



TPE OVERMOLDED TEMPERATURE PROBE Ø6.5-X-25MM

Features

- IP67 rated sensor
- 24 AWG double insulated TPE cable
- Insulation resistance 100MΩ @ 500VDC
- Temperature range -40°C to +105°C

Applications

- Refrigeration applications
- Case refrigeration
- Climate control systems
- Industrial process control
- Vending machines

Description

This assembly consists of a DO-35 NTC thermistor soldered to an extension cable. The sensor and the extension cable are molded as one single vulcanized unit to provide a high degree of protection against moisture and water ingress.

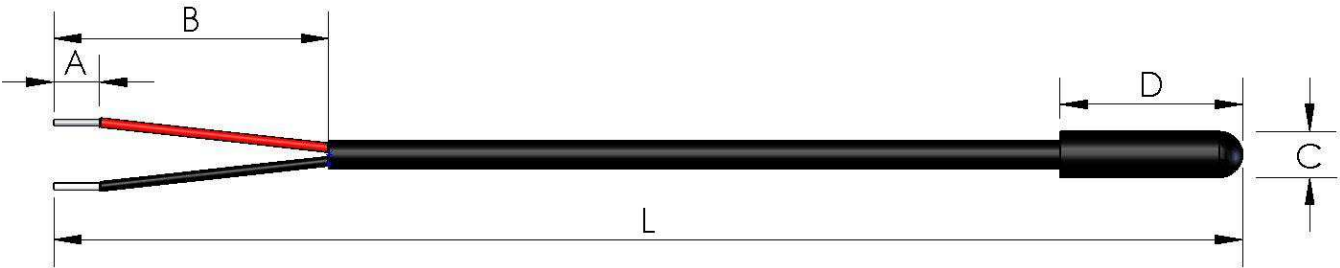
Customized configurations available on request for volume applications. Options include:

- Resistance / temperature characteristics
- Various electrical tolerances available
- Wire length
- Connector type

Performance Specifications

Parameters	Value	
Resistance and corresponding Beta options	Nominal resistance at +25°C	Beta value (25/85)
	10K Ohm	3435 K
	10K Ohm	3976 K
Resistance tolerance	± 1%	
Beta tolerance	± 2%	
Time response (63.2% of temperature span) in liquid	<30 s	
Insulation resistance	100 MΩ @ 500 VDC	
Temperature range	-40°C to +105°C	
Resistance drift after storage at 70°C for 1000h	<1%	
Cable	24 AWG (7/32) Stranded TPC conductor with black TPE insulation	
Probe head	Overmolded black TPE material	

Dimensional Information



	A	B	C	D	L
Dimensions	5.0	35.0	Ø 6.5	25	Refer to Page 4
Tolerance	± 1.0	± 3.0	± 0.5	± 1.0	

All dimensions in millimeters

Resistance v Temperature Table

Temperature (°C)	10K ohms Beta $_{25/85} = 3435$	10K ohms Beta $_{25/85} = 3976$
-40	203778	347166
-35	153354	248517
-30	116622	180144
-25	89567	132128
-20	69431	97989
-15	54296	73433
-10	42815	55576
-5	34028	42454
0	27246	32718
5	22045	25426
10	17943	19916
15	14688	15718
20	12088	12495
25	10000	10000
30	8313	8056
35	6944	6530
40	5826	5325
45	4909	4366
50	4154	3600
55	3529	2986
60	3011	2488
65	2579	2084
70	2217	1753
75	1913	1481
80	1657	1257
85	1439	1072
90	1254	917
95	1097	788
100	962	679
105	848	588

Ordering Information

Part Number	Resistance at +25°C	Beta Value (25/85)	Length (mm) (Dimension L)
20026073-01	10000 Ω	3435	1000
20026073-02			2000
20026073-03			3000
20026073-11	10000 Ω	3976	1000
20026073-12			2000
20026073-13			3000

Example of customization options available for high volume enquires:

- Various nominal resistance values and material systems available
- Variety of compatible connectors

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