



Sustainable Rainwater Management



Rainwater Harvesting
Retention
Filter technology
System controls

Water is our element

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Solutions to your challenges

GRAF offers an extensive range of products for water resource management. At GRAF, global challenges such as water protection meet the brand quality of "Made In Germany". We provide the solutions for to your challenges.

Global network of sales partners and production facilities!

Sales partners in more than 80 countries help us develop solutions suited to local markets and deliver the customer support needed locally.

The manufacturing process is essential for a top-quality product. GRAF masters the production of plastic products at the highest quality level and with the most modern machines.

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.

Seamless quality assurance

Our products portray is 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.

Our goal: your satisfaction. Hundreds of thousands of satisfied customers already benefit from the advantages of GRAF rainwater harvesting systems.



Manufacturing certified according to ISO 9001 and 50001

Fast responses, even when special solutions are needed

Our products are exported around the globe. Intelligent logistics and sufficient stock levels ensure first-class availability of standard solutions, as well as for customised rainwater solutions.



FOR A GREENER PLANET

Find out what GRAF does in the field of recycling and energy-efficient manufacturing

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Content



Tank system Platin

1,500 – 65,000 litres



PACKAGES

For garden irrigation
For harvesting rainwater in home and garden

MODULAR SYSTEM

Platin flat tank at a glance
Platin flat tank XL/XXL at a glance
The GRAF modular system – simply unique
Platin flat tank
Platin flat tank XL/XXL
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Filter packages
Pump packages

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Tank system Carat

2,700 – 122,000 litres



PACKAGES

For garden irrigation
For harvesting rainwater in home and garden

MODULAR SYSTEM

Carat S underground tank at a glance
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The GRAF modular system – simply unique
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Retention and infiltration



Retention and infiltration overview
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Choke drain shaft

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Filter technology



Filter technology overview
Internal filter technology
Universal filter 3/XL, Minimax-Pro filter, Optimax-Pro filter/XL
External filter technology
Universal filter 3, universal industrial filter 3, Drainstar filter, Drainstar filter XL, Optimax filter, Optimax industrial filter, Minimax filter, pot filter, Optimax XXL filter, infiltration/sedimentation filter shaft

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Controls/ pumps



RAINWATER SYSTEM CONTROLS

Aqua-Center Basic, Aqua-Center Silentio, Aqua-Center Silentio Press, Aqua-Center Silentio Connect
Domestic water control units and pumps

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Special purpose tanks



Herkules tank
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Accessories



Granite/wood water spring, Water hose connection
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Sustainability

GRAF – for a greener planet

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Q WEBCODE G1103

- Installation instructions and technical drawings
- Detailed product information
- Downloads
- Tender files

www.graf.info

Symbols in the catalogue

Load capacity

- Suitable for pedestrian loading
- Suitable for vehicle loading
- Lorry-bearing

Application range

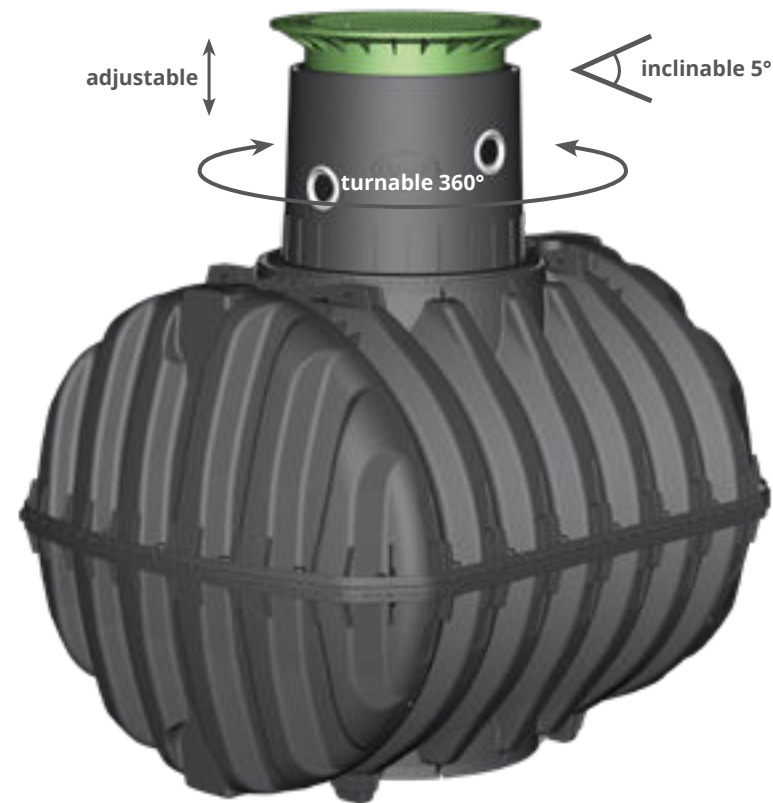
- Watering the garden
- Flushing the toilet
- Washing machine

Classical underground tank... Perfect for new buildings

Carat underground tank | 2,700 – 122,000l (700 – 32,229 US gal.)

- Highest fitting precision and quality thanks to unique production process
- Suitable for vehicle/lorry-bearing¹⁾
- Can be installed in groundwater
- Also available as detention cistern (page 76 – 79)

Q WEBCODE G1105



**>> Modular system
from page 54**



... or flat tank? Also ideal for retrofitting

Platin flat tank | 1,500 – 65,000l (397 – 17,172 US gal.)

- Minimal installation depth, so less installation time and costs
- Suitable for vehicle/lorry-bearing¹⁾
- Can be installed in groundwater
- Also available as detention cistern (page 72 – 75)

Q WEBCODE G1101



**>> Modular system
from page 28**



**>> Packages
from page 42**



**>> Packages
from page 12**



¹⁾ In conjunction with vehicle or lorry-bearing cover, choose from page 62/63

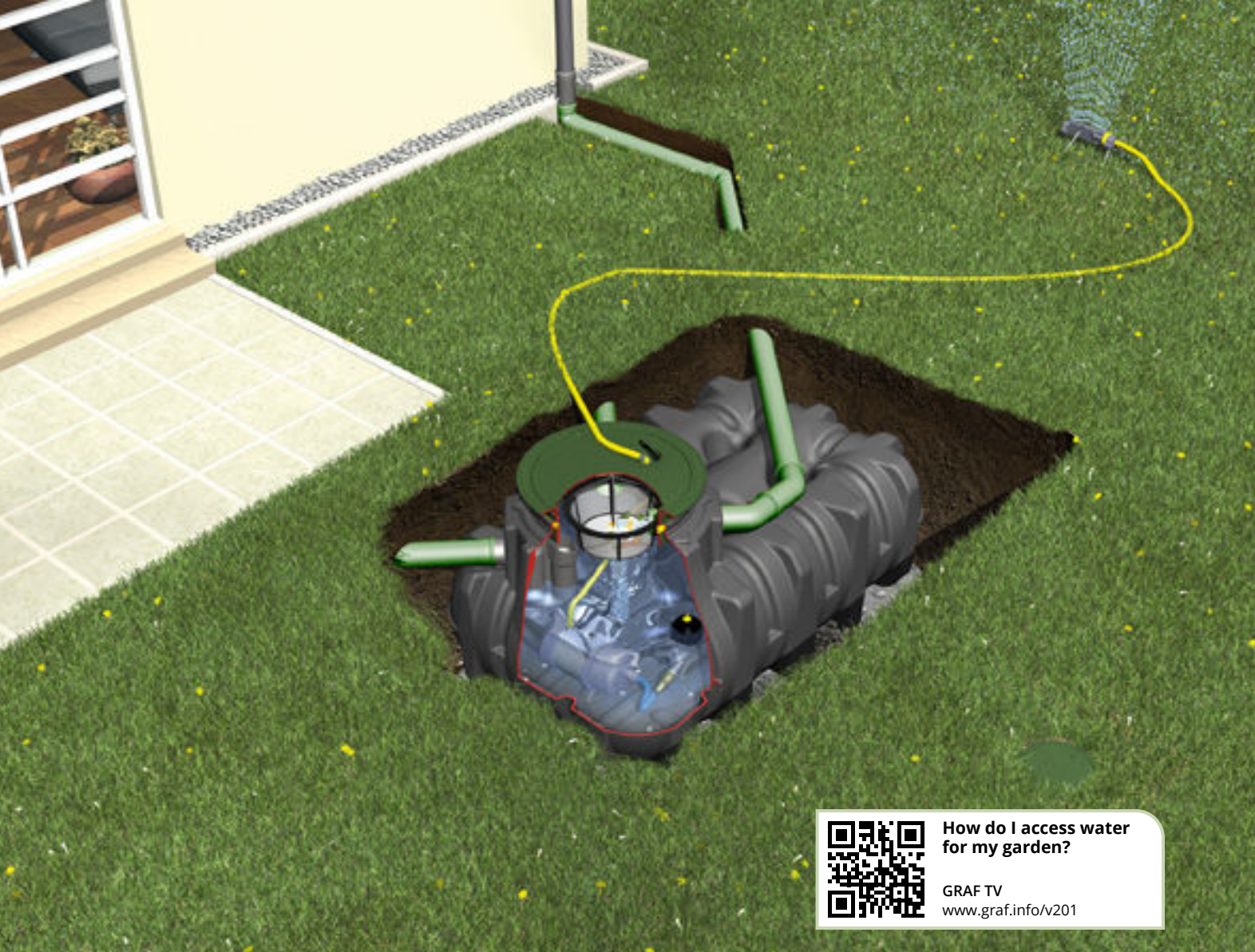
¹⁾ In conjunction with vehicle or lorry-bearing cover, choose from page 32/33



Platin packages

- > For garden irrigation
- > For harvesting rainwater in home and garden

page 12
page 16



Solutions for garden irrigation

Next summer is going to be a hot one! You may then have to dig deep in your pockets to supply drinking water to your garden. But for owners of a GRAF rainwater harvesting system, there's no need to worry. Optimised specifically for garden watering needs, GRAF packages supply your garden with limefree water at just the right temperature.

100 % water yield

GRAF garden packages have a basket filter that reliably holds back contaminants. This filter design safeguards a 100 % water yield.

Automatic pump

The garden Comfort 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 removal

The GRAF water socket comes with a range of connectors for your irrigation system, directly in the tank cover.* This package also includes a variant that can be installed in any position. You can simply connect your garden hose to the ground-level waster socket.

>> from page 12

*For packages suitable for pedestrian loading



Solutions for home and garden

Day after day households use precious mains water to flush the toilet, run the washing machine, and water the garden. GRAF packages for home and garden provide a reliable supply of rainwater for these uses. As a result, you save up to 50 % of drinking water – equivalent to about 65 litres (18 US gal.) per person per day!

Self-cleaning filter

GRAF home packages come with self-cleaning, and therefore low maintenance filters with a water yield of over 95 %.

Very high water quality

Not only the filters, also a multi-stage cleaning process safeguards the best water quality. The GRAF Professional package features in addition a reversible flow filter and automatic filter cleaning. These may be added as subsequent options to the other packages.

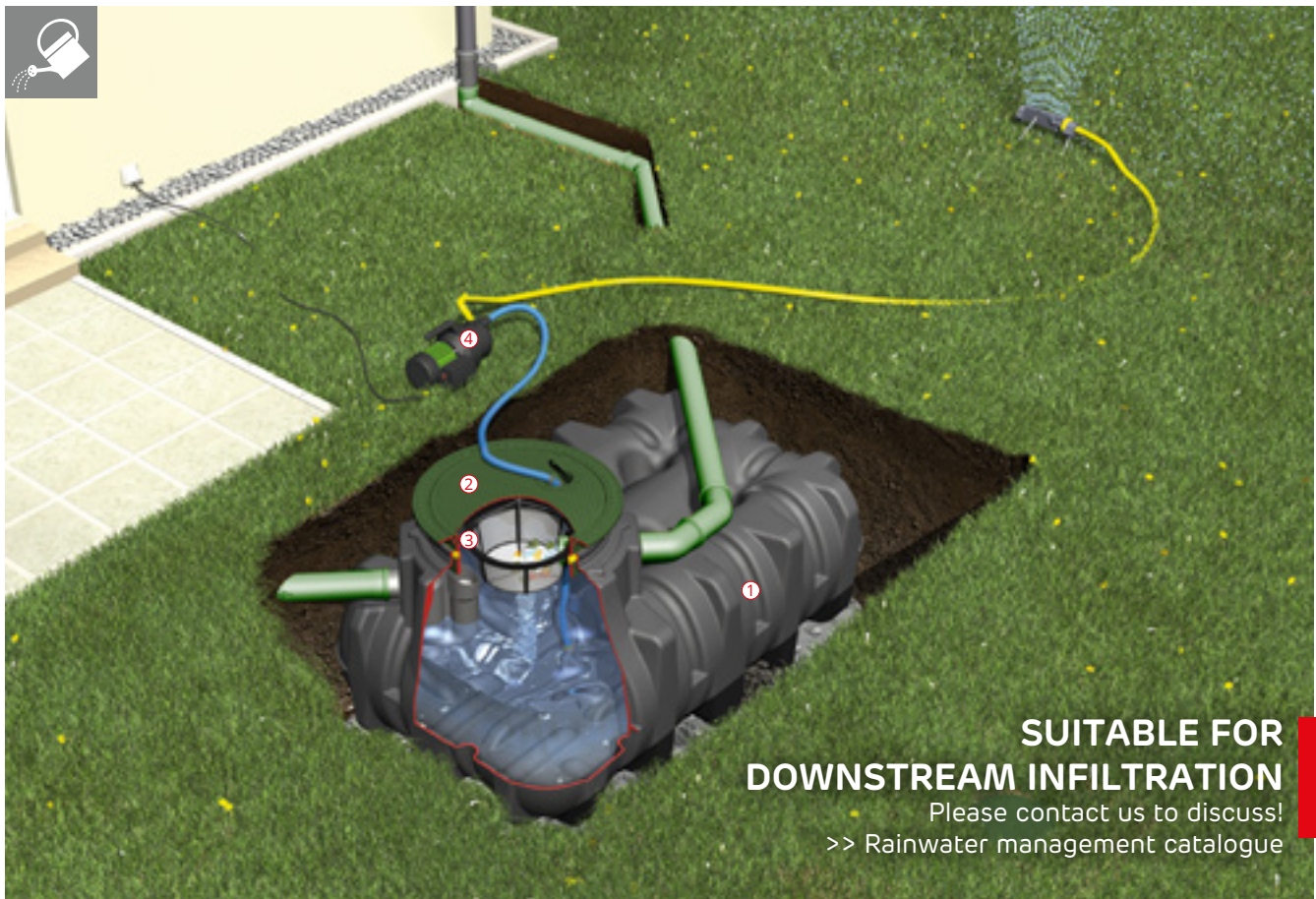
Reliable, ultra-quiet intake

The GRAF system control monitors the level in the tank and supplies water consumers with rainwater. When no rainwater is available, mains water is automatically supplied instead. GRAF Aqua-Center Silentio features an electronic control for the best possible ease of use. Its housing is designed to minimise operating noise.

>> from page 16

Platin garden Jet package

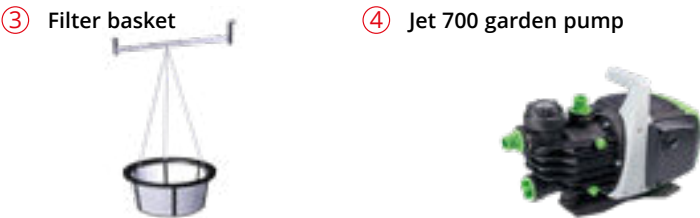
The low-cost solution



- Low-cost solution
- Integrated filter technology (100 % water yield)
- Easy installation and convenient water extraction through water socket (compatible with standard hose coupling)

Volume	Connections
1,500 l (400 US gal.)	DN110 (4")
3,000 l (800 US gal.)	DN110 (4")
5,000 l (1,325 US gal.)	DN110 (4")
7,500 l (1,980 US gal.)	DN110 (4")

See page 16 for more sizes

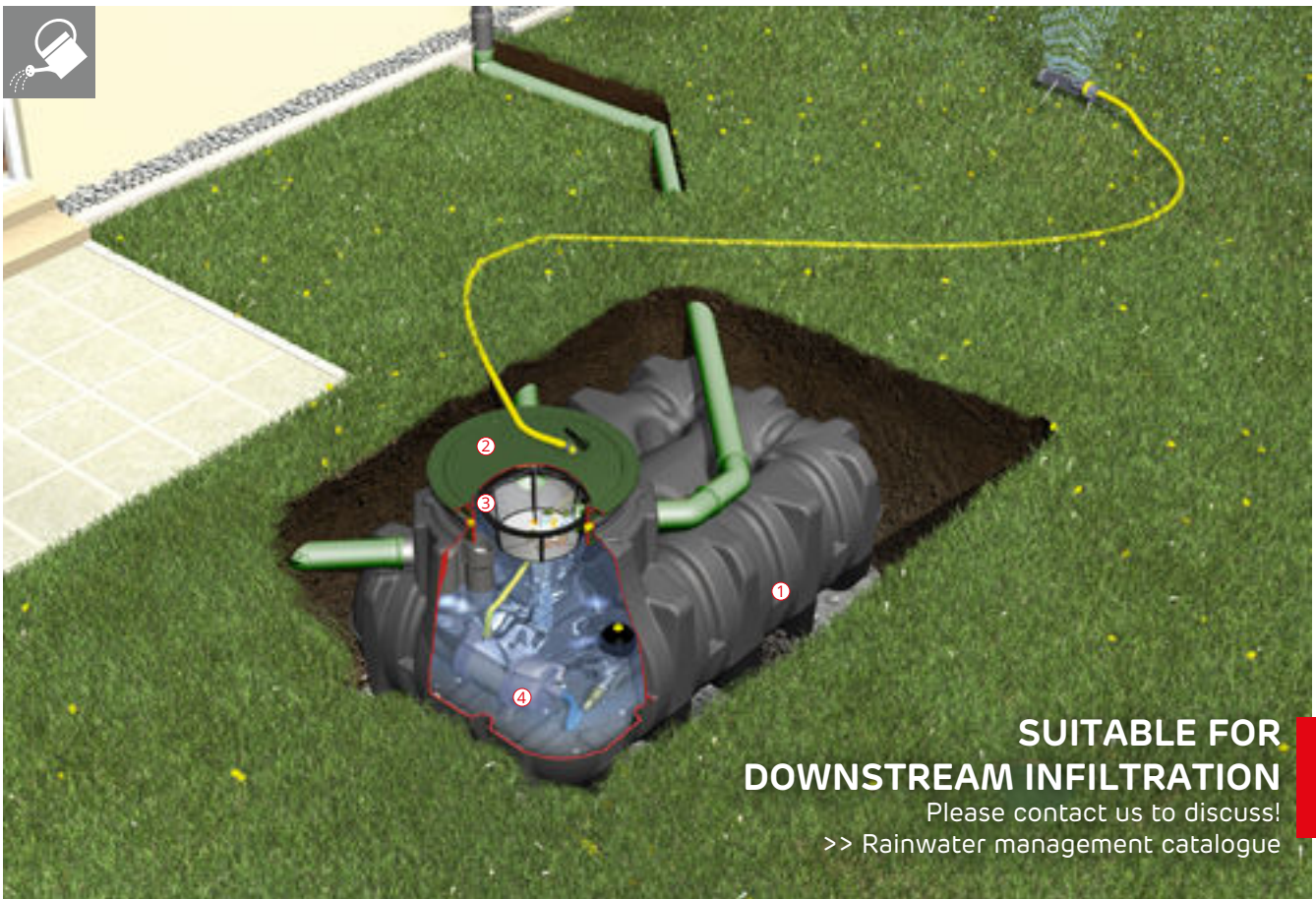


Q **WEBCODE** G1220

Scope of supply: ① Platin flat tank ② Tank cover ③ Telescopic dome shaft 600 Mini, suitable for pedestrian loading, smooth telescopic adjustments 455 – 655 mm (17.9" – 25.8") earth covering, with plastic cover, or ④ Telescopic dome shaft 600 car, suitable for vehicle loading, smooth telescopic adjustments 455 – 755 mm (17.9" – 29.7") earth covering, with plastic covering ⑤ Platin filter package 2 consisting of: filter basket incl suspension, overflow siphon, rodent guard ⑥ Pump package garden Jet consisting of: Jet 700 garden pump (page 106), water socket, internal and external (compatible with standard hose coupling, page 118), pump connection kit with 1 m (3' 3.4") PVC hose, suction pipe with 12.5 m (41') suction hose 25 mm (1")

Platin garden Comfort package

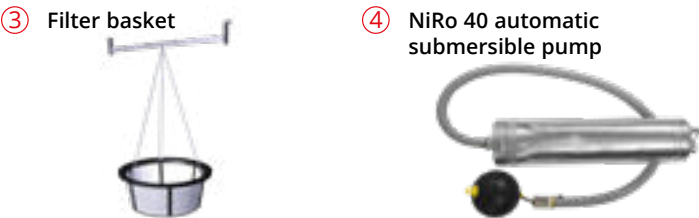
The convenient solution with automatic submersible pump



- Great ease of operation – Pump switches on and off automatically
- Integrated filter technology (100 % water yield)
- Easy installation and convenient water extraction through water socket (compatible with standard hose coupling)

Volume	Connections
1,500 l (400 US gal.)	DN110 (4")
3,000 l (800 US gal.)	DN110 (4")
5,000 l (1,325 US gal.)	DN110 (4")
7,500 l (1,980 US gal.)	DN110 (4")

See page 17 for more sizes



Q **WEBCODE** G1221

Scope of supply: ① Platin flat tank ② Tank cover ③ Telescopic dome shaft 600 Mini, suitable for pedestrian loading, smooth telescopic adjustments 455 – 655 mm (17.9" – 25.8") earth covering, with plastic cover, or ④ Telescopic dome shaft 600 car, suitable for vehicle loading, smooth telescopic adjustments 455 – 755 mm (17.9" – 29.7") earth covering, with plastic covering ⑤ Platin filter package 2 consisting of: filter basket incl suspension, overflow siphon, rodent guard ⑥ Pump package garden Comfort consisting of: NiRo 40 automatic submersible pump (page 66), internal and external water socket (compatible with standard hose coupling, page 118), floating suction fitting with fine filter and hose, 10 m (32' 10") pressure hose 25 mm (1")

Platin XL garden Jet package

The flexible solution with garden Jet pump



- Flexible solution with Jet 700 garden pump
- Integrated filter technology (100 % water yield)
- Easy installation and convenient water extraction through water socket (compatible with standard hose coupling)

Volume	Connections
7,500 l (1,980 US gal.)	DN160 (6")
10,000 l (2,650 US gal.)	DN160 (6")
15,000 l (3,960 US gal.)	DN160 (6")

③ Universal-Filter 3 XL



④ Jet 700 garden pump



Q WEBCODE G1220

Scope of supply: ① Platin XL flat tank ② Tank cover ③ Telescopic dome shaft 600 Mini, suitable for pedestrian loading, smooth telescopic adjustments 750 – 950 mm (29.5" – 37.4") earth covering, with plastic cover, or ④ Telescopic dome shaft 600 car, suitable for vehicle loading, smooth telescopic adjustments 750 – 1050 mm (29.5" – 41.3") earth covering, with plastic covering ⑤ Platin XL/XXL filter package 2 consisting of: Universal-Filter 3 XL intern, calmed inlet digester, overflow siphon, rodent guard, quick assembly sleeve Spannfix ⑥ Pump package garden Jet consisting of: Jet 700 garden pump (page 106), water socket, internal and external (compatible with standard hose coupling, page 118), pump connection kit with 1 m (3' 3.4") PVC hose, suction pipe with 12.5 m (41') suction hose 25 mm (1")

Platin XL garden Comfort package

The convenient solution with automatic submersible pump



- Great ease of operation – Pump switches on and off automatically
- Integrated filter technology (100 % water yield)
- Easy installation and convenient water extraction through water socket (compatible with standard hose coupling)

Volume	Connections
7,500 l (1,980 US gal.)	DN160 (6")
10,000 l (2,650 US gal.)	DN160 (6")
15,000 l (3,960 US gal.)	DN160 (6")

③ Universal-Filter 3 XL



④ NiRo 40 automatic submersible pump



Q WEBCODE G1221

Scope of supply: ① Platin XL flat tank ② Tank cover ③ Telescopic dome shaft 600 Mini, suitable for pedestrian loading, smooth telescopic adjustments 750 – 950 mm (29.5" – 37.4") earth covering, with plastic cover, or ④ Telescopic dome shaft 600 car, suitable for vehicle loading, smooth telescopic adjustments 750 – 1050 mm (29.5" – 41.3") earth covering, with plastic covering ⑤ Platin XL/XXL filter package 2 consisting of: Universal-Filter 3 XL intern, calmed inlet digester, overflow siphon, rodent guard, quick assembly sleeve Spannfix ⑥ Pump package garden Comfort consisting of: NiRo 40 automatic submersible pump (page 66), Internal and external water socket (compatible with standard hose coupling, page 118), floating suction fitting with fine filter and hose, 10 m (32' 10") pressure hose 25 mm (1")

Platin Eco-Plus package

The proven classical solution for harvesting rainwater in home and garden



- Low-cost solution
- Patented filter technology
- Internal water supply in the home
- Float switch control
- Only one cover visible on the surface

Volume	Connections
3,000 l (800 US gal.)	DN110 (4")
5,000 l (1,325 US gal.)	DN110 (4")
7,500 l (1,980 US gal.)	DN110 (4")

See page 20 for more sizes

③ Minimax-Pro Filter



④ Aqua-Center Basic

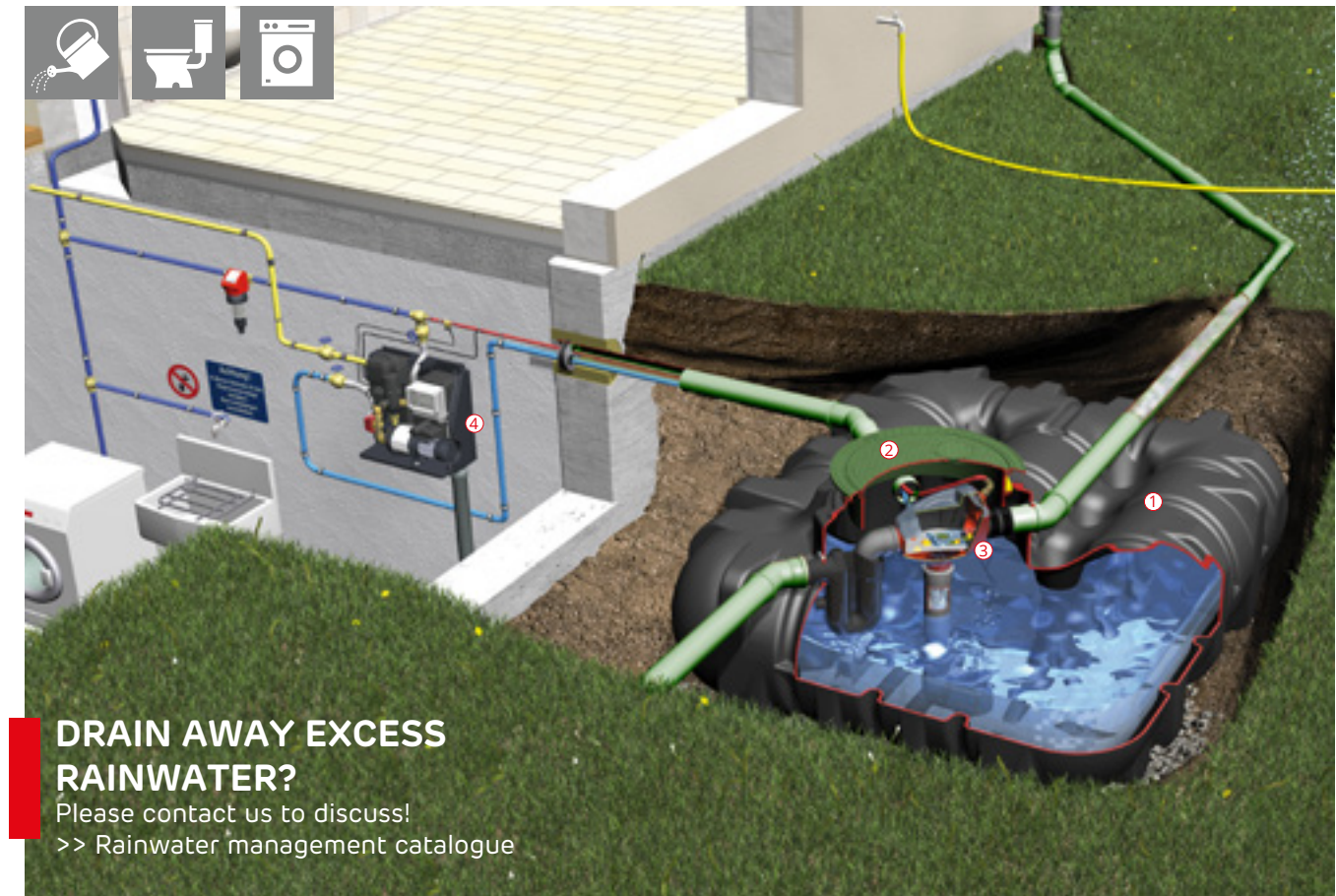


Q WEBCODE G1222

Scope of supply: ① Platin flat tank ② Tank cover ③ Telescopic dome shaft 600 Maxi, suitable for pedestrian loading, smooth telescopic adjustments 455 – 755 mm (17.9" – 29.7") earth covering, with plastic cover, or ④ Telescopic dome shaft 600 car, suitable for vehicle loading, smooth telescopic adjustments 455 – 755 mm (17.9" – 29.7") earth covering, with plastic covering ⑤ Platin filter package 3 consisting of: Minimax-Pro Filter intern (patented, self-cleaning), calmed inlet digester, overflow siphon, quick assembly sleeve Spannfix ⑥ Pump package Eco-Plus consisting of: Aqua-Center Basic (page 102), floating suction fitting with fine filter and hose, wall duct DN110 (4"), labelling kit, PE suction pipe 25 mm (1"), length 12 m (39' 4"), V2A Switch Control

Platin Professional package

The ideal solution for harvesting rainwater in home and garden



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

Volume	Connections
3,000 l (800 US gal.)	DN110 (4")
5,000 l (1,325 US gal.)	DN110 (4")
7,500 l (1,980 US gal.)	DN110 (4")

See page 21 for more sizes

③ Minimax-Pro Filter



④ Aqua-Center Silentio

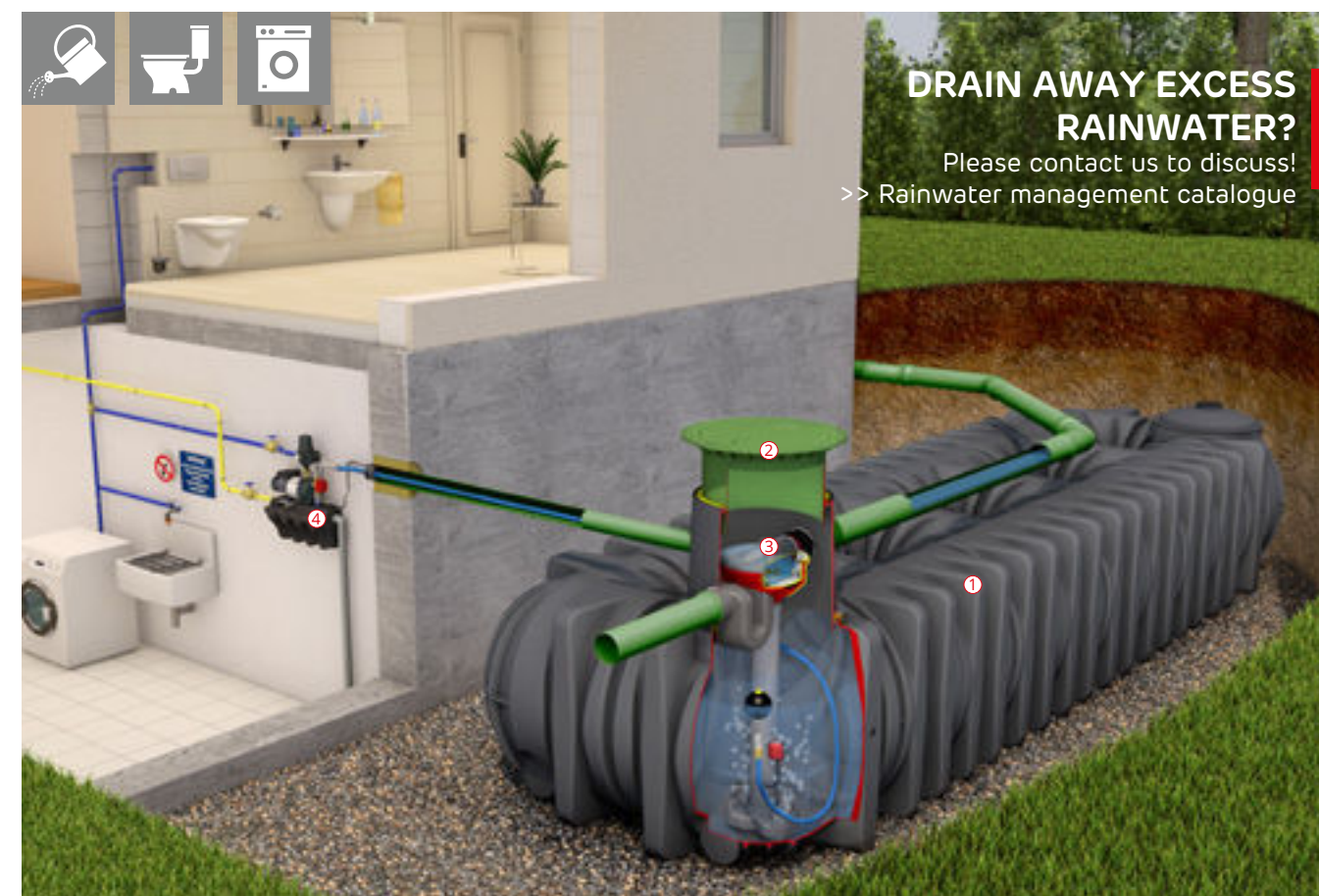


Q WEBCODE G1223

Scope of supply: ① Platin flat tank ② Tank cover ③ Telescopic dome shaft 600 Maxi, suitable for pedestrian loading, smooth telescopic adjustments 455 – 755 mm (17.9" – 29.7") earth covering, with plastic cover, or ④ Telescopic dome shaft 600 car, suitable for vehicle loading, smooth telescopic adjustments 455 – 755 mm (17.9" – 29.7") earth covering, with plastic covering ⑤ Platin filter package 3 consisting of: Minimax-Pro Filter intern (patented, self-cleaning), calmed inlet digester, overflow siphon, quick assembly sleeve Spannfix ⑥ Pump package Professional consisting of: Aqua-Center Silentio (page 103), floating suction fitting with fine filter and hose, wall duct DN160 (6"), labelling kit, filter cleaning unit internal, automatic filter cleaning, reversible flow filter, PE suction pipe 25 mm (1"), length 12 m (39' 4")

Platin XL Eco-Plus package

The proven classical solution for harvesting rainwater in home and garden



- Low-cost solution
- Patented filter technology
- Internal water supply in the home
- Float switch control
- Only one cover visible on the surface

