

FLOW VISUALIZATION MODEL



Non contractual photo

**SERVICE : WATER SUPPLY AND
EVACUATION OVERHEAD PROJECTOR**
DIMENSIONS : 450 X 180 X 32 MM /
CHANNEL DIMENSIONS: 280 X 60 X 3 MM
WEIGHT : 3KG

REFERENCE : EH200

A model, made of Plexiglas, allows a qualitative study of several types of flow. It can be placed in operation on an overhead projector in a classroom, or used in the classroom by the students themselves. The model EH200 is connected to a water circuit by quick couplings and hoses.

In several points, potassium permanganate can be injected. The nets that form highlight the current lines, as well as the different regimes (turbulent and laminar), and areas of dead fluid.

The water circuit can be directly connected to the network, or to a hydraulic bench.

The flow rate can be varied from 0 to 1 m³ / h to show the different effects along the model.

Technical specifications :

Straight flow : It shows the transition from laminar to turbulent flow, depending on flows, as well as velocity profiles.

Abrupt section change : Made using the accessories provided with the model, this configuration can be used in both directions, visualizing either a sudden narrowing or a sudden enlargement, and shows the contraction of the flow and the dead zones.

Venturi : Made using the accessories supplied with the model, this configuration shows, in laminar flow, the sharp and distinct current lines that round off and contract.

Diaphragms : Using the accessories provided with the model, we can visualize the current lines that round off and contract at the passage of the constriction, then glue to the wall at a distance that is a function of the flow (comparison with the Venturi)

Profile in a flow : Different profiles (airplane wing, cylinder, etc.) can be placed in the flow. During operation, the angle of incidence can vary and shows the detachments of the current lines.