



Bearing Type Resistance Temperature Detectors (BTDRs)

CE RoHS



Function:

Many applications require continuous temperature monitoring of various devices. The Bearing Temperature Detectors (BTDRs), due to their linear Resistance-Temperature characteristics, is used for temperature sensing, measurement & control of these devices. The Bearing Resistance Temperature Detectors (BTDRs) due to their linear Resistance - Temperature characteristics, is used for temperature sensing, measurement & control.

Temperature up to 200°C can be monitored and controlled with this type of Bearing RTDRs.

The Bearing RTDRs are mounted on the Motor/ Generator bearings by providing suitable tapped holes on bearing housing. The Bearing RTDRs with metal housings are used to monitor temperature in Control Panel, Heat Sink and Bus Bar.

PT 1000 and PT 500 are also available on request

Features:

- Customize dimension of sensing element can be supplied on request
- Various lead length and color codes wire can be supplied
- Various color code UL approved lead wires can be supplied on request
- Ex-stock delivery of standard Sizes

Please contact us for readily available and standard designs.

Applications:

The Bearing RTDRs can be used for continuous temperature indication and monitoring of the following:

- 1 AC Motors (HT)
- 2 DC Motors
- 3 AC Alternator
- 4 Transformers
- 5 Control Panel
- 6 Heat Sink and Bus Bar



INSTA CONTROL™

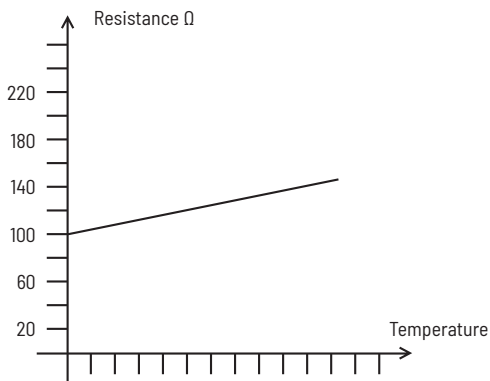
EXPERTISE OVER 4 DECADES IN WINDING PROTECTION AT YOUR SERVICE

Resistance - Temperature Characteristic

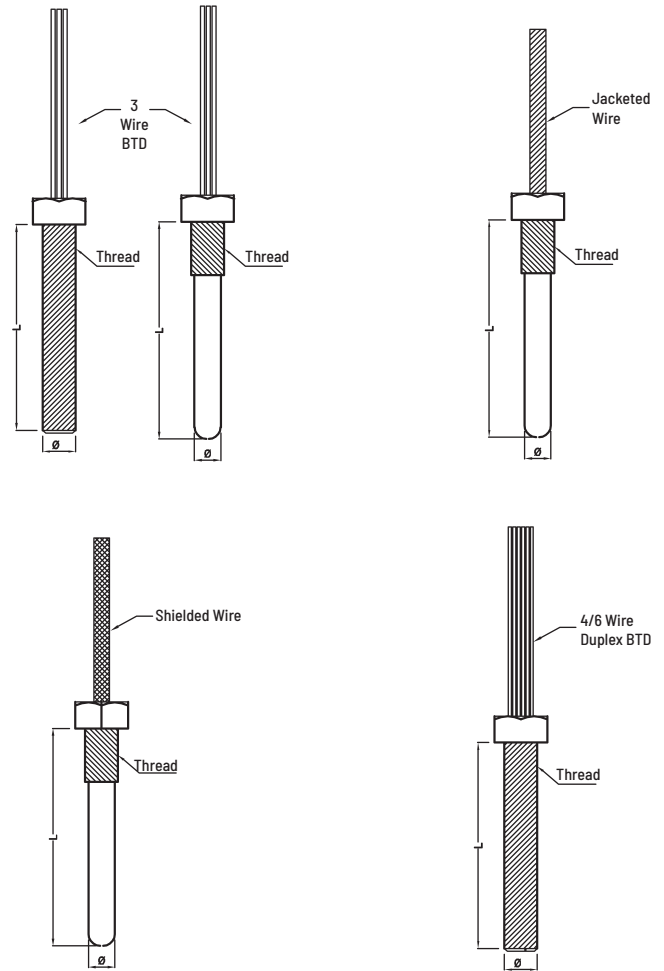
Following table gives the values of resistance at different temperatures and the graph shows the variation of resistance with the temperature rise. All the values are as per IEC 60751 Edition 2.0, 2008-07, BS EN 60751:2008 and IS 2848: 1986.

Temperature °C	Resistance Ω
0	100.00
10	103.90
20	107.79
30	111.67
40	115.54
50	119.40
60	123.24
70	127.07
80	130.89
90	134.70
100	138.50
110	142.29
120	146.06
130	149.82
140	153.58
150	157.31
160	161.04
170	164.76
180	168.46
190	172.16
200	175.84
210	179.51
220	183.19
230	186.84
240	190.47
250	194.10
260	197.69

The tolerance defined by the International Standard refers only to the sensing element.



Schematic Drawing



Technical Details

- 1 Bearing RTDs are Passive Components.
- 2 Dielectric Strength of standard Bearing RTDs is 2.0 kV for 1 minute. Dielectric Strength more than 2.0 kV are also available on request
- 3 The Insulation Resistance between the wire leads & body of Bearing RTDs is greater than 100M Ω
- 4 Rating: Temperature: - 40°C to + 200°C
- 5 The Resistance / Temperature relationship of the Bearing RTDs is as per IEC 60751 Edition 2.0, 2008-07, BS EN 60751:2008 and IS 2848: 1986

Other products from Insta Control

PTC Thermistor, Single TPU, Dual TPU, PT-100 RTDs, Slot RTDs, KTY Sensor, Space Heater & Thermal Switches (TOPs), ATEX & IEC Exe approved PT-100 Slot RTDs, Bead type PT-100 RTDs & Bearing RTDs are available on request.

ISO 9001 : 2015 Certified Company



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