

# Search Coils

## For Magnetic Fields



**EM3744-001 Axial**

**EM3745-001 Lateral**

### Description:

A Search Coil is a long slim insulating blade with two terminals fitted to one end and a small coil of fine wire fitted to the other end. The blade is about 300mm long and 20mm wide.

The coil carries about **5000 turns** of very fine wire and it is connected to the two socket terminals fitted at the end of the blade.

The blades of the IEC Search Coils are made from fibreglass circuit board material so that they are very strong, electrically insulating and non-magnetic.

The Axial model has the coil mounted with its axis parallel to the axis of the long blade. The Lateral model has the coil mounted to one side of the blade so that its axis is at 90° to the axis of the blade.

Used for determining field strengths or flux density inside the air gap of solenoids or magnets. An Oscilloscope or voltmeter or ammeter can be connected to either coil for detection of induced voltages and the coil can be positioned inside a magnetic fields or inside solenoids. As the search coils are positioned in various AC or DC fields, the behaviour of the fields and the creation of 'emf' can be better understood.

Conversely, a DC or AC signal can be applied to the search coil to study the effect of interacting magnetic fields.

EM3611-001	Length: 75mm	Diameter: 6mm	Weight:: 4g
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Designed and manufactured in Australia

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