CR

HIGH ACCURACY, COST EFFECTIVE 4 TERMINAL CALIBRATION RESISTOR

This range of low cost 4 terminal calibration resistors combine high accuracy, class 0.02, long term stability and permanence of calibration in a compact unit. Constructed using carefully selected low temperature coefficient Manganin or Zeranin wire, depending upon value and mounted to ensure mechanical stability, these resistors will provide a cost effective addition to any laboratory or workshop. Typical applications include calibration reference, accurate current measurement instrument calibration and accurate shunt resistors.

KEY FEATURE	CR
Low capacitance and low inductance design	■
High accuracy 0.02%	■
Suitable for direct current & technical frequencies	■
Oil-filled design ensures great long-term stability <±0.01% over many years	■

Dimensions

38mm x 97mm x 41mm (61mm with terminals - approx)

Mass

250g approx

CR SPECIFICATIONS

Model	Resistance Value	Tolerance ± %	Resistivity material	Max. current in air	Nominal voltage at voltage taps	Storage stability type/year
CR-0.0001	100 µΩ	0.1	Manganin® metal sheet	60 A	6 mV	$< 4 \times 10^{-4}$
CR-0.0002	200 µΩ	0.05		60 A	12 mV	$< 4 \times 10^{-4}$
CR-0.0005	500 µΩ	0.05		60 A	30 mV	$< 4 \times 10^{-4}$
CR-0.001	1 mΩ	0.05	Manganin® metal sheet	30 A	30 mV	$< 5 \times 10^{-5}$
CR-0.002	2 mΩ	0.05		30 A	60 mV	$< 5 \times 10^{-5}$
CR-0.005	5 mΩ	0.05		20 A	100 mV	$< 5 \times 10^{-5}$
CR-0.01	10 mΩ	0.03		14 A	140 mV	$< 5 \times 10^{-5}$
CR-0.02	20 mΩ	0.03		10 A	200 mV	$< 5 \times 10^{-5}$
CR-0.05	50 mΩ	0.03		6 A	300 mV	$< 5 \times 10^{-5}$
CR-0.1	100 mΩ	0.02		5 A	500 mV	$< 3 \times 10^{-5}$
CR-0.2	200 m?	0.02	Zeranin® - wire	3 A	600 mV	$< 2 \times 10^{-5}$
CR-0.5	500 mΩ	0.02		2 A	1 V	$< 2 \times 10^{-5}$
CR-1	1 Ω	0.02		1.5 A	1.5 V	$< 1 \times 10^{-5}$
CR-2	2 Ω	0.02		1 A	2 V	$< 2 \times 10^{-5}$
CR-5	5 Ω	0.02		0.7 A	3.5 V	$< 2 \times 10^{-5}$
CR-10	10 Ω	0.02		0.5 A	5 V	$< 1 \times 10^{-5}$
CR-20	20 Ω	0.02		0.35 A	7 V	$< 2 \times 10^{-5}$
CR-50	50 Ω	0.02		0.2 A	10 V	$< 2 \times 10^{-5}$
CR-100	100 Ω	0.02		0.15 A	15 V	$< 1 \times 10^{-5}$
CR-200	200 Ω	0.02		0.1 A	20 V	$< 2 \times 10^{-5}$
CR-500	500 Ω	0.02		70 mA	35 V	$< 2 \times 10^{-5}$
CR-1 k	1 kΩ	0.02		45 mA	45 V	$< 1 \times 10^{-5}$
CR-2 k	2 kΩ	0.02	Zeranin® - wire	20 mA	40 V	$< 2 \times 10^{-5}$
CR-5 k	5 kΩ	0.02		14 mA	70 V	$< 2 \times 10^{-5}$
CR-10 k	10 kΩ	0.02		10 mA	100 V	$< 1 \times 10^{-5}$
CR-20 k	20 kΩ	0.02	Zeranin® - wire	7 mA	140 V	$< 2 \times 10^{-5}$
CR-50 k	50 kΩ	0.02		4 mA	200 V	$< 3 \times 10^{-5}$
CR-100 k	100 kΩ	0.02		3 mA	300 V	$< 3 \times 10^{-5}$