

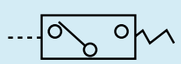
Mechanical Pressure Switch Standard White Series

P4000-W Series

Wide pressure setting range of 0.1 to 0.8 MPa is possible.

- Port Size : 1/4 to 1/2

Circuit Diagram Symbol



RoHS

Model No. Notation

P4000 - 8 - W - 1N - BW

Model No. | ❶ Port Size | ❷ Option | ❸ Attachment

*1 : Due to the modular design, a gasket is included.

Ozone Compatible Specification

Ozone compatible with standard specifications.

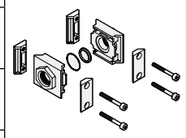
❶ Port Size

Code	Content
8	Rc1/4
10	Rc3/8
15	Rc1/2

❷ Option

Code		Content	
Lamp	Blank	No Lamp	
	1N	With Lamp for 100/200 VAC	
	3N	With Lamp for 24 VDC	
Pressure Gauge	Blank	Standard Pressure Gauge (G401-W) Attached	
	T	No pressure gauge (gauge port (Rc1/4) is assembled sealed)	
	T8	Included pressure gauge (gauge port (Rc1/4) is assembled opened)	

❸ Attachment (Included) *1, *2

Code	Content	
Blank	None included	
A8W	Rc1/4 pipe adaptor set	
A10W	Rc3/8 pipe adaptor set	
A15W	Rc1/2 pipe adaptor set	
A20W	Rc3/4 pipe adaptor set	
BW	C-type Bracket	

*1 : C type bracket and piping adapter set cannot be used together.
*2 : The piping adapter set comes with a joiner set.

Specifications

Item	P4000-8-W	P4000-10-W	P4000-15-W
Operating Fluid	Compressed Air		
Max. operating pressure MPa	1.0		
Proof Pressure MPa	1.5		
Pressure adjusting range MPa	0.1 to 0.8		
Ambient/Fluid Temperatures°C	5 to 60		
Port size Rc	1/4	3/8	1/2
Microswitch Type	Z-15GD-B (Omron)		
Contact Configuration	1C		
Hysteresis MPa	Within 0.049 hysteresis at 0.1 to 0.49		
	Within 0.078 hysteresis at 0.5 to 0.8		
Repeatability MPa	±0.02 against set pressure		
Allowable operating frequency cycle/min	20		
Insulation resistance MΩ	100 or more (at 500 VDC Megger)		
Weight kg	0.5		
Mounting Orientation	Mount with adjustment screw facing up or down		

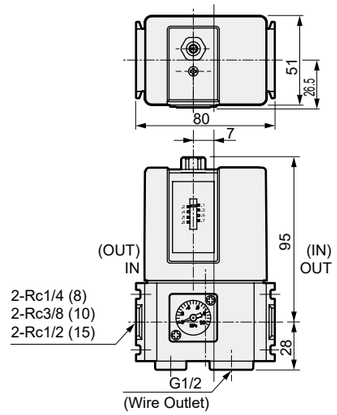
Microswitch Rating								
Load	Non-inductive Load (A)				Inductive Load (A)			
Circuit	Resistive Load		Lamp Load		Inductive Load		Motor Load	
Voltage	N.C	N.O	N.C	N.O	N.C	N.O	N.C	N.O
125 VAC	15	15	3.0	1.5	15	15	5.0	2.5
250 VAC	15	15	2.5	1.25	15	15	3.0	1.5
30 VDC	6.0	6.0	3.0	1.5	5.0	5.0	5.0	2.5

Option Weight Table

*Add to the Weight of the standard component. Unit : kg

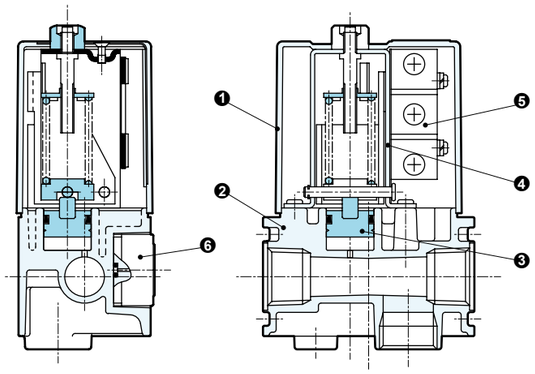
Code	Attachment				Bracket
	A8□W	A10□W	A15□W	A20□W	BW
P4000	0.16	0.16	0.16	0.16	0.21

Dimensions



Reduction ratio 0.24 (If you pass the copy through 4 times at 141%, it will be the approximate size of the actual drawing.)

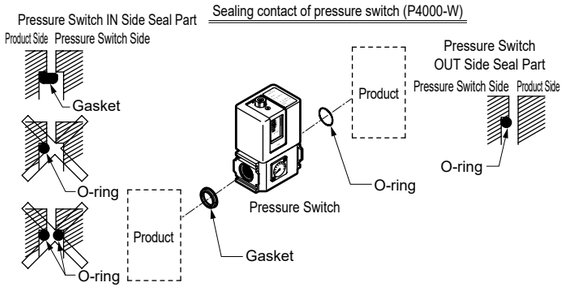
Internal Structure Diagram/Material



Part No.	Part Name	Material	Part No.
1	Cover	Resin	-
2	Body	Aluminum alloy die-cast	-
3	Piston Assembly	Polyacetal Resin, Nitrile Rubber	-
4	Frame	Steel	-
5	Microswitch	-	Z-15GD-B <Omron>
6	Pressure Gauge Assembly	PBT Resin, Brass	G401-W

* Remove cover (1) and attach wiring directly to microswitch (5).
* One gasket is attached.

Assembly Method



For maintenance parts, please visit the CKD Component Products Site (https://www.ckd.co.jp/kiki/en/) → "model No." → Maintenance Parts.

Safety Precautions

■ Design / Selection

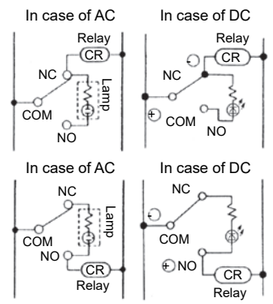
CAUTION

1 Micro switch contact specifications

Closed path max. 30 A Open path max.15 A
For inrush current, we recommend measuring it in advance.

2 Wiring the sensor with lamp

- The lamp is connected to the micro switch's NC terminal and NO terminal. As a fine current flows even when the load (relay, etc.) is not energized, take care when selecting the load.
  100 VAC 1.5 mA, 200 VAC 2.0 mA, 24 VDC 4.5 mA
- To turn the lamp ON at the set pressure or more, and OFF at the set pressure or lower, wire to the micro switch COM terminal and NC terminal. Attach the Pressure Rise → Lamp ON plate at a visible place on the cover.
- To turn the lamp ON at the set pressure or lower, and OFF at the set pressure and over, wire to the micro switch COM terminal and NO terminal. Attach Pressure Rise → Lamp OFF plate at a visible section of the cover.
- If there is a large amount of drainage, pipe so that the pressure adjustment screw is facing upward.



3 Use the pressure absorbing nipple (6556) to detect sudden changes in pressure, such as when confirming pneumatic cylinder pressure.

4 The scale plate is for reference. (Scale error within ±0.05 MPa)