

Thermometer Probe Selection Guide

Platinum Resistance Thermometers, Thermistors, and Thermocouples from Fluke Calibration

Fluke Calibration manufactures platinum resistance thermometers, thermocouples, thermistor temperature sensors for precision temperature measurement and calibration. High temperature thermometers for furnaces, ovens, and high temperature calibration include noble metal thermocouples and high temperature PRTs. Low temperature thermometers for freezers, cryogenics, and low temperature calibration include our freezer thermometer, secondary standard thermometers and secondary reference thermometers. These probes may be used for temperature measuring, temperature calibration, temperature monitoring and temperature validation. We also offer a complete selection of [thermometer readouts](#) for measuring and displaying the temperature readings of these probes. In addition our calibration laboratory offers a wide range of accredited calibration services to meet your accuracy needs.



Fluke Calibration Platinum Resistance Thermometers (PRTs)			
Model	Range	Size	Basic Accuracy [†]
Platinum Resistance Thermometer: Secondary Standard PRT			
5608-9-X	-200 to 500 °C	9 in x 1/8 in	Select from available calibration options
5608-12-X	-200 to 500 °C	12 in x 1/8 in	
5609-12-X	-200 to 670 °C	12 in x 1/4 in	
5609-15-X	-200 to 670 °C	15 in x 1/4 in	
5609-20-X	-200 to 670 °C	20 in x 1/4 in	
5609-300-X	-200 to 670 °C	300 mm x 6 mm	
5609-400-X	-200 to	400 mm x 6 mm	

	670 °C		
5609-500-X	-200 to 670 °C	500 mm x 6 mm	
5626	-200 °C to 661 °C	305 or 381 x 6.35 mm (12 or 15 x 0.25 in)	±0.007 °C at 0 °C
5628	-200 °C to 661 °C	305 or 381 x 6.35 mm (12 or 15 x 0.25 in)	±0.006 °C at 0 °C
Platinum Resistance Thermometer: Secondary Reference PRT			
5616-12	-200 °C to 420 °C	6.35 mm x 298 mm (0.250 x 11.75 in)	± 0.010 °C at 0.010 °C
5615-6	-200 to 300 °C	4.76 mm x 152 mm (0.188 x 6.0 in)	± 0.013 °C at 0.010 °C
5615-9	-200 °C to 420 °C	4.76 mm x 229 mm (0.188 x 9.0 in)	± 0.013 °C at 0.010 °C
5615-12	-200 °C to 420 °C	6.35 mm x 305 mm (0.250 x 12.0 in)	± 0.013 °C at 0.010 °C
Platinum Resistance Thermometer: Precision Industrial PRT			
5627A-6	-200 °C to 300 °C	152 x 4.7 mm (6 x 0.187 in)	±0.05 °C at 0 °C
5627A-9	-200 °C to 300 °C	229 x 4.7 mm (9 x 0.187 in)	±0.05 °C at 0 °C
5627A-12	-200 °C to 420 °C	305 x 6.35 mm (12 x 0.25 in)	±0.05 °C at 0 °C
Platinum Resistance Thermometer: Fast Response PRT			
5622-05	-200 °C to 350 °C	100 x 0.5 mm	±0.04 °C at 0 °C
5622-10	-200 °C to 350 °C	100 x 1.0 mm	±0.04 °C at 0 °C
5622-16	-200 °C to 350 °C	200 x 1.6 mm	±0.04 °C at 0 °C
5622-32	-200 °C to 350 °C	200 x 3.2 mm	±0.04 °C at 0 °C
Platinum Resistance Thermometer: Small Diameter Industrial PRTs			

5618B-6	-200 °C to 300 °C	152 x 3.2 mm (6 x 0.125 in)	±0.05 °C
5618B-9	-200 °C to 500 °C	229 x 3.2 mm (9 x 0.125 in)	±0.05 °C
5618B-12	-200 °C to 500 °C	305 x 3.2 mm (12 x 0.125 in)	±0.05 °C
Platinum Resistance Thermometer: Full Immersion PRTs			
5606 Immersion PRT	-200 to 160 °C	50 x 3.1 mm (2 x 1/8 in)	±0.05 °C
5607 Immersion PRT	0 to 450 °C	75 x 3.1 mm (3 x 1/8 in)	±0.055 °C
5623B Freezer Probe	-100 °C to 156 °C	152 x 6.35 mm (6 x 0.25 in)	±0.05 °C
Platinum Resistance Thermometer: High Temperature PRT			
5624 High Temperature PRT	0 °C to 1000 °C	508 x 6.35 mm (20 x 0.125 in)	±0.055 °C
Thermistors			
Thermistor: Standards			
5640	0 °C to 60 °C	229 x 6.35 mm (9 x 0.25 in)	±0.0015 °C
5641	0 °C to 60 °C	114 x 3.2 mm (4.5 x 0.125 in)	±0.001 °C
5642	0 °C to 60 °C	229 x 3.2 mm (9 x 0.125 in)	±0.001 °C
5643	0 °C to 100 °C	114 x 3.2 mm (4.5 x 0.125 in)	±0.0025 °C
5644	0 °C to 100 °C	229 x 3.2 mm (9 x 0.125 in)	±0.0025 °C
Thermistor: Secondary Probes			
5610	0 °C to 100 °C	152 or 229 x 3.2 mm (6 or 9 x 0.125 in)	±0.01 °C

5611A	0 °C to 100 °C	1.5 mm (0.06 in) tip dia.	±0.01 °C
5611T	0 °C to 100 °C	28 x 3 mm (1.1 x 0.12 in)	±0.01 °C
5665	0 °C to 100 °C	76 x 3.2 mm (3 x 0.125 in)	±0.01 °C
Thermocouples			
Thermocouple: Type R and S Standards			
5649/5650-20	0 °C to 1450 °C	508 x 6.35 mm (20 x 0.25 in)	±0.7 °C at 1100 °C
5649/5650-20C	0 °C to 1450 °C	508 x 6.35 mm (20 x 0.25 in)	±0.7 °C at 1100 °C
5649/5650-25	0 °C to 1450 °C	635 x 6.35 mm (20 x 0.25 in)	±0.7 °C at 1100 °C
5649/5650-25C	0 °C to 1450 °C	635 x 6.35 mm (20 x 0.25 in)	±0.7 °C at 1100 °C
†“Basic Accuracy” includes calibration uncertainty and short-term repeatability. It does not include long-term drift.			