

Average Temperature Sensor

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

Type	Output signal	Probe length
01MT-5B4	PT1000	3 m
01MT-5B5	PT1000	6 m
01MT-5E4	Ni1000 (JCI)	3 m
01MT-5E5	Ni1000 (JCI)	6 m
01MT-5L4	NTC10k (10k2)	3 m
01MT-5L5	NTC10k (10k2)	6 m
01MT-5M4	NTC10k Pre (10k3)	3 m
01MT-5M5	NTC10k Pre (10k3)	6 m
01MT-5Q4	NTC20k	3 m
01MT-5Q5	NTC20k	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) NTC10k Pre (10k3) NTC20k
	Media	Air
Measuring data	Measuring values	Temperature
	Measuring range temperature	PT.. : -35...70 °C [-30...160 °F] NTC.. : 0...50 °C [-30...120 °F]
	Accuracy temperature passive	Passive Sensors depending on used type PT.. : Class B, ±0.3 °C @ 0 °C [±0.5 °F @ 32 °F] Ni.. : ±0.4 °C @ 0 °C [±0.7 °F @ 32 °F] NTC.. : ±0.2 °C @ 25 °C [±0.3 °F @ 77 °F]
	Time constant t (63%) in the air duct	typical 100 s @ 0 m/s with probe length 3 m typical 100 s @ 0 m/s with probe length 6 m

Materials	Cable gland	PA6, black
	Housing	Cover: Lexan, orange Bottom: Lexan, orange Seal: 0467 NBR70, black
Safety data	Ambient humidity	Max. 95% r.h., non-condensing
	Ambient temperature	-35...50 °C [-30...120 °F]
	Medium temperature	PT., Ni.: -35...70 °C [-30...160 °F] NTC.: 0...50 °C [30...120 °F]
	Housing surface temperature	Max. 90 °C [195 °F]
	Protection class IEC/EN	III Safety Extra-Low Voltage (SELV)
	Protection class UL	UL Class 2 Supply
	EU Conformity	CE-Kennzeichnung
	Certification IEC/EN	IEC/EN 60730-1 and IEC/EN 60730-2-9
	Certification UL	cULus acc. to UL60730-1A/-2-9, CAN/CSA E60730-1:02/-2-9, CE acc. to 2004/108/EC and 2006/95/EC, NEMA 4X, IP65, UL Enclosure Type 4X
	Degree of protection IEC/EN	IP65
	Degree of protection NEMA/UL	NEMA 4X
Quality Standard	ISO 9001	

Safety notes


The installation and assembly of electrical equipment should only be performed by authorized personnel.

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 human, animals or assets.

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

Please comply with

- Local laws, health & safety regulations, technical standards and regulations
- Condition of the device at the time of installation, to ensure safe installation
- This data sheet and installation manual

Remarks
General remarks concerning sensors

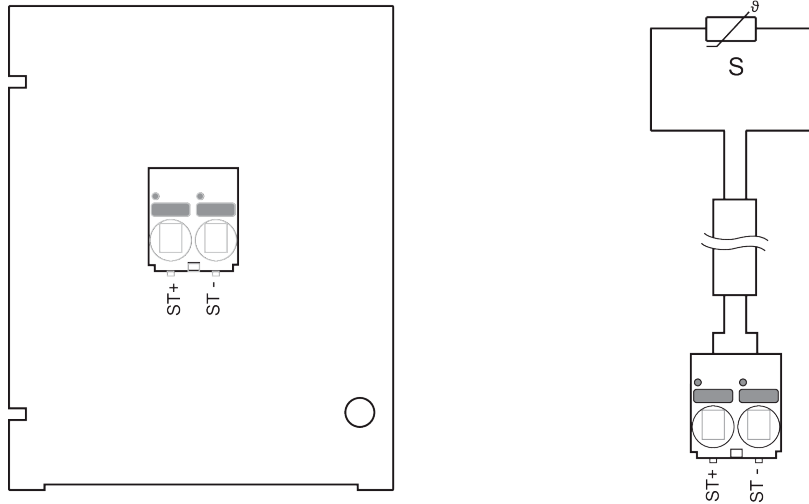
Due to self-heating with 2 wire passive sensors, the supply wire current affects the measurement accuracy, so it should not exceed 1 mA.

When using lengthy connection wires (depending on the cross section used) the measuring result might be falsified due to a voltage drop at the common GND-wire (caused by the voltage current and the line resistance). In this case, 2 GND-wires must be wired to the sensor - one for supply voltage and one for the measuring current.

Scope of delivery

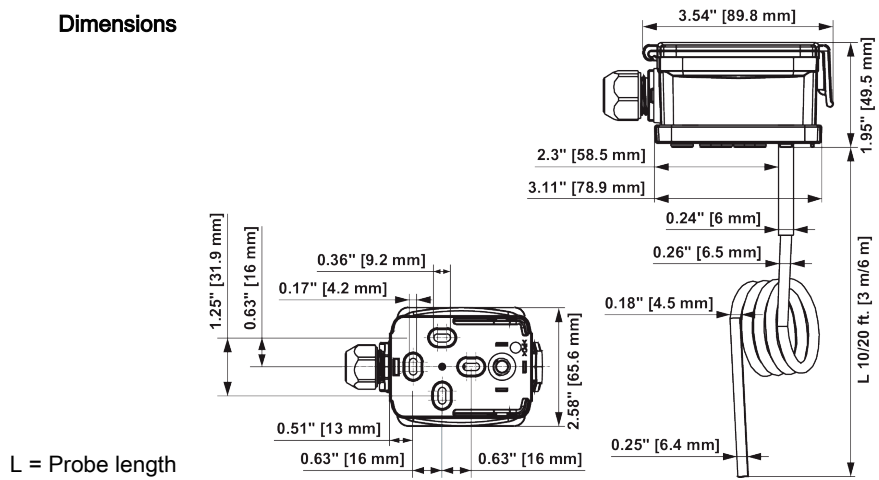
Scope of delivery	Description	Type
	Installation kit with mounting brackets	A-22D-A08
	Mounting plate	A-22D-A09
	1/2" NPT conduit adapter	

Wiring diagram



Dimensions

Dimensions



L = Probe length

Type	Probe length	Weight
01MT-5B4	3 m	0.24 kg
01MT-5B5	6 m	0.34 kg
01MT-5E4	3 m	0.24 kg
01MT-5E5	6 m	0.34 kg
01MT-5L4	3 m	0.24 kg
01MT-5L5	6 m	0.34 kg
01MT-5M4	3 m	0.24 kg
01MT-5M5	6 m	0.34 kg
01MT-5Q4	3 m	0.24 kg
01MT-5Q5	6 m	0.34 kg