

Differential pressure transmitter Model A2G-50

WIKA data sheet PE 88.02



for further approvals
see page 5

air2guide

Applications

- For measuring differential pressures and static pressures
- Monitoring of filters
- Overpressure monitoring in clean rooms and laboratories

Special features

- Electrical output signal 0 ... 10 V or 4 ... 20 mA, can be selected directly at the instrument via jumpers
- Modbus® output signal (option)
- LC display (option)
- Maintenance-free
- Maximum operating pressure 20 kPa



Differential pressure transmitter, model A2G-50

Description

The model A2G-50 differential pressure transmitter is used for measuring differential pressures of gaseous media in ventilation and air-conditioning applications.

It is based on the piezoresistive measuring principle. This compact differential pressure transmitter offers excellent performance and high quality at an attractive price.

Electrical analogue output signals for both measurement parameters (0 ... 10 V or 4 ... 20 mA; adjustable in the instrument via jumpers) or the digital Modbus® versions enable the direct connection to control systems or the building automation system.

Specifications

Differential pressure transmitter, model A2G-50			
	Variant 1	Variant 2	Variant 3
Measuring element	Piezo measuring cell		
Measuring range	0 ... 2,500 Pa ¹⁾ 0 ... 2,000 Pa ²⁾ 0 ... 1,500 Pa ²⁾ 0 ... 1,000 Pa ²⁾ 0 ... 500 Pa ²⁾ 0 ... 250 Pa ²⁾ 0 ... 100 Pa ²⁾ -100 ... +100 Pa ²⁾	0 ... 7,000 Pa ¹⁾ 0 ... 5,000 Pa ²⁾ 0 ... 4,000 Pa ²⁾ 0 ... 3,000 Pa ²⁾ 0 ... 2,500 Pa ²⁾ 0 ... 2,000 Pa ²⁾ 0 ... 1,500 Pa ²⁾ 0 ... 1,000 Pa ²⁾	-250 ... +250 Pa ¹⁾ -100 ... +100 Pa ²⁾ -50 ... +50 Pa ²⁾ -25 ... +25 Pa ²⁾ 0 ... 250 Pa ²⁾ 0 ... 100 Pa ²⁾ 0 ... 50 Pa ²⁾ 0 ... 25 Pa ²⁾
	8 measuring ranges can be selected via jumpers (Measuring ranges < 250 Pa: Automatic zero adjustment (AZ) recommended)		8 measuring ranges can be selected via jumpers (Only available with automatic zero adjustment (AZ))
	Option: Digital indicator (D), automatic zero adjustment (AZ), digital indicator and automatic zero adjustment (AZ-D)		
Accuracy	±1.5 % +1 Pa (of measured pressure)		
Units (adjustable in the menu)	<ul style="list-style-type: none"> ■ Air flow m³/h, m³/s, l/s, cfm ■ Differential pressure Pa, kPa, mbar, inWC, mmWC 		
Process connection	Connecting nozzle (ABS), lower mount, for hoses with inner diameter 4 or 6 mm		
Power supply U_B	AC 24 V or DC 24 V ±10 %		
Electrical connection	Cable gland M16 Screw terminals max. 1.5 mm ²		
Output signal	DC 0 ... 10 V (3-wire) or 4 ... 20 mA (3-wire)		
Current consumption	< 1.0 W (DC 0 ... 10 V), < 1.2 W (4 ... 20 mA), < 1.3 W (Modbus®)		
Case	Plastic (ABS)		
Permissible temperatures	<ul style="list-style-type: none"> ■ Ambient temperature -20 ... +70 °C ■ Storage temperature -50 ... +70 °C ■ Medium temperature -10 ... +50 °C 		
Ingress protection	IP54		
Weight	150 g		

