



### Features

- Demonstration of Boyle's law
- Processing of measured data on a PC

Tesca Boyle's Law Demonstration Apparatus consists of 2 independent transparent cylinders each contain a certain quantity of air. The air is used as the test gas. In the cylinder on the right the air is electrically heated at constant volume and the temperature and pressure changes are measured. The air in the left cylinder is compressed quasi-isothermally using hydraulic oil and a compressor. In this case the pressure and volume changes are measured. All measurements are made electrically and indicated on digital displays. They can be transferred to a PC for further processing.

### Technical Specifications

1. Unit for demonstrating Boyle's law, l<sub>w</sub>xh 860x560x840mm, 45kg
2. Processing of the measured data on a PC
3. 2 measuring cylinders containing air as test gas
4. Electronic sensors to measure temperature, pressure, level of liquid, 1 temperature controller
5. Compressor, can be used as vacuum pump
6. Mains: 230V, 50Hz, 1 ph. or 120V, 60Hz, 1 ph.
7. Compressor/vacuum pump: 60W, 2.5bar, vacuum 213mbar
8. Heater: 300W
9. Pressure measuring range: 0...4bar absolute
10. LabView software under Windows NT/2000/XP

### Experiment Capabilities:

- 1 Demonstration of Boyle's law
- 2 Ideal gas equation of state

Note: Specifications are subject to change.

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