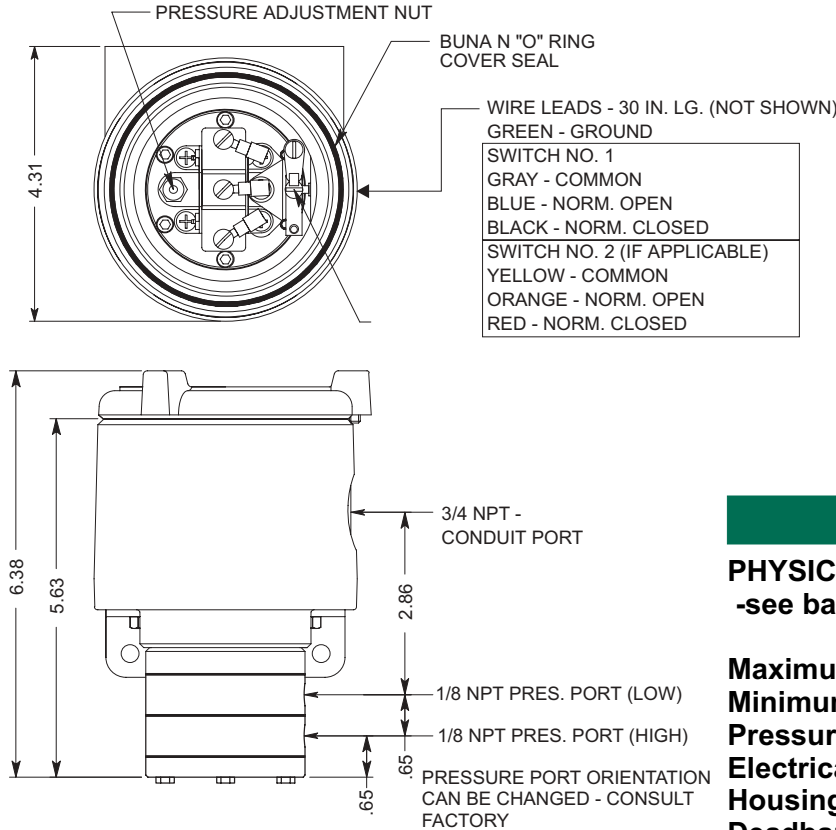




- Explosion Proof Housing (NEMA 4, 7, & 9)
- UL Listed Class I, Div. I, Gr. A, B, C, D
- Ranges from 10 to 100 PSID
- One or Two SPDT Contacts
- Various Wetted Materials Available

MODEL SERIES 42PSXD Differential 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 Connections: 1/8 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. 4 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.

42PSXD FEATURES

The Model Series 42PSXD Differential Pressure Switch is a rugged, versatile switch. 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 also be configured for Pressure and Vacuum applications. Models with these features and with ranges from low pressure to high pressure are described in separate catalog sheets.



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

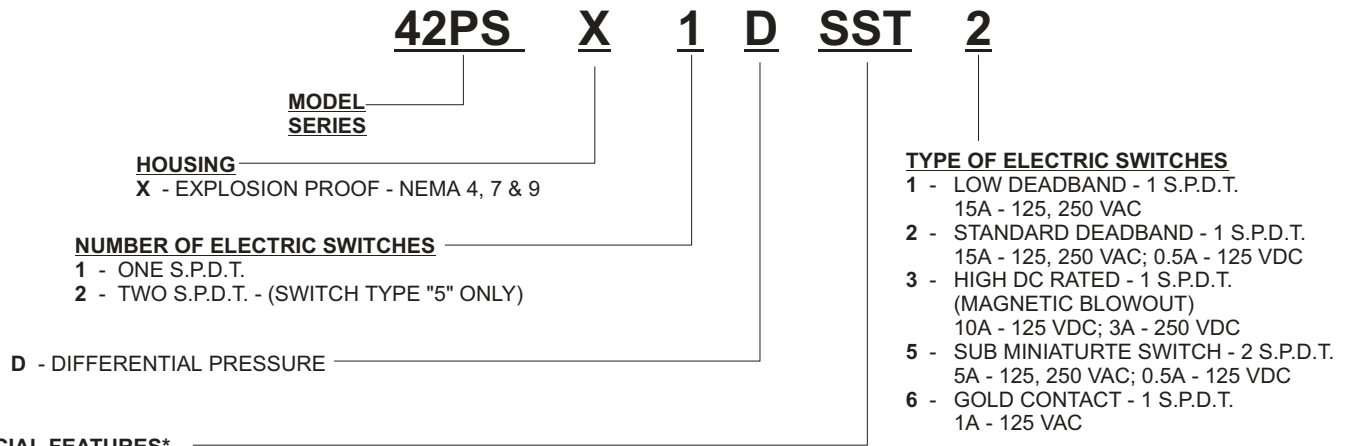
425 Center Street, P.O. Box 207, Chardon, Ohio 44024

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

Email: solon@solonmfg.com

ORDERING A SWITCH

MODEL SERIES 42PSXD Differential Pressure Switch Diaphragm Sensing Element



SPECIAL FEATURES*

- O - HIGH OVER PRESSURE- INCREASES MAX. WORKING PRESSURE TO 300 PSI
- 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"	
0-10 PSID	0.6 PSID	1.5 PSID	100 PSI
0-20 PSID	0.8 PSID	2.8 PSID	100 PSI
0-50 PSID	1.3 PSID	4.8 PSID	100 PSI
0-100 PSID	1.9 PSID	N/A	100 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 42PSXD 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 Connections - 1/8 NPT female is standard.

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

