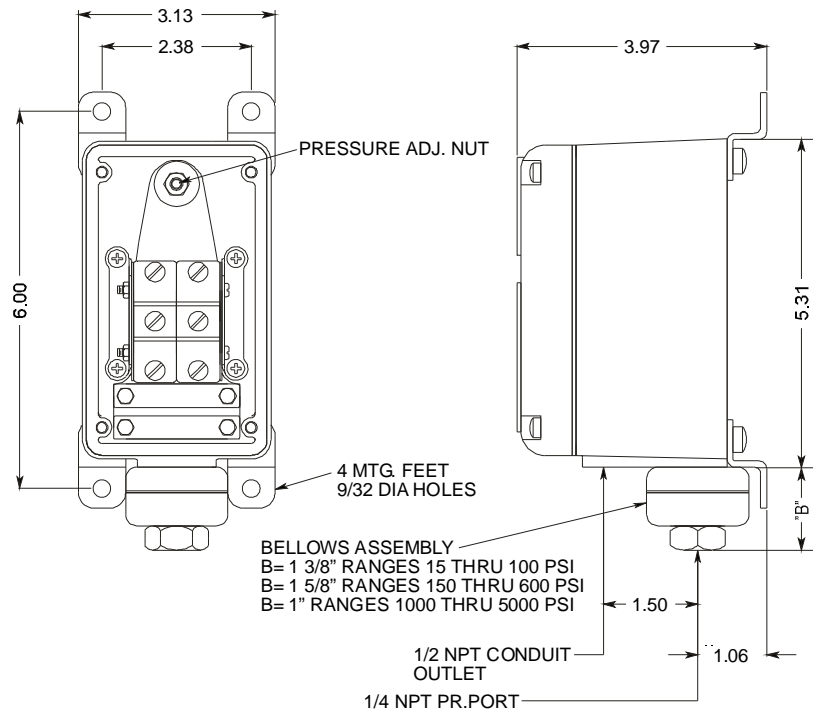




- Ranges from 0-15 PSI To 0-5000 PSI
- Rugged NEMA 4X, 12 & 13 Housing
- One or Two SPDT Contacts
- Versatile Mechanism Design
- Adjustable Deadband Available



MODEL SERIES 5PSB Pressure Switch Bellows Sensing Element



GENERAL DESCRIPTION

The Model Series 5PSWB Pressure Switch features a rugged cast aluminum housing and cover incorporating Solon's standard "frictionless" switching mechanism actuated by a stainless steel bellows assembly. Either one or two S.P.D.T. electric switch/s are available in a variety of configurations. Some of these configurations are:

- Tandem settings for D.P.D.T. operation.
- Independent adjustment for High-Low operation.
- Adjustable switch differential (dead band).
- Manual reset on either increasing or decreasing pressure.

In addition many switching configurations can be supplied with electric switches that have:

- Low switch differentials (dead band).
- High direct current ratings.
- Gold contacts
- Hermetically sealed contacts.

Bellows assemblies of various areas, when applied to the 5PSWB model, allow a wide variety of adjustable pressure ranges. See the Special Features section on page 2 for other options that are useful for particular applications.

The standard housing is NEMA 4X, 12 and 13.

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: Cast Aluminum

Deadband: Fixed

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

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

Weight: Approx. 3 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: 1 or 2 S.P.D.T or 1 D.P.D.T.

Contact Listings: UL Recognized, CSA Certified

Solon Manufacturing Company

425 Center Street, P.O. Box 207, Chardon, Ohio 44024

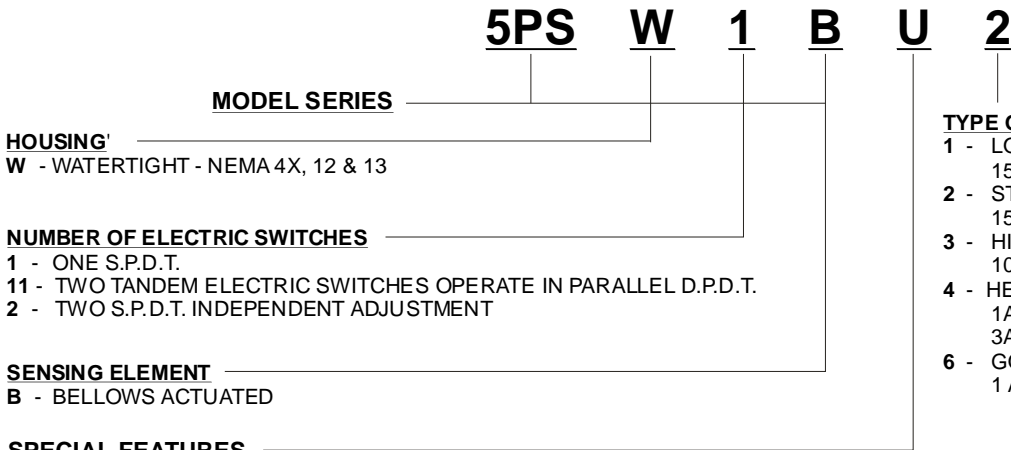
(440) 286-7149 800-323-9717 FAX (440) 286-9047

