

response and accuracy.

Contact Temperature Sensor

For temperature measurement on pipe and arched surfaces. PVC cable and a brass probe for fast

Technical data sheet





01ST-1

Type Overview

Туре	Output signal passive temperature
01ST-1A3	Pt100
01ST-1B3	Pt1000
01ST-1C3	Ni1000
01ST-1D3	Ni1000TK5000
01ST-1F3	NTC1k8
01ST-1L3	NTC10k (10k2)
01ST-1Q3	NTC20k

Technical Data		
Electrical data	Electrical connection	Cable 2 m, 2-wire
Functional data	Output signal passive temperature	Pt100 Pt1000 Ni1000
		Ni1000TK5000 NTC1k8 NTC10k (10k2) NTC20k
	Application	Water
Measuring data	Measuring values	Temperature
•	Measuring range temperature	-35100°C [-30210°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] NTC1k8: ±0.5°C @ 25°C [±0.9°F @ 77°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	With thermal contact fluid Typical 17 s
Safety data	Ambient humidity	Max. 95% r.H., non-condensing
	Ambient temperature	-35100°C [-30210°F]
	Fluid temperature	-35100°C [-30210°F]
	Protection class IEC/EN	III Safety Extra-Low Voltage (SELV)



0151-1
UL Class 2 Supply
CE Marking
IEC/EN 60730-1
IP65
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

Optional accessories

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.

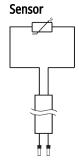
Scope of delivery

Scope of delivery	Description	Туре
	Fixing strap, for pipes up to Ø 40110 mm [1.64.3"]	A-22P-A47

Accessories

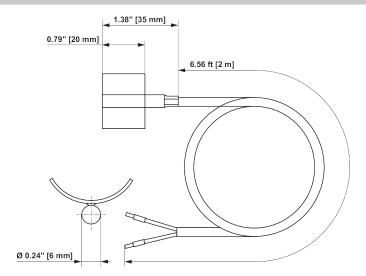
S	Description	Туре
	Syringe with thermal paste	A-22P-A44
	Fixing strap, for pipes up to Ø 40250 mm [1.69.8"]	A-22P-A49

Wiring diagram





Dimensions



Туре	Weight
01ST-1A3	0.08 kg
01ST-1B3	0.08 kg
01ST-1C3	0.08 kg
01ST-1D3	0.08 kg
01ST-1F3	0.08 kg
01ST-1L3	0.08 kg
01ST-1Q3	0.08 kg