

# OLS7 SERIES

OPTICAL LIQUID LEVEL SENSOR 1/4"NPT MOUNT



The OLS7 series is a liquid level sensor for single point liquid level detection.

The sensor has an infra-red emitter and detector aligned within an accurately shaped cone to give good optical coupling when the sensor is in air. This coupling is greatly reduced, when the sensor is immersed in liquid, as the infra-red light escapes through the liquid rather than being reflected back to the detector.

The sensor has a transistor output, so can be configured by the user for particular applications.

#### Features

- Low cost sensors for general liquid sensing
- High reliability optical sensing
- External mount via 1/4"NPT thread
- Standard temperature range -25°C to +80°C Extended temperature range -40°C to +125°C
- High and Low output versions
- Resistant to false triggering caused by foaming



#### Technical

Mounting Style	External		
Mounting Thread	1/4" NPT		
Body Material	Polysulfone UDEL 1700		
Temperature Range	-25 to +80°C/-40° to +125°C		
Maximum Pressure	20bar		
Tightening Torque for Fixing	1.5Nm/13.26lbs in		
Cable Length - Standard	25cm		
Wire Size	24AWG		
Cable Conductor Material	Tinned copper		
Wire Sheath Material	PTFE		
Wire Temperature Rating	125°C		
Sealing Gasket	Not supplied		

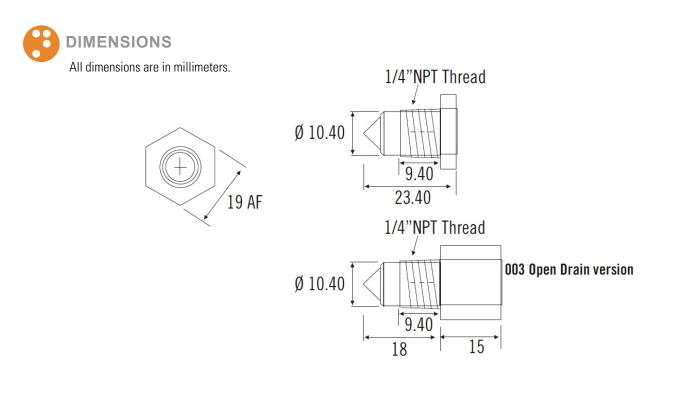
### Electrical

Supply Voltage (Vs) Vdc	4.5 to 15.4 or 10 to 28			
Supply Current Max (Is) mA	2.5 (Vs = 15.4Vdc)			
Output Type	Voltage High or Low			
Output Voltage (Vout) @ lout =100mA	Output High Vout = Vs-1V max Output Low Vout = 0.5Vmax			
Output Sink & Source Current lout	100mA max or 1A			
Sensor Connections	Red= supply + ve, Blue= common(OV), Green= Output (see wiring diagrams overleaf)			



	Mount	Temp Range °C	Supply Volts V	Output	
OLS700D3SH	1/4"NPT	-25 to +80	5 to 15dc	High in air	Volts
OLS700D3LSH	1/4"NPT	-25 to +80	5 to 15dc	Low in air	Volts
OLS710D3SH	1/4"NPT	-40 to +125	5 to 15dc	High in air	Volts
OLS710D3LSH	1/4"NPT	-40 to +125	5 to 15dc	Low in air	Volts
OLS710D324-003	1/4"NPT	-40 to +125	10 to 28dc	High in air	Open drain
OLS710D3L24-003	1/4"NPT	-40 to +125	10 to 28dc	Low in air	Open drain

Custom versions can be made for particular applications. Please contact Sensata with your requirements.



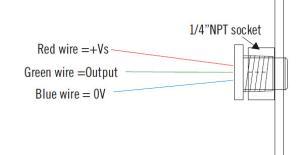


The sensor can be mounted in either the side or the bottom of a tank. It must not be mounted in the top of a tank with the cone downwards.

This sensor requires a 1/4"NPT thread connection.

The sensor should be screwed into a  $1/4^{\prime\prime}\text{NPT}$  socket and should not be overtightened.

#### Installation in 1/4"NPT socket









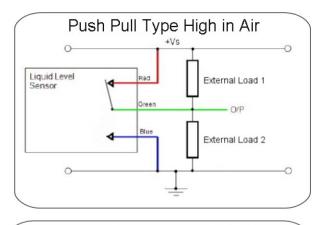
### Cleaning

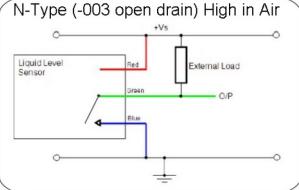
Proper fluids should be selected based on the type of contamination to be removed. It is recommended that freon or alcohol based solvents are used. DO NOT USE chlorinated solvents such as trichloroethylene as these are likely to attack the sensor housing material.

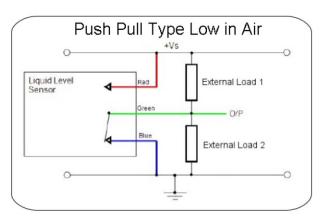
# Liquid Media Compatibility

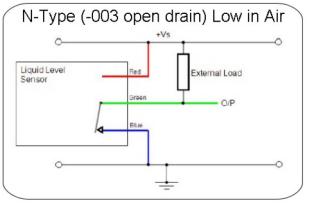
Check that the fluid in which you wish to use the sensor is compatible with Polysulfone.

# **Electrical Connections**









#### Made in the UK

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