

ROTARY PICK UP CYLINDER

PPR(L) Series

Features

NEW



- Miniature Rotary Pick Up Cylinder that unifies pneumatic motion type rotation and pick up with vacuum tube
- As ultra slim type, compact, light and generalized cylinder.
- Minimized backlash of rotation angle by the installation of external stopper.
- Actuator that integrate in one body rotation function with and up & down linear motion guide. (PPRL10)
- Possible to mount various Auto Switches
- Applicable to pick & place system that requires the rotation and pick up of small work piece such as electric components and semiconductor chips.

Order Form

PPR L 10 A - 90 - 10 - A2N3

① ② ③ ④ ⑤ ⑥ ⑦

⑤ Oscillation angle (°) : 90, 180

⑦ Auto Switch quantity

⑦ Symble	Quantity	Applicable cylinder	Switch type
A2NS	1ea	PPR10, PPRL10	DSC 2-wire PRO-A2N
		PPR13, PPRL13	
A2N	2ea	PPR10, PPR13	
		PPRL13	
A2N3	3ea	PPRL10, PPRL13	
A2N4	4ea	PPRL13	

- * For PPRL, install one auto switch (either clockwise or counter-clockwise) to rotary unit and 2 auto switches to feeding parts.
- * For PPRL13, can install two auto switches for detecting rotary position (either clockwise and counter-clockwise) and two auto switches for detecting up & down position. But, if use for detecting non-standard rotary angle, may can use only one auto switch.

① Series

③ Bore size

③ Name	Bore size(mm)
10	10
13	13

②, ④, ⑥ Up-Down specification

② Feeding stroke symbol	④ Feeding part magnetic	⑥ Feeding stroke (mm)
Blank (Only rotation function without UP & DOWN stroke)	-	-
L (Both of rotation and UP & DOWN function)	A, B	10, 20

- * For PPRL, use A type in basic and B type in mutual proximity alternately.
- * The external dimension of PPR10 and PPRL10 are different, but that of PPRL10A and PPRL10B are identical.

Specification

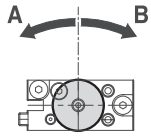
Model	PPR10	PPRL10	PPR13	PPRL13
Bore size(mm)	10(Rotation part)	10(Rotation part), 8(Up & Down part)	13(Rotation part)	13(Rotation part), 8(Up & Down part)
Theoretical torque for rotation(mm)	-	10, 20	-	10, 20
Oscillation angle(°)				
Theoretical thrust for UP & Down(kgf)	Forward	-	0.50 × P	-
	Backward	-	0.37 × P	-
P : Air pressure(kgf/cm ²)				
Theoretical torque for rotation(kgf · cm)	0.17 × P		0.4 × P	
Air port size(mm)	M3		M5	
Main body weight(kgf)	0.065	0.15	0.19	0.28
Shock Absorbing stroke(mm)	2	2.5	2	2
Fluid	Clean air Note 1)			
Air pressure(kgf/cm ²)	3.5 ~ 7 (General resistance pressure: 10.5) Note 2) Note 3)			
Lubrication	No need (if need, use one sort of turbine oil: SPEC ISOVG 32)			
Temperature(°C)	5 ~ 60			
Motion type	Double-acting type			
Guide type	-	L.M Guide	-	L.M Guide
Rotation accuracy(°)	±0.5			

