

FEATURES

- Suitable for fast time response applications
- Suitable for use in high humidity and high moisture conditions
- Custom tolerances available on request
- Available in a range of R/T curves
- Temperature range from -40°C to +105°C
- Supplied with cable and connector

APPLICATIONS

- Central heating systems
- Gas combi boilers
- Refrigeration units
- Solar collectors
- Domestic showers

PIPE CLAMP TEMPERATURE SENSOR

SPECIFICATIONS

- Radius contact on brass housing to optimize thermal response
- Suitable for Fast time response applications
- Clamp provides a tight fit to the pipe without the need for additional fastening and is easily field mounted
- Supplied with cable and connector.
- Designed to fit Ø 23.5mm pipe
- RoHS Compliant

This assembly consists of an NTC Thermistor mounted in a brass housing to provide the user with fast and accurate thermal response. The device is potted in a Delrin housing using epoxy resin.

PIPE CLAMP TEMPERATURE SENSOR

PERFORMANCE SPECS

Parameters	Units	Value
Nominal Resistance at +25°C	Ohms	10000
Tolerance at +25°C	%	± 2
Beta Value 25/85	K	3976
Tolerance on Beta Value	%	± 2
Time Response in application	Seconds	<3
Dissipation Constant	mW/°C	5
Insulation Resistance (Min. of 100Mohms for 1 Sec.)	Volts	500

MECHANICAL DETAILS

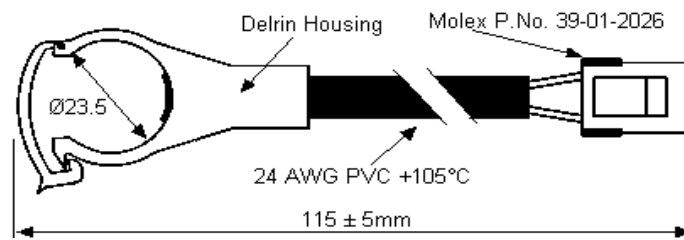


Figure 1: Pipe clamp temperature sensor

PIPE CLAMP TEMPERATURE SENSOR

RESISTANCE V TEMPERATURE TABLE

Temp °C	Ohms
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-40	336103.2
-39	314558.0
-38	294529.1
-37	275900.8
-36	258567.0
-35	242430.2
-34	227400.9
-33	213396.6
-32	200341.4
-31	188165.5
-30	176804.8
-29	166199.8
-28	156296.1
-27	147043.2
-26	138394.7
-25	130307.6
-24	122742.3
-23	115662.2
-22	109033.4
-21	102824.6
-20	97006.9
-19	91553.3
-18	86439.2
-17	81641.4
-16	77138.6
-15	72911.1
-14	68940.4
-13	65209.7
-12	61702.9
-11	58405.5
-10	55303.9
-9	52385.2
-8	49637.8
-7	47050.6
-6	44613.4
-5	42316.7

Temp °C	Ohms
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-4	40151.6
-3	38110.0
-2	36184.0
-1	34366.6
0	32650.9
1	31030.8
2	29500.5
3	28054.4
4	26687.5
5	25395.0
6	24172.5
7	23015.9
8	21921.2
9	20884.7
10	19903.2
11	18973.3
12	18092.2
13	17256.9
14	16464.9
15	15713.7
16	15000.9
17	14324.5
18	13682.3
19	13072.6
20	12493.3
21	11943.0
22	11419.9
23	10922.7
24	10449.8
25	10000.0
26	9572.0
27	9164.7
28	8777.0
29	8407.7
30	8056.1
31	7721.0

Temp °C	Ohms
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32	7401.7
33	7097.3
34	6807.1
35	6530.3
36	6266.2
37	6014.3
38	5773.8
39	5544.2
40	5325.0
41	5115.6
42	4915.6
43	4724.4
44	4541.7
45	4367.0
46	4200.0
47	4040.2
48	3887.4
49	3741.1
50	3601.1
51	3467.0
52	3338.7
53	3215.8
54	3098.0
55	2985.2
56	2877.0
57	2773.3
58	2673.9
59	2578.6
60	2487.1
61	2399.4
62	2315.2
63	2234.4
64	2156.8
65	2082.3
66	2010.8
67	1942.1

Temp °C	Ohms
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68	1876.0
69	1812.6
70	1751.6
71	1693.0
72	1636.6
73	1582.4
74	1530.2
75	1480.1
76	1431.8
77	1385.3
78	1340.6
79	1297.5
80	1256.1
81	1216.1
82	1177.7
83	1140.6
84	1104.9
85	1070.5
86	1037.3
87	1005.3
88	974.4
89	944.7
90	916.0
91	888.3
92	861.5
93	835.8
94	810.9
95	786.8
96	763.6
97	741.2
98	719.6
99	698.6
100	678.4
101	658.9
102	640.0
103	621.8
104	604.2
105	587.1

PIPE CLAMP TEMPERATURE SENSOR

ORDERING INFORMATION

Part Number	Description	Ω @25°C	MOQ
10K3D591	Pipe clamp temperature sensor	10000	1000*

* For quantities less than Minimum Order Quantity – contact distribution

NORTH AMERICA

Measurement Specialties, Inc.,
a TE Connectivity Company
1711 139th Lane NW
Andover, MN 55304
Tel: +1 763 689 4870
Fax: +1 763 689 5033
customer care.ando@te.com

EUROPE

Measurement Specialties (Europe), Ltd.,
a TE Connectivity Company
Ballybrit Business Park
Galway Ireland
Tel : +353-91-753238
Fax : +353-91-770789
Email: customer care.glwy@te.com

ASIA

Measurement Specialties (China), Ltd.,
a TE Connectivity Company
No. 368 Wulian 1st Road
Gongxing Town
Shuangliu, Chengdu
Sichuan, 610200
China
Tel: +86 (0) 28 8573 9088
Fax: +86 (0) 28 8573 9070
Email: customer care.chdu@te.com

te.com/sensorsolutions

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