# **High Temp Immersion Probe**



- Precision remote temperature sensing
- Highly stable precision thermistors
- Robust design
- Suitable for applications where sensor is exposed to temperatures up to 300°C
- Available in a variety of thread and connector types
- RoHs Compliant

### **DESCRIPTION**

This assembly consists of a NTC thermistor mounted in Stainless Steel screw-in housing. The sensing element is sealed with a ceramic compound. Device is available in a variety of thread and connector types.

### **FEATURES**

- Suitable for use in high temperature applications
- Pipe threaded probes provide excellent seal
- Custom tolerances available on request
- Available in a variety of thread and connector types
- Available in range of R/T curves
- Temperature range -40 °C to +300°C

#### **APPLICATIONS**

- · Domestic hot water generators
- Building automation systems
- Compact heat exchangers
- Closed loop pressurized systems
- Water tank applications

### **PERFORMANCE SPECS**

Parameters	Units	Value
Resistance @ +200°C	Ohms	8,000
Tolerance @ +200°C	%	± 5
Beta Value 150/250	K	5300
Tolerance on Beta Value	%	± 5
Time response in still water	Seconds	<12.5



## **MECHANICAL DETAILS**

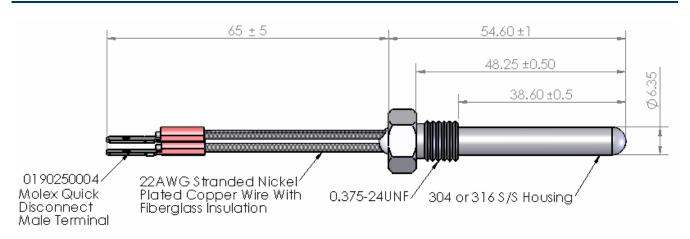


Figure 1: Immersion probe - mechanical drawing

## **RESISTANCE V TEMPERATURE TABLE**

K Ohms	
199,959	
138,733	
97,340	
69,031	
49,459	
35,783	
26,131	
19,254	
14,308	
10,720	
8,096	
6,160	
4,721	
3,643	
2,830	
2,213	
1,741	
1,378	

Temp. °C	K Ohms			
•				
50	1,097			
55	878.3			
60	706.8			
65	571.8			
70	464.8			
75	379.7			
80	311.6			
85	256.9			
90	212.7			
95	176.9			
100	147.7			
105	123.8			
110	104.2			
115	87.97			
120	74.56			
125	53.42			
130	54.1			
135	46.35			

remp. o	IX OIIIII3	
140	39.81	
145	34.3	
150	29.65	
155	25.7	
160	22.34	
165	19.47	
170	17.02	
175	14.92	
180	13.1	
185	11.54	
190	10.19	
195	9.019	
200	8	
205	7.112	
210	6.337	
215	5.658	
220	5.062	
225	4.538	

Temp. °C K Ohms

Temp. °C	K Ohms	
230	4.077	
235	3.669	
240	3.309	
245	2.989	
250	2.705	
255	2.453	
260	2.228	
265	2.026	
270	1.846	
275	1.685	
280	1.54	
285	1.41	
290	1.293	
295	1.187	
300	1.092	



## ORDERING INFORMATION

Part Number	Description	Ω @200°C	MOQ
G3.3M8D4	Immersion Probe	8,000	1000*

<sup>\*</sup> For quantities less than Minimum Order Quantity - contact distribution

The information in this sheet has been carefully reviewed and is believed to be accurate; however, no responsibility is assumed for inaccuracies. Furthermore, this information does not convey to the purchaser of such devices any license under the patent rights to the manufacturer. Measurement Specialties, Inc. reserves the right to make changes without further notice to any product herein. Measurement Specialties, Inc. makes no warranty, representation or guarantee regarding the suitability of its product for any particular purpose, nor does Measurement Specialties, Inc. assume any liability arising out of the application or use of any product or circuit and specifically disclaims any and all liability, including without limitation consequential or incidental damages. Typical parameters can and do vary in different applications. All operating parameters must be validated for each customer application by customer's technical experts. Measurement Specialties, Inc. does not convey any license under its patent rights nor the rights of others.