



PRESSURE AND VACUUM SWITCHES

COMPACT, RUGGED, PRE-FIXED SETPOINT

PSW27 Series
PSW28 Series
PSW29 Series

Starts at
\$22



- ✓ UL Recognized, CSA Certified Up to 21 A
- ✓ Fixed Setpoint
- ✓ Pressure and Vacuum Models Available
- ✓ 1/8" NPT or Spout for 1/8" ID Tubing

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

SPECIFICATIONS

Approvals: UL recognized, CSA certified; microswitches bear the ENEC and CE mark

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

Setpoint Accuracy: ±10% of setting at 21°C (70°F)

Note: Pressure settings may change over the temperature range.

Electrical: SPDT; see table for amp rating, 250 Vac

Electrical Connection

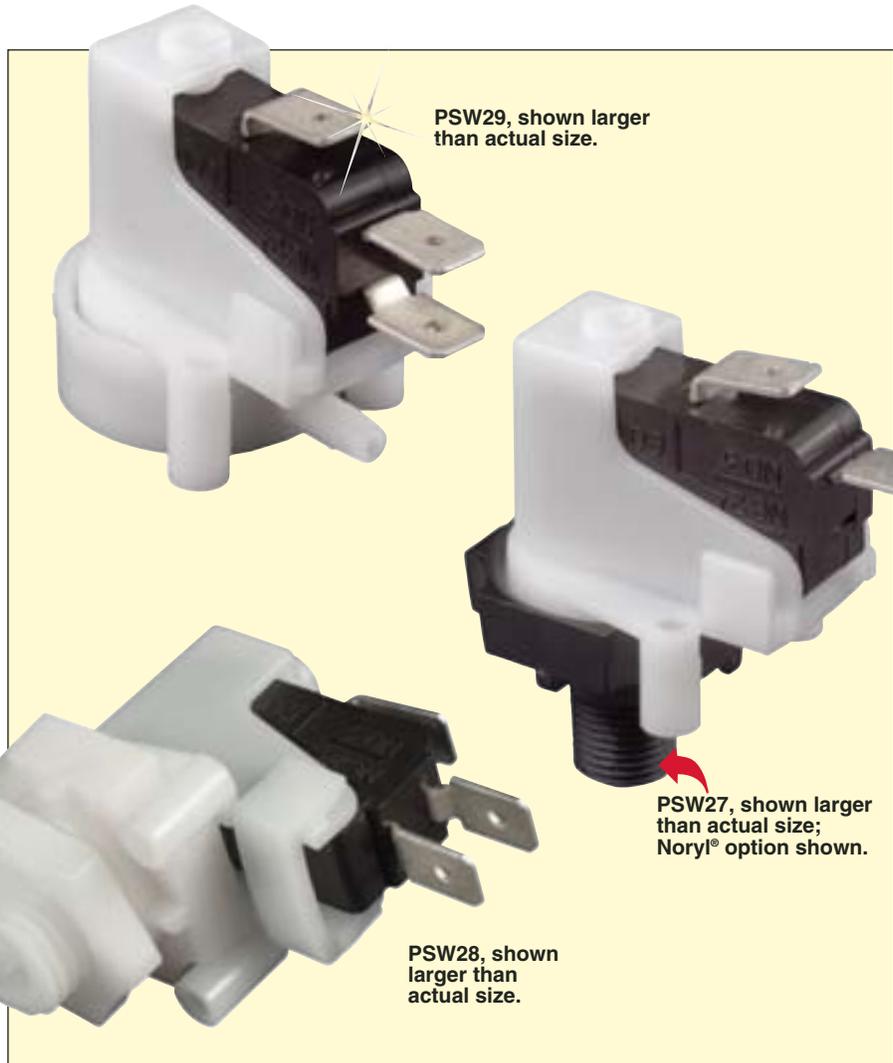
Terminals: 6.35 mm (0.25") standard "slide-on" male

Proof Pressure: Maximum system pressure, see table

Materials of Construction

Body: Acetal

Diaphragm: EPDM (ethylene-propylene diene monomer)



Pressure Connection

PSW27: 1/8" MNPT

PSW28: Center spout for 1/8" ID tubing; provided with 1/8"-18 threaded mounting and tube lock nut

PSW29: Radial spout for 1/8" ID tubing; through-hole legs for mounting bolt

Proof Pressure: See table

Hysteresis (Deadband)

Pressure Switches:

Approximately 25% of the setpoint

Vacuum Switches:

Approximately 30% of the setpoint

Media Compatibility: Air, water and many other fluids and gases that are compatible with EPDM and acetal

Note: Mineral oil and similar fluids are not compatible with EPDM. Request nitrile diaphragm (see "Custom Switches").

Weight: 0.6 oz (17 g)

Overall Dimensions:

45 x 51 x 25 mm (1.75 x 2 x 1")

CUSTOM SWITCHES

Custom pressure switches are available; 50 piece minimum order; consult Pressure Engineering for price and delivery

Custom Options:

Pre-fixed setpoints other than those in the tables

Body: Noryl® available on custom order (see photo of PSW27 on previous page)

Diaphragm: Nitrile is available on custom order.

