

# Air flow transmitter Model A2G-25

WIKA data sheet SP 69.04

air<sup>2</sup>guide

## Applications

- Pressure measuring instrument for measuring the volume flow in ventilation ducts of air and other non-inflammable and non-aggressive gases
- For operating fans/ventilators from various manufacturers

## Special features

- Simple installation
- User-friendly display
- Easy-to-read LCD display
- Temperature compensated
- Air flow calculation with k factor



Air flow transmitter model A2G-25

## Description

### Design

In accordance with the CE requirements of EMC directive 89/336/EEC and ROHS directive 2002/95/EC

### Accuracy

At 1,000 and 2,000 Pa:  $\pm 5$  Pa +  $\pm 1.5$  % of the display  
At 5,000 and 7,000 Pa:  $\pm 7$  Pa +  $\pm 1.5$  % of the display

### Scale ranges

0 ... 1,000, 0 ... 2,000, 0 ... 5,000 or 0 ... 7,000 Pa  
Selectable units on the display: m<sup>3</sup>/s, m<sup>3</sup>/h, cfm, l/s, scfh, lpm, mbar, mmWC, inchWC, kPa or Pa

### Long-term stability

- Manual zero adjustment (standard)
  - At 1,000 and 2,000 Pa:  $\pm 8$  Pa
  - At 5,000 and 7,000 Pa:  $\pm 24$  Pa
- Automatic zero adjustment (option)
  - $\pm 1$  Pa

### Maximum working pressure

25 kPa

### Permissible temperature

Ambient: -20 ... +70 °C  
Operation: -5 ... +50 °C

### Permissible ambient humidity

0 ... 95 % rH, non-condensing

### Ingress protection

IP 54 per EN 60529 / IEC 529

### Weight

150 g

## Standard version

### Process connection

Connecting nozzle (ABS), for hoses with inner diameter 4 or 6 mm

### Measuring element

Piezo measuring cell

### Display

Alphanumeric display with menu-driven user interface

### Case

Plastic (ABS), cap polycarbonate (PC)

### Output signal

V OUT DC 0 ... 10 V, P OUT DC 0 ... 10 V,  
Load R minimum 1 k $\Omega$  linear to output unit set

### Supply voltage

AC 24 V or DC 24 V  $\pm$ 10 %

## Standard accessories

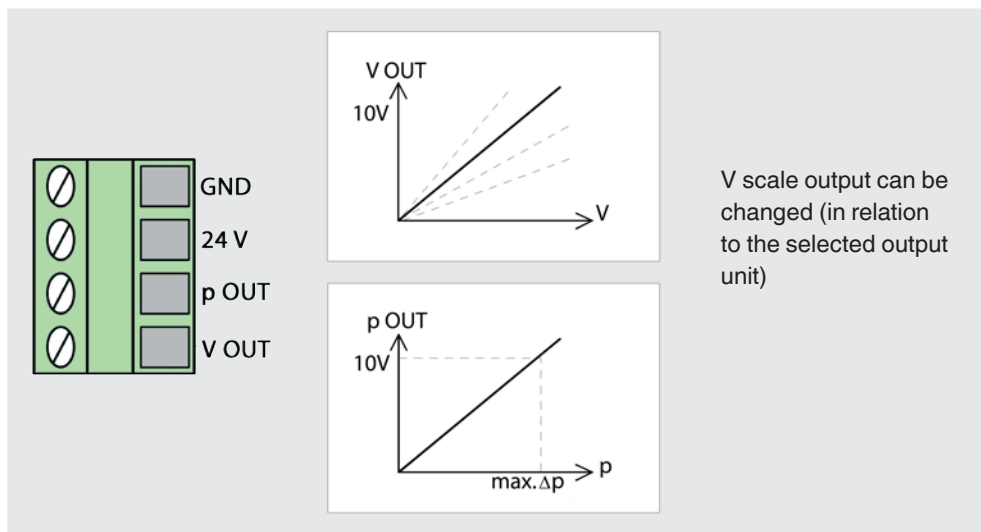
- 2 mounting screws
- 2 duct connectors
- 2 m PVC hose with 4 mm inner diameter