Volume	Connections
7,500 l (1,980 US gal.)	DN160 (6")
10,000 l (2,650 US gal.)	DN160 (6")
15,000 l (3,960 US gal.)	DN160 (6")

③ Optimax-Pro Filter XL



④ Aqua-Center Basic

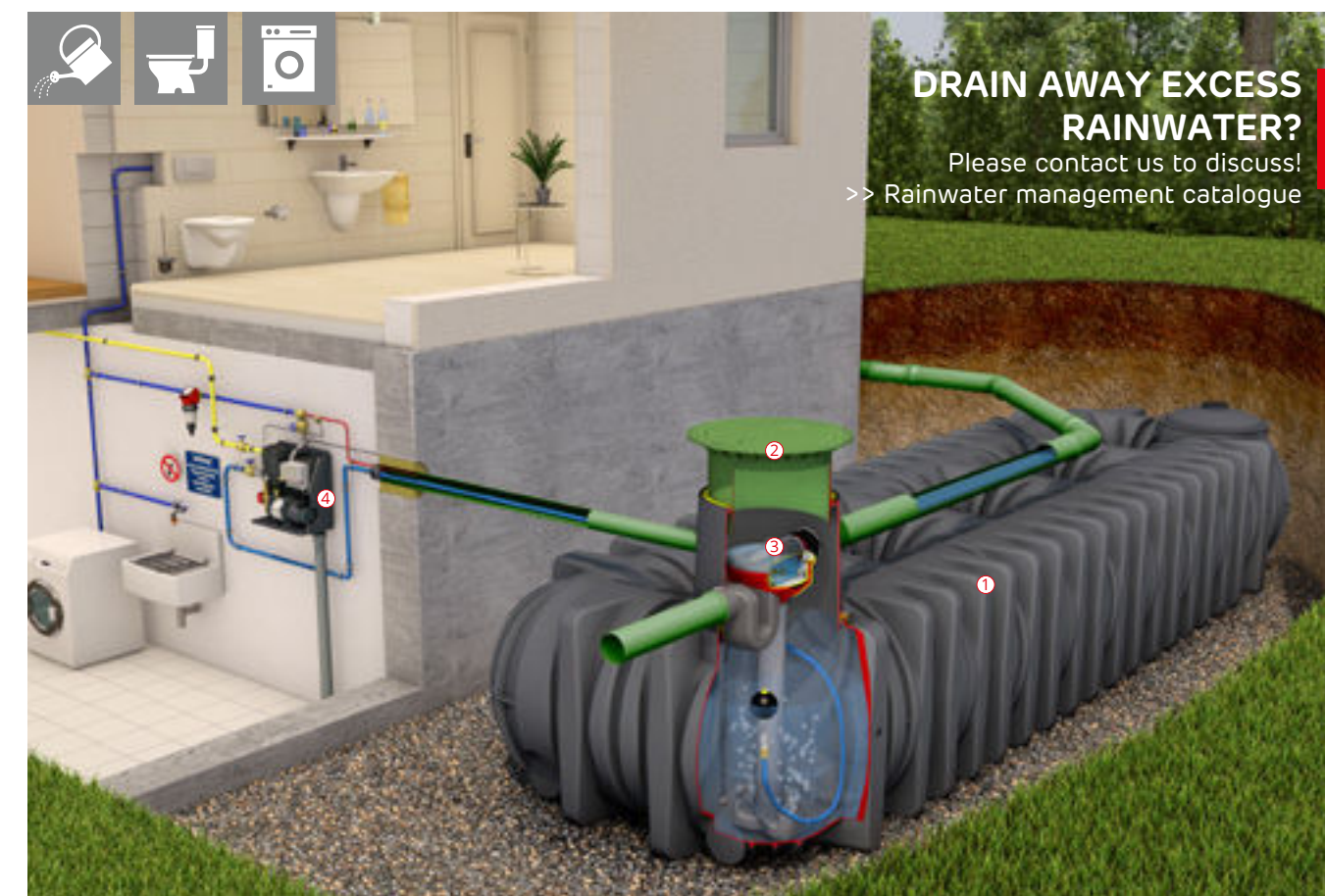


Q WEBCODE G1222

Scope of supply: ① Platin XL flat tank ② Tank cover ③ Telescopic dome shaft 600 Maxi, suitable for pedestrian loading, smooth telescopic adjustments 750 – 1050 mm (29.5" – 41.3") earth covering, with plastic cover, or ④ Telescopic dome shaft 600 car, suitable for vehicle loading, smooth telescopic adjustments 750 – 1050 mm (29.5" – 41.3") earth covering, with plastic covering ⑤ Platin XL/XXL filter package 3 consisting of: Optimax-Pro Filter XL intern (patented, self-cleaning), calmed inlet digester, overflow siphon, quick assembly sleeve Spannfix ⑥ Pump package Eco-Plus consisting of: Aqua-Center Basic (page 102), floating suction fitting with fine filter and hose, wall duct DN110 (4"), labelling kit, PE suction pipe 25 mm (1"), length 12 m (39' 4"), V2A Switch Control

Platin XL Professional package

The ideal solution for harvesting rainwater in home and garden



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

Volume	Connections
7,500 l (1,980 US gal.)	DN160 (6")
10,000 l (2,650 US gal.)	DN160 (6")
15,000 l (3,960 US gal.)	DN160 (6")

③ Optimax-Pro Filter XL



④ Aqua-Center Silentio



Q WEBCODE G1223

Scope of supply: ① Platin XL flat tank ② Tank cover ③ Telescopic dome shaft 600 Maxi, suitable for pedestrian loading, smooth telescopic adjustments 750 – 1050 mm (29.5" – 41.3") earth covering, with plastic cover, or ④ Telescopic dome shaft 600 car, suitable for vehicle loading, smooth telescopic adjustments 750 – 1050 mm (29.5" – 41.3") earth covering, with plastic covering ⑤ Platin XL/XXL filter package 3 consisting of: Optimax-Pro Filter XL intern (patented, self-cleaning), calmed inlet digester, overflow siphon, quick assembly sleeve Spannfix ⑥ Pump package Professional consisting of: Aqua-Center Silentio (page 103), floating suction fitting with fine filter and hose, wall duct DN160 (6"), labelling kit, filter cleaning unit XL internal, automatic filter cleaning, reversible flow filter, PE suction pipe 25 mm (1"), length 12 m (39' 4")

Platin Silentio Press package

Ideal for large distances between tank and domestic water control unit



- Additional in-tank feed pump makes this ideal for distances of ≥ 15 m (49' 2.6") from the home
- Professional solution with patented filter technology
- Ultra-quiet operation thanks to encapsulated system control unit
- Internal water supply in the home
- Microprocessor control
- Digital level gauge
- Automatic rinse intervals of feed tank and filter
- Only one cover visible on the surface

Volume	Connections
3,000 l (800 US gal.)	DN110 (4")
5,000 l (1,325 US gal.)	DN110 (4")
7,500 l (1,980 US gal.)	DN110 (4")

③ Minimax-Pro Filter



④ Aqua-Center Silentio Press



Q WEBCODE G1228

Scope of supply: ① Platin flat tank ② Tank cover ③ Telescopic dome shaft 600 Maxi, suitable for pedestrian loading, smooth telescopic adjustments 455 – 755 mm (17.9" – 29.7") earth covering, with plastic cover, or ④ Telescopic dome shaft 600 car, suitable for vehicle loading, smooth telescopic adjustments 455 – 755 mm (17.9" – 29.7") earth covering, with plastic covering ⑤ Platin filter package 3 consisting of: Minimax-Pro Filter Intern (patented, self-cleaning), calmed inlet digester, overflow siphon, quick assembly sleeve Spannfix ⑥ Pump package Silentio Press consisting of: Aqua-Center Silentio Press incl submersible pump 300 A (page 104), filter cleaning unit internal, automatic filter cleaning, reversible flow filter, wall duct DN160 (6"), labelling kit, 25 m (82') special suction and pressure hose 25 mm (1")

Platin XL Silentio Press package

Ideal for large distances between tank and domestic water control unit



- Additional in-tank feed pump makes this ideal for distances of ≥ 15 m (49' 2.6") from the home
- Professional solution with patented filter technology
- Ultra-quiet operation thanks to encapsulated system control unit
- Internal water supply in the home
- Microprocessor control
- Digital level gauge
- Automatic rinse intervals of feed tank and filter
- Only one cover visible on the surface

Volume	Connections
7,500 l (1,980 US gal.)	DN160 (6")
10,000 l (2,650 US gal.)	DN160 (6")
15,000 l (3,960 US gal.)	DN160 (6")

③ Optimax-Pro Filter XL



④ Aqua-Center Silentio Press



Q WEBCODE G1228

Scope of supply: ① Platin XL flat tank ② Tank cover ③ Telescopic dome shaft 600 Maxi, suitable for pedestrian loading, smooth telescopic adjustments 750 – 1050 mm (29.5" – 41.3") earth covering, with plastic cover, or ④ Telescopic dome shaft 600 car, suitable for vehicle loading, smooth telescopic adjustments 750 – 1050 mm (29.5" – 41.3") earth covering, with plastic covering ⑤ Platin XL/XXL filter package 3 consisting of: Optimax-Pro Filter XL intern (patented, self-cleaning), calmed inlet digester, overflow siphon, quick assembly sleeve Spannfix ⑥ Pump package Silentio Press consisting of: Aqua-Center Silentio Press incl submersible pump 300 A (page 104), filter cleaning unit internal, automatic filter cleaning, reversible flow filter, wall duct DN160 (6"), labelling kit, 25 m (82') special suction and pressure hose 25 mm (1")

Platin modular system

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- > Underground tanks page 30
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- > Filter packages page 34
- > Pump packages page 36



GRAF tank systems

Platin flat rainwater tank

Flat! Sturdy! Low-cost!

GRAF brand quality – try it for yourself!

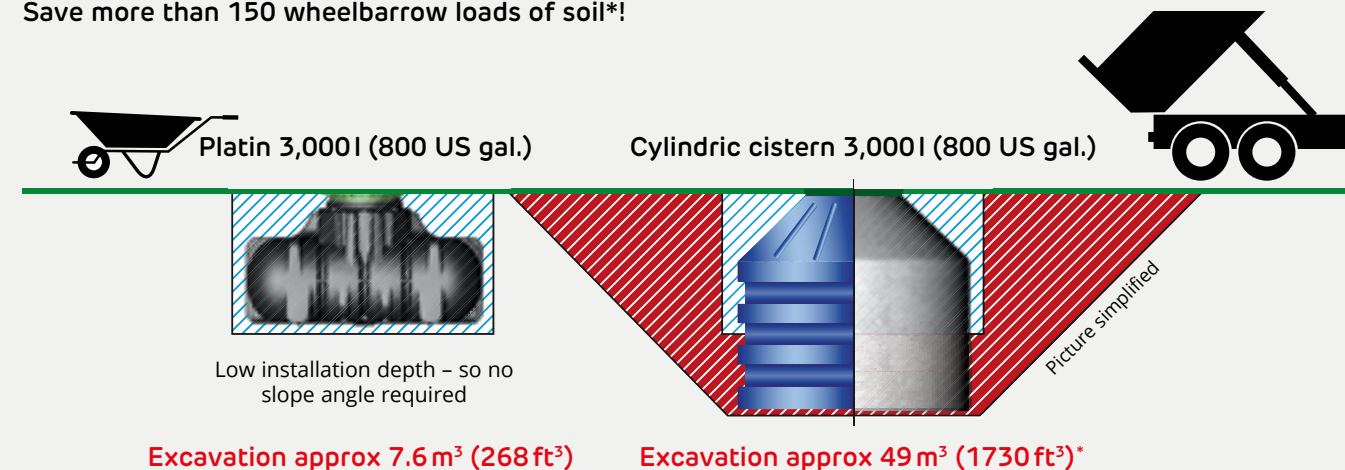
- Minimum installation depth, which translates into short installation time and low costs
- Suitable for vehicle/lorry-bearing¹⁾
- Groundwater stable
- Connection opening with prefitted DN110 (4") edge seals



²⁾ Size 1,500 l (400 US gal.)



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.

¹⁾ Suitable for vehicle loading with vehicle traversable cover
Suitable for lorry-bearing with lorry-bearing cover in conjunction with load distribution plate

Installing tanks the easy way!



Built-in professional filter technology

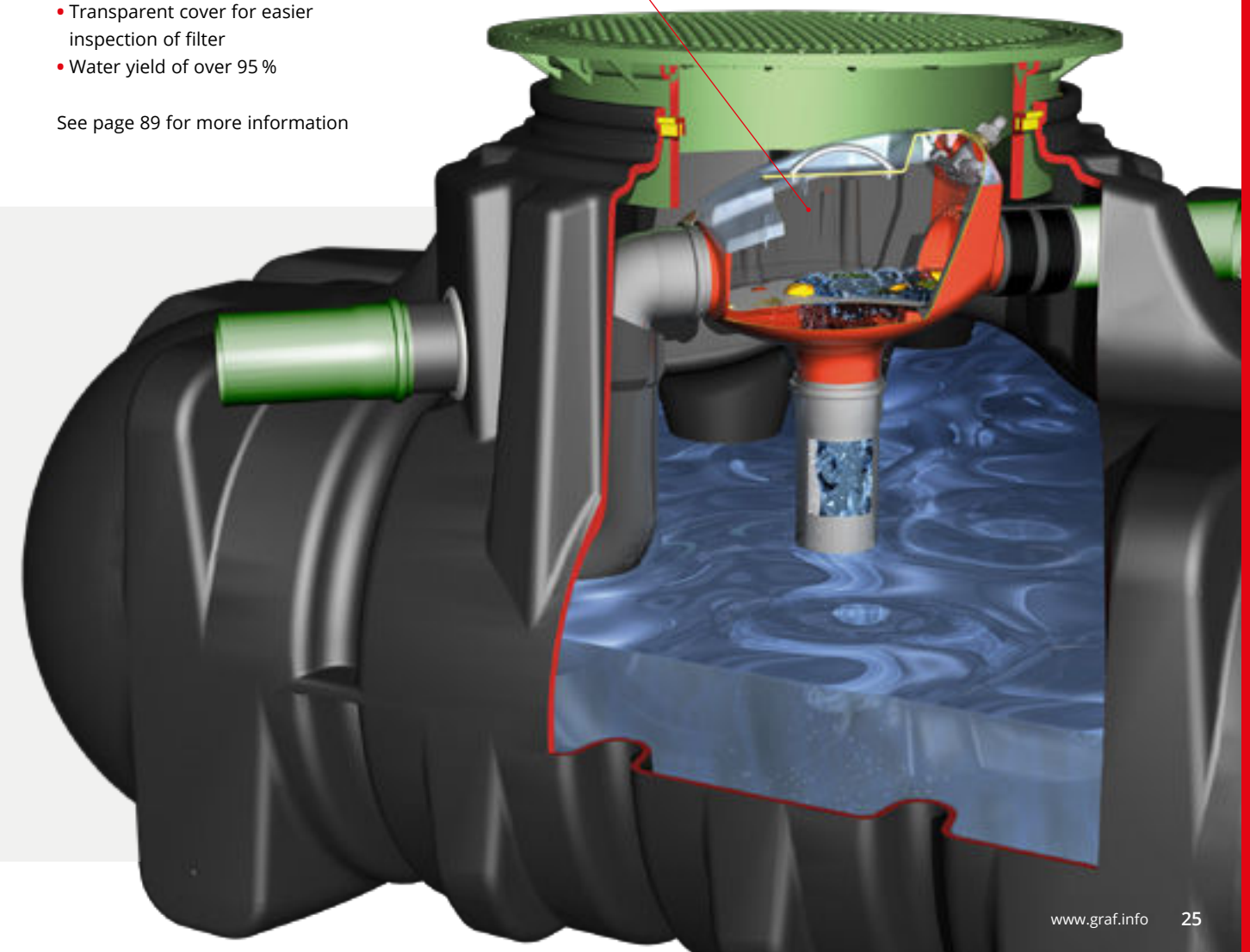
The GRAF Minimax-Pro filter (patented) is specially designed to be used in the GRAF Platin flat tank.

- 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 89 for more information

PLATIN PACKAGES

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- >> Page 20



GRAF tank systems

Platin XL/XXL flat rainwater tank



- Dome opening 800 mm (31.5") (DIN)
- Connection opening with prefitted DN160 (6") edge seals
- Rotating tank dome simplifies the alignment of connecting lines
- Tank height only 125 cm (4' 1.3")



Suitable for lorry-bearing

The GRAF Platin XL/XXL flat rainwater tank is designed to withstand lorry-bearing.*



Flexible connections up to DN315 (12")

The rotating tank dome is easy to align with the connecting pipe. The adjustable/tilting dome shaft makes it easy to align the tank with the level of the ground. Connecting faces up to DN160 (6") are already fitted as standard. If necessary, Platin XXL can be fitted with connectors up to DN315 (12") on the tank dome ①, or up to DN200 (8") on the face end ②.

High quality, integrated filter technology DN160 (6")

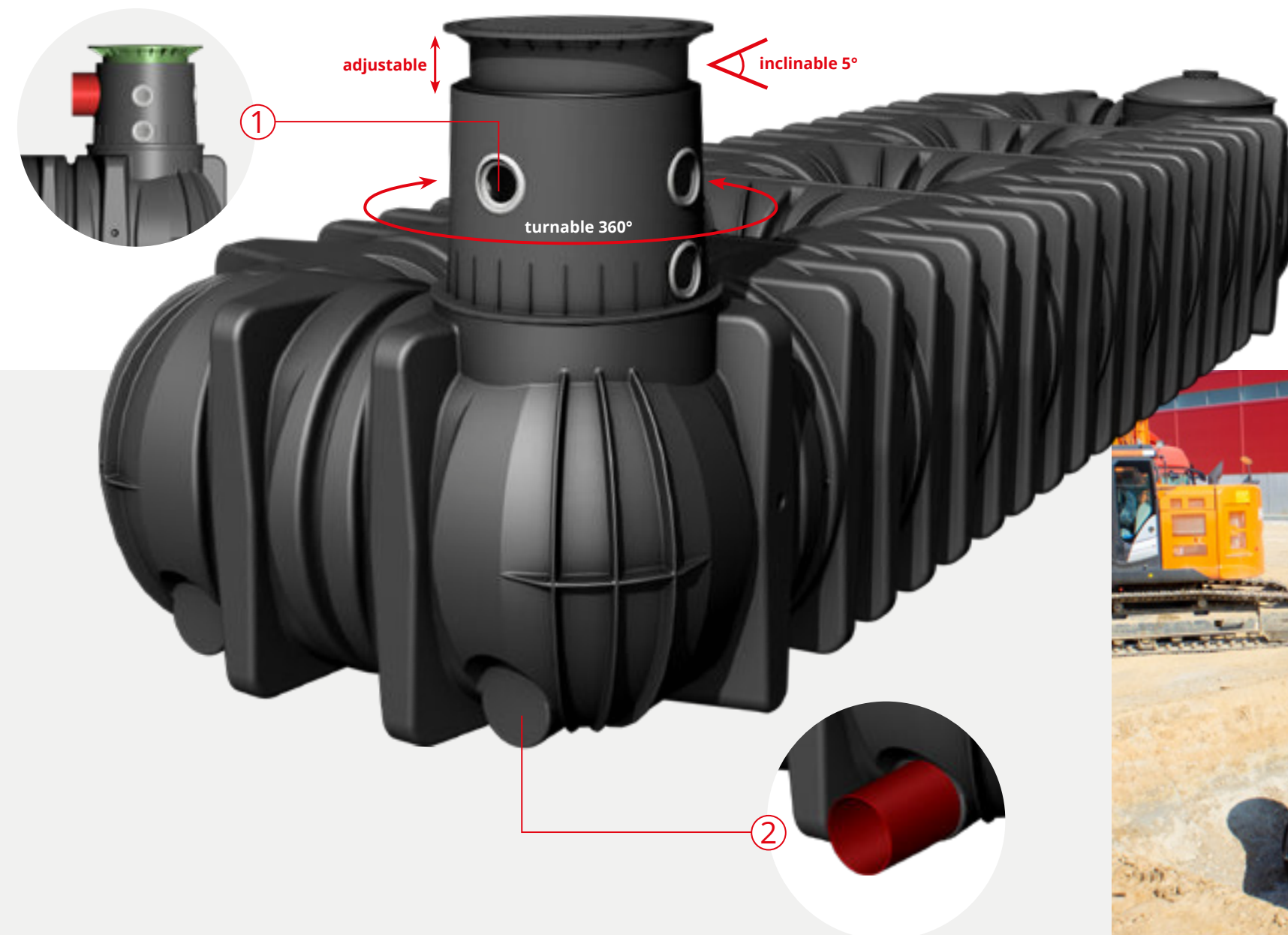


Available with a second tank dome as an option



Dome opening with stainless steel profile

A firmly integrated V2A steel profile ensures a high degree of fitting accuracy and installation safety of the tank dome components.



PLATIN XL PACKAGES

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Flexible in use

- Rainwater tank (page 31)
- Detention cistern (page 74/75)
- Infiltration tank (page 80/81)
- Drinking water reservoir (page 115)
- Extinguishing water storage system

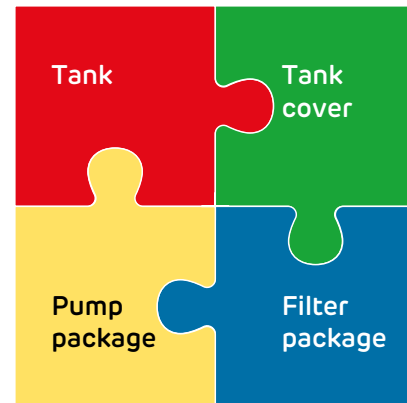
>> See GRAF Water storage systems for firefighting

Q [WEBCODE G1317](#)



*Suitable for lorry-bearing with lorry-bearing cover in conjunction with load distribution plate

Compile your own system from four components



Tank (page 30/31)

The Platin/XL/XXL flat tank is the basis for the modular system.

Tank cover (page 32/33)

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

Filter package (page 34/35)

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.

Pump package (page 36)

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

Tank	
Platin 1,500 – 7,500 litres	
Platin 1,500 litres (400 US gal.) Order no. 390000	Platin 3,000 litres (800 US gal.) Order no. 390001
Platin 5,000 litres (1,325 US gal.) Order no. 390002	Platin 7,500 litres (1,980 US gal.) Order no. 390005

Tank dome

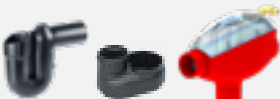
Platin XL 7,500 – 15,000 litres	
Platin XL 7,500 litres (1,980 US gal.) Order no. 390828	Platin XL 10,000 litres (2,650 US gal.) Order no. 390822
Platin XL 15,000 litres (3,960 US gal.) Order no. 390823	
Platin XXL 20,000 – 65,000 litres	
Platin XXL 20,000 litres (5,284 US gal.) Order no. 391810	Platin XXL 25,000 litres (6,605 US gal.) Order no. 391811
Platin XXL 30,000 litres (7,926 US gal.) Order no. 391812	Platin XXL 35,000 litres (9,247 US gal.) Order no. 391813
Platin XXL 40,000 litres (10,567 US gal.) Order no. 391814	Platin XXL 45,000 litres (11,888 US gal.) Order no. 391815
Platin XXL 50,000 litres (13,209 US gal.) Order no. 391816	Platin XXL 55,000 litres (14,530 US gal.) Order no. 391817
Platin XXL 60,000 litres (15,851 US gal.) Order no. 391818	Platin XXL 65,000 litres (17,172 US gal.) Order no. 391819

Tank dome Mini for Platin XL/XXL DN110 (4") Order no. 371064
Tank dome Maxi for Platin XL/XXL DN110 (4") Order no. 371014 DN160 (6") Order no. 371018
Dome shaft Plug for Platin XL/XXL Order no. 371065

Tank cover
Telescopic dome shaft 600 Mini, suitable for pedestrian loading plus 140 – 340 mm (5.5 – 13.4") earth covering Order no. 371010
Telescopic dome shaft 600 Maxi, suitable for pedestrian loading plus 140 – 440 mm (5.5 – 17.3") earth covering Order no. 371011

WITH PLASTIC LID

Telescopic dome shaft 600 car, suitable for vehicle loading plus 140 – 440 mm (5.5 – 17.3") earth covering Order no. 371052
Cover and compensating ring to be provided on site
Telescopic dome shaft 600 universal, for lorry-bearing plus 140 – 440 mm (5.5 – 17.3") earth covering For commercially available concrete / cast iron covers Order no. 371021
Extension 600/L 400 Usable length: 300 mm (11.8") Order no. 371003

Filter package	
Platin – connection DN110 (4")	
	
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	

Platin XL/XXL – connection DN110 (4")	
Basic filter package Order no. 342001	Platin XL/XXL filter package 2 Recommended for garden use Order no. 342002
Platin filter package 3 Recommended for household use Order no. 342005	
Platin XL/XXL – connection DN160 (6")	
Platin XL/XXL filter package 1 Basic filter package Order no. 342040	Platin XL/XXL filter package 2 Recommended for garden use Order no. 342041
Platin XL/XXL filter package 3 Recommended for household use Order no. 342042	

Pump package
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

Tank

Platin flat rainwater tank

 **Platin flat rainwater tank**
Suitable for vehicle/lorry-bearing ¹⁾

 **WEBCODE** G1101



Figure depicts 1,500 l (400 US gal.) tank with telescopic dome shaft 600 Mini suitable for pedestrian loading (accessories on page 32)

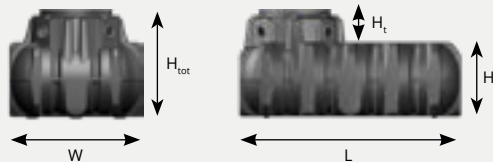


Installation instructions
and dimensional
drawings available at
www.graf.info

Technical data

Volume	Width B	Length L	Height H	Height H _{tot}	Height dome shaft H _t	Internal Ø of dome shaft	Weight	Order no.
1,500 l (400 US gal.)	1250 mm (4' 1")	2100 mm (6' 11")	700 mm (27.6")	1015 mm (3' 4")	315 mm (12.4")	650 mm (25.6")	82 kg (181 lbs)	390000
3,000 l (800 US gal.)	2100 mm (6' 11")	2450 mm (8' 1")	735 mm (28.9")	1050 mm (3' 5")			180 kg (397 lbs)	390001
5,000 l (1,325 US gal.)	2300 mm (7' 7")	2890 mm (9' 6")	1000 mm (3' 3")	1315 mm (4' 4")			250 kg (551 lbs)	390002
7,500 l (1,980 US gal.)	2250 mm (7' 5")	3600 mm (11' 10")	1250 mm (4' 1")	1565 mm (5' 2")			380 kg (837 lbs)	390005

Max. earth covering:	1200 mm (3' 11")
Trafficability:	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 DN110 (4") (DN160 (6") on request)



¹⁾ Suitable for vehicle loading with vehicle traversable cover
Suitable for lorry-bearing with lorry-bearing cover in conjunction with load distribution plate

Tank

Platin XL/XXL flat rainwater tank

 **Platin XL/XXL flat rainwater tank**
Suitable for vehicle/lorry-bearing ¹⁾

Platin XL
 **WEBCODE** G1106

Platin XXL
 **WEBCODE** G1107



Available with a second tank dome as an option

Figure depicts Platin XL/XXL flat tank with telescopic dome shaft 600 car with plastic cover, suitable for vehicle loading (accessories on page 33)

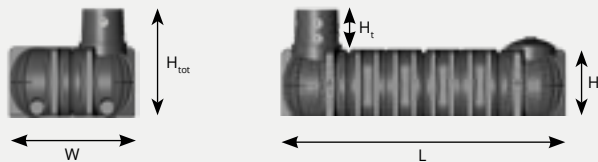


Installation instructions
and dimensional
drawings available at
www.graf.info

Technical data

Volume	Width B	Length L	Height H	Height H _{tot}	Height dome shaft H _t	Internal Ø of dome shaft	Weight	Order no.
7,500 l (1,980 US gal.)	2250 mm (7' 5")	3600 mm (11' 10")	1250 mm (4' 2")	1910 mm (6' 4")	610 mm (24")	650 mm (25.6")	390 kg (860 lbs)	390828
10,000 l (2,650 US gal.)		4900 mm (16' 1")					460 kg (1014 lbs)	390822
15,000 l (3,960 US gal.)		7500 mm (24' 8")					710 kg (1566 lbs)	390823
20,000 l (5,284 US gal.)		9405 mm (30' 11")					890 kg (1963 lbs)	391810
25,000 l (6,605 US gal.)		11400 mm (37' 5")					1140 kg (2514 lbs)	391811
30,000 l (7,926 US gal.)		14265 mm (46' 10")					1355 kg (2988 lbs)	391812
35,000 l (9,247 US gal.)		16510 mm (54' 2")					1570 kg (3462 lbs)	391813
40,000 l (10,567 US gal.)		18430 mm (60' 6")					1750 kg (3859 lbs)	391814
45,000 l (11,888 US gal.)		21030 mm (68' 12")					2000 kg (4410 lbs)	391815
50,000 l (13,209 US gal.)		22935 mm (75' 3")					2180 kg (4807 lbs)	391816
55,000 l (14,530 US gal.)		25195 mm (82' 8")					2395 kg (5281 lbs)	391817
60,000 l (15,851 US gal.)		27795 mm (91' 3")					2645 kg (5852 lbs)	391818
65,000 l (17,172 US gal.)		29700 mm (97' 6")					2825 kg (6229 lbs)	391819

Max. earth covering:	1500 mm (4' 12")
Trafficability:	Max. axle load: 2.2 to (4850 lbs) Max. vehicle weight: 3.5 to (7716 lbs)
Earth covering required for vehicle loading:	750 – 1300 mm (29.5 – 4' 4")
Groundwater stability:	up to tank shoulder
Earth covering required for groundwater stability:	750 – 1500 mm (29.5 – 4' 12")
Connection:	5 x DN160 (6") (or 10 x DN160 (6")) (optionally up to DN315 (12") on tank dome)



¹⁾ Suitable for vehicle loading with vehicle traversable cover
Suitable for lorry-bearing with lorry-bearing cover in conjunction with load distribution plate



Select your desired tank cover



Telescopic dome shaft 600 Mini with plastic cover, suitable for pedestrian loading

Smooth adjustments to earth covering via back of tank, tilts through 5°. Including childproof plastic cover. Colour: lawn green

The perfected cover for GRAF flat tanks. Ideal for the garden.



Earth covering Platin	Earth covering Platin XL/XXL	Internal Ø of	External Ø of	Height	Weight	Order no.
455 – 655 mm (17.9 – 25.8")	750 – 950 mm (29.5 – 3' 2")	600 mm (23.6")	780 mm (30.7")	360 mm (14.2")	9 kg (20 lbs)	371010

Telescopic dome shaft 600 Maxi with plastic cover, suitable for pedestrian loading

Smooth adjustments to earth covering via back of tank, tilts through 5°. Including childproof plastic cover. Colour: lawn green

The sturdy cover for GRAF flat tanks. Ideal for the home.



Earth covering Platin	Earth covering Platin XL/XXL	Internal Ø of	External Ø of	Height	Weight	Order no.
455 – 755 mm (17.9 – 29.7")	750 – 1050 mm (29.5 – 3' 6")	600 mm (23.6")	850 mm (33.5")	476 mm (18.7")	15 kg (34 kg)	371011

Extension 600/L 400

The earth covering can be raised by 300 mm (11.8") using the extension sleeve.



Earth covering Platin	Ø	Height	Weight	Order no.
+300 mm (+11.8")	680 mm (26.8")	400 mm (15.7")	6 kg (14 lbs)	371003



Water socket, internal

For the convenient extraction of rainwater in your garden. Extract water directly from the tank. Easy to retrofit with 600 Mini or Maxi telescopic dome shaft, incl valve for standard hose coupling, hose connection 25 mm (1").

Order no. 375119



Flush adaptation to ground level.



CORROSION-FREE thanks to childproof plastic lid

- Corrosion free, childproof plastic cover
- Tank's low weight makes it easy to access (11 kg/25 lbs)
- Smooth adjustments to earth covering

Telescopic dome shaft 600 car with plastic cover

Suitable for vehicle loading – with childproof plastic cover class B max 3.5 to (4850 lbs), smooth adjustments to earth covering via back of tank, tilts through 5°. Colour: black



Earth covering Platin	Earth covering Platin XL/XXL	Internal Ø of	External Ø of	Height	Weight	Order no.
455 – 755 mm (17.9 – 29.7")	750 – 1050 mm (29.5 – 3' 6")	600 mm (23.6")	850 mm (33.5")	476 mm (18.7")	22 kg (49 lbs)	371052

Lifting aid

For 600 car telescopic dome shaft for locking/unlocking and the ergonomic removal of the plastic cover suitable for vehicle loading

Order no. 371071



Telescopic dome shaft 600 universal

Suitable for vehicle/lorry-bearing – for commercially available concrete rings/ covers (to be provided on site) Smooth adjustments to earth covering via back of tank, tilts through 5°. Ideal for asphalt surfaces.

Cover and compensating ring to be provided on site



Earth covering Platin	Earth covering Platin XL/XXL	Internal Ø of	External Ø of	Height	Weight	Order no.
455 – 755 mm (17.9 – 29.7")	750 – 1050 mm (29.5 – 3' 6")	600 mm (23.6")	855 mm (33.7")	460 mm (18.1")	11 kg (25 lbs)	371021



Select your required filter package

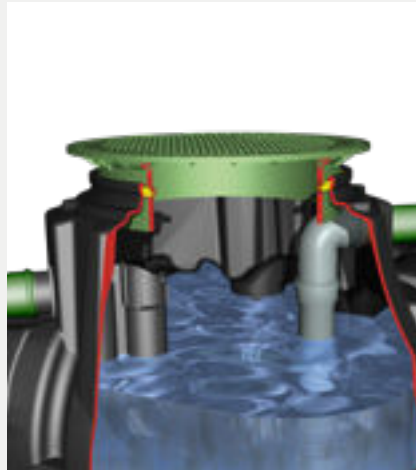


Platin flat tank – Connection DN110 (4")

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).



DN110 (4")

Order no. 342001

Scope of supply: Calmed inlet digester, overflow siphon, rodent guard

Platin XL/XXL flat tank – Connection DN160 (6")

Platin XL/XXL filter package 1

To be combined with external filter

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



DN160 (6")

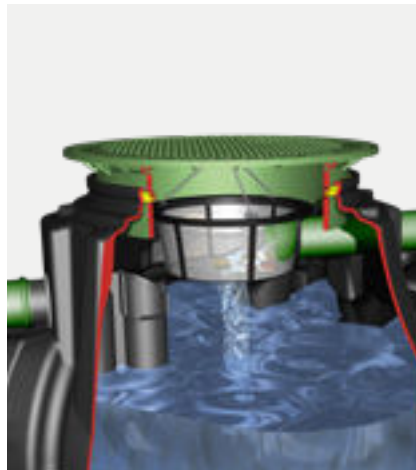
Order no. 342040

Scope of supply: Calmed inlet digester, overflow siphon, rodent guard

Platin filter package 2

For use in the home and garden – 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.



