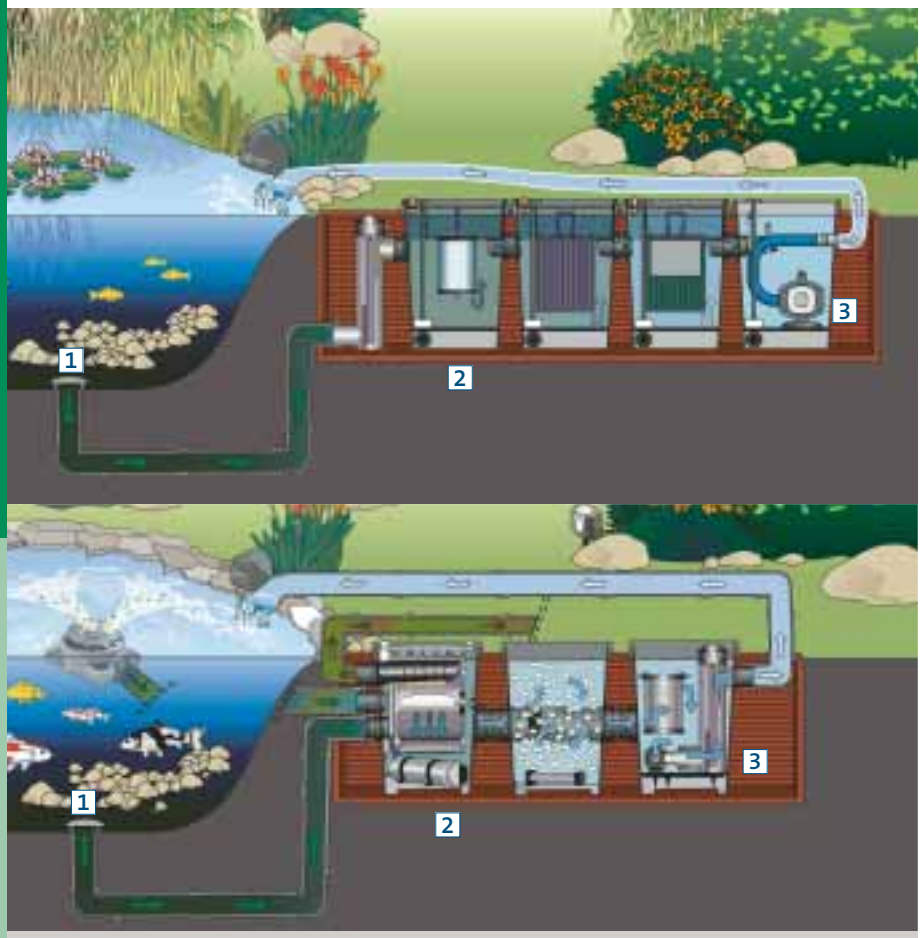


Schematic diagram: Module filter **ProfiClear** installed as »gravity-fed filter system«

Filter systems for clear water dreams

The **ProfiClear modular filter systems** can be operated in two different ways depending on the local conditions: In accordance with the **gravity-fed principle** or as a **pump-fed system**.

Regardless of the variant for which you decide – **ProfiClear modular filters offer variable implementation** and are based on decades of OASE experience in the field of pond and system technology. This means mature technology of the highest quality.

