



# Rainwater harvesting solutions



RAINWATER HARVESTING TANK SYSTEMS  
FILTER & ACCESSORIES



Production site in Dachstein (France)



Production site in Teningen (Germany) near Freiburg

## GRAF – Setting standards in quality

GRAF has been supplying high-quality plastic products to its customers for 50 years. In 1974, GRAF developed its first pioneering range of rainwater harvesting products. Today we are the market leader in numerous countries for Rainwater Harvesting Systems.

### Commitment to Germany as our corporate site

GRAF continually invests in the development of its headquarters in Teningen, Germany. Covering an area of 155,000 square metres – equivalent to 31 football pitches – it is one of the world's most state-of-the-art manufacturing facilities for plastic products. We feel a strong sense of loyalty to Germany as our corporate site. For one thing, our long history means we have deep-rooted ties with the site. And for another, here in Teningen we have access to a highly skilled and motivated workforce who enable us to uphold and develop our high quality standards.

### Logistics Expertise

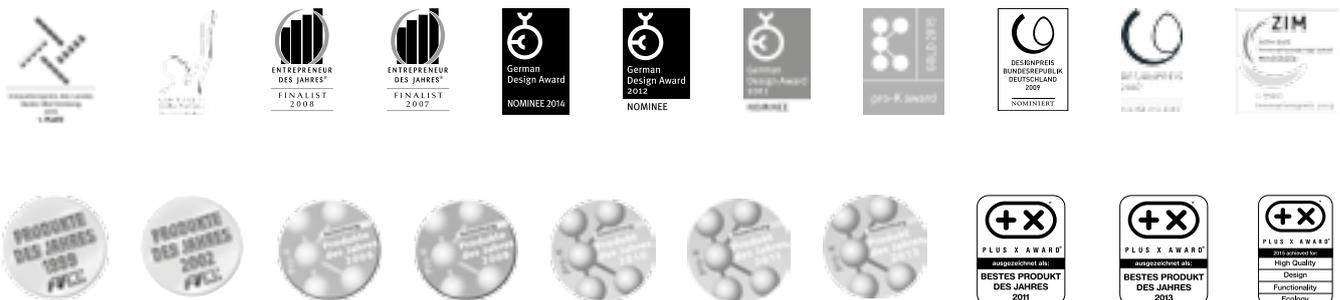
GRAF products are exported to over 60 countries around the globe. The share of products exported by our company has almost doubled over the last five years. We owe the outstanding loyalty of our customers to unique product quality, great value for money and the distinct service approach we deploy with our trade partners. Well thought-out logistics with short response and delivery times are essential to ensuring a high standard of service. GRAF logistics have an impressively high delivery rate of 99 %

### Engineering Expertise

More than 200 registered property rights and countless awards document our work as an innovation leader. These innovations are the growth drivers and basis for our economic success. All GRAF products are designed by our own development department, which brings together all the expertise needed, from design and function to construction and structural analysis.

### Our goal: your satisfaction

More than 100,000 satisfied customers already benefit from the advantages of GRAF rainwater harvesting systems.





## High Quality Manufacturing

Our products have to fulfil a wide range of requirements. GRAF has expertise in all standard plastic manufacturing processes and can access the optimum process for a given product.

### Durable products: reliable investment

Right from the product development stage, GRAF attaches great importance to durable design. GRAF offers a warranty of up to 15 years for its rainwater tanks. All products manufactured by GRAF are also 100 % recyclable.

### Sustainability starts with production

Nearly all GRAF products work to protect the environment. Thanks to GRAF rainwater harvesting systems our customers can cut their mains water consumption by at least 50 % . State-of-the-art facilities in the production process ensure minimal use of resources.

Our injection moulding process requires considerably less energy than standard. The heat produced during production is used to heat the production and logistics building thanks to heat recovery.

### Environmental products from recycled raw materials

Over 50 % of the raw materials processed at GRAF are recycled. Thanks to an in-house raw materials recycling facility, we ensure a constantly high quality of raw materials and take account of the sustainability concerns of our products throughout the value added chain.

### Seamless quality assurance

Our products portray an image of superlative production quality and reliability. Each part is then given a serial number. The production process for each and every tank is documented throughout. All production parameters, such as weight or material batch, are recorded for quality assurance.



Manufacturing certified according to ISO 9001



World's biggest injection moulding machine



Blow moulding process



Rotational moulding



COMPOSTERS

HORTICULTURE & VITICULTURE

STORMWATER MANAGEMENT



**DOWNPIPE FILTERS**



**WASTEWATER TREATMENT**



**RAINWATER HARVESTING UNDERGROUND**

**WATER EXTRACTION**

**RAINWATER HARVESTING OVERGROUND**

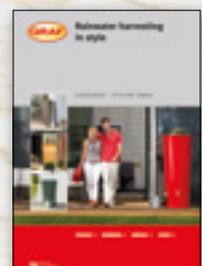


# Rainwater harvesting in style



## Functions of the app

- Calculate your annual savings
- Browse the complete product range
- Access the video channel GRAF TV



## Rainwater harvesting in style

For more information about Rainwater harvesting in style, ask for our catalogue.

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www.graf-water.com



## Q Webcode G1103

The webcode will lead you directly to the required information.

- Installation instructions
- Technical drawings
- Detailed product information
- Downloads

## Symbols in the catalogue

### Load capacity



Suitable for pedestrian loading



Suitable for vehicle loading



Lorry-bearing

### Application range



Watering the garden



Flushing the toilet



Washing machine

# Carat S underground rainwater tank

Ingeniously designed down to the smallest detail

## Unique manufacturing process

The GRAF Carat S underground tank is unlike any other underground tank in the world. It is the largest tank of its kind to be manufactured by injection compression moulding. This technique

provides the tank with unbeatable stability and ensures that each component is produced with the highest of accuracy.

Unlike other underground tanks, the wall thickness is equal in all areas of the tank. The production tolerances

are kept to a minimum, resulting in a product of the highest quality, which is strong, accurate, reliable and extremely user-friendly.

To manufacture the Carat S range, one of the worlds largest injection moulding systems had to be developed.



## The tank that turns its head for you

The GRAF Carat S underground tank has a rotating tank dome. The tank dome can be aligned with the connections independently of the tank – this makes installation much easier! All installation pipes are connected using the five standard lip seals. The Carat S telescopic dome shaft connects the system to the ground surface. The height of the tank can be smoothly adjusted to suit the local conditions and it can be tilted by 5°. To allow the lid to be flush with the finished ground level.

## Four-stage cleaning process for best water quality



### Stage 1

First the rainwater is cleaned by a patented filter system. The cleaned water flows into the tank and dirt particles are rinsed into the sewer system along with a small amount of residual water.



### Stage 2

To allow very fine dirt particles to settle, the filtered water is routed through a steady inflow pot on the base of the tank. This prevents the water from being stirred up and also adds oxygen to the water at the bottom of the tank. This keeps the water clear and fresh.



### Stage 3

Particles that are lighter than water (such as pollen) form a floating layer on the surface. The overflow siphon installed in the tank causes the floating layer to be removed when the tank overflows. So it's important to let the tank overflow regularly to ensure consistent water quality.



### Stage 4

The collected rainwater is removed by means of a floating extraction unit near the top of the tank. The best water quality is found around 10 cm (4") below the water's surface.

# The tank with a smart head!



## Built-in professional filter technology

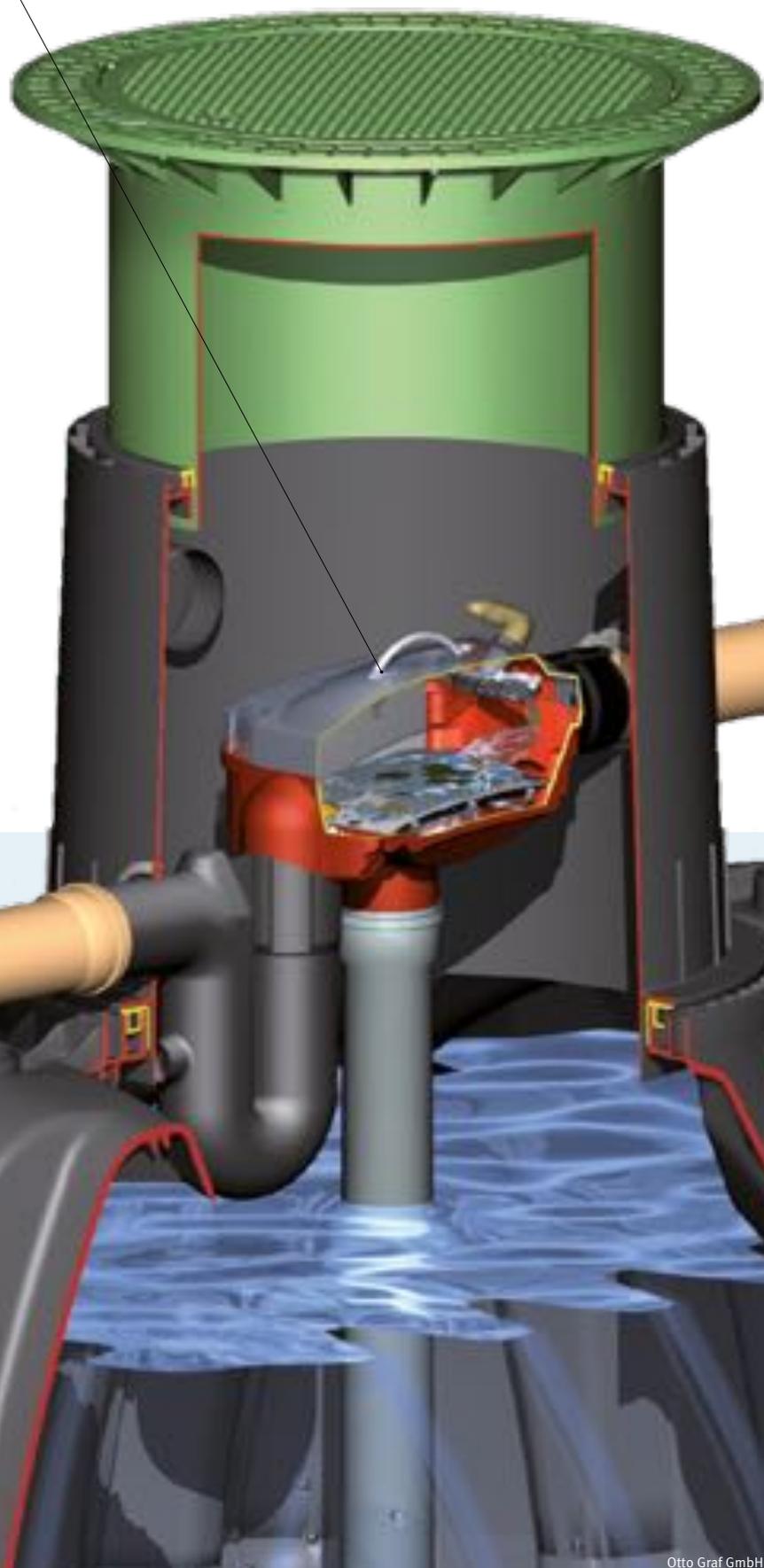
The GRAF Optimax-Pro filter is specially designed to be used in the GRAF Carat S underground tank.

- Compact filter technology integrated in the tank
- Low maintenance, self-cleaning
- Optional internal cleaning unit
- Transparent cover for easier inspection
- Water yield of over 95 %

See page 59 for more information



Quality material  
**Duralen**



Rainwater harvesting ▶ Carat S

# Carat S complete packages for garden irrigation

During a hot summer, as every gardener knows, it takes a lot of water to keep thirsty plants happy and healthy. But for owners of a GRAF rainwater harvesting system, there's no need to worry! With Carat S complete packages, specially designed for watering the

garden, rainwater harvesting is child's play. The components are optimally designed to work together. The pump can be operated above ground or installed in the tank.

The irrigation technology can be connected to the convenient GRAF water hose connection box using a standard hose coupling. Carat S complete packages for garden irrigation are an effective solution for any garden.



How do I access water for my garden?

GRAF TV  
[www.graf.info/v201](http://www.graf.info/v201)



## Carat S complete packages for garden irrigation

### 100% water yield

GRAF garden packages have a basket filter that reliably holds back contaminants. The filter construction guarantees a water yield of 100%.

### Dome shaft

The GRAF dome shaft provides easy access to the filter and tank. It features a tank cover suitable for pedestrian loading and blends seamlessly into the ground surface. Because it is flush with the ground, the tank cover won't get in the way during lawn mowing.

### Automatic pump

The Carat S Garden Comfort complete package includes a submersible pump that switches on and off automatically. The water can be extracted very easily: just open the tap and you have water on demand!

### Easy extraction

GRAF's unique water hose connection box allows you to connect up equipment for watering the garden. It can be installed at any location in the garden or in the tank cover itself. Simply connect your garden hose or lawn sprinkler to the integrated standard connection valve.



# Carat S garden Jet package

The great value complete solution



## Carat S garden Jet package

- The great value complete solution
- Low visual impact
- Integrated filter technology (100 % water yield)
- Easy to install using prepared components

**Q Webcode** G1201

## Scope of supply

- ① Carat S underground tank
- ② Mini telescopic dome shaft for pedestrian loading with an adjustable PP lid 750 mm – 950 mm (29.5 – 3' 1.4")
- ③ Filter package 2, consisting of
  - Internal Universal Filter 3
  - Inflow stilling system for controlling the water inflow
  - Overflow siphon and rodent guard
  - Spannfix pipe connection sleeve
- ④ Garden Jet pump package, consists of:
  - Garden Jet pump 700
  - Water hose connection box
  - Suction set with 12,5 m (41') suction pipe

Volume [l]	Volume [US gal.]
2,700	700
3,750	1,000
4,800	1,250
6,500	1,700
8,500 <sup>1)</sup>	2,240
10,000 <sup>1)</sup>	2,640
13,000 <sup>2)</sup>	3,400

<sup>1)</sup> Carat XL underground tank

<sup>2)</sup> Set consisting of two Carat S underground tanks



Vehicle loading version available see page 18

# Carat S garden Comfort package

The simple garden solution with submersible pump system



## Carat S garden Comfort package

- Simple to install and use
- Use a simple hose connection socket and pressure sensitive pump for automatic water activation
- Low visual impact
- Reduces electricity consumption by using a pressure drop activation system, so that electricity is only used when required
- Integrated filter technology (100 % water yield)

**Q Webcode G1202**

## Scope of supply

- ① Carat S underground tank
- ② Mini telescopic dome shaft for pedestrian loading with an adjustable PP lid 750 mm – 950 mm (29.5 – 3' 1.4")
- ③ Filter package 2, consisting of:
  - Internal Universal Filter 3
  - Inflow stilling system for controlling the water inflow
  - Overflow siphon and rodent guard
  - Spanifix pipe connection sleeve
- ④ Garden Comfort pump package, consists of:
  - Integra INOX Submersible and suction pump, with protection against dry running and automatic start / stop function
  - Floating water extraction unit
  - Water hose connection box
  - 10 m (33') of pressure hose

Volume [l]	Volume [US gal.]
2,700	700
3,750	1,000
4,800	1,250
6,500	1,700
8,500 <sup>1)</sup>	2,240
10,000 <sup>1)</sup>	2,640
13,000 <sup>2)</sup>	3,400

<sup>1)</sup> Carat XL underground tank

<sup>2)</sup> Set consisting of two Carat S underground tanks



Vehicle loading version available see page 19



You will find an enquiry form and sizing assistance on our website [www.graf-water.com](http://www.graf-water.com)

# Carat S complete packages for the home and garden

Day after day households use precious drinking water to flush the toilet, run the washing machine and water the garden. But these applications, which use a lot of water, don't actually require water of drinking quality. GRAF rainwater harvesting systems provide a reliable supply of rainwater for these uses,

reducing drinking water consumption by around 50%. The self-cleaning Opti-max-Pro filter feeds rainwater into the underground tank through the steady inflow. The feed technology (e.g. the GRAF Aqua Center Silentio, page 69) is installed in the technical room inside the house. It provides a reliable supply

of rainwater to the separate supply network. When no rainwater is available, drinking water is automatically supplied instead.

Carat S complete packages for the home are state of the art.



What happens when my tank is empty?

GRAF TV  
[www.graf.info/v202](http://www.graf.info/v202)



## Carat S complete packages for home and garden

### Self-cleaning filter

Graf household packages include the patented Optimax-Pro filter. This self-cleaning filter delivers a water yield of over 95% and requires minimal maintenance. If required the filter can also be equipped with a cleaning unit, which cleans contaminants out of the filter at your preferred intervals. With a mesh width of just 0.35 mm (0.02"), the filter reliably holds back dirt.

### Very high water quality

Not only the GRAF Optimax-Pro filter but also the floating extraction unit ensures very high water quality. This unit extracts the water from the cleanest zone – about 10 cm (4") below the water's surface. The GRAF Professional complete

package also comes with a reversible flow fine filter that filters the water again before it is fed into the supply network.

### Reliable, ultra-quiet intake

The GRAF Aqua Center Silentio monitors the level of rainwater in the Carat S underground tank. When no rainwater is available, drinking water is automatically supplied instead. For ultra-quiet operation the domestic water control unit is installed in a fully encapsulated housing.



# Carat S Eco-Plus package

The ideal solution for use in the home and garden



## Carat S Eco-Plus package

- Economic package solution
- Patented filter technology and in-house pump system with automatic switch-over to mains water supply
- Easy to assemble due to modular components
- Float switch controlled
- Low visual impact

Q Webcode G1203

## Scope of supply

- ① Carat S underground tank
- ② Maxi telescopic dome shaft for pedestrian loading with an adjustable PP lid 750 mm – 1,050 mm (29.5 – 3' 5")
- ③ Filter package 3 consisting of:
  - Internal Optimax-Pro filter (self-cleaning)
  - Inflow stilling system for controlling the water inflow
  - Overflow siphon with rodent guard function
  - Spannfix pipe connection sleeve
- ④ Eco-Plus pump package consists of:
  - Water supply control unit
  - Floating water extraction unit
  - DN 100 (4") wall duct
  - Labelling set
  - Suction pipe 12 m (39' 4")

Volume [l]	Volume [US gal.]
3,750	1,000
4,800	1,250
6,500	1,700
8,500 <sup>1)</sup>	2,240
10,000 <sup>1)</sup>	2,640
13,000 <sup>2)</sup>	3,400

<sup>1)</sup> Carat XL underground tank

<sup>2)</sup> Set consisting of two Carat S underground tanks



Vehicle loading version available see page 19



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# Carat S Professional package

The convenient complete solution for use in the home and garden



## Carat S Professional package

- Patented filter technology and in-house drinking water intake
- Easy to fit using modular technology
- Microprocessor control system
- Digital fill level display
- Automatic rinsing intervals for the intake reservoir and the filter
- Low visual impact

Q Webcode G1204

## Scope of supply

- ① Carat S underground tank
- ② Maxi telescopic dome shaft for pedestrian loading with an adjustable PP lid 750 mm – 1,050 mm (29.5 – 3' 5")
- ③ Filter package 3 consisting of:
  - Internal Optimax-Pro filter (self-cleaning)
  - Inflow stilling system for controlling the water inflow
  - Overflow siphon and rodent guard
  - Spannfix pipe connection sleeve
- ④ Pump package Professional consisting of:
  - Drinking water feeding module Aqua-Center-Silentio
  - Floating water extraction unit
  - DN 150 (6") wall duct
  - Automatic filter cleaning unit Opticlean®
  - Reversible flow filter
  - Labelling set, PE suction pipe 12 m (39' 4")

Volume [l]	Volume [US gal.]
3,750	1,000
4,800	1,250
6,500	1,700
8,500 <sup>1)</sup>	2,240
10,000 <sup>1)</sup>	2,640
13,000 <sup>2)</sup>	3,400

<sup>1)</sup> Carat XL underground tank

<sup>2)</sup> Set consisting of two Carat S underground tanks

Vehicle loading version available see page 19

## Carat S package Silentio-Press

suitable for pedestrian loading. Ideal for installations >15 m (49' 3") away from the house

Q Webcode G1210

Volume [l]	Volume [US gal.]
3,750	1,000
4,800	1,250
6,500	1,700
8,500 <sup>1)</sup>	2,240
10,000 <sup>1)</sup>	2,640
13,000 <sup>2)</sup>	3,400

<sup>1)</sup> Carat XL underground tank

<sup>2)</sup> Set consisting of two Carat S underground tanks

# Complete packages for vehicle loading

for use in the home and garden



## Suitable for vehicle loading with cast iron cover

Do you want to install your GRAF complete package in your driveway or under your carport? The GRAF complete packages for vehicle loading with the cast iron telescopic dome shaft are extremely robust. They can bear a maximum axle load of 2.2 to. This provides a certain

reserve for larger vehicles. A minimum earth covering of 800 mm (31.4") is required for these loads. If the axle load is insufficient for your needs, please contact us. GRAF also offers solutions for special requirements!

### Carat S garden Jet package

#### Scope of supply

- ① Carat S underground tank
- ② Telescopic dome shaft cast iron, 800 mm – 1,050 mm (31.4" – 3' 5") earth covering, for vehicle loading with 2.2 to cast iron cover
- ③ + ④ Filter / pump package identical to package page 12

**Q Webcode** G1205



### Suitable for vehicle loading

Volume [l]	Volume [US gal.]
2,700	700
3,750	1,000
4,800	1,250
6,500	1,700
8,500 <sup>1)</sup>	2,240
10,000 <sup>1)</sup>	2,640
13,000 <sup>2)</sup>	3,400

<sup>1)</sup> Carat XL underground tank

<sup>2)</sup> Set consisting of two Carat S underground tanks



### Carat S garden Comfort package

#### Scope of supply

- ① Carat S underground tank
- ② Telescopic dome shaft cast iron, 800 mm – 1,050 mm (31.5" – 3' 5") earth covering, for vehicle loading with 2.2 to cast iron cover
- ③ + ④ Filter / pump package identical to package page 13

Q **Webcode** G1206



#### Suitable for vehicle loading

Volume [l]	Volume [US gal.]
2,700	700
3,750	1,000
4,800	1,250
6,500	1,700
8,500 <sup>1)</sup>	2,240
10,000 <sup>1)</sup>	2,640
13,000 <sup>2)</sup>	3,400

<sup>1)</sup> Carat XL underground tank

<sup>2)</sup> Set consisting of two Carat S underground tanks



### Carat S Eco-Plus package

#### Scope of supply

- ① Carat S underground tank
- ② Telescopic dome shaft cast iron, 800 mm – 1,050 mm (31.5" – 3' 5") earth covering, for vehicle loading with 2.2 to cast iron cover
- ③ + ④ Filter / pump package identical to package page 16

Q **Webcode** G1207



#### Suitable for vehicle loading

Volume [l]	Volume [US gal.]
3,750	1,000
4,800	1,250
6,500	1,700
8,500 <sup>1)</sup>	2,240
10,000 <sup>1)</sup>	2,640
13,000 <sup>2)</sup>	3,400

<sup>1)</sup> Carat XL underground tank

<sup>2)</sup> Set consisting of two Carat S underground tanks



### Carat S Professional package

#### Scope of supply

- ① Carat S underground tank
- ② Telescopic dome shaft cast iron, 800 mm – 1,050 mm (31.5" – 3' 5") earth covering, for vehicle loading with 2.2 to cast iron cover
- ③ + ④ Filter / pump package identical to package page 17

Q **Webcode** G1208



#### Suitable for vehicle loading

Volume [l]	Volume [US gal.]
3,750	1,000
4,800	1,250
6,500	1,700
8,500 <sup>1)</sup>	2,240
10,000 <sup>1)</sup>	2,640
13,000 <sup>2)</sup>	3,400

<sup>1)</sup> Carat XL underground tank

<sup>2)</sup> Set consisting of two Carat S underground tanks



### Carat S Professional package Silentio Press

Ideal for distances ≥ 15 mtr to the house

#### Scope of supply

- ① Carat S underground tank
- ② Telescopic dome shaft cast iron, 800 mm – 1,050 mm (31.5" – 3' 5") earth covering, for vehicle loading with 2.2 to cast iron cover
- ③ + ④ Filter / pump package identical to package page 17

Q **Webcode** G1209



#### Suitable for vehicle loading

Volume [l]	Volume [US gal.]
3,750	1,000
4,800	1,250
6,500	1,700
8,500 <sup>1)</sup>	2,240
10,000 <sup>1)</sup>	2,640
13,000 <sup>2)</sup>	3,400

<sup>1)</sup> Carat XL underground tank

<sup>2)</sup> Set consisting of two Carat S underground tanks



# Platin flat rainwater tank

Flat! Sturdy! Low-cost!

