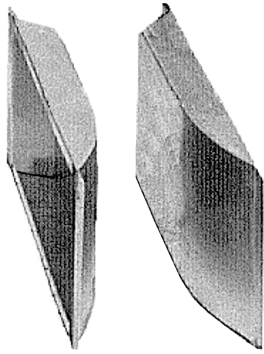
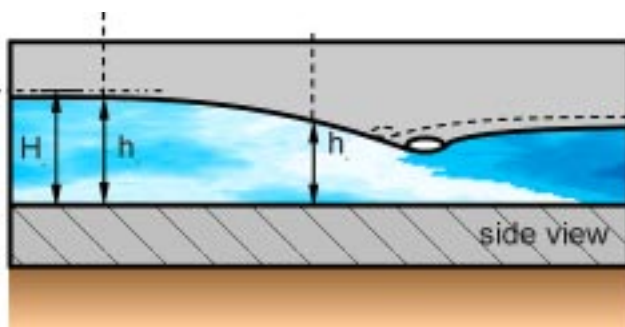
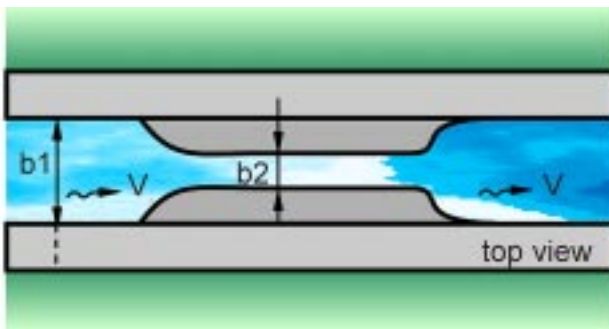


Venturi flumes



stainless steel version



To reach an accurate measurement result take care on the following points:

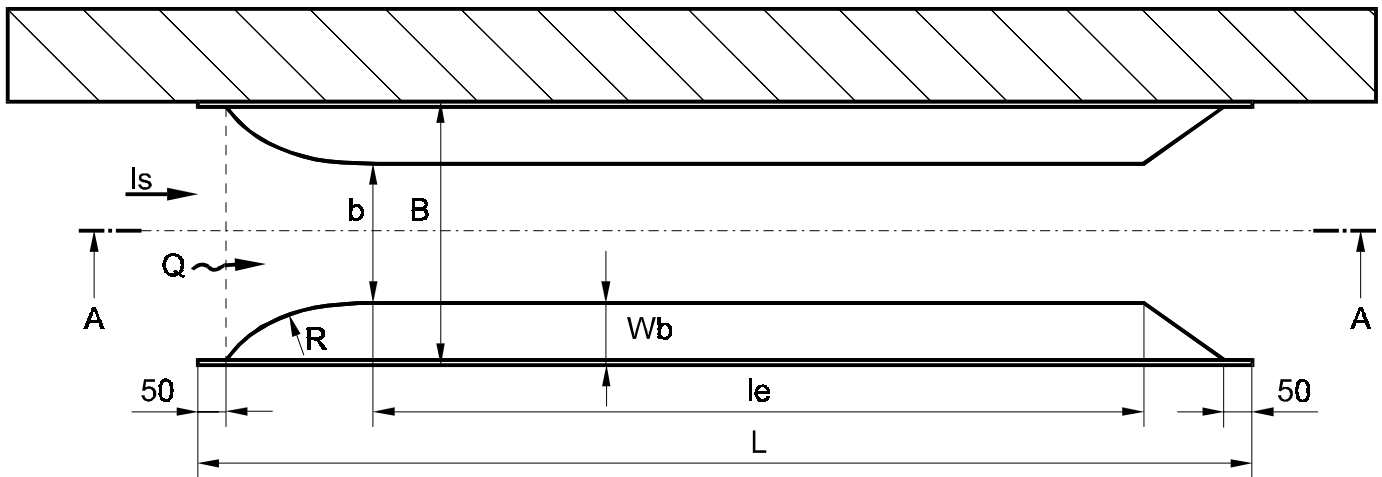
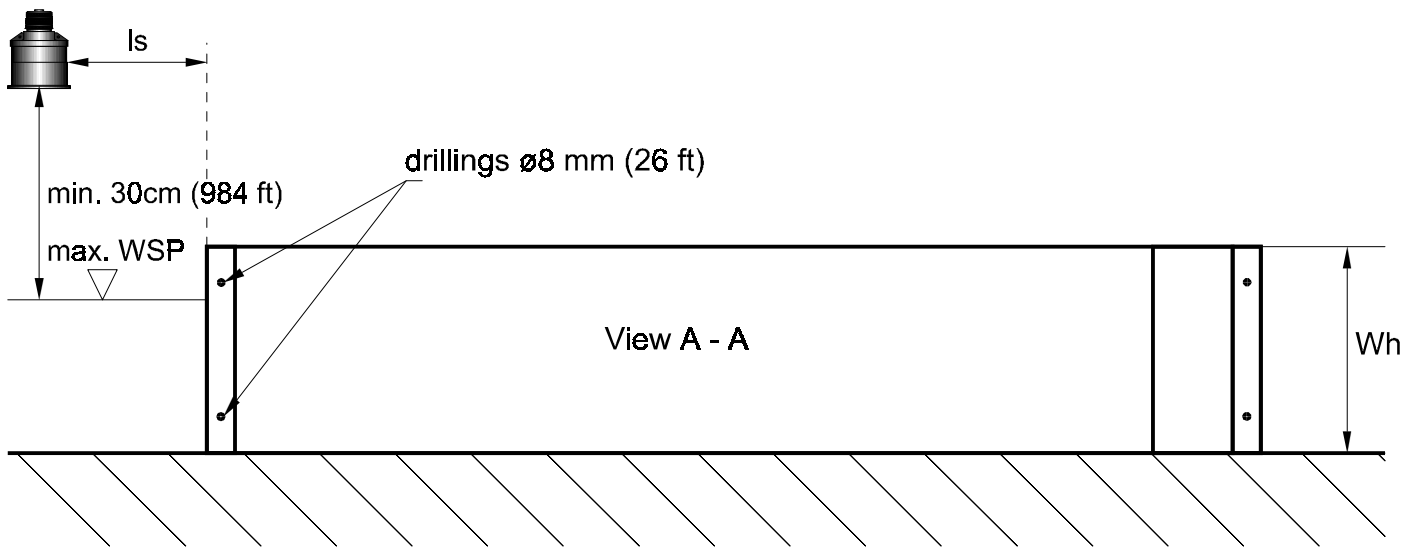
- The Venturi can not be used in channels where a flow stop or back flow is expected.
- The flume have to be installed horizontal. (maximum allowed difference is 1,5 o/oo)
- The venturi must be installed exactly in line to channel.
- On no flow condition, there should be no water staying on the Venturi floor.
- Downstream the flume there shall be nothing installed that obstruct the flow.
- The side walls of the channel, where the two flume parts are installed, have to be vertical
- Upstream the flume (15 up to 20 x the channel width) the flow of the water has not to be obstructed. There shall be no hydraulic disturbance e.g. curves, installations, jumps, changes in the channel width etc.

When measuring flow by using a Venturi flume and an ultrasonic measurement device, please note:

- * The best position of the ultrasonic transducer is approx. 2 x the height of the flume side parts upstream the flume.
- * The transducer has to be installed 90° through the survice of the water.
- * Use ultrasonic units with temperature compensation. Avoid direct sun light on the t-comp of the transducer, or use separate t-comp. It can be installed under a shadow roof.
- * For accuracy reasons, the distance between maximum level and transducer should be as small as possible. The minimum distance between transducer face and maximum level must be 30cm.

Specifications

The different dimensions are based on the channel width and the flow that is expected.
The calculation of the Venturi flume is based on DIN 19559 standard part 2.



