ETP - MO - 18NPT - 30 - G1B - 10K3435 - 1 TEMPERATURE PROBE

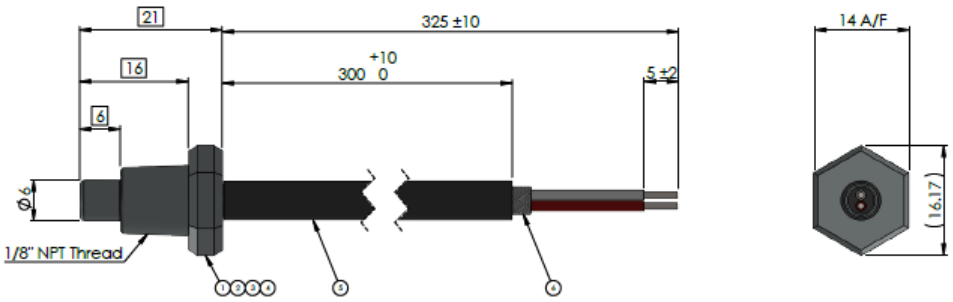


- **Cost effective standard model**
- **Robust and compact design**
- **For harsh environments**
- **Wide environmental temperature range**

The ETP-MO-SP has been specifically designed for demanding temperature measurement tasks as can be found in motor vehicles. The probe is designed to withstand shock and vibration due to a robust overall construction. The selected materials are oil and fuel resistant for use in typical mobile applications whilst supporting a wide environmental temperature range.

Specifications	
Element:	NTC Thermistor
Resistance at +25 °C:	10000 Ω
Resistance Tolerance at +25°C	±1%
Beta Value 25/85 constant	3435K ± 1%
Working temperature:	-40° C to +230° C
Environmental temperature:	-40° C to +150° C
Sealing:	IP67
Housing:	316 stainless steel
Cable:	2 core AWG 20 oil/fuel resistant cable with stainless steel braid
Heat shrink:	Raychem DR-25

Dimensions in mm



Ordering information

Order code: 25936-ETP-MO-SP-1/8NPT-30-G1B-10k3435-1

ETP - MO - 18NPT - 30 - G1B - 10K3435 - 1
TEMPERATURE PROBE

Resistance vs. temperature table for 10k3435-1

R(25) = 10000 Ohm **B(25/85) = 3435K**

Temp. (°C)	R_{min} (KΩ)	$R_{nor.}$ (KΩ)	R_{max} (KΩ)
-40	194.3148	202.2693	210.5284
-39	183.6545	191.0637	198.7519
-38	173.6512	180.5546	187.7137
-37	164.2602	170.6944	177.3629
-36	155.44	161.4387	167.6521
-35	147.1525	152.7468	158.5379
-34	139.362	144.5807	149.9798
-33	132.0356	136.9052	141.9402
-32	125.1427	129.6879	134.3847
-31	118.6551	122.8985	127.281
-30	112.5462	116.5089	120.5991
-29	106.7917	110.4932	114.3116
-28	101.3688	104.8272	108.3927
-27	96.2564	99.4883	102.8185
-26	91.4348	94.4558	97.5669
-25	86.8857	89.7101	92.6171
-24	82.592	85.2332	87.9501
-23	78.5378	81.0082	83.5479
-22	74.7084	77.0194	79.394
-21	71.09	73.2523	75.4729
-20	67.6695	69.6931	71.77
-19	64.4351	66.3291	68.272
-18	61.3754	63.1485	64.9663
-17	58.4801	60.1402	61.8412
-16	55.7394	57.2939	58.8858
-15	53.144	54.5998	56.0899
-14	50.6855	52.049	53.4439
-13	48.3557	49.633	50.9389
-12	46.1473	47.3439	48.5666
-11	44.0532	45.1743	46.3193
-10	42.0668	43.1172	44.1894
-9	40.182	41.1663	42.1705
-8	38.3929	39.3153	40.2558
