**Features**

- Differential pressure transmitter with very small dimensions – ideal for control cabinet installation
- Optional: P-/T-compensated volume flow (temperature analogue input and internal stat. pressure sensor)
- Optionally with relay
- Zero-point correction prevents zero-point drift
- Built-in valve provides a high level of overpressure protection
- Volume flow can be configured via k-factor, dPmax / Vmax or 20 individual values
- USB interface: via PC-software scaling, characteristic line form and many other parameters can be set
- Free software available at www.halstrup-walcher.de/en/software
- Delivery possible already completely integrated into the control cabinet (on request)

**Measured data differential pressure**

| Measurement ranges (also a measurement range) others available upon request | 10/50/100/250/500 Pa |
| Temperature coefficient span | ±0.2 % or ±0.5 % of max. value |
| Temperature coefficient zero point | ±0 % (cyclical zero-point correction) |
| Max. system pressure / Overload capacity | 400 kPa measurement ranges ≥ 2.5 kPa 200 x measurement ranges < 2.5 kPa |
| Medium | air, all non-aggressive gases |
| Sensor response time | 25 ms |
| Time constants | 25 ms .. 60 s (adjustable) |
| Operating temperature | 10 .. 50°C |
| Storage temperature | -10 .. 70°C |
| Power consumption | approx. 6 VA |
| Weight | approx. 450 g |
| Connections | Screw terminals (connection capacity 0.25 .. 2.5 mm²) |
| USB interface | USB 2.0 Full-Speed Slave (Mini USB) |
| Pressure ports | for tubing NW 4 or 6 mm |
| Protection class | IP20 |
| Certificates | CE |

**Power supply**

24 VAC/DC ± 10 %

**Output (linear / root extracted) 1)**

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>0..10 V (R&lt;sub&gt;L&lt;/sub&gt; ≥ 2 kΩ)</td>
<td>Measurement range</td>
</tr>
<tr>
<td>0..20 mA (R&lt;sub&gt;L&lt;/sub&gt; ≤ 500 Ω)</td>
<td>e.g. 0 .. 10 Pa, -10 .. 50 mbar, ±100 mmHg (etc.)</td>
</tr>
<tr>
<td>4..20 mA (R&lt;sub&gt;L&lt;/sub&gt; ≤ 500 Ω)</td>
<td></td>
</tr>
</tbody>
</table>

1) output signals can be configured freely

**Contact points**

| D |
| none | 0 |
| 2 relays (changeover contacts) max. 230 VAC, 6 A | 2 |

**Order code**

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>P34</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

**Can be pre-set on request:**

- Time constant, relay parameter, analogue output root-extracted / linear, deactivation of the cyclic zeroing
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>PUC 24</th>
<th>PUC 28 (K)</th>
<th>P 26</th>
<th>P 34</th>
<th>P 29</th>
<th>PU / PI / PIZ</th>
<th>PS 27</th>
<th>REG 21</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 clean-rooms (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** (0.3 Pa margin of error for the reference)
- ± 0.5 % (standard)
- ± 0.2 % (optional)
- ± 0.5 % (optional)
- ± 0.2 % (optional)
- ± 0.5 % (optional)
- ± 0.2 % (optional)
- ± 1 % (optional)
- ± 3 % (for 50 Pa of the set value)

**Square-root (volume flow)**
- -
- -
- ✓
- ✓ 3)
- ✓
- -
- -
- -

**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

**ACCESSORIES**

**Certificates (see p. 42)**
- DAkkS calibration certificate (German)
- DAkkS calibration certificate (English)
- ISO factory calibration certificate

**Order no.**
- 9601.0003
- 9601.0004
- 9601.0002

**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

**Order no.**
- 9601.0160
- 9601.0161
- 9061.0132
- 9601.0171

**User software**

You can set the parameters for our instruments or monitor and record measurements using a PC via a USB or RS 232 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: PUC 24, PUC 28 (K), P 26, P 34 and P 29.

You can download the file here: [www.halstrup-walcher.de/en/software](http://www.halstrup-walcher.de/en/software)

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