

Model PSO

General Purpose Pressure Switches

Description

PSO sensing element has excellent temperature properties by adopting a self temperature compensation foil strain gauge. A diaphragm and a pressure port are composed as one body for the prevention of leakage. It is also durable to an instant over pressure. It can control the system without any controller due to the output of a 1 or 2 channel NPN open collector switch.

Features

- ▶ Electrical pressure switch with no mechanical moving part
- ▶ Fast response 1ms
- ▶ Measuring range 0~50MPa
- ▶ One or two pressure setting points
- ▶ Self temperature compensation foil strain gauge
- ▶ Stainless steel media-wetted materials

Applications

- ▶ Process control
- ▶ Hydraulics & Pneumatic
- ▶ Compressor Control
- ▶ Chillers
- ▶ Refrigeration Equipment

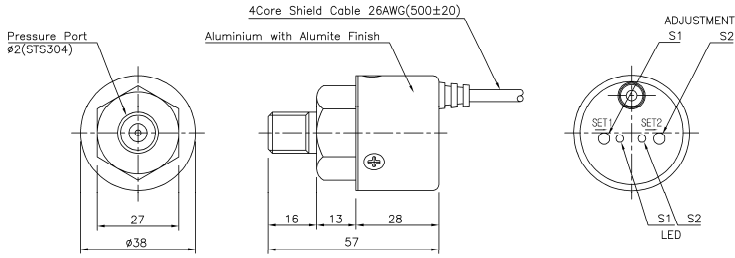


Specifications

	PSOU	PSOW
Range	0~1, 2, 3, 5, 10, 20, 30, 35, 50MPa (Gauge) -0.1~0, 1, 2, 3, 5, 10, 20, 30, 35, 50MPa (Gauge)	
Performance		
Accuracy		±1%FS
Hysteresis	Hysteresis adjustable(2~10%)	3%FS
Thermal Effect on Zero		±0.1%FS/°C
Thermal Effect on Span		±0.1%FS/°C
Compensated Temperature Range		-10 ~ 70°C
Operating Temperature Range		-20 ~ 80°C
Electrical		
Excitation		11 ~ 28VDC
Output	1 Channel NPN Open Collector	2 Channel NPN Open Collector
Switch Load Current		28V 80mA Max.
Electrical Connection		Cable
Physical		
Proof Pressure		150%FS Max.
Burst Pressure		200%FS Min.
Vibration		49.1m/s ² {5G}, 10~500Hz
Shock		490m/s ² {50G}
Pressure port	R(PT)1/8", G(PF)1/8", R(PT)1/4"(Stock), G(PF)1/4", R(PT)3/8"(Stock), G(PF)3/8"	
Media-Wetted Materials		Stainless Steel 304, 630
Weight		Approx. 150g (include cable 50cm)

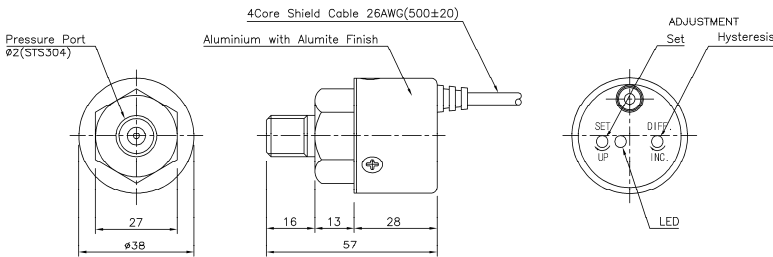
Dimension

▶ PSOW Type



Wire Color	Connections
Red	Power ⊕
Black	Com. ⊖
Green	Switch 1
White	Switch 2
Shield	Earth

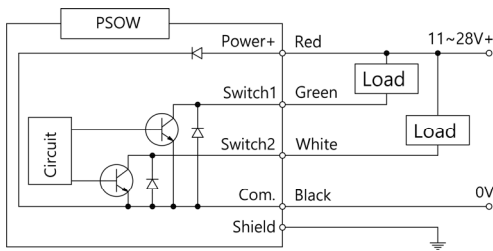
▶ PSOU Type



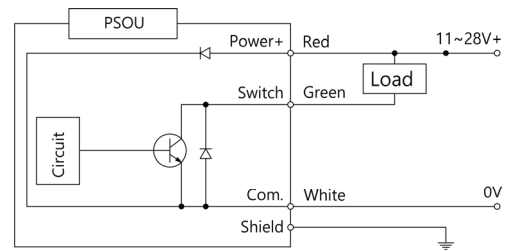
Wire Color	Connections
Red	Power ⊕
White	Com. ⊖
Green	Switch
Shield	Earth

Circuit Diagram

▶ PSOW



▶ PSOU



Ordering Information

PSO U 0010 K A C A	
Model Name	Option
Output	A : Normal
U : Switch 1, Hysteresis adjustable	Connecting Methods
W : Switch 1,2	C : Cable
Pressure Range	Pressure port
XXXX : Pressure	A : R(PT)3/8" D : G(PF)1/4"
CXXX : Compound Pressure	B : G(PF)3/8" G : R(PT)1/8"
	C : R(PT)1/4" H : G(PF)1/8"
	Pressure Unit
	M : MPa B : bar
	K : kgf/cm ² P : psi