

6WPS Series

DIFFERENTIAL PRESSURE SWITCH - BELLOWS ACTUATED

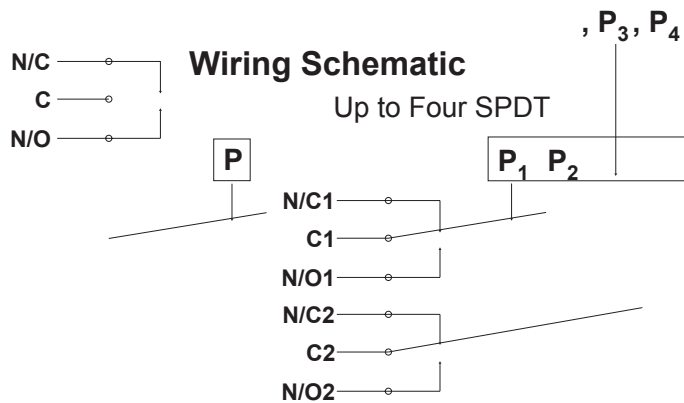


- Ranges from 0-15 PSI To 0-5000 PSI
- Rugged NEMA 4X & 12 Housing Std.
- Class I, Div. I, Gr. C & D Available
- Up to Four SPDT Contacts
- Various Wetted Materials Available

Description

The Winters' Series 6WPS Differential Pressure Switch (Bellows Actuated) is constructed using a rugged cast aluminum housing that incorporates Winter's standard accurate switching mechanism actuated by stainless steel differential pressure bellows assemblies. The housing can be specified, watertight; or 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 this 6WPS model, allows a wide variety of adjustable Differential Pressure Ranges.

One SPDT



The 6WPS (Differential) can be utilized in filtration applications, hazardous locations and system level controls.

Specifications - 6WPS (Bellows Actuated)

Housing:	Cast Aluminum
Pressure Connection:	1/4 NPT
Electrical Connection:	1/2 NPT
Port Material:	Stainless Steel with Silver Braze
Bellows Material:	Stainless Steel
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. Contacts:	1, 2, 3 or 4 S.P.D.T or 1 D.P.D.T.
Contact Listings:	UL Recognized, CSA Certified
Maximum Ambient Temperature:	180°F
Minimum Ambient Temperature:	-20°F
Weight: Approx.	5 lbs.

INSTALLATION NOTES

Orientation - The 6WPS Differential (Bellows) 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. Setting adjustment is available at no charge.

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



Corporate Office: 121 Railside Road • Toronto • ON • M3A 1B2 • (416) 444-2345 • Fax: (416) 444-8979

U.S.A. Office: 600 Ensminger Road • Buffalo • NY • 14150 • (716) 874-8700 • Fax: (716) 874-8800

www.winters.com • 1-800-WINTERS (946-8377)

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How to Order: Specify Product Code

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 1/2 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.

Ranges			
BELLOWS ACTUATED DIFFERENTIAL PRESSURE (DP)			
0-15 PSI	.7#	1.3#	300
0-30 PSI	.7	1.4	300
0-60 PSI	.8	1.6	300
0-100 PSI	1.0	1.9	300
0-150 PSI	4.0	7.3	1500
0-200 PSI	4.0	7.6	1500
0-300 PSI	4.0	8.2	1500
0-600 PSI	5.0	10.0	1500
0-1000 PSI	12.0	25.0	3000
0-2000 PSI	15.0	30.0	3000
0-3000 PSI	37.0	75.0	7000
0-5000 PSI	45.0	90.0	7000

BELLOWS ACTUATED TWO-WAY DIFFERENTIAL PRESSURE		
0-15 PSI	2.6	300
0-30 PSI	6.0	300
0-60 PSI	9.7	300
0-100 PSI	18.0	1500
0-150 PSI	30.0	1500
0-200 PSI	32.0	1500
0-300 PSI	48.0	1500
0-600 PSI	92.0	3000
0-1000 PSI	146.0	3000
0-2000 PSI	400.0	7000
0-3000 PSI	425.0	7000

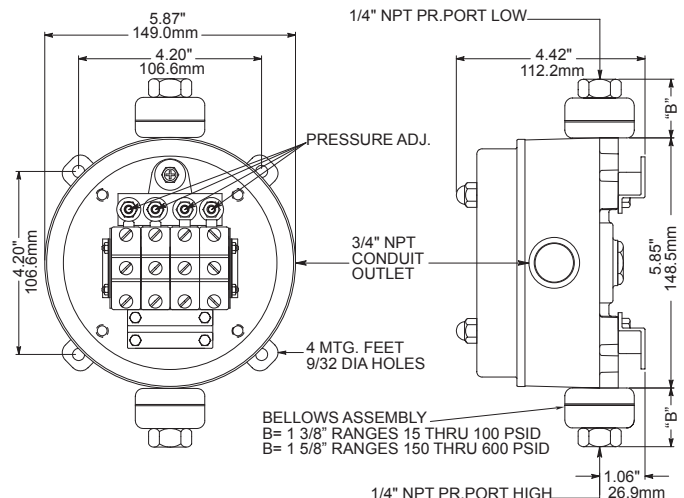
DEADBAND NOTES

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 1/2 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 S.P.D.T. - Use TYPE 5 table values.
 Type "6" - Gold Contact - Use TYPE 2 table values.

Please note that Type "5" is the only available option on 2WPS Switches that requires two Electric Switches.



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