



## Application

The COLM (COntec Level Measurement) liquid level sensor T/LL400 is a modern capacitive sensor, Continuous level monitoring and configurable voltage output. Voltage supply range 0-10 VDC. This compact and rugged sensor is designed for precise measurement and to provide repeatable level data. It is ideal for extended temperature range applications. It is ideal for applications such as monitoring engine oil or coolant in relatively narrow tanks.

## Liquid Types

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

## Dimensions

<b>Length:</b>	Min. 80 mm, Max. 300 mm.
<b>Thread:</b>	½" BSPT, ½" BSPP, ½" NPTF, 3/8" NPTF, M14 x 1.5, M18 x 1.5, M22 x 1.5, M26 x 1.5.

## Materials

<b>Header:</b>	316 stainless steel.
<b>Stem:</b>	316 stainless steel.
<b>Internal electrode:</b>	PTFE sheathed stainless steel.
<b>End plug:</b>	PTFE.
<b>Wetted seals:</b>	Fluorosilicone (FVMQ).
<b>Connector enclosure:</b>	30% glass filled nylon 66 (where fitted).
<b>Leads:</b>	XLPE wires sheathed in nylon 6 conduit (where fitted). Back-shell and connector dependant on series.

## Electrical

<b>Supply Voltage:</b>	9 to 36 VDC.
<b>Supply Current:</b>	10 mA @ 12 VDC + output load.
<b>Supply Protection:</b>	80 VDC over voltage. Reverse polarity.
<b>Signal Output:</b>	Voltage source. 2 kΩ min load. 10 mV resolution. Range 0 to 10 VDC @ 24 VDC. Range 0 to 5 VDC @ 12 VDC.
<b>Output Protection:</b>	Short circuit to supply. Short circuit to ground.

## Connections:

	4P Metri-pack 150	Deutsch DTO4-4P	Flying lead	Description
<b>V+</b>	C	2	Red	+ve supply 9-36 VDC
<b>Ground</b>	B	1	Black	-ve supply, 0V
<b>Output</b>	A	3	Green	In range 0-10 VDC
<b>Alarm</b>	D	4	White	Switch to ground. Max 100 mA.



## Environmental Ratings

<b>Ingress:</b>	Liquid side - IP68, Connector side - IP67.
<b>Operating temp:</b>	-40°C to 125°C.
<b>Max tank pressure:</b>	1 bar.
<b>Alarm Output:</b>	Switch to ground. Max 100 mA. Default low level alarm at 12% of active length. Minimum 23 mm distance from end of probe. Minimum 35 mm from datum.
<b>EMC:</b>	Type approval in accordance with EN ISO 13766:2006.
<b>Vibration:</b>	15.3 grms BS EN 60068-2-4:1995.
<b>Shock:</b>	500 ms-2, 6 ms, BS EN 60068-2-27:1993.
<b>Weight:</b>	0.16 kg (for 300 mm version).

