

# **HM 500.14**

## Turbine wheel flow meter



The illustration shows a similar unit

#### Description

- turbine wheel flow meter as accessory for HM 500
- quantity measurement via the speed of a turbine wheel

The turbine wheel flow meter is installed in the water circuit of the HM 500 trainer. The flow rate is measured according to the principle of quantity measurement. The measuring element in this process is a rotating mounted turbine wheel, which is caused to rotate by the flow. There is a linear relationship between the speed of the turbine wheel and the flow velocity, so that speed and flow rate are proportional within a limited measuring range.

The speed of the turbine wheel is recorded inductively. The speed is used to calculate flow velocity and flow rate. A display shows the flow rare.

The necessary connections are available for determining the pressure loss with HM 500.

#### Learning objectives/experiments

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

#### Specification

- turbine wheel flow meter with transducer as accessory for HM 500 trainer
- [2] function according to the principle of quantity measurement via the speed of a turbine wheel
- [3] connections for measuring the pressure loss
- [4] operation with water
- [5] vertical and horizontal installation
- [6] all connections designed for HM 500 trainer

### Technical data

DN 32 pipe connections

Measuring ranges

■ flow rate: 300...3900L/h

2 lithium batteries LxWxH: 820x200x150mm Weight: approx. 4kg

### Scope of delivery

- turbine wheel flow meter
- set of instructional material



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Required accessories

HM 500 Flow meter trainer