1) Standard

2) Jumpers

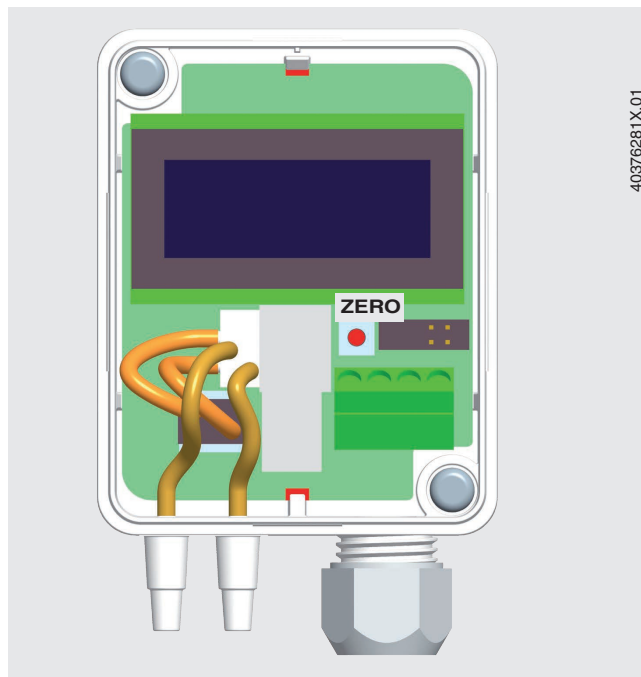
Modbus® version (option)

Modbus® communication	
Protocol	Modbus® via serial interface
Transfer mode	RTU
Interface	RS-485
Byte format	(11 bits) in RTU mode Coding system: 8 bits binary Bits per byte: - 1 Start bit - 8 data bits, lowest-order bit is sent first - 1 bit for parity - 1 stop bit
Baud rate	9,600, 19,200, 38,400 - adjustable in the configuration
Modbus® addresses	1 ... 247 addresses - adjustable in the configuration

Automatic zero adjustment (option)

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

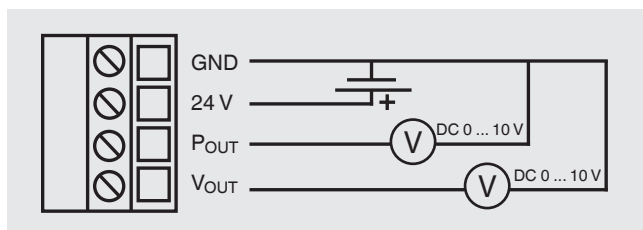
During the zero adjustment (3 seconds every 10 minutes), the output signal and the digital display show the last measured value.



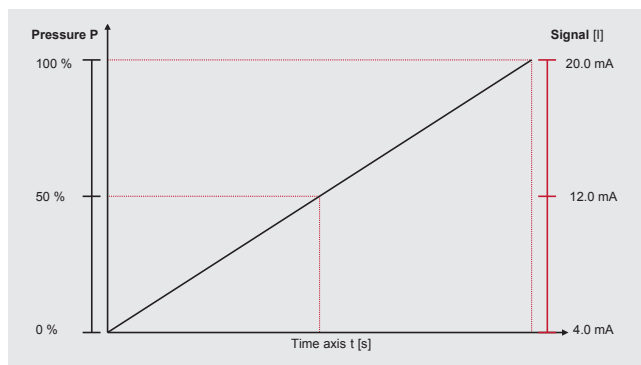
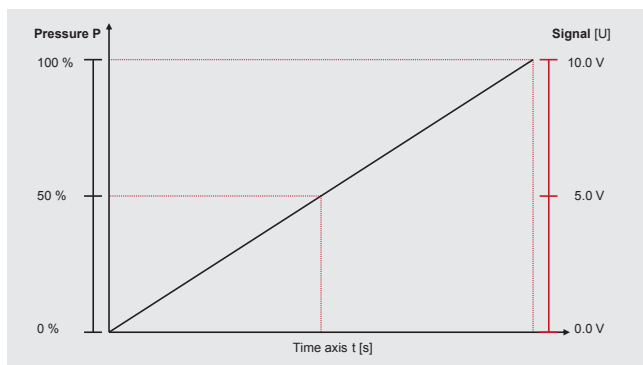
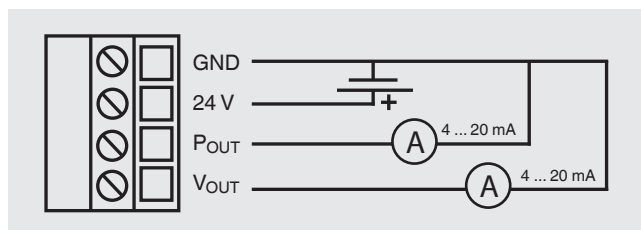
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Electrical connection

