

LevelSlick

Specialist Liquid Level Sensor

Quickstart guide



Thanks

Thank you for purchasing this sensor. The short guide will help get the sensor installed and operational. Further information, including the full manual, is available on our website at www.gillsc.com/support. This guide covers all models in the range.

LevelSlick liquid level sensor is a high quality device that will give years of dependable service when used according to this guidance.

Note; Safety Warning, This equipment is not ATEX certified and has not been designed for use in areas which fall within the scope of the ATEX directive. If an area of intended usage is within the scope of the ATEX directive, then contact Gill Sensors & Controls Ltd for further information.

LevelSlick is a sealed unit and any damage to the black sleeving on the probe will result in failure of the sensor. Do not attempt to cut the sensor to length or bend the sensor probe. Both actions will result in sensor failure and invalidate the warranty. Any damage to the black sleeving on the probe will result in failure of the sensor.

If the sensor has been used in Blackwater or any other liquids requiring special handling, please contact Gill Sensors & Controls for further guidance.

Installation guidance

Ensure you have sufficient clearance to get the sensor into the tank without bending the probe or scraping the black sleeve on sharp edges. (fig 1)

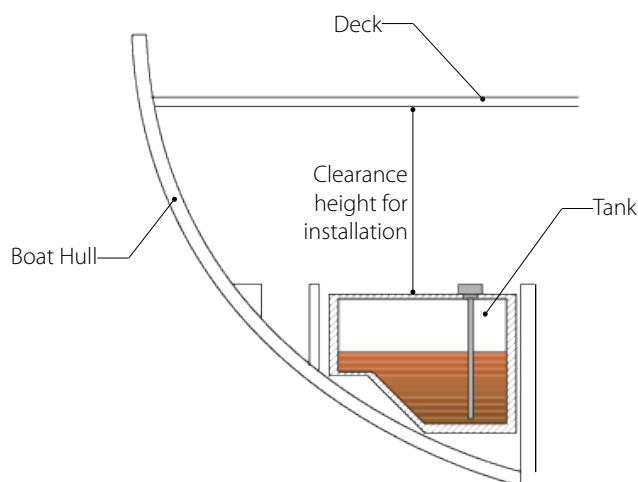
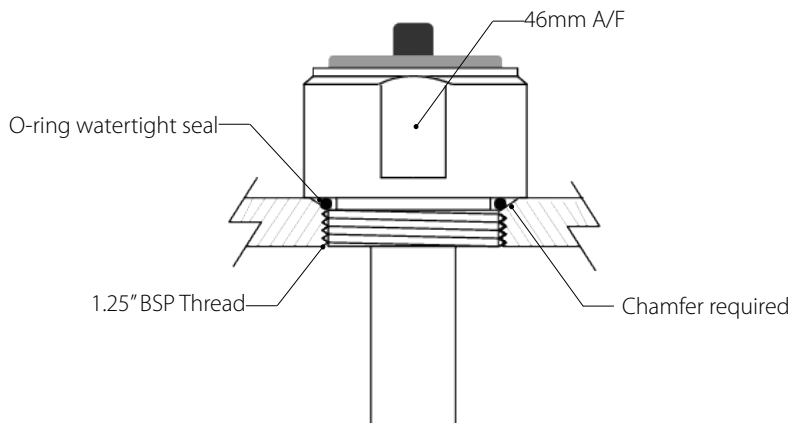


fig 1

To use the O-ring seal, the mounting hole requires a 3mm x 45° bevel around the upper edge of the hole. Fit the sensor into a 1.25" BSP threaded hole using a 46mm A/F spanner. Tighten to 50Nm torque ensuring the flange face is flush to the top of the tank. (fig 2)

fig 2



If it is not possible to create a bevel, then the gasket should be used. Remove the O-ring and fit the gasket over the thread mount, black side up. Ensure the gasket is centered under the sensor and tighten to a torque of 50Nm. (fig 3)

Using 46mm spanner
tighten to 50Nm

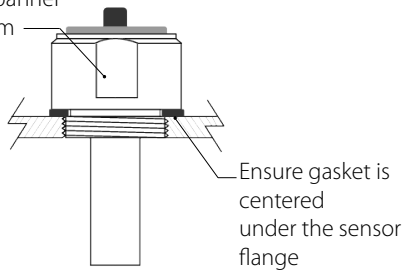


fig 3

Minimum 90mm
clearance for
cable

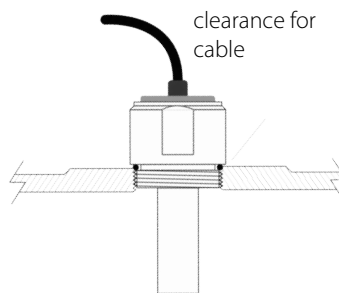


fig 4

45°
max.

