

## 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 -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

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

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

### Electrical

<b>Supply Voltage (Vs)</b>	<b>Vdc</b>	4.5 to 15.4 or 10 to 28
<b>Supply Current Max (Is)</b>	<b>mA</b>	2.5 (Vs = 15.4Vdc)
<b>Output Type</b>		Voltage High or Low (L in part number indicates low)
<b>Output Voltage (Vout) @ Iout =100mA</b>		Output High Vout = Vs-1V max Output Low Vout = 0.5Vmax
<b>Output Sink &amp; Source Current Iout</b>		100mA max or 1A
<b>Sensor Connections</b>		Red= supply + ve, Blue= common(OV), Green= Output (see wiring diagrams overleaf)



## STANDARD PARTS

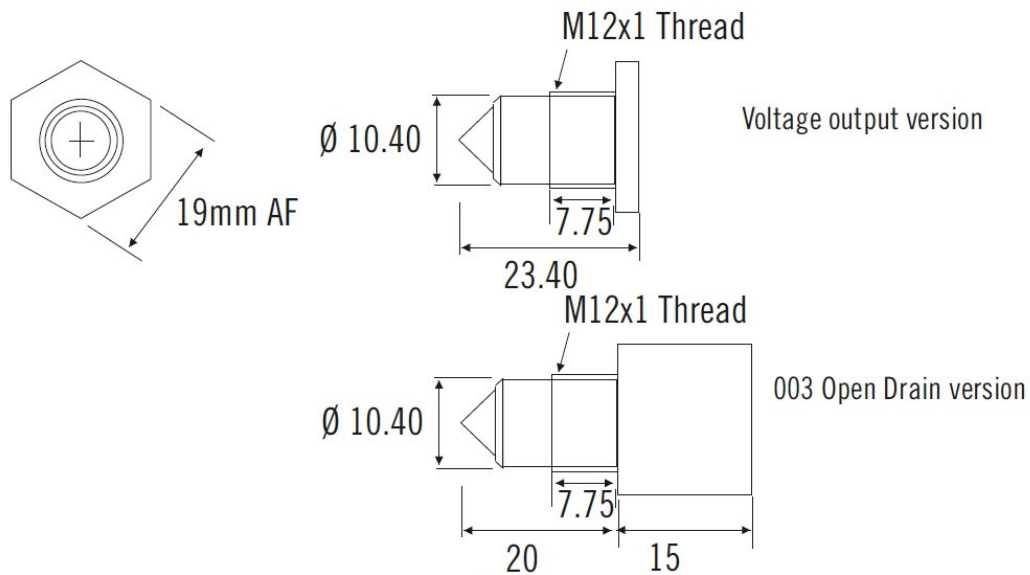
	Mount	Temp Range °C	Supply Volts V	Output	
<b>OLS200D3SH</b>	M12x1	-25 to +80	5 to 15dc	High in air	Volts
<b>OLS200D3LSH</b>	M12x1	-25 to +80	5 to 15dc	Low in air	Volts
<b>OLS210D3SH</b>	M12x1	-40 to +125	5 to 15dc	High in air	Volts
<b>OLS210D3LSH</b>	M12x1	-40 to +125	5 to 15dc	Low in air	Volts
<b>OLS210D324-003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

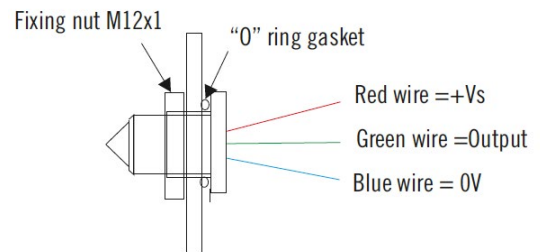


## INSTALLATION

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.

