

# Electronic ventilation duct temperature sensor

## For ventilation and air-conditioning

### Model A2G-60

WIKA data sheet TE 62.90



#### Applications

- For measuring the temperature of gaseous media in heating, ventilation and air-conditioning systems
- Designed for connection to control and display systems

#### Special features

- Simple mounting, including mounting flange
- Compact and robust design
- Direct mounting on circular ventilation pipes or rectangular ventilation ducts
- Pt1000 or Ni1000 sensor
- Also available with electrical output signal (0 ... 10 V or 4 ... 20 mA)



Electronic ventilation duct temperature sensor,  
model A2G-60

#### Description

The model A2G-60 electronic ventilation duct temperature sensor is used for temperature measurement in heating, ventilation, air-conditioning and refrigeration systems and is primarily used in air ducts.

Mounting is performed using a mounting flange. In conjunction with an additional thermowell, the A2G-60 can also be used for temperature measurement in liquid media.

By selecting the appropriate measuring elements, the ventilation duct temperature sensor is compatible with all commonly used control systems. The A2G-60 is available with a Pt1000 or Ni1000 sensor, but also with an integrated transmitter (0 ... 10 V or 4 ... 20 mA).

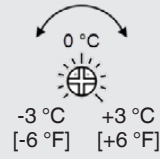
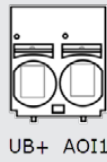
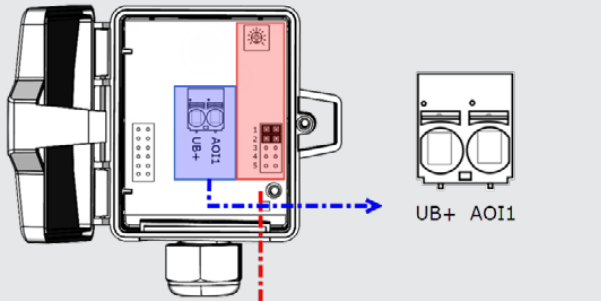
## Specifications

Electronic ventilation duct temperature sensor, model A2G-60		
<b>Version</b>	Temperature probe (passive)	
	Transmitter (active)	Voltage output
		Current output
<b>Measuring range</b>		
Temperature probe	-50 ... +160 °C [-58 ... +320 °F]	
Transmitter	0 ... 160 °C [32 ... 320 °F]	
	Other measuring ranges adjustable at the transmitter:	
	-50 ... +50 °C [-58 ... +122 °F]	
	-20 ... +80 °C [-4 ... +176 °F]	
	-15 ... +35 °C [5 ... 95 °F]	
	-10 ... +120 °C [14 ... 248 °F]	
	0 ... 50 °C [32 ... 122 °F]	
	0 ... 100 °C [32 ... 212 °F]	
	0 ... 250 °C [32 ... 482 °F]	
<b>Accuracy</b>		
Temperature probe	Pt1000	±0.3 K
	Ni1000	±0.4 K
Transmitter	±0.5 K	
<b>Output / Sensor</b>		
Temperature probe	<ul style="list-style-type: none"> <li>■ Pt1000</li> <li>■ Ni1000</li> </ul> Available in 2-, 3- or 4-wire connection	
Transmitter, voltage output	0 ... 10 V or 0 ... 5 V, min. load 5 kΩ	
Transmitter, current output	4 ... 20 mA, max. load 500 Ω (2-wire)	
<b>Power consumption</b>		
Transmitter, voltage output	0.4 W (24 V =), 0.8 VA (24 V ~)	
Transmitter, current output	0.5 W (24 V =)	
<b>Electrical connection, cable entry</b>	Removable plug-in terminal, max. 2.5 mm <sup>2</sup> / Flextherm M20, for cables with Ø 4.5 ... 9 mm [0.18 ... 0.35 in], removable	
<b>Insertion length</b>	<ul style="list-style-type: none"> <li>■ 50 ... 300 mm [1.97 ... 11.81 in] (in 50 mm increments / in 1.97 in increments)</li> <li>■ 450 mm [17.72 in]</li> </ul>	
<b>Material</b>		
Probe sleeve	Stainless steel 1.4571	
Case	Polycarbonate, pure white	
Mounting clip	Polycarbonate, pure white	
<b>Relative humidity</b>	0 ... 85 %, not permanently condensing	
<b>Permissible temperatures</b>		
Head	Temperature probe	-35 ... +90 °C [-31 ... +194 °F]
	Transmitter	-35 ... +70 °C [-31 ... +158 °F]
Probe sleeve	<ul style="list-style-type: none"> <li>■ -50 ... +160 °C [-58 ... +320 °F]</li> <li>■ -80 ... +260 °C [-112 ... +500 °F]</li> </ul>	
<b>Ingress protection per IEC/EN 60529</b>	IP65	
<b>Supply voltage U<sub>B</sub></b>		
Transmitter, voltage output	15 ... 24 V = (±10 %) or 24 V ~ (±10 %) SELV	
Transmitter, current output	15 ... 24 V = (±10 %) SELV	
<b>Mounting</b>	Mounting clip (included in delivery) → Other mounting options see "Accessories"	
<b>Weight</b>	150 g	

