200SS WATERMARK Sensor

Features:

- Proven stable calibration
- Inexpensive and easy to install
- No maintenance
- Range of measurement from 0 to 239 cb (kPa)
- Durable construction
- Not harmed by freezing
- Compensated for soil water salinity

In use since 1978, the patented WATERMARK sensor is a granular matrix sensor used to measure soil water tension. Water in the soil exchanges with the proprietary matrix inside of the sensor, creating a relationship between measured resistance and soil water tension.

The sensor consists of corrosion resistant electrodes imbedded within a granular matrix, contained in a perforated stainless-steel enclosure. Power (normally 2.5 to 5V) is applied to the WATERMARK to obtain a resistance value. Reading devices use published calibrations to convert the measured resistance into centibars (cb) or kilopascals (kPa) of soil water tension.

The WATERMARK is designed to be a permanent sensor, placed in the soil to be read as needed for monitoring soil conditions. Low cost, minimal power requirements, and easy installation make this sensor ideal for battery powered IoT devices in both agriculture and landscape applications.

Available in standard cable lengths of either 5' (1.5m) or 15' (4.5m), Sensors can optionally be installed on the end of ½" class 315 (SDR 13.5) PVC pipe for wire protection or ease of installation/removal.

Specifications:

OUTPUT: Variable resistance from 550 to 32000 ohms
WEIGHT: 0.147 lb. (.067 kg) – with 5' lead
DIMENSIONS: Diameter- 0.875" (22mm), Length: 3.25" (83mm)
CABLE: 2 conductor AWG 20 in 5' (1.5m) or 15' (4.5m) standard lengths
RANGE: 0 to 239 centibar (kPa)
MATERIAL: ABS plastic caps – stainless-steel body -hydrophilic fabric -granular matrix

Ordering Information:

Sensor Options:

200SS-5   Watermark Sensor, 5' (1.5m) cable
200SS-15   Watermark Sensor, 15'(4.5m) Cable

Adapter Options:

200SS-VA   1 sensor adapter with 0-3VDC analog output
200SS-SDI   3 sensor adapter with SDI-12 output

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