2000-Series Low Resistance Standards

- *Reference Resistance Standards*
- *Excellent Stability*
- *Recommended for Use in Oil at 25 °C*
- *1 Ohm to 10 Micro-Ohms*

Model 2004 100 Micro-Ohm Standard

The 2000 series Low Resistance Standards are designed as prime laboratory references for maintaining the ohm at levels below one ohm.

Based on recent advances in materials processing, these standards are designed to provide good long term stability.

Models 2000, 2001 and 2002 (1 ohm, 0.1 ohm and 0.01 ohm) feature a nickel alloy element, carefully heat treated for low temperature coefficients of resistance (tcr). These standards are housed in a hermetically sealed enclosure, to provide relative immunity from changes in ambient pressure and relative humidity. These models may be used in oil at 25 °C or in air at 23 °C.

Models 2003, 2004 and 2005 (1 milli-ohm through 10 micro-ohm) are made with Manganin alloy elements, housed in a perforated can for improved dissipation of heat. These models are recommended for use in stirred oil at 25 °C.

All models are supplied with an ISO17025 accredited report of calibration, including temperature coefficient data.

The 2000 series are available in intermediate values by special order.

For secondary low resistance standards, please see our 1000-series resistors. For accurate current measurement, please see information on our precision current shunts.

Model Number	Nominal Resistance	Tolerance in ppm	Rated Current	Temperature Coefficients
2000	1 Ohm	<5	1 Amp	< 2 ppm / °C
2001	0.1	<5	3	
2002	0.01	<15	10	
2003	0.001	<20	30	< 15 ppm / °C
2004	0.000 1	<50	100	
2005	0.000 01	<100	300	
Special Values available on request – use the following format				
Specify 20(X)(Y)	20 = 2000 Series	X = Resistance Y = Range		2051 = 0.5 2023 = 0.002

Notes:
Initial 12 month stability < 10 ppm
Tolerance is accuracy at time of manufacture
Temperature coefficients are at nominal 25°C +/-5°C.

Physical:
2000 - 2004:
89 mm dia. X 159 mm high (3.5” x 6.25”); 1.5 kg (3 #)
2005:
267 mm dia. X 305 mm high (10.5” x 12”); 7 kg (14 #)

-LABS
Excellence in Resistance

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