

Differential pressure sensor

For ventilation and air-conditioning, with switch and digital display

Model A2G-45

WIKA data sheet PE 88.01



for further approvals
see page 4



Applications

- For monitoring the differential pressure of air and other non-inflammable and non-aggressive gases
- Differential pressure monitoring in filters and clean rooms

Special features

- Electrical output signal 0 ... 10 V (3-wire)
- Simple and quick mounting
- Maintenance-free
- Maximum operating pressure 20 kPa



Differential pressure sensor, model A2G-45

Description

The model A2G-45 differential pressure sensor combines a local differential pressure display, measured value transmission and differential pressure switching in a single instrument and is therefore mainly used in the ventilation and air-conditioning industry.

A second switch relay and/or an automatic zero point setting are optionally available. The compact and robust measuring instrument impresses with its intuitive operation. The setting of different switch points for rising and falling differential pressure make the A2G-45 very flexible and adaptable in use.

Through the use of the model A2G-45 differential pressure sensor the number of conventional measuring instruments otherwise used can be reduced considerably.

Specifications

Differential pressure sensor with switch and digital display, model A2G-45		
Measuring range	Variant 1: -500 ... +500 Pa ¹⁾ -300 ... +300 Pa ²⁾ -250 ... +250 Pa ²⁾ -100 ... +100 Pa ²⁾	Variant 2: 0 ... 2,500 Pa ¹⁾ 0 ... 1,000 Pa ²⁾ 0 ... 250 Pa ²⁾ 0 ... 100 Pa ²⁾
	8 measuring ranges can be selected at the instrument via jumpers (measuring ranges < 250 Pa: automatic zero point setting (AZ) recommended)	
Accuracy class	±1.5 %	
Type of mounting	Wall mounting	
Measuring element	Piezo measuring cell	
Case	Plastic (ABS), plastic (PC)	
Process connection	For hoses with inner diameter 4 mm	
Output signal	0 ... 10 V, load resistance min. 1 kΩ, relay 250 V, DC 30 V, 6 A	
Power supply U _B	AC 24 V ±10 % or DC 21 ... 35 V	
Electrical connection	Cable gland M16 and M20 Screw terminals max. 1.5 mm ²	
Permissible temperatures	<div> <div>■ Ambient temperature</div> <div>■ Medium temperature</div> </div> -20 ... +70 °C, 95 % r. h. (non-condensing) -10 ... +50 °C (-5 ... +50 °C for AZ models)	
Ingress protection	IP54	
Dimensions (H x W x D)	89.5 x 86.5 x 37.1 mm	
Weight	150 g	

1) Standard

2) Jumpers

Options

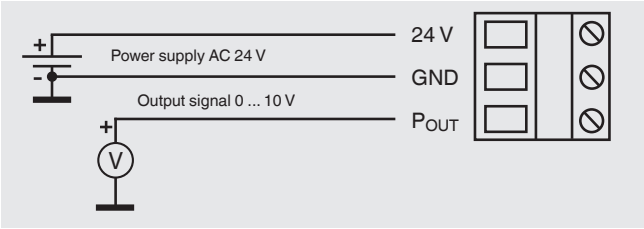
- Automatic zero point setting (AZ)
- 2 relay outputs (2R)
- Automatic zero point setting and 2 relay outputs (AZ-2R)
- 2 duct connectors
- 2 m PVC hose, inner diameter 4 mm

Automatic zero point setting (option)

The automatic zero point setting aligns the zero point from time to time so that a manual zero point setting is not necessary.

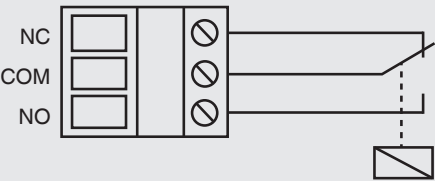
During the zero point setting (3 seconds every 10 minutes), the output signal and the display show the last measured value.

