

COMPACT, VIBRATION-RESISTANT SWITCHES FOR CLASS 1 HAZARDOUS LOCATIONS

8 to 6000 psi

PSW12 Series



- ✓ Compact Stainless Steel Construction
- ✓ Belleville Technology for Long Life, Vibration Resistance, and Stability
- ✓ Easy Field Setting and Adjustment
- ✓ SPDT Sealed Switches
- ✓ Strain Relief
- ✓ 1.8 m (72") Lead Wires
- ✓ Mounting Bracket for Retrofit Applications

OMEGA'S PSW12 offers reliability, repeatability, and durability in a compact design. This switch is rack mountable and has an accessible adjustment when installed. Snap-action Belleville spring design contributes to a long, stable life and to vibration resistance. An optional mounting bracket provides easy retrofit, and an optional cover lock adds security. Ranges are from 8 to 6000 psi (0.6 to 414 bar).

SPECIFICATIONS

Approval: UL listed, cUL certified; Class I, Groups A, B, C, and D; Class II, Groups E, F, and G; Class III

Storage Temperature: -50 to 80°C (-58 to 176°F)

Process Temperature:

Stainless Steel Diaphragm: -17 to 160°C (0 to 320°F)

Polyimide Diaphragm: -28 to 93°C (-20 to 200°F)

Ambient Temperature: -50 to 80°C (-58 to 176°F); setpoint typically shifts less than 1% of range for a 28°C (50°F) ambient temperature change.

Shock: Setpoint repeats after 75 g, 10 ms duration

Vibration: Setpoint repeats after 15 g, 10 to 2000 Hz

Setpoint Repeatability: ±1% of adjustable range

Switch Output: 1 or 2 SPDT, factory-sealed lead wires; mechanical contact life: 10 million cycles

Electrical Ratings: 5 A @ 250 Vac, 5 A resistive and 3 A inductive @ 28 Vdc; silver contacts

Enclosure: 300 stainless steel; NEMA 4X, 7, 9 and IP66

Weight: Approximately 0.34 kg (12 oz)

Electrical Connection: ½ MNPT with 1.8 m (72") lead wires

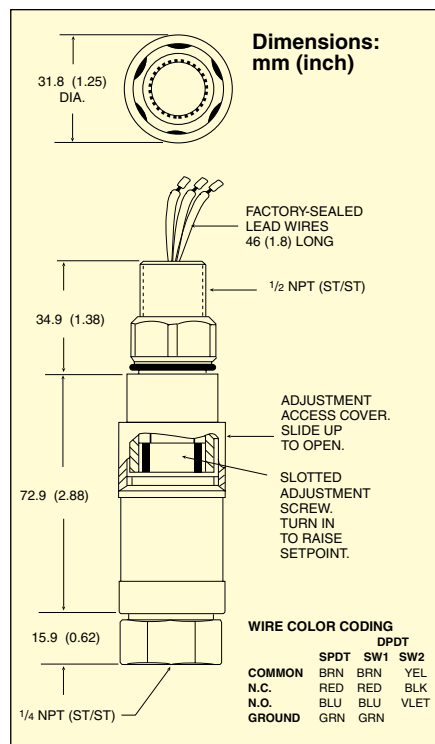
Pressure Connection: ¼ FNPT

Setpoint adjustment with cover open (up)

Belleville assembly (inside)

Rugged Design

PSW12T-BS, shown actual size.



COMPACT SWITCHES

See switch accessories, visit us online for audible alarms and relay modules.

PSW12T-CS, shown smaller than actual size.



