series

② Bore size

Name	Bore size(mm)
12	12
16	16
20	20
25	25
30	30

③ Rotation angle 90°, 180°

④ Auto Switch type

Symbol	Type	Length	Applied cylinder
A1	DSC PRO-A1 (2-wire)	1m	ø20 ø25 ø30
A1L		3m	
B1	PLC PRO-B1 (3-wire)	1m	
B1L		3m	
A2	DSC PRO-A2 (2-wire)	1m	ø12 ø16
A2L		3m	
B2	PLC PRO-B2 (3-wire)	1m	
B2L		3m	

⑤ Auto Switch quantity

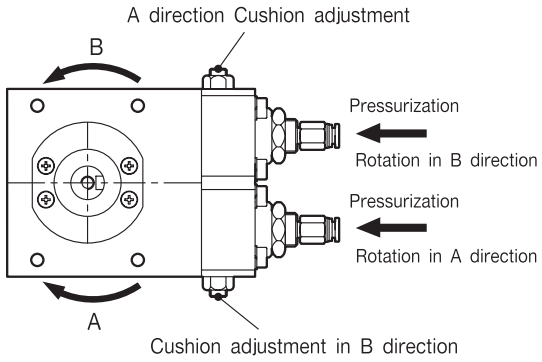
Blank	2ea
S	1ea

Specification

Model	PRC12-90	PRC12-180	PRC16-90	PRC16-180	PRC20-90	PRC20-180	PRC25-90	PRC25-180	PRC30-90	PRC30-180
Bore size(mm)	12		16		20		25		30	
Rotation angle(°)	90	180	90	180	90	180	90	180	90	180
Cusion angle(°)	One-sided angle 35° range									
Existence of cushion	Air Cushion (adjustable)									
Effective torque(kgf · cm) P:Allowable air pressure(kgf/㎠)	0.5×P		1.1×P		1.8×P		3.4×P		6.9×P	
Allowable energy(kgf·cm)	0.48		0.65		1.4		2.7		4.8	
Main body weight(kgf)	0.18	0.21	0.26	0.31	0.5	0.58	0.8	1.0	1.38	1.79
Air port size	M5		M5		M5		PT1/8		PT1/8	
Maximum radial load(kgf) Note 2)	6.9		7.4		13		18.5		20	
Maximum thrust load(kgf)	2		2.3		4		5.5		6	
Rotation time	0.2 ~ 0.5	0.4 ~ 0.7	0.2 ~ 0.7	0.4 ~ 0.9	0.2 ~ 1.0	0.4 ~ 1.2	0.2 ~ 1.0	0.2 ~ 1.2	0.3 ~ 1.0	0.5 ~ 1.3
Fluid	Clean air Note 1)									
Air pressure(kgf/㎠)	3 ~ 7 (General resistance pressure: 10.5) Note 3)									
Lubrication	No need (if need, use one sort of turbine oil: SPEC ISOVG 32)									
Temperature(℃)	5 ~ 60									
Motion type	Double-acting type (Structure: Parallel open & close motion type by Rack & Pinion: synthetic resins sytem guide)									

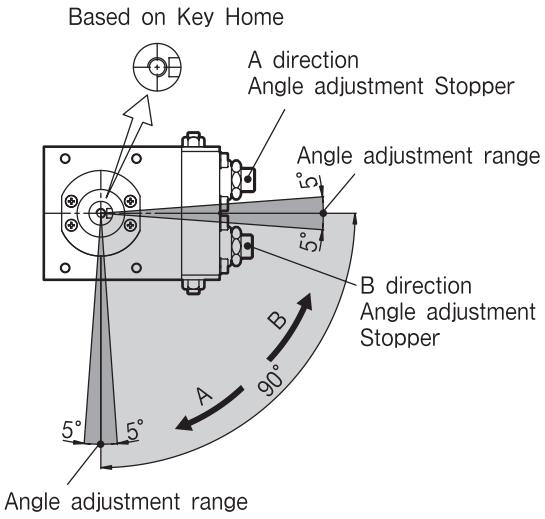
Note 1) Clean air: Fresh air containing solid matters with 0.3% of supersaturated moisture and 99.9% of liquid oil that passed through the 3~10㎛ degree of filtering
Note 2) Above radial load is allowable value at the end of output shaft.
Note 3) Guaranteed capacity of resist pressure: A pressure that does not cause an abnormality in parts when it is applied for 1 minute without any weight loaded.
※ For detailed model selection method, please refer to page 516.

