

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.

- 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 Specification

Mounting style	External	Cable length - standard	25cm
Mounting thread	1/4"NPT	Wire size	24AWG
Body material	Polysulfone UDEL 1700	Cable conductor material	Tinned copper
Temperature Range	-25 to +80°C/-40° to +125°C	Wire sheath material	PTFE
Maximum pressure	7bar	Wire temperature rating	125°C
Tightening torque for fixing	1.5Nm/13.26lbs in	Sealing gasket	Not supplied

Electrical Specification

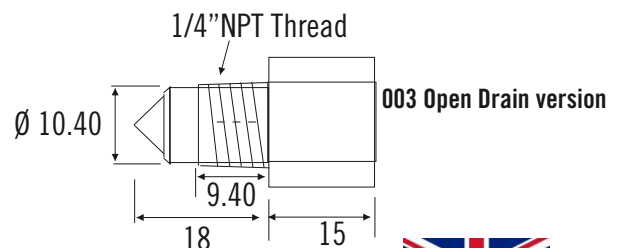
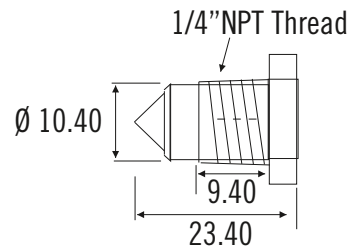
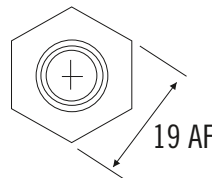
Supply Voltage (Vs)	Vdc	4.5 to 15.4	or	10 to 28
Supply Current Max (Is)	mA	2.5 (Vs = 15.4Vdc)		
Output type	Voltage High or Low			
Output Voltage (Vout) @ Iout=100mA	Output High	Vout = Vs-1V max	Output Low	Vout = 0.5Vmax
Output Sink & Source Current Iout	100mA max	or	1A	

Sensor connections Red= supply +ve, Blue= common(0V), Green= Output (see diagrams overleaf)

Standard Parts	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 Cynergy3 with your requirements.

Mechanical Dimensions



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Installation

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"NPT socket and should not be overtightened.

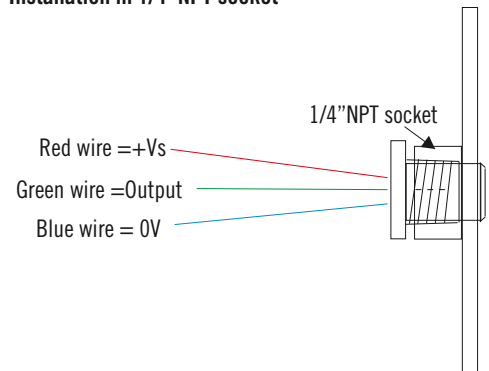
Cleaning

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.

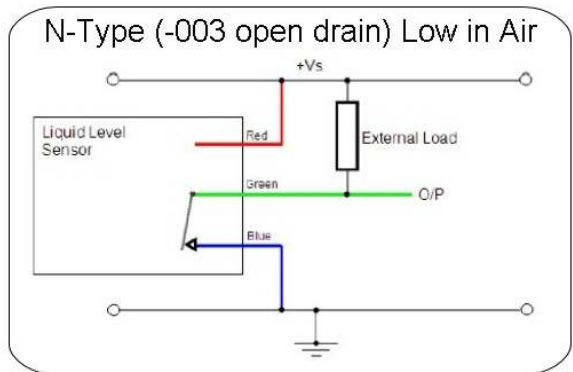
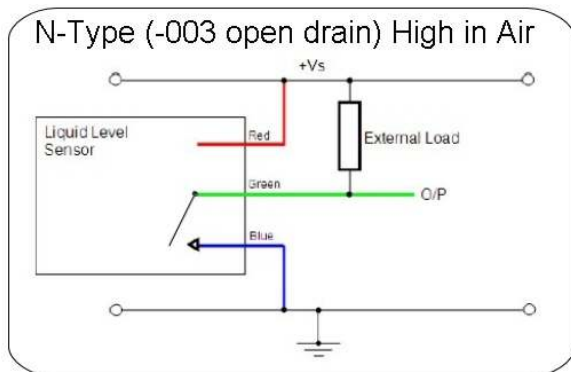
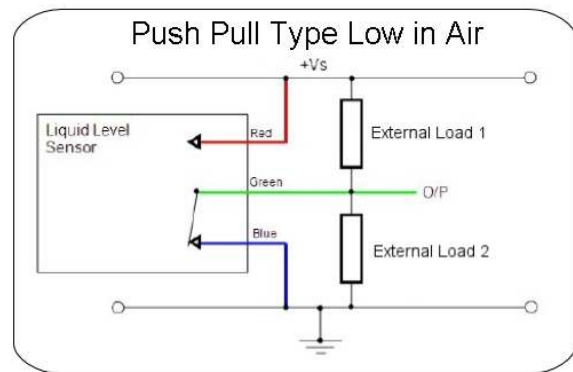
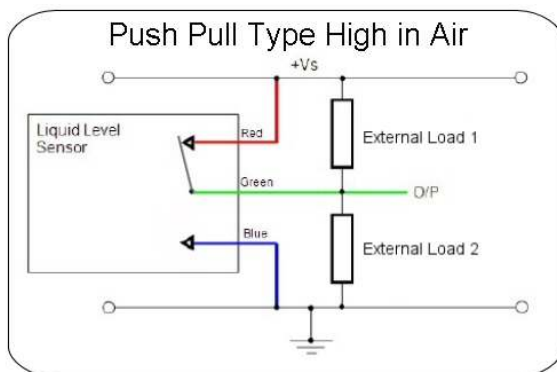
Liquid Media Compatibility

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

Installation in 1/4"NPT socket



Electrical Connections



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Sensata:](#)

[OLS700D3LSH](#) [OLS700D3SH](#) [OLS710D324-003](#) [OLS710D3SH](#)