

T/LL130 Liquid Level Sensor



The **T/LL130** series is designed for use in water, coolant or fuel/oil tanks and provides a factory set variable resistive or voltage output suitable for driving industry standard fuel gauges or connecting into PLCs.

The device has no moving parts and can be mounted at any angle above horizontal as long as it covers the whole depth of the tank. The unit cannot be inverted. An optional manual calibration feature is available.



SPECIFICATION

Liquid Types Liquids compatible with the construction materials: typically diesel, kerosene, petrol, water.

Not suitable for fuels which contain Toluene.

Dimensions:

Probe Length: Min 200mm, Max 1000mm mobile / 2000mm
Threads: static ½" BSPT, 1" BSPT, ½" NPT, 1" NPT
Optional Flange: Rochester Sensors **F/T1** SAE 5 Hole

Performance:

Accuracy ±2% of depth @ 20 °C

Materials

Enclosure: 30% glass filled nylon
Internal Electrode: PTFE
Sensor Tube: 316 stainless steel

Environmental Ratings:

Sealing: IP67 with mating connector
Max Pressure: 1 bar

Operating Temp: -20 °C to +85 °C

Electrical

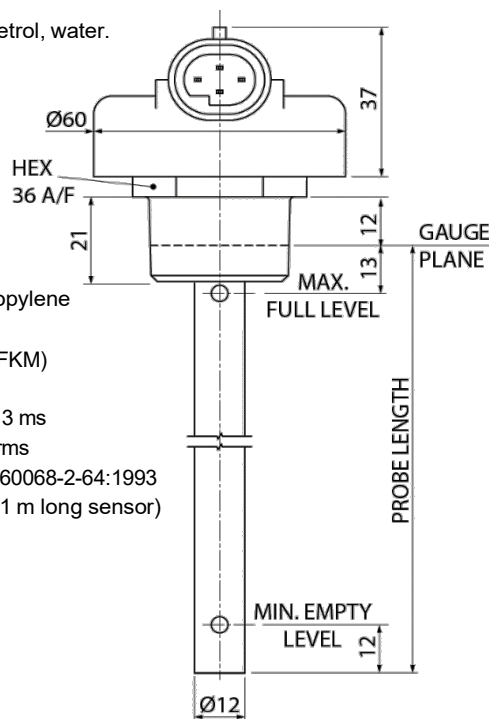
Supply Voltage: Supply 9-34 VDC
Current: Supply 30 mA
Protection: Signal Over-voltage 80 VDC for 2 minutes. Reverse polarity.
Output: Resistance range; 0-250 Ω or 250-0 Ω, 2 Ω steps, 0.4 W max. Voltage source range; 0-5 V or 5-0 V, 20 mV steps, 10 mA max.

Alarm Output: Switch to ground. Max 100 mA. High or low level.
 Default setting is 12.5% of full level.

Connections:

Mating Connector: Minimum 30 mm from sensor end.
 4 Way Delphi Packard Metri-Pack 150 Series
 Rochester Sensors **C/K1** (Delphi Packard Metri-Pack 150).
 To fit 0.8-1.0 mm² conductor, Ø1.6-2.15 mm sleeve.

Internal Spacers: Polypropylene
End Plug: PTFE
Wetted Seals: Viton (FKM)
Shock: 50 g, 6.3 ms
Vibration: 15.3 Grms
 BS EN 60068-2-64:1993
Weight: 300 g (1 m long sensor)



Model	Output	User Calibration
T/LL130	Resistive	No
T/LL131	Voltage	No
T/LL133	Resistive	Yes
T/LL134	Voltage	Yes

Calibration Instructions (Models 133 & 134)

Units will be supplied calibrated for diesel. They can be recalibrated for alternative fuels:

Full Point:

1. Install sensor in the tank and power on.
2. Fill tank to required full level.
3. Remove calibration bung from sensor and use a suitable tool to depress PCB mounted calibration button. Hold for 5 seconds to set full point. Release button.
4. Check full point and refit bung.

Empty Point (if required):

1. Fill tank to required level or, for Min. Empty Level, remove from tank and shake to remove excess liquid.
2. Disconnect power.
3. Remove calibration bung from sensor and use a suitable tool to depress PCB mounted calibration button then reconnect power whilst depressing calibration button. Continue to depress for a further 5 seconds to set empty point. Release button.
4. Check empty point and refit bung.

N.B. Warranty is void if the label is removed

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8.6/33 Rev 3