

Aluminum Immersion Probe



- NTC Temperature Sensor
- Various lead lengths available
- Aluminum material to give good thermal transfer
- Various leads lengths available
- Various connector types available
- RoHS Compliant

DESCRIPTION

This probe consists of a NTC Thermistor is soldered to an extension cable and potted in a Mylar tube. The device is then potted in an Aluminum Housing using Black Stycast epoxy.

FEATURES

- Custom tolerances available on request
- Available in a range of R/T curves
- Temperature range -40°C to +80°C

APPLICATIONS

- HVAC applications
- Industrial Process Control

PERFORMANCE SPECS

Parameters	Units	Value
Resistance @ +25°C	Ohms	10,000
Resistance tolerance from 0°C to +70°C	°C	± 0.2
Beta Value 25/85	K	3976
Tolerance on Beta Value 25/85	%	± 0.5
Time response in Liquids	Seconds	<7
Insulation Resistance (Min. of 100Mohms for 1 Sec.)	Volts	500

Fast Time Response Probe

MECHANICAL DETAILS

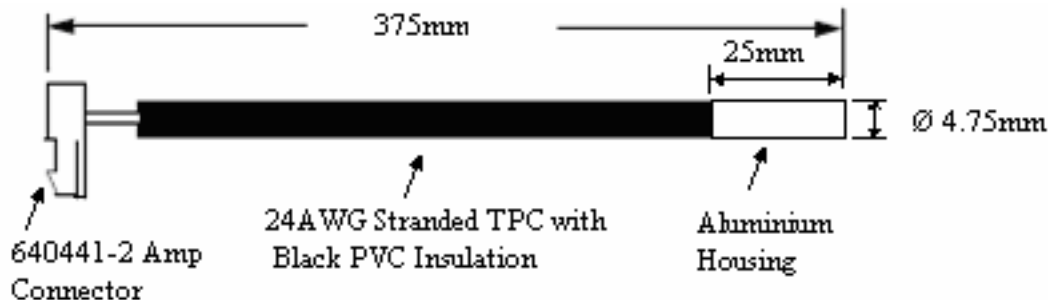


Figure 1: Fast time response probe

RESISTANCE V TEMPERATURE TABLE

Temp. °C	Ohms
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-40	336098
-39	314553
-38	294524
-37	275897
-36	258563
-35	242427
-34	227398
-33	213394
-32	200339
-31	188163
-30	176803
-29	166198
-28	156294
-27	147042
-26	138393
-25	130306
-24	122741
-23	115661
-22	109032
-21	102824
-20	97006
-19	91553
-18	86439
-17	81641
-16	77138
-15	72911

Temp. °C	Ohms
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-14	68940
-13	65209
-12	61703
-11	58405
-10	55304
-9	52385
-8	49638
-7	47050
-6	44613
-5	42317
-4	40151
-3	38110
-2	36184
-1	34366
0	32651
1	31031
2	29500
3	28054
4	26687
5	25395
6	24172
7	23016
8	21921
9	20885
10	19903
11	18973

Temp. °C	Ohms
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12	18092
13	17257
14	16465
15	15714
16	15001
17	14324
18	13682
19	13073
20	12493
21	11943
22	11420
23	10923
24	10450
25	10000
26	9572
27	9165
28	8777
29	8408
30	8056
31	7721
32	7402
33	7097
34	6807
35	6530
36	6266
37	6014

Temp. °C	Ohms
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38	5774
39	5544
40	5325
41	5116
42	4916
43	4724
44	4542
45	4367
46	4200
47	4040
48	3887
49	3741
50	3601
51	3467
52	3339
53	3216
54	3098
55	2985
56	2877
57	2773
58	2674
59	2579
60	2487
61	2399
62	2315
63	2234

Fast Time Response Probe

64	2157
65	2082
66	2011
67	1942
68	1876

69	1813
70	1752
71	1693
72	1637
73	1582

74	1530
75	1480
76	1432
77	1385
78	1341

79	1298
80	1256

ORDERING INFORMATION

Part Number	Description	Ω @25°C	MOQ
10K3D506	Aluminum Immersion probe	10,000	1000 *

* For quantities less than Minimum Order Quantity – contact distribution

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