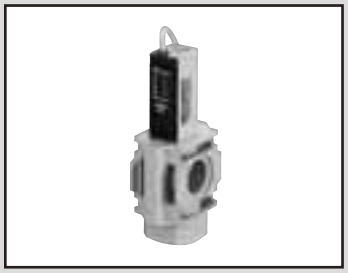


Compact reed switch type mechanical pressure switch standard white Series

P1100-W/P4100-W/P8100-W Series

・Compatible with module connection to SELEX F.R.L.

JIS symbol 

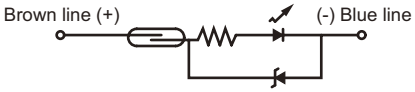
Specifications

Descriptions	P*100-W
Working fluid	Compressed air
Max. working pressure MPa	1.0
Set pressure range MPa	0.1 to 0.6
Hysteresis MPa	0.08 or less
Repeatability MPa	±0.02 or less
Contact configuration	1a Note 1
Wiring	Lead wire (oil resistant vinyl cabtire code 2-conductor 0.2mm^2)
Ambient temperature / fluid temperature	5 to 60℃
Protective structure Note 2	IP20 or equivalent

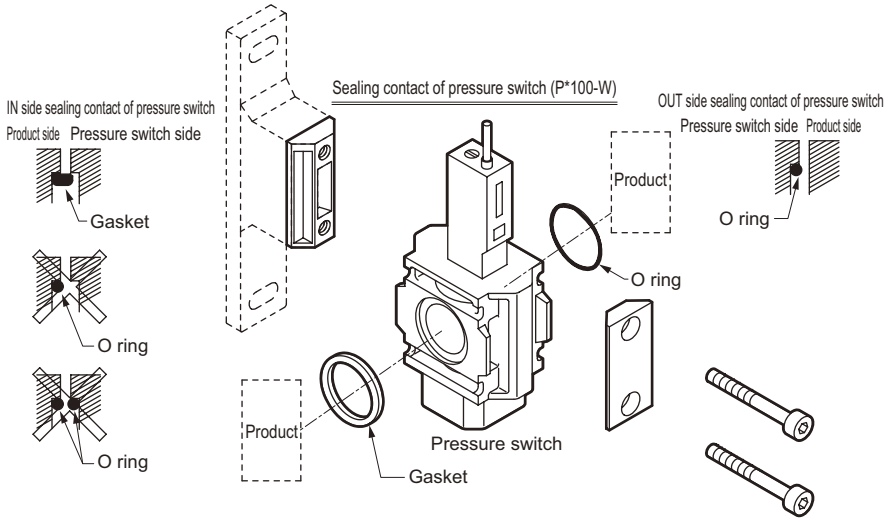
Note 1: The contact turns on if air pressure exceeding the scale setting pressure is applied.
Note 2: The protective structure is IP 65 or equivalent if an optional joint is connected to the atmospheric pressure introduction port and extended with tubes to a place free of water. This port can not be used outdoors.

Electric component section specifications		
Load voltage	12/24 VDC	100 VAC
Load current	5 to 50mA	7 to 20mA
Internal voltage drop	3V or less	
Light	LED (ON lighting)	
Maximum shock resistance	294m/S^2	
Insulation resistance	20MΩ and over at 500 VDC megger	
Withstand voltage	No failure when 1000 VAC is applied for one minute	

Internal circuit diagram



How to assemble (P1100-W, P4100-W, P8100-W)



How to order (modular design)

P 1100 - 6 L - W - B11W - 3 -
(White type)

Ⓐ Series
Ⓑ Port size
Ⓒ Branch direction
Ⓓ Attachment
Ⓔ Lead wire length
Ⓕ Option

Symbol	Descriptions
Ⓐ Series	
1100	1000-W Series modular design
4100	2500-W, 3000-W, 4000-W modular design Series
8100	6000-W, 8000-W modular design Series

Ⓑ Port size		1100	4100	8100
6	Rc1/8	●		
8	Rc1/4	●	●	
10	Rc3/8		●	
15	Rc1/2		●	
20	Rc3/4			●
25	Rc1			●

Ⓒ Branch direction Note 1

Blank Note 2	L	R
		

Ⓓ Attachment		1100	4100	8100
Blank	Joiner set and gasket	●	●	●
B11W	T type bracket and gasket	●		
B31W	T type bracket and gasket		●	
B41W	T type bracket and gasket		●	
B81W	T type bracket and gasket			●
4W	Joint for atmospheric release port attached (M3 elbow)	●	●	●

