Membrane Apparatus for PF Determination (PF 3.0-4.2)



Membrane apparatus for pF determination of pF 3.0 - 4.2 (1.0 - 15.0 bar). The standard set can hold up to 15 samples.

Set contains

- Pressure membrane extractor suitable for a maximum of 15 samples
- 20 bar compressor including reducing valve
- Pressure gauge
- Air filter
- Hoses
- Cellophane membrane
- Filter cloth
- Synthetic soil sample retaining rings
- Various accessories

Key Features

- Determines the driest range of the pF curve
- Uses overpressure on disturbed samples
- Effective set-up

Applications

- Soil physical laboratory research
- pF determination in the lab
- Irrigation research

Additional Requirements

Successful pF determination with the membrane apparatus also requires a balance, drying oven and aluminium soil sample boxes with lids.

Specification	
Maximum number of samples	15
Sample specification	disturbed
Measuring range	3.0 - 4.2 pF
Measured parameters	pF
Reading accuracy	0.25 bar
Power supply	line voltage
Voltage	230 VAC 50Hz
Weight	95 kg

Method

The determination of the range pF 3.0 - 4.2 (1.0 - 15.5 bar) with the membrane apparatus does not use samples cut in sample rings, but the semi-disturbed sample is saturated before measurement in the laboratory and placed in a synthetic ring.

To reach the high values of the pF-curve, it is necessary to apply pressure, up to 15.5 bar, on the samples, as it is not possible to create that amount of suction force. On reaching the equilibrium at the desired pressure value, the samples are removed, weighed, dried and weighed again.

For measuring larger series of samples, an additional membrane extractor can be connected parallel to the first extractor.



