



EVOLUTION
AQUA
INNOVATION IN WATER



www.evolutionaqua.com

ea product training

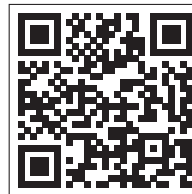
A Guide To Evolution Aqua Pond Products



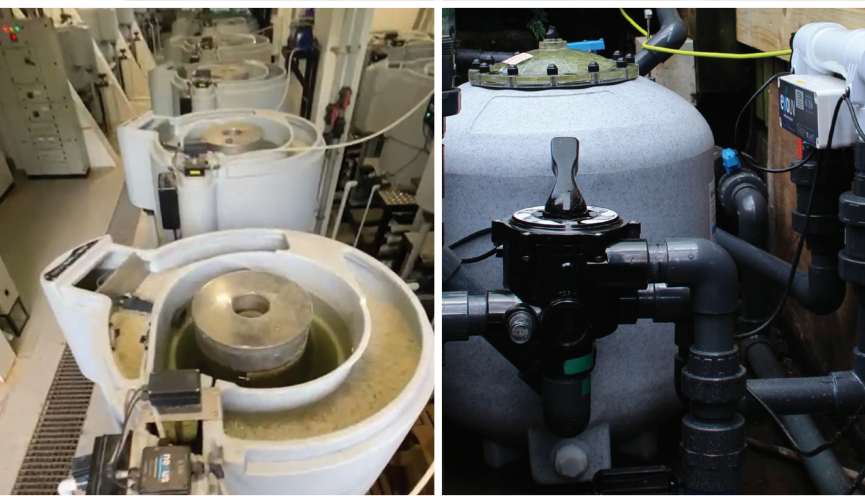
Innovation In Water

About us

- Multi award-winning manufacturer of pond and aquatics technology.
- Founded in 2001, as a specialist in Koi pond filtration.
- One of most popular and respected aquatic brands in the world.
- Manufacture leading products for use in all areas of aquatics, including Koi and ornamental ponds, tropical and marine aquariums, commercial systems, aquaculture, waste water and swimming pools.
- Evolution Aqua are filtration specialists, first and foremost.
- Developed patented technology including filters, ultra-violet clarifiers, filtration media, beneficial bacteria, dechlorinators and more.
- Based in the north west of England, our products are available throughout UK and across the globe.



Scan the QR code
to view our
About Us
webpage



Product Training

Using this guide

- This document aims to provide a basic, fundamental understanding of our core products and be a useful resource to call upon.
- Each product section is colour coded for easy reference.
- Within a product section, we cover general product information, run through the specifications, installation, set-up and dimensions, and also cover maintenance advice.
- In addition to this training guide, we recommend visiting our website **www.evolutionaqua.com**, where you can find even more information along with a host of helpful resources and tools.
- Throughout the guide we invite you to scan QR codes that direct you to product web pages and useful videos on YouTube.



