

# VENTURI TYPE METERING CHANNEL

## WITH EXPONENTIAL CROSS-SECTION

### Accessories

6342

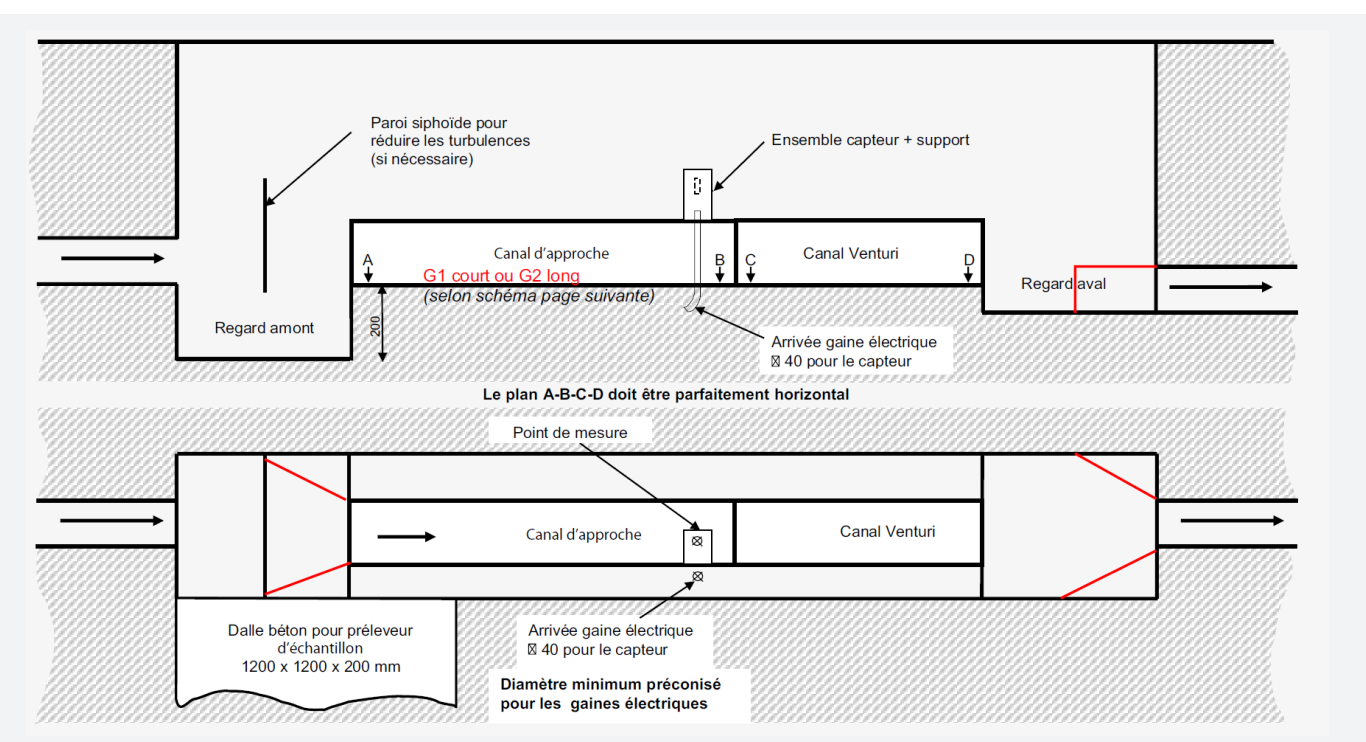
#### 1 Presentation

Exponential" venturi flumes are depressurizers designed to measure flow rates in straight open channels. When river flow conditions (non-turbulent) are respected upstream of the venturi contraction, and dewatering is ensured downstream (free flow without head constraints), then the water level upstream of the contraction (h; hydraulic head) is directly linked to the flow in transit (Q). Venturi" flumes are unique in that they combine the advantages of conventional "Venturi" flumes (free passage with no weir) with the ability to respond to wide flow variations (inclined flanks).

#### 2 Building material

The "exponential" venturi channels are made of composite, fiberglass matrix and isophthalic polyester resin, with blue gel-coat UV protection (RAL 5015).

