

The easy path to your own irrigation system

Would you like to have a convenient irrigation system in your garden?

- Information that will help you decide on the best solution.
- Reasons that make it easier to make your decision.
- Help with planning, from the blueprint to the final plan – do-it-yourself planning instructions. Step by step.

More at: www.gardena.com

Who and what else can help you

- Micro-Drip-System Online Product Advisor - which set fits your requirements? Here you will find helpful advice to support you in your purchase decision. www.gardena.com/micro-drip-system-planer
- GARDENA My Garden – the free online tool also offers automatic planning for Sprinklersystems www.gardena.com/mygarden
- The GARDENA customer service team will answer your questions or will refer you to the relevant planning installation service upon request.
- Videos on YouTube with informative films about our irrigation solutions

More about GARDENA

Would you like to know more about gardens and GARDENA? Just take a look in our other brochures, visit our website at www.gardena.com or subscribe to our free-of-charge newsletter at www.gardena.com/newsletter

Planning / Consulting Irrigation Systems

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We reserve the right to make changes, including product changes.

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GARDENA Irrigation Control

Above-ground Water Controls

Flex

Balcony & terrace / micro irrigation



Use

- For watering potted plants/balcony plants
- Flexible setting with short cycles and high watering frequencies (up to every 4 hours)
- Ideal in combination with the GARDENA Micro-Drip-System

Watering schedules	1
Start time	flexible
Duration	1 sec. - 99 min.
Intervals	every 4/6/8/12/24/48/72 hours
Selection of weekdays	predefined cycles
Watering cycles/day	up to 6 (every 4 hours)
Water-saving option	• with Soil Moisture Sensor
Manual watering	•
Art.-No.	1890

Select

3 watering schedules / all garden areas



Use

- For convenient, flexible watering
- 3 individual watering schedules including start time, duration, week days - ideal e.g. for pre-watering the soil
- Ideal in combination with Sprinklers or Micro-Drip-System

Watering schedules	3
Start time	flexible based on schedule
Duration	1 sec - 7 hrs 59 min per schedule
Intervals	weekdays per schedule
Selection of weekdays	• per schedule
Watering cycles/day	up to 3
Water-saving option	• with Soil Moisture Sensor
Manual watering	•
Art.-No.	1891

MultiControl duo

Up to 2 areas



Use

- For independent watering of 2 areas
- For instance the lawn behind the house and the flower beds in front of it

Watering schedules	2 x 1
Start time	flexible based on schedule
Duration	1 sec - 3 hrs 59 min per outlet
Intervals	selection of weekly programs or in cycles every 8/12/24 hrs every 2nd/3rd/7th day
Selection of weekdays	• for each schedule
Watering cycles/day	up to 3 (every 8 hours)
Water-saving option	• with Soil Moisture Sensor
Manual watering	•
Art.-No.	1874

Master

6 watering schedule / very flexible settings / up to 6 areas



Use

- For automatic watering of a large area in the garden with a maximum of flexibility in time
- 6 individual watering schedules including start time, duration, week days
- Watering of up to 6 different areas in combination with the ● Water Distributor automatic.

Watering schedules	6
Start time	flexible based on schedule
Duration	1 sec - 4 hrs per schedule
Intervals	weekdays
Selection of weekdays	• for each schedule
Watering cycles/day	up to 6
Water-saving option	• with Soil Moisture Sensor
Manual watering	•
Art.-No.	1892

App based watering controls

Bluetooth®



Via GARDENA Bluetooth® App / all garden areas

Use

- For convenient, flexible watering per Bluetooth® App
- Up to three individual watering schedules
- Ideal in combination with Sprinklers or Micro-Drip-System

Benefits of the Bluetooth® App:



Watering schedules	3
Start time	flexible per schedule
Duration	1 min - 8 hrs per schedule
Intervals	weekdays per schedule
Selection of weekdays	• for each schedule
Watering cycles/day	up to 3
Water-saving option	• the Soil Moisture Sensor
Manual watering	•
Art.-No.	1889

smart Water Control



Control via GARDENA smart app

smart Water Control

With the smart Water Control you can flexibly set the watering schedules in the GARDENA smart App and adjust them as needed at any time.

Benefits of the smart App:



More information on the GARDENA smart System on page 50.

Watering schedules	free selectable
Start time	flexible per schedule
Duration	1 sec - 10 hrs
Intervals	weekdays
Selection of weekdays	• per schedule
Watering cycles/day	individual
Water-saving option	• with smart Sensor
Manual watering	•
Art.-No.	19031 or supplied with smart system sets

Add-ons for analog or app-based watering controls



Soil Moisture Sensor

Measures and skips scheduled watering cycles as soon as a pre-set moisture level is reached. For optimized, water-conserving watering in connection with a GARDENA Water Control.

Art.-No. 1867



smart Sensor

Measures the soil moisture level and the ground temperature and transfers those data to the GARDENA smart App. Can be used in combination with the smart multi-channel Irrigation Control and the smart Home & Garden Pump.

Art.-No. 19040



Water Distributor automatic ●

Perfect in combination with the Water Control Master. With several irrigation lines, e.g. for GARDENA Sprinklers, Micro-Drip-System or Sprinklersystem. Each line can be triggered up to once per day by the Water Control Master. Ideal for planted areas with different watering needs or if the water pressure is too low to water them all at the same time.

