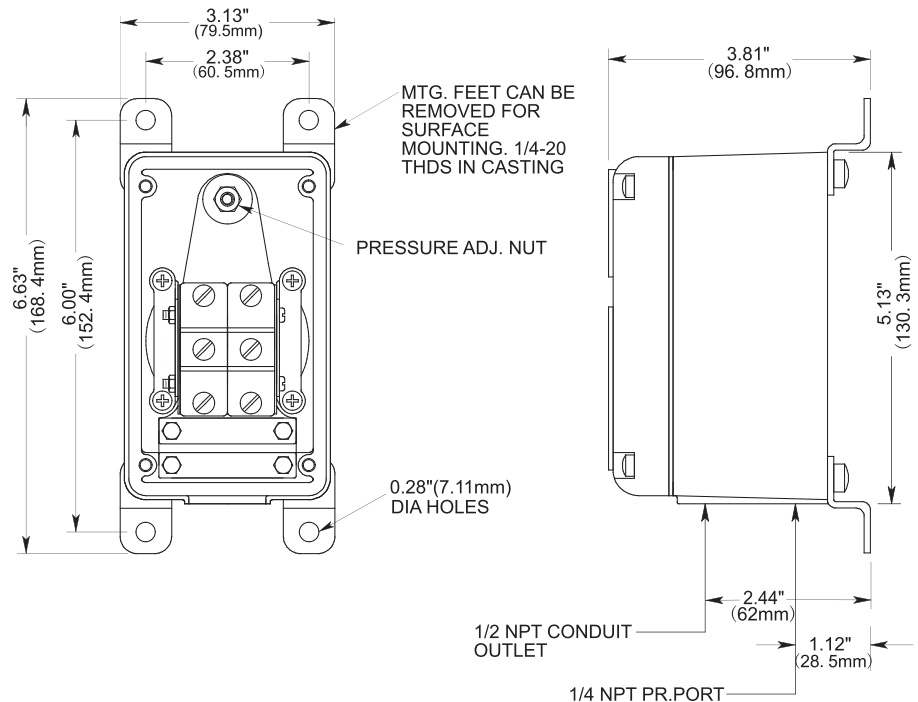


- Ranges from 0-15 PSI (0-0.07 MPa) to 0-300 PSI (0-2.07 MPa)
- Rugged NEMA 4X, 12 & 13 Housing Std
- One or Two SPDT Contacts, Two DPDT Contacts.
- Versatile Mechanism Design
- Adjustable Deadband Available



GENERAL DESCRIPTION

The Model Series 5WPS Pressure Switch features a rugged cast aluminum housing and cover incorporating Winters standard accurate switching mechanism actuated by a diaphragm. Either one or two S.P.D.T. electric switch(es) 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 (deadband).
- Manual reset on either increasing or decreasing Pressure.

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

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

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

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

SPECIFICATIONS

PHYSICAL DATA (Standard)

-see back for special features

Maximum Ambient Temperature: 180°F/82°C

Minimum Ambient Temperature: -20°F/-29°C

Pressure Connection: 1/4 NPT female is standard. 1/2 NPT male is available ("M" option).

Electrical Connection: 1/2 NPT

Housing: Cast Aluminum

Deadband: Fixed

Sensitivity: 1/2% of range (for 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, TEFLON Protected

Set Point Adjustment: Screw type, field adjustable

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

Contact Listings: UL recognized, CSA certified

ORDERING A SWITCH

1. SPECIFY A MODEL NUMBER

5WPS W 1 A 2

MODEL SERIES _____

HOUSING*
W - WATERTIGHT - NEMA 4X, 12 & 13

NUMBER OF ELECTRIC SWITCHES
1 - ONE S.P.D.T.
11 - TWO TANDEM ELECTRIC SWITCHES OPERATE IN PARALLEL D.P.D.T.
2 - TWO S.P.D.T. INDEPENDENT ADJUSTMENT

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 1/2 NPT
O - HIGH OVERPRESSURE DIAPHRAGM - INCREASES MAX. PRESSURE TO 1000 PSI(7.0MPa)
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 - SPECIAL EPOXY PAINT

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

* 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"			
PSI	MPa	PSI	kPa	PSI	kPa	PSI	MPa
0-15	0-0.104	0.3	2.07	0.6	4.14	50	0.35
0-30	0-0.207	0.4	2.76	0.8	5.52	100	0.69
0-60	0-0.414	0.5	3.45	1.0	6.90	200	1.38
0-100	0-0.69	1.0	6.90	2.0	13.8	300	2.07
0-150	0-1.035	1.0	6.90	2.5	17.2	300	2.07
0-200	0-1.38	2.0	13.8	3.5	24.1	500	3.45
0-300	0-2.07	3.0	20.7	5.0	34.5	500	3.45

INSTALLATION NOTES

Orientation - The 5WPS 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).

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.

DEADBAND NOTES

The deadbands listed in the tables are the maximum switch differentials when the Type 1 or Type 2 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 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

Wiring Schematic