## Less digging! Less work! Less cost!

### GRAF brand quality – try it for yourself!

- Minimum installation depth, which translates into short installation time and low costs
- Suitable for vehicle loading
- Groundwater stable



<sup>1)</sup>Size 1.500 l



### Four-stage cleaning process for best water quality



#### Stage 1

First the rainwater is cleaned by a patented filter system. The cleaned water flows into the tank and dirt particles are rinsed into the sewer system along with a small amount of residual water.



#### Stage 2

To allow very fine dirt particles to settle, the filtered water is routed through a steady inflow pot on the base of the tank. This prevents the water from being stirred up and also adds oxygen to the water at the bottom of the tank. This keeps the water clear and fresh.



#### Stage 3

Particles that are lighter than water (such as pollen) form a floating layer on the surface. The overflow siphon installed in the tank causes the floating layer to be removed when the tank overflows. So it's important to let the tank overflow regularly to ensure consistent water quality.



#### Stage 4

The collected rainwater is removed by means of a floating extraction unit near the top of the tank. The best water quality is found around 10 cm (4") below the water's surface.

## How do you install a tank? I know!

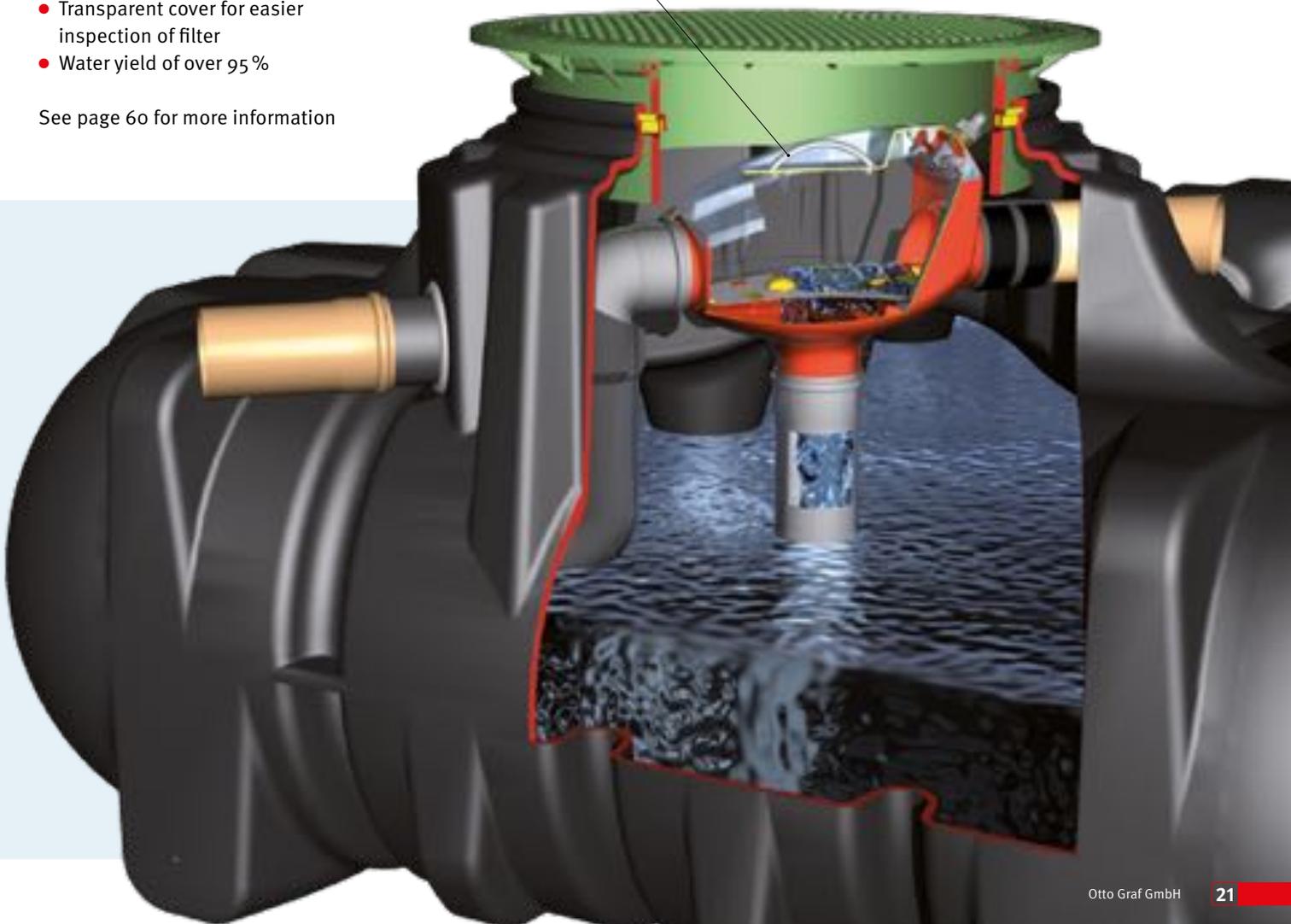


### Built-in professional filter technology

The GRAF Minimax-Pro filter (patented) is specially designed to be used in the GRAF Platin flat tank.

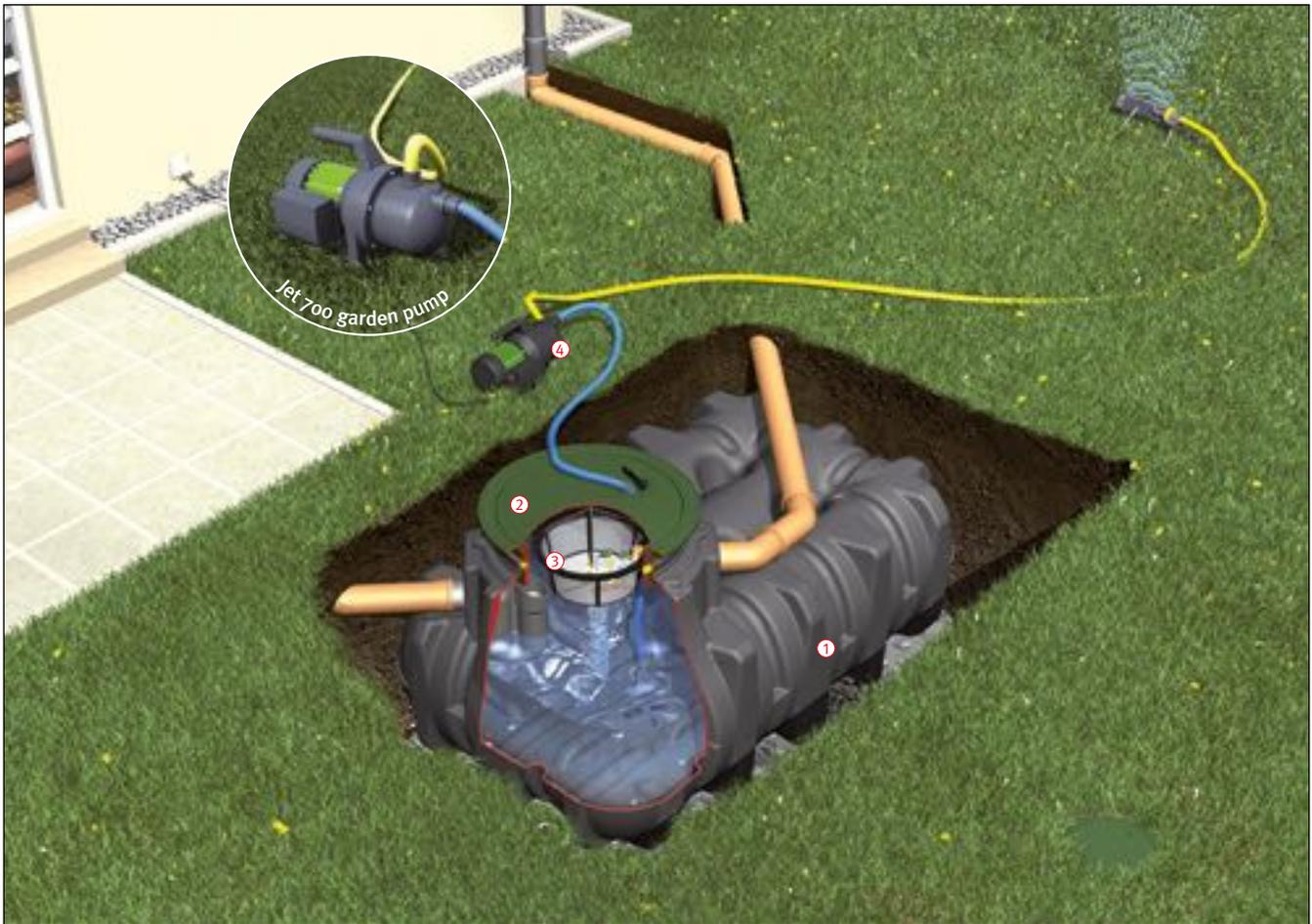
- Compact filter technology integrated in the tank
- Low maintenance, self-cleaning
- Optional internal cleaning unit
- Transparent cover for easier inspection of filter
- Water yield of over 95 %

See page 60 for more information



# Platin garden Jet package

The low-cost complete solution



## Platin garden Jet package

- Low-cost complete solution
- Integrated filter technology (100% water yield)
- Easy assembly thanks to modular design
- Easy installation and convenient water extraction with water hose connection box (compatible with standard hose coupling)

Q **Webcode** G1220

## Scope of supply

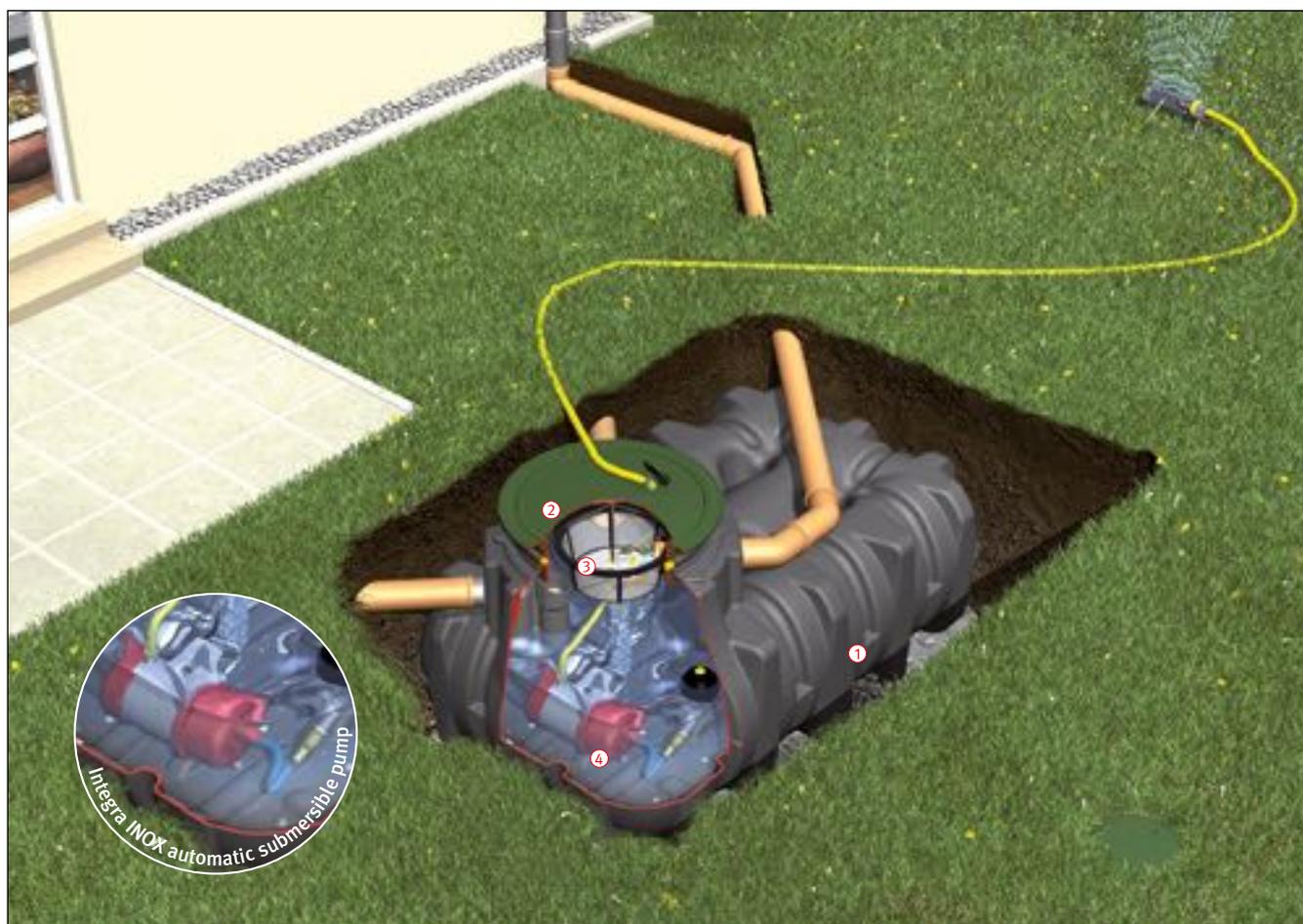
- ① Platin flat tank
- ② Mini dome shaft tank cover suitable for pedestrian loading, smooth telescopic adjustment from 455 mm – 655 mm (17.9" – 25.8") earth covering or cast iron dome shaft suitable for vehicle loading, smooth telescopic adjustment from 455 mm – 655 mm (17.9" – 25.8") earth covering
- ③ Platin filter package 2 consisting of:
  - Filter basket with suspension
  - Overflow siphon, rodent guard
- ④ Garden Jet technical package consisting of:
  - Jet 700 garden pump (page 72)
  - Internal and external water hose connection box (compatible with standard hose coupling, page 75)
  - Pump connection set with 1 m (3' 3.4") PVC hose
  - Suction set with 12.5 m (41') suction hose 25 mm (1")

Volume [l]	Volume [US gal.]
1,500	400
3,000	800
5,000	1,325
7,500	1,980
10,000 <sup>1)</sup>	2,650
15,000 <sup>1)</sup>	3,960

<sup>1)</sup> Set consisting of two Platin flat rainwater tanks

# Platin garden Comfort package

The convenient solution with automatic submersible pump



## Platin garden Comfort package

- Draw water from the socket like electricity
- Simple installation thanks to integrated filter technology
- Water can be extracted using either an internal or external water connection box for standard watering systems
- Easy to assemble due to modular components
- Just one cover visible at the surface

[Q Webcode G1221](#)

## Scope of supply

- ① Platin flat tank
- ② Mini dome shaft tank cover suitable for pedestrian loading, smooth telescopic adjustment from 455 mm – 655 mm (17.9" – 25.8") earth covering or cast iron dome shaft suitable for vehicle loading, smooth telescopic adjustment from 455 mm – 755 mm (17.9" – 29.7") earth covering
- ③ Platin filter package 2 consisting of:
  - Filter basket with suspension
  - Overflow siphon, rodent guard
- ④ Garden Comfort technical package consisting of:
  - Integra INOX automatic submersible pump (page 73)
  - Internal and external water hose connection box (compatible with standard hose coupling, page 75)
  - Floating suction fitting with fine filter and hose
  - 10 m (33') pressure hose 25 mm (1")

Volume [l]	Volume [US gal.]
1,500	400
3,000	800
5,000	1,325
7,500	1,980
10,000 <sup>1)</sup>	2,650
15,000 <sup>1)</sup>	3,960

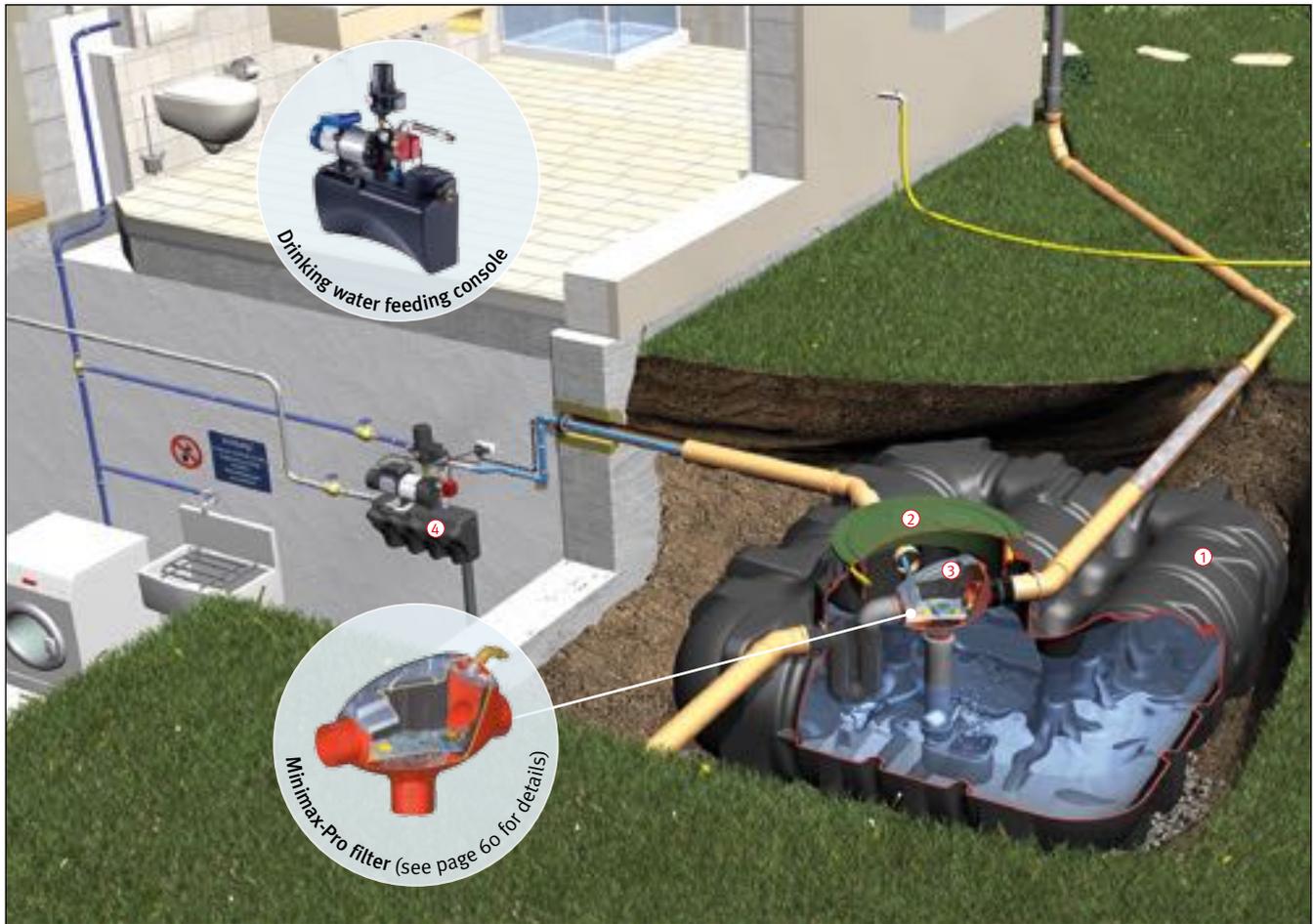
<sup>1)</sup> Set consisting of two Platin flat rainwater tanks



You will find an enquiry form and sizing assistance on our website [www.graf-water.com](http://www.graf-water.com)

# Platin complete package Eco-Plus

The low-cost complete solution for the home and garden



## Platin Eco-Plus package

- Low-cost complete solution
- Patented filter technology
- Switch to drinking water supply in the home when needed
- Easy assembly thanks to modular design
- Float switch controlled
- Only one cover visible on the surface