#### 3 Assembly diagram

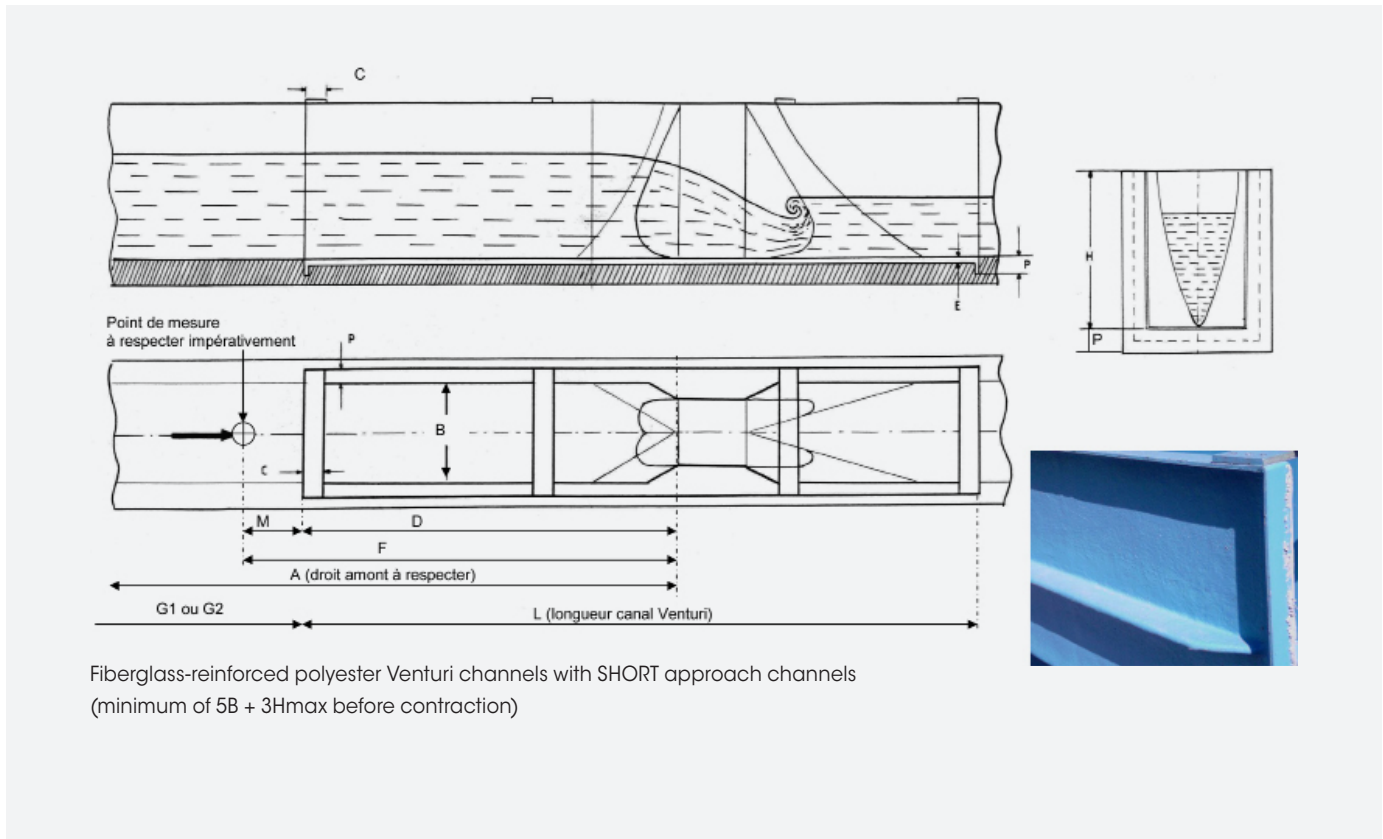


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6342

## 4 DIMENSIONAL CHARACTERISTICS



		CANA/6342/1 +CANV/6342/1	CANA/6342/2 + CANV/6342/2	CANA/6342/4 + CANV/6342/4
<b>A</b>	Upright to be respected/lateral contraction	945	1300	2800
<b>B</b>	Inside channel width	90	130	280
<b>C</b>	Crossbar width/Number of crossbars	25/3	30/4	40/4
<b>D</b>	Straight length in the channel/lateral contraction	455	575	880
<b>E</b>	Channel thickness	4	4	4
<b>F</b>	Position of measurement point relative to lateral contraction	560	700	1120
<b>G1</b>	Minimum straight length upstream from Venturi flume inlet	490	725	1920
<b>G2</b>	Recommended upstream straight length from Venturi channel inlet	945	1300	2800
<b>M</b>	Measurement point (upstream of Venturi)	105	125	240
<b>H</b>	Venturi channel internal height	200	250	380
<b>L</b>	Overall length Venturi flume	750	1000	1800
<b>P</b>	Stiffener and flange width	30	30	50
<b>R</b>	Side reinforcement Nbr and width.	none	none	none
<b>Q</b>	Minimum flow m <sup>3</sup> /h	0.22	0,43	1.80
<b>Q</b>	Maximum flow m <sup>3</sup> /h	22	43	180

