

TENSIOMETRY : abstract of all technicals ... COMPARISON

"PMS 9000" ELECTRODE

Benefits

- Good price.
- Strong.
- No temperature sensibility.
- Very good stability in time.
- No need water inside to run.
- Time life very important (more than 15 years).
- No maintenance.
- More than 20 years as experience .

Inconvenients

- You have to do a soil calibration to know absolute value of hydric potential. No calibration need if you use this equipment only to observe rate flow of groudwater.
- Can be considered as expensive if the numer of electrode is important (more than 50 units).



ELECTRONIC SENSOR "SKT 850"

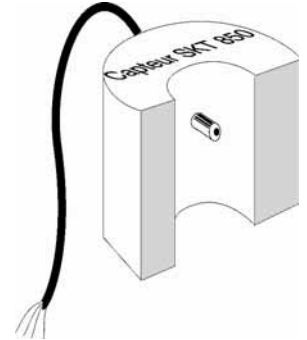
Benefits

- Low price.
- Easy placed (You just have to drill a hole in tube).
- Strong and **highly accurate** .
- Can be plugged on a data logger.
- Efficient temperature compensation.
- Very good water saturation of the sensor.
- It is not necessary to get out the tensiometer from the soil for water refill.

Inconvenients

- This sensor can be damaged if the operator put the silicon bung with to much strength into the tensiometric tube (overpressure).
- Must be protected against frost (use some anti-freeze liquid).
- The silicon bung can be eaten ... by some animals on the field !

SENSOR PLACED ON THE TENSIOMETER TUBE for PERMANENT installation



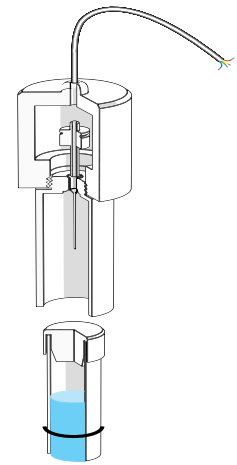
ELECTRONIC SENSOR "SKM 850"

Benefits

- Low price.
- Is immediately placed on any tensiometer tube. No extra tools are needed.
- Strong and **highly accurate**.
- Can be plugged on a data logger.
- No over pressure possible on sensor.
- Efficient temperature compensation.
- Very good water saturation of the sensor.
- The silicon bung is protected against rodents (rabbits, field mouses, and so on ...).
- It is NEVER necessary to remove the tensiometer from the soil for water refill.

Inconvenients

- This sensor is made in black colour (this colour is a ray absorber) and you have to protect it against the direct solar rays.



SENSOR PLACED ON THE TENSIOMETER TUBE for PERMANENT installation

ELECTRONIC TENSIMETER "SMS 2500 S"

Benefits

- Very low price for this type and quality device.
- Measurement is instantaneoues.
- Strong and **high accuracy**.
- Extraordinary reliability in time.
- Very long lifespan.
- Very easy Offset adjustment.
- The "unit measurement cost" is very low if the tensiometric tubes quantity is upper 50 pces (see above).
- Very thin needle but very strong .
- Very easy carrying on the field.

Inconvenients

- The operator must lean over for every measurement.
- No automatical datalogging possible.

THIS DEVICE ALLOWS THE BEST RATIO PRICE/QUALITY in TENSIOMETRIC MEASUREMENTS



SENSOR MOVED FROM ONE TENSIOMETER TUBE TO ANOTHER ONE