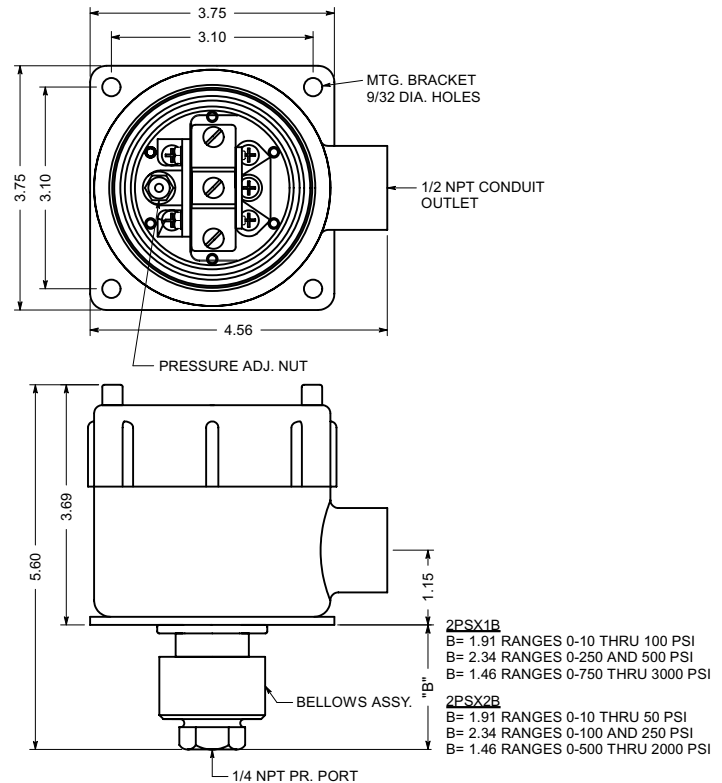




- Ranges from 10 to 3000 PSI
- NEMA 7 CLASS I, Groups C & D
- NEMA 9 CLASS II, Groups E, F, & G
- One or Two SPDT Contacts
- Stainless Steel Sensing Element



## MODEL SERIES 2PSXB Pressure Switch Bellows Sensing Element



### GENERAL DESCRIPTION

The 2PSXB employs Solon's unique, rugged, and sensitive switching mechanism. Unlike most "inline" pressure switch designs, the Solon mechanism is frictionless and amplifies the movement of the sensing element. This results in improved life, repeatability, and lower deadbands. The 2PSB mechanism can be supplied with one S.P.D.T. electric switch or two S.P.D.T. electric switches that are independently adjustable. With the cover of the enclosure removed, the terminals of the electric switch/s, and the pressure adjustment/s are exposed for easy wiring and adjustment of the pressure setting. The bellows pressure-sensing elements are constructed from stainless steel and are sized for a wide variety of pressure ranges. Other useful options can easily be specified with this model. See the Special Features section on page 2 for these options.