Art.-No. 1197

Product overview

Micro-Drip-System System Start

	Connection to the tap		Pressure regulator and filtering		Installation
MADE IN EUROPE					
	Tap Fitting 13 mm (1/2") – G 3/4"	Tap Fitting 4.6 mm (3/16") – G 3/4"	Master Unit 1000	Master Unit 2000	Installation Tool
Use	For connecting the Connecting Pipe Flex 13 mm (1/2") to the Master Unit 1000/2000 (Art. No. 13333/13310) or directly to the water connection of a cistern (3/4") with maximum 1.5 bar	For connecting the Supply Pipe 4.6 mm (3/4") to the Master Unit 1000/2000 (Art. No. 13333/13310) or directly to the water connection of a cistern (3/4") with maximum 1.5 bar	Starter component of the Micro-Drip-System for reducing pressure to 1.5 bar and for filtering the water	Starter component of the Micro-Drip-System for reducing pressure to 1.5 bar and for filtering the water	Universal tool for the fitting of various articles and piercing of the connecting pipe
Water flow	–	–	up to 1,000 l/h	up to 2,000 l/h	–
Article No.	13222	13224	13333	13310	13313

Micro-Drip-System Pipes, Connectors and Accessories

Pipes and accessories

	13 mm (1/2")		4.6 mm (3/16")		13 mm (1/2")	4.6 mm (3/16")
1 MADE IN GERMANY						
2 MADE IN EUROPE	Connecting Pipe Flex¹	Connecting Pipe Flex²	Supply Pipe²		Shut-off/Regulation Valves¹	
Diameter	13 mm (1/2")	13 mm (1/2")	4.6 mm (3/16")	4.6 mm (3/16")	13 mm (1/2")	4.6 mm (3/16")
Use	Central supply pipe in the Micro-Drip-System, can be laid above or below ground, very supple due to unique flexible technology		Supply pipe for drip heads and spray nozzles, can be laid above or below ground		Shutting off individual pipelines 13 mm (1/2") (Art. No. 1346/1347)	
Contents	15 m	50 m	15 m	50 m	1 piece	2 pieces
Article No.	1346	1347	1350	1348	13207	13217

Pipe Pegs

	13 mm (1/2")	4.6 mm (3/16")
1 MADE IN GERMANY		
	Pipe Pegs 13 mm (1/2")¹	Pipe Pegs 4.6 mm (3/16")
Use	The pipe peg is used for guiding and securing the supply pipe in the ground. Guiding and fixing the connecting/supply pipe.	
Contents	10 pieces	15 pieces
Article No.	13208	13218

Micro-Drip-System Pipes, Connectors and accessories

Connectors

	4.6 mm (3/16")					
MADE IN EUROPE						
	Connector	L-Joint	T-Joint	4-Way Coupling	Plug	T-Joint Nozzles/ Endline Drip Heads
Use	Extension of the Supply Pipe	Precise branching of the Supply Pipe 4.6 mm (3/16") (Art. No. 1348/1350)	For branching off the Supply Pipe 4.6 mm (3/16") (Art. No. 1348/1350)	For branching off the Supply Pipe 4.6 mm (3/16") (Art. No. 1348/1350)	For sealing off the Supply Pipe 4.6 mm (3/16"), for sealing a hole in the Connecting Pipe 13 mm (1/2")	For fixing Spray Nozzles and Endline Drip Heads in the Supply Pipe 4.6 mm (3/16") (Art. No. 1348/1350)
Contents	10 pieces	10 pieces	10 pieces	10 pieces	10 pieces	5 T- pieces, 1 Closing cap
Article No.	13213	13212	13211	13214	13215	13216

	13 mm (1/2")						
MADE IN EUROPE							
	Connector	L-Joint	T-Joint	Connector 13 mm (1/2") - 4.6 mm (3/16")	Plug	T-Joint Spray Nozzles	Universal Connector
Use	Extension of the Connecting Pipe Flex and Supply Pipe 13 mm (1/2") (Art. No. 1346/1347, 13503, 13504)	Precise branching off the Connecting Pipe Flex 13 mm (1/2") (Art. No. 1346/1347)	Branching off the Connecting Pipe Flex 13 mm (1/2") (Art. No. 1346/1347)	Transition from Connecting Pipe Flex 13 mm (1/2") to Supply Pipe 4.6 mm (3/16") (Art. No. 1348/1350)	Sealing of Connecting Pipe Flex 13 mm (1/2") (Art. No. 1346/1347)	For fixing Spray Nozzles in the Connecting Pipe Flex 13 mm (1/2") (Art. No. 1346, 1347)	For connecting the underground Dripline Pipe (Art. No. 1389/1395) with Connecting Pipe Flex 13 mm (1/2") (1346/1347), Dripline 13 mm (1/2") (13503/13504) for connecting the Connection Pipe Flex (Art. No. 1346/1347) with standard supply pipes 13-16 mm.
Contents	3 pieces	2 pieces	2 pieces	5 pieces	5 pieces	5 pieces	1 piece
Article No.	13203	13202	13201	13204	13205	13206	13220

Micro-Drip-System for Potted Plants

Starter Sets

MADE IN GERMANY



New! Set

Micro-Drip-Irrigation Balcony Set
For 15 plants

Contents
1 Master Unit 1000, 20 m Supply Pipe 4.6 mm (3/16"), 10 Pipe Pegs 4.6 mm (3/16"), 15 Inline Drip Heads pressure-compensating 2 l/h, 5 T-Joints 4.6 mm (3/16"), 2 Regulation and Shut-Off Valves 4.6 mm (3/16"), 5 Plug 4.6 mm (3/16")

Artikel No. 13401



New! Set

Micro-Drip-Irrigation Terrace Set
For 30 plants

Contents
1 Master Unit 1000, 15 m Connecting Pipe Flex 13 mm (1/2"), 10 Connectors 13 mm (1/2") - 4.6 mm (3/16"), 2 Plugs 13 mm (1/2"), 20 m Supply Pipe 4.6 mm (3/16"), 20 Pipe Pegs 4.6 mm (3/16"), 5 Plugs 4.6 mm (3/16"), 5 T-Joints 4.6 mm (3/16"), 3 Regulation and Shut-Off Valves 4.6 mm (3/16"), 10 Adjustable Endline Drip Heads 0-15 l/h, 20 Inline Drip Heads 2 l/h, 1 Cleaning Needle

13400

Endline Dripper

1 MADE IN GERMANY
2 MADE IN EUROPE



New!