Q **Webcode** G1222

## Scope of supply

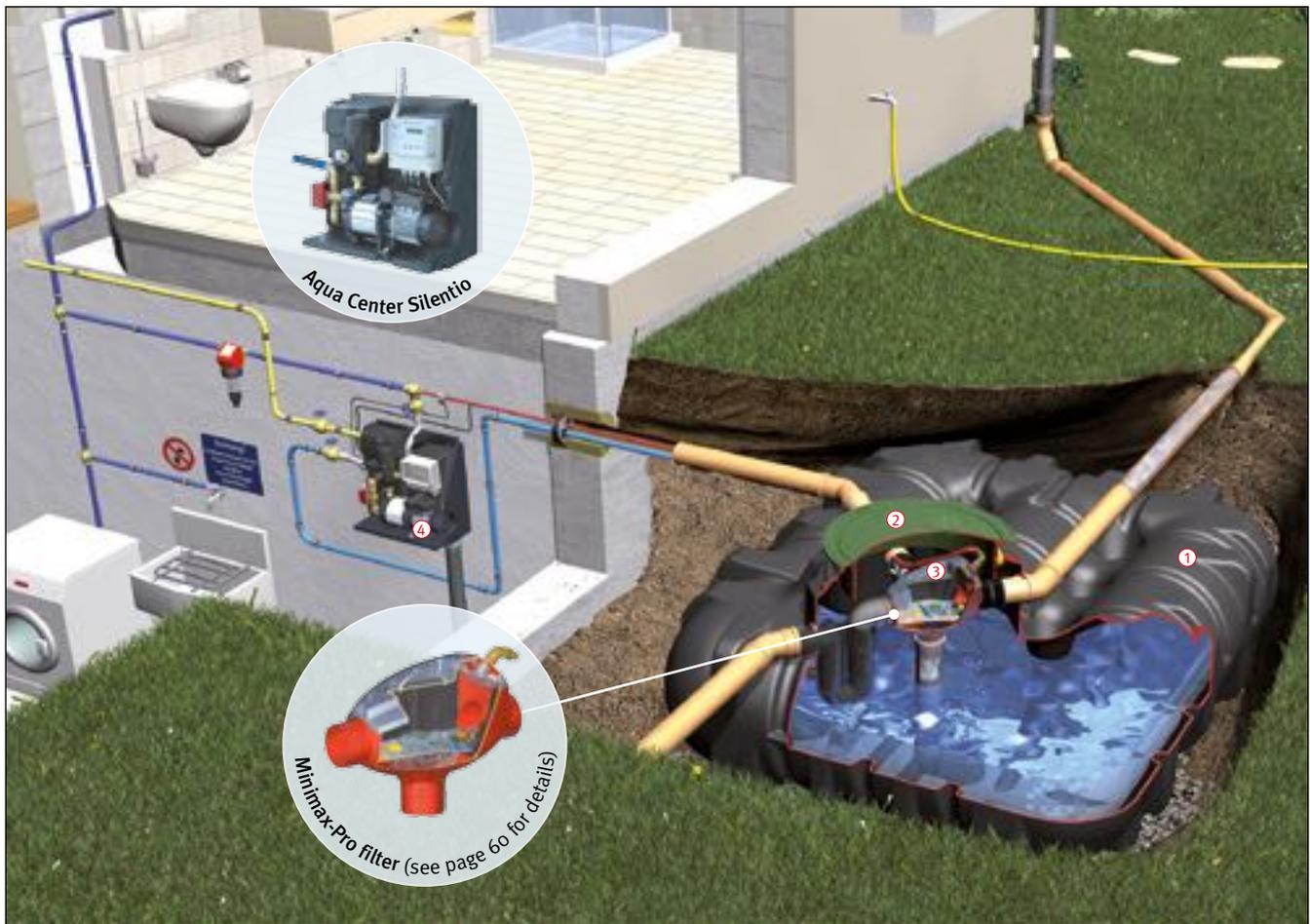
- ① Platin flat tank
- ② Maxi dome shaft tank cover suitable for pedestrian loading, smooth telescopic adjustment from 455 mm – 755 mm (17.9" – 29.7") earth covering or cast iron dome shaft suitable for vehicle loading, smooth telescopic adjustment from 455 mm – 755 mm (17.9" – 29.7") earth covering
- ③ Platin filter package 3 consisting of:
  - Minimax-Pro internal filter (patented, self-cleaning)
  - Steady inflow pot, overflow siphon, Spannfix quick-assembly sleeve
- ④ Eco-Plus technical package consisting of:
  - Drinking water feed console (page 68)
  - Floating suction fitting with fine filter and hose
  - DN 100 (4") wall duct
  - Labelling set
  - PE suction pipe 25 mm (1"), length 12 m (39' 4")

Volume [l]	Volume [US gal.]
1,500	400
3,000	800
5,000	1,325
7,500	1,980
10,000 <sup>1)</sup>	2,650
15,000 <sup>1)</sup>	3,960

<sup>1)</sup> Set consisting of two Platin flat rainwater tanks

# Platin Professional package

The ideal complete solution for the home and garden



## Platin Professional package

- Professional solution with patented filter technology
- Ultra-quiet operation thanks to encapsulated system control unit
- Switch to drinking water supply in the home when needed
- Easy assembly thanks to modular design
- Microprocessor control
- Digital level gauge
- Automatic rinse intervals of feed tank and filter
- Only one cover visible on the surface

Q **Webcode** G1223



You will find an enquiry form and sizing assistance on our website [www.graf-water.com](http://www.graf-water.com)

## Scope of supply

- ① Platin flat tank
- ② Maxi dome shaft tank cover suitable for pedestrian loading, smooth telescopic adjustment from 455 mm – 755 mm (17.9 – 29.7") earth covering or cast iron dome shaft suitable for vehicle loading, smooth telescopic adjustment from 455 mm – 755 mm (17.9 – 29.7") earth covering
- ③ Platin filter package 3 consisting of:
  - Minimax-Pro internal filter (patented, self-cleaning)
  - Steady inflow pot, overflow siphon, Spanfix quick-fit sleeve
- ④ Professional technical package consisting of:
  - Aqua Center Silentio drinking water feed module (page 69)
  - Floating suction fitting with fine filter and hose
  - DN 150 wall duct (6")
  - Internal filter cleaning unit
  - Automatic filter cleaning system
  - Reversible flow fine filter
  - Labelling set
  - PE suction pipe 25 mm (1"), length 12 m (39' 4")

Volume [l]	Volume [US gal.]
1,500	400
3,000	800
5,000	1,325
7,500	1,980
10,000 <sup>1)</sup>	2,650
15,000 <sup>1)</sup>	3,960

<sup>1)</sup> Set consisting of two Platin flat rainwater tanks

# The modular system

Simply unique

## Tank

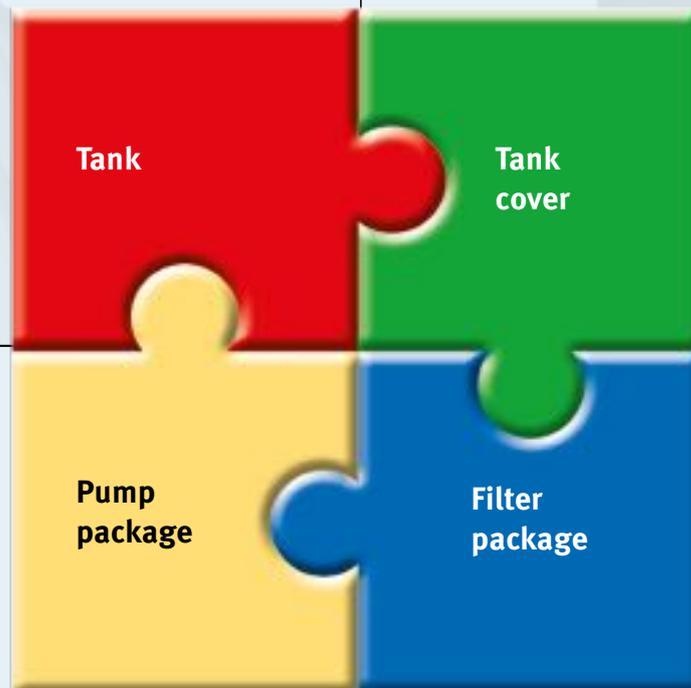
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The underground tank Carat S, Carat XL or Platin is the basis for the modular system. It is available in sizes from 1,500 to 10,000 litres (400 – 2,640 US gal.) and combined up to 15,000 litres (3,960 US gal.). Its high-quality makes it suitable for vehicle loading and groundwater-stable (page 28 – 33).

## Tank cover

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Would you like to install your tank in the garden or in a driveway? GRAF offers you wide range of telescopic tank covers from plastic to cast iron (page 34 – 35).



## Pump package

---

From the simple garden pump to the fully automatic drinking water intake technology. The pump package also includes the accessories needed for installation (page 38).

## Filter package

---

Are you looking for the best value solution or high-quality, self-cleaning filter technology? The GRAF filter package contains all components needed in the tank (page 36 – 37).



# Choose your system

from four different modulares



## Tanks

Page 28



### Carat S



Carat S 2,700 l  
(700 US gal.)  
Order no. 372024

Carat S 3,750 l  
(1,000 US gal.)  
Order no. 372025

Carat S 4,800 l  
(1,250 US gal.)  
Order no. 372026

Carat S 6,500 l  
(1,700 US gal.)  
Order no. 372027

Carat XL 8,500 l  
(2,240 US gal.)  
Order no. 370005

Carat XL 10,000 l  
(2,640 US gal.)  
Order no. 370006



## Tank cover

Page 34



Mini telescopic dome shaft  
Order no. 371010



Maxi telescopic dome shaft  
Order no. 371011



Telescopic dome shaft  
cast iron  
Order no. 371020



Cover and  
compensating ring  
to be provided  
on site



### Telescopic dome shaft lorry-bearing

For standard cast concrete  
covers  
Order no. 371021



Extension  
Order no. 371003



Tank dome Mini  
for Carat S  
Order no. 371041



Tank dome Maxi  
for Carat S  
Order no. 371040



## Filter package

Page 36



### Platin



Platin Filter package 1  
Basic filter package  
Order no. 342001



Platin Filter package 2  
Recommended for garden use  
Order no. 342026



Platin Filter package 3  
Recommended for  
household use  
Order no. 342038



### Carat S



Carat S Filter package 1  
Basic filter package  
Order no. 342001



Carat S Filter package 2  
Recommended for garden use  
Order no. 342002



Carat S Filter package 3  
Recommended for household  
use  
Order no. 342005



## Pump package

Page 38



Pump package garden Jet  
Order no. 342010



Pump package Garden  
Comfort  
Order no. 342011



Pump package house  
Eco-Plus  
Order no. 342014



Pump package house  
Professional  
Order no. 342016



Pump package house  
Silentio-Press  
Order no. 342015



### Platin



Platin 1,500 l (400 US gal.)  
Order no. 390000

Platin 3,000 l (800 US gal.)  
Order no. 390001

Platin 5,000 l (1,325 US gal.)  
Order no. 390002

Platin 7,500 l (1,980 US gal.)  
Order no. 390005

Platin Set 10,000 l  
(2,650 US gal.)  
Set consisting of two  
Platin flat rainwater tank  
5,000 l (1,325 US gal.)  
Order no. 390010

Platin Set 15,000 l  
(3,960 US gal.)  
Set consisting of two  
Platin flat rainwater tank  
7,500 l (1,980 US gal.)  
Order no. 390011



# Carat S underground tank – Logistical advantages



**UP TO 8 TIMES MORE TANK  
VOLUME PER TRUCK / CONTAINER**

## Benefits

- Easy to transport
- Tank consisting of two half-shells
- 5 – 9 tanks per pallet
- This allows up to 8 times more tank volume to be shipped thanks to the unique product design
- Up to 36 complete wastewater or 45 rainwater systems per lorry



Carat S: Reduce freight costs by up to 80%

GRAF TV  
[www.graf.info/v208](http://www.graf.info/v208)





# The modular system Carat S

Choose your tank size



## Carat S underground tank Suitable for vehicle loading

Size 2,700 – 6,500 l (700 – 1,700 US gal.)  
Designed to be used in conjunction with  
the vehicle loading telescopic tank dome.  
The access dome is designed in accordance  
with DIN testing.



Tank dome Maxi  
Order no. 371040



Tank dome Mini  
Order no. 371041



Tank dome Micro  
Order no. 371009



Illustration shows 4,800 l  
(1,250 US gal.) tank with  
telescopic dome shaft for  
pedestrian loading

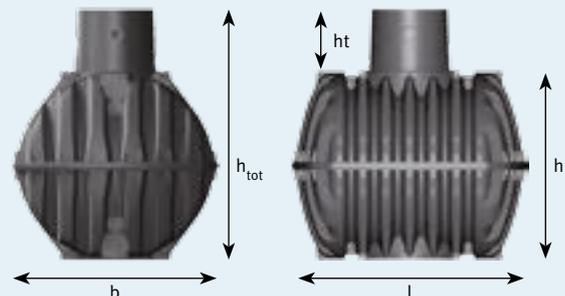
Webcode G1102

### Dimensions

Volume [l]	Width b [mm]	Length l [mm]	Height h [mm]	Height h <sub>tot</sub> [mm]	Height of tank dome ht [mm]	Inner Ø of tank dome [mm]	Weight [kg]	Order no.
2,700 (700 US gal.)	1565 (5' 2")	2080 (6' 10")	1400 (4' 7")	2010 (6' 7")	610 (24")	650–800 (25.6–31.5")	120 (265 lbs.)	372024
3,750 (1,000 US gal.)	1755 (5' 9")	2280 (7' 6")	1590 (5' 3")	2200 (7' 3")	610 (24")	650–800 (25.6–31.5")	150 (331 lbs.)	372025
4,800 (1,250 US gal.)	1985 (6' 6")	2280 (7' 6")	1820 (6')	2430 (8')	610 (24")	650–800 (25.6–31.5")	185 (408 lbs.)	372026
6,500 (1,700 US gal.)	2190 (7' 2")	2390 (7' 10")	2100 (6' 11")	2710 (8' 11")	610 (24")	650–800 (25.6–31.5")	220 (485 lbs.)	372027

### Technical data

Max. earth covering (without groundwater, vehicle loading)	1200 mm (3' 11")
Max. vehicle weight	Suitable for vehicle loading (3.5 to (7716 lbs.)) Higher loads on request
Earth covering required for vehicle loading	800 – 1200 mm (31.5 – 3' 11")
Groundwater stability	up to middle of tank
Earth covering required for groundwater stability	800 – 1000 mm (31.5 – 3' 3")
Connection	DN 100 (4") / DN 150 (6") / DN 200 (8") on top





# The modular system Carat S

Choose your tank extension



## Technical data

Max. earth covering (without groundwater, vehicle loading)	1200 mm (3' 11")
Max. vehicle weight	Suitable for vehicle loading (3,5 to (7716 lbs.)) Higher loads on request
Earth covering required for vehicle loading	800 – 1200 mm (31.5 – 3' 11")
Groundwater stability	up to middle of tank
Earth covering required for groundwater stability	800 – 1000 mm (31.5 – 3' 3")
Connection	DN 100 (4") / DN 150 (6") / DN 200 (8") on top

Tank sets



For dimensions, refer to  
3.750 l tank  
(1,000 US gal.)



For dimensions, refer to  
4.800 l tank  
(1,250 US gal.)



For dimensions, refer to  
6.500 l tank  
(1,700 US gal.)

## Accessories

Extension filter	Order no. 371005
Drill DN 100 (4")	Order no. 202003
Special seal 100	Order no. 332033
Special seal 150	Order no. 332035

Filter can be placed in the first tank to clean the water between the tanks.





# Carat XL underground tank

8,500 and 10,000 litres (2,240 and 2,640 US gal.)

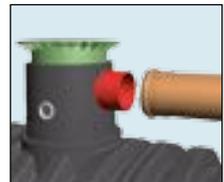
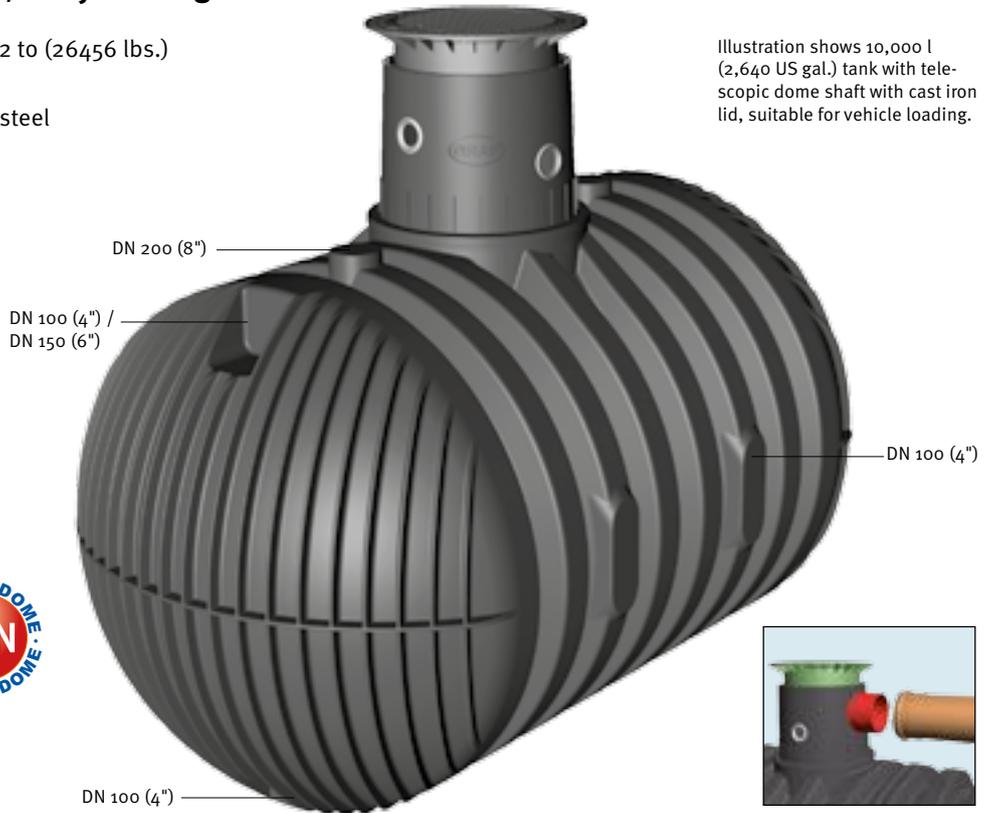


## Carat XL underground tank Suitable for vehicle / lorry-bearing

- Suitable for lorry-bearing up to 12 to (26456 lbs.)
- Can be mounted in groundwater
- Lower weight than concrete and steel
- Various connection surfaces  
DN 100 (4")/150 (6") /200 (8")
- Investment security thanks  
to a 15-year warranty

Illustration shows 10,000 l (2,640 US gal.) tank with telescopic dome shaft with cast iron lid, suitable for vehicle loading.

Q Webcode G1103



Larger connection fittings on request

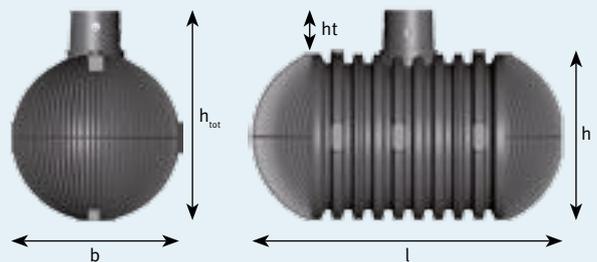


## Dimensions

Volume [l]	Width b [mm]	Length l [mm]	Height h [mm]	Height h <sub>tot</sub> [mm]	Height of dome shaft ht [mm]	Internal Ø of dome shaft [mm]	Weight [kg]	Order no.
8,500 (2,240 US gal.)	2040 (6' 3")	3500 (11' 6")	2085 (6' 10")	2695 (8' 10")	610 (24")	650 (25.6")	380 (838 lbs.)	370005
10,000 (2,640 US gal.)	2240 (7' 4")	3520 (11' 7")	2285 (7' 6")	2895 (9' 6")	610 (24")	650 (25.6")	456 (1005 lbs.)	370006

## Technical data

Max. earth covering (without groundwater vehicle loading)	1500 mm (4' 11")
Max. axle load	8 to (17637 lbs.)
Max. total weight	12 to (26456 lbs.)
Earth covering required for vehicle loading	800 – 1200 mm (31.5 – 3' 11")
Groundwater stability	up to middle of tank
Earth covering required for groundwater stability	800 – 1200 mm (31.5 – 3' 11")
Connection	DN 100 (4") / DN 150 (6") / DN 200 (8") on top





# Platin flat rainwater tank



## Platin flat rainwater tank Suitable for vehicle loading<sup>1)</sup>

Q Webcode G1101

Illustration shows 1,500 l (400 US gal.) tank with Mini dome shaft suitable for pedestrian loading (for accessories, see page 35)



You will find an enquiry form and sizing assistance on our website [www.graf-water.com](http://www.graf-water.com)



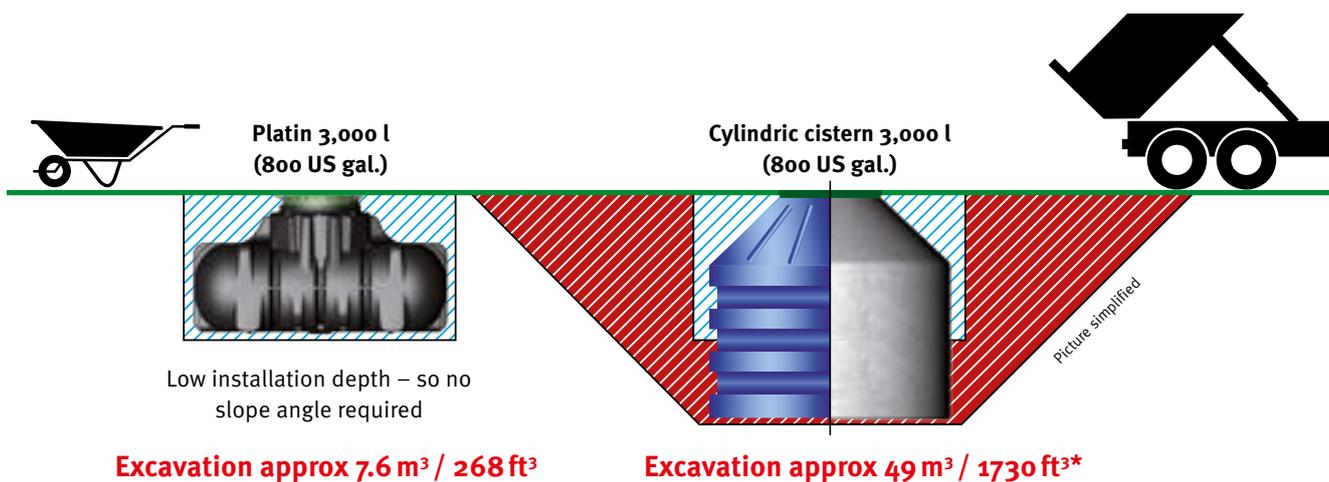
## Dimensions

Volume [l]	Width b [mm]	Length l [mm]	Height h [mm]	Height hges [mm]	Height dome shaft ht [mm]	Innen Ø dome shaft [mm]	weight [kg]	Order no.
1,500 (400 US gal.)	1250 (4' 1")	2100 (6' 11")	700 (27.6")	1015 (3' 4")	315 (12.4")	650 (25.6")	82 (181 lbs.)	390000
3,000 (800 US gal.)	2100 (6' 11")	2450 (8' 1")	735 (28.9")	1050 (3' 5")	315 (12.4")	650 (25.6")	180 (397 lbs.)	390001
5,000 (1,325 US gal.)	2300 (7' 7")	2890 (9' 6")	950 (3' 1")	1265 (4' 2")	315 (12.4")	650 (25.6")	250 (551 lbs.)	390002
7,500 (1,980 US gal.)	2250 (7' 5")	3600 (11' 10")	1250 (4' 1")	1565 (5' 2")	315 (12.4")	650 (25.6")	360 (794 lbs.)	390005
10,000 <sup>2)</sup> (2,650 US gal.)	Set consisting of two Platin flat tanks. For dimensions and weights, see 5,000 l (1,325 US gal.) Tank							390010
15,000 <sup>2)</sup> (3,960 US gal.)	Set consisting of two Platin flat tanks. For dimensions and weights, see 7,500 l (1,980 US gal.) Tank							390011

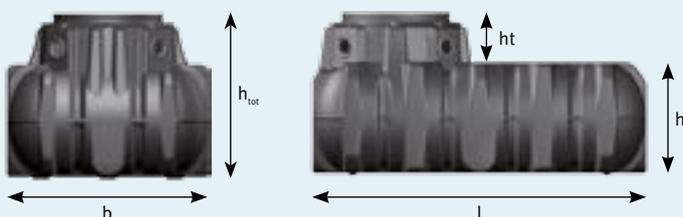
<sup>1)</sup> In conjunction with cover suitable for vehicle loading    <sup>2)</sup> Please note: two tank covers required

## 80%\* less digging compared with a cylindric cistern\*.

Save more than 150\* wheelbarrow loads of soil\*!



