

### SP 111 ARCHIMEDES PRINCIPLE APPARATUS

#### GENERAL DESCRIPTION

This apparatus demonstrates that the buoyancy acting on a body submerged in a liquid corresponds to the weight of the displaced liquid.

The equipment consists of a solid cylinder fits exactly into a hollow acrylic cylinder. Both cylinders have hooks for attachment to a spring balance hung on a stand. A beaker holding a liquid provides the buoyancy.

#### TECHNICAL DATA

- Cylinder diameter : 40 mm.
- Spring balance : 1 kg.
- Beaker : 1000 ml.



### SP 112 PASCAL'S APPARATUS



#### GENERAL DESCRIPTION

The apparatus is used to demonstrate that the pressure at the bottom of a liquid column in a vessel depends only on the height of the column but not on the shape of the vessels.

The equipment consists of a tapered glass socket fitted into a base block held to a stand by a rod. The other side of the base block also has a rod holding a pivot supporting a lever. One end of the lever is a pressure disc against the bottom of the base block while the other end of the lever has a sliding weight hanger with weights. Glass vessels of different shapes can alternatively fit on the tapered glass socket. Height of water column is measured by a scale.

#### TECHNICAL DATA

- Tapered glass socket with base block, rod holder and lever with pressure disc.
- Glass vessels : 1 ea four different shapes.
- Weight hanger and weights.
- Stand and a pan.

### SP 113 BOYLE'S LAW APPARATUS

#### GENERAL DESCRIPTION

This apparatus demonstrates the relation between pressure and volume of a gas at constant temperature using pressure from an outside supply.

The equipment consists of an acrylic tube sealed on top and bottom and attached to a stand. Pressure gauge, vent valve is fitted to the top of the tube while water supply and drain valves are fitted to the bottom. Water level in the tube determines volume of the air column. Corresponding pressure is indicated on the pressure gauge. The apparatus requires an outside water supply.

#### TECHNICAL DATA

- Acrylic tube : 35 mm diameter.
- Pressure gauge : 0-5 kg/cm<sup>2</sup>, class 1.