Endline Drip Head 2 l/h¹

Water flow 2 l/h

Special features

Contents
25 Endline Drip Heads,
1 Cleaning Needle

Article No. 13307



New!

**Endline Drip Head 2 l/h,
pressure-compensating**²

Constant 2 l/h independent of the water pressure

Self-cleaning with membrane/labyrinth technology, constant water output, self-sealing when system switched off

10 pieces

13302



New!

**Adjustable Endline Drip Head
0-15 l/h**¹

Adjustable from 0-15 l/h

Fully adjustable endline drip head with integrated cleaning needle

10 pieces

13305



New!

**Adjustable Endline Drip
Head pressure-compensating**²

Adjustable from 1-8 l/h, independent of the water pressure

Adjustable with volume scale, self-cleaning with membrane/labyrinth technology, constant water output, self sealing when system switched off

5 pieces

13304

Inline Dripper

For Potted Plants

For Plant Areas

1 MADE IN GERMANY
2 MADE IN EUROPE



New!

Inline Drip Head 2 l/h¹

Water flow 2 l/h

Special features
Can also be used as Endline Drip Head

Contents
10 Inline Drip Heads, 1 Plug, 1 Cleaning Needle

Article No. 13317



New!

**Inline Drip Head 2 l/h
pressure-compensating**²

2 l/h

Self-cleaning with membrane/labyrinth technology, constant water flow, self-sealing when system switched off

10 Inline Drip Heads, 1 Plug

13312



New!

**Adjustable Inline Drip
Head 0-15 l/h**¹

0-15 l/h

Fully adjustable spray head with integrated cleaning needle

10 Inline Drip Heads, 1 Plug

13315



New!

**Adjustable Inline Drip Head¹
pressure-compensating**

1-8 l/h

Adjustable, with volume scale. Self-cleaning with membrane/labyrinth technology, constant water output, self-sealing when system switched off

5 Inline Drip Heads, 1 Plug

13314

Holiday and Balcony Watering

Watering with power supply



Set

Holiday Irrigation Set

Use indoor/outdoor Indoor, for up to 36 pot plants

Water connection required -

Power connection required •

Contents
Transformer, pump, 3 drip distributors with 12 outlets each, 9 m Distribution Pipe, 30 m Drip Pipe, 36 Pipe Pegs, 20 Plugs

Article No. 1265



Set

**Holiday Irrigation Set with
Water Reservoir**

Indoor, up to 36 pot plants

-

•

10.5 l extendable water reservoir, transformer, pump, 3 drip distributors with 12 outlets each, 9 m Supply Pipe, 30 m Drip Pipe, 36 Pipe Pegs, 20 Plugs

13366



Set

city gardening Balcony Watering

Outdoor, up to 25 plants

-

•

Water Control for pump, 25 Inline Drip Heads approx. 2 l/h with Plug and Cleaning Needle, 10 m Distribution Pipe 4.6 mm (3/16"), 15 Pipe Pegs

1407

Solar-powered Watering

1 MADE IN GERMANY



reddot winner 2020
innovative product



Set

**Solar-powered Irrigation
AquaBloom Set²**

Use indoor/outdoor Outdoor, up to 20 plants

Water connection required -

Power supply required -

Contents
1 x Main-Unit with integrated pump and solar panel, 20 x 0.5 l/h pressure-compensating Inline Drip Heads, 15 x (3/16") Pipe Pegs, 3 x rechargeable AA batteries 1.2 V, 2,400 mAh, 8 x (3/16") Plugs, 1 x Filter, 20 m (3/16") Distribution Pipe

Article No. 13300



Set

**Solar-powered AquaBloom Water
Reservoir Set**

Outdoor, up to 20 plants

-

-

1 x 10.5 l Water Reservoir extendable with Plug, 1 x Main-Unit with integrated pump and solar panel, 20 x 0.5 l/h Inline Drip Heads pressure-compensating, 15 x (3/16") Pipe Peg, 3 x rechargeable AA batteries 1.2 V 2,400 mAh, 8 x (3/16") T-Joints, 8 x (3/16") Plugs, 1 x filter, 20 m (3/16") Distribution Pipe

13301



Water Reservoir^{1,2}

Outdoor

-

-

1 x 10.5 l Water Reservoir
1 x Plug (3/16")

13367

Micro-Drip-System for Plant Areas

Starter Sets

MADE IN GERMANY



New! Set

Micro-Drip-Irrigation Vegetable Bed/Flower Border Set

For up to 60 m² vegetable bed/flower border

Contents
1 Master Unit 1000, 1 Installation Tool, 25 m Connecting Pipe Flex 13 mm (1/2"), 15 Pipe Pegs 13 mm (1/2"), 2 T-Joints 13 mm (1/2"), 2 L-Joints 13 mm (1/2"), 3 Plugs 13 mm (1/2"), 5 Control Valves 4.6 mm (3/16"), 4 Spray Nozzles 90°, 1 Spray Nozzle 360°, 5 Extension Pipes for Spray Nozzles

Article No. 13450



New! Set

Micro-Drip Irrigation Raised Bed/Bed Set

For a bed/raised bed with up to 35 plants

Contents
1 Master Unit 1000, 1 Installation Tool, 15 m Connecting Pipe Flex 13 mm (1/2"), 5 Pipe Pegs 13 mm (1/2"), 1 T-Joint 13 mm (1/2"), 2 L-Joints 13 mm (1/2"), 5 Connectors 13 mm (1/2") - 4.6 mm (3/16"), 2 Plugs 13 mm (1/2"), 15 m Distribution Pipe 4.6 mm (3/16"), 20 Pipe Pegs 4.6 mm (3/16"), 35 Inline Drip Heads 2 l/h pressure-compensating, 2 Regulation and Shut-off Valves 4.6 mm (3/16"), 5 Plugs 4.6 mm (3/16")

Article No. 13455

Spray Nozzles

MADE IN GERMANY



New!



