Differential pressure gauge with electrical output signal
Model A2G-15

Applications

- Differential pressure monitoring for filters
- Pressure monitoring for ventilators
- Overpressure monitoring for clean rooms and also under- and overpressure monitoring for laboratories and operating rooms

Special features

- Electrical output signal DC 0 … 10 V (3-wire) or 4 … 20 mA (2-wire)
- Simple and fast mounting via threaded bezel
- Separated construction of measuring chamber and display area
- Integrated sealing element for direct mounting in a ventilation duct or instrument panel
- Available as a built-in or add-on version

Description

The model A2G-15 differential pressure gauge with electrical output signal is used for monitoring the differential pressure in ventilation and air-conditioning applications. The measuring ranges cover from 0 … 100 Pa to 0 … 6,000 Pa. Plus/minus ranges can be fulfilled from -50 … +50 Pa to -1,500 … +1,500 Pa.

Electrical output signals for both measurands (DC 0 … 10 V or 4 … 20 mA) enable the direct connection to control systems or the building automation system.

The separated construction of the measuring chamber and display area ensures that impurities from the process air do not settle on the back of the window.

The differential pressure gauge is available in IP54 and IP65 ingress protection as well as two different mounting versions.

Built-in version

The built-in version with threaded bezel is notable for its fast and tool-free mounting. The built-in case features two back mount connections with a G ½ female thread, into which matching threaded pressure connections are screwed.

Add-on version

With the add-on version, the add-on case is attached with three screws and then the pressure measuring system is fitted into the case. The add-on case features two lower-mount connections with a G ½ female thread, into which matching threaded pressure connections are screwed. The position of each connection can be altered through 90° by rotating the add-on case.
Specifications

<table>
<thead>
<tr>
<th>Differential pressure gauge with electrical output signal, model A2G-15</th>
</tr>
</thead>
</table>
| **Version** | ■ Standard version  
■ Silicone-free version |
| **Nominal size in mm** | 110 |
| **Measuring range** | ■ 0 … 100 Pa to 0 … 6,000 Pa  
■ -50 … +50 Pa to -1,500 … +1,500 Pa  
Other plus/minus ranges on request |
| **Unit** | ■ Pa  
■ kPa  
■ inWC  
■ mmWC  
■ mbar |
| **Scale** | ■ Single scale  
■ Dual scale |
| **Accuracy class** |  
Span ≥ 250 Pa: 3.0  
Span 101 … 249 Pa: 5.0  
Span ≤ 100 Pa: 10.0 |
| **Process connection** | G ¾ female  
Threaded pressure connection for measuring hoses with inner diameter 4 … 6 mm (see “Accessories”) |
| **Movement** | Contact-free transmission (SWISS MOVEMENT) |
| **Output signal** | ■ DC 0 … 10 V, 3-wire  
■ 4 … 20 mA, 2-wire |
| **Supply voltage U_B** | DC 15 … 35 V |
| **Electrical connection** | Cable gland M12 |
| **Materials** |  
Case components: Plastic, glass-fibre reinforced  
Without  
Separating diaphragm: Silicone  
EPDM (with silicone-free version)  
Window: Polycarbonate (UV stabilised)  
Dial: Aluminium  
Pointer: Plastic, black  
Mark pointer: Without  
Plastic, red  
Medium: Air  
Non-flammable and non-aggressive gases |
| **Permissible temperature** |  
Medium: -16 … +50 °C [-3 … +122 °F]  
Ambient: -30 … +80 °C [-22 … +176 °F]  
Max. working pressure (static pressure): 20 kPa  
Ingress protection per IEC/EN 60529: ■ IP54  
■ IP65  
Weight (pressure measuring system): 255 g |

**Electrical connection**

**DC 0 … 10 V, 3-wire**

- 1: GND  
- 2: 0 … 10 V  
- 3: DC 24 V  
- DC 15 … 35 V  
- U_B  

**4 … 20 mA, 2-wire**

- 1: 4 … 20 mA  
- 2: 4 … 20 mA  
- DC 15 … 35 V  
- U_B
Approvals (option)

