

**Average temperature sensor**

The Pt1000 version is supplied with one continuous sensing element across the whole length of the probe to ensure optimum accuracy and eliminate air stratification problems.

NTC and Ni1000 are industry standard multi-point sensing elements.



5-year warranty


**Type Overview**

| Type     | Output signal    | Probe length |
|----------|------------------|--------------|
| 01MT-5B4 | Pt1000           | 10 ft [3 m]  |
| 01MT-5B5 | Pt1000           | 20 ft [6 m]  |
| 01MT-5B8 | Pt1000           | 50 ft [15 m] |
| 01MT-5E4 | Ni1000 (JCI)     | 10 ft [3 m]  |
| 01MT-5E5 | Ni1000 (JCI)     | 20 ft [6 m]  |
| 01MT-5L4 | NTC10k (10k2)    | 10 ft [3 m]  |
| 01MT-5L5 | NTC10k (10k2)    | 20 ft [6 m]  |
| 01MT-5M4 | NTC10k3 (Precon) | 10 ft [3 m]  |
| 01MT-5M5 | NTC10k3 (Precon) | 20 ft [6 m]  |
| 01MT-5Q4 | NTC20k           | 10 ft [3 m]  |
| 01MT-5Q5 | NTC20k           | 20 ft [6 m]  |

**Technical data**

|                                  |                                   |  |
|----------------------------------|-----------------------------------|--|
| <b>Electrical Data</b>           | Electrical connection             | Pluggable spring-loaded terminal block max. 2.5 mm <sup>2</sup>  |
|                                  | Cable entry                       | Cable gland with strain relief ø6...8 mm (1/2" NPT conduit adapter included)   |
| <b>Functional Data</b>           | Application                       | air  |
|                                  | Output signal passive temperature | Pt1000<br>Ni1000 (JCI)<br>NTC10k (10k2)<br>NTC10k3 (Precon)<br>NTC20k  |
| <b>Measuring Data</b>            | Measured values                   | Temperature  |
| <b>Specification Temperature</b> | Measuring range                   | Pt., Ni.: -31...158°F [-35...70°C]<br>NTC.: -32...122°F [0...50°C]   |
|                                  | Measuring current                 | Pt1000: <0.3 mA @ 32°F [0°C]<br>Ni1000 (JCI): <5 mA @ 21°C [70°F]<br>NTC10k2: <2 mA @ 77°F [25°C]<br>NTC10k3: <2.7 mA @ 77°F [25°C]<br>NTC20k: <0.5 mA @ 77°F [25°C] |

**Technical data**

|                                  |   |  |
|----------------------------------|---|--|
| <b>Specification Temperature</b> | Accuracy temperature passive  | Passive sensors depending on used type<br>Pt.. : ±0.5°F @ 32°F [±0.3°C @ 0°C]<br>Ni.. : ±0.7°F @ 32°F [±0.4°C @ 0°C]<br>NTC.. : ±0.35°F @ 77°F [±0.2°C @ 25°C] |
|                                  | Time constant $\tau$ (63%) in the air duct                            | Typical 100 s @ 0 m/s  |
| <b>Safety Data</b>               | Protection class IEC/EN   | III, Protective Extra-Low Voltage (PELV)   |
|                                  | Power source UL   | Class 2 Supply   |
|                                  | Degree of protection IEC/EN   | IP65   |
|                                  | Degree of protection NEMA/UL  | NEMA 4X  |
|                                  | Enclosure   | UL Enclosure Type 4X   |
|                                  | EU Conformity   | CE Marking   |
|                                  | Certification IEC/EN  | IEC/EN 60730-1   |
|                                  | Quality Standard  | ISO 9001   |
|                                  | UL 2043 Compliant   | Suitable for use in air plenums per Section 300.22(C) of the NEC and Section 602 of the IMC  |
|                                  | Type of action  | Type 1   |
|                                  | Rated impulse voltage supply  | 0.8 kV   |
|                                  | Pollution degree  | 3  |
|                                  | Ambient humidity  | Max. 95% RH, non-condensing  |
|                                  | Ambient temperature   | -35...50°C [-30...122°F]   |
| Fluid temperature                | Pt., Ni.. : -30...160°F [-35...70°C]<br>NTC.. : 0...50°C [32...122°F] |  |
| Housing surface temperature      | max. 195°F [90°C]   |  |
| <b>Materials</b>                 | Cable gland   | PA6, black   |
|                                  | Housing   | Cover: PC, orange<br>Bottom: PC, orange<br>Seal: NBR70, black<br>UV resistant<br>UL94 5VA  |

**Safety Notes**


This device has been designed for use in stationary heating, ventilation and air-conditioning systems and must not be used outside the specified field of application. Unauthorized modifications are prohibited. The product must not be used in relation with any equipment that in case of a failure may threaten humans, animals or assets.

