

# **Direct Mount Pressure Switch**

## Model PSB

The PSB switch is a direct-mount switch for critical pressure points. It has one limit contact that can be used to activate an alarm, actuate indicator lights or shutdown equipment.

The construction of this instrument is the same as Murphy's time-proven Swichgage® instrument. A precision machined brass mounting plate and port captures a high-quality, stamped beryllium copper diaphragm. The single-pole, double-throw (SPDT) snapswitch is operated directly from the diaphragm for quick acting and positive switching. Trip point is factory preset according to your specifications.

Housing is weather sealed to prevent entry of moisture, dust, etc. A glass-filled nylon terminal block with screw terminal connections gives the PSB switch a real advantage in industrial engine applications. The PSB is ideal when reading is not desired, but pressure is critical to operational efficiency. Intended for use in general purpose non-classified areas.

Applications include:

Engine lubrication Water pumps
Compressors Oil field systems

Irrigation systems Construction equipment

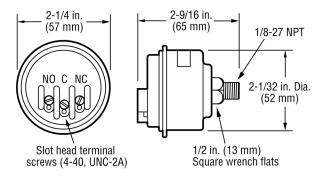
Marine engines Generators

Light-duty mobile equipment

Features include:

- Fits all engine applications
- SPDT snap-switch
- Activates indicator lights, alarms or shuts down equipment
- Time-proven Swichgage® construction
- Easy wiring terminal block
- Steel housing specially coated to resist corrosion
- Factory preset to your specifications

#### Dimensions





Products covered by this bulletin comply with EMC Council directive 89/336/EEC regarding electromagnetic compatibility except as noted.

## **Specifications**

Housing: Plated steel

Pressure Connection: 1/8-27 NPT, brass

**Diaphragm:** Formed beryllium copper (heat treated) **Pulsation Dampener:** Brass (removable for cleaning)

**Terminal Block:** Three #4-40 screws **Accuracy:** Trip point: ±3% of full scale **Switch reset differential:** ±7% of full scale

Repeatability: ±1% of full scale

**Contact Rating:** SPDT 3 A @ 30 VDC inductive **Maximum Pressure:** See Trip Point Chart

Temperature Range:

Ambient= -40° to 150° F (-40° to 66° C)

Process= -40° to 250° F (-40° to 121° C)

Factory Trip Point Setting: See Trip Point Chart

Pressure Range: Specify from 15-400 psi (0.21 kPa- 2.76 MPa)

[1.03-27.58 bar]. See Trip Point Chart

**Contact:** Operates on rising or falling pressure (specify)

Shipping Weight: 8 oz. (0.25 kgs)

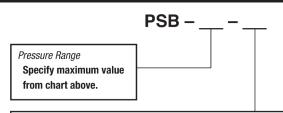
**Shipping Dimensions:** 3 x 2-3/4 x 2-3/4 in. (76 x 70 x 70 mm)

**NOTE:** No customer replacement parts

Ranges available			Factory setting			Maximum pressure		
psi (kPa	/MPa) [bar]	psi	(kPa/MPa)	[bar] Falling	psi	(kPa/MPa)	[bar]	
0-15 (0-1	03) [0-1.03]	3	(21)	[.21]	30	(207)	[2.07]	
0-30 (0-2	07) [0-2.07]	7	(48)	[.48]	60	(414)	[4.14]	
0-50 (0-3	45) [0-3.45]	10	(69)	[.69]	100	(0-689)	[0-6.89]	
0-75 (0-5	17) [0-5.17]	15	(103)	[1.03]	150	(0-1.03)	[0-10.34]	
0-100 (0-6	889) [0-6.89]	20	(138)	[1.38]	200	(0-1.38)	[0-13.79]	
0-150 (0-1	.03) [0-10.34]	30	(207)	[2.07]	300	(0-2.07)	[0-20.70]	
0-200 (0-1	.38) [0-13.79]	50	(345)	[3.45]	400	(0-2.76)	[0-27.60]	
0-300 (0-2	2.07) [0-20.70]	75	(517)	[5.17]	500	(3.45)	[34.50]	
0-400 (0-2	2.76) [0-27.60]	150	(1.03)	[10.34]	500	(3.45)	[34.50]	

### How to Order

Options listed at right. All configurations may not be available. Call your sales representative or Enovation Controls for more information.



Switch Trip Point<sup>†</sup>

 ${\bf F}=$  Factory set to trip on falling. Specify "F" and the set point value. Example: PSB-100- ${\bf F20}$ .

R = Factory set to trip on rising, Specify "R" and the set point value.
For units of measure other than psi, specify the set point value followed by unit of measure as follows:

 $\mathbf{B} = \mathsf{Bar}$ 

 $\mathbf{K} = kPa/MPa$ 

 $\mathbf{M}=\text{kg/cm2}$ 

Example: PSB-7B-2B

†Switch set point value will be stated on label.