

# TLL155 Capacitive Fuel Level Sensor



The TLL155 liquid level sensor is designed for use in fuel tanks and is available with a variable resistive, voltage or current output suitable for driving industry standard fuel gauges or connecting into PLCs. It is supplied in standard probe lengths of 500mm or 1000mm and can be cut to suit the length required at site. For volume production requirements we will manufacture to the length & output you require.

## SPECIFICATION

### Liquid Types

**Non-conductive fuels:** Diesel, Petrol, Kerosene, Gasolene and HVO.

### Dimensions

**Probe Length:** 200 - 1100mm, 500mm and 1000mm standard cut to length for low volume.

**Mounting:** SAE 5 hole (N/A 1½" version), ½", 1", 1½" NPT or BSPT.

### Electrical

**Supply Voltage:** 9 - 36 VDC with 80V over protection.

**Supply Current:** 15mA @ 12VDC + output load.

**Connection:** Integral 4-way Tyco Superseal connector.

### Outputs

**Resistive:** Any values between 3- 500Ω or 500 -3Ω (3Ω steps)

Resolution: 3Ω,

Max dissipation: 250mW.

**Current:** 1 - 20mA, 4 - 20mA,

Resolution: 20μA, Max Load: 250Ω.

**Voltage:** **12VDC** systems: Any values between 0-5V & 5-0V.

**24VDC** system: Any values between 0 -10V & 10-0V.

Resolution: 10mV,

Max Load: 10mA source (dependent on in supply voltage) for probe lengths 300mm and above.

**Accuracy:** **Voltage & Current:** ±2% of probe length @ 20°C in diesel

**Resistance:** ±2% rounded to the nearest multiple of 3  
±0.5Ω is added to empty and full tolerance.

**Alarm Output:** Switch to ground, close on fall 12% of active length. Max 100mA.

### Construction:

**Probe:** 316 Stainless Steel.

**Wetted Materials:** Nylon 66, Aluminum Alloy 6063, FVMQ, Gasket NBR N70C181.

**Light Tube:** Polycarbonate for LED calibration.

**End Cap:** Nylon 66.

### Environmental Ratings:

**Ingress:** Sensor housing & connector IP67.

**Max. Pressure:** 1 Bar.

**Temperature Range:** -40°C to +100°C

**Weight:** 300g (1000mm long sensor).

**EMC:** EN ISO13766-1:2018.

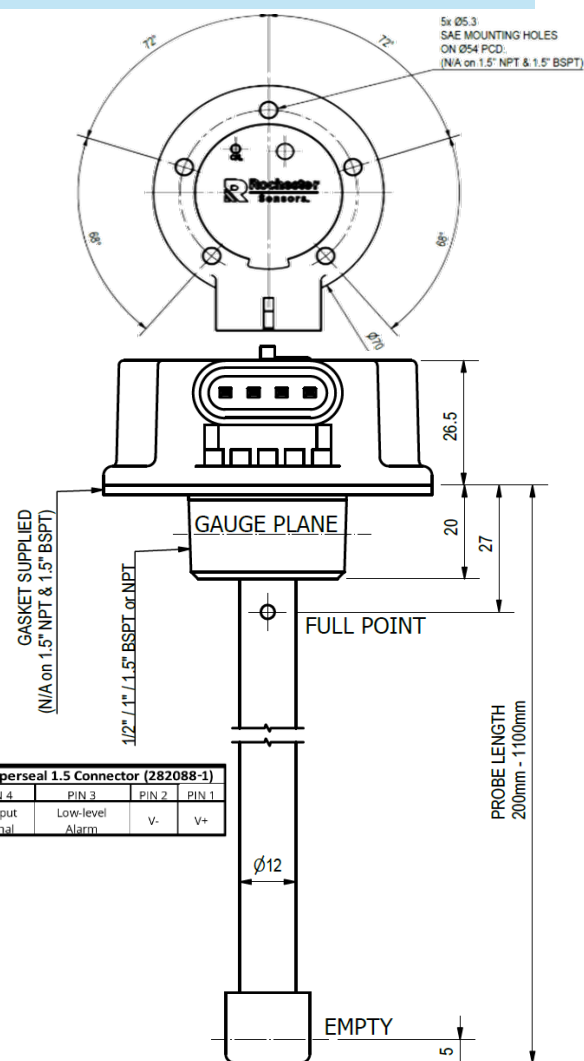
**Vibration:** 500mm sensor type tested to 6.3grms to BS EN 60068-2-64:2008.

**Shock:** 500ms<sup>-2</sup> 11ms to BS EN 60068-2-27:200.

**Drop Test:** 1M to concrete surface.

**Accessories:** **C/K16** kit mating Tyco 4-way AMP 1.5 Superseal Connector with terminals to suit wire range 0.75mm<sup>2</sup> to 1.5mm<sup>2</sup>.

**S/K155** Cut to length kit: End cap, spacer & calibration tool.



Superseal 1.5 Connector (282088-1)			
PIN 4	PIN 3	PIN 2	PIN 1
Output	Low-level	V-	V+
Signal	Alarm		

Standard part numbers and options. Contact Rochester Sensors for other length and output

TLL15X	/ X	/XXXX	/XX
TLL155 (Resistive)	5N, ½" NPT	0500 (500mm)	70, 10-180 Ω
TLL156 (Voltage)	5B, ½" BSPT	1000 (1000mm)	73, 240-33 Ω
TLL157 (Current)	N, 1" NPT		80, 0-5V
	B, 1" BSPT		81, 0.5-4.5V
	15N, 1 ½" NPT		90, 4-20mA
	15B, 1 ½" BSPT		