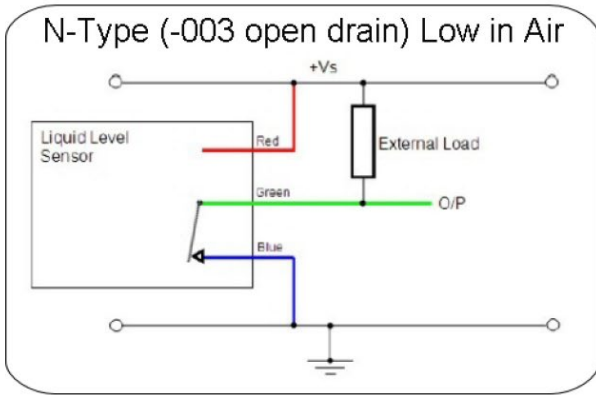
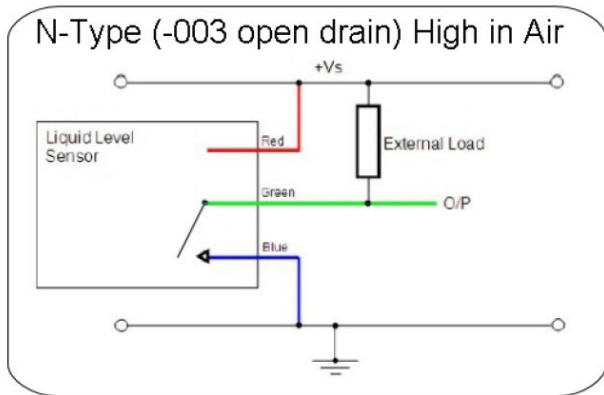
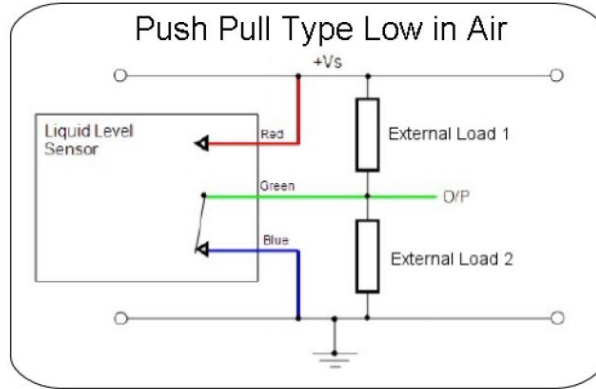
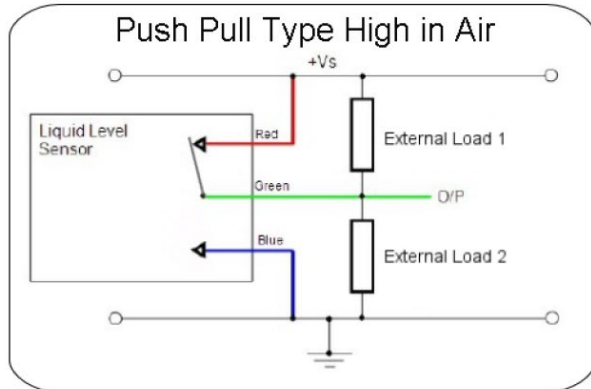
It is recommended that freon or alcohol based solvents are used.

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



Made in the UK

Page 3

Sensata Technologies, Inc. ("Sensata") data sheets are solely intended to assist designers ("Buyers") who are developing systems that incorporate Sensata products (also referred to herein as "components"). Buyer understands and agrees that Buyer remains responsible for using its independent analysis, evaluation and judgment in designing Buyer's systems and products. Sensata data sheets have been created using standard laboratory conditions and engineering practices. Sensata has not conducted any testing other than that specifically described in the published documentation for a particular data sheet. Sensata may make corrections, enhancements, improvements and other changes to its data sheets or components without notice.

