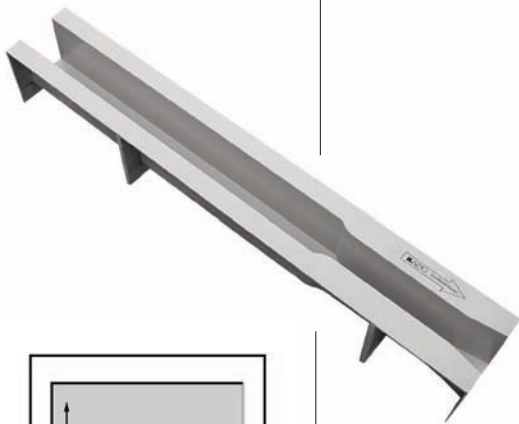


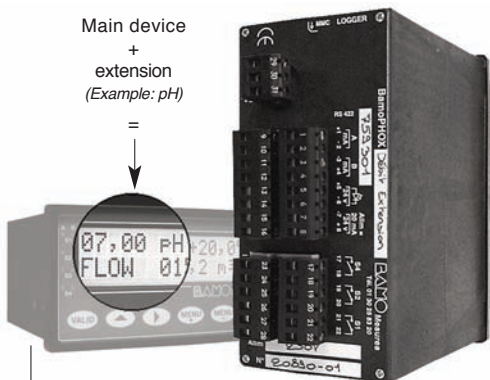
# VENTURI CHANNEL FLOW CALCULATOR BAMOPHOX 759



Wall mounting (main device)



Main device + extension  
(Example: pH)



Maximum cable length:  
500 meter

DIN Rail mounting  
(extension)

- Input 4-20 mA for level height
- Alphanumeric back lighted LCD display:  
Level, Flow rate,  
Daily volume,  
Total indicator
- Curves memorized for Venturi channels,  
standard weir plates V or U
- 4 relay outputs (Normally Open contacts)  
Contact for flow rate limit  
Contact for sampler  
Contact for external pulse counting
- 1 analogue output 0/4-20mA galvanic  
insulated
- 2 models available:  
Panel mounting 72 x 144  
Wall mounting IP 65
- OPTIONS:  
RS 422 /J-BUS + LOGGER  
Extension for 2nd measurement input

## EXTENSION TERMINAL

- An extension terminal (wall, panel mounting or DIN rail mounting):
- Allows a second measurement parameter (Turbidity, pH, Conductivity, Chlorine, Flow depending on the model)
  - The data from this blind device are displayed on the main device (second line display).
  - A 4 wires shielded cable is necessary to link both devices (maximum length of 500m)
  - The options RS422 and the data logger are shared between both BAMOPHOX.

## DESCRIPTION

The display allows an easy reading of flow rate (or water level height) and total indication. Through a user friendly menu relays are dedicated and configured for limits, alarms, sampler operation. The 4-20 mA input (proportional to the water level height) comes from a BAMOBUL (bubbling level measurement) or from an ultrasonic level transmitter. The BAMOPHOX 759 converts this signal directly in flow rate with the memorized curves of our range of Venturi open channel ISO 4359 and standardized Weir plates V or U). On request we may configure the instrument for a special curve. An output 4-20 mA is a copy of the flow rate. A pulse output is available for an external Total indicator. An optional RS422 is available for direct transfer to a computer.

# BAMO MESURES

22, Rue de la Voie des Bans - Z.I. de la Gare - 95100 ARGENTEUIL  
Tél : (+33) 01 30 25 83 20 - Web : [www.bamo.fr](http://www.bamo.fr)  
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VENTURI CHANNEL FLOW  
CALCULATOR  
**BAMOPHOX 759**

