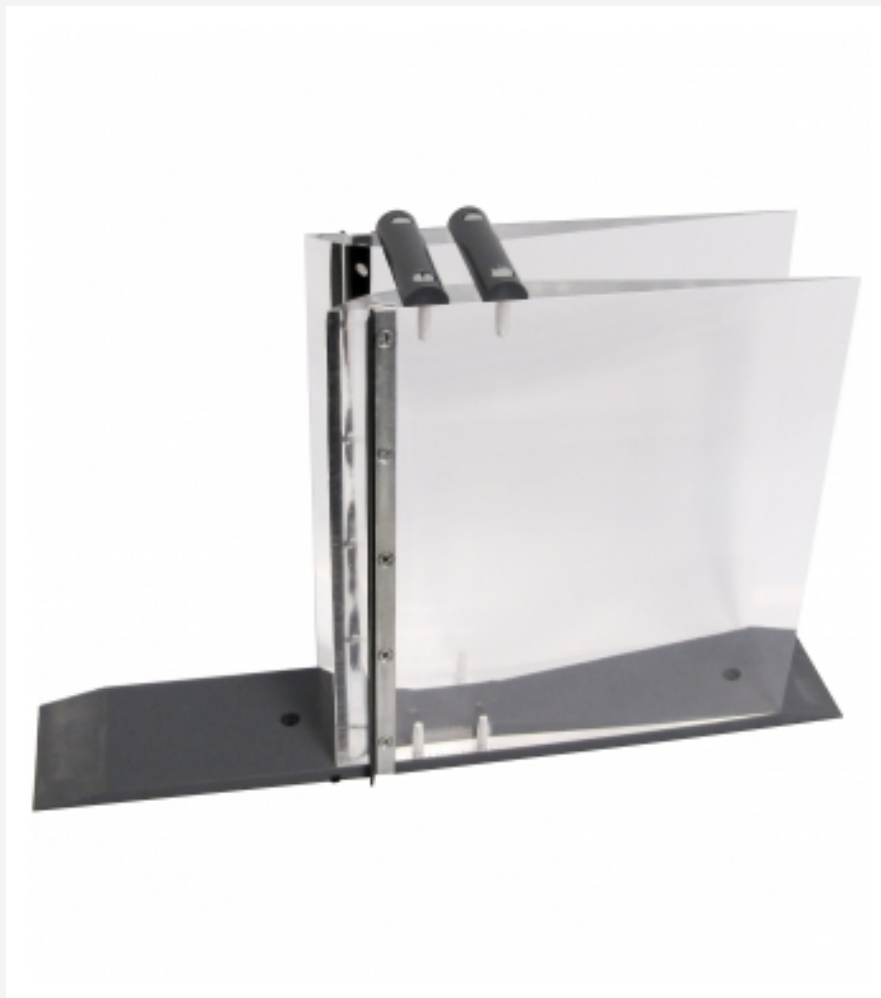


HM 160.51

Venturi flume



Learning objectives/experiments

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

Specification

- [1] venturi flume for the experimental flume HM 160
- [2] venturi flume consisting of a base plate and 2 side elements
- [3] side elements with sealing lips

Technical data

Venturi flume

- narrowest cross-section,
WxH: 42x240mm

Side element

- material: PMMA

LxWxH: 450x84x260mm

Weight: approx. 2kg

Scope of delivery

- 1 venturi flume
- 1 set of accessories
- 1 manual

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 160.51 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.