

FLOOR SENSORS

PRODUCT OVERVIEW



The majority of temperature control is achieved via a standard or programmable room thermostat. However, there are certain restrictions in this that has brought about the development of many other, more sophisticated, temperature sensing devices, all purposed to provide a more comfortable and proactive means of climate control. One common device used is a floor probe. Floor probes are often used in wet areas or areas with high air change rates where a normal wall mounted air sensor would struggle to get an accurate reading. They are also used underneath sensitive floors where a maximum floor temperature is required.

The floor probe is an NTC sensor which means that it measures the floor temperature on a negative coefficient as shown in the table below.

Type	Dimensions	Sensor Element (NTC 12k Ω @25 $^{\circ}$ C)	Material
ETF-144/99A floor sensor/ probe	6.5 x 30mm sensor 2.5m cable probe	NTC 12k +25 $^{\circ}$ C = 12k Ω Range -20 $^{\circ}$ C +70 $^{\circ}$ C	ABS plastic PVC insulated

NTC 12k resistance table						
-20 $^{\circ}$ C = 112246 Ω	11 $^{\circ}$ C = 22300 Ω	16 $^{\circ}$ C = 17750 Ω	21 $^{\circ}$ C = 14238 Ω	26 $^{\circ}$ C = 11506 Ω	35 $^{\circ}$ C = 7978 Ω	60 $^{\circ}$ C = 3201 Ω
-10 $^{\circ}$ C = 63929 Ω	12 $^{\circ}$ C = 21292 Ω	17 $^{\circ}$ C = 16974 Ω	22 $^{\circ}$ C = 13636 Ω	27 $^{\circ}$ C = 11035 Ω	40 $^{\circ}$ C = 6569 Ω	70 $^{\circ}$ C = 2306 Ω
0 $^{\circ}$ C = 37942 Ω	13 $^{\circ}$ C = 20335 Ω	18 $^{\circ}$ C = 16237 Ω	23 $^{\circ}$ C = 13064 Ω	28 $^{\circ}$ C = 10587 Ω	45 $^{\circ}$ C = 5442 Ω	80 $^{\circ}$ C = 1692 Ω
5 $^{\circ}$ C = 29645 Ω	14 $^{\circ}$ C = 19428 Ω	19 $^{\circ}$ C = 15537 Ω	24 $^{\circ}$ C = 12519 Ω	29 $^{\circ}$ C = 10159 Ω	50 $^{\circ}$ C = 4535 Ω	90 $^{\circ}$ C = 1263 Ω
10 $^{\circ}$ C = 23364 Ω	15 $^{\circ}$ C = 18567 Ω	20 $^{\circ}$ C = 14871 Ω	25 $^{\circ}$ C = 12000 Ω	30 $^{\circ}$ C = 9752 Ω	55 $^{\circ}$ C = 3800 Ω	100 $^{\circ}$ C = 958 Ω