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 μ m degree of filtering

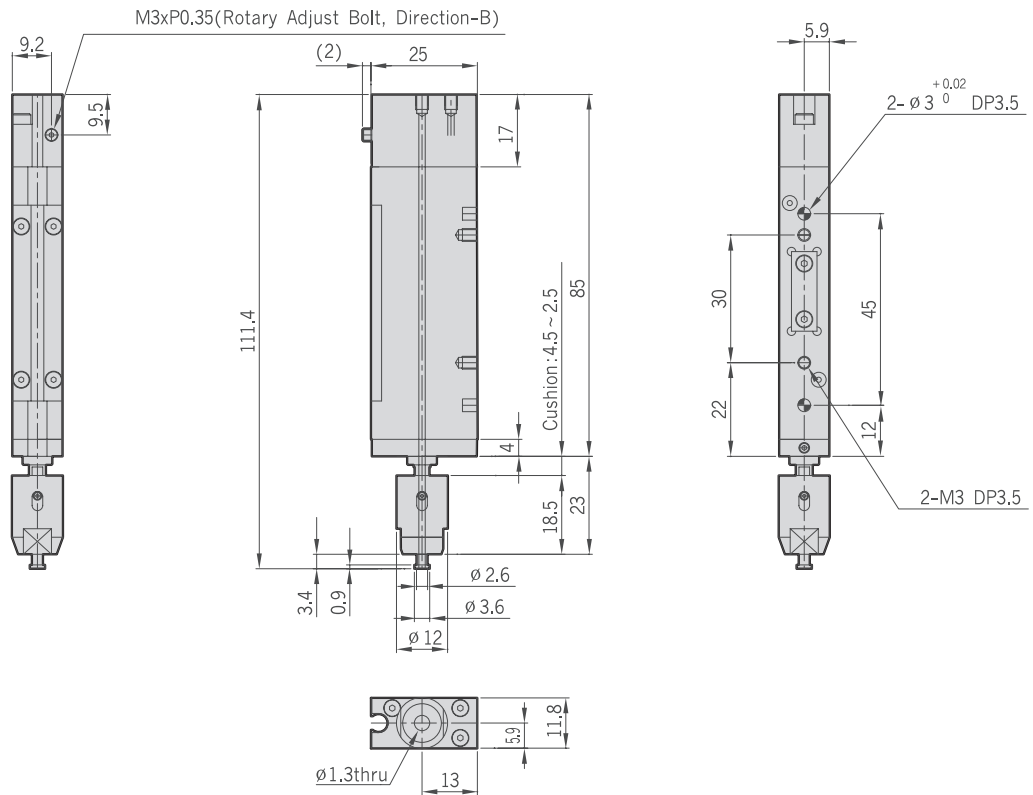
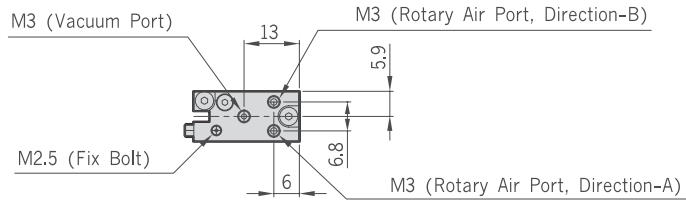
Note 2) It may not operate normally at the pressure less than 3.5kgf/cm². Therefore, always follow allowable pressure.

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.

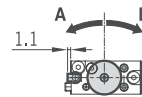
PPR10



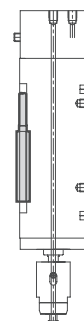
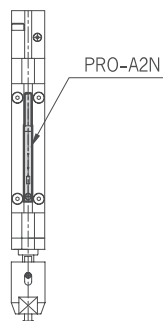
Rotary Direction (Plane View)



PPR10-Auto Switch



Rotary Direction (Plane View)



