EUROSENSOR

PITCH TECHNOLOGIES

ETP-SP TEMPERATURE SENSOR

- **Hex Bolt Sensor 10K3A1B**
- **Temperature range -40 to +125°C**
- **Miniature design with M8 hexagonal bolt**
- **Custom designs available**
- **Higher temperature range available**
- **Versatile temperature probe with screw body**
- **Vielseitig Temperaturfühler mit Schraubenkörper**

Applications

Heating / cooling systems	Laboratory	Industrial process
Energy	HVAC	Drilling

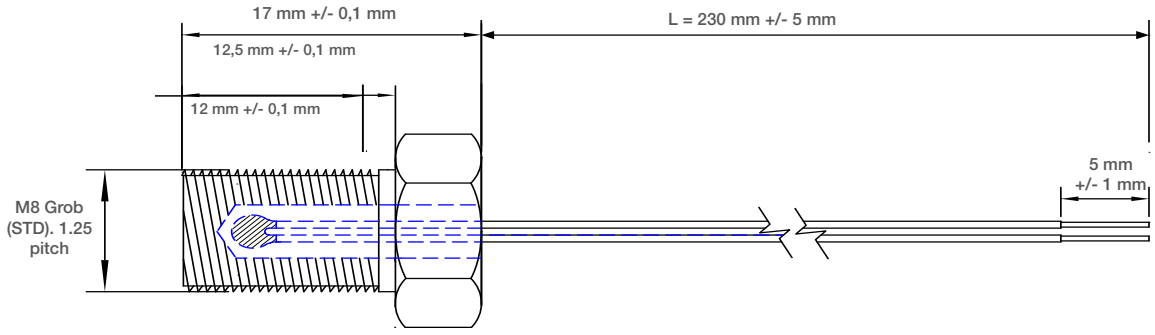
Features

Cost effective - off the shelf model
Solid tin plated lead wires
Stock model - reduced lead times
Improved potting epoxy has outstanding thermal conductivity for faster response times

Technical parameters for stock model		
	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	Stainless steel

Dimensions



ETP-SP TEMPERATURE SENSOR

Ordering information

(Please use the characters in the chart below to construct your product code)

Beispielcode 93068 - ETP - SP - M8x12 - 23 - 10K3A1B

Probe Size	
4	M4
5	M5
6	M6
8	M8
x	optional stud size

Probe cable length	
5	50
10	100
15	150
20	200
23	230
25	250
30	300
35	350
40	400
45	450
x	Custon length

Thermistor Type

All thermistor types available: Insert details are required

Stock model:
93068-ETP-SP-8-23-10K3A1B
94846-ETP-SP-8-100-10K3A1B

If you require a customized solution for your program contact our sales team.

Resistance vs. Temperature Table for 10K3A1B Thermistor

Temp. °C	Ohm
-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	32.650
1	31.030
2	29.500

Temp. °C	Ohm
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	Ohm
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	1.751,6
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	Ohm
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