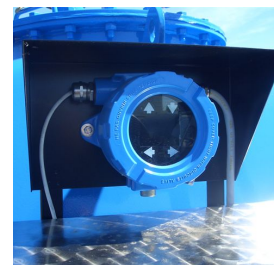
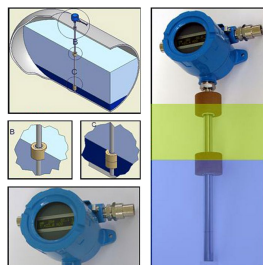
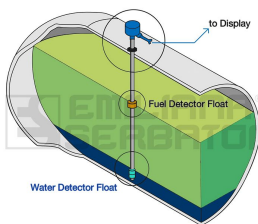




ES Level

Electronic fuel level gauge, magnetostrictive technology.



Description

ES LEVEL is a magnetostrictive level probe based on the Wiedemann effect. This device performs a continuous and highly accurate reading of the level of liquid inside the tank. The level transmitter ES LEVEL consists of an elec flash technology, a stainless steel AISI 304 rod with a die cast aluminium head, closed-cell expanded PVC or stainless steel floats and an LCD alphanumeric display. The following is the operating principle: inside the probe tube there is a rigid wire made of magnetostrictive material. The sensor circuitry emits pulses of current through the wire, generating a circular magnetic field. The level transmitter is a magnet, which is integrated into the float. Its magnetic field magnetizes the wire axially. Since the two magnetic fields are superimposed, around the float magnet a torsion wave is generated which runs in both directions along the wire. One wave runs directly to the probe head while the other is reflected at the bottom of the probe tube. The time is measured between emission of the current pulse and arrival of the wave at the probe head. The position of the float is determined on the basis of the transit times. ES LEVEL can be connected to EMILTOUCH® fuel management system in order to provide continuous monitoring of fuel level inside tanks and display it via LAN or by means of an internet connection.

Main features

- Electronics: 16 bit flash technology microprocessor 16-MHz.
- Alphanumerical backlit LCD display.
- Power cable, 5 m.
- Tank connection: threaded nickel-plated brass, 2" M BSPP.
- Stainless steel AISI 304 rod.
- Temperature sensor (on request).
- Closed-cell expanded PVC float, diameter Ø 50 mm.
- Closed-cell expanded PVC ballast float for water detection (on request).
- Serial communication port: RS 485 type.
- Accuracy: +/- 0,5 mm, resolution: +/- 0,1 mm.
- Temperature accuracy (in the range -20 +70°C) +/- 0,2°C.
- Power Supply: 220 Vac or Battery 9 - 30 Vcc.
- CE certified and marked.
- N. 4 alarm relays (i.e. min level alarm, max level alarm, etc.).

The following data are shown sequentially on the mono-chromatic alphanumerical display:

- Level of liquid in the tank (mm).
- Volume of liquid in the tank (L).
- Ullage: the empty space in the tank (L).
- Volume stored (%).
- Presence of water (mm).
- Fuel average temperature (°C).
- Volume compensation @ 15°C (L).
- Product weight (Kg).

Accessories

- Stainless steel floats for vegetable oil or other chemical aggressive fluids.
- MAGLINK Consoles for filling stations and fuel depots management.
- Available ATEX version (CESI ATEX 020 II 1/2 GD Ex d IIC T6 Ex tD A21IP66/68 T85°C).
- ATEX version with a monochromatic alphanumerical display which can monitor to 1 probe/tank. (protection level: IP65) or with a color LCD touch-screen display (protection level: Eexd) that can monitor up to 16 probes/tanks.