

TECHNICAL DATA

S298 Coolant Level Switch – Capacitance Type with Voltage Output

FOZMULA
INNOVATION IN SENSORS



The **S298** is an active device designed to give an alarm signal if liquid falls below, or rises above, a preset level. It can be specified with a delay to eliminate false alarms due to turbulence.

Containing a factory programmable microprocessor and an integral 3-pin Metripack 150 connector, this switch can be configured to provide most industry standard voltage outputs.

Its small footprint with limited intrusion into the tank means a reduced risk of damage and a wide range of customer specifiable options make it suitable for most applications.

The switch is designed to operate in both earthed metal and isolated plastic tanks. For high accuracy the S298 is ideally mounted horizontally at the point where an alarm or control signal is required. However, the switch can be mounted vertically – contact Fozmula with your application requirements.

SPECIFICATION

Liquid types: Water based liquids such as coolant or washer fluid.

Electrical rating

| | |
|---------------------------------|---|
| Supply voltage: | 5±0.25 VDC. |
| Supply current: | 5 mA + source output. |
| Alarm delay time: | 0 to 25 s rising or falling (factory set). |
| Connection: | 3 way Packard Metripack 150 connector. |
| Power up delay: | 0 to 10 s (factory set). |
| Power up state: | 'In Liquid' or 'Out of Liquid' (factory set). |
| Output type: | Voltage. |
| Output pin: | Pin B. |
| Output state in liquid*: | 1.2±0.25 VDC |
| Output state in air*: | 3.75±0.25 VDC |
| Output current: | 10 mA maximum. |

Connections: See diagram below.

*Outputs are factory selectable; opposite states and alternative values from 0.5-4.5 VDC are available on request.

Environmental Ratings

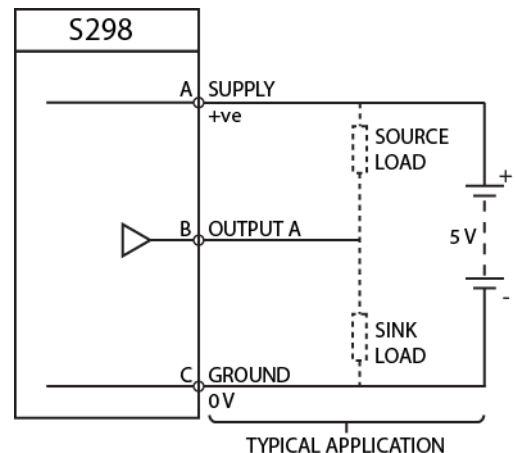
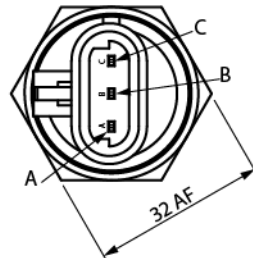
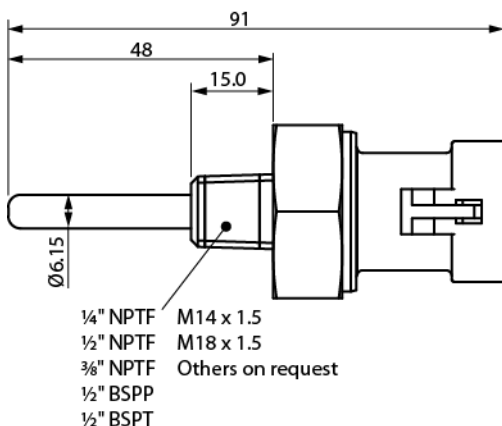
| | |
|-----------------------|---|
| Ingress: | IP67 (with mating connector fitted). |
| Max. pressure: | 5.0 Bar (72 psi) |
| Temp. range: | -40 °C to +125 °C (-40 °F to + 257 °F) |
| Weight: | 70 g typical (dependent on thread size) |
| EMC: | ISO13766:2006 |

Construction

| | |
|------------------------|--|
| Body: | Brass. |
| Probe: | PTFE. |
| Terminals: | Brass, Tin Plated. |
| Seals: | EPDM & FVMQ. |
| Connector: | PA66 30% Glass Filled Nylon. |
| Thread sealant: | Vibra-Seal 516 (taper thread variants only). |

Vibration (15.3 Grms)

| |
|---|
| 3 orthogonal planes for 3 hours per plane |
| Testing performed in accordance with BSEN 60068-2-64:1993 |
| Drop: 1 m to concrete surface. |



Recommended Installation Tightening Torques:

| | | | |
|-----------|-------|---------|-------|
| 1/4" NPTF | 9 Nm | M14x1.5 | 10 Nm |
| 3/8" NPTF | 11 Nm | M18x1.5 | 15 Nm |
| 1/2" NPTF | 20 Nm | | |
| 1/2" BSPP | 15 Nm | | |
| 1/2" BSPT | 20 Nm | | |

Optional accessories

Packard Metri-Pack 150 series mating connector kit to suit harness wire cross sectional area of 0.8 to 1.0 mm² and sleeve Ø1.60 to 2.15 mm.

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