



MicroFlow Long Range

Measuring surface speed in the most demanding applications providing maximum performance

ELECTRONICS

ACOUSTIC

WEIGHT

OVERLOADING
SAFETY SYSTEMS

VALVES

TEMPERATURE

DETECT
A FIRE®

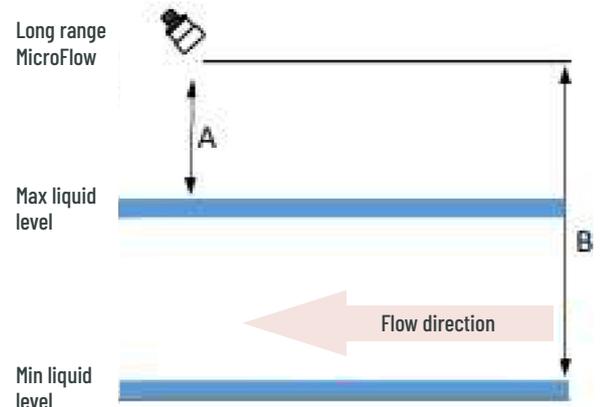
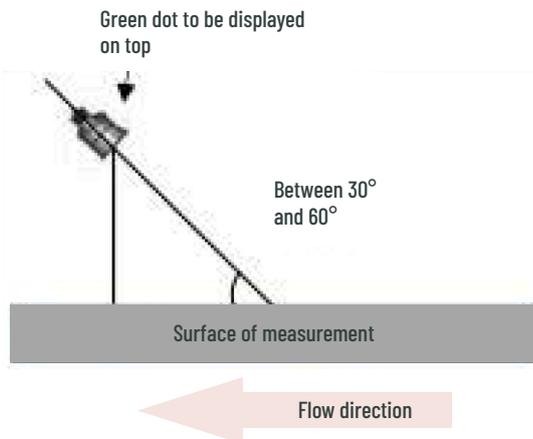
FLOW

DENSITY

INTERFACE

PRESSURE

LEVEL



A = Minimum 250mm above Maximum Liquid level
B = Maximum 10m above Minimum Liquid Level

High-performance non-contact speed sensors

With excellent low speed measurement capabilities, increased beam width, built-in tilt compensation, rain interference discrimination and low power consumption, Modbus RTU output, LONG RANGE MICROFLOW (LRMFLOW) is the right choice for clean water, wastewater, industrial or irrigation applications.

Tried and tested

Designed specifically with harsh global weather conditions in mind, the LONG RANGE MICROFLOW speed sensor has been tried and tested in a wide range of climatic conditions, including tropical storms. Without loss of data, LONG RANGE MICROFLOW provided repeatable and accurate results thanks to its more powerful signal processing and rainfall discrimination system.

Easy to install and use

The need for installation skills and resources is minimised thanks to the integrated tilt sensor that automatically mitigates user error in the installation angle. With standard Modbus RTU output, LONG RANGE MICROFLOW is compatible with both third-party RTUs or loggers, as well as our dedicated electronics. LONG RANGE MICROFLOW can be used with continuous or intermittent power supply to reduce power consumption when connected to a logger.

Advanced measurement capabilities

LONG RANGE MICROFLOW can be mounted up to 15 metres above the water surface, making it ideal for applications where the mounting position cannot be changed, such as the flow of a river under a bridge. The measuring area of the sensor can be up to 3 metres, which means that fewer sensors are needed to measure speed over wider channels. LONG RANGE MICROFLOW is the right choice for applications with varying flow rates due to its ability to measure velocities up to 0.2 metres per second.



River monitoring with small area disturbances



Monitoring the river with great distance from the surface



FarSight™ and REFLECT™ mounted on angled bracket dBA 0008 for surface velocity flow measurement

Technical Specifications

INSTALLATION: SPECIFIC MOUNTING OPTION

Sensor body measurements	195 mm P x 145 mm A
Weight	Nominal 1.2 kg
Sensor Body Material/Description	Valox 357 / PVDF
Transducer cable	5-pole shielded L=10m (other length on request)
Maximum separation	500m MAX
Mounting connection	Via rear-mounted 1" BSP thread. Mounting bracket available on request
Mounting angle	Automatic angle compensation for installation between 30° and 60° (40° from optimum horizontal) and mounted on the centre line of the channel, with clear and uninterrupted flow the best installation angle is the one that gives the best response

ENVIRONMENTAL CONDITIONS

Housing protection	IP68
Maximum and minimum temperature (electronic)	-40 °C to +80 °C

PERFORMANCE

Measuring range	0.2 - 6 m/s
Operating range	Up to 15 m high
Accuracy	Greater than +/- 0.5% or 0.05 m/s (0.1 ft/s)
Optimum installation	Install at an angle between 35° and 80° (in relation to the horizontal plane) against the flow. For more information, see section "Locating the MicroFlow Long-Range Sensor"
Maximum channel width per sensor	3 m
Radar/Frequency	K-Band (ISM) / 24 GHz
Opening angle	10°

OUTPUTS

Connection	RS485
Protocol	ModBus RTU

PROGRAMMING

Programming	Via electronic interface VHQ / Ultimate / Speedy
Programming security	Via access code
Programmed data integrity	Via non-volatile memory
PC configuration and monitoring software	Compatible with Windows 7/8/10

APPROVALS

Approvals	CE
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