

MINIATURE PRESSURE AND VACUUM SWITCHES

Vacuum to 800 psi

PSW-500 Series



- ✓ External Pressure Scale and Pointer for Easy Setpoint Adjustments
- ✓ 5 A Model Switches with High Proof Pressures
- ✓ 1 A Gold-Plated Switches for TTL and Dry-Contact Closures
- ✓ Stainless Steel, Sealing Compound and/or O-Ring Wetted Parts



PSW-523



PSW-541

Both shown actual size.

See Switch Accessories at omega.com for Audible Alarms and Relay Modules.

To Order

PRESSURE MODELS	ADJUSTABLE RANGE (psig)		DEADBAND (psig)	REPEATABILITY (psi)	MAX SYSTEM PRESSURE (psi)*	SWITCH
	DECREASING	INCREASING				
PSW-521	0.8 to 28.5	1.6 to 30	0.8 to 1.3	±0.6	30	1 A
PSW-522	2.0 to 38.3	3.0 to 40	1.0 to 1.7	±1.0	50	1 A
PSW-523	3.0 to 96.5	4.5 to 100	1.5 to 3.5	±2.0	100	1 A
PSW-524	7.5 to 242.5	9.7 to 250	2.2 to 9.0	±5.0	250	1 A
PSW-525	15 to 485	20 to 500	5.0 to 21	±10	500	1 A
PSW-531	0.8 to 16.3	1.2 to 20	0.6 to 3.7	±0.8	3000	5 A
PSW-532	2.0 to 42.5	2.0 to 50	0.8 to 7.5	±2.0	3000	5 A
PSW-533	4.0 to 91	4.0 to 100	1.1 to 9.0	±4.0	5000	5 A
PSW-534	10 to 222	10 to 250	2.2 to 28	±10	5000	5 A
PSW-535	20 to 432	20 to 500	3.5 to 68	±20	5000	5 A
PSW-536	50 to 700	100 to 800	20 to 100	±40	5000	5 A
VACUUM MODELS	ADJUSTABLE RANGE (inHg)		DEADBAND (inHg)	REPEATABILITY (inHg)	MAX SYSTEM PRESSURE (inHg vac/psig)*	SWITCH
	DECREASING	INCREASING				
PSW-541	1.6 to 27.0	2.7 to 28.2	1.3 to 2.7	±1.2	29.9/0	1 A
PSW-542	4.0 to 24.8	5.1 to 28.2	1.5 to 3.2	±2.0	29.9/0	1 A
PSW-543	6.0 to 21.5	8.4 to 28.2	2.0 to 7.3	±4.0	29.9/0	1 A
PSW-551	1.2 to 22.5	1.6 to 28.2	1.1 to 5.7	±1.6	29.9/3000	5 A
PSW-552	1.2 to 21.8	8.0 to 28.2	8.0 to 6.4	±8.0	29.9/5000	5 A

* Exceeding these values may cause a shift in the setpoint.

Comes complete with operator's manual.

Ordering Example: PSW-525, gage model switch for maximum system pressure of 500 psi.

MINIATURE HIGH-PRESSURE SWITCHES

- ✓ 500 to 6000 psi
- ✓ 1 A and 5 A Switch Models
- ✓ Heavy-Duty Overpressure Protection

PSW-560 (1 A) AND PSW-570 (5 A) SERIES PERFORMANCE TABLE

MODEL	NOMINAL SETPOINT (psi)	DEADBAND 1 A/5 A	REPEATABILITY (±psi)
PSW-561 PSW-571	500	70/120	25
	1000	80/130	50
	1500	90/145	75
	2000	100/160	100
	2500	110/180	125
PSW-562 PSW-572	600	113/186	45
	1000	145/220	60
	1500	190/262	85
	2000	235/305	100
	2500	280/345	125
	3000	325/385	150
	3500	364/430	175
	4000	410/470	200
PSW-563 PSW-573	5000	410/470	250
	700	177/455	65
	1000	210/620	75
	1500	247/730	85
	2000	300/820	100
	3000	315/980	150
	4000	340/1000	200
	5000	355/1110	250
	6000	375/1280	300

SPECIFICATIONS

Approvals: UL (1 A switches PSW-520 and PSW-540 Series only)

Process Temp: -55 to 105°C (-65 to 221°F) [2% setpoint shift can occur below -25°C (-13°F) or above 50°C (122°F)]

Cycling: Not to exceed 20 cycles/min

Warranty: 3 year/1 million cycles

Sensor: Piston (PSW-520 and PSW-540: diaphragm)

Proof Pressure: 150% max system pressure (PSW-530 and PSW-550: proof pressure is the max system pressure)

Wetted Parts:

PSW-520 and 540 Series:

17-7 PH SS, 303 SS and loctite #271

PSW-530 and 550 Series: 303 SS,

316 SS, Buna-N O-ring, loctite #271

PSW-560 and 570 Series: 17-7 PH SS, 303 SS, Buna-N O-ring and loctite #271



PSW-562 shown actual size.



PSW-571 shown actual size.

Enclosure:

Body: 303 SS

Internal Switch Housing and

Lock Ring: Zinc alloy, chromate finish

Cap: Black Valox®

Dimensions:

PSW-520 and PSW-540:

65 L x 28.6 mm Dia. (2.56 x 1.13")

PSW-560 and PSW-570:

71 L x 27.8 mm Dia. (1.75 x 1.09")

Pressure Port: 1/8-27 NPT

Electrical Connection: 20 AWG, 3 polyvinyl-insulated, unjacketed, 300 mm (12") pigtail leads

Wiring Code (Pressure):

Red = N/C

White = N/O

Black = Common

Wiring Code (Vacuum):

Red = N/O

White = N/C

Black = Common

Weight: 113 g (4 oz); PSW-520 and PSW-540 Series: 85 g (3 oz)

To Order

1 A MODEL	5 A MODEL	ADJUSTABLE RANGE (psig)		MAX SYSTEM PRESSURE (psig)	PROOF PRESSURE (psig)
		DECREASING	INCREASING		
PSW-561	PSW-571	500 to 2390	500 to 2500	3000	4500
PSW-562	PSW-572	600 to 4500	600 to 5000	5000	7500
PSW-563	PSW-573	700 to 5500	700 to 6000	6000	9000

* Exceeding these values may cause a shift in the setpoint.

SWITCH RATING

MAX RATING	AC/DC	VOLTS RESISTIVE	AMPS	AMPS INDUCTIVE CONTACTS
1 A SPDT	115/28	1/1	1/0.5	Gold**
5 A SPDT	250/28	5/5	5/3	Silver

** Use gold contacts for dry and TTL circuitry (e.g., 5 Vdc @ 50 mA or less).

Caution: Pressure switches are manufactured to the highest-quality specifications. However, because of their economical construction, they should be used only for applications in which, in the event of product failure, the risk of damage to equipment or personnel is minimal.