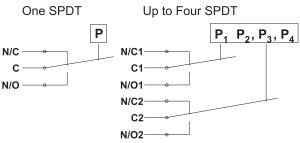
Differential Diaphragm Pressure Switch



Ranges from 0-1.5" WC to 0-150" WC Rugged NEMA 4X and 12 housing standard CSA Certified Class I, Div. I, Gr. C and D available Up to four SPDT contacts Various wetted materials available

Wiring Schematic



Installation Notes

Orientation - The 7WPSD Differential Diaphragm will operate satisfactorily in any position. However, mounting the device vertically will allow the easist 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.

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Description & Features:

 Rugged cast aluminum housing incorporates Winters' standard accurate switching mechanism actuated by a large area differential pressure diaphragm assembly

7WPS

- Housing can be specified watertight or explosion proof and 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
- Standard pressure-sensing element uses a strong Buna N elastimer diaphragm. Other diaphragm materials are available
- 1 year warranty

Applications:

Designed for low differential pressure applications

	Specifications		
Housing	Cast aluminum		
Pressure Connection	¹ /4 NPT		
Electrical Connection	³ / ₄ NPT		
Port Material	Aluminum		
Diaphragm Material	Buna N, Teflon [®] protected Viton [®]		
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 SPDT or 1 DPDT		
Contact Listings	UL Recognized, CSA Certified		
Maximum Ambient Temperature	180°F (82°C)		
Minimum Ambient Temperature	-20°F (-29°C)		
Weight	Approx. 6 lbs.		

Series Number (how to order)

7WPS W 1 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
- THREE S.P.D.T. INDEPENDENT ADJUSTMENT 4 - FOUR S.P.D.T. INDEPENDENT ADJUSTMENT

SPECIAL FEATURES

- NO SPECIAL FEATURES ADJUSTABLE DEADBAND
- Α-EXTERNAL PRESSURE ADJUSTMENT
- E -
- **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
- R> MANUAL RESET, SWITCH ON INCR. PR. R< MANUAL RESET, SWITCH ON DECR. PR
- SS SPECIAL TRIM BASE 316 STAINLESS STEEL
- T TEFLON PROTECTED DIAPHRAGM
- U ADDITIONAL PAINTING AFTER ASSEMBLY V HIGH TEMPERATURE SERVICE
- VITON DIAPHRAGM

Ranges Diaphragm Actuated				
Adjustable Pressure	Maximum Deadband WC		Maximum Working	
Range	Туре 1	Type 2	Pressure	
Pressure				
0-1.5" WC	0.17	-	50	
0-3" WC	-	-	50	
0-6" WC	0.18	-	50	
0-15" WC	0.23	0.4 5	50	
0-30" WC	0.6	1.2	50	
0-60" WC	0.7	1.4	50	
0-100" WC	0.8	1.6	50	
0-150" WC	1.2	2.5	50	

- Ε 2 **TYPE OF ELECTRIC SWITCHES** 1 - LOW DEADBAND 15A - 125, 250, 480 VAC STANDARD DEADBAND 15A - 125, 250, 480 VAC; 0.5A - 125 VDC HIGH DC RATED (MAGNETIC BLOWOUT) 2 10A - 125 VDC; 3A - 250 VDC - HERMETICALLY SEALED SWITCH 1.A-125VAC; 25A.RES, 10A.IND, 5A.MOTOR 4 3A.LAMP-28VDC 6 GOLD CONTACT -
 - 1 A 125 VAC

* SPECIAL FEATURES SUCH AS STAINLESS TAGGING, OR SPECIAL WETTED PARTS; BRASS, HASTELLOY, ETC. ARE AVAILABLE ON REQUEST. CONSULT WINTERS FOR CAPABILITES AND PRICING FOR ANY FEATURES NOT SHOWN.

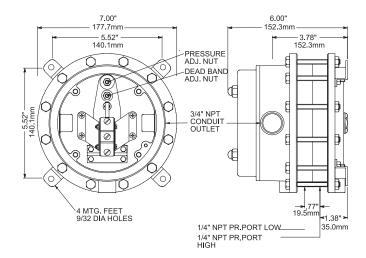
Deadband Notes

D

The deadbands listed in the tables are the maximum switch differentials when the Type 1 or Type 2 electric switch is 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



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