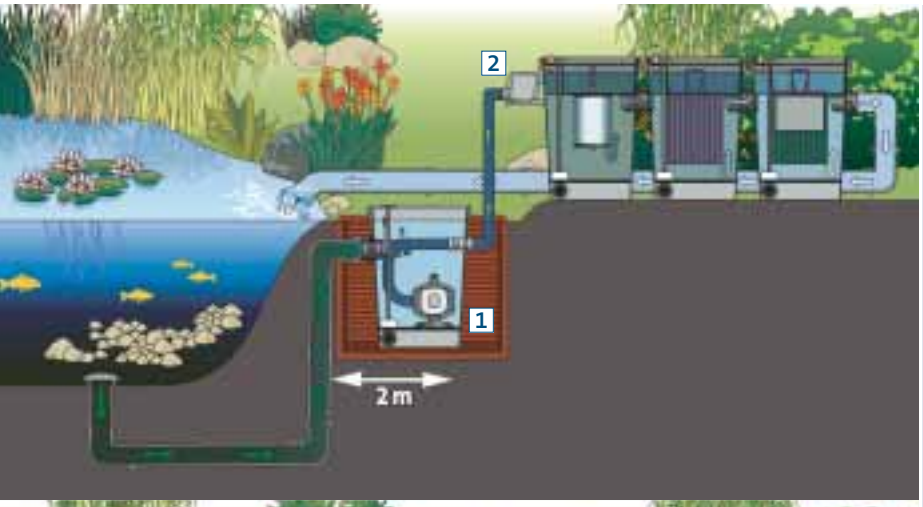
ProfiClear – Gravity-fed principle

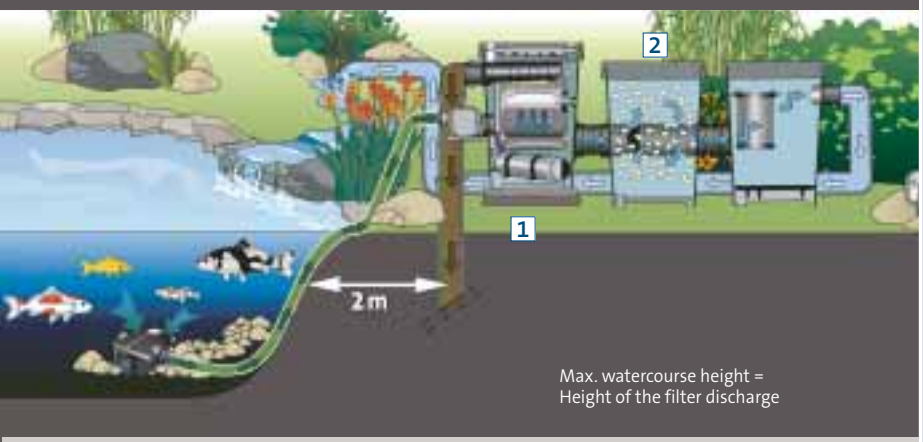
With the gravity-fed system the filter is recessed into the ground and made level to the water line of the pond. Polluted pond water reaches the first filter module via the bottom drain or a liner transition. Because the pump is not positioned at the beginning of the system, the coarse debris extractor can remove suspended matter in the water very effectively.

The pump is in the pump chamber at the back of the system and conveys the cleaned water back into the pond. Since there are no significant height differentials to overcome, energy-efficient AquaMax Eco Gravity pumps can be used.

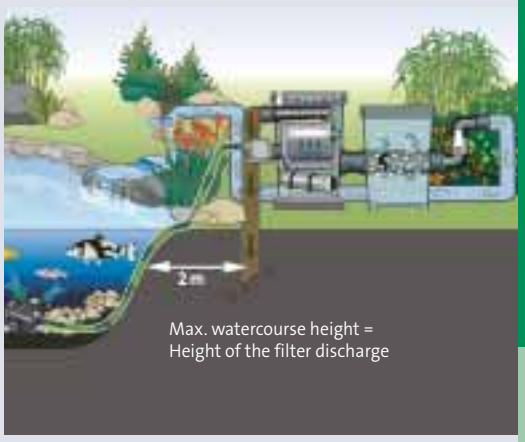
System advantages at a glance:

- **Effective removal of suspended matter through exploitation of the gravity-fed principle**
- **Energy-efficient, as there is virtually no height differential and only minimal friction losses occur**
- **Can be integrated inconspicuously in the water garden**
- **UVC devices can be installed downstream or even upstream with the new Bitron Gravity**
- **Optimally matched to OASE AquaMax Eco filter pumps**





