

PS32/PS52 – Elastomer Diaphragm OEM Subminiature Pressure Switch

- ▶ 10 to 300 psi (0.69 to 20 bar)
- ▶ Ideal for Pneumatic and Low Pressure Hydraulic Applications
- ▶ Adjustable or Factory Set

These compact pressure switches are designed for OEM applications. Made economical by using metal blade contacts in lieu of microswitches, the series features long-lasting Elastomer diaphragms in three materials. Elastomer diaphragms offer increased sensitivity and life for applications without temperature extremes.

The PS32 and PS52 share identical construction and envelope dimensions, with the PS52 Series providing higher pressure ranges.

Specifications

Switch*	100 VA Max.
Repeatability	See Table 1
Wetted Parts	
Diaphragm	Elastomer (Nitrile standard) (Viton®, EPDM optional)
Fitting	Brass standard (optional 316 SS)
Electrical Termination	Exposed Terminals IP00; IP option IP66
Deadband	See Table 1
Proof Pressure	500 psi (35 bar)
Burst Pressure	1000 psi (69 bar)
Approvals	CE (limits switch voltage to 42 VDC)
Weight, Approximate	Brass: 0.14 lbs. (0.06 kg)

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

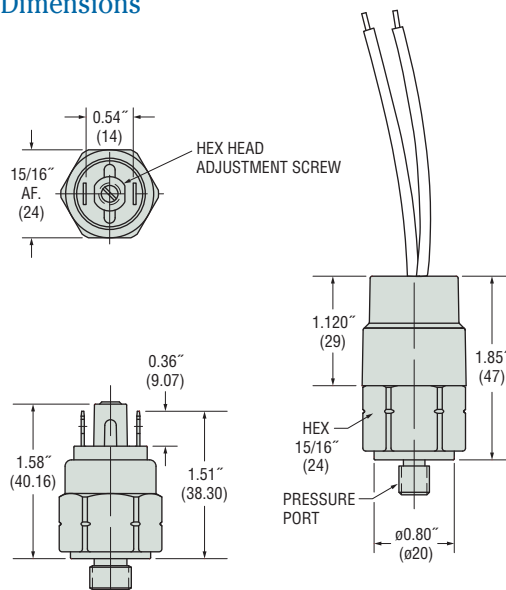
Recommended Operating Temperature Limits

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	-10°F to 230°F (-23°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



How To Order

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



1 Series

PS32 or **PS52**

2 Pressure Range Code

Insert Pressure Range Code from Tables 1, below.

3 Pressure Fitting¹

Brass

- 2MNB = 1/8" NPTM
- 4MNB = 1/4" NPTM
- 2MGB = 1/8" BSPM (G type)
- 4MGB = 1/4" BSPM (G type)
- 4MSB = 7/16"-20 SAE Male

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

4 Circuit

- A = SPST/N.O.
- B = SPST/N.C.

5 Electrical Termination

- SP = Spade Terminals (standard)
- TS = Terminal Screws
- FLXX = Flying Leads²
- FLSXX = Flying Leads w/PVC Shrink Tubing²
- CABXX = 18 AWG PVC Cable³

6 Options

- V = Viton® Diaphragm
- E = EPDM Diaphragm
- H = ECOH Diaphragm
- G = Gold Contacts
(for loads less than 12 mA @ 12 VDC)
- IP = Ingress Protection⁴
- IPA = Removable Silicone Seal for Set Point Adjustment⁵
- OF = Oil Free Cleaned
- RB = Rubber Boot (shipped loose)
- WF = Weather Pack Connector, Female
- WM = Weather Pack Connector, Male
- DE = Deutsch Connector, Male, DT04 Series

7 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: **-FS0.6BARF** for 0.6 BAR Falling
or **-FS10PSIR** for 10 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. IPA protection is available only with **-FL** or **-FLS**.
6. Set Point must be within Pressure Range selected in Step 2.

Table 1 — Pressure Range Codes

PS32

Pressure Range Code	Pressure Range	Accuracy*	Average Deadband**
20	10-25 psi (0.69-1.7 bar)	±1 psi (0.07 bar) +3% of setting	2 psi (0.14 bar) +4% of setting
30	20-60 psi (1.4-4.1 bar)	±1.5 psi (0.10 bar) +3% of setting	3 psi (0.21 bar) +4% of setting
40	50-150 psi (3.4-10.3 bar)	±2.5 psi (0.17 bar) +3% of setting	4 psig (0.28 bar) +4% of setting

PS52

Pressure Range Code	Pressure Range	Accuracy*	Average Deadband**
15	50-150 psi (3.4-10.3 bar)	±3.0 psi (0.21 bar) +4% of setting	5 psi (0.14 bar) +5% of setting
20	150-300 psi (10.3-20.7 bar)	±4 psi (0.28 bar) +4% of setting	8 psi (0.21 bar) +5% of setting

* Accuracy 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.