

Helmholtz Coil



The APREL Helmholtz Coil is a standalone unit, consisting of two identical precision coils which are wound in series, coaxially aligned and separated by a distance equal to the radius of the coils. All coil forms, base and supporting structures are of non-metallic low permittivity materials.

The calibration point of the unit is located on the Calibration Axis, exactly centered between the two units. The strength of the magnetic field can be varied proportionately to the applied current.

APPLICATIONS

- Calibration of Probe Coils
- Fast, accurate and simple measurement of magnetic strength (in conjunction with an integrating fluxometer)
- Effective quality control for checking of components after magnetization.
- Measurement of 2-pole bar and slab magnets and arc sections.
- CRT Adjustments

TECHNICAL SPECIFICATIONS:

Compliance:	IEEE 1027, ANSI C63.19-2011	
Field Level:	100 x current through the coils	
Coil Radius:	142mm, 118 mm, 93 mm	
Wire:	AWG24 enameled magnet wire	
Winding:	20 Turns per coil	
Linearity:	min 20 dB (A/m)	
Field orientation:	X axis	
Field uniformity region:	±0.1 dB for 20×30×30 mm ±0.5 dB for 45×65×65 mm	



