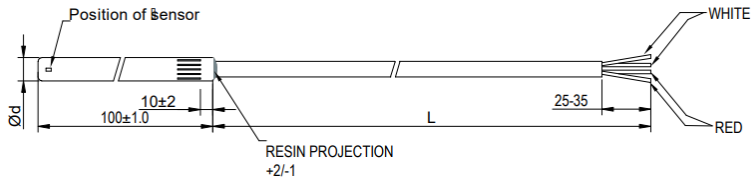


DESCRIPTION

RTD sensor assembled with 24AWG UL 2517 rated double insulated PVC wire. Sensor encapsulated with metal housing with variable dimension as per the requirement.



SPECIFICATIONS

SL NO	PARAMETER	VALUE	UNIT
1	Resistance at 0°C	1000	Ω
2	Grade	DIN EN 60751 CLASS A/CLASS B	
3	Temperature Coefficient	3850	PPM/K
4	Housing Diameter	6	mm
5	Voltage Breakdown Strength	2500	V AC
6	Insulation Resistance	500	MΩ
7	Isolation Strength	500	VDC
8	Response Time	10	Sec
9	Wire Length	100-4000	mm
10	Storage Temperature	-40 to 85	°C
11	Operating temperature	-40 to 105	°C

- Customized dimension available with 4-6.35mm

FEATURES

- High Stability & reliability
- Flame Resistant and Retardant
- High measuring accuracy

APPLICATIONS

- Automotive sector
- BMS
- Power electronics
- Motor Windings

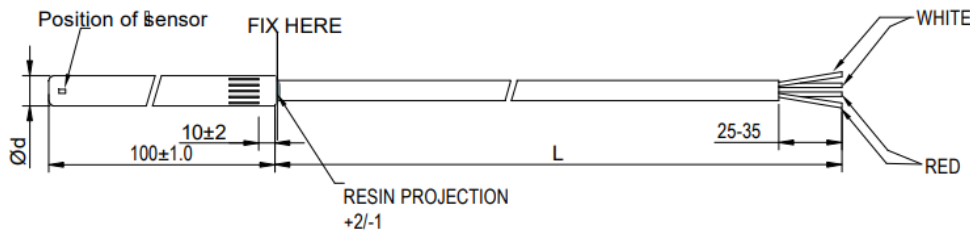
RELIABILITY SPECIFICATION

Description	Test Conditions	Characteristics Drift
Dry Heat Test	Elements are placed in a oven of temp. at 105°C± 5°C for 1000 (+48, -0)hr. After test the elements are stored in room temperature for one hour.	ΔR after test are less than ± 3%. ΔB after test are less than ± 2%.
Cold Test	Elements are placed in an oil bath of temperature at -20°C± 5°C for 500 (+48, -0)hr. After test the elements are stored in room temperature for one hour.	ΔR after test are less than ± 3%. ΔB after test are less than ± 2%.
Thermal Shock Test	-30°C Air Chamber,3 minute) -> RT(Air, under 1min) -> 105°C Air Chamber, 5 minute) for 100000 cycle. After test the elements are stored in room temperature for one hour.	ΔR after test are less than ± 3%. ΔB after test are less than ± 2%.

Mechanical Test

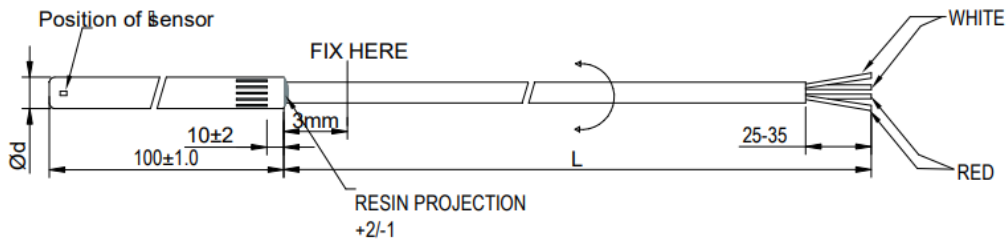
1.Terminal tensile strength test

Load tensile stress of 5N to axial direction slowly and keep it for 30±5 sec. after the test characteristics, there should not be any physical damage or abnormalities in product characteristics.



2.Terminal bending test

Lead wire will be fixed at 3mm from its probe end. Apply load of 50N to lead wire so that it makes 90 degree. Then put it back to original position. After two times of this action, characteristics, appearance of sensor shall not change.



SOLDERING (*)

1. Soldering Temperature: 320°C Max.
2. Soldering Duration: 6.0 Second Max.
3. Preheat Temperature: 160°C for 3.0 Sec.

(* instruction to customer)

PART NUMBER SYSTEM

T R A- M- 10104 LXXX

THERMOSEN

RTD

ASSEMBLY

METAL HOUSING

SERIES CODE

WIRE LENGTH(Eg: 101 for 100mm (10x10¹), 102 for 1000mm (10x10²))

MATERIAL LIST

Class	Tolerance @ 0°C(Ω)	TCR (Ωs/Ω/°C)
A	±0.06	0.003851±0.000005
B	±0.12	0.003851±0.000012
2B	±0.25	0.003851±0.000024

RESISTANCE TABLE

TEMP (°C)	RES (Ω)	TEMP (°C)	RES (Ω)	TEMP (°C)	RES (Ω)	TEMP (°C)	RES (Ω)
-200	185.2	-90	643.0	10	1039.0	110	1422.9
-190	228.5	-80	683.3	20	1077.9	120	1460.7
-180	271.0	-70	723.3	30	1116.7	130	1498.3
-170	313.4	-60	763.3	40	1155.4	140	1535.8
-160	355.4	-50	803.1	50	1194.0	150	1573.3
-150	397.2	-40	842.7	60	1232.4	160	1610.5
-140	438.8	-30	882.2	70	1270.8	170	1647.7
-130	480.0	-20	921.6	80	1309.0	180	1684.8
-120	521.1	-10	960.9	90	1347.1	190	1721.7
-110	561.9	0	1000.0	100	1385.1	200	1758.6
-100	602.6						

CUSTOM DESIGN & SUPPORT

- Customized product available upto 300°C.
- End wire stripped and Tinned or with connector assembly.
- Part can be supplied with customised connectors

PACKING

- Bulk layer packing
- 100 in poly bag
- Custom packing solution will be provided.

Consult Thermosen Technologies Pvt. Ltd. for custom product requirement

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