

|  |  |
|--|--|
| Measurement ranges<br>(also $\pm$ measurement ranges)<br>others available upon request | 10/50/100/250/500 Pa<br>1/2.5/5/10/20/50/100 kPa<br>freely scalable from 10..100 %<br>within a measurement range |
| Margin of error  | $\pm 0.2\%$ or $\pm 0.5\%$ of the scaled range + 0.3 Pa (40..100 % of max. value)                                |
| Temperature coefficient span   | 0.03 % of max. value/K (10..50 °C)   |
| Temperature coefficient zero point   | $\pm 0\%$ (cyclical zero-point correction)   |
| Max. system pressure/<br>Overload capacity   | 600 kPa for measurement ranges $\geq$ 2.5 kPa<br>200 x for measurement ranges $<$ 2.5 kPa                        |
| Medium   | air, all non-aggressive gases  |
| Sensor response time   | 25 ms  |
| Time constants   | 25 ms..40 s (adjustable)   |
| Operating temperature  | 10..50 °C  |
| Storage temperature  | -10..70 °C   |
| Power consumption  | approx. 6 VA   |
| Weight   | approx. 750 g  |
| Cable glands   | 3 x M 16   |
| Pressure ports   | for tubing NW 6 mm,<br>others available on request   |
| Protection class   | IP65, with USB: IP40   |
| Certificates   | CE, CSA  |

| Output (linear/<br>root-extracted) <sup>1)</sup>   | A |
|--|---|
| 0..10 V ( $R_L \geq 2 \text{ k}\Omega$ )           | 1 |
| 0..20 mA ( $R_L \leq 500 \Omega$ )                 | 0 |
| 4..20 mA ( $R_L \leq 500 \Omega$ )                 | 4 |
| $\pm 5 \text{ V}$ ( $R_L \geq 2 \text{ k}\Omega$ ) | 5 |

<sup>1)</sup> output signals can be configured freely

| Power supply                                   | B       |
|--|---------|
| 24 VAC/DC $\pm 10\%$                           | 24ACDC  |
| 24 VAC $\pm 6\%$<br>(with galvanic separation) | 24AC    |
| 230/115 VAC -15 %                              | 230/115 |

| Measurement<br>range  | C |
|---|---|
| Measurement range<br>e.g. 0..10 Pa,<br>-10..50 mbar,<br>$\pm 100 \text{ mmHg}$ (etc.) |   |

| Margin of error           | D |
|---------------------------|---|
| $\pm 0.2\%$ <sup>2)</sup> | 2 |
| $\pm 0.5\%$ <sup>2)</sup> | S |

<sup>2)</sup> of the scaled range (40..100 % of max. value) (min. 0.3 Pa)

| Display + keyboard                 | E  |
|------------------------------------|----|
| none                               | 0  |
| multi-coloured LCD<br>and keyboard | LC |



| Contact points                                      | F |
|---|---|
| none  | 0 |
| air meter   | 1 |
| 2 relays (changeover contacts)<br>max. 230 VAC, 6 A | 2 |

| Data interface  | G  |
|---|----|
| none  | 0  |
| USB (data cable supplied)                                     | U0 |
| External zero-point calibration                               | 0X |
| External zero-point calibration and USB (data cable supplied) | UX |

| Order<br>code | A | B | C | D | E | F | G |
|---------------|---|---|---|---|---|---|---|
| P 26          | - | - | - | - | - | - | - |

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

Time constant, relay parameter, analogue output root-extracted / linear, deactivation of the cyclic zeroing

