# **HUMIDITY**

## **Tensiometer type ZB9602TMxxx**

- Measurement of soil moisture through the identification of suction pressure. The suction pressure is the force with which water is being held in the soil or is available for absorption. This is the force that must be produced by the plant roots in order for water to be absorbed.
- The porous, clay tip of the tensiometer transfers water from within to the drier outer surroundings by means of capillarity, thereby, creating a sub-pressure within the sealed tensiometer tube. This sub-pressure is a measure of the moisture level and can be determined as a value or used directly to activate an electrical switch. The customary unit of measurement is hPa.
- However, a tensiometer also functions in dry air as long as evaporation can take place over the porous, clay chamber. Therefore, moisture levels can be measured even in coarsegrained or very loose substrate.
- Suction pressure measurements are largely independent of the salt concentration of the substrate or soil.

ypical Suction P	ressure at Peat Substrates	
30 - 40 hPa	very moist	
50 – 120 hPa	moist	
150 – 200 hPa	a dried	

dry

### **Typical Suction Pressure at Open fields**

(interm	ediate	grade	soil)
lincenn	iculate	Siduc	5011

>200 hPa

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< 50 hPa saturated 100 – 150 hPa wet to moist >200 hPa start drying 200 – 500 hPa Irrigation

### **Tensiometer electronic**

FDA602TM1:

FD9602TM1:



Screw cap for direct tensiometer connection with ALMEMO® connector and 7m cable.

Measuring range:	0 - 1000 hP
Output:	0 - 10 V
Power supply:	12V via ALN

Ъ MEMO<sup>®</sup>-device

#### **Tensiometer electronic**

without ALMEMO<sup>®</sup> connector and cable



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