

Contact Temperature Sensor

Surface contact temperature sensor for pipe applications. Spring loaded brass contact pin to ensure fast response and accurate reading. IP65 / NEMA 4X rated enclosure.


Type Overview

Type	Output signal passive temperature
01HT-1A	Pt100
01HT-1B	Pt1000
01HT-1C	Ni1000
01HT-1D	Ni1000TK5000
01HT-1F	NTC1k8
01HT-1L	NTC10k (10k2)
01HT-1Q	NTC20k

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	
Functional data	Output signal passive temperature	Pt100 Pt1000 Ni1000 Ni1000TK5000 NTC1k8 NTC10k (10k2) NTC20k	
	Application	Water	
	Measuring data	Measuring values	Temperature
		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 [±0.35°F @ 77°F]
		Measuring current	Pt100: <1 mA @ 0°C [32°F] Pt1000: <0.3 mA @ 0°C [32°F] Ni1000: <0.3 mA @ 0°C [32°F] Ni1000TK5000: <0.3 mA @ 0°C [32°F] NTC1k8: <0.1 mA @ 25°C [77°F] NTC10k (10k2): <2 mA @ 25°C [77°F] NTC20k: <0.5 mA @ 25°C [77°F]
	Time constant τ (63%) on water pipe	typical 16 s	

Materials	Cable gland	PA6, black
	Housing	Cover: Lexan, orange Bottom: Lexan, orange Seal: 0467 NBR70, black UV resistant
Safety data	Ambient humidity	Max. 95% r.H., non-condensing
	Ambient temperature	-35...50°C [-30...120°F]
	Fluid temperature	-35...90°C [-30...195°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 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 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.

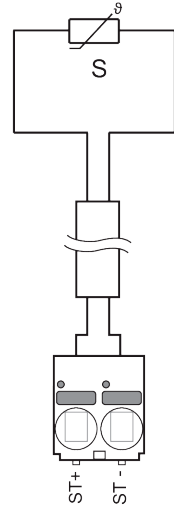
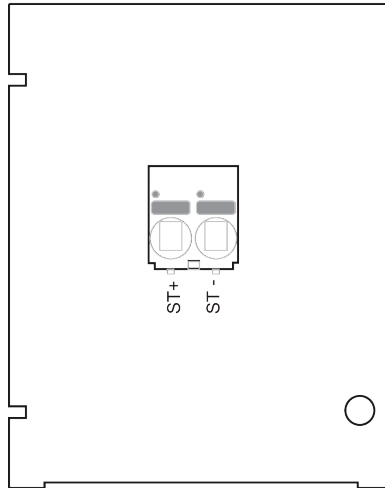
Scope of delivery

Scope of delivery	Description	Type
	Fixing strap, for pipes up to Ø 40...110 mm [1.6...4.3"]	A-22P-A47

Accessories

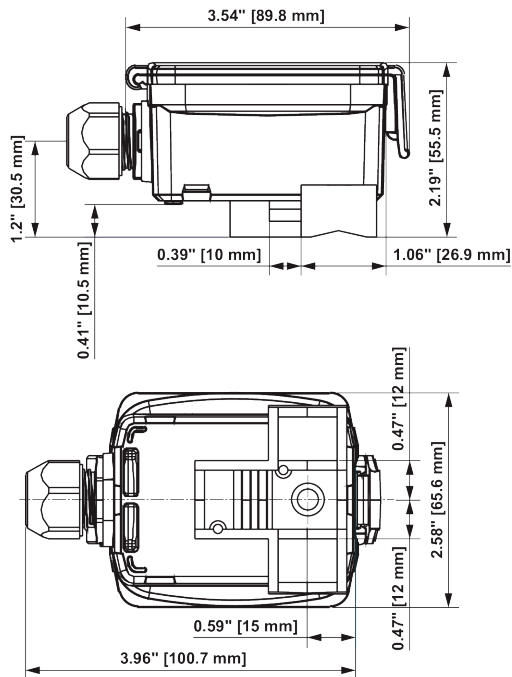
Optional accessories	Description	Type
	Fixing strap, for pipes up to Ø 40...250 mm [1.6...9.8"]	A-22P-A49
	Syringe with thermal paste	A-22P-A44
	Connection adapter, M20x1.5, for cable 1x6 mm,	A-22G-A01.1

Wiring diagram



Dimensions

Dimensions



Type	Weight
01HT-1A	0.15 kg
01HT-1B	0.15 kg
01HT-1C	0.15 kg
01HT-1D	0.15 kg
01HT-1F	0.15 kg
01HT-1L	0.15 kg
01HT-1Q	0.15 kg