

PORTAFLOW™ 216 CE

NON INVASIVE ULTRASONIC FLOW METER

The Portaflow 216, Transit time, clamp-on ultrasonic flow meter have been designed to help Service/Maintenance and Commissioning Engineers make quick, accurate flow readings of any liquid, within pipes from 50mm to 400mm. Utilising the pulse output the instrument can be connected to a separate data logger to store flow volume information.

This compact, rugged instrument will measure flow rate in litres/min, gallons/min, litre/sec, metres/sec, feet/sec and will give you as total volume in litres and gallons. There is no shut down time, lost production or contact with the process liquid when making the measurement, as the instrument is completely non-invasive.

Simple to set up, the Portaflow 216 is able to accurately measure flows from 0.5 metres/sec up to 8 metres/sec. You are able to measure on almost any clear liquids such as water, oils and chemicals in any pipe material over a temperature range of -20°C to +125°C

Set up is menu driven with the user entering the pipe dimensions, material and temperature. When measuring liquids other than water, speed of sound data must be entered. Programming the instrument and mounting the sensors using chains attached to the guide rail can be completed in under 2 minutes, with stable flow data becoming available immediately. The unit can be powered by mains (110/240V) for long term flow monitoring and using the built-in rechargeable batteries it can be operated for up to 8 hours continuously.

Thoroughly reliable with a rapid response time of one to two seconds, the Portaflow 216 is an unbeatable instrument for fast accurate flow measurements.



PORTAFLOW 216

specification

Electronic Enclosure

Outside dimensions	: 204 x 110 x 41mm
Protection class	: IP40
Material	: ABS
Total weight complete	: 500 grams
Operating temperature	: 0°C to +45°C
Storage temperature	: -20°C to +55°C
Data input	: Via 15 Key tactile membrane keypad
Display	: 1x8 Character super twist LCD 'low batt' indication

Supply Voltage

Power supply/charger	: Mains supply 110-230V AC±10% @ 50/60Hz Max 9 watts
Battery type	: 4 x AA rechargeable Ni-Cad batteries
Battery life	: 8 hrs continuous operation on fully charge battery cells : 12 hours recharge time

Output Data

Flow Display	Volumetric units	: litres, gallons(Imperial and US),m ³
	Velocity units	: feet/sec, metres/sec
	Total volume	: litres, gallons (Imperial and US), m ³
Pulse Output	0-5 Volts	: Maximum 1 pulse per second

Flow Range

Pipe size 400mm	: 0.5 metres/sec to 4 metres/sec
Pipe size 50mm	: 0.5 metres/sec to 8 metres/sec
Minimum and maximum velocity dependent on the pipe size	

Transducer

Temperature range	: -20°C to +125°C
Guide rail size	: 395mm x 33mm x 42mm
Cable length	: 2 metres

Pipe Range

50mm to 400mm nominal bore

Pipe Material

Any sonic conducting medium such as Carbon Steel, Stainless Steel, Copper, UPVC, PVDF, Concrete, Galvanised Steel, Mild Steel, Glass, Brass, ductile Iron, Cast Iron and PE

Accuracy

1%. The specification assumes turbulent flow profile with Reynolds numbers above 4000

Repeatability

±0.5% with unchanged transducer position

Response Time

Less than 2 seconds

Micronics reserve the right to alter any specification without notification