# Electrical connection

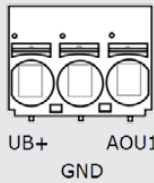
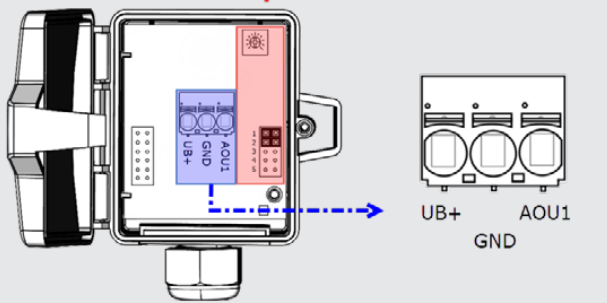
## Transmitter (active)

4 ... 20 mA

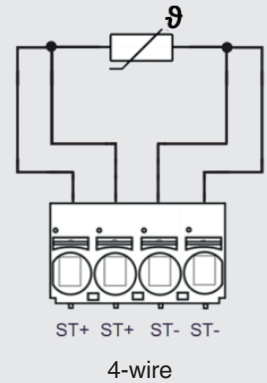
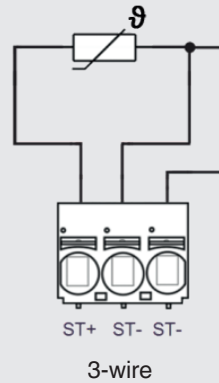
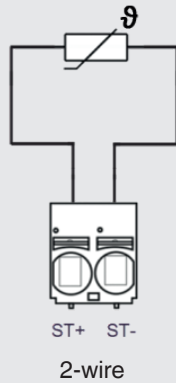
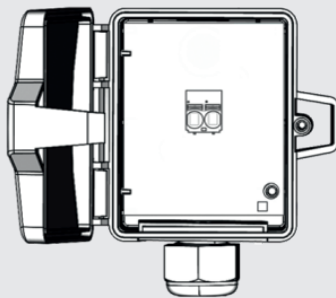


<p>1 0.10 V</p>	<p>2 0.5 V</p>	<p>3 0 ... 50 °C 4 5</p>
<p>3 -50 ... +50 °C 4 5 [-30 ... +130 °F]</p>	<p>3 -10 ... +120 °C 4 5 [0 ... 250 °F]</p>	<p>3 0 ... 50 °C 4 5 [40 ... 140 °F]</p>
<p>3 0 ... 100 °C 4 5 [40 ... 240 °F]</p>	<p>3 0 ... 250 °C 4 5 [30 ... 480 °F]</p>	<p>3 -15 ... +35 °C 4 5 [0 ... 100 °F]</p>
<p>3 0 ... 160 °C 4 5 [0 ... 150 °F]</p>	<p>3 -20 ... +80 °C 4 5 [40 ... 90 °F]</p>	

