



FIXED-UFM

Fixed installation, wall mounted clamp on ultrasonic flowmeter.



The FIXED-UFM is a fixed installation, wall mounted clamp on ultrasonic flowmeter. Its intuitive menu driven HMI and the layout of its display and keypad makes it incredibly easy to use. It incorporates heat quantity measurement functionality. It can accept up to 6 optional plug in IO modules.

Specification

- Pipe outer diameters ranging from 10 to 6500 mm.
- Temperature range for control unit -10.... +65 degC.
- Weight 840 g.
- Dimensions 215 x 185 x 100 mm.
- IP 65 enclosure.
- Full 240 x 160 pixel graphics display with backlight.
- Full 15 key tactile keypad with audio feedback.
- Available in both 85... 265Vac and 12... 36Vdc PSU configurations at 10W.
- RS232 and USB serial communications as standard.

- 16MB datalogger as standard. All measurement values can be logged. User selected interval from 1 to 255 s.

Features

- Intuitive installation using menu driven HMI.
- Full set of instrument and measurement diagnostics.
- Signal oscilloscope for sensor positioning and diagnostics.
- Internal database of pipe, fluid and lining materials.
- Fluid database of sound speed, density, viscosity and SHC compensated for fluid temperature (if temperature is known from optional PT100 or 0/4... 20mA temperature transmitter input)
- Heat quantity measurement (if inlet and outlet temperatures are known from optional PT100 inputs, 0/4... 20mA temperature transmitters or direct user entry).
- All measured values can be totalised.
- Connection to PC using both RS232 and built in USB.
- Serial communications can be used for device control (command line interface) and datalogger download via PC.
- Batching functionality.
- Manual totaliser functionality.
- Product identification functionality. Can be used for a range of processes including oil dewatering.

Performance

- Measurement principle ultrasonic transit time difference.
- Flow velocity range 0.01....25 m/s.
- Resolution 0.25 mm/s.
- Repeatability 0.15% of measured value.
- Accuracy +/-0.5% of measured value under ideal conditions.

- Turn down ratio 1/100.
- Measurement rate 1Hz as standard.
- Gas/solids <10% of volume.

Quantity and units of measurement

- Flow velocity
- Volumetric flow rate
- Mass flow rate
- Energy flow rate
- Volume
- Mass
- Energy

Optional plug in IO modules

- Galvanic and optical isolation.
- Namur levels for signalling.
- 16 bit resolution.

Currently available modules include:

- Active 4... 20mA current output.
- Passive 4... 20mA current output.
- Active 4... 20mA current input.
- Passive 0/4... 20mA current input.
- Open Collector pulser (user selected duration 3... 999ms).
- Opto Relay pulser.
- Relay (NO and NC) output.
- PT100 input (4 wire).
- Modbus RTU.

Transducers

- A range of sensor sizes to cover the range of pipe outer diameter 10.... 6500 mm.



- DS, for pipes of 50 mm and over. Dimensions 60 x 30 x 35 mm.
- DM, for pipes from 10.... 750 mm. Dimensions 40 x 20 x 25 mm.
- DN, for pipes less than 100 mm. Dimensions 25 x 20 x 20 mm.
- Material stainless steel and PEEK.
- Temperature range -20.... +150 degC.
- Ingress Protection rated IP 66.
- Cable length 3.0 m as standard.
- Matched pairs for accurate zero flow measurement.

For more information or to arrange a demonstration please contact Sonic Driver by email noel@sonic-driver.com, telephone +44(0)7971 273000 or by post at the address shown at the bottom of this page.

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