

Electronic pressure switch (pressure switch)

PSW Series

High precision pressure switch with semiconductor pressure sensor.



- F.R.L
- F (Filtr)
- R (Reg)
- L (Lub)
- PresSW
- Shutoff
- SlowStart
- FimResistFR
- Oil-ProhR
- MedPresFR
- No Cu/ PTFE FRL
- Outdrs FR
- F.R.L (Related)
- CompFRL
- LgFRL
- PrecsR
- VacF/R
- Clean FR
- ElecPneuR
- AirBoost
- SpdContr
- Silncr
- CheckV/ other
- Jnt/tube
- AirUnt
- PrecsCompn
- Mech/ ElecPresSw
- ContactSW
- AirSens
- PresSW Cool
- AirFloSens/ Contr
- WaterRtSens
- TotAirSys (Total Air)
- TotAirSys (Gamma)
- RefrDry
- DesicDry
- HiPolymDry
- MainFiltr
- Dischrg etc
- Ending

Overview

This product is a reliable pressure switch developed for pneumatics/vacuum systems. Due to a semiconductor pressure sensor, high precision and high speed response are achieved.

Features

- Fast response time (10 ms)
- With no movable parts, high reliability and long durability are achieved.
- Using multi rotation trimmer and operational indicator lamp, setting is easily done.
- Accuracy $\pm 3\%$ F.S.

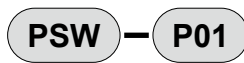
Specifications

1 MPa \approx 145.0 psi, 1 MPa = 10 bar

Descriptions	PSW-P01	PSW-P10	PSW-V01
Pressure sensitive element	Diffusion semiconductor pressure sensor		
Applicable fluid	Air/non-corrosive gas		
Rated pressure	0 to 100 kPa	0 to 1 MPa	0 to -100 kPa
Proof pressure	F.S. x 1.5 times		
Accuracy	$\pm 3\%$ F.S. (0 (32°F) to 50°C (122°F))		
Indicator lamp	Red LED lit when ON		
Hysteresis	2% F.S. or less		
Operating ambient temperature	0 (32°F) to 50°C (122°F)		
Storage ambient temperature	-20 (-4°F) to 80°C (176°F) (no freezing)		
Response time	10 ms or less		
Switch output	NPN transistor open collector MAX30 V 80 mA		
Analog output Note	1 to 5 VDC (0 to F.S.) $\pm 3\%$ F.S. (25°C)		
Power supply voltage	11 to 26 VDC 30 mA (ripple rate 1% or less)		
Vibration resistance	10 to 55 Hz compound amplitude 1.5 mm 2 hours per X, Y, Z direction		
Lead wire	1.5 m Shielded wire		
Weight	Approx. 80 g (body: approx. 60 g, mounting bracket: approx. 20 g)		

Note: Voltage of analog output may vary within 1 ± 0.4 VDC to 5 ± 0.8 VDC per product.

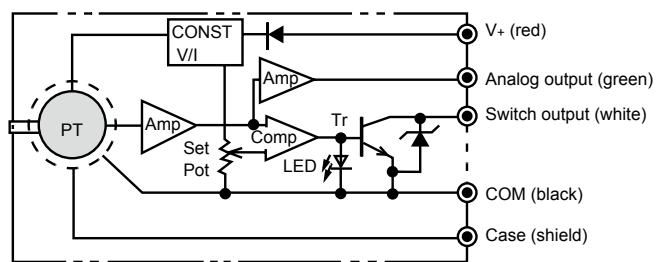
How to order



Ⓐ Pressure range

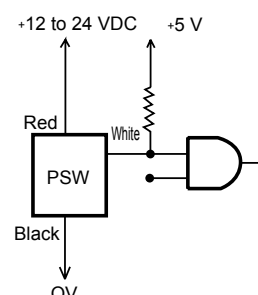
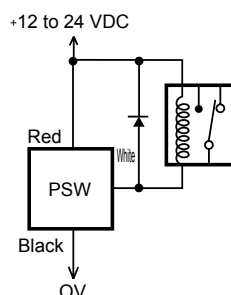
Code	Content
Ⓐ Pressure range	
P01	0 to 100 kPa
P10	0 to 1 MPa
V01	-100 to 0 kPa

