

PSW27, PSW28, PSW29 Series

Pressure & vacuum switches
Compact, rugged, pre-fixed setpoint

**INSTRUCTION
SHEET**

M4070-0504

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Installation instructions for OMEGA PSW27, PSW28 & PSW29 Series: Pressure and vacuum switches, compact, rugged, pre-fixed setpoint.

General

These reliable, compact single pole switches are used in pressure and vacuum applications where moderate accuracy is sufficient. The fixed setpoint is factory set.

Additional Information

Temperature Range: -10 to 75°C (14 to 167°F)

Setpoint Accuracy: +/- 10% at 70°F. *Note: pressure settings may change over the temperature range.*

Pressure Connection:

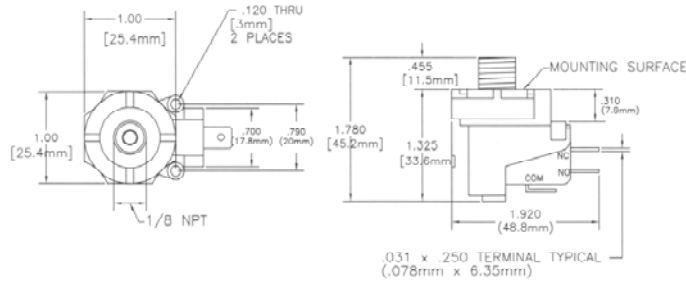
PSW27: 1/8" NPT male.

PSW28: Center spout for 1/8" ID tubing. Provided with 9/16-18 mounting nut.

PSW29: Radial spout for 1/8" ID tubing.

Approvals: UL recognized, CSA certified, microswitches bear the ENEC & CE Mark.

PSW27 Series



Mounting Instructions

PSW27 series come with a 1/8 NPT male pressure connection with a 9/16 threaded mounting, and nut is included.

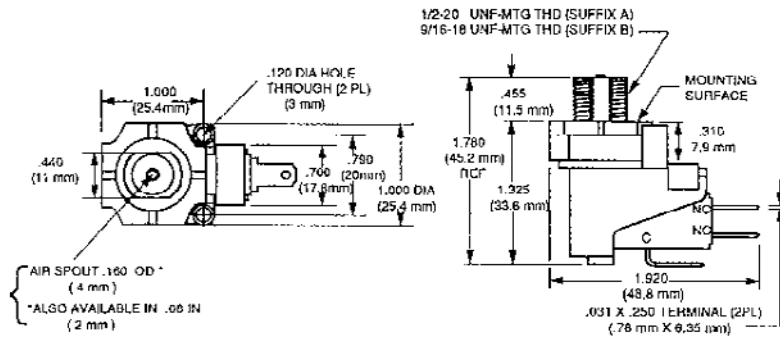
Electrical/Pneumatic Specification for PSW27 Series Pressure Switches

Model No.	Fixed Setpoint	Proof Pressure	SPDT Switch Rating
PSW27-1P	1 psig	30 psig	10 amps (resistive)
PSW27-2P	2 psig	50 psig	21 amps (resistive)
PSW27-5P	5 psig	50 psig	21 amps (resistive)
PSW27-10P	10 psig	50 psig	21 amps (resistive)
PSW27-20P	20 psig	50 psig	21 amps (resistive)
PSW27-30P	30 psig	80 psig	21 amps (resistive)
PSW27-40P	40 psig	80 psig	21 amps (resistive)
PSW27-50P	50 psig	80 psig	21 amps (resistive)

Electrical/Pneumatic Specifications for PSW27V Vacuum Switches

Model No.	Fixed Setpoint	Proof Pressure	SPDT Switch Rating
PSW27V-25W	25" WC Vac	300" WC Vac	10 amps (resistive)
PSW27V-30W	30" WC Vac	300" WC Vac	10 amps (resistive)
PSW27V-40W	40" WC Vac	300" WC Vac	21 amps (resistive)
PSW27V-50W	50" WC Vac	300" WC Vac	21 amps (resistive)
PSW27V-75W	75" WC Vac	350" WC Vac	21 amps (resistive)
PSW27V-100W	100" WC Vac	350" WC Vac	21 amps (resistive)
PSW27V-150W	150" WC Vac	350" WC Vac	21 amps (resistive)
PSW27V-200W	200" WC Vac	350" WC Vac	21 amps (resistive)

PSW28 Series



Mounting Instructions

PSW28 Series come with a center spout for 1/8" ID tubing, with a 9/16 mounting thread and tube lock nut included.

