

Pipe Probe



- Robust, compact design
- Improved overall reliability
- Fast response time
- Integrated clip
- Supplied with connector.
- RoHS Compliant

DESCRIPTION

This probe consists of a NTC thermistor soldered to a 24 AWG Stranded TPE cable and potted in a copper housing. The assembly is over molded leaving the copper housing exposed. A metal clip is attached to the final assembly.

FEATURES

Fast Time Response (Typically 5 Seconds)
 Available with various cable lengths
 Various clip sizes available for different pipe sizes
 Custom tolerances available on request
 Various R/T curves available
 Temperature range -40°C to +125°C
 Easy to install
 Can be supplied with connector

APPLICATIONS

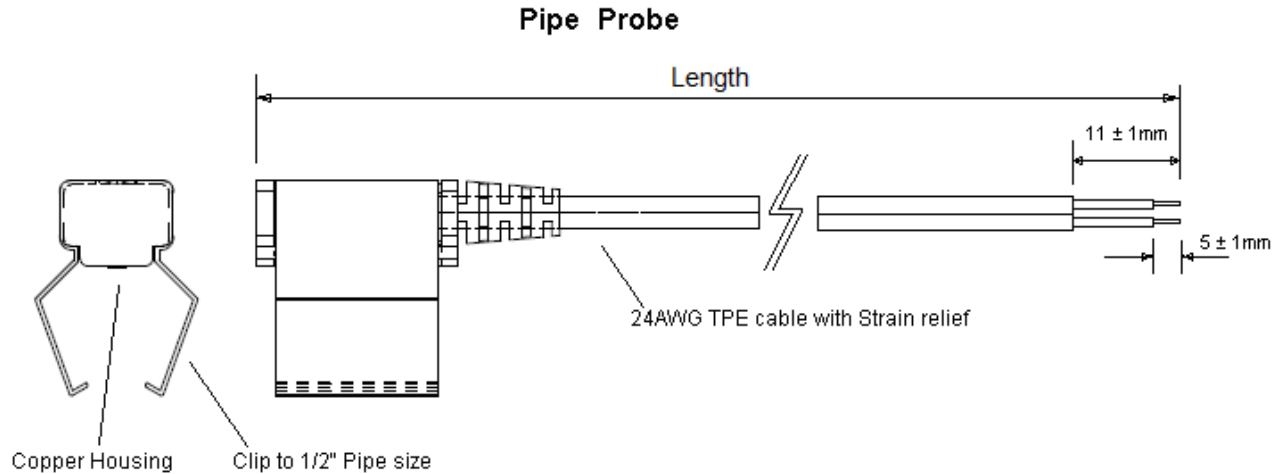
Suitable for measuring surface pipe temperatures in various applications
 Industrial process control
 Boiler control

PERFORMANCE SPECS

Parameters	Units	Value
Resistance @ +25°C	Ohms	10,000
Tolerance from +25°C to +85°C	°C	±1
Beta Value 25/85	K	3435
Tolerance on Beta Value	%	±2
Time response on pipe surface (T63)	Seconds	~5

Pipe Probe

MECHANICAL DETAILS



RESISTANCE V TEMPERATURE TABLE

Temp. °C	K Ohms
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-40	186
-39	176.4
-38	167.4
-37	158.8
-36	150.7
-35	143.1
-34	135.9
-33	129.1
-32	122.7
-31	116.6
-30	110.8
-29	105.4
-28	100.2
-27	95.37
-26	90.76
-25	86.39
-24	82.26
-23	78.35
-22	74.64
-21	71.12

Temp. °C	K Ohms
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-20	67.79
-19	64.63
-18	61.64
-17	58.79
-16	56.1
-15	53.53
-14	51.1
-13	48.8
-12	46.6
-11	44.52
-10	42.54
-9	40.66
-8	38.87
-7	37.17
-6	35.55
-5	34.01
-4	32.55
-3	31.15
-2	29.82
-1	28.56

Temp. °C	K Ohms
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0	27.35
1	26.2
2	25.11
3	24.07
4	23.07
5	22.13
6	21.22
7	20.36
8	19.53
9	18.75
10	18
11	17.28
12	16.6
13	15.94
14	15.32
15	14.72
16	14.15
17	13.6
18	13.08
19	12.58

Temp. °C	K Ohms
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20	12.1
21	11.64
22	11.21
23	10.79
24	10.38
25	10
26	9.631
27	9.278
28	8.94
29	8.615
30	8.304
31	8.006
32	7.72
33	7.445
34	7.182
35	6.929
36	6.687
37	6.454
38	6.23
39	6.015

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40	5.809	62	2.814	84	1.47	106	0.819
41	5.611	63	2.728	85	1.429	107	0.7987
42	5.42	64	2.645	86	1.39	108	0.7789
43	5.237	65	2.565	87	1.352	109	0.7597
44	5.061	66	2.487	88	1.315	110	0.7411
45	4.891	67	2.413	89	1.28	111	0.723
46	4.729	68	2.341	90	1.245	112	0.7054
47	4.572	69	2.271	91	1.212	113	0.6883
48	4.421	70	2.204	92	1.18	114	0.6718
49	4.276	71	2.139	93	1.149	115	0.6556
50	4.137	72	2.076	94	1.118	116	0.64
51	4.003	73	2.016	95	1.089	117	0.6248
52	3.873	74	1.957	96	1.06	118	0.61
53	3.749	75	1.901	97	1.033	119	0.5956
54	3.629	76	1.846	98	1.006	120	0.5817
55	3.513	77	1.794	99	0.9801	121	0.5681
56	3.402	78	1.743	100	0.9549	122	0.5549
57	3.295	79	1.693	101	0.9305	123	0.542
58	3.192	80	1.645	102	0.9069	124	0.5295
59	3.092	81	1.599	103	0.8839	125	0.5174
60	2.996	82	1.555	104	0.8616		
61	2.903	83	1.511	105	0.84		

ORDERING INFORMATION

Part Number	Description	Length	Ω @25°C	MOQ
10K3D1217	Pipe Probe	1M	10,000	10,000*
10K3D1271	Pipe Probe	3M	10,000	10,000*

* For quantities less than Minimum Order Quantity – contact distribution

SAMPLE ACCEPTANCE

Meas Approval

Quality: _____ Date _____

Engineering: _____ Date _____

Customer Approval

_____ Date _____

Pipe Probe

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