Schematic diagram: Module filter **ProfiClear** installed as »pump-fed system«



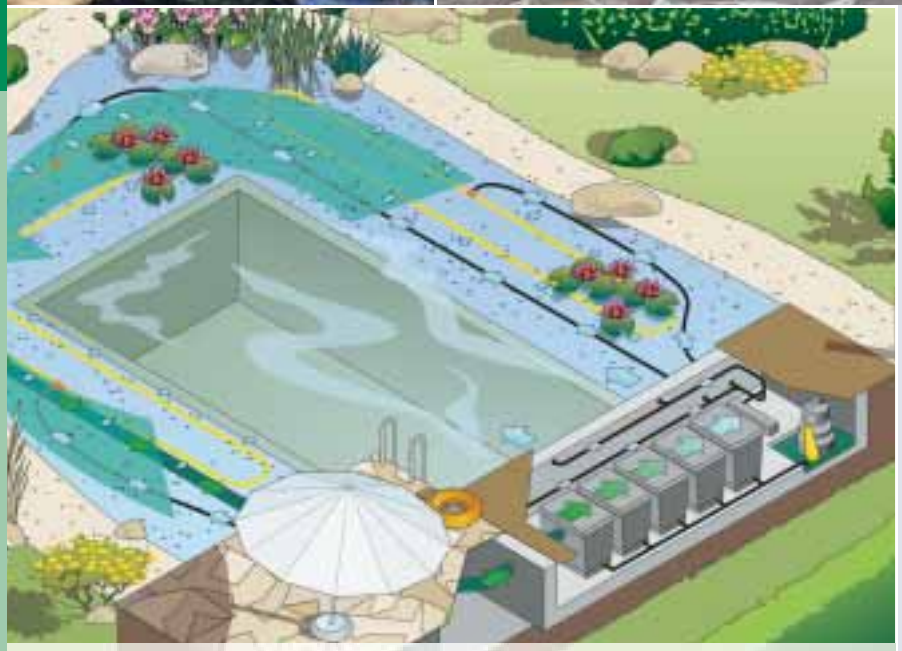
With the optional discharge adapter you can operate the ProfiClear Premium in pump-fed setup even without the individual chamber.

ProfiClear – Pump-fed principle

With the pump-fed principle the filter system is installed above ground, and thus it is also above the water level of the pond. The polluted pond water is conveyed out of the pond or out of the levelled pump chamber and into the filter system using a pump. The cleaned water flows back via a freely inclined pipeline, watercourse, or waterfall. In this process the source of the watercourse is not higher than the filter discharge.

System advantages at a glance:

- **Can be easily retrofitted to existing ponds**
- **Minimum installation effort**
- **Easy upstream installation of UVC devices**
- **Easy to extend the system**
- **Optimally matched to OASE AquaMax Eco Premium filter pumps**



Schematic diagram: **ProfiClear** module filters are outstandingly suited for use on swim ponds

Top 3 product characteristics

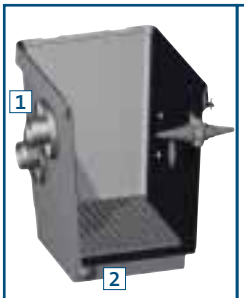
- Can be individually matched to the size and the conditions of the pond
- Can be modularly extended if the pond changes
- Can be used in the energy saving gravity fed system

	Fresh Water	Pool Water	Sea Water
ProfiClear Classic	●	○	○

ProfiClear Classic – Reliable modular filter system for large bodies of water

System advantages at a glance:

- Ideal for large ponds and swim ponds up to 200 m³
- Modularly extensible filter system for individual adaptation to local conditions
- Individual solutions through bringing together of different components
- Can be implemented in any size of pond and under any pond conditions
- Can be used as a pump fed version as well as a particularly energy saving gravity fed filter
- Coarse pollutant extraction with automatic cleaning (optional accessory)
- Easy maintenance cleaning handles and floor drains in each filter chamber
- High quality and impact resistant GRP and perfect workmanship
- Optimally matched to OASE filter pumps
- Protection against disproportionate algae growth when using the phosphate binder module



