

# HM 160.33

## Crump weir



### Learning objectives/experiments

- free and submerged overfall at the Crump weir
- observation of downstream hydraulics jumps
- discharge at a sill
- together with a level gauge:
  - ▶ determination of the discharge
  - ▶ comparison of the theoretical and the measured discharge

### Specification

- [1] Crump weir for the experimental flume HM 160
- [2] weir body contour according to E. S. Crump
- [3] weir body with sealing lips

### Technical data

#### Weir body

- made of PVC
- inclination (upstream): 1:2
- inclination (downstream): 1:5

LxWxH: 420x84x60mm

Weight: approx. 2kg

### Scope of delivery

- 1 Crump weir
- 1 set of accessories
- 1 manual

### Description

#### ■ weir according to E. S. Crump

Crump weirs are control structures. They are broad-crested weirs. The triangular shape of the weir has several advantages, e.g. only minor siltation occurs upstream of the weir. a part of sediment transport can flow over the weir. In addition, aquatic creatures can often pass this weir upstream.

HM 160.33 is a weir according to E. S. Crump with defined inclinations both upstream and downstream. The Crump weir is preferably used as a sill. Sills are used to decrease the flow velocity to avoid erosion. A sill is well dimensioned for the prevailing discharge when there is no hydraulic jump.