

GENERAL PURPOSE PRESSURE SWITCHES IN NEMA 4X (IP66) ENCLOSURES

Vacuum to 3000 psi

PSW-100 Series



- ✓ Ranges from 0.5 inH₂O to 3000 psi
- ✓ SPDT or DPDT Switches
- ✓ Adjustment Lock
- ✓ Safe, Easy Wiring Access

OMEGA's affordable, general purpose pressure switches offer distinct advantages over most similar-style switches, including DPDT or adjustable deadband switches, as well as a wide selection of adjustable ranges from 0.5 inH₂O to 3000 psi.

SPECIFICATIONS

Approval: UL listed

Storage Temperature: -55 to 70°C (-67 to 158°F)

Process Temperature:

Stainless Steel:

-55 to 205°C (-67 to 401°F)

Phosphor Bronze:

-40 to 150°C (-40 to 302°F)

Buna-N: -25 to 95°C (-13 to 203°F)

Ambient Temperature: -40 to 70°C (-40 to 158°F), except models PSW-107 to PSW-117 and PSW-134 to PSW-139: -20 to 70°C (-4 to 158°F); setpoint typically shifts less than 1% of range for a 30°C (54°F) ambient temperature change

Shock: Setpoint repeats after 15 g, 10 ms duration

Vibration: Setpoint repeats after 2.5 g, 5 to 500 Hz

Setpoint Repeatability: All models ±1% of adjustable range, except models PSW-118 to PSW-125 and PSW-132 to PSW-133, which are ±1.5%

Switch Output: One SPDT or DPDT switch can be wired "normally open" or "normally closed"

Electrical Rating: Standard 15 A 125/250/480 Vac resistive

External Manual Reset: 15 A 125/250 Vac resistive

Double Pole Double Throw: 10 A 125/250 Vac resistive

Enclosure: Die-cast aluminum (max 0.6% copper); epoxy-coated blue enclosure, gasketed, complies with NEMA 4X (IP66)

Weight: Approximately 0.9 kg (2 lb)

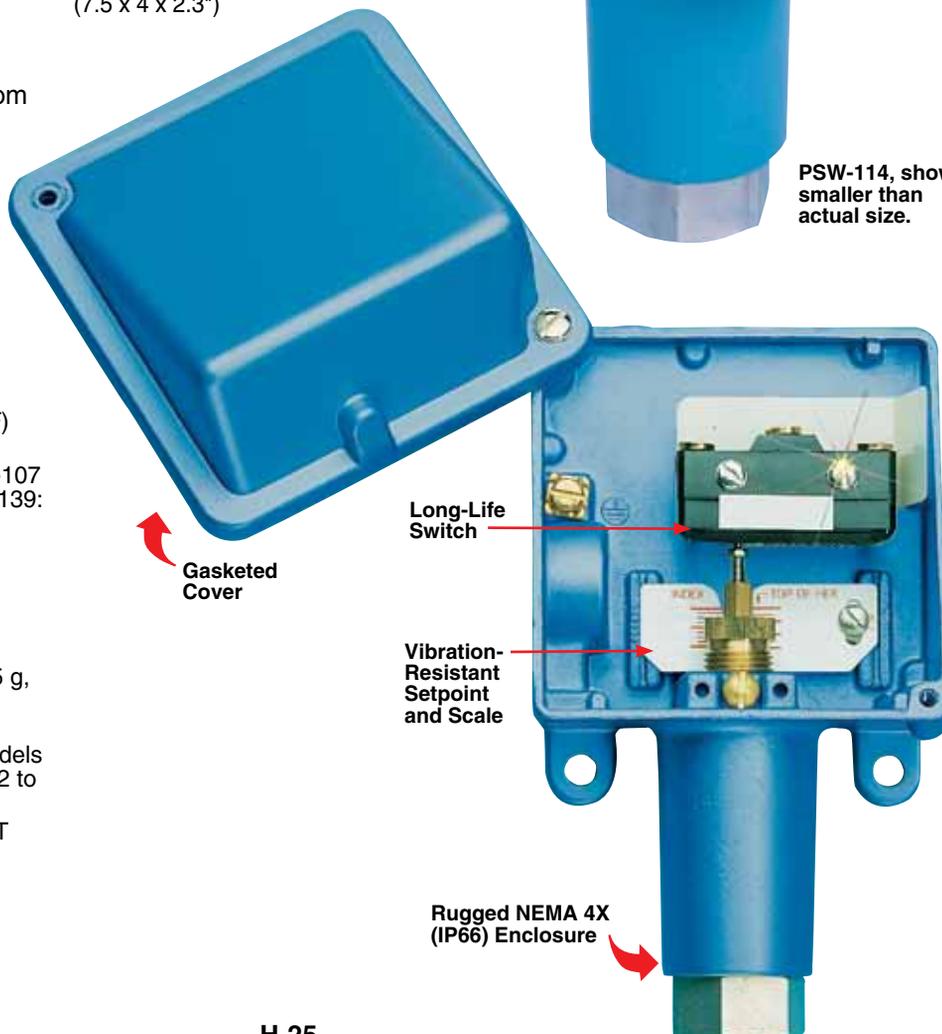
Electrical Connection: ½ NPT and two 7/8" diameter knockouts

Pressure Connection: See "To Order" on next page

Dimensions: 191 max H x 101 W x 60 mm D (7.5 x 4 x 2.3")



PSW-114, shown smaller than actual size.



