



# Bearing Temperature Detectors



## Bearing Temperature Detectors

### ● Product Overview

BTDs are bearing temperature detectors.

Bearing temperature detectors are installed in stationary bearing casing and monitors bearing temperature.

Bearing temperature is an important parameter of heavy rotary machines and it indicates bearing health in rotating equipment.

Rise in bearing temperature suggest possibilities of problem in oil film or alignment of shafting.

BTDs give early detection of bearing problems and it prevents further damage of machine.

The measuring elements are located in proximity of tip in order to measure correct reading.

### ● Construction

BTDs are just like normal temperature sensors, however they are designed to work in applications where fast response and vibration immunity is required,

They are often used in spring loaded design for firm contact and vibration immunity.

Because of relatively low temperature range, RTDs are used as measuring element in BTDs, However in certain application various kind of thermocouples are also used

Techno offers various designs of BTDs that suits customer requirement.

Techno offers various elements like Pt100, PT1000, Pt50, Ni 1000 etc.

Techno also offers various kinds of thermocouples.

This sensors are specially designed to suit this application.

Just like other temperature sensors they are custom made according to the requirement.

Almost all designs are available in single element or dual element.

In case of RTD element, we offer 2/3/4 wire per element, as per customer requirement.

There are certain standard designs which are used for this kind of applications.

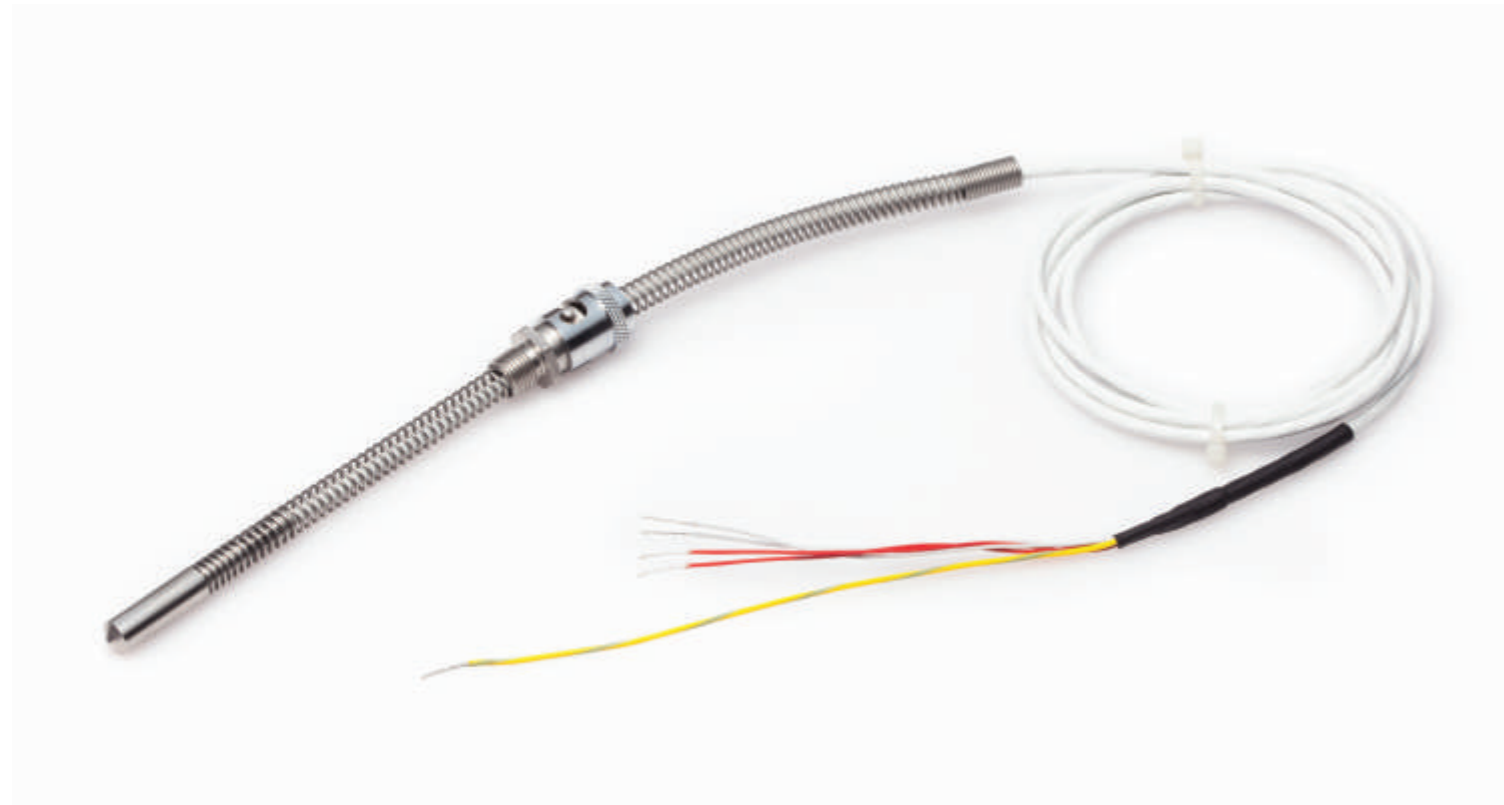
1. BTDs with bayonet
2. BTDs with extension cables.
3. BTDs with terminal heads
4. Specially designed BTDs

- Certain design of BTDs will be available very soon with ATEX and IECEx certification.



## BTDs with bayonet

- Sensor with bayonets are widely used for this application.
- This design offers quick mounting or removal of sensor.
- This kind of construction also offer firm contact with metal parts for fast response.
- Also this design is quite rugged and suitable for environment where vibration is present.
- Just like other design, there are many options available in this designs and our product range includes various dimensions, connecting threads, option of single or double notch etc.



## BTDs with extension cables

- This kind of BTDs are available with inbuilt or integrated extension leads.
- Length and construction of the extension leads can be customized.
- We offer various kind extension leads like PTFE/FEP/Polyamide/PVC etc with or without screening.
- Color codes can also be customized.
- Just like previous design, it is available with various kind of compression fittings.
- Also, option of electrical insulating sleeves on metal sheath is available.



## BTDs with terminal head

- In this kind of design, terminal head is provided to connect signal cable with sensor.
- This design is suitable when termination of signal cable is far from sensor.
- Terminal heads are available in various material like aluminum, nylon or SS.
- Normally, mounting of terminal is on spring loaded assembly
- This head are available with Ingress protection certificates.
- There are several options like number of cable entries, cable entry size etc.
- Movable or fix (welded fitting) of required size can be provided.
- Also, we also provide insulating sleeve on sheath if required.



## BTDs - Special design

As the name suggest, we offer special designed BTDs.

This designs includes various options like

- (1) 100% electrical insulated
- (2) BTDs with various connectors
- (3) BTDs with special mounting arrangements

This design are truly customized and available in various designs.

We also execute development orders for BTDs which are not mentioned in our standard product list.



Plot No. 54/1, Survey No. 299,  
Meladi Estate, Nr. Gota Railway Crossing,  
Gota, Ahmedabad - 382481, Gujarat, India.

Mobile: +91-99099 25234  
Telefax: +91-2717-241315, 241312  
Email: [info@technocontrols.com](mailto:info@technocontrols.com)

[www.technocontrols.com](http://www.technocontrols.com)