	A ProfiClear Classic Pump chamber	B ProfiClear Classic Coarse debris extractor	C ProfiClear Classic Filter foam module	D ProfiClear Classic Phosphate binder module
Dimensions (L x W x H) [mm]	830 x 600 x 820			
Net weight [kg]	34.40	36.10	40.40	43.35
Coarse debris extraction [µm]	–	800	–	–
Biological filter surface [m²]	–	–	90.0	148.0
Special filter granulate [kg]	–	–	–	4.00
Number of blue filter foams [EA]	–	–	3	–
Number of red filter foams [EA]	–	–	3	–
Number of black filter foams [EA]	–	–	–	6
Temperature display	No			
Inlets ProfiClear Classic	2 x DN 110 / DN 150	1 x DN 110 / DN 150 + 2 x DN 50		
Outlets ProfiClear Classic	25–50 mm (1"–2") + 1 x DN 50	1 x DN 110 / DN 150		
Connections, sludge discharge	DN 75			
Max. flow rate [l / h]	25000	12500		
Rec. flow rate (pumped) [l / h]	–	8000		
Rec. flow rate (gravitation) [l / h]	–	6000		
Other	Pollutant discharge incl. slide valve			
Description	**Whether gravity fed principle or pump fed system – the ProfiClear Classic pump chamber ensures optimal pump position.** • Filters mechanically and biologically • Reduction of pressure losses • Safe and standard conformant set up for swim ponds • Easy maintenance and winter care • Protection against excessive silt • Two inlets 1 incl. regulator for individual adjustment of the inflow • Debris that accumulates in the sediment tank is flushed out via the bottom drain 2	**Enables easy mechanical extraction of solids up to 800 µm in size.** • Incoming water is fed via two large-surface extraction sieves 1 into the next filter chamber • Pulling the slide valve 2 flushes out the debris via a DN 75 discharge • Incl. hose coupling for fresh water rinsing • The extraction sieves are quiccleaned by interior and exterior brushes by operating the cleaning handle 3 • A pollutant level indicator 4 signals when maintenance is required • Automatic and regular cleaning is possible via the ProfiClear Screendrive (optional accessory)	**Reliably removes toxins such as ammonium/ ammonia or nitrite.** • The water to be filtered is channelled through the coarse and fine foams 1 that contain the vital filter biology • The oxygen necessary for the nitrification processes is supplied via connections on the housing • The foams are cleaned by being compressed against the intermediate floors via the cleaning levers 2 • Pulling the slide valve 3 flushes the debris out via a DN 75 discharge, which can be supported through rinsing via cleaning nozzles	**Converts nitrate into gaseous nitrogen (denitrification) and eliminates phosphates.** • A majority of the water is channelled past the 1 filter foam. This establishes the low oxygen milieu that is so important for the denitrifying bacteria • The lesser portion of the flow volume is channelled through the PhosLess inserts 2 (4 units) • Binders ensure quick and safe phosphate removal • Elimination of these nutrients significantly restricts string algae growth • Virtually maintenance free due to bypass regulation in the foam prevents clogging • A pollutant level indicator 3 signals when maintenance is required • Pollutant discharge 4 incl. slide valve
Order no.	**51061**	**51064**	**51065**	**51066**

The solution for large koi ponds. Koi pond owners know that what starts as a small pond with a few koi quickly, with increasing passion becomes a larger koi pond installation. With the number of fish and use of the pond, the demands imposed on performance and convenience of the a filter system, naturally increase as well, today no one wants to make any compromises.
The new generation ProfiClear Premium module filter system has been developed jointly in intensive cooperation with leading european koi experts, and with its extremely reliable filter performance, its well thought-out functions, and its unusual price / performance ratio, it sets totally new standards.
It consists of three modules, drum filter module, moving bed module and individual module, the entire system even ensures clear water if the pond is extended by an additional 50m³ or if their is a desire for swimming. The secret is its flexibility; depending on the use of the pond a second Moving Bed module can be connected, and the Individual module can be equipped with additional filter media. In the most uncomplicated way, this increases the overall filter capacity and large bodies of water, such as natural ponds and swim ponds up to 200m³ remain clear.
Discover the versatile functions and convincing advantages of this system; it remains unique in is class!

ProfiClear Premium	Fresh Water	Pool Water	Sea Water	220-240 V	400 V	110-120 V	50 Hz	60 Hz
Individual Module	●	○	○	○	○	○	○	○
Moving Bed Module	●	○	○	○	○	○	○	○
Drum filter pump-fed	●	○	○	●	○	○	●	○
Drum filter gravity-fed system	●	○	○	●	○	○	●	○

www.oase-livingwater.com/proficlearfilm

ProfiClear Premium – Sophisticated filter system for koi ponds

System advantages at a glance:

- Intelligent high end module filter system for Koi ponds and other large bodies of water to 260 m³
- Outstanding filter capacity with intelligent control functions
- Intelligent self cleaning function for unique maintenance free operation (drum filter module)
- Highly effective decomposition of pollutants and nutrients, thanks to professional filter media and moving bed process (MovingBed module)
- Flexible adaptation of the filter system to individual requirements (individual module)
- Mature, professional technology with more than 3 years of development time
- Innovative and reliable product »made in Germany*« *Except pressure pump

ProfiClear Premium sieve
- Accessories for the Drum Filter Module
- At 150 µm, ensures removal of coarser debris and thus reduces water consumption
- Ideal for use on natural ponds or swim ponds

ProfiClear Premium sieve	
Order no.	50947

Drum filter module

Intelligence sets the pace. The intelligent switch centre removes coarse debris to 60 µm – i.e. finer than a hair.

