Thermistor Selection Guide

What is a thermistor?

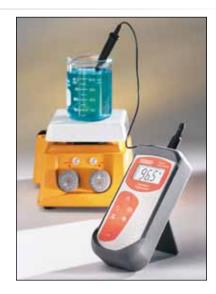
A thermistor is a thermally sensitive resistor which changes electrical resistance due to temperature changes. It has very predictable characteristics and offers long-term stability.

Why choose a thermistor?

Thermistors have excellent accuracy over the biological or ambient temperature ranges when compared to thermocouples or RTDs, but have a limited temperature range that usually cannot exceed 150°F (300°C). Response times are generally faster than other types of probes.

Other thermistor series

Unless otherwise specified, Oakton thermistor thermometers are designed for use with 400-series probes. These probes provide accurate thermistor results and are interchangeable with little probe-to-probe variation. Oakton meters can be used with 500-series probes (not offered by Oakton) but will require the user to consult a conversion chart typically provided with the 500-series probe. The 500-series probes have significant probe-to-probe variability that can not be compensated for in the meter. Oakton meters are not compatible with 700-series probes.





WD-17002-06 NIST-traceable calibration with data for Thermistor system (meter + probe) WD-17000-06 NIST-traceable calibration with data for Thermistor meter WD-17001-06 NIST-traceable calibration with data for Thermistor probe Service includes test data calibrated at four temperature test points.

General-Purpose 400-Series Thermistor Probes

Ideal for measurement in liquids or semisolids

Use our thermistor probes to measure temperature when accuracy within the biological range is important. All probes include a 5-ft PVC coiled cord with strain relief that protects from repeated flexing and tugging. Ergonomic, easy-grip 5"L glass-filled nylon handle provides maximum heat insulation and impact resistance. Fingerstops on handle prevent probe from rolling and fingers from sliding when inserting probe into hard materials. The 316 stainless steel sheath (tip casing) provides durability, strength, and maximum abrasion resistance. All probes come with a ¼" phono plug connector. Compatible with all Oakton and Acorn® thermistor thermometers.

Specifications & Ordering Information

Key	Catalog number	Temperature range	Tip length	Dimensions
А	WD-93824-00	–30 to 100°C (–22 to 212°F)	10"	$\underbrace{\begin{array}{c} \bullet \\ \bullet $
В	WD-93824-30	–30 to 100°C (–22 to 212°F)	4"	4" → ↓ ↓ 0.188" dia
С	WD-93824-12	–30 to 100°C (–22 to 212°F)	10"	



B C Penetration tip PTFE-coated tip

General-Purpose: Designed for most common and liquid immersion applications.

Penetration: Pointed tip style for penetration into hard and semisolid materials. Sturdy stainless steel tip casing prevents tip from bending when inserting.

 PTFE-Coated: Same as our generalpurpose tip above, but this tip has a PTFE coating over the casing for use with acids and strong chemicals.

You'll find more thermistor probes on page 87.