

# PS98 - Solid-State Pressure Switch

- ▶ 0 to 6000 psi and 0 to 400 bar
- ▶ No Moving Parts—Highly Resistant to Shock and Vibration
- ▶ Ideal for Off-Highway, Mobile, Demanding Applications
- ▶ Long Cycle Life

Answering the demand for solid-state switches, Gems proudly offers the PS98. Built from our proven CVD and ASIC design, the PS98 Solid-State pressure switch offers greater accuracy in rough environments. This switch is an ideal alternative to electromechanical types when cycles exceed 50 cycles/minute and broad frequency response is needed. In addition to a modular design, a host of pressure ports and electrical connections are available. Switch and switch-back points are factory set per customer specification.

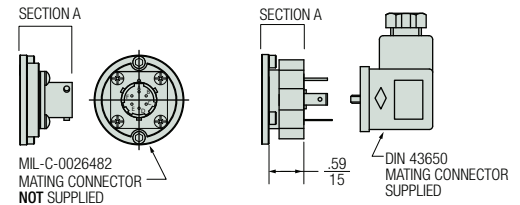
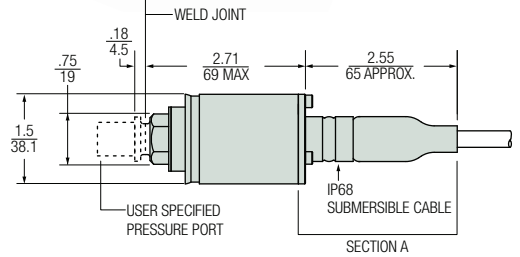
### Specifications:

<b>Operating Temperature</b>	-40°F to +260°F (-40°C to +127°C)
<b>Switch</b>	Relay or Transistor
<b>Repeatability*</b>	.25% of Full Set point range @ 70°F (20°C)
<b>Fatigue Life</b>	Designed for more than 100 million FS cycles
<b>Wetted Parts</b>	
<b>Diaphragm</b>	17-4PH Stainless Steel
<b>Fitting</b>	316 Stainless Steel
<b>Electrical Termination</b>	DIN "G" IP65 10-6 MIL CONN "C" IP65 Submersible Cable "M" IP68
<b>Supply Voltage (Vs)</b>	24-72 VDC
<b>Vibration</b>	70g, peak to peak sinusoidal, 5 to 2000 Hz (Random Vibration: 20 to 2000 Hz @ approx. 20g Peak per MIL-STD-810E Method 514.4)
<b>Acceleration</b>	100g steady acceleration in any direction 0.032% FS/g for 1 bar (15 psi) range decreasing logarithmically to 0.0007% FS/g for 400 bar (6000 psi) range.
<b>Shock</b>	20g, 11 ms, per MIL-STD-810E Method 516.4 Procedure 1
<b>Proof Pressure</b>	2X Full Scale
<b>Approvals</b>	CE (limits switch voltage to 42 VDC)
<b>Weight, Approximate</b>	1.0 lbs. (0.45 kg)

\* Repeatability and set point of units may change due to the effects of temperature.

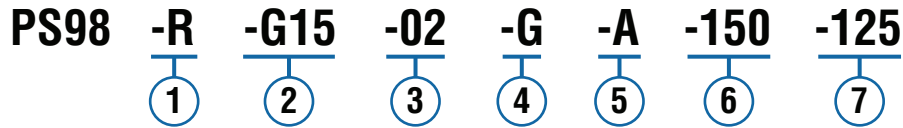


### Dimensions



How To Order

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



**1 Output**

- R=Relay
- T=Transistor

**2 Pressure Range**

Insert Pressure Range Code from Tables 1, below.

**3 Pressure Port**

- 08=1/8"-27 NPT External
- 02=1/4"-18 NPT External
- 0J=1/4" NPT External w/snubber
- 0E=1/4" NPT Internal
- 0H=1/2"-14 NPT External
- 04=7/16"-20 External (SAE #4, J514)
- 1P=9/16"-18 External (SAE #6, J1926-2)
- 1J=7/16"-20 External (SAE #4, J1926-2)
- 09=G1/8" Internal
- 01=G1/4" External
- 0A=R1/4" External

**4 Electrical Termination**

- G=Large DIN (Mating Connector Supplied)
- MXXX=IP68 Cable  
(Specify length in meters; e.g. -M012)
- C=6-Pin Connector  
(Mating Connector Supplied)

**5 Circuit**

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

**6 Factory Set Point<sup>1</sup>**

**7 Re-Set Point<sup>1</sup>**

Note:

1. Set Points must be within Pressure Range selected in Step 2.

**Accessories**

PN	Description
557254	Mating Connector for -G
165835	Mating Connector for -C

Tables 1 — Pressure Range Codes

PSI Measurement

Pressure Range Code	Pressure Range (psi)
<b>F15</b>	0-15
<b>F30</b>	0-30
<b>F60</b>	0-60
<b>G10</b>	0-100
<b>G15</b>	0-150
<b>G20</b>	0-200
<b>G30</b>	0-300
<b>G50</b>	0-500
<b>G60</b>	0-600
<b>H10</b>	0-1000
<b>H15</b>	0-1500
<b>H20</b>	0-2000
<b>H30</b>	0-3000
<b>H40</b>	0-4000
<b>H50</b>	0-5000
<b>H60</b>	0-6000

Bar Measurement

Pressure Range Code	Pressure Range (bar)
<b>A10</b>	0-1
<b>A16</b>	0-1.6
<b>A25</b>	0-2.5
<b>A40</b>	0-4
<b>A60</b>	0-6
<b>B10</b>	0-10
<b>B16</b>	0-16
<b>B25</b>	0-25
<b>B40</b>	0-40
<b>B60</b>	0-60
<b>C10</b>	0-100
<b>C16</b>	0-160
<b>C25</b>	0-250
<b>C40</b>	0-400
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