



Ranges from 0-15 PSI to 0-5000 PSI

Rugged NEMA 4X, 12 and 13 housing
One or two SPDT contacts
Versatile mechanism design
Adjustable deadband available

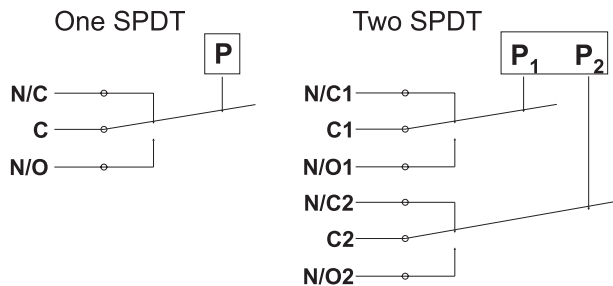
Description & Features:

- Features a rugged cast aluminum housing (NEMA 4X, 12 and 13) and cover, incorporating Winters' accurate switching mechanism, actuated by stainless steel differential pressure bellows assemblies
- Either one or two SPDT electric switches are available in a variety of configurations: tandem settings for DPDT operation, independent adjustment for High-Low operation, adjustable switch differential (deadband), manual reset on either increasing or decreasing pressure
- Many switching configurations can be supplied with electric switches that have: low switch differentials (deadband), high direct current ratings, gold contacts, hermetically sealed contacts
- Wide variety of adjustable differential pressure ranges
- 1 year warranty

Applications:

- Can be utilized in applications requiring a differential activation (i.e. filtration)

Wiring Schematic



Installation Notes

Orientation - The 5WPS 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.

Adjustment - Turn pressure adjustment nut(s) clockwise to increase setpoint. Detailed installation and calibration instructions are provided for every shipment. Settings adjustment is available at no charge.

Specifications

Specifications	
Housing	Cast aluminum
Pressure Connection	1/4" NPT female standard 1/2" NPT male available
Electrical Connection	1/2" NPT
Port Material	SS with silver braze
Bellows Material	SS
Deadband	Fixed
Sensitivity	0.5% 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	One or Two SPDT, One DPDT
Contact Listings	UL Recognized, CSA Certified
Maximum Ambient Temperature	180F (82°C)
Minimum Ambient Temperature	-40°F (-40°C)
Weight	Approx. 3 lbs

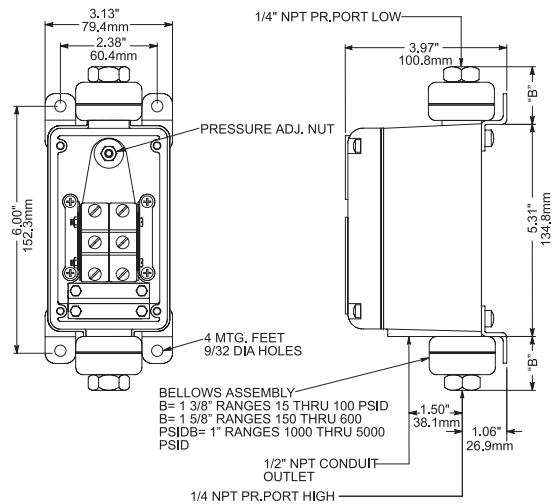
Adjustable Pressure Range		Maximum Deadband				Maximum Working Pressure	
		Type 1		Type 2			
psi	MPa	psi	kPa	psi	kPa	psi	MPa
0-15	0-0.104	0.7	4.83	1.3	8.96	300	2.07
0-30	0-0.207	0.7	4.83	1.4	9.65	300	2.07
0-60	0-0.414	0.8	5.52	1.6	11.03	300	2.07
0-100	0-0.69	1.0	6.90	1.9	13.10	300	2.07
0-150	0-1.035	4.0	27.58	7.3	50.33	1500	10.35
0-200	0-1.38	4.0	27.58	7.6	52.40	1500	10.35
0-300	0-2.07	4.0	27.58	8.2	56.54	1500	10.35
0-600	0-4.14	5.0	34.47	10.0	68.95	1500	10.35
0-1,000	0-6.90	12.0	82.74	25.0	172.4	3000	20.69
0-2,000	0-13.8	15.0	103.4	30.0	206.8	3000	20.69
0-3,000	0-20.7	37.0	255.1	75.0	517.1	7000	48.28
0-5,000	0-34.5	45.0	310.3	90.0	620.5	7000	48.28

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 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 value



Series Number (how to order)

5WPS W 1 BD V 2

SERIES
 5WPS - SERIES

HOUSING'
 W - WATERTIGHT - NEMA 4X, 12 & 13

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

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
 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.
 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.