




ST-C1-02

Cable sensors, type ST-C1-02

- Temperature measurement
- Indirect measurement via probe
- Probe Ø 6mm x 15mm : stainless steel
- Standard cable length : 2m
- Pt1000, NTC 20kΩ, NTC 10kΩ Precon or Ni1000Tk5000
- Other sensing elements available on request

Cable
 Passive

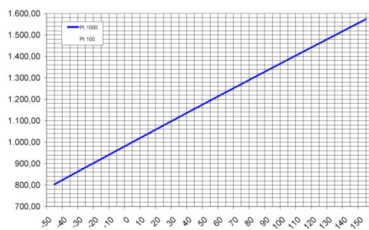
Description

The cable sensors, type ST-C1-02, are typically used for the temperature measurement of water in HVAC applications. The cable sensors can be used in a temperature range of -30..+70°C.

The sensor probe houses the sensing element which is contact with the medium. The value of the sensor (resistance) changes depending on the water temperature in the pipe. The value will change according the characteristic curve for this type of sensing element.

The sensing element of the ST-C1-02 sensors is a standard platinum Pt100 IEC751-EN60751 class B ¹⁾. This sensor has a calibrated resistance value 1000Ω at a temperature of 0°C.

The sensors have a Ø 6mm probe made of stainless steel, a cable with standard length 2m.



curve Pt1000

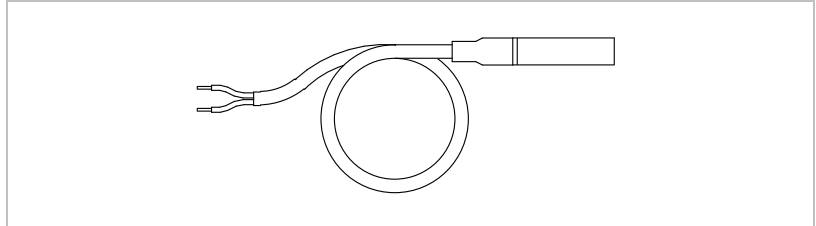
Technical data

ST-C1-02

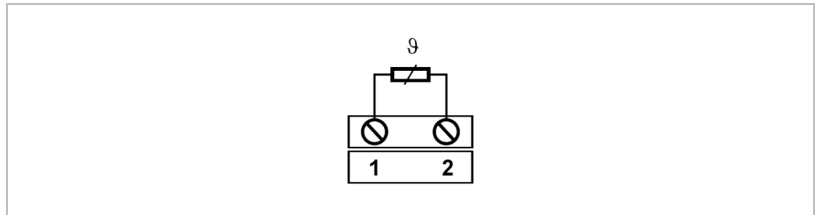
Sensing element	Pt1000 ¹⁾
Precision	IEC751-EN60751 class B
Probe	Ø 6mm x 15mm
Time constant t ₆₃	± 25s (@ 1m/s)
Measuring current	ca.1mA
Electrical connection	2-wire
Wiring	cable 2m, 2x 0,14mm ² (LIYY)
Medium temperature	-30°C..+70°C

¹⁾ other measuring elements can be delivered (see also 'Overview' table on next page).

Construction



Wiring diagram



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Overview			
Type	Sensing element	Value (resistance)	Precision
ST-C1-02	Pt1000	1000 Ω @ 0°C	±0,3 K @ 0°C
ST100-C1-02	Pt100	100 Ω @ 0°C	±0,3 K @ 0°C
ST1000-C1-02	PTC1000	1000 Ω @ +25°C	±1,3 K @ +25°C
STN-C1-02	Ni1000Tk5000	1000 Ω @ 0°C	±0,5 K @ 0°C
STND-C1-02	Ni1000 DIN	1000 Ω @ 0°C	±0,4 K @ 0°C
STC02-C1-02	NTC 2kΩ	2252 Ω @ +25°C	±0,2 K @ +25°C
STC10-C1-02	NTC 10kΩ	10 kΩ @ +25°C	±0,2 K @ +25°C
STC10-C1-02	NTC 20kΩ	20 kΩ @ +25°C	±0,2 K @ +25°C
STP-C1-02	NTC 10kΩ Precon	10 kΩ @ +25°C	±0,25 K @ +25°C

Accessories

Type	Description	Remarks
ST.TR.010	T° transmitter 0..10Vdc	to combine with Pt1000 (or Pt100) only !
ST.TR.420	T° transmitter 4..20mA	to combine with Pt1000 (or Pt100) only !