

# TENSIOMETERS

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P1.63

The right quantity of water in the soil is of primary importance for an optimum plant growth and yield of crop. Measuring the soil moisture content (in percentages) as well as the determination of the soil suction (in hPa, mbar or cbar) in the soil therefore is one of the most important aspects of complete agricultural physical soil research.

The simplest and most commonly used method to determine the soil suction (and with that the moisture content of unsaturated soil) directly in the field uses the tensiometer.

The tensiometer is available in many types and sizes. They can be applied in normal soils but also in potting compost and other organic and anorganic substrates.

Before a tensiometer is placed in the soil or a substrate a hole needs to be drilled.

## 14.04 Tensiometer set

This multi-functional set can be applied to execute different research with various types of tensiometers up to a depth of 90 cm. The standard tensiometer for example is used in irrigation areas for permanent placement.

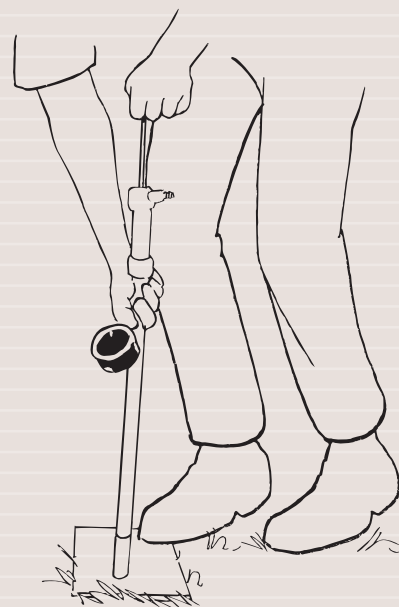
The Jet-fill tensiometer has an additional water reservoir in order to be able to continuously fill the tensiometer allowing it to be ready for use faster and more mobile.

For fast measurement of soil suction (usually in small areas) the quick draw tensiometer provides measuring results within minutes.

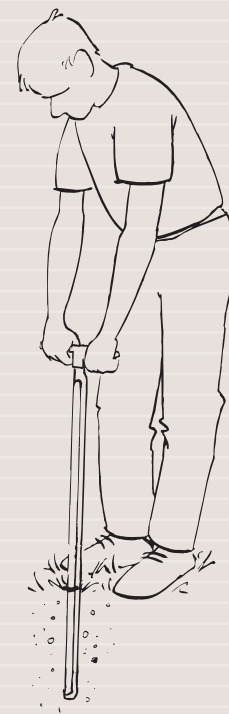
In case of all tensiometers the measuring values are read from the manometer.

In addition to tensiometers in various lengths the set also includes a service set as well as a gouge auger (to pre-drill a hole) with extension rod and a cleaning spatula.

The air is sucked from the tensiometer after the meter is filled with water.



The hole for the tensiometer is pre-drilled using a gouge auger.



Tensiometer set, complete set

## BENEFITS

### 14.04 Tensiometer set

- Direct read out of plant water stress
- Simple purely physical operating principle
- Set perfect for schools and horticulturists
- Exchangeable porous ceramic cups
- Simple installation