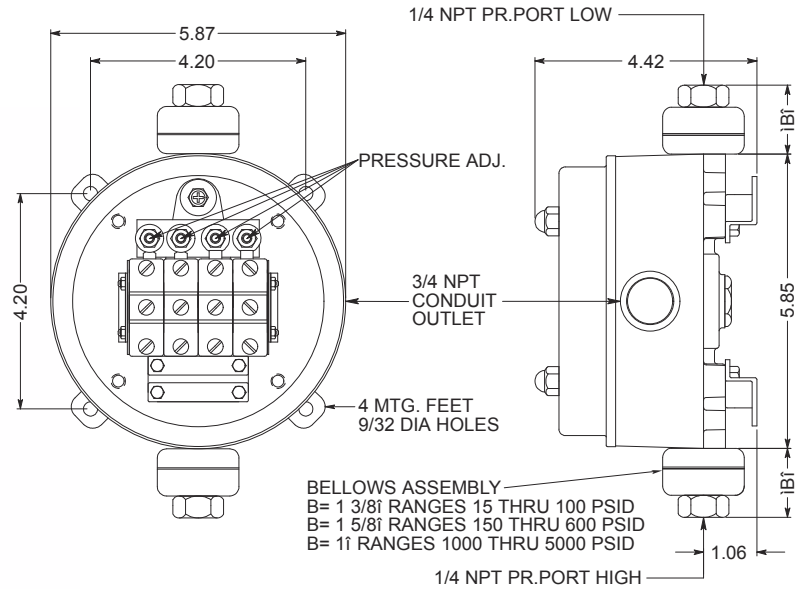




Industrial Controls and Belleville Springs

Ranges from 0-15 PSID To 0-5000 PSID
 Rugged NEMA 4X & 12 Housing Std.
 Class I, Div. I, Gr. C & D Available
 Up to Four SPDT Contacts
 Stainless Steel Wetted Materials

6PSBD Differential Pressure Switch Bellows Sensing Element



GENERAL DESCRIPTION

The Model Series 6PSBD Differential Pressure Switch is constructed using a rugged cast aluminum housing that incorporates Solon's standard "frictionless" switching mechanism actuated by stainless steel differential pressure bellows assemblies. The housing can be specified 6PSWBD, watertight; or 6PSXBD, explosion proof. The housing is large enough to accommodate up to four full size S.P.D.T. electric switches. These electric switches are available in a variety of configurations including adjustable switch differential (dead band), D.P.D.T., High-Low operation, and manual reset. 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.

Differential Pressure Bellows Assemblies of various areas, when applied to the 6PSBD model, allow a wide variety of adjustable Differential Pressure Ranges. See the Special Features section on page 2 for other materials and other options that are useful for particular applications.

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: 3/4 NPT

Housing: Cast Aluminum

Deadband: Fixed

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

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

Weight: Approx. 5 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, 2, 3 or 4 S.P.D.T or 1 D.P.D.T.

Contact Listings: UL Recognized, CSA Certified



Underwriters Laboratories, Inc. Listed:
 Industrial Controls Equipment Type 4 & 12, File E130423,
 Pressure Operated Switch for Hazardous Locations,
 Class I, Groups C&D ; Class II, Groups E, F, & G File E65371.



Canadian Standards Association Certified:
 Industrial Control Equipment Type 4 & 12, LR88975.
 Switches Pressure Type for Hazardous Locations,
 Class I, Groups C&D ; Class II, Groups E, F & G , LR88975.

Solon Manufacturing Company

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

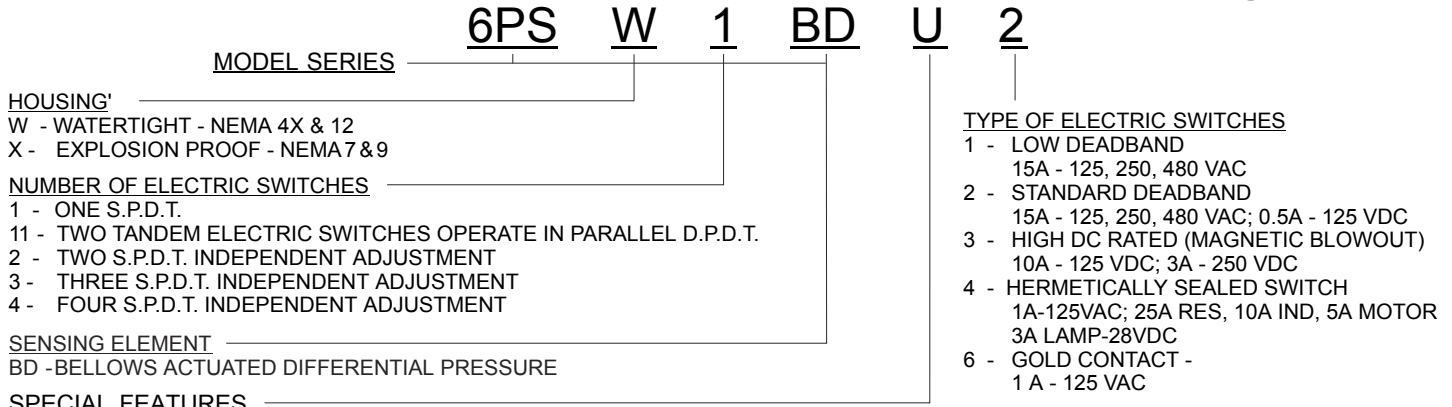
(440) 286-7149 800-323-9717 FAX (440) 286-9047

www.solonmfg.com

ORDERING A SWITCH

6PSBD Differential Pressure Switch Bellows Sensing Element

1. SPECIFY A MODEL NUMBER



* 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 PSID	.7	1.3	300 PSI
0-30 PSID	.7	1.4	300 PSI
0-60 PSID	.8	1.6	300 PSI
0-100 PSID	1.0	1.9	300 PSI
0-150 PSID	4.0	7.3	1500 PSI
0-200 PSID	4.0	7.6	1500 PSI
0-300 PSID	4.0	8.2	1500 PSI
0-600 PSID	5.0	10.0	1500 PSI
0-1000 PSID	12.0	25.0	3000 PSI
0-2000 PSID	15.0	30.0	3000 PSI
0-3000 PSID	37.0	75.0	7000 PSI
0-5000 PSID	45.0	90.0	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 D.P.D.T., 2, 3 or 4 S.P.D.T. switches multiply calculated value from above by 1.5 to 2.

INSTALLATION NOTES

Orientation - The 6PSBD will operate satisfactorily in any position, however, mounting the device vertically will allow the easiest adjustability.

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.

Wiring Schematic

