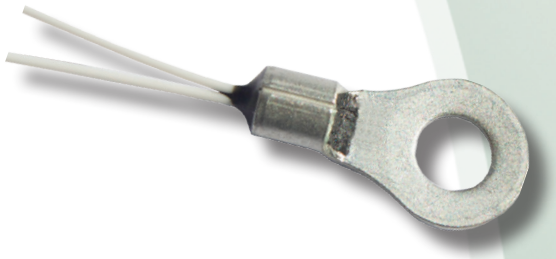
Temperature sensor ETP-RT

Variohm
Eurosensor

SMT Ring Terminal Probe ETP-RT-10K3A1B

- Temperature range -40 to +125°C
- Available in a range of sizes
- Resistance values from 2.2 - 100 kΩ
- Custom designs available
- Higher temperature range available



Typical applications for the ETP-RT Ring Terminal Probe are:

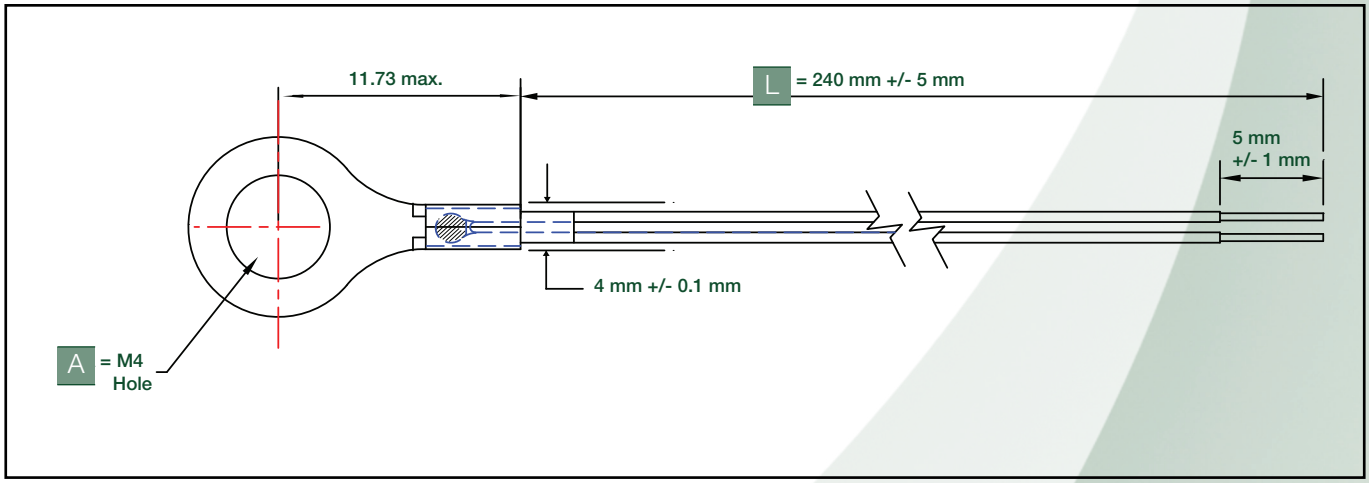
- Industrial equipment
- Transit
- HVAC
- Power and utilities
- Computers
- Home appliances
- Calibration and instrumentation

Technical information

	Unit	Value
Nominal resistance at +25°C	Ohms	10,000
Resistance tolerance from 0..70°C	°C	+/- 0.2
Beta value 25/85	K	3976
Tolerance on Beta value 25/85	%	+/- 0.5
Dissipation constant in still air	mW/°C	2
Operating temperature	°C	-40 to +125
Epoxy thermal conductivity	W/(m.K)	1.7

Materials	
Leads and insulation	28AWG Solid silver plated copper leads with white Kynar insulation
Probe material	Tin plated copper

Dimensions in mm



Temperature sensor ETP-RT

Variohm
Eurosensor

Ordering information for standard stock model:

Order code for stock models:

93069-ETP - RT - 4 - 24 - 10K3A1B

A L T

- T - Thermistor type
- L - Probe cable length
- A - To suit stud size

93069-ETP-RT-4-24-10K3A1B
93549-ETP-RT-4-100-10K3A1B

Ordering information for custom designs:

Use the information below to build up a custom probe design.

