

TECHNICAL DATA

FOZMULA
INNOVATION IN SENSORS

TLL150 Liquid Level Sensor Cut-to-Length and Calibrate



The **T/LL150** liquid level sensor is designed for use in diesel fuel tanks and is available with a variable resistive or voltage output suitable for driving industry standard fuel gauges or connecting into PLCs.

This capacitance type level sensor is supplied in standard lengths and is designed to be cut-to-length and calibrated by the customer making it ideal for custom and urgent projects.

SPECIFICATION

Dimensions

Probe Lengths: 500mm, 1,000mm for cutting to length by customer.
Threads: ½" BSPT, 1" BSPT, ½" NPT
Optional Flange: SAE 5 Hole: Fozmula **F/T1** for ½" BSPT
 Fozmula **F/T8** for ½" NPT

Performance

Accuracy: ±2% of depth @ 20 °C

Materials

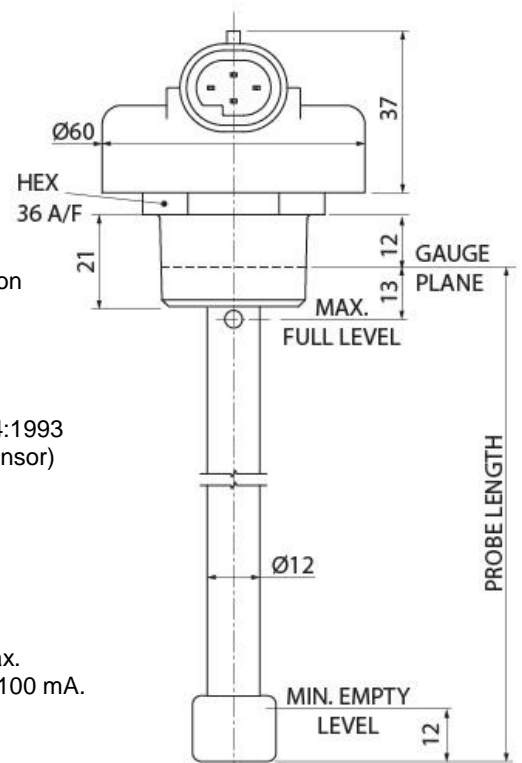
Enclosure: 30% glass filled nylon
Internal Electrode: Aluminium alloy 6063
Sensor Tube: 316 stainless steel
Internal Spacers: Polypropylene
End plug: PVC / G/F nylon
Wetted Seals: Viton, NBR

Environmental Ratings

Sealing: IP67 with mating connector
Max Pressure: 1 bar
Shock: 50 g, 6.3 ms
Vibration: 7.6 Grms
 BS EN 60068-2-64:1993
Operating Temp: -20 °C to +85 °C
Weight: 300 g (1 m long sensor)

Electrical

Supply Voltage: 9-34 VDC
Supply Current: 30 mA
Supply Protection: Over-voltage 80 VDC for 2 minutes.
 Reverse polarity.
Signal 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, close on fall at 12.5% of active length. Max 100 mA.
Connections: 4 Way Delphi Packard Metri-Pack 150 Series.
Mating Connector: Fozmula **C/K1** (Delphi Packard Metri-Pack 150)
 To fit 0.8-1.0 mm² conductor, Ø1.6-2.15 mm sleeve.



Calibration Instructions

Units will be supplied calibrated for diesel.

Full Point:

1. Install sensor in the tank and power on.
2. Fill tank to required full level.
3. Depress "CAL" button. Hold for 5 seconds to set full point. Release button. Check output for full point.

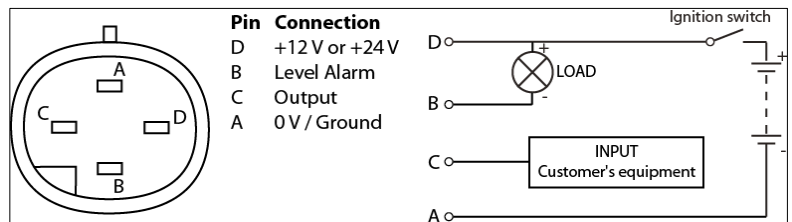
Empty Point (if required):

1. Fill tank to required level or, for Min. Empty Level, remove from tank and shake to remove excess liquid.
2. Disconnect power.
3. Depress "CAL" button then reconnect power whilst depressing calibration button. Continue to depress for a further 5 seconds to set empty point. Release button. Check output for empty point.

Standard part numbers and options

TLL15 X	XX	XXXX	XX
Type	Thread	Length	Output
0 Resistive, Ω	5B ½" BSPT	0500 500 mm	70 10 - 180 Ω
1 Voltage, V	1B 1" BSPT	1000 1000 mm	71 240 - 32 Ω
	5N ½" NPT		01 0 - 5 VDC
	1N 1" NPT*		

*Available Sept, 2019



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