

Tensiometer

A device that measures the soil water tension. It indicates the effort required by the plant root system to extract water from the soil.



Orchards



Greenhouse



Field crops

/ Highlights & Benefits

- ✓ High accuracy and reliability
- ✓ Unaffected by salinity
- ✓ Easy installation
- ✓ Available in several models for different soil types
- ✓ Thread tip for quick and easy replacement

/ Technical Specifications

- **Output Voltage** – 0.5-4.5V DC, 2.5mA
- **Accuracy** – $\pm 2\%$ of full scale
- **Operating Temperature** – 0° to 66°C (32° to 150°F)
- **Connection** – 6.3mm (1/4") brass male NPT for all models
- **Supply Voltage** – 5V DC ($\pm 0.5V$ DC)
- **Supply Current** – 10mA
- **Range** – Model MS 0-100cb (kPa) / Model SS 0-40cb (kPa)
- **Available Lengths** – 30, 60, 90cm (12", 24", 36")

Ceramic Tip

- **Weight** – 61.22g (2.16oz)
- **Dimensions** – 25mm high x 25mm wide x 30mm deep (1" high x 1" wide x 1.88" deep)

→ Wiring Diagram

Terminal	Wire
+	● Red
AI	○ White
-	● Black

→ Installation

1. Remove the filler cap of the tensiometer and fill it with clean water. If the tensiometer tube does not completely fill, it may be due to an "air lock" that was formed at the bottom of the reservoir. Tap the top of the reservoir with the palm of your hand to break this "air lock" and facilitate complete filling of the tube
2. Take the plastic wrapper off the ceramic tip and place the tensiometer in clean water overnight (use clean non-rusting glass jar, plastic bucket or basin). Water will drain from the ceramic tip to the bucket
3. Connect the tensiometer to the required device, according to the wiring diagram. Take a measurement and calibrate the tensiometer
4. Select the optimal location of the probe that represents the average condition of the crop in the plot
5. The sensor should be located around 10 - 15cm from the dripper, within the wetted bulb and the active root zone

→ Care & Maintenance

1. Make sure the tensiometer and its reservoir are filled with water along the growing season
2. Upon completion of usage, clean the ceramic tip, drain the tensiometer of water, and store it in a dry environment

→ Kit Contents

- ✓ Tensiometer
- ✓ Product sheet

→ Catalog Numbers

Description	Catalog Number
TENS.MS 30/12-IRRROMETER	74730-000001
TENS.MS 60/24-IRRROMETER	74730-000002
TENS.MS 90/36-IRRROMETER	74730-000003
TENS.SS 30/12-IRRROMETER	74730-000004
TENS.SS 60/24-IRRROMETER	74730-000005
TENS.SS 90/36-IRRROMETER	74730-000006

MS = Most soils
SS = Sandy soils