

TIPPING COUNTER V2A

Tipping counters are volumetric flow measurement devices used for the continuous monitoring of small, time-varying seepage flows and event-driven surface water runoff. The volume of water flowing out is quantitatively measured as a flow rate (volume flow). The flow rate describes the volume of a fluid flowing through a cross-section per unit of time. Tipping counter thus offer a high-resolution, automated alternative to volumetric measurement tests.

ADVANTAGES

- Cost-effective flow measurement
- Alternative to manual volumetric flow measurements
- Sturdy and corrosion-resistant, made of V2A steel
- Inert to water of various sources and compositions; suitable for use with slightly contaminated water containing high level of suspended solids
- Larger designs are possible than with plastic tipping counters
- Tilting tray sizes ranging from 0.1 to 20 liters
- Includes data logger & software

APPLICATIONS

- Measurement of leachate flow rates in lysimeters, landfills, or mine spoil heaps
- Detection of leaks from reservoirs, dams, and similar structures
- When used in combination with the UGT Run-off System, tipping counters can be used to measure surface runoff on slopes.
- When used in combination with the UGT H-Flume, tipping counters provide high measurement accuracy during low-flow conditions, while the H-Flume accurately measures higher flows in open channels.



TECHNICAL DATA

L	0,1 L	0,25	0,5	1	2	3	5	10	20
Max. flow rate in l/min	2	4	7	12	24	36	60	120	240
Dimensions W x D x H in cm	33 x 19 x 21.5	29 x 23 x 34	29 x 23 x 34	28 x 42 x 35	37 x 41 x 37	44 x 46 x 43	61 x 29 x 37	70 x 36 x 43	88 x 45 x 55
Weight in kg	3.2	5.7	6.6	9.4	13.2	17	11	18	32
Design	closed						open		
Material	stainless V2A steel								
Features	Robust and chemically inert toward water of various sources and compositions, Operating temperature down to 0 °C; insulation and/or pipe tracing available								
TIPPING BUCKET									
Vol. per tray in ml	100	250	500	1.000	2.000	3.000	5,000	10,000	20,000
Bearing	adjustable double-sided knife-edge bearing					Flange bearing	adjustable double-point bearing		
HOSE CONNECTION									
Inlet/outlet connections in mm	Ø 20	Ø 34	Ø 34	Ø 34	Ø 34 / 50	Ø 50	free outlet for installation in a manhole		
Inlet height in mm	197	315	315	320	340	390			
Drain height in mm	42	65	65	70	70	50			
BASE									
Features	Holes for horizontal mounting; wall mounting available upon request					Holes for horizontal mounting			
PULSE TRANSMITTER									
Features	Reed switch with permanent magnet on the tipping bucket, including terminal block for connection cables								
Max. switching current	0.5 A								
Max. switching voltage	200 V								
Clamping range	up to 1.5 mm²								
ALIQOT SAMPLING									
Flow rate	0.1 ... 3 % of the total flowed through / tipped water volume						Aliquot sampling not possible		

A cost-effective alternative to V2A tipping counters is the food-grade polycarbonate tipping counter with a bowl volume of 0.1 L, designed for low flow rates of up to 5 L/min.