## Options

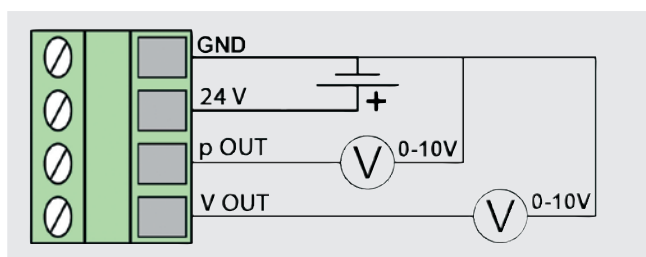
- Automatic zero adjustment  
(long-term stability  $\pm$ 1 Pa)
- Air flow calculation with Pitot tube (FloXact)

## Electrical connection

Cable gland M16, screw terminals max. 1.5 mm<sup>2</sup>



## Connection diagram



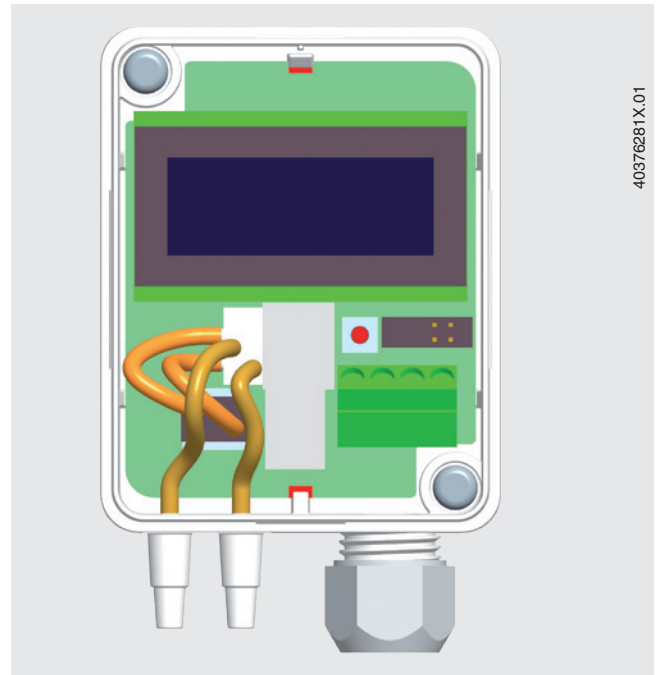
## Zero point adjustment

### Manual zero adjustment (standard)

1. Both the + and the – flow inputs must be disconnected.
2. Press the zero point button until the red LED lights up.
3. Wait until the LED switches off again. Now the instrument can be reconnected.
4. In normal operation, we recommend that a zero adjustment is carried out every 12 months.