New!



New!



New!



New!



New!

Endline Micro Strip Sprinkler

Use
For covering long, narrow beds with fine spray

Irrigation diameter –

Range approx. 2.75 m

Sprinkling width approx. 0.6 m

Contents 5 pieces

Article No. 13318

Micro Strip Sprinkler

Use
For covering long, narrow beds with fine spray

Irrigation diameter –

Range approx. 5.5 m

Sprinkling width approx. 0.6 m

Contents 5 pieces

Article No. 13319

Spray Nozzle 90°

Use
For covering beds with fine spray from the corner

Irrigation diameter –

Range approx. 2.5 m

Sprinkling width –

Contents 5 pieces

Article No. 13320

Spray Nozzle 180°

Use
For covering beds with 180° fine spray

Irrigation diameter –

Range approx. 2.5 m

Sprinkling width –

Contents 5 pieces

Article No. 13321

Spray Nozzle 360°

Use
For covering beds with 360° fine spray

Irrigation diameter 6 m

Range approx. 3 m

Sprinkling width –

Contents 5 pieces

Article No. 13322

6 in 1 Spray Nozzle

Use
Flexible use for different garden areas

Irrigation diameter –

Range adjustable

Sprinkling width –

Contents 2 pieces

Article No. 13324

Nozzles, Sprinklers & Accessories

MADE IN GERMANY



New!



New!



New!



New!



New!



New!



New!

Micro Mist Nozzle

Use
For covering newly planted beds with fine spray from above

Area coverage Ø 1m

Range –

Sprinkling width –

Contents 5 pieces

Article No. 13323

Small Area Spray Nozzle

Use
Accurate watering of small areas such as shrubs and flower bushes

Area coverage Ø 10–40 cm

Range –

Sprinkling width –

Contents 10 pieces

Article No. 13306

Inline Small Area Spray Nozzle

Use
Accurate watering of small areas such as shrubs and flower bushes

Area coverage Ø 10–40 cm

Range –

Sprinkling width –

Contents 10 Small Area Nozzles, 1 Plug

Article No. 13316

Oscillating Sprinkler OS 90

Use
Watering of square and rectangular areas

Area coverage 1–90 m²

Range Adjustable from 0.5–7 m

Sprinkling width Adjustable from 1.5–13 m

Contents 1 Oscillating Sprinkler, 1 Plug

Article No. 13325

Extension Pipe for Spray Nozzles

Use
For Spray Nozzles for watering over tall plants

Area coverage –

Range –

Sprinkling width –

Contents 5 pieces

Article No. 13326

Reguliertventil

Use
For adjusting the flow rate and range of Spray Nozzles

Area coverage –

Range –

Sprinkling width –

Contents 5 pieces

Article No. 13231

Extension Pipe OS 90

Use
For Oscillating Sprinkler OS 90

Area coverage –

Range –

Sprinkling width –

Contents 2 pieces

Article No. 13334

Note

For an overview of Inline Drip Heads for plant areas, please to go page 56.



Micro-Drip-System for Plant Rows

Starter Sets

MADE IN EUROPE



4.6 mm (3/16")

New! Set



Micro-Drip-Irrigation Vegetable/Plant Row Set (15 m)

For 15 m planting row or sensitive kitchen garden and ornamental plants

Internal pipe diameter 4.6 mm (3/16")

Water output 1.6 l/h per section of 30 cm

Installation only above ground

Contents
1 Master Unit 1000, 15 m Drip Irrigation Line 4.6 mm (3/16"), 15 Pipe Pegs 4.6 mm (3/16"), 1 Plug 4.6 mm (3/16")

Article No. 13010

13 mm (1/2")

New! Set



Micro-Drip-Irrigation Hedge/Bush Set 25 m

For 25 m planting row (e.g. hedges or planted borders)

Internal pipe diameter 13 mm (1/2")

Water output 1.6 l/h per section of 30 cm

Installation above and below ground

Contents
1 Master Unit 1000, 25 m Drip Irrigation Line 13 mm (1/2"), 15 Pipe Pegs 13 mm (1/2"), 1 Plug 13 mm (1/2")

Article No. 13500

New! Set



Micro-Drip-Irrigation Hedge/Bush Set 50 m

For 50 m planting row (e.g. hedges or planted borders)

Internal pipe diameter 13 mm (1/2")

Water output 1.6 l/h per section of 30 cm

Installation above and below ground

Contents
1 Master Unit 1000, 50 m Drip Irrigation Line 13 mm (1/2"), 1 Plug 13 mm (1/2")

Article No. 13501

Drip Lines

MADE IN EUROPE



4.6 mm (3/16")

New!



Dripline 4.6 mm (3/16") 15 m

Internal pipe diameter 4.6 mm (3/16")

Water output 1.6 l/h per section of 30 cm

Use
15 m planting row for sensitive kitchen garden and ornamental plants

Installation only above ground

Contents
15 m Drip Irrigation Line without fittings

Article No. 1362

13 mm (1/2")

New!



Dripline 13 mm (1/2") 25 m

Internal pipe diameter 13 mm (1/2")

Water output 1.6 l/h per section of 30 cm

Use
For extending the above and below ground Drip Irrigation Lines for planted borders or lawns

Installation above or below ground

Contents
25 m Drip Irrigation Line without fittings

Article No. 13503

New!



