

# PS71 – General Purpose Mini Pressure Switches

▶ 10 to 5000 psi (.7 to 344 bar) formerly PS-EH series

These versatile general purpose switches with snap action microswitches can be used in a wide range of hydraulic and pneumatic applications. Their proven piston/diaphragm design offers outstanding accuracy over a very wide pressure range with an outstanding 9000 psi proof pressure. Their modular construction allows Gems to offer a large number of standard pressure fittings in two materials as well as numerous electrical ratings and terminations. Users can easily configure this model to meet their needs.

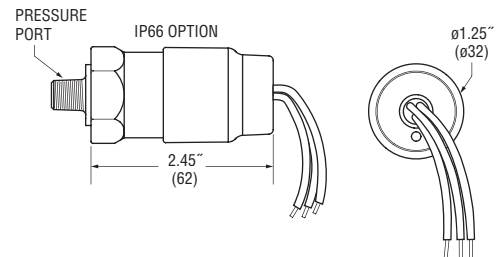
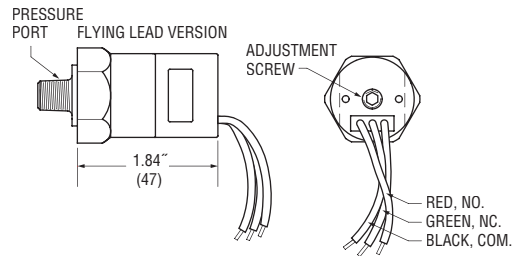
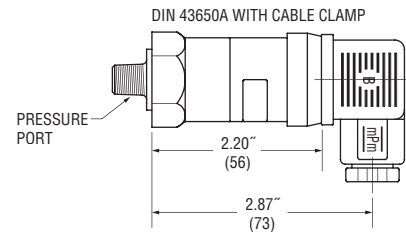
## Specifications

<b>Operating Temperature</b>	-40°F to +180°F (-40°C to +80°C)
<b>Switch*</b>	5 Amp at 12/24 VDC and 125/250 VAC (Optional 10 Amp or 1 Amp with Gold contacts)
<b>Repeatability</b>	±2% of Full Set Point Range @ 70°F (20°C)
<b>Wetted Parts</b>	
<b>Diaphragm</b>	Nitrile (optional EPDM, Viton® or Neoprene)
<b>Fitting</b>	Zinc Plated Steel (Optional 316 SS)
<b>Electrical Termination</b>	DIN 43650A IP65; Spade Terminals IP00; Flying Leads IP65; Conduit with Flying Leads IP00; IP option IP66
<b>Proof Pressure</b>	9000 psi (600 bar)
<b>Approvals</b>	CE, UL Approved units available
<b>Weight, Approximate</b>	0.4 lbs. (0.15 kg)

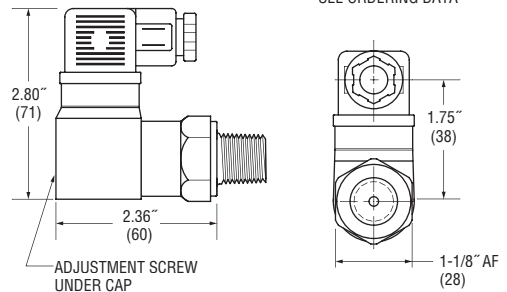
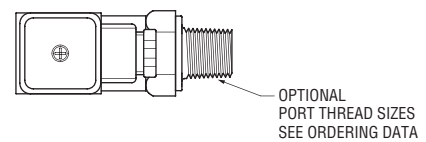
\*Gold contacts (option G) may be required for less than 12 VDC and 20 mA.  
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## Dimensions



RIGHT ANGLE DIN 43650A WITH CABLE CLAMP



## How To Order

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

<b>SELECT</b>	<b>PS71</b>	<b>-10</b>	<b>-4MNZ</b>	<b>-C</b>	<b>-H</b>	<b>-XX</b>	<b>-XXXX</b>
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1. Pressure Range Code \_\_\_\_\_  
Insert Pressure Range Code from table below
2. Pressure Fitting<sup>1</sup> \_\_\_\_\_  

