

Differential pressure gauge

For ventilation and air-conditioning, NS 110

Model A2G-10

WIKA data sheet PM 07.40



Applications

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

Special features

- Fast, tool-free mounting via threaded bezel
- Separated construction of measuring chamber and scale range
- Integrated sealing element for direct installation in a ventilation duct or instrument panel
- Available as a built-in or add-on version
- Individual design of dial and scale possible



Differential pressure gauge, built-in version with threaded bezel, model A2G-10

Standard article



Description

The model A2G-10 differential pressure gauge 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. Compound measuring ranges can be fulfilled from -50 ... +50 Pa to -3,000 ... +3,000 Pa.

The separated construction of 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 G 1/8 female thread connections, 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 G 1/8 female thread connections, 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

| Basic information | |
|--|---|
| Version | <ul style="list-style-type: none"> ■ Standard version ■ Silicone-free version |
| Nominal size | 110 mm [4.33 in] |
| Measuring range | <ul style="list-style-type: none"> ■ 0 ... 100 Pa to 0 ... 6,000 Pa ■ -50 ... +50 Pa to -3,000 ... +3,000 Pa Other compound measuring ranges on request |
| Unit | <ul style="list-style-type: none"> ■ Pa ■ kPa ■ inWC ■ mmWC ■ mbar |
| Scale | <ul style="list-style-type: none"> ■ Single scale ■ Dual scale |
| Accuracy class | |
| Span ≥ 250 Pa | 3.0 |
| Span < 250 Pa ¹⁾ | 5.0 |
| Process connection | G 1/8 female thread, threaded pressure connection for measuring hoses with inner diameter 4 ... 6 mm [0.16 ... 0.24 in] |
| | → see "Accessories and spare parts" |
| Movement | Contact-free transmission (SWISS MOVEMENT) |
| Materials | |
| Case components | Plastic, glass-fibre reinforced |
| Separating diaphragm | <ul style="list-style-type: none"> ■ Silicone ■ EPDM (with silicone-free version) |
| Window | Polycarbonate (UV stabilised) |
| Dial | Aluminium |
| Pointer | Plastic, black |
| Mark pointer | <ul style="list-style-type: none"> ■ Without ■ Plastic, red |
| Medium | <ul style="list-style-type: none"> ■ Air ■ Non-flammable and non-aggressive gases |
| Max. operating pressure (static pressure) | 20 kPa |
| Ingress protection per IEC/EN 60529 | <ul style="list-style-type: none"> ■ IP54 ■ IP65 |
| Weight (pressure measuring system) | 235 g [0.52 lb] |

1) Silicone-free version EPDM on request

| Operating conditions | |
|----------------------------------|----------------------------------|
| Medium temperature range | -20 ... +50 °C [-4 ... +122 °F] |
| Ambient temperature range | -30 ... +80 °C [-22 ... +176 °F] |

Optional approvals

| Logo | Description | Region |
|---|--|------------|
|  | PAC Kazakhstan Metrology, measurement technology | Kazakhstan |

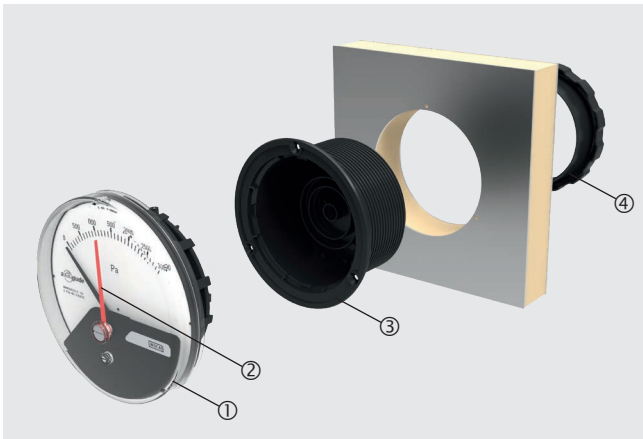
Certificates

| Description | |
|---------------------|--|
| Certificates | <ul style="list-style-type: none"> ■ 2.2 test report per EN 10204 (e.g. state-of-the-art manufacturing, material proof, indication accuracy) ■ 3.1 inspection certificate per EN 10204 (e.g. material proof for wetted metal parts, indication accuracy, calibration certificate) ■ Measurement report per EN 837 |

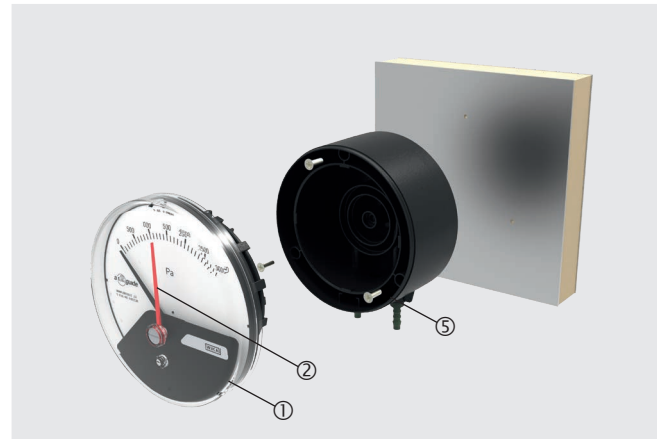
→ For approvals and certificates, see website