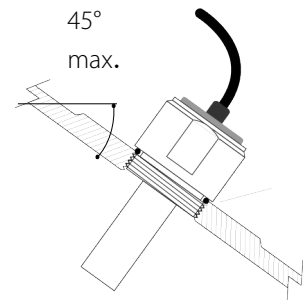


fig 5

Once installed the sensor requires a minimum of 90mm from the top of the tank to the underside of the housing to allow for cable bend. (fig 4)

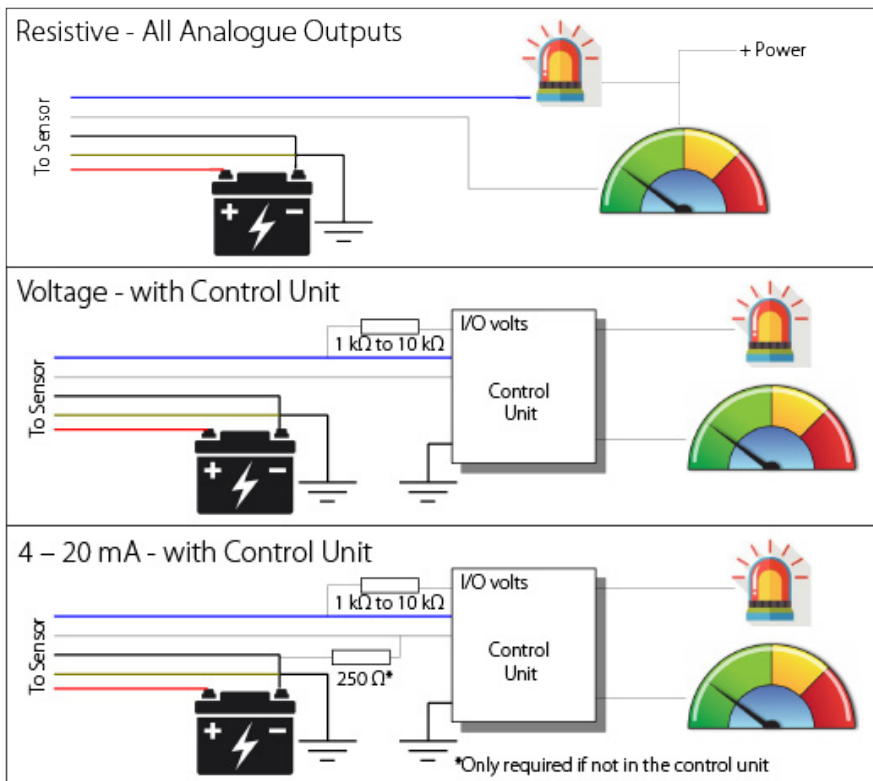
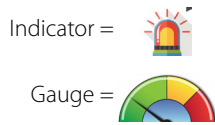
The sensor can be installed at any angle from vertical to a maximum recommended angle of 45°. Even at its maximum supplied length of 2 metres the sensor does not require any supports inside the tank. (fig 5)

Electrical connection

The sensor requires a DC power supply between 6V and 32V. It has reverse polarity protection to -32V and over voltage protection to +/- 50V (5 minutes).

Analogue Output options are as follows:

- RED** = Power
- BLACK** = Ground
- WHITE** = Measurement
- BLUE** = Switch
- BARE** = Shield



Configuration

To setup and configure the sensor you will require a standard USB lead - Type A to Micro B.



On the top of the sensor flange, remove the retaining screw and cover to access the USB connection. There is an O-ring seal around the cover which makes it resistive to removal. When replacing the cover please ensure that a good seal is re-established.

Go to the Gill website www.gillsc.com/support to download the GSlevel software. The User Manual covers sensor set-up and configuration.

Electrical connections

Connecting the sensor should be carried out according to the following table

RED	+V (+5 to +32 VDC) *
BLACK	-V (Ground)
ORANGE	Primary output (0.25 to 4.75VDC)
BLUE	Secondary output (refer to datasheet)
GREEN	RS232 Rx line
WHITE	RS232
SILVER	Drain Wire

*The power supply * must be at least 0.5V greater than the maximum output voltage required. The switch output requires a pull-up resistor of 1 kOhm to 10 kOhms.*

Sensor outputs

The primary output of the sensor is factory calibrated to a range of 0.25 V to 4.75 V. The sensor can be configured to a maximum output range of 0.25 V to 10 V.

The sensor's secondary output is either switch or temperature output as follows:

- **Switch:** Open collector output of 50V / 1A max switch to -V (ground)
- **Temperature:** 0.25 V to 4.75 V where 0.25 V = -40°C and 4.75 V = + 125°C

After sales support

Should you require after sales assistance with this product, please go to www.gillsc.com where you can request support by clicking on the "Get Support" button and filling out the form. Alternatively, call us during UK office hours on 01590 613900 (UK). Please have details of the product and serial number whenever possible.