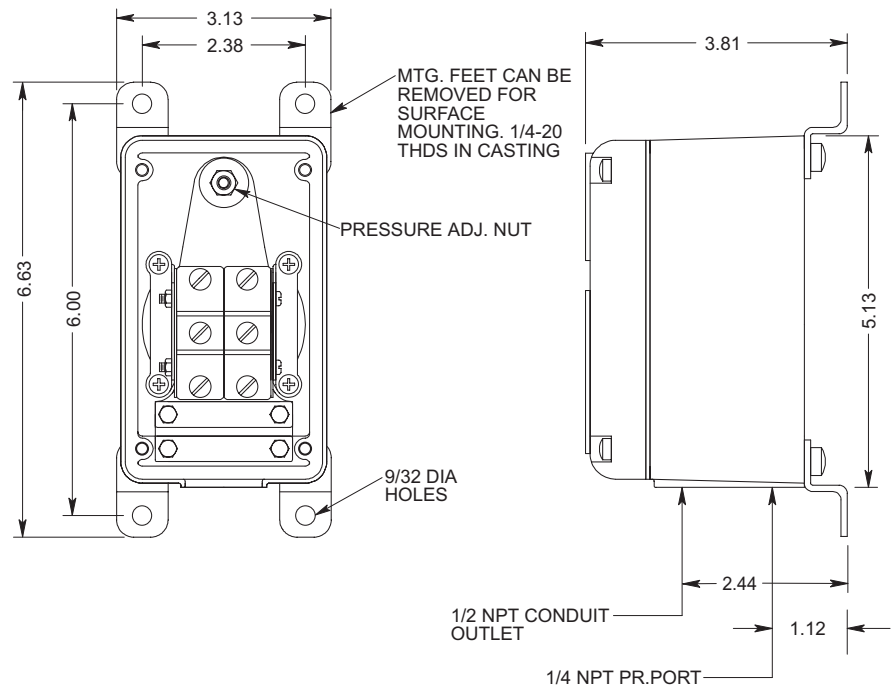




- Ranges from 0-15 PSI To 0-300 PSI
- Rugged NEMA 4X, 12 & 13 Housing
- One or Two SPDT Contacts
- Versatile Mechanism Design
- Adjustable Deadband Available

MODEL SERIES 5PS Pressure Switch Diaphragm Sensing Element



GENERAL DESCRIPTION

The Model Series 5PS Pressure Switch features a rugged cast aluminum housing and cover incorporating Solon's standard "frictionless" switching mechanism actuated by a diaphragm. Either one or two S.P.D.T. electric switch/s are available in a variety of configurations. Some of these configurations are:

- Tandem settings for D.P.D.T. operation.
- Independent adjustment for High-Low operation.
- Adjustable switch differential (dead band).
- Manual reset on either increasing or decreasing pressure.

In addition many switching configurations can be supplied with electric switches that have:

- Low switch differentials (dead band).
- High direct current ratings.
- Gold contacts
- Hermetically sealed contacts.

The standard pressure-sensing element uses a strong Buna N elastomer diaphragm. See the Special Features section on page 2 for other diaphragm materials and options that are useful for particular applications.

The standard housing is NEMA 4X, 12 and 13.

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)

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

Weight: Approx. 3 lbs.

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

Port Material: Aluminum

Diaphragm Material: Buna N

Set Point Adjustment: Screw type, field adjustable

No. Contacts: 1 or 2 S.P.D.T or 1 D.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

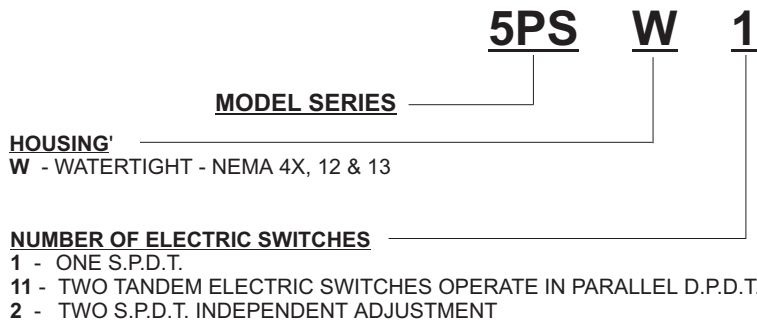
ORDERING A SWITCH

MODEL SERIES 5PS

Pressure Switch

Diaphragm Sensing Element

1. SPECIFY A MODEL NUMBER



SPECIAL FEATURES

- "-" - NO SPECIAL FEATURES
- A - ADJUSTABLE DEADBAND
- E - EXTERNAL PRESSURE ADJUSTMENT
- EE - TWO EXTERNAL PRESSURE ADJUSTMENTS
- L - ONE INDICATOR LIGHT
- LL - TWO INDICATOR LIGHTS
- M - MALE PIPE MOUNTING ½ NPT
- O - HIGH OVERPRESSURE DIAPHRAGM - INCREASES MAX. PRESSURE TO 1000 PSI
- Q - DOUBLE SNAP ACTION (BELLEVILLE SPRING)
- R> - MANUAL RESET, SWITCH ON INCR. PR.
- R< - MANUAL RESET, SWITCH ON DECR. PR.
- T - TEFLON PROTECTED DIAPHRAGM
- U - ADDITIONAL PAINTING AFTER ASSEMBLY
- V - HIGH TEMPERATURE SERVICE
- Z - VITON DIAPHRAGM

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 SWITCH
1A - 125VAC; 25A RES, 10A IND, 5A MOTOR
3A LAMP-28VDC
- 6 - GOLD CONTACT -
1 A - 125 VAC

* SPECIAL FEATURES SUCH AS STAINLESS TAGGING, KALREZ DIAPHRAGM, HIGH/LOW SWITCHING, 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 PSI		MAX. WORKING PRESSURE
	TYPE "1"	TYPE "2"	
0-15 PSI	.3	.6	50 PSI
0-30 PSI	.4	.8	100 PSI
0-60 PSI	.5	1.0	200 PSI
0-100 PSI	1.0	2.0	300 PSI
0-150 PSI	1.0	2.5	300 PSI
0-200 PSI	2.0	3.5	500 PSI
0-300 PSI	3.0	5.0	500 PSI

DEADBAND NOTES

The deadbands listed in the tables are the maximum switch differentials when one S.P.D.T. Type "1" or Type "2" electric switch is used.

Deadband is affected by the type of electric switch and the number of electric switches used. Each type of electric switch's effect on deadband is as follows:

Type "1" - *Low Deadband* - Use 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* - Multiply TYPE 2 table values by six.

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

For one D.P.D.T. or two S.P.D.T. switches multiply calculated value from above by 1.5 to 2.

INSTALLATION NOTES

Orientation - The 5PS 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).

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