- Maximum partical removal to 60 µm and flow-through rates to 25 m³/h for a crystal clear view
- Automatic self-cleaning offers maximum convenience
- Rinsing is executed with cleaned pond water, a water connection is not required
- A watertight microcontroller system monitors and controls the main functions, operation is as easy as child's play (Plug & Play)
- Control system with retrospective display of errors in running operation, as well as adjustment possibilities for forced cleaning, duration of cleaning and supplemental cleaning
- Pollutant rakes on the sieves reliably remove string algae and other larger particles from the drum
- Pollutant trough made of ductile EPDM material prevents jamming of larger particles
- VDE testing certifies reliable and safe functions
- Flexible implementation possibilities; can be used in the gravity fed system, as well as in the pump fed system
- Safety level switch in the pumped system prevents jamming due to debris particles
- Stable housing thanks to solid stainless steel elements and dimensionally stable Duroplast
- Individually removable sieve elements (no tools required) and free-wheeling functions for easy access to the drum
- Incomparably quiet through extensive noise damping
- Powerful, high quality pressure pump is integrated for flushing the drum
- Full flexibility for the connection with up to 4 x DN 110 inlets (1 x optional)
- Screen elements in 150 µm mesh width optionally available as accessories

Moving Bed Module

Hel-X ensures optimum media circulation, Original Hel-X biomedia are highly effective at degrading pollutants in the moving bed process.

- Extremely large, protected settlement surface for microorganisms (704 m²/m³)
- Innovative bypass technology for optimal movement of the Hel-X bio-elements, even at high flow rates
- Removal of toxins, such as ammonium / ammonia and nitrite.
- Hel-X Biomedium: 50 l decompose approx 300 g of fish food per day. Its performance depends on temperature, feed quality and degree of settlement of microorganisms
- Aerator bar for optimal oxygen enrichment and turbulence already installed
- Advantages of the moving bed process: Permanent, optimal oxygen supply; self-cleaning effect from dead biomass, know-how from industrial water treatment
- Integrated bottom drain with high-quality, finely engineered slide valve

Integrated aerator can be connected to AquaOxy aerator pumps.

Biological surface for settlement of the microorganisms (left – biomedia that has not yet been used, right – with settled microorganisms).

Individual module

Flexible with maximum effectiveness. The filter system is flexibly aligned to the individual conditions of the body of water.

- Space-saving pump and UVC chamber for easy integration of: AquaMax Eco Gravity filter pumps and Bitron Gravity UVC clarifiers
- Maximum flexibility in the connection through DN 110 and 2" ducts
- To increase the filter capacity, it is possible to fill the 2 individual baskets in the flow area with additional filter medium up to 8 litres fill volume
- Integrated bottom drain with high-quality, finely engineered slide valve

Convenient filling of the 2 individual baskets with up to 8 litres fill volume.

NEW

ProfiClear Premium	1 ProfiClear Premium **Drum filter pump fed**	1 ProfiClear Premium **Drum filter gravity fed system**
Description	• Filter capacity to 60 µm and 25 m³/h flow through • Automatic self cleaning • A watertight microcontroller system monitors and controls the main function • VDE testing certifies reliable and safe functions • Gravity fed system only: Full flexibility for the connection with up to 4 x DN 110 inlets • Safety level switch in the pumped system prevents jamming due to debris particles • Massive stainless steel elements • Individually removable sieve elements (no tools required) and free wheeling function • Incomparably quiet • High quality pressure pump is integrated for flushing the drum • Filter capacity to 60 µm and 33 m³/h flow through	
Dimensions (L x W x H) [mm]	830 x 600 x 820	
Rated voltage	230 V / 50 Hz	
Power consumption [W]	5	
Power consumption cleaning [W]	1090	
Cable length [m]	2.00 + 5.00	
Net weight [kg]	70.00	
Control unit	Microcontroller	
Temperature display	Digital	
Coarse debris extraction [µm]	60.00	
Number of nozzles / flush quantity	4 x 2.5 l / min	
Flush pump	6 bar	
Flush automation	Sensor, time interval, manual	
Number of sieve elements [EA]	8	
Filter intake surface [cm²]	4200	
Material	GRP Duroplast / stainless steel	
Number of inlets [EA]	2	4
Connections, inlet [mm]	50	–
Connections, inlet	2"	DN 110
Number of outlets [EA]	2	
Connections, outlet	DN 150	
Connections, sludge discharge	DN 75, DN 110	
Connection, flush trough	DN 110	
Connection to	Bitron Eco, Bitron C	Bitron Gravity
Min. flow rate [l / h]	10000	
Max. flow rate [l / h]	25000	33000
Install height above the water level [cm]	40	13
Type of use	Pump fed system	Gravity fed system
Other	Pollutant discharge incl. slide valve	
Order no.	**50773**	**56774**

