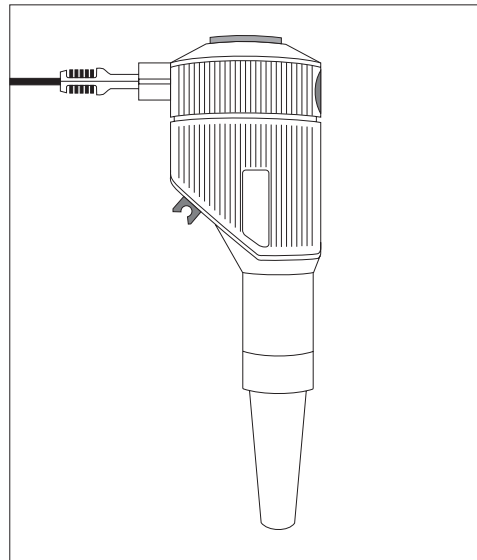
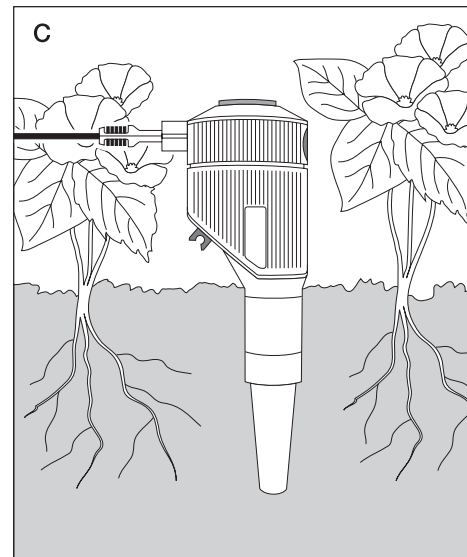
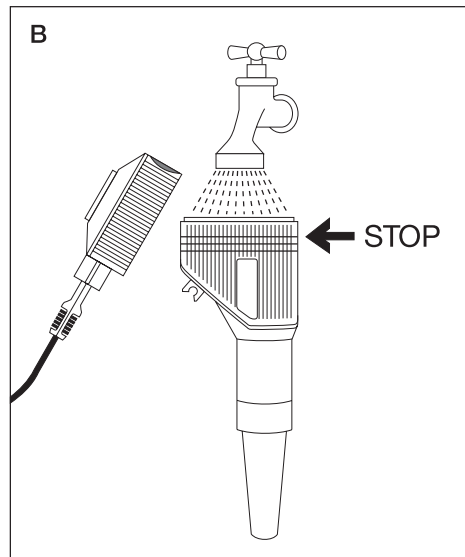
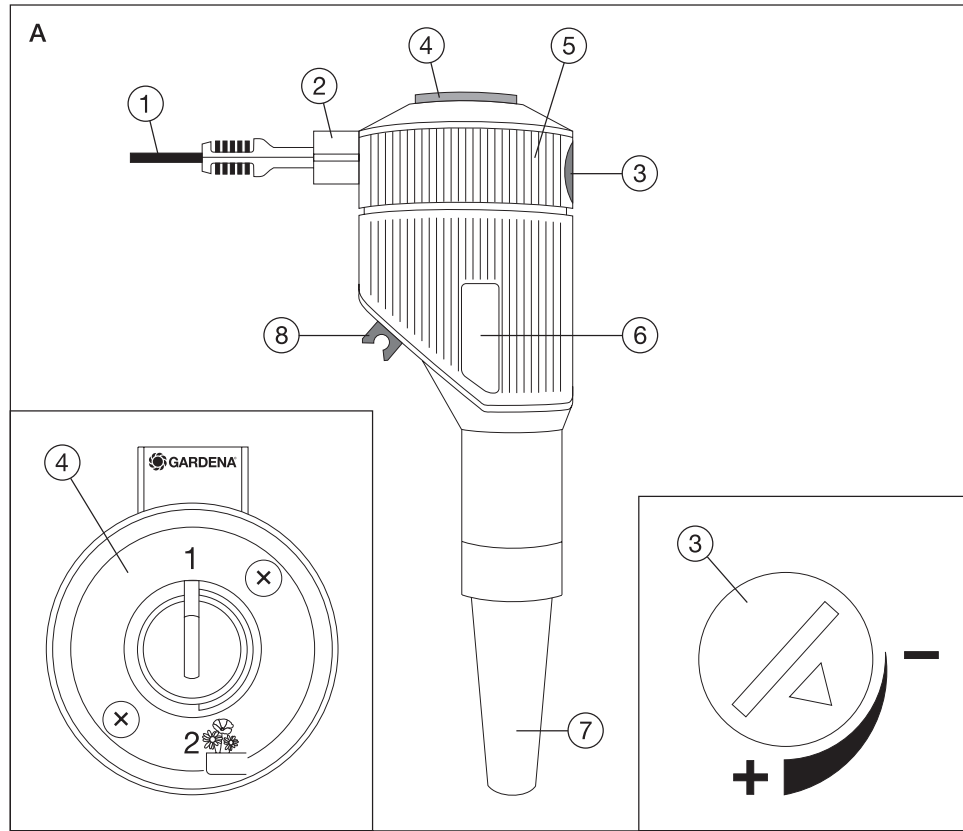




Bodenfeuchtesensor  
Soil Moisture Sensor  
Jordfuktighetsføler  
Kosteusanturi  
Sensor de humedad  
Sensor de humidade no solo  
Υγρασιόμετρο εδάφους  
Merilec vlažnosti tal



**Gebrauchsanweisung**  
**Operating Instructions**  
**Bruksanvisning**  
**Käyttöohjeet**  
**Manual de instrucciones**  
**Instruções de manejo**  
**Οδηγίες χρήσης**  
**Navodila za uporabo**



# GARDENA Soil Moisture Sensor

## 1. Notes on these Operating Instructions

Please read these operating instructions carefully and observe the notes given. Use these operating instructions to familiarise yourself with the Soil Moisture Sensor, the unit's features and proper use as well as with the notes on safety.

**⚠ For safety reasons, children and young people under 16 as well as anyone who is not familiar with these operating instructions may not use the Soil Moisture Sensor.**

**The Soil Moisture Sensor must only be used to control the components recommended by the manufacturer.**

**Keep these operating instructions in a safe place.**

## 2. Proper Use

The GARDENA Soil Moisture Sensor is intended for private use in domestic and hobby gardens, exclusively for outdoor use, to control sprinklers and watering systems by means of water computers<sup>1)</sup> taking the soil moisture into account.


**⚠ The Soil Moisture Sensor must not be used for industrial purposes or in conjunction with chemicals, food-stuffs, easily flammable and explosive materials.**

Compliance with the operating instructions provided by the

manufacturer is a prerequisite to ensure proper use of the GARDENA Soil Moisture Sensor.

The operating instructions also contain operating, servicing and maintenance conditions.

## 3. Operating Parts (Fig. A)

- |                           |  |  |
|---------------------------|--|--|
| ① Connection cable        | ④ Control knob positions 1 and 2  | ⑥ Water container with inspection window                 |
| ② Cable socket            | ⑤ Lid with low-pressure controller   | ⑦ Ceramic sensor   |
| ③ Control knob with scale |  | ⑧ Holder for GARDENA micro-drip system endline drip head |

## 4. How the Soil Moisture Sensor Works

The GARDENA Soil moisture sensor takes the soil moisture into account during controlled watering.

### 4.1 Control knob ④ Set to Position 1

The Soil Moisture Sensor measures the amount of moisture in the soil and closes the valve of the respective water computer if the soil moisture reaches the set soil moisture level.

If the required soil moisture level is not reached, watering is allowed to proceed at the next programmed starting time. If the pre-set moisture level is reached during the watering program, the watering program is stopped.

**Note:** The Soil Moisture Sensor can also re-activate watering during a programmed watering time when it is dry in conjunction with the solenoid valve boxes of the water controller 6030.

### 4.2 Control knob ④ Set to Position 2

If the Soil Moisture Sensor is used together with GARDENA flower box watering and if automatic program 14 is selected, watering is switched on and off automatically according to the soil moisture level.

**Note:** The automatic on/off function is only possible with GARDENA flower box watering and by selecting watering program 14.

## 5. Putting into Operation

### 5.1 Choosing the Installation Position

The Soil Moisture Sensor must be positioned in the area which is watered with the same climatic conditions (sun, wind, rain etc.) as the plants. The Soil Moisture Sensor must not be covered by neighbouring plants. Avoid shaded areas. To prevent the moisture sensor reacting incorrectly due to water logging, it must not be placed in dips in the ground.