<u>12L14 Zinc Plated Steel</u>	<u>316 Stainless Steel</u>
<b>-2MNZ</b> 1/8" NPTM	<b>-2MGS</b> 1/8" BSPM
<b>-4MNZ</b> 1/4" NPTM	<b>-4MNS</b> 1/4" NPTM
<b>-2MGZ</b> 1/8" BSPM	<b>-4MGS</b> 1/4" BSPM
<b>-4MGZ</b> 1/4" BSPM	
<b>-4MSZ</b> 7/16"-20 SAE Male	
<b>-6MSZ</b> 9/16"-18 SAE Male	
3. Circuit \_\_\_\_\_  
**-A** SPST/NO; **-B** SPST/NC; **-C** SPDT
4. Electrical Termination \_\_\_\_\_  
**-SP** Spade Terminals<sup>2</sup>; **-FLXX** Flying Leads<sup>3</sup>;  
**-FLSXX** Flying Leads w/PVC Shrink Tubing<sup>3</sup>;  
**-ELXX** 1/2" NPT Male Conduit w/Flying Leads<sup>4</sup>; **-CABXX** 18 AWG PVC Cable<sup>5</sup>;  
**-H** DIN 43650A Male Half Only<sup>6</sup>; **-HR** Right Angle DIN 43650A Male Half Only<sup>6</sup>;  
**-HC** DIN 43650A 9mm Cable Clamp<sup>6</sup>;  
**-HCR** Right Angle DIN 43650A 9mm Cable Clamp<sup>6</sup>;  
**-HN** DIN 43650A with 1/2" Female NPT Conduit<sup>6</sup>;  
**-HNR** Right Angle DIN 43650A with 1/2" Female NPT Conduit<sup>6</sup>
5. Options<sup>7</sup> \_\_\_\_\_  
**-V** Viton<sup>®</sup> Diaphragm; **-E** EPDM Diaphragm; **-N** Neoprene Diaphragm;  
**-10A** 10A @ 125/250 VAC Max. Rating;  
**-G** Gold Contacts (for loads less than 12 mA @ 12 VDC);  
**-RD** Reduced Differential (50% reduction typical); **-IP** Ingress Protection<sup>8</sup>;  
**-OXY** Oxygen Cleaned<sup>9</sup>; **-R** Restrictor (low damping coefficient) Brass;  
**-SR** Spiral Restrictor (high damping coefficient) 12L14 Steel w/Black Oxide Finish;  
**-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>10</sup> \_\_\_\_\_  
 B. Set Point Actuation \_\_\_\_\_  
**R** on Rising Pressure; **F** on Falling Pressure  
 Example: **-FS2BARF** for 2 BAR Falling or **-FS20PSIR** for 20 PSI Rising

Notes:

1. Other connectors available. Consult factory.
2. Requires **-10A** or **-G** option.
3. 18" is standard. Specify lead length in inches (max. 48"). e.g. **-FL18** or **-FLS30**.
4. 18" is standard. Specify cable length in inches (max. 48"). e.g. **-EL18** or **-EL30**.
5. 36" is minimum. Specify cable length in inches. e.g. **-CAB36** or **-CAB120**.
6. DIN connectors require **-C** SPDT circuit.
7. Options **-10A**, **-G** or **-RD** cannot be combined.
8. Ingress Protection is available only with **-FL**, **-FLS** or **-CAB** Electrical Termination choices.  
Ingress Protection requires Fixed Set Point **-FS**.
9. Requires stainless steel housing.
10. Set Point must be within Pressure Range selected in Step 1 above.

## Pressure Range Table

Pressure Range Code	Adjustment Ranges	Average Dead Band
10	10-30 psi (0.7-2.1 bar)	4-6 psi (0.25-0.40 bar)
20	25-75 psi (1.7-5.2 bar)	5-10 psi (0.35-0.65 bar)
30	65-300 psi (4.5-20.7 bar)	20-40 psi (1.3-2.6 bar)
40	250-1000 psi (17.2-69 bar)	40-85 psi (2.6-5.7 bar)
50	1000-3000 psi (69-206.8 bar)	120-220 psi (8-15 bar)
60	2500-5000 psi (172.4-344.7 bar)	300-500 psi (21-35 bar)