DN110 (4")

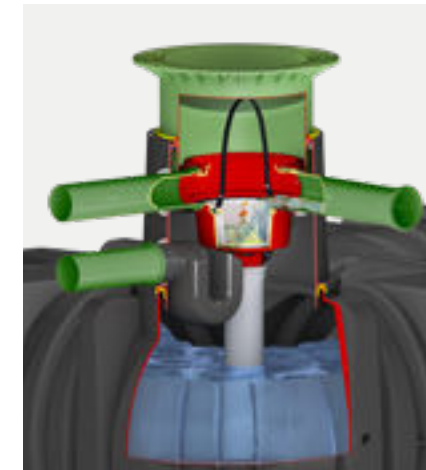
Order no. 342026

Scope of supply: Filter basket, crossbar and chain suspension, overflow siphon, rodent guard

Platin XL/XXL filter package 2

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

The Platin XL/XXL basic tank can integrate the universal filter 3 XL 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.



DN160 (6")

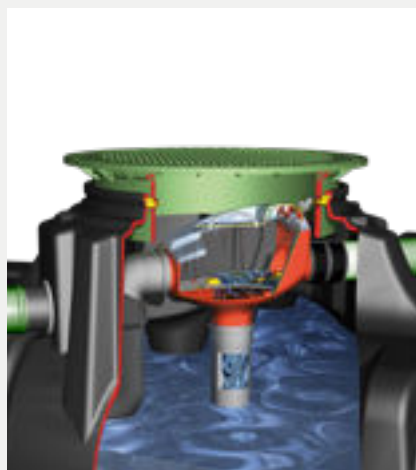
Order no. 342041

Scope of supply: Universal filter 3, XL internal, calmed inlet digester, overflow siphon, rodent guard, quick assembly sleeve Spannfix (patented)

Platin filter package 3

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

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.



DN110 (4")

Order no. 342038

Scope of supply: Minimax-Pro filter internal (patented), calmed inlet digester, overflow siphon – closed system prevents rodents from infiltrating the tank, quick assembly sleeve Spannfix (patented)

Internal cleaning unit

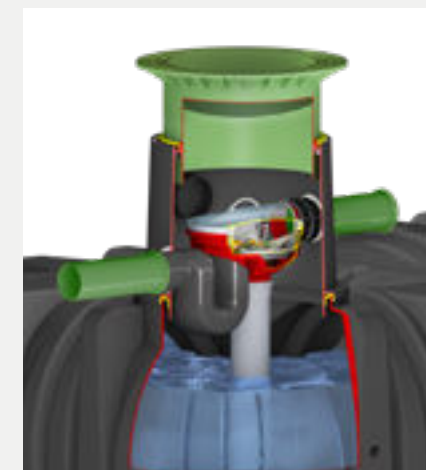
Connection 19 mm (¾"), supplied without hose

Order no. 340040

Platin XL/XXL filter package 3

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

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



DN160 (6")

Order no. 342042

Scope of supply: Optimax-Pro XL filter internal (patented), calmed inlet digester, overflow siphon – closed system prevents rodents from infiltrating the tank, quick assembly sleeve Spannfix (patented)

Internal cleaning unit XL

Connection 19 mm (¾"), supplied without hose

Order no. 340117



Select your required pump package

Pump package garden Jet

The good value solution.

- Jet 700 garden pump (page 106)
- Pump connection kit with 1 m (3' 3.4") PVC hose
- Internal and external water socket (compatible with standard hose coupling) (page 118)
- Suction kit with 12.5 m (41') suction hose 25 mm (1")

Order no. 342010



BESTSELLER

Pump package garden Comfort

Automatic pump control for great ease of use.

- NiRo 40 automatic submersible pump (page 66)
- Internal and external water socket (compatible with standard hose coupling) (page 118)
- Floating suction fitting with fine filter and hose
- 10 m (32' 10") pressure hose 25 mm (1") (not depicted)

Order no. 342011



Pump package house Eco-Plus

The low-cost solution for internal drinking water supply in the home.

- Aqua-Center Basic incl domestic water control unit KSB-Superinox 15/4 (page 102)
- Floating suction fitting with fine filter and hose
- Wall duct DN110 (4")
- Labelling kit
- PE suction pipe 25 mm (1"), length 12 m (39' 4") (not depicted)
- V2A switch control (not depicted)

Order no. 342014



PROFESSIONAL SOLUTION

Pump package house Professional

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

- Aqua-Center Silentio incl domestic water control unit KSB-Superinox 15/4 (page 103)
- Floating suction fitting with fine filter and hose
- Filter cleaning unit internal/XL (not depicted)
- Automatic filter cleaning (not depicted)
- Reversible flow filter
- Wall duct DN160 (6")
- Labelling kit
- PE suction pipe 25 mm (1"), length 12 m (39' 4") (not depicted)

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.

- Aqua-Center Silentio Press incl KSB domestic water control unit and submersible pump 300 A (page 104)
- Filter cleaning unit internal/XL (not depicted)
- Automatic filter cleaning (not depicted)
- Reversible flow filter
- Wall duct DN160 (6")
- Labelling kit
- 25 m (82') special suction and pressure hose 25 mm (1") (not depicted)

Order no. 342015



Preserving the natural cycle



Legal change

With the adoption of the European Water Framework Directive (2000/60/EC), the European Parliament and of the council has set the goal of using water more sustainably and in a more environmentally friendly way. The European states will be responsible for implementing this directive.

The Water Resources Acts of most European countries will therefore be amended. The implementations can be found in

many current versions – among others:

"rainwater should be drained away and irrigated locally ..., as long as this is not opposed by water legislation, other provisions of public law or water management issues."

The infiltration of rainwater locally offers considerable advantages over the previously customary draining into combined wastewater/separate sewage systems:

- ✓ Promotes groundwater recharge
- ✓ Reduces costs through lower structural costs – sewers in the separate network and wastewater lifting units can be dimensioned on a smaller scale
- ✓ Reduces the effects of surface sealing
- ✓ Minimises the hydraulic loads in the sewer system during storms
- ✓ Contributes to flooding prevention

**ONE TANK –
DOUBLE USE**

>> from page 72

Internationally recognised quality:
the extreme sturdiness of the Platin flat tank



15,000 l (3,960 US gal.), Production plant, Herbolzheim (Germany)



30,000 l (7,926 US gal.), Industrial plant, Geelong (Australia)



5,000 l (1,325 US gal.), Private home, Teningen (Germany)



7,500 l (1,980 US gal.), Luxury apartment, Sussex (United Kingdom)



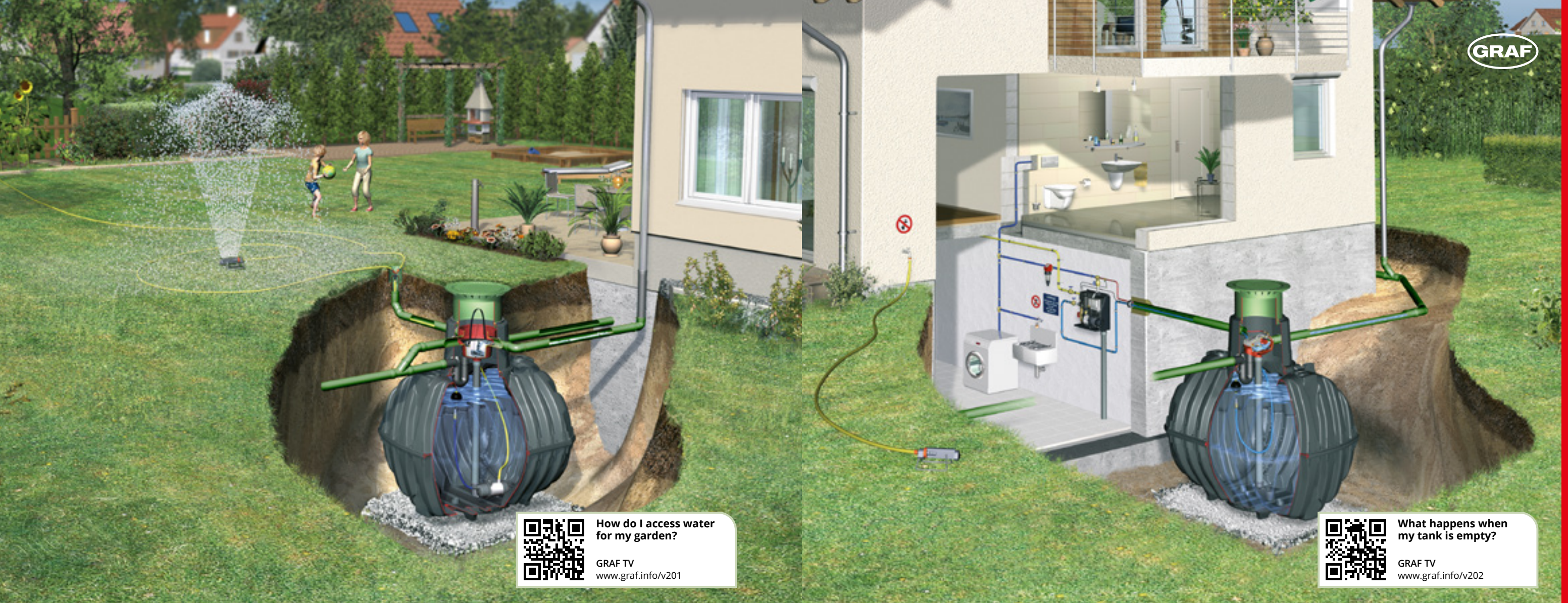
3,500 l (925 US gal.), Building, Vacarisses (Spain)



Carat
packages

- > For garden irrigation
- > For harvesting rainwater in home and garden

page 42
page 44



How do I access water for my garden?
 GRAF TV
www.graf.info/v201

What happens when my tank is empty?
 GRAF TV
www.graf.info/v202

Solutions for garden irrigation

Next summer is going to be a hot one! You may then have to dig deep in your pockets to supply drinking water to your garden. But for owners of a GRAF rainwater harvesting system, there's no need to worry. Optimised specifically for garden watering needs, GRAF packages supply your garden with limefree water at just the right temperature.

100 % water yield

GRAF garden packages have a basket filter that reliably holds back contaminants. This filter design safeguards a 100 % water yield.

Automatic pump

The garden Comfort 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 removal

The GRAF water socket comes with a range of connectors for your irrigation system, directly in the tank cover.* This package also includes a variant that can be installed in any position. You can simply connect your garden hose to the ground-level waster socket.

>> from page 42

*For packages suitable for pedestrian loading

Solutions for home and garden

Day after day households use precious mains water to flush the toilet, run the washing machine, and water the garden. GRAF packages for home and garden provide a reliable supply of rainwater for these uses. As a result, you save up to 50 % of drinking water – equivalent to about 65 litres (18 US gal.) per person per day!

Self-cleaning filter

GRAF home packages come with self-cleaning, and therefore low maintenance filters with a water yield of over 95 %.

Very high water quality

Not only the filters, also a multi-stage cleaning process safeguards the best water quality. The GRAF Professional package features in addition a reversible flow filter and automatic filter cleaning. These may be added as subsequent options to the other packages.

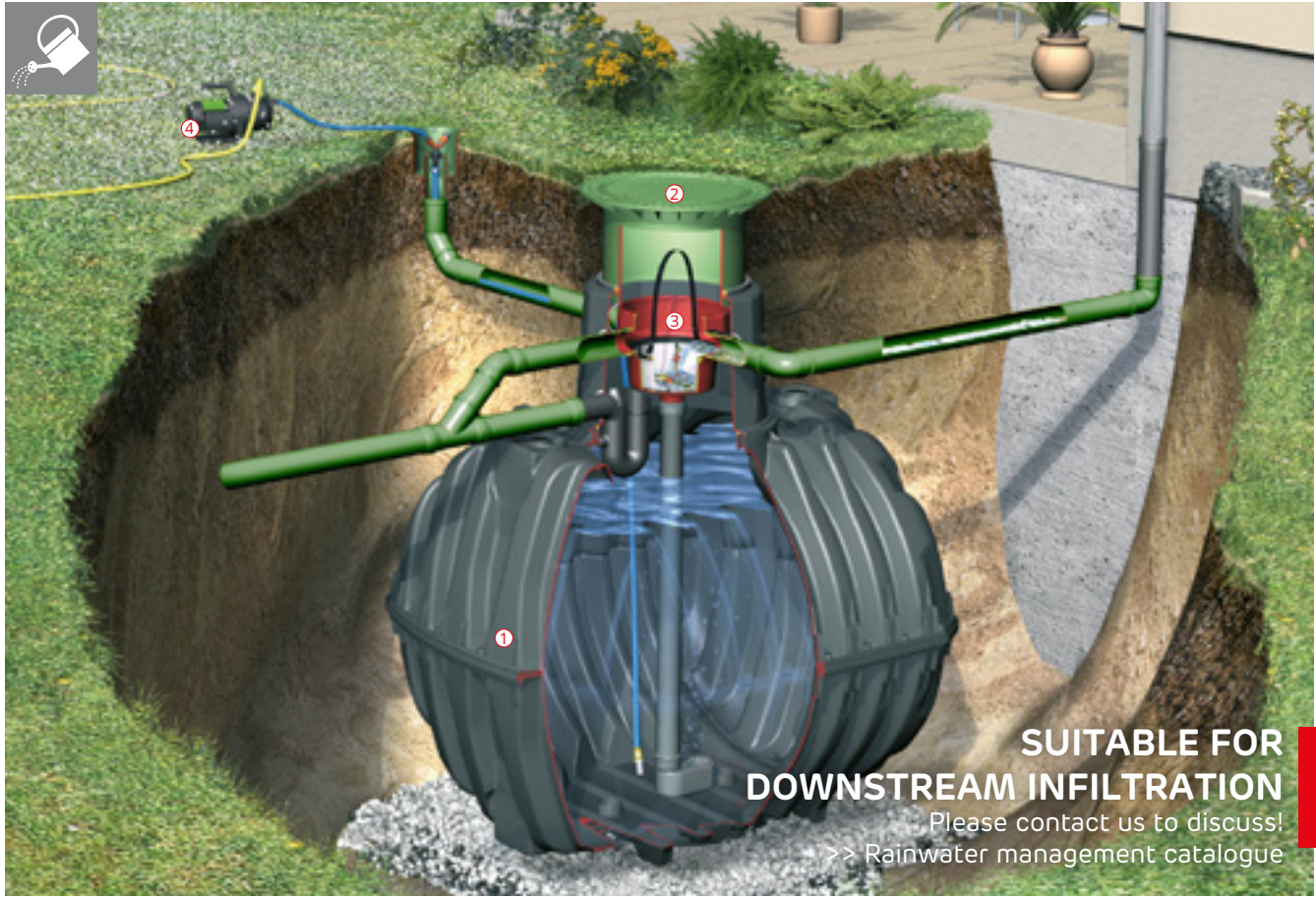
Reliable, ultra-quiet intake

The GRAF system control monitors the level in the tank and supplies water consumers with rainwater. When no rainwater is available, mains water is automatically supplied instead. GRAF Aqua-Center Silentio features an electronic control for the best possible ease of use. Its housing is designed to minimise operating noise.

>> from page 44

Carat S garden Jet package

The great value solution



- The great value solution
- Integrated filter technology (100 % water yield)
- Easy installation and convenient water extraction through water socket (compatible with standard hose coupling)

Volume	Connections
2,700 l (700 US gal.)	DN110 (4")
3,750 l (1,000 US gal.)	DN110 (4")
4,800 l (1,250 US gal.)	DN110 (4")
6,500 l (1,700 US gal.)	DN110 (4")
8,500 l (2,240 US gal.)	DN160 (6")
10,000 l (2,640 US gal.)	DN160 (6")
13,000 l (3,400 US gal.)	DN110 (6")

③ Universal-Filter 3/XL



④ Jet 700 garden pump

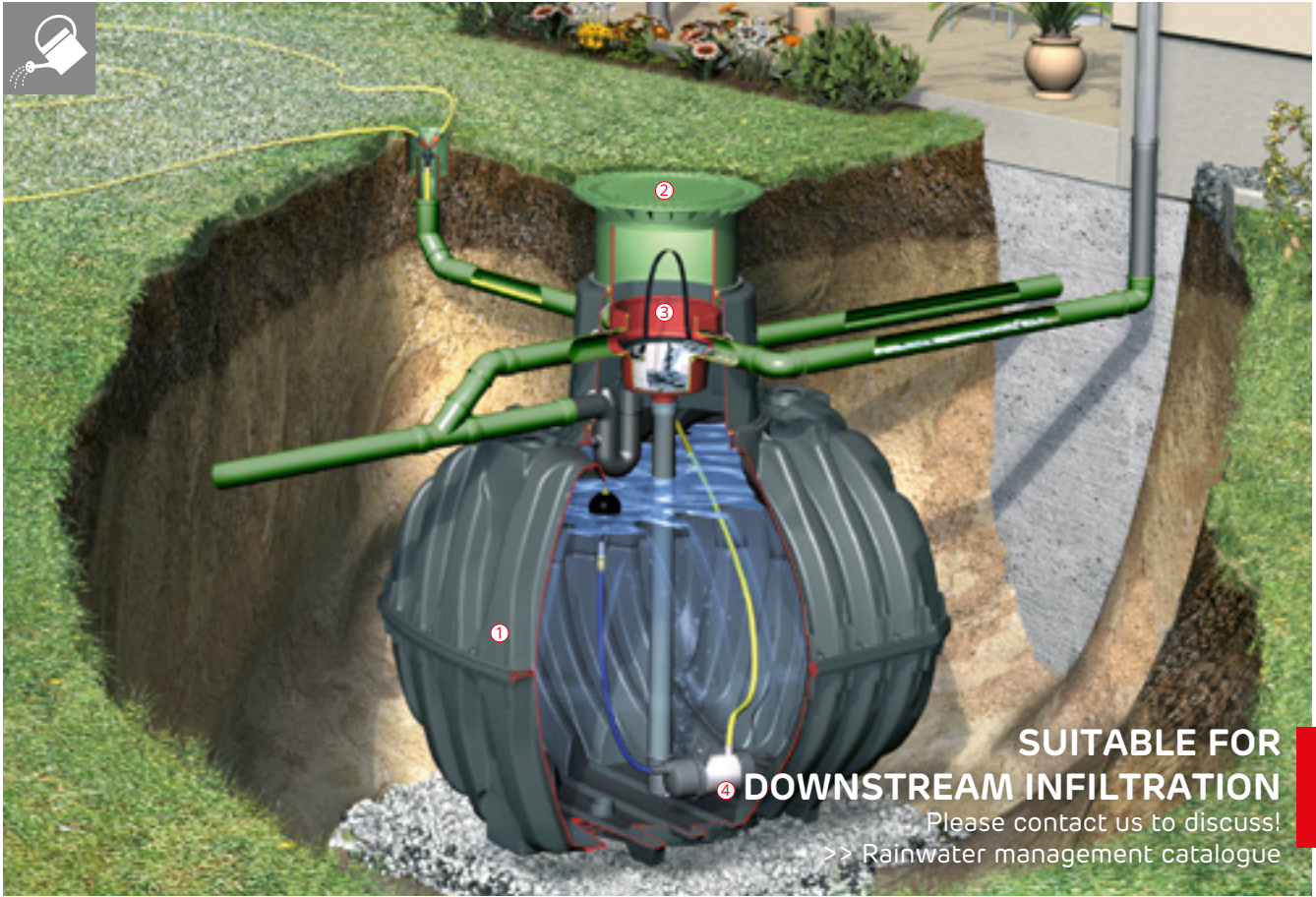


Q WEBCODE G1201

Scope of supply: ① Carat S/Carat XL underground tank ② Tank cover ③ Telescopic dome shaft 600 Mini, suitable for pedestrian loading, smooth telescopic adjustments 750 – 950 mm (29.5" – 37.4") earth covering, with plastic cover, or ④ Telescopic dome shaft 600 car, suitable for vehicle loading, smooth telescopic adjustments 750 – 1050 mm (29.5" – 41.3") earth covering, with plastic covering ⑤ Carat/Carat XL filter package 2 consisting of: Universal-Filter 3/XL intern (page 88), calmed inlet digester, overflow siphon, rodent guard, quick assembly sleeve Spannfix ⑥ Pump package garden Jet consisting of: Jet 700 garden pump (page 106), Internal and external water socket (compatible with standard hose coupling, page 118), pump connection kit with 1 m (3' 3.4") PVC hose, suction pipe with 12.5 m (41') suction hose 25 mm (1")

Carat S garden Comfort package

The convenient solution with automatic submersible pump



- Great ease of operation – Pump switches on and off automatically
- Integrated filter technology (100 % water yield)
- Easy installation and convenient water extraction through water socket (compatible with standard hose coupling)

Volume	Connections
2,700 l (700 US gal.)	DN110 (4")
3,750 l (1,000 US gal.)	DN110 (4")
4,800 l (1,250 US gal.)	DN110 (4")
6,500 l (1,700 US gal.)	DN110 (4")
8,500 l (2,240 US gal.)	DN160 (6")
10,000 l (2,640 US gal.)	DN160 (6")
13,000 l (3,400 US gal.)	DN110 (6")

③ Universal-Filter 3/XL



④ NiRo 40 automatic submersible pump



Q WEBCODE G1202

Scope of supply: ① Carat S/Carat XL underground tank ② Tank cover ③ Telescopic dome shaft 600 Mini, suitable for pedestrian loading, smooth telescopic adjustments 750 – 950 mm (29.5" – 37.4") earth covering, with plastic cover, or ④ Telescopic dome shaft 600 car, suitable for vehicle loading, smooth telescopic adjustments 750 – 1050 mm (29.5" – 41.3") earth covering, with plastic covering ⑤ Carat/Carat XL filter package 2 consisting of: Universal-Filter 3/XL intern (page 88), calmed inlet digester, overflow siphon, rodent guard, quick assembly sleeve Spannfix ⑥ Pump package garden Comfort consisting of: NiRo 40 automatic submersible pump (page 66), Internal and external water socket (compatible with standard hose coupling, page 118), floating suction fitting with fine filter and hose, 10 m (32' 10") pressure hose 25 mm (1")

Carat S Eco-Plus package

The proven classical solution for harvesting rainwater in home and garden



- Low-cost solution
- Patented filter technology
- Internal water supply in the home
- Float switch control
- Only one cover visible on the surface

Volume	Connections
3,750 l (1,000 US gal.)	DN110 (4")
4,800 l (1,250 US gal.)	DN110 (4")
6,500 l (1,700 US gal.)	DN110 (4")
8,500 l (2,240 US gal.)	DN160 (6")
10,000 l (2,650 US gal.)	DN160 (6")
13,000 l (3,400 US gal.)	DN110 (4")

③ Optimax-Pro Filter/XL



④ Aqua-Center Basic



Q WEBCODE G1203

Scope of supply: ① Carat S/Carat XL underground tank ② Tank cover ③ Telescopic dome shaft 600 Maxi, suitable for pedestrian loading, smooth telescopic adjustments 750 – 1050 mm (29.5" – 41.3") earth covering, with plastic cover, or ④ Telescopic dome shaft 600 car, suitable for vehicle loading, smooth telescopic adjustments 750 – 1050 mm (29.5" – 41.3") earth covering, with plastic covering ⑤ Carat/Carat XL filter package 3 consisting of: Optimax-Pro Filter internal/XL internal (patented, self-cleaning), calmed inlet digester, overflow siphon, quick assembly sleeve Spannfix ⑥ Pump package Eco-Plus consisting of: Aqua-Center Basic (page 102), floating suction fitting with fine filter and hose, wall duct DN110 (4"), labelling kit, PE suction pipe 25 mm (1"), length 12 m (39' 4")

Carat S Professional package

The ideal solution for harvesting rainwater in home and garden



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

Volume	Connections
3,750 l (1,000 US gal.)	DN110 (4")
4,800 l (1,250 US gal.)	DN110 (4")
6,500 l (1,700 US gal.)	DN110 (4")
8,500 l (2,240 US gal.)	DN160 (6")
10,000 l (2,650 US gal.)	DN160 (6")
13,000 l (3,400 US gal.)	DN110 (4")

③ Optimax-Pro Filter/XL



④ Aqua-Center Silentio



Q WEBCODE G1204

Scope of supply: ① Carat S/Carat XL underground tank ② Tank cover ③ Telescopic dome shaft 600 Maxi, suitable for pedestrian loading, smooth telescopic adjustments 750 – 1050 mm (29.5" – 41.3") earth covering, with plastic cover, or ④ Telescopic dome shaft 600 car, suitable for vehicle loading, smooth telescopic adjustments 750 – 1050 mm (29.5" – 41.3") earth covering, with plastic covering ⑤ Carat/Carat XL filter package 3 consisting of: Optimax-Pro Filter internal/XL internal (patented, self-cleaning), calmed inlet digester, overflow siphon, quick assembly sleeve Spannfix ⑥ Pump package Professional consisting of: Aqua-Center Silentio (page 103), floating suction fitting with fine filter and hose, wall duct DN160 (6"), filter cleaning unit internal, automatic filter cleaning, reversible flow filter, labelling kit, PE suction pipe 25 mm (1"), length 12 m (39' 4")

Carat S Silentio Press package

Ideal for large distances between tank and domestic water control unit



DRAIN AWAY EXCESS RAINWATER?
Please contact us to discuss!
>> Rainwater management catalogue

- Additional in-tank feed pump makes this ideal for distances of ≥ 15 m (49' 2.6") from the home
- Professional solution with patented filter technology
- Ultra-quiet operation thanks to encapsulated system control unit
- Internal water supply in the home
- Microprocessor control
- Digital level gauge
- Automatic rinse intervals of feed tank and filter
- Only one cover visible on the surface

Volume	Connections
3,750 l (1,000 US gal.)	DN110 (4")
4,800 l (1,250 US gal.)	DN110 (4")
6,500 l (1,700 US gal.)	DN110 (4")
8,500 l (2,240 US gal.)	DN160 (6")
10,000 l (2,650 US gal.)	DN160 (6")
13,000 l (3,400 US gal.)	DN110 (4")

③ Optimax-Pro Filter/XL



④ Aqua-Center Silentio Press



Q **WEBCODE** G1210

Scope of supply: ① Carat S/Carat XL underground tank ② Tank cover ③ Telescopic dome shaft 600 Maxi, suitable for pedestrian loading, smooth telescopic adjustments 750 – 1050 mm (29.5" – 41.3") earth covering, with plastic cover, or ④ Telescopic dome shaft 600 car, suitable for vehicle loading, smooth telescopic adjustments 750 – 1050 mm (29.5" – 41.3") earth covering, with plastic covering ⑤ Carat/Carat XL filter package 3 consisting of: Optimax-Pro Filter internal/XL internal (patented, self-cleaning), calmed inlet digester, overflow siphon, quick assembly sleeve Spannfix ⑥ Pump package Silentio Press consisting of: Aqua-Center Silentio Press incl submersible pump 300 A (page 104), filter cleaning unit internal/XL, automatic filter cleaning, reversible flow filter, wall duct DN160 (6"), labelling kit, 25 m (82') special suction and pressure hose 25 mm (1")



Carat modular system

- > Modular system page 54
- > Underground tanks page 56
- > Tank covers page 62
- > Filter packages page 64
- > Pump packages page 66

GRAF tank systems

Carat S underground tank

Unique production process worldwide

Unlike their conventional counterparts, GRAF Carat S underground tanks are injection-compressed – unique worldwide

for tanks of this size. Injection compression lends the tanks an unequalled stability and fitting precision between each of their components. The wall thicknesses

can be defined at all positions in the tank, and the production tolerances are minimal. The result is a first-class product: resilient, precision fit, and easy to use!



The tank that turns its head for you

- Rotating tank dome that can be aligned easily to the connecting lines
- Easy adjustment to the ground surface thanks to telescopic/tilting dome shaft
- Ease of transport thanks to low weight and peripheral H profile
- Incl edge seals as standard for simplified connections
- Suitable for vehicle/lorry-bearing¹⁾
- Can be mounted in groundwater
- Sealed up to ground level
- Unique stability and precision fit of components

Ingeniously designed down to the smallest detail!



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
- Self cleaning, so low maintenance
- Optional internal cleaning unit
- Transparent cover for easier inspection of filter
- Water yield of over 95 %

See page 90 for more information

CARAT S PACKAGES

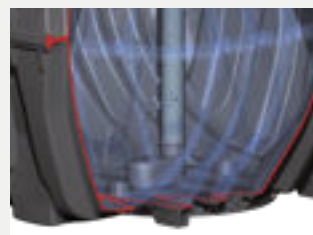
>> from page 42

Four-stage cleaning process for best water quality



1. Cleaning step

First the rainwater is cleaned by a patented filter system. The cleaned water runs into the tank, and dirt particles are flushed into the sewers with a small quantity of residual water.



2. Cleaning step

So that ultra fine dirt particles can deposit on the tank base, the filtered water is routed through a calmed inlet digester on the base of the tank. This prevents the water from being stirred up and introduces additional oxygen to the water on the base of tank. The water is then always clean and fresh.



3. Cleaning step

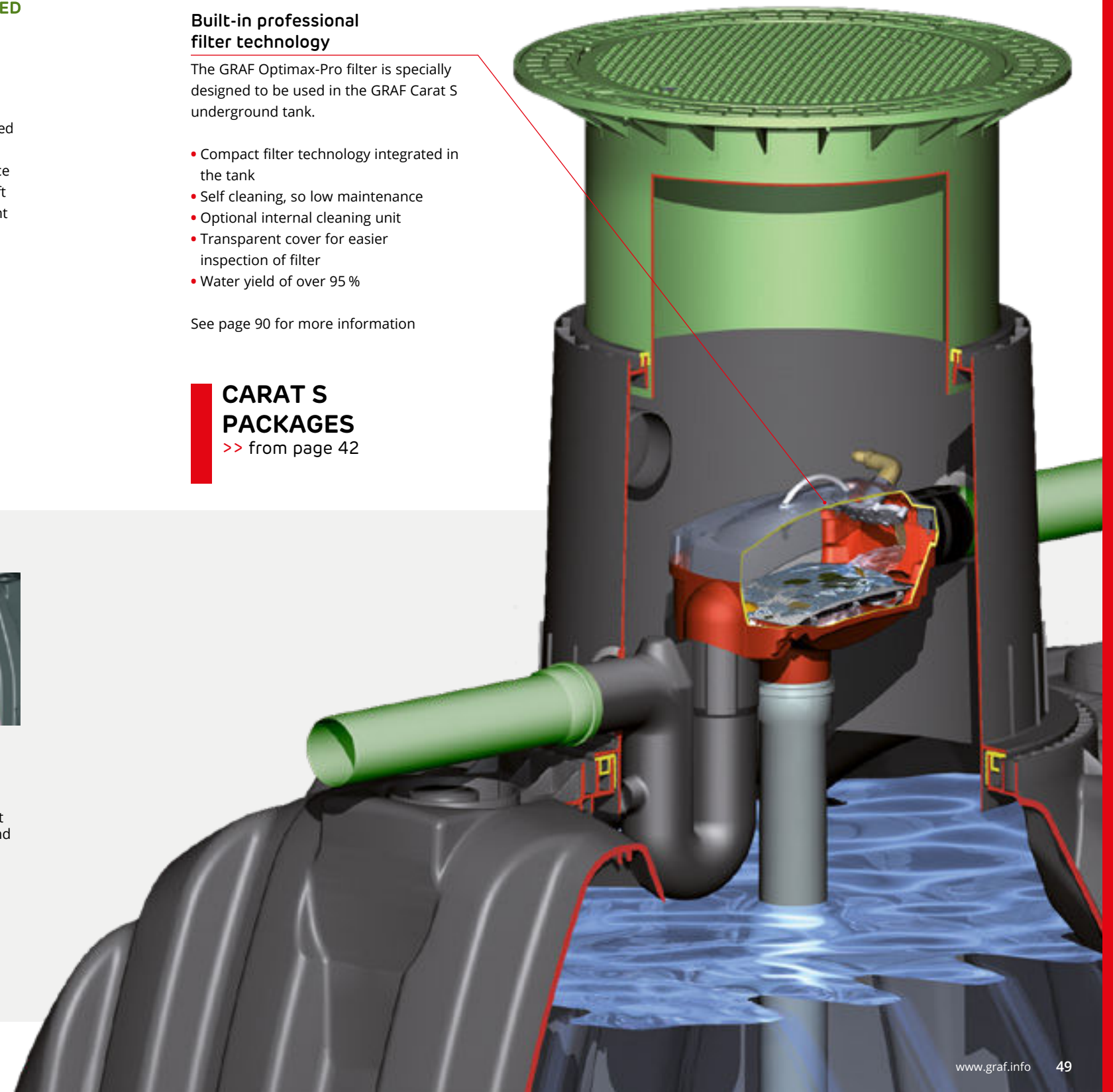
Particles that are lighter than water (such as pollen) form a floating layer on the surface. The overflow siphon installed in the tank causes the floating layer to be removed when the tank overflows. It is important that the tank overflows regularly if the water quality is to remain constant.



4. Cleaning step

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 below the water's surface.

¹⁾ Suitable for vehicle loading with vehicle traversable cover, suitable for lorry-bearing with lorry-bearing cover



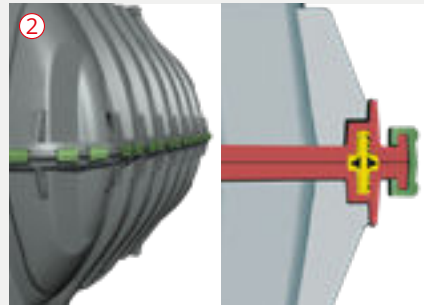
Advantages of the Carat S system

Sealed, stable, unique



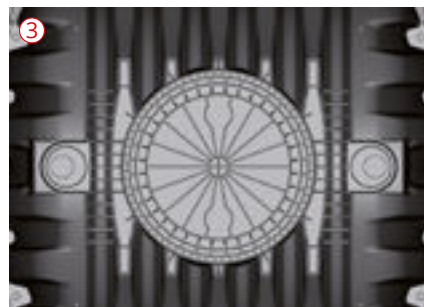
Adjustment with the ground level (2 seals)

The Carat S underground tank has many seals that prevent debris from getting inside. This means that the water infiltrating the ground cannot penetrate the tank, and that debris and particles cannot contaminate the water inside. The seals are placed in the intersections between the tank and the shaft and between the shaft and the telescopic dome lid. All supplied piping connected to the lid are also secured with seals.



Ring to seal stabilisation with unique H-profile

The Carat S underground tank has a unique profile to ensure greater stability and safety. Thanks to the additional ribs, the Carat S tank does not deform even under very heavy loads. Therefore, Carat S can be driven over by vehicles up to a total weight of 3.5 to (4850 lbs), it can be installed in the phreatic zone up to the middle of the tank and can be covered with 1.2 m of soil. In addition, the H-profile for sealing acts as a carrying handle and as a pitch to connect the lid. Please follow the installation instructions (which can be downloaded at www.graf.info).



Tank base with reinforced ribs

The base of the Carat S underground tank is extremely stable thanks to its many ribs. These allow installing the tank in the phreatic zone up to the middle of the tank. In addition, a stable base makes the tank sturdier during transport to the installation site. The excellent rigidity of the tank base was proven in numerous computer simulations during the development process. Please follow the installation instructions (which can be downloaded at www.graf.info).

An overview of the advantages

- High stability thanks to modern production methods
- Unique accuracy in component production thanks to the new manufacturing processes
- High quality proven by safety tests and production control
- CE 12566-3 certified tank for stability and watertightness
- Drive-over for cars (if combined with the telescopic dome shaft 600 car with plastic cover, page 63)

- Can be installed in the phreatic zone up to the middle of the tank thanks to its extremely stable structure
- Easy to transport thanks to its low weight and H-profile
- Safe investment thanks to the 15-year warranty
- Its capacity can be expanded at any time



Installation instructions and dimensional drawings available at www.graf.info



Carat S underground tank

Logistical advantages



Advantages

- Easy to transport
- Tank made up of two half shells
- 5 – 9 tanks per pallet
- Up to 8 times more tanks per lorry / container
- Up to 36 wastewater or 45 rainwater harvesting systems per lorry / container



GRAF tank systems

Carat XXL underground tank

Available with a second tank dome as an option

On request the Carat XXL can be fitted with an additional dome (excl size 16,000 l (1550 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.

56,000 l (14,800 US gal.) possible without special transport measures

Because it makes maximum use of the 2.5 m (8' 3") wide loading space, a 56,000 l (14,800 US gal.) tank can be transported without special measures. Lifting straps are included in the delivery.

Suitable for lorry-bearing

The GRAF Carat XXL underground rainwater tank is designed to withstand lorry-bearing.*



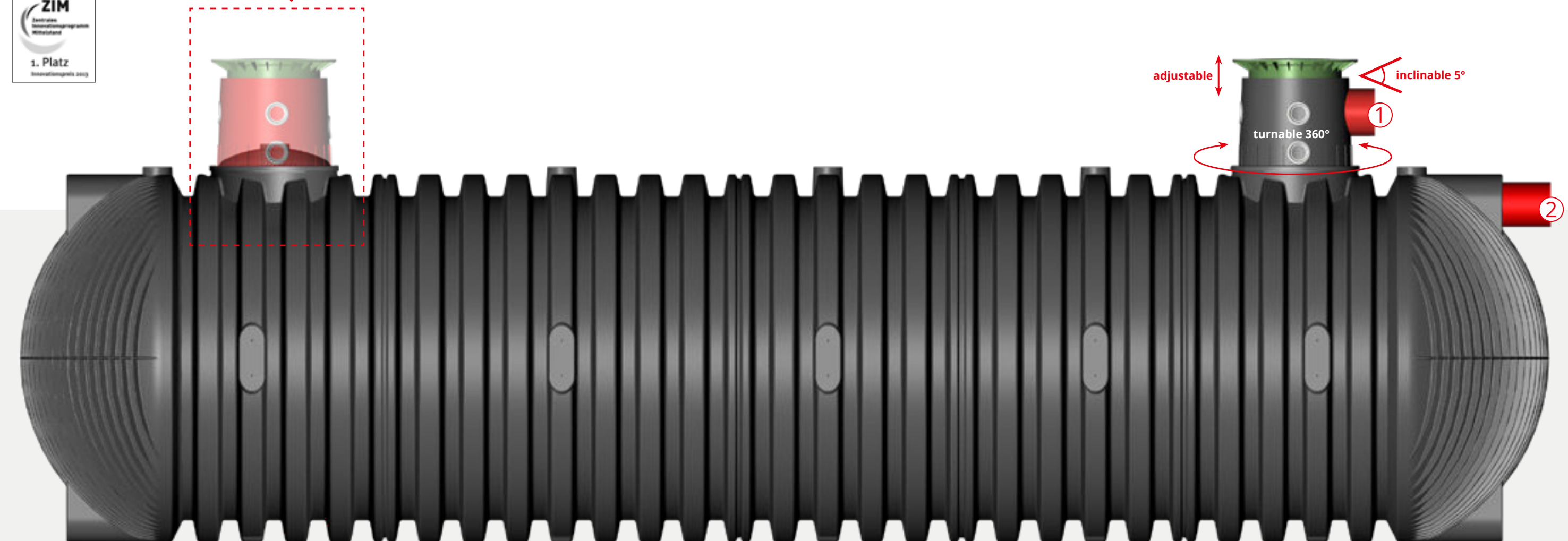
Flexible connections up to DN315 (12")

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 DN200 (8") are already fitted as standard. If necessary the Carat XXL can be fitted with connectors up to DN315 (12"), either on the tank dome ① or on the face end ②.

Flexible in use

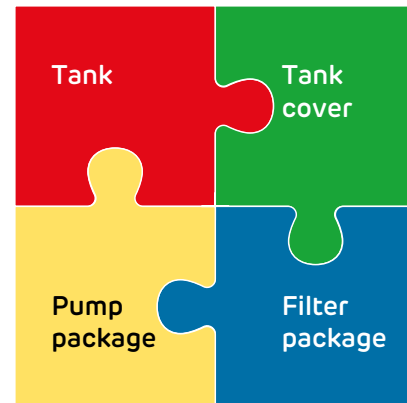
- Rainwater tank (page 60/61)
- Detention cisterns (page 78/79)
- Drinking water storage
- Extinguishing water storage system
- >> See GRAF Water storage systems for firefighting

Q WEBCODE G1312



*Suitable for lorry-bearing with lorry-bearing cover in conjunction with load distribution plate (60 to)

Compile your own system from four components



Tank (page 56–61)

The underground tank Carat S, Carat XL or Carat XXL is the basis for the modular system.

Tank cover (page 62/63)

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

Filter package (page 64/65)

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.

Pump package (page 66/67)

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

Tank

Carat S 2,700 – 6,500 litres

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

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

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

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

Carat XL 8,500 – 10,000 litres

Carat XL 8,500 litres
(2,240 US gal.)
Order no. 370043

Carat XL 10,000 litres (2,640 US gal.)
Order no. 370044

Carat XL 13,000 litres
(3,430 US gal.)
Order no. 370045

Carat XXL 16,000 – 122,000 litres

Carat 16,000 litres
(4,230 US gal.)
Order no. 380811

Carat 22,000 litres
(5,820 US gal.)
Order no. 380812

Carat 26,000 litres
(6,870 US gal.)
Order no. 380813

Carat 32,000 litres
(8,460 US gal.)
Order no. 380814

Carat 36,000 litres
(9,520 US gal.)
Order no. 380815

Carat 42,000 litres
(11,100 US gal.)
Order no. 380816

Carat 46,000 litres
(12,160 US gal.)
Order no. 380817

Carat 52,000 litres
(13,740 US gal.)
Order no. 380818

Carat 56,000 litres
(14,800 US gal.)
Order no. 380819

Carat 62,000 litres
(16,380 US gal.)
Order no. 380820

Carat 66,000 litres
(17,440 US gal.)
Order no. 380821

Carat 72,000 litres
(19,020 US gal.)
Order no. 380822

Carat 76,000 litres
(20,080 US gal.)
Order no. 380823

Carat 82,000 litres
(21,670 US gal.)
Order no. 380824

Carat 86,000 litres
(22,720 US gal.)
Order no. 380825

Carat 92,000 litres
(24,310 US gal.)
Order no. 380826

Carat 96,000 litres
(25,360 US gal.)
Order no. 380827

Carat 102,000 litres
(26,950 US gal.)
Order no. 380828

Carat 106,000 litres
(28,010 US gal.)
Order no. 380829

Carat 112,000 litres
(29,590 US gal.)
Order no. 380830

Carat 116,000 litres
(30,650 US gal.)
Order no. 380831

Carat 122,000 litres
(32,230 US gal.)
Order no. 380832

Tank dome

Tank dome Micro
for Carat S
DN110 (4") Order no. 371009

Tank dome Mini
for Carat S
DN110 (4") Order no. 371041

Tank dome Maxi for Carat S
DN110 (4") Order no. 371040
DN160 (6") Order no. 371019

Tank dome Mini
for Carat XL/XXL
DN110 (4")
Order no. 371064

Tank dome Maxi
for Carat XL/XXL
DN110 (4") Order no. 371014
DN160 (6") Order no. 371018

Dome shaft Plug
for Carat XL/XXL
Order no. 371065

Tank cover

Telescopic dome shaft
600 Mini, suitable for
pedestrian loading
plus 140 – 340 mm
(5.5 – 13.4") earth covering
Order no. 371010

Telescopic dome shaft
600 Maxi, suitable for
pedestrian loading
plus 140 – 440 mm
(5.5 – 17.3") earth covering
Order no. 371011

WITH PLASTIC LID

Telescopic dome shaft
600 car, suitable for
vehicle loading
plus 140 – 440 mm
(5.5 – 17.3") earth covering
Order no. 371052

Cover and
compensating ring
to be provided
on site

Telescopic dome shaft 600
universal, for lorry-bearing
plus 140 – 440 mm
(5.5 – 17.3") earth covering
For commercially available
concrete / cast iron covers
Order no. 371021

Extension 600/L 400
Usable length: 300 mm
(11.8")
Order no. 371003

Filter package

Carat S – connection DN110 (4")

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

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

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

Carat XL/XXL – connection DN160 (6")

Carat XL/XXL filter package 1
Basic filter package
Order no. 342040

Carat XL/XXL filter package 2
Recommended for garden use
Order no. 342041

Carat XL/XXL filter package 3
Recommended for household use
Order no. 342042

Pump package

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

Tank Carat S underground tank

 **Carat S underground tank**
Suitable for vehicle / lorry-bearing ¹⁾

 **WEBCODE** G1105



**100 %
RECYCLED**



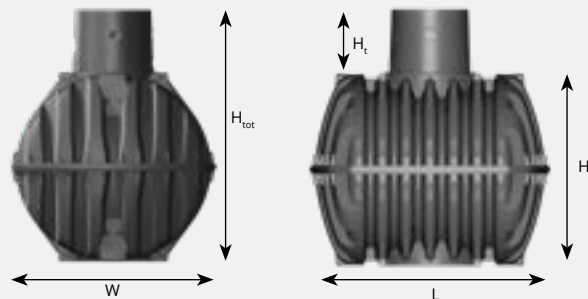
Installation instructions
and dimensional
drawings available at
www.graf.info

Figure depicts 3,750 l (1,000 US gal.) tank with
telescopic dome shaft 600 Maxi with plastic
cover, suitable for pedestrian loading suitable
for pedestrian loading (accessories on page 62)

Technical data

Volume	Width B	Length L	Height H	Height H _{tot}	Height of tank dome H _t	Inner Ø of tank dome	Weight	Order no.
2,700 l (700 US gal.)	1565 mm (5' 2")	2080 mm (6' 10")	1400 mm (4' 7")	2010 mm (6' 7")	610 mm (24")	650 mm (25.6")	120 kg (265 lbs)	372025
3,750 l (1,000 US gal.)	1755 mm (5' 9")	2080 mm (6' 10")	1590 mm (5' 3")	2200 mm (7' 3")	610 mm (24")	650 mm (25.6")	150 kg (331 lbs)	372025
4,800 l (1,250 US gal.)	1985 mm (6' 6")	2080 mm (6' 10")	1820 mm (6')	2430 mm (8')	610 mm (24")	650 mm (25.6")	185 kg (408 lbs)	372026
6,500 l (1,700 US gal.)	2190 mm (7' 2")	2390 mm (7' 10")	2100 mm (6' 11")	2710 mm (8' 11")	610 mm (24")	650 mm (25.6")	220 kg (485 lbs)	372027

Max. earth covering:	1500 mm (4' 12")
Trafficability:	Max. axle load: 8 to (17637 lbs) Max. total weight: 12 to (26456 lbs)
Earth covering required for vehicle loading:	800 – 1500 mm (31.5" – 4' 12")
Groundwater stability:	up to the middle of the tank
Earth covering required for groundwater stability:	800 – 1500 mm (31.5" – 4' 12")
Connection:	5 x DN110 (4") (DN160 (6") on request)



¹⁾ Suitable for vehicle loading with vehicle traversable cover
Suitable for lorry-bearing with lorry-bearing cover

Tank Carat S tank extension



The image shows an example with
tank extension. The connection pipes
are to be positioned by the customer.

Technical data

Volume	Width B	Length L	Height H	Weight	Order no.
6,500 l (1,700 US gal.)	2190 mm (7' 2")	2390 mm (7' 10")	2100 mm (6' 11")	220 kg (485 lbs)	372014

Max. earth covering:	1500 mm (5' 11")
Trafficability:	Max. axle load: 8 to (17637 lbs) Max. total weight: 12 to (26456 lbs)
Earth covering required for vehicle loading:	800 – 1500 mm (31.5" – 4' 12")
Groundwater stability:	up to the middle of the tank
Earth covering required for groundwater stability:	800 – 1500 mm (31.5" – 4' 12")

Accessories

Extension filter

Order no. 371005

Drill DN110 (4")

Order no. 202003

Special seal 110

Order no. 332033



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

Tank

Carat XL

underground tank



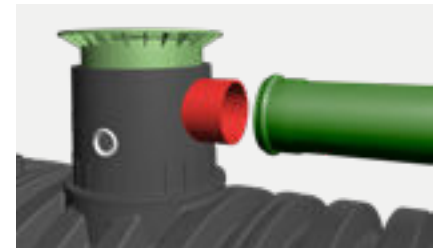


Carat XL underground tank

Suitable for vehicle / lorry-bearing ¹⁾



Installation instructions
and dimensional
drawings available at
www.graf.info



Larger connection fittings on request



Also available as a detention
cistern

- 2,700 – 10,000 l (714 – 2,642 US gal.)
- Suitable for lorry-bearing up to 12 to
- Can be mounted in groundwater

Q **WEBCODE** G1103

Illustration shows 10,000 l (2,640
US gal.) tank with telescopic dome
shaft 600 car with plastic cover
(accessories, see page 63)

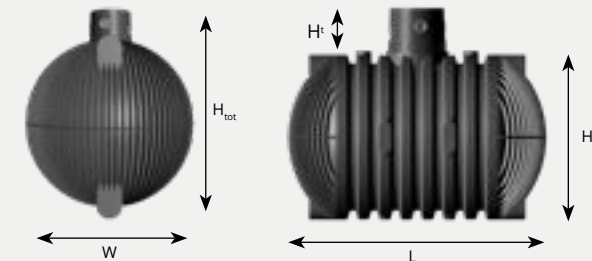
Q **WEBCODE** G4307

>> page 76

Technical data

Volume	Width B	Length L	Height H	Height H _{tot}	Height of tank dome H _t	Inner Ø of tank dome	Weight	Order no.
8,500 l (2,240 US gal.)	2040 mm (6' 8")	3500 mm (11' 6")	2085 mm (6' 10")	2695 mm (8' 10")	610 mm (24")	650 mm (25.6")	380 kg (838 lbs)	370043
10,000 l (2,640 US gal.)	2240 mm (7' 4")	3520 mm (11' 7")	2285 mm (7' 6")	2895 mm (9' 6")	610 mm (24")	650 mm (25.6")	455 kg (1003 lbs)	370044
13,000 l (3,430 US gal.)	2420 mm (7' 11")	4000 mm (13' 2")	2470 mm (8' 1")	3080 mm (10' 1")	610 mm (24")	650 mm (25.6")	600 kg (1323 lbs)	370045

Max. earth covering:	2000 mm (6' 7")
Trafficability:	Max. axle load: 8 to (17637 lbs) Max. total weight: 12 to (26456 lbs)
Earth covering required for vehicle loading:	800 – 2000 mm (31.5" – 6' 7")
Groundwater stability:	up to the middle of the tank
Earth covering required for groundwater stability:	800 – 1800 mm (31.5" – 5' 11")
Connection:	5 x DN160 (6") (optional up to DN315 (12"))



¹⁾ Suitable for vehicle loading with vehicle traversable cover
Suitable for lorry-bearing with lorry-bearing cover

Tank Carat XXL underground rainwater tank

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



Installation instructions
and dimensional
drawings available at
www.graf.info



 **WEBCODE** G1104

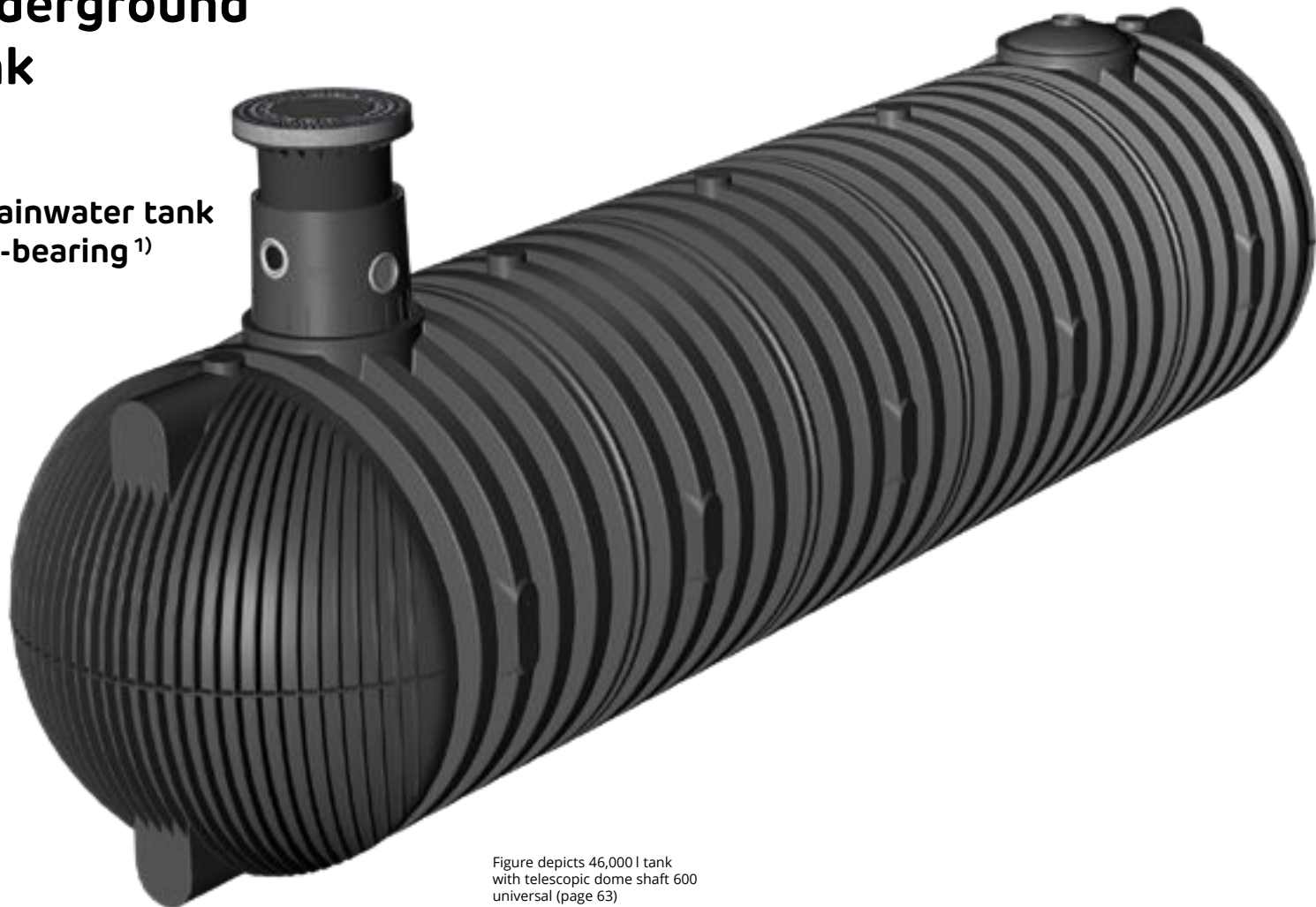


Figure depicts 46,000 l tank
with telescopic dome shaft 600
universal (page 63)

**SUITABLE FOR
LORRY-BEARING**
up to 40 to (88185 lbs)
without load distribution plate

**Also available as a firefighting
water tank**

- 16,000–122,000 litres
(1,550–32,229 US gal.)
- Suitable for lorry-bearing up to 60 to²⁾
- Delivery includes all firefighting water
accessory parts to DIN 14230

 **WEBCODE** G1312

**>> See Water storage
systems for firefighting**



Technical data

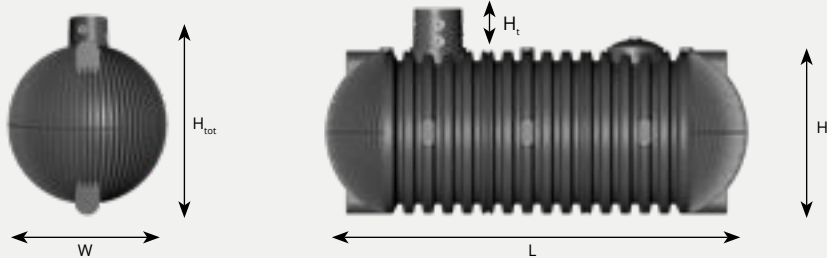
Volume	Width B	Length L	Height H	Height H _{tot}	Height dome shaft H _t	Internal Ø of dome shaft	Weight	Order no.
16,000 l (1,550 US gal.)*		4590 mm (5' 3")					770 kg (1698 lbs)	380811
22,000 l (5,820 US gal.)		6230 mm (20' 6")					1025 kg (2260 lbs)	380812
26,000 l (6,870 US gal.)		7200 mm (23' 8")					1125 kg (2481 lbs)	380813
32,000 l (8,460 US gal.)		8440 mm (27' 9")					1405 kg (3098 lbs)	380814
36,000 l (9,520 US gal.)		9410 mm (30' 11")					1500 kg (3307 lbs)	380815
42,000 l (11,100 US gal.)		10680 mm (35' 1")					1795 kg (3958 lbs)	380816
46,000 l (12,160 US gal.)		11650 mm (38' 3")					1890 kg (4167 lbs)	380817
52,000 l (13,740 US gal.)		12920 mm (42' 5")					2185 kg (4818 lbs)	380818
56,000 l (14,800 US gal.)		13890 mm (45' 7")					2280 kg (5027 lbs)	380819
62,000 l (16,380 US gal.)		15160 mm (49' 9")					2580 kg (5688 lbs)	380820
66,000 l (17,440 US gal.)	2500 mm (8' 3")	16130 mm (52' 11")	2550 mm (8' 5")	3160 mm (10' 5")	610 mm (24")	650 mm (25.6")	2670 kg (5887 lbs)	380821
72,000 l (19,020 US gal.)		17400 mm (57' 2")					2965 kg (6537 lbs)	380822
76,000 l (20,050 US gal.)		18370 mm (60' 4")					3060 kg (6747 lbs)	380823
82,000 l (21,670 US gal.)		19640 mm (64' 6")					3355 kg (7397 lbs)	380824
86,000 l (22,720 US gal.)		20610 mm (67' 8")					3460 kg (7628 lbs)	380825
92,000 l (24,310 US gal.)		21880 mm (71' 10")					3755 kg (8279 lbs)	380826
96,000 l (25,360 US gal.)		22850 mm (74' 12")					3850 kg (8488 lbs)	380827
102,000 l (26,950 US gal.)		24120 mm (79' 2")					4145 kg (9139 lbs)	380828
106,000 l (28,010 US gal.)		25090 mm (82' 4")					4240 kg (9348 lbs)	380829
112,000 l (29,590 US gal.)		26360 mm (86' 6")					4535 kg (9998 lbs)	380830
116,000 l (30,650 US gal.)		27330 mm (89' 8")					4630 kg (10208 lbs)	380831
122,000 l (32,230 US gal.)		28600 mm (93' 10")					4925 kg (10858 lbs)	380832

Delivery time by arrangement. Delivered ex works – shipping costs on request.

Second tank dome: optional possibility (*exception, second tank dome not possible here)

¹⁾ Suitable for vehicle loading with vehicle traversable cover
Suitable for lorry-bearing with lorry-bearing cover in conjunction with load distribution plate (60 to)

Max. earth covering:	1500 mm (4' 12")
Trafficability:	Max. axle load: 13.5 to (29763 lbs) Max. vehicle weight: 40 to (88185 lbs)
Earth covering required for vehicle loading:	800 – 1500 mm (31.5" – 4' 12") for vehicles 1000 – 1500 mm (31.5" – 4' 12") for HGV
Groundwater stability:	up to the middle of the tank
Earth covering required for groundwater stability:	800 – 1500 mm (31.5" – 4' 12")
Connection:	5 x DN150 (6") (or 10 x DN160*) (optionally up to DN315 (12")), DN200 (8") connection on tank back



²⁾ Suitable for lorry-bearing with lorry-bearing cover in
conjunction with load distribution plate

*available with a second tank dome as an option



Larger connection fittings on request



Select your desired tank cover



Telescopic dome shaft 600 Mini with plastic cover, suitable for pedestrian loading

Smooth adjustments to earth covering via back of tank, tilts through 5°. Including childproof plastic cover. Colour: lawn green

The perfected cover for GRAF flat tanks. Ideal for the garden.



Earth covering Platin	Earth covering Platin XL/XXL	Internal Ø of	External Ø of	Height	Weight	Order no.
455 – 655 mm (17.9 – 25.8")	750 – 950 mm (29.5 – 3' 2")	600 mm (23.6")	780 mm (30.7")	360 mm (14.2")	9 kg (20 lbs)	371010

Telescopic dome shaft 600 Maxi with plastic cover, suitable for pedestrian loading

Smooth adjustments to earth covering via back of tank, tilts through 5°. Including childproof plastic cover. Colour: lawn green

The sturdy cover for GRAF flat tanks. Ideal for the home.



Earth covering Platin	Earth covering Platin XL/XXL	Internal Ø of	External Ø of	Height	Weight	Order no.
455 – 755 mm (17.9 – 29.7")	750 – 1050 mm (29.5 – 3' 6")	600 mm (23.6")	850 mm (33.5")	476 mm (18.7")	15 kg (34 kg)	371011

Extension 600/L 400

The earth covering can be raised by 300 mm (11.8") using the extension sleeve.



Earth covering Platin	Ø	Height	Weight	Order no.
+300 mm (+11.8")	680 mm (26.8")	400 mm (15.7")	6 kg (14 lbs)	371003



Water socket, internal

For the convenient extraction of rainwater in your garden. Extract water directly from the tank. Easy to retrofit with 600 Mini or Maxi telescopic dome shaft, incl valve for standard hose coupling, hose connection 25 mm (1").

Order no. 375119



Flush adaptation to ground level.



CORROSION-FREE thanks to childproof plastic lid

- Corrosion free, childproof plastic cover
- Tank's low weight makes it easy to access (11 kg/25 lbs)
- Smooth adjustments to earth covering

Telescopic dome shaft 600 car with plastic cover

Suitable for vehicle loading – with childproof plastic cover class B max 3.5 to (4850 lbs), smooth adjustments to earth covering via back of tank, tilts through 5°. Colour: black



Earth covering Platin	Earth covering Platin XL/XXL	Internal Ø of	External Ø of	Height	Weight	Order no.
455 – 755 mm (17.9 – 29.7")	750 – 1050 mm (29.5 – 3' 6")	600 mm (23.6")	850 mm (33.5")	476 mm (18.7")	22 kg (49 lbs)	371052

Lifting aid

For 600 car telescopic dome shaft for locking/unlocking and the ergonomic removal of the plastic cover suitable for vehicle loading

Order no. 371071



Telescopic dome shaft 600 universal

Suitable for vehicle/lorry-bearing – for commercially available concrete rings/ covers (to be provided on site) Smooth adjustments to earth covering via back of tank, tilts through 5°. Ideal for asphalt surfaces.

Cover and compensating ring to be provided on site



Earth covering Platin	Earth covering Platin XL/XXL	Internal Ø of	External Ø of	Height	Weight	Order no.
455 – 755 mm (17.9 – 29.7")	750 – 1050 mm (29.5 – 3' 6")	600 mm (23.6")	855 mm (33.7")	460 mm (18.1")	11 kg (25 lbs)	371021



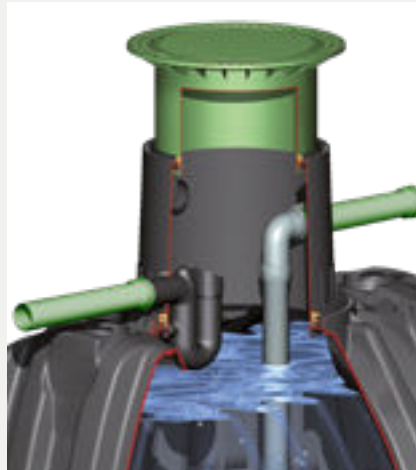
Select your required filter package

Carat S underground tank – Connection DN110 (4")

Carat S filter package 1

To be combined with external filter

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



DN110 (4")

Order no. 342001

Scope of supply: Calmed inlet digester, overflow siphon, rodent guard

Carat XL/XXL underground tank – Connection DN160 (6")

Carat XL/XXL filter package 1

To be combined with external filter

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



DN160 (6")

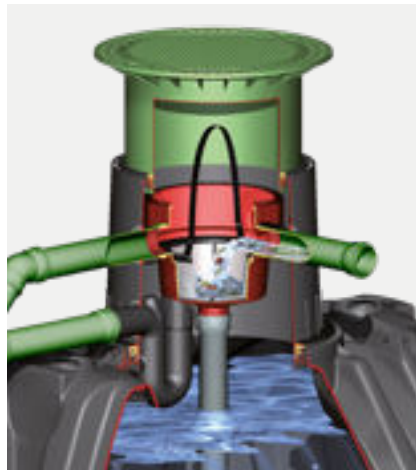
Order no. 342040

Scope of supply: Calmed inlet digester, overflow siphon, rodent guard

Carat S filter package 2

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

The Carat S basic tank can integrate the universal filter 3 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.



DN110 (4")

Order no. 342002

Scope of supply: Universal filter 3, internal, calmed inlet digester, overflow siphon, rodent guard, quick assembly sleeve Spannfix (patented)

Carat XL/XXL filter package 2

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

The Carat XL/XXL basic tank can integrate the universal filter 3 XL 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.



DN160 (6")

Order no. 342041

Scope of supply: Universal filter 3, XL internal, calmed inlet digester, overflow siphon, rodent guard, quick assembly sleeve Spannfix (patented)

Carat S filter package 3

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

Carat S basic tank can integrate Optimax-Pro filter (self-cleaning). The convenient solution that requires minimum maintenance thanks to a self-cleaning filter with over 95 % water yield. An additional option is the internal cleaning unit. With this filter package, the tank or filter overflow is connected to the sewer network.



DN110 (4")

Order no. 342005

Scope of supply: Optimax-Pro filter internal (patented), calmed inlet digester, overflow siphon – closed system prevents rodents from infiltrating the tank, quick assembly sleeve Spannfix (patented)

Internal cleaning unit

Connection 19 mm (¾"), supplied without hose

Order no. 340040

Carat XL/XXL filter package 3

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

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



DN160 (6")

Order no. 342042

Scope of supply: Optimax-Pro XL filter internal (patented), calmed inlet digester, overflow siphon – closed system prevents rodents from infiltrating the tank, quick assembly sleeve Spannfix (patented)

Internal cleaning unit XL

Connection 19 mm (¾"), supplied without hose

Order no. 340117



Select your required pump package



Pump package garden Jet

The good value solution.

- Jet 700 garden pump (page 106)
 - Pump connection kit with 1 m (3' 3.4") PVC hose
 - Internal and external water socket (compatible with standard hose coupling; page 118)
 - Suction kit with 12.5 m (41') suction hose 25 mm (1")
- Order no. 342010



Pump package house Eco-Plus

The low-cost solution for internal drinking water supply in the home.

- Aqua-Center Basic incl domestic water control unit KSB-Superinox 15/4 (page 102)
 - Floating suction fitting with fine filter and hose
 - Wall duct DN110 (4")
 - Labelling kit
 - PE suction pipe 25 mm (1"), length 12 m (39' 4") (not depicted)
 - V2A switch control (not depicted)
- Order no. 342014



BESTSELLER

Pump package garden Comfort

Automatic pump control for great ease of use.

- NiRo 40 automatic submersible pump (see below)
 - Internal and external water socket (compatible with standard hose coupling; page 118)
 - Floating suction fitting with fine filter and hose
 - 10 m (32' 10") pressure hose 25 mm (1") (not depicted)
- Order no. 342011



Pump package house Professional

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

- Aqua-Center Silentio incl domestic water control unit KSB-Superinox 15/4 (page 103)
 - Floating suction fitting with fine filter and hose
 - Filter cleaning unit internal/XL (not depicted)
 - Automatic filter cleaning system (not depicted)
 - Reversible flow fine filter
 - Wall duct DN160 (6")
 - Labelling kit
 - PE suction pipe 25 mm (1"), length 12 m (39' 4") (not depicted)
- Order no. 342016



NiRo 40

- Automatic submersible pump with integrated pressure and flow monitor
- Pump switches on and off automatically
- Tried and tested pump technology of brand quality
- Very low running noise
- Made of high quality, corrosion free materials
- Incl 10 m (32' 10") cable and floating water extraction unit
- Integrated dry running protection

Performance characteristics

Motor rating	1,0 kW
Max delivery height	45 m
Max operating pressure	4,5 bar
Max. flow rate	5.700 l/h
Pump connection, intake side	G1" IG
Pump connection, delivery side	G1 ¼" IG

Pump package house Silentio Press

Internal drinking water supply in the home with submersible pump. Ideal for large distances (≥ 15 m (49' 2.6")) between tank and domestic water control unit.

- Aqua-Center Silentio Press incl KSB domestic water control unit and submersible pump 300 A (page 104)
 - Filter cleaning unit internal/XL (not depicted)
 - Automatic filter cleaning system (not depicted)
 - Reversible flow fine filter
 - Wall duct DN160 (6")
 - Labelling kit
 - 25 m (82') special suction and pressure hose 25 mm (1") (not depicted)
- Order no. 342015



Retention and infiltration

> Retention Platin	page 72
> Retention Platin XL/XXL	page 74
> Retention Carat S/XL	page 76
> Retention Carat XXL	page 78
> Platin XL/XXL rainwater infiltration	page 80
> VS-Control flex – vortex flow control shaft	page 82
> Choke drain shaft	page 83



You want retention? We have the solution!

GRAF detention cisterns

A detention cistern collects rainwater and discharges it into the sewer system at a controlled rate. This reduces the burden on drains during periods of rainfall. For controlled discharge of the rainwater the

detention cistern is fitted with a flow control. This discharges water to the sewer at a rate of 0.05–75 l (0.02–20 US gal.) per second. The water level in the tank rises temporarily during heavy

rainfall and falls at the set rate during, and after the rain stops. GRAF detention cisterns are also equipped with an emergency overflow to prevent backflow in the tank.

Retain Water, Save Water: GRAF retention cisterns

You want to install a retention cistern, but don't want to sacrifice the advantages of rainwater harvesting? The GRAF retention cistern is a combination of retention and rainwater harvesting.

A larger tank is selected according to the requirements. Allowing some of the rainwater to be used in addition to the required retention volume.