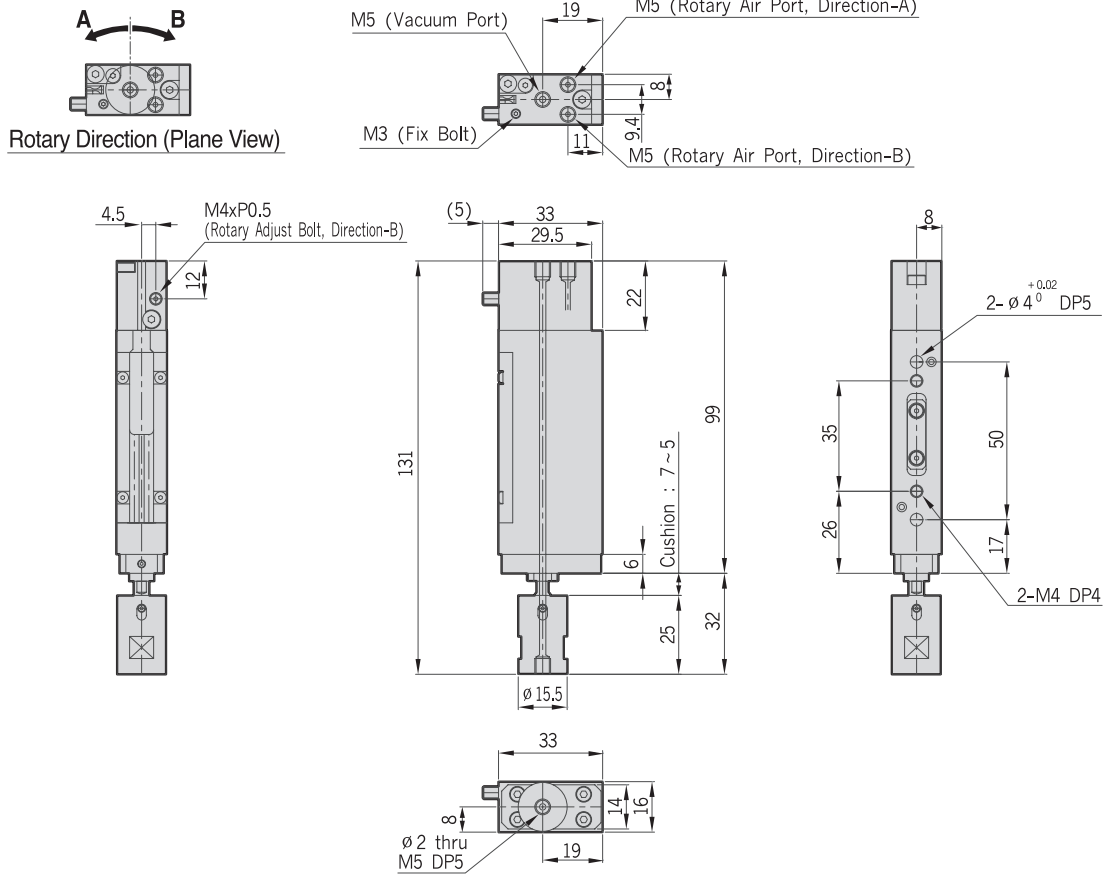


PPR Series

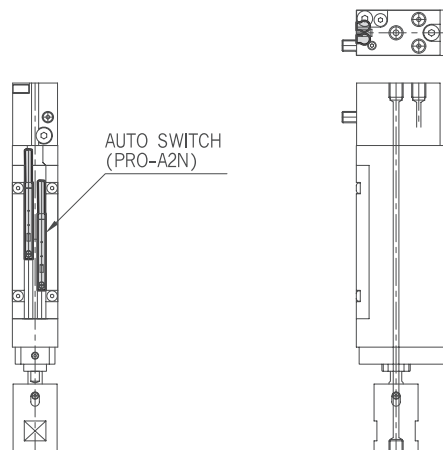
10

13

PPR13



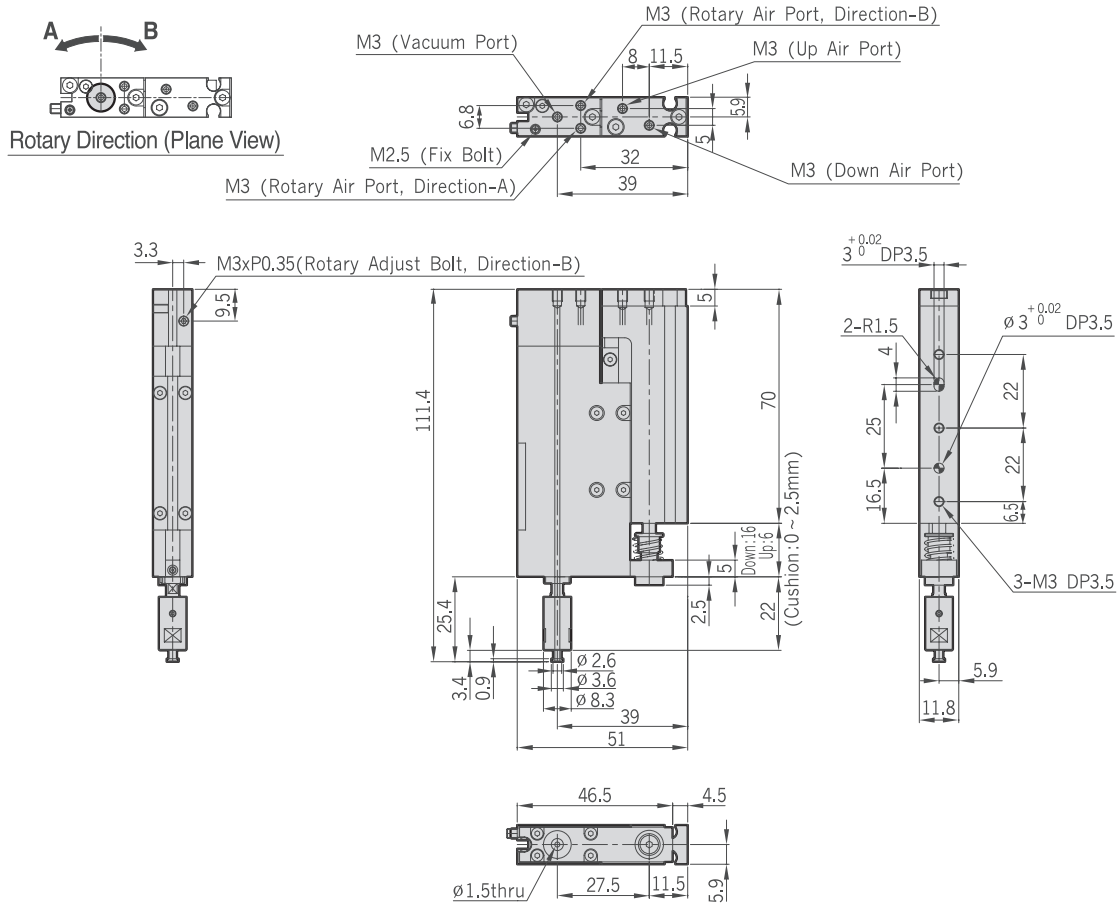