Dripline 13 mm (1/2") 50 m

Internal pipe diameter 13 mm (1/2")

Water output 1.6 l/h per section of 30 cm

Use
For extending the above and below ground Drip Irrigation Lines for planted borders or lawns

Installation above or below ground

Contents
50 m Drip Irrigation Line 13 mm (1/2") without fittings

Article No. 13504

DO it YOURSELF

Micro-Drip-System

Put an end to the traditional watering solution, such as hose or water cans! You want to be supported with a compact and convenient irrigation solution? Then our Starter Sets are the perfect first step into drip irrigation. Select the set for your specific application area. The package contains a Master Unit with a Connecting Pipe, Connectors and the appropriate Nozzles or Drip Heads. Easily assemble the components together with just a click. Everything is securely connected. Rearrangement of the installation is possible is at any time. A Water Control, extension sets or individual components can easily be added.

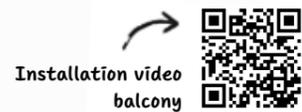
Tip

For even more convenient and time-saving irrigation, we recommend the Water Control Flex (art. no. 1890) or Select (art. no. 1891). Would you like even more comfort - or control the watering via app? Compare our Water Controls on page 46.

Starter Sets for Potted Plants

Up to 15 Potted Plants
Starter Set Balcony (Art. No. 13401)

Up to 30 Terrace Potted Plants on a terrace
Starter Set Terrace (Art. No. 13400)



You want to water more plants?

- Easily complement the Start Sets by buying the following products:
- + Inline/Endline Drip Heads (see page 56)
 - + Pipe Pegs (Art. No. 13218, 13208, see page 54)
 - + Connectors (see page 55)
 - + Additional Pipes (see page 54)

Tip

Use the colour code as a guide in the planning and selection process. The Starter Sets are also colour-coded for easy identification of your required application usage. If your installation requirement is particularly complex, we recommend using the GARDENA Micro-Drip Configurator as a support when planning your installation.



Starter Sets for Plant Area

Raised beds and beds with up to 35 sensitive plants
Starter Set (Art. No. 13455)



Installation video

You want to water more than 35 bed plants?

- Simply buy the required quantities of Drip Heads:
- + Inline Drip Heads (see page 56)
 - + Pipe Pegs (Art. No. 13218)
 - + Connectors (see page 54)
 - + Pipes (see page 54)

Vegetable/plant beds up to 60 m²
Starter Set (Art. No. 13450)



Installation video

You want to extend your set?

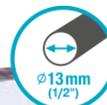
- Select from range of Spray Nozzles for your specific bed:
- + Spray Nozzles (see page 58)
 - + Pipe Pegs (Art. No. 13208)
 - + Connectors (see page 54)
 - + Pipes (see page 54)

Starter Sets for Plant Rows

Hedges and Shrubs up to 25 m
Starter Set (Art. No. 13500)

Hedges and Shrubs up to 50 m
Starter Set (Art. No. 13501)

Vegetable and plant rows up to 15 m
Starter Set (Art.-No. 13010)



Installation video

You have a longer plant row?

- Simply buy your desired extension for your Dripline installation:
- + 25 m Dripline 13 mm 1.6 l/h (Art.-No. 13503) (see page 59)
 - + 50 m Dripline 13 mm 1.6 l/h (Art.-No. 13504) (see page 59)
 - + Pipe Peg (Art.-No. 13208)



Installation video

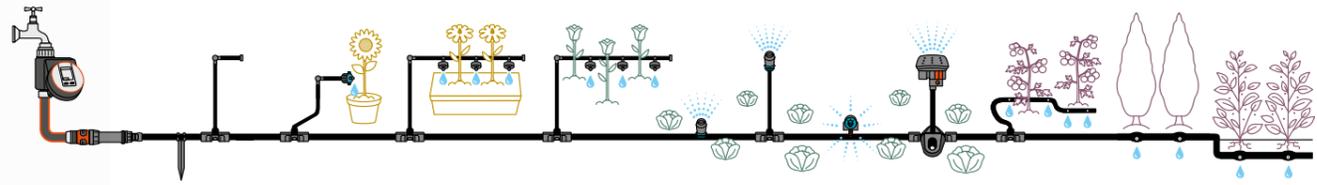
You have a longer plant row?

- Simply buy your desired extension for your Dripline installation:
- + 15 m Dripline 4.6 mm 1.6 l/h (Art.-No. 13010) (see page 59)
 - + Pipe Pegs (Art.-No. 13218)

Let's get started.

How to build your own Micro-Drip-System

You'll be amazed: assembling your own MDS solution is easier than you think. Just follow a few simple steps and you will quickly have your individual and convenient watering solution.



System Start

At the beginning you set the Water Control and then the so-called Master Unit. The Master Unit regulates the pressure and filters the water.

Connection

There are 2 different connection sizes. 13 mm Pipes and Connectors for larger areas and 4.6 mm Pipes and Connectors for smaller surfaces, such as balconies.

Potted Plants

For pots or flower boxes choose Drip Heads or Starter Sets marked in yellow.

Plant Areas

For beds you select Drip Heads, Spray Nozzles or Starter Sets marked in green.

Plant Rows

Pipeline for above and below ground irrigation of plant rows. Select the practical Starter Sets marked in purple and extend them with Extension Pipes if desired.

The planning process

Do you want to extend your existing system or would like to cover an area in your garden that goes beyond the components included in the Starter Sets? Would you like to create your bespoke Micro-Drip solution and cover different areas in your garden? We are going to show you how many plants you can water with just one connection attached to the water tap.

1. Select number of water outlets available to cover the designated areas.
2. Then identify the load capacity of your irrigation system - the connection value. This is defined by considering following factors:
 - a.) Mode of installation of the Connection and Supply Pipes
 - b.) Positioning of the Master Unit
 You can then compare the connection value of your system with the consumption values of all your planned application devices.



1. Assemble the irrigation equipment

Map out the number of pots or size of areas you want to cover. Define the suitable components based on the type of usage application, such as Drip Heads, Dripline or Spray Nozzles. Check out pages 56-59 and discover the range of components available by usage application.