\* Based on a vertical, cylindric cistern with a useable volume of 3,000 l (800 US gal.), a height of 1.90 m (6' 3") and a diameter of 2.20 m (7' 3") Calculation of excavation is under consideration of a ditch bottom of 10 cm (4"), a sidewise distance of 50 cm (19.7") and a slope with 45° gradient according to DIN 4124.



### Technical data

Max. earth covering (without groundwater, vehicle loading)	1200 mm (3' 11")
Max. axle load:	2,2 to (4850 lbs.)
Max. vehicle weight	3,5 to (7716 lbs.)
Earth covering required for vehicle loading	700 – 1000 mm (27.6 – 3' 3")
Groundwater stability	up to tank shoulder
Earth covering required for groundwater stability	700 – 1200 mm (27.6 – 3' 11")
Connection	4 x DN 100 (4")



# Tank domes and covers

Select your desired tank cover



## Tank dome Mini

- Suitable for Carat S
- Weight: 11 kg (24 lbs.)
- For especially flat installation
- Incl. 3 edge seals

Order no. 371041



## Tank dome Maxi

- Suitable for Carat S
- Weight: 15 kg (33 lbs.)
- For large earth coverings (loading capacity)
- Incl. 5 edge seals

Order no. 371040



## Tank dome Micro

- Suitable for Carat S
- Weight: 7 kg (15 lbs.)
- Including green lid
- For shallow excavation
- Earth cover only 90mm

Order no. 371009



## Extension for shafts and domes

- Weight: 6 kg (13 lbs.)
- The earth covering can be raised 300 mm (11.8") using the spacer

Order no. 371003



## Infiltration connecting piece 1000 DN 600 (24")

With DN 200 (8") contact surface, incl. profile seal, length 1000 mm (3' 3"), 750 mm (21.5"), 500 mm (19.7")

Order no. 371015



## Infiltration connecting piece 1000 DN 600 (24")

With DN 200 (8") pipe connections, incl. profile seal, length 1000 mm (3' 3"), 750 mm (29.5"), 500 mm (19.7")

Order no. 371016



Tank dome Mini



Tank dome Maxi



### Telescopic dome shaft Mini

- With PP cover
- Suitable for pedestrian loading
- Weight: 9 kg (20 lbs.)
- Adjustable earth covering across upper tank surface



plus 140 mm – 340 mm (5.5 – 13.4")  
earth covering

Order no. 371010



### Telescopic dome shaft cast iron

- Suitable for vehicle loading – with childproof cast iron cover up to 3.5 to (7716 lbs.)
- Weight: 55 kg (121 lbs.)
- Adjustable earth covering across upper tank surface



plus 140 mm – 440 mm (5.5 – 17.3")  
earth covering

Order no. 371020



### Telescopic dome shaft Maxi

- With PP cover
- Suitable for pedestrian loading
- Weight: 15 kg (33 lbs.)
- Adjustable earth covering across upper tank surface



plus 140 mm – 440 mm (5.5 – 17.3")  
earth covering

Order no. 371011



### Telescopic dome shaft lorry-bearing

- Suitable for vehicle/lorry-bearing
- Weight: 11 kg (24 lbs.)
- Cover to be provided on site
- Adjustable earth covering across upper tank surface
- For commercially available concrete rings/covers (to be provided on site)



plus 140 mm – 440 mm (5.5 – 17.3")  
earth covering

Order no. 371021



Telescopic dome shaft suitable for pedestrian loading

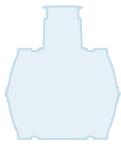


Telescopic dome shaft suitable for vehicle/lorry-bearing



# The modular system

Select your desired tank filter package

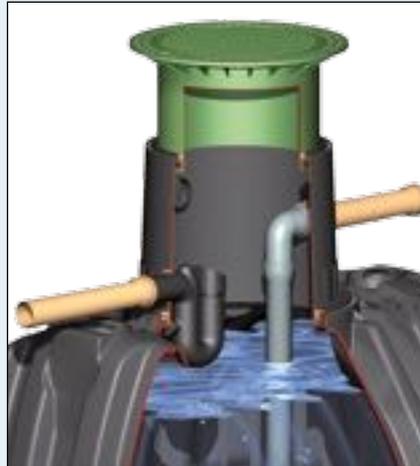


## Carat S

### Carat S filter package 1

**Garden use – for improving the water quality**

With filter package 1, the basic Carat S tank (with external filter) can also be used for household applications (WC and washing machine).



#### Scope of supply:

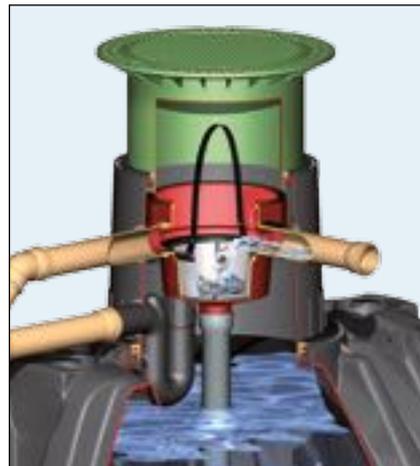
- Inflow stilling system for controlling the water inflow
- Overflow siphon
- Rodent guard

Order no. 342001

### Carat S filter package 2

**For use in the home and garden – 100 % water yield**

Universal-Filter 3 integrated in the basic Carat S tank with 100 % water yield. Filter package 2 is ideal if you need a water yield of 100 %, or if the tank's overflow is connected to an infiltration plant rather than the sewer network.



#### Scope of supply:

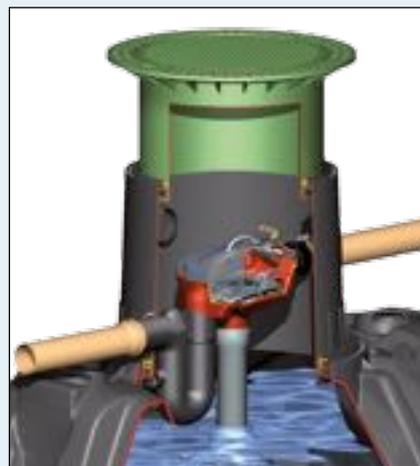
- Internal Universal Filter 3
- Inflow stilling system for controlling the water inflow
- Overflow siphon and rodent guard
- Spannfix pipe connection sleeve

Order no. 342002

### Carat S filter package 3

**For use in the home and garden – the self-cleaning design**

The self-cleaning Optimax-Pro Filter can be integrated into the basic Carat S tank. The convenient, low maintenance solution with self-cleaning filter and > 95 % water yield. Can also be fitted with Opticlean® cleaning unit. Tank and filter overflow are connected to the sewer network with this filter package.



#### Scope of supply:

- Internal Optimax-Pro (self cleaning) filter
- Inflow stilling system for controlling the water inflow
- Overflow siphon with rodent guard function
- Spannfix pipe connection sleeve

Order no. 342005

#### Cleaning unit

Connection 19 mm (3/4"), delivery without hose

Order no. 340040

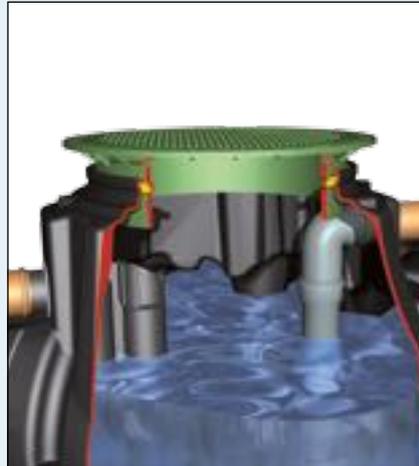


## Platin

### Platin filter package 1

#### To be combined with external filter

With filter package 1, the Platin basic tank (with external filter) is also suitable for household use (WC and washing machine).



#### Scope of supply:

- Inflow stilling system for controlling the water inflow
- Overflow siphon
- Rodent guard

Order no. 342001

### Platin filter package 2

#### Garden and home use – 100% water yield

Filter basket for Platin basic tank with 100% water yield. Filter package 2 is ideal if you want to achieve a water yield of 100% or connect the tank's overflow to an infiltration system rather than the sewer.



#### Scope of supply:

- Filter basket
- Crossbar and chain suspension
- Overflow siphon
- Rodent guard

Order no. 342026

### Platin filter package 3

#### Garden and home use – the self-cleaning model

Minimax-Pro filter (self-cleaning) for Platin basic tank. The convenient solution that requires minimum maintenance thanks to a self-cleaning filter with over 95% water yield. Can also be fitted with the internal cleaning unit. With this filter package, the tank and filter overflows are connected to the sewer system.



#### Scope of supply:

- Minimax-Pro internal filter (patented)
- Inflow stilling system for controlling the water inflow
- Overflow siphon with rodent guard function
- Spannfix pipe connection sleeve

Order no. 342038

#### Cleaning unit

Connection 19 mm (3/4"), delivery without hose

Order no. 340040



# The modular system Carat S

Select your desired pump package

## Pump package garden Jet

The good value complete solution.



- Garden Jet pump 700 (page 72)
- Suction set with 12.5 m (41') suction hose
- Water hose connection box internal and external

Order no. 342010

## Pump package Garden Comfort

Improved operating convenience through automatic pump control.



- Integra INOX Submersible and suction pump (page 73)
- Floating water extraction unit
- PE pressure max. 10 m (32' 10")
- Water hose connection box internal and external

Order no. 342011

## Pump package house Eco-Plus

The good value complete solution.



- Drinking water feeding console including domestic waterworks KSB-Superinox 15/4 (page 72)
- Floating water extraction unit
- Wall duct DN 100 (4")
- Labelling set
- PE suction pipe 12 m (39' 4") (not shown)

Order no. 342014

## Pump package house Professional

In-house drinking water feeding using the latest modular technology with microprocessor control and digital fill level display.



- Drinking water feeding module Aqua-Center-Silentio including domestic waterworks KSB-Superinox 15/4 (page 72)
- Floating water extraction unit
- Internal cleaning unit
- Automatic filter cleaning unit (not shown)
- Reversible flow filter
- Wall duct DN 150 (6")
- Labelling set
- PE suction pipe 12 m (39' 4") (not shown)

Order no. 342016

## Pump package house Silentio-Press

In-house drinking water intake with submersible pump. Ideal when there are larger distances (15 m/ 49' 3") between the tank and the domestic waterworks.



- Drinking water feeding module Aqua-Center-Silentio Press including domestic waterworks and submersible pump 300 A (page 73)
- Internal cleaning unit
- Automatic filter cleaning unit (not shown)
- Reversible flow filter
- Wall duct DN 150 (6")
- Labelling set
- 25 m (82') special suction and pressure hose 25 mm (1")

Order no. 342015

# Carat XXL underground Tank

The new dimension



Rainwater harvesting ▶ Carat XXL

# Carat XXL underground tank

The perfect combination of flexibility and stability

## Available with a second tank dome as an option

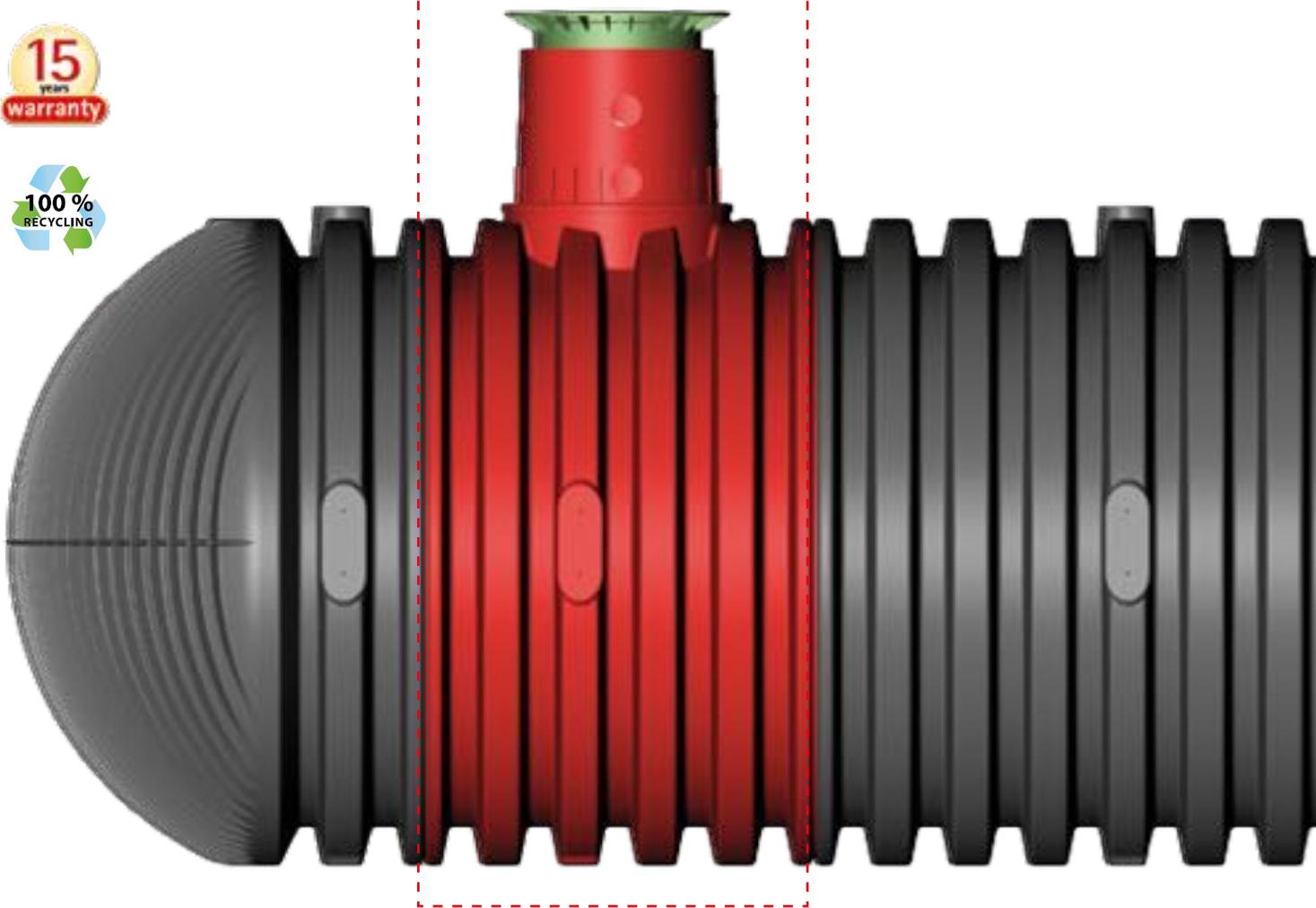
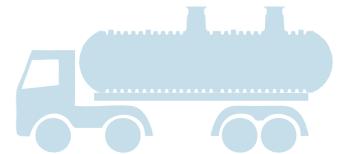
On request the Carat XXL can be fitted with an additional dome. This increases the tank volume by 6,000 l (1,550 US gal.)

## Lighter than concrete or steel

In spite of its large capacity, the Carat XXL has all the advantages of a plastic tank: its comparatively low weight reduces both logistics and installation costs.

## Up to 76,000 l (20,050 US gal.) without abnormal load vehicle

Because the tank makes maximum use of the 2.5 m (8' 3") wide loading space, a 76,000 l (20,050 US gal.) tank can be transported without the need for an abnormal load vehicle. Lifting straps are included in the delivery.



Delivery time by arrangement. Shipping costs on request

### Suitable for lorry-bearing up to 40 to

The GRAF Carat XXL underground tank can be driven over by vehicles of up to 40 to with an earth covering of 1000 mm (3' 3").

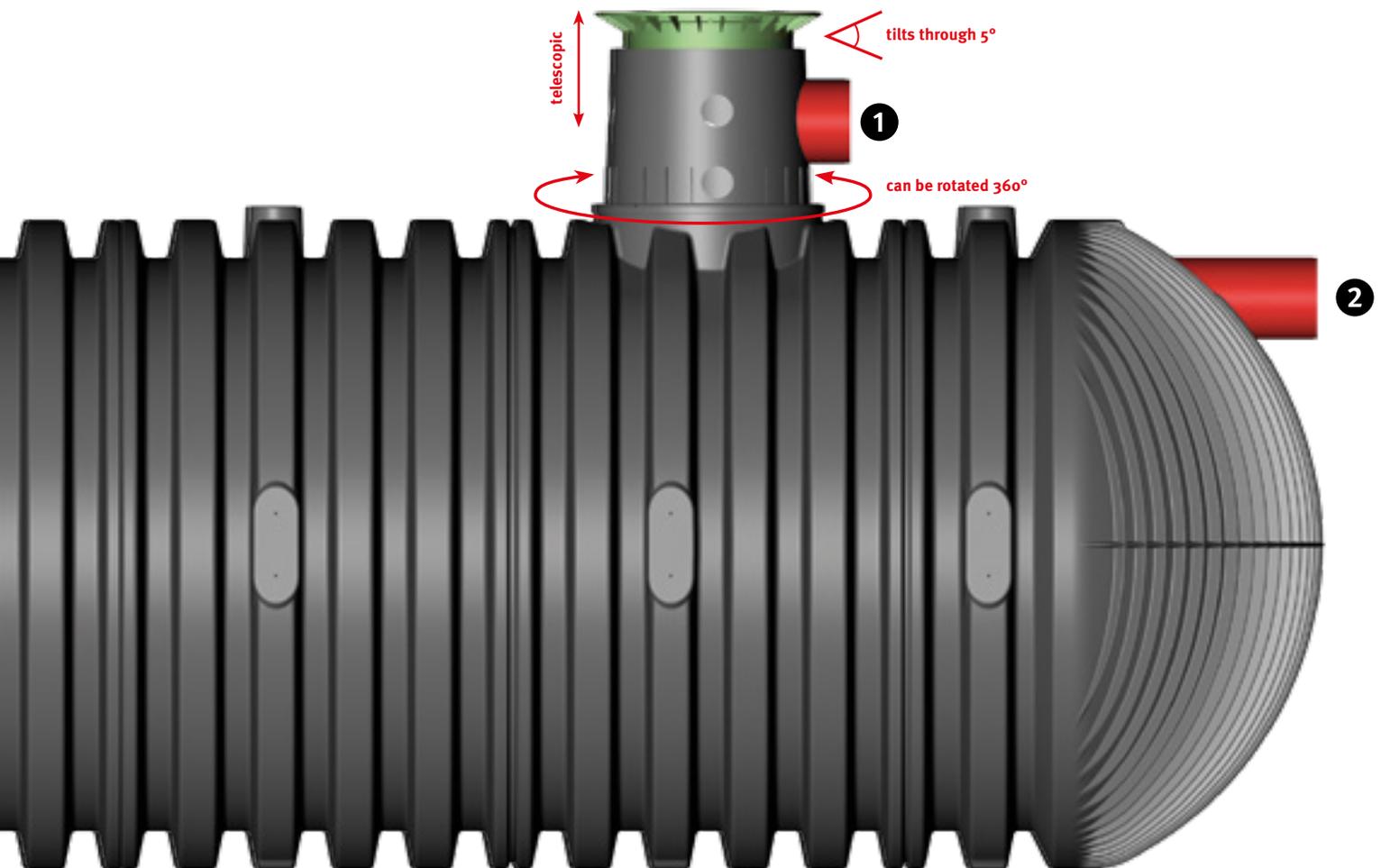


### Flexible connection up to DN 300 (12")

The rotating tank dome is easy to align with the connecting pipe. The telescopic tilting dome shaft makes it easy to align the tank with the level of the ground. Connecting faces up to DN 200 (8") are already fitted as standard. If necessary the Carat XXL can be fitted with connectors up to DN 300 (12"), either on the tank dome ① or on the tank end ②.

### Flexible in use

- Rainwater tank
  - Retention cistern
  - Firefighting water tank
  - Wastewater tank
- see GRAF wastewater catalogue >>



# Carat XXL underground rainwater tank

Up to 102,000 l (26,950 US gal.)



