



*Examples of a current CHAMP Methanol pit lane refuelling tank level sensor



Key Features

- No Moving Parts
- High Accuracy
- Race Proven
- Thermally Stable
- Fully Submersible
- Lightweight
- Fully Configurable Output
- Individually designed

Gill has developed a methanol pit lane refuelling tank fuel level sensor specifically for the Champ Car World Series.

The sensor flange is designed to mount to a simple boss welded to the top face of the tank with the probe suspended in the deepest section of the fuel tank ensuring that a fast, accurate measurement is made in real time. Each sensor is constructed from an aluminium alloy equipped with fully encapsulated integral electronics and a Deutsch connector offering a robust design, proven in the pit lane environment.

Gill will produce this sensor to any preferred customer length and supply each device factory calibrated ensuring a quality result straight from the box.



Specification

Electrical

Supply Voltage	+6VDC to +24VDC
Supply Current	<10mA @12V
Serial Interface	RS422 (internal)
Resolution	10 bit
Sample Rate	40Hz

Analogue Output

Voltage Output Range	0.25V - 4.75V over sensing range or customer specified, fully configurable
Range Accuracy	±0.5% of fuel depth @20°C

Connector

Integrated Connector	Deutsch ASL 006-05PN-HE
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Mechanical

Probe Length	600mm (any custom length available up to 700mm)
Mounting	2 x ¼" Cap Head Screws
Weight	200g

Environmental

Protection Class	IP68
Operational Temperature	0°C to 125°C
EMC Immunity Level	SAE J1113/2 1996 design guideline
Vibration	15g RMS (24-2000Hz) & SAE J1455 design guidelines used
Finish	Anodised to DEF STAN 025

BioFuels

Compatible Medium	Methanol Ethanol E100, E85, E50, E10 Please consult Gill for other biofuel compatibilities
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Methanol Level Sensor



Connectors

This sensor utilises an integral Deutsch ASL connector. Please consult Gill if you have a different requirement.



Application

The Custom Pit Lane Refuelling Tank Sensor has been designed specifically for Champ Car World Series refuelling tanks.



Dimensions

Gill M-Series sensors are custom-designed to your specifications. An example of an M-Series methanol pit lane refuelling tank level sensor currently used by Champ Car World Series teams is illustrated below:

