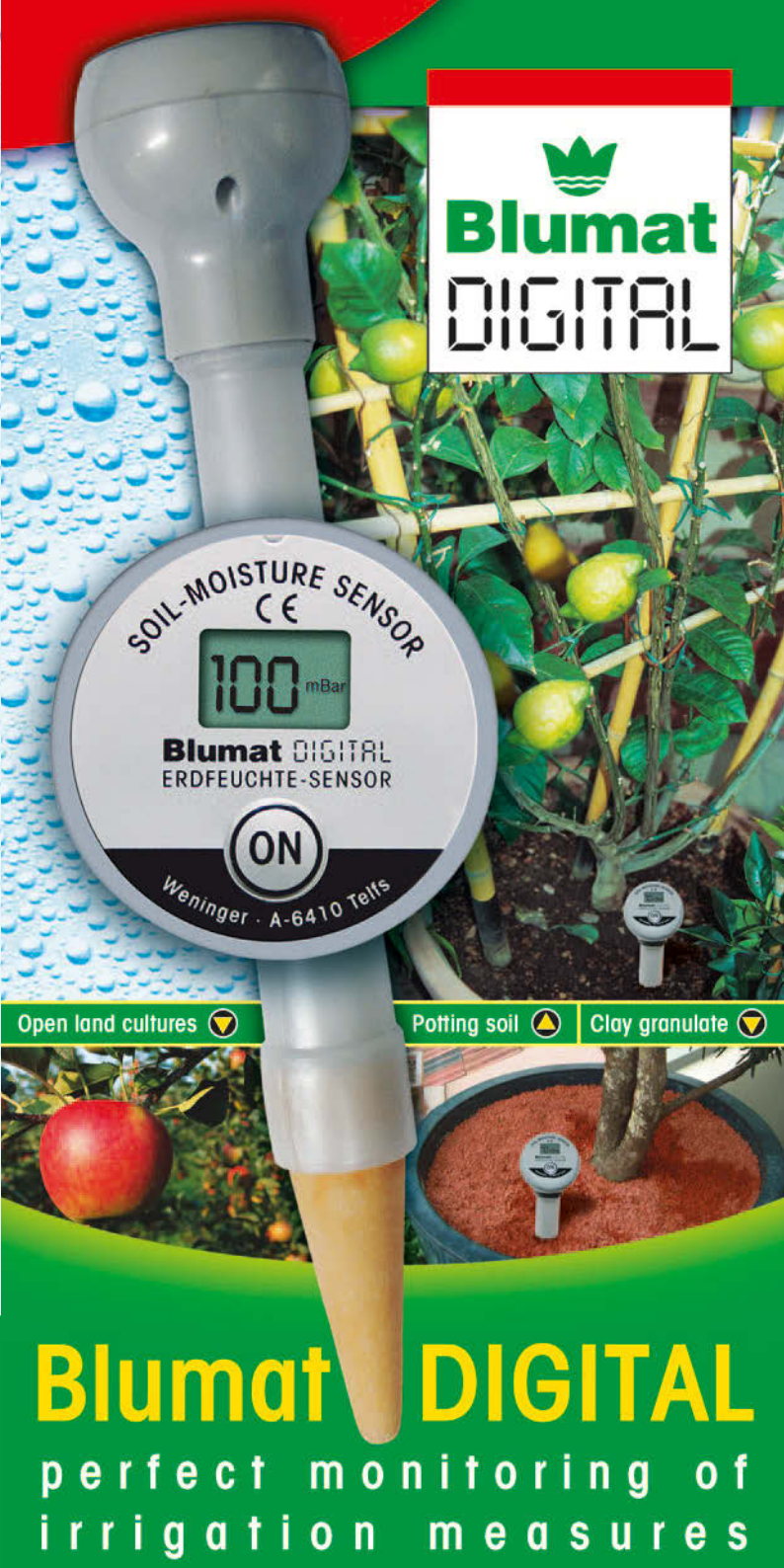
Blumat
DIGITAL
SOIL-MOISTURE SENSOR
CE
100 mBar
Blumat DIGITAL
ERDFEUCHTE-SENSOR
ON
Weninger · A-6410 Telfs
Open land cultures
Potting soil
Clay granulate
Blumat DIGITAL
perfect monitoring of
irrigation measures

Installation

Blumat DIGITAL

» 1 Unscrew the measuring head

» 2 Soak the ceramic tip with tube in water for at least **one hour.**

» 3 Fill the tube to the **top with water.**

» 4 Replace the measuring head. Insert the sensor into the soil about 6 to 7 inches deep (15-18 cm).

» **Positioning:** do not insert the sensor too close to the stem or top of the root, placement in the outer region of the root zone is best. With container plants, the Sensor should be placed about 2 to 3 inches (5-8 cm) from the edge of the container.

Insert the Sensor into fresh soil by turning clockwise. Tamp the soil down around the Sensor after insertion. (Inserting the Sensor into hard, compact soil or a hard root ball can be difficult and is not recommended).