Ⓔ Lead wire length	
Blank	1m
3	3m
5	5m

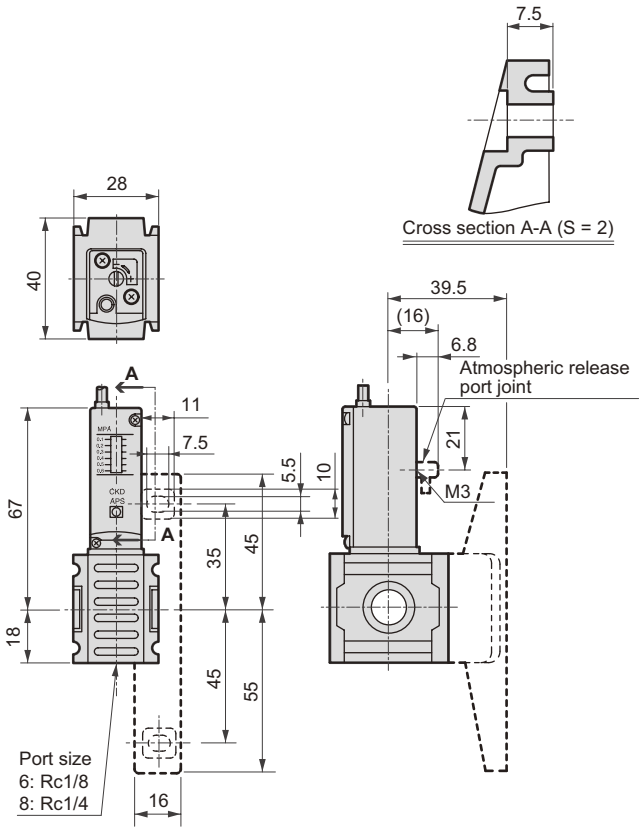
Ⓕ Option	
Blank	None
P6	Copper and PTFE free (custom order)

⚠ Note on model no. selection

Note 1: This is used for intermediate connection of the module Series so the module connection section is not threaded.
Note 2: A masking plug matching the port size is enclosed.
Note 3: When piping the isolated P*100-W unit, use piping adapter A*00-W.
(The horizontal direction port does not have threads.)

