

5WPS Series

PRESSURE SWITCH - DIAPHRAGM ACTUATED



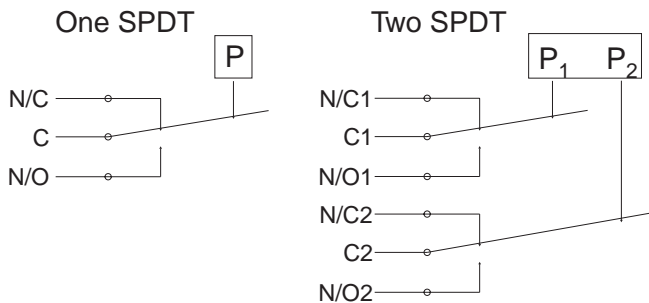
- Ranges from 0-15 PSI To 0-300 PSI
- Rugged NEMA 4X, 12 & 13 Housing Std.
- One or Two SPDT Contacts
- Versatile Mechanism Design
- Adjustable Deadband Available

Description

The 5WPS Pressure Switch features a rugged cast aluminum housing (NEMA 4X, 12 and 13 standard) 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 (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. Other diaphragm materials are available.

Common applications include: pumping stations, remote areas where a status high can be seen, ideal for Hi/Lo level control (requiring dual elements).

Wiring Schematic



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).

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. Adjustment setting is available at no charge.

Specifications - 5WPS (Diaphragm Actuated)

Housing:	Cast Aluminum
Pressure Connection:	1/4 NPT
Electrical Connection:	1/2 NPT
Port Material:	Aluminum
Diaphragm Material:	Buna N
Deadband:	Fixed
Sensitivity:	1/2% of range (for SPDT)
Drift:	<1% of range (100,000 operations)
Contact Ratings:	15A - 125, 250, 480 VAC
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
Maximum Ambient Temperature:	180°F
Minimum Ambient Temperature:	-20°F
Weight:	Approx. 3 lbs



Corporate Office: 121 Railside Road • Toronto • ON • M3A 1B2 • (416) 444-2345 • Fax: (416) 444-8979

U.S.A. Office: 600 Ensminger Road • Buffalo • NY • 14150 • (716) 874-8700 • Fax: (716) 874-8800

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5WPS Series

PRESSURE SWITCH - DIAPHRAGM ACTUATED

How to Order: Specify Product Code

5WPS W 1 A 2

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

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

V - HIGH TEMPERATURE SERVICE

Z - VITON DIAPHRAGM

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 WINTERS FOR CAPABILITIES AND PRICING FOR ANY FEATURES NOT SHOWN.

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 switch used. Each type of switch's effect on deadband is as follows:

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

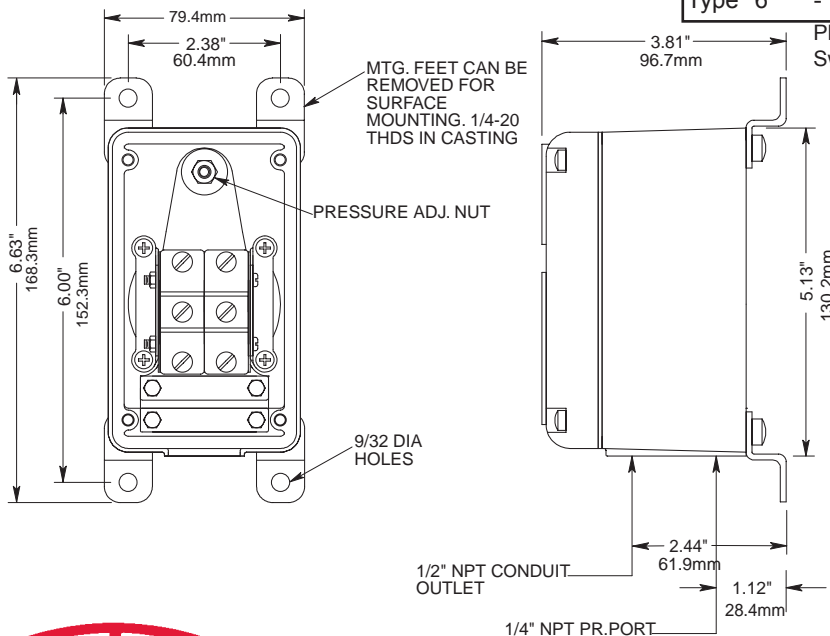
Type "2" - Std. Deadband - Use table values.

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.

Please note that Type "5" is the only available option on 2WPS Switches that requires two Electric Switches.



Ranges

DIAPHRAGM ACTUATED

Adjustable Pressure Range	Maximum DEADBAND		Maximum Working Pressure
	Type "2"	Type "5"	
PRESSURE			
0-15 PSI	.3#	.6#	50
0-30 PSI	.4	.8	100
0-60 PSI	.5	1.0	200
0-100 PSI	1.0	2.0	300
0-150 PSI	1.0	2.5	300
0-200 PSI	2.0	3.5	500
0-300 PSI	3.0	5.0	500

HIGH OVER-PRESSURE

0-15 PSI	.3#	.6#	1000
0-30 PSI	0.4	.8	1000
0-60 PSI	0.5	1.0	1000
0-100 PSI	0.8	1.5	1000



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