

TEL NTC 10-5M - Floor temperature sensor



TEL NTC 10-5M temperature sensor is designed for measuring floor temperatures in automatic HVAC systems.

Temperature is detected by an NTC 10 element with a nominal resistance of 10 k Ω at 25 °C.

Install a metal or plastic pipe into the floor construction for mechanical protection. The rigid cable helps to install the sensor inside the protection pipe.

Technical specifications

Property	Value
Sensor	10 k Ω NTC element
Accuracy	± 0.23 °C (at 25 °C)
Beta value 25/85	3977K $\pm 1\%$
Range	-40...105 °C
Cable	$\varnothing 3$ mm x 5 m, 2 x AWG24 (rigid, double insulation)
Probe	$\varnothing 5$ mm x 20 mm
Protection class	IP68, 1.5 m / 30 min

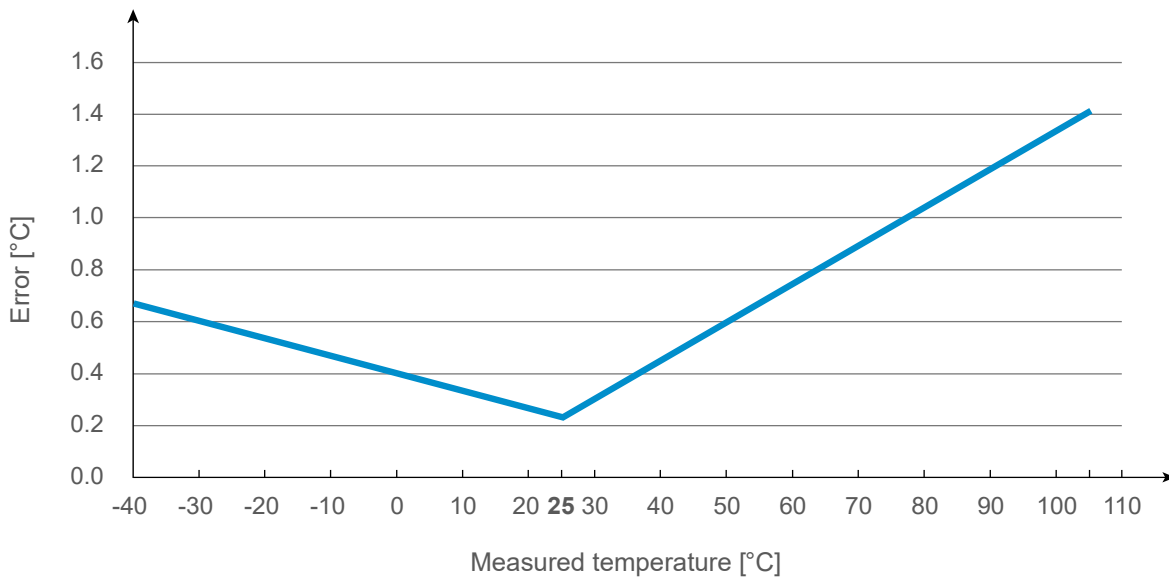
Sensor resistance at different temperatures

°C	Ω
-40	344330
-35	247150
-30	179720
-25	132180
-20	98214
-15	73673
-10	55765
-5	42578
0	32786
5	25456

°C	Ω
10	19924
15	15717
20	12492
25	10000
30	8060
35	6538
40	5335
45	4378
50	3611
55	2994

°C	Ω
60	2493
65	2086
70	1753
75	1480
80	1256
85	1070
90	917
95	789
100	682
105	592

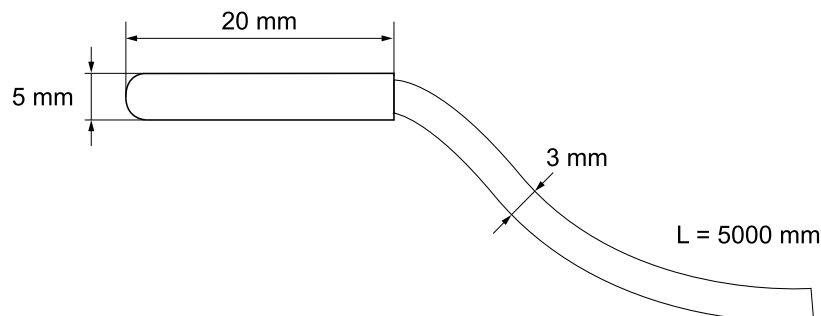
Detailed measurement accuracy



Ordering information

Type	Product number	Description
TEL NTC 10-5M	1175281	cable temperature sensor, floor, 10 kΩ at 25 °C

Dimensions



Supported standards, directives and regulations

Standard	Description
2014/30/EU	Electromagnetic Compatibility (EMC).
2014/35/EU	Low Voltage Directive (LVD).
2011/65/EU	Restriction of Hazardous Substances (RoHS2) Directive.
(EU) 2015/863	Commission Delegated Directive, amending Annex II to Directive 2011/65/EU.
S.I. 2016 No. 1091	Electromagnetic compatibility regulations
S.I. 2016 No. 1101	The electrical equipment (safety) regulations
S.I. 2012 No. 3032	The restriction of the use of certain hazardous substances in electrical and electronic equipment regulations
EN 61000-6-3:2007/ A1:2011	Electromagnetic compatibility (EMC) - Part 6-3: Generic standards - Emission standard for residential, commercial and light-industrial environments.
EN 61000-6-2:2006	Electromagnetic compatibility (EMC) - Part 6-2: Generic standards - Immunity for industrial environments.