

HM 500.11

Vortex flow meter



The illustration shows a similar unit

Description

■ vortex flow meter as accessory for HM 500

The vortex flow meter is installed in the water circuit of the HM 500 trainer. It operates according to the principle of Von Karman vortex shedding. Downstream of a dam body in a flow, vortices alternately form which are separated off by the flow. The frequency of the vortex

separation to both sides of the dam body is proportional to the flow rate. The separated vortices alternately generate local vacuum which is measured using capacitive pressure sensors. The pressure signals are converted and indicated as the flow rate on a display. 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] vortex flow meter as accessory for HM 500 trainer
- [2] operation according to Von Karman vortex shedding
- [3] display indicating flow rate
- [4] connections to facilitate pressure loss measurement with the HM 500
- [5] connections to supply auxiliary power via the HM 500
- [6] vertical and horizontal installation possible

Technical data

Max. flow rate: 4600L/h Auxiliary power: 24VDC Pipe connections: DN 32

LxWxH: 800x160x360mm Weight: approx. 8kg

Scope of delivery

- 1 vortex flow meter
- 1 set of instructional material



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Required accessories

HM 500 Flow meter trainer