

# Duct sensor for relative humidity and temperature Model A2G-70

WIKA data sheet TE 62.91



## Applications

- For measuring the relative humidity and temperature of gaseous media in heating, ventilation and air-conditioning systems (e. g. in fresh-air and exhaust-air ducts)
- Designed for locking on to control and display systems

## Special features

- Simple mounting
- Direct installation into the process
- Incl. mounting flange



Duct sensor for relative humidity and temperature,  
model A 2G-70

## Description

### Design

CE conformity: 2004/108/EC electromagnetic compatibility

Product safety: 2001/95/EG product safety

EMC: EN 607301: 2002

Product safety: EN 607301: 2002

### Supply voltage

DC 15 ... 24 V / AC 24 V  $\pm$ 10 %

### Scale range / measuring range

Humidity: 0 ... 100 % rH

Temperature: -20 ... +80 °C

### Power consumption

0.5 W / 1.7 VA

### Transmitter output

Humidity: DC 0 ... 10 V, load: min. 5 k $\Omega$

Temperature: DC 0 ... 10 V, load: min. 5 k $\Omega$

### Ingress protection

IP 65 per EN 60529 / IEC 592 (connection head)

### Accuracy

Humidity:  $\pm$ 3 % between 20 ... 80 % rH

Temperature:  $\pm$ 1 % between 5 ... 45 °C

### Electrical connection

Screw terminal max. 1.5 mm<sup>2</sup>

Cable gland M16 x 1.5 for conductors with D = 8 mm max.

The instruments are designed to operate with safety extra-low voltage (SELV). The transmitters must be operated at a constant operating voltage ( $\pm 0.2$  V). Current/voltage spikes from switching the power supply on or off must be prevented by the customer.

### Insertion length L standard

140 mm

Other lengths on request

### Permissible temperature

Ambient: -20 ... +70 °C

Sensor tip: max. 60 °C

### Sensor tube

PVC, black

### Filter element

Stainless steel, mesh width 80 µm

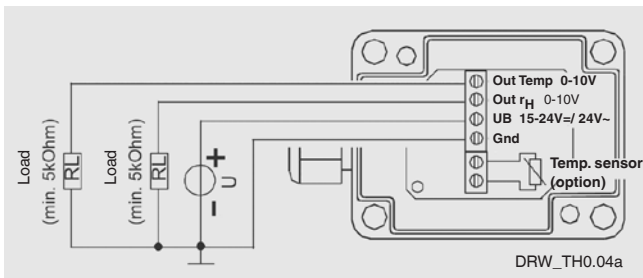
### Connection head

PA6, white

### Mounting instructions

Max. air velocity 10 m/s

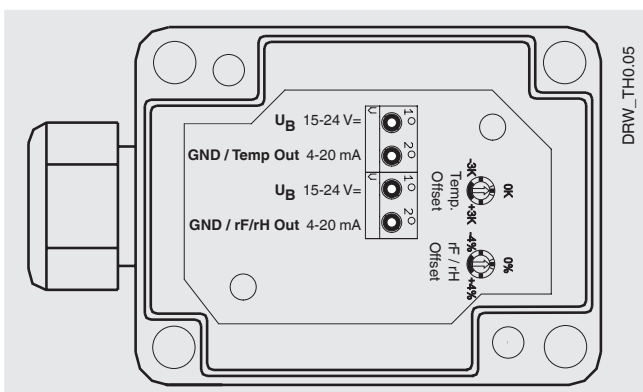
### Connection diagram for output 0 ... 10 V (standard)



### Option

- Transmitter output 4 ... 20 mA
  - Humidity: 4 ... 20 mA, load < 500 Ω at DC 24 V
  - Temperature: 4 ... 20 mA, load < 500 Ω at DC 24 V

