

Barnant RTD and Thermistor Probes

RTD Probes

Use these probes with the Barnant ThermoLogR RTD Thermometer listed on page G29. Alpha coefficient is 0.003850 $\Omega/\Omega/^\circ\text{C}$. Resistance at ice point (0°C) is 100 Ω . Note: Each probe has a characteristic time constant; five time constants are needed to reach 99% of final reading.

Ordering Information — Integral Handle Probes with 316 SS Sheath and 5.5" Glass-Filled Nylon Handle

MP8117-70	10"L	General-purpose immersion probe Range: -58 to 932°F (-50 to 500°C) Time Constant: 10 Seconds	
MP8117-72	18"L		
MP8117-73	10"L	Bendable immersion probe Range: -58 to 932°F (-50 to 500°C) Time Constant: 10 Seconds	
MP8117-74	18"L		
MP8117-75	Surface Probe	Range: -58 to 932°F (-50 to 500°C) Time Constant: 24 Seconds	
MP8117-80	Needle Probe	Range: -58 to 932°F (-50 to 500°C) Time Constant: 10 Seconds	
MP8117-85	Penetration Probe	Range: -58 to 932°F (-50 to 500°C) Time Constant: 10 Seconds	
MP8117-90	Air/Gas Probe	Range: -58 to 932°F (-50 to 500°C) Time Constant: 4 Seconds	

400 Series Thermistor Probes

Probes are accurate to $\pm 0.1^\circ\text{C}$ from 0 to 70°C . All probes include certificate indicating traceability to NIST standards. Note: Each probe has a characteristic time constant. Time constant is estimate time required to reach 63.2% of a new reading. To determine how long it will take to reach 99% of a new reading, multiply the time constant by five.

Ordering Information

Order # (YSI #)	Description	Temperature Range	Time Constant	Dimensions	Price
MP8430-00 (401)	General-purpose probe, immersible for short-term deep-water and subsoil readings. Vinyl sheath and tip	-40 to 212°F (-40 to 100°C)	7 Seconds		
MP8434-00 (403)	Liquid-immersion probe 1/2" diameter, stainless steel (316 SS). Immersible only to cap unless waterproofed.	-40 to 302°F (-40 to 150°C)	3.4 Seconds		
MP8436-00 (406)	Like 8434-00 above, but with 1/8" diameter probe		2.5 Seconds		
MP8481-00 (418)	Penetration probe for insertion into semi-solids like fruits, soil, tobacco. No handle. All 316 SS, with vinyl-covered lead.	-40 to 300°F (-40 to 150°C)	3.7 Seconds		

700 Series Thermistor Probes

Probes are accurate to $\pm 0.15^\circ\text{C}$. All probes include certificate indicating traceability to NIST standards. Probes also include a vinyl-covered 10-ft lead with 1/4" phone plug connector. (Lead and probe-lead junction are not waterproof). Probes have a temperature range of -22 to 212°F (-30 to 100°C). Note: Each probe has a characteristic time constant. Time constant is estimate time required to reach 63.2% of a new reading. To determine how long it will take to reach 99% of a new reading, multiply the time constant by five.

Ordering Information

Order # (YSI #)	Description	Time Constant	Dimensions	Price
MP8415-21 (701)	General-purpose probe. The most rugged probe we offer. Vinyl tipped probe recommended for short term liquid immersion or soil readings.	7 Seconds		
MP8415-26 (731)	General-purpose probe. Nonimmersible, epoxy-tipped; can be potted in place. Suitable for surface temperature measurements.	0.9 Seconds		
MP8415-29 (709B)	Attachable surface probe. Designed for rugged applications; good for measuring heat loss or the compression efficiency in pipes. Continuous 10' vinyl covered lead	1.1 Seconds		
MP8415-22 (703)	Tubular probe. Made of stainless steel for rugged use. Use for liquid immersion; immersible to transition joint only	3.4 Seconds		