Electrical connection

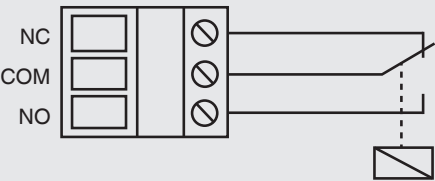


If the voltages being switched via the relays are not in accordance with SELV, then the power supply and signal/control cables of the relays should be installed so that they are separated. A separate cable entry is available for both.

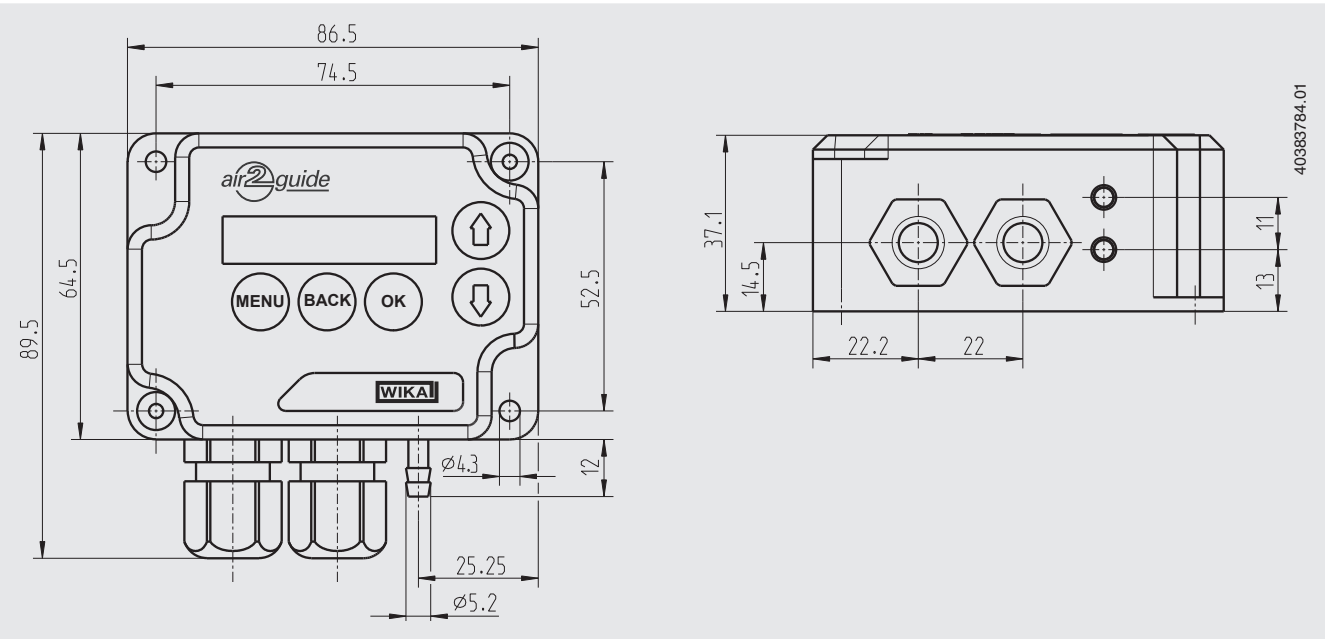
Relay 1 (standard)





Relay 2 (option)






Dimensions in mm



Accessories

Description	Order number
Measuring hoses	
 PVC hose, inner diameter 4 mm, roll at 25 m	40217841
PVC hose, inner diameter 6 mm, roll at 25 m	40217850
Silicone hose, inner diameter 4 mm, roll at 25 m	40208940
Silicone hose, inner diameter 6 mm, roll at 25 m	40208958
Duct connector for hose 4 and 6 mm	40217507
	

Approvals

Logo	Description	Country
	EU declaration of conformity <ul style="list-style-type: none">■ EMC directive■ RoHS conformity■ WEEE directive	European Union
	EAC (option) Import certificate	Eurasian Economic Community
	GOST (option) Metrology, measurement technology	Russia

Certificates (option)

- 2.2 test report
- 3.1 inspection certificate

Approvals and certificates, see website

Scope of delivery

- Differential pressure sensor with switch and digital display

Ordering information

Model / Measuring range / Options / Accessories

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