When using the GARDENA micro-drip system, a 4.6 mm (3/16") supply pipe with drip head must be installed on the dripholder ⑧ of the soil moisture sensor. The water from this drip head is measured by the ceramic sensor ⑦.

### 5.2 Setting-up and Filling the Sensor

**Note:** To prevent the Soil Moisture Sensor reacting incorrectly after installation, it should only be installed in dry weather and when the soil is dry.

- After you have chosen a suitable position, you must prepare the soil ready to install the Soil Moisture Sensor. Loosen an area of soil approx. 10 cm across and 10 cm deep. Remove any stones to prevent damaging or breaking the sensitive ceramic sensor ⑦.

- Before pushing the GARDENA Soil Moisture Sensor into the ground, fill the water container ⑥ with water. To do this, unscrew the lid with the low-pressure controller ⑤ and fill the water container ⑥ with clean water to where the thread begins.

- Replace the lid ⑤ on the water container ⑥ and **slowly screw tight until the stop.**

**Note:** When closing the Soil Moisture Sensor, ensure that the thread and sealing ring are free from particles of dirt.

- Push the Soil Moisture Sensor, filled with water approx. 10 cm into the ground (Fig. C). **Push the soil down around the Soil Moisture Sensor and water (the ceramic tip must not be exposed to the air after installation).**

- Connect the soil moisture sensor to the GARDENA water controller with the supplied cable ①.

**Important:** The cable must be laid such that it cannot be damaged or tripped over. When laying the cable underground, we recommend using a bed of sand.

**Warning:** The Soil Moisture Sensor must be fixed firmly in the ground. Therefore, after plugging the cable into the water controller and setting the moisture level (see point 5.3), firmly press down the soil again around the Soil Moisture Sensor.

### 5.3 Setting the Soil Moisture Sensor

#### General

The amount of water plants consume depends on many factors: the amount of water the plant requires, the type of soil, amount of sunshine, wind and many other factors.

To find a suitable switching point (= suitable moisture level to supply your plants with the optimum amount of water) you must **observe the Soil Moisture Sensor over a certain period of time (1-2 weeks)** and if necessary, adjust the settings.

#### Setting the Watering Time

The watering time can be set using a control knob ③. The control knob ③ can be adjusted using a screw driver or coin as follows: Turn the knob towards the minus sign (-) to reduce the moisture level and watering time. Turn the knob towards the plus sign (+) to increase the moisture level and watering time.

#### Setting the Type of Watering Control

##### Position 1

Set the control knob ④ on the top of the unit to position 1 when using the Soil Moisture Sensor together with one of the GARDENA water computers or programs 1-13 of the GARDENA flower box watering set.

##### Position 2

Set the control knob ④ to position 2 when using the Soil Moisture Sensor together with the GARDENA flower box watering set and when selecting automatic program 14.

1) Water Computer 1030 and 1060, Water Timer Electronic T 14 and T 1030, Water Computer Plus C 1030 and Profi C 1060, GARDENA Solenoid Valve Boxes, GARDENA Automatic Valves, GARDENA Pump Relay, and GARDENA Flower Box Watering Set

## 6. Notes on Use

**The Soil Moisture Sensor is fitted with a “safety switch”. When the moisture sensor is set in position 1, a switching point is set ensuring the set watering programs run, in case the water container no longer contains any water (e.g. if the ceramic sensor is damaged). When set in position 2, watering is not continued if the water container no longer contains any water.**

The Soil Moisture Sensor measures the moisture level of the soil in the roots of the plants. The time it takes until the soil is sufficiently moist or until the water flow is stopped by the water computer, depends on the intensity of rain fall and the artificial watering. In the worst case, a watering program and a rain shower may overlap until the required soil moisture is reached.

You can shorten the time it takes for the moisture sensor to react by reducing the installation depth of the moisture sensor. However, it must be ensured that the ceramic sensor ⑦ still has sufficient contact with the soil (the ceramic sensor must not be exposed to the air – see point 5.2).

## 7. Maintenance, Care and Storage

### 7.1 Storage

The Soil Moisture Sensor must be disconnected from the connection cable ① and removed from the ground **before the frosty season begins**. If you leave the cable outside or under ground, close the cable socket with the cover (on the cable). After removing the Soil Moisture Sensor from the ground

rinse with clean water, thoroughly clean the inside and outside of the water container ⑥.

Store the Soil Moisture Sensor over the winter in a dry, dust-free place away from frost.

The self-tapping screws inside the housing and lid must not be unscrewed.

### 7.2 Care

The Soil Moisture Sensor should be cleaned approx. every 4 months and replaced in the soil as described in point 5.2.

**Note:** Do not use harsh household cleaning agents or scouring powder. Handle the ceramic sensor ⑦ carefully.

## 8. Accessory

Should the connection cable of the Moisture Sensor be not long enough it can be extended up

to a length of max. 105 m by using the 10 m Extension Cable, Art. no. 1186.

## 9. Faults

Fault	Possible Cause	Remedy
<b>Watering starts operation although soil is wet.</b>	Disadvantageous location (Soil Moisture Sensor is not supplied with water).	Locate the Soil Moisture Sensor in the area to be watered.
	Switching point has not been set correctly.	Readjust the setting via the turning knob ③ (see point 5.3.).
	Defective or loose connection cable.	Check the plug-in connection for damage and replace it, if necessary (spare cable can be ordered from the GARDENA Service).
	No water in the Soil Moisture Sensor.	Fill the Soil Moisture Sensor with clean water. Screw on the cover correctly (see point 5.2).

### Watering starts operation although soil is wet.

Ceramic sensor ⑦ has not sufficient soil contact.

Press down and water the soil around the Soil Moisture Sensor (see point 5.2.).

### Watering not switched on although it is dry.

Switching point is not set correctly.

Correct setting using control knob ③ (see point 5.3).

Unsuitable position for sensor, depression in ground, water-logging, too much shade etc.

Change the location.

No water in Soil Moisture Sensor and control knob ④ set at position 2. ☁

Fill housing with water (Fig. B) and close the lid properly.

Control unit battery power is too low.

Exchange the battery in the control unit.

### Soil Moisture Sensor losing water.

O-ring in lid ⑤ is dirty.

Clean O-ring.

### Soil Moisture Sensor losing water despite having cleaned O-ring.

Seal is damaged.

Send the Soil Moisture Sensor to GARDENA Service.

### Flower box watering set running constantly in prog. 14 although the soil is moist.

Soil Moisture Sensor control knob ④ set at position 1.

Set the control knob ④ to position 2. ☁

If you have any problems with your Soil Moisture Sensor, please contact our Customer Service or return the defective unit together with a short description of the problem directly to one of the GARDENA Service Centres listed on the back of this leaflet.

If covered under warranty, please include the completed and signed warranty card.

**We expressly point out that, in accordance with the product liability law, we are not liable for any damage caused by our units if it is due to improper**

**repair or if parts exchanged are not original GARDENA parts or parts approved by us, and, if the repairs were not carried out by a GARDENA Service Centre or an authorised specialist. The same applies to spare parts and accessories.**

**D****Garantie**

GARDENA gewährt für dieses Produkt 1 Jahr Garantie (ab Kaufdatum). Diese Garantieleistung bezieht sich auf alle wesentlichen Mängel des Gerätes, die nachweislich auf Material- oder Fabrikationsfehler zurückzuführen sind. Sie erfolgt durch die Ersatzlieferung eines einwandfreien Gerätes oder durch die kostenlose Reparatur des eingesandten Gerätes nach unserer Wahl, wenn folgende Voraussetzungen gewährleistet sind:

- Das Gerät wurde sachgemäß und laut den Empfehlungen in der Gebrauchsanweisung behandelt. Es wurde weder vom Käufer noch von einem Dritten versucht, das Gerät zu reparieren.
- Das Gerät wurde ausreichend frankiert direkt an eine der GARDENA Servicestellen gesandt, unter Beifügung der vollständig ausgefüllten Garantiekarte bzw. des Rechnungsbeleges.

Diese Hersteller-Garantie berührt die gegenüber dem Händler/Verkäufer bestehenden Gewährleistungsansprüche nicht.

**GB****Guarantee**

GARDENA guarantees this product for 1 year (from date of purchase). This guarantee covers all serious defects of the unit that can be proved to be material or manufacturing faults. Under warranty we will either replace the unit or repair it free of charge if the following conditions apply:

- The unit must have been handled properly and in keeping with the requirements of the operating instructions.

Neither the purchaser nor a non-authorised third party have attempted to repair the unit.

- The unit has been returned directly to a GARDENA Service Centre, postage paid, together with the completed and signed warranty card and proof of purchase.

This manufacturer's guarantee does not affect the user's existing warranty claims against the dealer/seller.

**SCAN****Garanti**

GARDENA gir ett års garanti for dette produktet (fra kjøpsdato). Denne garantiytelsen refererer seg til alle vesentlige mangler ved produktet som beviselig kan tilbakeføres til material- eller fabrikkasjonsfeil. Garantien ytes ved levering av et feilfritt produkt i erstatning eller ved en gratis reparasjon av det innsendte produkt. Vi velger i hvert enkelt tilfelle hvilken ytelse som er aktuell – hvis følgende betingelser er oppfylt:

- Produktet har fått en sakkynndig behandling i samsvar med anbefalingene i bruksanvisningene. Verken kjøper eller tredjemann har gjort noe forsøk på å reparere produktet.
- Produktet er blitt sendt korrekt frankert direkte til et GARDENA serviceverksted; et fullstendig utfyllt garantikort eller kvittering for betalt regning ble vedlagt.

Denne produsent-garantien berører ikke eventuelle garanti-krav som måtte finnes overfor forhandler/selger.

**FIN****Takuu**

GARDENA myöntää tälle tuotteelle yhden (1) vuoden takuun ostopäivästä lukien. Takuu kattaa materiaali- ja valmistusvial. Takuuajan puitteissa korjaamme tai korvaamme tuotteen uudella vastaavalla tuotteella veloituksetta, edellyttäen että tuotetta on käsitelty asianmukaisesti käyttöohjeiden mukaan tai että tuotetta ei ole korjannut asiakas itse tai joku muu kuin GARDENA-huolto.

Takuutuote tulee palauttaa jälleenmyyjälle takuukortin ja/tai ostokuitin kanssa. Valmistajan takuu ei koske asiakkaan ja myyjän välillä tehtyjä erityis-sopimuksia. Kuluvat osat eivät kuulu takuun piiriin.

**E****Garantía**

Para este producto GARDENA concede una garantía de 1 año (a partir de la fecha de compra). Esta garantía se refiere a todos los defectos esenciales del producto que tengan de origen defectos de materiales o de fabricación. La garantía se efectúa mediante intercambio por un artículo en perfectas condiciones o mediante la reparación gratuita de la pieza enviada, según nuestro criterio, sólo en el caso de que se hayan cumplido los siguientes requisitos:

- El aparato fue manipulado correctamente y según la indicaciones del manual de instrucciones. Ni el cliente ni terceros intentaron repararlo.
- El aparato fue enviado directamente al Servicio Técnico de GARDENA, adjuntando la tarjeta de garantía o la factura de compra.

Esta garantía del fabricante no afectará la existente entre el distribuidor/vendedor.

**Garantiekarte**  
**Warranty Card**  
**Garantikort**  
**Takuukortti**  
**Tarjeta de garantía**  
**Carta de garantia**  
**Κάρτα Εγγύησης**  
**Garancijski list**

GARDENA Bodenfeuchtesensor	Art.-Nr. 1187
Soil Moisture Sensor GARDENA	Art. No. 1187
GARDENA Jordfuktighetsføler	art.nr. 1187
GARDENA-kosteusanturi	Tuoteno. 1187
Sensor de humedad GARDENA	art. nº 1187
Sensor de humidade no solo GARDENA	art. nº 1187
Υγρασιόμετρο εδάφους τις GARDENA	κωδ 1187
GARDENA Merilec vlažnosti tal	art. št. 1187

wurde gekauft am:

Purchase date:

Ble kjøpt hos:

Ostopäivä:

Fecha de compra:

Comprado em:

Αγοράστηκε την:

Datum nakupa:

Händlerstempel:  
Dealer's stamp / Receipt:  
Forhandlerstempel:  
Myyjän leima / nimi ja yhteystiedot.  
Sello del comerciante:  
Carimbo do vendedor:  
Σφραγίδα καταστήματος:  
Pečat trgovca:

Beanstandung:  
Reasons for complaint:  
Reklamasjonsgrunn:  
Syy palautukseen:  
Averia:  
Motivo de reclamação:  
Πρόβλημα:  
Opis napake:



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