

Differential pressure gauge with electrical output signal

Model A2G-15

WIKA data sheet PV 17.40



For further approvals,
see page 3

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

- 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 scale range
- 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. Compound measuring ranges can be fulfilled from -50 ... +50 Pa to -3,000 ... +3,000 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 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 in two different mounting versions.



Differential pressure gauge with electrical output signal, add-on version, model A2G-15

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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

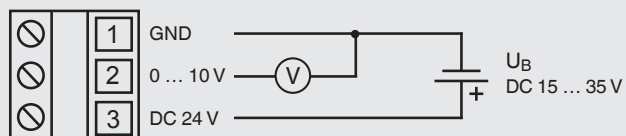
Basic information	
Version	<ul style="list-style-type: none"> ■ Standard version ■ Silicone-free version
Nominal size	110 [4.33 in]
Measuring range	<ul style="list-style-type: none"> ■ 0 ... 100 Pa to 0 ... 6,000 Pa ■ -50 ... +50 Pa to -3,000 ... +3,000 Pa Other compound measuring ranges on request
Unit	<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 \geq 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)
Output signal	<ul style="list-style-type: none"> ■ DC 0 ... 10 V, 3-wire ■ 4 ... 20 mA, 2-wire
Auxiliary power U_B	DC 15 ... 35 V
Electrical connection	Cable gland M12
Materials	
Case components	<ul style="list-style-type: none"> ■ Plastic, glass-fibre reinforced ■ Without
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)	255 g [0.52 lb]

1) Silicone-free version EPDM on request

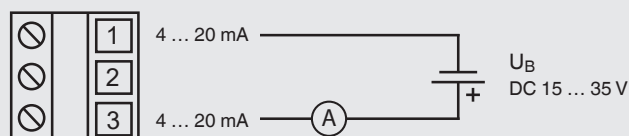
Operating conditions	
Medium temperature range	-16 ... +50 °C [-3 ... +122 °F]
Ambient temperature range	-30 ... +80 °C [-22 ... +176 °F]

Electrical connection

DC 0 ... 10 V, 3-wire



4 ... 20 mA, 2-wire



Approvals

Logo	Description	Region
CE	EU declaration of conformity	European Union
	EMC Directive	
	RoHS directive	

Optional approvals

Logo	Description	Region
Ⓢ	PAC Kazakhstan Metrology, measurement technology	Kazakhstan
-	PAC Ukraine Metrology, measurement technology	Ukraine

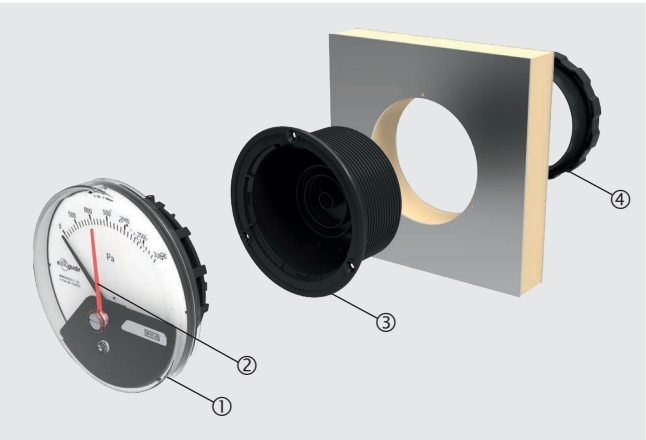
Certificates

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

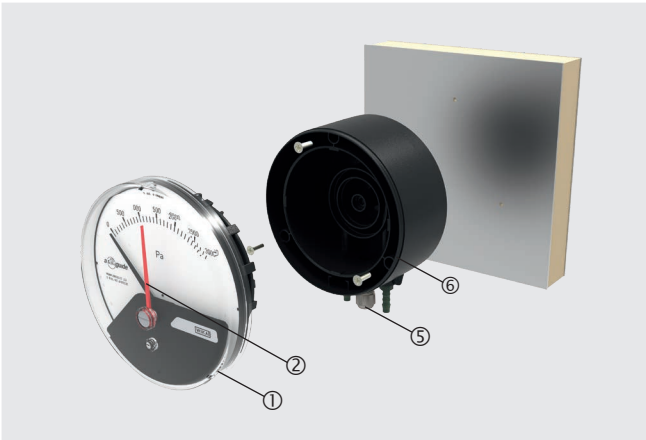
→ For approvals and certificates, see website

