

TPE Overmoulded Probe Ø 5 x 20mm



- TPE Overmolded probe with probe head dimensions of Ø 5 x 20mm
- Ideal for refrigeration and HVAC applications
- 24 AWG double insulated cable
- IP 68 Rated
- Available in a variety of connector types
- RoHS Compliant

DESCRIPTION

This assembly consists of a DO-35 NTC thermistor soldered to a TPE extension cable. The sensor and the extension cable are moulded together as one hot vulcanised unit to give a high degree of protection against water/moisture ingress.

FEATURES

- 24AWG double insulated TPE cable
- IP 68 Rated
- Insulation Resistance 100MΩ @ 500VDC
- Available in a variety of connector types
- Customized tolerances and resistances available on request
- Temperature range -40°C to +125°C

APPLICATIONS

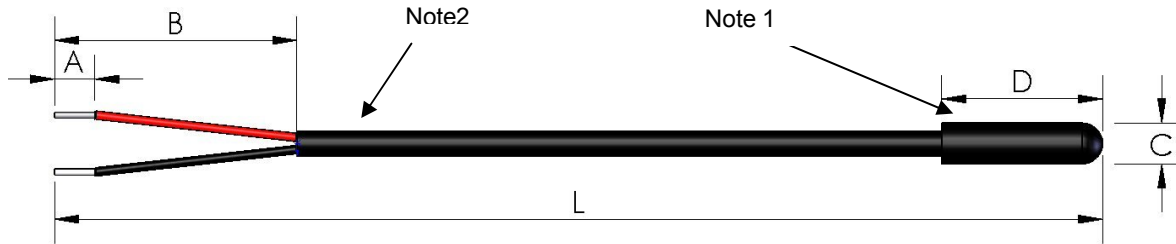
- Refrigeration and HVAC applications
- Industrial Process Control

PERFORMANCE SPECS

Parameters	Units	Value
Nominal Resistance at +25°C	Ohms	10,000
Tolerance at +25°C	%	± 1
Beta Value <small>25/85</small>	K	3435
Tolerance on Beta Value	%	± 2
Time Response (+75°C to +25°C Water Bath)	Seconds	~24
Di-electric Strength (Core wires-cap 60Sec)	Vac	>2750
Breaking strain	N	>200
Temperature range	°C	-40 to +125

TPE Overmoulded Probe Ø 5 x 20mm

MECHANICAL DETAILS



	Dimension			
	A	B	C	D
	5 ± 1mm	35 ± 3mm	Ø 5mm	20 ± 1mm
Note 1	NTC encapsulated using TPE over-mold material (Temp. Rating +125°C)			
Note 2	24AWG (7/32) Tin plated copper cable with Black TPE jacket (Temp. Rating +125°C)			

Figure 1: TPE Overmoulded Probe Ø 5 x 20mm

RESISTANCE V TEMPERATURE TABLE

Temp. °C	K Ohms
----------	--------

-40	197.734
-39	186.893
-38	176.719
-37	167.167
-36	158.196
-35	149.765
-34	141.840
-33	134.386
-32	127.373
-31	120.771
-30	114.555
-29	108.698
-28	103.179
-27	97.975
-26	93.067
-25	88.435
-24	84.064
-23	79.935
-22	76.036
-21	72.351
-20	68.867
-19	65.573
-18	62.456

Temp. °C	K Ohms
----------	--------

-17	59.506
-16	56.714
-15	54.070
-14	51.565
-13	49.191
-12	46.940
-11	44.806
-10	42.782
-9	40.861
-8	39.038
-7	37.306
-6	35.662
-5	34.099
-4	32.615
-3	31.203
-2	29.860
-1	28.583
0	27.368
1	26.212
2	25.111
3	24.062
4	23.063
5	22.111

Temp. °C	K Ohms
----------	--------

6	21.204
7	20.339
8	19.514
9	18.727
10	17.976
11	17.259
12	16.575
13	15.922
14	15.298
15	14.702
16	14.132
17	13.587
18	13.067
19	12.569
20	12.092
21	11.636
22	11.200
23	10.783
24	10.383
25	10.000
26	9.633
27	9.282
28	8.945

Temp. °C	K Ohms
----------	--------

29	8.622
30	8.313
31	8.016
32	7.731
33	7.458
34	7.196
35	6.944
36	6.703
37	6.471
38	6.248
39	6.035
40	5.829
41	5.631
42	5.442
43	5.259
44	5.084
45	4.915
46	4.753
47	4.596
48	4.446
49	4.302
50	4.162
51	4.028

TPE Overmoulded Probe Ø 5 x 20mm

52	3.899	71	2.164	90	1.266	109	0.775
53	3.775	72	2.102	91	1.233	110	0.757
54	3.655	73	2.041	92	1.200	111	0.738
55	3.539	74	1.982	93	1.169	112	0.720
56	3.428	75	1.925	94	1.138	113	0.703
57	3.321	76	1.871	95	1.108	114	0.686
58	3.218	77	1.818	96	1.080	115	0.670
59	3.118	78	1.766	97	1.052	116	0.654
60	3.022	79	1.717	98	1.025	117	0.639
61	2.930	80	1.669	99	0.999	118	0.624
62	2.840	81	1.622	100	0.973	119	0.609
63	2.754	82	1.578	101	0.948	120	0.595
64	2.671	83	1.534	102	0.924	121	0.581
65	2.591	84	1.492	103	0.901	122	0.567
66	2.513	85	1.451	104	0.879	123	0.554
67	2.439	86	1.412	105	0.857	124	0.542
68	2.366	87	1.374	106	0.836	125	0.529
69	2.297	88	1.337	107	0.815		
70	2.229	89	1.301	108	0.795		

ORDERING INFORMATION

Part Number	Description	Ω @25°C	MOQ
10K3435DM010	TPE OM Probe Ø 5 x 20mm Length 1 meter	10,000	1000*
10K3435DM020	TPE OM Probe Ø 5 x 20mm Length 2 meters	10,000	1000*
10K3435DM030	TPE OM Probe Ø 5 x 20mm Length 3 meters	10,000	1000*

* For quantities less than Minimum Order Quantity – contact distribution

NORTH AMERICA

Measurement Specialties, Inc.
910 Turnpike Road
Shrewsbury, MA 01545
Tel: 1-508-842-0516
Fax: 1-508-842-0342
Sales:
temperature.cs.amer@meas-spec.com

EUROPE

Measurement Specialties, Inc
Ballybrit Business Park
Galway Ireland
Tel: +353-91-753238
Fax: +353-91-770789
Sales:
temperature.cs.emea@meas-spec.com

ASIA

Measurement Specialties (China) Ltd.
No. 26, Langshan Road,
Shenzhen High-tech Park (North)
Nanshan District, Shenzhen,
China 518057
Sales:
temperature.cs.asia@meas-spec.com

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.