## 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 ${ }^{\circledR}$ 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
Compressors
Irrigation systems
Marine engines
Light-duty mobile equipment
Features include:

- Fits all engine applications
- SPDT snap-switch
- Activates indicator lights, alarms or shuts down equipment
- Time-proven Swichgage ${ }^{\circledR}$ 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: $\pm 3 \%$ of full scale
Switch reset differential: $\pm 7 \%$ of full scale
Repeatability: $\pm 1 \%$ of full scale
Contact Rating: SPDT 3 A @ 30 VDC inductive
Maximum Pressure: See Trip Point Chart

## Temperature Range:

Ambient $=-40^{\circ}$ to $150^{\circ} \mathrm{F}\left(-40^{\circ}\right.$ to $\left.66^{\circ} \mathrm{C}\right)$
Process $=-40^{\circ}$ to $250^{\circ} \mathrm{F}\left(-40^{\circ}\right.$ to $\left.121^{\circ} \mathrm{C}\right)$
Factory Trip Point Setting: See Trip Point Chart
Pressure Range: Specify from $15-400 \mathrm{psi}(0.21 \mathrm{kPa}-2.76 \mathrm{MPa})$
[1.03-27.58 bar]. See Trip Point Chart
Contact: Operates on rising or falling pressure (specify)
Shipping Weight: $8 \mathrm{oz} .(0.25 \mathrm{kgs})$
Shipping Dimensions: $3 \times 2-3 / 4 \times 2-3 / 4 \mathrm{in} .(76 \times 70 \times 70 \mathrm{~mm})$
NOTE: No customer replacement parts

| Ranges available |  |  | Factory setting |  |  | Maximum pressure |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| psi | (kPa/MPa) | [bar] | psi | ( $\mathrm{kPa} / \mathrm{MPa}$ ) | [bar] Falling | psi | (kPa/MPa) | [bar] |
| 0-15 | (0-103) | [0-1.03] | 3 | (21) | [.21] | 30 | (207) | [2.07] |
| 0-30 | (0-207) | [0-2.07] | 7 | (48) | [.48] | 60 | (414) | [4.14] |
| 0-50 | (0-345) | [0-3.45] | 10 | (69) | [.69] | 100 | (0-689) | [0-6.89] |
| 0-75 | (0-517) | [0-5.17] | 15 | (103) | [1.03] | 150 | (0-1.03) | [0-10.34] |
| 0-100 | (0-689) | [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 | (0-2.07) | [0-20.70] | 75 | (517) | [5.17] | 500 | (3.45) | [34.50] |
| 0-400 | (0-2.76) | [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.

|  |  |
| :---: | :---: |
| Pressure Range <br> Specify maximum value from chart above. |  |
| Switch Trip Point ${ }^{\dagger}$ <br> F = Factory set to trip on falling. Specify "F" and the set point value. <br> Example: PSB-100-F20. <br> $\mathbf{R}=$ Factory set to trip on rising, Specify "R" and the set point value. <br> For units of measure other than psi, specify the set point value followed by unit of measure as follows: $\begin{aligned} & \mathbf{B}=\mathrm{Bar} \\ & \mathbf{K}=\mathrm{kPa} / \mathrm{MPa} \\ & \mathbf{M}=\mathrm{kg} / \mathrm{cm} 2 \end{aligned}$ <br> Example: PSB-7B-2B <br> $\dagger$ Switch set point value will be stated on label. |  |

