

## TECHNICAL DATA

# S98 capacitance coolant level switch

**FOZMULA**  
INNOVATION IN SENSORS



The **Model S98** is an active device which is designed to give an alarm signal if fluid falls below a preset level. It will only signal an alarm after a few seconds of low level to eliminate false alarms due to turbulence.

The **S98** will output one of two distinct voltage levels (customer specified) dependent upon whether the probe detects a safe or alarm condition. For example, the output can be set to give 1V out in the safe condition and 4V out in the alarm condition of low coolant. In this way, any voltage level other than 1V or 4V can be assigned an error code.

## SPECIFICATION

### Electrical Rating

**Supply Voltage:** 5 VDC or 7 - 35 VDC  
**Supply Current:** 1.5mA + source output  
**Max. Load Current:** 10mA 0-5v output (source)  
**Alarm Delay Time:** 0 - 25 secs rising or falling (factory set)  
**Connection:** 4 way Delphi Packard connector  
**Start up Delay:** 1 - 5 secs

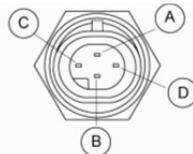
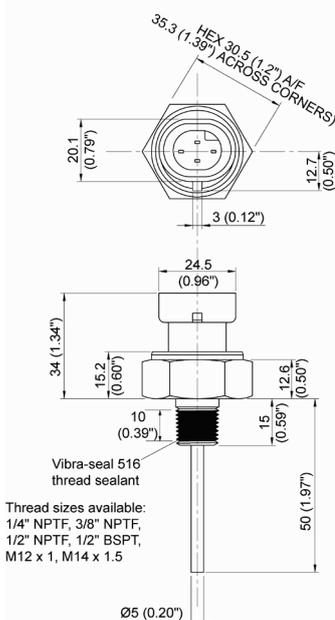
### Fluid Types

Water based fluids compatible with Brass, PTFE and NBR rubber

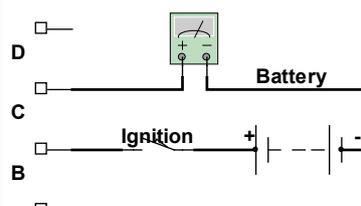
### Environmental Ratings

**Sealing:** IP67  
**Max. pressure:** 5.0 Bar (72 psi)  
**Temp. ranges:** Fluid: -40°C to +130°C (-40°F to + 266°F)  
 Storage: -40°C to +140°C (-40°F to + 266°F)  
**Weight:** 53g (2 oz)

Note: Torque setting on installation should not exceed 22Nm. Unit should be tightened with a 31mm ring spanner or 31mm socket.



- A NOT TO BE CONNECTED
  - B GND Negative power supply or GND
  - C V+ Positive power supply
  - D Output voltage signal
- Body not connected



### Construction

**Body:** Brass  
**Probe:** PTFE  
**Terminals:** SAE CA210Brass, Tin Plated  
**Seals:** NBR rubber  
**Connector:** 30% Glass Filled Nylon 6  
**Thread sealant:** Vibra-Seal 516

### Connections

See diagram below

Note: Output is factory programmable between 0-5V ±0.1V

### Vibration (15.3 grms)

3 orthogonal planes for 3 hours per plane

Frequency (Hz)	G2/Hz
24	0.4
60	0.5
100	0.5
240	0.1
2000	0.1

Testing performed in accordance with BSEN 60068-2-64:1993

### Optional accessories:

Mating connector kit to suit harness wire cross sectional area of 0.8 to 1.0mm<sup>2</sup> and sleeve Ø1.60 to 2.15mm:

Our Part no	Description
C/K1	Connector kit comprising of: Crimp Terminals (x4) Cable seals (x4) Cavity plug (x1) Connector assembly 4 way (x1) TPA lock (x1)

From the Packard Metri-Pack 150 series of connectors.

Hermes Close | Tachbrook Park | Warwick | CV34 6UF | United Kingdom  
 Tel: +44 (0)1926 466700 | Fax: +44 (0)1926 450473 | sales@fozmula.com

[www.fozmula.com](http://www.fozmula.com)

E. & O. E. © Fozmula Limited. July 2012 Issue No. 3

Since the suitability of these products depends upon a wide range of factors not in our control, Fozmula Limited expects and understands that you will conduct the testing and evaluation necessary to determine that these products are suitable for your application. Whilst every effort is made to ensure the above details are correct at the time of printing, Fozmula Limited reserves the right to make material changes, and or technical changes without notification.