PPR13-Auto Switch



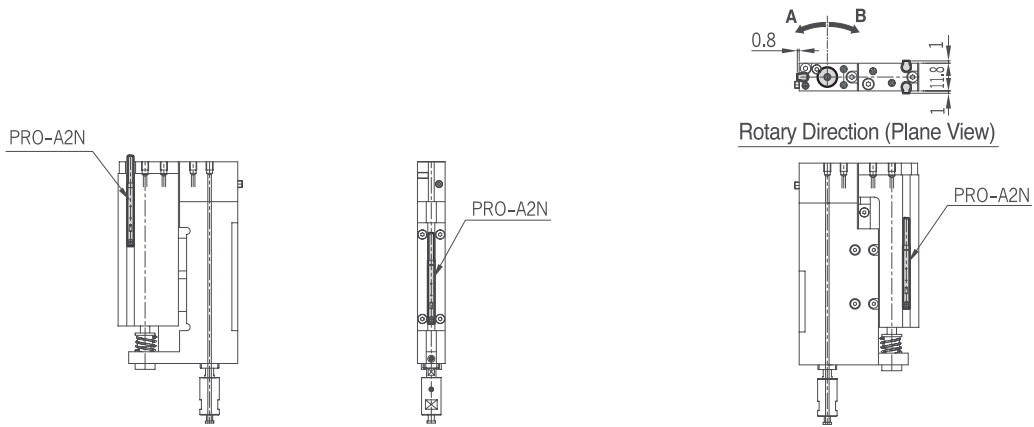
10 13
10 20

PICK UP
Auto Pitch
PPU
PPC
PPR
PPRL
PPRM

PPRL10-10



