

# 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.

### 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 min 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.

**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.

### 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.

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

### Environmental Ratings

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

**Max. Pressure:** 1 Bar.

**Temperature Range:** -40°C to +85°C.

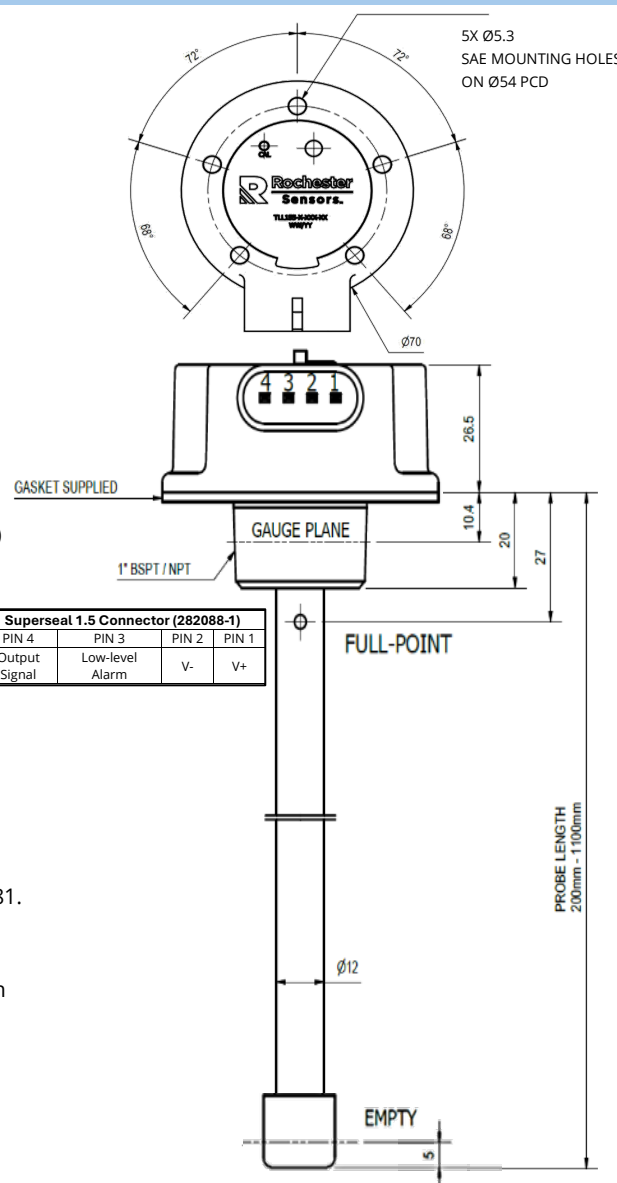
**Weight:** 300g (1000mm long sensor).

**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.



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

TYPE	THREAD	LENGTH	OUTPUT
TLL15X	X - XXXX	- XX	-
TLL155 Resistive, Ω	N, NPT	0500, 500mm	70, 10 - 18Ω 73, 240 - 330Ω
TLL156 Voltage, V	B, BSPT	1000, 1000mm	80, 0-5V 81, 0.5 - 4.5V
TLL157 Current, mA			90, 4 - 20mA



A John M. Ellsworth Company

John M. Ellsworth Co., Inc.

P.O. Box 240072  
8700 West Bradley Road  
Milwaukee, WI 53224

800-333-3331 **PHONE**

info@jmesales.com **E-MAIL**  
www.JMESales.com **WEB**