

NEMA-7 SWITCHES PRESSURE/VACUUM RANGES

PSW790 Series
Vacuum to 3000 psi
EXPLOSION-PROOF ENCLOSURE
DIVISION 1 AND 2, NEMA-7,
NEMA-9, AND IP66



PSW790B
Series
\$370
Basic Unit

- ✓ Watertight, Corrosion Resistant Case
- ✓ UL Listed
- ✓ Reliable in Harsh Environments

The OMEGA® PSW790 Series switches are designed to satisfy most industrial switch requirements in Class I and Division 1 environments. The actuators have been proven in more than 20 years of service worldwide. A Buna-N seal PSW790B and SPDT switch is standard. Optional FKM PSW790V or stainless steel seals PSW790SS extend media compatibility to most fluids, and the choice of either a hermetically sealed or dual SPDT switches will satisfy most switching applications.

SPECIFICATIONS

Switch: UL listed SPDT

Electrical: 15 A, 125/250/480 Vac; 0.5 A, 125 Vdc; 0.25 A, 250 Vdc; 6 A, 30 Vdc

Process Temperature Range:

Buna-N: -18 to 66°C (0 to 150°F)

FKM: -7 to 149°C (20 to 300°F)

Stainless Steel: -18 to 149°C (0 to 300°F)

Repeatability: ±1% Full Range

Proof Pressure: 400% of Range

Deadband: Buna-N see "To Order" box

FKM: multiply Buna-N by 1.4

Stainless Steel: multiply Buna-N by 1.7

Enclosure: Epoxy-coated aluminum.

Class I, Division 1 & 2, Groups B, C, D

Class II, Division 1 & 2, Groups E, F, G

NEMA-7, -9, and IP66

Process Connection: ½ NPT Male,

¼ NPT Female combination

Electrical Connections: (2) ¼ NPT

conduit ports, screw terminals internal

Wetted Parts: 316 SS, Buna-N

Dimensions: psi ranges: 146 H x 132 W

x 100 mm D (5.7 x 5.8 x 4")

inH2O ranges: D = 130 mm (5.6")

Terminal block wiring standard on dual switches, optional (XK3, \$90) on single-switch models



Buna-N gasketed for environmental sealing



316 SS fitting

Epoxy-coated aluminum enclosure for corrosion resistance

PSW790B-L, \$370, shown smaller than actual size

OPTIONAL CONFIGURATIONS

Hermetically Sealed Switch:

11 A, 125/250 Vac; 5 A, 30 Vdc

add suffix "-HS", \$90

Dual SPDT Switches:

add suffix: "-DS", \$60

Stainless Steel Actuator Seal: (psi ranges to 1000) replace "B" in model no. with "SS", \$50 (not avail on 3000 psi rg)

FKM Actuator Seal: (vacuum to 1000 psi ranges) replace "B" in model no. with "V", add \$10 for psi ranges; add \$50 for inH2O ranges

Single switch terminal block: add suffix: "-XK3", \$90

MOST POPULAR MODELS HIGHLIGHTED!

To Order (Specify Model Number)

| NOMINAL RANGE ⁽¹⁾ | MODEL NUMBER | PRICE | PROOF (PSI) | APPROXIMATE DEADBAND ⁽²⁾ |
|--|--------------|-------|-------------|-------------------------------------|
| STANDARD MODELS: BUNA-N SEAL, 15 A SWITCH | | | | |
| 30 inHg Vac | PSW790B-A | \$395 | 250 | 1.5 to 3.0 |
| -15 inH2O/15 inH2O | PSW790B-B | 405 | 20 | 1.5 to 2.5/1.5 to 2.5 |
| -30 inH2O/30 inH2O | PSW790B-C | 405 | 20 | 1.5 to 2.5/1.5 to 2.5 |
| 30 inHg Vac/15 psi | PSW790B-D | 405 | 250 | 2.0 to 3.0/0.5 to 1.5 |
| 30 inHg Vac/30 psi | PSW790B-E | 405 | 250 | 3.0 to 6.0/1.0 to 2.0 |
| 30 inHg Vac/60 psi | PSW790B-F | 405 | 250 | 5.0 to 9.0/3.0 to 5.0 |
| 10 inH2O | PSW790B-G | 405 | 20 | 1.0 to 2.0 |
| 30 inH2O | PSW790B-H | 405 | 20 | 1.5 to 2.5 |
| 60 inH2O | PSW790B-I | 405 | 20 | 1.5 to 3.5 |
| 100 inH2O | PSW790B-J | 405 | 20 | 2.5 to 5.5 |
| 150 inH2O | PSW790B-K | 405 | 20 | 4.5 to 8.5 |
| 15 psi | PSW790B-L | 370 | 500 | 0.5 to 1.5 |
| 20 psi | PSW790B-M | 370 | 500 | 0.5 to 1.5 |
| 60 psi | PSW790B-N | 370 | 500 | 1.0 to 3.5 |
| 100 psi | PSW790B-O | 370 | 1000 | 1.5 to 5.0 |
| 200 psi | PSW790B-P | 370 | 1000 | 5 to 13 |
| 400 psi | PSW790B-Q | 370 | 2400 | 5 to 24 |
| 600 psi | PSW790B-R | 370 | 2400 | 9 to 30 |
| 1000 psi | PSW790B-S | 420 | 12000 | 30 to 110 |
| 3000 psi | PSW790B-T | 420 | 12000 | 80 to 235 |

Comes with complete operator's manual.

Notes: 1. Switches can generally be set between 15 and 100% of nominal range.

2. Deadbands are in English units as shown in the Nominal Range column for Buna-N diaphragm models. See table in "Specifications" for approximate deadbands of optional seals.

Ordering Example: PSW790SS-L-HS has a stainless steel seal, a range of 15 psi and a hermetically sealed 11 A switch, \$370 + 50 + 90 = \$510.

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