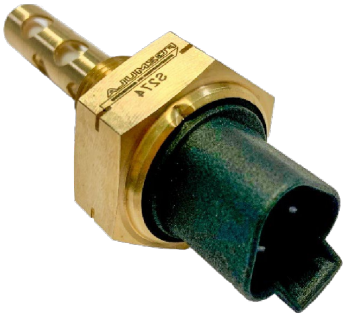
Rochester Sensors
AN AMPHENOL COMPANY
Engineering Innovative Solutions™

S274 Oil Level Switch - Capacitance Type



Featuring an integrated Deutsch DT04-3P connector, the **S274** is a capacitance type oil level switch for use in mineral oils including engine, transmission, and hydraulic oils. It is an active device designed to give an alarm signal if oil falls below, or rises above, a preset level. It can also be specified with a delay to eliminate false alarms due to turbulence.

The switch is available with either sink to ground or source voltage output. A wide range of customers' specifiable options make it suitable for most applications.

For high accuracy, the S274 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 with your application requirements.

SPECIFICATION

Liquid Types

Mineral oils, typically used in engines, transmissions, compressors or hydraulic actuators, are compatible with brass, PTFE, and FVMQ.

Materials

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.
Connection:	3-way Deutsch DT04-3P.
Power up delay*:	0 to 10s
Power up state*:	`In Liquid` or `Out of Liquid`.
Output type*:	Sink (open collector) or Source (supply voltage less typically 2.7 v @ 10 mA
Output state*:	Sink Open / Closed in oil. Source On / Off in oil.

***Factory set**

Connections: See diagrams below.

Construction

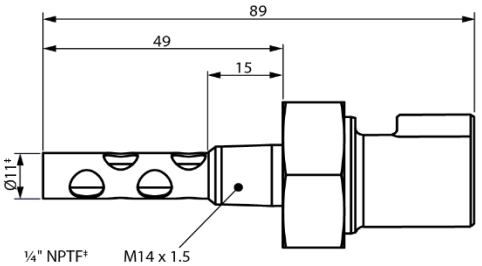
Body:	Brass or 316 Stainless Steel - one piece body and probe shroud
Probe:	PTFE.
Terminals:	Brass, Gold Plated.
Seals:	EPDM & FVMQ.
Connector:	30% Glass Filled PBT.

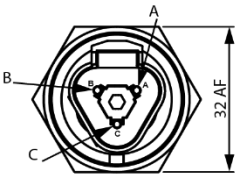
Environmental Ratings

Ingress	IP67, IPX9K (with mating connector fitted).
Max. Pressure	24 bar (348 PSI).
Temp. range:	-40 ºC to +125 ºC.
Weight:	70g 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:
1m to concrete surface.



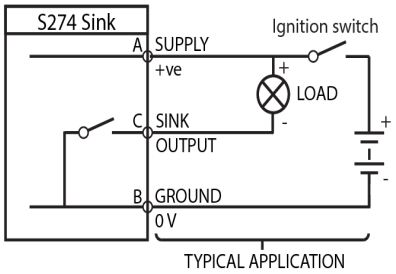


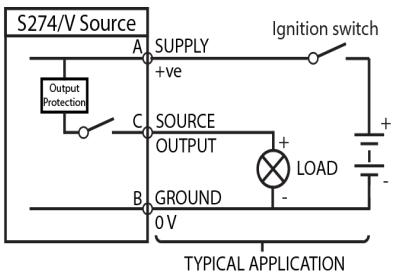
¼" NPTF‡	M14 x 1.5
⅜" NPTF	M18 x 1.5
½" NPTF	M22 x 1.5
⅜" BSPP	M22 x 2.5
½" BSPP	
½" BSPT	Others on request

‡Ø10 for ¼" NPTF variants.

Recommended Installation Tightening Torques:

¼" NPTF	Nm	M14x1.5	Nm
⅜" NPTF	Nm	M18x1.5	Nm
½" NPTF	Nm	M22x1.5	Nm
½" BSPP	Nm	M22x2.5	Nm
½" BSPT	Nm		





Optional Accessories:

C/ K8: 3 way Deutsch DT06-3S mating connector kit to suit harness wire cross sectional area of 0.5 to 1.5mm2 (16-20 AWG).

REV 7

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Manufacturing Worldwide