Set magnetism and electromagnetism

EQ052D

Function

Intended for experimental study, physics laboratory and carrying out physics experiments: Magnetism. The lines of magnetic force around a magnet are one of the ways to magnetize a ferromagnetic object. Identifying the poles of the magnet with a compass. Changing the field configuration around a magnet by inserting ferromagnetic materials into it. The magnetic field passes through the human body. It is impossible to separate a pole from the magnet. Interactions between the magnetic poles of magnets, repulsion and attraction. The magnetic field. The lodestone, magnetism and the compass. The magnets their magnetic poles. The interaction between the magnetic poles of magnets. Identifying the magnetic field vector at a point of each observed configuration. Observing magnetic lines of force around magnets and objects within their magnetic field. The variation of magnetic lines of force due to the inclusion of a ferromagnetic material. The density of magnetic lines of force in regions around magnets close to each other. Magnetism, lodestone and compass. Permanent magnets. Magnetic levitation. Electromagnetism. The Oersted experiment and electromagnetism. The right-hand rule for a straight conductor, which relates the orientation of the magnetic induction lines to the direction of the electric current flowing in the conductor. Observing the electromagnetic effect around straight conductors carried by an electric current. What is meant by a spiral in electromagnetism. The direction of the magnetic induction field vector at a point inside a conducting loop as a function of the direction of the electric current flowing through it. The right-hand rule that relates the direction of electric current to the direction of the magnetic induction vector around the conducting wire of a

loop. The magnetic induction inside a loop and a solenoid, traversed by an electric current.
Note: Batteries not included.

Knowledge areas

Physics - Compact Kits