Noryl® is a registered trademark of GE



PRESSURE AND VACUUM SWITCHES

MOST POPULAR MODELS HIGHLIGHTED!

To Order (Specify Model Number)

PRESSURE SWITCHES PSW27 1/8 MNPT				
MODEL NO.	PRICE	FIXED SETPOINT	PROOF PRESSURE	SPDT SWITCH RATING
PSW27-1P	\$22	1 psig	30 psig	10 A (resistive)
PSW27-2P	22	2 psig	50 psig	21 A (resistive)
PSW27-5P	22	5 psig	50 psig	21 A (resistive)
PSW27-10P	22	10 psig	50 psig	21 A (resistive)
PSW27-20P	22	20 psig	50 psig	21 A (resistive)
PSW27-30P	22	30 psig	80 psig	21 A (resistive)
PSW27-40P	22	40 psig	80 psig	21 A (resistive)
PSW27-50P	22	50 psig	80 psig	21 A (resistive)

VACUUM SWITCHES PSW27V 1/8 MNPT				
MODEL NO.	PRICE	FIXED SETPOINT	PROOF PRESSURE	SPDT SWITCH RATING
PSW27V-25W	\$27	25 inWC Vac	300 inWC Vac	10 A (resistive)
PSW27V-30W	27	30 inWC Vac	300 inWC Vac	10 A (resistive)
PSW27V-40W	27	40 inWC Vac	300 inWC Vac	21 A (resistive)
PSW27V-50W	27	50 inWC Vac	300 inWC Vac	21 A (resistive)
PSW27V-75W	27	75 inWC Vac	350 inWC Vac	21 A (resistive)
PSW27V-100W	27	100 inWC Vac	350 inWC Vac	21 A (resistive)
PSW27V-150W	27	150 inWC Vac	350 inWC Vac	21 A (resistive)
PSW27V-200W	27	200 inWC Vac	350 inWC Vac	21 A (resistive)

Note: PSW27V vacuum switches have $\pm 20\%$ field adjustment. Inside the 1/8 NPT fitting, locate the set screw. Turning the set screw will adjust the setpoint approx. $\pm 20\%$. The setting is considered "NO-Tamper", because when installed, there is no access to this adjustment.

PRESSURE SWITCHES PSW28 Center Spout for 1/8 ID Tubing with 1/8-18 Threaded Mounting and Tube Lock Nut Included				
MODEL NO.	PRICE	FIXED SETPOINT	PROOF PRESSURE	SPDT SWITCH RATING
PSW28-1P	\$22	1 psig	30 psig	10 A (resistive)
PSW28-2P	22	2 psig	50 psig	21 A (resistive)
PSW28-5P	22	5 psig	50 psig	21 A (resistive)
PSW28-10P	22	10 psig	50 psig	25 A (resistive)
PSW28-20P	22	20 psig	50 psig	25 A (resistive)
PSW28-30P	22	30 psig	80 psig	25 A (resistive)
PSW28-40P	22	40 psig	80 psig	25 A (resistive)
PSW28-50P	22	50 psig	80 psig	25 A (resistive)

PRESSURE SWITCHES PSW29 Radial Spout for 1/8 ID Tubing				
MODEL NO.	PRICE	FIXED SETPOINT	PROOF PRESSURE	SPDT SWITCH RATING
PSW29-1P	\$22	1 psig	30 psig	10 A (resistive)
PSW29-2P	22	2 psig	50 psig	21 A (resistive)
PSW29-5P	22	5 psig	50 psig	21 A (resistive)
PSW29-10P	22	10 psig	50 psig	21 A (resistive)
PSW29-20P	22	20 psig	50 psig	21 A (resistive)
PSW29-30P	22	30 psig	50 psig	21 A (resistive)

Ordering Example: PSW27-10P, pressure switch with fixed setpoint at 10 psig, deadband of approx. 2.5 psig (25% of the fixed setpoint) with a 1/8 MNPT pressure port, \$22.



SENSITIVE PRESSURE, VACUUM, OR DIFFERENTIAL PRESSURE SWITCHES

PSW20 Series

All Models
\$30



These sensitive single-pole switches can be used as pressure, vacuum, or differential switches.

SPECIFICATIONS

Approvals: UL recognized, CSA certified

Temperature: -30 to 65°C (-23 to 149°F)

Setpoint Accuracy: ±10% of setting at 21°C (70°F)

Note: Pressure settings may change over the temperature range.

