flow - captor

Type 4114.30, 4115.30

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	4114.30 / 4115.30
1.2	Union nut	G 1¼ A / G 1 A
	stainless steel	1.4305 (303)
1.3	O-ring for	G 1¼ A / G 1 A
1.4	Screwdriver for adjustment	

2.0 Installation Instructions

2.1 Installation depth: 1/7 x ID, min. 5 mm

2.2 Orientation to flow: see drawing

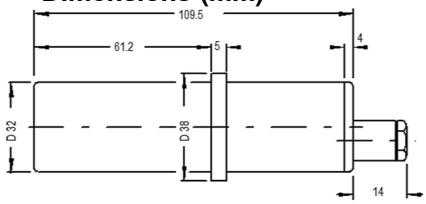
2.3 Fitting position: preferably in vertical pipes with ascending flow or in horizontal pipes with flow-captor in horizontal position. For optimal flow, pipe should be 5-7 x ID before, and 3-5 x ID behind the flow-captor.

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).

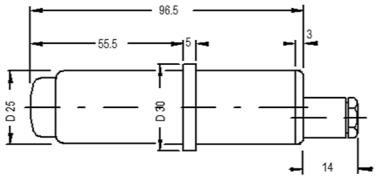
2.5 **Initial operation:** connect flow-captor to 24 V DC according to connection diagram and wait approx. 2 minutes before starting adjustment. The flow-captor has been preset under test pipe conditions to a flow range of 0-200 cm/s (related to water). At customer's plant signal may vary dependant on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

Dimensions (mm)

4114.30



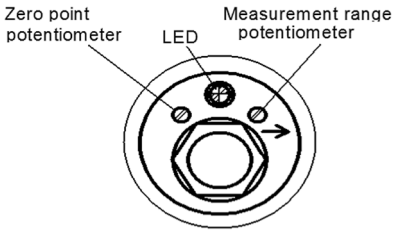
4115.30



Installation

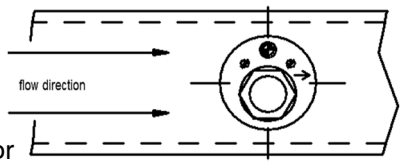
Union nut: G 1¼ A / G 1 A

Spanner gauge: 50 mm / 37 mm



Potentiometer, 18 turn, endless

Positioning



Rear view of flow-captor

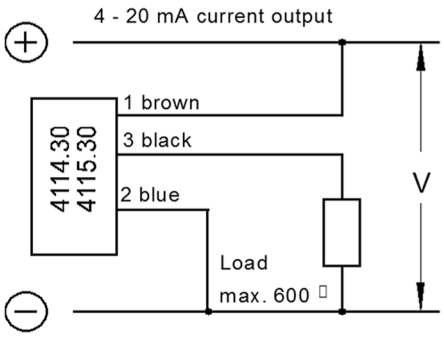
3.0 Adjustment Procedure

3.1 Zero point adjustment in stationary medium (roughly): Adjust zero point potentiometer after 2 min. so, that Ia » 4 mA, i.e. at Ia > 4 mA turn pot. to the left, at Ia < 4 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 Ia = 20 mA (to the left Ia will be greater, to the right Ia will be smaller).The color of the LED will change from green (Ia £ 20 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 Ia 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.



weber

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