**Carat XXL underground rainwater tank**  
**Suitable for vehicle/lorry-bearing <sup>1)</sup>**

Lorry-bearing up to  
**40 to**

- Suitable for lorry-bearing up to 40 to
- Can be installed in groundwater
- Lower weight than concrete and steel
- Various connection surfaces  
 DN 100 (4")/150 (6")/200 (8")
- Larger connectors up to DN 300 (12")  
 also available
- Volumes up to 76,000 l (20,050 US gal.)  
 can be transported without abnormal  
 load vehicle

Q **Webcode G1104**



Illustration shows 26,000 l (6,850 US gal.)  
 tank with telescopic dome shaft suitable for  
 lorry-bearing loading (see pages 35)

## Carat XXL underground rainwater tank

Volume [l]	Length L [mm]	Inner Ø of tank dome [mm]	Weight [kg]	Order no.
16,000 (4,227 US gal.)	4660 (15' 4")	650 (2' 2")	805 (1775 lbs.)	380001
22,000 (5,812 US gal.)*	6145 (20' 2")	650 (2' 2")	1015 (2238 lbs.)	380000
26,000 (6,869 US gal.)	7045 (23' 1")	650 (2' 2")	1150 (2535 lbs.)	380002
32,000 (8,454 US gal.)*	8530 (27' 12")	650 (2' 2")	1360 (2998 lbs.)	380003
36,000 (9,511 US gal.)	9430 (30' 11")	650 (2' 2")	1495 (3296 lbs.)	380004
42,000 (11,095 US gal.)*	10915 (35' 10")	650 (2' 2")	1705 (3759 lbs.)	380005
46,000 (12,152 US gal.)	11815 (38' 9")	650 (2' 2")	1840 (4057 lbs.)	380006
52,000 (13,737 US gal.)*	13300 (43' 8")	650 (2' 2")	2050 (4520 lbs.)	380007
56,000 (14,794 US gal.)	14200 (46' 7")	650 (2' 2")	2185 (4817 lbs.)	380008
62,000 (16,379 US gal.)*	15685 (51' 6")	650 (2' 2")	2395 (5280 lbs.)	380009
66,000 (17,435 US gal.)	16585 (54' 5")	650 (2' 2")	2530 (5578 lbs.)	380010
72,000 (19,020 US gal.)*	18070 (59' 3")	650 (2' 2")	2740 (6041 lbs.)	380011
76,000 (20,077 US gal.)	18970 (62' 3")	650 (2' 2")	2875 (6338 lbs.)	380012
82,000 (21,662 US gal.)*	20455 (67' 1")	650 (2' 2")	3085 (6801 lbs.)	380013
86,000 (22,719 US gal.)	21355 (70' 1")	650 (2' 2")	3220 (7099 lbs.)	380014
92,000 (24,303 US gal.)*	22840 (74' 11")	650 (2' 2")	3430 (7562 lbs.)	380015
96,000 (25,360 US gal.)	23740 (77' 11")	650 (2' 2")	3565 (7860 lbs.)	380016
102,000 (26,946 US gal.)*	25225 (82' 9")	650 (2' 2")	3775 (8322 lbs.)	380017

Scope of supply: Carat XXL underground rainwater tank with Maxi dome  
 Delivery time by arrangement. Dispatched from the factory – shipping costs on request

\*with a second tank dome  
<sup>1)</sup>In conjunction with vehicle- or lorry-bearing cover

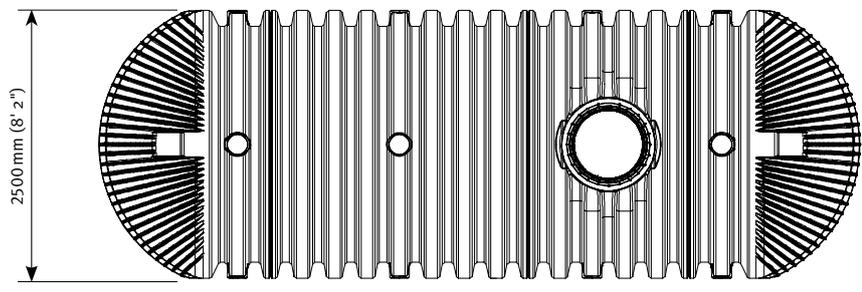
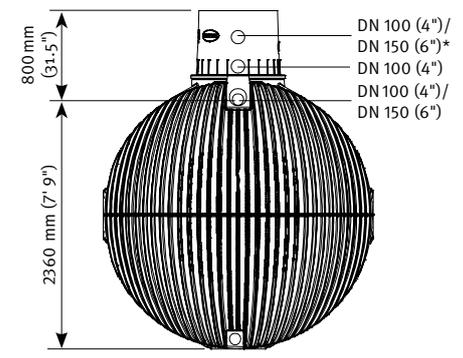
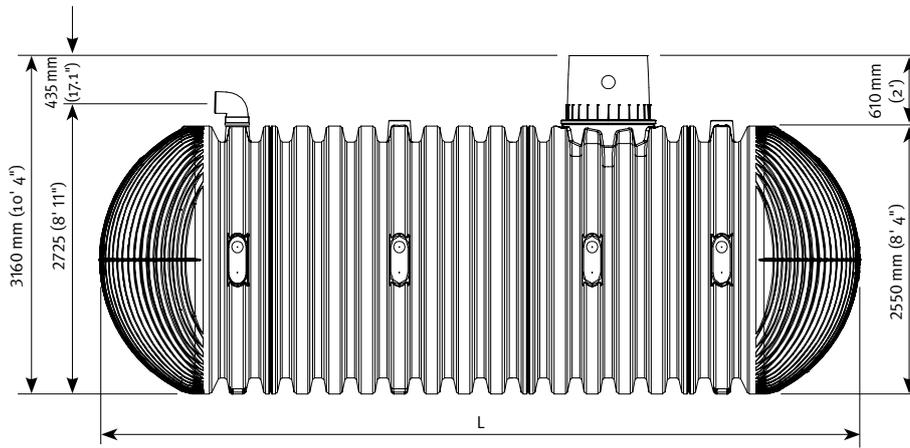


Illustration shows tank with Maxi tank dome without cover. The total installation height results from the total tank height ( $H_{TOD}$ ) plus the telescopic dome shaft.  
 >> pages 34/35



Installation instructions and dimensional drawings available at [www.graf-water.com](http://www.graf-water.com)

\*with a second tank dome

### Technical data

Max. earth covering:	1500 mm (4' 11")
Max. axle load:	8 to (17637 lbs.)
Max. vehicle weight:	3.5 to (7716 lbs.) with 2.2 to cast iron cover, 40 to (88183 lbs.) with telescopic dome shaft lorry
Earth covering with loading capacity:	800 – 1500 mm (31.5" – 4' 11")
Groundwater stability:	up to the middle of the tank
Earth covering with groundwater installation:	800 – 1500 mm (31.5" – 4' 11")
Connection options:	DN 100 (4") – DN 200 (8") Optionally up to DN 300 (12")

**Tank covers**

>> page 35

**Also available as a fire fighting water tank**

>> page 47

# Optimax XXL filter

- Water yield of over 95 %
- Self-cleaning filter principle
- Stainless steel filter insert with 0.35 mm (0.01") mesh
- Maximum catchment area 3000 m<sup>2</sup> (32.292 ft<sup>2</sup>) with DN 300 (12") connections and 6000 m<sup>2</sup> (65.000 ft<sup>2</sup>) with DN 400 (16") connections
- Patented filter technology
- Larger connections on request
- Includes cleaning unit
- Height loss of just 45 mm (1.75") between inlet and dirty water outlet

Q **Webcode** G2207

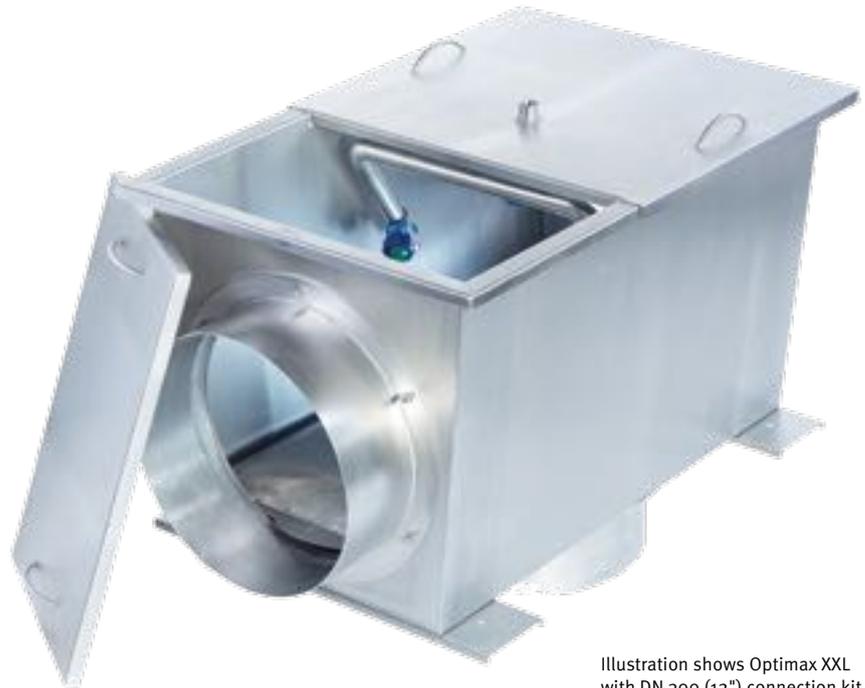


Illustration shows Optimax XXL with DN 300 (12") connection kit

## Optimax XXL external filter

Width [mm]	Length [mm]	Height [mm]	Weight [kg]	Order no.
675 (26.6")	1125 (3' 8")	780 (30.7")	75 (165 lbs.)	340096

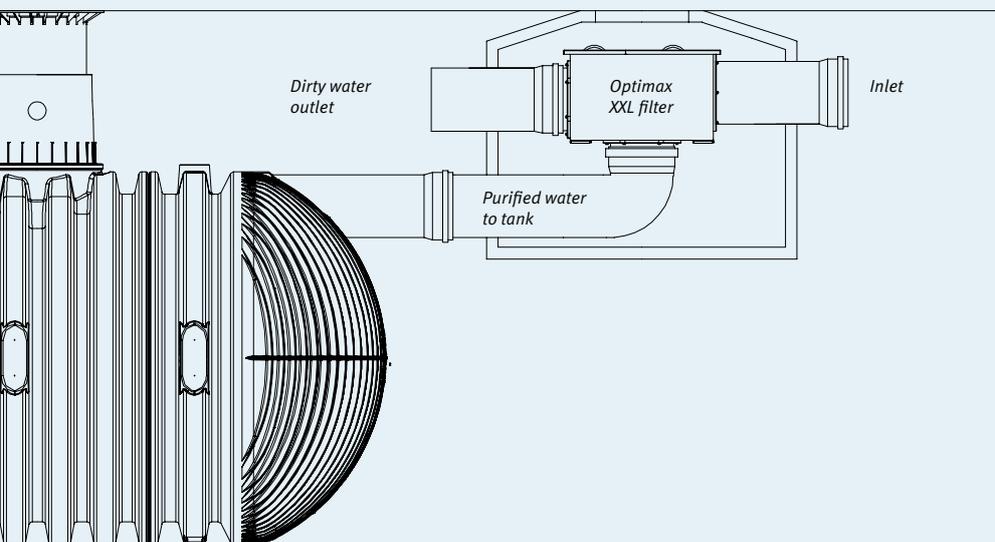
## Including filter cleaning unit

Consisting of four adjustable flat jet nozzles with a very powerful water jet to clean the filter screen. This means fewer maintenance intervals. Automatic control possible with Aqua Center Silentio.



How the filter cleaning unit works

## Example installation\*



\*Simplified representation

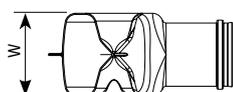
## Accessories

Description	Order no.
Connection kit DN 300	340097
Connection kit DN 400	340099
Connection kit DN 12"	340098
Connection kit DN 16"	340100

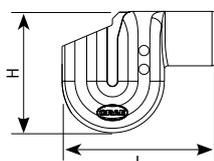


## Overflow siphon

Connections DN	Width W [mm]	Length L [mm]	Height H [mm]	Weight [kg]	Order no.
150 (6")	275 (10.8")	445 (17.5")	355 (14")	2 (4 lbs.)	330450
200 (8")	275 (10.8")	605 (23.8")	420 (16.5")	3 (7 lbs.)	330451
300 (12")	400 (15.7")	955 (3' 2")	660 (26")	12 (27 lbs.)	330452

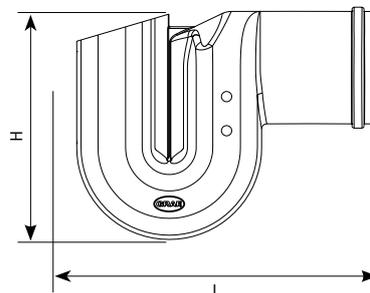


DN 150 (6")<sup>1)</sup>



<sup>1)</sup> with fitting

DN 200 (8") / DN 300 (12")<sup>2)</sup>

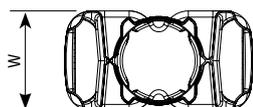


<sup>2)</sup> with sleeve

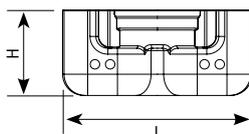


## Steady inflow pot

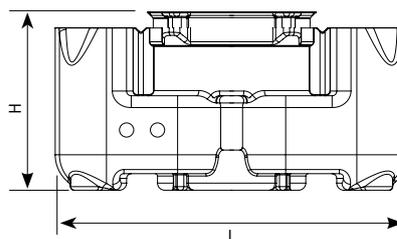
Connections DN	Width W [mm]	Length L [mm]	Height H [mm]	Weight [kg]	Order no.
150 (6")	200 (7.9")	400 (15.7")	180 (7.1")	1.5 (3 lbs.)	330453
200 (8") 300 (12")	400 (15.7")	750 (29.5")	377 (14.8")	9 (20 lbs.)	330454



DN 150 (6")



DN 200 (8") / DN 300 (12")





## DPA-IRM dual pump system

Incl. level sensor with 25 m (82') connecting line, floating extraction 1 m (3' 3"), 1 1/4", inspection kit

- Dual pump system with self-priming, horizontal centrifugal pumps
- Alternating start-up
- Second pump activated at peak extraction times
- Integrated dry running protection
- Protection against stagnation to German drinking water standards
- Digital control
- Pump system pressure gauge
- Rainwater level gauge
- Level sensor with 25 m (82') connecting cable, also available with 50 m (164') cable

🔍 [Webcode G3104](#)

## Feeder pump\*

High-quality stainless steel housing, 10 m (33') connecting cable



Order no. 355008

## Optional accessories:

### Pressure sensor

50 m (164') connecting cable

Order no. 355006

### Diaphragm expansion tank

100 l (26.5 US gal.)

Order no. 355009

Properties	DPA-IRM dual pump system			Feeder pump*
	C-class RM 6-40	C-class RM 8-40	C-class RM 14-40	Feeder pump
<b>Pump</b>				
<b>Order no.</b>	<b>353002</b>	<b>353007</b>	<b>353009</b>	<b>355008</b>
Rated power	2 x 700 W	2 x 880 W	2 x 1200 W	1100 W
Operating noise	–	–	–	–
Protection class	IP 44	IP 44	IP 44	IP 68
Operating pressure	4.2 bar	4.2 bar	4.7 bar	1.4 bar
Delivery height	42 m (137' 10")	42 m (137' 10")	47 m (154' 3")	14 m (45' 11")
Max. flow rate	6 m <sup>3</sup> /h	9 m <sup>3</sup> /h	14 m <sup>3</sup> /h	16.5 m <sup>3</sup> /h
Max. suction lift / suction length	Feeder pump required			–
Operating pressure gauge	•	•	•	–
<b>Drinking water feed</b>				
Volume	100 l (26.5 US gal.)	100 l (26.5 US gal.)	100 l (26.5 US gal.)	–
Manual switchover to drinking water possible	•	•	•	–
Automatic water exchange in feed tank	•	•	•	–
Overflow according to DIN EN 1717	•	•	•	–
<b>Control</b>				
Float switch	–	–	–	–
Electronic level measurement	•	•	•	–
Optional automatic filter cleaning	–	–	–	–
Fault indicator	•	•	•	–
<b>Dimensions</b>				
Width	570 mm (22.4")		160 mm (6.3")	
Height	1540 mm – 1560 mm (5' 1" – 5' 2") (adjustable)			474 mm (18.7")
Depth	665 mm (26.2")			–
Weight	100 kg (220 lbs.)	100 kg (220 lbs.)	100 kg (220 lbs.)	22 kg (48 lbs.)

\*must be ordered at the same time

# Carat XXL firefighting water tank



- Delivery includes all firefighting water accessory parts to DIN 14230
- Complete system fully factory-assembled if required – no on-site assembly
- Dome shaft allows easy access / rescue from tank
- Individual tanks can be enlarged / connected to create large volumes
- Fill with drinking water or rainwater
- Individual adjustment to ground level (earth covering / angle of slope)

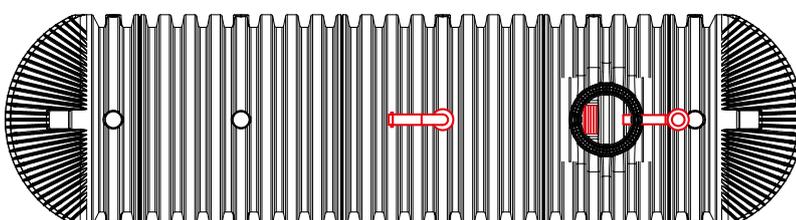
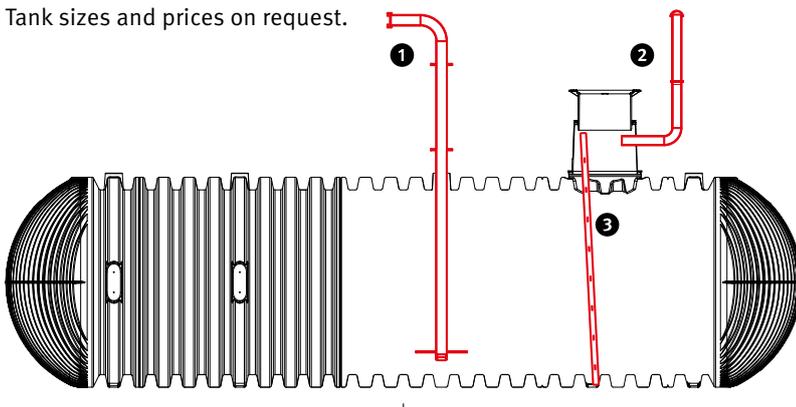
- Low procurement costs
- Incl. telescopic dome shaft lorry-bearing
- Cover to be provided on site according to national regulations



Q Webcode G1312



Tank sizes and prices on request.



# Stormwater Management

The infiltration range



- Infiltration modules
- Infiltration filters
- Retention cisterns
- Shafts and accessories

**Catalogue Stormwater Management**  
For more information about our Stormwater Management, ask for our catalogue.





Industrial building, Tumeltsham (Austria)



City park, Barcelona (Spain)



Energy supplier, Warwick (UK)

# GRAF tank systems

For special requirements



# Herkules-Tank

For overground and underground installation



- Three ways to use it!
- Can be installed in groundwater up to top edge of tank
- Very good value for money

### Herkules-Tank 1,600 l (423 US gal.) (extendable)

Order no. 320001

[Q Webcode G1301](#)

### Herkules Infiltration tank

Geotextile required (Accessories)  
Incl. support pipe

Order no. 200201

[Q Webcode G1309](#)

### Technical data

Capacity	1,600 l (423 US gal.)
Max Ø	1350 mm (4' 4")
Height	1600 mm (5' 3")
Material	fibre-glass reinforced PP (UV stable and 100% recyclable)
Weight	approx. 60 kg (132 lbs.)
Connections:	each 2 x DN 70 (2.8"), DN 100 (4") and DN 200 (8")

### Herkules-Tank-Set

DN 100 (4") extension set(s) included

3,200 l (846 US gal.) Order no. 211001

4,800 l (1.269 US gal.) Order no. 211002

[Q Webcode G1302](#)

### GRAF-Tex geotextile

For one Herkules Infiltration Tank

Order no. 369015

## Practical advantages of Herkules

### Ease of transport

Each half of the Herkules-Tank only weighs 30 kg (66 lbs.). This allows ease of transport and manual installation. The tank halves fit through any doorway (80 cm (31.5") width and above).



### Easy to install



### Several tanks can be combined



# Herkules complete garden package

For the garden or home



## Herkules complete garden package

- Very convenient to use
- Draw off water like you do power from a socket. Pump switches on and off automatically
- Convenient water extraction with water hose connection box (compatible with standard hose coupling)
- Pot filter reliably holds back contaminants

### Scope of supply

- ① Herkules tank(s)
- ② Pot filter
- ③ Extension set (2 or more tanks)
- ④ Submersible pressure pump 1000 E
- ⑤ Support pipe(s) for below ground installation
- ⑥ DN 200 (8") dome(s)
- ⑦ External water hose connection box
- ⑧ 10 m (33') pressure hose 25 mm (1")

**Webcode** G1234



## Herkules complete home package

- Low-cost complete solution
- High-quality filter technology for excellent water quality
- Drinking water automatically supplied to tank when necessary

### Scope of supply

- ① Herkules tanks
- ② Universal filter 3 external
- ③ Extension set(s)
- ④ Drinking water feed with level gauge
- ⑤ Domestic water control unit, centrifugal 4/1000 with pump wall bracket
- ⑥ Suction fitting without suction hose
- ⑦ DN 200 (8") domes
- ⑧ Labelling set
- ⑨ Support pipes for installation

**Webcode** G1235

# Herkules-Tank

Three installation options



## ① Above ground

You can simply set up the Herkules tank in the garden. The tried-and-tested GRAF downpipe filters (pages 64/65) provide a reliable connection.

## ② Underground

By using accessory parts, the Herkules tank can also be installed underground. The tank can be installed in groundwater up to the top edge.

## ③ As a cellar tank

You can also install the Herkules tank in the cellar. Its tank halves will fit through any standard door of 80 cm (31.5") and above.

## Accessories

### Interconnect Pipe Set\*

(without cut-out tool)

DN 70 (2.8") Order no. 202029

DN 100 (4") Order no. 202028

\*Consisting of special seals

### Cut-out tool (with pilot drill)

DN 70 (2.8") Order no. 202002

DN 100 (4") Order no. 202003

### Tank dome

(with telescopic end 1 m (3' 3") to be cut on demand)

DN 200 (8") Order no. 322026

### Floating suction fitting with fine filter

Includes: Backflow preventer with 25 mm (1") hose connector, fine filter basket with 1.2 mm (0.05") mesh width, float ball with eye and ring, without hose

Order no. 330054

### Support pipe

(for underground installation)

DN 150 (6") Order no. 322014

### Tap with tank screw

Connection for Herkules, top and garden tank, size 19 mm (3/4"), incl. teflon sealing tape

Order no. 330044

### Aqua-Quick plastic tap

with brass finish, suited to all above-ground tanks and water butts, socket size 19 mm (3/4")

Order no. 504040

### Water butt connection kit

Kit for complete water extraction and water level display for above-ground rainwater storage tanks. Consisting of 2.15 m (7') flexible hose, extraction tap and various connection options. Suited to all storage tanks.

Order no. 220015

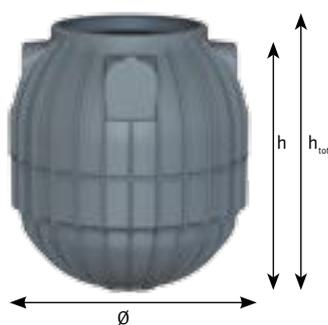
# Saphir universal shaft



## Saphir universal shaft

- Numerous connection faces for easy installation
- Telescopic / tilting dome shaft for easy alignment with ground surface
- Easy to transport thanks to low weight
- With lifting eyes for easy handling and setting down in the trench
- With profile seal for easy assembly of telescopic dome shaft
- Sealed up to ground level
- Groundwater stable up to a certain high from the bottom of the tank
- Unique stability and precision fit of components

Q Webcode G9304



### Dimensions

Volume [l]	Ø [mm]	Height h [mm]	Height h <sub>tot</sub> [mm]	Height of dome shaft [mm]	Inner Ø of dome shaft [mm]	Groundwater stable from the bottom of the tank [mm]	Weight [kg]	Order no.
600 (159 US gal.)	1125 (3' 8")	985 (3' 3")	1045 (3' 5")	60 (2.4")	645 (25.4")	430 (17")	27 (59.5 lbs.)	330455
900 (238 US gal.)	1155 (3' 10")	1265 (4' 2")	1345 (4' 5")	80 (3.2")	645 (25.4")	430 (17")	47 (103.6 lbs.)	330456
1200 (317 US gal.)	1155 (3' 10")	1590 (5' 3")	1670 (5' 6")	80 (3.2")	645 (25.4")	550 (21.6")	58 (127.9 lbs.)	330457

# 1,000 l (264 US gal.) underground tank



## Applications

- Lift station shaft
- Separating tank
- Inspection shaft
- Regulator drain shaft

## Extension for shafts and domes



- Weight: 6 kg (13 lbs.)
- The earth covering can be raised 300 mm (11.8") using the spacer

Order no. 371003

## Tank domes and covers



>> page 34/35

## Technical data

Max. earth covering (without groundwater, vehicle loading)	1000 mm (3.3")
Max. vehicle weight	Can only be driven over if a self-supporting, iron-reinforced concrete bridge is installed
Groundwater stability	<p>600 l (159 US gal.) and 900 l (238 US gal.): up to a height of 43 cm (17") from bottom of the tank</p> <p>1,200 l (317 US gal.): up to a height of 55 cm (21.6") from bottom of the tank</p>
Earth covering required for groundwater stability	300 – 600 mm (11.8 – 23.6")
Connection	DN 100 (4") / DN 150 (6")

## 1,000 l (264 US gal.) underground tank

Underground tank suitable for pedestrian loading, 1,000 l (264 US gal.) produced in one without seams, incl. PE cover.