PPRL10-10-Auto Switch



PPRL10B-10

PPRL10A-10

PPRL Series

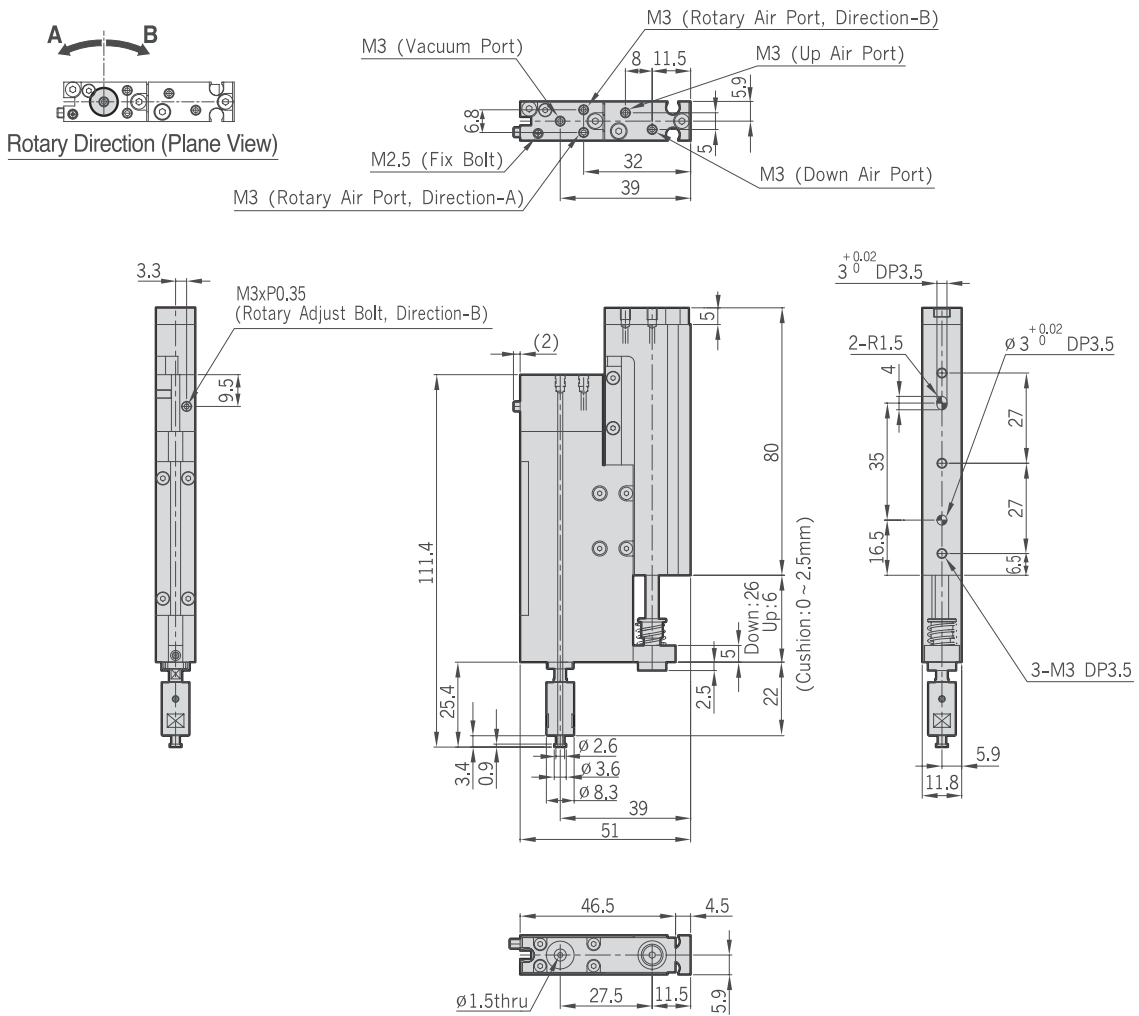
10

13

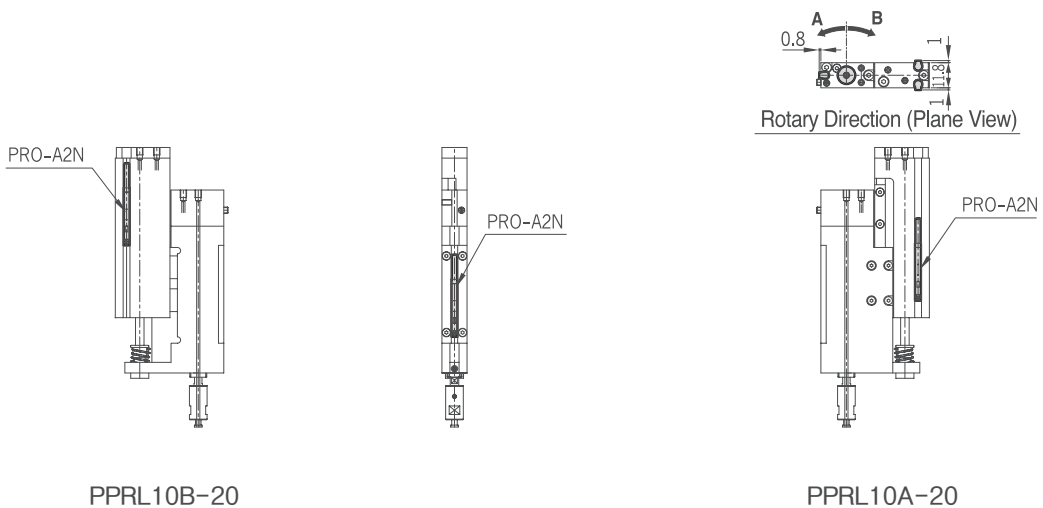
