

MICRONICS

PORTAFLOW 204plus!

Transit time portable flow meter

The Portaflow 204 Transit Time, clamp-on ultrasonic flow meter has been designed to help Service/Maintenance and commissioning Engineers make quick, accurate flow readings of any liquid, with pipes from 13mm to 115mm NB.



This compact rugged instrument gives a readout of velocity or volumetric flow rate and a total flow in litres and gallons. There is no shut down time, lost production or contact with process liquid when making the measurement, as the instrument is completely non-invasive.

Simple to set up, the Portaflow 204plus! is able to measure flow from 0.02 metres/sec up to 8 metres/sec. It is able to measure flow on almost any clear liquids such as water, oils and chemicals, in any pipe material over 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 transducers using the hardware provided, can be completed in under 2 minutes, with stable flow data becoming available immediately.

The unit powered by mains (110/240V) or the internal Ni-Cad rechargeable battery pack, giving an operating life of 8 hours.

Thoroughly reliable with a rapid response time of one or two seconds, the Portaflow 204 is an unbeatable instrument for fast and accurate flow measurements.

PORTAFLOW 204plus! Specification

Electronic Enclosure

Outside dimensions	: 236 x 125 x 41mm
Protection class	: IP40
Material	: ABS
Total weight complete	: <1.5Kgs
Operating temperature	: 0°C to + 50°C
Storage temperature	: -10°C to + 60°C
Data input	: Via 15 Key tactile membrane keypad

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	: 10 hrs continuous operation on fully charge battery cells

Output Data

Flow Display	Volumetric units (7 Significant Figures-2 decimal places)	: litres, gallons (Imperial and US), m ³
	Velocity units	: feet/sec, metres/sec
	Total volume (7 Digits-2 decimal places)	: litres, gallons (Imperial and US), m ³
	Pulse Output	: 0-5 Volts
Analogue	4-20mA into 750 Ohms	: Maximum 1 pulse per second : User definable scaling

Flow Range

Pipe size 115mm	: 0.02 metres/sec to 4 metres/sec
Pipe size 13mm	: 0.2 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	: 210mm x 36mm x 27mm
Cable length	: 2 metres

Pipe Range

13mm to 115mm nominal bore

Pipe Material

Any sonic conducting medium such as Carbon Steel, Stainless steel, copper, UPVC, PVDF, Concrete, Galvanised Steel, Mild Steel, Glass, Brass

Accuracy

1%...3% or 0.02 m/sec whichever is the greater. The specification assumes turbulent flow profile with Reynolds numbers above 4000

Repeatability

±0.5% with unchanged transducer position
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Response Time

Less than 2 seconds

Micronics reserve the right to alter any specification without notification