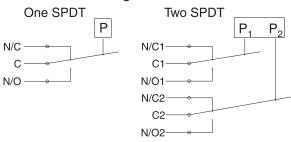


Diaphragm Actuated: 2 to 300 PSI Bellows Actuated: 10 to 3000 PSI

# Wiring Schematic



# **Installation Notes**

Orientation - The 2WPS Diaphragm Actuated 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). Single switch units have screw terminals while dual switch versions use a terminal block.

Pressure Connection -  $\frac{1}{4}$ " NPT female is standard.  $\frac{1}{2}$ " 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.

Teflon® is a registered trademark of Dupont Corporation Viton® is a registered trademark of DuPont Performance Elastomers

## **Description & Features:**

- Can be supplied with 1 SPDT electric switch or 2 SPDT electric switches that are independently adjusted
- Can be supplied with no housing or enclosed in a rugged die cast NEMA 4X, 12 and 13 housing. With the cover of the enclosure removed, the terminals of the electric switch(es) and pressure adjustment(s) are exposed for easy wiring and adjustment of the pressure setting
- · Field adjustable set points
- Diecast cover is equipped with captive stainless steel screws
  that retain the cover gasket when the cover is removed. A useful
  feature of the single switch enclosed model is a calibrated
  pressure adjustment that aligns with a numerical pressure
  indicating scale showing the set point range
- 1 year warranty

## **Applications:**

 Common applications include: tank and compressor level and precision control, hydraulic systems, pumping controls and hazardous area lift station controls

	0 10 4				
	Specifications				
Housing	Diecast aluminum				
Pressure Connection	ୀ⁄a" NPT female standard ୀ⁄a" NPT male available				
<b>Electrical Connection</b>	<sup>1</sup> / <sub>2</sub> " NPT male				
Port Material	Diaphragm Actuated: Brass Bellow Actuated: SS with silver braze				
Diaphragm Material	Buna N, Teflon® protected, Viton®				
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				
Contact Listings	UL Recognized, CSA Certified				
Maximum Ambient Temperature	Diaphragm Actuated: 180°F (82°C) Bellows Actuated: 180°F (82°C)				
Minimum Ambient Temperature	Diaphragm Actuated: -20°F (-29°C) Bellows Actuated: -40°F (-40°C)				
Weight	1.5 to 1.8 lbs				

### **Diaphragm Actuated**

Adjustable Pressure Range		Max	timum	Maximum			
		Type 2		Type 5		Working Pressure	
psi	MPa	psi	kPa	psi	kPa	psi	MPa
0-2	0-0.01	0.25	1.72	0.23	1.59	20	0.14
0-5	0-0.05	0.27	1.86	0.50	3.45	20	0.14
0-10	0-0.07	0.34	2.34	0.90	6.21	50	0.35
0-20	0-0.14	0.50	3.45	1.9	13.1	50	0.35
0-50	0-0.35	1.6	11.03	6.0	41.35	250	1.72
0-100	0-7.0	1.9	13.1	8.3	57.23	250	1.72
0-200	0-1.38	4.4	30.34	16.0	110.3	500	3.45
0-300	0-2.07	5.3	36.54	22.0	151.7	500	3.45

#### **Deadband Notes**

The deadbands listed in the tables are the maximum switch differentials when the standard 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

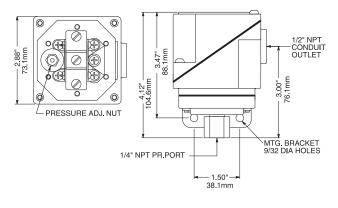
Type 3 High DC Rated - Multiply Type 2 table values by two Type 5 Sub Miniature - 2 SPDT - Use Type 5 table values

Type 6 Gold Contact - Use Type 2 table values

### **Bellows Actuated**

Adjustable Pressure Range		Maximum Deadband			Maximum Working Pressure				
		Type 2		Type 5		Type 2		Type 5	
psi	MPa	psi	kPa	psi	kPa	psi	MPa	psi	MPa
0-10	0-0.69	0.80	5.52	1.5	10.34	300	2.069	300	2.069
0-20	0-0.138	0.90	6.21	2.3	15.86	300	2.069	300	2.069
0-50	0-0.345	1.0	7.00	5.2	35.85	300	2.069	300	2.069
0-100	0-0.69	1.5	10.34	13	89.63	300	2.069	1500	10.35
0-250	0-1.724	6	41.37	27	186.2	1500	10.35	1500	10.35
0-500	0-3.448	8	55.16	58	400.0	1500	10.35	2500	17.24
0-750	0-5.172	16	110.3	77	530.9	2500	17.24	2500	17.24
0-1,000	0-6.897	19	131.0	183	1261.7	2500	17.24	5000	34.48
0-1,500	0-10.345	58	400.0	232	1599.6	5000	34.48	5000	34.48
0-2,000	0-13.793	60	414	240	1654.7	5000	34.48	5000	34.48
0-3,000	0-20.69	66	455.1	-	-	5000	34.48	-	-

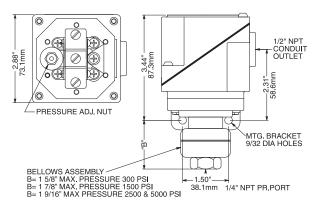
### **Diaphragm Actuated**



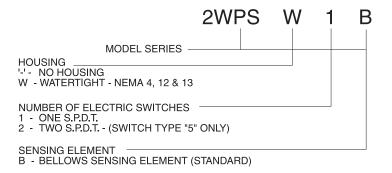
### **Bellows Actuated**

U

2



# Series Number (how to order)



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) 10A - 125 VDC; 3A - 250 VDC
- SUB MINIATURE SWITCH 2 S.P.D.T.
- 5A 125, 250 VAC; 0.5A 125 VDC 6 GOLD CONTACT -
- 1 A 125 VAC

SPECIAL FEATURES

M - 1/2 NPT MALE PIPE MOUNTING
Q - DOUBLE SNAP ACTING BELLEVILLE SPRING - TO PROVIDE POSITIVE SETPOINT

ACCURACY IN HIGH VIBRATION APPLICATIONS

U - ADDITIONAL PAINTING AFTER ASSEMBLY

V - HIGH TEMPERATURE SERVICE - INCREASED FROM 180°F TO 250°F AMBIENT