Air quality sensor VOC
Type A2G-80

Applications

- For the measurement of indoor air quality
- The air quality sensor detects oxidizing gases and vapors such as body odor, tobacco smoke and evaporations from materials (furniture, carpets, coats of paints, glues etc.)
- In applications where air quality is essential, e.g. buildings, offices, class rooms, kitchens etc.

Special Features

- The set point for the required air quality can be preset on installation
- Low consumption, reduced energy costs
- Standard offering includes mounting flange

Air quality sensor, Type A2G-80

Standard Features

Measuring principle
The sensor changes its conductivity proportionally with the number of molecules of reduced gases. The associated output voltage of the measuring element is amplified accordingly from 0 … 10 V. The greater the output signal of the sensor (0 … 10 V), the worse the air quality. Mixed-gas sensors are broad band, meaning the result of the sensor cannot be used to conclude neither the type of the gas not its concentration.

The sensor cannot differentiate between pleasant and unpleasant smells. It is the people in the area who must ultimately decide whether they are satisfied with the air quality.

Design standards
In accordance with EN 60730-1:2002, CE conformity
2004/108/EC (electromagnetic compatibility)
2001/95/EC (product safety)

Supply voltage
DC 15 ... 24 V / AC 24 V ± 10 %

Power input
1.2 W / 2.2 VA

Output signal
0 … 10 V (3-wire), min. load 10 kΩ

Operating temperature
Ambient: -4...+122°F

Humidity range
Max. 85 % r.h. (non-condensing)

Ingress protection
IP 20 per EN 60529 / IEC 592 (with case)

Weight
approx. 5.2 oz.

Installation instructions

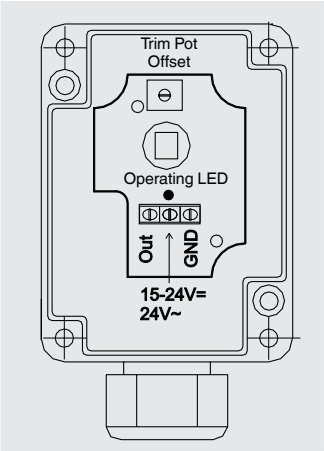
- Mount duct sensors with their air intake facing against the direction of the flow
- Prevent exposure to sunlight
- Max. airflow 10 m/s

Start-up

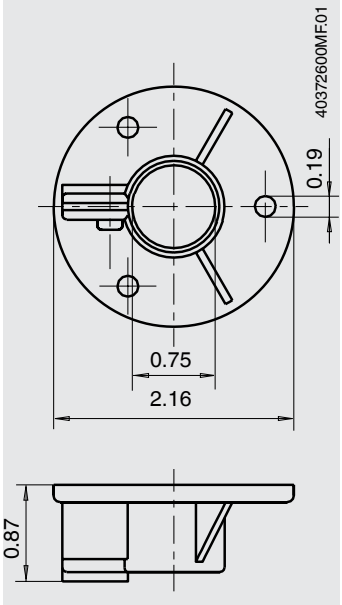
Individual adjustment of the output signal is made via a trim pot on the sensor PCB. With this, the offset of the output signal is either raised or lowered:

1. Attach sensors, lock the cover, switch on the power supply
2. Make sure there are good air conditions close to the sensor
3. After running for about 30 minutes, check the output signal. The voltage should be in the range of 1 ... 3 V. With a too high/too low voltage, correct the value accordingly with the trim pot on the PCB: Turn the trim pot to the left until the red LED barely turns off. The output signal will now be approximately 0.7 V.
4. The sensor is now ready to be used. The voltage of the output signal will increase as the air quality worsens.

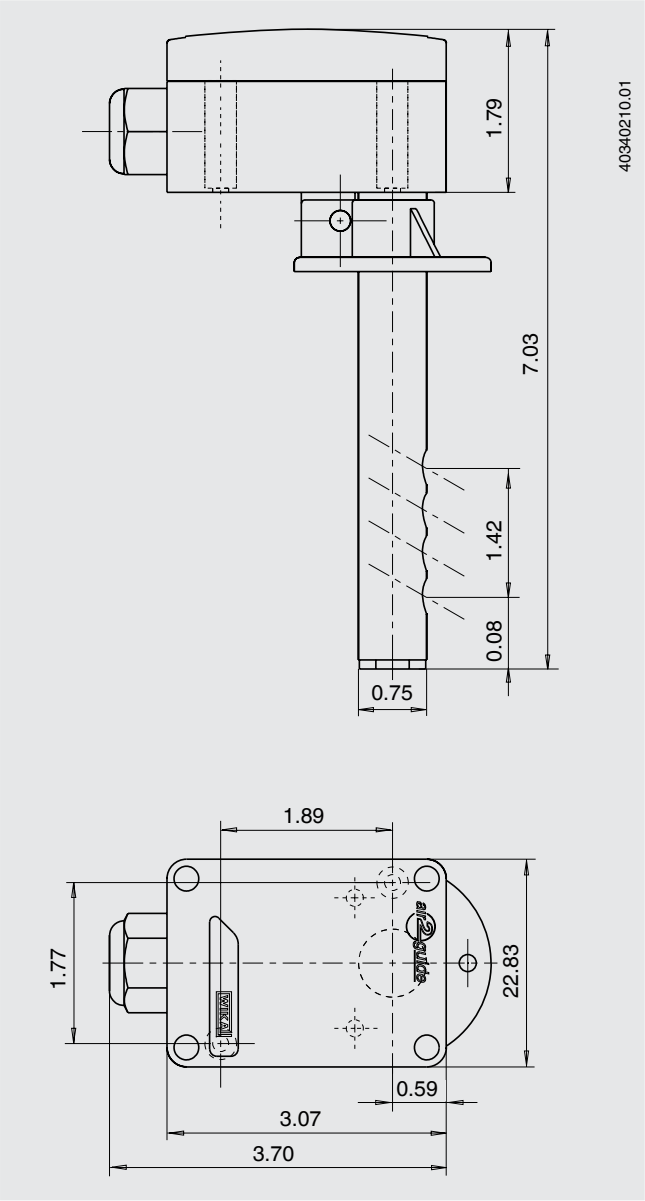
Wiring diagram



Mounting flange MF19-PA



Dimensions in inches



Ordering information

Type / Options

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