

flow-captor 4215.30

Installation and Adjustment Instructions

Please read carefully: No liability can be accepted for damage caused by improper use of the captor.

1.0 Items delivered

- 1.1 flow-captor 4215.30
- 1.2 Union nut G 1 A stainless steel AISI 303
- 1.3 O-ring for G 1 A
- 1.4 Screwdriver for adjustment

4215.30



2.0 Installation Instructions

2.1 Installation depth: $1/7 \times \text{ID}$, min. 5 mm

2.2 Orientation to flow: see drawing

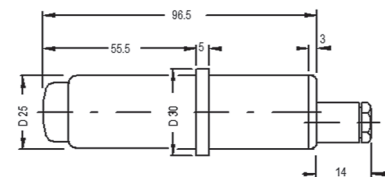
2.3 Fitting position: preferably in vertical pipes with ascending flow or in horizontal pipes with flow-captor in horizontal position. For optimal flow, pipe should be $5 - 7 \times \text{ID}$ before, and $3 - 5 \times \text{ID}$ behind the flow-captor.

2.4 Mounting: Push O-ring over the sensing surface and housing to the flange. Insert flow-captor into the fitting which is welded onto the pipe and hold in place with the union nut. Ideal sealing is achieved by a fitting of a 4 - 5 mm wall (fittings available).

2.5 Initial operation: connect flow-captor to 24 VDC according to connection diagram and wait approx. 2 minutes before starting adjustment. The flow-captor has been preset under test pipe conditions to a flow range of 0 - 200 cm/s (related to water). At customer's plant signal may vary dependant on individual mounting and medium conditions. Output current is 4 - 20 mA. If re-adjustment is required, please refer to point 3.

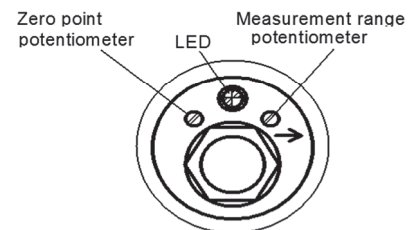
2.6 Fixed temperature range: $-10\text{ }^{\circ}\text{C} - +80\text{ }^{\circ}\text{C} \triangleq 4 - 20\text{ mA}$

Dimensions (mm)



Installation

Union nut: G 1 A
Wrench size: 37 mm



Potentiometer, 18 turn, endless

3.0 Adjustment Procedure

3.1 Zero point adjustment in stationary medium (roughly):

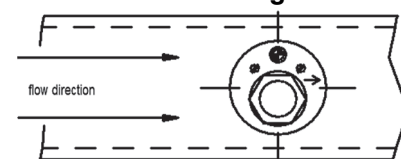
Adjust zero point potentiometer after 2 min. so, that $I_{out} \approx 4\text{ mA}$, i.e. at $I_{out} > 4\text{ mA}$ turn pot. to the left, at $I_{out} < 4\text{ mA}$ turn pot. to the right.

3.2 Measuring range adjustment at max. flow: Measuring range: adjustable from 0 - 20 cm/s to 0 - 200 cm/s (medium water). Accelerate flow of the medium to a point, where the flow-captor should give an output signal of 20 mA and wait min. 2 minutes. Turn range pot. until $I_{out} = 20\text{ mA}$ (to the left I_{out} will be greater, to the right I_{out} will be smaller). The color of the LED will change from green ($I_{out} = 20\text{ mA}$) to red (exceeding measuring range).

3.3 Fine adjustment of zero point: After at least 3 minutes standstill of flow turn zero point slightly so, that I_{out} is just 4 mA (turning direction as in 3.1).

3.4 Repeat adjustment according to 3.2 and 3.3 until the zero point (4 mA) or max. range setting (20 mA) remains constant.

Positioning



Rear view of flow-captor

Connection diagram

4 - 20 mA current output

