

PSW-180 SERIES

Differential Pressure Switches



INSTRUCTION
SHEET

M-1477/0500

GENERAL

The PSW-180 differential pressure switch utilizes dual diaphragm sensors to monitor the difference in pressure between two sources.

Part I - Installation

Tools Needed

- Screwdriver to accommodate customer-supplied mounting screws
- Adjustable wrenches (2)

MOUNTING



LOCATE SWITCH WHERE VIBRATION, SHOCK, AND AMBIENT TEMPERATURE FLUCTUATIONS ARE MINIMAL. TO AVOID DAMAGE TO CONTROL, ALWAYS HOLD THE WRENCH ON THE WRENCH FLATS OR HEX PORTION OF THE PRESSURE CONNECTION WHEN TIGHTENING.

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).

Pipe Mounting

Mount unit from its port(s). Always hold a wrench on pressure port when making pressure connection.

Making Pressure Connection

Use a wrench on the pressure port and thread a 1/4" NPTM fitting into the port. Be sure to connect high pressure source to port labeled "HIGH". Similarly, connect low pressure source to "LOW".



NEVER TIGHTEN BY TURNING THE CONTROL INTO THE FITTING.



MODELS PSW-181, 182, 185, 186 HAVE A POLYSULPONE PORT WITH 1/4" NPSF THREAD. A 1/4 NPT OR 1/4 NPS FITTING MAY BE USED WITH THIS CONNECTION. HOWEVER, IN BOTH CASES, THE MATING FITTING WILL BOTTOM-OUT IN THE PRESSURE CONNECTION. THEREFORE, WITH THESE MODELS, TEFLON TAPE MUST BE APPLIED TO FITTING FOR A TIGHT SEAL. DO NOT OVER TIGHTEN. CONNECTION TORQUE MUST NOT EXCEED 2 FT. / LBS. OVER TIGHTENING MAY DAMAGE THE PORT.

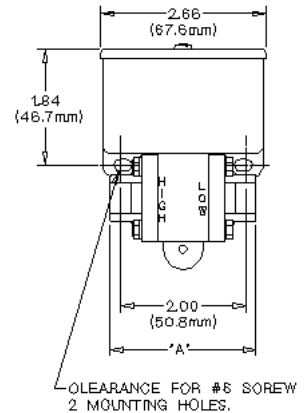
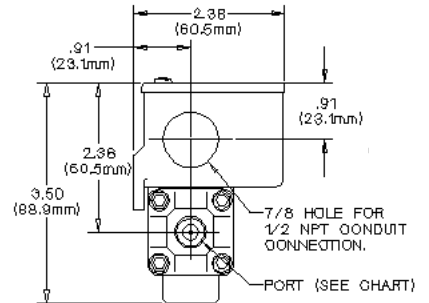
WIRING



ALL LIVE SUPPLY CIRCUITS MUST BE DISCONNECTED BEFORE WIRING THE CONTROL. FOR ENCLOSED UNITS, CONNECT THE CONDUIT TO THE HOLE IN ACCORDANCE WITH NATIONAL AND LOCAL CODES. BRING WIRES UP TO THE TERMINALS FROM THE REAR. MAXIMUM RECOMMENDED WIRE SIZE IS 16 AWG.

Unscrew terminal just enough to put stripped wire under terminal block clamp.

Dimensions



Part II - Adjustments

Tools Needed

- 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.

MODEL	PORT	DIM A.
DIFFERENTIAL PRESSURE		
PSW-181, 182,	1/4" NPSF	
185, 186	Polysulphone	2.75" (69.9 mm)
PSW-183,		
184, 187, 188	1/4" NPTF Brass	3.125" (79.4 mm)



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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:

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2. Model and serial number of the product under warranty, and
3. Repair instructions and/or specific problems relative to the product.

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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.

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