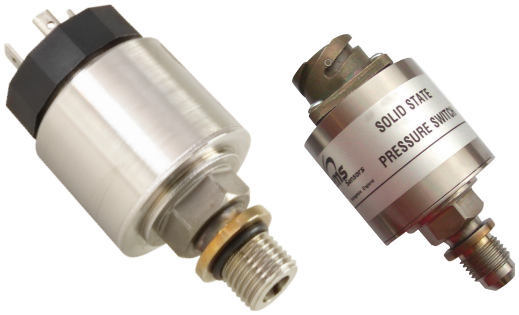
PS98 - Solid-State Pressure Switch

- 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.

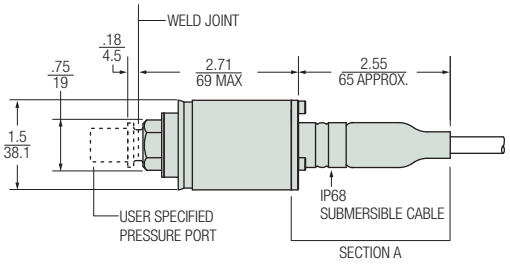


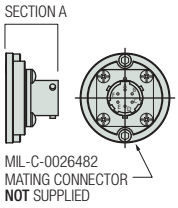
Specifications:

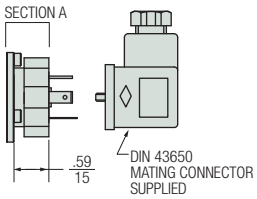
Operating Temperature	-40°F to +260°F (-40°C to +127°C)
Switch	Relay or Transistor
Repeatability*	.25% of Full Set point range @ 70°F (20°C)
Fatigue Life	Designed for more than 100 million FS cycles
Wetted Parts	
Diaphragm	17-4PH Stainless Steel
Fitting	316 Stainless Steel
Electrical Termination	DIN "G" IP65 10-6 MIL CONN "C" IP65 Submersible Cable "M" IP68
Supply Voltage (Vs)	24-72 VDC
Vibration	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)
Acceleration	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.
Shock	20g, 11 ms, per MIL-STD-810E Method 516.4 Procedure 1
Proof Pressure	2X Full Scale
Approvals	CE (limits switch voltage to 42 VDC)
Weight, Approximate	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.

PS98 -R -G15 -02 -G -A -150 -125

(1) (2) (3) (4) (5) (6) (7)

(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[1]

(7) Re-Set Point[1]

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)
F15	0-15
F30	0-30
F60	0-60
G10	0-100
G15	0-150
G20	0-200
G30	0-300
G50	0-500
G60	0-600
H10	0-1000
H15	0-1500
H20	0-2000
H30	0-3000
H40	0-4000
H50	0-5000
H60	0-6000

Bar Measurement

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