

# Boiler Probe with Integrated Connector



- Robust, compact design
- Improved overall reliability
- Fast response time
- Integrated connector
- RoHS Compliant



## DESCRIPTION

This assembly consists of a NTC thermistor soldered to an industry std 2.5mm connector. The sensor is assembled into a Brass screw in Housing. Device is available in a variety of thread types.

## FEATURES

- Suitable for measuring water temperature in various boiler systems
- Standard industry style connector
- Available in a variety of thread types
- Custom tolerances available on request
- Available in range of R/T curves
- Temperature range -40°C to +125°C
- Other RTD elements available (Platinum, Nickel)

## APPLICATIONS

- Temperature measurement of water in Hot Water Boiler systems
- 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	3976
Tolerance on Beta Value	%	±1
Time response in still water	Seconds	<8

# Boiler Probe with Integrated Connector

## MECHANICAL DETAILS

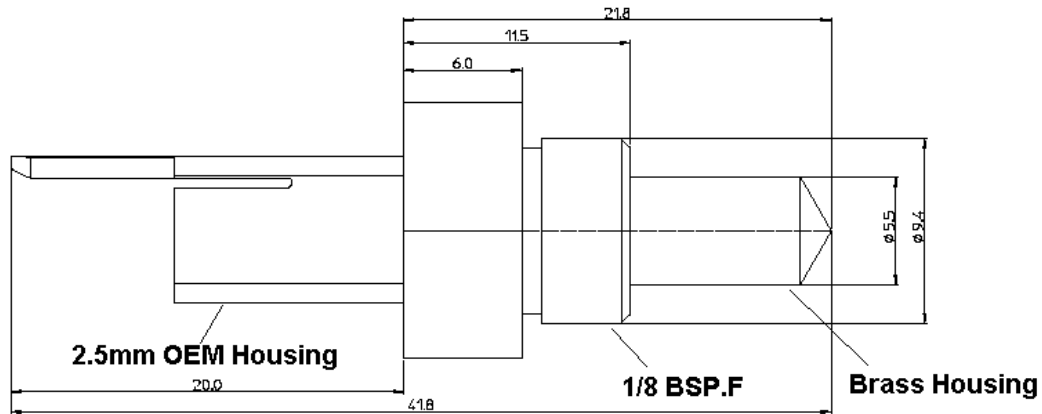


Figure 1: Boiler probe integrated connector – mechanical drawing

## RESISTANCE V TEMPERATURE TABLE

Temp. °C	Ohms
----------	------

-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

Temp. °C	Ohms
----------	------

-18	86439
-17	81641
-16	77138
-15	72911
-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

Temp. °C	Ohms
----------	------

4	26687
5	25395
6	24172
7	23016
8	21921
9	20885
10	19903
11	18973
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
<b>25</b>	<b>10000</b>

Temp. °C	Ohms
----------	------

26	9572
27	9165
28	8777
29	8408
30	8056
31	7721
32	7402
33	7097
34	6807
35	6530
36	6266
37	6014
38	5774
39	5544
40	5325
41	5116
42	4916
43	4724
44	4542
45	4367
46	4200
47	4040

# Boiler Probe with Integrated Connector

48	3887	68	1876	88	974	108	539
49	3741	69	1813	89	945	109	524
50	3601	70	1752	90	916	110	510
51	3467	71	1693	91	888	111	496
52	3339	72	1637	92	862	112	482
53	3216	73	1582	93	836	113	469
54	3098	74	1530	94	811	114	457
55	2985	75	1480	95	787	115	444
56	2877	76	1432	96	764	116	432
57	2773	77	1385	97	741	117	421
58	2674	78	1341	98	720	118	410
59	2579	79	1298	99	699	119	399
60	2487	80	1256	100	678	120	388
61	2399	81	1216	101	659	121	378
62	2315	82	1178	102	640	122	368
63	2234	83	1141	103	622	123	359
64	2157	84	1105	104	604	124	350
65	2082	85	1070	105	587	125	341
66	2011	86	1037	106	571		
67	1942	87	1005	107	555		

## ORDERING INFORMATION

Part Number	Description	$\Omega$ @25°C	MOQ
10K3D1037	Immersion Probe with Integrated Connector	10,000	10,000*

[sales@thermalcomponents.com.au](mailto:sales@thermalcomponents.com.au)

Tel: 07 55641282; Fax: 07 55296027

[www.thermalcomponents.com.au](http://www.thermalcomponents.com.au)