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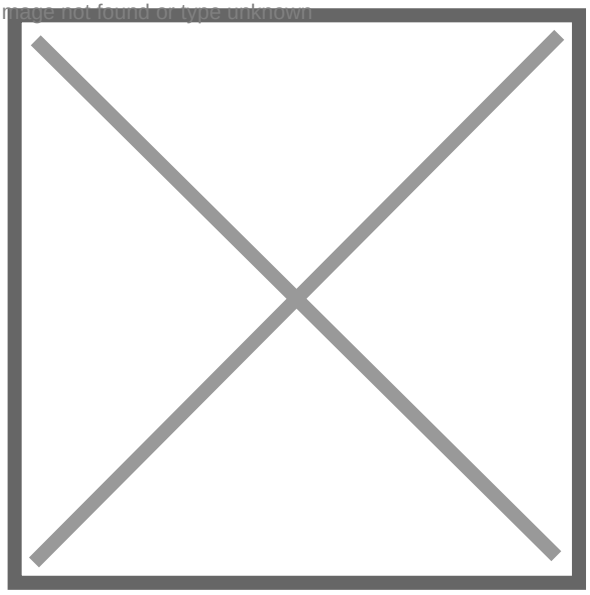
Product Name :

Apparatus for Determining "g" During the Free Fall of Bodies

Product Code :

SCL-391/05

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Description :

Apparatus for Determining "g" During the Free Fall of Bodies (Product Code: SCL-391/05) is a free-fall timing apparatus used to measure the acceleration due to gravity, g, from the time a steel ball takes to fall a known height in school and college physics laboratories. A micro-magnet holds the ball, contact pins start the timing on release and a contact plate stops it on impact. It is supplied by **Jain Scientific Equipments Pvt Ltd (ScienceLab)**, Ambala, a physics instruments and laboratory equipment supplier in India for teaching laboratories.

Specifications

Parameter	Detail
Timing	Digital stopwatch, time in seconds
Height measurement	Tape measure (1.5 m, 2 m as listed); scale on the column
Spherical bodies	Diameter 50–100 mm (as listed); 3 steel balls included
Ball release	Micro-magnet holds the ball in its start position
Start contacts	Three contact pins under the release mechanism give a reproducible start position and open as a switch on release to begin timing
Stop contact	Contact plate at the bottom stops the timer and holds the ball so it does not bounce
Drop height	Adjustable to a fraction of a millimetre, read from the scale on the column
Product code	SCL-391/05
Supplied by	Jain Scientific Equipments Pvt Ltd (ScienceLab), Ambala, India

What Is the g by Free Fall Apparatus Used For?

Students set a drop height on the column, place a steel ball on the magnet and release it; timing runs from the moment the contact pins open until the ball lands on the contact plate. Using $h = \frac{1}{2}gt^2$, each height and time pair gives a value of g, and repeating the run at several heights lets students plot h against t^2 and take g from twice the gradient. Because the ball starts from a reproducible position and does not bounce at the bottom, repeat readings stay consistent.

Set the height carefully and read the column scale at eye level, since small height errors matter over short drops. Keep the contact surfaces clean, stop the balls from rolling off the bench, and use the tape measure to cross-check the column scale. The experiment is a standard mechanics practical for senior-school and first-year college physics.

What to Specify When Ordering

- Tape measure length: 1.5 m or 2 m, as listed.
- The number of sets for your student groups.
- Whether you want spare steel balls or an additional digital stopwatch.

Sup

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