



ORIFICE AND FREE JET FLOW



DL DKL122

This equipment, that can be used also with the hydraulic bench DL DKL014, is designed to study the flow through orifices arranged in order to let the flow get out horizontally. The water tank has adjustable height, so that it is possible to perform several experiments according to different flow conditions; the tank has a graduated scale indicating the liquid level in every moment.

Along the flow outlet, there are 8 vertical needles with graduated scale that can be easily adjusted to the flow trajectory. Different nozzles are in line with the inner surface of the tank in order to have the minimum possible disruption; the system has got adjustable legs and a bubble level for correct equipment leveling. The equipment is made of aluminum and stainless steel in order to grant maximum durability.

PERFORMABLE EXPERIMENTS

- Rate coefficient determination.
- Jet trajectory stud.
- Rate coefficient determination for every size of a nozzle.
- Different nozzle comparison.
- Water jet comparison.
- Identification of the factor responsible for water column height changing.

TECHNICAL DATA

Tank:

- Cylindrical tank: \varnothing 160mm x 500mm
- Maximum water height: 410mm

Measurement system:

- 8 measurement rods with back ruler.

Nozzles

- \varnothing 3 nozzle
- \varnothing 6 nozzle

Requirements:

Hydraulic bench DL DKL014, not included in this item.