

ULTRASONIC FLOW METER



This innovative design provides a high accuracy, non-invasive, flow measurement device at a fraction of the cost of other current non-invasive systems. The unique measurement technique automatically compensates for viscosity and temperature variations. The measurement of flow is by ultrasonic transit time in-line cell.

The flow path is designed to minimize pressure drop and, having no moving parts within, will not clog or jam. The sensor also allows contaminants to pass through without affecting its performance.

The sensor is supplied with pulse and analogue outputs, which are selectable by connection wires.

Features

- Non-invasive sensor technology
- Fully electronic, no moving parts
- Automatic viscosity and temperature compensation
- Pulse or analogue output selectable
- Low pressure drop
- LED indication of no liquid & of flow rate



Technical

Max. Flow I/min (Q4)		25	
Transitional Flow I/min (Q2)		0.5	
Min. Flow I/min (Q1)		0.2	
Output Selectable	Pulse		Analogue

Performance

Accuracy for Flow Rates Between Q2 and Q4	3% of reading
Accuracy for Flow Rates Between Q1 and Q2	5% of reading
Resolution Better Than	0.001 l/min
Flow Range	0-25 l/min
Response Time	Better than 0.1s

Interface

Connection 8 Wires	RED supply +ve, BLACK ground, Orange Voltage output, Brown (Blue NPN output, Yellow - factory u Current output, Green Ground conne	use only, White PNP output, cted internally to black
Supply	8 - 24VDC (input current <10mA	@ 9VDC)	
Output Selectable	1000 pulses/L	0-5Vdc	4-20mA

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Operation

Principle	Ultrasonic transit time in-line flow cell
Temp. Range (fluid)	-10°C to +85°C
Continuous Fluid Sound	Maintains performance regardless of fluid type, temperature or viscosity for speed measurement fluids with sound speeds 1250 - 1750 m/s
Green LED Definitions	Flashing with 5 second break = power present, no liquid present Constant flashing = power present, flow present Always on = power present, liquid present, no flow

Physical Characteristics

Flow Tube Material	Glass filled plastic, Grivory HT1V-4FWA Black 9225 (FDA and EU approved for foodstuffs)					
Flow Tube Internal Diameter	10mm					
Connection Thread	3/8" BSP Parallel					
Internal Bore of Connection	10mm					
Suitable Pushfit Adapter (to fit 1/2" OD Tube)	John Guest Speedfit PI451613S					
Maximum Pressure	10 bar					
Case Material	ABS black, Polylac PA-757					
Case Integrity	Ultrasonically welded					
Connection	8 core, PVC sheathed, 100cm long standard					
Environmental Protection	IP66 level of protection					



DIMENSIONS

All dimensions are in millimeters.





Page 2

	UF	25	В	100	В
Series					
Flow Range -					
25 = 0 to 25/Lmin	I				
Output					
B = selectable					
Cable Length	(cms) —				
Reverse Flow					
B = enabled					

Made in the UK

Page 3

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