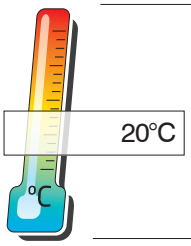

AC/DC Standard Resistors
Models SRA & SRB

Eventually all resistance thermometry refers back to one or more fixed resistors. These are a key element in any laboratory which measures temperature. The resistors need to be very stable with time, temperature and transportation, and they need to have negligible inductance and capacitance.

They also need to have a long and successful history of use. Wilkins and Swan at our National Physical Laboratory (NPL) developed a resistor design flexible enough to allow windings with various resistance values to be made available and stable enough to be accepted world-wide as resistance standards. Particularly important is that the AC/DC characteristics are the same up to about 1000 Hz.

This design has been licensed to H. Tinsley & Co. who have been producing (and have made further improvements to) this product since 1970.

Isotech are pleased to be able to offer this design of resistor made for us by Tinsley with 1 of 2 calibration possibilities:

UKAS with an uncertainty of ±0.3ppm (SRA models).

NPL with an uncertainty of ±0.1 ppm (dependant on resistance value).

TYPE SRA Values	1, 10, 25 and 100 Ohms 400 Ohms to special order
TYPE SRB Values	1000, 10,000 Ohms
Calibrated uncertainty	0.3ppm (see UKAS schedule)
Accuracy of adjustment	±20ppm
Stability	2ppm/year (0.5ppm/year to special order)
Temperature coefficient of resistance	2ppm/°C 0.5ppm to special order
Recommended dissipation	10 mW
Maximum dissipation	1 Watt
Approximate load coefficient	6ppm/Watt
A.C./D.C. transfer error at 1kHz	1ppm 10Ω - 10kΩ 5ppm 1Ω

Construction

Element	Strain free, immersed in dry oil (No. 4 Kerosene)
Top panel	Bakelite with PTFE inserts and engraved lettering
Terminal - Current	0BA copper
Terminal - Potential	4BA copper
Earth	6BA brass
Dimensions	Container 114 x 76mm dia. Overall 140 x 83mm dia.
Weight	680g

How to order

Standard Resistor
Please specify type, resistance value and calibration option.