

## TECHNICAL DATA

### S276 Oil Level Switch – Capacitance Type

**FOZMULA**  
INNOVATION IN SENSORS



The **S276** 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 provides 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 S276 is ideally mounted horizontally at the point where an alarm or control signal is required. However, the switch can be mounted vertically – contact Fozmula with your application requirements.

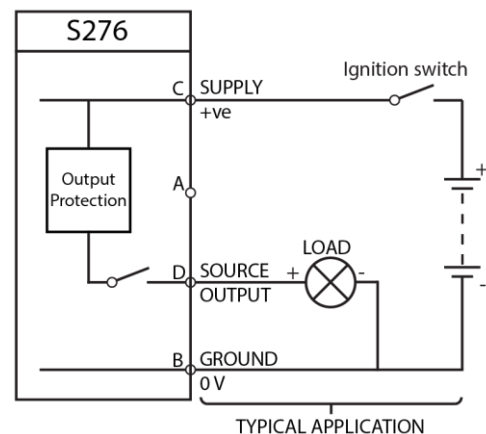
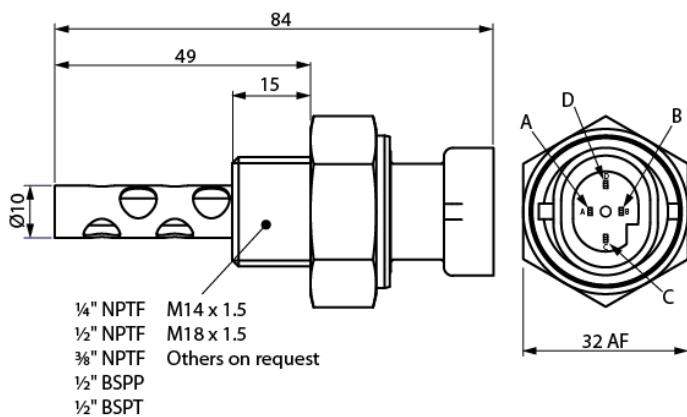
## SPECIFICATION

<b>Liquid types:</b>	Mineral oils, typically used in engines or hydraulic actuators, compatible with brass, PTFE and FVMQ.	<b>Construction</b>	
<b>Electrical rating</b>		<b>Body:</b>	Brass.
<b>Supply voltage:</b>	9-36 VDC.	<b>Probe:</b>	PTFE.
<b>Supply current:</b>	7 mA + source output.	<b>Terminals:</b>	Brass, Tin Plated.
<b>Max. load current:</b>	20 mA (source).	<b>Seals:</b>	FVMQ.
<b>Alarm delay time:</b>	0 to 25 s rising or falling (factory set).	<b>Connector:</b>	PA66 30% Glass Filled Nylon.
<b>Connection:</b>	4 way Delphi Packard Metri-Pack 150 series connector.		
<b>Power up delay:</b>	0 to 10 s (factory set).		
<b>Power up state:</b>	'In Liquid' or 'In Air' (factory set).		
<b>Output type:</b>	Source (supply voltage less typically 2.7 V @ 10 mA).		
<b>Output pin:</b>	Pin D.		
<b>Output state:</b>	Source On / Off in liquid (factory set).		

**Connections:** See diagram below.

### Environmental Ratings

<b>Ingress:</b>	IP67 (with mating connector fitted).	<b>Vibration (15.3 Grms)</b>	3 orthogonal planes for 3 hours per plane
<b>Max. pressure:</b>	5.0 Bar (72 psi)		Testing performed in accordance with BSEN 60068-2-64:1993
<b>Temp. range:</b>	-40 °C to +125 °C	<b>Drop:</b>	1 m to concrete surface.
<b>Weight:</b>	70 g typical (dependent on thread size)		
<b>EMC:</b>	ISO13766:2006		



NOTE: PIN A IS NOT USED.

### Recommended Installation Tightening Torques:

1/4" NPTF	9 Nm	M14x1.5	10 Nm
3/8" NPTF	11 Nm	M18x1.5	15 Nm
1/2" NPTF	20 Nm		
1/2" BSPP	15 Nm		
1/2" BSPT	20 Nm		

### Optional accessories

**C/K1:** Packard Metri-Pack 150 series 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.