-7	36.6943	37.5587	38.4396
-6	35.0809	35.891	36.7161
-5	33.5482	34.3074	35.0803
-4	32.0914	32.8029	33.5268
-3	30.7066	31.3734	32.0515
-2	29.3896	30.0145	30.6497
-1	28.1368	28.7225	29.3174
0	26.9448	27.4936	28.0508
1	25.8102	26.3245	26.8463
2	24.73	25.2119	25.7006
3	23.7012	24.1527	24.6103
4	22.7213	23.1442	23.5726
5	21.7874	22.1835	22.5846
6	20.8972	21.2682	21.6436
7	20.0485	20.3959	20.7472
8	19.2392	19.5644	19.8931
9	18.467	18.7714	19.0789
10	17.7303	18.0151	18.3027
11	17.027	17.2935	17.5624
12	16.3556	16.6048	16.8561
13	15.7145	15.9475	16.1823
14	15.102	15.3198	15.5391
15	14.5169	14.7203	14.9251
16	13.9575	14.1475	14.3386
17	13.423	13.6003	13.7786
18	12.9117	13.0772	13.2435
19	12.4228	12.5771	12.732
20	11.955	12.0988	12.2431
21	11.5074	11.6413	11.7756
22	11.0791	11.2037	11.3286
23	10.6689	10.7848	10.9009
24	10.2762	10.3839	10.4917
25	9.9	10	10.1
26	9.5325	9.6324	9.7324
27	9.1805	9.2802	9.38
28	8.8435	8.9428	9.0423
29	8.5206	8.6195	8.7186
30	8.2113	8.3096	8.4083
31	7.9147	8.0124	8.1105
32	7.6305	7.7275	7.8249
33	7.3579	7.4541	7.5508
34	7.0966	7.1919	7.2878
35	6.8458	6.9403	7.0354
36	6.6052	6.6987	6.7928
37	6.3744	6.4669	6.5601
38	6.1527	6.2442	6.3364
39	5.94	6.0304	6.1216
40	5.7357	5.825	5.9151
41	5.5394	5.6276	5.7166
42	5.3509	5.438	5.5259
43	5.1698	5.2557	5.3425
44	4.9957	5.0804	5.1661
45	4.8283	4.9119	4.9964
46	4.6674	4.7498	4.8331
47	4.5127	4.5939	4.6761
48	4.3639	4.4439	4.5249
49	4.2207	4.2995	4.3793
50	4.0829	4.1605	4.2391
51	3.9504	4.0268	4.1042
52	3.8228	3.898	3.9742
53	3.6999	3.7739	3.849
54	3.5816	3.6544	3.7283
55	3.4677	3.5393	3.612
56	3.358	3.4284	3.5
57	3.2522	3.3215	3.3919
58	3.1504	3.2185	3.2877
59	3.0521	3.1191	3.1872
60	2.9576	3.0234	3.0904
61	2.8663	2.931	2.9969
62	2.7783	2.8419	2.9067
63	2.6934	2.7559	2.8196
64	2.6115	2.6729	2.7355
65	2.5326	2.5929	2.6544
66	2.4563	2.5156	2.5761
67	2.3828	2.441	2.5004
68	2.3118	2.369	2.4274
69	2.2432	2.2994	2.3568
70	2.177	2.2322	2.2886
71	2.1131	2.1673	2.2227
72	2.0513	2.1046	2.159
73	1.9917	2.044	2.0975
74	1.934	1.9854	2.0379
75	1.8783	1.9288	1.9804
76	1.8245	1.874	1.9247
77	1.7724	1.8211	1.8709
78	1.7221	1.7699	1.8188
79	1.6735	1.7204	1.7685
80	1.6264	1.6725	1.7197
81	1.581	1.6262	1.6726
82	1.5369	1.5813	1.6268
83	1.4943	1.5379	1.5826

