

## Aquaflex Soil Moisture Sensor

The Aquaflex Soil Moisture Sensor measures soil moisture content with  $\pm 2\%$  precision and temperature over the range  $-10$  to  $+50$  degrees C. The moisture measurement compensates for



errors caused by changes in soil conductivity.

Aquaflex is suitable for use in hydrology, soil stability studies, soil water profiling, pollution monitoring, water leakage detection from pipes and dams, ground truthing and forestry.

The major use of the Aquaflex sensor is to manage irrigation practices in turf, sports grounds, parklands, golf courses and pasture applications and in horticulture.

The Aquaflex sensor is three metres long and is normally installed flat, on its edge. The sensor reading averages soil moisture over its body length which results in a sampling area of 6 litres of soil; very large by comparison to any other soil moisture sensor.

The flat strip nature of the sensor makes it particularly suited to shallow rooted crops such as vegetables or sports and recreational turf.

The sensor can be installed in a straight line or in U or S shaped configurations.

The Aquaflex sensor can be used with a range of MEA data loggers and hand held readers;

- Aquaflex handheld reader for spot measurements of soil moisture and temperature.
- ABug which accepts one or two Aquaflex sensors
- Directly connect to an MEA Automatic Weather Station (AWS)
- Starlogger which accepts up to four sensors.
- Prologger which accepts up to eight sensors.
- Starlogger with an MEA2043 Sensor Field Station network which accepts up to 68 sensors.
- MEARadio for widely distributed, centrally recorded networks of sensors.

The sensor is extremely robust and can be buried in are replaceable should there be a breakage. An insertion kit is recommended when the sensor is used for spot readings, particularly when used in hard or rocky soils.

The Aquaflex sensor has a fixed cable which can be extended to 250 metres.

The Aquaflex sensor is used world wide.

## Specifications

Description	Soil moisture	Temperature
Measurement range	0 to 60 % volume	-10 to +50 deg C
Accuracy	$\pm 2$ %vol	$\pm 0.5$ deg C
Output Signal	4..20 mA representing 0 to 60%	4..20 mA representing $-10$ to $+50$ Deg
Operating range		$-10$ to $+40$ deg C
Power Requirement	6 to 26V; 10mA average, 150mA peak	
Sensing Volume	Six litres	