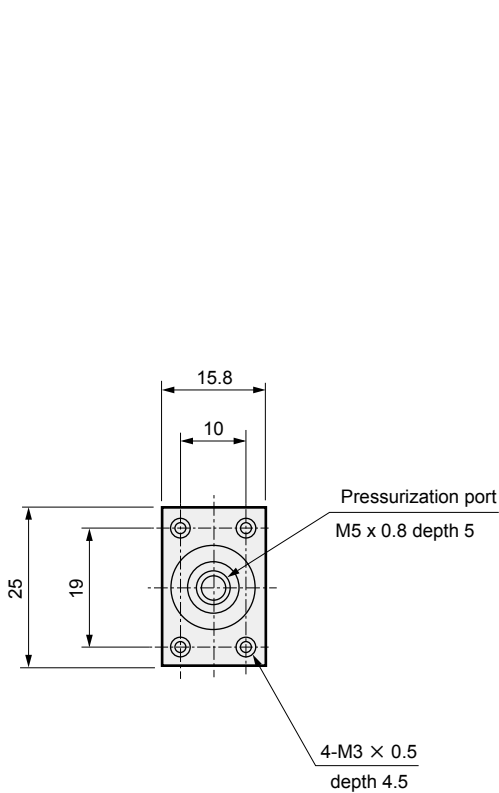
Configuration diagram



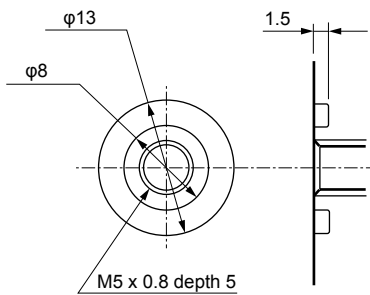
- Red LED lights when turning ON.
- Care must be taken when handling lead wire.

Example of wiring

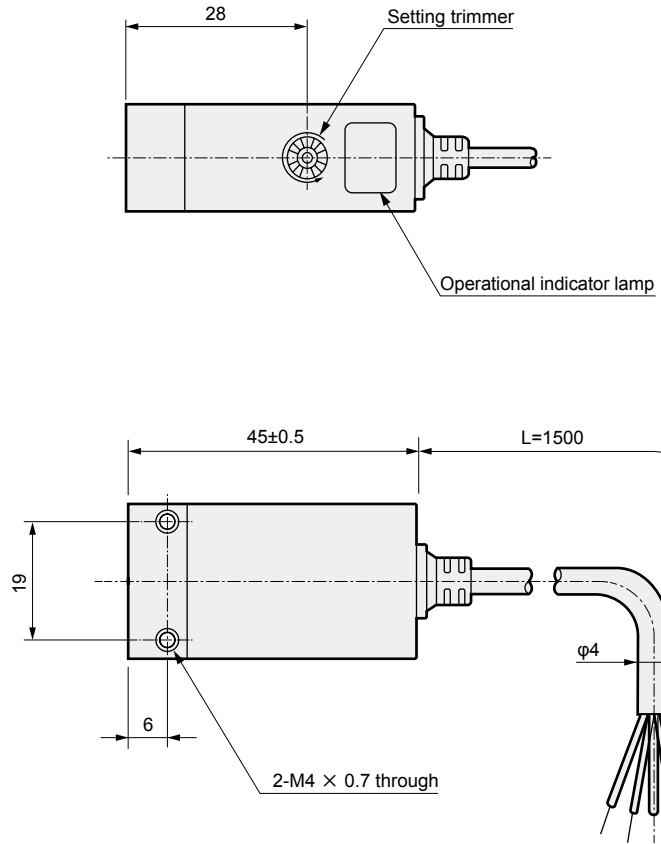




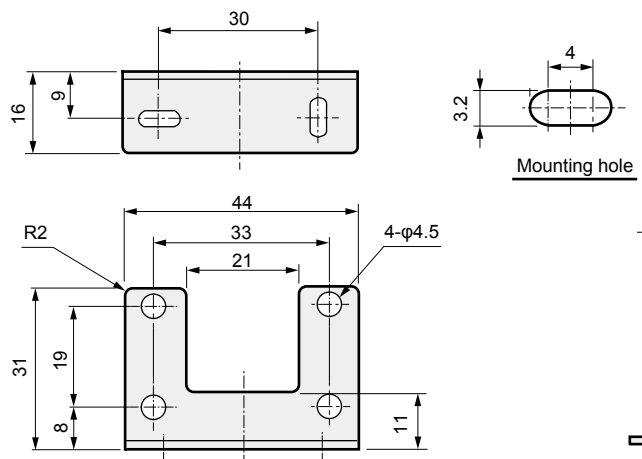
● Pressure port section details (Note)



(Note) Compatible O-ring (JIS B2401)
 For positive pressure: P10
 For negative pressure: P8



● Mounting bracket (accessory)



Material : SPCC
 Treatment : Ni plating
 Weight : Approx. 20 g



Refer to Safety precautions PSW Series on page 1120 for details.

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AirBoost
SpdContr
Silncr
CheckV/ other
Jnt/tube
AirUnt
PrecsCompn
Mech/ ElecPresSw
ContactSW
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TotAirSys (Total Air)
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RefrDry
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