

PF-CURVE DETERMINATION (CERAMIC PLATES)

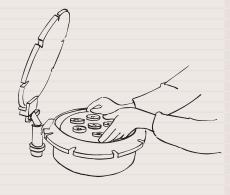
You will return to the contents of P1 SOIL by clicking the pictogram

P1.81

The ceramic plate and the soil samples are completely saturated with water.



The ceramic plate with the samples is placed in the extractor.



Water relations are among the most important physical phenomena that affect the use of soils for agricultural (effective irrigation and fertilizer practices for the commercial growing of food stuffs) or engineering purposes. Determination of soil moisture charateristics can be done by many methods. One of them is the method of determination of pF-curves (pF 2.0 - 4.2) with ceramic plates.

08.25.SA Set for pF-determination with ceramic plates, minimal standard set

08.25.SB Set for pF-determination with ceramic plates, comprehensive standard set

The equipment is suitable for determination of pF-curves in the range pF 2.0 - 4.2 (0.1 - 15 bar of suction). Futhermore the sets are suitable for the calibration of soil moisture blocks or soil moisture measurement equipment.

The standard set contains amongst others: two extractors with ceramic plates (0.1 MPa, 0.3 MPa and 1.5 MPa, resp. 1, 3 and 15 bar) and accessories, soil sample rings, a pressure control panel and a

compressor. Several ceramic plates with soil samples can be placed in the extractor at the same time.

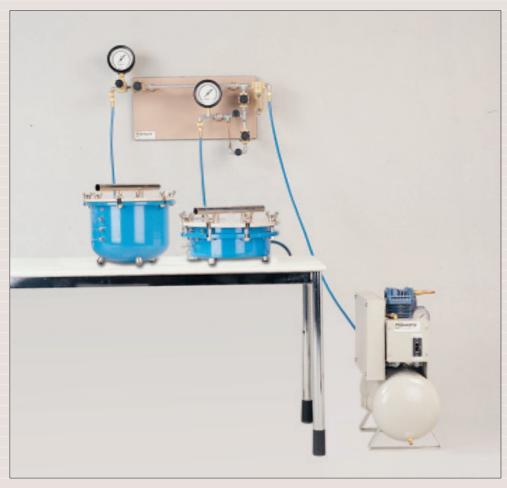
The pressure control panel is standard equiped with two manometers 0 - 2 MPa and 0- 0.4 MPa (resp. 0 - 20 bar and 0 - 4 bar).

The included compressor (220V - 50 Hz) is specifically designed for this purpose: maximum pressure 2.0 MPa (20 bar), built-in safety precautions, completely guarded and quiet.

Principle

Soil moisture is removed from the soil samples by raising air pressure in an extractor. A porous ceramic plate serves as a hydraulic link for water to move from the soil to the exterior of the extractor. The high pressure air will not flow through the pores in the plate since the pores are filled with water. The smaller the pore size, the higher pressure can be before air will pass through.

During a run, at any set pressure in the extractor, soil moisture will flow around each of the soil



Set for pF-determination (SB)