



AQUA-UV, 316L stainless steel measuring channel for circular pipe laying

The Venturi that slides into the tightest spots.

Fully 316L stainless steel, Aqua-UV® Aqualyse U-shaped is actually a measurer Canal «U» easily fitting into pipes in all diameters for a very economical and quick installation.

The Aqua-UV has been specially designed to answer to the problematic installation in small dimensions and insertion in cylindrical pipe layings. A simple existing room or the end of a pipe is sufficient for the installation.

Upstream slope up to 1% is acceptable. Stainless steel improves the fluidity and reduces the deposits on walls. The transport of sediment is optimum and the development of minimum algae. The rigidity of this material makes it easier to install than a polyester channel by reducing the installation costs.

The Aqua-UV is ideally suited for installation in standard vents.

Applications

- Sanitation systems
- Stormwater systems
- Industrial or collective discharges

ADVANTAGES



- Reduced of Civil Engineering
- Excellent accuracy
- Very Reduced size

	Ø 200	Ø 250	Ø 300	Ø 400	Ø 500	Ø 600
Recommended minimum flow (m³/h)	3	3	4	4	5	6
Recommended maximum flow (m³/h)	67	119	180	383	649	1185
Overall length (excluding bracket)	300	300	360	480	600	720
Overall height (excluding bracket)	240	300	360	480	600	720
Minimum approach length REQUIRED	2000	2500	3000	4000	5000	6000

Material: stainless steel 316L. Other models : contact us. All dimensions in mm.



References

U Threshold triangular section AQUA UV 67 m³/h	UV0200
U Threshold triangular section AQUA UV 119 m³/h	UV0250
U Threshold triangular section AQUA UV 180 m³/h	UV0300
U Threshold triangular section AQUA UV 383 m³/h	UV0400
U Threshold triangular section AQUA UV 649 m³/h	UV0500
U Threshold triangular section AQUA UV 1185 m³/h	UV0600



AQUAFLOW, Venturis flumes

Venturi flumes are intended to measure flowrate in open channels with a free surface.

Made from reinforced polyester, they offer excellent dimensional stability, ensuring highly accurate measurement. Combined with a level sensor, they become a continuous flowrate measurement solution that is reliable and accurate. Suitable for liquids loaded with solid or corrosive particles, they can be used in industry, water treatment and WWTP.



Principle

The Venturi principle is a lateral-contraction system, moving liquids from a sub-critical to a super-critical flow at the throat cross-section. Adding a threshold to the bottom of the channel enables low flow rates to be measured.

To obtain the flowrate of this discharge, simply measure the level upstream of the contraction and convert it to a flowrate using a formula specific to the size of each Venturi.

The Q(h) curve is provided for each channel.

ADVANTAGES



- Open channel flowrate
- Level conversion to flowrate
- Clear or loaded liquids
- Made of polyester resin
- Compliant with ISO 4359
- Ranges from 5 to 2,200 m³/h

Installation

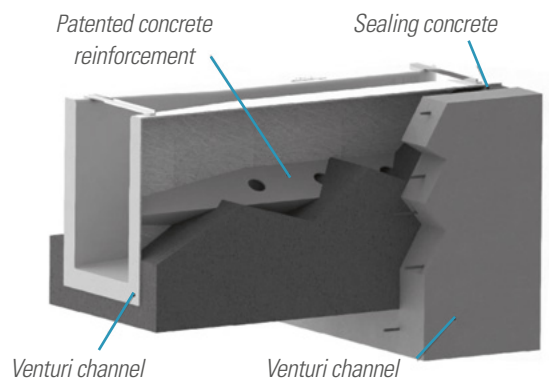
The complete channel must have a straight length before the venturi of 10 x B. This approach length must be masonry or made from the optional measurement and approach channels.

The measuring channel consists of a measuring well with a level scale.

The approach channel uses the dimensions of the measuring channel.

Reinforced structure

As the main cause of measurement inaccuracy is channel installation conditions, and in particular the risk of deformation associated with pouring concrete, the Venturi channel includes an omega-type patented horizontal side reinforcement that provides its rigidity and better grip for the concrete.





