

HM 163.40

Radial gate



Learning objectives/experiments

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

Specification

- [1] radial gate for the experimental flume HM 163
- [2] radial gate with lateral sealing lips
- [3] height adjustment using lever

Technical data

Gate

- weir plate made of stainless steel, width: 404mm
- radius of the segment: 450mm

LxWxH: 600x404x900mm
Weight: approx. 17kg

Scope of delivery

- 1 weir body
- 1 set of accessories
- 1 manual

Description

■ flow under a radial gate

Radial gates are movable control structures. The water flows under the gate. The core element of a radial gate is a wall with the shape of a segment of a circle. The gate causes backwater in the flume.

Radial gates are often used in combination with a fixed control structure, e.g. a broad-crested weir. These combinations are typical for barrages. With them the discharge in the open channel can be adjusted and controlled according to the needs.

The gate opening of the radial gate HM 163.40 and therefore the discharge under the gate can be manually adjusted.

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Required accessories

HM 163 Experimental flume 409x500mm