10

20

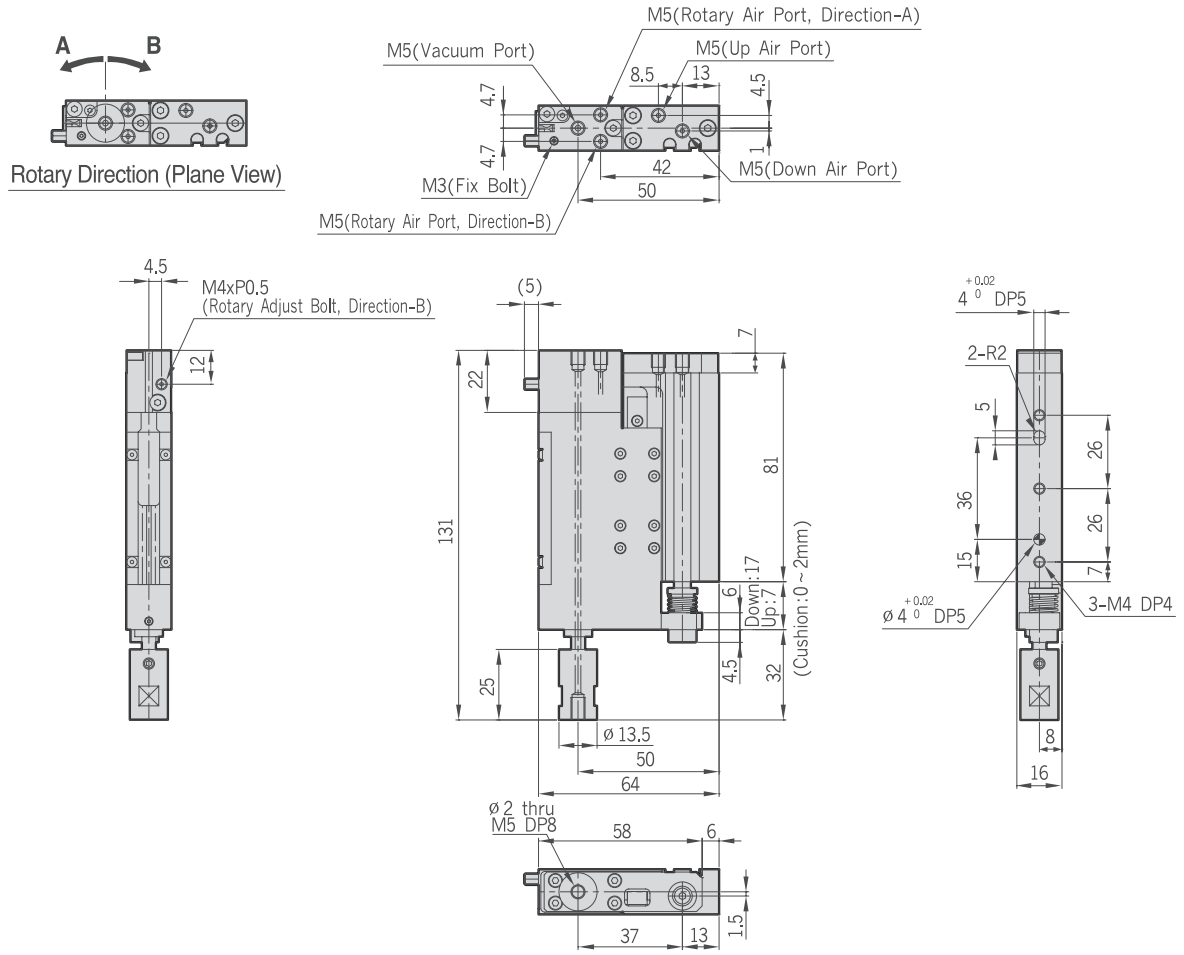
PPRL10-20



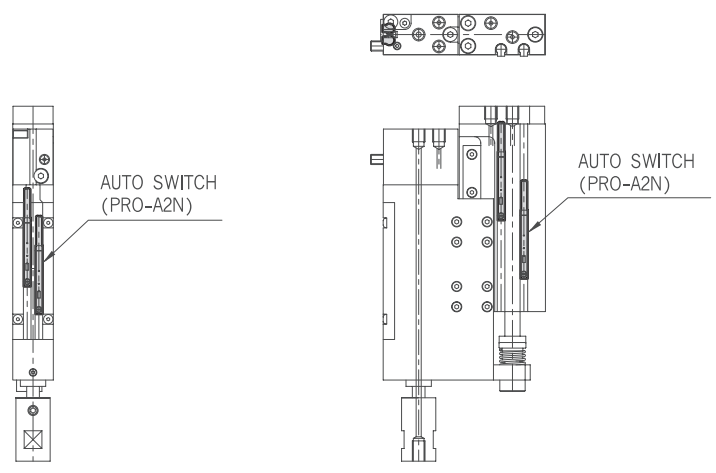
PPRL10-20-Auto Switch



