# Inline flow - captor

## Type 4311.30



## **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 4311.30 /\*

  \* Pipe diameter as customer specification
- 1.2 Screwdriver for adjustment

#### 2.0 Installation Instructions

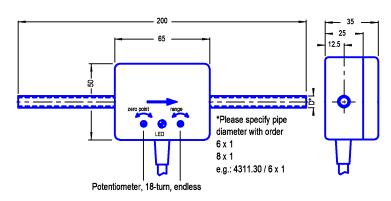
2.1 Depending on the pipe system a variety of connectors can be used e.g. with screw fittings (e.g. Ermeto) or with hose clamps etc.

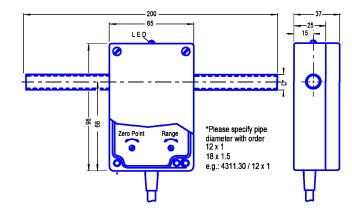
**NOTE:** The inline pipe element must not be subjected to any kind of force, twisting etc., or to high temperatures e.g. in welding processes.

Torsion:  $\leq$  10 Nm up to  $\leq$  40 °C

- 2.2 Installation site: Preferably in vertical pipes with ascending flow or in horizontal pipes.
- 2.3 Initial Operation: Connect flow-captor to 24 V DC as in connection diagram and wait approx. 2 min. before adjusting. Adjustments are possible from 0-20 cm/s up to 0-100 cm/s (related to water). Zero point potentiometer is factory set. Range potentiometer is adjusted at the max. measuring range <sup>3</sup> 100 cm/s.

### Dimensions (mm)





#### 3.0 Adjustment Procedure:

3.1 Zero point adjustment in stationary medium (roughly). Adjust zero point potentiometer after 2 min. so,

that Ia  $\approx$  4 mA, i.e.

at Ia > 4 mA turn pot. to the left,

at Ia < 4 mA turn pot. to the right.

3.2 Adjustment of measuring range in max. flow rate of medium:
Accelerate flow of the medium to a point, where the
flow-captor should give an output signal of 20 mA and wait
approx. 2 min. Turn range pot. until Ia = 20 mA (to the left
Ia will be greater, to the right Ia will be smaller).

I.ED. ON": flow rate is within the measuring range.

LED "ON": flow rate is within the measuring range LED "OFF": flow rate exceeds measuring range.

- 3.3 Fine adjustment of zero point: After waiting at least 2 minutes standstill of flow turn zero point slightly so, that la 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.

#### **Connection Diagram**