www.solonmfg.com

ORDERING A SWITCH

MODEL SERIES 5PSB Pressure Switch Bellows Sensing Element

1. SPECIFY A MODEL NUMBER



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
- 4 - HERMETICALLY SEALED SWITCH
1A-125VAC; 25A RES, 10A IND, 5A MOTOR
3A LAMP-28VDC
- 6 - GOLD CONTACT -
1 A - 125 VAC

SPECIAL FEATURES

- "-" - NO SPECIAL FEATURES
- A - ADJUSTABLE DEADBAND (ADJ. 10% - 50% OF RANGE)
- E - EXTERNAL PRESSURE ADJUSTMENT
- EE - TWO EXTERNAL PRESSURE ADJUSTMENTS
- L - ONE INDICATOR LIGHT
- LL - TWO INDICATOR LIGHTS
- M - MALE PIPE MOUNTING 1/2 NPT
- Q - DOUBLE SNAP ACTION (BELLEVILLE SPRING)
- R> - MANUAL RESET, SWITCH ON INCR. PR.
- R< - MANUAL RESET, SWITCH ON DECR. PR.
- U - ADDITIONAL PAINTING AFTER ASSEMBLY
- V - HIGH TEMPERATURE SERVICE

* SPECIAL FEATURES SUCH AS STAINLESS TAGGING, APPLICATION OF DIAPHRAGM SEALS, ETC. ARE AVAILABLE ON REQUEST. CONSULT FACTORY FOR CAPABILITIES AND PRICING FOR ANY FEATURES NOT SHOWN.

2. SPECIFY A RANGE

ADJUSTABLE PRESSURE RANGE	MAXIMUM DEADBAND PSI		MAX. WORKING PRESSURE
	TYPE "1"	TYPE "2"	
0-15 PSI	.7	1.5	300 PSI
0-30 PSI	.8	1.7	300 PSI
0-60 PSI	.9	1.9	300 PSI
0-100 PSI	1.1	2.2	300 PSI
0-150 PSI	4.0	8.5	1500 PSI
0-200 PSI	4.0	8.8	1500 PSI
0-300 PSI	5.0	9.5	1500 PSI
0-600 PSI	6.0	12.0	1500 PSI
0-1000 PSI	15.0	30.0	3000 PSI
0-2000 PSI	17.0	35.0	3000 PSI
0-3000 PSI	40.0	82.0	7000 PSI
0-5000 PSI	48.0	96.0	7000 PSI

DEADBAND NOTES

The deadbands listed in the tables are the maximum switch differentials when the Type "1" or Type "2" electric switch are 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 table values.

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

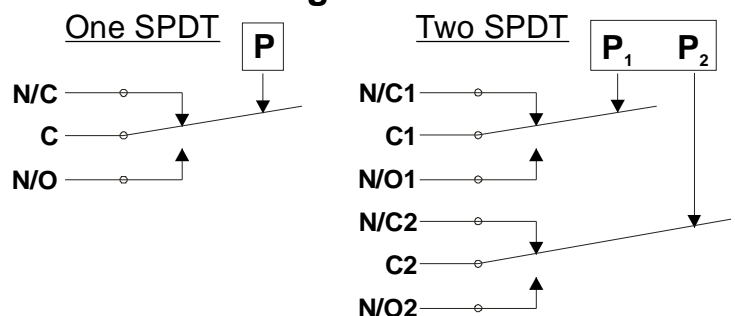
Type "3" - High DC Rated - Multiply TYPE 2 table values by two.

Type "4" - Hermetically Sealed Switch - Multiply TYPE 2 table values by six.

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

For one D.P.D.T or two S.P.D.T. switches multiply calculated value from above by 1.5 to 2.

Wiring Schematic



INSTALLATION NOTES

Orientation - The 5PSB 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).

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.

SOLON
800-323-9717