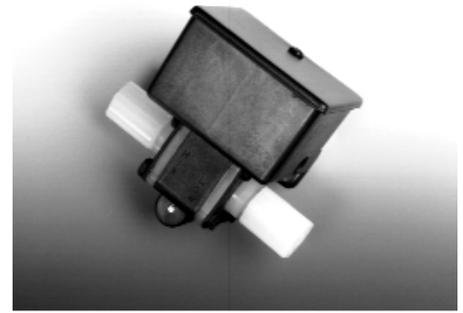


# PSW-180 TEFLON SERIES

## Differential Pressure Switches



INSTRUCTION  
SHEET

M3569/0500

### GENERAL

PSW-180 Teflon® differential pressure switch utilizes a diaphragm sensor to monitor pressure changes. The switch utilizes dual diaphragm sensors to monitor the difference in pressure between two sources. PFA Teflon® wetted ports insure corrosion resistance in highly corrosive applications and is well suited for high purity applications.

## Part I - Installation

#### Tools Needed

Applicable Screwdriver

Flaretek® tubing cutter 213-14 or equal

Flaretek® flaring tool 213-58 or equal

Flaretek® tools may be ordered from

Flouroware, Inc., Phone (612) 448 - 3131

### MOUNTING



LOCATE SWITCH WHERE VIBRATION, SHOCK, AND AMBIENT TEMPERATURE FLUCTUATIONS ARE MINIMAL.

The control can be mounted in any position. Locate where ambient temperature is above 30°F and below 160°F.

#### Surface Mounting

Insert two #6 screws through mounting ear holes on 2" centers (recommended mounting for maximum vibration resistance). Follow directions for making pressure connection.

#### Pipe Mounting

Mount unit from its port(s). Follow directions for making pressure connection.



Figure 1

#### Making Pressure Connection

Use proper tools and prepare tubing per manufacturers recommendations. Cut tubing. Slip nut over tubing. Flare tubing. Press tubing onto pressure connection, making certain tubing is seated on pressure connection shoulder. Tighten nut, hand tight, onto pressure connection (see Figure 1).

Minimum torque requirement for 1/4" nut is 5 inch • pounds (0.57 Newton • Meters). Be sure to connect high pressure source to port labeled "HIGH." Connect low pressure source to "LOW."



NEVER TIGHTEN BY TURNING THE CONTROL INTO THE FITTING.



DO NOT USE A WRENCH. FITTING MUST BE HAND TIGHTENED ONLY, OVER TIGHTENING MAY DAMAGE THE PORT.

### WIRING



ALL LIVE SUPPLY CIRCUITS MUST BE DISCONNECTED BEFORE WIRING THE CONTROL. CONNECT THE CONDUIT TO THE HOLE IN ACCORDANCE WITH NATIONAL AND LOCAL CODES. MAXIMUM RECOMMENDED WIRE SIZE IS 16 AWG.

Unscrew terminal just enough to put stripped wire under terminal block clamp. Nominal torque value for terminal block screws is 9.0 in-lbs.

Conduit hub is to be connected to conduit before conduit is connected to enclosure.

## Part II - Adjustments

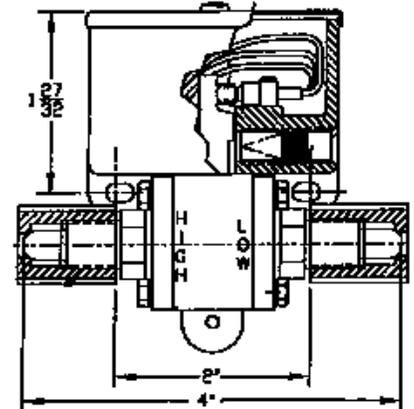
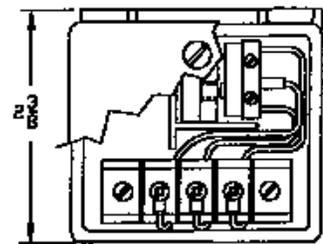
#### Tools Needed

Flat blade screwdriver

Use screwdriver to turn external adjusting screw on the side. Turn "in" (clockwise) to increase pressure setting. For best setting accuracy, set the

switch using the actual working pressures encountered in the application.

### Dimensions



All dimensions are stated in inches unless noted.



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Customer Service: 1-800-622-2378 / 1-800-622-BEST®  
Engineering Service: 1-800-872-9436 / 1-800-USA-WHEN®  
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**WARNING:** These products are not designed for use in, and should not be used for, patient-connected applications.



## WARRANTY/DISCLAIMER

OMEGA ENGINEERING, INC. warrants this unit to be free of defects in materials and workmanship for a period of **13 months** from date of purchase. OMEGA's WARRANTY adds an additional one (1) month grace period to the normal **one (1) year product warranty** to cover handling and shipping time. This ensures that OMEGA's customers receive maximum coverage on each product.

If the unit malfunctions, it must be returned to the factory for evaluation. OMEGA's Customer Service Department will issue an Authorized Return (AR) number immediately upon phone or written request. Upon examination by OMEGA, if the unit is found to be defective, it will be repaired or replaced at no charge. OMEGA's WARRANTY does not apply to defects resulting from any action of the purchaser, including but not limited to mishandling, improper interfacing, operation outside of design limits, improper repair, or unauthorized modification. This WARRANTY is VOID if the unit shows evidence of having been tampered with or shows evidence of having been damaged as a result of excessive corrosion; or current, heat, moisture or vibration; improper specification; misapplication; misuse or other operating conditions outside of OMEGA's control. Components which wear are not warranted, including but not limited to contact points, fuses, and triacs.

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Direct all warranty and repair requests/inquiries to the OMEGA Customer Service Department. BEFORE RETURNING ANY PRODUCT(S) TO OMEGA, PURCHASER MUST OBTAIN AN AUTHORIZED RETURN (AR) NUMBER FROM OMEGA'S CUSTOMER SERVICE DEPARTMENT (IN ORDER TO AVOID PROCESSING DELAYS). The assigned AR number should then be marked on the outside of the return package and on any correspondence.

The purchaser is responsible for shipping charges, freight, insurance and proper packaging to prevent breakage in transit.

FOR **WARRANTY** RETURNS, please have the following information available BEFORE contacting OMEGA:

1. Purchase Order number under which the product was PURCHASED,
2. Model and serial number of the product under warranty, and
3. Repair instructions and/or specific problems relative to the product.

FOR **NON-WARRANTY** REPAIRS, consult OMEGA for current repair charges. Have the following information available BEFORE contacting OMEGA:

1. Purchase Order number to cover the COST of the repair,
2. Model and serial number of the product, and
3. Repair instructions and/or specific problems relative to the product.

OMEGA's policy is to make running changes, not model changes, whenever an improvement is possible. This affords our customers the latest in technology and engineering.

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