PPRL13-10



PPRL13-10-Auto Switch





PPRL Series

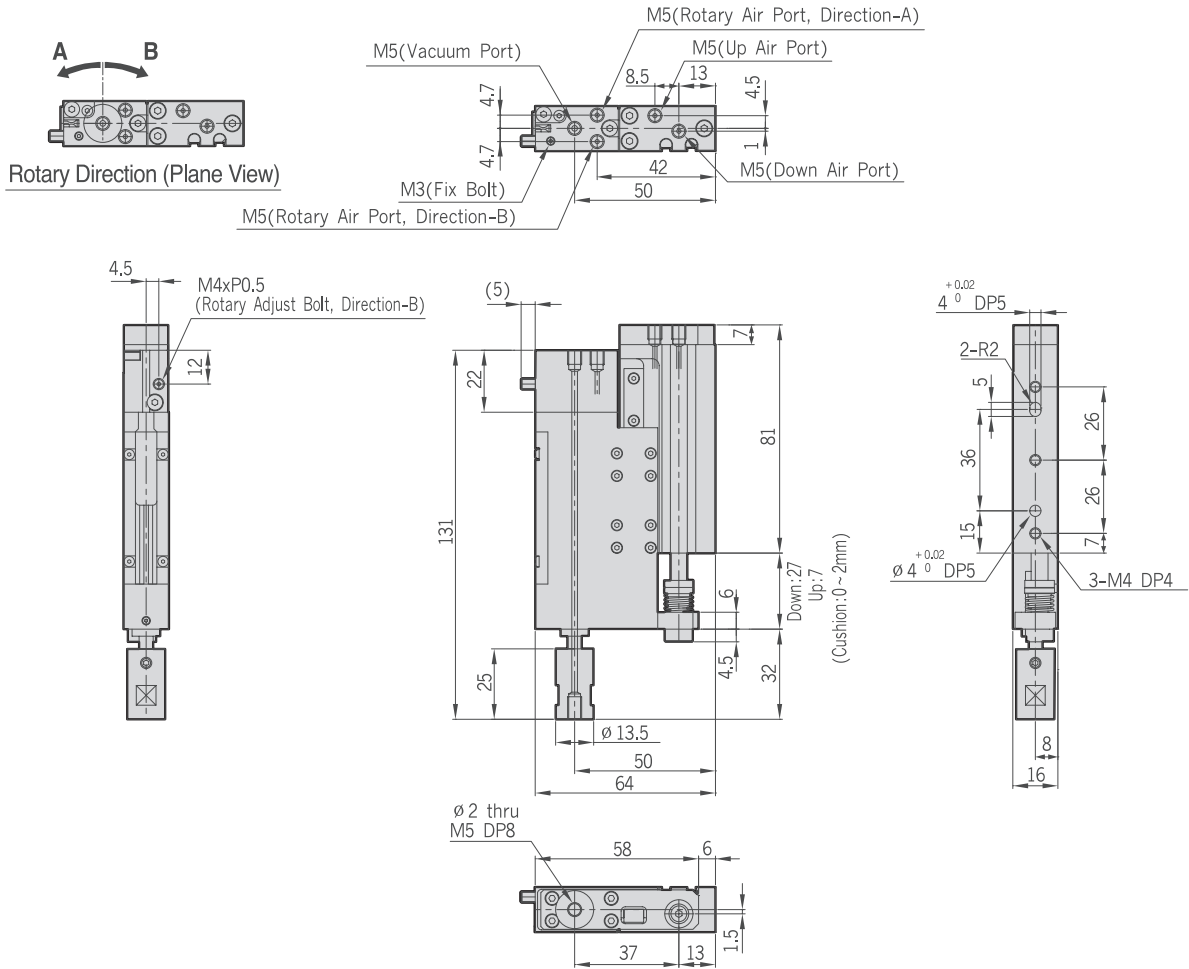
10

13

10

20

PPRL13-20



PPRL13-20-Auto Switch