Scan the QR code to view our channel on YouTube



PRODUCT INFO



SPECIFICATIONS



INSTALLATION



DIMENSIONS

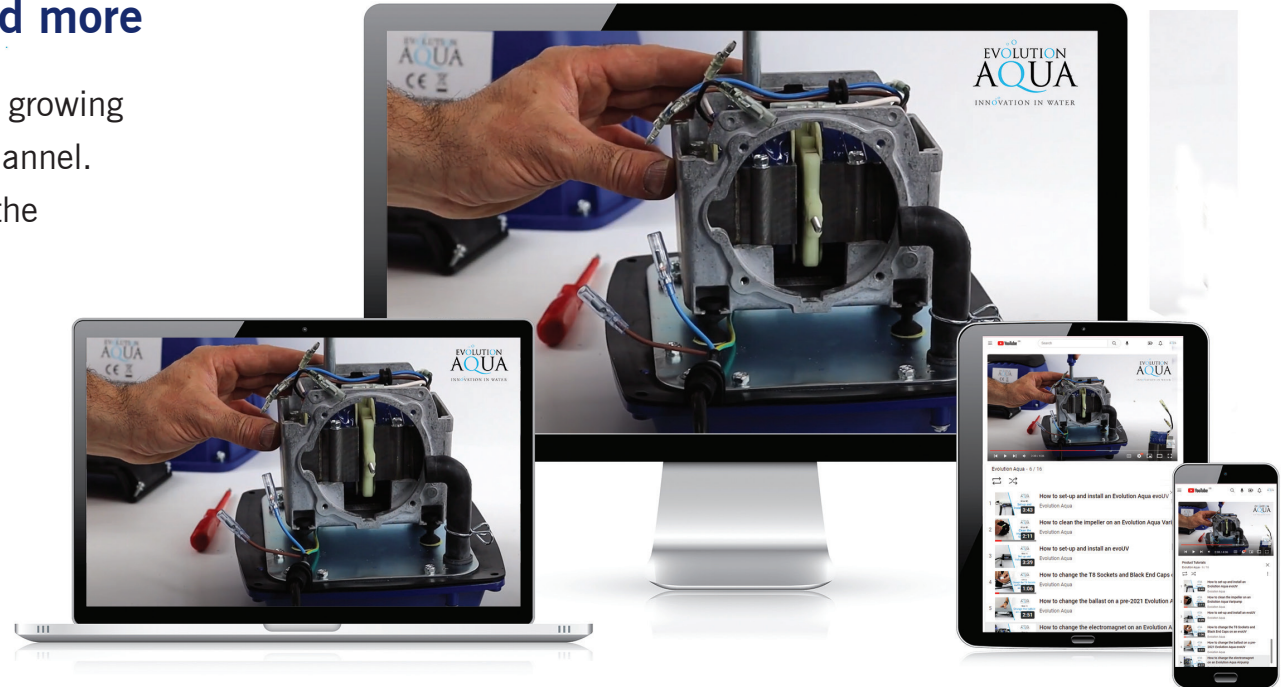
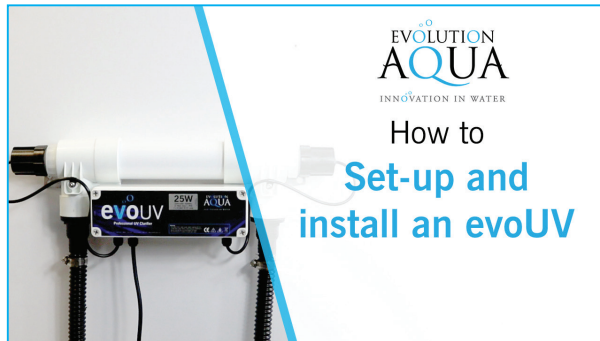


MAINTENANCE

Product Videos

Product tutorials, inspiration and more

To accompany this training guide, we have a growing number of product videos on our YouTube channel. Visit youtube.com/evolutionaqua or scan the QR code below to see our playlists.



Scan the
QR code
to view our
channel on
YouTube



Website Resources

Our website www.evolutionaqua.com provides access to a range of helpful resources.



Scan the QR code to visit our online Help Centre



INSTRUCTION MANUALS

Download **instruction manuals** for all Evolution Aqua products



PARTS STORE

Find **spare parts** and **accessories** for Evolution Aqua products



FAQS

Read **frequently asked questions** about Evolution Aqua products



E-NEWS

Sign up to receive our email newsletters at evolutionaqua.com/newsletter



STOCKISTS

Locate your nearest Evolution Aqua **product stockist**



EA OWNERS GROUP

Join our Facebook community group **Evolution Aqua Pond Owners Club**



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Keep updated with our latest news at facebook.com/evolutionaqua



INSTAGRAM

Check out our posts on Instagram at instagram.com/evolution_aqua



TIKTOK

Follow us on TikTok at tiktok.com/@evolution_aqua



YOUTUBE

Watch our YouTube channel at youtube.com/evolutionaqualtd

Pond Product Selector Tool





Easy to use online pond filtration builder

Our new, easy to use, Pond Product Selector is now live on our website. Simply enter some key information about the pond and our tool will select the most appropriate filtration products, pumps, UV and even add-ons, that meet your needs. Once the tool has selected the products you need it can create downloadable shopping list that you can use to make your purchases. You can even request a call back from our team.

Step by step selection tool



Simply provide some basic details

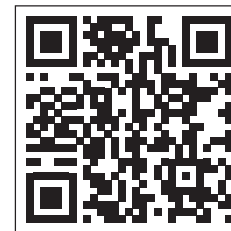
 What is your pond size? ⓘ	 How will you clean your filter?
 What is your installation?	 What is the light exposure?

