



## APPLICATIONS

- Pipelines.
- Open channels.
- Wastewater.
- Sea water.
- Others.

## KEY FEATURES

- Ideal for retrofitting.
- Installation without interruption of the process.
- Simple assembly.
- Accurate and reliable.
- No pressure loss.
- No inspections required.
- No moving parts.
- No wear.
- Portable meter for control measurements.

## CONTENT

- 1 x ultrasonic flowmeter.
- 2 x transducers.
- 2 x 5m connection wire.
- 2 x clamping chains.
- 3 x AAA Ni-H.
- 1 x RS232 interface.
- 1 x chargeable wire.
- 1 x coupling.
- 1 x flexometer.
- 1 x aluminum case.
- 1 x instructions.

## Series 100H/HS Ultrasonic Flowmeter



The ultrasonic flowmeter is used for control measurements or to quickly detect the flow rate in a pipe, so it is a transportable and easy to install measuring system.

The ultrasonic flowmeter works according to the method of difference in transit time. The principle of measuring the flowmeter is very simple. In a diagonal measurement on a tube less time is required for a measurement in the direction of the current than against. The more the flow increases, the longer it takes to measure if the measurement is against the current, and the less time if the measurement is in the direction of the current. The difference between the flow times in the direction of the current, or against it, depends directly on the velocity of the flow. The flowmeter uses this effect to determine flow rate and flow rate. The electro-acoustic transducers receive and emit brief ultrasonic pulses through the medium flowing in the pipeline.

The transducers are displaced vertically on both sides of the tube to be measured. The non-invasive sensors are placed on the tube and are fixed for example with a flange. In a short time, the screen tells you the speed of the flow. The ultrasonic flowmeter can be used in metal tubes, plastic tubes and rubber pipes.

## Specifications

Models	SP-TDS 100HS	SP-TDS 100H
Pipeline's dimensions	20 ... 100 mm	50 ... 700 mm
Sensor type	TDS-S1	TDS-M1
Sensor size	45 x 30 x 30 mm	60 x 45 x 45 mm
Sensor weight	75 g	250 g
Sensor installation method	V, N, W	V, Z
Measurement range	0,01 ... 30 m/s	
Resolution	0,0001 m/s	
Accuracy	±1 % reading	
Linearity	0,5 %	
Reproducibility	0,2 %	
Response time	0 ... 999 seconds	
Fluids	Every liquid type	
Wire	aprox. 5 m	
Screen	4 x 16 LCD	
Supply	3 x AAA Ni-H	
Charger	100 .. 240 V/AC	
Interface	RS-232C	
Data logger	2000 values	
Housing material	ABS	
Temperature	0 ... 70 °C / consult for other temperaturas	
Weight	514 g batteries included	

## Accessories

### Sensor standard TDS-M1

For pipelines from 50 to 700 mm / 0 to +70 °C  
Dimensions: 60 x 45 x 45 mm



### Sensor mini TDS-S1

For pipelines from 20 to 100 mm / 0 to +70 °C  
Dimensions: 45 x 30 x 30 mm



### High temperature sensor TDS-M1H

For pipelines from 50 to 700 mm / 0 to +160 °C  
Dimensions: 90 x 82 x 29 mm



### High temperature sensor TDS-S1H

For pipelines from 20 to 100 mm / 0 to +160 °C  
Dimensions: 90 x 85 x 24 mm

