

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

SPECIFICATIONS

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	7bar
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) @ 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(OV), Green or Green/White= Output (see wiring diagrams overleaf)

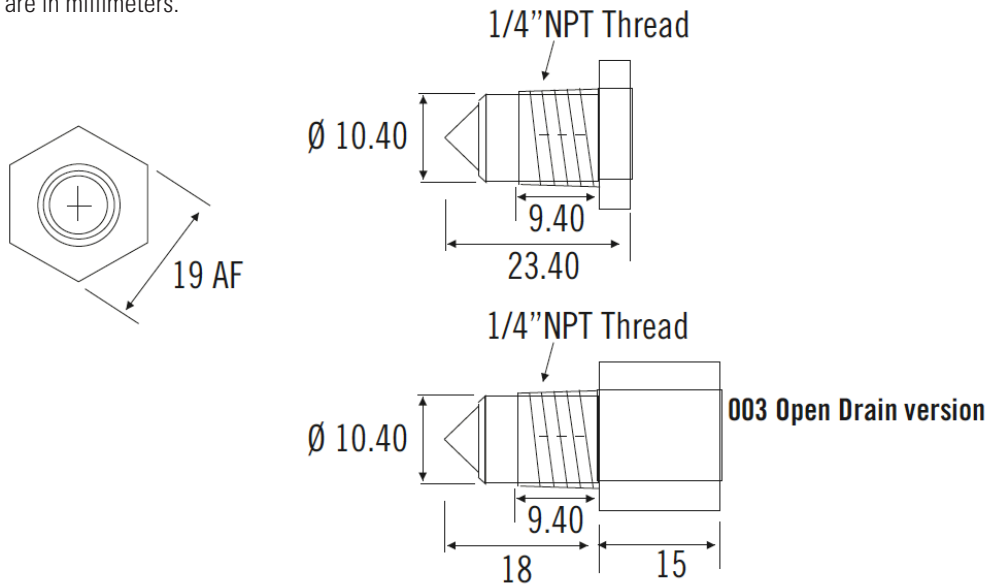
STANDARD PARTS

	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 Sensata with your requirements.

DIMENSIONS

All dimensions are in millimeters.



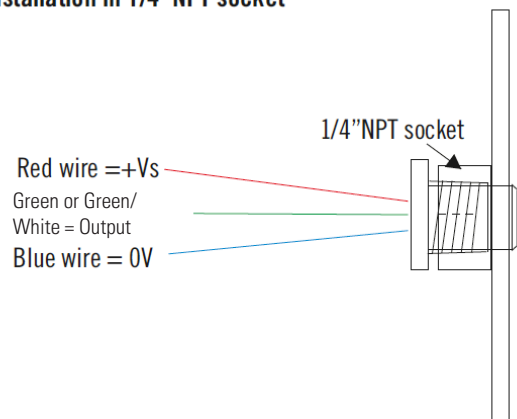
INSTALLATION

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.

Installation in 1/4"NPT socket



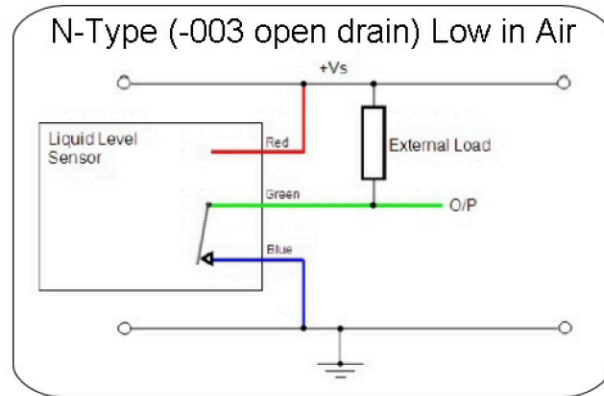
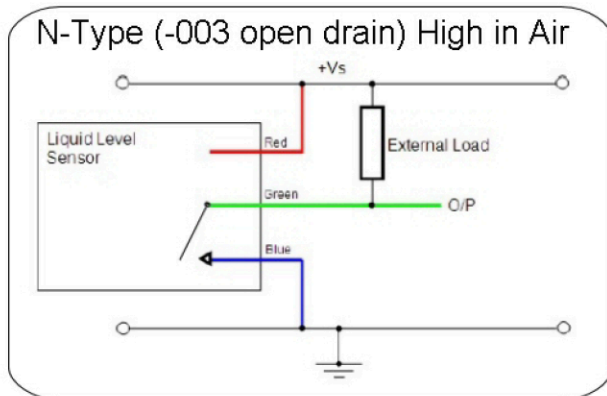
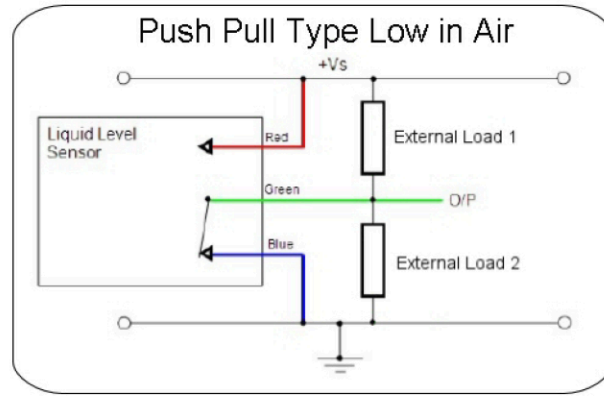
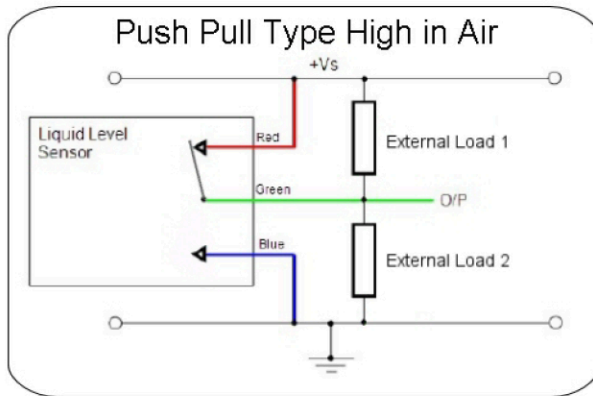
Cleaning

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



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