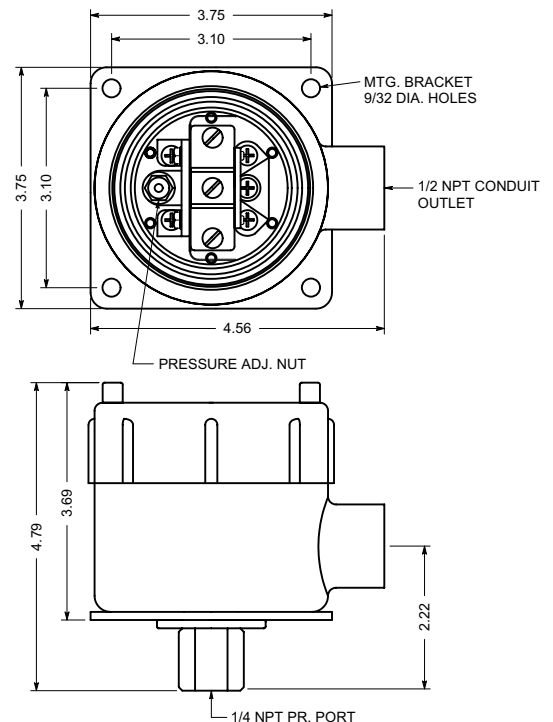




- Ranges from 2 to 300 PSI
- NEMA 7 Class I, Groups C & D
- NEMA 9 Class II, Groups E, F & G
- One or Two SPDT Contacts
- Various Wetted Materials Available



MODEL SERIES 2PSX Pressure Switch Diaphragm Sensing Element



GENERAL DESCRIPTION

The 2PSX employs Solon's unique, rugged, and sensitive switching mechanism. Unlike most "inline" pressure switch designs, the Solon mechanism is frictionless and amplifies the movement of the sensing element. This results in improved life, repeatability, and lower deadbands. The 2PSX mechanism can be supplied with one S.P.D.T. electric switch or two S.P.D.T. electric switches that are independently adjustable. With the cover of the enclosure removed, the terminals of the electric switch(es), and the pressure adjustment(s) are exposed for easy wiring and adjustment of the pressure setting. Other useful options can easily be specified with this model. See the Special Features section on page 2 for special wetted materials and options for particular applications.

OTHER 2PSX MODELS ARE AVAILABLE...

The modular design of pressure-sensing elements used in the 2PSX series switches allows a variety of models for different pressure applications. These applications include High Pressure, Vacuum, and Vacuum-Pressure models using diaphragms and bellows for actuation. See individual information sheets describing these models.

SPECIFICATIONS

PHYSICAL DATA (Standard)

-see page 2 for special features

Maximum Ambient Temperature: 180°F

Minimum Ambient Temperature: -20°F

Pressure Connection: 1/4 NPT

Electrical Connection: 1/2 NPT

Housing: Cast Aluminum

Deadband: Fixed

Sensitivity: 1/2% of range (for one SPDT switch)

Drift: <1% of range (100,000 operations)

Weight: Approx. 2.0 lbs.

Contact Ratings: 15A - 125, 250, 480 VAC

Port Fitting Material: Stainless Steel

Trim Material: Anodized 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

Solon Manufacturing Company

425 Center Street, P.O. Box 207, Chardon, Ohio 44024
(440) 286-7149 800-323-9717 FAX (440) 286-9047
www.solonmfg.com

ORDERING A SWITCH

MODEL SERIES 2PSX

Pressure Switch

Diaphragm Sensing Element

1. SPECIFY A MODEL NUMBER

2PSX 1 SST 2

MODEL SERIES ————

NUMBER OF ELECTRIC SWITCHES ————

SPECIAL FEATURES ————

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

5 - SUB MINIATURE SWITCH - 2 S.P.D.T.
5A - 125, 250 VAC; 0.5A - 125 VDC

6 - GOLD CONTACT -
1 A - 125 VAC

1 - ONE S.P.D.T.
2 - TWO S.P.D.T. - (SWITCH TYPE "5" ONLY)

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
Q - DOUBLE SNAP ACTING BELLEVILLE SPRING - TO PROVIDE POSITIVE SETPOINT ACCURACY IN HIGH VIBRATION APPLICATIONS
SS - STAINLESS STEEL WETTED TRIM MATERIAL
SN - BRASS WETTED TRIM MATERIAL
T - TEFLON PROTECTED DIAPHRAGM
U - ADDITIONAL PAINTING AFTER ASSEMBLY
V - HIGH TEMPERATURE SERVICE - INCREASED FROM 180°F TO 250°F AMBIENT
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 CAPABILITIES AND PRICING FOR ANY FEATURES NOT SHOWN.

2. SPECIFY A RANGE

ADJUSTABLE PRESSURE RANGE	MAXIMUM 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

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 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 TYPE 2 table values.

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

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

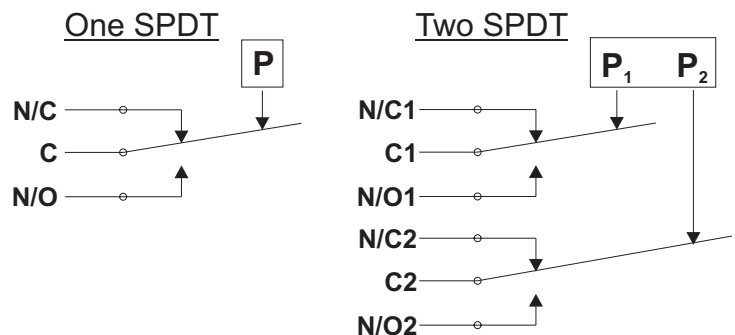
Orientation - The 2PSX will operate satisfactorily in any position, however, mounting the device vertically will allow the easiest adjustability and reduce sediment in the pressure chamber.

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



SOLON 
800-323-9717