Resistance vs. temperature table for 10k3435-1

Temp. (°C)	R_{min} (KΩ)	$R_{nor.}$ (KΩ)	R_{max} (KΩ)
84	1.4531	1.4959	1.5398
85	1.4132	1.4553	1.4985
86	1.3746	1.4159	1.4583
87	1.3373	1.3778	1.4194
88	1.301	1.3408	1.3817
89	1.266	1.3051	1.3453
90	1.232	1.2704	1.3099
91	1.1991	1.2368	1.2756
92	1.1673	1.2043	1.2424
93	1.1365	1.1728	1.2102
94	1.1065	1.1422	1.1789
95	1.0776	1.1126	1.1487
96	1.0495	1.0839	1.1193
97	1.0222	1.056	1.0908
98	0.9958	1.029	1.0632
99	0.9702	1.0028	1.0364
100	0.9454	0.9774	1.0104
101	0.9213	0.9527	0.9851
102	0.8979	0.9288	0.9606
103	0.8752	0.9055	0.9368
104	0.8532	0.883	0.9137
105	0.8318	0.8611	0.8913
106	0.8112	0.8399	0.8696
107	0.7911	0.8193	0.8485
108	0.7715	0.7992	0.8278
109	0.7526	0.7798	0.808
110	0.7341	0.7609	0.7886
111	0.7162	0.7425	0.7697
112	0.6989	0.7247	0.7514
113	0.682	0.7074	0.7337
114	0.6657	0.6906	0.7164
115	0.6497	0.6742	0.6996
116	0.6342	0.6583	0.6832
117	0.6192	0.6429	0.6674
118	0.6046	0.6278	0.6519
119	0.5904	0.6132	0.6369
120	0.5765	0.599	0.6223
121	0.5631	0.5852	0.6081
122	0.5501	0.5718	0.5943
123	0.5374	0.5587	0.5808
124	0.525	0.546	0.5677
125	0.513	0.5336	0.555
126	0.5014	0.5216	0.5426
127	0.4899	0.5098	0.5305
128	0.4788	0.4984	0.5187
129	0.4681	0.4873	0.5073
130	0.4576	0.4765	0.4961
131	0.4474	0.466	0.4853
132	0.4375	0.4558	0.4748
133	0.4278	0.4458	0.4645
134	0.4184	0.4361	0.4545
135	0.4092	0.4266	0.4447
136	0.4003	0.4174	0.4352
137	0.3916	0.4084	0.4259
138	0.3832	0.3997	0.4169
139	0.3748	0.3911	0.408
140	0.3668	0.3828	0.3995
141	0.359	0.3747	0.3911
142	0.3514	0.3669	0.383
143	0.344	0.3592	0.3751
144	0.3367	0.3517	0.3673
145	0.3297	0.3444	0.3598
146	0.3227	0.3372	0.3523
147	0.316	0.3303	0.3452
148	0.3095	0.3235	0.3381
149	0.3031	0.3169	0.3313
150	0.2968	0.3104	0.3246
151	0.2908	0.3042	0.3182
152	0.2848	0.298	0.3117
153	0.279	0.292	0.3055
154	0.2734	0.2862	0.2995
155	0.2679	0.2805	0.2936
156	0.2625	0.2749	0.2878
157	0.2573	0.2695	0.2822
158	0.2522	0.2642	0.2767
159	0.2472	0.259	0.2713
160	0.2424	0.254	0.2661
161	0.2376	0.249	0.261
162	0.2329	0.2442	0.256
163	0.2284	0.2395	0.2511
164	0.224	0.2349	0.2463
165	0.2197	0.2304	0.2416
166	0.2154	0.226	0.2371
167	0.2114	0.2218	0.2327
168	0.2073	0.2176	0.2284
169	0.2034	0.2135	0.2241
170	0.1995	0.2095	0.2199
171	0.1958	0.2056	0.2159
172	0.1921	0.2018	0.2119
173	0.1885	0.198	0.208
174	0.185	0.1944	0.2042
175	0.1816	0.1908	0.2005
176	0.1783	0.1874	0.197
177	0.1749	0.1839	0.1933
178	0.1718	0.1806	0.1899
179	0.1687	0.1774	0.1865
180	0.1656	0.1742	0.1832
181	0.1626	0.1711	0.18
182	0.1597	0.168	0.1768
183	0.1568	0.165	0.1736
184	0.154	0.1621	0.1706
185	0.1513	0.1593	0.1677
186	0.1486	0.1565	0.1648
187	0.146	0.1538	0.162
188	0.1434	0.1511	0.1591
189	0.141	0.1485	0.1564
190	0.1385	0.1459	0.1537
191	0.1361	0.1434	0.1511
192	0.1338	0.141	0.1486
193	0.1315	0.1386	0.1461
194	0.1292	0.1362	0.1436
195	0.127	0.1339	0.1412
196	0.1249	0.1317	0.1389
197	0.1228	0.1295	0.1366
198	0.1206	0.1273	0.1343
199	0.1186	0.1252	0.1321
200	0.1166	0.1231	0.1299
201	0.1147	0.1211	0.1278
202	0.1128	0.1191	0.1257
203	0.111	0.1172	0.1238
204	0.1092	0.1153	0.1218
205	0.1073	0.1134	0.1198
206	0.1056	0.1116	0.1179
207	0.1039	0.1098	0.116

Resistance vs. temperature table for 10k3435-1

Temp. (°C)	R_{min} (KΩ)	$R_{nor.}$ (KΩ)	R_{max} (KΩ)
208	0.1022	0.108	0.1141
209	0.1006	0.1063	0.1124
210	0.0989	0.1046	0.1106
211	0.0973	0.1029	0.1088
212	0.0958	0.1013	0.1071
213	0.0943	0.0997	0.1054
214	0.0928	0.0982	0.1039
215	0.0914	0.0967	0.1023
216	0.09	0.0952	0.1007
217	0.0885	0.0937	0.0992
218	0.0871	0.0922	0.0976
219	0.0858	0.0908	0.0961
220	0.0845	0.0895	0.0948
221	0.0832	0.0881	0.0933
222	0.0819	0.0868	0.0919
223	0.0807	0.0855	0.0906
224	0.0795	0.0842	0.0892
225	0.0782	0.0829	0.0878
226	0.0771	0.0817	0.0866
227	0.0759	0.0805	0.0853
228	0.0748	0.0793	0.0841
229	0.0737	0.0781	0.0828
230	0.0726	0.077	0.0816
231	0.0716	0.0759	0.0805
232	0.0705	0.0748	0.0793
233	0.0695	0.0737	0.0782
234	0.0684	0.0726	0.077
235	0.0675	0.0716	0.076
236	0.0665	0.0706	0.0749
237	0.0655	0.0695	0.0738
238	0.0646	0.0686	0.0728
239	0.0637	0.0676	0.0718
240	0.0627	0.0666	0.0707
241	0.0619	0.0657	0.0698
242	0.061	0.0648	0.0688
243	0.0601	0.0639	0.0679
244	0.0593	0.063	0.0669
245	0.0584	0.0621	0.066
246	0.0577	0.0613	0.0651
247	0.0569	0.0605	0.0643
248	0.0561	0.0596	0.0634
249	0.0553	0.0588	0.0625
250	0.0545	0.058	0.0617