



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). In order to grant easy observation of the phenomenon, Venturi tube is made of methacrylate.

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 a suitable hydraulic energy source.

HIGHLIGHTS

- The equipment can be connected to both the hydraulic bank or a hydraulic group with flow meter.
- The system grants great observation of the studied phenomenon because Venturi tube is made in transparent material.

PERFORMABLE EXPERIMENTS

- Observation of the cavitation phenomenon in the Venturi tube.
- Calculation and testing of the pressure and temperature conditions in which the phenomenon occurs.
- Calculation of the minimum required water flow necessary to observe the phenomenon.

TECHNICAL DATA

Manometers:

- Bourdon manometer, measure range 0 / 15m water column.
- Bourdon vacuum gauge, measure range: -76 cm Hg / 25 m water column.

Venturi tube:

- Throat dimensions: 6x6mm
- Material: methacrylate

Requirements:

Hydraulic bench DL DKL014 or Hydraulic group DL DKL011, not included in this item.