



Email : sales@laboratoryinstrumentindia.com

Product Name :
Bernoullis Experiment

Product Code :
LBNY-0005-15800018



Description :

An eleven tube static pressure manometer bank is attached to the convergent divergent duct. A dye injection system is provided which allows for a single filament of dye to be introduced into the entrance to the convergent section to enable laminar and turbulent flow regimes to be demonstrated. Bernoulli's Apparatus consists essentially of a two dimensional rectangular section convergent divergent duct designed to fit between Constant Head Inlet Tank and Variable Head Outlet Tank. The convergent divergent duct is symmetrical about the centre line with a flat horizontal upper surface into which the eleven static pressure tappings are drilled. The differential head across the test section can be varied from zero up to a maximum of 450 mm. The test section is manufactured from acrylic sheet. The height of the channel at entry and exit is 19.525 mm and the height at the throat is 6.35 mm. The static tappings are at a pitch of 25 mm distributed about the centre and therefore about the throat. The lower surface is at an angle of $4^{\circ} 29'$. The width of the channel is 6.35 mm.

Technical Specification :

Experimental Capability:

Use of dye injector nozzle to indicate the path of a streamline and show the onset of turbulent flow.
Demonstration of Bernoulli's Theorem that flow energy is made up of three separate components, the sum of which is constant i.e. pressure energy + Kinetic energy + potential energy = constant.

Accessories Required of Bernoullis Experiment:

Variable Head Outlet Tank
Constant Head Inlet Tank
Pump Speed Display (optional)
Dimensions And Weights:

Net: 525 x 70 x 500 mm, 5.0 Kg
Gross: 0.026m, 7.0 Kg.



Laboratory Instrument India