



Resistive level gauge ELG



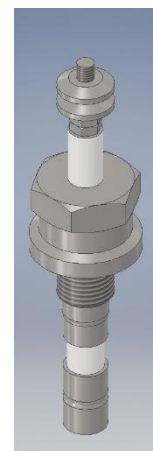
**OFFICINE OROBICHE**

## DESCRIPTION:

OFFICINE OROBICHE ELG is an electronic level measuring unit specifically designed for measuring water level inside vessels characterized by high pressures and temperatures.

It comprises a series of sensors (ELG-P) mounted on a column (ELG-C) connected to the vessel and an electronic unit (ELG-E); one or two remote displays can be connected as optional accessories (ELG-R).

Sensors are made of two metallic parts, which are insulated by a ceramic part. The electronic unit measures the conductivity of the fluid around the metallic part and the discrimination of water or steam is based on their different conductivity values. Each sensor is connected to the control unit via a pair of conductors to guarantee operating continuity and to signal anomalies.

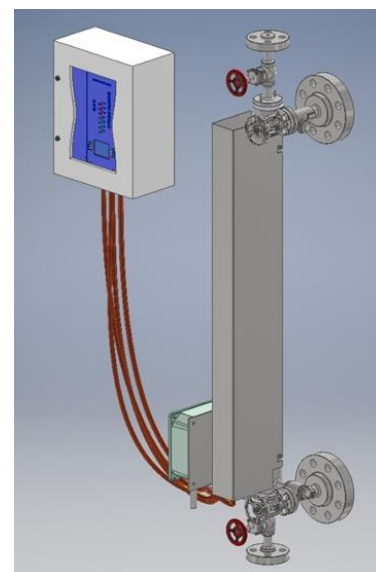


## APPLICATIONS:

- Highly visible local and remote level indication.
- Sensors divided in two groups to guarantee operating continuity and high reliability.
- Available for high pressures and temperatures.
- Two microprocessor each with its own independent alarm outputs and 4-20 mA current loop signal.

## SYSTEM COMPONENTS:

- Control unit
- Remote displays
- Sensor
- Column
- Power supply
- Alarm relays



## TECHNICAL SPECS:

	Design temperature	Design pressure	Test pressure at ambient
Sensors	374°C	220 bar	420 bar
Column	374°C	220 bar	420 bar Min Pitch 50 mm

### Control unit ELG

- Glass-filled polyester, RAL 9002 with front window Dimensions: 340 x 430 x 180 mm - Weight < 4 Kg Wall-mounted with brackets supplied
- IP66
- Remote display ELG-R
- Painted aluminium

### Power supply (ac Input)

- 100-240Vac nominal – 50/60Hz (auto-switch) Double power supply unit (redundant)
- Output 24Vdc Nominal - Negative connected to GND Absorbed power < 2 x 20W

### Power supply (dc Input)

- 1x 40W min - 24Vdc nominal +/- 10 % - Negative connected to GND Or redundant)
- 2x 20W - 24Vdc nominal +/- 10 % - Negative connected to GND
- Outputs and alarm contacts Channel Relays
- Standard Relays SPST contacts (NO-C) Maximum capacity of contacts: 48Vdc – 1A

### Alarm Relays

- Standard Relays SPDT contacts (NC-C-NO) Maximum capacity of contacts: 48Vdc – 1A Optional Relay Board SPDT
- Contacts (NC-C-NO) Maximum capacity of contacts: 250V AC – 1.5A

### Analogue output

- Double analogue output 4-20 mA (current loop) Open circuit Voltage: 21.5 V
- Drive capability: 800 ohm
- Setting to 3.5 mA in case of alarm

### Level indication

- One bi-color LED for each channel, green for water and red for steam
- One LCD display – white/blue backlighted – resolution of 128x64 Alarms Signaling
- Green LED for normal functioning Yellow LED for level alarm signaling Red LED for system alarm signaling



#### Remote Display ELG-R Electrical Data:

- Power supply: 24 Vdc +/-10 % nominal - Negative connected to GND Can be directly powered by control unit ELG-E
- Loop resistance: 340 ohm
- Distance: (Using EN IEC 60228 multipole wires 0.75 mm<sup>2</sup> - class 5/6 – R= 26 ohm/Km) max suggested 1000 mt  
(Contact Officine Orobiche Tech Dpt for detailed distance calculation)

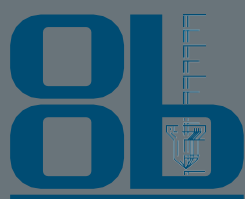
#### Environment:

- Compatible with standard industrial environments. Temperature range of control unit: -20 ÷ +60 °C ATEX: 2 / 22 zone (control unit only)

#### Certifications

- We can provide CE and ATEX certifications





**OFFICINE OROBICHE**

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