

NORTH STAR SENSORS CURVE 44

R/T SPECIFICATIONS

°C	RESISTANCE RATIO Rt / R25	NTC (%/°C)	POINT MATCHED RESISTANCE MFG. TOL. ADDER (±%)	INTER- CHANGEABLE T2A CODE ±°C TOL.
-50	67.0115	-7.14	6.5	0.58
-45	47.1985	-6.89	5.7	0.53
-40	33.6499	-6.65	5.0	0.49
-35	24.2694	-6.42	4.4	0.44
-30	17.6977	-6.21	3.8	0.39
-25	13.0148	-6.00	3.3	0.34
-20	9.70741	-5.81	2.8	0.30
-15	7.29500	-5.62	2.4	0.26
-10	5.53247	-5.44	2.0	0.23
-5	4.23247	-5.27	1.7	0.21
0	3.26505	-5.11	1.4	0.20
5	2.53931	-4.95	1.1	0.20
10	1.99013	-4.80	0.8	0.20
15	1.57121	-4.66	0.5	0.20
20	1.24927	-4.52	0.3	0.20
25	1.00000	-4.39	0.0	0.20
30	0.80567	-4.26	0.3	0.20
35	0.65314	-4.14	0.5	0.20
40	0.53266	-4.02	0.7	0.20
45	0.43689	-3.91	0.9	0.20
50	0.36031	-3.81	1.2	0.20
55	0.29857	-3.71	1.4	0.20
60	0.24869	-3.61	1.6	0.20
65	0.20816	-3.51	1.8	0.20
70	0.17508	-3.42	2.0	0.20
75	0.14793	-3.33	2.1	0.22
80	0.12554	-3.24	2.3	0.24
85	0.10700	-3.16	2.5	0.28
90	0.091563	-3.08	2.7	0.31
95	0.078666	-3.00	2.8	0.36
100	0.067842	-2.91	3.0	0.40
105	0.058757	-2.84	3.1	0.45
110	0.051066	-2.77	3.3	0.49
115	0.044531	-2.71	3.4	0.54
120	0.038958	-2.64	3.6	0.59
125	0.034190	-2.58	3.7	0.65
130	0.030096	-2.52	3.8	0.70
135	0.026570	-2.46	4.0	0.77
140	0.023524	-2.41	4.1	0.83
145	0.020884	-2.35	4.3	0.92
150	0.018590	-2.30	4.4	1.00

COLUMN HEADING DEFINITIONS:

RESISTANCE RATIO – The ratio of the resistance at temperature “t” to the resistance at 25 °C. To determine the resistance of a thermistor at a temperature point other than 25 °C, multiply the given resistance ratio by the resistance at 25 °C.

NTC - The Negative Temperature Coefficient of resistance is the % change in resistance per change in temperature, expressed in units of -%/ °C. To determine the approximate % resistance tolerance of a thermistor at a particular temperature, multiply the given NTC value by the temperature tolerance at that temperature.

POINT MATCHED - For thermistors with a specified tolerance at a single temperature point, the manufacturing tolerance is used to determine the tolerance at other temperature points. Typically, thermistors are specified at 25 °C. To determine the resistance tolerance at another temperature point, add the manufacturing tolerance to the specified point matched tolerance. For example, a thermistor with a ± 5 % resistance tolerance at 25 °C has a ± 6.4 % tolerance at 0 °C. Point matched thermistors should typically not cycle or operate continuously above 105 °C.

INTERCHANGEABLE T2A CODE - An interchangeable tolerance means that a thermistor has a temperature tolerance specified over a temperature range. For example, a “T2A” code indicates a ± 0.2 °C temperature tolerance from 0 °C to 70 °C. Typically, interchangeable thermistors should not cycle or operate continuously above their specified temperature range.