

PSW03 Series



FEATURES

- Pressure & Vacuum Capable
- Long Lasting Diaphragm with Teflon-Coated Kapton
- -20-90°C Operating Temperature
- Adjustable Settings from 5-300psi
- Compatible with a Wide Range of Media (Liquid, Air, Gas)
- IP65 (with Cover)
- 500psi Proof Pressure
- Low Cost & Easy Installation

DESCRIPTION

The PSW03 is a pressure switch manufactured for low-medium pressure industrial applications. This pressure switch was designed for industrial and commercial applications and has a cycle rating for more than 1,000,000 switches. The stainless-steel design and high temperature component selection allows the sensor to be used in high temperature applications.

The PSW03 series utilizes a silver (ag) alloy diaphragm design with Teflon Coated Kapton which has superior long-term stability and reliability.

The design is simple, cost effective, and proves reliable for OEM customers. Please contact us for Custom design availability.

APPLICATIONS

- Engine Controls
- Hydraulics
- Pumps
- Compressors
- Pneumatic Lines

Maximum Environmental Ratings

Operating Temperature ……..... -20°C to 90°C
Storage Temperature Range ……..-20°C to 90°C

Proof pressure ……..……... 500PSI
Burst pressure ……..……... 5x pressure (or 750PSI)

PSW03 Operational Characteristics

V_+ = 5V, V_- = 0V, Temperature = 25°C					
PARAMETER	SYMBOL	MIN	TYP	MAX	UNITS
Max Voltage	V		250		Volts
Max Current	A		1		Amp
Linearity (Note 2)		-0.25		0.25	%FS
Response Time	t_R		25	100	ms
Total Hysteresis(Note 4)		-5		5	%FS
Operating Temperature Range	C	-20		90	C

Notes:

1) Measured with Supply Voltage at 5V. Output is ratiometric. 2) Defined as best straight line 3) Measured from 0°C to 80°C 4) Measured at room temperature (25C)

Application Information

Package

The one piece body design is made of stainless steel (SS316L), which allows for easy manufacturability and long term stability. Automotive grade vibration proof design for engine mount.

Stability

The silicon MEMS pressure sensor element is mounted to a ceramic base and sealed into the SS housing. The selection of thermally capability materials reduce the mechanical stress on the sensor resulting in greater stability over time and temperature.

Additional stability is gained from factory stabilization of all sensors.

Pressure port

1/4" -18NPT and 1/8"-18NPT threads are standard SS fittings. Other port fittings such as 7/16-20UNF, and ¼" BSP are available for OEM customers.

Media

The pressure port is tolerant to most media including but not limited to oil, air, gas, some corrosive media, and salt water.

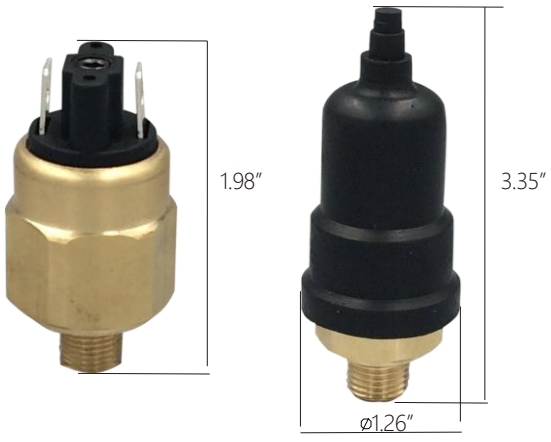
Wetted parts

When checking media capability, the wetted surface is composed of only Silver Alloy.

Pressure ranges

Standard pressure ranges are 5, 30, 50, 100, and 150 psi. Custom pressure ranges are available for OEM customers.

Mechanical Dimensions (inches)



No Cover

With Cover

Part Number Configuration

Model	Pressure Range	Set Point	Type	Port	Control	Material	Cover
PSW03	01 = 5-25psi(±2PSI)	2 = 2psi	G = Gauge	1 = 1/4"NPT	C = Normally Closed	B = Brass	Null = No Cover
	02 = 20-60psi(±3PSI)	5 = 5psi		2 = 1/8"NPT	O = Normally Open	S = Steel	C = with Cover
	03 = 50-150psi(±5PSI)	….				SS = Stainless Steel	
	04 =150-300psi(±10PSI)	100 = 100psi					
Example: PSW03-03-65G1O-BC Pressure Range: 50-150psi(±5PSI), Set Point: 65psi, Gauge, 1/4"NPT, Normally Open, Brass, With Cover							

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