### Features

- Compact differential pressure transmitter for basic applications
- ± measurement ranges and asymmetric measurement ranges
- Either with one fixed measurement range or toggling between 4 different measurement ranges (can be selected via jumpers, optional)
- Optionally with 2-wire technology (ZWL)
- With optional display
- With optional relay (6 A)
- Suitable for top-hat rail mounting and wall surface installation

### Measurement ranges

<table>
<thead>
<tr>
<th>Measurement range C</th>
<th>Standard[a] (e.g. 0..100 Pa)</th>
<th>toggles between: 100 Pa/250 Pa/500 Pa/1000 Pa</th>
<th>toggles between: 250 Pa/500 Pa/1000 Pa/2.5 kPa</th>
<th>toggles between: 1 kPa/2.5 kPa/5 kPa/10 kPa</th>
<th>toggles between: 10 kPa/25 kPa/50 kPa/100 kPa</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

[a] others available upon request, also ± measurement ranges

### Margin of error

<table>
<thead>
<tr>
<th>Margin of error</th>
<th>± 2 % of the set value for ≥ 100 Pa or ± 3 % of the set value for 50 Pa</th>
</tr>
</thead>
</table>

### Temperature coefficient

<table>
<thead>
<tr>
<th>Temperature coefficient span</th>
<th>0.1 % of max. value/K</th>
</tr>
</thead>
</table>

### Overload capacity

<table>
<thead>
<tr>
<th>Overload capacity</th>
<th>50 kPa for measurement ranges ≤ 2 kPa</th>
<th>200 kPa for measurement ranges &gt; 2 kPa</th>
<th>500 kPa for measurement ranges &gt; 10 kPa</th>
</tr>
</thead>
</table>

### Medium

<table>
<thead>
<tr>
<th>Medium</th>
<th>air, all non-aggressive gases</th>
</tr>
</thead>
</table>

### Max. system pressure

<table>
<thead>
<tr>
<th>Max. system pressure</th>
<th>10 kPa for measurement ranges ≤ 10 kPa</th>
</tr>
</thead>
</table>

### Sensor response time

<table>
<thead>
<tr>
<th>Sensor response time</th>
<th>20 ms</th>
</tr>
</thead>
</table>

### Time constants

<table>
<thead>
<tr>
<th>Time constants</th>
<th>20 ms..4 s adjustable (factory-provided)</th>
</tr>
</thead>
</table>

### Operating temperature

<table>
<thead>
<tr>
<th>Operating temperature</th>
<th>-20...60 °C with Display 0..50 °C</th>
</tr>
</thead>
</table>

### Storage temperature

<table>
<thead>
<tr>
<th>Storage temperature</th>
<th>-20...70 °C</th>
</tr>
</thead>
</table>

### Power supply

<table>
<thead>
<tr>
<th>Power supply B</th>
<th>24 V AC/DC ± 10 % without galvanic separation</th>
<th>15...32 V DC two-wire (only for A = 4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZWL</td>
<td>AC/DC</td>
<td></td>
</tr>
</tbody>
</table>

### Contact point D

<table>
<thead>
<tr>
<th>Contact point D</th>
<th>none 0</th>
<th>1 relay (changeover contacts)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>max. 230 V AC, 6 A (min. required switching capacity 300 mW) (not for two-wire)</td>
</tr>
</tbody>
</table>

### LCD E

<table>
<thead>
<tr>
<th>LCD E</th>
<th>none 0</th>
<th>4-digit 1</th>
</tr>
</thead>
</table>

### Time constant F

<table>
<thead>
<tr>
<th>Time constant F</th>
<th>20 msec 20</th>
<th>30 msec 30</th>
<th>60 msec 60</th>
<th>120 msec 120</th>
<th>250 msec 250</th>
<th>500 msec 500</th>
<th>1 sec 1</th>
<th>2 sec 2</th>
<th>4 sec 4</th>
</tr>
</thead>
</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>PS 27</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Relay parameter can be pre-set on request.
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

### Min. measurement range

- ± 100 Pa
- ± 10 Pa
- ± 250 Pa
- ± 50 Pa

### Degree of measurement uncertainty

- ± 0.5 % 1) (standard)
- ± 0.2 % 1) (optional)
- ± 0.5 % 1) (standard)
- ± 0.2 % 1) (optional)
- ± 0.5 % 1) (standard)
- ± 0.2 % 1) (optional)
- ± 0.5 % 1) (standard)
- ± 0.5 % 1) (standard)
- ± 1 % 1) (for measurement ranges ≥ 250 Pa)
- ± 2 % (for 50 Pa)

### Square-root (volume flow)

- -
- -
- ✓ 2)
- ✓
- -
- -
- -

### Display

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

1) of max. value
2) for measurement ranges ≥ 250 Pa
3) optionally with stat. pressure sensor and temperature analogue output for compensation

### 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.

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### Certificates (see p. 42)

- Order no.
- 9601.0003
- 9601.0004
- 9601.0002

### 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](http://www.halstrup-walcher.de/en/software)