



STANDARD

# Fuel, Oil or BioFuel Level Sensor



## Key Features

- No Moving Parts
- Accurate
- Race Proven
- Thermally Stable
- Fully Submersible
- Lightweight
- Fully Configurable



The Gill R-Series level sensor is available for gasoline/petroleum, oil or biofuel medium. This sensor is equipped as standard with an SAE 5-bolt mounting pattern, common with the aperture in FIA Motorsport fuel cells.

The R-Series sensor is a solid-state device that utilises selected features from the more advanced M-Series range of level sensors, successfully campaigned in F1, IRL, CHAMP and ALMS.

This sensor is offered with standard features such as integral electronics and predetermined probe length options, avoiding the need for any mechanical adjustment by the customer. Additional features include a low flange height profile and side exit fully sealed cable, providing the user with a robust sensor.

Every Gill R-Series level sensor is compatible with our 'Sensor Service Unit', a unique hand-held tool for 'on-car' calibration and functional checks. This tool enables the race engineer to totally recalibrate the sensor within 30 seconds without needing to remove the sensor from the vehicle.



## Specification

### Electrical

Supply Voltage	+6VDC to +24VDC
Supply Current	<10mA @12V
Serial Interface	RS422 (internal)
Resolution	10 bit
Sample Rate	80Hz

### Analogue Output

Voltage Output Range	0.25V - 4.75V over sensing range
Range Accuracy	±2% of medium depth @20°C

### Wiring

Wire	0.5m Flying Lead unless specified
Wiring Gauge	Typically 26 AWG (options up to 20 AWG if requested)
Cable Material Compatibility	Wiring sleeved with either Fluorocarbon or Raychem DR25, or customised to customer specifications

### Mechanical

Probe Length	0 - 700mm (customer to specify)
Mounting	SAE 5-Bolt Pattern
Weight	From only 180g (dependant on length)

### Environmental

Protection Class	IP67
Operational Temperature	-40°C to +125°C
EMC Immunity Level	SAE J1113/2 1996
Finish	Optional anodised finish to DEF STAN 025

### Compatible Medium

Fuel	Gasoline, Unleaded, LRP
Oil	Engine oils, transmission oils, steering & hydraulic fluids Diesel Heavy Oil
BioFuel	Ethanol E100, E85, E50, E10 Methanol
Other	Please consult Gill if you have another fuel requirement



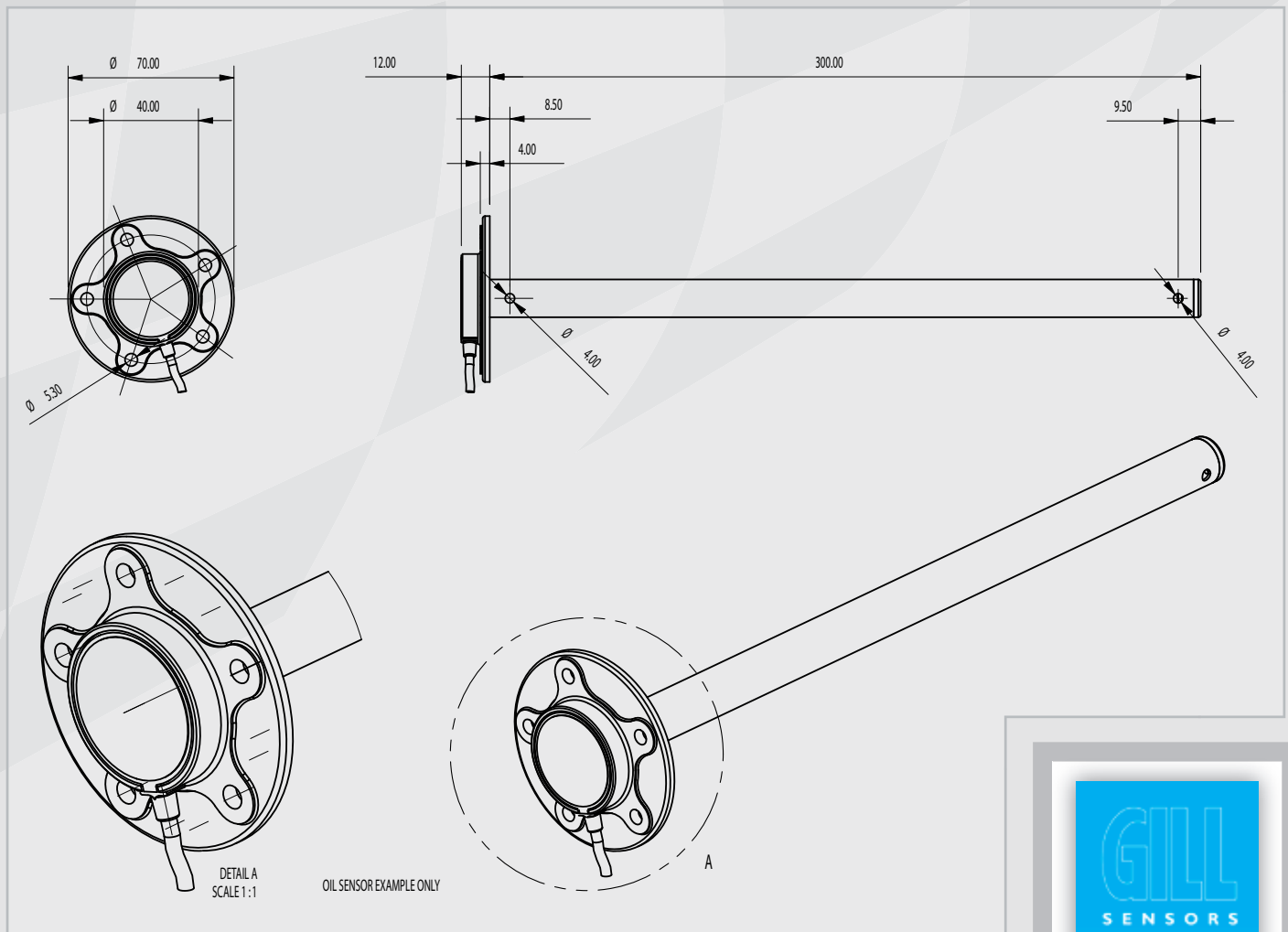
## Typical Applications

- WRC
- NASCAR
- DTM
- Grand Am
- GT Series
- Test Rigs
- Dynos



## Dimensions

Gill R-Series sensors are built to your exact length requirements. Typical dimensions of an R-Series Oil Level Sensor are illustrated below:



**GILL**  
SENSORS