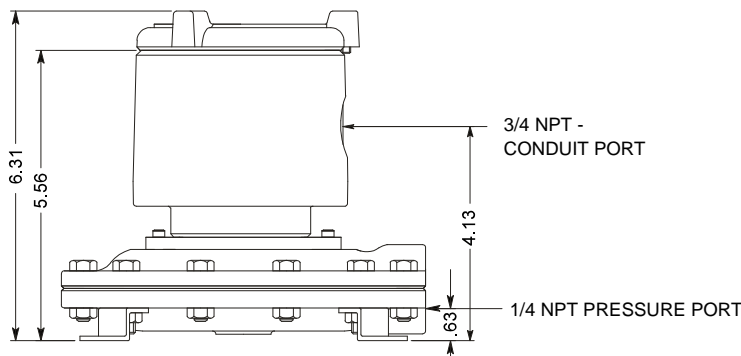
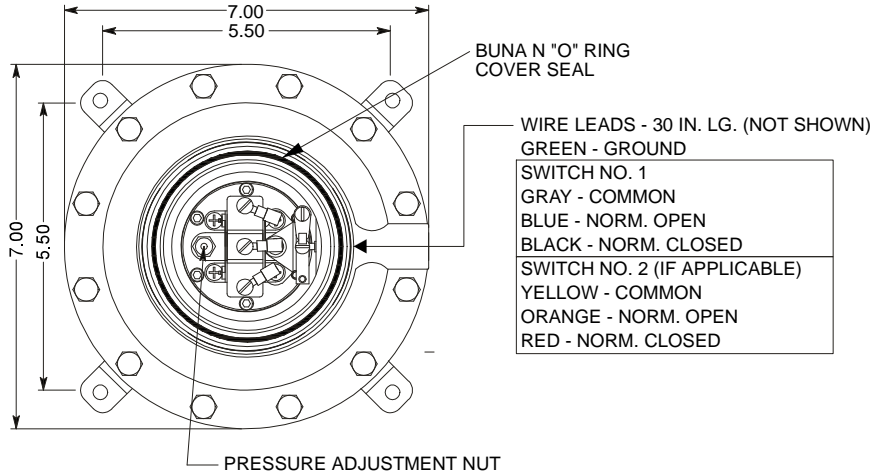




- Explosion Proof Housing (NEMA 4, 7, & 9)
- UL Listed Class I, Div. I, Gr. A, B, C, D
- Ranges from 5 to 200 in. W.C.
- One or Two SPDT Contacts
- Various Wetted Materials Available



## 47PSX FEATURES

The Model Series 47PSX Pressure Switch is a rugged, versatile switch for low pressure applications. The cast aluminum housing is Explosion Proof and Watertight while the switching mechanism is simple and proven. Pressure sensing elements outside the flame path allow a wider variety of wetted materials than would otherwise be possible. Proper selection of wetted materials allows this switch to be used in almost any corrosive process. See the Special Features section on the opposite side for a listing of available materials and options.

### **MANY OTHER 4PSX MODELS ARE AVAILABLE...**

The versatile design of the 4PSX series allows a wide variety of sensing element arrangements and materials to be used in their construction. Diaphragm, Bellows, and Piston sensing elements are available. These sensing elements can be configured for Pressure, Vacuum, and Differential Pressure applications. Models with these features and with ranges from low pressure to high pressure are described in separate catalog sheets to make selection easy.

## MODEL SERIES 47PSX Pressure Switch Diaphragm Sensing Element



## 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:** 3/4 NPT

**Housing:** 355/356 Cast Aluminum

**Deadband:** Fixed

**Sensitivity:** 1% of range (for 1 SPDT)

**Drift:** <2% of range (100,000 operations)

**Weight:** Approx. 8 lbs.

**Contact Ratings:** 15A - 125, 250 VAC (1 S.P.D.T.)

**OR:** 5A - 125, 250 VAC (2 S.P.D.T.)

**Port Material:** Aluminum

**Diaphragm Material:** Buna N

**Set Point Adjustment:** Screw type, field adjustable

**No. Contacts:** One or Two S.P.D.T.

**Contact Listings:** UL Recognized, CSA Certified



All models shown are Underwriters Laboratories, Inc. listed for use in Class I, Groups A, B, C, & D; Class II, Groups E, F, & G hazardous locations under File E65371.

## Solon Manufacturing Company

425 Center Street, P.O. Box 207, Chardon, Ohio 44024

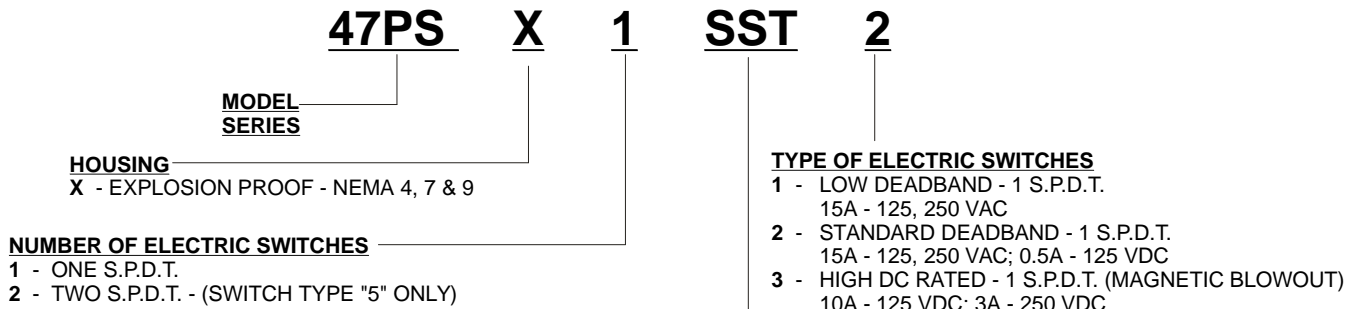
(440) 286-7149 800-323-9717 FAX (440) 286-9047

Email: [solon@solonmfg.com](mailto:solon@solonmfg.com)

# ORDERING A SWITCH

# MODEL SERIES 47PSX Pressure Switch Diaphragm Sensing Element

## 1. SPECIFY A MODEL NUMBER



### SPECIAL FEATURES\*

- "-" - NO SPECIAL FEATURES - STANDARD CONSTRUCTION
- G - EXTRA SENSITIVE (DOUBLE DIAPHRAGM)
- J - SAFETY SEAL - BETWEEN MAIN DIAPHRAGM AND SWITCH HOUSING
- M - 1/2 NPT MALE PIPE MOUNTING
- SS - STAINLESS STEEL WETTED TRIM MATERIAL
- SN - BRASS WETTED TRIM MATERIAL
- SI - TEFLON WETTED TRIM MATERIAL (15 PSI MAX. PR.)
- SY - PVC WETTED TRIM MATERIAL
- T - TEFLON PROTECTED DIAPHRAGM
- U - SPECIAL EPOXY PAINT
- Z - VITON DIAPHRAGM MATERIAL

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

## 2. SPECIFY A RANGE

ADJUSTABLE PRESSURE RANGE	MAXIMUM DEADBAND		MAX. WORKING PRESSURE
	TYPE "2"	TYPE "5"	
0-5 WC	1.42 WC	1.8 WC	25 PSI
0-10 WC	1.49 WC	2.2 WC	25 PSI
0-20 WC	1.55 WC	3.8 WC	25 PSI
0-50 WC	1.68 WC	5.3 WC	25 PSI
0-100 WC	2.3 WC	8.5 WC	25 PSI
0-150 WC	3.4 WC	12.5 WC	25 PSI
0-200 WC	3.8 WC	N/A	25 PSI

## DEADBAND NOTES

The deadbands listed in the tables are the maximum switch differentials when the standard (type "2" or type "5") microswitch is used.

Deadband is affected by the type of microswitch used. Each type of microswitch's effect on deadband is as follows:

**Type "1" - Low Deadband** - Use 1/2 the TYPE 2 table values.

**Type "2" - Std. Deadband** - Use table values.

**Type "3" - High DC Rated** - Multiply TYPE 2 table values by 2.

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

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

## INSTALLATION NOTES

**Orientation** - The 47PSX 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 are provided pre-wired with 30" leads. To reduce the risk of explosion, conduit runs must have a sealing fitting connected within 18 inches of the enclosure.

**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