Inserting the Sensor in containers with roots or very hard soil:
If inserting the Sensor into very hard soil, it is best to remove a plug or wedge of soil about 2 to 3 inches wide (5 to 7 cm) and 7 to 8 inches deep (20 cm). Be sure to remove soil from the outer root zone to avoid damage to plant roots. Place some loose soil in the bottom of the hole. Insert the Sensor and add very moist soil (muddy) around the Sensor to hold it in place. Water thoroughly. This insures that the ceramic tip has good contact with the soil. Finish by filling the hole to the top with soil.

» After 2-3 hours one can do the first measuring.

» **Measuring:**
Press and release the „ON"-Button. The display shows the result for 10 seconds.

Suction power values for plants in millibar:

Condition / measures – pot plants in potting soil feel best at values of between 50 and 120 millibar, whereas the optimal value for plants in open land soil is between 150 and 250 millibar. If the respective maximum value is exceeded, then it,s time for irrigation.

saturated, very moist to moist

moist to moderately moist

dry to severly desiccated, irrigation range

dry – irrigation necessary
(WATER URGENTLY NEEDED)

Interpreting display-readings:

10 – 750	**normal measuring results in millibar.**
0	**The sensor does not respond,** there may be an air leak. Check water inside the tube and refill it necessary.
ERR	**Excess pressure in sensor after screwing on the measuring device.** Disappears automatically after a few minutes.
750	**flushing.** Measurement more than 750 mbar, soil completely dried out. Immediate watering necessary, sensor may be losing water.
	Battery symbol flashing. Indication of weak battery.

» Test-display-readings without tube (measuring-head only):

0	**System OK**
ERR, 10, 20	**Reset System.** Environmental temperature 72°–82° F (22°–28 °C) necessary. Press "ON". Upon appearance of the wrong measurement press "ON" until "ooo" apears. Reset was successful.

in POTTING SOILS	Sandy clay / clay sand
	
10–40 (0,2 – 0,6 psi)	30–150 (0,5 – 2,2 psi)
50–120 (0,7 – 1,7 psi)	150–250 (2,2 – 3,6 psi)
120–190 (1,7 – 2,7 psi)	250–300 (3,6 – 4,3 psi)
200–300 (2,8 – 4,3 psi)	310–500 (5,1 – 7,3 psi)

Other information

CHANGING THE BATTERY

Unscrew bottom of measuring head with a Phillips Screwdriver, press the metal bracket holding the battery backwards until the battery is released. Replace with new battery (Lithium 3 V CR 2032) and screw sensor together again. Take care that the positioning flap is correctly in place.

MEASUREMENT-UNIT

can be changed into psi, mbar, kPa, simply by pressing and releasing the „ON"-button after appearance of measuring digits.

MAINTENANCE

The ceramic tip can remain in the soil over the winter, the measuring head should be taken off to allow any remaining water to seep out. The surface of the ceramic cone can be cleaned and renewed with fine sand paper, this should be done only when the cone is dry.

N.B: Always monitor the water level in the plastic pipe if soil is very wet! If need be, fill up to the brim again.

Blumat DIGITAL

» At the touch of a button the professional humidity sensor shows you how thirsty your plants are and gives you 100% certainty that you,re watering them properly. For, in the case of large pots, the soil,s humidity content cannot be assessed visually. Blumat displays the suction power the roots need to absorb water.

FIELDS OF APPLICATION:

In all soils and clay granulates.
For inside and outside,
such as, e.g..:

- » for plant troughs
- » perennials and shrubs
- » bushes
- » hedges
- » vegetable and fruit cultivation
- » in horticultural farms
- » valuable plants controlled hibernation
- » in storage granulate

HOW BLUMAT-DIGITAL WORKS:

As roots absorb water from the soil, soil moisture tension increases. Water moves out through the ceramic tip, creating a sub-pressure that is displayed on the LCD. The ability of the soil to withdraw water from the tensiometer increases continuously as soil dries (high value). Irrigation reverses this action. Sub-pressure in the tensiometer draws water back from the soil into the sensor (low value).

» High values
f.e. above 200 mBar
= **dry soil**

» Low values
f.e. below 50 mBar
= **moist soil**

Blumat-DIGITAL – child's play.

- The easiest way to measure humidity.
- You,ll get to know your plant,s water requirement best if you leave Blumat Digital at their location. If unplugged and then plugged back in again, give it 2 to 3 hours, in order to ensure an exact measurement result is displayed.

MORE FROM OUR RANGE:

[Use the plant-oriented irrigation system for balcony, terrace and indoor plants in conservatories, greenhouses, allotments and roof gardens, etc.]

The fully automatic plant irrigation system

Irrigation system for plants

With Blumat your indoor plants get just as much water as they actually need, irrespective of sunny or shady locations. The water is suctioned off from any container via a thin hose and dispensed directly to the plant via the clay cone.

www.blumat.info · info@blumat.at

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