Ensure all power is disconnected before installing. Do not connect to live/operating equipment.

Only authorized specialists may carry out installation. All applicable legal or institutional installation regulations must be complied with during installation.

The device contains electrical and electronic components and must not be disposed of as household refuse. All locally valid regulations and requirements must be observed.

**Remarks**

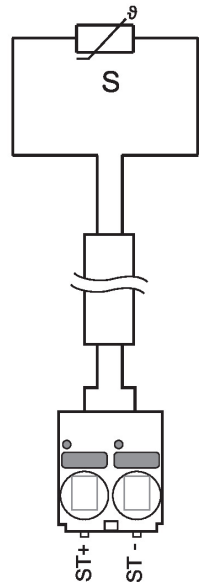
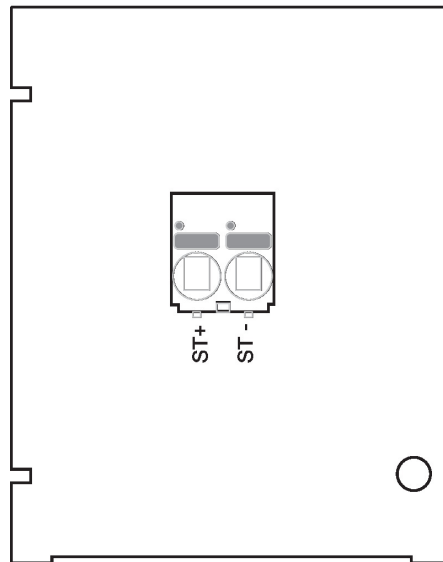
**General Remarks Concerning Sensors** Due to self-heating with 2 wire passive sensors, the supply wire current affects the measurement accuracy. So the supply current should not be higher than the measuring current values specified in this data sheet.

When using lengthy connecting cables (depending on the cross section used), the cable resistance must be taken into account. The lower the impedance of the sensor used, the greater the effect of the line resistance on the measurement, because it generates an offset.

