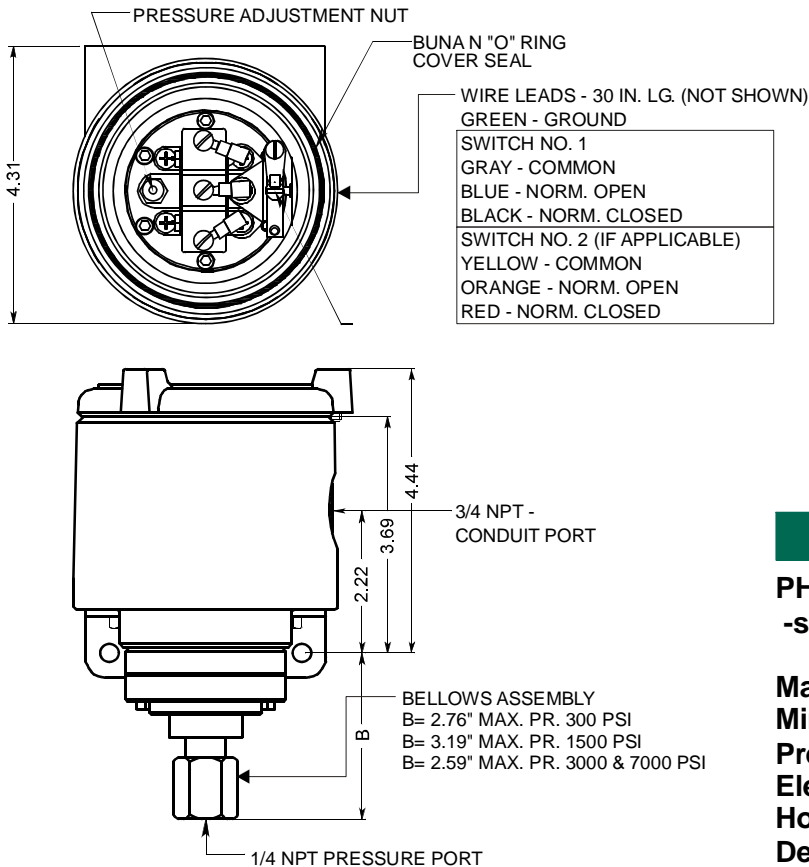




- Explosion Proof Housing (NEMA 4, 7, & 9)
- UL Listed Class I, Div. I, Gr. A, B, C, D
- Ranges from 10 to 3000 PSI
- One or Two SPDT Contacts
- All Welded Stainless Bellows



MODEL SERIES 42PSXB Pressure Switch Bellows Sensing Element



SPECIFICATIONS

PHYSICAL DATA (Standard)

-see back for special features

Maximum Ambient Temperature: 180°F

Minimum Ambient Temperature: -20°F

Pressure Connection: 1/4 NPT

Electrical Connection: 3/4 NPT

Housing: 355/356 Cast Aluminum

Deadband: Fixed

Sensitivity: 1% of range (for 1 SPDT)

Drift: <2% of range (100,000 operations)

Weight: Approx. 4 lbs.

Contact Ratings: 15A - 125, 250 VAC (1 S.P.D.T.)

OR: 5A - 125, 250 VAC (2 S.P.D.T.)

Port Material: Stainless Steel

Diaphragm 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

42PSX FEATURES

The Model Series 42PSXB Pressure Switch is both rugged and versatile. The cast aluminum housing is Explosion Proof and Watertight while the switching mechanism is simple and proven. The bellows pressure-sensing elements are stainless steel assemblies. These assemblies allow a wide variety of adjustable pressure ranges to be available. See the Special Features section on the opposite side for a listing of available materials and options.

MANY OTHER 4PSX MODELS ARE AVAILABLE...

The versatile design of the 4PSX series allows a wide variety of sensing element arrangements and materials to be used in their construction. Diaphragm, Bellows, and Piston sensing elements are available. These sensing elements can be configured for Pressure, Vacuum, and Differential Pressure applications. Models with these features and with ranges from low pressure to high pressure are described in separate catalog sheets to make selection easy.



All models shown are Underwriters Laboratories, Inc. listed for use in Class I, Groups A, B, C, & D; Class II, Groups E, F, & G hazardous locations under File E65371.

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ORDERING A SWITCH

MODEL SERIES 42PSXB Pressure Switch Bellows Sensing Element

1. SPECIFY A MODEL NUMBER

42PS X 1 B U 2

MODEL SERIES

HOUSING

X - EXPLOSION PROOF - NEMA 4, 7 & 9

NUMBER OF ELECTRIC SWITCHES

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

SENSING ELEMENT

B - BELLOWS SENSING ELEMENT (STANDARD)

SPECIAL FEATURES

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

TYPE OF ELECTRIC SWITCHES

1 - LOW DEADBAND
15A - 125, 250 VAC
2 - STANDARD DEADBAND
15A - 125, 250 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

2. SPECIFY A RANGE

ADJUSTABLE PRESSURE RANGE	MAXIMUM DEADBAND		MAXIMUM PRESSURE	
	TYPE "2"	TYPE "5"	TYPE "2"	TYPE "5"
0-10 PSI	1.2 PSI	2.9 PSI	300 PSI	300 PSI
0-20 PSI	1.5 PSI	3.8 PSI	300 PSI	300 PSI
0-50 PSI	1.7 PSI	7.2 PSI	300 PSI	300 PSI
0-100 PSI	2.3 PSI	20.2 PSI	300 PSI	1500 PSI
0-250 PSI	8.8 PSI	36.8 PSI	1500 PSI	1500 PSI
0-500 PSI	12.0 PSI	84 PSI	1500 PSI	3000 PSI
0-750 PSI	24.5 PSI	107 PSI	3000 PSI	3000 PSI
0-1000 PSI	31.2 PSI	257 PSI	3000 PSI	7000 PSI
0-1500 PSI	83 PSI	317 PSI	7000 PSI	7000 PSI
0-3000 PSI	100 PSI	385 PSI	7000 PSI	7000 PSI

DEADBAND NOTES

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

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

Type "1" - Low Deadband - Use 1/2 the TYPE 2 table values.

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

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

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

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

INSTALLATION NOTES

Orientation - The 42PSXB 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 are provided pre-wired with 30" leads. To reduce the risk of explosion, conduit runs must have a sealing fitting connected within 18 inches of the enclosure.

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

