

# TLL155 Capacitive Fuel Level Sensor. Cut-To-Length and Calibrate



The **TLL155** liquid level sensor is designed for use in diesel 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 length and magnetically calibrated by the end user.



## SPECIFICATION

### Liquid Types

**Non-conductive Fuels:** Diesel and Kerosene

### Electrical

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

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

### 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 system:** 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 up to the nearest multiple of 3  
-2% rounded down to the nearest multiple of 3  
±0.5Ω is added to empty and full tolerance.

### Options

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

**Customer empty & Full points:** Specific empty and full levels can be calibrated within the allowable measurement range of the probe.

**Connections:** Integral 4 Way Tyco Superseal connector.

**Accessories:** **C/K16** kit consisting of mating Tyco 4-way AMP 1.5 Superseal Connector (282088-1), 4 x 1.5 receptacle terminals (183025-1) & 4 x wire seals (281934-2). Wire range 0.75mm<sup>2</sup> to 1.5mm<sup>2</sup>  
**S/K155 Cut to length kit** – Nylon end cap, spacer & calibration magnet.

### Construction

**Probe:** 316 Stainless Steel

**Wetted Materials:** Nylon 66, Aluminium Alloy 6063, FKM

**Light Tube:** Polycarbonate for LED calibration Nylon 66

**End Plug:** Standard 500mm & 1000mm for cutting to

**Probe Length:** length by the customer.

### Environmental Ratings

**Ingress:** Sensor housing & connector IP67

**Max. pressure:** 1 Bar

**Temperature range:** -20°C to +85°C

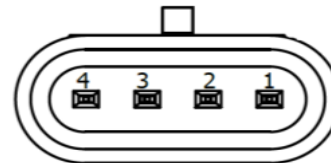
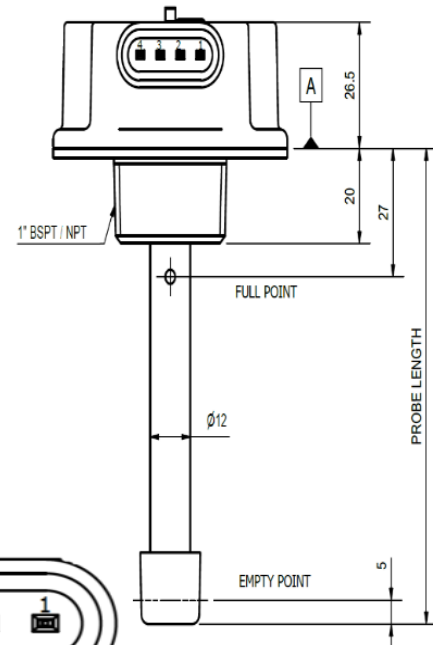
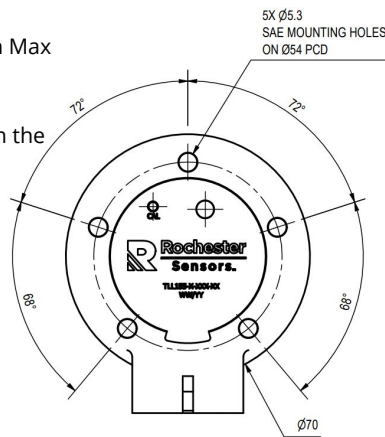
**Weight:** 300 g (1000mm long sensor)

**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 60068-2-27:2001

**Drop test** 1M to concrete surface.



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

TLL15X	/	X	/	XXXX	/	XX
TYPE	THREAD	LENGTH	OUTPUT			
TLL155 Resistive, Ω	N, NPT	0500, 500mm	70, 10 - 180 Ω			
TLL156 Voltage, V	B, BSPT	1000, 1000mm	80, 0 - 5 V			
TLL157 Current, mA			90, 4 - 20 mA			

Part number Example: TLL155-B-0500-70  
Supplied with SAE 5-Hole Gasket.

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