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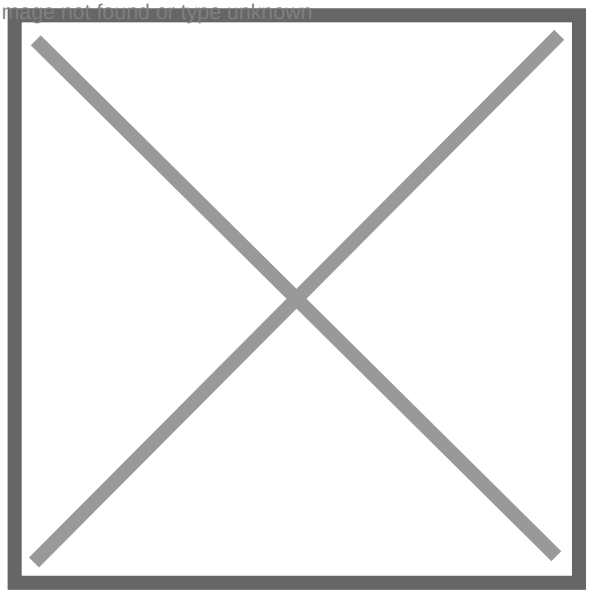
Product Name :

Apparatus for Demonstrating the Boil-Marriott Law

Product Code :

SCL-379/011

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Description :

Apparatus for Demonstrating the Boil-Marriott Law (Product Code: SCL-379/011) is a gas-law demonstration unit used to show that the volume of a fixed mass of gas at constant temperatureis inversely proportional to its pressure, in school and college physics classes. A horizontal transparent tube scaled 0–300 cm³ is read against a pressure gauge beside the gas tap, giving pairs of values for PV = constant. It is manufactured by **Jain Scientific Equipments Pvt Ltd (ScienceLab)**, an OEM scientific instruments manufacturer in India, at its own factory in Ambala.

Specifications

Parameter	Detail
Law demonstrated	Boyle–Mariotte law: for a given mass of gas at constant temperature, volume is inversely proportional to pressure (PV = constant)
Tube	Transparent, mounted horizontally
Volume scale	0–300 cm³
Tap	Gas tap that closes the tube
Pressure reading	Pressure gauge located next to the gas tap
Effective tube length	Selected by changing the position of the rubber stopper
Quantities measured	Volume and pressure of the enclosed gas as the pressure is changed
Product code	SCL-379/011
Manufacturer	Jain Scientific Equipments Pvt Ltd (ScienceLab) — OEM
Country of origin	India (made in Ambala, Haryana)

What Is the Boyle's Law Apparatus Used For?

The apparatus lets a class test Boyle's law — called the Boyle–Mariotte law in many countries — with real numbers. Air is trapped in the transparent tube by closing the gas tap; the pressure is then changed step by step, and at each step the volume is read from the 0–300 cm³ scale and the pressure from the gauge. Multiplying each pair gives nearly the same product, and a graph of pressure against 1/volume comes out as a straight line.

Moving the rubber stopper sets the effective length of the tube, so the starting volume of trapped air can be chosen before a run. Make each change slowly and pause before reading, because compressing a gas warms it slightly and the law holds only at constant temperature; also make sure the tap is fully closed so no air escapes mid-series. As a Boyle law apparatus for schools and colleges in India and abroad, it turns a textbook formula into a measurement students can repeat themselves.

OEM Manufacturer

ScienceLab is the brand under which Jain Scientific Equipments Private Limited makes this gas-law a y's own l colleg