MICROFLOW-i

Technical Specifications:

MicroFlow-i is a non-contacting low power consumption microwave liquid velocity sensor. It can be installed as an individual sensor or used to provide HART communication protocol or a 4-20mA loop powered signal into a system. It's extremely low power consumption makes it the ideal velocity solution for sewerage network monitoring (CSO) and all remote installations where mains power is unavailable.

PHYSICAL: MOUNTING OPTION SPECIFIC

Sensor Body Dimensions:	90 mm D x 140 mm H (3.5 in x 5.5 in)
Weight:	Nominal 1 kg (2.2 lb)
Sensor Body Material/ Description:	Valox 357
Transducer Cable Extensions:	2-core screened
Maximum Separation:	Up to 1,000 m (3,280 ft)
Mounting Connection:	Via 1" BSP back-mounted thread or 20 mm (0.8 in) via the supplied adaptor. Optional mounting bracket available from Pulsar
Mounting Angle:	45° optimal and mounted at the centerline of the channel with a clear uninterrupted view

ENVIRONMENTAL

Enclosure Protection:	IP68
Max. & Min. Temperature (Electronics):	-20 °C to +60 °C (-4 °F to +140 °F)
CE & Radar Approvals:	Listed in the Certificate of Conformity within the manual.
ATEX Approval:	Ex II 1 G D, Ex ia IIC T4 Ga, Ex ia IIIC T135°C Da (Directive 2014/34/EU)

PERFORMANCE

Velocity Range:	200 mm/s to 6 m/s (7.9 in/s to 19.7 ft/s)
Operational Range:	Up to 3 m H
Accuracy:	The greater of ±1.5% or 50 mm/s (2 in/s)
Optimal Installation:	Install at an angle of 45° in line with the flow. More information is provided within the manual — see the 'Locating the MicroFlow-i sensor' section
Max. Channel Width per Sensor:	1.5 m (4.9 ft)
Radar:	K-Band (ISM)
Transmitter Power:	<15 dBm
Beam Width:	20° inclusive
Wake-up Time:	Typically 4 seconds warm (<12 hours from last start-up)

OUTPUTS

Communication:	HART compatible, 4-20mA loop powered

PROGRAMMING

PC Programming:	MicroFlow-i HART PC
Programming Security:	Via passcode
Programmed Data Integrity:	Via non-volatile memory
PC Setup & Monitoring Software:	Compatible with Windows 7/8/10

SUPPLY

Operating Voltage:	10-28 V DC
Power Consumption:	• Start-up = 20mA • Average current = 60 µA per hour when one velocity measurement is performed every 15 minutes

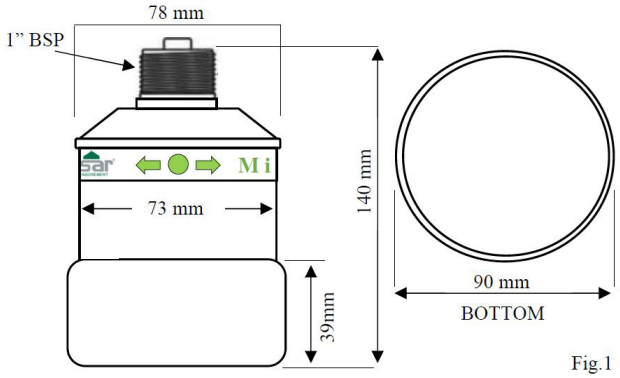

Fig.1

Microflow-i Drawing

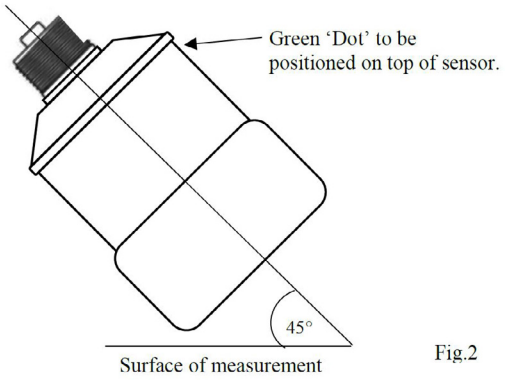

Fig.2

Microflow-i Mounting Drawing

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For more information, please visit our website:

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Rev 4.0