

# HM 500.05

## Ultrasonic flow meter



The illustration shows a similar unit

### Description

#### ■ ultrasonic flow meter as accessory for HM 500

The ultrasonic flow meter is installed in the water circuit of the HM 500 trainer. It operates according to the principle of transit-time measurement.

Sensors are located at the start and end of a measuring section. An ultrasonic signal is reciprocally transmitted and received between the two sensors. The ultrasonic signal traveling in the direction opposing the flow takes more time than the signal traveling in the direction of the flow. The flow velocity and flow rate are calculated from this difference in transit times.

A display indicates the flow rate. The necessary connections are provided so that the pressure loss can be determined with the HM 500.

### Learning objectives/experiments

- familiarisation with the principle of operation
- flow measurement
- plotting a pressure loss curve
- comparison with other flow meters

### Specification

- [1] ultrasonic flow meter as accessory for HM 500 trainer
- [2] operates according to principle of transit-time measurement
- [3] display indicating flow rate
- [4] connections to facilitate pressure loss measurement with the HM 500
- [5] battery to supply auxiliary power
- [6] vertical and horizontal installation possible

### Technical data

Measuring range: 35...7000L/h  
Pipe connections: DN 32

LxWxH: 820x200x160mm  
Weight: approx. 5kg

### Scope of delivery

- 1 ultrasonic flow meter
- 1 set of instructional material

# HM 500.05

## Ultrasonic flow meter

Required accessories

HM 500                      Flow meter trainer