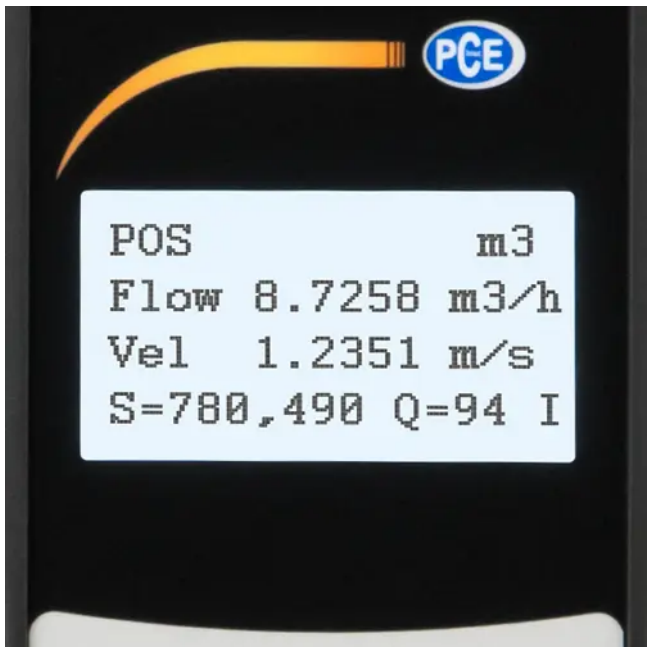
Ultrasonic Flow Meter PCE-TDS 100HMHS-ICA incl. ISO Calibration Certificate



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According to the transit time difference method / To determine flow velocity and flow rate / Measuring method for liquids as homogeneous as possible

The ultrasonic flow meter is required as part of a control measurement or to quickly determine the flow in a pipeline and is therefore a portable / easy-to-install measuring system. The ultrasonic flow meter works according to the transit time difference method. The measuring principle of the flow meter is quite simple. Measuring a pipe at an angle with the flow takes less time than measuring against the flow.

The stronger the current gets, the longer you need against it and the faster you get with it. The difference between the flow times with the flow or against it therefore depends directly on the flow speed of the river. The flow meter uses this effect to determine flow velocity and flow. Electro-acoustic transducers ("Piëzo effect") send and receive short ultrasonic pulses through the medium flowing in the pipe.

The transducers are offset in the longitudinal direction on both sides of the measuring pipe. The non-destructive working sensors are placed on the pipe and fastened e.g. by means of a cable tie. The display shows the flow rate within a short time. The ultrasonic flow meter can be used for measurements on metallic pipes, plastic pipes or rubber pipes.

Measurable liquids include: acetate, acetone, alcohol, ammonia, aniline, benzene, butyrate, chloroform, ethanol, ethyl alcohol, ethyl ether, ethylene glycol, freon R 12, petrol, glycerin, glycol, isobutanol, isobutane, isopentane, kerosene, linseed oil, methanol, methyl alcohol, engine oil, diesel oil, olive oil, peanut oil, paraffin oil, pentane, petroleum, 1-propanol, coolant, lubricating oil, silicone oil, transformer oil, trichlorethylene, 1, 1, 1 - trichloroethane, turpentine, distilled water and sea water.

- Ideal for retrofitting
- Installation without process interruption
- Easy construction
- Accurate and reliable
- No pressure loss
- Maintenance-free, no moving parts
- Wear-free
- Portable devices for control measurements
- **incl. ISO Calibration Certificate**

Subject to change

Specifications

Hand-held device measuring range	-32 ... +32 m/s
Resolution	0.0001 m/s, 0.00033 ft/s
Accuracy for DN ≥ 50 mm:	±1.5% of the measured value
for DN < 50 mm:	±3.5% of the measured value
Reproducibility	±1.0% of the measured value
Media	All liquids with an impurity < 5% and a flow rate >0.03 m^3/h

Units of flow	Cubic meter [m^3]
	Liter [l]
	Gallon (USA) [gal]
	Imperial Gallon (UK) [igl]
	Million USA Gallons [mgl]
	Cubic feet [cf]
	Barrel (USA) [bal]
	Imperial Barrel (UK) [ib]
	Oil Barrel [ob]

Time setting	per day [/d]
	per hour [/h]
	per minute [/m]
	and per second [/s]

Data logger	60,000 measuring points
Interface	USB (for online measurement and readout of the internal memory)
Protection class	IP 52
Power supply	3 x AA NiMH batteries/ 2100 mAh (12 h running time when fully charged)
	100 ... 240 V AC 50/60 Hz
Dimensions	214 x 104 x 40 mm / 8.4 x 4.1 x 1.5"
Weight	450 g / 15.9 oz
Sensor	nominal width DN 20 ... 108, 50 ... 720 mm / 0.8 ... 4.2, 1.9 ... 28.3"
Liquid temperature	-30 ... 160 °C / -22 ... 320 °F
Dimensions	50 x 45 x 45 mm / 1.97 x 1.77 x 1.77"
Weight	260 g / 9.2 oz

More information

Manual

Manual P1

Video Quick Start

Video

More product info

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