Use free rainwater e.g. for

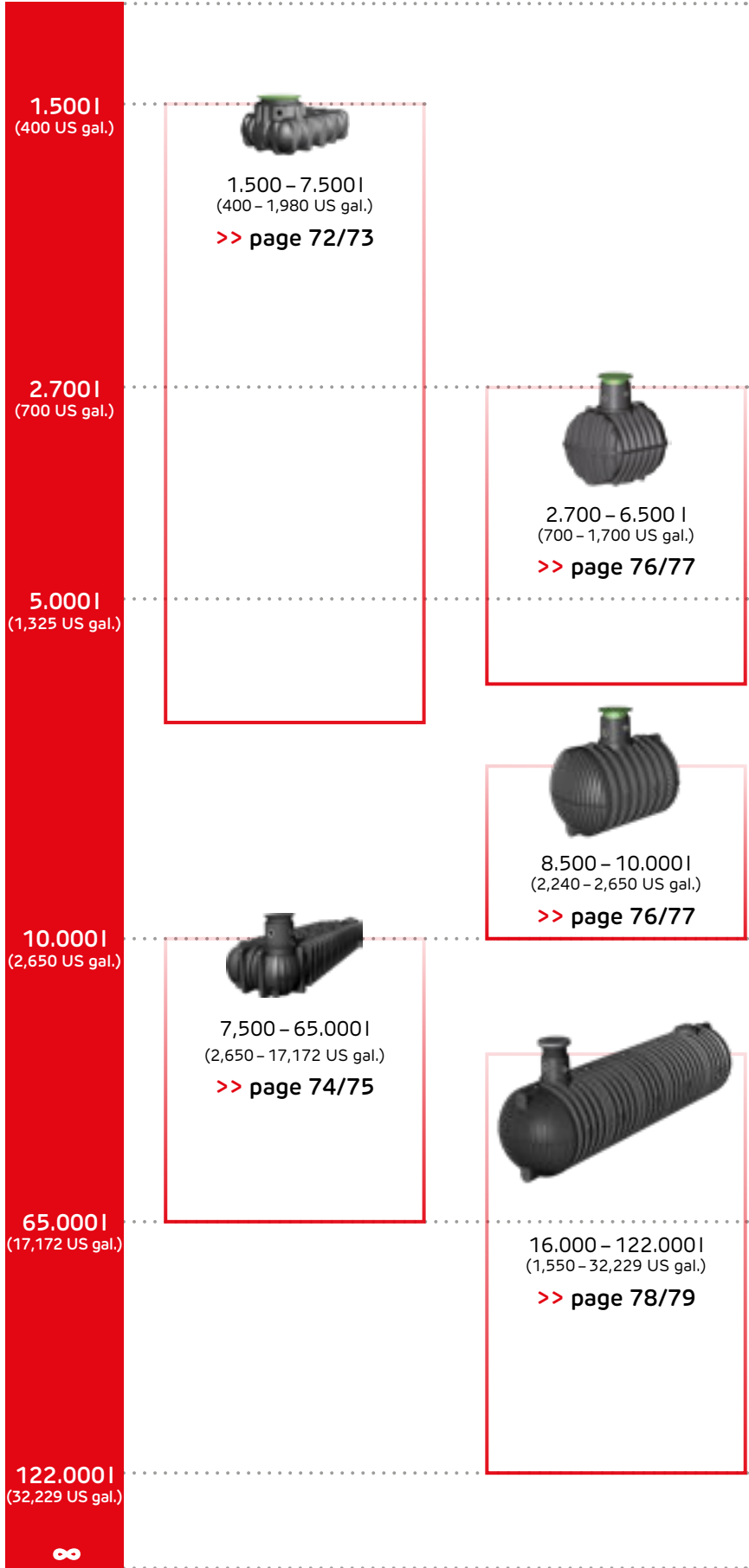
- Watering gardens
- Flushing toilets
- Washing machines
- Cleaning

and save up to 50 % drinking water!

	Detention	Retention
Rainwater retention	✓	✓
Rainwater harvesting		✓

Volume

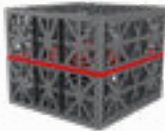
Your solution with underground tanks



Your solution with filling material ditches

>> Any size is possible
Please contact us to discuss!

EcoBloc Inspect 420



EcoBloc Inspect flex



EcoBloc Inspect 230

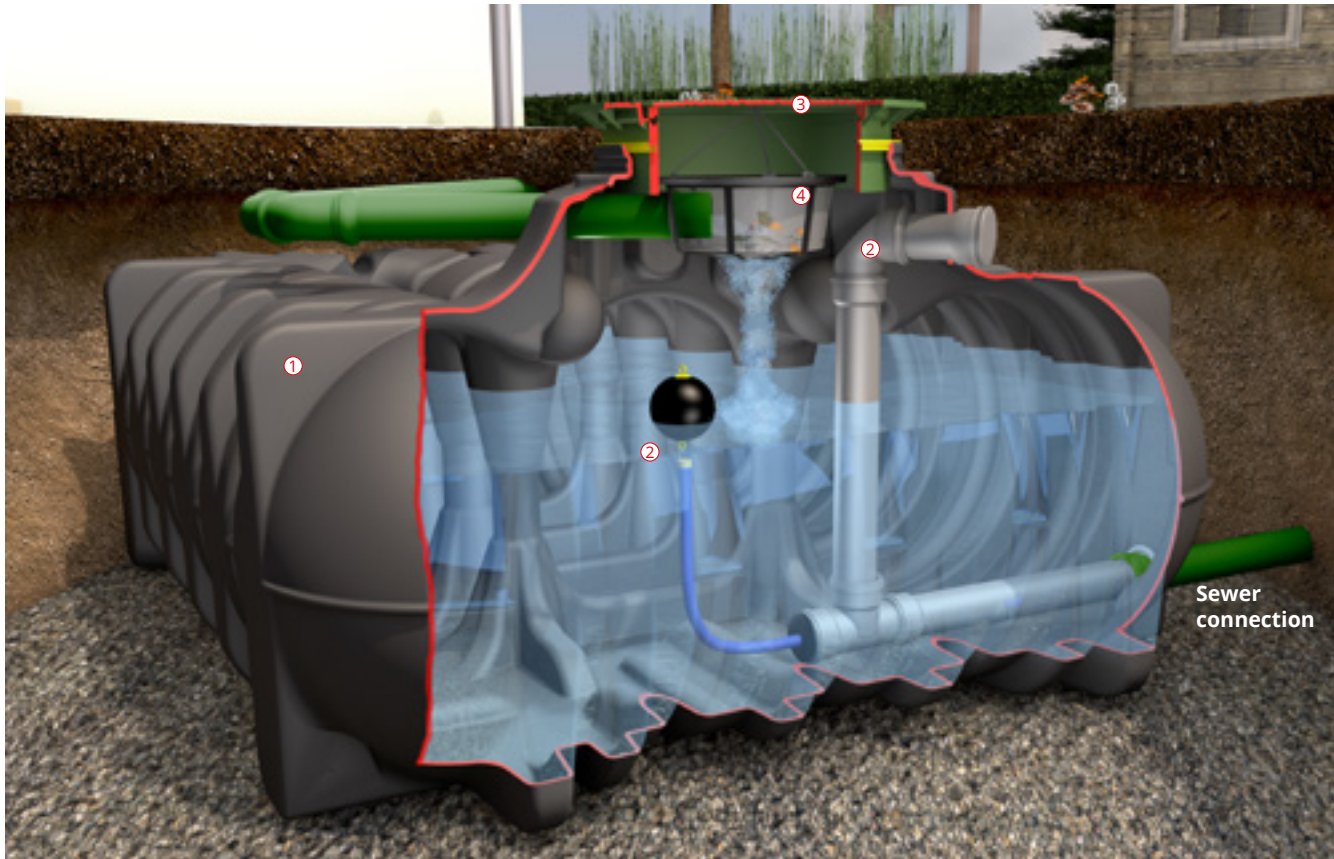


>> Further details on retention with filling material ditches can be found in our "Stormwater Management" range catalogue.



Platin detention cistern

For relieving the load on the sewer system



The figure depicts a detention cistern with Platin retention filter package 2 (accessories below)

Platin detention cistern

Including retention kit

WEBCODE G4303

Volume	Connections	Retention volume	Order no.
1,500 l (400 US gal.)	DN110 (4")	1,500 l (400 US gal.)	390300
3,000 l (800 US gal.)	DN110 (4")	3,000 l (800 US gal.)	390301
5,000 l (1,325 US gal.)	DN110 (4")	5,000 l (1,325 US gal.)	390302
7,500 l (1,980 US gal.)	DN110 (4")	7,500 l (1,980 US gal.)	390305

See page 30 for more sizes

The technical data for the detention cistern you need, e.g. the dimensional drawing with height offset between inlet and sewer connection, can be obtained from your GRAF contact.

Scope of supply: ① Platin flat tank ② retention kit: floating choke drain, outlet fittings with emergency overflow DN110 (4")
Not included in the scope of supply: ③ matching cover (page 32/33) ④ Platin retention filter package 2 (accessories below)

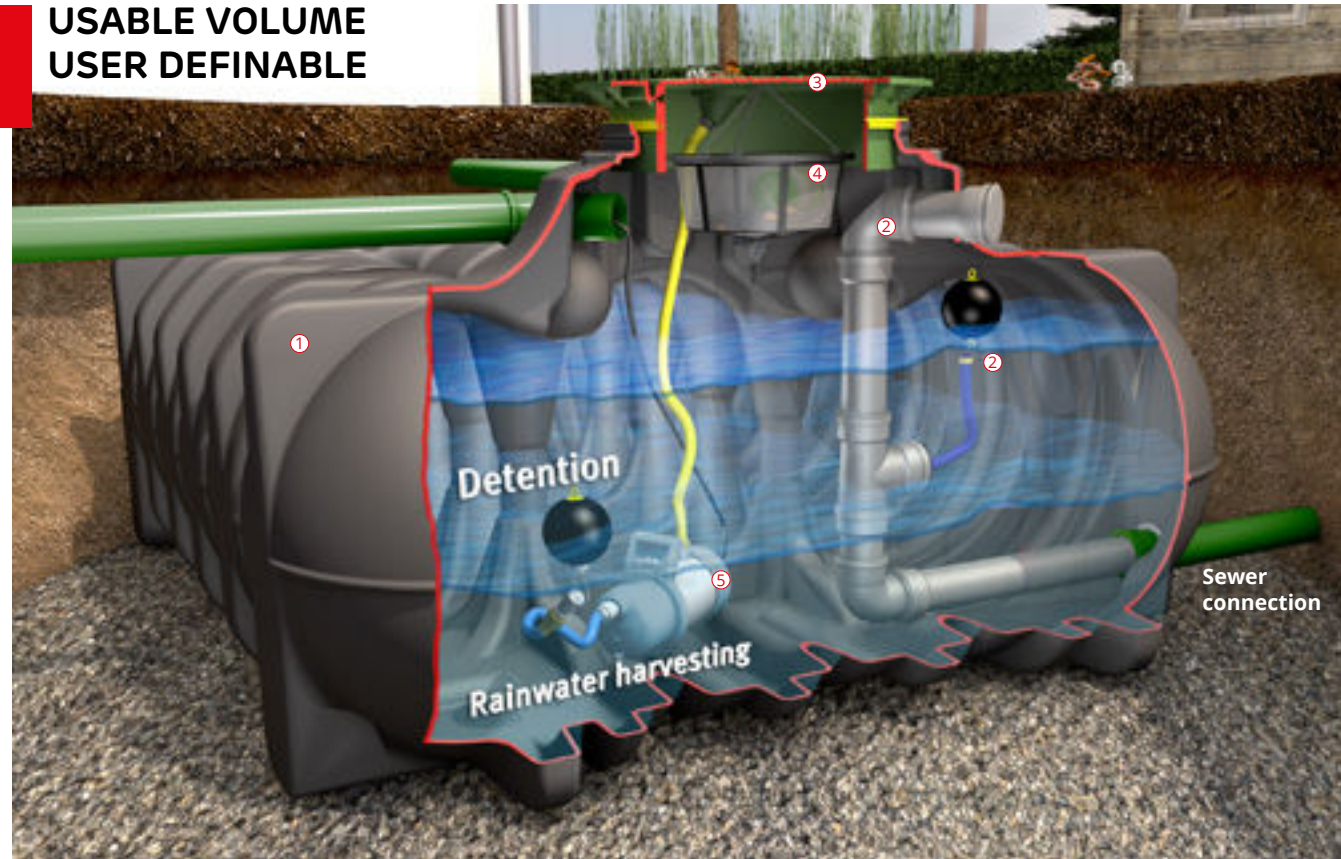
TANK DOMES AND COVERS

>> page 32/33



Platin retention cistern

For combined retention and rainwater harvesting



The figure depicts a Platin retention cistern with Platin retention filter package 2 (accessories below) and pump package garden Comfort (accessories on page 36)

Platin retention cistern

Including retention kit

WEBCODE G4304

Volume	Connections	Retention volume	Usable volume	Order no.
3,000 l (800 US gal.)	DN110 (4")	Custom ratios of retention to usable volume		390312
5,000 l (1,325 US gal.)	DN110 (4")			390315
7,500 l (1,980 US gal.)	DN110 (4")			390324

See page 30 for more sizes

The technical data for the retention cistern you need, e.g. the dimensional drawing with height offset between inlet and sewer connection, can be obtained from your GRAF contact.

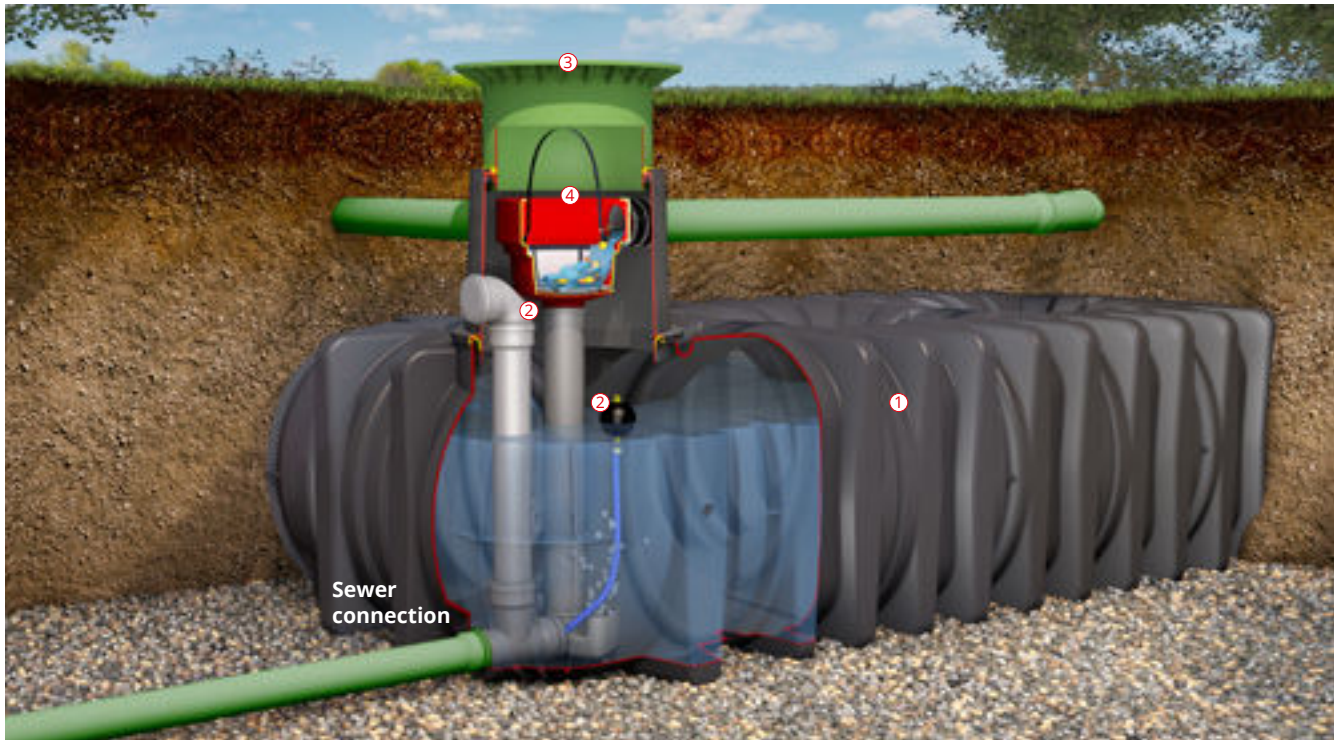
Scope of supply: ① Platin flat tank ② retention kit: floating choke drain, outlet fittings with emergency overflow DN110 (4")
Not included in the scope of supply: ③ matching cover (page 32/33) ④ Platin retention filter package 2 (accessories below)
⑤ Pump package garden Comfort (accessories page 36)

Platin retention filter package 2
DN110 (4")
Order no. 342045



Platin XL/XXL detention cistern

For relieving the load on the sewer system



The figure depicts a Platin XL detention cistern with Platin XL/XXL retention filter package 2 (accessories below)

Platin XL/XXL detention cistern

Including retention kit

Volume	Connections	Retention volume	Art.-Nr.
7,500 l (1,980 US gal.)*	DN160 (6")	7,500 l (1,980 US gal.)	390327
10,000 l (2,650 US gal.)*	DN160 (6")	10,000 l (2,650 US gal.)	390328
15,000 l (3,960 US gal.)*	DN160 (6")	15,000 l (3,960 US gal.)	391300
20,000 l (5,284 US gal.)*	DN160 (6")	20,000 l (5,284 US gal.)	391301
25,000 l (6,605 US gal.)*	DN160 (6")	25,000 l (6,605 US gal.)	391302
30,000 l (7,926 US gal.)*	DN160 (6")	30,000 l (7,926 US gal.)	391303
35,000 l (9,247 US gal.)*	DN160 (6")	35,000 l (9,247 US gal.)	391304
40,000 l (10,567 US gal.)*	DN160 (6")	40,000 l (10,567 US gal.)	391305
45,000 l (11,888 US gal.)*	DN160 (6")	45,000 l (11,888 US gal.)	391306
50,000 l (13,209 US gal.)*	DN160 (6")	50,000 l (13,209 US gal.)	391307
55,000 l (14,530 US gal.)*	DN160 (6")	55,000 l (14,530 US gal.)	391308
60,000 l (15,851 US gal.)*	DN160 (6")	60,000 l (15,851 US gal.)	391309
65,000 l (17,172 US gal.)*	DN160 (6")	65,000 l (17,172 US gal.)	160

Further sizes upon request!
* Available with a second tank dome as an option

The technical data for the detention cistern you need, e.g. the dimensional drawing with height offset between inlet and sewer connection, can be obtained from your GRAF contact.

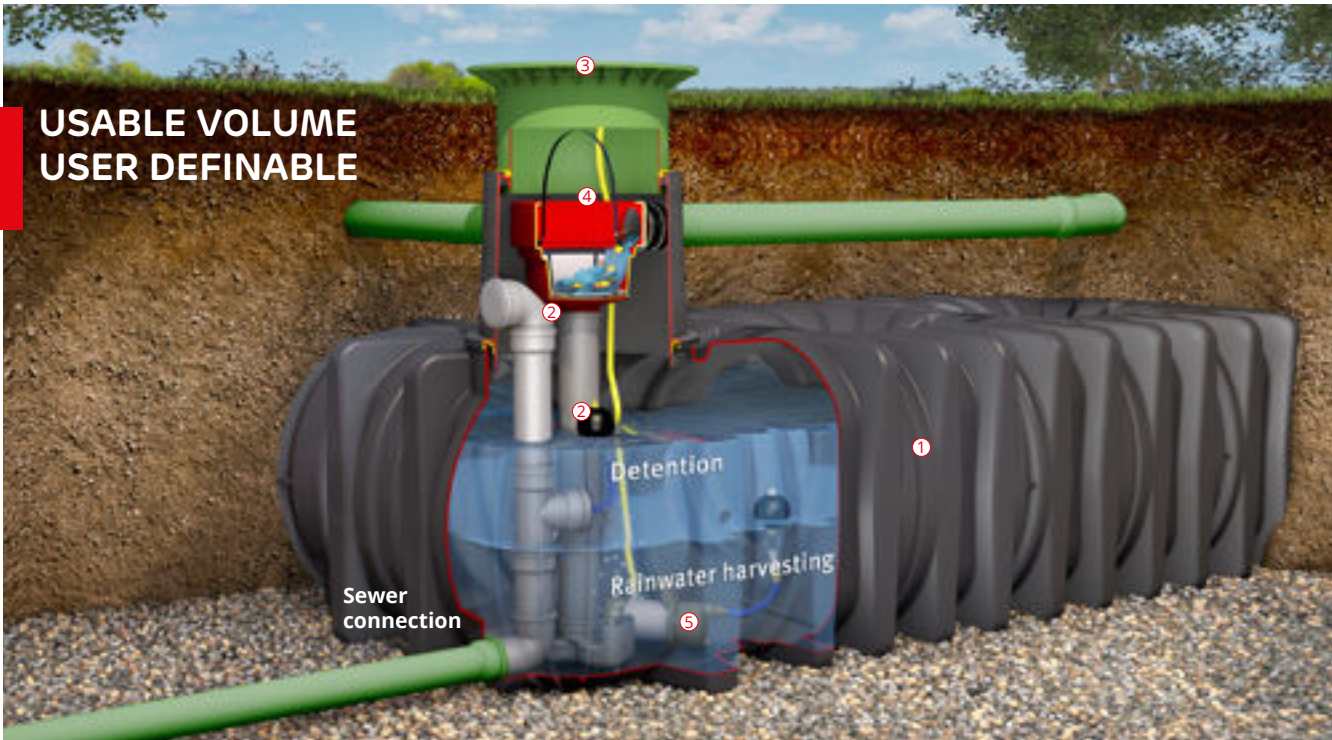
Scope of supply: ① Platin XL/XXL flat tank ② retention kit: floating choke drain, outlet fittings with emergency overflow DN160 (6")
Not included in the scope of supply: ③ matching cover (page 32/33) ④ Platin XL/XXL retention filter package 2 (accessories below)

TANK DOMES
AND COVERS
>> page 32/33



Platin XL/XXL retention cistern

For combined retention and rainwater harvesting



The figure shows a Platin XL retention cistern with Platin XL/XXL retention filter package 2 (accessories below) and pump package garden Comfort (accessories on page 36)

Platin XL/XXL retention cistern

Including retention kit

Volume	Connections	Retention volume	Usable volume	Order no.
7,500 l (1,980 US gal.)*	DN160 (6")	Custom ratios of retention to usable volume		390340
10,000 l (2,650 US gal.)*	DN160 (6")			390329
15,000 l (3,960 US gal.)*	DN160 (6")			390330
20,000 l (5,284 US gal.)*	DN160 (6")			391350
25,000 l (6,605 US gal.)*	DN160 (6")			391351
30,000 l (7,926 US gal.)*	DN160 (6")			391352
35,000 l (9,247 US gal.)*	DN160 (6")			391353
40,000 l (10,567 US gal.)*	DN160 (6")			391354
45,000 l (11,888 US gal.)*	DN160 (6")			391355
50,000 l (13,209 US gal.)*	DN160 (6")			391356
55,000 l (14,530 US gal.)*	DN160 (6")			391357
60,000 l (15,851 US gal.)*	DN160 (6")			391358
65,000 l (17,172 US gal.)*	DN160 (6")			391359

Further sizes upon request!
* Available with a second tank dome as an option

The technical data for the retention cistern you need, e.g. the dimensional drawing with height offset between inlet and sewer connection, can be obtained from your GRAF contact.

Scope of supply: ① Platin XL/XXL flat tank ② retention kit: floating choke drain, outlet fittings with emergency overflow DN160 (6")
Not included in the scope of supply: ③ matching cover (page 32/33) ④ Platin XL/XXL retention filter package 2 (accessories below)
⑤ Pump package garden Comfort (accessories on page 36)

Carat/Platin XL/XXL
retention filter package 2
DN160 (6")
Order no. 342047



Carat/Carat XL detention cistern

For relieving the load on the sewer system



The figure depicts a Carat detention cistern with calmed inlet (accessories on page 121)

Carat/Carat XL detention cistern

Including retention kit

Carat XL
Q WEBCODE G4301 Q WEBCODE G4307

Volume	Connections	Retention volume	Order no.
2,700 l (700 US gal.)	DN110 (4")	2,700 l (700 US gal.)	370500
3,750 l (1,000 US gal.)	DN110 (4")	3,750 l (1,000 US gal.)	370501
4,800 l (1,250 US gal.)	DN110 (4")	4,800 l (1,250 US gal.)	370502
6,500 l (1,700 US gal.)	DN110 (4")	6,500 l (1,700 US gal.)	370503
8,500 l (2,240 US gal.)	DN160 (6")	8,500 l (2,240 US gal.)	370504
10,000 l (2,650 US gal.)	DN160 (6")	10,000 l (2,650 US gal.)	370505

See page 76 for more sizes

The technical data for the detention cistern you need, e.g. the dimensional drawing with height offset between inlet and sewer connection, can be obtained from your GRAF contact.

Scope of supply: ① Carat/Carat XL underground tank ② Retention kit: floating choke drain, outlet fittings with emergency overflow DN110 (4")
Not included in the scope of supply: ③ matching cover (page 62/63) ④ Platin retention filter package 2 (accessories below)

TANK DOMES AND COVERS

>> page 62/63



Carat/Carat XL retention cistern

For combined retention and rainwater harvesting



The figure depicts a Carat retention cistern with Carat retention filter package 2 (accessories below) and pump package garden Comfort (accessories on page 66)

Carat/Carat XL retention cistern

Including retention kit

Carat XL
Q WEBCODE G4302 Q WEBCODE G4308

Volume	Connections	Retention volume	Usable volume	Order no.
3,750 l (1,000 US gal.)	DN110 (4")	Custom ratios of retention to usable volume		370519
4,800 l (1,250 US gal.)	DN110 (4")			370520
6,500 l (1,700 US gal.)	DN110 (4")			370521
8,500 l (2,240 US gal.)	DN160 (6")			370523
10,000 l (2,650 US gal.)	DN160 (6")			370525

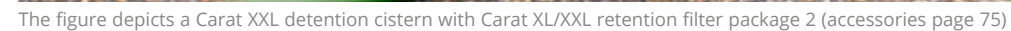
See page 77 for more sizes

The technical data for the retention cistern you need, e.g. the dimensional drawing with height offset between inlet and sewer connection, can be obtained from your GRAF contact.

Scope of supply: ① Carat/Carat XL underground tank ② Retention kit: floating choke drain, outlet fittings with emergency overflow DN110 (4")
Not included in the scope of supply: ③ matching cover (page 62/63) ④ Carat retention filter package 2 (accessories below)
⑤ Pump package garden Comfort (accessories on page 66)

Carat retention filter package 2
DN110 (4")
Order no. 342044
DN160 (6")
Order no. 342047





Including retention kit

 WEBCODE G4305

Volume	Connections	Retention volume	Order no.
16,000 l (1,550 US gal.)	DN160 (6")	16,000 l (1,550 US gal.)	380500
22,000 l (5,820 US gal.)*	DN160 (6")	26,000 l (6,870 US gal.)	380501
26,000 l (6,870 US gal.)*	DN160 (6")	26,000 l (6,870 US gal.)	380502
32,000 l (8,460 US gal.)*	DN160 (6")	32,000 l (8,460 US gal.)	380503
36,000 l (9,520 US gal.)*	DN160 (6")	36,000 l (9,520 US gal.)	380504
42,000 l (11,100 US gal.)*	DN160 (6")	42,000 l (11,100 US gal.)	380505
46,000 l (12,160 US gal.)*	DN160 (6")	46,000 l (12,160 US gal.)	380506
56,000 l (14,800 US gal.)*	DN160 (6")	52,000 l (13,740 US gal.)	380507
56,000 l (14,800 US gal.)*	DN160 (6")	56,000 l (14,800 US gal.)	380508
62,000 l (16,380 US gal.)*	DN160 (6")	62,000 l (16,380 US gal.)	380509
66,000 l (17,440 US gal.)*	DN160 (6")	66,000 l (17,440 US gal.)	380510
72,000 l (19,020 US gal.)*	DN160 (6")	72,000 l (19,020 US gal.)	380511
76,000 l (20,050 US gal.)*	DN160 (6")	76,000 l (20,050 US gal.)	380512
82,000 l (21,670 US gal.)*	DN160 (6")	82,000 l (21,670 US gal.)	380513
86,000 l (22,720 US gal.)*	DN160 (6")	86,000 l (22,720 US gal.)	380514
92,000 l (24,310 US gal.)*	DN160 (6")	92,000 l (24,310 US gal.)	380515
96,000 l (25,360 US gal.)*	DN160 (6")	96,000 l (25,360 US gal.)	380516
102,000 l (26,950 US gal.)*	DN160 (6")	102,000 l (26,950 US gal.)	380517
106,000 l (28,010 US gal.)*	DN160 (6")	106,000 l (28,010 US gal.)	380518
112,000 l (29,590 US gal.)*	DN160 (6")	112,000 l (29,590 US gal.)	380519
116,000 l (30,650 US gal.)*	DN160 (6")	116,000 l (30,650 US gal.)	380550
122,000 l (32,229 US gal.)*	DN160 (6")	122,000 l (32,229 US gal.)	380551

Further sizes upon request!

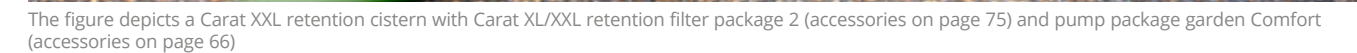
The technical data for the detention cistern you need, e.g. the dimensional drawing with height offset between inlet and sewer connection, can be obtained from your GRAF contact.

* Available with a second tank dome as an option

Scope of supply: ① Carat XXL underground tank ② retention kit: floating choke drain, outlet fittings with emergency overflow DN160 (6")

Not included in the scope of supply: ③ matching covers (page 62/63) ④ Carat XL/XXL retention filter package 2 (accessories on page 75)

For combined retention and rainwater harvesting



Including retention kit

 WEBCODE G4306

Volume	Connections	Retention volume	Order no.
16,000 l (1,550 US gal.)	DN160 (6")	Custom ratios of retention to usable volume	380520
22,000 l (5,820 US gal.)*	DN160 (6")		380521
26,000 l (6,870 US gal.)*	DN160 (6")		380522
32,000 l (8,460 US gal.)*	DN160 (6")		380523
36,000 l (9,520 US gal.)*	DN160 (6")		380524
42,000 l (11,100 US gal.)*	DN160 (6")		380525
46,000 l (12,160 US gal.)*	DN160 (6")		380526
56,000 l (14,800 US gal.)*	DN160 (6")		380527
56,000 l (14,800 US gal.)*	DN160 (6")		380528
62,000 l (16,380 US gal.)*	DN160 (6")		380529
66,000 l (17,440 US gal.)*	DN160 (6")		380530
72,000 l (19,020 US gal.)*	DN160 (6")		380531
76,000 l (20,050 US gal.)*	DN160 (6")		380532
82,000 l (21,670 US gal.)*	DN160 (6")		380533
86,000 l (22,720 US gal.)*	DN160 (6")		380534
92,000 l (24,310 US gal.)*	DN160 (6")		380535
96,000 l (25,360 US gal.)*	DN160 (6")		380536
102,000 l (26,950 US gal.)*	DN160 (6")		380537
106,000 l (28,010 US gal.)*	DN160 (6")		380538
112,000 l (29,590 US gal.)*	DN160 (6")		380539
116,000 l (30,650 US gal.)*	DN160 (6")	380540	
122,000 l (32,229 US gal.)*	DN160 (6")	380541	

Further sizes upon request!

The technical data for the retention cistern you need, e.g. the dimensional drawing with height offset between inlet and sewer connection, can be obtained from your GRAF contact.

* Available with a second tank dome as an option

Scope of supply: ① Carat XXL underground tank ② retention kit: floating choke drain, outlet fittings with emergency overflow DN160 (6")

Not included in the scope of supply: ③ matching covers (page 62/63) ④ Carat XL/XXL retention filter package 2 (accessories on page 75)

⑤ Pump package garden Comfort (accessories on page 66)

Platin XL Infiltration tank



The figure depicts a Platin XL infiltration tank with Platin XL retention/infiltration filter package 2 (see accessories)

Platin XL Infiltration tank

Q **WEBCODE** G4601

Volume	Order no.
7,500 l (1,980 US gal.)	390025
10,000 l (2,650 US gal.)	390012
15,000 l (3,960 US gal.)	390013

Further sizes upon request!
Available with a second tank dome as an option

The technical data for the infiltration tank you need, e.g. the dimensional drawing or installation instructions, can be obtained from your GRAF contact.

Scope of supply: Special seals, drainage pipes and connections, drain holes ① Platin XL infiltration tank
Not included in the scope of supply: ② matching cover (page 32/33) ③ Installing the optional Platin XL retention/infiltration filter package 2 recommended (accessories below)

**TANK DOMES
AND COVERS**
>> page 32/33



Platin XL Infiltration tank plus



The figure depicts a Platin XL infiltration tank plus with Platin XL retention/infiltration filter package 2 (see accessories) and pump package garden Comfort (page 36)

Platin XL Infiltration tank plus

Including rainwater harvesting kit

Q **WEBCODE** G4605

Volume	Order no.
7,500 l (1,980 US gal.)	390026
10,000 l (2,650 US gal.)	390020
15,000 l (3,960 US gal.)	390021

Further sizes upon request!
* Available with a second tank dome as an option

The technical data for the infiltration tank plus you need, e.g. the dimensional drawing or installation instructions, can be obtained from your GRAF contact.

Scope of supply: Special seals, drainage pipes and connections, drain holes ① Platin XL infiltration tank
② Rainwater harvesting kit: Internal piping DN160 (6")
Not included in the scope of supply: ③ matching cover (page 32/33) ④ Installing the optional Platin XL retention/infiltration filter package 2 recommended (accessories below) ⑤ Pump package garden Comfort (page 36)

**Platin XL retention/
infiltration
filter package 2**
DN160 (6")
Order no. 342047



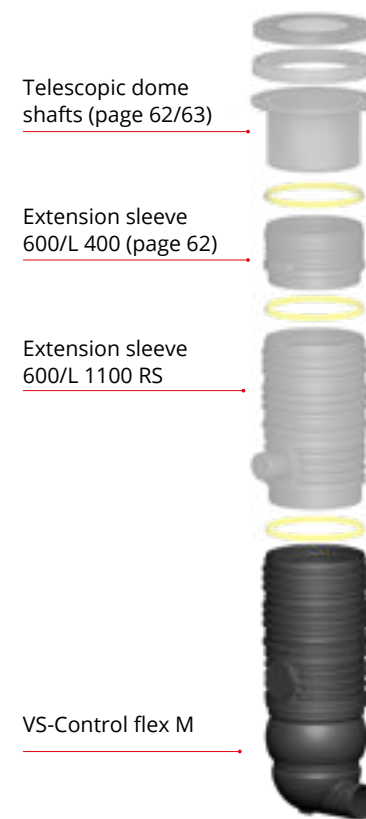
VS-Control flex

Vortex flow control shaft



- Minimum height loss 410 mm
- Individually adjustable throttle discharge capacity
- Project-specific dimensioning of the replaceable orifice
- Easy inspections thanks to the horizontal arrangement of the orifice
- High operating reliability thanks to the self cleaning effects from the vortex flow
- 360° DN250 (10") discharge rotation for flexible configurations

Q WEBCODE G4331



VS-Control flex M replacement parts kit

For subsequent adjustments to the throttle discharge capacity
Order no. 340180

VS-Control flex M

With custom orifice size DN630 (24"); inlet DN200 (8"), outlet DN250 (10")
Order no. 340171

Extension sleeve 600/L 1100 RS

With pipe fitting DN200 (8"), incl profile seal for telescopic dome shaft; for larger installation depths, usable length 1000 mm (3' 4"), can be shortened to 750/500 mm (29.5"/19.7")
Order no. 371016

Extension sleeve 600/L 1100

With DN200 (8") connection surface, incl profile seal for telescopic dome shaft; for greater installation depths, usable length 1000 mm (3' 4"), can be shortened to 750/500 mm (29.5"/19.7")
Order no. 371015

Vortex flow control and choke drain shaft are compatible with:

Platin/XL/XXL flat tank 1,500 – 65,000 l
(400 – 17,172 US gal.)
page 30/31



Carat S/XL/XXL underground tank 2,700 – 122,000 l (700 – 32,229 US gal.)
page 56 – 61



Onsite/default retention setup

>> Further details on retention with filling material ditches can be found in our "Stormwater management" range catalogue.



