

# TS22545 Series Thermistor Bolt Sensor

Thermistor probe for medical temperature measurement applications.

*Minco temperature sensors deliver unmatched performance, value and reliability to meet the demanding requirements in a variety of applications. Thermistor sensors offer high sensitivity and accuracy for medical diagnostics equipment and many other applications.*

## Overview

The versatility of bolt style temperature sensors makes them popular in a wide variety of applications throughout many industries. Thermistor configurations are most popular for their high sensitivity in medical equipment, while platinum RTD configurations are popular in industrial equipment for the extended temperature range.

- Temperature range: -50°F to 250°F (-45.6°C to 121.1°C)
  - 167°F (75°C) max continuous for best stability
- Accuracy +/- 0.18°F (0.10°C) up to 122°F (50°C)
- Optional connector for easy installation
- M4 and larger bolt styles
- Stainless steel cases for high strength and corrosion resistance or aluminum cases for faster thermal conductivity
- Platinum RTD configurations also available for extended temperature range



## Diagnostics Applications

Minco understands the critical requirements of your applications. Thermistor sensors are used to monitor reagents, chambers, enclosures, and ambient environmental temperature. Bolt sensors are also easily installed into heat-sinks to provide temperature feedback for PCR process control.

- Small bolt profile offers low thermal mass for fast time response and installation into small heatsinks and thermal assemblies
- Thermistor sensors are suitable for integration with many popular control systems
- Easily removed for periodic calibration to maintain quality standards

## Thermistor Bolt Configuration Guide

TS22545	Thermistor Bolt Sensor				Probe Type	
	0	M4x0.7 – 0.093" (2.36mm) hex			Bolt Size	
	1	M5x0.8 – 0.101" (2.57mm) hex				
	2	M6x1.0 – 0.125" (3.18mm) hex				
	3	8-32 UNC – 0.093" (2.36mm) hex				
	4	10-32 UNF – 0.101" (2.57mm) hex				
	5	1/4-20 UNC – 0.125" (3.18mm) hex				
	TA	2,252 Ohms at 77°F (25°C), Beta <sub>0-50</sub> = 3892K			Sensing Element	
	TD	10,000 Ohms at 77°F (25°C), Beta <sub>0-50</sub> = 3892K				
	TQ	30,000 Ohms at 77°F (25°C), Beta <sub>0-50</sub> = 3892K				
	6	Specify in whole inches; standard lengths: 6" (0.15m); 12" (0.3m); 36" (0.9m); 60" (1.5m)			Lead Length	
	S	PTFE insulated leads, copper braid shielding, drain wire and FEP jacket overall			Lead Wire Type	
	T	PTFE insulated leads, no jacket				
	N	No Connector			Connector Option	
	C1	Connector Terminal, AMP 104257-1 (2 contacts)				
TS22545	2	TD	6	S	C1	Sample Part Number

### Additional Capabilities

Minco's broad development, integration, and assembly capabilities make us more than just a sensor supplier. We can optimize functional and packaging efficiency, and provide greater design flexibility for your application. We offer:

- Comprehensive development support
- Seamless integration of sensors, heaters, flex circuits, controllers, transmitters, and other electronics
- Broad-based assembly capabilities

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ISO 9001:2008 / AS9100: 2009  
TS22545 v.2  
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