

Rhizon Soil Moisture Samplers

With the Rhizon soil moisture sampler (Rhizon SMS) we supply a range of miniature soil moisture samplers. The Rhizon samplers are used for repeated and reliable sampling of all dissolved components in the soil solution.

The porous synthetic material (PES) wets spontaneously and has standard 0.15 micron pores. The samplers are supplied with coextruded tubing (PE inside/PVC outside) 1 mm internal diameter, luer connector and protective cap. The sampler is reinforced by a wire. Dissolved organic and inorganic matter will not absorb on the soil moisture sampler. The sampler is placed preferably horizontally in moist soil. Water acts as a lubricant during inserting. Due to the minimal disturbance the soil will quickly settle, resulting in a good sampler-soil contact.

Available Rhizon SMS options

The Rhizon soil moisture samplers are supplied in various designs. Type MOM and type SMS (with stainless steel strengthening wire) are designed for sampling in undisturbed soil cylinders (core samples) or in pots with growing plants.

- Inert construction: suitable for analyses on many parameters
- Resists freezing
- Inexpensive
- Small to very small; fit for lab and pot use
- Quick results



Standard Rhizon SMS

The standard Rhizon SMS are inserted through the wall of undisturbed soil columns and pots with plants. A sample is obtained by placing the sampler under vacuum. The vacuum is obtained using a vacuum tube or a syringe.

The standard Rhizon SMS is available with a length of 5 and 10 cm.



Rhizon SMS MOM

For sampling metals a special Rhizon soil moisture sampler type MOM is available, with a length of 5 and 10 cm and a diameter of 2.5 mm, with glassfiber reinforced strengthening wire and 10 cm coextruded tubing.



Rhizon SMS CSS

For direct sampling of macro and micro elements with minimal disturbance, a special Rhizon soil moisture sampler type CSS is available, with a length of 5 and 10 cm and a diameter of 2.5 mm, with glassfiber reinforced strengthening wire and 10 cm coextruded tubing.



Rhizon SMS FLEX

For inserting in pots during filling, the Rhizon soil moisture sampler type FLEX with a length of 10 cm, with nylon strengthening wire is available.



MacroRhizon

The MacroRhizons are thicker at 4.5 mm diameter and more robust, with an epoxy core. They can be used very effectively in the field, even down to a depth of several feet. Installation at an angle of around 45° in a drilled and gouged out small-diameter hole guarantees good contact between the soil and the porous element. Moreover, this prevents the rainwater running into the hole. Extension tubes and hoses are available for installation at greater depths.



MacroRhizons can be used for all analyses and it is possible to take repeated samples.

