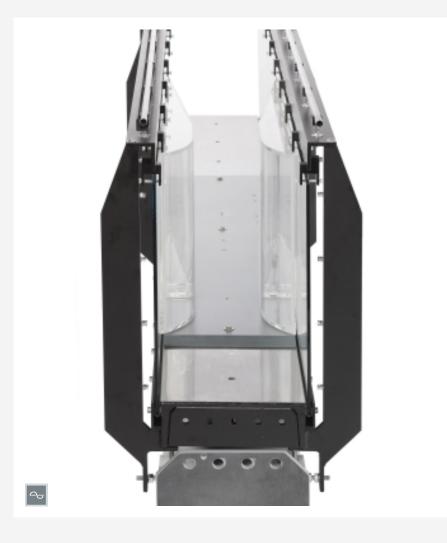


# HM 163.51

### Venturi flume



#### Description

#### ■ typical flow-measuring flume

Flow-measuring flumes are used to determine the discharge of a flume. Venturi flumes are specially shaped flumes with defined lateral contraction, sometimes also with a shaped bottom.

The constriction dams up the discharge. The backed-up water ensures that subcritical discharge occurs in the flume. The constriction is where acceleration from subcritical to supercritical discharge (including flow transition) takes place. Critical discharge is present at the narrowest cross-section. This results in a hydraulic jump in the expansion section of the venturi flume.

The venturi flume HM 163.51 consists mainly of two transparent side elements and a flat base plate. The transparent side elements allow to clearly observe the processes in the flume.

#### Learning objectives/experiments

- together with a level gauge:
  - ► discharge measurement in open channels

#### Specification

- [1] venturi flume for the experimental flume HM 163
- [2] venturi flume consisting of 1 base plate, 2 side elements, 1 clamping device
- [3] side elements with sealing lips

#### Technical data

Venturi flume

- LxWxH: 1200x404x500mm
- narrowest cross-section, WxH: 202x480mm

#### Side element

- LxWxH: 1006x101x480mm
- material: PMMA

LxWxH: 1200x404x500mm Weight: approx. 40kg

#### Scope of delivery

- 2 side elements
  - l base plate
- 1 clamping device
- 1 set of accessories
- 1 manual



# **HM 163.51**

## Venturi flume

Required accessories

HM 163 Experimental flume 409x500mm