Model PSL

Electronic Pressure Switches

Description

PSL sensing element has excellent temperature properties by adopting a self temperature compensation Glass on Titanium or Stainless 316L. It can control the system without any controller due to the output of 1 or 2 channel NPN open collector switch.

Features

- Electronic pressure switch with no mechanical moving part
- Fast response 1ms
- Measuring range 0~150MPa
- One or two pressure setting points
- Piezoresistive silicon cell
- Stainless steel 316L or Titanium Diaphragm

Applications

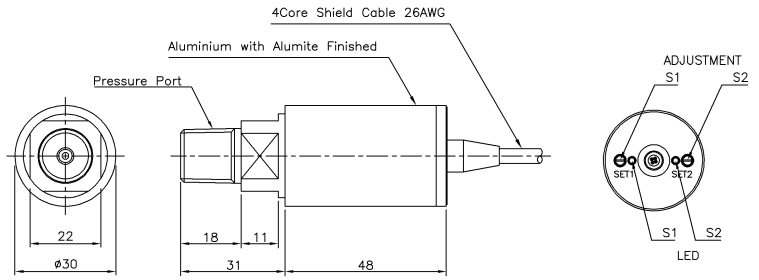
- Process control
- Hydraulics & Pneumatic
- Compressor Control
- Chillers
- Refrigeration Equipment

Specifications

	PSLU	PSLW
Range		
	0 ~ 20kPa ... 150MPa(Gauge) −100kPa ~ 0 ... 150MPa(Gauge) 0 ~ 100kPa ... 70MPa (Absolute)	
Performance		
Accuracy	±1%FS	
Hysteresis	Hysteresis adjustable(2~10%)	3%FS
Thermal Effect on Zero	±0.1%FS/℃	
Thermal Effect on Span	±0.1%FS/℃	
Compensated Temperature Range	−10 ~ 70℃	
Operating Temperature Range	−20 ~ 80℃	
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	X1.5 or 150MPa, Whichever is less.	
Burst Pressure	X2 or 150MPa, Whichever is less.	
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", G(PF)1/4", R(PT)3/8", G(PF)3/8"	
Media−Wetted Materials	Stainless Steel 304 / Titanium 87% or Stainless Steel 316L	
Weight	Approx. 150g (include cable 100cm)	

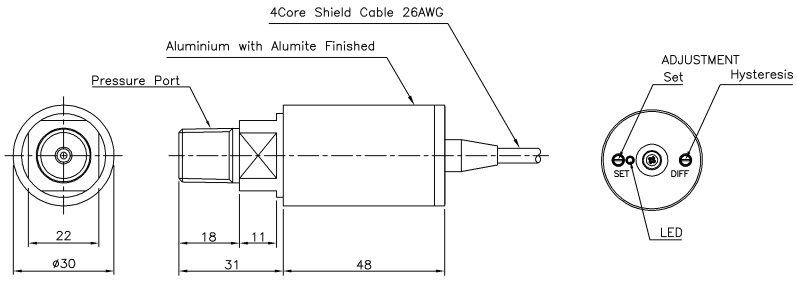
Dimension

▶ PSLW Type



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

▶ PSLU Type



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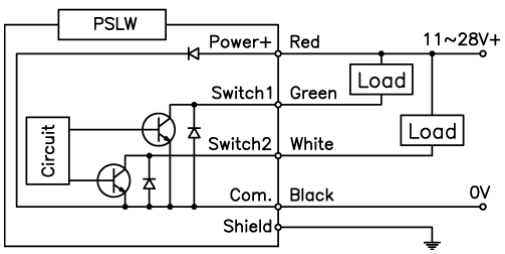
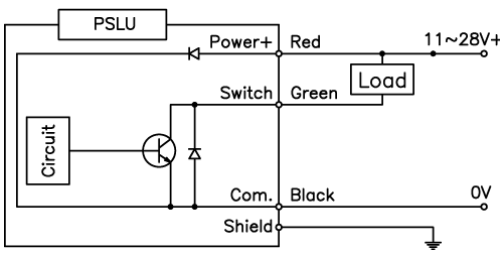
Circuit Diagram

▶ PSLW



▶ PSLU



Ordering Information

PSL U 0100 R A C G

Model Name

Output
- U : Switch 1, Hysteresis adjustable
- W : Switch 1,2

Pressure Range
- XXXX : Pressure
- CXXX : Compound Pressure

Pressure Unit
- R : kPa
- B : bar
- P : psi
- C : cmH_2O
- M : MPa
- K : kgf/cm^2
- H : mmHg

Type of Pressure Measurement
- G : Gauge
- J : Absolute

Connecting Methods
- C : Cable

Pressure port
- A : R(PT)3/8"
- B : G(PF)3/8"
- C : R(PT)1/4"
- D : G(PF)1/4"
- G : R(PT)1/8"
- H : G(PF)1/8"