Materials of Construction

Body: Acetal

Diaphragm: EPDM bonded to steel ring

Contacts: Gold-plated silver

Springs: Plated phosphor bronze

Terminals: Plated copper or brass

Pressure Connection:

Spout for 1/8" ID tubing

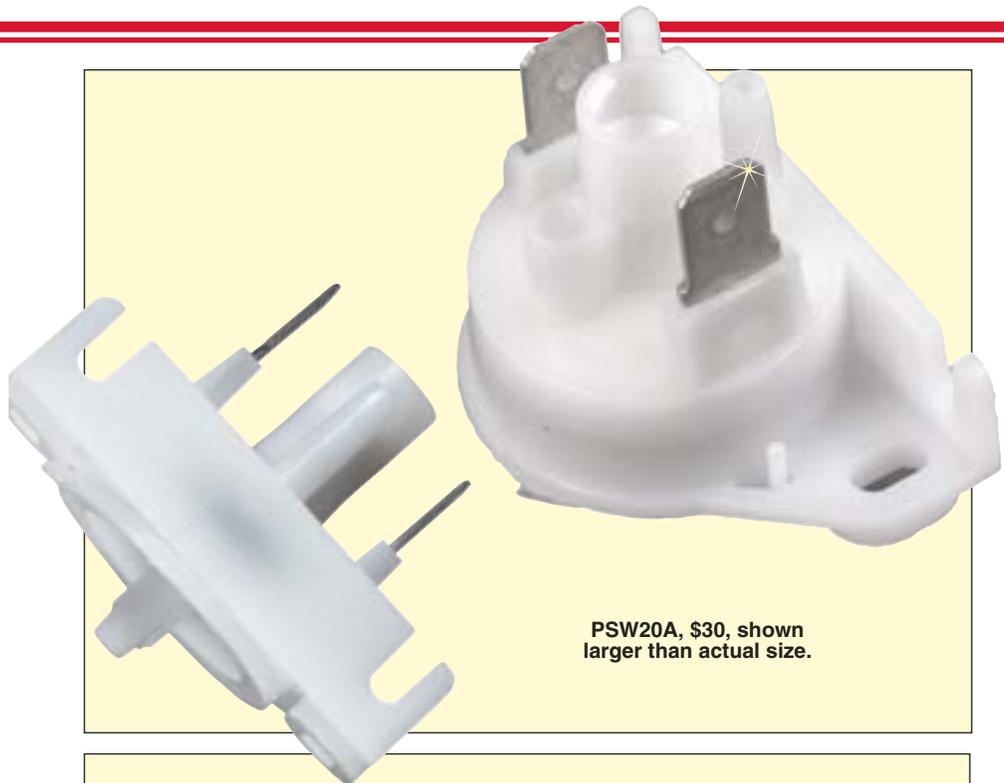
Adjusting Screw:

Stainless steel or zinc-plated steel; setting as shipped, 2 inH₂O negligible deadband

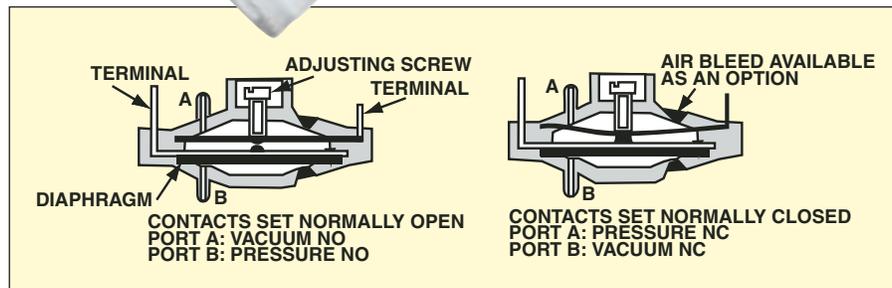
Media: Clean, dry, non-corrosive gases only

Note: The pressure media entering through port A are in direct contact with the electrical contacts in the switch. The media entering through port B are separated from the electrical contacts by the diaphragm.

Weight: 9 g (0.3 oz)



PSW20A, \$30, shown larger than actual size.



Pressure Switching—Normally Open Contacts

Connect the pressure source to inlet port B, and set the adjusting screw to the desired pressure setpoint. Turning the screw clockwise narrows the gap between contacts and decreases the setpoint. Turning the screw counterclockwise increases the gap, thereby increasing the setpoint.

Pressure Switching—Normally Closed Contacts

Connect the pressure source to port A and monitor continuity across the terminals. Slowly turn the adjusting screw clockwise, narrowing the gap

between the contacts until the contacts are closed. Apply the setpoint pressure, which will open the contacts. Continue to turn the adjusting screw clockwise until the contacts make and break at the desired setpoint.

Vacuum Switching: Repeat above using port A for normally open contacts and port B for normally closed contacts.

MOST POPULAR MODELS HIGHLIGHTED!

To Order (Specify Model Number)

MODEL NO.	PRICE	PRESSURE RANGE	PROOF PRESSURE	SWITCH RATING 250 Vac
PSW20A	\$30	0.4 to 15 inH ₂ O	8 psig	750 mA (resistive)
PSW20B	30	1 to 20 inH ₂ O	8 psig	1 A (resistive)

Ordering Example: PSW20A, sensitive differential pressure switch adjustable from 0.4 to 15 inH₂O column, \$30. Custom switches and pre-fixed setpoint at customer-specified value available, 50 piece minimum order.

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