



FLOW THROUGH ORIFICES



DL DKL121

This equipment is designed to study the phenomenon that occurs when a fluid pass through an orifice. The equipment has three nozzles whose geometry differs from each other in order to perform tests in different conditions. With these characteristics, the equipment allows the easy understanding of the topic.

The system is provided with Pitot tube through which it is possible to measure the fluid speed at the output.

Moreover, the equipment includes a suitable instrument for the jet diameter measurement that is adjustable and that can grant more accurate measurements. The system includes also a water column pressure gauge allowing the measurements of the water level in the tank and of the height of the water jet.

HIGHLIGHTS

The equipment can be connected to the hydraulic bench or to the hydraulic group with flowmeter.

PERFORMABLE EXPERIMENTS

- Determining the speed coefficients.
- Calculating the discharge coefficient
 - Outlet holes
 - Outlet nozzles
- Determining of the discharge coefficient through flow measurement
 - Outlet holes
 - Outlet nozzles
- Comparing the necessary time to empty a tank with different initial heights.

TECHNICAL DATA

Tank:

- Cylindrical tank \varnothing 200mm x 400mm

Accessories:

- 30mm accessory port
- 13mm outlet
- 10mm outlet
- 6mm outlet

Requirements:

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