<table>
<thead>
<tr>
<th>Logo</th>
<th>Description</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>EAC</td>
<td>Import certificate</td>
<td>Eurasian Economic Community</td>
</tr>
<tr>
<td>GOST</td>
<td>Metrology, measurement tech.</td>
<td>Russia</td>
</tr>
<tr>
<td>KzInMetr</td>
<td>Metrology, measurement tech.</td>
<td>Kazakhstan</td>
</tr>
<tr>
<td>MTSCHS</td>
<td>Permission for commissioning</td>
<td>Kazakhstan</td>
</tr>
<tr>
<td>UkrSEPRO</td>
<td>Metrology, measurement tech.</td>
<td>Ukraine</td>
</tr>
</tbody>
</table>

Certificates (option)

- Measurement report per EN 837
- 2.2 test report per EN 10204
- 3.1 inspection certificate per EN 10204

Approvals and certificates, see website

Mounting versions

Built-in version ¹)

Add-on version

¹) For wall thicknesses 1 … 70 mm

Legend

1) Pressure measuring system
2) Red mark pointer
3) Built-in case
4) Threaded bezel
5) Cable gland
6) Add-on case
Dimensions in mm

**Built-in version with threaded bezel**

**Variant 1**

- 3 x flat head screw
- ISO 7050 ST4, 2 x 16

**Variant 2**

- (view without mounting ring)

**Add-on version**

**Variant 1**

- 3 x flat head screw
- ISO 7050 ST4, 2 x 16

**Variant 2**

Legend

- **Variant 1**: With threaded pressure connection, straight, Ø 4 ... 6 mm
- **Variant 2**: With threaded pressure connection, angled, Ø 4 ... 6 mm
## Accessories

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<tr>
<th>Description</th>
<th>Order number</th>
</tr>
</thead>
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<tr>
<td><strong>Process connections</strong></td>
<td></td>
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<tr>
<td>2 x threaded pressure connection, straight, Ø 4 … 6 mm</td>
<td>40423607</td>
</tr>
<tr>
<td>2 x threaded pressure connection, angled, Ø 4 … 6 mm</td>
<td>40423526</td>
</tr>
<tr>
<td>With mounting thread G ¼ for pipes 6.35 mm/¼&quot;</td>
<td>40232867</td>
</tr>
<tr>
<td>Combi hose connection for pressure measuring hoses Ø 4 … 7 mm</td>
<td>40232484</td>
</tr>
<tr>
<td><strong>Static duct probes with combi hose connection for pressure measuring</strong></td>
<td></td>
</tr>
<tr>
<td>hoses Ø 4 … 7 mm</td>
<td></td>
</tr>
<tr>
<td>Insertion length 100 mm</td>
<td>40232981</td>
</tr>
<tr>
<td>Insertion length 150 mm</td>
<td>40232999</td>
</tr>
<tr>
<td>Insertion length 200 mm</td>
<td>40233006</td>
</tr>
<tr>
<td><strong>Measuring hoses</strong></td>
<td></td>
</tr>
<tr>
<td>PVC hose, inner diameter 4 mm, roll at 25 m</td>
<td>40217841</td>
</tr>
<tr>
<td>PVC hose, inner diameter 6 mm, roll at 25 m</td>
<td>40217850</td>
</tr>
<tr>
<td>Silicone hose, inner diameter 4 mm, roll at 25 m</td>
<td>40208940</td>
</tr>
<tr>
<td>Silicone hose, inner diameter 6 mm, roll at 25 m</td>
<td>40208958</td>
</tr>
<tr>
<td><strong>Duct connectors for measuring hoses Ø 4 … 6 mm</strong></td>
<td>40217507</td>
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<tr>
<td><strong>Weather protection</strong></td>
<td>40241564</td>
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## Ordering information
Model / Version / Measuring range / Output signal / Unit / Scale / Ingress protection / Mark pointer / Mounting version / Accessories / Approvals / Certificates / Options

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