Mounting versions

Built-in version ¹⁾



Add-on version



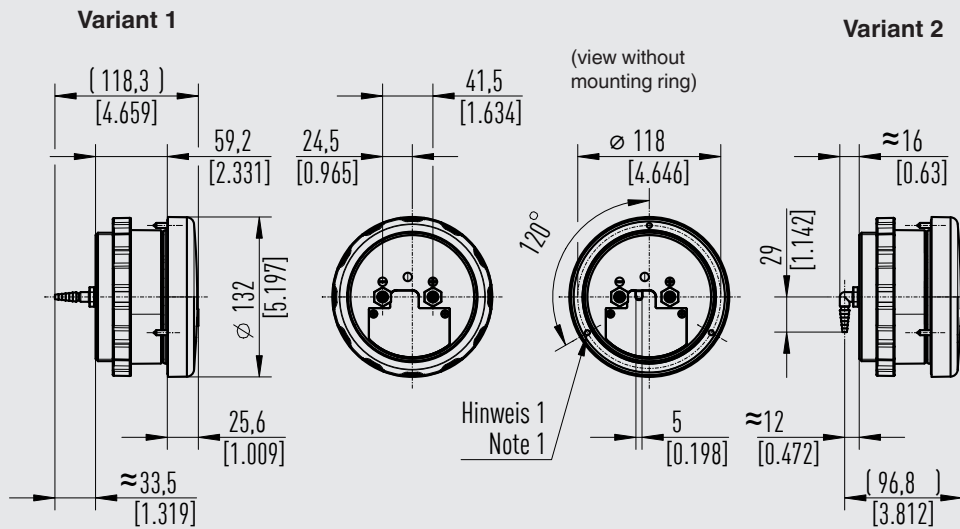
1) For wall thickness 1 ... 70 mm [0.04 ... 2.76 in]

Legend

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

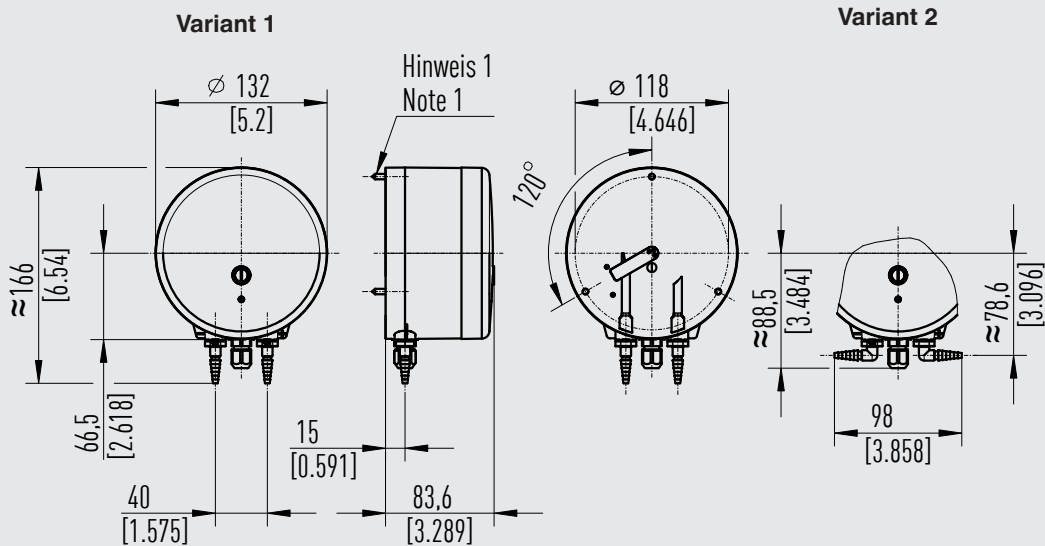
Dimensions in mm [in]

Built-in version with threaded bezel



40455836.01

Add-on version



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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 / Output signal / Unit / Scale / Ingress protection / Mark pointer /
Mounting version / Accessories / Approvals / Certificates / Options

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