Rochester Sensors
AN AMPHENOL COMPANY
Engineering Innovative Solutions™

S283 Coolant Level Switch – Capacitance Type



The S283 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 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 S283 should ideally be 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: Water based liquids, such as coolant or washer fluid, are compatible with brass, PTFE, EPDM and FVMQ.

Electrical rating

Supply voltage:	9-36 VDC.
Supply current:	7 mA + source output.
Max. load current:	1.0 A (sink) or 20 mA (source).
Alarm delay time:	0 to 25 s rising or falling (factory set).
Connection:	4 way Deutsch DT04-4P.
Power up delay:	0 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 4 (sink) or Pin 3 (source).
Output state:	Sink Open / Closed in liquid (factory set). Source On / Off in liquid (factory set).

Connections: See diagram below.

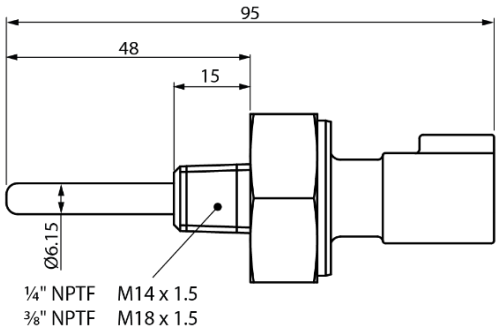
Construction

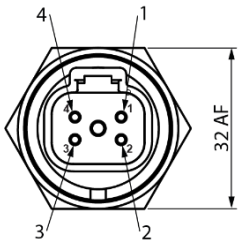
Body:	Brass.
Probe:	PTFE.
Terminals:	Brass, Gold Plated.
Seals:	FVMQ.
Connector:	PBT 30% Glass Filled.
Thread sealant:	Applied to taper threads only.

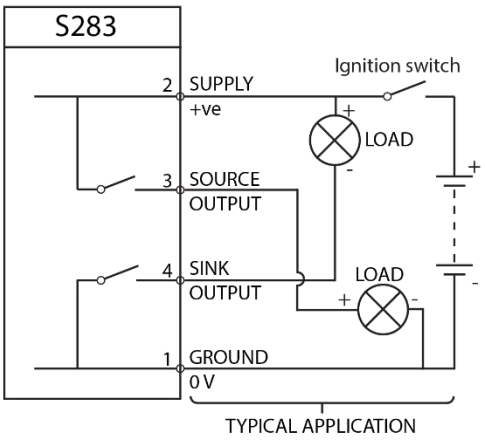
Environmental Ratings

Ingress:	IP67, IPX9K (with mating connector fitted).
Max. pressure:	5.0 Bar (72 psi).
Temp. range:	-40 °C to +125 °C.
Weight:	70 g typical (dependent on thread size).
EMC:	ISO13766:2006.

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.







NOTE: IF SINK ONLY OUTPUT IS REQUIRED THEN PIN 3 IS NOT USED.

Recommended Installation Tightening Torques:

¼" NPTF	9 Nm	M14x1.5	10 Nm
⅜" NPTF	11 Nm	M18x1.5	15 Nm
½" NPTF	20 Nm	M22x1.5	15 Nm
½" BSPP	15 Nm	M22x2.5	15 Nm
½" BSPT	20 Nm		

Optional accessories

C/K13: 4 way Deutsch DT06-4S mating connector kit to suit harness wire cross sectional area of 0.5 to 1.5 mm² (16-20 AWG).

REV 3

Since the suitability of these products depends upon a wide range of factors not in our control, Rochester Sensors UK 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, Rochester Sensors UK Limited reserves the right to make material changes, and or technical changes without notification.

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