ProfiClear Premium	2 ProfiClear Premium **Moving bed module**	3 ProfiClear Premium **Individual module**
Description	• Extremely large, protected settlement surface for microorganisms (704 m²/m³) • Innovative bypass technology for optimal movement of the Hel-X bio-elements • Removal of toxins, such as ammonium / ammonia, nitrite and nitrate • 50 l of Hel-X decompose approx. 300 g of fish food per day (can be extended to 100 l / module) • Aerator bar for oxygen enrichment and turbulence already installed • Permanent, optimal oxygen supply; self-cleaning effect from dead biomass • Integrated bottom drain with high quality, finely engineered slide valve	• Space saving pump and UVC chamber for • Maximum flexibility in the connection through DN 110 and 2" ducts • To increase the filter capacity, it is possible to fill the individual baskets in the flow area with additional filter medium up to 8 litres fill volume
Dimensions (L x W x H) [mm]	830 x 600 x 820	
Net weight [kg]	44.00	37.00
Biological filter surface [m²]	43.0	–
Biolog. filter surface protected [m²]	35.5	–
Individual granulate filter	–	2 x 8 litres
Number of sieve elements [EA]	–	2
Material	GFK Duroplast	GRP / stainless steel
Number of inlets [EA]	2	
Connections, inlet [mm]	180	
Number of outlets [EA]	2	
Connections, outlet	–	50
Connections, outlet	DN 150	2", DN 110
Connections, sludge discharge	DN 75	
Min. flow rate [l / h]	10000	
Max. flow rate [l / h]	33000	
Connection to	AquaOxy 2000 – 4800	Bitron Gravity, AquaMax Eco Gravity
Install height above the water level [cm]	13	
Type of use	Pump fed system, gravity fed system	
Other	Aeration pre-installed, pollutant discharge incl. slide valve	Pollutant discharge incl. slide valve
Order no.	**50772**	**50771**

Module filter **ProfiClear Premium** pump fed system

Module filter **ProfiClear Premium** gravity fed system

Selection table – ProfiClear Classic

Natural ponds & swim ponds (without fish stock)		40 m³	60 m³	80 m³	100 m³	120 m³	160 m³	200 m³
Coarse debris extractor	EA	1	1	1	1	2*	2*	2*
Filter foam module	EA	1	1	2	3	3	4	6
Phosphate binder module	EA	-	1	1	1	1	2	2
Pump chamber	EA	1	1	1	1	1	1	1
Bitron 72 W	EA	1	1	–	–	2	–	–
Bitron 110 W	EA	–	–	1	–	–	2	–
Bitron Eco 120 W	EA	–	–	–	1	–	–	2
Optional: Bitron Gravity	EA	1	1	2	2	2	2	2
Pump capacity / h = pond size / x	EA	8	8	8	8	8	8	8

* Double-row configuration (The filter system must be operated in two filter rows that are separate from each other) see illustration below. This table considers the usual flow losses within the filter system.

With fish stock (up to 1 kg / 1000 l)		20 m³	30 m³	40 m³	50 m³	60 m³	80 m³	100 m³
Coarse debris extractor	EA	1	1	1	1	2*	2*	2*
Filter foam module	EA	1	1	2	3	3	4	6
Phosphate binder module	EA	-	1	1	1	1	2	2
Pump chamber	EA	1	1	1	1	1	1	1
Bitron 72 W	EA	1	1	–	–	2	–	–
Bitron 110 W	EA	–	–	1	–	–	2	–
Bitron Eco 120 W	EA	–	–	–	1	–	–	2
Optional: Bitron Gravity	EA	1	1	2	2	2	3	4
Pump capacity / h = pond size / x	EA	4	4	4	4	4	4	4

* Double-row configuration (The filter system must be operated in two filter rows that are separate from each other) see illustration below. This table considers the usual flow losses within the filter system.