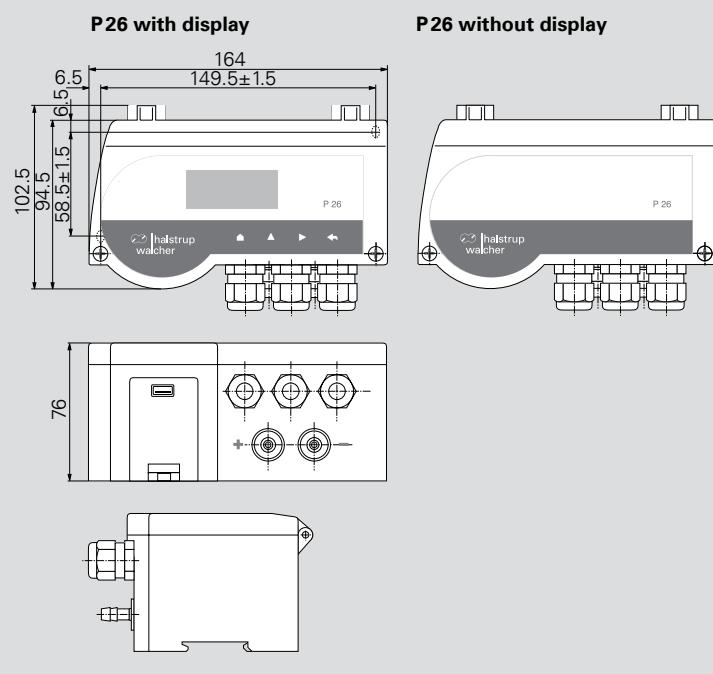


#### Features

- High precision differential pressure transmitter for top-hat rail or wall mounting (air-conditioning, cleanroom, process)
- Wide range of units available for pressure and volume flow, also  $\pm$  measurement ranges
- Scalable measurement ranges and units
- Zero-point correction prevents zero-point drift
- Built-in valve provides a high level of overpressure protection
- Multilingual menu (English/French/German/Italian)

#### Optional

- Contact points with adjustable switching outputs
- Set the zero-point via the interface
- USB interface (free parameterisation software at [www.halstrup-walcher.com](http://www.halstrup-walcher.com))
- Air meter function



# 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. You can find more information about pressure sensor technology on p. 6.

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

|  | <b>PUC24</b>  | <b>PUC28(K)</b>  | <b>P26</b>   | <b>P34</b>   | <b>P29</b>   | <b>PU/PI/PIZ</b>  | <b>PS27</b>  | <b>REG21</b>                                   |
|--|---|--|--|--|--|---|--|--|
| <b>Details on</b>                        | <b>p. 18</b>  | <b>p. 19</b>   | <b>p. 20</b>   | <b>p. 21</b>   | <b>p. 22</b>   | <b>p. 23</b>  | <b>p. 24</b>   | <b>p. 25</b>                                   |
| <b>Application</b>                       | Process monitoring for clean-rooms (Pa, °C, % rH), with stainless steel front | Process monitoring panel (optional: with calibration port) (Pa, °C, % rH), aluminium, anodised | High precision, scalable differential pressure transmitter   | Measuring transmitter with very small dimensions – ideal for the control cabinet | Like P26, for natural gas  | For standard applications. PIZ: PI in two wire technology                 | A basic sensor for simple applications                             | Measurement and regulation of pressure         |
| <b>Housing installation</b>              | Installed in wall (panel)   |  |  |  | Mounted on a wall/top-hat rail                                       |   |  | Rack   |
| <b>Max. measurement range</b>            | ± 250 Pa  |  |  |  | ± 100 kPa  |   |  |  |
| <b>Min. measurement range</b>            | ± 100 Pa  |  | ± 10 Pa  |  | ± 250 Pa   |   | ± 50 Pa  |  |
| <b>Degree of measurement uncertainty</b> | ± 0.5 % <sup>1)</sup> (standard)  |  | ± 0.2 % of the scaled range (40..100 % of max. value) <sup>2)</sup> (optional)<br>± 0.5 % of the scaled range (40..100 % of max. value) <sup>2)</sup> (standard) |  | ± 0.2 % <sup>1)</sup> (optional)<br>± 0.5 % <sup>1)</sup> (standard) | ± 0.2 % <sup>1,3)</sup><br>± 0.5 % <sup>1,2)</sup><br>± 1 % <sup>1)</sup> | ± 2 %<br>(≥ 100 Pa)<br>or ± 3 %<br>(for 50 Pa)<br>of the set value | ± 0.5 % <sup>1,2)</sup><br>± 1 % <sup>1)</sup> |
| <b>Square-root (volume flow)</b>         | -   | -  | ✓  | ✓ <sup>4)</sup>  | ✓  | -   | -  | -  |
| <b>Display</b>                           | ✓   | ✓  | optional   | -  | optional   | optional  | optional   | ✓  |

<sup>1)</sup> max. value of upper range value

<sup>2)</sup> but not less than 0.3 Pa

<sup>3)</sup> for measurement ranges ≥ 250 Pa only

<sup>4)</sup> optionally with stat. pressure sensor and temperature analogue input for compensation

## ACCESSORIES

### Certificates (see p. 41)

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)  | 9601.0160 |
| Silicone tubing ID 5 mm, OD 9 mm, blue (please state length required) | 9601.0161 |
| Norprene tubing (please state length required)                        | 9061.0132 |
| Y-piece for tubing  | 9601.0171 |

### Pressure ports

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