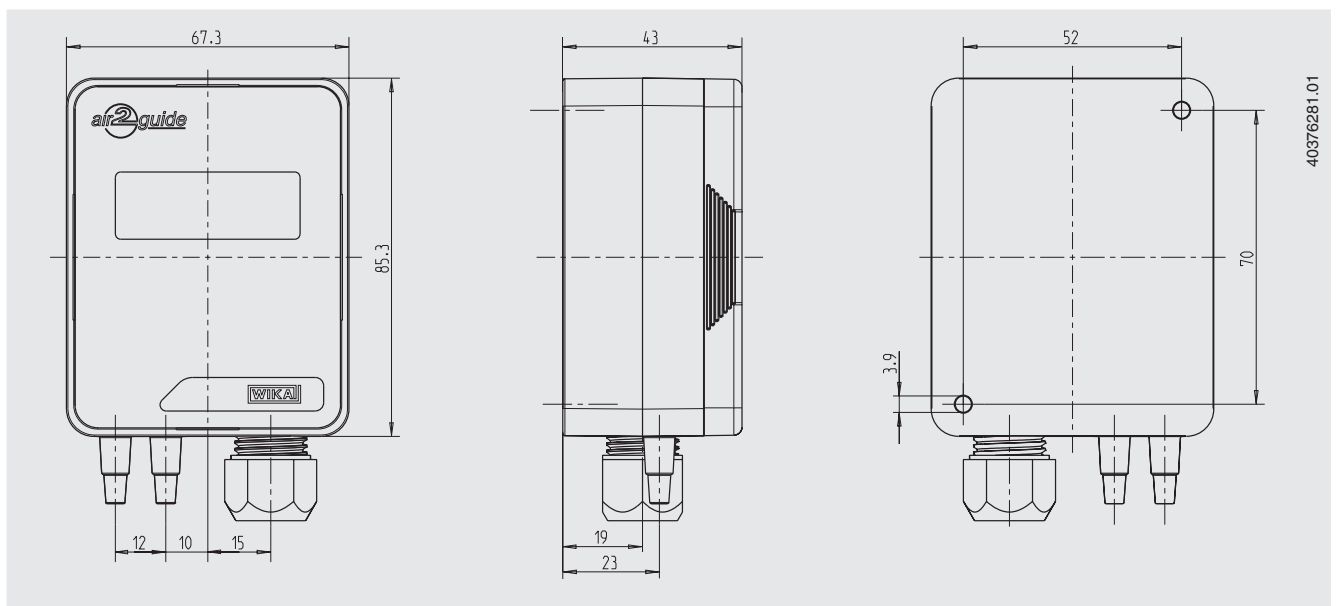
### Automatic zero adjustment (option)

The automatic zero adjustment adjusts 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 display show the last measured value.



40376281X.01

## Dimensions in mm



40376281.01

# Menu selection and initialisation instructions for installation

If no button is pressed within 20 seconds, the instrument returns to the display mode.

1. Press the Select button for 2 seconds to open the menu.
2. Select the required fan manufacturer.
3. Each fan manufacturer has its own specific k value. Please take the right k value from the data sheet:  
 Fläkt Woods (k = 0.3 ... 99)  
 Rosenberg (k = 37 ... 800)  
 Nicotra (c = 10 ... 1,500)  
 Comefri (k = 10 ... 2,000)  
 Ziehl (k = 10 ... 1,500)  
 Ebm-Papst (k = 10 ... 1,500)  
 Gebhard (k = 50 ... 4,700)
4. The following units will be shown on the display:  
 m<sup>3</sup>/s, m<sup>3</sup>/h, cfm, l/s, scfh, lpm, kPa, mbar, mmWS, inchWS or Pa.
5. Pressure output unit (and P OUT scale)
 

At 1,000 Pa	At 2,000 Pa	At 5,000 Pa	At 7,000 Pa
0 ... 1,000 Pa	0 ... 2,000 Pa	0 ... 5,000 Pa	0 ... 7,000 Pa
0 ... 1 kPa	0 ... 2 kPa	0 ... 5 kPa	0 ... 7 kPa
0 ... 10 mbar	0 ... 20 mbar	0 ... 50 mbar	0 ... 70 mbar
0 ... 100 mmWS	0 ... 200 mmWS	0 ... 500 mmWS	0 ... 700 mmWS
0 ... 4 inchWS	0 ... 8 inchWS	0 ... 20 inchWS	0 ... 25 inchWS

The maximum value corresponds to an output signal of 10 V.
6. Flow output unit for defining the V OUT scale
7. V OUT scale, selectable:  
 m<sup>3</sup>/s → 10 V = 1 ... 50 m<sup>3</sup>/s  
 m<sup>3</sup>/h → 10 V = 4,000 ... 200,000 m<sup>3</sup>/h  
 cfm → 10 V = 2,000 ... 100,000 cfm  
 l/s → 10 V = 1,000 ... 50,000 l/s  
 scfh → 10 V = 1,000,000 ... 6,000,000 scfh  
 lpm → 10 V = 60,000 ... 3,000,000 lpm
8. Infinite response time selection.
9. Press the END button and the instrument returns to the display mode.

## Ordering information

Model / Scale range

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