Rotation direction / Cushion adjustment

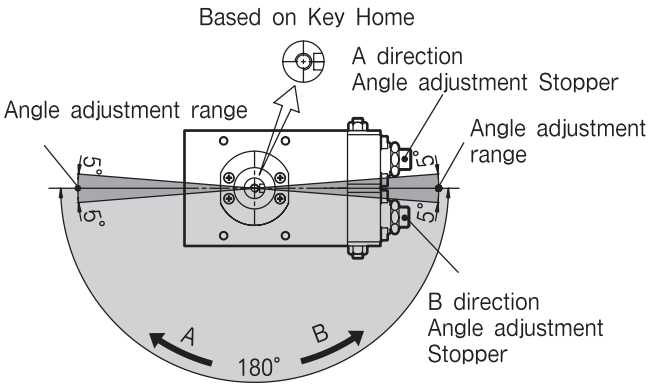


▶Left figure shows pressurized port position and air cushion adjustable position.
▶Rotation direction is marked based on the key groove in output shaft.
▶Turning cushion adjustable needle clockwise makes shock buffer speed slower, while tuning counter-clockwise make shock buffer speed faster. Please adjust it in optimal state according to the size and shape of load.

Rotation angle adjustment



90° rotation type

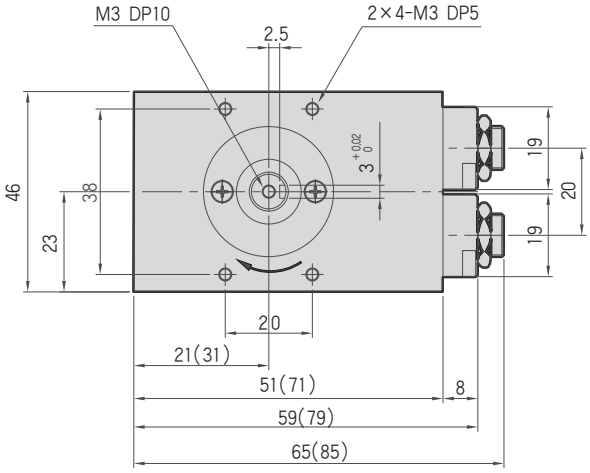


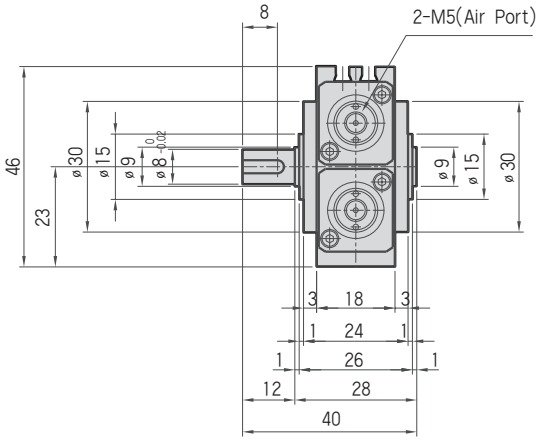
180° rotation type

▶Side stopper angle can be adjusted within range at the end of rotation with the control of side stopper as shown in figure.
▶Rotation direction is marked based on the key groove in figure.
▶Angle adjustment Stopper is set at a random position within the adjustment range of rotary angle. Readjust it as required for use.

