

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

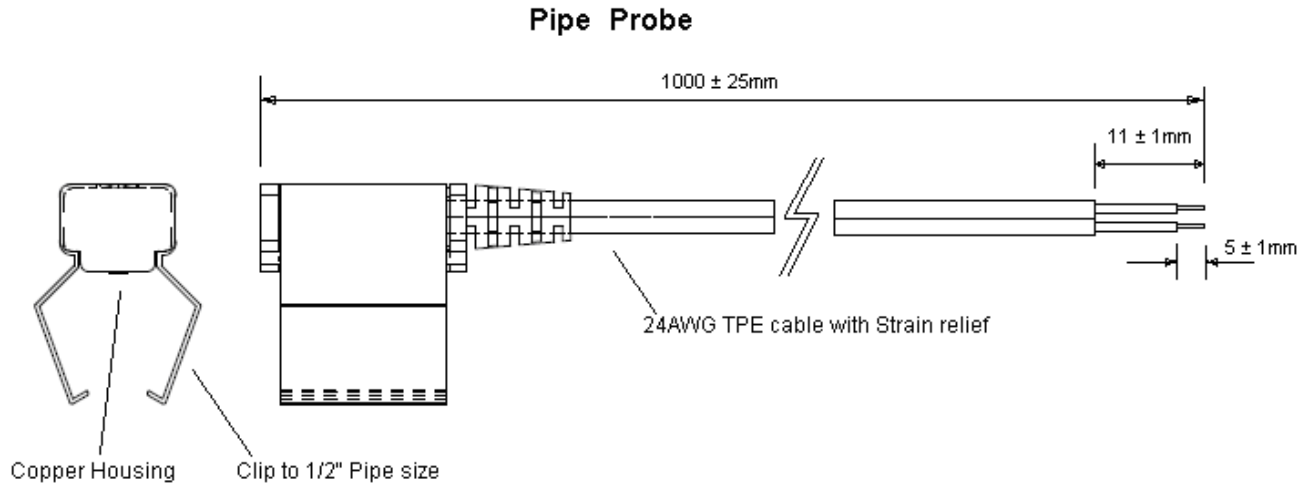
- Suitable for measuring surface pipe temperatures in various applications
- Industrial process control
- Boiler control

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
----------	--------

-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
-20	67.79

Temp. °C	K Ohms
----------	--------

-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
0	27.35
1	26.2

Temp. °C	K Ohms
----------	--------

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
20	12.1
21	11.64
22	11.21

Temp. °C	K Ohms
----------	--------

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
40	5.809
41	5.611
42	5.42
43	5.237

Pipe Probe

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

ORDERING INFORMATION

Part Number	Description	Ω @25°C	MOQ
10K3D1217	Pipe Probe	10,000	10,000*

sales@thermalcomponents.com.au

Tel: 07 55641282; Fax: 07 55296027

www.thermalcomponents.com.au