Pressure Sensor
PTM C2

Output 4–20 mA

Features
- Ideal as a dry run protection device for pumps and for process monitoring
- Pressure range from 0-0.5 up to 0-10 bar
- Robust design
- High accuracy
- Resistant to aggressive media

www.asv-stuebbe.com/produkte/mess-und-regeltechnik
PTM C2
Version: Fitted to pipe

Signal output
Current: 2-wire, 4–20 mA
Operating voltage: 9–35 V DC

Sensor: Al₂O₃ 96 %
Housing material

Connection Material (process connection)

1. PVC-U socket DIN
2. PP socket DIN spigot DIN
3. PVDF socket DIN spigot DIN
4. Sealing (Sensor + Connection)
   » EPDM
   » FPM

Signal inputs:
Pressure
0-0.5 bar
0-1 bar
0-2 bar
0-5 bar
0-10 bar

available
not available
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Application
- The PTM C2 can be used as a dry run protection device for pumps and for process monitoring.

Use
- Pressure transducers for installation in pipes

Function
- The process pressure is registered by a ceramic transducer made of Al₂O₃.
- Versions
  C2: The current module transmits pressure via a normalised 4–20 mA signal.

Type
- PTM C2 as a compact one-piece variant

Interfaces
- Signal output, current loop (C2): 4–20 mA
  2-wire

Measured variables
- pressure

Device connection
- Socket end for solvent welding (PVC-U): d32
- Fusion socket end (PVDF or PP): d32
- Fusion spigot end (PVDF or PP): d32

Voltage supply
- U = 9–35 V DC

Cable connections
- Cable outside diameter: 3–6 mm
- Nominal cross-section, voltage supply: 0.25 mm²

Materials, wetted parts
- Sensor: Al₂O₃ 96 %
- Sensor housing: PVC-U, PVDF or PP
- Sensor seal: EPDM, FPM
- Union end and union nut: PVC-U, PVDF or PP
- Sealing: EPDM, FPM

Materials, not wetted parts
- Housing: PP

Weights
- Basic weight: 0.3 kg

Type of protection
- IP 65

Output behaviour
- Power up: < 200 ms
- Step response (10–90%) 10 ms

Sensor data (pressure)
- Measuring range: 0-0.5, 0-1, 0-2, 0-5, 0-10 bar
- Maximum overpressure: 2 x nominal pressure
- Precision >= 0-2 bar:
  at 0–85°C: ±2.4 % FS
  at 25 °C: ±1% FS
- Precision < 0-2 bar:
  at 0–85°C: ±2.5 % FS
  at 25 °C: ±1.5 % FS

Ambient conditions
- Ambient temperature: -20–70 °C
- Atmospheric ambient pressure: 0.8–1.1 bar
- Relative humidity: 20–85 %

Process temperature
- See pressure and temperature diagram

Process pressure
- See pressure and temperature diagram

Mounting position
- As required
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Ohmic resistance

![Graph showing ohmic resistance](image)

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
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<tbody>
<tr>
<td>R</td>
<td>Max. ohmic resistance</td>
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<tr>
<td>U</td>
<td>Voltage supply</td>
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</table>

Pressure and temperature diagram

![Graph showing pressure and temperature limits](image)

<table>
<thead>
<tr>
<th>PN 10</th>
<th>P [bar]</th>
<th>T [°C]</th>
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<tbody>
<tr>
<td></td>
<td>0</td>
<td>-40</td>
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<tr>
<td></td>
<td>2</td>
<td>0</td>
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<tr>
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<td>140</td>
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</table>

The pressure/temperature limits of the materials are valid for the stated nominal pressures and a service life of 25 years. These values are guide values for flow medium types which do not negatively impact the physical and chemical characteristics of the valve material. It may be necessary to take diminution factors into consideration. The operating life of the wear parts depends on the conditions of use.
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1. Device connection
2. Sensor housing
3. 4-pin connector M12

Circuit diagram, plug connector

1. Signal (+)
2. Signal (-)
3. n.c.
4. n.c.
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