

PORTAFLOW 216

Transit time portable flow meter

The Portaflow 216 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 50mm to 400mm 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 216 is able to measure flow from 0.5 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 10 hours.

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

PORTAFLOW 216 Specification

Electronic Enclosure

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|-----------------------|--------------------------------------|
| 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 16 Key tactile membrane keypad |

Supply Voltage

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| 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

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| 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 | : Maximum 1 pulse per second |
| Analogue | 0-5 Volts 4-20mA into 750 Ohms | : User definable scaling |

Flow Range

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|---|----------------------------------|
| 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

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

Pipe Range

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| 50mm to 400mm nominal bore |
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Pipe Material

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

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

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| ±0.5% with unchanged transducer position |
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Response Time

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| Less than 2 seconds |
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Micronics reserve the right to alter any specification without notification

