**TECHNICAL INFORMATION**

**Inline flow-captor Type 432-.1- M**

The flow-captor 432-.1- M is a unique, precise, compact, metering flow switch with adjustable set-point and analog display for industrial applications in stainless steel housing. The functionality is based on a new calorimetric principle. The inline flow-captor allows to set an exact flow set-point and to measure simultaneously the flow rate up to the lowest flow conditions.

- Accurate switching flow monitor for water or oil-based solutions
- High accuracy also under low flow conditions
- Separate adjustments for "Range" and "Set-point"
- Analog display of actual flow and display of adjusted set-point
- LED for output status
- ISO 9002 certified manufacturing
- CE approval

**Technical Data**

<table>
<thead>
<tr>
<th>Type</th>
<th>4320.12/13 M</th>
<th>4321.12/13 M</th>
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</thead>
<tbody>
<tr>
<td>Medium</td>
<td>water-based solutions</td>
<td>oil-based solutions</td>
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</table>

**Sensor Data (Inline Pipe)**

- Measuring range: 0-20 cm/s to 0-300 cm/s, cont. adjust ¹) 0-30 cm/s to 0-300 cm/s, cont. adjust ²)
- Flow rate at 300 cm/s: 6x1: 2,25 l/min. 8x1: 5,1 l/min. 12x1: 14,1 l/min. 18x1:1,5: 31,8 l/min.
- Set-point range: approx. 15%-90% of measuring range setting
- Medium temperature: -20 °C to +80 °C
- Ambient temperature: -20 °C to +70 °C
- Pressure: up to 30 bar
- Response time: 2 s to 10 s, acc. to range setting 2 s to 15 s, acc. to range setting
- Linearity deviation: < 5% ¹) < 5% ²)
- Repeatability: < 2%
- Hysteresis: approx. 10 %

**Mechanical Data**

- Protection class: IP 67
- Housing material: stainless steel WN 1.4404
- Sensor pipe: stainless steel WN 1.4571 (V4A) (Titanium, Hastelloy C4 on request)
- Pipe dimensions in mm (diameter x wall thickness): 6x1, 8x1, 12x1, 18x1,5
- Connection: plug M12x1, 4-pin

**Electrical Data (Electronic Housing)**

- Operating voltage: 18 to 30 V DC, incl. residual ripple
- Switching current: ≤ 400 mA
- Initial operation: approx. 10 s after connection of power
- Electrical output: PNP n.c. ³): 4320.12 M  
  PNP n.o. ³): 4320.13 M  
  PNP n.c. ⁴): 4321.12 M  
  PNP n.o. ⁴): 4321.13 M

Notes: ¹) data applies to water ²) depends on oil solution type ³) switch open with flow ⁴) switch closed with flow

**Connection Diagram**

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Technical data is subject to change! © Copyright by weber Sensors