

# Bearing Temperature Sensors

## Description

A family of temperature sensors manufactured for use in rotating equipment where bearing temperature monitoring is critical to reliability and longevity. Wide varieties of configurations are available and consist of single and dual element temperature sensors and thermocouples, 1/8" and larger diameters, with and without bends, and a variety of process connection fittings. The housing to sheath interface contains a Viton o-ring to help seal and reduce the vibration between the sheath and housing.

#### Application

For use in rotating equipment where bearing temperature monitoring is critical to reliability and longevity.

Bearing temperature is a key indicator of bearing health. Monitoring the temperature can prompt routine maintenance procedures such as greasing or predicting when rebuilds are necessary. Using the Burns Bearing Temperature Sensor for early detection of bearing problems can minimize machine downtime and alert maintenance to an impending bearing failure.

#### **Features and Benefits**

- Vibration and shock resistant for long life and long-term stability
- Configurations to fit your application
- Spring-loaded to minimize vibration damage
- Sealed to prevent bearing lubricant leakage
- 1/8" and larger sheath diameters

#### **Specifications**

Temp Range: -50°C to +200°C

Element Configuration: Dual element, 100 ohms at 0°C, .00385 ohm/ohm/°C nominal alpha

Stability: ±0.26°C (0.10 ohms) maximum shift at 0°C after 1000 hours at 200°C

Repeatability: ±0.10°C (0.04 ohms) maximum shift at 0°C after 10 cycles between -50°C and 200°C

R0 Interchangeability: R0 ±0.10 ohms

**Short-Term Repeatability and Hysteresis:** ±0.05°C (0.02 ohms) maximum change at 0°C over any 5 consecutive thermal cycles from 0°C to +200°C

Transition Fitting and Cable Temp Limits: -26°C to +200°C continuous

Insulation Resistance: 500 megohms minimum at 100 VDC at room temp



### What will your next solution BE?

Durable temperature sensors that deliver accurate, stable and repeatable measurements. BE confident. Trust Burns Engineering for the most creative solutions to your most challenging temperature-sensing needs.

#### For current model numbers and precise ordering information, visit burnsengineering.com and search > BEARING



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