Order no. 319039

[Q Webcode G1303](#)

## Technical data

Length	1915 mm (6' 3")
Width	930 mm (3' 1")
Height	1100 mm (3' 7")
Weight	60 kg (132 lbs.)



## Shaft extension

For 1,000 l (264 US gal.) tank, Ø 620 mm (24.4"), 700 mm (27.6") high, can be shorted

Order no. 202057



# Filter technology



## Internal filter

For use in the tank

Properties	Universal-Filter 3	Universal-Filter 3 XL	Optimax-Pro Filter	Minimax-Pro Filter
Installed in	Tank dome Carat	Tank dome Carat	Tank dome Carat	Tank dome Carat/Platin
Suitable for infiltration	•	•	–	–
Low maintenance, self-cleaning	–	–	•	•
Cleaning unit as an option	–	–	•	•
Max. flow rate l/s	5.5 l/s	16 l/s	5.5 l/s	5.5 l/s
Material of filter insert	Plastic	Plastic	Stainless steel	Stainless steel
Mesh width	0.35 mm (0.01")	0.35 mm (0.01")	0.35 mm (0.01")	0.35 mm (0.01")
Water yield with normal rain	100 %	100 %	99 %	99 %
with heavy rain	100 %	100 %	over 95 %	over 95 %
<b>Measurements</b>				
Offset height between inlet and outlet	275 mm (10.8")	275 mm (10.8")	165 mm (6.5")	10 mm (0.4")
Length	570 mm (22.4")	535 mm (21.1")	480 mm (18.9")	500 mm (19.7")
Width	570 mm (22.4")	535 mm (21.1")	260 mm (10.2")	270 mm (10.6")
Height	485 mm (19.1")	485 mm (19.1")	320 mm (12.6")	365 mm (14.4")
Connections	DN 100 (4")	DN 150 (6")	DN 100 (4")	DN 100 (4")
Weight	4.3 kg (9.5 lbs.)	4.6 kg (10 lbs.)	5.0 kg (11 lbs.)	3.6 kg (8 lbs.)
<b>Page</b>	<b>Page 58</b>	<b>Page 58</b>	<b>Page 59</b>	<b>Page 60</b>

# The ideal filter for every solution



## External filter

in plastic shaft

Properties	Optimax-Industrial-Filter external	Universal-Industrial-Filter 3 external	Optimax-Filter external	Minimax-Filter external	Universal-Filter 3 external	Pot filter
Installed in	Ground	Ground	Ground	Ground	Ground	Ground
Suitable for infiltration	–	•	–	–	•	•
Loading capacity pedestrian loading	•	•	•	•	•	–
vehicle loading	•	•	•	•	•	–
Low maintenance, self-cleaning	•	–	•	•	–	–
Cleaning unit as an option	•	–	•	•	–	–
Max flow rate l/s	29.5 l/s	29.5 l/s	16 l/s	5.5 l/s	16 l/s	5.5 l/s
Material of filter insert	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Plastic	Filter mat
Mesh width	0.35 mm (0.01")	0.75 mm (0.03")	0.35 mm (0.01")	0.5 mm (0.02")	0.35 mm (0.01")	0.10 mm (0.004")
Water yield with normal rain	99%	100%	99%	99%	100%	100%
with heavy rain	over 95%	100%	over 95%	over 95%	100%	100%
<b>Measurements</b>						
Offset height between inlet and outlet	224 mm (8.8")	229 mm (9")	200 mm (7.9")	100 mm (3.9")	270 mm (10.6")	290 mm (11.4")
Length over Connections	1180 mm (3' 9")	1140 mm (3' 7")	860 mm (33.9")	510 mm (20")	760 mm (29.9")	595 mm (23.4")
Diameter	850 mm (33.5")	850 mm (33.5")	550 mm (21.7")	550 mm (21.7")	550 mm (21.7")	560 mm (22")
Height	733 – 1320 mm (28.9" – 4' 4")	703 – 1270 mm (27.7" – 4' 2")	580 – 1050 mm (22.8" – 3' 5")	485 – 955 mm (19.1" – 3' 1")	600 – 1050 mm (23.6" – 3' 5")	340 mm (13.4")
Connections	DN 150 (6") DN 200 (8")	DN 150 (6") DN 200 (8")	DN 100 (4") DN 150 (6")	DN 100 (4")	DN 100 (4") DN 150 (6")	DN 100 (4")
Weight pedestrian loading version	37 kg (82 lbs.)	37 kg (82 lbs.)	14 kg (31 lbs.)	11 kg (24 lbs.)	11 kg (24 lbs.)	8.5 kg (19 lbs)
vehicle loading version	77 kg (170 lbs.)	77 kg (170 lbs.)	40 kg (88 lbs.)	37 kg (82 lbs.)	37 kg (82 lbs.)	–
<b>Page</b>	<b>Page 61</b>	<b>Page 61</b>	<b>Page 62</b>	<b>Page 62</b>	<b>Page 63</b>	<b>Page 63</b>

## Downpipe filters

Perfect solution for rainwater butts and above-ground tanks



Properties	Rapido Quattro	Speedy	Regendieb Pro
Installed in	Downpipe	Downpipe	Downpipe
Suitable for downpipe sizes	50x75 mm (2x3")	70 – 100 mm (2.8 – 4") (DN 70 (2.8") / DN 100 (4"))	70 – 100 mm (2.8 – 4") (DN 70 (2.8") / DN 100 (4"))
Minimum distance between downpipe / wall	–	–	16 mm (0.6")
Overflow stop function	•	•	•
Max. roof area	80 m <sup>2</sup> (865 ft <sup>2</sup> )	80 m <sup>2</sup> (865 ft <sup>2</sup> )	200 m <sup>2</sup> (2.150 ft <sup>2</sup> )
Filter insert	–	Plastic sieve	Stainless steel fine sieve
Summer/winter operation through change over on the filter body	•	•	•
<b>Measurements</b>			
Depth	60 mm (2.4")	130 mm (5.1")	–
Height	80 mm (3.2")	90 mm (3.5")	257 mm (10.1")
Diameter	60 mm (2.4")	60 mm (2.4")	132 mm (5.2")
Rainwater butt connection	32 mm (1 1/4")	32 mm (1 1/4")	DN 50 (2") / 32 mm (1 1/4")
<b>Page</b>	<b>Page 64</b>	<b>Page 64</b>	<b>Page 65</b>

# Universal-Filter 3

100 % water yield



## Advantages

- Allows up to 100 % water yield
- Space-saving filter technology inside the tank
- The filter housing can be easily removed without tools
- Ideally suited when connecting the tank to a soakaway
- 275 mm (10.8") offset height between inlet and outlet
- Maximum flow rate of 5.5 l/s with connections DN 100 (4") and 16 l/sec. with DN 150 (6")
- Emergency overflow available
- Sieve set mesh width 0.35 mm (0.01")

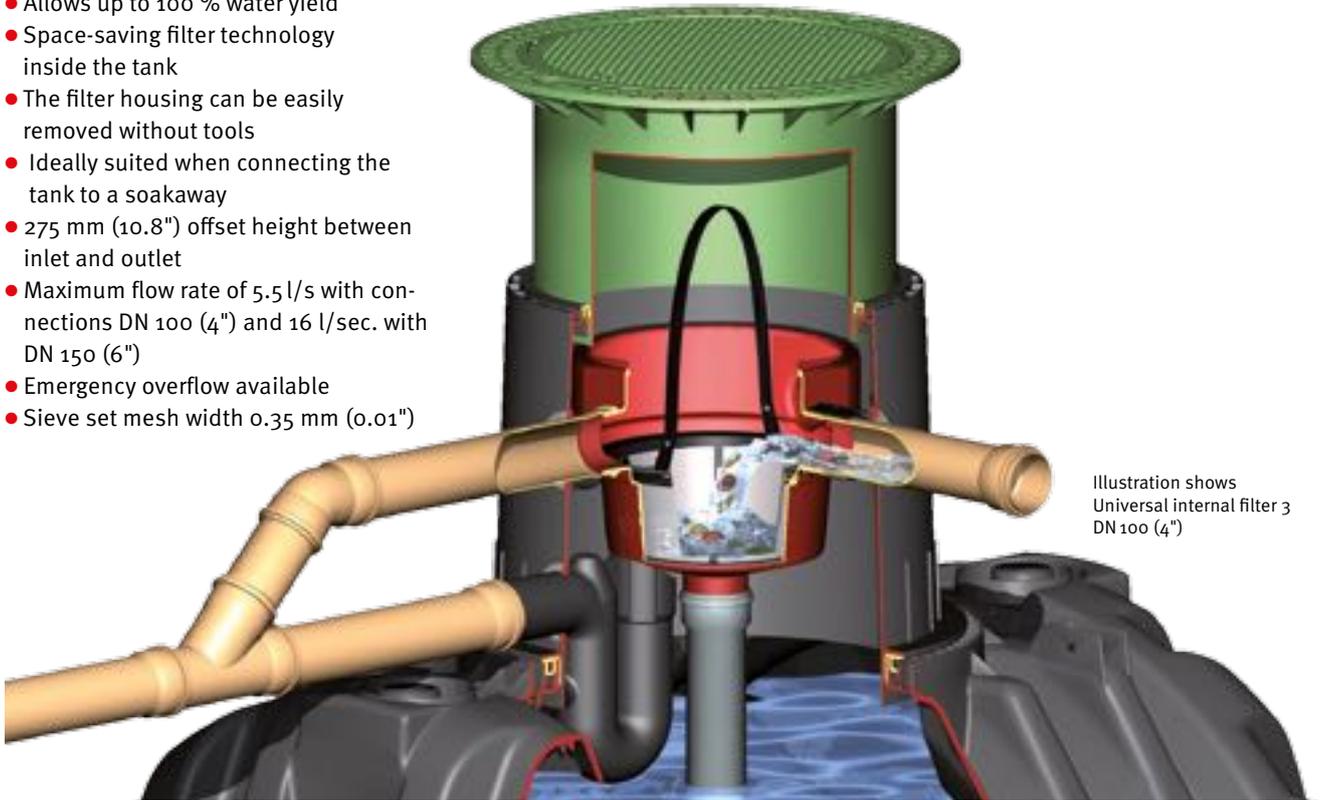


Illustration shows Universal internal filter 3 DN 100 (4")

### Universal-Filter 3 Internal

DN 100 (4")

Order no. 340022

### Universal-Filter 3 XL Internal

DN 150 (6")

Order no. 340107



## Accessories

### Quick assembly sleeve Spannfix

Patented (Page 81)

DN 100 (4")

Order no. 295909

DN 150 (6")

Order no. 340546

**Webcode** G2101

## Connecting dimensions for telescopic dome shaft

For Universal-Filter 3 Internal for Carat S

telescopic dome shaft	Inlet	Tank overflow	Emergency overflow
Mini	385 – 585 mm (15.2" – 23")	660 – 860 mm (26" – 33.9")	385 – 585 mm (15.2" – 23")
Maxi	385 – 685 mm (15.2" – 27")	660 – 960 mm (26" – 3' 2")	385 – 685 mm (15.2" – 27")

All dimensions are calculated middle of connection until earth top edge



### Replacement filter basket

Filter basket with practical lift-out device

Order no. 340056

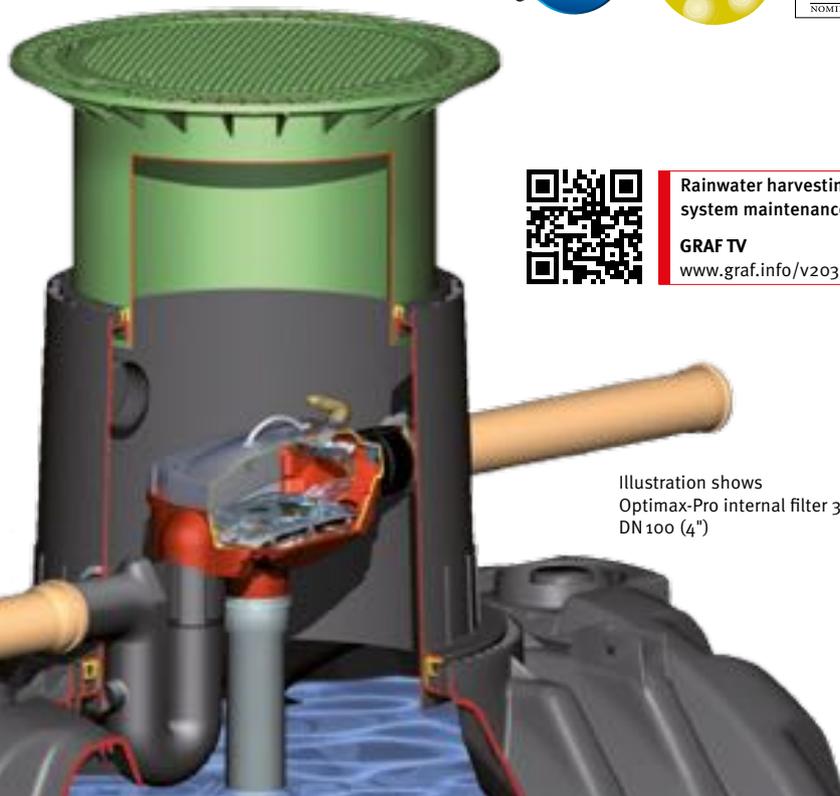
# Optimax Pro, self-cleaning Filter

Efficient cleaning system with high water yield!



## Advantages

- Provides over 95 % water yield
- Low maintenance (self-cleaning)
- Space-saving filter technology inside the tank
- Filter housing can be easily removed without tools
- Transparent lid for filter visibility
- Standard 100 mm (4") connections
- Self cleaning Opticlean system available as an optional extra
- Low offset height of 165 mm (6.5") between inlet and outlet
- Maximum flow rate of 5.5 l/s



Rainwater harvesting system maintenance

GRAF TV  
www.graf.info/v203

Illustration shows Optimax-Pro internal filter 3 DN 100 (4")

### Optimax-Pro Filter Internal (patented)

DN 100 (4")

Order no. 340037

**Webcode** G2102

### Accessories

#### Internal cleaning unit

Very powerful jet of water to clean the filter sieve, resulting in fewer maintenance intervals. Automatic control possible with the Aqua Center Silentio (page 69); 19 mm (3/4") connection, supplied without hose

Order no. 340040

#### Quick assembly sleeve Spannfix

Patented (Page 81), DN 100 (4")

Order no. 340502



### Filter cartridge

Very smooth surface and, therefore, max. self cleaning, mesh width 0.35 mm (0.01")



### Connecting dimensions for telescopic dome shaft

For Optimax-Pro Filter Internal (patented) for Carat S

telescopic dome shaft	Inlet	Tank overflow
Mini	495 – 695 mm (19.5" – 27.4")	660 – 860 mm (26" – 33.9")
Maxi	495 – 795 mm (19.5" – 31.3")	660 – 960 mm (25.9" – 3' 2")

All dimensions are calculated middle of connection until earth top edge

### XL lift out device

For a convenient withdrawal of filter cover and filter insert, length 505 mm (19.9")

Order no. 330220



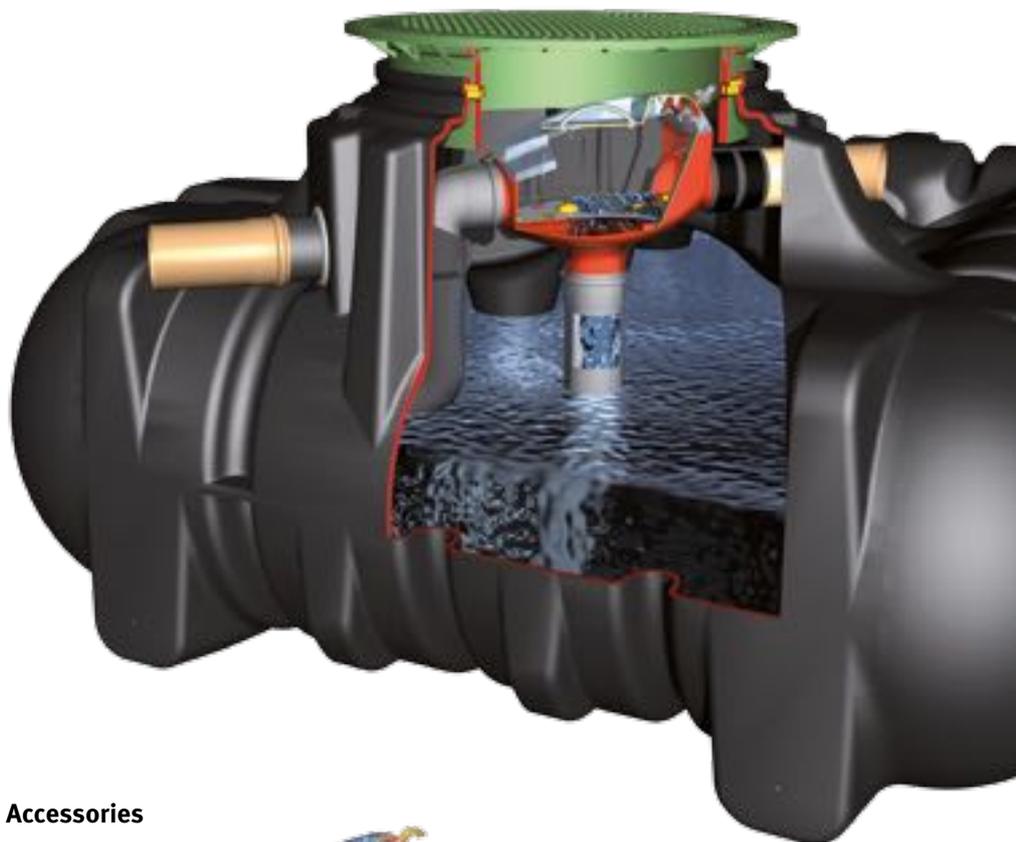
# Minimax-Pro filter, self-cleaning

Minimum height loss, maximum water yield!



## Advantages

- Water yield of over 95%
- Self-cleaning stainless steel filter insert with mesh width of 0.35 mm (0.01")
- Compact filter technology integrated in the tank
- Filter housing can be removed for tank inspection without tools
- Transparent cover for easier inspection of filter
- DN 100 (4") connections
- Optional internal cleaning unit
- Just 10 mm (0.4") height offset between inlet and outlet (with optional curved outlet – 80 mm (3.2") height offset)
- Maximum flow rate of 5.5 l/s



90° plastic pipe bend for connection to an internal siphon is included in delivery.

### Minimax-Pro internal filter (patented)

Just 10 mm (0.4") height offset between inlet and outlet

Order no. 340093

Q **Webcode** G2105

### Accessories

#### Internal cleaning unit

Very powerful jet of water to clean the filter sieve, resulting in fewer maintenance intervals. Automatic control possible with the Aqua Center Silentio (page 69); 19 mm (3/4") connection, supplied without hose

Order no. 340040



**Stainless**  
STAINLESS STEEL

#### Quick assembly sleeve Spannfix

Patented (Page 80), DN 100 (4")

Order no. 340502

### Connecting dimensions for telescopic dome shaft

For Minimax Filter Internal (patented) for Carat S

telescopic dome shaft	Inlet	Tank overflow
Mini	325 – 525 mm (12.8 – 20.7")	405 – 605 mm (15.9 – 23.8")
Maxi	325 – 625 mm (12.8 – 24.6")	405 – 705 mm (15.9 – 27.8")

All dimensions from middle of connection to ground level

#### XL lift out device

for a convenient withdrawal of filter cover and filter insert, length 505 mm (19.9")

Order no. 330220



**LORRY-BEARING CAPABILITY ON REQUEST**



Q Webcode G2201

## Optimax-Industrial filter external

- Maximum flow rate of 29.5 l/s
- Smooth installation depths from 733 – 1320 mm (28.9 – 4' 4") using the telescopic dome shaft
- Only 224 mm (8.8") height offset between the inlet and outlet.

