

TENSIOMETRE

Materials

1. POROUS CUPS - Soil Moisture Equipment U.S.A.

SPECIFICATIONS:- 1 Bar
6 mm EXT
4 mm INT
27 mm LENGTH

2. PLASTIC TUBING (clear)

4 mm INT
6 mm EXT

3. PLASTIC TUBING (fairly stiff)

4 mm EXT

4. GLASS TUBING

5 to 6 mm EXT

5. PLASTIC TEST TUBES

6. RUBBER STOPPERS TO FIT PLASTIC TEST TUBES.

7. TEE PIECE CONNECTORS TO FIT PLASTIC TUBING
(kartel 459)

8. SUPER GLUE & FIVE MINUTE EPOXY GLUE

9. SYRINGE 2 ml.

10. STAND VIAL & MERCURY

TO CONSTRUCT:

Cut a length of Plastic tube (3) to 15 mm then glue into porous cups approximately 3 mm into cup. This is then glued into plastic tubing and test tube (drill test tube for T piece. Then Glue 1100mm length of plastic tube to T piece and sweat glass rod on see plan.

TO FILL:

Use boiled water that has cooled to fill tensiometer. A water jet pump can be used to draw the water through the cap up the tube and into the test tube after clamping off on open end and side of test tube. Release clamp to fill rest of unit.

TO TRANSPORT:

Keep both ends of unit submerged at all times except when installing.

TO INSTALL:

Place stand in selected position and half fill viel with water, then insert glass rod though stand and into water (keep pressure on rubber stopper to avoid air bubbles),

Then place porous cup at desired depth. Mercury can now be added to viel.

FIELD MAINTENANCE:

Cleaning air from unit can be done easily.

Remove glass rod from stand (taprod to release mercury) then with the open end of rod level with stopper end of test tube remove stopper and add water raising test tube to force water through glass rod. When system is free of air replace stopper and install.