Choke drain shaft

For Platin/XL/XXL flat tank and Carat S/XL/XXL underground tank



- Ideal for high sewer levels
- Suitable for tanks/buildings under the backflow/road level
- Choke drain shaft with external access
- Throttle discharge capacity adjustable over defined stages up to 1.5 l/s (0.4 US gal./s)
- Suitable for combinations with all GRAF tank and retention systems

Q WEBCODE G4330

Choke drain shaft suitable for pedestrian loading

Incl VS drain regulator DN110 (4"), emergency overflow, connector seal DN110 (4"), and telescopic dome shaft 400 suitable for pedestrian loading
Order no. 340028

Choke drain shaft suitable for vehicle loading

Incl VS drain regulator DN110 (4"), emergency overflow, connector seal DN110 (4"), and telescopic dome shaft 400 suitable for class B vehicle loading
Order no. 340029

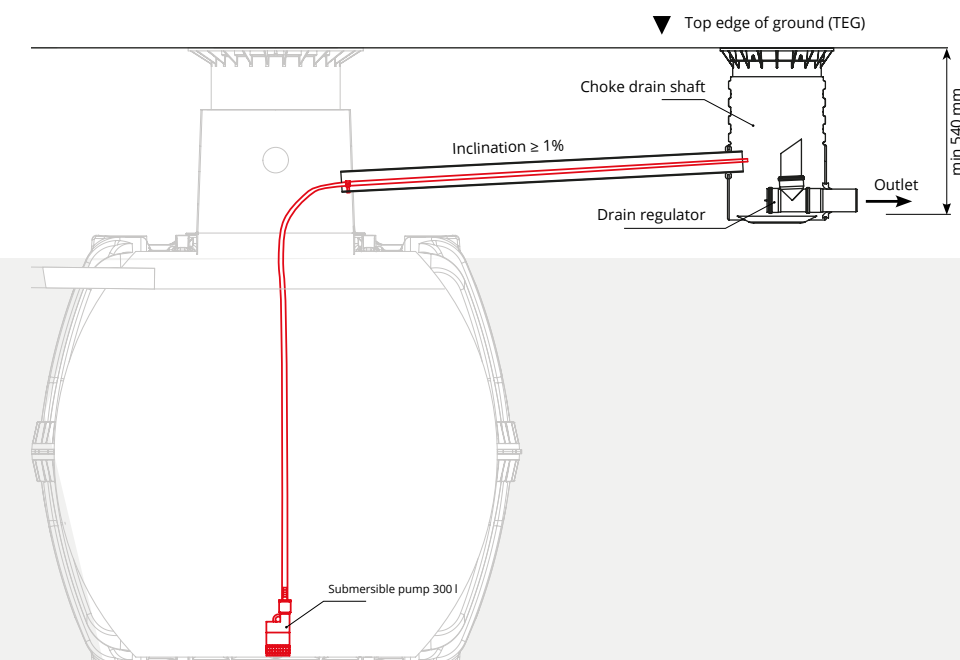
Choke drain shaft suitable for lorry-bearing

Incl VS drain regulator DN110 (4"), emergency overflow, connector seal DN110 (4"), and telescopic dome shaft 400 suitable for class D lorry-bearing
Order no. 340019



Lifting pump set for choke drain shaft

Submersible pump 300 l incl connecting material, volume flow up to 1.5 l/s (0.4 US gal./s)
Order no. 340556



The optimal filter for every application

- > Internal filters for installation in the tank page 88
- > External filters page 92



The optimal filter for every application

Internal filters

For installation in the tank



Properties	Universal-Filter 3	Universal-Filter 3 XL
Installation site	Carat S tank dome	Carat S/Platin XL tank dome
Suitable for infiltration	•	•
Low-maintenance as self-cleaning	-	-
Optional filter cleaning unit	-	-
Max flow rate	5.5 l/s	16 l/s
Material of filter insert	Plastic	Plastic
Mesh width	0.35 mm (0.01")	0.35 mm (0.01")
Water yield during normal rain	100 %	100 %
during heavy rain	100 %	100 %
Filter basket volume	17 l (4.5 US gal.)	17 l (4.5 US gal.)
Dimensions		
Difference in heights between inlet and outlet	275 mm (10.8")	275 mm (10.8")
Length over connection	570 mm (22.4")	535 mm (21.1")
Diameter	570 mm (22.4")	535 mm (21.1")
Height	485 mm (19.1")	485 mm (19.1")
Connection	DN110 (4")	DN160 (6")
Weight	4.3 kg (9.5 lbs)	4.6 kg (10 lbs)
Page	Page 88	Page 88

Internal filters

For installation in the tank



Properties	Minimax-Pro Filter	Optimax-Pro Filter	Optimax-Pro XL Filter
Installation site	Carat/Platin tank dome	Carat tank dome	Carat/Platin XL tank dome
Suitable for infiltration	—	—	—
Low-maintenance as self-cleaning	•	•	•
Optional filter cleaning unit	•	•	•
Max flow rate	5.5 l/s	5.5 l/s	16 l/s
Material of filter insert	Stainless steel	Stainless steel	Stainless steel
Mesh width	0.35 mm (0.01")	0.35 mm (0.01")	0.35 mm (0.01")
Water yield during normal rain	99 %	99 %	99 %
during heavy rain	over 95 %	over 95 %	over 95 %
Filter basket volume	—	—	—
Dimensions			
Difference in heights between inlet and outlet	10/80 mm (0.4/3.2")	165 mm (6.5")	165 mm (6.5")
Length over connection	500 mm (19.7")	480 mm (18.9")	515 mm (8.3")
Diameter	270 mm (10.6")	260 mm (10.2")	475 mm (18.7")
Height	365 mm (14.4")	320 mm (12.6")	430 mm (16.9")
Connection	DN110 (4")	DN110 (4")	DN160 (6")
Weight	3.6 kg (8.0 lbs)	3.7 kg (8.2 lbs)	4.8 kg (10.6 lbs)
Page	Page 89	Page 90	Page 91

External filters

In sturdy plastic shaft



Properties	Universal filter 3, external	Universal industrial filter 3, external	Drainstar filter, external	Drainstar filter XL, external
Installation site	Soil	Soil	Soil	Soil
Suitable for infiltration	•	•	•	•
Suitable for pedestrian loading	•	•	•	•
Trafficable by cars	•	•	•	•
Suitable for lorry-bearing	–	•	–	•
Low-maintenance as self-cleaning	–	–	–	–
Optional filter cleaning unit	–	–	–	–
Max flow rate	16 l/s	29.5 l/s	16 l/s	30 l/s
Material of filter insert	Plastic	Stainless steel	Plastic	Stainless steel
Mesh width	0.35 mm (0.01")	0.75 mm (0.03")	0.35 mm (0.01")	0.75 mm (0.03")
Water yield during normal rain	100 %	100 %	99 %	99 %
during heavy rain	100 %	100 %	over 95 %	over 95 %
Filter basket volume	15 l (4.0 US gal.)	25 l (6.6 US gal.)	15 l (4.0 US gal.)	25 l (6.6 US gal.)
Dimensions				
Difference in heights between inlet and outlet	270 mm (10.6")	230 mm (9")	–	–
Length over connection	760 mm (29.9")	1140 mm (3' 7")	910 mm (2' 12")	1500 mm (4' 12")
Diameter	550 mm (21.7")	850 mm (33.5")	550 mm (21.7")	850 mm (33.5")
Height	600 – 1050 mm (23.6" – 3' 5")	705 – 1270 mm (29.1" – 4' 2")	600 – 1050 mm (23.6" – 3' 5")	780 – 1330 mm (30.7" – 4' 5")
Connection	DN110 (4") / DN160 (6")	DN160 (6") / DN200 (8")	DN110 (4") / DN160 (6")	DN200 (8") / DN250 (10")
Weight of pedestrian-bearing version	13 kg (29 lbs)	37 kg (82 lbs)	11 kg (25 lbs)	42 kg (93 lbs)
Vehicle-bearing version	39 kg (86 lbs)	44 kg (97 lbs)	37 kg (82 lbs)	48 kg (106 lbs)
Lorry-bearing version	–	36 kg (79 lbs)	–	37 kg (82 lbs)
Page	Page 92	Page 92	Page 93	Page 93

External filters

In sturdy plastic shaft



Properties	Optimax-Filter external	Optimax-Industrial filter, external	Minimax-Filter external	Optimax XXL	Pot filter
Installation site	Soil	Soil	Soil	Shaft	Soil
Suitable for infiltration	–	–	–	–	•
Suitable for pedestrian loading	•	•	•	•	–
Trafficable by cars	•	•	•	•	–
Suitable for lorry-bearing	–	•	–	•	–
Low-maintenance as self-cleaning	•	•	•	•	–
Optional filter cleaning unit	•	•	•	•	–
Max flow rate	16 l/s	29.5 l/s	5.5 l/s	200 l/s	5.5 l/s
Material of filter insert	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Fleece
Mesh width	0.35 mm (0.01")	0.35 mm (0.01")	0.5 mm (0.02")	0.35 mm (0.01")	0.1 mm (0.004")
Water yield during normal rain	99 %	99 %	99 %	over 95 %	100 %
during heavy rain	over 95 %	over 95 %	over 95 %	95 %	100 %
Filter basket volume	–	–	–	–	–
Dimensions					
Difference in heights between inlet and outlet	200 mm (7.9")	225 mm (8.9")	100 mm (4")	120 mm (4.8")	290 mm (11.4")
Length over connection	860 mm (33.9")	1180 mm (46.5")	510 mm (20.1")	1125 mm (44.3")	595 mm (23.4")
Diameter	550 mm (21.7")	850 mm (33.5")	550 mm (21.7")	675 mm (26.6")	560 mm (22")
Height	580 – 1050 mm (22.8" – 3' 5.4")	730 – 1320 mm (28.7" – 4' 4")	485 – 955 mm (19.1" – 3' 1.6")	770 mm (30.3")	340 mm (13.4")
Connection	DN110 (4") / DN160 (6")	DN160 (6") / DN200 (8")	DN110 (4")	DN315 (12") / DN400 (16")	DN110 (4")
Weight of pedestrian-bearing version	14 kg (31 lbs)	37 kg (82 lbs)	11 kg (25 lbs)	75 kg (166 lbs)	8,5 kg (19 lbs)
Vehicle-bearing version	40 kg (89 lbs)	44 kg (170 lbs)	37 kg (82 lbs)	75 kg (166 lbs)	–
Lorry-bearing version	–	35 kg (78 lbs)	–	75 kg (166 lbs)	–
Page	Page 94	Page 94	Page 95	Page 97	Page 95

Universal-Filter 3/XL

Internal filter technology, 100 % water yield



FOR ROOFS OF
UP TO 500 m²

Advantages

- 100 % water yield, so ideal for small roof surfaces
- Sieve insert mesh width 0.35 mm (0.01")
- Compact filter technology integrated in the tank
- Filter housing can be removed for tank inspection without tools
- Ideal for downstream infiltration
- Little height loss of (275 mm (10.8")) between inlet and outlet
- Maximum flow rate of 5.5 l/s with connections DN110 (4") and 16 l/s with DN160 (6")
- DN110 (4")/DN160 (6") connections
- Optional emergency overflow

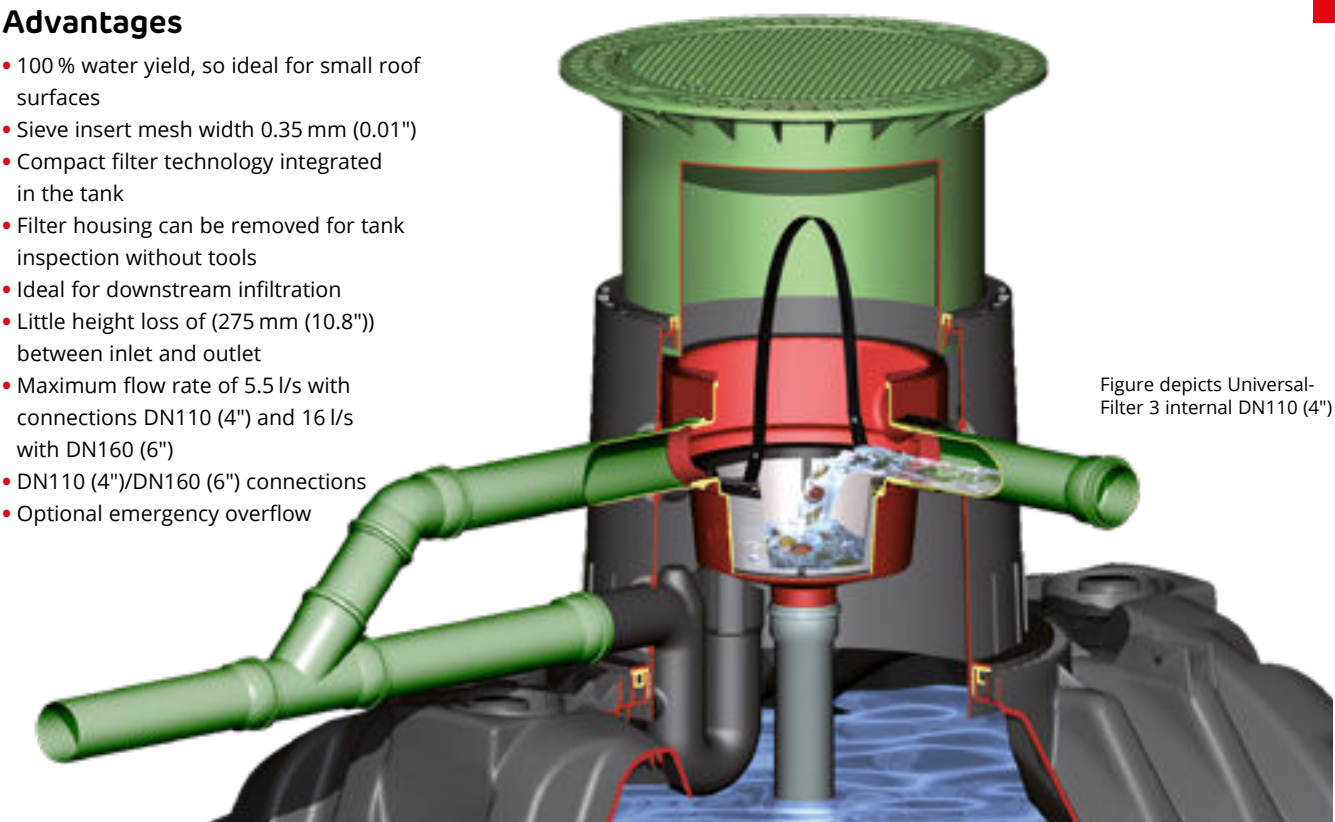


Figure depicts Universal-Filter 3 internal DN110 (4")

Tank dome connection measurements

For universal filter 3 internal/XL in Carat S/Carat XL/XXL and Platin XL/XXL

Telescopic dome shaft		Inlet	Outlet	Emergency overflow
Mini	Connection DN110 (4")	450 – 650 mm (17.7" – 25.6")	725 – 925 mm (28.5" – 36.4")	450 – 650 mm (17.7" – 25.6")
	Connection DN160 (6")			
Maxi	Connection DN110 (4")	450 – 750 mm (17.7" – 29.5")	725 – 1025 mm (28.5" – 3' 4.4")	450 – 750 mm (17.7" – 29.5")
	Connection DN160 (6")			
Cast	Connection DN110 (4")	500 – 750 mm (19.7" – 29.5")	785 – 1025 mm (30.9" – 3' 4.4")	500 – 750 mm (19.7" – 29.5")
	Connection DN160 (6")			

All measurements from pipe bottom to top edge of ground

Q **WEBCODE** G2101

Universal-Filter 3 internal DN110 (4")

Order no. 340022

Universal-Filter 3 XL internal DN160 (6")

Order no. 340107

Accessories

Quick assembly sleeve Spannfix

Patented (page 121)

DN110 (4")

Order no. 295909

DN160 (6")

Order no. 340546

Replacement filter basket

Filter basket with practical lifting device

Order no. 340056



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
- Maximum flow rate of 5.5 l/s
- DN110 (4") connection
- Optional internal cleaning unit
- Just 10 mm (0.04") height offset between inlet and outlet (with optional curved outlet – 80 mm (3.2") height offset)

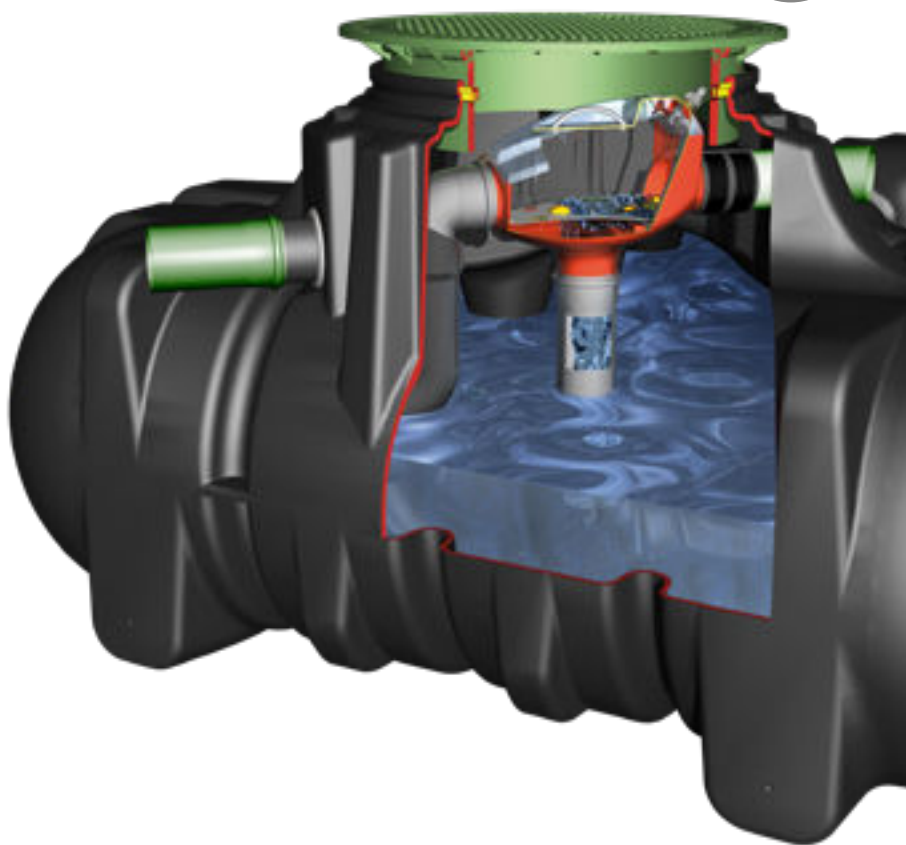
Tank dome connection measurements

For Minimax-Pro filter internal (patented) in Platin flat tank

Telescopic dome shaft		Inlet	Outlet
Mini	Connection DN110 (4")	385 – 585 mm (15.2" – 33.8")	465 – 665 mm (18.3" – 26.2")
Maxi	Connection DN110 (4")	385 – 685 mm (15.2" – 27")	465 – 765 mm (18.3" – 30.1")
Cast	Connection DN110 (4")	630 – 685 mm (24.8" – 27")	710 – 765 mm (28" – 30.1")

All measurements from pipe bottom to top edge of ground

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 97); 19 mm (¾") connection, supplied without hose

Order no. 340040



Removal handle Plus

For convenient filter removal; length: 505 mm (19.9")

Order no. 330220

Quick assembly sleeve Spannfix

Patented (page 121)

DN110 (4")

Order no. 340502

Optimax-Pro Filter, self-cleaning

Optimal cleaning function at maximum water yield!



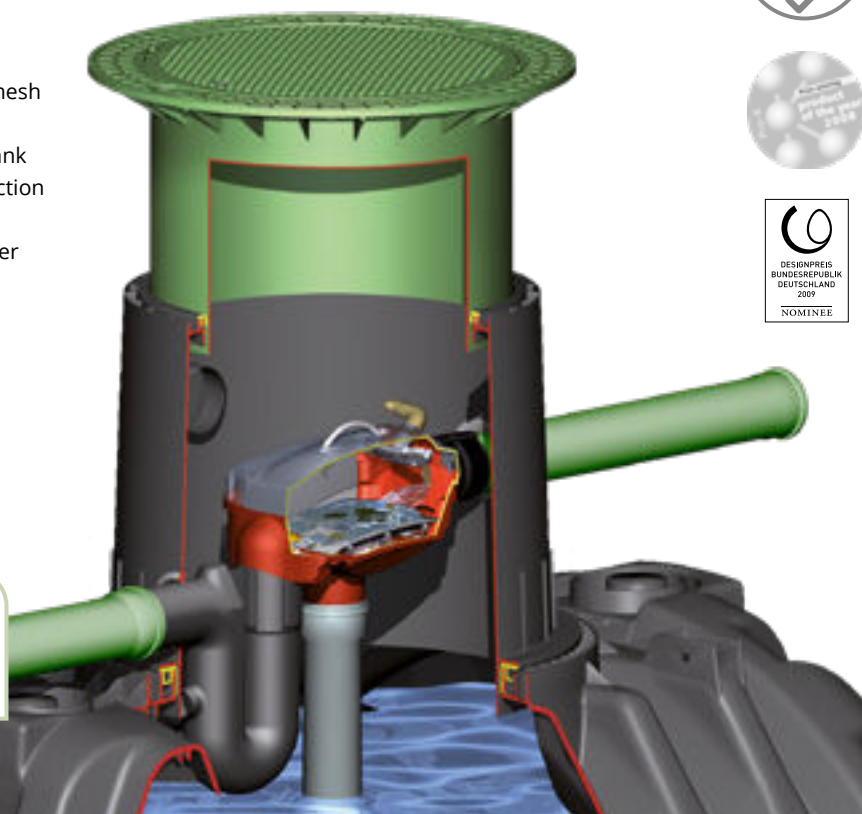
Advantages

- Water yield of over 95 %
- Low maintenance, self cleaning filter insert, mesh width 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
- Maximum flow rate of 5.5 l/s
- Connection DN110 (4")
- Optional internal cleaning unit
- Just 165 mm (6.5") height offset between inlet and outlet



Maintenance of a rainwater harvesting system

GRAF TV
www.graf.info/v203



Tank dome connection measurements

For Optimax-Pro Filter internal in Carat S underground tank

Telescopic dome shaft	Inlet	Outlet
Mini Connection DN110 (4")	555 – 755 mm (21.9" – 29.7")	725 – 925 mm (28.5" – 36.4")
Maxi Connection DN110 (4")	555 – 855 mm (21.9" – 33.7")	725 – 1025 mm (28.5" – 3' 4.4")
Cast Connection DN110 (4")	605 – 725 mm (23.8" – 28.5")	785 – 1025 mm (30.9" – 3' 4.4")

Optimax-Pro Filter internal (patented)
DN110 (4")
Order no. 340037

All measurements from pipe bottom to top edge of ground

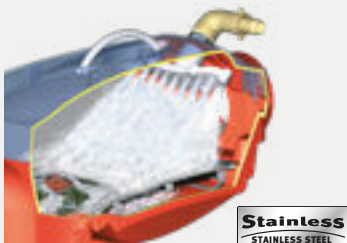
Q **WEBCODE** G2102

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 103); 19 mm (¾") connection, supplied without hose

Order no. 340040



Removal handle Plus

For convenient filter removal; length: 505 mm (19.9")

Order no. 330220

Quick assembly sleeve Spannfix

Patented (page 121)
DN110 (4")

Order no. 340502



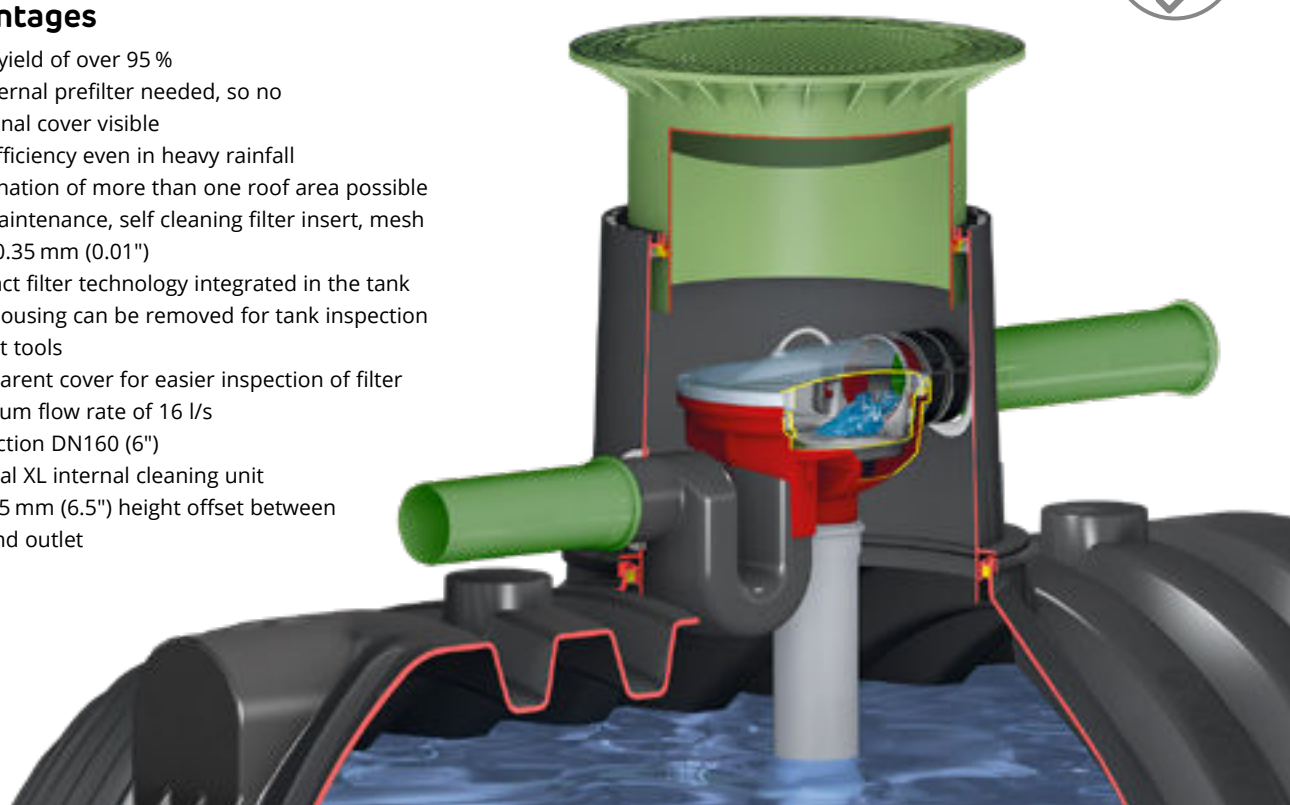
Optimax-Pro Filter XL, self-cleaning

Optimal cleaning function at maximum water yield!



Advantages

- Water yield of over 95 %
- No external prefilter needed, so no additional cover visible
- High efficiency even in heavy rainfall
- Combination of more than one roof area possible
- Low maintenance, self cleaning filter insert, mesh width 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
- Maximum flow rate of 16 l/s
- Connection DN160 (6")
- Optional XL internal cleaning unit
- Just 165 mm (6.5") height offset between inlet and outlet



Tank dome connection measurements

For Optimax-Pro XL Filter internal in Carat XL/XXL and Platin XL/XXL

Telescopic dome shaft	Inlet	Outlet
Mini Connection DN160 (6")	560 – 760 mm (22" – 29.9")	725 – 925 mm (28.5" – 36.4")
Maxi Connection DN160 (6")	560 – 860 mm (22" – 33.9")	725 – 1025 mm (28.5" – 3' 4.4")
Cast Connection DN160 (6")	610 – 860 mm (24" – 33.9")	785 – 1025 mm (30.9" – 3' 4.4")

Optimax-Pro XL Filter internal (patented)
DN160 (6")
Order no. 340108

All measurements from pipe bottom to top edge of ground

Q **WEBCODE** G2103

Accessories

Internal cleaning unit XL

Very powerful jet of water to clean the filter sieve, resulting in fewer maintenance intervals. Automatic control possible with the Aqua Center Silentio (page 103); 19 mm (¾") connection, supplied without hose

Order no. 340117



Removal handle Plus

For convenient filter removal; length: 505 mm (19.9")

Order no. 330220

Quick assembly sleeve Spannfix

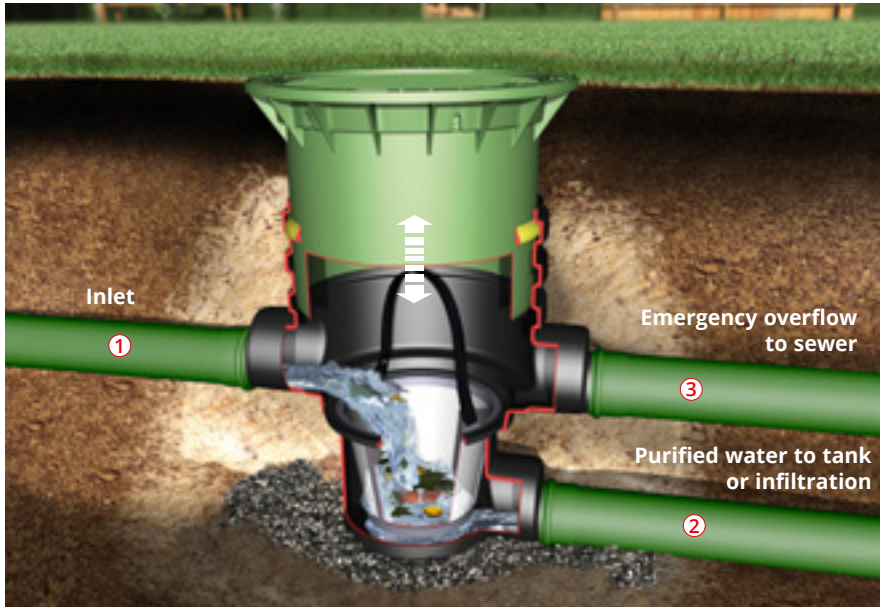
Patented (page 121)
DN160 (6")

Order no. 340546



Universal-Filter 3 and Universal-Industrial Filter 3

External filters in sturdy plastic shaft



Connection dimensions

① Inlet	DN110 (4")/160 (6")	330 – 780 mm (13 – 30.7")
② Outlet	DN110 (4")/160 (6")	600 – 1050 mm (23.6 – 3' 5.4")
③ Emergency overflow	DN110 (4")/160 (6")	330 – 780 mm (13 – 30.7")

All measurements from pipe bottom to top edge of ground

Q **WEBCODE** G2205



Universal-Filter 3 external

- 100 % water yield, so ideal for small roof areas or downstream infiltration
- Continuously variable installation depth of 600–1050 mm (23.6"– 3' 5.4") using telescopic dome shaft
- Filter insert with mesh width of 0.35 mm (0.01")
- Sealed up to ground level
- Little height loss (270 mm (10.6")) between inlet and outlet
- Ideally suited to infiltration and pond systems
- Maximum flow rate of 16 l/s

Universal-Filter 3 external suitable for pedestrian loading

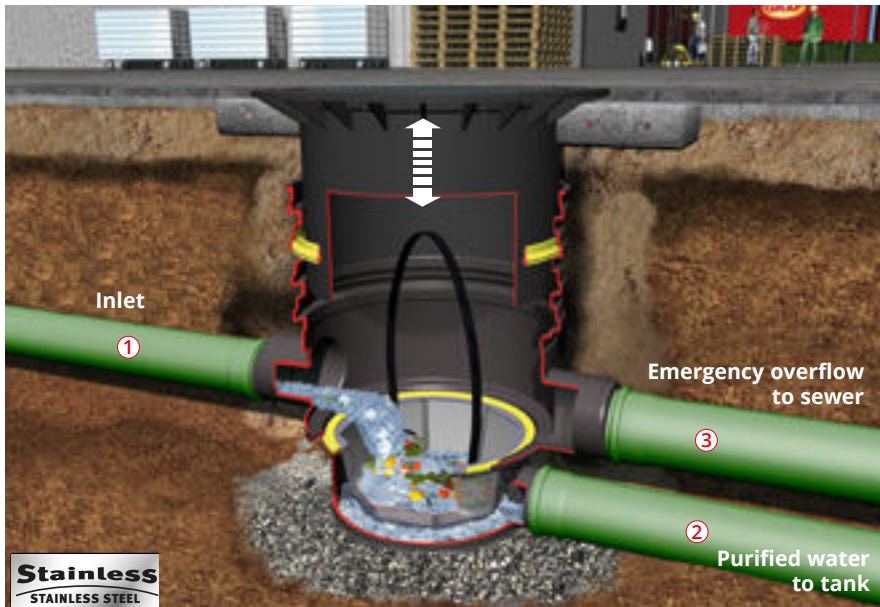
With plastic covering, childproof

Order no. 340020

Universal-Filter 3 external suitable for vehicle loading

With cast cover, class B

Order no. 340021



Connection dimensions

① Inlet	DN160 (6")/200 (8")	475 – 1040 mm (18.7" – 3' 5")
② Outlet	DN160 (6")	705 – 1270 mm (27.8" – 4' 2")
③ Emergency overflow	DN160 (6")/200 (8")	475 – 1040 mm (18.7" – 3' 5")

All measurements from pipe bottom to top edge of ground

Q **WEBCODE** G2202



Universal-Industrial Filter 3 external

- 100 % water yield
- For roof areas of up to 1200 m²
- Continuously variable installation depth of 705–1270 mm using telescopic dome shaft
- Filter insert with mesh width of 0.75 mm (0.03")
- Maximum flow rate of 29.5 l/s