For example:

Terrace with 4 potted plants and 1 plant tray with 5 plants

- 4 x Adjustable Endline Drip Head 1-8 l/h for 4 plant pots
- 5 x Inline Drip Head pressure-compensating for plant pot with 5 plants in row

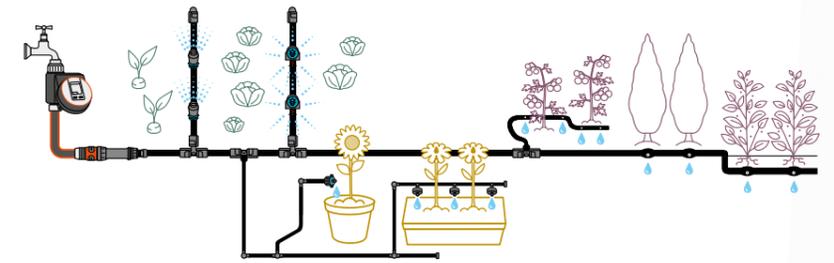
Narrow flower bed at the edge of the terrace

- 2 x Endline Micro Strip Sprinkler
- 1 x Micro Strip Sprinkler

2a. Select the ideal installation method of Connection and Supply Pipes

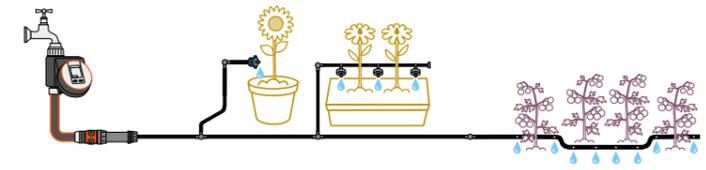
Installation type 1 4.6 mm and 13 mm pipes

To be able to cover more plants, the Supply Pipe 4.6 mm is used in combination with the Connection Pipe 13 mm. The main line is the connection pipe, the small supply pipe transports the water to the plants. Maximum combination is approx. 60 m Connection pipe and approx. 15 m supply pipe.



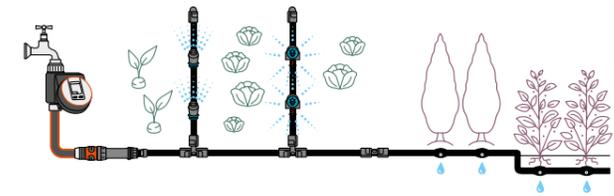
Installation type 2 4.6 mm pipes

In this installation method only the supply pipe and drip line 4,6 mm is used. It is ideal for small garden beds or balconies. Maximum length is approx. 30 m.*



Installation type 3 13 mm pipes

Only the pipe and drip line 13 mm is used e. g. 13 mm drip line or connection pipe in combination with spray nozzles or endline drip heads. Maximum length is approx. 60 m

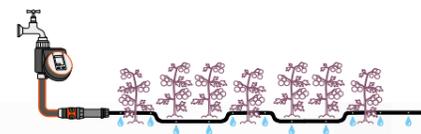


* The maximum pipe length is given as a guide only. The value can vary based on the number of connected components

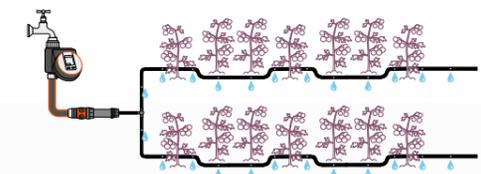
2b. Positioning of the Master Unit

The Master Unit is an important component of the Micro-Drip-System. With this ready-to-connect Master Unit the water pressure is regulated and the water is filtered. If you place the Master Unit centrally in the pipe run, you can easily double the length of the pipe system (see 3. Connection values). If the system starts further away from the tap, then you can bridge the distance with an underground GARDENA pipeline or a garden hose. Like this you prevent loss of water pressure.

Master Unit is placed at the System Start



Master Unit is placed centrally in the pipe run



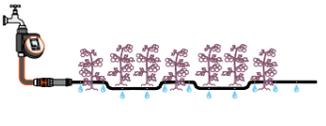
3. Comparison of consumption value and connection value

Three things you need to know:

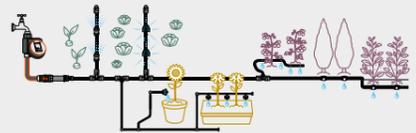
- The Master Unit is the starting point and defines the connection value, depending on the model and installation type.
- The connection value defines the capacity available for the maximum installation of Drip Heads, Spray Nozzles and Driplines.
- The connection value of the system must be higher than the consumption value of the installation.

The connection value depends on your selection of pipe combination and positioning of the master unit. You might notice in the below table that the connection value with a 13 mm pipe is higher than with a 4.6 mm pipe. Now enter how many Drip Heads and Spray Nozzles you are planning to install in your system. If the consumption value is below the connection value, you will have a reliable irrigation system.

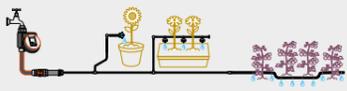
Connection values

		Master Unit at the System Start		Master Unit in the middle of the pipe run*	
					
		Master Unit 1000	Master Unit 2000	Master Unit 1000	Master Unit 2000
Installation type 1	Connection value Recommended pipe length**	500 13 mm max. 40 m 4.6 mm max. 15 m	1000 13 mm max. 40 m 4.6 mm max. 15 m	1000 13 mm max. 2 x 30 m 4.6 mm max. 15 m	2000 13 mm max. 2 x 30 m 4.6 mm max. 15 m
Installation type 2	Connection value Recommended pipe length**	50 max. 15 m	50 max. 15 m	100 max. 2 x 15 m	100 max. 2 x 15 m
Installation type 3	Connection value Recommended pipe length**	500 max. 40 m	1000 max. 40 m	1000 max. 2 x 30 m	2000 max. 2 x 30 m

Installation type 1
4.6 mm and 13 mm pipes



Installation type 2
4.6 mm pipes



Installation type 3
13 mm pipes



* If the base unit is positioned centrally in the pipe run, then the connected value of each pipe is halved.
** The maximum pipe length is given as a guide only. The value can vary based on the number of connected components.

