# **OLS7 Series**

# Optical liquid level sensor 1/4"NPT mount

- 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

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.

#### Technical Specification

Mounting style	External	Cable length - st	andard	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 mate	erial	PTFE
Maximum pressure	7bar	Wire temperature rating		125°C
Tightening torque for fixing 1.5Nm/13.26lbs in		Sealing gasket	Not supplie	d

E	lectrical	Specifica	atioi

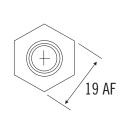
Supply voltage (vs) vac	4.5 to 15.4 or	10 to 28
Supply Current Max (Is) mA	2.5  (Vs = 15.4 Vdc)	
Output type	Voltage High or Low	
Output Voltage (Vout) @ lout=100mA	Output High Vout = $Vs-1V$ max	Output Low Vout = $0.5Vmax$
Output Sink & Source Current lout	100mA max or	1A

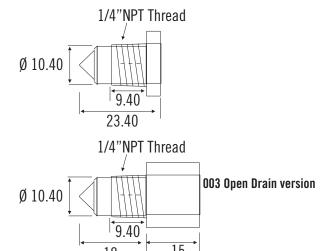
Sensor connections Red= supply +ve, Blue= common(0V), Green= Output (see diagrams overleaf)

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**





Cynergy3 Components Ltd. 7 Cobham Road Ferndown Industrial Estate Wimborne, Dorset BH21 7PE Telephone +44 (0) 1202 897969

Email:sales@cynergy3.com

ISO9001 CERTIFIED

OLS7 2018



www.cynergy3.com



# **OLS7 Series**

# Optical liquid level sensor 1/4"NPT mount

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

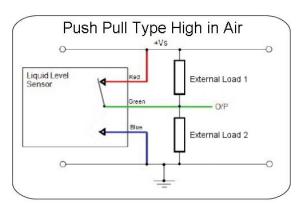
Proper fluids should be selected based on the type of contamination to be removed. It is recommended that freon or alcohol based solvents are used. DO NOT USE chlorinated solvents such as trichloroethylene as these are likely to attack the sensor housing material.

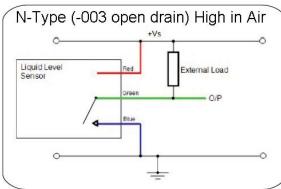
## Liquid Media Compatibility

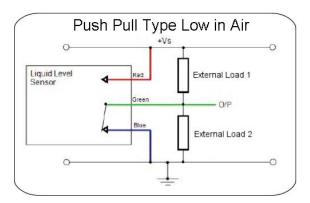
Check that the fluid in which you wish to use the sensor is compatible with Polysulfone.

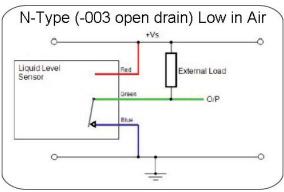
# Installation in 1/4"NPT socket Red wire =+Vs Green wire =0utput Blue wire = 0V

# **Electrical Connections**









Cynergy:
7 Cobham Road
Ferndown Industrial Estate
Wimborne, Dorset BH21 7PE
Telephone +44 (0) 1202 897969
Email:sales@cynergy3.com

ISO9001 CERTIFIED www.cynergy3.com

# **Mouser Electronics**

**Authorized Distributor** 

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

# Sensata:

OLS710D3L24-003 OLS710D3LSH