Duct sensor for relative humidity and temperature sensor Type A2G-70

WIKA Datasheet A2G-70

Applications

- For measuring relative humidity and temperature of gaseous media in heating, cooling and air-conditioning systems
- Designed for PLC's and other control and display panels

Special features

- Easy installation
- Direct assembly into the process
- Compact and robust design
- Comes standard with mounting flange



Duct sensor for relative humidity and temperature
Type A2G-70

Description

Design standards

CE-conformity: 2004/108/EG Electromagnetic

compatibility

Product Safety: 2001/95/EG Product Safety

EMC: EN 607301: 2002 Product Safety: EN 607301: 2002

Supply voltage

DC 15 \dots 24 V / AC 24 V \pm 10%

Scale range / measuring range

Humidity: $0 \dots 100\%$ rH Temperature: $-20 \dots +80$ °C

Power consumption

0.5 W / 1.7 VA

Transmitter outputs

Humidity: DC 0 ... 10 V, load: min. 5 kOhm Temperature: DC 0 ... 10 V, load: min. 5 kOhm

Ingress protection

NEMA 4 (IP 65 per EN 60529 / IEC 592 (connecting head))

Accuracy

Humidity: $\pm 3\%$ between 20 ... 80% rH Temperature: $\pm 1.0\%$ between +5 ... +45°C



Electrical connection

Screw connection M16 x 1.5 for wire with max. dia = 0.31"

The instrument is designed to operate with safety extralow voltage (SELV). The transmitter must be operated at a constant operating voltage ($\pm 0.2 \, \text{V}$). Current/Voltage spikes from switching the power supply on or off must be prevented by the customer.

Insertion length L (standard)

5.51"

Other lengths on request

Operating temperature

Ambient: -4 ... +158 °F (-20 ... +70 °C) Sensor tip: max. +140 °F (+60 °C)

Probe tube

PVC, black

Filter element

Stainless steel, mesh size 80 µm

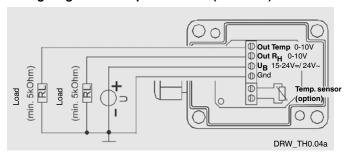
Connection head

PA6, white

Mounting instructions

Max. air speed 10 m/s

Wiring diagram for output 0 ... 10 V (standard)

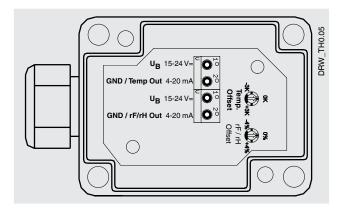


Option

■ Transmitter output 4 ... 20 mA

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

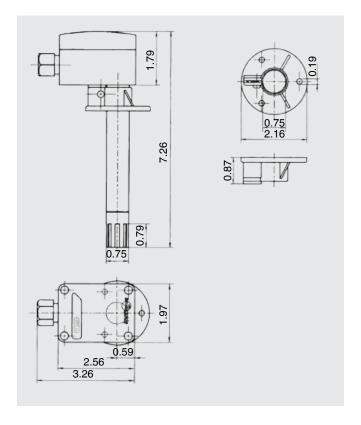
Wiring diagram for output 4 ... 20 mA (optional)



Note

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

Dimensions in inches



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The specifications given in this document represent the state of engineering at the time of publishing. We reserve the right to make modifications to the specifications and materials.

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