PRESSURE SWITCHES
H

To Order

MODEL NO.	ADJUSTABLE RANGE				DEADBAND				MAXIMUM WORKING PRESSURE		PROOF PRESSURE		SWITCH
	FALL/LOW		RISE/HIGH		LOW		HIGH						
	psi	bar	psi	bar	psi	bar	psi	bar	psi	bar	psi	bar	
¼ FNPT 316 SS PRESSURE CONNECTION, PFA-COATED POLYIMIDE DIAPHRAGM, BUNA N O-RING, ⅛" ORIFICE, SINGLE 5 A SPDT SWITCH													
PSW12T-AS	8	0.6	30	2.1	2	0.1	6	0.4	600	41	1000	69	Single
PSW12T-BS	15	1.0	55	3.8	3	0.2	8	0.6	600	41	1000	69	Single
PSW12T-CS	30	2.1	170	11.7	5	0.3	15	1.0	600	41	1000	69	Single
PSW12T-DS	100	6.9	370	25.5	15	1.0	50	3.4	600	41	1000	69	Single
PSW12T-ES	200	13.8	700	48.3	40	2.8	90	6.2	1500	103	3000	206	Single
PSW12T-FS	400	27.6	1500	103.0	100	6.9	250	17.2	3000	206	4500	309	Single
PSW12T-GS	1000	68.9	3200	220.6	100	6.9	500	34.5	6000	414	10,000	689	Single
PSW12T-HS	2000	137.9	6000	414.0	400	27.6	800	55.2	8000	551	10,000	689	Single
¼ FNPT 316 SS PRESSURE CONNECTION AND DIAPHRAGM, FKM O-RING, ⅛" ORIFICE, SINGLE 5 A SPDT SWITCH													
PSW12V-AS	9	0.6	35	2.4	2	0.1	7	0.5	600	41	1000	69	Single
PSW12V-BS	25	1.7	65	4.5	3	0.2	10	0.7	600	41	1000	69	Single
PSW12V-CS	50	3.5	150	10.3	5	0.3	15	1.0	600	41	1000	69	Single
PSW12V-DS	100	6.9	350	24.1	15	1.0	50	3.4	600	41	1000	69	Single
PSW12V-ES	250	17.2	700	48.3	40	2.8	95	6.6	1500	103	3000	206	Single
PSW12V-FS	400	27.6	1500	103.0	100	6.9	300	20.7	3000	206	4500	309	Single
PSW12V-GS	1000	68.9	3200	220.6	100	6.9	500	34.5	6000	414	10,000	689	Single
PSW12V-HS	2000	137.9	6000	414.0	400	27.6	1000	69	8000	551	10,000	689	Single
¼ FNPT 316 SS PRESSURE CONNECTION, PFA-COATED POLYIMIDE DIAPHRAGM, BUNA-N O-RING, ⅛" ORIFICE, DUAL 5 A SPDT SWITCH													
PSW12T-AD	8	0.6	30	2.1	2	0.1	6	0.4	600	41	1000	69	Dual
PSW12T-BD	15	1.0	55	3.8	3	0.2	8	0.6	600	41	1000	69	Dual
PSW12T-CD	30	2.1	170	11.7	5	0.3	15	1.0	600	41	1000	69	Dual
PSW12T-DD	100	6.9	370	25.5	15	1.0	50	3.4	600	41	1000	69	Dual
PSW12T-ED	200	13.8	700	48.3	40	2.8	90	6.2	1500	103	3000	206	Dual
PSW12T-FD	400	27.6	1500	103.0	100	6.9	250	17.2	3000	206	4500	309	Dual
PSW12T-GD	1000	68.9	3200	220.6	100	6.9	500	34.5	6000	414	10,000	689	Dual
PSW12T-HD	2000	137.9	6000	414.0	400	27.6	800	55.2	8000	551	10,000	689	Dual
¼ FNPT 316 SS PRESSURE CONNECTION AND DIAPHRAGM, FKM O-RING, ⅛" ORIFICE, DUAL 5 A SPDT SWITCH													
PSW12V-AD	9	0.6	35	2.4	2	0.1	7	0.5	600	41	1000	69	Dual
PSW12V-BD	25	1.7	65	4.5	3	0.2	10	0.7	600	41	1000	69	Dual
PSW12V-CD	50	3.5	150	10.3	5	0.3	15	1.0	600	41	1000	69	Dual
PSW12V-DD	100	6.9	350	24.1	15	1.0	50	3.4	600	41	1000	69	Dual
PSW12V-ED	250	17.2	700	48.3	40	2.8	95	6.6	1500	103	3000	206	Dual
PSW12V-FD	400	27.6	1500	103.0	100	6.9	300	20.7	3000	206	4500	309	Dual
PSW12V-GD	1000	68.9	3200	220.6	100	6.9	500	34.5	6000	414	10,000	689	Dual
PSW12V-HD	2000	137.9	6000	414.0	400	27.6	1000	69	8000	551	10,000	689	Dual

Comes complete with operator's manual.

Ordering Examples: PSW12T-DS-GND, single 5 A SPDT switch with PFA-coated diaphragm and external grounding screw.

PSW12V-ED, dual 5 A SPDT switch with 316 SS diaphragm and FKM O-ring.

ACCESSORIES

MODEL NO.	DESCRIPTION
PSW12-CL	Cover lock
PSW12-MB	Mounting