Cylinder type	Angle adjustment range at the end of rotation
PRC□-90	±5°
PRC□-180	

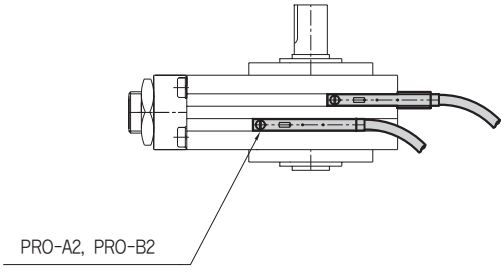
PRC12

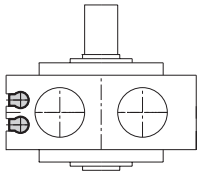




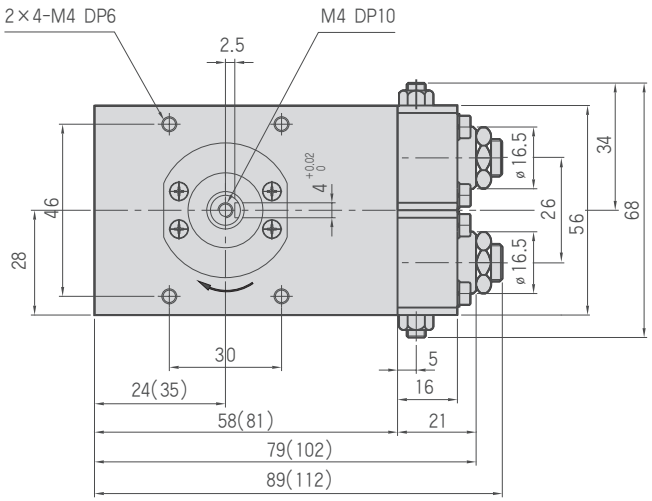
* ( )Size 180° Type

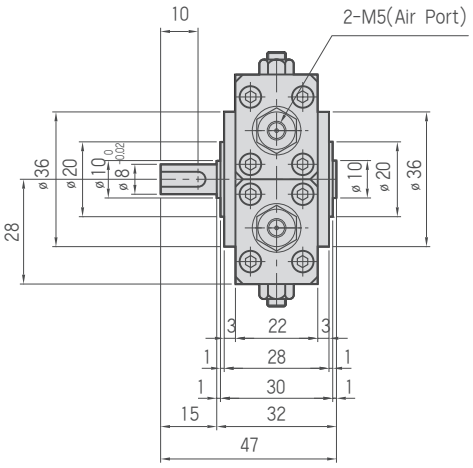
PRC12-Auto Switch





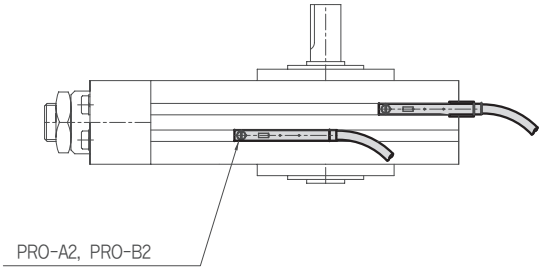
PRC16

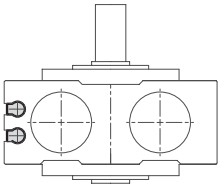




