

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-5L8	NTC10k (10k2)	50 ft [15 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	Pluggable 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	Application	Air
	Measuring Data	Measured values	Temperature
Specification Temperature passive		Measuring range	Pt., Ni.: -30...160°F [-35...70°C] -30...120°F [-35...50°C]
		Measuring current	Pt1000: <0.3 mA @ 32°F [0°C] Ni1000 (JCI): <5 mA @ 70°F [21°C] NTC10k2: <2 mA @ 77°F [25°C] NTC10k3: <2.7 mA @ 77°F [25°C] NTC20k: <0.5 mA @ 77°F [25°C]
		Accuracy temperature	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]
		Time constant τ (63%) in the air duct	Typical 100 s @ 0 m/s
	Safety Data	Protection class IEC/EN	III, Protective Extra-Low Voltage (PELV)

Technical data

Safety Data	Power source UL	Class 2 Supply
	Degree of protection IEC/EN	IP65
	Degree of protection NEMA/UL	NEMA 4X
	Housing	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	-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]
Materials	Housing	Cover: PC, orange Bottom: PC, orange Seal: NBR70, black UV resistant UL94 5VA
	Cable gland	PA6, black

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.

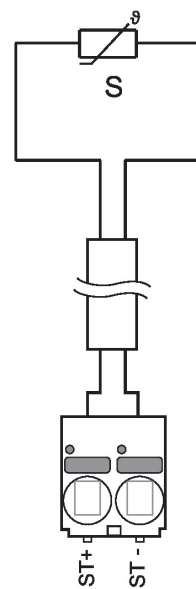
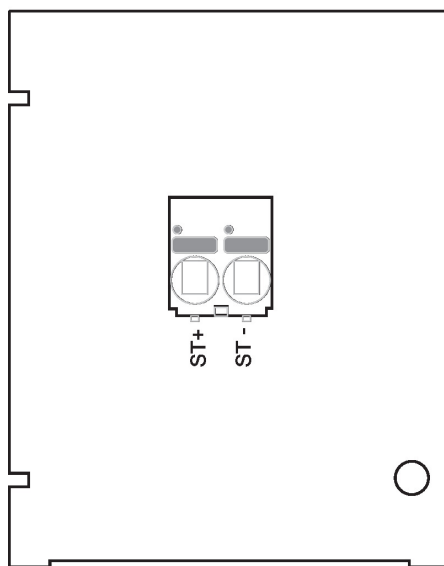
Remarks

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.
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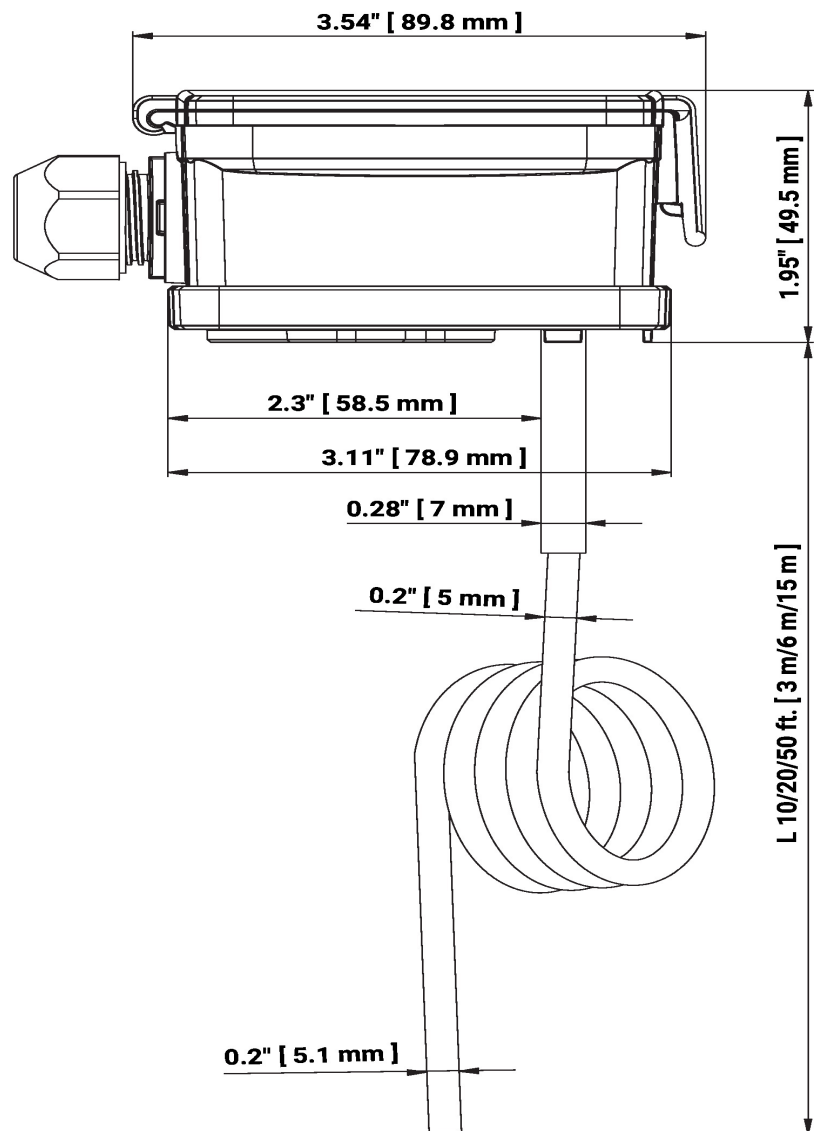
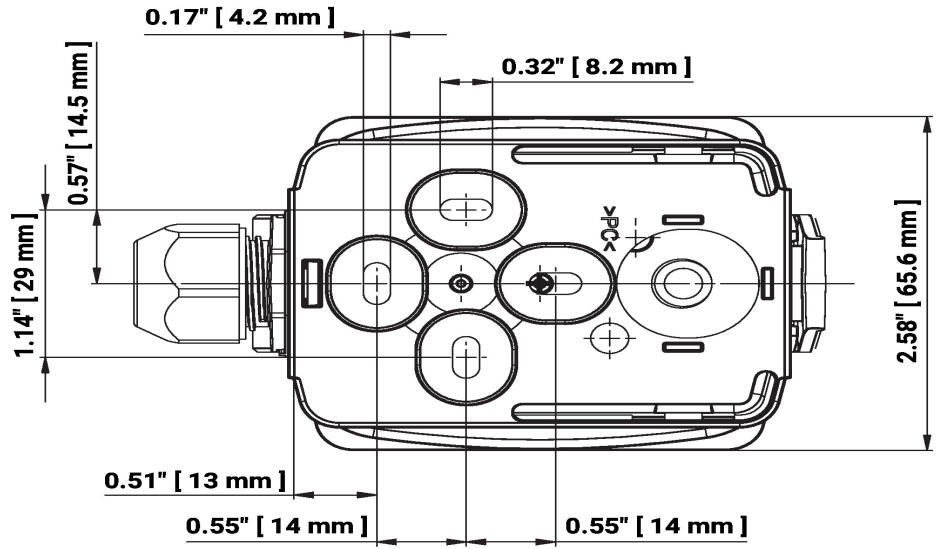
Parts included

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-5L8	50 ft [15 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