This is how you proceed ...

To get the most out of your Micro-Drip-System, we recommend **installation type 1**. This way you can make the most of your system and maximise its capacity to cover even larger plant areas and support an extension of the system. Depending on your individual needs, the other two types of installation are also a good option.

Your to-do list:

1. Determine required quantities of the suitable components based on the type of usage application (Drip Heads, Dripline or Spray Nozzles).
2. Determine consumption values of the system (number of application devices x consumption value in the table).
3. Add up the total consumption values. If the consumption value of the system is less than the connection value, the system will operate smoothly.

Consumption values

Art. No.	Name	Consumption values of the application devices		
		M1	M2	M3
13302	Endline Drip Head 2 l/h, pressure-compensating	2	2	5
13304	Adjustable Endline Drip Head 1-8 l/h, pressure-compensating	8	8	20
13305	Adjustable Endline Drip 1-15 l/h*	15	15	38
13306	Small Area Spray Nozzle*	-	-	80
13307	Endline Drip 2 l/h	2	2	2
13312	Inline Drip Head 2 l/h, pressure-compensating	4	4	-
13314	Adjustable Inline Drip Head 1-8 l/h, pressure-compensating	16	16	-
13315	Adjustable Inline Drip Head 1-15 l/h*	30	30	-
13316	Inline Small Area Spray Nozzle*	80	40	-
13317	Inline Drip Head 2l/h	4	4	-
13318	Endline Micro Strip Sprinkler	70	50	70
13319	Micro Strip Sprinkler	70	50	70
13320	Spray Nozzle 90°	90	50	70
13321	Spray Nozzle 180°	120	100	80
13322	Spray Nozzle 360°	140	100	120
13323	Micro Mist Nozzle	40	25	40
13324	6 in 1 Spray Nozzle*	125	50	60
13325	Oscillating Sprinkler OS 90	-	-	1000
13010 / 1362	Dripline 4.6 mm (3/16")**	-	4	-
13503 / 13504	Dripline 13 mm (1/2")**	-	-	7
Total value		262 < 500		

* Flexible adjustable Drip Heads/Nozzles are average values. In individual cases, the value may be higher or lower than stated here, depending on your setting.
** Data per metre of Dripline. If you carry out the installation yourself, we ask for your understanding that we accept no liability and no guarantee for costs and damage that may arise during the implementation of the planning.

Calculation example

Quantity in plan	Consumption value total
4 pcs.	32
5 pcs.	20
2 pcs.	140
1 pcs.	70
262 < 500	

4. Assembly - simply put together

The Micro-Drip-System is very easy to put together.
Typical GARDENA.

Original GARDENA OGS system From the tap to the Master Unit

It starts at the water tap: everything is interconnected, such as Water Control, hose and Master Unit. Easy, leakproof, flexible and safe. For over 50 years we are recognised for safe and innovative product solutions and connections.

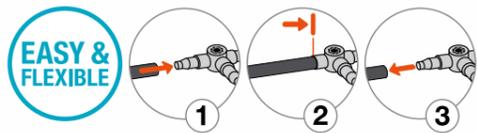
Micro-Drip-System From the Master Unit to the plants

Then the Micro-Drip-System takes over. The Driplines are simply put together with the Connectors (e.g. with 4-Way Coupling or T-Piece). Easy thanks to Quick & Easy technology.

Screw on the desired
Water Control

Mount hose

2 Connect the Master Unit as
part of System Start



All Drip Heads, Nozzles
and Sprinklers are either
screwed or pushed into the
pipe. Everything is kept
tight, everything is very
easy to do.

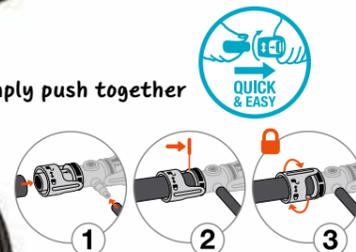
1 The pipe can easily be
cut with scissors

Create hole with
installation tool

Screw Spray Nozzle
in the pre-punched hole

Assemble the
Regulation Valve
below the Spray
Nozzle and screw
it into the
Extension Pipe

Simply push together



Screw the Extension Pipe
into the Connector

Connect Dripline
and ready!

Plug in the
connector

Secure Pipe
with Pipe Pegs

7 Screw in Endline
Drip Heads for
potted plants

6 Install Inline Drip Heads
for plant troughs

8 Screw in the Plug at
the end of the system

8 Install the Plug at the end
of the system

Cut the Pipes to the required length, then plug them together and attach the Drip Heads or Nozzles. You can also attach the Drip Heads and Nozzles first and then put the Pipes together. In any case, everything should be connected and the pipe closed at the end before you start the system with water. If you want to change something later, you can flexibly rebuild the system.

