

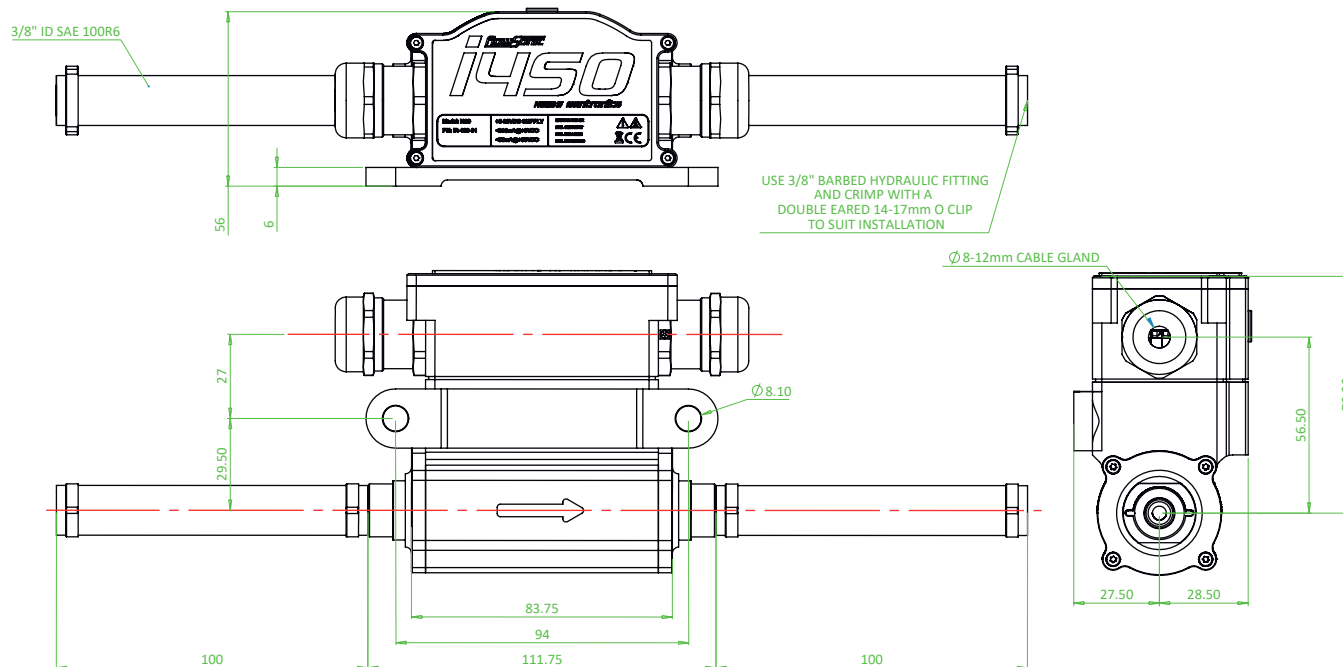
FlowSonic i450

POWERED BY *sentronics*

Introducing the FlowSonic® i450: Accurate flow measurement compatible with most common fuels. The FlowSonic® i450 is a revolutionary ultrasonic flow meter designed to quantify even the most dynamic flows. Its innovative inline design allows for precise measurement of highly viscous fluids making it ideal for a wide range of applications. Building on the trusted performance of our existing FlowSonic® series, the i450 delivers the same cutting-edge accuracy and reliability in a lighter and more compact package. Key features and benefits include:

- ✓ No moving parts
- ✓ Highly accurate and repeatable
- ✓ -20°C to +80°C temperature range
- ✓ Internal processing and diagnostics
- ✓ Fast measurement rate for dynamic flows
- ✓ Compatible with wide range of fuel types
- ✓ Lightweight and compact for in-vehicle installation
- ✓ Zero pressure drop design

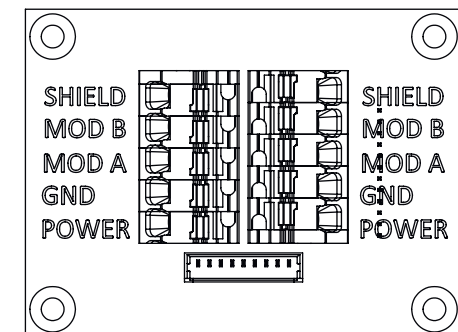
Dimensions (mm)



Inline Ultrasonic Flow Sensor



Sprung Terminal Functions



Model References

Model	Colour	Part #	Description
i450	●	IR-100-01	Inline Ultrasonic Flow Sensor

Measurement Performance

Flow Measurement

Measurement principle	Ultrasonic time of flight
Repeatability	± 0.15% of reading
Uncertainty*	± 0.5% of reading
Operating flow range	0 - 8000 ml/min (0 - 480 l/hr)
Calibrated measurement range	100 - 8000 ml/min
Turndown Ratio	80:1

Fluid Temperature Measurement

Accuracy	± 0.5°C
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* Calculated according to ISO/TR using root-sum square method yielding 95% confidence

Fluid Compatibility

Pump petrol or diesel	Diesel/methanol/petrol or ethanol/petrol
Biodiesel	Sustainable biofuel
Neat butanol, neat methanol or neat ethanol	

Environmental

Operational temperature	-20°C to +80°C
Fluid temperature	-20°C to +80°C
Environmental protection	IP65

Mechanical

Dry weight	645 g
Fluid Capacity	5 ml
O-ring seal elastomer	FPM fluorocarbon
Wetted materials	FPM, anodised aluminium alloy, stainless steel, PEEK
Fluid line connectors	-8AN Male
Fluid operating pressure	0 - 25barG
Flow Tube ID	4.5mm

Electrical

Voltage	8V DC to 30V DC
Current	210 mA @ 8V DC
Voltage protection	Over-voltage 45V DC, reverse polarity -45V DC
Fuse requirement	1.0A maximum
Sprung Terminals	Internal - Phoenix push spring terminals. Suitable for wire gauge 24-16 AWG. <i>(Remove cover plate to access terminals.)</i>