**Optimax-Industrial Filter external**  
suitable for pedestrian loading

Order no. 340035

**Optimax-Industrial Filter external**  
suitable for vehicle loading

Order no. 340036

### Accessories

**External cleaning unit**  
without hose

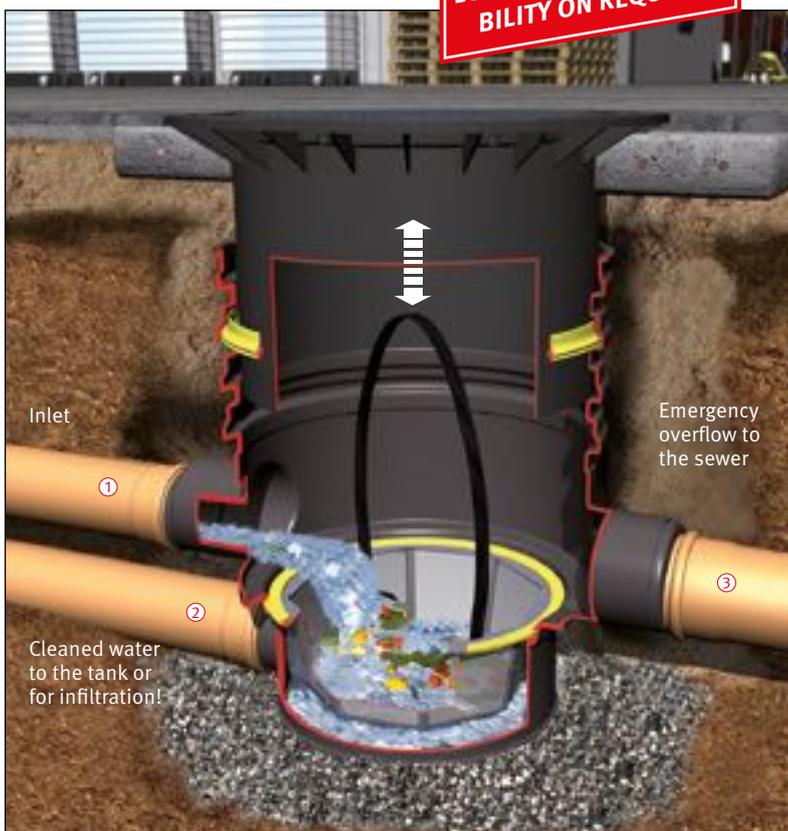
Order no. 340041

### Connecting dimensions

① Inlet	DN 150 (6")	430 – 1017 mm
	DN 200 (8")	(16.9" – 3'3")
② Outlet	DN 150 (6")	654 – 1241 mm
		(25.7" – 4' 1")
③ To the sewer	DN 150 (6")	654 – 1241 mm
	DN 200 (8")	(25.7" – 4' 1")

All dimensions are calculated middle of connection until earth top edge

**LORRY-BEARING CAPABILITY ON REQUEST**



Q Webcode G2202

## Universal-Industrial filter 3 external

- Maximum flow rate of 29.5 l/s
- Continuously variable installation depth of 703 – 1270 mm (26.7 – 4' 2") using the telescopic dome shaft
- Only 229 mm (9") height offset between the inlet and the outlet

**Universal industrial filter 3 external**  
suitable for pedestrian loading

Order no. 340050

**Universal industrial filter 3 external**  
suitable for vehicle loading

Order no. 340051

### Connecting dimensions

① Inlet	DN 150 (6")	395 – 962 mm
	DN 200 (8")	(15.6" – 3' 2")
② Outlet	DN 150 (6")	624 – 1191 mm
		(24.6" – 3'9")
③ Emergency overflow	DN 150 (6")	395 – 962 mm
	DN 200 (8")	(15.6" – 3' 2")

All dimensions are calculated middle of connection until earth top edge

# External filter technology

Self-cleaning



## Optimax-Filter external

- Provides over 95 % water yield
- Low maintenance as it is self cleaning
- Continuously variable installation depth of 580 mm – 1050 mm (22.8 – 3' 5") using the telescopic dome shaft
- Minimal height offset (200 mm (8")) between the inlet and outlet
- Optional with cleaning unit Opticlean
- Maximum flow rate of 16 l/s

### Optimax-Filter external

Suitable for pedestrian loading

Order no. 340030

### Optimax-Filter external

Suitable for vehicle loading

Order no. 340031



## Accessories

### External cleaning unit

Without hose

Order no. 340041

### VS connecting piece DN 400 (16")

For large installation depths, useful length: 500 mm (19.7"), can be shortened to 250 mm (9.8")

Order no. 330341

### Connecting dimensions

① Inlet	330 – 800 mm (13" – 31.5")
② Outlet	530 – 1000 mm (20.9" – 3' 3")
③ To the sewer	530 – 1000 mm (20.9" – 3' 3")

All dimensions are calculated from the middle of connection to the earth top edge

Q Webcode G2203



## Minimax-Filter external

- Only 10 mm (0.4") height offset between the inlet and outlet
- Sieve insert mesh width 0.35 mm (0.01")
- Continuously variable installation depth of 485 mm – 955 mm (19.1 – 3' 2") using the telescopic dome shaft
- Standard 100 mm (4") connections
- Optional with cleaning unit Miniclean
- Maximum flow rate of 5.5 l/s.

### Minimax-Filter external

suitable for pedestrian loading

Order no. 340061

### Minimax-Filter external

suitable for vehicle loading

Order no. 340062



Q Webcode G2204

## Accessories

### External cleaning unit

Order no. 340041

### Connecting dimensions

① Inlet	330 – 800 mm (13" – 31.5")
② Outlet	430 – 900 mm (16.9" – 3")
③ To the sewer	340 – 810 mm (13.4" – 31.9")

All dimensions are calculated from the middle of connection to the earth top edge

# External filter technology

Universal-Filter 3 external and Pot filter



## Universal filter 3 external

- 100% water yield therefore ideal for smaller roof areas
- Filter insert mesh width 0.35 mm (0.01")
- Continuously variable installation depth of 600 mm – 1050 mm (23.6" – 3' 5") using the telescopic dome shaft
- Lockable, childproof cover
- Flush with ground level
- Minimal height offset (270 mm (10.6")) between the inlet and outlet
- Also suitable for infiltration and pond systems
- Maximum flow rate of 16 l/s

### Accessories

#### Replacement filter basket

Filter insert with practical lift-out device



Order no. 340524

#### VS connecting piece DN 400 (16")

For large installation depths, useful length: 500 mm (19.7"), can be shortened to 250 mm (9.8")

Order no. 330341

### Connecting dimensions

① Inlet	273 – 723 mm (10.7" – 28.5")
② Outlet	544 – 944 mm (21.4" – 3' 1")
③ Emergency overflow	273 – 723 mm (10.7" – 28.5")

All dimensions are calculated from the middle of connection to the earth top edge

[Q Webcode G2205](#)

### Universal filter 3 external

suitable for pedestrian loading

Order no. 340020

### Universal filter 3 external

suitable for vehicle loading

Order no. 340021



## Pot filter

For installation at ground level (underground tank inflow) before the cistern. Good value alternative – suitable when only used for garden irrigation, ponds or infiltration. Connection: DN 100 (4"). Dimensions: 500 mm (19.7") Ø, 340 mm (13.4") high

### Pot filter

Order no. 340003

### Connecting dimensions

① Outlet	288 mm (11.3")
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All dimensions are calculated from the middle of connection to the earth top edge

[Q Webcode G2206](#)

### Accessories

#### Replacement filter mats (2 units)

Order no. 347010

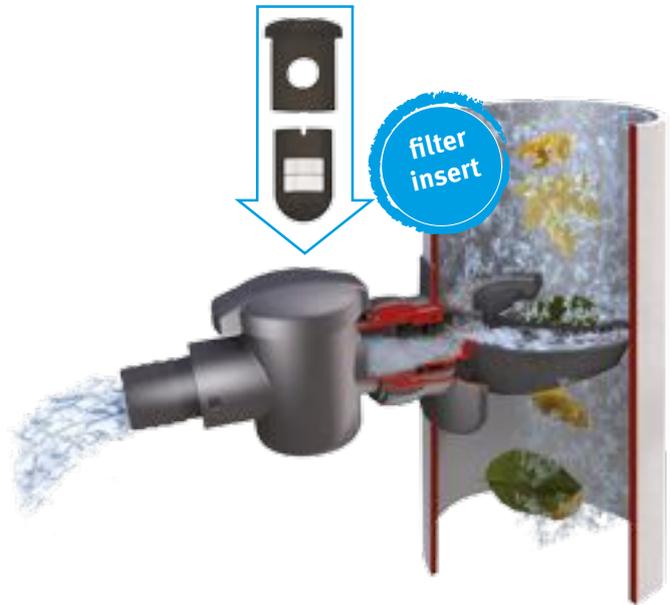
# Rain collector *Speedy* and *Rapide*® Quattro

The installation champions

**INSTALLED IN 5 MINUTES**



- No need to cut through downpipe for assembly
- Wall clearance of the downpipe does not matter
- Can also be used as a flap valve
- Includes filter and overflow function
- Summer/winter operation
- Suitable for downpipe size 70 – 100 mm (2.8 – 4")
- Recommended roof area max. 80 m² / 865 ft²
- Includes core drill, connector seal and connection hose



## *Speedy*

Order no. 503041

Q **Webcode** G2301

### Drill



### Plug in



### Done



How does a downpipe filter work?

GRAF TV  
www.graf.info/v211



- For rectangular downpipe
- No removal of the downpipe for the installation
- Wall clearance of the downpipe does not matter
- With Overflow function
- Summer/winter operation
- Suitable for downpipe size 50 x 75 mm (2 x 3")
- Including core drill, connection seal and flexible connection hose



## *Rapide*® Quattro

Order no. 503071

Q **Webcode** G2307

# Rain collector Regendieb Pro

The slim version for big roof areas

**FOR ROOF SURFACES  
UP TO 200 m<sup>2</sup>**



- Reliably filters contaminants out of rainwater
- Automatically fills the rainwater storage tank and prevents the full tank from overflowing
- High water yield (approx. 95%)
- New filter principle with much larger filter area
- Slimline design – only requires a 16 mm (0.6") space between downpipe and house wall
- Rotating filter housing for flexible connection
- Easy switching from summer to winter use
- Includes inlet seal
- Suitable for downpipe size 70 – 100 mm (2.8 – 4")

## Regendieb Pro

grey: Order no. 344202

brown: Order no. 344203

**Q Webcode** G2305



### Connection set Flex-Comfort

Extra-long and extremely flexible connection kit (40 cm (15.7")) to connect rainwater tanks as well as Regendieb, Regendieb de luxe and Regendieb Pro. Includes extensive installation accessories.

### Scope of supply:

Flexible 40 cm (15.7") connection hose, core drill and hose connector; with 2 x connection fittings, inlet seals and hose clips.

grey: order no. 220019

brown: order no. 220020



# Domestic waterworks and pumps



# The central system control for your rain water harvesting system



## Feeding console

Properties	Drinking water feeding console		Aqua Center Silentio		EcoSmart	Mains-on-tap
<b>Pump</b>	<b>15/4</b>	<b>25/4</b>	<b>15/4</b>	<b>25/4</b>	<b>Diaphragm Pump</b>	–
Nominal power	660 W	800 W	660 W	800 W	90 W	–
Operating noise	55 dB(A)	55 dB(A)	49 dB(A)	49 dB(A)	–	–
Predection class	IP 44	IP 44	IP 44	IP 44	IP 44	IP 44
Operating pressure	3.5 bar (51 psi)	4.3 bar (62 psi)	3.5 bar (51 psi)	4.3 bar (62 psi)	2.4 bar (35 psi)	–
Feed height	35 m (114' 9")	43 m (141' 1")	35 m (114' 9")	43 m (141' 1")	24 m (78' 9")	–
Max. delivery rate	3,600 l/h (951 US gal.)	4,200 l/h (1110 US gal.)	3,600 l/h (951 US gal.)	4,200 l/h (1110 US gal.)	750 l/h (298 US gal.)	up to 720 l/h (190 US gal.)
Max. suction height	6 m (19' 8")	6 m (19' 8")	6 m (19' 8")	6 m (19' 8")	3 m (9' 10")	–
Max. suction length	15 m (49' 3")	15 m (49' 3")	15 m (49' 3")	15 m (49' 3")	12 m (39' 4")	–
Display operating pressure	•	•	•	•	–	–
Optionally available as Silentio Press package for distances of >/=15 m to the house	–	–	•	•	–	–

## Drinking water feeding module

	10 l (2.6 US gal.)	6.5 l (1.7 US gal.)	3 l (0.8 US gal.)	–
Capacity				
Manual switching to drinking water is possible	•	•	•	–
Automatic water exchange basin	–	•	–	–
Overflow corresponds to EN 1717	•	•	•	•

## System control

Via float switch / level sensor	•	–	–	•
Via electronic measurement	–	•	•	–
Optional filter cleaning unit	–	•	–	–
Display Operating error	–	LED/Full text		LED

## Measurements

Width	680 mm (26.8")	580 mm (22.8")	429 mm (16.9")	218 mm (8.6")
Height	760 mm (29.9")	530 mm (20.9")	394 mm (15.5")	277 mm (10.9")
Depth	210 mm (8.3")	295 mm (11.6")	282 mm (11.1")	95 mm (3.7")
Weight	30 kg (66.2 lbs.)	34 kg (75 lbs.)	8 kg (17.6 lbs.)	0.6 kg (1.3 lbs.)
<b>Page in catalogue</b>	<b>Page 68</b>	<b>Page 69</b>	<b>Page 70</b>	<b>Page 71</b>

# Drinking water feeding console

The cost-effective solution

The drinking water feeding console controls and regulates the entire water requirement and guarantees outstanding operational safety due to its reliable operation. The drinking water feeding console is safety-tested in accordance with DIN 1988 and EN1717. The floating switch-controlled monitoring of the fill level in the rainwater tank ensures

that, in the event that the water level in the tank drops below the predefined minimum, drinking water is automatically provided from the in-house reservoir as needed. As soon as the cistern refills with rainwater, the drinking water feeding console switches back to rainwater operation.

## Advantages

- Cost-effective in-house internal drinking water intake
- Floating switch- controlled



Display of the operating pressure

The integrated dry running prediction prevents damage in the event of water shortage and guarantees safe operation.

High-quality, high-performance KSB centrifugal pump guarantees long, safe system operation

Suction pipe for the rainwater from the tank 25 mm (1")

Closed three-way valve: reduces the risk of backpressure. Opens to provide drinking water when the water level is low

Emergency overflow DN 50 (2") in accordance with EN 1717



### Drinking water feeding console

Incl. floating switch with 20 m (65' 6") connection cable

Pump	Order no.
15/4	350021
25/4	350022

Q Webcode G3101

# Aqua Center Silentio

The convenient control system

The GRAF Aqua-Center-Silentio is the central system control for your rainwater harvesting system. The microelectronics control and regulate the entire system. The pump and processor units are compactly installed with the intake container. The switching valve is sensor-controlled and opens the drinking water intake to the service water network when the water level is low in the cistern. The Aqua-Center-Silentio switches back to rainwater operation after even a brief rain shower. The Aqua-Center-Silentio is safety-tested in accordance

with DIN 1988 and EN 1717 and can be installed above the backpressure level without problems. By connecting a lifting device in accordance with DIN 1988 and EN 1717 to the overflow, installation is also possible below the backpressure level. Please follow the installation instructions. A quiet, multi-stage, self-priming centrifugal pump with professional output works below the attractive soundproof hood. The Aqua-Center-Silentio comes ready to connect – this facilitates a simple and quick start-up.

## Advantages

- With automatic filter cleaning unit as option
- Regular rinsing of the drinking water reservoir prevents microbial contamination
- Digital display of the operating status and the level in the cistern.



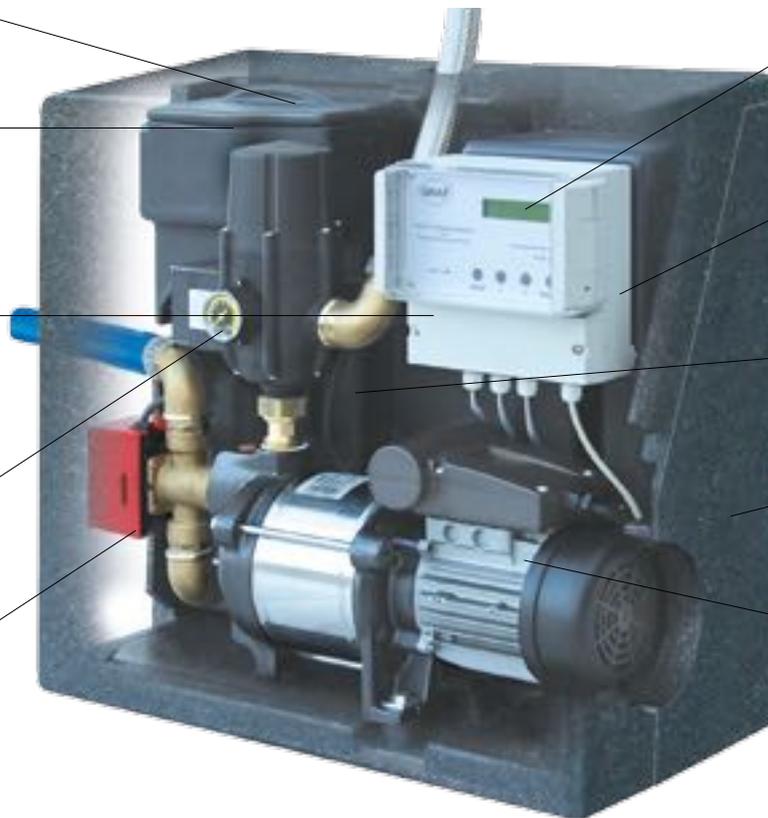
Regular rinsing of the drinking water reservoir prevents microbial contamination

The integrated dry running prediction prevents damage in the event of a water shortage and guarantees safe operation

High operating safety thanks to approved micro-processor controls (can be adjusted individually)

Operating pressure display

When required, drinking water is drawn



Digital display of the operating status and the level in the cistern

Automatic control of the Opticlean® filter cleaning unit, cleaning intervals can be programmed

Integrated emergency overflow corresponds to the new EN 1717 Part 3

Complete soundproofing of all sources of noise for quiet operation

High-quality, high-performance KSB redary pumps guarantee long, safe system operation



**Aqua Center Silentio**  
Incl. switching valve sensor controlled and 20 m (65' 6") data line



**Aqua-Center-Silentio Press**  
For greater distances between the tank and the house waterworks (15 m (49' 3")) including submersible pump 300 A as a pressure pump (Page 73)

Pump	Order no.
15/4	350209
25/4	350210

Pump	Order no.
15/4	350211
25/4	350212

## Accessories

**Automatic filter cleaning unit**

Order no. 352038

**Data line 50 m (164')**

2 wire with Cinch plug

Order no. 330699

Q Webcode G3102

Q Webcode G3103

# GRAF EcoSmart

The central system control of your rainwater harvesting system

GRAF EcoSmart is the smart system control of your rainwater harvesting system. The electronic control unit checks and regulates the entire operation. When the rainwater tank level is low or becomes empty, GRAF EcoSmart automatically switches to mains water supply until the rainwater tank is replenished. Then it automatically switches back to rainwater supply. This ensures that a minimum of

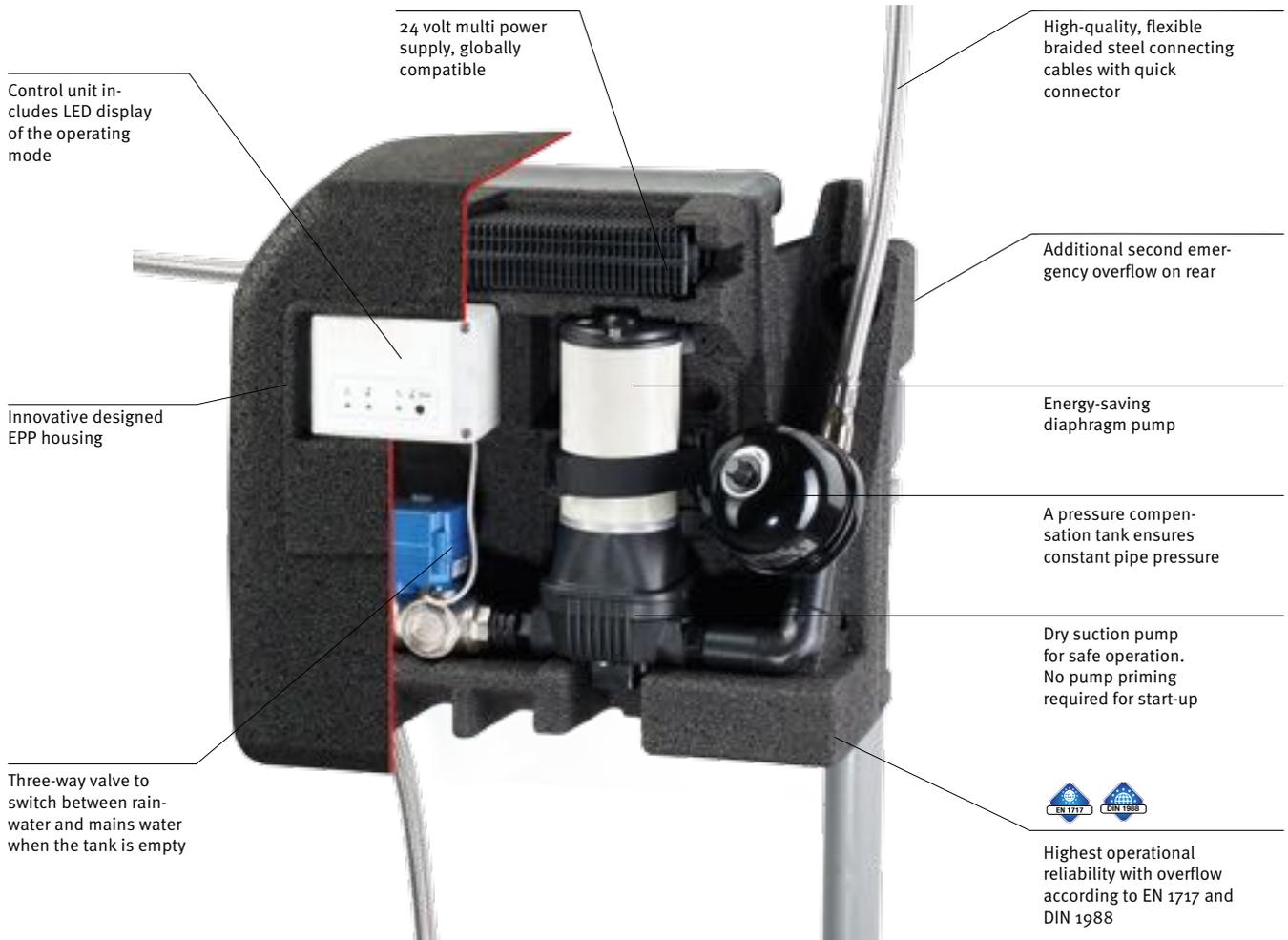
mains water is used during longer dry periods.



**85% less power consumption**  
With its diaphragm pump, EcoSmart creates considerable energy savings

## Advantages

- Very compact housing – only 429 x 394 x 282 mm (16.9 x 15.5 x 11.1") (w x h x d)
- No electrical parts in the tank
- Can switch to main water at the push of a button
- Low drinking water consumption by supplying only when required
- Solar capable using 24-volt technology



## EcoSmart – the Plug & Play feed console

No initial pump priming | No floating switch  
No calibration required | Tool-free plug connections

**GRAF EcoSmart system control**

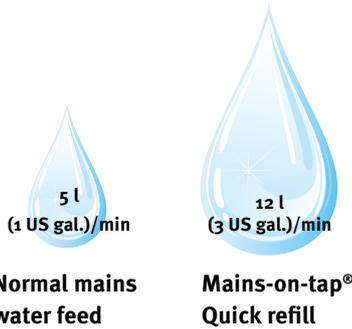
Order no. 350030

Q Webcode G3105



# GRAF Mains-on-tap®

So that your rainwater harvesting system never runs out of water

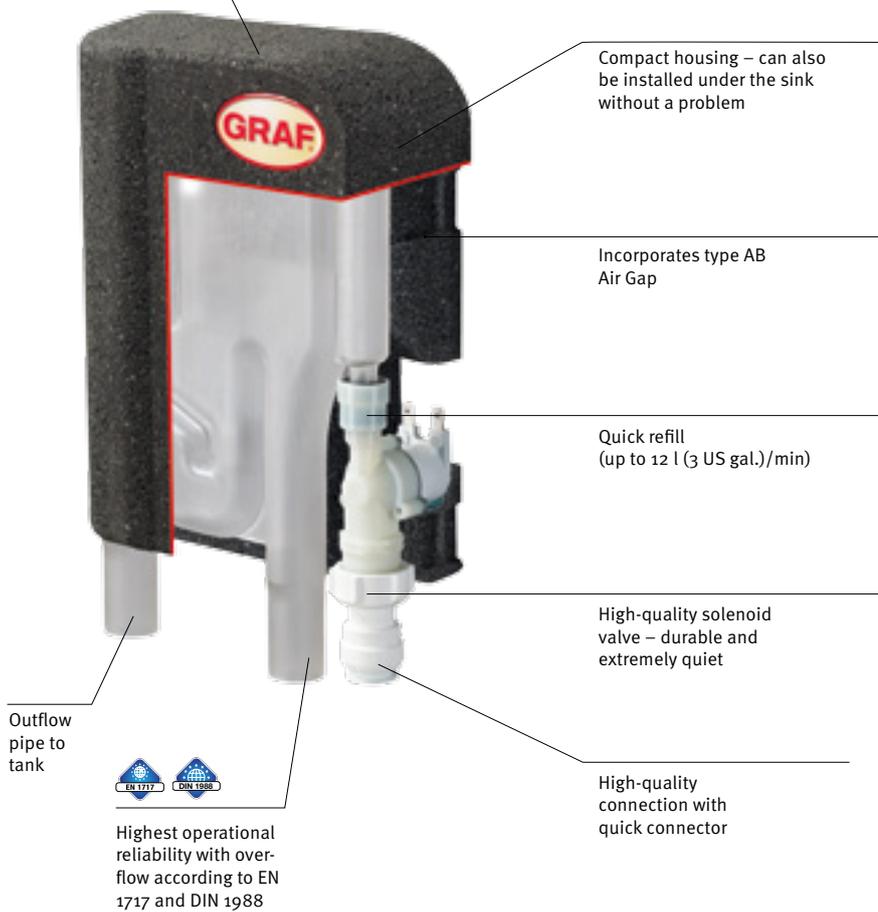


1. Permanent monitoring of your rainwater tank level
2. Upon reaching a critical fill level, the rainwater tank is topped up with a small quantity of mains water.

