

HM 163.29

Sluice gate



Learning objectives/experiments

- free discharge under a sluice gate
- submerged discharge under a sluice gate
- observation of jet contraction (vena contracta)
- observation of downstream hydraulic jumps

Specification

- [1] sluice gate for the experimental flume HM 163
- [2] sluice gate with lateral sealing lips
- [3] height adjustment using handwheel
- [4] scale to read the height of the gate opening

Technical data

Gate

- weir plate made of PVC
- head adjustment: 0...150mm

LxWxH: 470x263x760mm Weight: approx. 6kg

Scope of delivery

- 1 sluice gate
- 1 set of accessories
- 1 manual

Description

■ Flow under a sluice gate

Sluice gates are movable control structures. The water flows under the gate. A sluice gate is a vertical wall causing backwater in the flume. Sluice gates are often used to ensure a minimum upstream discharge depth at varying discharge, e.g. for shipping.

The gate opening of the sluice gate HM 163.29 and therefore the discharge under the gate can be manually adjusted with a handwheel.



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Required accessories

HM 162 Experimental flume 309x450mm