



# Ultrasonic Flow Sensor



## Key Features

- ✓ No Moving Parts
- ✓ High Accuracy
- ✓ Flow Rate up to 200 l/min
- ✓ Minimal flow intrusion
- ✓ Lightweight
- ✓ To fit -16 flexible tube couplings
- ✓ Individually designed

## PRELIMINARY DEVELOPMENT Specifications are subject to change

This sensor has been developed for 'real time' liquid measurement with specific attention given to the mechanical packaging to allow dyno and 'on car' correlation of data. The sensor installs directly into a suitable existing pipe or is modified to accept -16 flexible tube connector couplings.

The system uses the established ultrasonic 'time of flight' measurement principle. The flow tube, transducers and mounting arrangement are compatible with an installation on an engine, capable of measuring liquid flow of up to 200 litres/min and temperatures of up to 150°C.

The remote processing electronics are rated for 105°C and can be placed up to one metre away from the flow tube. These electronics provide the user with flow data over a USB or analogue interface and can be powered from an automotive supply of 5 to 24 volts.

## Specification

### Electrical

Supply Voltage	+5VDC to +24VDC
Supply Current	<100mA
Serial Interface	USB
Flow Rate	0-200 l/min
Sample Rate	500Hz

### Analogue Output

Voltage Output Range	0-5V DC configurable to flow rate
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### Connections

Connectors	Deutsch ASU
Hose Couplings	-16 Flexible tube connectors

### Mechanical

Dimensions	Ø25mm x 160mm (Nominal Ø x L)
Weight	140g (excluding couplings)

### Electronics

Control Electronics Dimensions	105mm x 65mm x 25mm (L x W xH)
Control Electronics Weight	200g

### Environmental

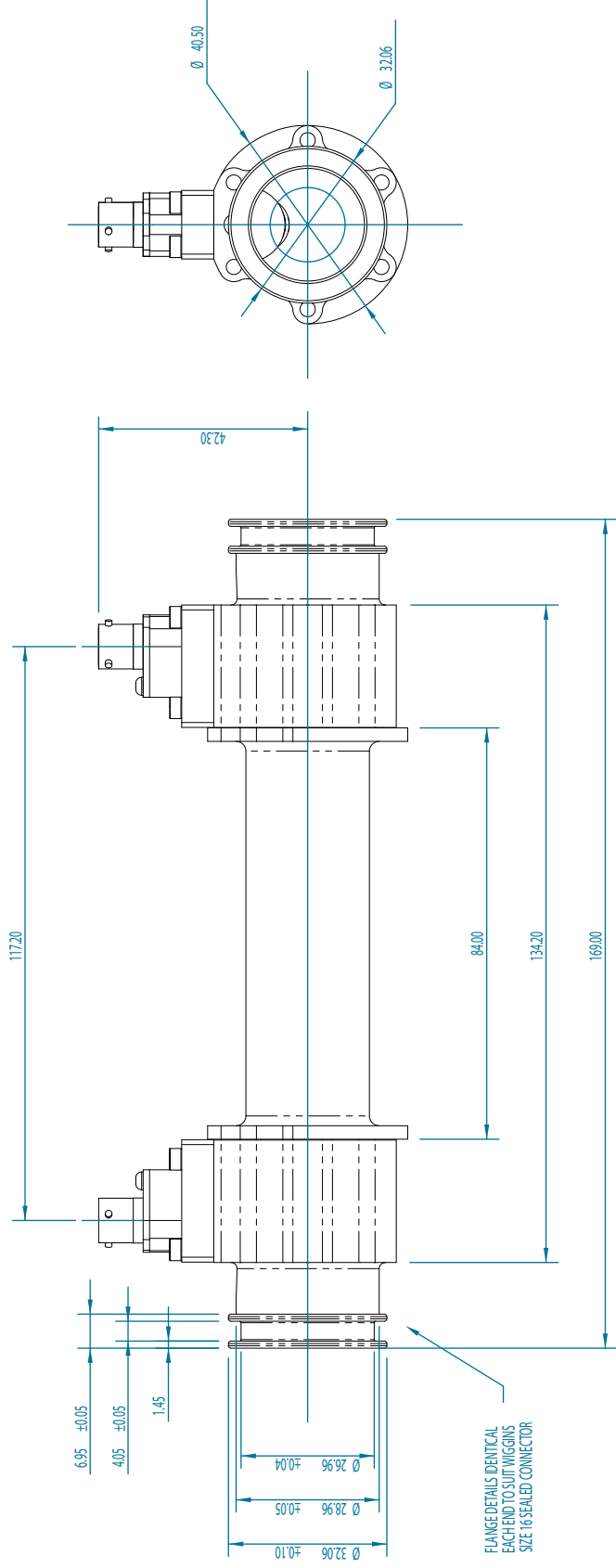
Protection Class	Sensor: IP67, Electronics: IP65
Operational Temperature	Sensor: -40°C to +150°C, Electronics: -40°C to +105°C

### Fuels

Compatible Medium	Engine oils, transmission oils, steering & hydraulic fluids Diesel, Heavy Oil
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# Dimensions

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All dimensions in millimetres

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