## Advantages

- Excellent value for money
- Low mains water consumption
- Quick refill (up to 12 l (3 US gal./min))
- Extremely small housing – only 218 x 277 x 95 mm (8.6 x 10.9 x 3.7") (w x h x d)
- Virtually silent operation
- Incorporates AB Air Gap
- Solar capable using 12-volt technology
- Mains-on-tap® – the Plug & Play feed console. No calibration required. Tool-free plug connections

Innovative designed EPP housing

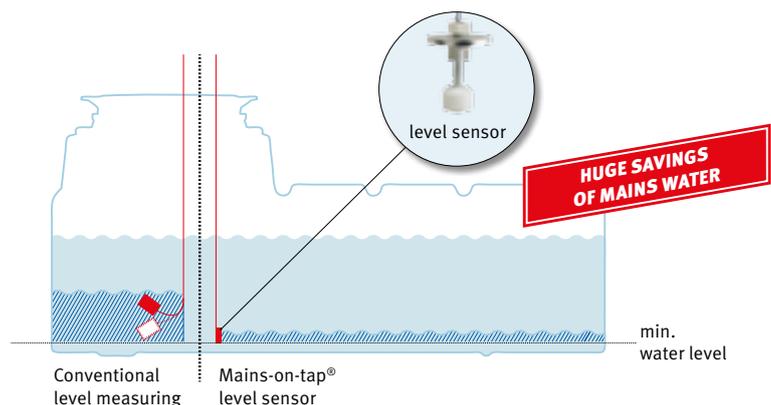


**Mains-on-tap®**  
Scope of delivery:  
Mains-on-tap® incl.  
12 volt wall power supply  
and level sensor



Order no. 350020

Q Webcode G3106



# Domestic waterworks and pumps



## KSB-Superinox 15/4 and 25/4

- Tried-and-tested domestic waterworks with brand-name quality from Graf
- Stainless steel housing
- Runs very quietly
- Multi-stage, self-priming centrifugal pump with energy efficient motor
- Pump is automatically switched on and off via pressure and flow monitor
- Integrated dry running prediction and reflux prevention
- Motor with life-long lubrication and integrated prediction switch
- Prediction type IP 44

15/4 Order no. 353032

25/4 Order no. 353046

[Q Webcode G3201](#)

[Q Webcode G3202](#)



## Kreisel 4/1000

- Domestic waterworks with brand-name quality from Graf
- Low operating noise
- Multi-stage, self-priming centrifugal pump with energy-efficient motor
- Pump is automatically switched on and off via pressure and flow monitor
- Integrated dry running prediction and backflow prevention
- Motor with life-long lubrication and integrated predictive switch

Order no. 354021

[Q Webcode G3203](#)



## Jet 700

- Self-priming Jet pump
- Tried-and-tested pump technology with the brand-name quality from Graf
- Runs very quietly
- Made of oxidation-resistant materials

Order no. 202011

[Q Webcode G3204](#)

Performance Data	Superinox 15/4	25/4	Kreisel 4/1000	Jet 700
Motor performance	0.66 kW	0.8 kW	1.0 kW	0.7 kW
Max. feed height	35 m (114' 9")	43 m (141' 1")	48 m (157' 6")	40 m (131' 3")
Max. operating pressure	3.5 bar	4.2 bar	4.8 bar	4.0 bar
Max. delivery rate	3,600 l/h (951 US gal.)	4,200 l/h (1,110 US gal.)	4,800 l/h (1,268 US gal.)	3,000 l/h (793 US gal.)
Max. suction height	8 m (26' 2")		8 m (26' 2")	8 m (26' 2")
Max. suction length	18 m (59' 1")		15 m (49' 2")	15 m (49' 2")
Max. submersion depth	–		–	–

Attention: the suction performance values represented in the chart are not valid in combination with drinking water feeding consoles!

## Accessories



### Pump wall console

suitable for pumps KSB-Superinox and Kreisel 4/1000, rubber mounting brackets reduce noise

Order no. 355020



### Flexible armoured hose

Latex core, stainless steel jacket, length 500 mm (19.7"), wear-free, rust-free, brass connections R 1"

Order no. 330058



### Controlmatic

Pump switching gear with dry running prediction and pressure gauge, completely wired, 1"

Order no. 355022



### Brio

Pump switching gear with dry running prediction, completely wired, 1", IP 65

Order no. 355021



### Integra INOX

- Automatic submerged pump with integrated pressure-and flow monitor
- Pump switches on and off automatically
- Tried-and-tested pump technology with the brand-name quality from Graf
- Runs very quietly
- Made of oxidation-resistant materials
- Includes 10 m (33') cable and floating water extraction unit
- Can also be used as a suction pump

Order no. 354018

Q Webcode G3205



### Submerged pump 300 A

- Submerged pump with dry running predection
- Tried-and-tested pump technology with the brand-name quality from Graf
- Runs very quietly
- Made of oxidation-resistant materials
- Incl. 15 m (49' 3") cable

Order no. 354031

Q Webcode G3206



### Submersible pressure pump 1000 A

- Submersible pressure pump with dry running predection and 4 running wheels
- Tried-and-tested pump technology with the brand-name quality from Graf
- Runs very quietly
- Made of oxidation-resistant materials
- Incl. 15 m (49' 3") cable

Order no. 354030

Q Webcode G3207



### Submersible pressure pump 1000 E

- Submersible pressure pump with integrated pressure-and flow monitor
- Pump switches on and off automatically
- Tried-and-tested pump technology with the brand-name quality from Graf
- Runs very quietly
- Made of oxidation-resistant materials
- Incl. 15 m (49' 3") cable

Order no. 354036

Q Webcode G3208

Performance data Integra INOX	Submerged pump 300 A	Submersible pressure pump 1000 A	Submersible pressure pump 1000 E
1.1 kW	0.3 kW	0.9 kW	0.9 kW
40 m (131' 3")	7 m (23'")	36 m (118' 1")	36 m (118' 1")
4.0 bar	0.7 bar	3.6 bar	3.6 bar
3,000 l/h (793 US gal.)	7,200 l/h (1,902 US gal.)	6,000 l/h (1,585 US gal.)	5,600 l/h (1,479 US gal.)
8 m (26' 2")	–	–	–
12 m (39' 4")	–	–	–
5 m (16' 4")	3 m (9' 10")	8 m (26' 3")	8 m (26' 3")



### Reversible flow filter

For fine filtering of rainwater after the pump. This is sensible if the water is going to be used for the washing machine. The mesh width of the 0.1 mm (0.004") fine filter retains the smallest dirt particles. Connections R 1" AG.

DVGW-tested fine filter in accordance with DIN. The

sieve insert cleans easily in a few seconds, the sieve does not need to be replaced.

Note: the rainwater must be fed through a pre-filter (page 56 – 63) before it is fed into the tank.

Order no. 331021



# Water hose connection box / Water extraction unit



## External water hose connection box

For the convenient extraction of rainwater in your garden. For jet pump and submersible pump, includes 2-way valve for standard hose coupling, 25 mm (1") hose connection.

[Webcode G9102](#)

- Made of extra-tough, weather-resistant plastic
- Makes an ideal extra extraction point for your underground tank

Order no. 202060



## Internal water hose connection box

For the convenient extraction of rainwater in your garden. Extract water directly from the tank. Easy to retrofit with Mini

[Webcode G9103](#)



or Maxi telescopic dome shaft, includes valve for standard hose coupling, 25 mm (1") hose connection.

Order no. 375119



## Stainless steel water filling pump

The elegant water extraction point for the garden. Made of stainless steel, with chrome-plated drain cock. 19 mm (3/4") connection with external thread in base.

[Webcode G9104](#)

Ø Column 10 cm (4"), Base 20 cm (8"), Height 90 cm (3'), Weight 6.2 kg (13.6 lbs.)

Order no. 356020



## Pump set

Complete set with heavy cast pillar 32 mm (1 1/4") connection, colour: green

Order no. 356010

## Pump body

Top part only, 32 mm (1 1/4") connection, colour: green

Order no. 356503

[Webcode G9105](#)

## Spare seal set

Piston sleeve, flange and valve seals, leather piston seal

Order no. 356502

## Reducing adapter

1 1/4" internal thread to 1" external thread for connecting the manual pump to a GRAF underground tank with a suction fitting

Order no. 330025

# Granite water extraction | Wood water extraction

Practical and stylish



**TIP**  
 • Ideal as an additional extraction point for rainwater harvesting systems

## water extraction

- Elegant water extraction point in the form of a natural granite stela
- Can be fitted with 19 mm (3/4") hose connection at bottom
- Includes 19 mm (3/4") chrome drain cock for convenient water extraction
- Easy assembly – pre-drilled holes in base
- Very UV-stable
- Made of high-quality, weather-resistant plastic



### Granite water extraction

Height 100 cm (3' 3"), Column 13 x 13 cm (5.1 x 5.1"), Base 25 x 25 cm (9.8 x 9.8"), Weight 5 kg (11 lbs.)

darkgranite	Order no. 356025
lightgranite	Order no. 356026

[Q Webcode G9107](#)



### Wood water extraction

Height 100 cm (3' 3"), Column 13 x 13 cm (5.1 x 5.1"), Base 25 x 25 cm (9.8 x 9.8"), Weight 5 kg (11 lbs.)

darkwood	Order no. 356030
lightwood	Order no. 356031

[Q Webcode G9108](#)



## Rondo water extraction unit

- Made of extra-tough, weather-resistant plastic
- The convenient water extraction point for the garden
- Can be fitted with 19 mm (3/4") hose connection at bottom
- Includes 19 mm (3/4") chrome drain cock for convenient water extraction
- Easy assembly – pre-drilled holes in base



∅ Column 12 cm (4.7"), Base 19 cm (7.5"), Height 90 cm (3'), Weight 3 kg (7 lbs.)

stonegrey	Order no. 356021
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[Q Webcode G9101](#)

# Stone fountain Venezia & Roma

In natural stone look



**! TIP**  
 • Ideal as an additional extraction point for rainwater harvesting systems



## Stone fountain

- Includes 19 mm (3/4") traditional-look drain cock for convenient water extraction
- Can be fitted with 19 mm (3/4") hose connection at bottom
- Pre-assembled and ready to connect
- Made of high-quality, weather-resistant plastic

### Venezia

Height 90 cm (3'), Width 44 cm (17.3"), Depth 52 cm (20.5"), Height basin 15 cm (5.9"), Weight 8 kg (18 lbs.)

lightgranite	Order no. 356100
redstone	Order no. 356102

[Q Webcode G9109](#)

### Roma

Height 100 cm (3' 3"), Width 54 cm, Depth 54 cm (21'3"), Height basin 25 cm (9.8"), Weight 10 kg (22 lbs.)

lightgranite	Order no. 356101
redstone	Order no. 356103

[Q Webcode G9110](#)

# Accessories

For rainwater harvesting

Order no.

## ① Floating water extraction unit

Scope of supply: floating balloon, non-return valve with stainless steel fine suction basket, suction hose with brass connecting thread R 1" inside thread, length 300 cm (9'9")

Fine filter nominal width 1.2 mm (0.05")

333014

Micro filter nominal width 0.23 mm (0.01")

333015



## ② Floating suction fitting with fine filter

330054

Includes: Non-return valve with 25 mm (1") hose connector, fine filter basket with mesh width of 1.2 mm (0.05"), float ball with eye and ring, without hose



## ③ Floating suction fitting with micro-fine filter

330055

Includes: Backflow preventer with 25 mm (1") hose connector, micro-fine filter basket with mesh width of 0.2 mm (0.01"), float ball with eye and ring, without hose



## ④ Suction set

333002

Scope of supply: suction basket, backpressure valve made of brass, suction hose with 1" curved hose nozzle, length: 250 cm (8' 2") can be shortened, for Carat S and Rondus tanks



## ⑤ Suction set

Suction hose with filter basket and backpressure valve, connection 25 mm (1") outside thread

4 m (13' 1")

355012

7 m (23')

355013



## ⑥ PE suction pipe,

12 m (39' 4") long, for connecting between the tank connection and pump. With screw connection, 1" outside thread and MS <math>\sphericalangle</math> 90° R 1" outside thread

330082



**Order no.**
**① PVC pressure hose**

Yellow with fabric lining, size 25 mm (1")



5 m (16' 4")	330075
10 m (32' 8")	330076
15 m (49' 2")	330077
25 m (82')	330078

**② PVC suction hose**

Grey with reinforcing ribs, size 25 mm (1")



5 m (16' 4")	330188
10 m (32' 8")	330189
15 m (49' 2")	330190
25 m (82')	330191

**③ PVC suction hose**

Grey with reinforcing ribs, size 32 mm (1 1/4")



5 m (16' 4")	330060
10 m (32' 8")	330062
15 m (49' 2")	330063
25 m (82')	330065

**④ Special suction and pressure hose**

PVC hose, with spring steel coil, high bending strength, max. pressure 10 bar, max. vacuum 0.9 bar, size 25 mm (1"), colour: black, price per metre



330624

**⑤ Cut-out tool**

for pipe DN 50 (2") with pilot drill Ø 58 mm (2.3")	332004
for pipe DN 70 (2.8") with pilot drill Ø 83 mm (3.3")	202002
for pipe DN 100 (4") with pilot drill Ø 124 mm (4.9")	202003
for pipe DN 150 (6") with pilot drill Ø 175 mm (6.9")	332002
for pipe DN 200 (8"), with pilot drill Ø 210 mm (8.3")	332005


**⑥ Special seal**

For connecting the tanks and further connections



for pipe	Ø Borehole	Tank wall thickness	Colour	
DN 32 (1.3")	46 mm (1.8")	4–8 mm (0.15–0.3")	black	332036
DN 19 (0.8")	45 mm (1.8")	1–15 mm (0.04–0.6")	black	330383
DN 32 (1.3")				
DN 32 (1.3")	58 mm (2.3")	1–15 mm (0.04–0.6")	black	330347
DN 50 (2")				
DN 50 (2")	58 mm (2.3")	4–8 mm (0.15–0.3")	black	332038
DN 50 (2")	58 mm (2.3")	10–18 mm (0.4–0.7")	black	332045
DN 70 (2.8")	83 mm (3.3")	3–5 mm (0.1–0.2")	grey	332041
DN 70 (2.8")	83 mm (3.3")	4–6 mm (0.15–0.25")	green	332039
DN 70 (2.8")	83 mm (3.3")	9–16 mm (0.4–0.6")	black	332040
DN 100 (4")	124 mm (4.9")	4–6 mm (0.15–0.25")	green	332031
DN 100 (4")	124 mm (4.9")	9–13 mm (0.4–0.5")	black	332033
DN 100 (4")	124 mm (4.9")	14–17 mm (0.55–0.66")	red	332032
DN 100 (4")	124 mm (4.9")	17–21 mm (0.66–0.8")	blue	332030
DN 150 (6")	175 mm (6.9")	6–11 mm (0.25–0.4")	black	332035
DN 150 (6")	175 mm (6.9")	11–21 mm (0.4–0.8")	grey	332046
DN 200 (8")	210 mm (8.3")	11–21 mm (0.4–0.8")	grey	332049

**⑦ Labelling set**

for rainwater harvesting systems, consisting of: engraved sign, adhesive foil, 10 m (33') film strip, adhesive label, pipe label



330122

# Accessories

For rainwater harvesting

	Order no.
<p><b>① Aqua-Control+</b></p> <p>The Aqua-Control+ informs on the exact water level in the tank and switches automatically to drinking water intake as needed. This ensures smooth operation of the entire plant. The pump is also protected against dry running. Digital display and adjustable intake amount in 1 % steps. Regular rinsing of the magnetic valve. 2-year warranty. Price incl. brass magnetic valve and 20 m (65' 7") of data cable.</p>	351021
<p><b>② Digital fill level display</b></p> <p>Childproof 12-volt technology with 20 m (65' 7") of data line. Digital display in 1 % steps, any tank size up to 3 m (9' 8") high, simple assembly, also for retrofitting existing systems, 2-year warranty.</p>	351013
<p><b>③ Wall duct DN 100 (4")</b></p> <p>1 x 25 mm (1") + 2 x cable bushing</p> <p style="text-align: right;">331002</p> <p><b>Wall duct DN 150 (6")</b></p> <p>1 x 25 mm (1") + 1 x 32 mm (1 1/4") + 2 x cable bushing</p> <p style="text-align: right;">331003</p> <p>Prevents thermal and moisture bridges to the wall ducts using a compression seal. Bushing possibilities for intake pipe (only with DN 150 (6")), suction hose, sensor cable and pump or floating switch cable.</p>	
<p><b>④ Steady inflow pot</b></p> <p>So that small dirt particles can settle on the base of the tank, the filtered water is fed to the base of the tank through a steady inflow pot. Larger steady inflow pots, please see page 45</p> <p style="text-align: right;">DN 100 (4")   330140</p> <p style="text-align: right;">DN 150 (6")   330453</p>	
<p><b>⑤ Overflow siphon</b></p> <p>Used as an odour trap and for disposing of the floating layer</p> <p>Larger overflow siphons, please see page 45</p> <p style="text-align: right;">DN 100 (4")   330108</p> <p style="text-align: right;">DN 150 (6")   330450</p> <p>As above but with rodent guard</p> <p style="text-align: right;">DN 100 (4")   331004</p>	
<p><b>⑥ Quick assembly sleeve Spannfix</b></p> <p>patented, for connecting 2 DN 100 (4") pipes without sleeve (butt connection), no assembly tools required!</p> <div style="text-align: center;">  </div> <p style="text-align: right;">3er-Spannfix</p> <p style="text-align: right;">DN 100 (4")   340502</p> <p style="text-align: right;">2er-Spannfix</p> <p style="text-align: right;">DN 100 (4")   295909</p> <p style="text-align: right;">DN 150 (6")   340546</p>	
<p><b>⑦ Protection against small animals</b></p> <p>made of stainless steel for inserting into common plastic pipes. Prevents small animals getting into the system.</p> <p style="text-align: right;">DN 100 (4")   331008</p> <p style="text-align: right;">DN 150 (6")   331013</p>	



Illustration shows wall duct DN 100 (4")



# Drinking water reservoir

For underground installation



Illus. with telescopic dome shaft (see below for accessories)



- Tank made of sturdy, durable polyethylene
- Food-safe model with test certificate
- Easy to clean thanks to smooth inner surface



## Carat drinking water reservoir (without tank cover – see below)

Volume [l]	Volume [US gal.]	Order no.
2,700	700	370600
3,750	1,000	370601
4,800	1,250	370602
6,500	1,700	370603
10,000 <sup>1)</sup>	2,640	370605

Q Webcode G1313

<sup>1)</sup> Carat XL underground tank Q Webcode G1311

## Platin drinking water reservoir (without tank cover – see below)

Volume [l]	Volume [US gal.]	Order no.
1,500	400	390600
3,000	800	390601
5,000	1,325	390602

Q Webcode G1310

## Accessories

### Container screw connection 50 mm (2")

Order no. 330035

Other connection options on request



## Spring water shaft

- Variable installation depth thanks to telescopic dome shaft
- To aerate and remove sand from spring water
- Food-safe model with test certificate
- Sealed up to ground level
- Lockable cover with special key
- Includes dome ventilation

Dimensions: Ø 730 mm (28.7")  
 Height: 1200 – 1500 mm (3' 9" – 4' 9") (telescopic)  
 Inlet/outlet: 51 mm (2") External thread  
 Overflow: DN 100 (4")

### Spring water shaft 200 l (52 US gal.)

Incl. cover for pedestrian loading, colour grass-green

Order no. 381541

Q Webcode G9106

## Maxi drinking water telescopic dome shaft with regular cover and drinking water cover

- Smoothly adjustable for earth covering of 750 – 1050 mm (2.9" – 3' 5") (Carat) or 455 – 755 mm (17.9 – 29.7") (Platin)
- With additional protective cover for drinking water
- Sealed up to ground level
- Lockable cover with special key
- Includes dome ventilation



Maxi telescopic dome shaft with regular cover and drinking water cover

### Maxi drinking water telescopic dome shaft with cover

Order no. 381545

# Internationally proven: GRAF rainwater technology



Detached house, (Australia)



Residential building, British Columbia (Canada)



Industrial building, Neu-Isenburg (Germany)



FARM, CROSS PLAINS TX, USA



Library, Lincoln South (Australia)



Detached house, Barcelona (Spain)



Industrial building, Navata (Spain)



Detached house, Eichstetten (Germany)



Shopping centre, Geelong (Australia)



Industrial building, Nova Scotia (Canada)



Baseball Academy, Mexico City (Mexico)



Sport-Base (Bulgaria)



### Wastewater treatment solutions

For more information about our wastewater treatment solutions, ask for our catalogue.

Your local distributor:

## GreenScape Ltd.

For Landscape & Geosynthetic Engineering

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Home Page: [www.greenscape-ltd.com](http://www.greenscape-ltd.com)



#### Prices:

A price list with our export conditions is available on request.

#### Warranty clause:

The warranty mentioned in this brochure only refers to the tank in question and not to the accessories. Within the warranty period we grant free replacement of the material. Further benefits are excluded. Warranty services are dependent on proper handling, assembly and installation according to the mounting guidelines.

N.B. Protect tanks from frost when installed above ground! In case of groundwater installation, please contact us for further information prior to purchase!

For all indications of measurements in this brochure we reserve a tolerance of +/- 3%. The useful volume of the tanks may be up to 10% lower than the tank volume, depending on the connecting option.

Subject to technical modifications and further development of the various products. Errors excepted.

For all our offers and conclusions of contract, only our General Terms and Conditions of Business as at 01/10/2012 shall apply, a copy of which is available on request.

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