

Product Name :
Astra Scientific Pascals Apparatus

Product Code :
Fluid Mechanics Lab0027



Description :

Astra Scientific Pascals Apparatus

Technical Specification :

DESCRIPTION:

The module allows demonstrating Pascals principle, that is to say, that pressure in an incompressible fluid has no relation with the size of the column section; it only depends on its head (level of the liquid) and on the nature of the liquid. For that purpose, the unit consists of three vessels with the same diameter on their base but different shape, so that they can be compared. It also allows to determine the hydrostatic pressure quantitatively and to study the linear relation between pressure and filling height.

This module is made up of a body with a diaphragm or membrane to which any of the three vessels can be attached. The membrane transfers the force to a lever arm that is balanced with masses and a spirit level.

A movable pointer adjustable in height located in a vertical rod allows to fix the height of the water in the vessels to the same level, so that the force or pressure is common for the three vessels regardless their shape.

FEATURES:

- Demonstration of Pascal's principal by comparing three vessels of different shape.
- Determining the hydrostatic pressure.
- Determining the linear relation between pressure and filling Head of the vessel.
- With glass vessels of 4 different shapes mounted in leak proof metallic collars mounted on a metal base.

SPECIFICATION:

- Anodized aluminum profile frame and painted steel panel that guarantees good stability and resistance to the environment.
- Three vessels of 230 mm high
- Straight shaped vessel with internal diameter of 26 mm.
- Conical vessel with internal diameter from 26 mm. to 80 mm.
- Inverted conical vessel with internal diameter from 26 mm. to 10 mm.
- Support for the vessel and membrane.? Lever arm and spirit level to measure the weight at the base of the vessel.
- Fastening nut for leveling.?Masses set.?Vertical rod with portable indicator to fix the fluid level in the vessels.



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