



NTC Sensor

INTRODUCTION

Two tinned copper wires cable and type-NTC temperature sensor at one end. Sensor is protected by a rubber or a stainless steel capsule, both waterproof. It is a proper solution for either heating or cooling applications.

SPECIFICATION

Sensor: NTC thermistor, R25= 10 kΩ, 1%, β25/85= 3435 K 1%

Cable: 2 tinned copper wires; 2 x 0.22 mm²; TPE (synthetic rubber) overmolded cap; tinned stripped terminals; black color.

Length: 3 meters

Protection capsules: option 1- overmolded TPE rubber capsule; dimensions Φ5 x 20 mm; black color; waterproof.
option 2- 304 stainless steel capsule; dimensions Φ 5 x 30 mm; waterproof.

Operating temperature: - 50 to +110 °C for rubber capsule / - 30 to +105 °C for stainless steel capsule

Response time: 8 seconds (rubber capsule) and 9 seconds (stainless steel capsule) to reach 63 % of the applied temperature step.

Protection degree: IP68

Electrical insulation: > 20 MΩ @ 500 Vdc

FEATURES

NTC-type temperature sensor; R25= 10 kΩ; 1%; β25/85= 3435 K 1%

Accuracy: < 1% @ 25 °C

Interchange error: 0.5 % @ 25 °C

Temperature x Ohmic Resistance relation:

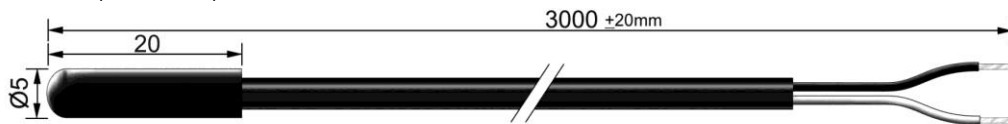
Temperature (°C / °F)	Resistance (kΩ)	Temperature (°C / °F)	Resistance (kΩ)	Temperature (°C / °F)	Resistance (kΩ)
-50 / -58	329.500	5 / 41	22.050	60 / 140	3.020
-45 / -49	247.700	10 / 50	17.960	65 / 149	2.588
-40 / -40	188.500	15 / 59	14.690	70 / 158	2.228
-35 / -31	144.100	20 / 68	12.090	75 / 167	1.924
-30 / -22	111.300	25 / 77	10.000	80 / 176	1.668
-25 / -13	86.430	30 / 86	8.313	85 / 185	1.451
-20 / -4	67.770	35 / 95	6.940	90 / 194	1.266
-15 / 5	53.410	40 / 104	5.827	95 / 203	1.108
-10 / 14	42.470	45 / 113	4.911	100 / 212	0.973
-5 / 23	33.900	50 / 122	4.160	105 / 221	0.857
0 / 32	27.280	55 / 131	3.536	110 / 230	0.758

ORDERING

Identification Code (P/N)	Description
NTC-MOD1-TPE-3M	NTC sensor, rubber capsule, 3 meter long
NTC-MOD2-304SS-3M	NTC sensor, 304 stainless steel capsule, 3 meter long

DIMENSIONS

NTC Sensor cable, rubber protection capsule:



NTC Sensor cable, stainless steel protection capsule:

**MORE INFORMATION**

Sensor cables should always be routed away from high-current power conductors, preferably through grounded conduits.

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