Mounting versions

Built-in version ¹⁾



Add-on version



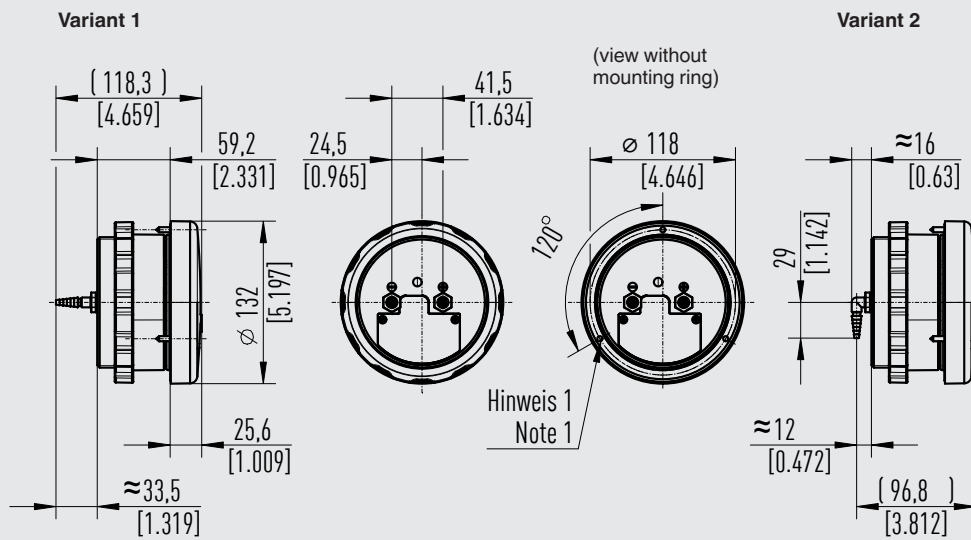
1) Installation for wall thicknesses of 1 ... 70 mm [0.04 ... 2.76 in]

Legend

- ① Pressure measuring system
- ② Red mark pointer
- ③ Built-in case
- ④ Threaded bezel
- ⑤ Add-on case

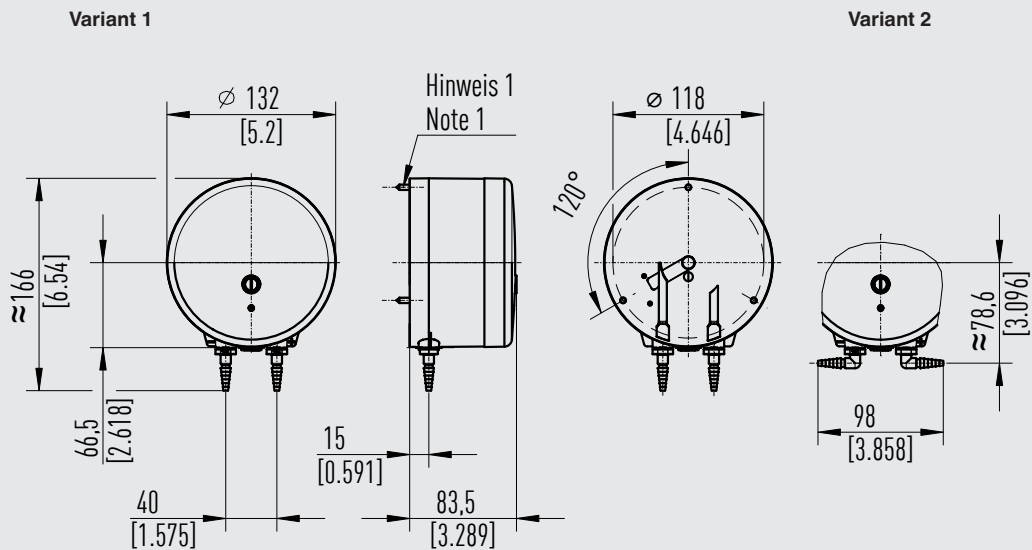
Dimensions in mm [in]

Built-in version with threaded bezel



40455780.01

Add-on version



40455774.01









Legend

Variant 1: With threaded pressure connection, straight, $\varnothing 4 \dots 6$ mm [0.16 ... 0.24 in]

Variant 2: With threaded pressure connection, angled, $\varnothing 4 \dots 6$ mm [0.16 ... 0.24 in]

Note: 3 x countersunk head screw ISO 7050 ST4.2 x 16

Accessories and spare parts

| Model | Description | Order number |
|---|---|--------------|
| | Process connections | |
|  | Threaded pressure connection, straight, Ø 4 ... 6 mm [0.16 ... 0.24 in] | 40423607 |
|  | Threaded pressure connection, angled, Ø 4 ... 6 mm [0.16 ... 0.24 in] | 40423526 |
|  | With mounting thread G 1/8 for pipes 6.35 mm [1/4"] | 40232867 |
|  | Combi hose connection for pressure measuring hoses Ø 4 ... 7 mm [0.16 ... 0.28 in] | 40232484 |
|  | Static duct probes with combi hose connection for pressure measuring hoses Ø 4 ... 7 mm [0.16 ... 0.28 in] | |
| | Insertion length 100 mm [3.94 in] | 40232981 |
| | Insertion length 150 mm [5.91 in] | 40232999 |
| | Insertion length 200 mm [7.87 in] | 40233006 |
|  | Measuring hoses | |
| | PVC hose, inner diameter 4 mm [0.16 in], roll of 25 m [82 ft] | 40217841 |
| | PVC hose, inner diameter 6 mm [0.24 in], roll of 25 m [82 ft] | 40217850 |
| | Silicone hose, inner diameter 4 mm [0.16 in], roll of 25 m [82 ft] | 40217906 |
| | Silicone hose, inner diameter 6 mm [0.24 in], roll of 25 m [82 ft] | 40217914 |
|  | Duct connectors for measuring hoses Ø 4 ... 6 mm [0.16 ... 0.24 in] | 40217507 |
|  | Weather protection | 40241564 |

Ordering information

Model / Version / Measuring range / Unit / Scale / Ingress protection / Mark pointer / Mounting version / Accessories / Approvals / Certificates / Options



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