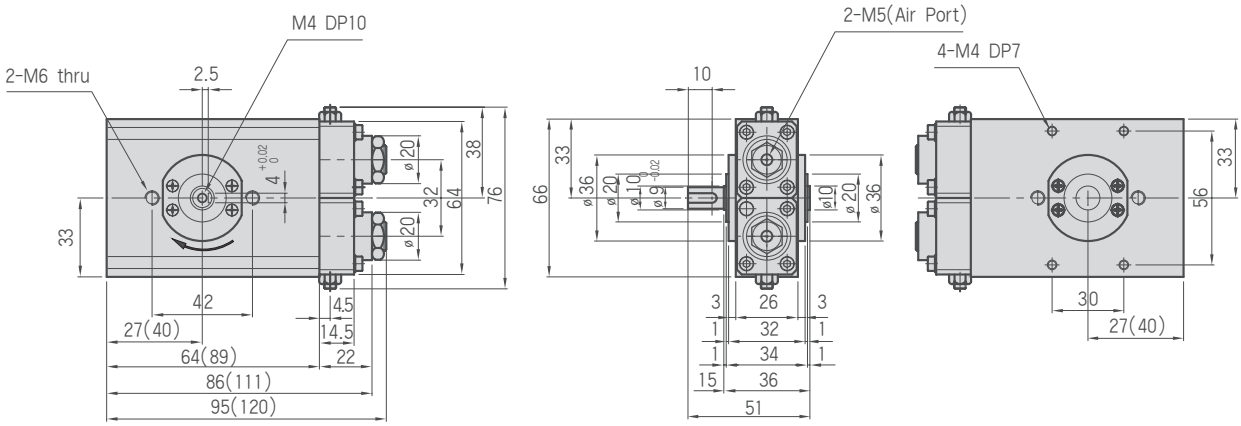
* ( )Size 180° Type

PRC16-Auto Switch



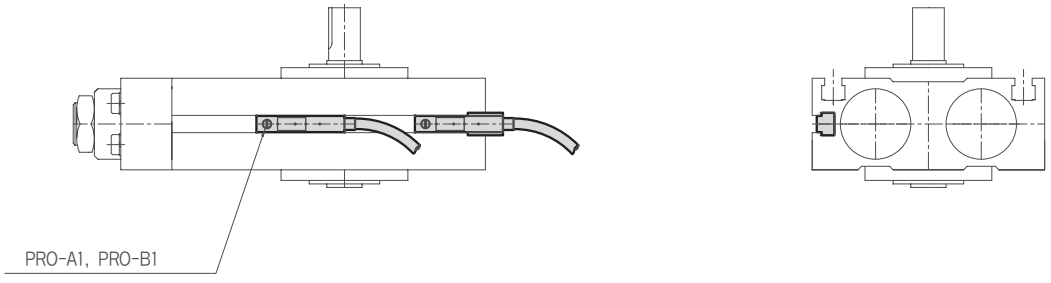


PRC20

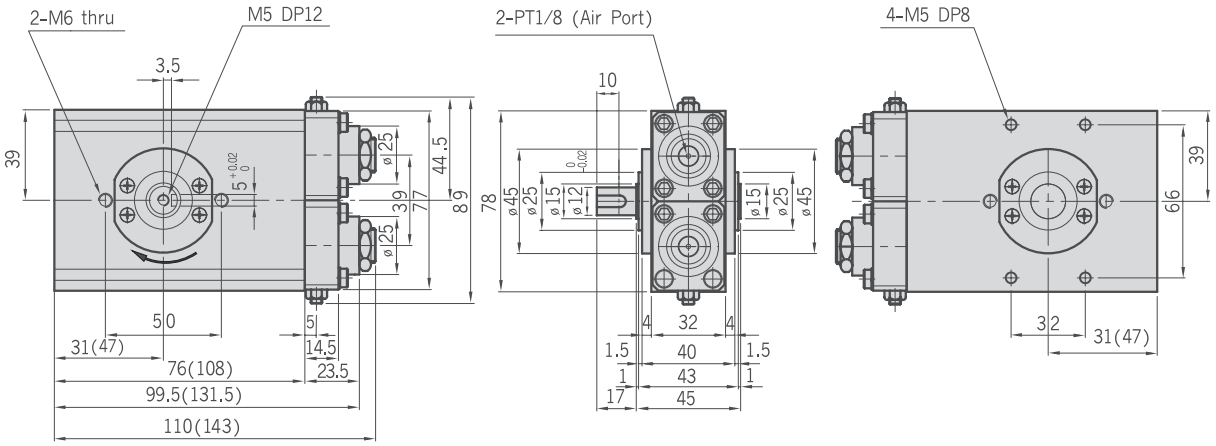


* ( )Size 180° Type

PRC20-Auto Switch

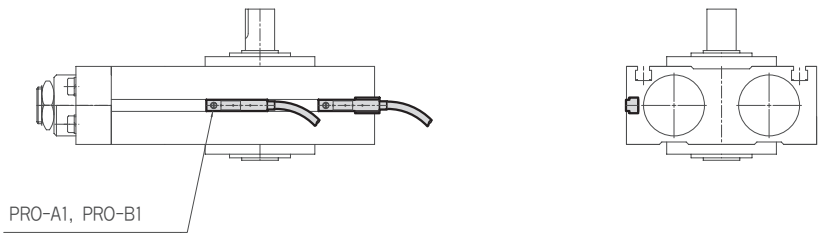


PRC25

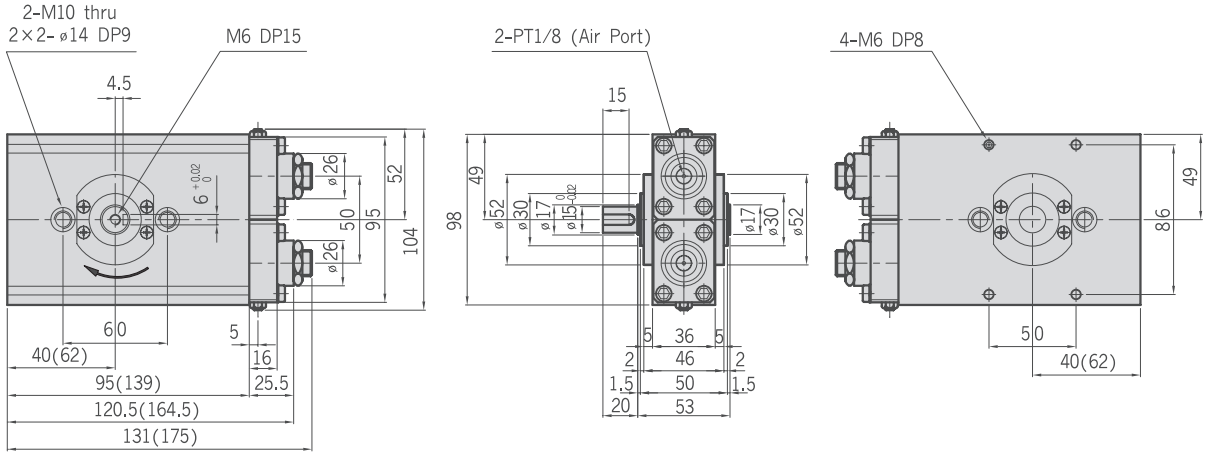


* ( )Size 180° Type

PRC25-Auto Switch



PRC30



* ( )Size 180° Type

PRC30-Auto Switch