Fiberglass-reinforced polyester approach channel for tranquilization upstream of a Venturi channel with exponential cross-section, with flange for connection to the Venturi channel. Internal dimensions: 490X90X200 mm (L x W x D)

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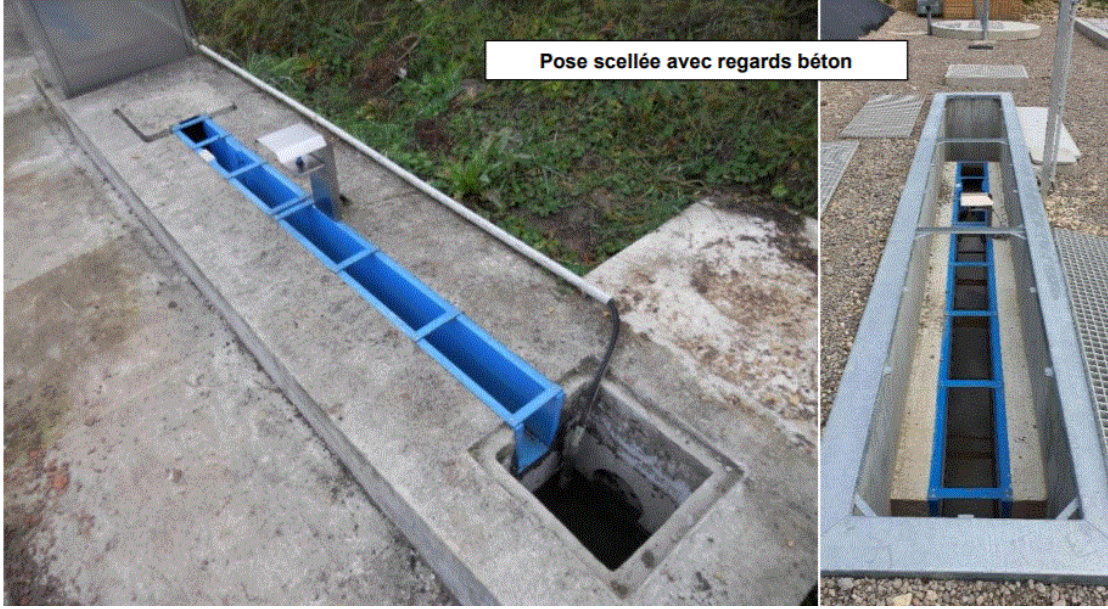
**6342**

**5 Options**

**EL/6342/.. Water level gauge for venturi channel**

- material stainless steel sheet
- 1 mm thick
- width 40 mm
- scale for water head/corresponding flow rate in m3/h

<b>EL/6342/1</b>	CANV/6342/1 water level gauge for venturi channel
<b>EL/6342/2</b>	CANV/6342/2 water level gauge for venturi channel
<b>CAPT/6342</b>	Electronic flowmeter + probe
<b>SCAPT/6342</b>	Probe holder



**CAPT/6342 Electronic flowmeter + probe**

- Fixed electronic flowmeter on open channel, power supply 230 VAC/50 Hz including :
- 1 digital transmitter in an IP 65 waterproof polyester case - Altuglas door
- case dimensions: 280 x 210 x 145 mm (L x W x D)
- 1 IP 68 waterproof digital ultrasonic transducer, type P43 F4Y (200-2000 mm range)
- supplied with 10 m of shielded cable

**Entries :**

- 4 analog inputs (4 and 8 additional inputs optional)
- 1 digital input (1 additional input optional)

**Releases :**

- 4 analog outputs (4 - 20 mA) (up to 8 additional outputs optional)
- 2 relay outputs (T.O.R.) configurable in m3/pulse, alarm thresholds or min./max. thresholds.
- (up to 10 additional outputs optional)
- 1 RS 232 output

**User-friendly menu programming**

Backlit alphanumeric LCD display (except 12 VDC-powered units)

4 lines - 20 characters

**Direct reading :**

- water height in mm
- instantaneous flow in m3/h
- partial totalizer Tp in m3, with reset to zero
- general totalizer T in m3, without reset



WASTEWATER TREATMENT | WWTP > 20 PE