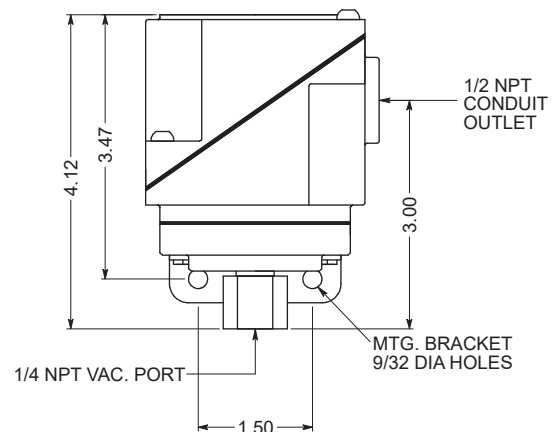
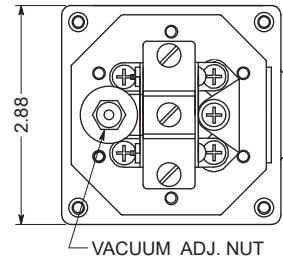




2PSVAC Vacuum Switch Diaphragm Sensing Element

- Ranges from 5 to 30 IN/HG and -30/0/30 IN/HG
- Rugged NEMA 4X, 12 & 13 housing
- One or two SPDT contacts
- Various wetted materials available



GENERAL DESCRIPTION

- Cast-aluminum housing available in explosion-proof or weather-tight options
- Frictionless switching mechanism, which amplifies the movement of the switching element, resulting in improved life, repeatability, and lower deadbands
- Available with one or two SPDT electric switches that are independently adjustable
- Removeable enclosure cover for easy wiring and adjustment of the vacuum setting. Features s/s screws that retain the cover gasket when the enclosure is removed
- Standard vacuum sensing element uses a strong Buna-N elastomer diaphragm (other diaphragm and wetted materials are available)
- Modular design or pressure-sensing elements accommodates high/low and differential pressure using diaphragm, bellows, or piston for actuation

SPECIFICATIONS

PHYSICAL DATA (Standard) -see page 2 for special features

- Maximum Ambient Temperature:** 180°F
- Minimum Ambient Temperature:** -20°F
- Vacuum Connection:** 1/4 NPT
- Electrical Connection:** 1/2 NPT
- Housing:** Diecast Aluminum - Painted per ASTM B117
- Deadband:** Fixed
- Sensitivity:** 1/2% of range (for one SPDT switch)
- Drift:** <1% of range (100,000 operations)
- Weight:** Approx. 1.5 lbs.
- Contact Ratings:** 15A - 125, 250, 480 VAC
- Port Fitting Material:** Brass
- Trim Material:** Anodized Aluminum
- Diaphragm Material:** Buna N
- Set Point Adjustment:** Screw type, field adjustable from 10 to 100% of range
- No. Contacts:** One or Two S.P.D.T.
- Contact Listings:** UL Recognized

SOLON MANUFACTURING COMPANY

425 Center St. | Chardon, OH 44024
440.286.7149 | 800.323.9717 | Fax 440.286.9047
solon@solonmfg.com | www.solonmfg.com

ORDERING A SWITCH

2PSVAC

Vacuum Switch

Diaphragm Sensing Element

1. SPECIFY A MODEL NUMBER

2PS **W** **1** **SSU** **2**

MODEL SERIES

HOUSING

"-" - NO HOUSING

W - WATERTIGHT - NEMA 4X, 12 & 13

NUMBER OF ELECTRIC SWITCHES

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

SS - STAINLESS STEEL WETTED TRIM MATERIAL

SN - BRASS WETTED TRIM MATERIAL

V - HIGH TEMPERATURE SERVICE - INCREASED FROM 180°F TO 250°F AMBIENT

Z - VITON DIAPHRAGM MATERIAL

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 11 AMP, 125, 250 VAC; 5A-30 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

* SPECIAL FEATURES SUCH AS STAINLESS TAGGING, OR SPECIAL WETTED PARTS; TEFLON, PVC, KYNAR, KALREZ, HASTELLOY, ETC. ARE AVAILABLE ON REQUEST. CONSULT FACTORY FOR CAPABILITIES AND PRICING FOR ANY FEATURES NOT SHOWN.

2. SPECIFY A RANGE

ADJUSTABLE VACUUM RANGE	TYPICAL DEADBAND*		MAX. WORKING PRESSURE
	TYPE "2"	TYPE "5"	
0-5 IN/HG	.53 HG	N/A	20 PSI
0-15 IN/HG	.67 HG	N/A	20 PSI
0-30 IN/HG	.90 HG	2.0 HG	20 PSI
-30/0/30 IN/HG	1.4 HG	N/A	20 PSI

* MAXIMUM DEADBANDS MAY BE 50% GREATER.

DEADBAND NOTES

The deadbands listed in the tables are the typical 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 "4" - *Hermetically Sealed Switch* - Use TYPE 2 table value UL-recognized component, guide WSQ2, File E85076. All stainless steel construction.

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 2PS will operate satisfactorily in any position, however, mounting the device vertically will allow the easiest adjustability and reduce sediment in the vacuum 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.

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

Adjustment - Turn vacuum adjustment nut(s) counterclockwise to increase setpoint. Detailed installation & calibration instructions are provided for every shipment. Factory setting is available at no charge.

Wiring Schematic