Templates	MINIMUM FLOWRATE			NOMINAL FLOWRATE			MAXIMUM FLOWRATE		b mm	B mm	Lc mm	P mm	C mm
	h (mm)	Q (l/s)	Q (m ³ /h)	h (mm)	Q (l/s)	Q (m ³ /h)	Q (l/s)	Q (m ³ /h)					
AQF6 ⁽¹⁾	5	0,02	0,08	81	1,37	4,95	1,89	6,79	35	50	165	15	140
AQF15 ⁽¹⁾	16	0,20	0,73	122	4,3	15,4	5,84	21	59	100	245	30	200
AQF40	50	1,94	7,00	178	13	47	18	65	102	156	360	30	270
AQF100	50	2,10	7,55	259	25	89	34	123	110	220	520	30	370
AQF200	50	3,24	11,67	330	55	200	76	273	170	340	660	30	460
AQF300	50	4,00	14,41	370	80	290	112	402	210	420	740	30	510
AQF600	51,5	5,38	19,37	506	167	600	230	829	270	450	1012	30	680
AQF1000	61	8,73	31,44	605	273	982	376	1355	340	540	1210	30	800
AQF3000	Maximum Flowrate : 3860 m ³ /h - Please contact us for more informations												

(1) Standard ISO 4359 requires width b to be > 100 mm

Venturi Channel

Templates	OVERALL DIMENSIONS		
	IT (mm)	LT (mm)	HT (mm)
AQF6 ⁽²⁾	140	733	170
AQFMV15 ⁽³⁾	200	995	230
AQFV40	244	607	314
AQFV100	308	930	414
AQFV200	456	1395	518
AQFV300	540	1636	570
AQFV600	590	1830	750
AQFV1000	700	2126	880

(2) A single element with approach, measurement and integrated well (3) Supplied with measurement channel and integrated well (4) Provided in the form of two panels

Measurement channels

Templates	OVERALL DIMENSIONS		
	IT (mm)	LT (mm)	HT (mm)
AQFM40	244	780	314
AQFM100	308	1100	414
AQFM200	456	1700	518
AQFM300	540	2100	570

Canaux de mesure pour versions 600 et 1000 non disponibles

Approach channels

Templates	OVERALL DIMENSIONS		
	IT (mm)	LT (mm)	HT (mm)
AQFA15	200	450	230
AQFA40	244	780	314
AQFA100	308	1100	414
AQFA200	456	1700	518
AQFA300	540	2100	570

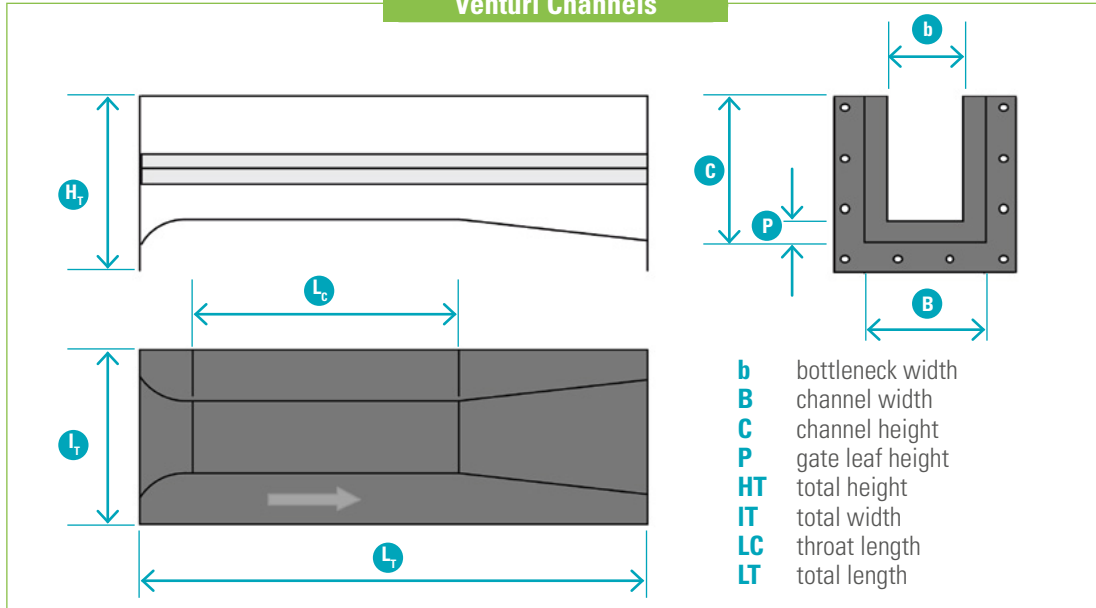
600 and 1000 measuring channels not available