- | | | | | | |
|-------|---|--------------------------------------|-------|---|---|
| B | = | width of the inlet | W_b | = | width of one SS Venturi part |
| b | = | throat width of the Venturi flume | W_h | = | height of one SS Venturi part |
| l_e | = | throat length | l_s | = | upstream distance between sensor and Venturi flume = $2 \times W_h$ |
| R | = | radius | | | |
| L | = | over all length of the Venturi flume | | | |

Shipping accessories:

V4A-bolts FB 6/10.

On Venturi-type 150/... -250/... V4A DIN 96-screws and dowels are provided.

After the installation the appearing joints between

two Venturi parts, the channel wall and ground have to be sealed by using silicon.

Venturi flumes

Type overview for stainless steel Venturi flumes

type	Q/max l/s	B mm	Wh mm	b mm	L mm	Le mm	ls mm	r mm	V4A Ø mm
150/15	7	150	150	57	600	300	300	450	1,5
200/20	15	200	200	100	790	400	400	600	1,5
200/30	25	200	300	100	1046	600	600	900	1,5
250/20	17	250	200	125	829	400	400	600	1,5
250/30	30	250	300	125	1092	600	600	900	1,5
Because of the small channel width, Venturi flumes type 150/.. up to 250/.. are shipped in one part. They can be screwed directly on the channel ground.									
300/20	20	300	200	150	865	400	400	600	1,5
300/30	40	300	300	150	1135	600	600	900	1,5
300/40	60	300	400	150	1400	800	800	1200	1,5
400/30	50	400	300	200	1212	600	600	900	1,5
400/40	85	400	400	200	1480	800	800	1200	1,5
400/50	110	400	500	200	1740	1000	1000	1500	2,0
400/60	150	400	600	200	1990	1200	1200	1800	2,0
500/30	60	500	300	250	1280	600	600	900	2,0
500/40	95	500	400	250	1560	800	800	1200	2,0
500/50	150	500	500	250	1825	1000	1000	1500	2,0
500/60	190	500	600	250	2085	1200	1200	1800	2,0
500/70	250	500	700	250	2340	1400	1400	2100	2,0
600/40	115	600	400	300	1630	800	800	1200	2,0
600/50	170	600	500	300	1950	1000	1000	1500	2,0
600/60	240	600	600	300	2170	1200	1200	1800	2,0
600/70	300	600	700	300	2430	1400	1400	2100	2,0
600/80	360	600	800	300	2685	1600	1600	2400	2,0
700/40	135	700	400	350	1700	800	800	1200	2,0
700/50	195	700	500	350	1980	1000	1000	1500	2,0
700/60	260	700	600	350	2250	1200	1200	1800	2,0
700/70	350	700	700	350	2515	1400	1400	2100	2,0
700/80	420	700	800	350	2775	1600	1600	2400	2,0
800/40	145	800	400	400	1765	800	800	1200	2,0
800/50	210	800	500	400	2050	1000	1000	1500	2,0
800/60	300	800	600	400	2325	1200	1200	1800	2,0
800/70	400	800	700	400	2595	1400	1400	2100	2,0
800/80	480	800	800	400	2860	1600	1600	2400	2,0
900/50	260	900	500	450	2115	1000	1000	1500	2,5
900/70	450	900	700	450	2670	1400	1400	2100	2,5
1000/50	280	1000	500	500	2180	1000	1000	1500	2,5
1000/70	500	1000	700	500	2745	1400	1400	2100	2,5
1100/70	550	1100	700	550	2815	1400	1400	2100	2,5
1200/70	600	1200	700	600	2885	1400	1400	2100	2,5
1300/70	650	1300	700	650	2950	1400	1400	2100	2,5
1400/70	700	1400	700	700	3010	1400	1400	2100	2,5
1500/70	750	1500	700	750	3150	1400	1400	2100	2,5
<p><i>Bold printed types are standard flumes! Other dimensions are available on request!</i> <i>If the value of the throat dimension b is different to value in this table, a special Q/h breakpoint curve can be calculated.</i></p>									