Double ring infiltrometer

Product code: 09.04

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The double ring infiltrometer is a simple instrument that is used to determine the rate of infiltration of water into the soil.

The rate of infiltration is determined as the amount of water per surface area and time unit, that penetrates the soil. This rate can be calculated based on the measuring results and the Law of Darcy.

The standard set of the double ring infiltrometer consists of a number of sets of stainless-steel rings with different diameters (for reasons of transportation). Several measurements can be executed simultaneously, yielding a very reliable and accurate mean result. As vertically infiltrated water runs away to the sides, the outer ring of the infiltrometer serves as a separation. The measurements exclusively take place in the inner ring through which the water runs virtually vertical.

The measurement of infiltration of water into the soil is an important indication of the efficiency of irrigation and drainage, optimizing the availability of water for plants, improving the yield of crops and minimizing erosion.

Applications

- Infiltration research.
- Soil permeability research.
- Irrigation research.

Benefits

- Ideal for infiltration measurement of top soils.
- Perfect for flood / furrow irrigation advice.
- Triple rings to get a representative average.
- Stainless steel rings are extremely long-lasting.

Remarks

- Additional profile research always needed.
- Cracks/root channels disturb measurements.

Good measuring results

To achieve good measuring results it is important to take into account several factors that may influence the measurement: the surface vegetation, the extent to which the soil has been compacted, the soil moisture content and the soil layers (strata). The best measuring results are obtained at ‘field capacity’ of the soil.

The ring infiltrometer may be used for determining the rate of infiltration and capacity for irrigation and drainage projects, studying drainage, determining the intensity of artificial precipitation and the effect of treatment of the soil.

Technical Specifications

Maximum measuring depth	0 cm
Measured parameters	infiltration ratio
Reading accuracy	1 mm
Registration type	manual
Package size	65 x 65 x 50 cm
Weight	56 kg