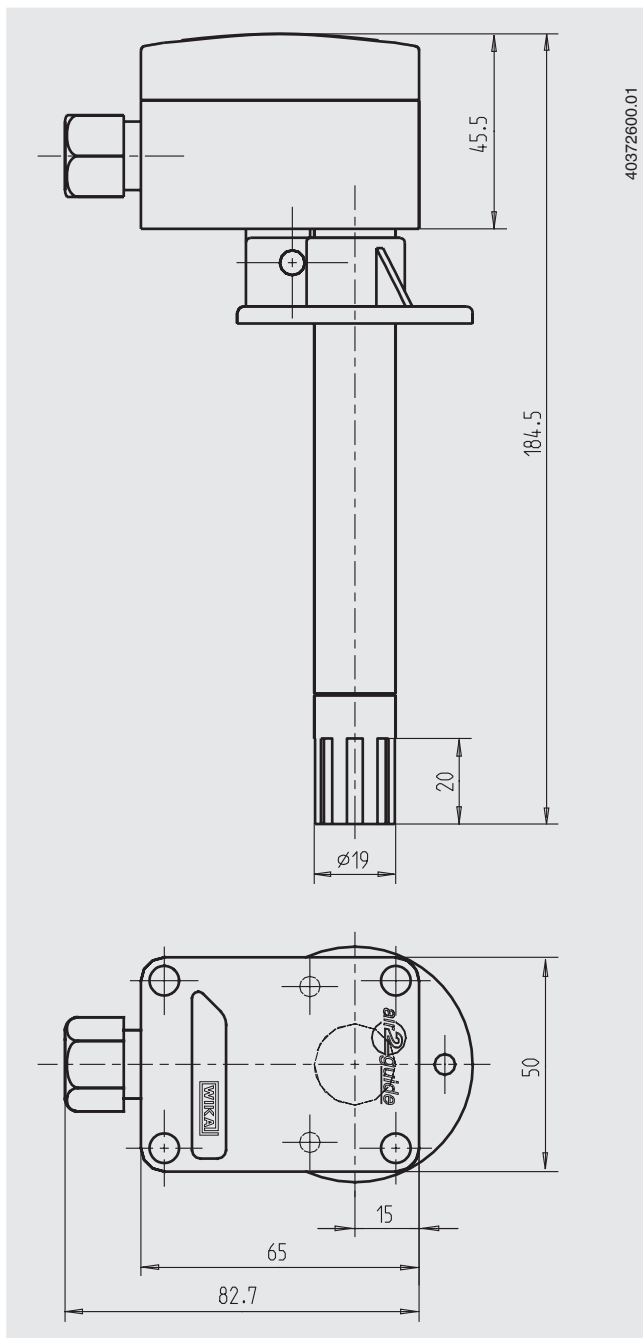
### Connection diagram for output 4 ... 20 mA (option)



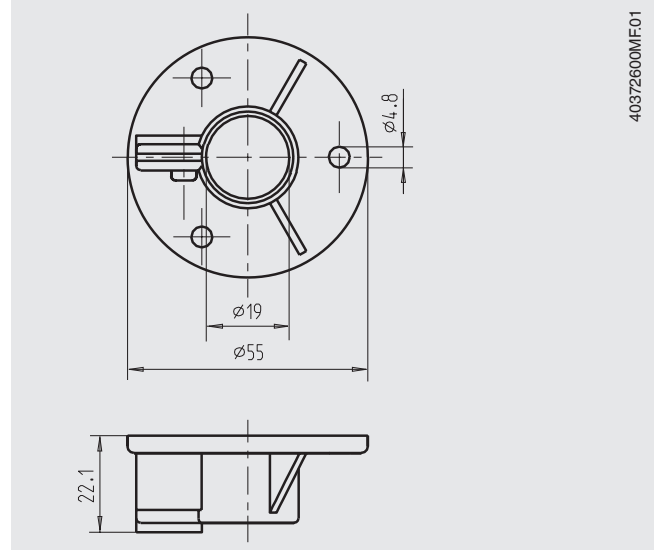
### Note

If only the humidity output is used, "UB 15 ... 24 V= (temp.)" must be bridged to "UB 15 ... 24 V= (rF/rH)" and the temperature output "GND / Temp Out 4 ... 20 mA" must be bridged to "GND" of the voltage supply.

## Dimensions in mm



## Mounting flange MF19-PA



## Ordering information

### Model / Options

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