References

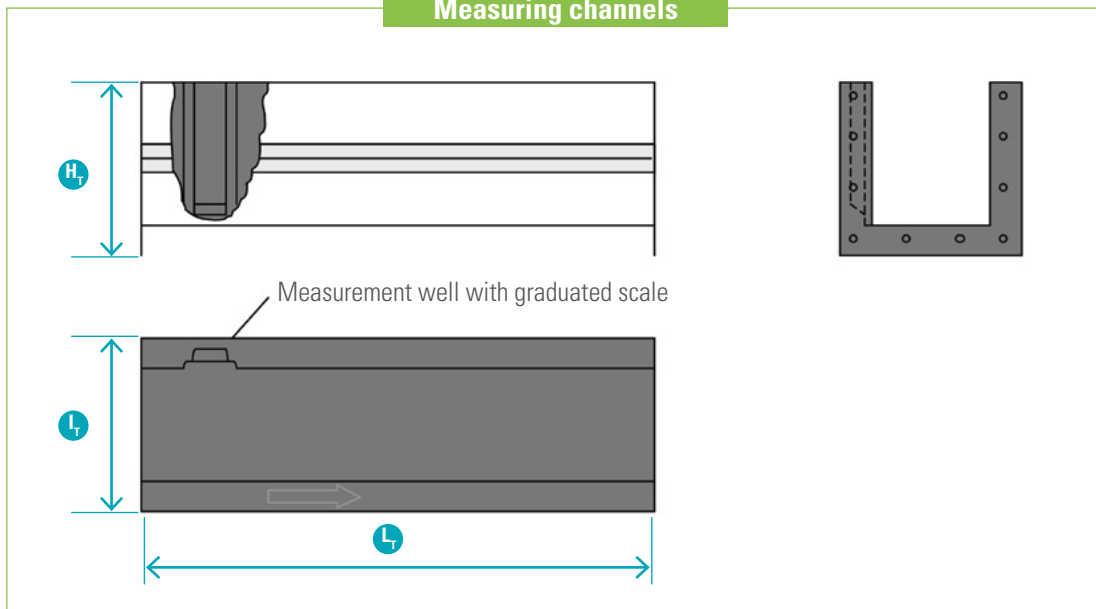
Venturi flume AQUAFLOW with approach channel, 6m ³ /h	AQF6
Venturi flume AQUAFLOW with approach channel, 15m ³ /h	AQF15
Venturi flume AQUAFLOW with approach channel, 40m ³ /h	AQF40
Venturi flume AQUAFLOW with approach channel, 100m ³ /h	AQF100
Venturi flume AQUAFLOW with approach channel, 200m ³ /h	AQF200
Venturi flume AQUAFLOW with approach channel, 300m ³ /h	AQF300
Venturi flume AQUAFLOW 600m ³ /h	AQF600
Venturi flume AQUAFLOW 1000m ³ /h	AQF1000
Venturi flume AQUAFLOW 3000 m ³ /h	AQF3000



