



Specifications sheet: Steering coil

Introduction

The dual axis deflector consists of four coils, arranged in a square geometry around the beam pipe. In the beam steering setting, equal currents are sent through opposite coils, creating an on-axis magnetic field perpendicular to the electron beam. The two sets of opposite coils allow controlled deflection of the electron beam in both directions perpendicular to the beamline axis.

Applications

- Control position of electron beam
- Control over both position and angle with two successive deflectors.

Features

- Homogeneous magnetic field across electron beam
- Low hysteresis iron core
- Compact

General	
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Cooling	:	Convection
Mount	:	M6 tapped hole in bottom of deflector

Coil	
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Wire type	:	Circular (diameter 0.5 mm)
Number of turns	:	250
Coil housing	:	Weisser EI66/18
Core	:	Armco pure iron

Electric	
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Maximum current	:	1 A
Coil pair	:	Connected in serie
Voltage	:	7 V at rated current
Temperature	:	..°C at reated current

Magnetic	
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On-Axis magnetic field	:	.. mT at 1 A
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Dimensions	
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Size	:	75 × 75 × 30 mm
Weight	:	Unknown