

## TECHNICAL DATA

# S285 Coolant Level Switch – Capacitance Type

**FOZMULA**  
INNOVATION IN SENSORS



The **S285** 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, the switch offers sink to ground or source voltage outputs, or even both outputs on separate pins. 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.

## SPECIFICATION

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

### Electrical rating

**Supply voltage:** 9-35 VDC.  
**Supply current:** 7 mA + source output.  
**Max. load current:** 1.0 A (sink) or 20 mA (source).  
**Alarm delay time:** 0 to 10 s rising or falling (factory set).  
**Connection:** 4 way Delphi Packard connector.  
**Power up delay:** 1 to 10 s (factory set).  
**Power up state:** 'In Liquid' or 'Out of Liquid' (factory set).  
**Output type:** Sink (open collector) and/or Source (supply voltage).  
**Output pin:** Pin D (sink) or Pin A (source).  
**Output state in liquid:** Closed (sink), On (source)\*  
**Output state in air:** Open (sink), Off (source)\*

**Connections:** See diagram below.

\*Outputs are factory selectable opposite states and dual outputs on output 1 are available on request.

### Environmental Ratings

**Ingress:** IP67  
**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:** ISO10605, ISO11452-1 & ISO11452-3

### Construction

**Body:** Brass.  
**Probe:** PTFE.  
**Terminals:** Brass, Tin Plated.  
**Seals:** EPDM & FVMQ.  
**Connector:** PA66 30% Glass Filled Nylon.  
**Thread sealant:** Vibra-Seal 516 on request.

### Vibration (15.3 Grms)

3 orthogonal planes for 3 hours per plane  
 Testing performed in accordance with BSEN 60068-2-64:1993

### Frequency (Hz) g<sup>2</sup> Hz<sup>-1</sup>

24	0.4
60	0.5
100	0.5
240	0.1
2000	0.1

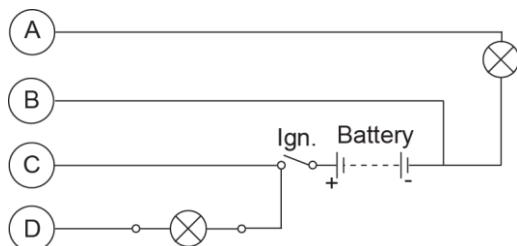
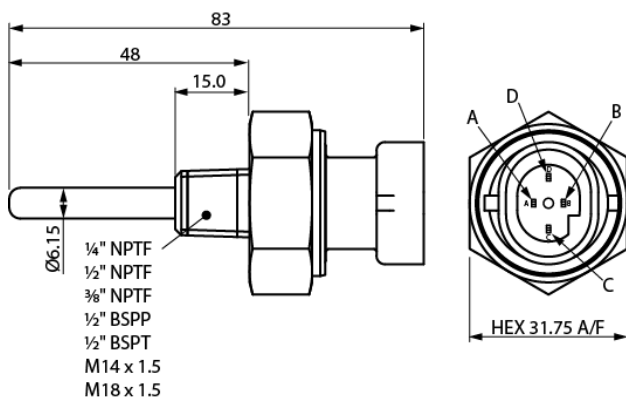
**Drop:** 1 m to concrete surface.

### Optional accessories

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

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.



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