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Dimensions: 8.25 in wide x 5.25 in tall (folded), 8.25 in wide x 10.5 in tall (not folded)

Colors: CMYK/Full Color 4/4

Printer Type: Digital only

Material: Digital only

Image below is for reference only. Not to scale.

HYPROP TENSIOMETER SHAFTS APPLICATION GUIDE

INTRODUCTION

Using the air-entry value of the ceramic tensiometer cup as an additional measurement point can extend the range of the tensiometric measurements (Schindler et al., 2010b). The LABROS SoilView-Analysis includes this option for Power Users. The air-entry point occurs when the pressure of the tensions drops quickly to zero. This option is only viable if the sharp drop towards zero tension is recorded (i.e. if the measurement campaign was performed long enough).

Clicking on the Use Air Entry Point button will add an extra measurement point for each tensiometer that has reached the point where air passes the tensiometer cup. At that point in time a tension that is specified in the Information register as HYPROP Parameters is used to measure tension of the respective tensiometer.

When the Use Air Entry Point option is active, dashed lines are shown that interpolate the tensiometric data between the last reliably measured points (stop point) and the air entry points of both tensiometers.

DIFFERENTIATION

There are two kinds of tensiometer shafts 8.8-bars ceramic (Figure 1A) and 5-bars ceramic (Figure 1B). They differ in the air entry point of the ceramics. Shafts with a black color have an air entry point of 8.8 bars (Figure 1A) Shafts with a blue color have an air entry point of 5 bars (Figure 1B).

A) 8.8 bars ceramic   B) 5 bars ceramic

Figure 1   Tensiometer shafts (A) 8.8-bars ceramic (B) 5.5- bars ceramic

SETTINGS IN LABROS SOILVIEW- ANALYSIS SOFTWARE

For evaluation, the correct Air entry point of the used tensiometer shaft must be selected in the Information tab. There are two ways to adapt the Air entry point value. The first option is to change the user mode to "Power User" (see Figure 2) and adapt the value manually to 5 bars (see Figure 3).