

# Ventilation duct sensor

## For relative humidity and temperature

### Model A2G-70

WIKA data sheet TE 62.91



for further approvals  
see page 4



#### Applications

- For measuring the relative humidity and temperature of gaseous media in ventilation and air-conditioning systems

#### Special features

- Electrical output signal DC 0 ... 10 V
- Simple mounting
- Compact and robust design
- Modbus® output signal (option)
- Maintenance-free



Ventilation duct sensor, model A2G-70

#### Description

The model A2G-70 ventilation duct sensor is a relative humidity sensor with an integrated temperature measurement, suitable for direct mounting on circular ventilation pipes or rectangular ventilation ducts.

The adjustable mounting flange enables a quick installation. The illuminated display (option) provides good readability, even from a distance. The A2G-70 has a screwless cover for rapid wiring and commissioning.

The measurement of relative humidity and the air temperature as the basis of demand-orientated control/regulation is gaining ever more importance in the ventilation and air-conditioning industry. The A2G-70 registers the relative humidity and the temperature of the air with a capacitive sensor. The sensor signals for both measurement parameters are transmitted to the control/regulation or building automation with analogue output signals (0 ... 10 V) or digital Modbus® protocol.

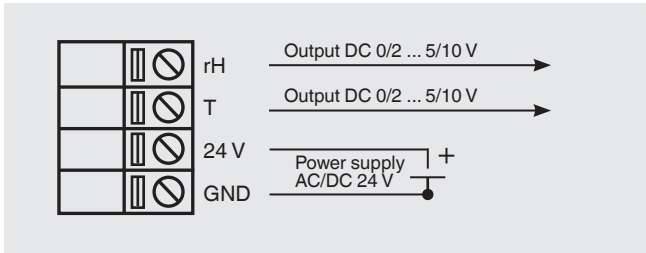
## Specifications

Ventilation duct sensor, model A2G-70	
<b>Measuring range</b>	
■ Temperature	0 ... 50 °C
■ Relative humidity	0 ... 100 %
<b>Accuracy</b>	
■ Temperature	< 0.5 °C
■ Relative humidity	±4 % (with measuring range 0 ... 90 %)
<b>Insertion length</b>	183 mm
<b>Power supply U<sub>B</sub></b>	AC 24 V or DC 24 V ±10 %
<b>Power consumption</b>	Max. 150 mA
<b>Electrical connection</b>	Cable gland M16 Screw terminals max. 1.5 mm <sup>2</sup>
<b>Output signal</b>	DC 0 ... 10 V, load min. 1 kΩ
<b>Material</b>	
■ Case	Plastic (ABS)
■ Cover	PVC
■ Sensor sleeve	Plastic (ABS)
■ Mounting flange	LLPDP
<b>Permissible temperatures</b>	
■ Ambient temperature	-20 ... +70 °C
■ Operating temperature	0 ... 50 °C (at sensor)
<b>Relative humidity</b>	0 ... 95 %, non-condensing
<b>Ingress protection</b>	IP20
<b>Weight</b>	150 g

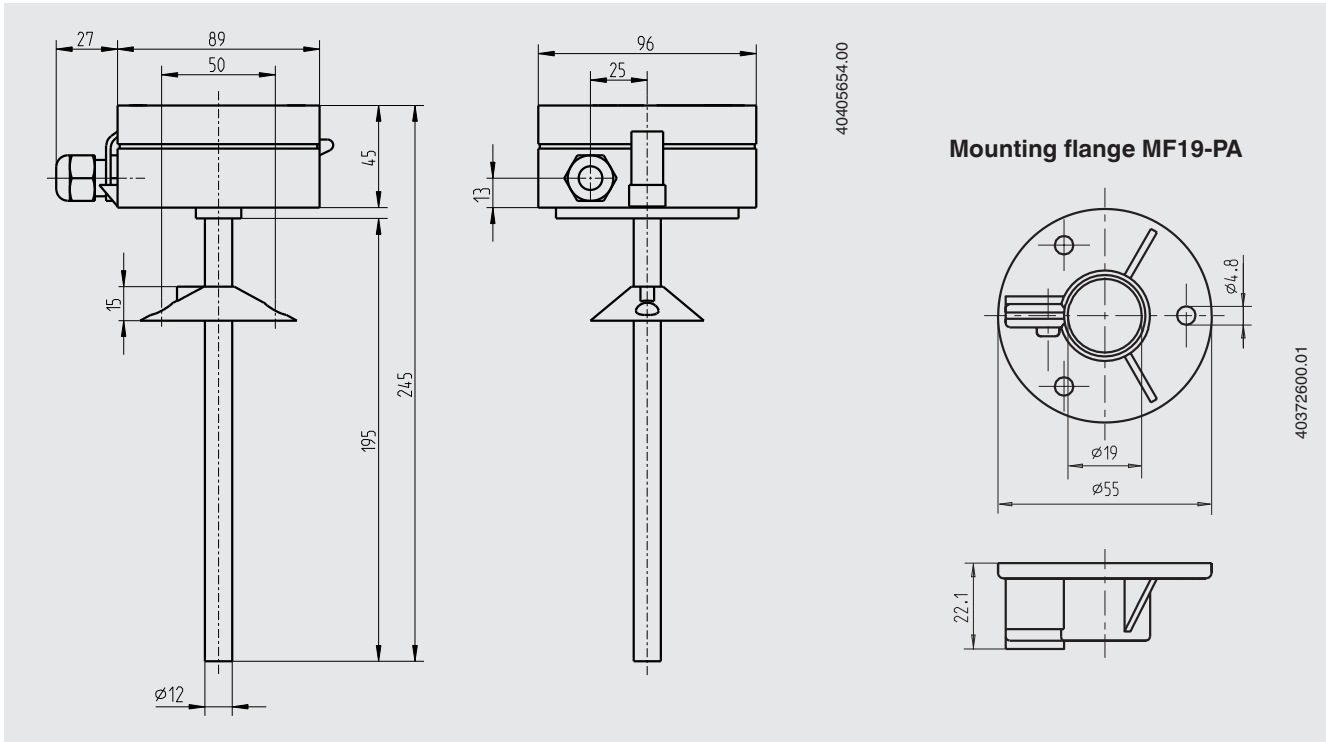
## Modbus® version (option)

Modbus® communication	
<b>Protocol</b>	Modbus® via serial interface
<b>Transfer mode</b>	RTU
<b>Interface</b>	RS-485
<b>Byte format</b>	(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
<b>Baud rate</b>	9,600, 19,200, 38,400 - selectable in the configuration
<b>Modbus® addresses</b>	1 ... 247 addresses selectable in the configuration menu




# Electrical connection



# Dimensions in mm



## Approvals

Logo	Description	Country
	<b>EC declaration of conformity</b> <ul style="list-style-type: none"><li>■ EMC directive</li><li>■ RoHS conformity</li><li>■ WEEE directive</li></ul>	European Union
	<b>EAC (option)</b> Import certificate	Eurasian Economic Community
	<b>KazInMetr (option)</b> Metrology, measurement technology	Kazakhstan
-	<b>MTSCHS (option)</b> Permission for commissioning	Kazakhstan
	<b>Uzstandard (option)</b> Metrology, measurement technology	Uzbekistan

## Certificates (option)

- 2.2 test report
- 3.1 inspection certificate

Approvals and certificates, see website

## Scope of delivery

- Digital ventilation duct temperature sensor
- Mounting flange

## Ordering information

Model / Options

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

