

# Flow meter for liquid media



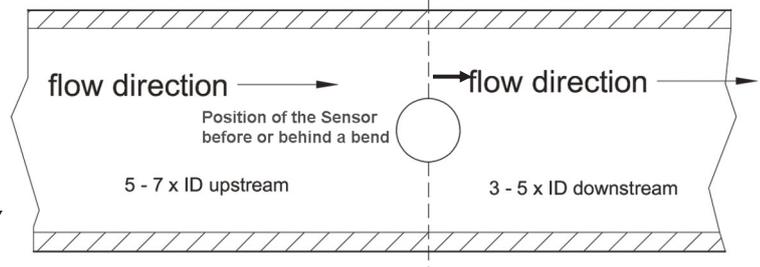
## flow-captor 4215 S101 + 4615.30 S101

### Installation and Adjustment Instructions

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

#### 1.0 Items delivered

- 1.1 **flow-captor** 4215 S101 + 4615.30 S101
- 1.2 **Union nut** G 1" A stainless steel AISI 303
- 1.3 **O-ring for** G 1" A
- 1.4 **Screwdriver for adjustment**



#### 2.0 Installation Instructions

- 2.1 **Installation depth:**  $1/7 \times \text{ID}$ , min. 5 mm
- 2.2 **Orientation to flow:** see sketch
- 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 depending 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:** 77 °F to 275 °F  $\triangleq$  4 - 20 mA  
25 °C to +135 °C  $\triangleq$  4 - 20 mA

#### 3.0 Adjustment Procedure

- 3.1 **Zero point adjustment in stationary medium (roughly):**  
adjust zero point potentiometer after 2 min. so,  
that output current  $\gg 4$  mA, i.e. at output current  $> 4$  mA turn potentiometer to the left,  
at output current  $< 4$  mA turn potentiometer to the right.
- 3.2 **Measuring range adjustment at max. flow:**  
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 potentiometer until output current = 20 mA (to the left output current will be greater, to the right output current will be smaller). The color of the LED will change from green (output current = 20 mA) to red (exceeding measuring range).
- 3.3 **Fine adjustment of zero point:** after at least 2 minutes standstill of flow turn zero point slightly so, that output current is just 4 mA (turning direction as in 3.1).
- 3.4 **Repeat the adjustment according to 3.2 and 3.3 until a stable condition is reached.**

