

# Ultrasonic Flow Meter Kit PCE-TDS 100HSH



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**Measures liquid flow velocity in pipes and tubes with a diameter of 20 ... 720 mm (approx. 3/4" ... 28")**

PCE-TDS 100HSH is a portable handheld clamp-on ultrasonic flow meter kit used for non-invasive, unobstructed and highly accurate measurements of the flow velocity of liquids in metal, plastic and rubber pipes and tubes with a diameter of 20 ... 720 mm / approx. 3/4" ... 28". Ideal for use in oil and gas, water and wastewater, chemical, food and beverage, pharmaceutical, metals and mining, pulp and paper, power and heating, ventilation, air conditioning and refrigeration (HVACR) industries, this ultrasonic flow meter kit features user-friendly velcro-strap clamps that allow for quick and easy repositioning of the electroacoustic transducers.

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.

**The transit-time principle requires pipes to be full and have no bubbles and no particles.**

Note: To transfer data to a computer, SOFT-PCE-TDS software is required. SOFT-PCE-TDS software sold separately - see accessories for details.

Each PCE-TDS series meter is assembled by PCE Instruments in Germany and is factory-calibrated (without any documentation). The reference display of the in-house test stand used by PCE for calibration has a valid DAkkS calibration certificate. This ensures traceability to the Physikalisch-Technische Bundesanstalt (PTB) German national standard. Please note that the meter's measured values depend on the pipe geometry, material and coating; the medium type, temperature and speed; and the sensor type and measuring method.

- ▶ 0.5% linearity
- ▶ 0.2% repeatability
- ▶ Bi-directional flow measurement
- ▶ Quick and adjustable response time
- ▶ Eliminates interfering frequencies
- ▶ Includes data logger functionality
- ▶ Stores up to 2000 measurement values
- ▶ Auto power-off battery-saving function (can be disabled)
- ▶ Saves time- and date-stamped measurement data to internal memory
- ▶ Rechargeable, battery-operated flow measuring device

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Subject to change

# Specifications

Measuring range	-32 ... 32 m/s, -105 ... 105 ft/s
Resolution	0.0001m/s, 0.00033 ft/s
Accuracy for DN ≥ 50 mm:	± 1.5% of measured value
for DN < 50 mm:	± 3.5% of measured value
Reproducibility	± 1.0% of measured value
Units	Meters, feet, cubic meters, liters, cubic feet, gallon, oil barrel, liquid barrel, million gallon
Response time	0 ... 999 seconds, freely configurable
Pipe diameter	<b>DN 15 ... 700, 20 ... 720 mm / approx. 3/4" ... 28"</b>
Measuring media	All liquids with an impurity <5% and a flow >0.03 m <sup>3</sup> /h
Heads	Type M1 and S1
Cable length	Approx.5 m / 16.4 ft each (x 4)
Display	4 x16 LCD, 7 digits for net flow, positive and negative flow
Power supply	3 x AAA Ni-H rechargeable batteries
Battery life	Approx. 10 hours continuous use at full charge
Battery charger	100.. 240V / AC
Interface	RS-232C
Memory	Stores up to 2,000values
Housingmaterial	ABS plastic
Dimensions	Device: 100x 66 x 20 mm / 3.93 x 2.60 x 0.79 in
	Transducers: 2 x M1 each 60 x 45 x 45 mm / 2.36 x 1.77 x 1.77 in
	2 x S1 each 90 x 85 x 24 mm / 3.54 x 3.35 x 0.95 in
Operating temp.	0... 70°C / 32 ... 158°F
Weight	514g / 1.14 lb (with batteries)

# More information

Manual



Manual P1



Video Quick Start



Video



More product info



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