### SPECIFICATIONS

#### PHYSICAL DATA (Standard)

-see page 2 for special features

**Maximum Ambient Temperature:** 180°F

**Minimum Ambient Temperature:** -40°F

**Pressure Connection:** 1/4 NPT

**Electrical Connection:** 1/2 NPT

**Housing:** Diecast Aluminum

**Deadband:** Fixed

**Sensitivity:** 1/2% of range (for SPDT)

**Drift:** <1% of range (100,000 operations)

**Weight:** Approx. 2 lbs.

**Contact Ratings:** 15A - 125, 250, 480 VAC

**Port Material:** Stainless Steel

**Bellows Material:** Stainless Steel

**Set Point Adjustment:** Screw type, field adjustable

**No. Contacts:** One or Two S.P.D.T.

**Contact Listings:** UL Recognized, CSA Certified

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# ORDERING A SWITCH

# MODEL SERIES 2PSXB Pressure Switch Bellows Sensing Element

## 1. SPECIFY A MODEL NUMBER

**2PSX 1 B M 2**

**MODEL SERIES** ————

**NUMBER OF ELECTRIC SWITCHES** ————

**SENSING ELEMENT** ————

**SPECIAL FEATURES** ————

**TYPE OF ELECTRIC SWITCHES**

- 1 - LOW DEADBAND  
15A - 125, 250, 480 VAC
- 2 - STANDARD DEADBAND  
15A - 125, 250, 480 VAC; 0.5A - 125 VDC
- 3 - HIGH DC RATED (MAGNETIC BLOWOUT)  
10A - 125 VDC; 3A - 250 VDC
- 5 - SUB MINIATURE SWITCH - 2 S.P.D.T.  
5A - 125, 250 VAC; 0.5A - 125 VDC
- 6 - GOLD CONTACT -  
1 A - 125 VAC

**1** - ONE S.P.D.T.  
**2** - TWO S.P.D.T. - (SWITCH TYPE "5" ONLY)

**B** - BELLOWS SENSING ELEMENT (STANDARD)

**M** - 1/2 NPT MALE PIPE MOUNTING  
**Q** - DOUBLE SNAP ACTING BELLEVILLE SPRING - TO PROVIDE POSITIVE SETPOINT ACCURACY IN HIGH VIBRATION APPLICATIONS  
**U** - ADDITIONAL PAINTING AFTER ASSEMBLY  
**V** - HIGH TEMPERATURE SERVICE - INCREASED FROM 180°F TO 250°F AMBIENT

## 2. SPECIFY A RANGE

ADJUSTABLE PRESSURE RANGE	MAXIMUM DEADBAND		MAXIMUM PRESSURE	
	TYPE "2"	TYPE "5"	TYPE "2"	TYPE "5"
0-10 PSI	.80 PSI	1.5 PSI	300 PSI	300 PSI
0-20 PSI	.90 PSI	2.3 PSI	300 PSI	300 PSI
0-50 PSI	1.0 PSI	5.2 PSI	300 PSI	300 PSI
0-100 PSI	1.5 PSI	13 PSI	300 PSI	1500 PSI
0-250 PSI	6 PSI	27 PSI	1500 PSI	1500 PSI
0-500 PSI	8 PSI	58 PSI	1500 PSI	2500 PSI
0-750 PSI	16 PSI	77 PSI	2500 PSI	2500 PSI
0-1000 PSI	19 PSI	183 PSI	2500 PSI	5000 PSI
0-2000 PSI	60 PSI	240 PSI	5000 PSI	5000 PSI
0-3000 PSI	66 PSI	N/A	5000 PSI	N/A

## DEADBAND NOTES

The deadbands listed in the tables are the maximum switch differentials when the standard (Type "2" or Type "5") electric switch is used.

Deadband is affected by the type of electric switch used. Each type of electric switch's effect on deadband is as follows:

**Type "1"** - Low Deadband - Use ½ TYPE 2 table values.

**Type "2"** - Std. Deadband - Use TYPE 2 table values.

**Type "3"** - High DC Rated - Multiply TYPE 2 table values by two.

**Type "5"** - Sub Miniature - 2 S.P.D.T. - Use TYPE 5 table values.

**Type "6"** - Gold Contact - Use TYPE 2 table values.

## INSTALLATION NOTES

**Orientation** - The 2PSXB will operate satisfactorily in any position, however, mounting the device vertically will allow the easiest adjustability and reduce sediment in the pressure chamber.

**Wiring** - Switches may be wired to 'normally open' or 'normally closed' terminals on electric switch(es). Single switch units have screw terminals while dual switch versions use a screw terminal block.

**Pressure Connection** - 1/4 NPT female is standard. 1/2 NPT male is available ("M" option).

**Adjustment** - Turn pressure adjustment nut(s) clockwise to increase setpoint. Detailed installation & calibration instructions are provided for every shipment. Factory setting is available at no charge.

## Wiring Schematic

