

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.


Type Overview

| Tyyppi | Output signal | Anturiputken pituus |
|----------|------------------|---------------------|
| 01MT-5B4 | Pt1000 | 10 ft [3 m] |
| 01MT-5B5 | Pt1000 | 20 ft [6 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

| | | |
|------------------------|-----------------------------------|--|
| Electrical Data | Electrical connection | Removable spring loaded terminal block max. 2.5 mm ² |
| | Cable entry | Cable gland with strain relief Ø6...8 mm (1/2" NPT conduit adapter included) |
| Functional Data | Output signal passive temperature | Pt1000 Ni1000 (JCI) NTC10k (10k2) NTC10k3 (Precon) NTC20k |
| | Application | air |
| Measuring Data | Measuring values | Temperature |
| | Measuring range temperature | Pt.. : -30...160°F [-35...70°C] NTC.. : -30...120°F [0...50°C] |
| | Accuracy temperature passive | Passive Sensors depending on used type Pt.. : ±0.5°F @ 32°F [±0.3°C @ 0°C] Ni.. : ±0.7°F @ 32°F [±0.4°C @ 0°C] NTC.. : ±0.35°F @ 77°F [±0.2°C @ 25°C] |
| | Measuring current | Pt1000: <0.3 mA @ 32°F [0°C] Ni1000 (JCI): <5 mA @ 21°C [70°F] NTC10k2: <2 mA @ 77°F [25°C] NTC10k3: <2.7 mA @ 77°F [25°C] NTC20k: <0.5 mA @ 77°F [25°C] |
| | Time constant τ (63%) in air duct | typical 100 s @ 0 m/s |
| Materials | Cable gland | PA6, black |

| | |
|------------------------------|--|
| Housing | cover: lexan, orange base: lexan, orange seal: 0467 NBR70, black UV resistant |
| Safety Data | |
| Ambient humidity | max. 95% r.H., non-condensing |
| Ambient temperature | -30...120°F [-35...50°C] |
| Fluid temperature | Pt., Ni.: -30...160°F [-35...70°C] NTC.: 30...120°F [0...50°C] |
| Housing surface temperature | max. 195°F [90°C] |
| Protection class IEC/EN | III Safety Extra-Low Voltage (SELV) |
| Protection class UL | UL Class 2 Supply |
| EU Conformity | CE Marking |
| Certification IEC/EN | IEC/EN 60730-1 |
| Certification UL | cULus acc. to UL60730-1A/-2-9, CAN/CSA E60730-1:02/-2-9 |
| Degree of protection IEC/EN | IP65 |
| Degree of protection NEMA/UL | NEMA 4X |
| Quality Standard | ISO 9001 |

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. Unauthorised 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 authorised specialists may carry out installation. All applicable legal or institutional installation regulations must be complied 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

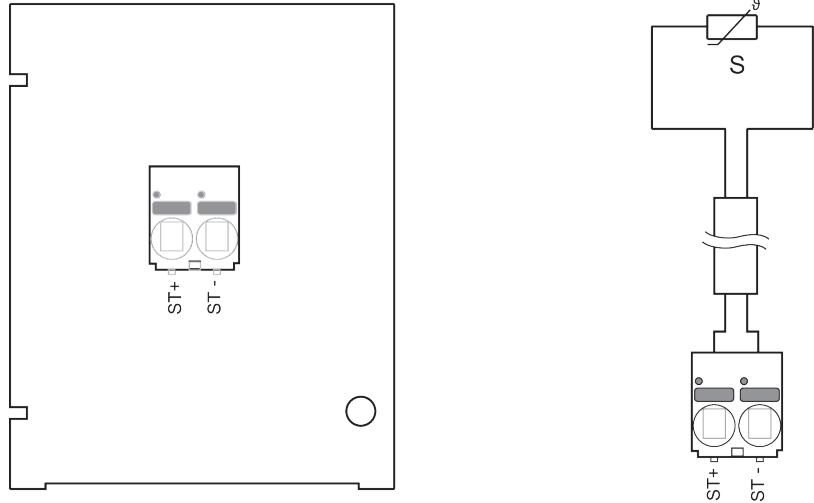
Due to self-heating with 2 wire passive sensors, the supply wire current affects the measurement accuracy, so it should not exceed 1 mA.

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.

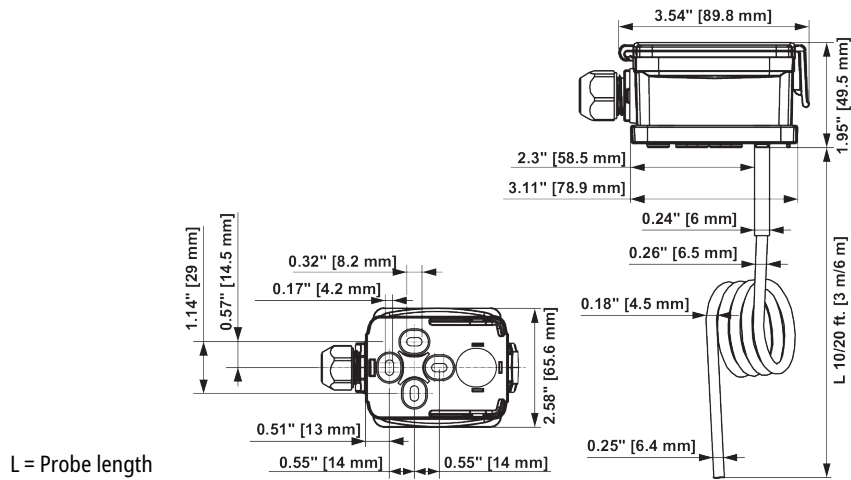
Scope of delivery

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

Wiring Diagram



Dimensions



Tyyppi

- 01MT-5B4
- 01MT-5B5
- 01MT-5E4
- 01MT-5E5
- 01MT-5L4
- 01MT-5L5
- 01MT-5M4
- 01MT-5M5
- 01MT-5Q4
- 01MT-5Q5

Anturiputken pituus

| | |
|-------------|-------------------|
| 10 ft [3 m] | 0.49 lb [0.22 kg] |
| 20 ft [6 m] | 0.55 lb [0.25 kg] |
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