Email : sales@scilabexport.com
Phone: +91-7082934803

Product Name :

Force on a Conductor Apparatus

Product Code :

SLE/PHY/98



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Description :

Force on a Conductor Apparatus (Product Code: SLE/PHY/98) is a rolling-axle demonstration used to show the force on a current-carrying conductor in a magnetic field, the motor effectbehind Fleming's left-hand rule, in physics lessons. A brass axle resting on a pair of brass railsbetween the poles of a strong U-shaped magnet rolls away from the centre of the field as soon asa power supply is connected. It is manufactured by **Jain Scientific Equipments Pvt Ltd (ScienceLab)**, an OEM manufacturer of school physics lab equipment in India, at its own factoryin Ambala.

Specifications

Parameter	Detail
Magnet	Strong U-shaped magnet
Rails	Pair of brass rails with 4 mm socket terminals
Conductor	Brass axle with plastic discs, free to roll along the rails
Electrical contact	The axle completes the circuit between the two rails
Observed effect	Axle is repelled and rolls away from the centre of the magnetic field
Power	External power supply unit, connected at the rail terminals
Product code	SLE/PHY/98
Manufacturer	Jain Scientific Equipments Pvt Ltd (ScienceLab) — OEM
Country of origin	India (made in Ambala, Haryana)

What Is the Force on a Conductor Apparatus Used For?

Current flows along one rail, through the brass axle and back along the other, so the axle itself becomes the conductor lying across the magnetic field. The resulting force pushes it along the rails, and reversing either the current or the magnet reverses the direction it rolls, letting students check Fleming's left-hand rule for themselves. It is a staple piece of physics practical equipment for showing the principle behind every electric motor.

Connect a low-voltage supply to the 4 mm socket terminals and switch on only briefly, since the path through the axle has very little resistance. Keep the rails and axle clean so the contact stays good, and store the U-shaped magnet carefully to preserve its strength.

What to Specify When Ordering

- Number of sets, for a teacher demonstration or for group practicals.
- Whether a suitable low-voltage, high-current supply should be quoted as well.
- 4 mm leads for connecting the rails to the supply.
- Delivery location for packing and freight.

OEM Manufacturer

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