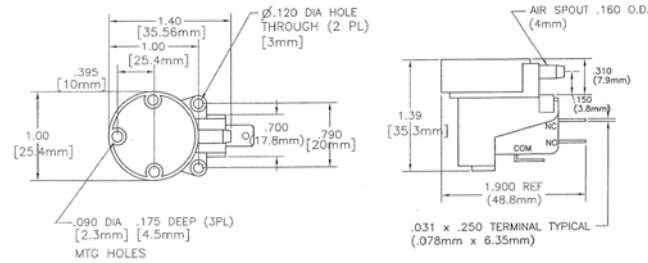
Electrical/Pneumatic Specifications for PSW28 Pressure Series

Model No.	Fixed Setpoint	Proof Pressure	SPDT Switch Rating
PSW28-1P	1 psig	30 psig	10 amps (resistive)
PSW28-2P	2 psig	50 psig	21 amps (resistive)
PSW28-5P	5 psig	50 psig	21 amps (resistive)
PSW28-10P	10 psig	50 psig	25 amps (resistive)
PSW28-20P	20 psig	50 psig	25 amps (resistive)
PSW28-30P	30 psig	80 psig	25 amps (resistive)
PSW28-40P	40 psig	80 psig	25 amps (resistive)
PSW28-50P	50 psig	80 psig	25 amps (resistive)

Electrical/Pneumatic Specifications for PSW28V Vacuum Series

Model No.	Fixed Setpoint	Proof Pressure	SPDT Switch Rating
PSW28V-25W	25" WC Vac	300" WC Vac	10 amps (resistive)
PSW28V-30W	30" WC Vac	300" WC Vac	10 amps (resistive)
PSW28V-40W	40" WC Vac	300" WC Vac	21 amps (resistive)
PSW28V-50W	50" WC Vac	300" WC Vac	21 amps (resistive)
PSW28V-75W	75" WC Vac	350" WC Vac	21 amps (resistive)
PSW28V-100W	100" WC Vac	350" WC Vac	21 amps (resistive)

PSW29 Series



Mounting Instructions

Radial spout for 1/8" ID tubing. Through hole legs for mounting bolt.

Electrical/Pneumatic Specifications for PSW29 Pressure series

Model No.	Fixed Setpoint	Proof Pressure	SPDT Switch Rating
PSW29-1P	1 psig	30 psig	10 amps (resistive)
PSW29-2P	2 psig	50 psig	21 amps (resistive)
PSW29-5P	5 psig	50 psig	21 amps (resistive)
PSW29-10P	10 psig	50 psig	21 amps (resistive)
PSW29-20P	20 psig	50 psig	21 amps (resistive)
PSW29-30P	30 psig	50 psig	21 amps (resistive)

Materials of Construction (All Series)

Body	Acetal
Diaphragm	EPDM (Ethylene-Propylene Diene Monomer) <i>The EPDM diaphragm should not be used with petroleum products. Specificity Nitrile for these applications.</i>
Hysteresis (Dead Band)	Pressure switches: approximately 25% of the setpoint. Vacuum switches: approximately 30% of the setpoint.
Electrical Connection	6.35mm (0.25") standard "Slide-On" male terminals
Proof Pressure	See table.
Media Compatibility	Air, water and many other fluids and gases that are compatible with EPDM & Acetal. <i>Note: Mineral Oil and similar fluids are not compatible with EPDM. Request Nitrile diaphragm.</i>
Overall Dimensions	46 x 51 x 26 mm (approximately 1.75" x 2" x 1")
Weight	6 g (0.2 oz)
Listings	UL Recognized & CSA Certified



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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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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.

PATENT NOTICE: U. S. Pat. No. 6,074,089; 5,465,838 / Canada 2,228,333; 2,116,055 / UK GB 2,321,712 / Holland 1008153 / Israel 123052 / France 2 762 908 / EPO 0614194. Other patents pending.

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.

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