

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

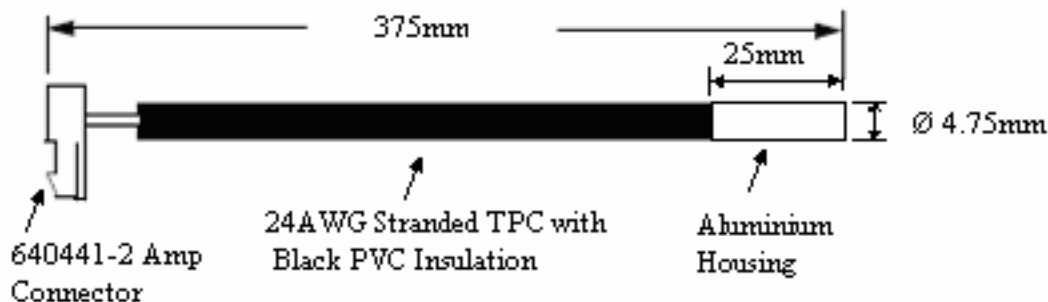


Figure 1: Fast time response probe

RESISTANCE V TEMPERATURE TABLE

Temp. °C	Ohms	Temp. °C	Ohms	Temp. °C	Ohms	Temp. °C	Ohms
-40	336098	-14	68940	12	18092	38	5774
-39	314553	-13	65209	13	17257	39	5544
-38	294524	-12	61703	14	16465	40	5325
-37	275897	-11	58405	15	15714	41	5116
-36	258563	-10	55304	16	15001	42	4916
-35	242427	-9	52385	17	14324	43	4724
-34	227398	-8	49638	18	13682	44	4542
-33	213394	-7	47050	19	13073	45	4367
-32	200339	-6	44613	20	12493	46	4200
-31	188163	-5	42317	21	11943	47	4040
-30	176803	-4	40151	22	11420	48	3887
-29	166198	-3	38110	23	10923	49	3741
-28	156294	-2	36184	24	10450	50	3601
-27	147042	-1	34366	25	10000	51	3467
-26	138393	0	32651	26	9572	52	3339
-25	130306	1	31031	27	9165	53	3216
-24	122741	2	29500	28	8777	54	3098
-23	115661	3	28054	29	8408	55	2985
-22	109032	4	26687	30	8056	56	2877
-21	102824	5	25395	31	7721	57	2773
-20	97006	6	24172	32	7402	58	2674
-19	91553	7	23016	33	7097	59	2579
-18	86439	8	21921	34	6807	60	2487
-17	81641	9	20885	35	6530	61	2399
-16	77138	10	19903	36	6266	62	2315
-15	72911	11	18973	37	6014	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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