SERIES 2066.41XX – ANALOG PRESSURE SENSOR
MEASURING LIQUID AND GAS PRESSURE

ADVANTAGE
High measurement accuracy
ESD protection
Long lifetime
Linear output signal
Numerous versions

PRODUCT FEATURES
→ Low hysteresis, 100%-final test with linearization and calibration
→ ESD EN 61000-4-2 with contact discharge of 8 kV and 8 kV air discharge
→ More than 150,000 pressure cycles, useful life of more than 15 years
→ Analoge voltage output signal (1,125 V - 3,6 V / 0 - 4,5 bar)
→ Different versions available regarding measuring range, output signal, supply voltage, mechanical and electrical connection

EXAMPLES OF APPLICATION
→ HVAC technology
→ Heat pumps
→ Solar thermal systems
→ Controlled pumps and valves
→ Large household appliances
→ Level measuring

<table>
<thead>
<tr>
<th>Medium</th>
<th>Heating water, water, air</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measuring range</td>
<td>0 ... 450 kPa / 4,5 bar / 65 psi</td>
</tr>
<tr>
<td>Burst pressure</td>
<td>&gt; 0,9 MPa / 9 bar / 130 psi</td>
</tr>
</tbody>
</table>

Characteristic / Tolerance* at Vcc = 5,00 V DC

→ Upper tolerance limit

Uout [V] = 0,55 [V/bar] x applied pressure [bar] + 1,235 [V]
Uout [V] = 0,55 [V/bar] x applied pressure [bar] + 1,125 [V]
Uout [V] = 0,55 [V/bar] x applied pressure [bar] + 1,015 [V]

→ Ideal characteristic

→ Lower tolerance limit

Material housing: Grivory (glass fibre reinforced)
Material membrane: EPDM

<table>
<thead>
<tr>
<th>Medium temperature (water)</th>
<th>+2 °C ... +90 °C (max. 120 °C for 10 min above lifetime)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ambient temperature</td>
<td>-10 °C ... +70 °C</td>
</tr>
<tr>
<td>Storage temperature</td>
<td>-40 °C ... +70 °C</td>
</tr>
</tbody>
</table>

Supply voltage: 5 V DC ± 0.25 V (ratiometric)
Maximum power consumption: < 14 mA (12 mA typ)

Output signal
→ at 0 bar
→ at 4.5 bar
Proportional analog voltage
→ 1,125 V
→ 3,6 V

Terminal
Rast 2.5; 4-pole; for increased ESD-protection

Technical changes reserved. Dimensions are not binding. Detailed specifications available on request.
## Variants

<table>
<thead>
<tr>
<th>Product Number</th>
<th>Supply Voltage</th>
<th>Ratioramic</th>
<th>Voltage-controlled</th>
<th>Pressure Range</th>
<th>Burst Pressure</th>
<th>O-ring Sealed</th>
<th>3-pole (Rast 2.5)</th>
<th>4-pole (Rast 2.5)</th>
<th>Plug-on Flanges</th>
<th>Screw Flange G3/8&quot;</th>
<th>Output Signal Uout</th>
</tr>
</thead>
<tbody>
<tr>
<td>2066.4111</td>
<td>5 V DC ±0,25 V</td>
<td></td>
<td></td>
<td>0...4,5 bar</td>
<td>9 bar</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>0,55 V x p + 1.125 V</td>
</tr>
<tr>
<td>2066.4112</td>
<td>5 V DC ±0,25 V</td>
<td></td>
<td></td>
<td>0...4,5 bar</td>
<td>9 bar</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>0,55 V x p + 1.125 V</td>
</tr>
</tbody>
</table>

## Characteristic Curves

- **Nominal characteristic curve**
  - 2066.4111 / 2066.4112

- **Typical sensor characteristic curve**
  - 2066.4111 / 2066.4112

## Drawings

(Dimensions in mm)

[Diagram of sensor variants and characteristic curves]

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