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Product Name : Cavitation Demonstration

Product Code : LBNY-0005-1580002



Description :

The pressure through the nozzle can be controlled by a ball valve located on the discharge side of the nozzle. The Inlet, Throat and Outlet pressures are displayed on a pressure gauge via a three-way selector switch. Cavitation demonstration apparatus is a bench top unit designed for use on Hydraulics Bench. It consists of a tube through which water can be pumped by the hydraulic bench. The apparatus comprises of a clear acrylic nozzle mounted on a support plate. The throat pressure can be varied in either of two ways. The first way is to vary the discharge. Reduction of discharge causes a corresponding reduction of the pressure drop as the flow accelerates into the throat because the velocities are reduced, so that the pressure in the throat increases and cavitation ceases. The tube has an initial diameter of 25mm. It then has a linear contraction to a throat diameter of 5mm. This is followed by a 10mm length of parallel-sided tube, after which it flows through a linear diffuser until the diameter is back to 25mm. The contraction ratio (measured in terms of cross-section area) is therefore 25:1. The second way is to throttle the flow out of the apparatus using the ball valve. From a situation where there is no cavitation, increasing the discharge increases the pressure drop as the flow accelerates into the throat because the velocities are increases.

Technical Specification :

Experimental Capability:

Observation of the relationship between cavitation and pressure Observation of Cavitation in liquid Demonstration of cavitation at a variety of flows Required Accessories of Cavitation Demonstration: Hydraulics Bench Dimensions and Weights: Dimensions: 350 x 430 x 225 mm Nett weight: 5 kg

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