Biological performance of the Hel-X Bio medium in the Moving Bed Module:

50 l of Hel-X decomposes approx 300 g of fish food per day. If necessary, the fill level already contained can be extended from 50 l auf 100 l (600 g fish food) per Moving Bed Module with an additional aeration. **Up to 3 Moving Bed Modules per row can be inserted in succession.** Among other factors, biological performance depends on temperature, food quality and the degree to which the Hel-X is settled with microorganisms.

Rules of thumb

How to calculate the right UVC power for your pond

Ponds **without fish stock:** **1 W** UVC power per m³ pond volume
Ponds **with fish stock:** **2 W** UVC power per m³ pond volume
Ponds **with koi stock**: **4 W** UVC power per m³ pond volume

Note: To keep the bacterial load low in the koi pond, the Bitron Gravity should be operated with a max. flow rate of 12.5 m³/h. In this regard recirculation of 55% of the pond volume/h should be the objective. These recommendations are already considered in the table above.

Double-row configuration with ProfiClear as the example
The filter system must be operated in two filter rows that are separate from each other.

Setup – gravity fed system

Setup – pump fed system

Selection table – ProfiClear Premium

Natural ponds & swim ponds		40 m³	60 m³	80 m³	100 m³	120 m³	160 m³	200 m³
Drum filter module	EA	1	1	1	1	1	1	1
Moving Bed filter module	EA	1	1	1	1	2	2	2
Individual module	EA	1	1	1	1	1	1	1
Bitron 72 W	EA	1	1	–	–	–	–	–
Bitron 110 W	EA	–	–	1	1	–	–	–
Bitron Eco 120 W	EA	–	–	–	–	1	–	–
Bitron Eco 180 W	EA	–	–	–	–	–	1	–
Bitron Eco 240 W	EA	–	–	–	–	–	–	1
Bitron Gravity (gravity fed system)	EA	1	1	1	1	2	2	2
Pump capacity / h = pond size / x	EA	8	8	8	8	8	8	8

This table considers the usual flow losses within the filter system.

With fish stock		20 m³	30 m³	40 m³	50 m³	60 m³	80 m³	100 m³
Drum filter module	EA	1	1	1	1	1	1	1
Moving Bed filter module	EA	1	1	1	1	2	2	2
Individual module	EA	1	1	1	1	1	1	1
Bitron 72 W	EA	1	1	–	–	–	–	–
Bitron 110 W	EA	–	–	1	–	–	–	–
Bitron Eco 120 W	EA	–	–	–	1	1	–	–
Bitron Eco 180 W	EA	–	–	–	–	–	1	–
Bitron Eco 240 W	EA	–	–	–	–	–	–	1
Bitron Gravity (gravity fed system)	EA	1	1	1	1	2	2	2
Pump capacity / h = pond size / x	EA	4	4	4	4	4	4	4

This table considers the usual flow losses within the filter system.

Koi ponds		15 m³	20 m³	25 m³	45 m³ (pumped)	50 m³ (gravitation)	60 m³	70 m³	90 m³
Drum filter module	EA	1	1	1	1	1	2*	2*	2*
Moving Bed filter module	EA	1	1	1	2	3	2	3	4
Individual module	EA	1	1	1	1	1	2	2	2
Bitron 110 W	EA	1	1	–	–	–	–	–	–
Bitron Eco 120 W	EA	–	–	1	–	–	2	1	–
Bitron Eco 180 W	EA	–	–	–	1	–	–	1	1
Bitron Eco 240 W	EA	–	–	–	–	–	–	–	1
Bitron Gravity (gravity fed system)	EA	1	1	2	–	2	3	4	4
Pump capacity / h = pond size / x	EA	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5

* Double-row configuration (the filter system must be operated in two filter rows that are separate from each other) see illustration page 194.
This table considers the usual flow losses within the filter system and expert recommendations for sterilisation capacity in koi ponds.