

T/LL140 Series Fuel Level Sensor



The **T/LL140 series** is a range of SAE 5 Hole mounted sensors for continuously measuring the contents of a fuel tank providing a factory set variable resistive or voltage output. The T/LL140 can be cut to length* and be recalibrated by the end user.

A low level alarm switches when the fuel drops below a predetermined level.

*Contact Rochester Sensors for shortening kit availability.



SPECIFICATION

Liquid Types

Liquids compatible with construction materials, typically diesel, biodiesel, kerosene, petrol.

Not suitable for fuels with a high dielectric constant.

Dimensions

Probe length: Min. 200 mm, max. 1100 mm.
Ensure probe end is above any contaminants.

Mounting: SAE 5 Hole.

Electrical

Supply voltage: 10-32 VDC.
Supply current: 28 mA@12 VDC + output load.
Supply protection: Over-voltage 80 VDC for 2 minutes. Reverse polarity.
Signal output: Resistance range: 0-250 Ω or 250-0 Ω .
Voltage Range: 0-5 VDC or 5-0 VDC, 20 mV steps, Max 10 mA source.
Alarm: Switch to ground. Max 100 mA.
Default setting 12.5% of full level.
Minimum 30 mm from sensor end.
Maximum 20 mm from full level.
Connections: 500 mm long, 24 AWG flying leads. Optionally fitted with any suitable connector.

Performance

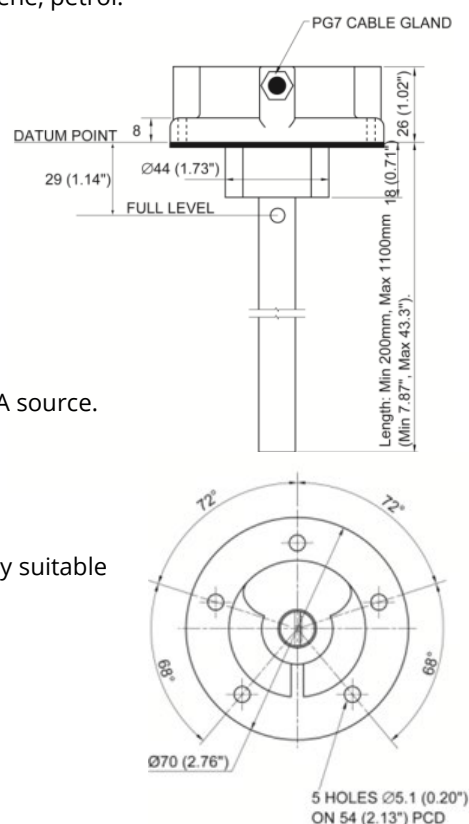
Accuracy: $\pm 3.0\%$ of depth @ 20 °C (+68 °F).

Materials

Enclosure: 30% glass filled nylon.
Enclosure bush: Polypropylene.
Internal electrode: Aluminium.
Sensor tube: 316 stainless steel.
Internal spacers: Polypropylene.
End plug: PTFE.
Wetted seals: Viton (FKM) & nitrile.
Gasket: Nitrile.
Cable: Polyurethane.

Environmental Ratings

Sealing: IP67 (Assuming suitably sealed cable breakout).
Operating temp: -20 °C to +85 °C.
Shock: 50 g, 6.3 ms.
Vibration: 9.7 Grms BS EN 60068-2-64:1993.
Weight: 300 g (1 m long sensor).



Model	Output
T/LL140	Resistive
T/LL141	Voltage

Wire Colours

Red: V+ (Supply)
Green: V- (Ground)
Yellow: Alarm
Blue: Signal out (V)
Black: Signal out (Ω)
White: Calibration