

## **Drainage Permeameter**

**Brand: EDIBON** 

Code: PPD



The Drainage Permeameter, "PPD", allows to measure the permeability of different filter materials before the passage of fluids through them, as well as to determine the most optimal combination of filter/soil.

The main element is a transparent column that can be filled with any type of soil and has a removable base where the filter material to be studied is placed. The equipment includes as filter material three metal filters of different mesh sizes that are easily and quickly interchangeable.

Water is added to the column at constant pressure and the permeated water and soil are collected at the base, in a tank placed below the column. The discharge of the drain can be observed to evaluate the efficiency of the filter material.

To add water at constant pressure to the permeameter, the water is raised by a pump from a feed tank to a water inlet tank that is connected to the top of the permeameter. This input tank has a height-adjustable spillway that discharges directly into the feed tank. In this way, all the water that exceeds the desired level in the permeameter will return to the feed tank, thus maintaining a constant water level in the permeameter.

Website: https://testglassware.com/



## **Features:**

Bench equipment

Anodized aluminum structure and painted steel panels.

Main metallic elements in stainless steel.

Diagram on the front panel with distribution similar to that of the elements in the real equipment.

Transparent column:

Made of methacrylate.

Diameter: 100mm.

It can be filled with any type of soil.

Removable test section at the base of the column to house the filter medium to be studied.

Three metallic filters of different mesh diameters.

Constant pressure water supply device. It consists of:

Water inlet tank, which allows the pressure in the permeameter to be varied by varying the water level with a height-adjustable spillway.

circulatory pump.

Feed tank, capacity: 20 l approx.

Tank for collecting permeated water and soil, capacity: 20 l approx.

Three drainage or emptying valves in the tanks

Control Panel:

Pump switch.

Cables and accessories, for normal operation.

Manuals: This equipment is supplied with the following manuals: Required Services, Assembly and Installation, Start-up, Safety, Maintenance and Practices manual.

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## **Specifications**

REOUIRED SERVICES



Electrical supply: single-phase, 200 VAC – 240 VAC/50 Hz

or 110VAC - 127VAC/60Hz.

Water supply and drainage

**DIMENSIONS AND WEIGHTS** 

PPS:

Dimensions:  $500 \times 700 \times 1300 \text{ mm approx}$ 

Weight: approx 30kg

## **EXERCISES AND PRACTICAL POSSIBILITIES**

- 1.- Research of drainage filtering materials.
- 2.- Select optimal and effective filter/soil combinations.
- 3.- Determination of the relative efficiency of drainage filtering materials.

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- 4.- Determination of permeability coefficients.
- 5.- Influence of the variation of the hydraulic load.

