

# PS76 – Rugged Cylindrical Pressure Switch

- ▶ Side Mounted DIN Connection
- ▶ Top Mounted Electrical Connection
- ▶ 15 to 1750 psi (1 to 121 bar)
- ▶ Minimal Set Point Change at Low Temperature Extremes

These versatile microswitch based pressure switches are designed for high pressure OEM applications. They offer all the performance of our proven PS75 model with the low temperature capability of Kapton®.

## Specifications

<b>Switch</b>	SPST, SPDT
<b>Repeatability</b>	See Table 1
<b>Wetted Parts</b>	
Port Fitting	Zinc-Plated Steel (316L Stainless Steel available)
Diaphragm	Kapton® (polyimide)
O-Ring	Nitrile (other materials available)
<b>Electrical Termination</b>	DIN 43650A IP65; Conduit with Flying Leads IP65; Flying Leads IP65
<b>Proof Pressure</b>	4500 psi (310 bar) except Range 10: 500 psi (35 bar)
<b>Burst Pressure</b>	6000 psi (414 bar)
<b>Approvals</b>	CE, UL Approved units available
<b>Weight, Approximate</b>	Steel: 0.6 lbs. (0.27 kg)

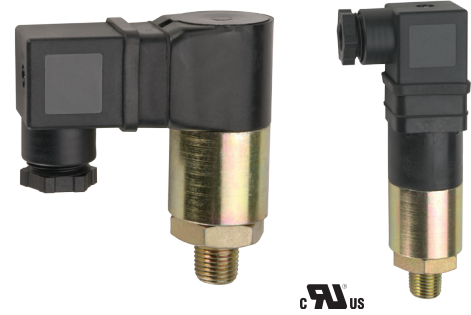
## Recommended Operating Temperature Limits

Diaphragm Material	Circuit Codes	
	-A, -B, -C	-A, -B, -C with -RD option
Teflon® Coated Kapton®	-40°F to +185°F (-40°C to +85°C)	-40°F to +250°F (-40°C to +121°C)

## Electrical Switch Ratings

Circuit Code	AC	DC
-A, -B, -C <sup>1</sup>	5 amps @ 125/250 Volts	5 amps resistive, 3 amps inductive @ 28 Volts
-A, -B, -C <sup>2</sup>	1 amp @ 125 Volts	1 amp resistive, 0.5 amp inductive @ 28 Volts

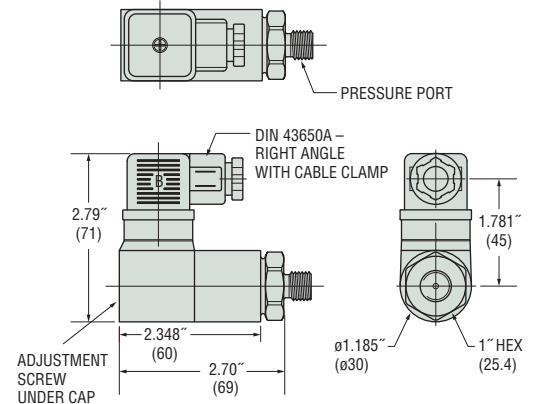
- Notes:
- Without Gold Contacts Option (-G).
  - With Gold Contacts Option (-G).



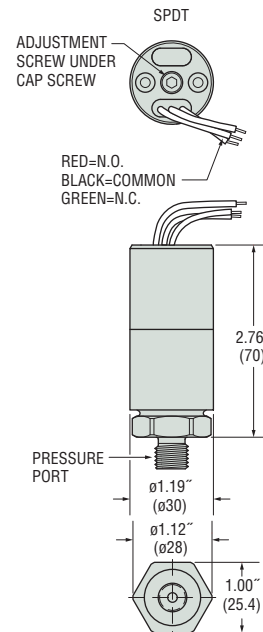
UL US

## Dimensions

### Right Angle DIN 43650A with Cable Clamp



### Flying Lead



## How To Order

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

**PS76**   **-10**   **-4MNZ**   **-C**   **-H**   **-XX**   **-XXXX**

1  
2  
3  
4  
5  
6

**1 Pressure Range Code**

Insert Pressure Range Code from Table 1, below.

**2 Pressure Fitting<sup>1</sup>**

12L14 Zinc-Plated Steel

- 2MNZ = 1/8" NPTM
- 4MNZ = 1/4" NPTM
- 4FNZ = 1/4" NPTF
- 4MGZ = 1/4" BSPM (G type)
- 4FGZ = 1/4" BSPF (G type)
- 4MSZ = 7/16"-20 SAE Male
- 6MSZ = 9/16"-18 SAE Male
- 4SSZ = 7/16"-20 SAE Male Swivel

316L Stainless Steel

- 4MNS = 1/4" NPTM
- 4MGS = 1/4" BSPM (G type)
- 4FGS = 1/4" BSPF (G type)
- 6MSS = 9/16"-18 SAE Male

**3 Circuit**

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

**4 Electrical Termination**

- FLXX = Flying Leads<sup>2</sup>
- FLSXX = Flying Leads w/PVC Shrink Tubing<sup>2</sup>
- ELXX = 1/2" NPT Male Conduit w/Flying Leads<sup>3</sup>
  - H = DIN 43650A Male Half Only<sup>4</sup>
  - HR = Right Angle DIN 43650A Male Half Only<sup>4</sup>
  - HC = DIN 43650A 9mm Cable Clamp<sup>4</sup>
  - HCR = Right Angle DIN 43650A 9mm Cable Clamp<sup>4</sup>
  - HN = DIN 43650A with 1/2" Female NPT Conduit<sup>4</sup>
  - HNR = Right Angle DIN 43650A with 1/2" Female NPT Conduit<sup>4</sup>

**5 Options**

- G = Gold Contacts  
(for loads less than 12 mA @ 12 VDC)
- RD = Reduced Differential  
(25% reduction typical)
- OF = Oil Free Cleaned<sup>5</sup>
- R = Restrictor (low damping coefficient) Brass
- SR = Spiral Restrictor (high damping coefficient)  
300 Series Stainless Steel<sup>6</sup>
- 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)<sup>7</sup>
  - B. Set Point Actuation
    - R** on Rising Pressure
    - F** on Falling Pressure
- Example: **-FS1BARF** for 1 BAR Falling  
or **-FS20PSIR** for 20 PSI Rising

Notes:

1. Manifold mounts available. Consult factory.
2. 18" is standard. Specify lead length in inches (max. 48"). e.g. **-FL18** or **-FL30**.
3. 18" is standard. Specify lead length in inches (max. 48"). e.g. **-EL18** or **-EL30**.
4. DIN connectors require **-C** SPDT circuit.
5. Requires stainless steel pressure fitting.
6. **-SR** will result in wider deadbands and slower response times.
7. Set Point must be within Pressure Range selected in Step 1.

Table 1 — Pressure Range Codes

For Circuit Codes -A, -B and -C

Pressure Range Code	Pressure Range	Accuracy*	Average Deadband**
<b>10</b>	15-75 psi (1.0-5.2 bar)	±2.5 psi (0.17 bar) +3% of setting	5 psig (0.34 bar) +11% of setting
<b>20</b>	50-150 psi (3.5-10.3 bar)	±6 psi (0.41 bar) +3% of setting	15 psig (1.03 bar) +14% of setting
<b>30</b>	150-650 psi (10.3-44.8 bar)	±15 psi (1.03 bar) +3% of setting	25 psi (1.72 bar) +15% of setting
<b>40</b>	500-1750 psi (34.5-121 bar)	±25 psi (1.72 bar) +3% of setting	55 psi (3.79 bar) +16% 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.