

General Description

The VisiLevel system is an electronic liquid level measurement gauge designed to detect height, density, temperature and colour of a fluid. Using this information VisiLevel can supply volume and product as well.

VisiLevel comes in two parts: a probe which can be mounted inside a tank up to a depth of 2 metres and an optional screen which can display information from the probe(s). Multiple probes (maximum 10) can be connected across a robust CAN network. Up to 10 screens can be connected into the same network.

Intended Use

The VisiLevel system has been designed for use with road tankers which carry oil-based fuels. VisiLevel is an ATEX and IECEx certified system suitable for use in fuel tanks and explosive atmospheres.

General Specifications

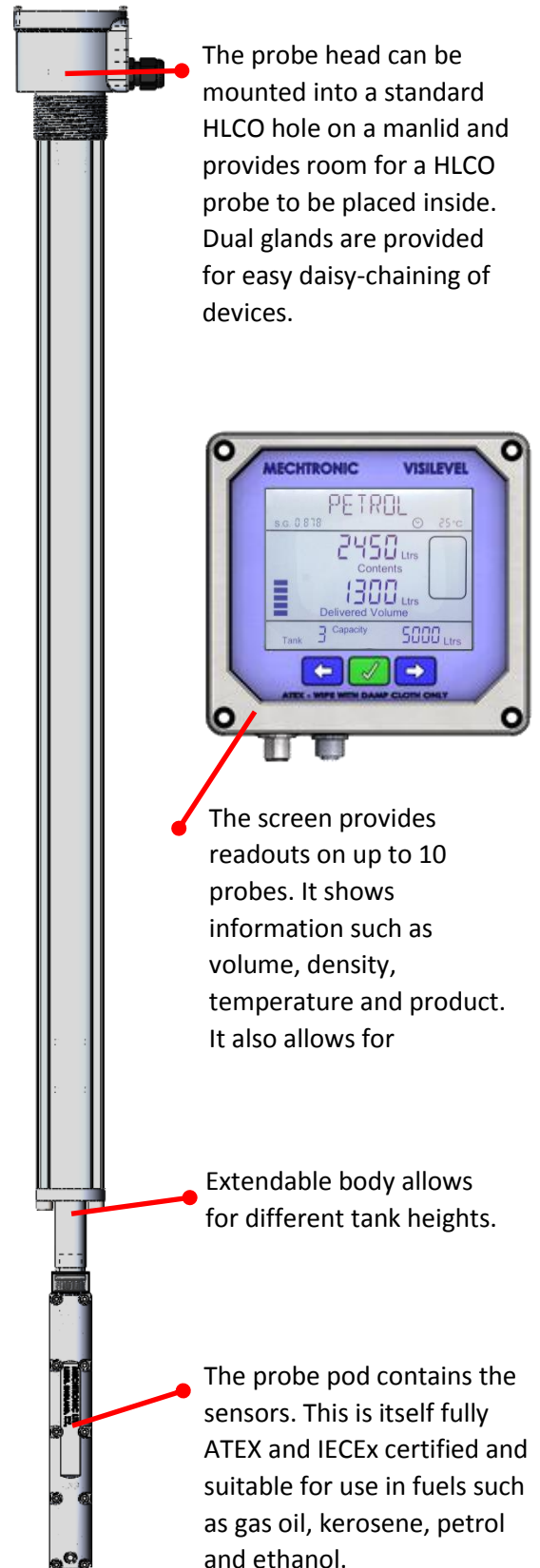
- Maximum depth 2m
- Maximum static head pressure 200mBar
- Typical accuracy +/-10 Litres assuming a 5000 Litre compartment
- Temperature range -40°C to +50°C
- Screen: IP56, Probe: IP68

Safety Specifications

- ATEX/IECEx Zone 0 (Ga)
- Temperature class T4
- Explosion group IIB
- Type of protection Ex ia (intrinsic safety)

Electrical Specification

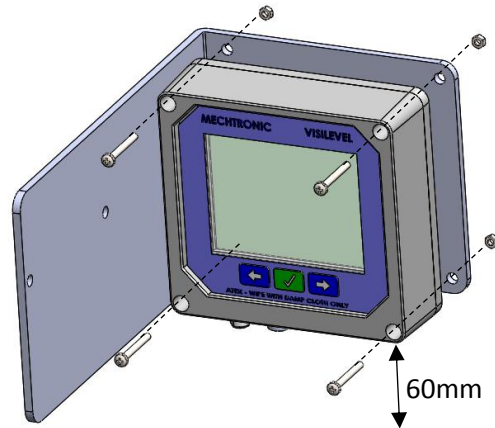
- Operating voltage 9.5 – 11V
- Probe supply current 50mA
- Screen supply current 87mA



Probe Wiring

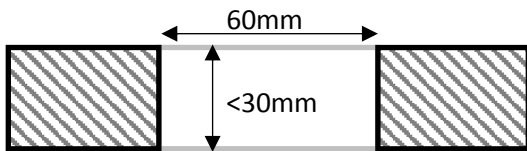
The probe only uses 4 wires: two for power and two for CAN. These need to be wired in inside the probe head in the following way:

Wire	Description
Red	+9.5-11V (Power)
Black	0V (Ground)
White	CAN High
Green	CAN Low

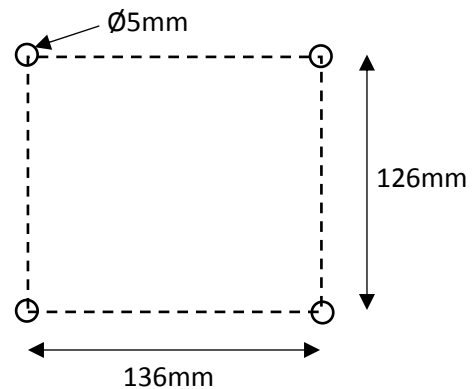


Probe Mounting

The VisiLevel probe should be mounted into a hole of diameter 60mm with a maximum wall thickness of 30mm.



The layout for the holes is shown below.



Screen Wiring

The screen is connected to using two M12 4-way connectors. Both connectors are connected to the same bus and two are provided to allow for easy daisy-chaining of the screen.

Pin	Description
1	+9.5-11V (Power)
2	CAN High
3	CAN Low
4	0V (Ground)

Screen Mounting

The VisiLevel screen needs to be mounted using the four holes positioned one at each corner. 4 M4x35 bolts should be used to hold the screen in place against a secure mount.

There should be an area of 60mm below the screen so that the M12 connector ports can be accessed.

Certificates