Buyers are authorized to use Sensata data sheets with the Sensata component(s) identified in each particular data sheet. HOWEVER, NO OTHER LICENSE, EXPRESS OR IMPLIED, BY ESTOPPEL OR OTHERWISE TO ANY OTHER SENSATA INTELLECTUAL PROPERTY RIGHT, AND NO LICENSE TO ANY THIRD PARTY TECHNOLOGY OR INTELLECTUAL PROPERTY RIGHT, IS GRANTED HEREIN. SENSATA DATA SHEETS ARE PROVIDED "AS IS". SENSATA MAKES NO WARRANTIES OR REPRESENTATIONS WITH REGARD TO THE DATA SHEETS OR USE OF THE DATA SHEETS, EXPRESS, IMPLIED OR STATUTORY, INCLUDING ACCURACY OR COMPLETENESS. SENSATA DISCLAIMS ANY WARRANTY OF TITLE AND ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, QUIET ENJOYMENT, QUIET POSSESSION, AND NON-INFRINGEMENT OF ANY THIRD PARTY INTELLECTUAL PROPERTY RIGHTS WITH REGARD TO SENSATA DATA SHEETS OR USE THEREOF.

All products are sold subject to Sensata's terms and conditions of sale supplied at [www.sensata.com](http://www.sensata.com) SENSATA ASSUMES NO LIABILITY FOR APPLICATIONS ASSISTANCE OR THE DESIGN OF BUYERS' PRODUCTS. BUYER ACKNOWLEDGES AND AGREES THAT IT IS SOLELY RESPONSIBLE FOR COMPLIANCE WITH ALL LEGAL, REGULATORY AND SAFETY-RELATED REQUIREMENTS CONCERNING ITS PRODUCTS, AND ANY USE OF SENSATA COMPONENTS IN ITS APPLICATIONS, NOTWITHSTANDING ANY APPLICATIONS-RELATED INFORMATION OR SUPPORT THAT MAY BE PROVIDED BY SENSATA.

Mailing Address: Sensata Technologies, Inc., 529 Pleasant Street, Attleboro, MA 02703, USA.

## CONTACT US

+44 (0)1202 897969  
c3w\_sales@sensata.com  
Cynergy3 Components Ltd.  
7 Cobham Road,  
Ferndown Industrial Estate,  
Wimborne, Dorset,  
BH21 7PE, United Kingdom

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Liquid Level Sensors](#) category:*

*Click to view products by [Sensata](#) manufacturer:*

Other Similar products are found below :

[F03-16PT-1M](#) [FSH-21](#) [FSH-25](#) [FSH-34](#) [FSH-35](#) [FSV-31](#) [FSV-35](#) [RSF54H100R1/8](#) [LRNH31S41](#) [F03-16PT-10M](#) [F03-16SFC-10M](#) [F03-15-1M](#) [F03-16SF-5M](#) [F03-16PE-5M](#) [F03-16PT-5M](#) [K7L-U](#) [SCN-1518SC](#) [LL103000](#) [LRNR31N01](#) [F03-16PT-2M](#) [14102](#) [MS03-PP](#) [F03-16SF-10M](#) [KSL-100-1](#) [LS01-1A66-PP-2000W](#) [LS01-1B66-PP-500W](#) [LS02-1B66-S-500W](#) [LS02-1B85-PP-5000W](#) [LS03-1A85-PP-500W](#) [LS03/DL-1A85-PA-500W](#) [EL-10N](#) [EL-3N](#) [LL01-1AA01](#) [59630-1-T-02-F](#) [SB0870](#) [LS04-1B66-2-500W](#) [LFFS 011](#) [PS-3S \(Q\)](#) [T0-SKF-0.5](#) [T0-SKF-10](#) [T0-SKF-5](#) [VNI3](#) [CLE2P](#) [VNI1](#) [LBFS 0111](#) [LFFS 014](#) [KSL-35-PP](#) [KSL-88-PP](#) [LS02-1A85-PP-500W](#) [LS02-1B85-PP-500W](#)