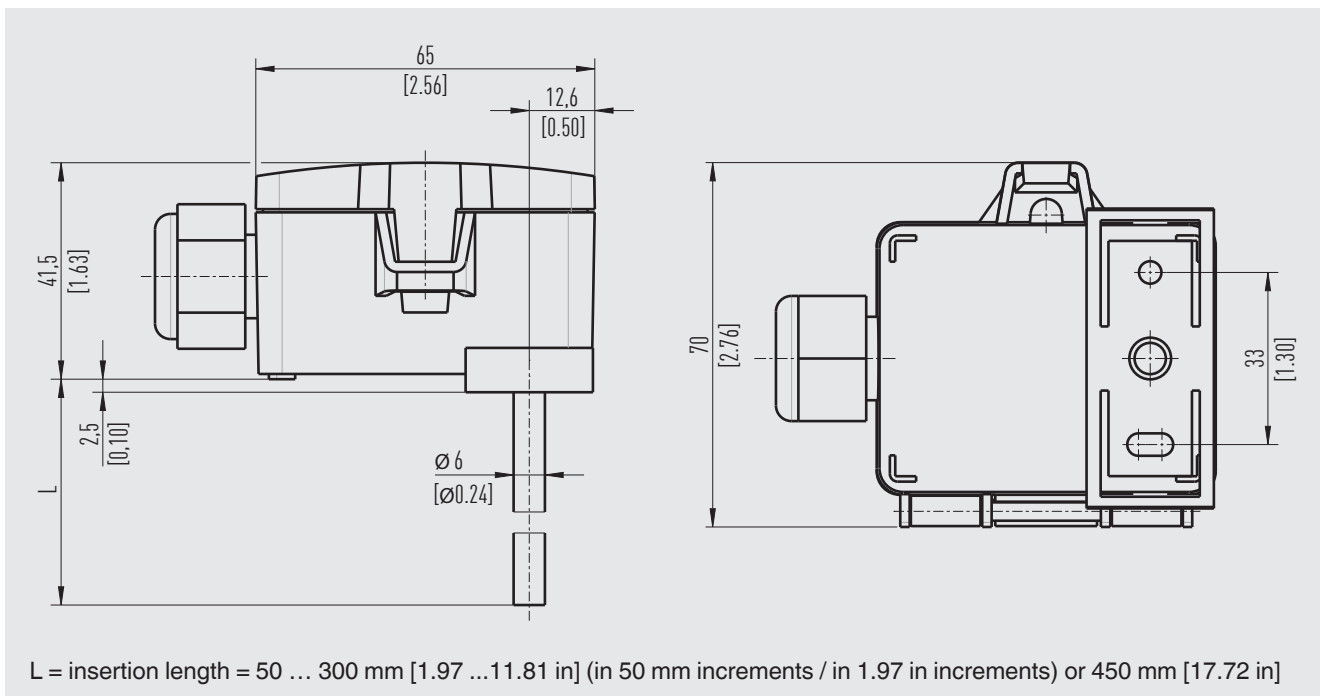
0 ... 10 V or 0 ... 5 V



## Temperature probe (passive)

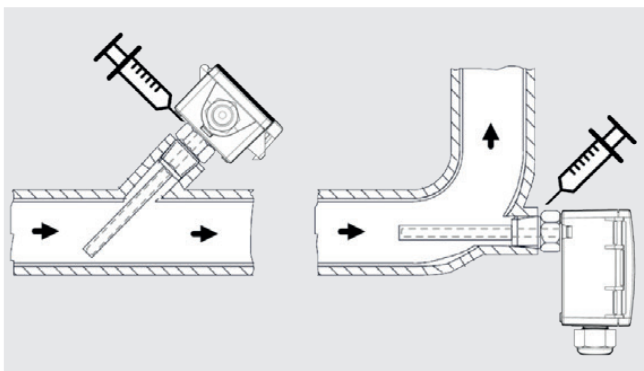


## Dimensions in mm [in]




## Thermowell for liquid media

Installation with a thermowell is necessary when used in liquid media. Thermal compound should be used to improve heat transfer from the thermowell to the temperature sensor.



## Approvals

Logo	Description	Country
	<b>EU declaration of conformity</b>	European Union
	EMC directive	
	RoHS conformity	
	WEEE directive	

## Certificates (option)

2.2 test report

→ Approvals and certificates, see website

## Accessories

Description	Order number
<b>Mounting base</b>	40440263
<b>Mounting flange</b>	40440225
<b>Syringe with thermal compound</b>	40440262
<b>Thermowell brass (MS63)</b>	
Insertion length of the sensor L = 50 mm [1.97 in]	40440161
Insertion length of the sensor L = 100 mm [3.94 in]	40440164
Insertion length of the sensor L = 150 mm [5.91 in]	40440165
Insertion length of the sensor L = 200 mm [7.87 in]	40440166
Insertion length of the sensor L = 250 mm [9.84 in]	40440167
Insertion length of the sensor L = 300 mm [11.81 in]	40440168
Insertion length of the sensor L = 450 mm [17.72 in]	40440169
<b>Thermowell stainless steel (V4A)</b>	
Insertion length of the sensor L = 50 mm [1.97 in]	40440171
Insertion length of the sensor L = 100 mm [3.94 in]	40440172
Insertion length of the sensor L = 150 mm [5.91 in]	40440173
Insertion length of the sensor L = 200 mm [7.87 in]	40440174
Insertion length of the sensor L = 250 mm [9.84 in]	40440175
Insertion length of the sensor L = 300 mm [11.81 in]	40440176
Insertion length of the sensor L = 450 mm [17.72 in]	40440177

## Ordering information

Model / Version / Measuring range / Insertion length / Approvals / Certificates / Accessories / Options

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