**Features**

- Differential pressure transmitter with linear curve for air-conditioning applications
- Also available as a two-wire system ("PIZ" model)
- Also for ± measurement ranges and asymmetric measurement ranges
- With optional LCD

---

**Model Output**

<table>
<thead>
<tr>
<th>Model</th>
<th>Output</th>
<th>A</th>
</tr>
</thead>
<tbody>
<tr>
<td>PU</td>
<td>0..10 V (R ≤ 2 kΩ)</td>
<td>U</td>
</tr>
<tr>
<td>PI</td>
<td>0..20 mA (R ≤ 500 Ω)</td>
<td>10</td>
</tr>
<tr>
<td>PI</td>
<td>4..20 mA (R ≤ 500 Ω)</td>
<td>14</td>
</tr>
<tr>
<td>PIZ</td>
<td>4..20 mA two-wire (R ≤ 50)</td>
<td>IZ</td>
</tr>
</tbody>
</table>

**Measurement Range**

<table>
<thead>
<tr>
<th>Measurement range</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>e.g. 0..100 Pa, 0..60 mbar, ±110 mmHg (etc.)</td>
<td></td>
</tr>
</tbody>
</table>

**Margin of Error**

<table>
<thead>
<tr>
<th>Margin of error</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>±0.2 % FS</td>
<td>02</td>
</tr>
<tr>
<td>±0.5 % FS</td>
<td>05</td>
</tr>
<tr>
<td>±1 % FS</td>
<td>1</td>
</tr>
</tbody>
</table>

**Supply Voltage**

<table>
<thead>
<tr>
<th>Supply voltage</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>24 VDC, +20 % / -15 %</td>
<td>24D</td>
</tr>
<tr>
<td>24 VAC, +6 % / -15 % (50/60 Hz)</td>
<td>24A</td>
</tr>
<tr>
<td>115 VAC, +6 % / -15 % (50/60 Hz)</td>
<td>115</td>
</tr>
<tr>
<td>230 VAC, +6 % / -15 % (50/60 Hz)</td>
<td>230</td>
</tr>
<tr>
<td>10..32 VDC (two-wire system)</td>
<td>PIZ</td>
</tr>
</tbody>
</table>

**Time Constant**

<table>
<thead>
<tr>
<th>Time constant</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>none</td>
<td>0</td>
</tr>
<tr>
<td>1 s</td>
<td>1</td>
</tr>
<tr>
<td>2 s</td>
<td>2</td>
</tr>
<tr>
<td>5 s</td>
<td>5</td>
</tr>
</tbody>
</table>

**LCD**

<table>
<thead>
<tr>
<th>LCD</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>none</td>
<td>0</td>
</tr>
<tr>
<td>3 ½ digit (see foto)</td>
<td>3</td>
</tr>
<tr>
<td>4 ½ digit (only for PU/PI)</td>
<td>4</td>
</tr>
</tbody>
</table>

**Order Code**

<table>
<thead>
<tr>
<th>Order code</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>PU / PI / PIZ</td>
<td>P</td>
<td>-</td>
<td>-</td>
<td>D</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
MEASUREMENT OF DIFFERENTIAL PRESSURE

Measurement of differential pressure is useful in a broad range of applications. It is used in ventilation and air-conditioning technology but also in many areas of air handling process technology. The next pages show a number of these.

halstrup-walcher offers a wide range of products for stationary measurement of differential pressure:

<table>
<thead>
<tr>
<th>Product</th>
<th>PUC24</th>
<th>PUC28 (K)</th>
<th>P26</th>
<th>P34</th>
<th>P29</th>
<th>PU / PI / PIZ</th>
<th>PS27</th>
<th>REG21</th>
</tr>
</thead>
<tbody>
<tr>
<td>Details on</td>
<td>p. 14</td>
<td>p. 15</td>
<td>p. 16</td>
<td>p. 17</td>
<td>p. 18</td>
<td>p. 19</td>
<td>p. 20</td>
<td>p. 21</td>
</tr>
</tbody>
</table>

Application

- Process monitoring for cleanrooms (Pa, °C, % rH), with stainless steel front
- Process monitoring panel aluminium, anodised (optional: with calibration port) (Pa, °C, % rH)
- High precision, freely scalable pressure transmitter for critical applications
- Measuring transmitter with very small dimensions — ideal for the control cabinet
- High precision, freely scalable pressure transmitter for natural gas
- For standard applications. PIZ in two wire technology
- A basic sensor for simple applications
- Measurement and regulation of pressure

Housing installation

- Installed in wall (panel)
- Mounted on a wall/top-hat rail
- Rack

Max. measurement range

- ± 250 Pa
- ± 100 kPa
- 0...100 kPa
- ± 100 kPa

Min. measurement range

- ± 100 Pa
- ± 10 Pa
- 0...250 Pa
- ± 50 Pa

Margin of error

- ± 0.5 % FS (standard)
- ± 0.2 % FS (optional)
- ± 0.5 % FS (standard)
- ± 0.2 % FS (optional)
- ± 0.5 % FS (standard)
- ± 0.2 % FS (optional)
- ± 0.5 % FS (standard)
- ± 0.2 % FS (optional)
- ± 0.5 % FS (standard)
- ± 0.2 % FS (optional)
- ± 0.5 % FS (standard)
- ± 0.2 % FS (optional)
- ± 0.5 % FS (standard)
- ± 0.2 % FS (optional)
- ± 0.5 % FS (standard)

Square-root (volume flow)

- -
- -
- ✓
- ✓ 3)
- ✓
- -
- -
- -

Display

- ✓
- ✓
- optional
- -
- optional
- -
- optional
- -

1) for measurement ranges ≤ 50 kPa
2) for measurement ranges ≥ 250 Pa and ≤ 50 kPa
3) optionally with stat. pressure sensor and temperature analogue output for compensation

ACCESSORIES

Certificates (see p. 42)

- DAkkS calibration certificate (German)
- DAkkS calibration certificate (English)
- ISO factory calibration certificate

Connecting components

- Silicone tubing ID 5 mm, OD 9 mm, red (please state length required)
- Silicone tubing ID 5 mm, OD 9 mm, blue (please state length required)
- Norprene tubing (please state length required)
- Y-piece for tubing

Pressure ports

We can supply a wide range of customer-specific pressure ports, e.g. various cutting ring couplings or hose connectors.

User software

You can set the parameters for our instruments or monitor and record measurements using a PC via a USB or RS232 interface. These features are supported by our free user software. This also allows you to transfer your settings to other devices by saving and reusing them.

Our user software is compatible with the following pressure transmitters: PUC24, PUC28 (K), P26, P34 and P29.

You can download the file here:

www.halstrup-walcher.de/en/software