

### 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

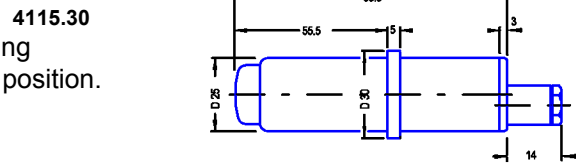
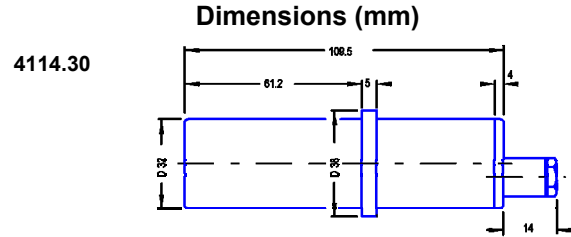
- 2.1 Installation depth: 1/7 x ID, min. 5 mm
- 2.2 Orientation to flow: see drawing
- 2.3 Fitting position: preferably in vertical pipes with ascending flow or in horizontal pipes with flow-captor in horizontal position. For optimal flow, pipe should be 5-7 x ID before, and 3-5 x ID behind the flow-captor.
- 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.

#### 3.0 Adjustment Procedure

- 3.1 Zero point adjustment in stationary medium (roughly): Adjust zero point potentiometer after 2 min. so, that  $I_a \approx 4$  mA, i.e. at  $I_a > 4$  mA turn pot. to the left, at  $I_a < 4$  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-

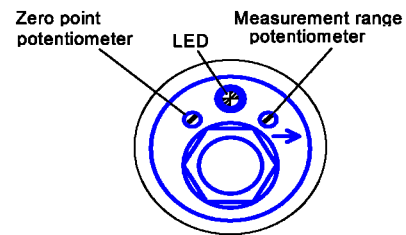
should give an output signal of 20 mA and wait min. 2 minutes. Turn range pot. until  $I_a = 20$  mA (to the left  $I_a$  will be greater, to the right  $I_a$  will be smaller). The color of the LED will change from green ( $I_a \leq 20$  mA) to red (exceeding measuring range).

- 3.3 Fine adjustment of zero point: After at least 3 minutes standstill of flow turn zero point slightly so, that  $I_a$  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.

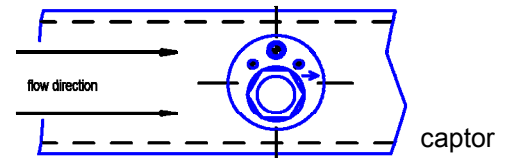


#### Installation

Union nut: G 1¼ A / G 1 A  
Spanner gauge: 50 mm / 37 mm



Potentiometer, 18 turn, endless  
**Positioning**



Rear view of flow-captor