GENERAL PURPOSE PRESSURE SWITCHES

To Order

MODEL NO.	ADJUSTABLE RANGE		DEADBAND STANDARD UNITS	PROOF PRESSURE	SWITCH	ADDED FEATURE
	STANDARD	METRIC				
BUNA-N DIAPHRAGM, O-RING AND ¼ FNPT NICKEL-PLATED BRASS PRESSURE CONNECTION						
PSW-107	1.5 to 30 psi	0.1 to 2 bar	1 to 2 psi	600 psi	15 A SPDT	—
PSW-108	3 to 100 psi	0.2 to 6.9 bar	1 to 4 psi	600 psi	15 A SPDT	—
PSW-109	3 to 100 psi	0.2 to 6.9 bar	—	600 psi	15 A SPDT	External Manual Reset
PSW-110	3 to 100 psi	0.2 to 6.9 bar	11.3 Typ.	600 psi	10 A DPDT	DPDT Switch
PSW-111	3 to 100 psi	0.2 to 6.9 bar	3 to 7 psi	600 psi	15 A SPDT	Adjustable Deadband
PSW-112	9 to 300 psi	0.7 to 20.7 bar	1 to 5 psi	600 psi	15 A SPDT	—
PSW-113	9 to 300 psi	0.7 to 20.7 bar	4 to 11 psi	600 psi	15 A SPDT	Adjustable Deadband
PSW-114	15 to 500 psi	1 to 34.5 bar	2 to 8 psi	2500 psi	15 A SPDT	—
PSW-115	15 to 500 psi	1 to 34.5 bar	5 to 12 psi	2500 psi	15 A SPDT	Adjustable Deadband
PSW-116	15 to 500 psi	1 to 34.5 bar	—	2500 psi	15 A SPDT	External Manual Reset
PSW-117	30 to 1000 psi	2 to 69 bar	3 to 20 psi	2500 psi	15 A SPDT	—
BUNA-N DIAPHRAGM, O-RING AND ½ FNPT ALUMINUM PRESSURE CONNECTION						
PSW-134	300 inWC vac to 0 inWC	747.24 to 0 mbar	0.2 to 8 inWC	100 psi	15 A SPDT	—
PSW-135	10 inWC vac to 10 inWC	-24.91 to 24.91 mbar	0.1 to 0.6 inWC	100 psi	15 A SPDT	—
PSW-136	50 inWC vac to 50 inWC	-124.54 to 124.54 mbar	0.1 to 3.0 inWC	100 psi	15 A SPDT	—
PSW-137	0.5 to 5 inWC	1.25 to 12.45 mbar	0.1 to 0.3 inWC	100 psi	15 A SPDT	—
PSW-138	2.5 to 50 inWC	6.23 to 124.54 mbar	0.1 to 0.8 inWC	100 psi	15 A SPDT	—
PSW-139	10 to 250 inWC	24.91 to 622.70 mbar	0.1 to 6.0 inWC	100 psi	15 A SPDT	—
316 SS DIAPHRAGM AND ½ FNPT PRESSURE CONNECTION						
PSW-104	1 to 20 psi	70 mbar to 1.4 bar	0.1 to 1 psi	500 psi	15 A SPDT	—
PSW-105	2 to 50 psi	140 mbar to 3.4 bar	0.1 to 1.5 psi	500 psi	15 A SPDT	—
PSW-118	5 to 30 psi	0.4 to 2 bar	1 to 3 psi	2500 psi	15 A SPDT	—
PSW-120	10 to 100 psi	0.7 to 6.9 bar	1 to 8 psi	2500 psi	15 A SPDT	—
PSW-121	15 to 300 psi	1 to 20.7 bar	3 to 18. psi	2500 psi	15 A SPDT	—
PSW-123	15 to 300 psi	1 to 20.7 bar	3 to 18 psi	2500 psi	15 A SPDT	Adjustable Deadband
PSW-124	20 to 500 psi	1.4 to 34.5 bar	4 to 30 psi	2500 psi	15 A SPDT	—
PSW-125	80 to 1700 psi	5.5 to 117 bar	5 to 120 psi	2500 psi	15 A SPDT	—
PHOSPHOR BRONZE BELLOWS AND ¼ FNPT BRASS PRESSURE CONNECTION						
PSW-127	30 inHg vac to 0	-1 to 0 bar	1 to 2 inHg	0 psi	15 A SPDT	—
PSW-128	30 inHg vac to 0	-1 to 0 bar	3 to 6.5 inHg	0 psi	10 A DPDT	DPDT Switch
PSW-129	4 to 200 psi	0.3 to 13.7 bar	1 to 4 psi	250 psi	15 A SPDT	—
316 SS BELLOWS AND ¼ FNPT PRESSURE CONNECTION						
PSW-130	15 to 200 psi	1 to 13.7 bar	1 to 3 psi	250 psi	15 A SPDT	—
PSW-131	25 to 500 psi	1.8 to 34.5 bar	1.5 to 5 psi	575 psi	15 A SPDT	—
PSW-132	100 to 1700 psi	6.9 to 11.7 bar	9 to 40 psi	2500 psi	15 A SPDT	—
303 SS PISTON, BUNA N O-RING AND ¼ FNPT SS PRESSURE CONNECTION						
PSW-133	125 to 3000 psi	8.6 to 206 bar	40 to 250 psi	10000 psi	15 A SPDT	—

* **Note:** The use of metallic diaphragms where higher pressures, shock or heavy cycling is expected should be avoided. When choosing a pressure range, it is recommended that the switch operate in the middle 80% of its adjustable range. Switching may not be accurate in the lower and upper 10% of the range.

Switches come complete with operator's manual.

Ordering Example: PSW-115, Buna-N diaphragm, ¼ brass FNPT thread, range of 50 to 500 psi and adjustable deadband.