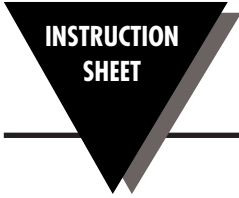


PSW400

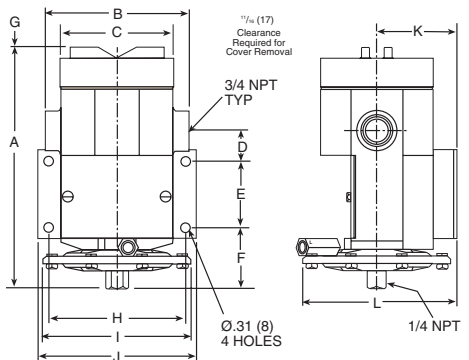
Pressure Switches



M0534/0902

INSTALLATION INSTRUCTIONS FOR OMEGA® SERIES PSW400 PRESSURE SWITCHES

PSW400 – H₂O



STANDARD RANGES
10, 30, 60, 100 & 150 IN.H₂O

A	B	C	D	E	F	G	H	I	J	K	L
8 1/8	5	3 3/8	1 1/16	2 3/16	2	1 1/16	4 3/4	5 1/2	5 1/2	2 3/4	5 3/16
(206)	(127)	(98)	(27)	(59)	(51)	(17)	(121)	(130)	(140)	(70)	(135)

The OMEGA® PSW400 Series pressure control is a precision device which features a snap-action switch. Fixed deadband is available with dual SPDT independently adjustable switches with various electrical ratings. Adjustable deadband is available with various electrical rating.

The PSW400 Series snap-action pressure switch offers a NEMA 7/9 explosion-proof enclosure, Class I, Div. 1 & 2, Groups B, C & D and Class II, Div. 1 & 2, Groups E, F & G. The enclosure is an epoxy-coated aluminum casting.

INSTALLATION

This control is a precision instrument and should never be left with internal components exposed. During installation, insure that covers are in place and conduit openings are sealed.

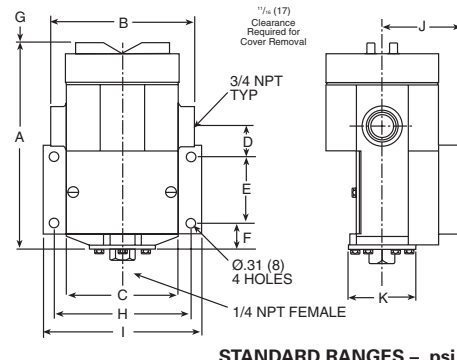
MOUNTING

Four holes in the bracket supplied are used in surface mounting of the control. Location of these holes is shown on the general dimension drawings. Mount on a vibration-free surface or pipe. When tightening control to pressure line, always use the wrench flats or hex on the pressure connection. Never tighten by twisting the case.

ELECTRICAL CONNECTION

Remove top cover; the cover unscrews

PSW400 – psi



STANDARD RANGES – psi
0/15 0/30 0/100 0/400
0/20 0/60 0/200 0/600

A	B	C	D	E	F	G	H	I	J	K
7 7/16	5	3 3/8	1 1/16	2 3/16	1 1/16	1 1/16	4 3/4	5 1/2	2 3/4	2 5/16
(189)	(127)	(98)	(27)	(59)	(33)	(17)	(121)	(140)	(70)	(59)

CCW. Wire directly to the switch according to circuit requirements.

CONDUIT CONNECTIONS

Two 3/4" NPT holes are provided, one fitted with a plug., the other with a cap. It is recommended that Teflon tape or other sealant be used on conduit bushing or plug threads to ensure integrity of the enclosure.

SETPOINT ADJUSTMENTS

Dual Setpoint Switch

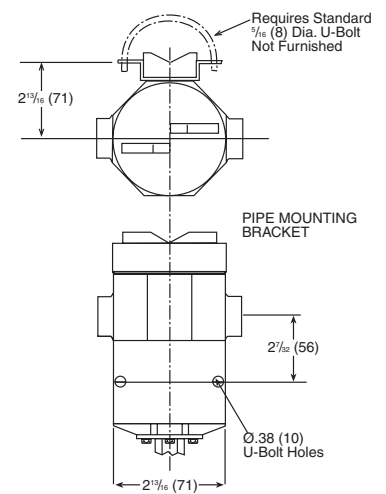
Remove front cover, which is held in place by two screws. There are two range adjusting wheels. The adjusting wheel on the left (labeled A) controls the left switch, the adjusting wheel on the right (labeled B) controls the right switch. The switches are set independently.

Note: The units are calibrated at the factory such that for proper operation, switch B setpoint must be set higher than switch A setpoint.

For setpoint adjustment to within ±1% of nominal range, mount the switch on a calibration stand, and use a suitable reference such as an OMEGA process gauge (Model PGH or PGJ), or test gauge (Model PGT). Monitor switch with a suitable pilot light or meter.

Pressurize the system to the required set-

PSW400 – Pipe Mounting Bracket



point and turn the adjusting wheel until the switch changes mode. When the setpoint has been achieved, raise and lower the pressure to insure that the setpoint is correct. This must be done for both setpoint A and setpoint B.

ADJUSTABLE DEADBAND SWITCH

Remove front cover, which is held in place by two screws. The adjusting wheel labeled A controls the reset point of the switch. The adjusting wheel on labeled B controls the setpoint of the switch.

Note: The units are calibrated at the factory such that for proper operation, setpoint B is always higher than reset point A .

For accurate setpoint adjustment, mount the switch on a calibration stand, and use a suitable reference such as an OMEGA process gauge (Model PGH or PGJ), or test gauge (Model PGT). Monitor switch with a suitable pilot light or meter. Pressurize the system to the required setpoint. Move adjusting wheel on spring B until switch changes mode. The lower pressure to the reset point, move adjusting wheel on spring A until the switch changes mode. Raise and lower pressure to insure that setpoint is correct. Repeat as necessary.



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WARNING: These products are not designed for use in, and should not be used for, patient connected applications.

MADE IN

USA

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 should malfunction, 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 being 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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RETURN REQUESTS / INQUIRIES

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. P.O. 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. P.O. number to cover the COST of the repair,
2. Model and serial number of 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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