

Differential Bellows Actuated Pressure Switch

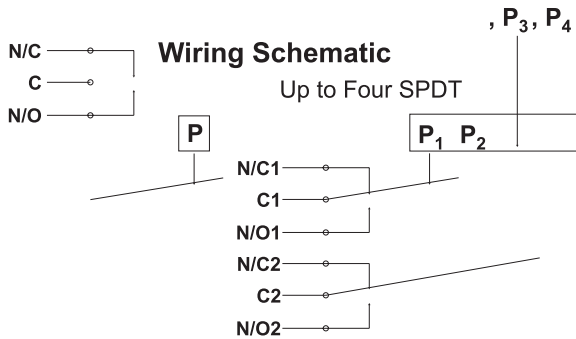
6WPSBD



Ranges from 0-15 psid to 0-5000 psid

Rugged NEMA 4X and 12 housing standard
Class I, Div. I, Gr. C and D Available
Up to four SPDT contacts
Various wetted materials available

One SPDT



Installation Notes

Orientation - The 6WPSBD Differential (Bellows) 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 and calibration instructions are provided for every shipment. Setting adjustment is available at no charge.



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

Description & Features:

- Constructed using a rugged cast aluminum housing that incorporates Winters' standard accurate switching mechanism actuated by stainless steel differential pressure bellows assemblies
- Housing can be specified watertight or explosion proof
- Housing is large enough to accommodate up to four full size SPDT electric switches
- Electric switches are available in a variety of configurations including adjustable switch differential (dead band), DPDT, high-low operation, manual reset
- 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 this 6WPSBD model, allow a wide variety of adjustable differential pressure ranges
- 1 year warranty

Applications:

- Can be utilized in filtration applications, hazardous locations and system level controls

Specifications

Housing	Cast aluminum
Pressure Connection	1/4" NPT
Electrical Connection	3/4" NPT
Port Material	SS with silver braze
Bellows Material	SS
Deadband	Fixed
Sensitivity	1/2% of range (for SPDT)
Drift	<1% of range (100,000 operations)
Contact Ratings	15A - 125, 250, 480 VAC
Set Point Adjustment	Screw type, field adjustable
No. of Contacts	1, 2, 3 or 4 SPDT or 1 DPDT
Contact Listings	UL Recognized, CSA Certified
Maximum Ambient Temperature	180°F (82°C)
Minimum Ambient Temperature	-40°F (-40°C)
Weight	Approx. 5 lbs.

Diaphragm Actuated			
Adjustable Pressure Range	Differential Pressure		Maximum Working Pressure
	Type 2	Type 5	
0-15 psi	0.7	1.3	300
0-30 psi	0.7	1.4	300
0-60 psi	0.8	1.6	300
0-100 psi	1.0	1.9	300
0-150 psi	4.0	7.3	1,500
0-200 psi	4.0	7.6	1,500
0-300 psi	4.0	8.2	1,500
0-600 psi	5.0	10.0	1,500
0-1,000 psi	12.0	25.0	3,000
0-2,000 psi	15.0	30.0	3,000
0-3,000 psi	37.0	75.0	7,000
0-5,000 psi	45.0	90.0	7,000

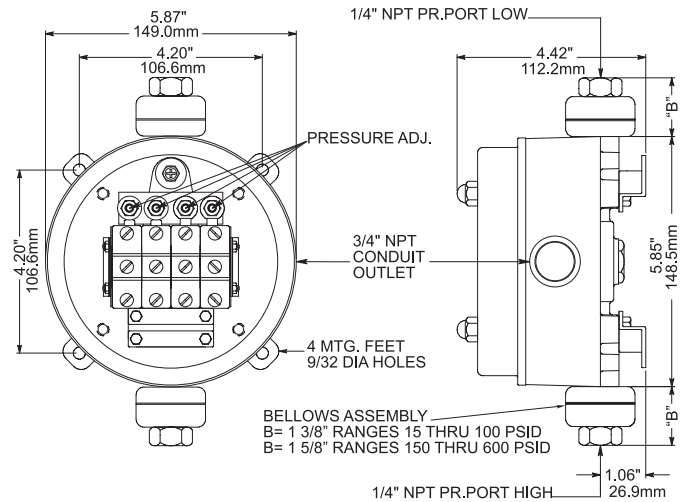
Bellows Actuated		
Adjustable Pressure Range	Two-Way Differential Pressure	Maximum Working Pressure
	Type 1	
0-15 psi	2.6	300
0-30 psi	6.0	300
0-60 psi	9.7	300
0-100 psi	18.0	1,500
0-150 psi	30.0	1,500
0-200 psi	32.0	1,500
0-300 psi	48.0	1,500
0-600 psi	92.0	3,000
0-1,000 psi	146.0	3,000
0-2,000 psi	400.0	7,000
0-3,000 psi	425.0	7,000

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 switch used. Each type of switch's effect on deadband is as follows:

- Type 1** Low Deadband - Use ½ Type 2 table values
- Type 2** Std. Deadband - Use table values
- Type 3** High DC Rated - Multiply Type 2 table values by two
- Type 5** Sub Miniature - 2 SPDT - Use Type 5 table values
- Type 6** Gold Contact - Use Type 2 table values



Series Number (how to order)

6WPS W 1 BD M 2

SERIES

HOUSING'
W - WATERTIGHT - NEMA 4X & 12
X - EXPLOSION PROOF - NEMA 7 & 9

NUMBER OF ELECTRIC SWITCHES
1 - ONE S.P.D.T.
11 - TWO TANDEM ELECTRIC SWITCHES OPERATE IN PARALLEL D.P.D.T.
2 - TWO S.P.D.T. INDEPENDENT ADJUSTMENT
3 - THREE S.P.D.T. INDEPENDENT ADJUSTMENT
4 - FOUR S.P.D.T. INDEPENDENT ADJUSTMENT

SENSING ELEMENT
BD - BELLOWS ACTUATED DIFFERENTIAL PRESSURE

SPECIAL FEATURES
-- NO SPECIAL FEATURES
A - ADJUSTABLE DEADBAND
E - EXTERNAL PRESSURE ADJUSTMENT
EE - TWO EXTERNAL PRESSURE ADJUSTMENTS
L - ONE INDICATOR LIGHT (NOT ON X HOUSING)
LL - TWO INDICATOR LIGHTS (NOT ON X HOUSING)
M - MALE PIPE MOUNTING ½ NPT
P - PANEL MOUNTING
Q - DOUBLE SNAP ACTION (BELLEVILLE SPRING)
R> - MANUAL RESET, SWITCH ON INCR. PR.
R< - MANUAL RESET, SWITCH ON DECR. PR.
V - HIGH TEMPERATURE SERVICE

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