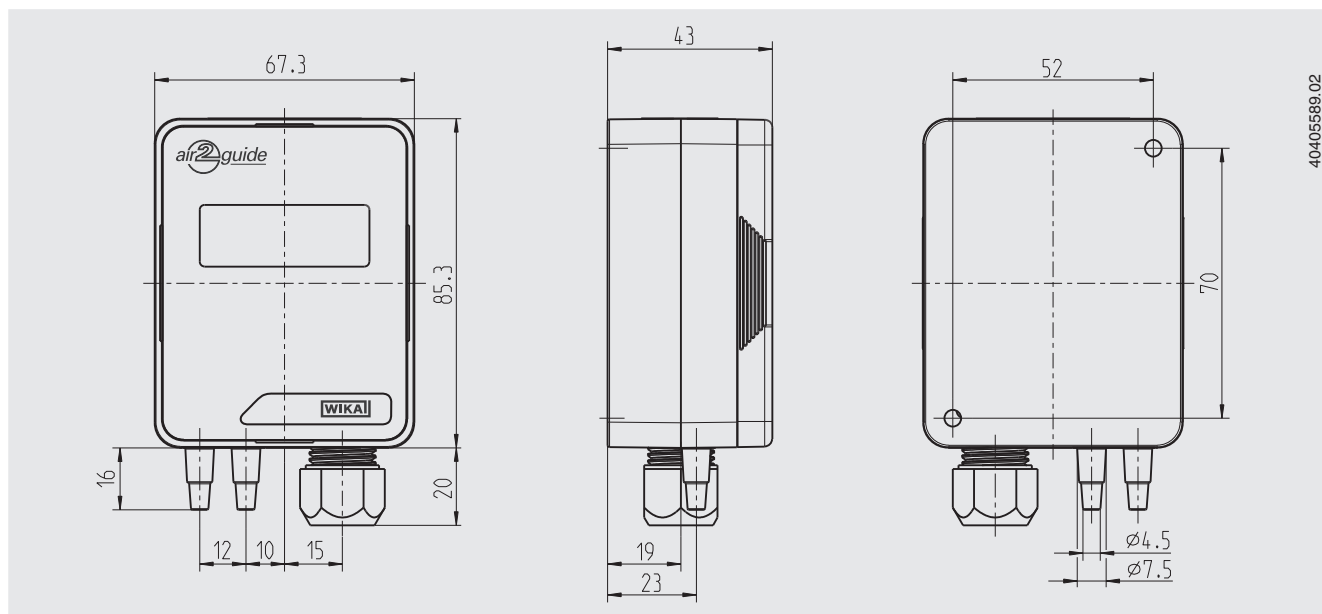
Output signal DC 0 ... 10 V







Output signal 4 ... 20 mA



Dimensions in mm



Accessories

Description	Order number
Connections for static duct probes for 1/4" pipes	
 Insertion length 100 mm	40232956
Insertion length 150 mm	40232964
Insertion length 200 mm	40232972
Combi hose connection	
 Insertion length 100 mm	40232981
Insertion length 150 mm	40232999
Insertion length 200 mm	40233006
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
	EC declaration of conformity <ul style="list-style-type: none">■ EMC directive■ RoHS conformity■ WEEE directive	European Union
	EAC (option) Import certificate	Eurasian Economic Community
	KazInMetr (option) Metrology, measurement technology	Kazakhstan
-	MTSCHS (option) Permission for commissioning	Kazakhstan
	UkrSEPRO (option) Metrology, measurement technology	Ukraine
	Uzstandard (option) Metrology, measurement technology	Uzbekistan

For deliveries to CIS countries and Ukraine, a technical passport is required and generated for each specific order.

Certificates (option)

- 2.2 test report
- 3.1 inspection certificate

Approvals and certificates, see website

Scope of delivery

- Differential pressure transmitter
- 2 mounting screws
- 2 duct connectors
- 2 x 2 m PVC measuring hose

Ordering information

Model / Measuring range / Options

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We reserve the right to make modifications to the specifications and materials.

