

The FlowSonic® Aviation High Flow Fuel Meter harnesses patented 'Time of Flight' ultrasonic flow measurement technology to measure high-volume jet engine fuel. Designed for superior accuracies of 0.25%, this flow meter is an ideal tool for efficiency-focussed R&D and emissions testing. Featuring remote electronics, the FlowSonic® is high temperature capable. Key features include:

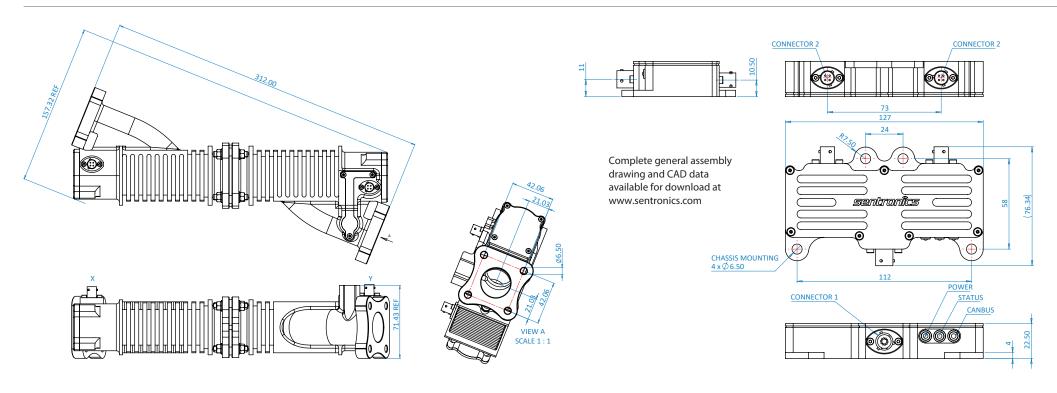
- No moving parts
- Highly accurate and repeatable
- Flow range of 4 450 l/min
- 0.5% flow accuracy

- Robust titanium alloy construction compatible with high temperature jet fuel
- Fast measurement rate for dynamic flows
- Compatible with wide range of fuel types
- CAN, TTL pulse, analog output formats

Aviation Fuel Flow Meter



Dimensions (mm)



Model References

Model	Colour	Part #	Description
Aviation Fuel Flow	•	MF-441-02	Aviation High Flow Fuel Meter

Measurement Performance

500 Hz	
± 0.15% of reading	
± 0.5% of reading	
0 - 450 l/min	
4 - 441 l/min	
± 0.5°C	
	± 0.15% of reading ± 0.5% of reading 0 - 450 l/min 4 - 441 l/min

^{*} Calculated according to ISO/TR using root-sum square method yielding 95% confidence

Flow Outputs and Functions

Calibrated volumetric flow rate (ml/min)	
Calibrated cumulative volumetric flow (ml)	
Calibrated mass flow rate (g/min)	
Calibrated cumulative mass flow (g)	
Max/min logging	
Elapsed time counter (power on, ETI)	
Run-time (flow time, RTI)	
Speed of sound (m/s)	
Diagnostics via CAN	

Fuel Compatibility

Jet A1	
Avgas	
MILPRF 7024 [calibration liquid]	
Jet B	
Jet TS-1	

Environmental

Operational temperature	-53°C to +143°C
Operational fluid pressure	0 - 200barG
IP Rating	IP69K

Mechanical

Dry weight	895 g
O-ring seal elastomer	FPM fluorocarbon
Wetted materials	FPM, Titanium, PEEK

Electrical

Voltage	8V to 30V DC
Current	< 200mA @ 12VDC
Voltage protection	Over-voltage 45V DC, reverse polarity -45V DC
Primary sensor connector	GLENAIR RECEPTACLE -803-003-02Z17-10-PN
Primary mating harness connector	GLENAIR RECEPTACLE 803-003-02Z16-4PN
Secondary/Display connector	GLENAIR RECEPTACLE 803-003-02Z16-4PN

CAN Communications

Design standard	ISO 11898-2 (high-speed applications)
Message format	2.0A (11-bit identifier)
Baud rate	1 Mbaud/s
CAN termination resistor	No
Message/Channel description	Please contact us for the .dbc

Primary Mating Harness Connector Pin-outs (GLENAIR RECEPTACLE -803-003-02Z17-10-PN)

Pin 1	V+ Supply (8-30V)
Pin 2	CAN Hi
Pin 3	CAN Lo
Pin 4	TTL Pulse Output
Pin 5	Analog Output
Pin 6	Comms A
Pin 7	Comms B
Pin 8	CAN Select
Pin 9	GnD
Pin 10	No Connect (NC)