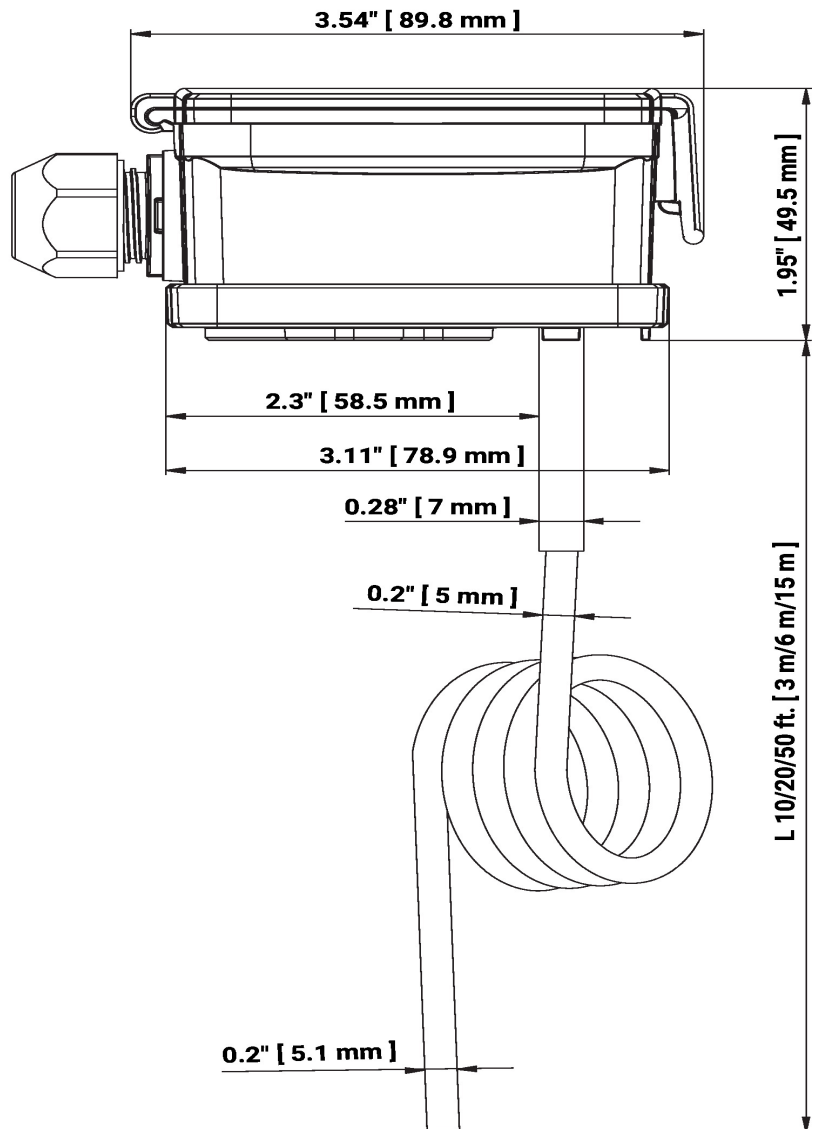
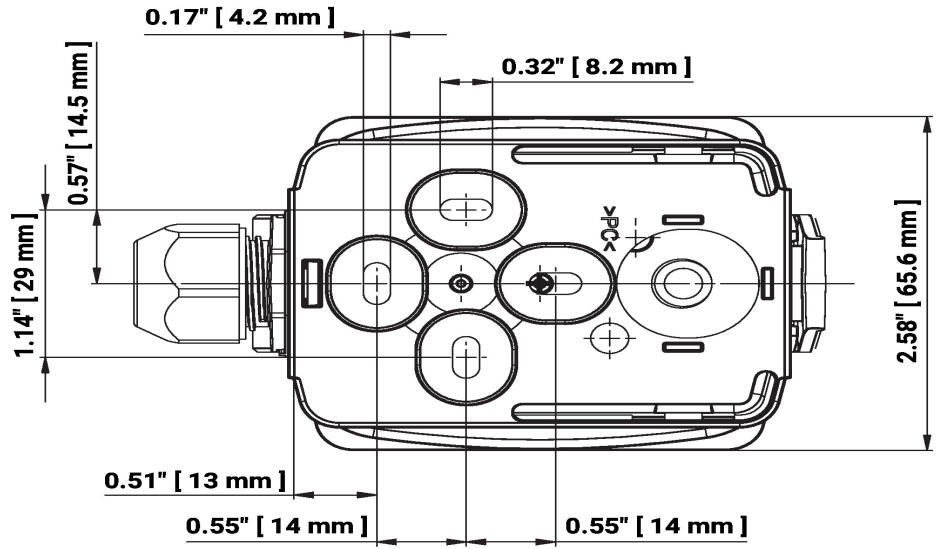
Parts included

| Description                            | Type      |
|--|-----------|
| Mounting kit, with 6 mounting brackets | A-22D-A08 |
| Mounting plate S housing               | A-22D-A09 |
| 1/2" NPT conduit adapter               |           |

Wiring Diagram



**Dimensions**



**Dimensions**

| Type     | Probe length | Weight            |
|----------|--------------|-------------------|
| 01MT-5B4 | 10 ft [3 m]  | 0.49 lb [0.22 kg] |
| 01MT-5B5 | 20 ft [6 m]  | 0.55 lb [0.25 kg] |
| 01MT-5B8 | 50 ft [15 m] | 0.55 lb [0.25 kg] |
| 01MT-5E4 | 10 ft [3 m]  | 0.49 lb [0.22 kg] |
| 01MT-5E5 | 20 ft [6 m]  | 0.55 lb [0.25 kg] |
| 01MT-5L4 | 10 ft [3 m]  | 0.49 lb [0.22 kg] |
| 01MT-5L5 | 20 ft [6 m]  | 0.55 lb [0.25 kg] |
| 01MT-5M4 | 10 ft [3 m]  | 0.49 lb [0.22 kg] |
| 01MT-5M5 | 20 ft [6 m]  | 0.55 lb [0.25 kg] |
| 01MT-5Q4 | 10 ft [3 m]  | 0.49 lb [0.22 kg] |
| 01MT-5Q5 | 20 ft [6 m]  | 0.55 lb [0.25 kg] |

**Further documentation**

- Installation instructions
- Resistance characteristics