

## HİRA TESTING EQUIPMENT

### FALLING HEAD PERMEAMETER

STANDARDS: CEN ISO/TS 17892-11

Used to determine the permeability of fine-grained soils such as clay-like or silty soils.

The specimen is confined within the permeameter which is connected to the manometer tube filled with water. The sample must be completely saturated with water before the test, and the operator will check the rate of fall of the water in the tube passing through the test specimen.

The Falling Head Permeability Cell is manufactured from plated steel with an inside diameter of 100 mm.

The Stand, comprising 4 pieces Ø4, Ø5, Ø6, Ø8 mm x 1 m long Manometer Tubes, Rubber Tube and Connectors. The Soaking Reservoir Tank is used for containing the permeability cell during the test.

Falling Head Permeameter Set is supplied complete with Ø100 mm Falling Head Permeability Cell, Stand with 4 pieces Manometer Tubes, Water Tank, Soaking Reservoir Tank, Steel Ruler, Rubber Tube and Connectors.



HR-S5820/1

HR-S5820 & VACUUM PANEL

#### Technical Specifications:

Product Code	Product Name	Dimensions (cm)	Weight (kg)
HR-S5820	Falling Head Permeameter Set, Ø 100 mm	32x70x170	15

#### Spare Parts & Accessories:

Product Code	Product Name	Dimensions (cm)	Weight (kg)
HR-S5820/1	Falling Head Permeability Cell, Ø 100 mm	Ø10x13	3
HR-S5820/2	Stand with 4 pieces Manometer Tubes	23x10x170	7
HR-S5820/3	Water Tank	35x35x35	2
HR-S5820/4	Soaking Reservoir Tank	32x32x25	4
HR-S5820/5	Rubber Tube	---	---
HR-S5820/6	Connectors	---	---
HR-G0478	Steel Ruler	100	---

### BALLOON DENSITY APPARATUS

STANDARDS: ASTM D2167, AASHTO T205

Balloon Density Apparatus is used to determine the in-situ density of compacted or firmly bonded soils.

The HR-S7700 consists of a graduated cylinder 1596 ml capacity, housed inside an aluminium guard, a reversible rubber aspirator pump and a density plate 9" square. The principle of operation is similar to the sand replacement but the hole is filled by a rubber balloon where water is pumped. The amount of water can be easily determined by the graduation of the cylinder. Rubber balloons should be ordered separately.

The HR-S7705 is 3000 ml capacity. A metal cylinder is filled with water which is then pumped into a rubber membrane mounted on the base of the cylinder. The water pressure is controlled by a pressure gauge and the volume of the balloon is measured on the graduated piston stem. Rubber balloons should be ordered separately.

#### Technical Specifications:

Product Code	Product Name	Capacity (ml)	Dimensions (cm)	Weight (kg)
HR-S7700	Balloon Density Apparatus	1600	25x25x70	7
HR-S7705	Balloon Density Apparatus	3000	36x36x100	10

#### Spare Parts & Accessories:

Product Code	Product Name
HR-S7700/1	Rubber balloons, Pack of 12



HR-S7705

