

Liquid Level Solutions

LLS350 Series Liquid Level Sensor

The LLS-350 Series provides a continuous level measurement of tank contents and offers a choice of voltage, resistance or 4-20 mA outputs. The dual probe design allows the sensor to continuously self calibrate and detect, for example, different fuels, and will recalibrate the output to compensate for differing dielectric constants. Therefore, if a tank is filled with conventional diesel and then bio-diesel, the sensor automatically calibrates to give a corrected output without the need for the user's intervention.

Specifications

Liquid Types Diesel, biodiesel, kerosene, petrol, water and others

Mechanical

Housing Die cast aluminum & stainless steel
Sensor tube Anodized aluminum
Wetted materials PTFE, polypropylene, Viton, aluminum & stainless steel

Dimensions

Probe length Min 150mm
 Max 2000mm (static applications), 1500mm (dynamic)

Electrical

Supply voltage 9-32V DC, 80V over voltage protection
Supply current 15mA @ 12VDC + output load
Connections 430mm long 18AWG flying leads

Outputs

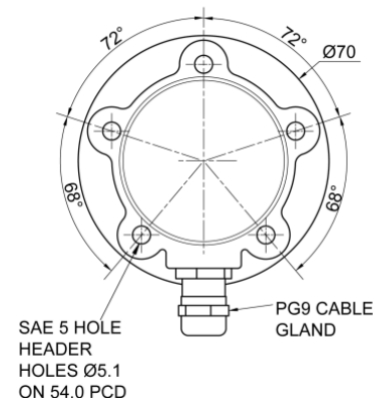
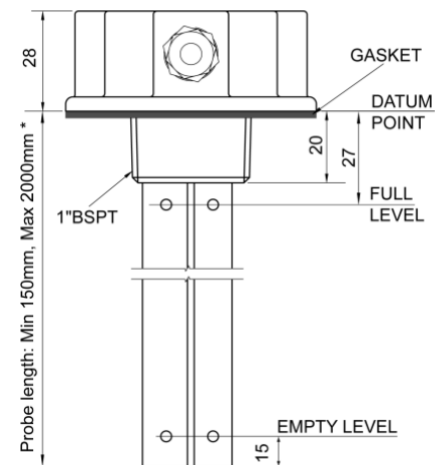
Resistive Any value 3-500Ω
 Resolution 3Ω
 Dissipation 250mW (maximum)
Current: 0-20mA, 4-20mA
 Resolution 20μA
 Max load 250Ω
Voltage
 12VDC: Any range between 0-5V/5-0V
 24VDC: Any range between 0-10V/10-0V
 Resolution: 10mV
 Max load 10mA source (dependent on min supply voltage)
Accuracy 2% of probe length @ 20°C (calculated in diesel)
 *For probe lengths ≥300mm
Alarm Empty or full levels can be set within measurement range

Environmental

Temperature -20°C to +85°C (-4°F to +185°F)
Sealing IP67
Max tank pressure 0.75 bar (10 psi)
EMC In accordance with EN ISO 13766:2006
Vibration 500mm sensor type tested to 1.88grms to BS EN 60068-2-64:1993
Shock 500ms², 11ms to BS EN 60068-2-27:1993

Model No	Output
LLS350	Resistive
LLS351	Voltage
LLS352	Current
LLS353	Resistive & alarm
LLS354	Voltage & alarm
LLS355	Current & alarm

Pinout	
Red	V+
Black	Ground
Green	Signal Output
White	Alarm (Optional)



LLS-35x Series Part Number Configurator

Output Type:

LLS-350: Resistive
 LLS-351: Voltage
 LLS-352: Current
 LLS-353: Resistive + Alarm
 LLS-354: Voltage + Alarm
 LLS-355: Current + Alarm

Output parameter:

350/353:

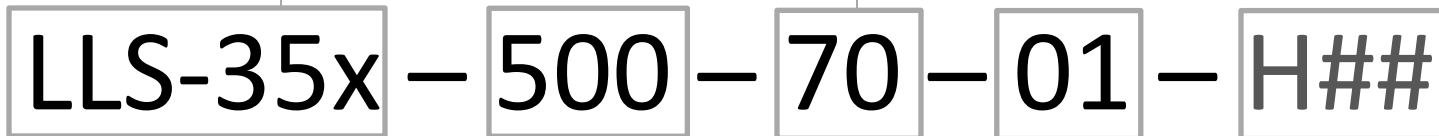
70: 9 – 180ohms
 71: 240 – 33ohms
 72: 3 – 180ohms
 74: 3 – 90ohms
 75: 3 – 501ohms
 76: 3 – 249ohms

351/354

01: 0 – 5 volts
02: 0.5 – 4.5 volts
 03: 0 – 10 volts
 04: 1 – 5 volts
 05: 0.5 – 9.5 volts

352/355

50: 4 – 20mA
 51: 0 – 20mA



Probe Length (mm):

Up to 2000mm

Standard sizes available at
 50mm increments from 150mm to 500mm and
 100mm increments from 500mm to 10000mm
 Any mm size available in
 quantities 10 or greater (150mm-2000mm)

Connection option:

**01: 430mm flying leads
 18AWG wires**
**02: 430mm flying leads
 18AWG wires with Deutsch
 DT03-3p connector**
**03: 430mm flying leads with
 4 wires for alarm us**

Optional alarm set point:

H: High level alarm – close on level rise
 L: Low level alarm – close on level fall
 ##: % Level threshold