

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)		8	
Transitional Flow (02)		0.4	
Min. Flow I/min (Q1)		0.1	
Output Selectable	Pulse		Analogue

Performance

Accuracy for Flow Rates Between 02 and 04	3% of reading
Accuracy for Flow Rates Between Q1 and Q2	5% of reading
Resolution Better Than	0.001 l/min
Reverse Flow	0-8 l/min
Response Time	Better than 0.1s

Interface

Connection 8 Wires		Blue NPN output, Yellow Data in, V Current output, Green Ground conne	
Supply	8 - 24VDC (input current <15mA	@ 24VDC)	
Output Selectable	1000 pulses/L	0-5Vdc	4-20mA





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

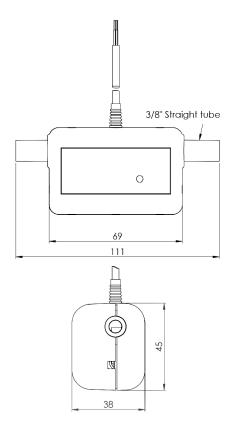
Physical Characteristics

Flow Tube Material	Glass filled plastic, Grivory HT1V-4FWA Black 9225 (FDA and EU approved for foodstuffs)
Flow Tube Internal Diameter	7mm
Connection Thread	3/8" straight tube
Internal Bore of Connection	7mm
Suitable Pushfit Adapter (to fit 3/8" OD Tube)	John Guest Speedfit PI0412S
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



DIMENSIONS

All dimensions are in millimeters.





Page 2

	UF	08	В	100
Series				
Flow Range				
8 = 0 to 8/Lmin				
Output				
B = selectable				
Cable Length	(cms)			

Made in the UK

Page 3

CONTACT US

+44 (0)1202 897969

7 Cobham Road, Ferndown Industrial Estate, Wimborne, Dorset,

c3w_sales@sensata.com

Cynergy3 Components Ltd.

BH21 7PE, United Kingdom

Sensata Technologies, Inc. ("Sensata") data sheets are solely intended to assist designers ("Buyers") who are developing systems that incorporate Sensata products (also referred to herein as "components"). Buyer understands and agrees that Buyer remains responsible for using its independent analysis, evaluation and judgment in designing Buyer's systems and products. Sensata data sheets have been created using standard laboratory conditions and engineering practices. Sensata has not conducted any testing other than that specifically described in the published documentation for a particular data sheet. Sensata may make corrections, enhancements, improvements and other changes to its data sheets or components without notice.

improvements and other changes to its data sheets or components without notice. Buyers are authorized to use Sensata data sheets with the Sensata component(s) identified in each particular data sheet. HOWEVER, NO OTHER LICENSE, EXPRESS OR IMPLIED, BY ESTOPPEL OR OTHERWISE TO ANY OTHER SENSATA INTELLECTUAL PROPERTY RIGHT, AND NO LICENSE TO ANY THIRD PARTY TECHNOLOGY OR INTELLECTUAL PROPERTY RIGHT, IS GRANTED HEREIN. SENSATA DATA SHEETS ARE PROVIDED "AS IS". SENSATA MAKES NO WARRANTIES OR REPRESENTATIONS WITH REGARD TO THE DATA SHEETS, OR USE OF THE DATA SHEETS, EXPRESS, IMPLIED OR STATUTORY, INCLUDING ACCURACY OR COMPLETENESS. SENSATA DISCLAIMS ANY WARRANTY OF TITLE AND ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, QUIET ENJOYMENT, QUIET POSSESSION, AND NON-INFRINGEMENT OF ANY THIRD PARTY INTELLECTUAL PROPERTY RIGHTS WITH REGARD TO SENSATA DATA SHEETS OR USE THEREOF.

All products are sold subject to Sensata's terms and conditions of sale supplied at www.sensata.com SENSATA ASSUMES NO LIABILITY FOR APPLICATIONS ASSISTANCE OR THE DESIGN OF BUYERS' PRODUCTS. BUYER ACKNOWLEDGES AND AGREES THAT IT IS SOLELY RESPONSIBLE FOR COMPLIANCE WITH ALL LEGAL, REGULATORY AND SAFETY-RELATED REQUIREMENTS CONCERNING ITS PRODUCTS, AND ANY USE OF SENSATA COMPONENTS IN ITS APPLICATIONS, NOTWITHSTANDING ANY APPLICATIONS-RELATED INFORMATION OR SUPPORT THAT MAY BE PROVIDED BY SENSATA.

Mailing Address: Sensata Technologies, Inc., 529 Pleasant Street, Attleboro, MA 02703, USA.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Sensata: UF08B100