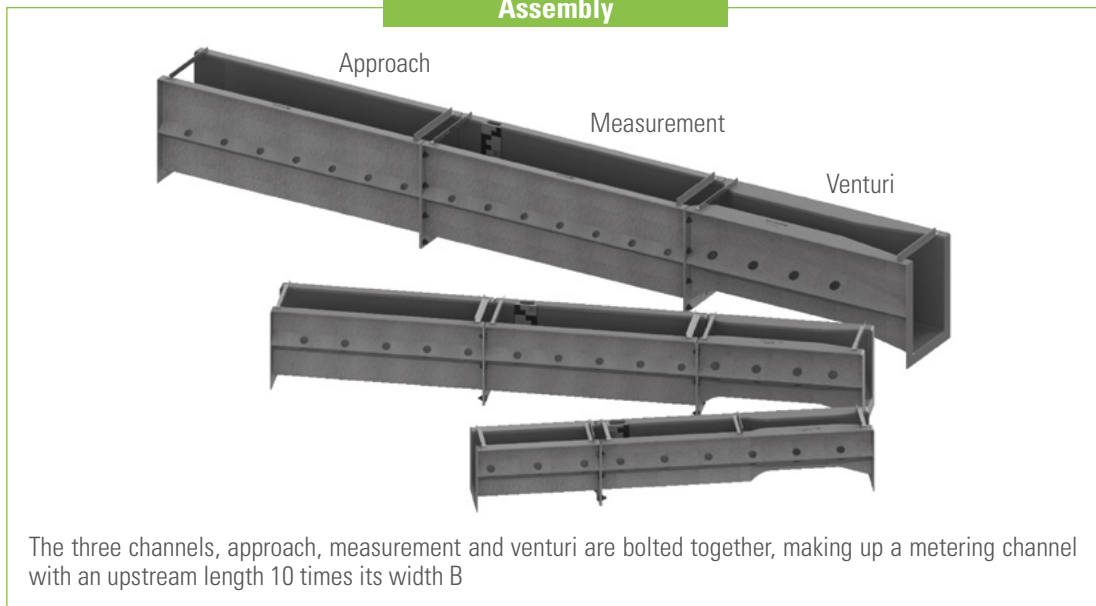
Venturi Channels



Measuring channels



Assembly





AQUABAC, Measuring tank with overflow of triangular or rectangular notch

Five models of AQUABAC with integrated overflows allow for measurements from 2.9 to 25 m³/h.

The AQUABAC is a rectangular tank made of PVC or 316L stainless steel with a triangular or rectangular overflow. An ultrasonic probe or radar sensor can be placed on the handle for measuring flow rate.

The ideal solution for measuring small flow rates.

AVANTAGES



- Ultra quick setup and implementation
- Very little engineering required
- More reliable results
- Excellent resistance to chemicals
- Easy to clean (thanks to the purge plug provided for emptying the tank)

Description

- The AQUABAC measuring tanks are made of stainless material, they have excellent resistance to chemicals.
- The “economic” versions are entirely of PVC (including the weir).
- Delivered in one piece an AQUABAC can be buried or set on the floor, and only requires for intake and drainage.
- Installation does not involve adjusting the «sensitive» parts (the spill blade and internal geometry of the overflow). This simplified installation, minimizing the risk of errors, guarantees excellent measurements.



	AQUABAC 3	AQUABAC 4	AQUABAC 8	AQUABAC 16	AQUABAC 25
MAXIMUM FLOW (m³/h)	2,9	4	8	16	25
WIDTH	290	290	290	290	290
TANK HEIGHT	440	440	440	305	305
OVERALL HEIGHT with measuring handle	850	850	850	715	715
LENGTH	1440	1440	1440	2440	2800

Tank material: grey PVC - Overflow material: 316L stainless steel (except economical models: PVC).
All dimensions in mm.

AQUALYSE can design and produce all types of overflows (triangular indentation, rectangular or others) to match your specific needs and ready to be installed at your location.

A table of height/flow ratio corresponding to applicable ISO standards is provided.

References

Aquabac with “V” weir 20 degrees	AQBAC03
Aquabac with “V” weir 28 degrees 4	AQBAC04
Aquabac with “V” weir 53 degrees 8	AQBAC08
Aquabac with “V” weir 90 degrees	AQBAC16
Aquabac with “V” weir 90 degrees long version	AQBAC25
Aquabac with rectangular weir 125 m ³ /h	AQBAC125
Ultrasonic probe holder for Aquabac	POTENFAQBAC