**weber**

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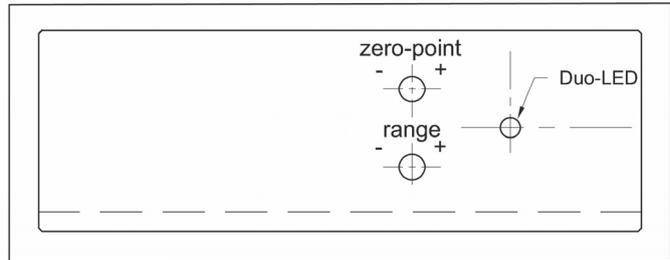
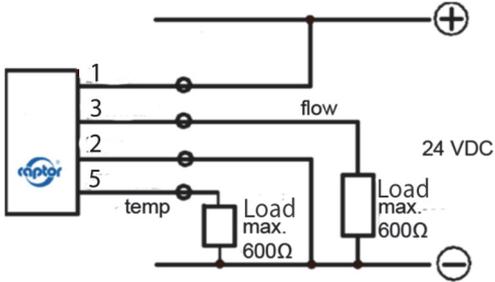
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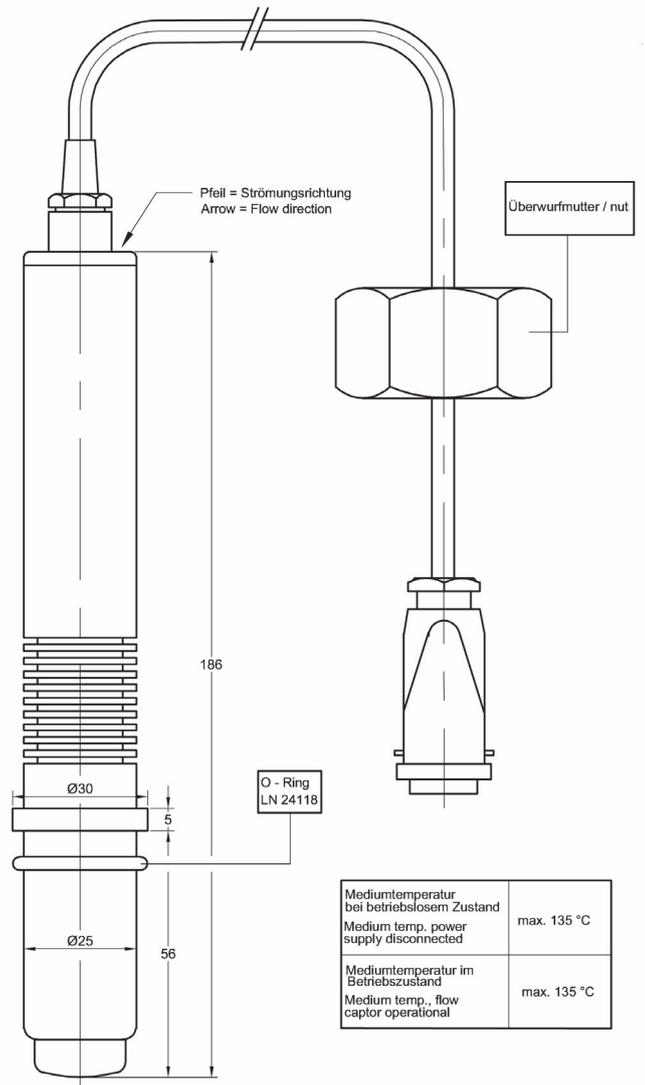
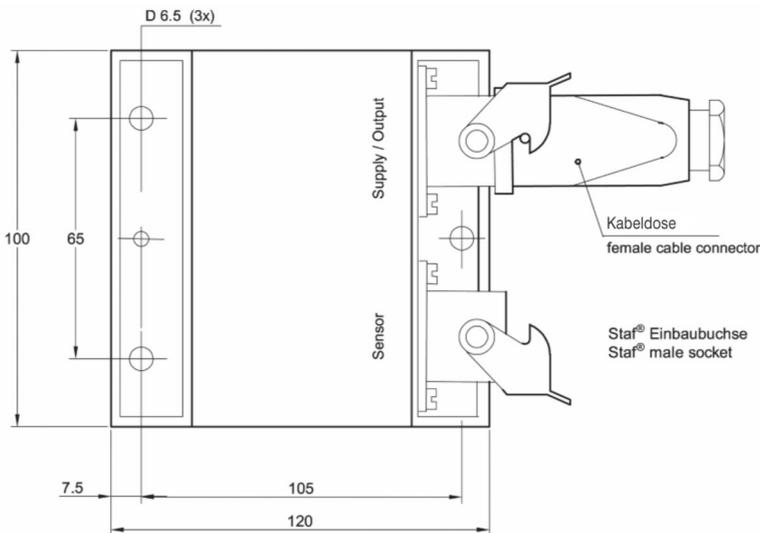
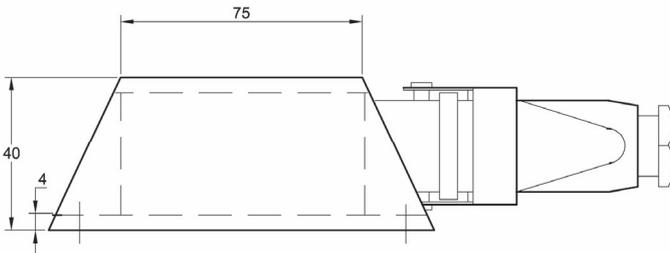
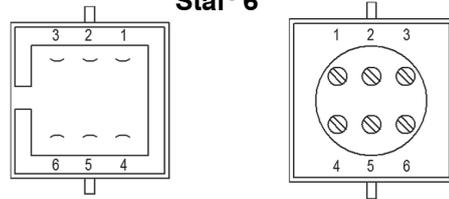
Connection diagram:



1	+	24 VDC
2	-	0 VDC
3	Flow	4 - 20 mA
5	Temp	4 - 20 mA

Connector types

Star® 6



Mediumtemperatur bei betriebslosem Zustand Medium temp. power supply disconnected	max. 135 °C
Mediumtemperatur im Betriebszustand Medium temp., flow captor operational	max. 135 °C

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