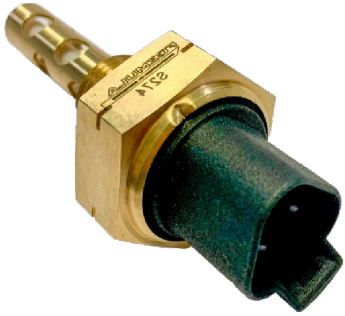


# S274 – Oil Level Switch – Capacitance Type



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, compatible with brass, PTFE and FVMQ.

### Materials

<b>Supply voltage:</b>	9-36 VDC.
<b>Supply current:</b>	7 mA + source output.
<b>Max. load current:</b>	1.0 A (sink) or 20 mA source).
<b>Alarm delay time*:</b>	0 to 25 s rising or falling.
<b>Connection:</b>	3-way Deutsch DT04-3P.
<b>Power up delay*:</b>	0 to 10s
<b>Power up state*:</b>	`In Liquid` or `Out of Liquid`.
<b>Output type*:</b>	Sink (open collector) or Source (supply voltage less typically 2.7 v @ 10 mA
<b>Output state*:</b>	Sink Open / Closed in oil. Source On / Off in oil.

### Construction

<b>Body:</b>	Brass or 316 Stainless Steel - one piece body and probe shroud
<b>Probe:</b>	PTFE.
<b>Terminals:</b>	Brass, Gold Plated.
<b>Seals:</b>	EPDM & FVMQ.
<b>Connector:</b>	30% Glass Filled PBT.
<b>Tread Sealant:</b>	Applied to taper thread variants only

### \*Factory set

**Connections:** See diagrams below.

### Environmental Ratings

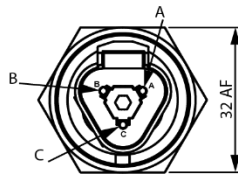
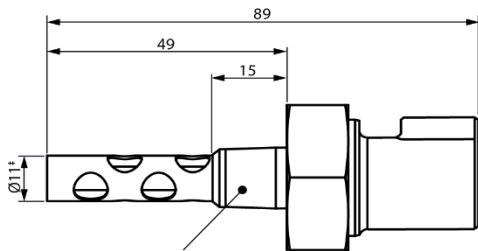
<b>Ingress</b>	IP67 (with mating connector fitted)
<b>Max. Pressure</b>	24 bar (348 PSI)
<b>Temp. range:</b>	-40 °C to +125 °C.
<b>Weight:</b>	70g typical (dependent on thread size)
<b>EMC:</b>	ISO13766:2006

### Vibration (15.3 GRMS):

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

### Drop:

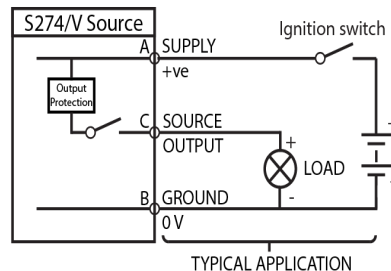
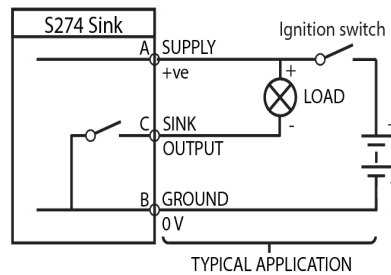
1m to concrete surface.



¼" NPTF <sup>+</sup>	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 1.5mm<sup>2</sup> (16-20 AWG).