

# 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**

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

Recommended Operating Temperature Limits

	Circuit Codes		
Diaphragm Material	-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, -C¹	5 amps @ 125/250 Volts	5 amps resistive, 3 amps inductive @ 28 Volts	
-A, -B, -C²	1 amp @ 125 Volts	1 amp resistive, 0.5 amp inductive @ 28 Volts	

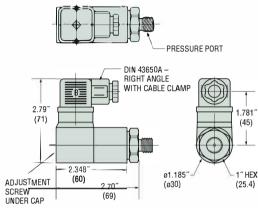
#### Votes:

- 1. Without Gold Contacts Option (-G).
- 2. With Gold Contacts Option (-G).

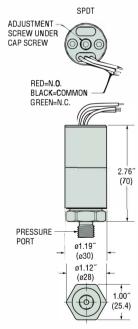


#### **Dimensions**

## Right Angle DIN 43650A with Cable Clamp



#### Flying Lead



1-29

#### How To Order

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

**PS76** 

## 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

-4\$\$Z = 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 Only4

-HC = DIN 43650A 9mm Cable Clamp4

-HCR = Right Angle DIN 43650A 9mm Cable Clamp4

-HN = DIN 43650A with 1/2" Female NPT Conduit4

-HNR = Right Angle DIN 43650A with 1/2" Female NPT Conduit⁴

## (5)Options

-G = Gold Contacts

(for loads less than 12 mA @ 12 VDC)

-RD = Reduced Differential (25% reduction typical)

-OF = Oil Free Cleaned5

-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)7

B. Set Point Actuation

R on Rising Pressure

F on Falling Pressure

Example: -FS1BARF for 1 BAR Falling

or -FS20PSIR for 20 PSI Rising

## Table 1 — Pressure Range Codes

For Circuit Codes -A, -B and -C

Pressure Range Code	Pressure Range	Accuracy*	Average Deadband**
10	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
20	50-150 psi (3.5-10.3 bar)	±6 psi (0.41 bar) +3% of setting	15 psig (1.03 bar) +14% of setting
30	150-650 psi (10.3-44.8 bar)	±15 psi (1.03 bar) +3% of setting	25 psi (1.72 bar) +15% of setting
40	500-1750 psi (34.5-121 bar)	±25 psi (1.72 bar) +3% of setting	55 psi (3.79 bar) +16% of setting

<sup>\*</sup> Accuracy and set point of units may change due to the effects of temperature.

1. Manifold mounts available. Consult factory.

Notes:

- 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.
- Requires stainless steel pressure fitting.
- 6. -SR will result in wider deadbands and slower response times.
- Set Point must be within Pressure Range selected in Step 1.

<sup>\*\*</sup> In certain applications deadband can be tailored and controlled to customer specifications. Consult factory for details.