Universal-Industrial Filter 3 external suitable for pedestrian loading

Order no. 340050

suitable for vehicle loading

Order no. 340051

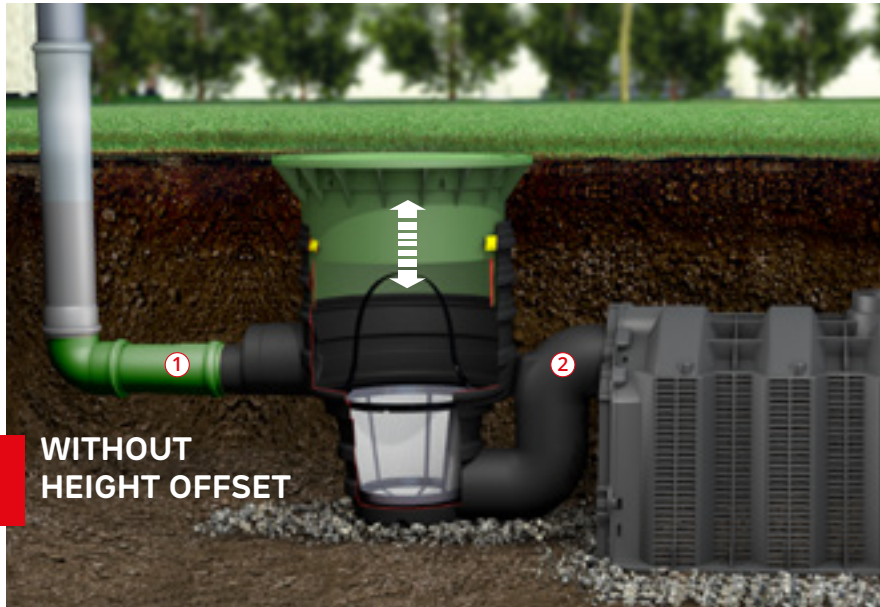
for lorry-bearing*

Order no. 340095

*Cover and compensating ring provided on site

Drainstar filter and Drainstar filter XL

External filters in sturdy plastic shaft



Connection dimensions

① Inlet	DN110 (4")/160 (6")	330 – 780 mm (13 – 30.7")
② Outlet	DN110 (4")	330 – 780 mm (13 – 30.7")

All measurements from pipe bottom to top edge of ground

Q **WEBCODE** G4405



Drainstar filter external

- Water yield of over 95 %
- No height loss between inlet and outlet
- Filter insert with mesh width of 0.35 mm (0.01")
- Continuously variable installation depth of 600–1050 mm (23.6"– 3' 5.4") using telescopic dome shaft
- Ideally suited to infiltration and pond systems
- Maximum flow rate of 5.5 l/s with DN110 (4") connection and 16 l/s with DN160 (6") connection

Drainstar filter external suitable for pedestrian loading

With plastic cover, childproof

Order no. 340143

Drainstar filter external suitable for vehicle loading

With cast cover, class B

Order no. 340144



Connection dimensions

① Inlet	DN200 (8")/250 (10")	510/520 – 1060/1070 mm (20" – 3' 6")
② Outlet	DN200 (8")/250 (10")	510/520 – 1060/1070 mm (20" – 3' 6")

All measurements from pipe bottom to top edge of ground

Q **WEBCODE** G4408



Drainstar filter XL external

- Water yield of over 95 %
- No height loss between inlet and outlet
- Filter insert with mesh width of 0.75 mm (0.03")
- Continuously variable installation depth of 820–1370 mm using telescopic dome shaft
- Maximum flow rate of 29.5 l/s with DN200 (8") connection and 30 l/s with DN250 (10") connection

Drainstar filter XL external suitable for pedestrian loading

Order no. 340156

Drainstar filter XL external suitable for vehicle loading

Order no. 340157

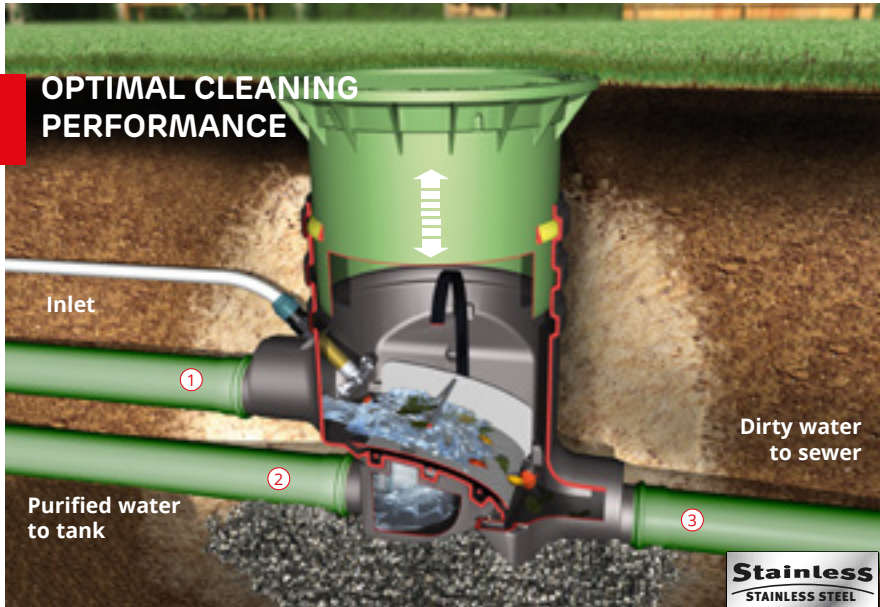
Drainstar filter XL external suitable for lorry-bearing*

Order no. 340158

*Cover and compensating ring provided on site

Optimax-Filter and Optimax-Industrial Filter

External filters in sturdy plastic shaft



Connection dimensions

① Inlet	380 – 850 mm (15" – 36")
② Outlet	580 – 1050 mm (23" – 3' 5")
③ Overflow	580 – 1050 mm (23" – 3' 5")

All measurements from pipe bottom to top edge of ground

Q **WEBCODE** G2203

Filter insert with ultra smooth surface, so max self cleaning, mesh width 0.35 mm (0.01").

Stainless steel fine filter

Lozenge fabric as supporting substrate

Collector area



Optimax-Filter external

- Water yield of over 95 %
- Self cleaning, so low maintenance
- Continuously adjustable installation depth of 580–1050 mm via telescopic dome shaft
- Self cleaning filter insert with mesh width of 0.35 mm (0.01")
- Sealed up to ground level
- Little height loss (200 mm) between inlet and outlet
- Maximum flow rate of 16 l/s
- Optional external cleaning unit

Optimax-Filter external suitable for pedestrian loading

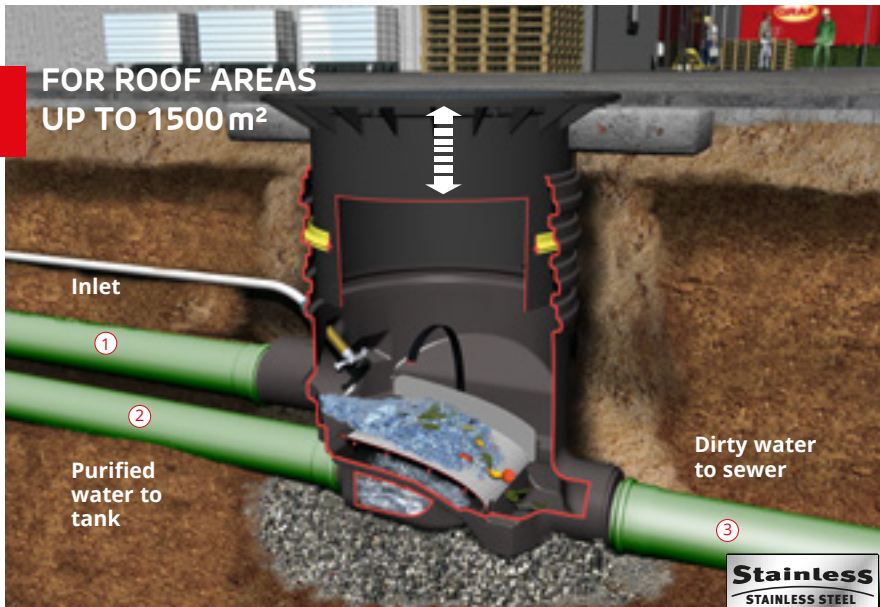
With plastic covering, childproof

Order no. 340030

Optimax-Filter external suitable for vehicle loading

With cast cover, class B

Order no. 340031



Connection dimensions

① Inlet	DN160 (6")/200 (8")	510 – 1095 mm (20" – 3' 7")
② Outlet	DN160 (6")	735 – 1320 mm (29" – 4' 4")
③ Overflow	DN160 (6")/200 (8")	735 – 1320 mm (29" – 4' 4")

All measurements from pipe bottom to top edge of ground

Q **WEBCODE** G2201



Optimax-Industrial Filter external

- Water yield of over 95 %
- For roof areas of up to 1500 m²
- Patented filter technology
- Continuously adjustable installation depth of 735–1320 mm via telescopic dome shaft
- Self cleaning filter insert with mesh width of 0.35 mm (0.01")
- Maximum flow rate of 29.5 l/s
- Height loss of 225 mm (9") between 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

Optimax-Industrial Filter external suitable for lorry-bearing*

Order no. 340116

*Cover and compensating ring provided on site

Minimax-Filter and Pot filter

External filters in sturdy plastic shaft



Connection dimensions

① Inlet	385 – 855 mm (15" – 34")
② Outlet	485 – 955 mm (19" – 3' 2")
③ Overflow	395 – 865 mm (16" – 34")

All measurements from pipe bottom to top edge of ground

Q **WEBCODE** G2204



Minimax-Filter external

- Water yield of over 95 %
- Just 100 mm height offset between inlet and outlet
- Self-cleaning filter insert with 0.5 mm (0.02") mesh
- Continuously variable installation depth of 485–955 mm using telescopic dome shaft
- Maximum flow rate of 5.5 l/s
- DN110 (4") connection
- Optional external cleaning unit

Minimax-Filter external suitable for pedestrian loading

With plastic covering, childproof

Order no. 340061

Minimax-Filter external suitable for vehicle loading

With cast cover, class B

Order no. 340062



Connection dimensions

① Outlet	340 mm (13.4")
----------	----------------

All measurements from pipe bottom to top edge of ground

Q **WEBCODE** G2206



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. Maximum flow rate of 5.5 l/s Connection DN110 (4") Dimensions: Ø 500 mm (19.7"), height 340 mm (13.4") Water yield: 100 %

Pot filter

Order no. 340003

Replacement filter mats for Pot filter (2 units)

Order no. 347010

Accessories for filter, external

Extension sleeve 400/L 600 for Universal-Filter 3 external/Drainstar filter external/Optimax-Filter/Minimax-Filter external

Incl profile seal; for realising large installation depths, usable length: 500 mm (19.7"), can be shortened to 250 mm (9.9")

Order no. 330341



Replacement filter basket 400 for Universal-Filter 3 external/Drainstar filter external

Mesh width 0.35 mm (0.02"); with practical lifting device

Order no. 340524



Replacement filter basket 600 for Universal-Industrial Filter 3 external/Drainstar filter XL external

Mesh width 0.75 mm (0.03"); all stainless steel

Order no. 340523



Extension sleeve 600/L 1100 for Universal-Industrial Filter 3 external/Drainstar filter XL external/Optimax-Industrial Filter external

With DN200 (8") connection surface, incl profile seal; for larger installation depths, usable length 1000 mm (3' 3.4"), can be shortened to 750/500 mm (29.5/19.7")

Order no. 371015



Cleaning unit external for Optimax-Filter/ Optimax-Industrial Filter external/ Minimax-Filter external

Connection 19 mm (¾"), supplied without hose

Order no. 340041



Optimax XXL Filter

External filter technology



- Water yield of over 95 %
- Self-cleaning filter principle
- Stainless steel filter insert with mesh width of 0.35 mm (0.01")
- Maximum flow rate of 100 l/s with DN315 (12") connection and 200 l/s with DN400 (16") connection
- Patented filter technology
- Larger connections on request
- Includes cleaning unit
- Height loss of just 45 mm (1.8") between inlet and dirty water outlet

Q WEBCODE G2207

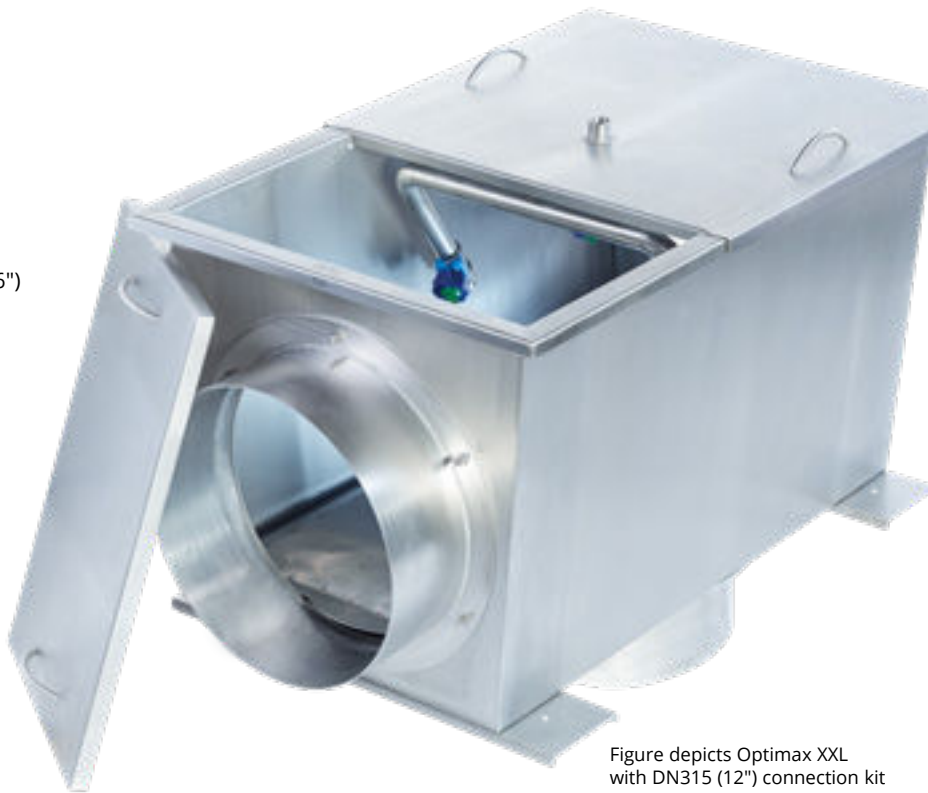


Figure depicts Optimax XXL with DN315 (12") connection kit

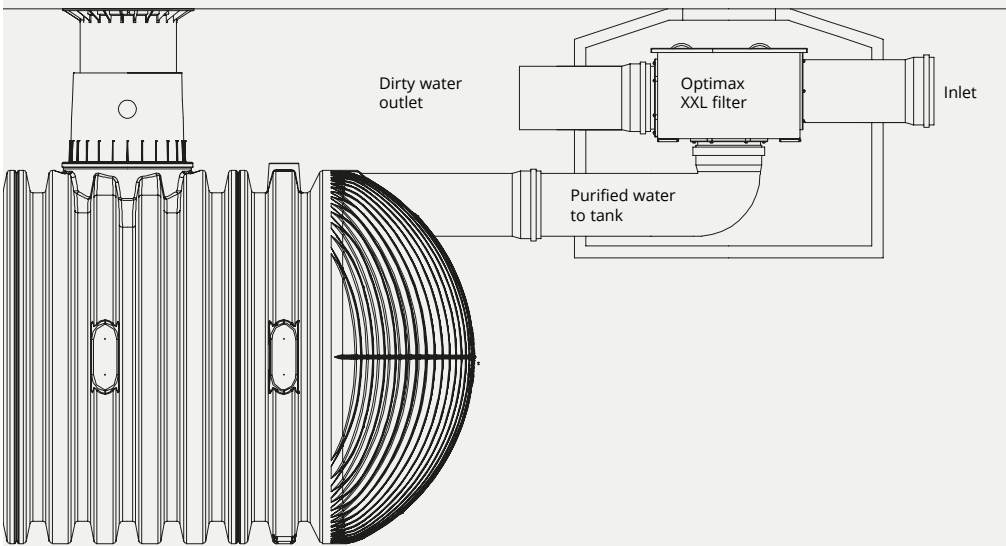
Optimax XXL Filter external

Width	Length	Height	Weight	Order no.
675 mm (26.6")	1125 mm (3' 8.3")	770 mm (30.3")	75 kg (166 lbs)	340096

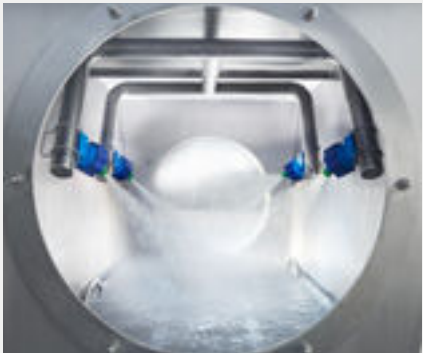
Including filter cleaning unit

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.

Example installation*



*Simplified representation



How the filter cleaning unit works

Accessories

Connection kit DN315 (12")

Order no. 340097

Connection kit DN400 (16")

Order no. 340099

Infiltration and Sedimentation filter shaft

External filter technology



Connecting dimensions

④ Outlet	DN110 (4") / DN160 (6")	275 – 725 mm (10.8" – 2' 4.5")
----------	----------------------------	-----------------------------------

All dimensions are calculated middle of connection until earth top edge

Q **WEBCODE** G4401

Telescopic filter shaft 400, class B

With slotted cast cover, suitable for vehicle loading, class B; incl coarse filter insert and fine filter basket (0.35 mm (0.01") mesh width); colour: black

Order no. 340126

Infiltration filter shaft

- 3-stage cleaning process
 - ① Coarse filter insert
 - ② Fine filter basket (0.35 mm (0.01") mesh width)
 - ③ Sedimentation zone
- Retains contaminants which may affect infiltration performance
- Ideal as a courtyard inlet structure or a trough-trench overflow element
- Suitable for vehicle loading with cast cover, class B
- Continuously variable installation depth of 600 – 1050 mm (24" – 3' 5.4") using the telescopic dome shaft diameter 400 mm (16")
- Maximum flow rate of 16 l/s
- DN110 (4") and DN160 (6") connections

VS connecting piece DN400 (16")

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

Order no. 330341

Infiltration filter shaft

suitable for vehicle loading

Order no. 340025



Connecting dimensions

④ Inlet	DN160 (6")	480 – 980 mm (18.9" – 38.6")
⑤ Outlet	DN160 (6")	730 – 1230 mm (28.7" – 4' 1")

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

Q **WEBCODE** G4402

Infiltration connecting piece 1000 DN630 (24")

With DN200 (8") contact surface, incl. profile seal, length 1000 mm (3' 3"), 750 mm (21.5"), 500 mm (19.7")

Order no. 371015

Sedimentation filter shaft

- 3-stage cleaning process
 - ① Fine filter basket (0.35 mm (0.01") mesh width)
 - ② Sedimentation zone
 - ③ Immersion pipe as separator
- Continuously variable installation depth of 1000 – 1500 mm (3' 3.4" – 4' 11") using the telescopic dome shaft diameter 600 mm (24")
- Suitable for pedestrian loading with plastic cover, or suitable for vehicle loading with cast cover, class B
- Lockable childproof cover
- Sealed up to ground level
- Maximum flow rate of 16 l/s
- DN160 (6") connection

Sedimentation filter shaft

suitable for pedestrian loading

Order no. 340026

Sedimentation filter shaft

suitable for vehicle loading

Order no. 340027

*Abdeckung und Ausgleichsring bauseits zu stellen

Control and pumps

- > Aqua-Center Basic page 102
- > Aqua-Center Silentio page 103
- > Aqua-Center Silentio Press page 104
- > Aqua-Center Silentio Connect page 105
- > Domestic water control units and pumps page 106

The central rainwater system control



Q WEBCODE G3101



Q WEBCODE G3102



Q WEBCODE G3103



Q WEBCODE G3104



Properties	Aqua-Center Basic		Aqua-Center Silentio		Submersible pump
Pump	15/4	25/4	15/4	25/4	300 A
Motor rating	0,66 kW	0,8 kW	0,66 kW	0,8 kW	0,22 kW
Operating noise	55 dB(A)	55 dB(A)	49 dB(A)	49 dB(A)	–
Protection class	IP 44	IP 44	IP 44	IP 44	IP X8
Max operating pressure	3,5 bar	4,3 bar	3,5 bar	4,3 bar	0,55 bar
Max delivery height	35 m (114' 10.0")	43 m (141' 0.9")	35 m (114' 10.0")	43 m (141' 0.9")	5.5 m (18' 0.5")
Max. flow rate	3,6 m³/h	4,2 m³/h	3,6 m³/h	4,2 m³/h	5,7m³/h
Max. suction lift	6 m (19' 8.2")	6 m (19' 8.2")	6 m (19' 8.2")	6 m (19' 8.2")	–
Max. suction length	15 m (49' 2.6")	15 m (49' 2.6")	15 m (49' 2.6")	15 m (49' 2.6")	–
Operating pressure gauge	•	•	•	•	
Optionally as Silentio Press package for distances of ≥ 15 m (49' 2.6") from house	–	–	•	•	
Feed unit					
Tank capacity	10 l (2.7 US gal.)		6.5 l (1.7 US gal.)		
Manual switchover to mains water possible	•		•		
Automatic water exchange in feed tank	–		•		
Overflow according to DIN EN 1717	•		•		
Control unit					
Float switch	•		–		
Electronic level measurement	–		•		
Optional automatic filter cleaning system	–		•		
Fault indicator	LED (on pressure monitor)		LED / full text		
Adjustable operating parameters	mains water feed threshold via float switch, start-up pressure		mains water feed threshold, start-up pressure, flushing interval / duration for mains water feed tank and filter, filter flushing suppression in mains water mode		
Dimensions					
Width	680 mm (26.8")		580 mm (22.8")		205 mm (8.1")
Height	760 mm (29.9")		530 mm (20.9")		245 mm (9.7")
Depth	210 mm (8.3")		295 mm (11.6")		150 mm (5.9")
Weight	30 kg (67 lbs)		34 kg (75 lbs)		3.75 kg (8.25 lbs)
Page	page 102		page 103		page 104

Properties	Aqua-Center Silentio Connect			Feeder pump
Pump	6/40	8/40	14/40	1100 A
Motor rating	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
Max operating pressure	4,6 bar	4,2 bar	4,7 bar	1,4 bar
Max delivery height	46 m (150' 11")	42 m (137' 9.6")	47 m (154' 2.4")	14 m (45' 11.2")
Max. flow rate	6 m³/h	9 m³/h	14 m³/h	16,5 m³/h
Max suction lift	with 1100 A feeder pump			-
Max suction length	with 1100 A feeder pump			-
Operating pressure gauge	•	•	•	
Incl feeder pump	•	•	•	
Feed unit				
Tank capacity	100 l (27 US gal.)	100 l (27 US gal.)	100 l (27 US gal.)	
Demand-driven drinking water intake with automatic closing function on power failure	•	•	•	
Manual switchover to mains water possible	•	•	•	
Stagnation protection for drinking water pipe	•	•	•	
Overflow according to DIN EN 1717	•	•	•	
Control unit				
Intelligent connect control with APP link	•	•	•	
Optional electronic level measurement	•	•	•	
Fault indicator	•	•	•	

Dimensions			
Width	600 mm (23.6")		160 mm (6.3")
Height	1540 – 1560 mm (5' 0.7" – 5' 4.5") (adjustable)		474 mm (18.7")
Depth	630 mm (24.8")		-
Weight	135 kg (298 lbs)	133 kg (294 lbs)	141 kg (913 lbs)
Page	page 105		

Aqua-Center Basic

The low-cost option

Aqua-Center Basic is designed to control and monitor the rainwater harvesting system. Its reliable design is its safeguard for maximum availability. A float switch in the rainwater tank switches automatically

to drinking water intake at low levels. Once the cistern again starts to fill with rainwater, Aqua-Center Basic switches back to rainwater mode.

Advantages

- Low-cost private mains water feed
- Float switch controlled



Pressure gauge

High quality, high performance KSB centrifugal pump for long, reliable availability



Integrated dry running protection prevents damage at low water levels and safeguards reliable operation

Suction pipe connection 25 mm (1")

Zero-current, closed three-way valve for needs-based drinking water intake on empty tank

Highest operational reliability with overflow (DIN EN 1717)

Q **WEBCODE** G3101

Aqua-Center Basic

Incl float switch, with 20 m (65' 7.4") connecting cable



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

Aqua-Center Silentio

The convenient rainwater system control

GRAF Aqua Center Silentio is the central controller of your rainwater harvesting system. The electronic control unit checks and regulates the entire operation. The sensor-controlled switching valve opens on low water levels in the cistern

and safeguards the intake of drinking water in the industrial water mains. Aqua-Center Silentio switches back to rainwater mode even after a brief shower. Maximised convenience is assured by automatic filter and feed tank flushing.

Advantages

- Optional automatic filter cleaning
- Automatic flushing of feed tank prevents buildup of bacteria
- Digit control and level measurement
- Display showing fill level and operating status



Regular flushing of mains feed tank prevents build-up of bacteria

Integrated dry running protection prevents damage from low water levels and safeguards reliable operation

High availability ensured by (user configurable) microprocessor control

Pressure gauge

Zero-current, closed three-way valve for needs-based drinking water intake on empty tank



Integrated interface to building bus system/ facilities

Digital display of operating status and cistern level

Automatic control of filter cleaning unit; cleaning intervals and duration user configurable

Maximised availability thanks to overflow (DIN EN 1717)

Complete soundproofing for ultra quiet operation

High quality, high performance KSB centrifugal pump for long, reliable availability

ULTRA QUIET

Q **WEBCODE** G3102

Aqua-Center Silentio

Incl sensor, sensor line, and 20 m (65' 7.4") data cable



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

Accessories

Automatic filter cleaning system

For automatic filter flushing

Order no. 352038

Data line 50 m

Two core with cinch plug

Order no. 330699

Replacement parts

Float valve retrofit kit

Retrofit kit 3/4"

Order no. 352024

ESD sensor

Excl sensors

Order no. 352010



What happens when my tank is empty?

GRAF TV
www.graf.info/v202

Aqua-Center Silentio Press

For large distances between tank and home

- Bridges distances between tank and domestic water control ($\geq 15\text{ m}$ (49' 2.6"))
- Pressure boost as a function of 300 A charging pump's delivery parameters
- Compensation of height differences between tank and domestic water control ($\geq 6\text{ m}$ (19' 8.3"))
- Charging pump regulated via system control



ULTRA
QUIET



Q WEBCODE G3103

Aqua-Center Silentio Press

For large distances between tank and domestic water control ($\geq 15\text{ m}$ (49' 2.6")); incl 300 A submersible pump (page 103) as charging pump



Accessories

Automatic filter cleaning system

For automatic filter flushing
Order no. 352038

Data line 50 m

Two core with cinch plug
Order no. 330699

Replacement parts

Float valve retrofit kit

Retrofit kit $\frac{3}{4}$ "
Order no. 352024

ESD sensor

Excl sensors
Order no. 352010



Aqua-Center Silentio Connect

The professional rainwater system control



Q WEBCODE G3104

The diaphragm expansion tank serves to reduce switching frequency and prolong service life to a great extent.

The Aqua-Center Silentio Connect control provides the following functions:

- live monitoring
- logs
- remote diagnosis and maintenance
- alerts and operating statuses
- internet updates

Aqua-Center Silentio Connect connects easily to your private LAN or Wifi network and complies with the highest security standards. Simply connect the device to your router, and enable communication via the app on your smartphone, tablet, or PC. Data communication is provided with the optimal protection against unauthorised access and handled exclusively by the Silentio Connect server.

Pump	Order no.
6/40	353002
8/40	353007
14/40	353009

Optional accessories:

Auto-drain function

As stagnation protection for feed tank
Order no. 355040

Fill level display in rainwater tank

Comprising 50 m (164' 0.5") submersible pressure sensor including configurable software
Order no. 355006

Rainwater stop - backflow inhibitor

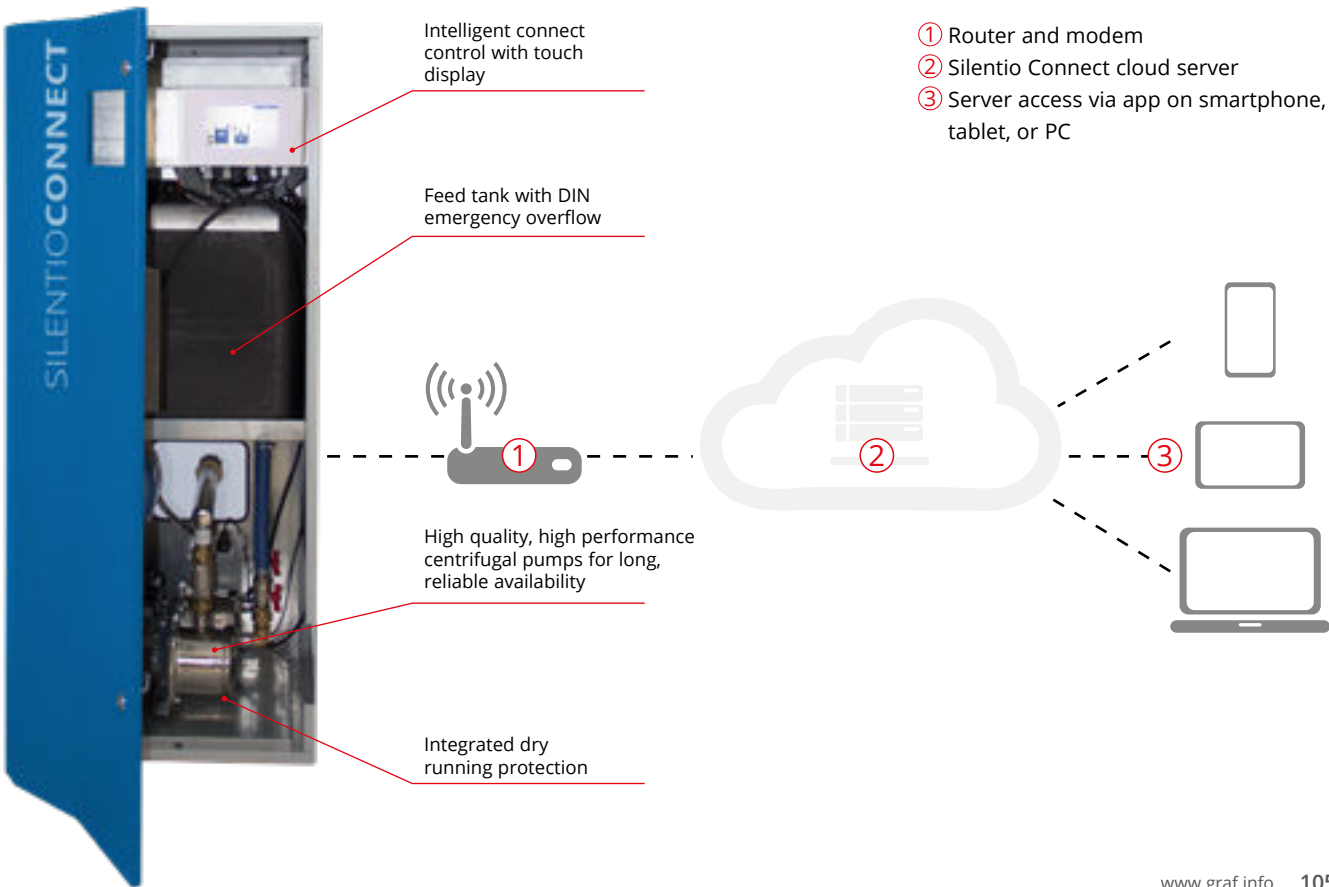
In deeper installations, rain manager acts as water level in the underground tank
Order no. 353011

Diaphragm expansion tank 50 l

(14 US gal.)
Incl set of connections, diameter 410 mm (16.1"), length 500 mm (19.7")
Order no. 355036

Diaphragm expansion tank 100 l

(27 US gal.)
Incl set of connections, diameter 500 mm (19.7"), length 670 mm (26.4")
Order no. 355009



Domestic water control units and pumps



KSB-Superinox 15/4 and 25/4

- Proven domestic water control unit of brand quality
- Stainless steel housing
- Extremely low running noise
- Multi-stage, self-priming centrifugal pump with energy-saving motor
- Pump switches on and off automatically via pressure and flow monitor
- Integrated dry running protection and backflow inhibitor
- Motor with lifetime lubrication and integrated circuit breaker
- IP 44

15/4 Order no. 353032

Q WEBCODE G3201



Kreisel 4/1000

Integrated prefilter

- Domestic water control unit of brand quality
- Water cooled motor (low noise)
- Energy saving motor
- Pump switches on and off automatically via pressure and flow monitor
- Integrated dry running protection and backflow inhibitor
- Incl 25 mm (1") hose connection fitting
- LED display (incl faults)

Order no. 354021

Q WEBCODE G3203



Jet 700 garden pump

Integrated prefilter

- Self-priming jet pump
- Tried and tested pump technology of brand quality
- Water cooled motor (low noise)
- Made of high quality, corrosion free materials
- Incl 25 mm (1") hose connection fitting
- Integrated backflow inhibitor

Order no. 202011

Q WEBCODE G3204

Performance characteristics	Superinox 15/4	25/4	Kreisel 4/1000	Jet 700 garden pump
Motor rating	0,66 kW	0,8 kW	0,85 kW	0,85 kW
Max delivery height	35 m (114' 10.0")	43 m (141' 1.0")	43 m (141' 1.0")	43 m (141' 1.0")
Max operating pressure	3,5 bar	4,3 bar	4,3 bar	4,3 bar
Max. flow rate	3.600 l/h	4.200 l/h	3.180 l/h	3.180 l/h
Max suction height (m)	8 m (26' 3.0")	8 m (26' 3.0")		8 m (26' 3.0")
Max suction length (m)	18 m (59' 0.7")	18 m (59' 0.7")	15 m (49' 2.6")	15 m (49' 2.6")
Max submersion depth (m)	-	-	-	-
Pump connection, intake side	G1" IT	G1" IT	G1" AG	G1" AG
Pump connection, delivery side	G1" AG	G1" AG	G1" AG	G1" AG

IT: internal thread ET: external thread

Important: The intake ratings listed in the table do not apply to combinations with drinking water feeding modules!



