

UMI 840 Ultrasonic Flowmeter

Ultrasonic handheld instrument for measuring flow and percolation

- Measuring range $-32...+32$ m/s
- Incl. sensor for pipes from \varnothing 20 up to 100 mm
- Optional sensor for pipes from \varnothing 50 up to 700 mm available
- Maintenance free, no movable parts
- Incl. logger-function
- Incl. 5 meter measuring cable
- Easy assembly
- Installation without process interruption
- no pressure loss
- Incl. accessories in a robust carry case

Applications:

- the perfect instrument for investigation of flow speed on all kind of pipe material. (metall, plastic or rubber)



The UMI 840 ultrasonic flow meter is designed to measure the fluid velocity of liquid within a closed pipe. It is a hand-held measurement system which is both easy to use and to install. The ultrasonic flow meter operates according to the difference in the transit time measured. The measuring principle of the ultrasonic flow meter is very easy.

In a diagonal measurement the tube will need less time in the same flow direction than against the flow direction. When the flow increases, it will need more time to measure flow if the measurement is against the flow direction and less time if the measurement is in the same flow direction. The difference between the flow direction therefore directly depends on the flow velocity. The UMI 840 ultrasonic flow meter determines the flow velocity. Electro acoustic transducers receive and emit brief ultrasonic pulses through the liquid of the pipe. Transducers are vertically placed on both sides of the measured pipe. Sensors are placed on the pipe and fastened by means of a flange. The display will quickly show the flow velocity. The instrument can be used for metallic, plastic and rubber tubes.



	UMI 840
Measuring range	-32...+32 m/s for DN > 50mm: +-1,5% from value for DN < 50mm: +-3,5% from value
Accuracy	0,0001 m/s
Resolution	+-1% from value
Reproducibility	0...999 Seconds, free configurable
Response time	-30...+160°C
Working temperature	Sensor 1: 20...108 mm (included) Sensor 2: 57...720 mm (optional)
Pipe dimensions	Sensor 1: 45x30x30 mm (included) Sensor 2: 60x45x45 mm (optional)
Sensor dimensions	Sensor 1: 75 g (included) Sensor 2: 260 g (optional)
Sensor weight	All liquids with impurity smaller 5% and a percolation or more than 0,03m ³ /h
Medium	Display LCD
Display	Data connection USB
Data connection	Power supply 3 x AA Ni MH Akku / 2100mAh
Power supply	Accu duration 12 hours (at full capacity)
Accu duration	Power supply 100...240 V / AC
Power supply	Data logger 1800 points
Data logger	Dimensions 214 x 104 x 40 mm
Dimensions	Weight 450 g
Weight	Order Number 5020-0840 UMI 840 Ultrasonic Flow meter incl. accessories
Order Number 5020-0840	Order Number 6050-0841 Sensor M1 for pipes from 50...700mm
Order Number 6050-0841	

