## AIR BUBBLING LEVEL TRANSMITTER **BAMOBUL**



- Level measurements on open channel flumes
- Flow rate and totalization on effluents
- For foaming and charged fluids
- Directly link with the BAMOPHOX 759
- Range from 0 500 mm WC
- Air generator with flow rate regulation
- Accuracy ± 1 %
- 4-20 mA analogical output
- Wall mounting IP 55
- Supply 230 V 50/60 Hz

#### PRINCIPLE

BAMOBUL is designed for Venturi channel or Weir plates *(documentation 755-01)* water level measurements up to 500 mm.

This application requires a highly accurate level measurement as between water height and level the relation is exponential.

The instrument is associating an air generator to a 4-20 mA pressure transmitter extremely accurate. The sensor permanently measures the necessary pressure to create bubbling against the water column.

This pressure difference is directly proportional to the water height (the pressure is equal to hydrostatic pressure of water column).

To limit errors due to the airflow fluctuation, adjustment are easy with integrated valves. Access to the "0 flow rate" calibration and the full measurement scale are permitted to the end-user.

This instrument is well known for its reliability and the accuracy of signal output even whit particles in the fluid or foam over the surface.

#### **DESCRIPTION**

BAMOBUL level sensor is wall mounting; housing protection IP 55, including a pressure sensor, an electronic amplifier and an air generator. Pneumatic connections are of quick coupling type for 6 x 4 mm RISLAN tubing. All wirings are with screw connectors, cable glands ensure the water tightness. The air bubbling stem is of stainless steel 316 L, equipped with a sliding fixing device allowing an exact position of "0 flow rate". Support is a stainless steel plate to mount on the channel.

#### **CODE NUMBER AND REFERENCE**

Code	Reference	Designation
758 121	BAMOBUL 758 MA	Wall mounting, 4-20 mA blind transmitter



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#### **TECHNICAL FEATURES**

Level transmitter

Scales: 0...30 / 0...50 / 0...100 / 0...300 / 0...500 mm WC (others on request)

Please specify the desired scale when ordering

Temperature limits:  $0...50^{\circ}$ C Accuracy:  $\pm 1\%$  full scale Response time: <10 ms

Air generation

Flow rate: Approximately 250 L/h (free outlet)

Maximal pressure: 200 mbar (approximately 2000 mm WC)

Pump body: ABS

Air flow adjustment: From 0 to maximal flow, regulated for a constant flow rate

Power supply: 230V - 50/60 Hz - 8 VA

**Transmitter** 

Adjustment: Level 0 by push button

Default detection: Tube breaking or chocked outlet

1 Volt free change over contact output, switching power 230V / 5A

Output: 4-20mA (power supply included) / max 600 Ohm / limit 23 mA

Presentation: wall mounting, IP55
Dimensions: 257 x 236 x 95 mm

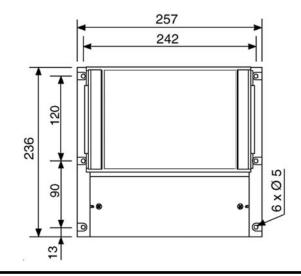
#### **BUBBLING AIR STEM**

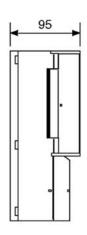
Manufactured in Stainless Steel 316 L, it is mounted on the channel with connection BSP 1/2" MG, fixed with a lock nut. The height adjustment is carried out with a sliding connection with gland and a mark "0" for the 0 flow rate value. The air inlet is ensured by a quick coupling connection for 6 x 4 mm RILSAN tubing.

Code	Reference	Designation
758 010	CAB1	Stainless Steel 316 L bubbling stem- Ø6 mm - L = 220 mm
758 011	CAB2	Stainless Steel 316 L bubbling stem- Ø6 mm - L = 400 mm
758 012	CAB3	Stainless Steel 316 L bubbling stem- Ø6 mm - L = 515 mm
758 013	CAB4	Stainless Steel 316 L bubbling stem- Ø6 mm - L = 690 mm
758 014	CAB5	Stainless Steel 316 L bubbling stem- Ø6 mm - L = 870 mm
758 017		6 x 4 mm RILSAN tubing – each meter

# **AIR BUBBLING STEM** 63 27 Stainless steel 90 x 30 x 2 Ø6 flow rate

#### **DIMENSIONS**







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