

Laboratory Accuracy Resistance Box for RTD Simulation

Model 006-A

- Accuracy 0.01%
- 6 decades, 0.001Ω Resolution
- Wire wound Resistors ensure high accuracy and permanence of calibration

As industry increasingly moves to high precision instrumentation there is an increasing need to utilise very high performance test and service equipment. Model 006-A is a laboratory accuracy six decade resistance box with a total resistance of 1,112.11Ω.

The performance is made possible using the Waidner-Wolff decade which avoids problems when switching low values by employing series and shunt coils. Simple to operate with a resolution of just 0.001Ω (a nominal 0.0025°C). To use just dial in the required resistance value.

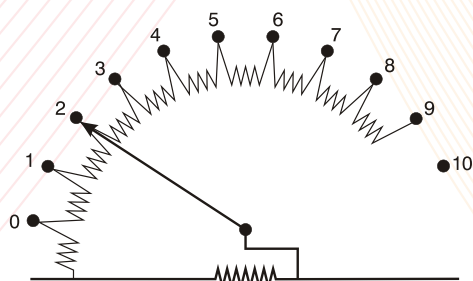
The resistor windings use an exclusive 'air cushion' technique providing virtually stress free elements. For improved performance the elements are non-inductively wound and the direction of each winding is reversed at the half turn points. Accuracy is +/-0.01% with exceptional stability and temperature coefficients of just ±35 ppm/ 10,000 hours. Noise is essentially non-measurable. The unit ships with a certificate of conformity or optionally UKAS Calibration from Isotech's leading temperature laboratory.

This product is made for Isotech by Cropico who for more than 50 years have gained a reputation of being one of the worlds leading manufacturers of electrical instruments and resistance sources.



<http://www.isotech.co.uk/industrial/>

WAIIDNER-WOLFF DECADE



$$\text{SERIES COIL} = X - \sqrt{X \times \frac{\text{TOTAL RESISTANCE}}{\text{CHANGE OF DIAL}}}$$

$$\text{SHUNT COIL} = \sqrt{X \times \frac{\text{TOTAL RESISTANCE}}{\text{CHANGE OF DIAL}}}$$

Decade	Accuracy	I max
10 x 0.001Ω	±2%	1.4A
10 x 0.01Ω	±1%	1.4A
10 x 0.1Ω	±0.5%	1.4A
10 x 1Ω	±0.2%	300mA
10 x 10Ω	±0.01%	100mA
10 x 100Ω	±0.01%	30mA

Residual Resistance 1Ω

(1 Ohm dial starts at 1 not 0)

How to Order 006-A

Please specify if UKAS calibration is required.