PS61 – OEM Subminiature Pressure Switch

- 15 to 3000 psi (1 to 207 bar)
- Exceptional Size-to-Pressure-Range Ratio
- Adjustable or Factory Set
- Perfect for Demanding OHV Applications

These compact pressure switches are designed for OEM applications. They are equipped with high proof pressure capabilities for demanding hydraulic applications such as forklifts, scissor lifts, and off road equipment.

Specifications

Switch*	100 VA Max.
Repeatability	See Table 1
Wetted Parts	
Diaphragm	Nitrile (optional Neoprene, EPDM or Viton®)
Fitting	Zinc-Plated Steel (optional 316 Stainless Steel)
Electrical Termination	Exposed Terminals IP00; IP option IP66
Deadband	See Table 1
Proof Pressure	6000 psi (414 bar)
Burst Pressure	9000 psi (600 bar)
Approvals	CE (limits switch voltage to 42 VDC)
Weight, Approximate	Steel: 0.14 lbs. (0.06 kg)

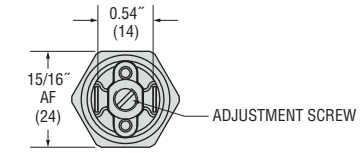
* Gold contacts (option G) may be required for less than 12 VDC and 20 mA.

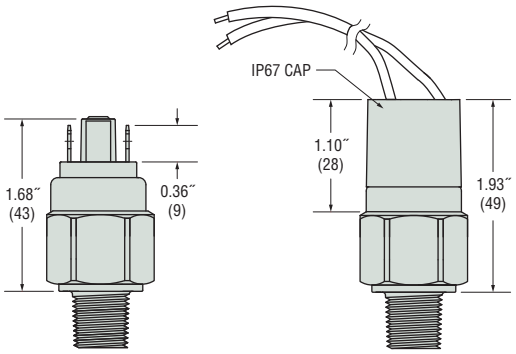
Recommended Operating Temperature Limits

Diaphragm Material	Range
Nitrile	15°F to 230°F (-9°C to +110°C)
Viton®	0°F to 230°F (-18°C to +110°C)
EPDM	-40°F to +230°F (-40°C to +110°C)

Note: Switches may function below the cold temperature limit but the set points and deadband will increase. Consult factory for details.

Dimensions





1/4″ Spades

Flying Leads with IP option

How To Order

Use the **Bold** characters from the chart below to construct a product code. Please reference Notes.

PS61 -11 -4MNZ -A -SP -XX -XXXX

1 2 3 4 5 6

1 Pressure Range Code
Insert Pressure Range Code from Table 1, below.

2 Pressure Fitting[1]

12L14 Zinc-Plated Steel
- **-2MNZ** = 1/8˝ NPTM 12L14
- **-4MNZ** = 1/4˝ NPTM 12L14
- **-2MGZ** = 1/8˝ BSPM 12L14 (G type)
- **-4MGZ** = 1/4˝ BSPM 12L14 (G type)
- **-4MSZ** = 7/16˝-20 SAE Male
- **-6MSZ** = 9/16˝-18 SAE Male
- **-8MSZ** = 3/4˝-16 SAE Male
- **-M10Z** = M10 x 1.0, Straight
- **-M12Z** = M12 x 1.5, Straight

316 Stainless Steel
- **-2MNS** = 1/8˝ NPTM
- **-4MNS** = 1/4˝ NPTM
- **-2MGS** = 1/8˝ BSPM (G type)
- **-4MGS** = 1/4˝ BSPM (G type)
- **-4MSS** = 7/16˝-20 SAE Male
- **-6MSS** = 9/16˝-18 SAE Male

3 Circuit
- **-A** = SPST/N.O.
- **-B** = SPST/N.C.

4 Electrical Termination
- **-SP** = Spade Terminals (standard)
- **-TS** = Terminal Screws
- **-FLXX** = Flying Leads[2]
- **-FLSXX** = Flying Leads w/PVC Shrink Tubing[2]
- **-CABXX** = 18 AWG PVC Cable[3]

5 Options
- **-V** = Viton® Diaphragm
- **-E** = EPDM Diaphragm
- **-N** = Neoprene Diaphragm
- **-H** = ECOH Diaphragm
- **-G** = Gold Contacts (for loads less than 12 mA @ 12 VDC)
- **-IP** = Ingress Protection[4]
- **-R** = Restrictor (low damping coefficient) Brass
- **-SR** = Spiral Restrictor (high damping coefficient) 12L14 Steel w/Black Oxide Finish[5]
- **-OXY** = Oxygen Cleaned (requires SS housing)
- **-RB** = Rubber Boot (shipped loose)
- **-WF** = Weather Pack Connector, Female
- **-WM** = Weather Pack Connector, Male
- **-DE** = Deutsch Connector, Male, DT04 Series

6 Fixed Set Point (optional)

A. Specify set point **-FS** (in PSI or BAR, see example)[6]

B. Set Point Actuation
R on Rising Pressure
F on Falling Pressure
Example: **-FS3BARF** for 3 BAR Falling or **-FS60PSIR** for 60 PSI Rising

Notes:
1. Other fittings available. Consult factory.
2. 18˝ is standard. Specify lead length in inches (max. 48˝). e.g. **-FL18** or **-FLS30**.
3. 36˝ is minimum. Specify cable length in inches. e.g. **-CAB36** or **-CAB120**.
4. Ingress Protection is available only with **-FL**, **-FLS** or **-CAB** Electrical Termination choices.
5. **-SR** will result in wider deadbands and slower response times.
6. Set Point must be within Pressure Range selected in Step 1.

Table 1 — Pressure Range Codes

Pressure Range Code	Pressure Range	Repeatability*	Average Deadband**
11	15-60 psi (1-4 bar)	±1.5 psi (0.10 bar) +3% of setting	3 psi (0.21 bar) +5% of setting
15	40-150 psi (3-10 bar)	±2.5 psi (0.17 bar) +3% of setting	5 psig (0.34 bar) +6% of setting
19	75-275 psi (5.2-18.9 bar)	±3.75 psi (0.26 bar) +3% of setting	7 psig (0.48 bar) +8% of setting
25	150-500 psi (10.3-34.5 bar)	±5 psi (0.34 bar) +3% of setting	10 psi (0.69 bar) +10% of setting
29	275-800 psi (19.0-55.2 bar)	±8 psi (0.55 bar) +3% of setting	15 psi (1.03 bar) +11% of setting
35	400-1100 psi (27.6-76 bar)	±13 psi (0.90 bar) +3% of setting	30 psi (2.07 bar) +12% of setting
50	1000-3000 psi (69-207 bar)	±35 psi (2.41 bar) +3% of setting	70 psi (4.83 bar) +14% of setting

* Repeatability and set point of units may change due to the effects of temperature.
** In certain applications deadband can be tailored and controlled to customer specifications. Consult factory for details.