Sensata Technologies

| OLS2 SERIES

OPTICAL LIQUID LEVEL SENSOR - EXTERNAL M12 MOUNT

The OLS2 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.

Output is via TTL compatible push pull output.

Features

- Low cost sensors for general liquid sensing
- High reliability optical sensing
- External mount via M12x1 thread
- Standard temperature range -25ºC to +80ºC
  Extended temperature range -40ºC to +125ºC
- High and Low output versions
- Resistant to false triggering caused by foaming

SPECIFICATIONS

Technical

Mounting Style	External
Mounting Thread	M12x1
Body Material	Polysulfone UDEL 1700
Temperature Range	-25 to +80ºC/-40º to +125ºC
Maximum Pressure	7bar
Tightening Torque for Fixing	1.5Nm/13.26lbs in
Mounting Hole	12mm
Cable Length - Standard	25cm
Wire Size	24AWG
Cable Conductor Material	Tinned copper
Wire Sheath Material	PTFE
Wire Temperature Rating	125ºC
Sealing Gasket	Not supplied

Note. LLPK1 - 'O' ring and M12 nut kit - is available as an optional extra.

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 (L in part number indicates 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)

cynergy3

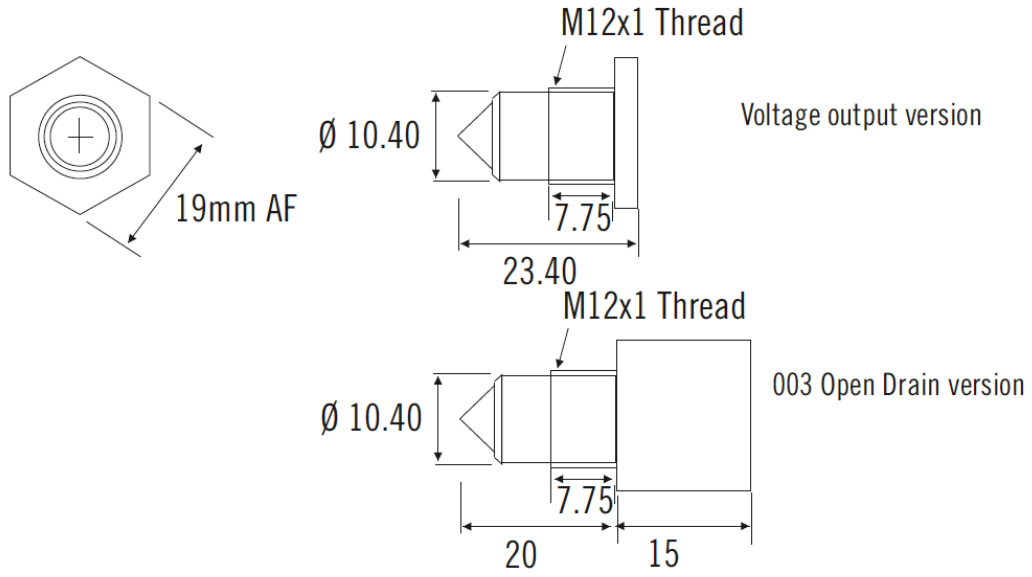
STANDARD PARTS

	Mount	Temp Range °C	Supply Volts V	Output	
OLS200D3SH	M12x1	-25 to +80	5 to 15dc	High in air	Volts
OLS200D3LSH	M12x1	-25 to +80	5 to 15dc	Low in air	Volts
OLS210D3SH	M12x1	-40 to +125	5 to 15dc	High in air	Volts
OLS210D3LSH	M12x1	-40 to +125	5 to 15dc	Low in air	Volts
OLS210D324-003	M12x1	-40 to +125	10 to 28dc	High in air	Open drain
OLS210D3L24-003	M12x1	-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.

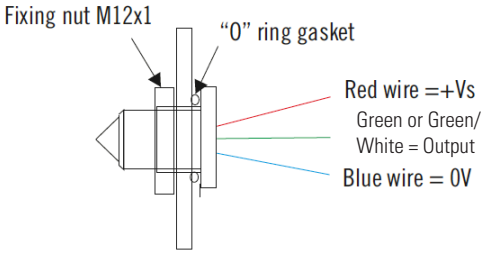


INSTALLATION

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 hole of 12mm minimum or an M12x1 thread socket connection. The hole should be in a flat surface and be free of burrs.

The sensor with suitable gasket should be inserted into the hole and a fixing nut fitted on the M12 thread on the inside of the tank. Alternatively the sensor can be screwed into a M12x1 socket. The sensor should not be over tightened.



Note. LLPK1 - Nitrile 'O' ring and Nickel plated brass M12 nut kit - is available as an optional extra.

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