

Cable Temperature Sensor with mounting flange

For temperature measurement in air ducts.
With 100/200 mm stainless steel probe and PVC cable.



5-year warranty

Type Overview

Type	Output signal	Cable length	Probe length	Probe diameter
01CT-5LLF1-4	NTC10k (10k2)	9.8 ft [3 m]	4" [100 mm]	0.24" [6 mm]
01CT-5LPF1-4	NTC10k (10k2)	9.8 ft [3 m]	8" [200 mm]	0.24" [6 mm]
01CT-5MLF1-4	NTC10k3 (Precon)	9.8 ft [3 m]	4" [100 mm]	0.24" [6 mm]
01CT-5MPF1-4	NTC10k3 (Precon)	9.8 ft [3 m]	8" [200 mm]	0.24" [6 mm]
01CT-5QLF1-4	NTC20k	9.8 ft [3 m]	4" [100 mm]	0.24" [6 mm]
01CT-5QPF1-4	NTC20k	9.8 ft [3 m]	8" [200 mm]	0.24" [6 mm]

Technical data

Electrical Data	Electrical connection	cable 9.8 ft [3 m], 2-wire	
	Cable specification	1 pair shielded plenum cable, 22AWG bare copper, black jacket, -13...167° [-25...75°C], 300 V	
Functional Data	Application	air	
	Output signal passive temperature	NTC10k (10k2) NTC10k3 (Precon) NTC20k	
	Measured values	Temperature	
Measuring Data	Measured values	Temperature	
Specification Temperature	Measuring range	-13...167°F [-25...75°C]	
	Measuring current	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	NTC... : ±0.35°F @ 77°F [±0.2°C @ 25°C]	
	Time constant τ (63%) in water pipe	With thermowell A-22P-A.. and thermal contact fluid Typical 7 s with thermowell brass Typical 9 s with thermowell stainless steel	
	Time constant τ (63%) in the air duct	Typical 155 s @ 0 m/s Typical 35 s @ 3 m/s	
	Safety Data	Protection class IEC/EN	III, Protective Extra-Low Voltage (PELV)
		Power source UL	Class 2 Supply
Degree of protection IEC/EN		IP67	
Degree of protection NEMA/UL		NEMA 4X	

Technical data

Safety Data	Certification IEC/EN	IEC/EN 60730-1
	Quality Standard	ISO 9001
	UL Approval	cULus acc. to UL60730-1A/-2-9, CAN/CSA E60730-1/-2-9
	Type of action	Type 1
	Rated impulse voltage supply	0.8 kV
	Method of mounting control	Surface mounted
	Pollution degree	3
	Ambient humidity	Max. 95% RH, non-condensing
	Ambient temperature	-13...167°F [-25...75°C]
Fluid temperature	-13...167°F [-25...75°C]	

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

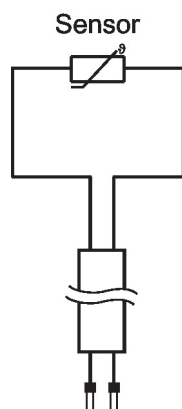
General Remarks Concerning Sensors Due to self-heating with 2 wire passive sensors, the supply wire current affects the measurement accuracy. So the supply current should not be higher than the measuring current values specified in this data sheet.

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.

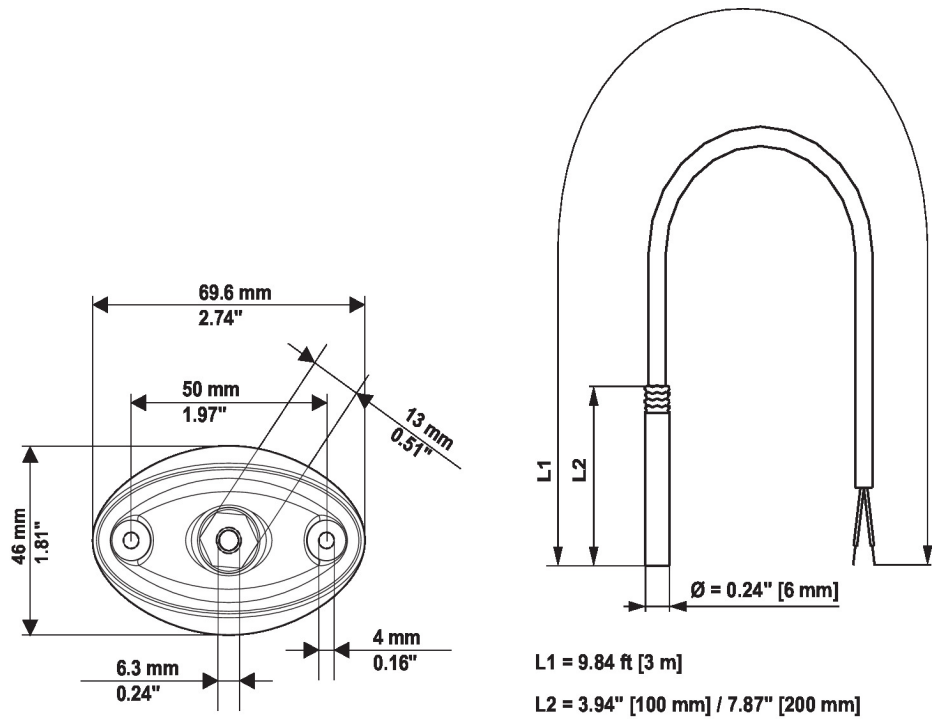
Parts included

Description	Type
Mounting flange for sensor probe 6 mm, up to max. 120°C [248°F], Plastic	A-22D-A03

Wiring Diagram



Dimensions



Type	Probe length	Weight
01CT-5LLF1-4	4" [100 mm]	0.15 lb [0.070 kg]
01CT-5LPF1-4	8" [200 mm]	0.18 lb [0.080 kg]
01CT-5MLF1-4	4" [100 mm]	0.15 lb [0.070 kg]
01CT-5MPF1-4	8" [200 mm]	0.18 lb [0.080 kg]
01CT-5QLF1-4	4" [100 mm]	0.15 lb [0.070 kg]
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Further documentation

- Installation instructions
- Resistance characteristics