

S281 Coolant Level Switch – Capacitance Type



The **S281** is an active device designed to give an alarm signal if coolant 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 output. 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.

For high accuracy, the S281 is ideally mounted horizontally at the point where an alarm or control signal is required. However, the switch can be mounted vertically - contact Rochester Sensors UK Limited with your application requirements.



SPECIFICATION

Liquid types: Electrical vating

Water based liquids, such as coolant or washer fluid, compatible with brass, PTFE, EPDM and FVMQ.

Electrical rating
Supply voltage:
Supply current:
Max. load current:
Alarm delay time:
Connection:
Power up delay:
Power up state:
Output type:
Output pin:
Output state:

	Construction
9-36 VDC.	Body:
7 mA + source output.	Probe:
1.0 A (sink) or 20 mA (source).	Terminals:
0 to 25 s rising or falling (factory set).	Seals:
4 way DIN 72585 / ISO 15170 connector	Connector:
0 to 10 s (factory set).	Thread sealant:
'In Liquid' or 'Out of Liquid' (factory set).	

Sink (open collector) and/or Source (supply voltage).

alant:

Brass. PTFF Brass, Tin Plated. EPDM & FVMQ. PA66 30% Glass Filled Nylon. Vibra-Seal 516 (taper thread variants only).

Connections:

Environmental Ratings

48

M14 x 1.5

M18 x 1.5

Others on request

9 Nm

11 Nm

20 Nm

15 Nm

20 Nm

Recommended Installation Tightening Torques:

M14x1.5

M18x1.5

10 Nm

15 Nm

80

15.0

Ingress: Max. pressure: Temp. range: Weight: EMC:

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1⁄4" NPTF

1/2" NPTF

3/8" NPTF

1/5" BSPP

1/2" BSPT

1/4" NPTF

3%" NPTF

1/2" NPTF

1/2" BSPP

1/2" BSPT

IP67 / IPX9K (with mating connector fitted). Vibration (15.3 Grms) 24 Bar (348 psi) -40 °C to +125 °C 70 g typical (dependent on thread size) ISO13766-1:2018

HEX 32 A/F

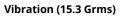
3

4

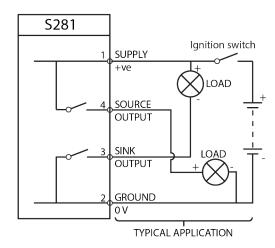
Sink Open / Closed in liquid (factory set). Source On / Off in liquid (factory set).

Pin 3 (sink) or Pin 4 (source).

See diagram below.



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



NOTE: IF SINK ONLY OUTPUT IS REQUIRED THEN PIN 4 IS NOT USED.

Optional accessories

C/K2: Mating connector kit to suit harness wire cross sectional area of 1 to 2.5 mm2, insulation diameter 1.2 to 3 mm: Ø1.60 to 2.15 mm. Comprising of: Crimp Terminals (x4), Cable seals (x4) and Connector assembly 4 way (x1).

3.18 rev 3

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