

T/LL401 Extended Temperature Range Liquid Level Sensor



The T/LL401 Liquid Level Sensor is an advanced capacitance sensor that continuously monitors liquid level providing a configurable current output within the range 0-20 mA, 4-20 mA is typically used.

Compact and robust, this sensor is designed to provide accurate and repeatable liquid level data.

It is ideal for extended temperature range applications such as monitoring engine oil or coolant in relatively shallow sumps or tanks.

SPECIFICATION

Liquid Types

Liquids compatible with the construction materials, typically engine and hydraulic oils, fuels or coolants.

Dimensions

Length: Min. 80 mm, Max. 300mm.
Thread: ½ "BSPT, ½ "BSPP, ½ NPTF, ¾" NPTF, M14, M18 and M22.

Materials

Header: 316 stainless steel.
Stem: 316 stainless steel.
Internal Electrode: PTFE sheathed stainless steel.
End Plug: PTFE.
Wetted Seals: Fluorosilicone (FVMQ).
Connector Enclosure: 30% glass filled nylon 66 (where fitted).
Leads: XLPE wires sheathed in nylon 6 conduit (where fitted).
Back-shell and connector dependent on series.

Electrical

Supply Voltage: 9 to 36 Vdc.
Supply Current: 10 mA @ 12 Vdc + output load.
Supply Protection: 80 VDC over voltage. Reverse polarity.
Signal Output: Current source. 250 Ω max load. 20 µA resolution.
Within range 0 to 20 mA, e.g. 4-20mA
*Due to protective components, max output load is reduced below 12Vdc.
Short circuit to supply. Short circuit to ground.
Output Protection:
Alarm Output: Switch to ground. Max 100mA. Default low level at 12% active length
Minimum 23mm from end probe or 35mm from datum.

Connections:

	4-Way Metri-Pack 150*	Flying Lead
+ve Supply 9-36 Vdc	Pin C	Red
-ve Supply (Ground) 0 Vdc	Pin B	Black
Current Output 0-20 mA	Pin A	Green
Alarm Output	Pin D	N/A**

*T/LL171 pinout available on request

**Please enquire if Alarm required on F/Lead version

Environmental Ratings

Ingress: Liquid side - IP68, Connector side - IP67.
Operating Temp: -40°C to 125°C.
Max Tank Pressure: 1 bar.
EMC: Type approval in accordance with EN ISO 13766:2006.
Vibration: 15.3 grms BS EN 60068-2-4:1995.
Shock: 500 ms⁻², 6 ms, BS EN 60068-2-27:1993.
Weight: 0.16 kg (for 300 mm version).

