



CAVITATION PHENOMENON



DL DKL063

The system for the demonstration of the cavitation phenomenon is a simple and practical equipment including a Venturi tube where the cavitation phenomenon occurs when we have the depression created by the flow acceleration (Venturi effect).

The system grants great observation of the studied phenomenon because Venturi tube is made in transparent material.

The equipment also includes a pressure gauge and a vacuum gauge to measure the generated overpressure and low pressure; a membrane valve is included for precise flow control adjustments.

For the full operating of this system, it is necessary to connect the item to the hydraulic bench or to a suitable hydraulic energy source.

TRAINING OBJECTIVES

- Demonstration of Bernoulli's Theorem along a tube of Venturi
- Calculation of the pressure loss of a Venturi tube.
- Calibration and use of the Venturi tube as a flow meter
- Study of cavitation.

TECHNICAL DESCRIPTION

Inside tubes: main tube \varnothing inner = 21.2 mm \varnothing outside = 25mm

Manometers:

- Bourdon manometer, measure range 10.33 mWC /25 MWC.

Venturi tube:

- Throat dimensions: 6x6mm
- Material: methacrylate

Necessary accessory:

DL DKL014 – Hydraulic bench

The basic hydraulic bench is a simple, mobile, self-contained module that allows a supply of "hydraulic energy", i.e. an accurately controlled and measurable flow of water.

It includes two collecting tanks, a centrifugal pump, a flowmeter, a mobile frame work on wheels, a set of valves and piping.

Or DL DKL011 - Hydraulic group

