



# WATER & SOIL

## Dial Tensiometers



Traditional design tensiometer with dial gauge readout of soil suction



Low cost, simple to use



Direct readout without the need for an electronic meter



Ideal for irrigation management



Suitable for soil, peat and other mediums



No correction factors for different soils or mediums



Robust construction for long life



Use in conjunction with automatic tensiometers for soil mapping



The Dial Tensiometer is a low cost version of Skye's successful field tensiometer range. Tensiometers measure the water availability to plant roots, and so can be used in irrigation scheduling and crop management.

Tensiometers are designed to be permanently installed in the growing medium, which they equilibrate with and measure the 'soil suction'. Plant roots need to exert a suction to remove water from the soil, it is this suction which is measured by the tensiometers.

The tensiometer itself consists of a shaft of clear acrylic plastic (length variable depending on depth of measurement required), with a porous ceramic bulb at the lower end.

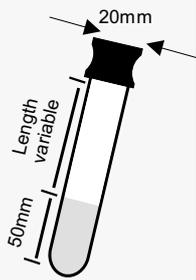
The top is sealed with a rubber stopper, and fitted with a dial pressure gauge.

This shaft is totally filled with water before installation into the growing medium to be measured. The water is able to flow in or out of the tensiometer via the ceramic bulb, as the suction inside the instrument equilibrates with the soil suction. The suction (or negative pressure) is shown directly on the gauge dial fitted into the top.

A series of tensiometers throughout the crop can give an accurate representation of crop water requirements and also produce a soil moisture map.

## SPECIFICATIONS

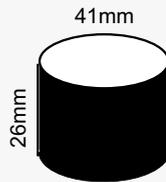
Shaft dimensions



Shaft construction

Porous ceramic bulb.  
Clear acrylic shaft lengths 20cm to 100cm. Rubber septum stopper

Gauge dimensions



Gauge construction

Brass mechanism.  
Plastic Housing.

Weight

80 to 110g

Operating range

0 to +70°C  
(precautions required for operation in below zero conditions)

## ORDERING INFORMATION

### Sensor

SKTD 690 series	Dial tensiometer. Please state shaft length required
TEN/2	Replacement ceramic bulb and shaft. Please state shaft length required

### Skye Instruments Ltd

21, Ddole Enterprise Park  
Llandrindod Wells  
Powys LD1 6DF  
United Kingdom

TEL +44 (0)1597 824811

FAX +44 (0)1597 824812

EMAIL [skyeemail@skyeinstruments.com](mailto:skyeemail@skyeinstruments.com)

WEB <http://www.skyeinstruments.com>

