

BLUMAT DIGITAL

is a precision device for measuring the degree of moisture in the soil

» At the push of a button, you are shown when to start or when to stop watering. «

AREAS OF USE

In all soils and clay granules indoors and outdoors

- In flowerpots and large plant pots
- Shrubs, bushes, hedges
- Vegetable and fruit growing
- In commercial nurseries
- Controlled watering of plants over winter

FUNCTION

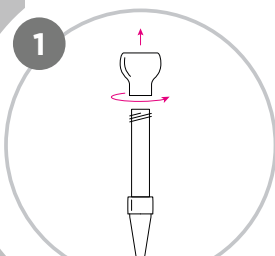
The power needed by the roots to extract water from the soil. In dry soil, water is sucked from the tube through the ceramic tip and sucked back again after watering. This causes different vacuum pressures in the tube which can be measured and displayed at the push of a button.

- High values (above 200 mbar) = dry soil
- Low values (below 50 mbar) = wet soil

The drier the soil, the higher the value!

OPERATION

1



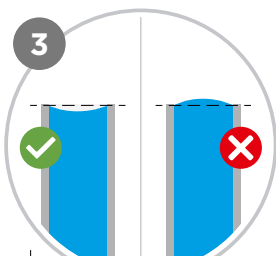
Unscrew measuring head.

2



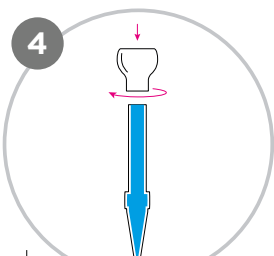
Soak plastic tube with ceramic tip in water for at least 5 minutes. Do not immerse the unscrewed measuring head in water!

3



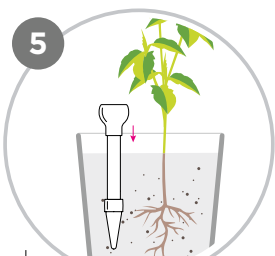
Fill the plastic tube with clean tap water; the water level must be slightly below the lip.

4



Screw measuring head back on as far as it will go.

5



Turn the Blumat Digital clockwise into the soil in the outer part of the root. Then, press down the soft soil slightly in freshly repotted plants. Dig a suitable hole in case of dense rooting or in very hard soil. Fill the hole halfway up with loose earth and water. Then insert the Blumat Digital, fill the hole with soil and press down.

6



A measurement can be taken after **2 to 3 hours**. Tap the button once - the measurement will be displayed for 10 seconds in mbar.

BLUMAT DIGITAL MEASURES WHAT THE PLANT REALLY FEELS

To get to the water in a soil, a plant has to exert power through its roots. The drier a soil is, the more power it needs. It is exactly this power (suction tension) that Blumat Digital measures.

So, it is not the amount of water that is measured but how strongly the water is bound by the soil. This is decisive because every soil reacts differently in the way it takes up, saves and gives off water.

- A substrate may look moist but the plants cannot get at the water.
- A substrate may look dry but can still contain enough water for the plants.

SUCTION TENSION VALUE FOR PLANTS (MBAR)

	Potting soil with peat	Potting soil without peat	Clay granules	Open soil - clayey sand
saturated to wet	10 - 30	5 - 20	5 - 15	10 - 50
sufficiently moist	80 - 120	40 - 80	20 - 40	90 - 150
moderately moist to slightly dry	150 - 200	100 - 150	60 - 90	180 - 250
dry to very dry	250 - 350	200 - 300	100 - 150	300 - 500

The specified suction tension values are recommendations. The optimum values depend on the water requirement of the individual plant. It is up to you whether you prefer to keep a plant dry or moist. Recommended values for many plants can be found: www.blumat.com/go/Digital

DISPLAY READINGS

10 - 750	Normal measuring result.
> 750	The accuracy is no longer guaranteed, air could penetrate. Water the soil.
0	• "0" must be displayed when the measuring head is unscrewed. • Air penetration. Refill the sensor with water and screw on.
LoB	Low battery, no more measurements possible.

TECHNICAL DATA

Unit:	millibar	Temperature range:	5 - 40°C
Range:	0 - 750 mbar	Battery:	CR2032
Accuracy:	+/- 1 %	Type of protection:	IP52
Measuring cycles:	20.000	Conformity:	CE, RoHS



MAINTENANCE

Preparing for winter: Unscrew the measuring head and store both parts safe from frost.

Use all-year-round: The water level drops slightly in time, this is normal. When the plastic tube is only up to half full in wet soil (values below 50 mbar), refill the Digital. After refilling, wait another 2 or 3 hours before taking a measurement.

Cleaning: Clean the plastic tube with water and a brush when necessary. Deposits on the cone can also be rubbed off with sandpaper. Never hold the measuring head under running water or immerse it.

Tip: The protective cap (accessory) will prolong the life of the Blumat Digital.



CHANGING THE BATTERY/CALIBRATION

An empty CR2032 battery cannot be recharged, it must be replaced by a new one. Unscrew the measuring head from the plastic tube, undo the 3 screws on the bottom and carefully lift off the display. Change the battery and recalibrate the measuring head. To do this, press "On" for several seconds until "ooo" appears. Then screw the measuring head back on.



DISPOSAL, DATA PROTECTION

The plastic tube with the clay cone can be thrown in the household waste. The measuring head must be taken along to a collection point for electrical devices. The inserted battery must always be removed first and also handed it in at a collection point.



Data protection: No data are saved in the device so there is no need to erase any data before passing on or disposing of the device.

3-YEAR WARRANTY

We want you to be satisfied. All Blumat products are covered by a 36-month warranty from the date of purchase. Should you not be entirely satisfied, please contact your retailer or us directly (info@blumat.at).