Integra INOX

- Automatic submersible pump with integrated pressure and flow monitor
- Pump switches on and off automatically
- Tried and tested pump technology of brand quality
- Very low running noise
- Made of high quality, corrosion free materials
- Incl 10 m (32' 10") cable and floating water extraction unit
- Also suitable as suction pump
- Integrated dry running protection

Order no. 354018

Q WEBCODE G3205



300 A submersible pump

- Submersible pump with dry running protection
- Tried and tested pump technology of brand quality
- Very low running noise
- Made of high quality, corrosion free materials
- Incl 10 m (32' 10") cable
- Incl 32 mm (1¼") hose connection fitting

Order no. 354031

Q WEBCODE G3206



Submersible pressure pump 1000A

- Submersible pressure pump with dry running protection and 3 impellers
- Tried and tested pump technology of brand quality
- Very low running noise
- Made of high quality, corrosion free materials
- Incl 15 m (49' 2.6") cable
- Incl 19 mm (¾")/25 mm (1") hose connection fitting

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 of brand quality
- Very low running noise
- Made of high quality, corrosion free materials
- Incl 15 m (49' 2.6") cable
- Integrated dry running protection
- Incl 19 mm (¾")/25 mm (1") hose connection fitting

Order no. 354036

Q WEBCODE G3208

Integra INOX	300 A submersible pump	Submersible pressure pump 1000 A	Submersible pressure pump 1000 E
1,1 kW	0,22 kW	0,9 kW	0,9 kW
40 m (131' 2.8")	5.5 m (18' 0.6")	36 m (118' 1.4")	36 m (118' 1.4")
4,0 bar	0,55 bar	3,6 bar	3,6 bar
3,000 l/h (800 US gal./l)	5.700 l/h (1,506 US gal./l)	5.700 l/h (1,506 US gal./l)	5.700 l/h (1,506 US gal./l)
8 m (26' 3.0")	-	-	-
12 m (39' 4")	-	-	-
5 m (16' 5")	7 m (22' 11.6")	12 m (39' 4")	12 m (39' 4")
G1" IT	-	-	-
G1 ¼" IT	G1 ¼" IT	G1" IT	G1" IT

Accessories

Pump wall bracket

Suitable for KSB-Superinox, Kreisel 4/1000, and Jet 700 garden pump, rubber suspension for low noise levels

Order no. 355020



Flexible armoured hose

Latex core, stainless steel jacket, Length: 500 mm (19.7"), zero wear, rust free, brass connector 25 mm (1")

Order no. 330058



Controlmatic

Automatic pump switcher with dry running protection and pressure gauge, fully wired, 25 mm (1")

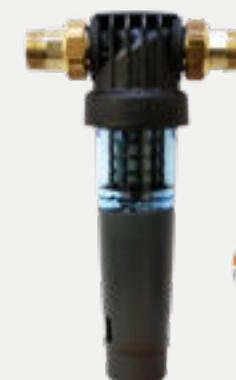
Order no. 355022



Brio

Automatic pump switcher with dry running protection, fully wired, 25 mm (1"), IP 65

Order no. 355021



Reversible flow filter

For fine filtering rainwater downstream of the pump. Practical when rainwater is to be used for the washing machine. The fine filter's mesh width of 0.1 mm (0.004")

retains even the finest of contaminants. 25 mm (1") connection with external thread. DVGW-approved DIN fine filter. Sieve insert cleaned easily within seconds, so no

replacement needed. Please note: The rainwater must be routed through a prefilter (page 84-93) before entering the tank.

Order no. 331021

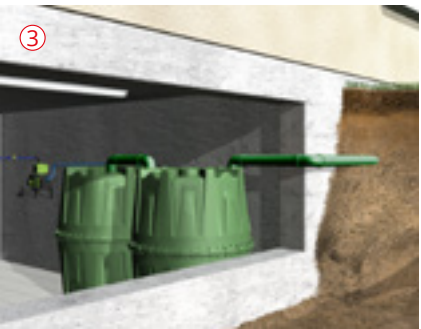


Special purpose tanks

- > Herkules-Tank page 110
- > 1,000 litre flat/cellar tank page 113
- > Collection and transport tanks page 114
- > Drinking water reservoir page 115
- > Saphir universal shaft page 116

Herkules-Tank

Three ways to use it!



① 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.

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



② Above ground

You can simply set up the Herkules-Tank in the garden. The tried and tested GRAF downpipe filter Regendieb Pro (see accessories) provides the perfect connection.

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

Vast scope for extension

Order no. 320001

[Q](#) [WEBCODE](#) G1301

Herkules Infiltration tank 1,600 l (423 US gal.)

Geotextile required (accessories)
Incl support pipe

Order no. 200201

[Q](#) [WEBCODE](#) G1309

GRAF-Tex Geotextil

For Herkules Infiltration tank

Order no. 369015

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 or more.

Herkules tank set 3,200 l (846 US gal.)

Consisting of 2 tanks and extension set DN110 (4") (Connecting pipes must be provided on site!)

Order no. 211001

Herkules tank set 4,800 l (1,250 US gal.)

Consisting of 3 tanks and extension set DN110 (4") (Connecting pipes must be provided on site!)

Order no. 211002

[Q](#) [WEBCODE](#) G1302

Your practical advantages for the Herkules-Tank

- **Convenient transport:**
Each tank half weighs about 30 kg (67 lbs), making easy work of transporting and installing by hand. Its tank halves will fit through any standard door of 80 cm (31.5") or more.
- **Permanently tight:**
Permanently tight thanks to durable profile sealing and quick assembly mechanisms. Seal life verified in excess of 50 years.
- **Quick and easy assembly:**
The quick assembly mechanisms for installations in just minutes. Disassembly possible.



Easy assembly of the Herkules tank

Install seal



Join tank halves



Install tank



Unlimited, extendible capacity



Accessories

Tank dome suitable for pedestrian loading

With telescopic end, 1 m (3' 3.4") long, can be shortened

[DN200 \(8"\)](#) Order no. 322026

Support pipe

Required for underground assembly

[DN160 \(6"\)](#) Order no. 322014

Extension set without drill*

[DN75 \(2.8"\)](#) Order no. 202029

[DN110 \(4"\)](#) Order no. 202028

*Consisting of special seals

Drill with shank mount

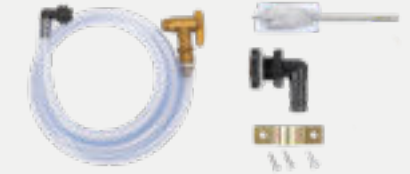
[DN75 \(2.8"\)](#) Order no. 202002

[DN110 \(4"\)](#) Order no. 202003

Universal hose kit ¾"

Set for complete water extraction and water level display. Consisting of 2.15 m (7' 0.7") flexible hose 19 mm (¾"), plastic drain tap, drill, and assembly accessories.

Order no. 220015



Brass tap

Cpl with tank screws, size 19 mm (¾")

Order no. 330044



Downpipe filter Regendieb Pro

Reliable filter of rainwater contaminants, easy switchover from summer to winter mode, suitable for downpipe sizes 70, 80, 100 mm (2.8, 3.2, 4.0"), incl inlet seal

[grey](#) Order no. 344200

[brown](#) Order no. 344201



Technical data

Volume	1,600 litres (423 US gal.)
Max diameter	1350 mm (4' 5.2")
Height	1600 mm (5' 3.0")
Material	GFR polypropylene (UV resistant and 100% recyclable)
Weight	approx 60 kg (133 lbs)
Connection	2 x DN75 (2.8"), 2 x DN110 (4") und 2 x DN200 (8") suitable for commercially available HT/KG pipes

Herkules packages

For garden irrigation and home use



Scope of supply: ① Herkules tank(s) ② Pot filter ③ Extension set (from 2 tanks) ④ Submersible pressure pump ⑤ Support pipe(s) for subsurface installations ⑥ Dome(s) DN200 (8") ⑦ External water socket, external ⑧ 10 m (32' 10") pressure hose 25 mm (1")



Herkules 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 from water socket (compatible with standard hose coupling)
- Pot filter reliably holds back contaminants

1,600 l (423 US gal.) Package (1 tank)

Order no. 321018

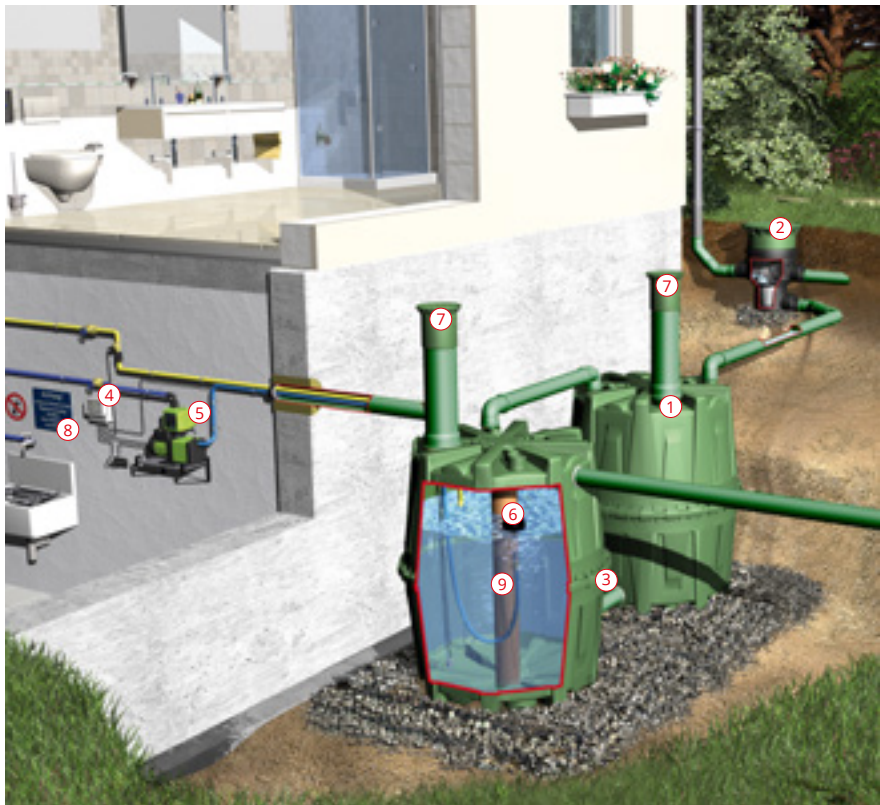
3,200 l (846 US gal.) Package (2 tanks)

Order no. 321015

4,800 l (1.250 US gal.) Package (3 tanks)

Order no. 321016

[Q WEBCODE G1234](#)



Scope of supply: ① Herkules tanks ② Universal filter 3 external ③ Extension set(s) ④ Drinking water intake with level gauge ⑤ Domestic water control unit, Kreisel 4/1000 with pump wall bracket ⑥ Suction fitting excl suction hose ⑦ Dome DN200 (8") ⑧ Labelling kit ⑨ Support pipes for subsurface installations



Herkules home package

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

3,200 l (846 US gal.) Package (2 tanks)

Order no. 321010

4,800 l (1.250 US gal.) Package (3 tanks)

Order no. 321011

6,400 l (1,691 US gal.) package (4 tanks)

Order no. 321012

[Q WEBCODE G1235](#)

1,000-litre flat tank and cellar tank



1,000 l (265 US gal.) Flat tank

Underground tank suitable for pedestrian loading, 1,000 l (265 US gal.), manufactured seamlessly from one piece, incl plastic cover, connections 3 x DN110 (4")

Order no. 319039

[Q WEBCODE G1303](#)

Shaft extensions

Ø 620 mm (24.4"), height 220 – 700 mm (8.7 – 27.6")

Order no. 202057

Incl inlet holes and seals, Ø 620 mm (24.4"), height 470 – 950 mm (18.5 – 3' 1.4")

Order no. 202058



Technical data

Length	1750 mm (24' 5.3")
Width	930 mm (36.6")
Height	1100 mm (3' 7.4")
Weight	60 kg (133 lbs)

Cellar tank

Of black PE, thick walled, impact resistant, weather resistant – extendible in batteries – with steel braces. Space-saving design.

Fitted as standard with:

- 2 galvanised steel braces
- 1 manhole dome with cover Ø 450 mm (17.7")
- 1 inlet DN110 (4")
- 1 overflow fitting DN110 (4")
- 2 connection fittings DN110 (4") (1 x right and 1 x left)

Drain tank when risk of frost!

[Q WEBCODE G1304](#)

Cellar tank 1,700 Liter (450 US gal.)

Order no. 327020

Connecting set, bottom

Order no. 327805



Figure depicts 2 x 1,700 l (450 US gal.) Tank with connecting set

Technical data

Length	1730 mm (5' 8.2")
Width excl/incl brace	780/815 mm (30.7/32.1")
Height excl/incl dome	1410/1660 mm (4' 7.6/5' 5.4")
Weight (incl steel braces)	91 kg (201 lbs)

Collection and transport tanks

For aboveground sitings

Vertical collection tank

Of PE, UV resistant, with access aperture, Ø 450 mm (17.7"). The tanks must be sited on a firm, level surface.

Drain tank when risk of frost!

 **WEBCODE** G1305



Illustration shows
9,000 l (2,978 US gal.) Tank

Volume	Ø max.	Height	Weight	Order no.
2,000 l (529 US gal.)	1400 mm (4' 7.2")	1675 mm (5' 6.0")	63 kg (139 lbs)	327041
3,000 l (800 US gal.)	1400 mm (4' 7.2")	2290 mm (7' 6.2")	83 kg (183 lbs)	327042
4,000 l (1,057 US gal.)	1700 mm (5' 7.0")	2160 mm (7' 1.1")	133 kg (294 lbs)	327043
6,000 l (1,586 US gal.)	2100 mm (6' 11")	2150 mm (7' 0.7")	183 kg (404 lbs)	327045
9,000 l (2,378 US gal.)	2600 mm (8' 6.4")	2350 mm (7' 8.6")	253 kg (558 lbs)	327047

Collection/transport tank horizontal

Of PE, UV resistant, with access aperture Ø 350–400 mm (13.8–15.7") and cover. (For 500 l (133 US gal.) Tank can take a pump fitted on the body).

Drain tank when risk of frost!

 **WEBCODE** G1306



Series 400–3,000 l
(106–800 US gal.)

500 l
(133 US gal.)



Volume	Length	Width	Height	Weight	Order no.
400 l (106 US gal.)	1000 mm (3' 3.4")	750 mm (29.5")	820 mm (32.3")	18 kg (40 lbs)	327010
500 l (133 US gal.)	1050 mm (3' 5.4")	750 mm (29.5")	820 mm (32.3")	23 kg (51 lbs)	327011
600 l (159 US gal.)	1320 mm (4' 4.0")	890 mm (35")	920 mm (36.2")	30 kg (67 lbs)	327012
1,000 l (265 US gal.)	1630 mm (5' 4.2")	1140 mm (3' 8.9")	1200 mm (3' 11.2")	50 kg (111 lbs)	327050
1,500 l (400 US gal.)	1850 mm (6' 0.9")	1120 mm (3' 8.1")	1130 mm (3' 8.5")	80 kg (177 lbs)	327051
2,000 l (529 US gal.)	2000 mm (6' 6.8")	1250 mm (4' 1.3")	1260 mm (4' 1.7")	108 kg (239 lbs)	327052
3,000 l (800 US gal.)	2150 mm (7' 0.7")	1450 mm (4' 9.1")	1440 mm (4' 8.7")	144 kg (318 lbs)	327053

Drinking water reservoir

For underground installation

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



Diamant drinking water reservoir
(without tank cover – see below)

Volume	Order no.
2,200 l (582 US gal.)	381130
3,350 l (885 US gal.)	381131
4,800 l (1,250 US gal.)	381132
6,500 l (1,700 US gal.)	381133
10,000 l (2,650 US gal.) ¹⁾	370605

Further sizes upon request!

 **WEBCODE** G1308

¹⁾Carat XL underground tank

 **WEBCODE** G1311

Illustration with telescopic dome shaft (see below for accessories)



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

Volume	Order no.
1,500 l (400 US gal.)	390600
3,000 l (800 US gal.)	390601
5,000 l (1,325 US gal.)	390602
10,000 l (2,650 US gal.) ²⁾	390604
15,000 l (3,960 US gal.) ²⁾	390605
20,000 l (5,284 US gal.) ²⁾	391600

Further sizes upon request!

 **WEBCODE** G1310

²⁾Drinking water reservoir Platin XL/XXL

 **WEBCODE** G1320



 **WEBCODE** G9106

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
- With additional protective cover for drinking water
- 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: DN110 (4")

Spring water shaft 200 l (52 US gal.)

Incl telescopic dome shaft with cover and drinking water cover

Order no. 381541

Maxi Drinking water telescopic dome shaft 600

- Smoothly adjustable for earth covering of 455 – 755 mm (17.9" – 29.7") (Platin), 750 – 1050 mm (29.5" – 41.3") (Diamant, Carat XL, Platin XL/XXL)
- With additional protective cover for drinking water
- Sealed up to ground level
- Lockable cover with special key
- Includes dome ventilation

 **WEBCODE** G9111

Maxi Drinking water telescopic dome shaft 600 with regular cover and drinking water cover

Order no. 381545



Saphir universal shaft

600I (159 US gal.), 900I (238 US gal.), 1,200I (318 US gal.)



- Suitable as universal, control, inspection, sedimentation, pump, or lifting shaft
- Numerous connection options for simple installation
- Telescopic/tilting dome shaft (not included in delivery)
- Simple transport thanks to low weight
- Lifting rings for simple handling and depositing in the construction pit
- Sealed up to ground level

Q WEBCODE G9304

Figs depict 600 I (159 US gal.), 900 I (238 US gal.), and 1,200 I (318 US gal.) tank with telescopic dome shaft 600 Mini suitable for pedestrian loading (accessories on page 62)



Volume	Ø	Height	Submersion depth in groundwater from tank base	Weight	Order no.
600 I (159 US gal.)	1125 mm (3' 8.3")	1045 mm (3' 5.2")	max. 430 mm (16.9")	27 kg (60 lbs)	330455
900 I (238 US gal.)	1155 mm (3' 9.5")	1345 mm (4' 5.0")	max. 430 mm (16.9")	47 kg (104 lbs)	330456
1,200 I (318 US gal.)	1155 mm (3' 9.5")	1670 mm (5' 5.8")	max. 550 mm (21.7")	58 kg (128 lbs)	330457

Suitable cover (page 62/63)

Technical data

Max. earth covering:	1200 mm (3' 11")
Max. axle load:	2.2 to (4851 lbs)
Max. vehicle weight:	3.5 to (7717 lbs)
Earth covering required for vehicle loading:	400 – 1000 mm (15.7 – 3' 3.4")
Groundwater stability:	600 I (159 US gal.), 900 I (238 US gal.) Submersion depth max 430 mm (16.9"), 1,200 I (318 US gal.) Submersion depth max 550 mm (21.7")
Earth covering required for groundwater stability:	300 – 600 mm (11.8 – 23.6")
Connection:	600 I (159 US gal.) DN110 (4") 900 I (238 US gal.) und 1,200 I (318 US gal.) DN110 (4")/DN160 (6")



Accessories

- > Filling pumps
- page 118
- > Water sockets
- page 118
- > Accessories
- page 120

Water drawing columns and water connection wells

Convenient drawing unit



TIP
Ideal for completing the pump package

Water drawing column

- Column for easily drawing water in the garden.
- It includes a 19 mm outlet tap (¾") for low-cost water drawing.
- Connection via 19 mm fitting (¾") below.
- Simple assembly, holes in the base are available.
- Made of particularly strong and weatherproof plastic.

Water drawing column	Rondo	lightwood	darkwood	lightgranite	darkgranite
Order no.	356021	356031	356030	356026	356025
Column	120 mm (4.8")	130 x 130 mm (5.2 x 5.2")	130 x 130 mm (5.2 x 5.2")	130 x 130 mm (5.2 x 5.2")	130 x 130 mm (5.2 x 5.2")
Base	190 mm (7.5")	250 x 250 mm (9.9 x 9.9")	250 x 250 mm (9.9 x 9.9")	250 x 250 mm (9.9 x 9.9")	250 x 250 mm (9.9 x 9.9")
Height	900 mm (35.4")	1000 mm (3' 3.4")	1000 mm (3' 3.4")	1000 mm (3' 3.4")	1000 mm (3' 3.4")
	Rondo	Wood		Granite	
	Q WEBCODE G9101	Q WEBCODE G9108		Q WEBCODE G9107	



Water Connector external

For low-cost water drawing in the garden For jet and submersible pump incl. 2-way valve and 25 mm (1") connection



- Made of particularly strong and weatherproof plastic.
 - Ideal as an addition to the garden Comfort, Eco-Plus and Professional packages
- Order no. 202060

Q WEBCODE G9102



Water Connector internal

Drawing water directly from the tank. Easy installation of the Mini or Maxi telescopic dome lid, 25 mm (1") connecting tube

Order no. 375119

Q WEBCODE G9103

Water drawing column



Fountain shaped as a classic stone fountain. Realistic imitation in particularly strong and weatherproof plastic.

Water drawing column	Venezia lightgranite	Venezia redgranite	Roma lightgranite	Roma redgranite
Order no.	356100	356102	356101	356103
Height	900 mm (35.4")	900 mm (35.4")	1000 mm (3' 3.4")	1000 mm (3' 3.4")
Width	440 mm (17.3")	440 mm (17.3")	540 mm (21.3")	540 mm (21.3")
Depth	520 mm (20.5")	520 mm (20.5")	540 mm (21.3")	540 mm (21.3")
Height basin	150 mm (6.0")	150 mm (6.0")	250 mm (9.9")	250 mm (9.9")
	Venezia		Roma	
	Q WEBCODE G9109		Q WEBCODE G9110	



Stainless steel water drawing column

Elegant stainless steel column for the garden. Chrome tap included. 19 mm (¾") connection in base with external thread.

Order no. 356020

Ø Column	Ø Base	Height
100 mm (4.0")	200 mm (7.9")	900 mm (35.4")

Q WEBCODE G9104

Accessories for rainwater harvesting



	Order no.
Special drills	
For pipe DN50 (2"), incl shank mount Ø 58 mm (2.3")	332004
For pipe DN75 (2.8"), incl shank mount Ø 83 mm (3.3")	202002
For pipe DN110 (4"), incl shank mount Ø 124 mm (4.9")	202003
For pipe DN160 (6"), incl shank mount Ø 175 mm (6.9")	332002
For pipe DN200 (8"), incl shank mount Ø 210 mm (8.3")	332005

Special sealing

For tank joins and other connections

For piping	Hole diameter	Wall thickness	Colour	Material	
DN32 (1.3")	46 mm (1.9")	4 – 8 mm (0.2 – 0.4")	black	EPDM	332036
DN19 (0.8")	45 mm (1.8)	1 – 15 mm (0.04 – 0.6")	black	EPDM	330383
DN32 (1.3")	58 mm (2.3")	1 – 15 mm (0.04 – 0.6")	black	EPDM	330347
DN50 (2")	58 mm (2.3")	4 – 8 mm (0.2 – 0.4")	black	EPDM	332038
DN50 (2")	58 mm (2.3")	10 – 18 mm (0.4 – 0.8")	black	EPDM	332045
DN75 (2.8")	83 mm (3.3")	3 – 5 mm (0.2 – 0.2")	grey	EPDM	332041
DN75 (2.8")	83 mm (3.3")	4 – 6 mm (0.2 – 0.3")	green	EPDM	332039
DN75 (2.8")	83 mm (3.3")	9 – 16 mm (0.4 – 0.7")	black	EPDM	332040
DN110 (4")	124 mm (4.9")	4 – 6 mm (0.2 – 0.3")	green	EPDM	332031
DN110 (4")	124 mm (4.9")	9 – 13 mm (0.4 – 0.6")	black	EPDM	332033
DN110 (4")	124 mm (4.9")	14 – 17 mm (0.6 – 0.7")	red	EPDM	332032
DN110 (4")	124 mm (4.9")	17 – 21 mm (0.7" – 0.9")	blue	EPDM	332030
DN110 (4")	124 mm (4.9")	9 – 13 mm (0.4 – 0.6")	grey	NBR	332053
DN110 (4")	124 mm (4.9")	14 – 17 mm (0.6 – 0.7")	dark red	NBR	332054
DN160 (6")	175 mm (6.9")	6 – 11 mm (0.3 – 0.5")	black	EPDM	332035
DN160 (6")	175 mm (6.9")	11 – 21 mm (0.5 – 0.9")	light grey	NBR	332046
DN200 (8")	210 mm (8.3")	9 – 13 mm (0.4 – 0.6")	black	EPDM	332051
DN200 (8")	210 mm (8.3")	11 – 21 mm (0.5 – 0.9")	light grey	NBR	332049

Aqua-Control+

351021

Aqua-Control+ displays the exact water level in the tank and switches in automatically the intake of drinking water when needed. This safeguards the smooth running of the entire system at all times. In addition, the pump is protected against dry running. Digital display and configurable intake rate in 1 % steps. Two-year warranty.

Digital level gauge

351013

Childproof 24 V technology with 20 m (65' 7.4") data line. Digital display in 1 % steps, any tank size up to 3 m (9' 10.1") in height, simple assembly, also as retrofit on existing systems, two-year warranty.

Wall duct DN110 (4")

1 x 25 mm (1") + 2 x cable bushing 331002

Wall duct DN160 (6")

1 x 25 mm (1") + 1 x 32 mm (1¼") + 2 x cable bushing 331003

Pinch sealing prevents thermal and moisture bridges in masonry lead-throughs. Lead-through options for intake pipe (DN160 (6") only), suction hose, sensor cabling, and pump or float switch wiring.



INTEGRATED INTERFACE TO BUILDING BUS SYSTEM/FACILITIES



Use wall all duct only with unpressurised water.

	Order no.
--	-----------

Calmed inlet digester

So that fine dirt particles can deposit on the tank base, the filtered water is routed through the calmed inlet digester on the base of the tank.

DN110 (4")	330140
DN160 (6")	330453
DN200 (8")/315 (12")	330454



DN110 (4")



DN160 (6")



DN200 (8")/315 (12")

Overflow siphon

As an odour trap and for disposal of the floating layer

DN110 (4")	330108
DN160 (6")	330450
DN200 (8")	330451
DN315 (12")	330452

As above, but with rodent guard

DN110 (4")	331004
DN160 (6")	331025



DN110 (4")



DN160 (6") (with fitting)



DN200 (8") (with sleeve)

Rodent guard

Of stainless steel for use in commercially available underground pipes. Effective and reliable guard against rodents.

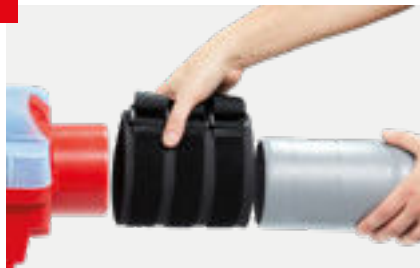
DN110 (4")	331008
DN160 (6")	331013

Quick assembly sleeve Spannfix

Patented connection between two sleeveless pipes (butt joining), no assembly tools needed!

3er- Spannfix – DN110 (4")	340502
2er- Spannfix – DN110 (4")	295909
2er- Spannfix – DN160 (6")	340546

FOR BUTT PIPE CONNECTIONS



DN200 (8")
DN315 (12")



DN315 (12")



Accessories for rainwater harvesting



	Order no.
PVC pressure hose	
Yellow with fabric lining, size 25 mm (1")	
5 metres (16' 4.9")	330075
10 metres (32' 9.7")	330076
15 metres (49' 2.6")	330077
25 metres (82' 0.3")	330078



PVC suction hose	
Grey with reinforcing ribs, size 25 mm (1")	
5 metres (16' 4.9")	330188
10 metres (32' 9.7")	330189
15 metres (49' 2.6")	330190
25 metres (82' 0.3")	330191



PVC suction hose	
Grey with reinforcing ribs, size 32 mm (1 ¼")	
5 metres (16' 4.9")	330060
10 metres (32' 9.7")	330062
15 metres (49' 2.6")	330063
25 metres (82' 0.3")	330065



Special suction and pressure hose	330624
PVC hose, with spring steel coil, high bending strength, max pressure 10 bar, max vacuum 0.9 bar, size 25 mm (1"), colour: black	



Suction pipe	333002
Scope of supply: Strainer, non-return valve of brass, suction hose with angled hose connector 25 mm (1"), length: 250 cm (8' 2.5") shortenable	



Suction fitting	
Suction hose with filter basket, mesh width 1.2 mm (0.05") and non-return valve, connection 25 mm (1") external thread	
4 m (13' 1.5")	355012
7 m (22' 11.6")	355013



PE suction pipe	330082
12 m (39' 4") long, for connecting pump to tank. With brass locking screws, 25 mm (1") internal thread and brass angle screws 90°, 25 mm (1") external thread	



	Order no.
Floating water extraction unit	
Scope of supply: float ball, non-return valve with stainless steel fine-filter basket, suction hose with brass connecting thread 25 mm (1") internal thread, length: 300 cm (9' 10.1")	
Fine filter NW 1.2 mm (0.05")	333014
Micro filter NW 0.23 mm (0.009")	333015



Floating suction fitting with fine filter	330054
Includes: Non-return valve with hose connector, 25 mm (1"), fine filter basket with mesh width of 1.2 mm (0.05"), float ball with eye and ring, without hose	



Floating suction fitting with micro-fine filter	330055
Includes: Non-return valve with hose connector 25 mm (1"), micro fine filter basket with mesh width of 0.23 mm (0.009"), float ball with eye and ring, without hose	



Labelling kit	330122
For rainwater harvesting systems, consisting of engraved plated, adhesive foil, adhesive tab, pipe symbols	



Retention accessories

VS drain regulator	
Adjustable discharge can be set project-specifically	
DN110 (4")	340512
DN160 (6")	340548
DN200 (8")	340557



DN110 (4"), DN160 (6"),
DN200 (8")

VS drain regulator DN315 (12")	340558
Adjustable discharge 15–75 l/s	



DN315 (12")

Drain regulator for Platin flat tank	369016
0.05–2.0 l/s, connection DN110 (4"), 1.5 m (4' 11.1") hose, larger discharge values on request	

Drain regulator for Carat underground tank	369020
0.05–2.0 l/s, connection DN110 (4"), 3 m (9' 10.1") hose, larger discharge values on request	





for a greener planet

for a greener planet

Climate change. Our world is currently facing huge challenges. In these times, we need role models. Inspirers who not only preach sustainability, but also put it into practice. Just as we at GRAF are already making an important contribution. After all, it's not just our solutions for rainwater management and other water-related applications that are sustainable through and through. The recycling plastic from which we manufacture our products is also sustainable.

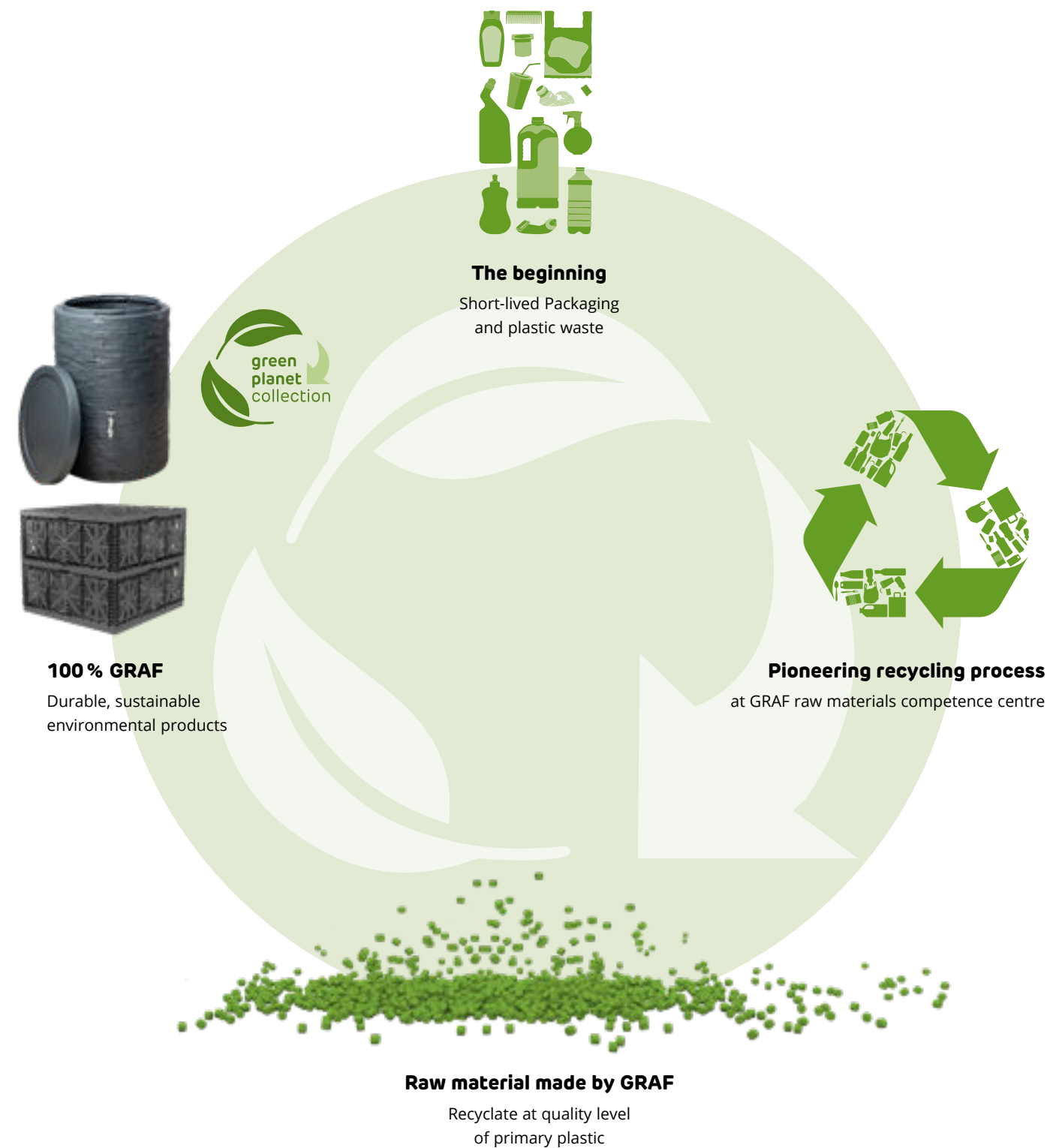
For example, we turn short-lived food packaging into an EcoBloc infiltration module that lasts for generations. This is how we can make our cities a little safer against increasing heavy rainfall events. Or rainwater tanks that allow us to water our gardens with a clear conscience, even during hot spells. Quite incidentally recycling saves us about 100,000 tonnes of CO₂ every year – as much as more than 60,000 cars emit.

By the way: we recycle our products ourselves. Our raw materials competence centre makes us unique. It is our heart, which not only contains all our innovative power, but also our lifeblood. For a better world for all of us – for a greener planet.

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The GRAF recycling cycle



This is us

The whole world is talking about sustainability. For us, it has long been a natural part of our DNA. We recognized the potential of rainwater early on: „Rainwater is free“ was one of our first campaigns back in the 1970s. Rain barrels were produced in our family business as early as 1974. The first underground tanks for rainwater harvesting followed just four years later. GRAF rain barrels have been made from recycled material since 1980. By the way, rainwater is still free of charge. But in times of climate change, drought and heavy rain, sustainable water management is much more than that: it is a valuable contribution to our future.

For this we stand



75 %
share of recycling material



Environmental products for SUSTAINABLE water management



100.000 TONNES CO₂ savings
every year as much as more than
60,000 cars emit



LONG SERVICE LIFE
and spare parts supply



Recycling material FREE FROM POLLUTANTS



80 % share of renewable energies in production



Products FULLY RECYCLABLE



State-of-the-art production facilities for LOW ENERGY CONSUMPTION

For further information see:
www.graf.info/sustainability



learn more



for a greener planet



Stormwater Management

Further details on infiltration, retention, and rainwater treatment can be found in our "Stormwater Management" range catalogue.

Please note:

Information on all products and systems in this brochure is subject to changes and errors.

Pictures and photographs are approximate only.

The applicable technical documentation for the products shall control, which we will be happy to send you on request.

All offers, deliveries and services are subject to our general terms and conditions, which we will also be happy to send you.

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www.graf.info

RAINWATER HARVESTING



STORMWATER MANAGEMENT



WASTEWATER TREATMENT SOLUTIONS



SEPARATORS



GARANTIA GARDEN PRODUCTS & MULTI-PURPOSE CONTAINERS



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