

## Flow rate and water level indicators



Tipping counters with adequate sampling

191100 Tipping counter 0,1 l made of PC  
191200 Tipping counter 0,1 l made of V2A



Polycarbonat tipping counter



V2A tipping counter

Tipping counter with adequate sampling, 100ml tipping tray in polycarbonate casing (macrolon) or a high graded steel casing, V2A tightener, sampler (1% per tipping), PE collector flask (100 ml) or Duran glass bottle (100, 250 or 500 ml), REED sensor, Flow quantity max. 5 l/min

### **Accessories:**

1-channel data logger

## V2A-tipping counter

- 192000 Tipping tray 0,1 l
- 192100 Tipping tray 0,5 l
- 192200 Tipping tray 1,0 l
- 192300 Tipping tray 2,0 l
- 192400 Tipping tray 3,0 l



Tipping counter 1l



Tipping counter 2l

V2A tipping counter with 0,1 l; 0,5 l; 1,0 l; 2,0 l and 3,0 l counting quantities, Flow quantity up to 60 l/min, V2A tipping tray and V2A casing with detachable lid and point support on either side for tipping tray, Inlet and outlet sockets for pipe or hose connection ( $\varnothing$  35 mm /  $\varnothing$  50 mm), Base holder, pulser with REED contact and permanent magnet incl. 5 m connecting cord.

## Water level indicators

194100 with ultrasonic sensing

195100 with pressure sensing

196100 with capacitive sensor



### Ultrasonic distance measuring device:

for recording distances and water levels in the range of 100 ... 600mm, complete with sound insulation and smoothing tube, microcomputer with power management and RS 232 interface, casing IP65.

### Accessories:

Data memory 128 Kbytes .

Operating voltage:	12 V
Linearity error:	< 0.2%
Accuracy of repetition:	< 0.3%
Temperature error (0... 50°C):	< 0.5%

## Water level indicator with capacitive level transmitter

High-grade steel casing, 5m connecting cord with integrated pressure balance, microcomputer with power management and RS 232 interface, casing IP65.

Operating voltage:	12 V
Measuring ranges:	0 to 1 m ... 0 to 10 m selectable
Complex error:	< 0.3%
Temperature drift:	< 0.02%/K

## Flow rate indicators (Flume)

196000	1Ft-H-Flume
196010	2Ft-H-Flume
196020	3Ft-H-Flume



High-grade steel (V2A) H-flume for recording flow rates in open channels.

The water table is scanned (e.g., no-contact scanning by ultrasonic sensor) and the level signal is then transformed into a flow-proportional measuring signal.

V2A protective casing and device for arresting the ultrasonic sensor below water surface.

5 m sensor connecting flex.

### Technical parameters:

Type	Height	Flow rate
1Ft-H-Flume	30,5 cm	0,02 ... 55 l/s
2Ft-H-Flume	61 cm	0,04 ... 315 l/s
3Ft-H-Flume	91,5 cm	0,06 ... 870 l/s

## Venturi – Messwehr

197000 VM1

197010 VM2

197020 VM3



Durchflussmessgerät aus Edelstahl (V2A) Erfassung der Referenz-Wasserspiegelhöhe mittels elektronischem Druckwandler mit 0..1VA Ausgangssignal.

### Technische Daten:

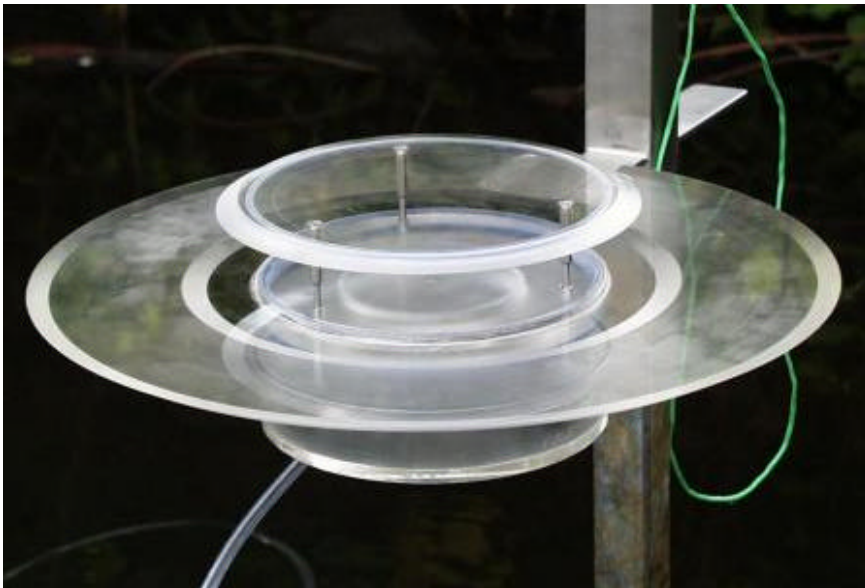
Typ	Höhe	Breite	Länge	Durchflussmenge
VG 1	240 mm	500 mm	695 mm	0,2 ... 9 l/s
VG 2	480 mm	1385 mm	1000 mm	1,0 ... 50 l/s
VG 3	590 mm	1250 mm	1735 mm	1,6 ... 86 l/s

## Plate sediment trap

198000 Plate sediment trap developed by I.G.B. Berlin, Pat.-Nr. 19737448.4

Plate sediment trap to measure the sedimentation of fine organic and inorganic particles in waters.

The arrangement and the design of the plate trap make it possible to simulate the hydrodynamic properties at the bottom. The sedimentation rate in moving waters (rivers, shallow lakes, canals, etc.) can be measured in consideration of gravity and bottom shear.



### Function principle:

The plate sediment trap is designed as a vertical moving piston which presents the collection area. The outer ring segment serves to establish boundary layer and shear stress conditions so that the suspended particles settle down to the piston in dependence on their intrinsic sinking velocity and on the actual bottom shear stress. In the lowered position, the piston and the cylinder walls form a vessel which confines the collected material.