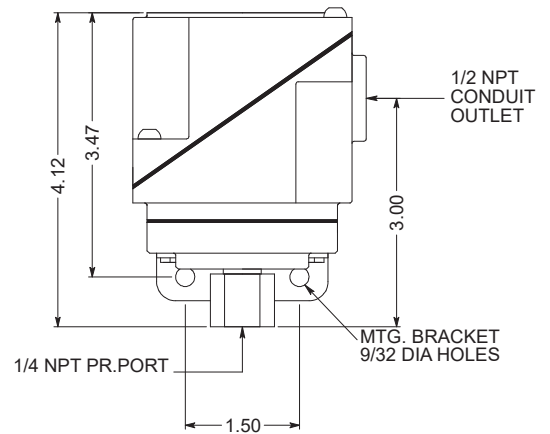
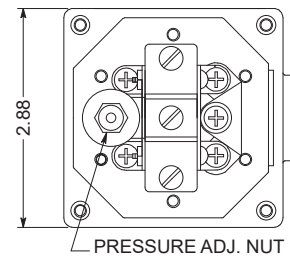




## 2PSW Weather-Tight Pressure Switch Diaphragm Sensing Element

- Ranges from 2-300 psi
- NEMA 4X, 12 & 13 housing
- One or two SPDT contacts
- Various wetted materials available



### GENERAL DESCRIPTION

- Weather-tight cast-aluminum housing
- Frictionless switching mechanism, which amplifies the movement of the switching element, resulting in improved life, repeatability, and lower deadbands
- Available with one or two SPDT electric switches that are independently adjustable
- Removable enclosure cover for easy wiring and adjustment of the vacuum setting. Features s/s screws that retain the cover gasket when the enclosure cover is removed
- Standard vacuum sensing element uses a strong Buna-N elastomer diaphragm (other diaphragm and wetted materials are available)
- Modular design of pressure-sensing elements accommodates high/low and differential pressure using diaphragm, bellows or piston for actuation

### SPECIFICATIONS

#### PHYSICAL DATA (Standard) -see back for special features

- Maximum Ambient Temperature:** 180°F
- Minimum Ambient Temperature:** -20°F
- Pressure Connection:** 1/4 NPT
- Electrical Connection:** 1/2 NPT
- Housing:** Diecast Aluminum - Painted per ASTM B117
- Deadband:** Fixed
- Sensitivity:** 1/2% of range (for SPDT)
- Drift:** <1% of range (100,000 operations)
- Weight:** Approx. 1.5 lbs.
- Contact Ratings:** 15A - 125, 250, 480 VAC
- Port Fitting Material:** Brass
- Trim Material:** Anodized Aluminum
- Diaphragm Material:** Buna N
- Set Point Adjustment:** Screw type, field adjustable from 10 to 100% of range
- No. Contacts:** One or Two S.P.D.T.
- Contact Listings:** UL Recognized

**SOLON MANUFACTURING COMPANY**

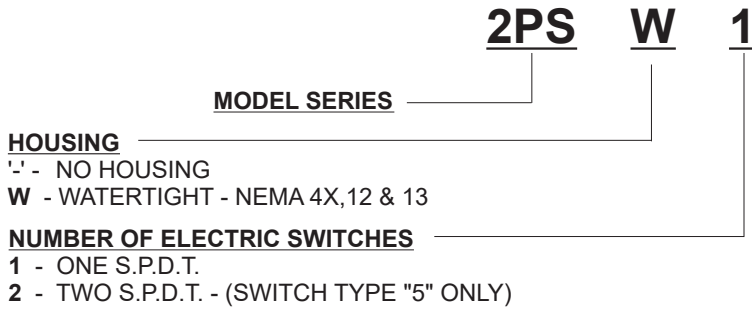
425 Center St. | Chardon, OH 44024  
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# ORDERING A SWITCH

# 2PSW

## Weather-Tight Pressure Switch Diaphragm Sensing Element

### 1. SPECIFY A MODEL NUMBER



#### SPECIAL FEATURES

- M - 1/2 NPT MALE PIPE MOUNTING
- O - HIGH OVERPRESSURE - INCREASES MAX. PRESSURE TO 1000 PSI FOR RANGES 0-2 PSI TO 0-20 PSI; MAX. PRESSURE IS 1500 PSI FOR RANGES 0-50 PSI AND UP
- SS - STAINLESS STEEL WETTED TRIM MATERIAL
- SN - BRASS WETTED TRIM MATERIAL
- SI - PTFE WETTED TRIM MATERIAL
- SY - PVC WETTED TRIM MATERIAL
- T - PTFE PROTECTED DIAPHRAGM
- Z - VITON DIAPHRAGM MATERIAL

#### 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 11 AMP, 125, 250VAC; 5A-30 VDC
- 5 - 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 SUCH AS STAINLESS TAGGING, OR SPECIAL WETTED PARTS; KYNAR, KALREZ, HASTELLOY, ETC. ARE AVAILABLE ON REQUEST. CONSULT FACTORY FOR CAPABILITIES AND PRICING FOR ANY FEATURES NOT SHOWN.

### 2. SPECIFY A RANGE

ADJUSTABLE PRESSURE RANGE	TYPICAL DEADBAND*		MAX. WORKING PRESSURE
	TYPE "2"	TYPE "5"	
0-2 PSI	.25 PSI	.23 PSI	20 PSI
0-5 PSI	.27 PSI	.50 PSI	20 PSI
0-10 PSI	.34 PSI	.90 PSI	50 PSI
0-20 PSI	.50 PSI	1.9 PSI	50 PSI
0-50 PSI	1.6 PSI	6 PSI	250 PSI
0-100 PSI	1.9 PSI	8.3 PSI	250 PSI
0-200 PSI	4.4 PSI	16 PSI	500 PSI
0-300 PSI	5.3 PSI	22 PSI	500 PSI

\* MAXIMUM DEADBANDS MAY BE 50% GREATER

### DEADBAND NOTES

The deadbands listed in the tables are the typical switch differentials when the standard (Type "2" or Type "5") 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 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 "4"** - Hermetically Sealed Switch- Use TYPE 2 table value UL-recognized component, guide WSQ2, File E85076. All stainless steel construction.

**Type "5"** - Sub Miniature - 2 S.P.D.T. - Use TYPE 5 table values.

**Type "6"** - Gold Contact - Use TYPE 2 table values.

### INSTALLATION NOTES

**Orientation** - The 2PS 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). Single switch units have screw terminals while dual switch versions use a screw terminal block.

**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. Factory setting is available at no charge.

### Wiring Schematic