A

Probe size					
Order Code A =	4	5	6	8	x
To suit stud size	M4	M5	M6	M8	Optional stud size

L

Probe cable length											
Order Code L =	5	10	15	20	23	25	30	35	40	45	x
Length in mm +/- 5 mm	50	100	150	200	230	250	300	350	400	450	Custom length

T

Thermistor type	
Order Code T =	All thermistor types available: Insert details as required

Variohm Holdings Ltd

Temperature sensor ETP-RT

Variohm
Eurosensor

Resistance v. temperature table for 10K3A1B Thermistor

Temp. °C	Ohms
-40	336,052
-39	314,512
-38	294,487
-37	275,863
-36	258,533
-35	242,399
-34	227,373
-33	213,371
-32	200,318
-31	188,144
-30	176,786
-29	166,183
-28	156,280
-27	147,029
-26	138,382
-25	130,296
-24	122,732
-23	115,653
-22	109,025
-21	102,817
-20	97,000
-19	91,547
-18	86,433
-17	81,636
-16	77,134
-15	72,907
-14	68,937
-13	65,206
-12	61,700
-11	58,403
-10	55,301
-9	52,383
-8	49,636
-7	47,049
-6	44,612
-5	42,315
-4	40,150
-3	38,109
-2	36,183
-1	34,366
0	32650
1	31,030
2	29,500

Temp. °C	Ohms
3	28,054
4	26,687
5	25,395
6	24,172
7	23,016
8	21,921
9	20,884
10	19,903
11	18,973
12	18,092
13	17,257
14	16,465
15	15,714
16	15,001
17	14,324
18	13,682
19	13,073
20	12,493
21	11,943
22	11,420
23	10,923
24	10,450
25	10,000
26	9,572.0
27	9,164.7
28	8,777.0
29	8,407.8
30	8,056.1
31	7,721.0
32	7,401.7
33	7,097.3
34	6,807.1
35	6,530.3
36	6,266.3
37	6,014.3
38	5,773.8
39	5,544.3
40	5,325.0
41	5,115.7
42	4,915.6
43	4,724.5
44	4,541.7
45	4,367.1

Temp. °C	Ohms
46	4,200.0
47	4,040.2
48	3,887.4
49	3,741.1
50	3,601.1
51	3,467.1
52	3,338.7
53	3,215.8
54	3,098.0
55	2,985.2
56	2,877.0
57	2,773.3
58	2,673.9
59	2,578.6
60	2,487.1
61	2,399.4
62	2,315.2
63	2,234.4
64	2,156.8
65	2,082.3
66	2,010.8
67	1,942.1
68	1,876.0
69	1,812.6
70	1751.6
71	1,693.0
72	1,636.6
73	1,582.4
74	1,530.2
75	1,480.1
76	1,431.8
77	1,385.3
78	1,340.6
79	1,297.5
80	1,256.1
81	1,216.1
82	1,177.7
83	1,140.6
84	1,104.9
85	1,070.4
86	1,037.3
87	1,005.3
88	974.4

Temp. °C	Ohms
89	944.7
90	916.0
91	888.3
92	861.5
93	835.7
94	810.8
95	786.8
96	763.6
97	741.2
98	719.5
99	698.6
100	678.4
101	658.9
102	640.0
103	621.8
104	604.1
105	587.1
106	570.6
107	554.6
108	539.2
109	524.3
110	509.8
111	495.8
112	482.3
113	469.2
114	456.5
115	444.2
116	432.3
117	420.8
118	409.6
119	398.8
120	388.3
121	378.2
122	368.3
123	358.8
124	349.5
125	340.6

Variohm
Holdings Ltd

Variohm EuroSensor - Williams' Barn - Tiffield Road -Towcester - Northants -NN12 6HP - UK
sales@variohm.com • www.variohm.com • +44 (0) 1327 351004