

Immersion temperature sensor with fast response characteristics

For temperature measurement of liquid mediums. With 50/100/200 mm stainless steel probe and connection R 1/2". NEMA 4 / IP65 rated enclosure.


Type Overview

Type	Output signal passive temperature	Probe length	Probe diameter	Weight
01PT-1BH	PT1000	50 mm	6/4 mm	0.17 kg
01PT-1BL	PT1000	100 mm	6/4 mm	0.17 kg
01PT-1BP	PT1000	200 mm	6/4 mm	0.18 kg
01PT-1DH	Ni1000TK5000	50 mm	6/4 mm	0.17 kg
01PT-1DL	Ni1000TK5000	100 mm	6/4 mm	0.17 kg
01PT-1DP	Ni1000TK5000	200 mm	6/4 mm	0.18 kg
01PT-1LH	NTC10k (10k2)	50 mm	6/4 mm	0.17 kg
01PT-1LL	NTC10k (10k2)	100 mm	6/4 mm	0.17 kg
01PT-1LP	NTC10k (10k2)	200 mm	6/4 mm	0.18 kg

Technical Data

Electrical data	Cable entry	Cable gland cap nut with strain relief Ø6...8 mm
Functional data	Output signal passive temperature	PT1000 Ni1000TK5000 NTC10k (10k2)
	Media	Air Water
Measuring data	Measured values	Temperature
	Measuring range temperature	PT... : -50...160 °C [-60...320 °F] NTC... : -50...150 °C [-60...300 °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]
Materials	Cable gland	Plug Adapter: PA66, black Nut: PA6, black
	Housing	Cover: Lexan, Belimo orange NCS S0580-Y6OR Bottom: Lexan, Belimo orange NCS S0580-Y6OR 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... : -50...160 °C [-60...320 °F] NTC... : -50...150 °C [-60...300 °F]
	Housing surface temperature	Max. 90 °C [195 °F]
	Protection class IEC/EN	III Protective extra-low voltage (PELV)
	Protection class UL	UL Class 2 Supply
	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

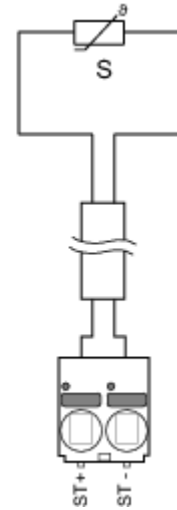
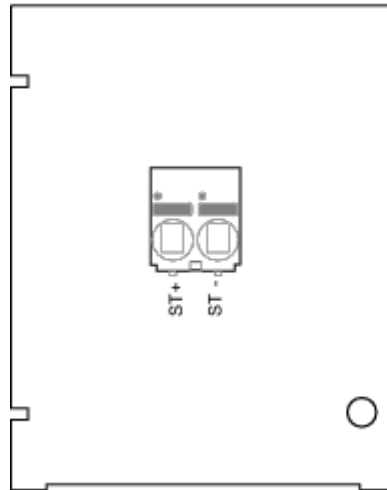
Due to self-heating with 2 wire passive sensors, the supply wire current affects the measurement accuracy, so it should not exceed 1 mA.

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.

Accessories

Optional accessories	Description	Type
	Connection adapter M20 for cable 1 x 6 mm (Multi-pack 10 pieces)	A-22G-A01.1

Wiring diagram



Dimensions

