

# Channel- immersion temperature sensor

## Channel- immersion temperature sensor

Terminal box, IP 65

<b>Order number:</b>	<b>010.xxxxx</b>
<b>Order code:</b>	<b>Kanal- Tauch-Temperatursensor xxx</b>



### Overview:

For measuring the temperature in the duct. Can also be used for liquid media in conjunction with a brass or stainless steel immersion sleeve. The housing meets the NEMA 4X / IP65 requirements.

Output signal: Pt1000

Typical applications:

- heating construction
- plant engineering
- Mechanical engineering
- Building automation
- ventilation

### Variants:

<b>Channel immersion temperature sensor 50mm</b> Bestellnummer: 010.17119 Bestellcode: Kanal- Tauch-Temperatursensor 50mm	<b>Channel immersion temperature sensor 100mm</b> Bestellnummer: 010.17315 Bestellcode: Kanal- Tauch-Temperatursensor 100mm
<b>Channel immersion temperature sensor 150mm</b> Bestellnummer: 010.17317 Bestellcode: Kanal- Tauch-Temperatursensor 150mm	<b>Channel immersion temperature sensor 200mm</b> Bestellnummer: 010.17318 Bestellcode: Kanal- Tauch-Temperatursensor 200mm
<b>Channel immersion temperature sensor 300mm</b> Bestellnummer: 010.17319 Bestellcode: Kanal- Tauch-Temperatursensor 300mm	<b>Channel immersion temperature sensor 450mm</b> Bestellnummer: 010.17320 Bestellcode: Kanal- Tauch-Temperatursensor 450mm

### Remarks:

General notes on sensors

With passive sensors in two-wire design, the accuracy of the measurement can be influenced as a result of self-heating. Therefore, the supply current should not be greater than 1 mA.

When using long connecting cables (depending on the wire cross section used), the cable resistance must be taken into account. The lower the impedance of the sensor used, the greater the line resistance affects the measurement, because it generates an offset.

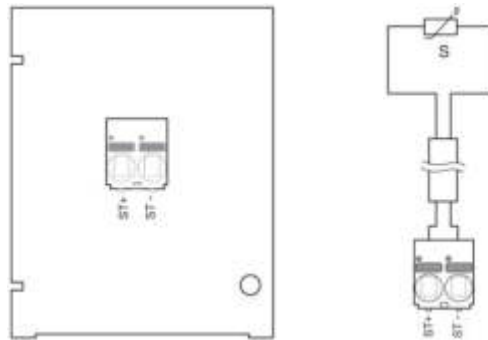
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## Safety instructions:

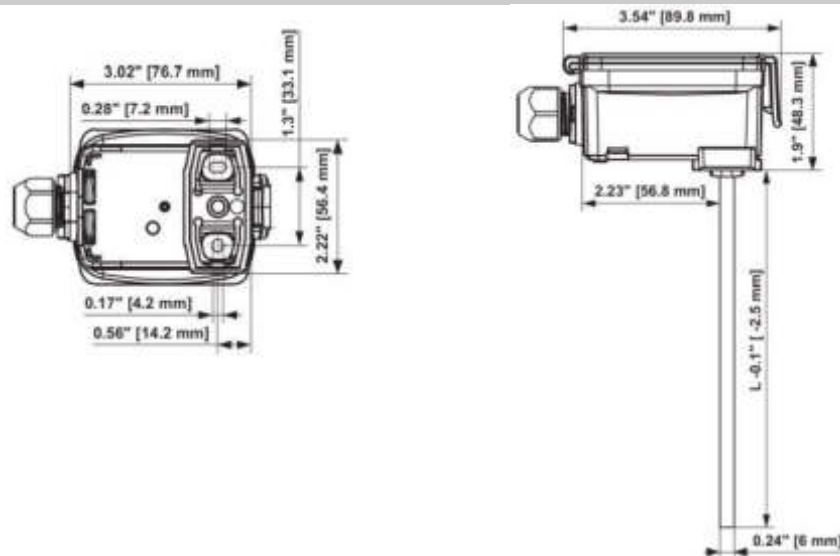
This device is designed for use in stationary heating, ventilation and air conditioning systems and must not be used for applications outside the specified area of application. Unauthorized modifications are prohibited. The device must not be used in combination with other equipment that can injure people, animals or property in the event of a malfunction.

It must be ensured that the power supply is not connected when the device is installed. Do not connect to running devices. The installation must be carried out by authorized specialist personnel. The legal and official regulations must be observed. The device contains electrical and electronic components and must not be disposed of as domestic waste. The local and currently valid legislation must be observed.

## Connection diagram:



## Dimensions:



## Scope of delivery:

Channel immersion temperature sensor (in the ordered length); Mounting clip, with screws and adhesive film

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## Technical specifications:

Intrastat number:	8537.10.91.90
Country of origin	EU/AT
Height, width, depth (in mm)	TTF 50mm: 92x60x98 TTF 100mm: 92x60x148 TTF 150mm: 92x60x198 TTF 200mm: 92x60x248 TTF 300mm: 92x60x348 TTF 450mm: 92x60x498
Weight (in kg)	TTF 50mm: 0,120 TTF 100mm: 0,120 TTF 150mm: 0,130 TTF 200mm: 0,130 TTF 300mm: 0,140 TTF 450mm: 0,150
Electrical connection	Spring-type terminal plug-in max. 2.5 mm <sup>2</sup>
Cable entry	Cable gland with strain relief Ø6 ... 8 mm
Passive temperature output signal	Pt1000
Application	Air / Water
Readings	Temperature
Measuring range temperature	-50...160°C [-60...320°F]
Passive temperature accuracy	Class B, ±0.3°C @ 0°C [±0.5°F @ 32° F]
Time constant t (63%) in the air duct	typically 210 s at 0 m / s; typically 46 s at 3 m / s
Time constant t (63%) in water pipe	with immersion sleeve A-22P-A .. and thermal paste; typically 7 s with brass immersion sleeve; typically 9 s with immersion sleeve made of stainless steel
Cable gland	Plug adapter: PA66, black; Mother: PA6, black
Casing	Lid: Lexan, orange; Below: Lexan, orange; Seal: 0467 NBR70, black; UV-resistant
Ambient humidity	Max. 95% r.H., non-condensing
Ambient temperature	-35...50°C [-30...120°F]
Medium temperature	-50...160°C [-60...320°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
IEC / EN certification	IEC/EN 60730-1
UL certification	cULus acc. to UL60730-1A/-2-9, CAN/CSA E60730-1:02/-2-9
Degree of protection IEC / EN	IP65
Quality standard	ISO 9001