19-05-2008

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DEB

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## TECHNICAL FEATURES

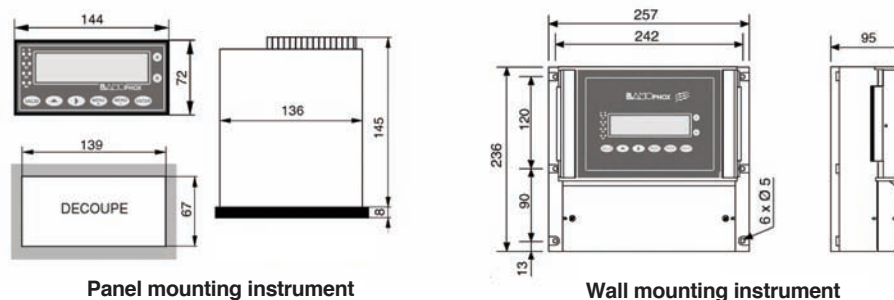
Displayed parameters:	Water level height - Flow rate – Total indicator - Configuration Menu
Display:	Back lighted - 2 lines of 16 alphanumeric characters ; 9,2 mm high
Indication:	LED relays status
Configuration:	8 push buttons keyboard on front face - Keyword protected
Scales:	Water height [mm] – Resolution 1 mm Flow rate [m <sup>3</sup> /h] – Resolution 0.1 m <sup>3</sup> /h Total indicator [m <sup>3</sup> ] – Resolution 1 m <sup>3</sup>
Total indicator:	Total on 8 digits – no reset possible Volume per day on 4 digits – Reset through the menu
Input:	4-20 mA proportional to the height of water
Memorized curves:	Venturi open channels ISO 4359 – DEBIFLO series (documentation 755-01) Weird plates ISO 1438/1-1980 – DEBIBAC series (documentation 755-02)
Limit contacts:	Dedicated to flow rate measurement, 2 contacts, potential free, switching capacity of 500 VA / 250 V / 2 A Adjustable hysteresis from 0 to 100 % - Adjustable reset timer from 0 to 9999 s
Sampler control:	Configuration by step of measured volume measurement [m <sup>3</sup> ] 1 contact, potential free - switching capacity of 500 VA / 250 V / 2 A Adjustable reset timer from 0 to 9999 s
Pulse output:	For external Total indicator – 1 pulse/m <sup>3</sup> 1 contact, potential free
Contact:	Initial resistance 100 mOhm as a maximum (voltage drop 6 V DC 1 A) Rated at 831 V AC / 3 A / 277 V AC ; 90 W / 3 A / 30 V DC
Switching capacity (minimum):	100 mA, 5 V DC (depending of switching frequency, ambient conditions, accuracy)
Mechanical life time (minimum):	5 x10 <sup>6</sup> operations (180 commutation/min)
Electrical life time (minimum):	2 x10 <sup>5</sup> (20 comm./min) [3 A, 125 V AC], [3 A, 30 V DC] and 10 <sup>5</sup> (evaluated charge) for 3 A, 125 V AC
Measurement output:	0/4-20 mA (maxi 600 Ω) proportional to the flow rate – scalable - galvanic insulated
Main power supply:	230 V AC / 50-60 Hz [other on request] - Consumption 10 VA
Models:	Panel mounting, IP65, 72 x 144 mm, connections on screw terminal IP40 Idem DIN Rail mounting, only for blind monitor Wall mounting, IP65, cable glands, connections on screw terminal

### OPTION (RS 422 + Logger)

Communication:	RS422 output, J-BUS link, binary slave mode, 2400 to 9600 bauds
Data Logger:	Cycle average measurement record, with a programmable period, 150000 records maxi on MMC (multi media card) / External driver necessary

## DIMENSIONS

**Extension terminal:**  
identical to the panel  
or wall mounting



## CODES AND REFERENCES

Code	Reference	Designation
759 300	BAMOPHOX759 E	Panel mounting 72 x 144 - IP 65 front panel - screw terminal IP40
759 301	BAMOPHOX759 E/A	Panel mounting 72 x 144 / Extension blind monitor - screw terminal IP40
759 303	BAMOPHOX759 D/A	DIN Rail mounting / Extension, blind monitor - screw terminal IP40
759 350	BAMOPHOX759 E LOG BUS	Panel mounting 72 x 144 / RS422 + logger - IP 65 front panel - screw terminal IP40
759 400	BAMOPHOX759 M	Wall mounting - IP 65 - cable glands, connections on screw terminal
759 401	BAMOPHOX759 M/A	Wall mounting - IP 65 / Extension, blind monitor - cable glands, connections on screw terminal
759 450	BAMOPHOX759 M LOG BUS	Wall mounting - IP 65 / RS 422 + LOGGER - cable glands, connections on screw terminal

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