Shopping list GARDENA Micro-Drip-System

Article No.	Name	Content	Piece
Systemstart and Accessories			
13333	Master Unit (flow rate up to 1000 l/h)	1	
13310	Master Unit (flow rate up to 2000 l/h)	1	
13222	Tap Fitting 13 mm (1/2") - G 3/4"	1	
13224	Tap Fitting 4.6 mm (3/16") - G 3/4"	1	
13313	Installation Tool	1	
Pipes and Accessories			
1346	Connecting Pipe Flex 13 mm (1/2"), 15 m	1	
1347	Connecting Pipe Flex 13 mm (1/2"), 50 m	1	
1350	Supply Pipe 4.6 mm (3/16"), 15 m	1	
1348	Supply Pipe 4.6 mm (3/16"), 50 m	1	
13207	Shut-Off/Regulation Valve 13 mm (1/2")	1	
13217	Shut-Off/Regulation Valve 4.6 mm (3/16")	2	
13208	Pipe Pegs 13 mm (1/2")	10	
13218	Pipe Pegs 4.6 mm (3/16")	15	
Connection			
13213	Connector 4.6 mm (3/16")	10	
13212	L-Joint 4.6 mm (3/16")	10	
13211	T-Pieces 4.6 mm (3/16")	10	
13214	4-Way Coupling 4.6 mm (3/16")	10	
13215	Plug 4.6 mm (3/16")	10	
13216	T-Joint Nozzles/Endline Drip Heads 4.6 mm (3/16")	5	
13203	Connector 13 mm (1/2")	3	
13202	L-Joint 13 mm (1/2")	2	
13201	T-Joint 13 mm (1/2")	2	
13204	Connector 13 mm (1/2") - 4.6 mm (3/16")	5	
13205	Plug 13 mm (1/2")	5	
13206	T-Joint Spray Nozzles 13 mm (1/2")	5	
13220	Universal Connector 13 mm (1/2")	1	
Micro-Drip-System for Potted Plants			
Starter Sets			
13401	Micro-Drip-Irrigation Balcony Set	1	
13400	Micro-Drip-Irrigation Terrace Set	1	
Endline Drip heads			
13307	Endline Drip 2 l/h	25	
13302	Endline Drip Head 2 l/h, pressure-compensating	10	
13305	Adjustable Endline Drip 0-15 l/h	10	
13304	Adjustable Endline Drip Head 1-8 l/h, pressure-compensating	5	
Inline Drip Heads			
13317	Inline Drip Head 2 l/h	10	
13312	Inline Drip Head 2 l/h, pressure-compensating	10	
13315	Adjustable Inline Drip Head 0-15 l/h	10	
13314	Adjustable Inline Drip Head 1-8 l/h, pressure-compensating	5	

Article No.	Name	Content	Piece
Holiday and Balcony Watering			
1265	Holiday Irrigation Set	1	
13366	Holiday Irrigation Set with Water Reservoir	1	
1407	city gardening Balcony Watering	1	
13300	Solar-powered Irrigation AquaBloom Set	1	
13301	Solar-powered Irrigation AquaBloom Water Reservoir Set	1	
13367	Water Reservoir	1	
Micro-Drip-System for Plant Areas			
Starter Sets			
13450	Micro-Drip-Irrigation Vegetable Bed/Flower Border Set (60 m ²)	1	
13455	Micro-Drip-Irrigation Raised Bed/Bed Set	1	
Spray Nozzles and Sprinklers			
13318	Endline Micro Strip Sprinkler	5	
13319	Micro Strip Sprinkler	5	
13320	Spray Nozzle 90°	5	
13321	Spray Nozzle 180°	5	
13322	Spray Nozzle 360°	5	
13324	6 in 1 Spray Nozzle	2	
13323	Micro Mist Nozzle	5	
13306	Small Area Spray Nozzle	10	
13316	Inline Small Area Spray Nozzle	10	
13325	Oscillating Sprinkler OS 90	1	
Accessories for Spray Nozzles and Sprinklers			
13326	Extension Pipe for Spray Nozzles	5	
13231	Regulation Valve Sprayers	5	
13334	Extension Pipe OS 90	2	
Inline Drip Heads			
13317	Inline Drip Head 2 l/h	10	
13312	Inline Drip Head 2 l/h, pressure-compensating	10	
13315	Adjustable Inline Drip Head 0-15 l/h	10	
13314	Adjustable Inline Drip Head 1-8 l/h, pressure-compensating	5	
Micro-Drip-System for Plant Rows			
Starter Sets			
13010	Micro-Drip-Irrigation Vegetable/Plant Row Set (15 m)	1	
13500	Micro-Drip-Irrigation Hedge/Bush Set (25 m)	1	
13501	Micro-Drip-Irrigation Hedge/Bush Set (50 m)	1	
Driplines			
1362	Dripline 4.6 mm, 3/16" (15 m)	1	
13503	Dripline 1.6 l/h for Above and Below Ground Irrigation (25 m)	1	
13504	Dripline 1.6 l/h for Above and Below Ground Irrigation (50 m)	1	



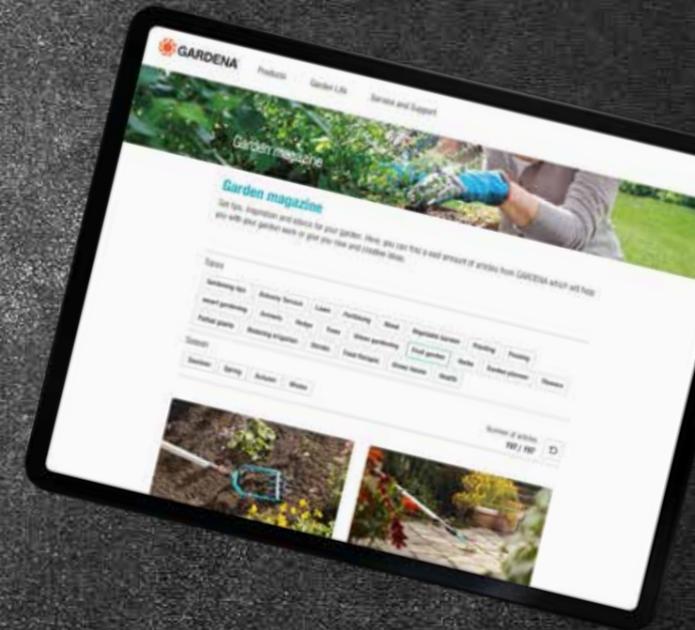
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