

# TLL155 – 156 - 157 INSTALLATION INSTRUCTIONS.

Model Variant Table		
TLL155 Resistive ( $\Omega$ )	TLL156 Voltage (VDC)	TLL157 Current (mA)

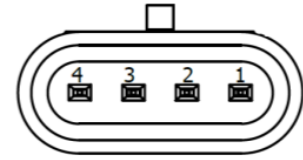
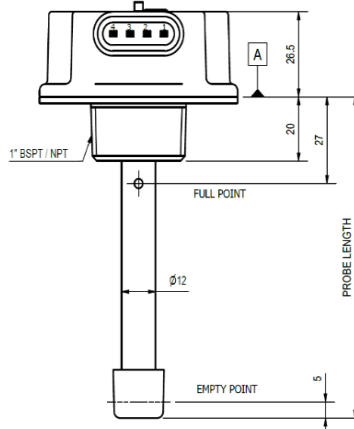
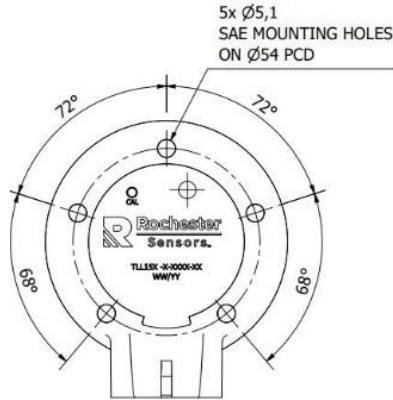


Fig 1

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

## 1, System Description:

The TLL155, 56 and 57 are externally mounted liquid level sensors that have the electronics mounted in an IP rated plastic enclosure with an integrated Tyco connector. The capacitive level probe is made from stainless steel and can be cut to length and re-calibrated by the user to suit different tank depths, please refer to the cut to length and calibrate instruction sheet. The sensor output goes into a customer specific analogue controller or gauge with the output being specified and set during the point of manufacture. The sensor is supplied in standard lengths of 500mm and 1000mm and has a factory set low level alarm at 12%.

## 2, The TLL155, 56 and 57 level sensors provide the following outputs:

<b>TLL155</b> Emulated resistance (#) Any range value 3 - 500 $\Omega$ or 500 - 3 $\Omega$ . Resolution = 3 $\Omega$
<b>TLL156</b> Voltage 0 - 10VDC range (24VDC systems) 0 - 5VDC range (12VDC systems) NB. Max load on voltage output = 10mA. Resolution = 10mA
<b>T/LL157</b> Current Any value in the range 0 - 20mA NB. Max load on the current output = 250 $\Omega$ . Resolution = 20 $\mu$ A

## 3, Mechanical fixing:

The sensor has a 1" BSPT or 1" NPT Male thread and a 5 Hole SAE mounting flange. A female thread needs to be present in the tank if using the threaded connection, The sensor should be screwed into the tank hand tight plus one quarter turn with a suitable peg spanner. If using the SAE 5- hole mounting use 5 off M5 bolts torqued to 22Nm depending on the mating tank material or inserts. Use with the 5-hole gasket supplied.

## 4, Electrical supply:

Voltage Supply: 9 - 32VDC with an 80V over voltage protection. Supply voltage needs to be in-line with the chosen output voltage. See the TLL156 table above.

Current Supply: Max 35mA at 24VDC

## 5, Electrical connections:

The sensor has an integral 4-way Tyco Superseal connector. See Fig 1 above for pin designation.

## 6, Accessories:

C/K16 contains the following parts: 1 x Tyco Superseal connector (282088-1), 4 x 1.5 receptacle terminals (183025-1), 4 x wire seals (281934-2). These are required for the mating harness. (An optional insulation boot 493581-1 may also be used on the harness side but purchased separately).

S/K155 cut to length kit contains: 1 x Nylon end cap, 1 x Nylon spacer and a calibration magnet.

**Notes:** A minimum clearance of 20mm between the probe end cap and the bottom of the tank is recommended.

(#) Do not connect V+ supply voltage to the signal or alarm connection of the sensor. This will result in damage to the sensor electronics.



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