



With the equipment HD 11.1, it is a question of knowing the ease that a land has, to the passage of the water inside, by obtaining its coefficient of permeability  $k$ , applying the Law of Darcy.

To do this, a flow is pumped into a small tank (constant load) from which the water exits to a cylindrical vessel open at both ends, placing the ground inside the cylinder.

Once the equality between the incoming flow and the overflow has been established, the pressure of the water in the upper part of the ground as well as the lower one is measured, verifying the loss of load that is produced.

Once known the cross section of the cylinder, the flow rate and the loss of charge the Darcy's Law is applied, obtaining the permeability coefficient of the field tested.

## HD 11.1 - INFILTRATION DEMONSTRATOR

### EXERCISES AND POSSIBLE PRACTICES

- Knowledge of the permeability of a area.
- Before weighing the ground know the index of voids of the ground inside the container and therefore its porosity.

### TECHNICAL DATA

- Flow pump to be introduced in the ground:
  - Flow 3800 l/h
  - Maximum height: 3,10 m
- Interchangeable reel 500 mm
- Water column manometer 1000 mm
- Sample collection vessel 500 ml
- Flow opening/closing valve
- Bottom graduated vessel to know the flow rate through the volumetric method

### REQUIREMENTS

- Input: 230V/50Hz.