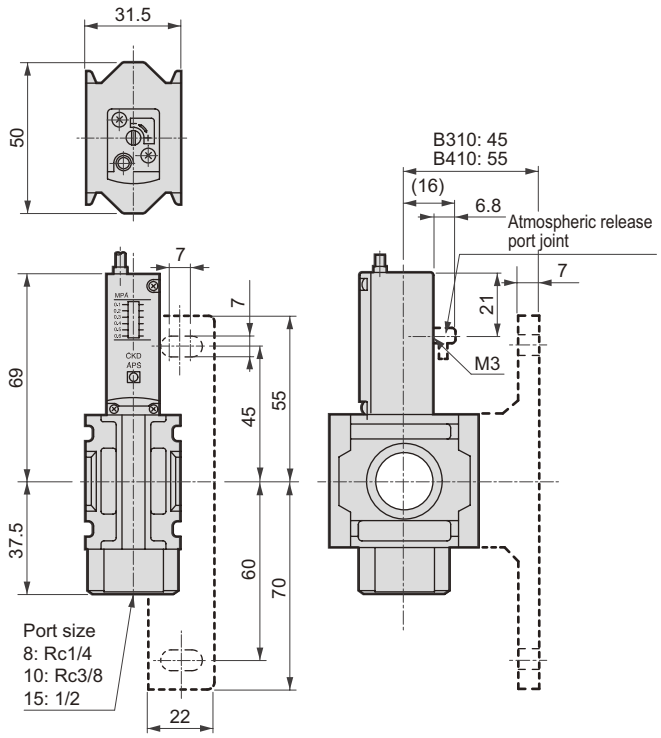
Dimensions CAD

● P1100-W



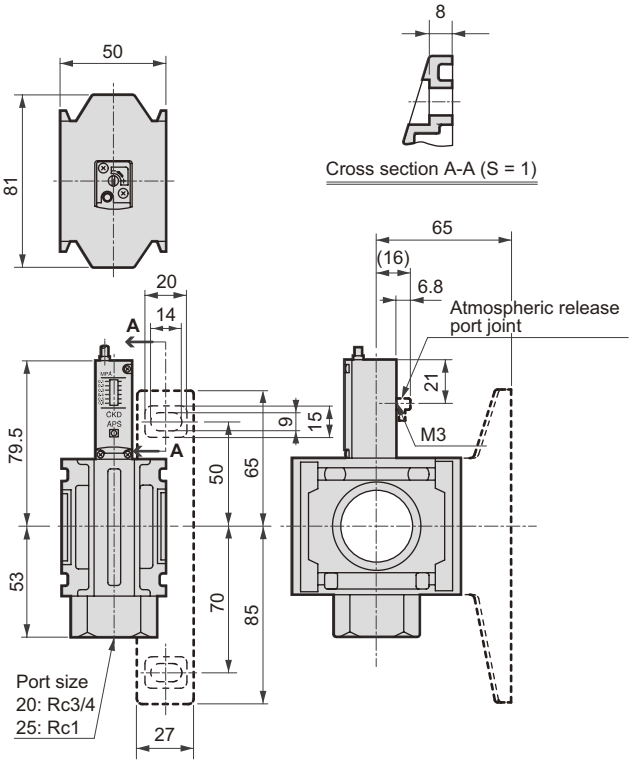
Weight 126g

● P4100-W



Weight 190g

● P8100-W



Weight 467g

⚠ Safety precautions

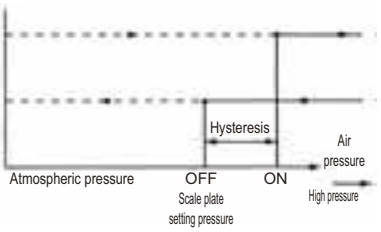
■ Installation & Adjustment

⚠ CAUTION

1 Setting pressure

- Pressure displayed on the scale plate is used as the reference. When setting pressure, refer to the separate pressure gauge.
- Pressure displayed on the scale plate is the value when the contact is off. To set the value when the contact is on, set the pressure displayed on the scale plate to a value smaller than that from which hysteresis has been subtracted. Refer to the chart diagram below. If not set, operation may not take place at the set value.
  (Hysteresis refers to the pressure width from when the switch operates once with the set pressure to when the pressure drops and the switch turns off.)

Operation chart



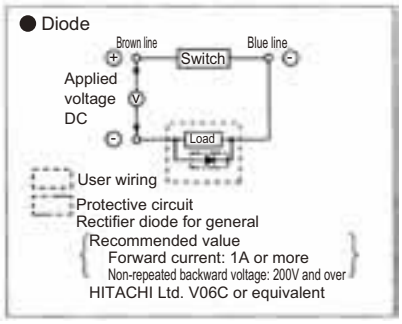
2 Installation

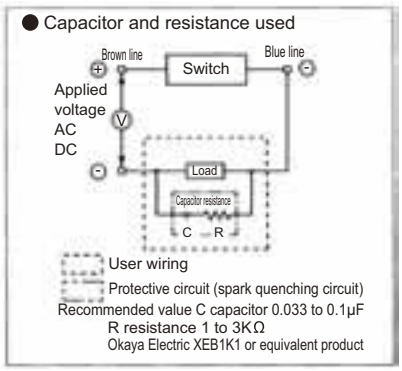
- Do not drop or bump the panel when handling it.
- Wire the lead so that the repeated bending strain and tensile strength are not applied to the wire. Failure to do so could lead to disconnection.
- Do not use this sensor near a strong magnetic field or large current (large magnet or spot welder, etc.) because the sensor could malfunction.
- The pressure switch is equivalent to IP-20, but the installation direction is limited to upward vertical. If water enters the introduction port for atmospheric pressure from below, pipe an M3 joint and extend with tubing to where water will not enter. Do not plug the atmospheric release port joint or else malfunctions could occur. This port can not be used outdoors.

- P*100 Series
  If there is drainage in pneumatic piping, install so that the pressure switch is higher than the drain.
- Do not pressurize the atmospheric release port joint or blow it with compressed air. Product performance could drop or the product could be damaged.

3 Connection

- Connecting the lead
  (1) Do not connect the lead directly to the power supply. Connect the load serially. Failure to do so could result in lamp blowing or contact melting.
  (2) When using for DC, connect the brown wire to the ⊕ side and the blue wire to the ⊖ side. The lamp will not light if wires are connected in reverse.
  (3) When connected to the AC relay or PC input, if half wave rectification is done with these circuits, the switch lamp may not light. In this case, the lamp will light if the switch lead polarity is reversed.
- Contact capacity
  Do not exceed the specified load voltage and load current range. Failure to observe this could result in problems such as lamp blowing and contact melting.
  The lamp may not light if the current is less than the rated current value.
- Contact protection
  (1) When using this sensor with a conductive load such as a relay, provide the contact protection circuit shown at right. The contact could melt if this protection circuit is not provided.





(2) If DC wiring exceeds 50 m or AC wiring exceeds 10 m, the wiring capacity will be attained. A rush current will occur, damaging the switch or shortening life.
Install a contact protection circuit if the wiring length is exceeded.