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Try
It Now

ProductSelector

Online pond filtration system builder



Scan the
QR code
to access the
Pond Product
Selector tool

Volume / Conversion Calculators

Pond volume calculators

Calculating pond volume of rectangular pond:

Scan the QR code
for online calculator tools



AVERAGE LENGTH	x	AVERAGE WIDTH	x	AVERAGE DEPTH	x	FACTOR	=	VOLUME
metres	x	metres	x	metres	x	1,000	=	litres
feet	x	feet	x	feet	x	6.25	=	gallons

Calculating pond volume of a circular pond (Pi x radius²):

RADIUS	x	RADIUS	x	Pi	x	AVERAGE DEPTH	x	FACTOR	=	VOLUME
metres	x	metres	x	3.14	x	metres	x	1,000	=	litres
feet	x	feet	x	3.14	x	feet	x	6.25	=	gallons

Useful conversions

CONVERTING LITRES TO GALLONS

(number of) litres x 0.219969 = (number of) UK gallons

.....

CONVERTING GALLONS TO LITRES

(number of) UK gallons x 4.54609 = (number of) litres

.....

CONVERTING US GALLONS TO LITRES

(number of) US gallons x 3.78541 = (number of) litres

CONVERTING CUBIC METRES TO LITRES

(number of) cubic metres x 1000 = (number of) litres

.....

CONVERTING METRES TO FEET

(number of) metres x 3.28084 = (number of) feet

.....

CONVERTING FEET TO METRES

(number of) feet x 0.3048 = (number of) metres

ea product training

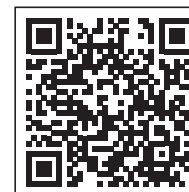
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EVOLUTION
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nexus⁺

Advanced Filtration System With K+Media

- Two models Nexus 220 and Nexus 320
- Mechanical and biological filtration
- Easy to install - pump or gravity-fed
- Simple to maintain, easy to clean
- For ponds up to 34,000 litres



Scan the
QR code
to learn
more on
our website



www.evolutionaqua.com



Nexus Filters

- Nexus are installed on ponds all around the world.
- The very first Nexus were developed in 2001.
- Nexus filters have been tried and tested.
- K+Media and K1 Micro filter media is used.
- Can be upgraded to have automatic cleaning.
- Scan QR code to watch videos about Nexus.



Click on the link below for videos:

<https://tinyurl.com/yc4zb93j>



Nexus Filters



UP TO
18,000
LITRES

nexus220+

Maximum pond size: 18,000 litres / 4,000 gallons

Recommended flow rate: 6,000 lph / 1,320 gph

Maximum flow rate: 10,000 lph / 2,200 gph

Volume of water in Nexus: 510 litres / 112 gallons

Volume of water in outer chamber: 405 litres / 89 gallons

Volume of water in inner chamber: 105 litres / 23 gallons

Amount of K1 Micro in EAZY: 18 litres

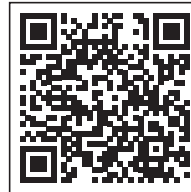
Amount of K+Media supplied: 50 litres

Maximum amount of K+Media: 150 litres



Scan the
QR code

to learn more
on our website



UP TO
34,000
LITRES

nexus320+

Maximum pond size: 34,000 litres / 7,500 gallons

Recommended flow rate: 11,000 lph / 2,420 gph

Maximum flow rate: 13,000 lph / 4,000 gph

Volume of water in Nexus: 840 litres / 185 gallons

Volume of water in outer chamber: 635 litres / 140 gallons

Volume of water in inner chamber: 205 litres / 45 gallons

Amount of K1 Micro in EAZY: 20 litres

Amount of K+Media supplied: 100 litres

Maximum amount of K+Media: 300 litres

Overview of the Nexus

INNER CHAMBER

EAZY (Mechanical Filtration)

Removable, stainless steel filter filled with K1 Micro. Airline ring inside base of filter used during cleaning.

OUTER CHAMBER (Biological Filtration)

Filled with K+Media. Airline ring around base of this chamber to aerate media.

AIRLINE & VALVES

12mm airline & air valves. Connects to air pump that powers outer chamber and cleans Eazy.

OUTLET CHAMBER

Fitted with overflow / by-pass pipe running through grill plate.

WASTE OUTLET & SETTLEMENT AREA

Filled with K+Media. Airline ring around base of this chamber to aerate media.

OUTLET

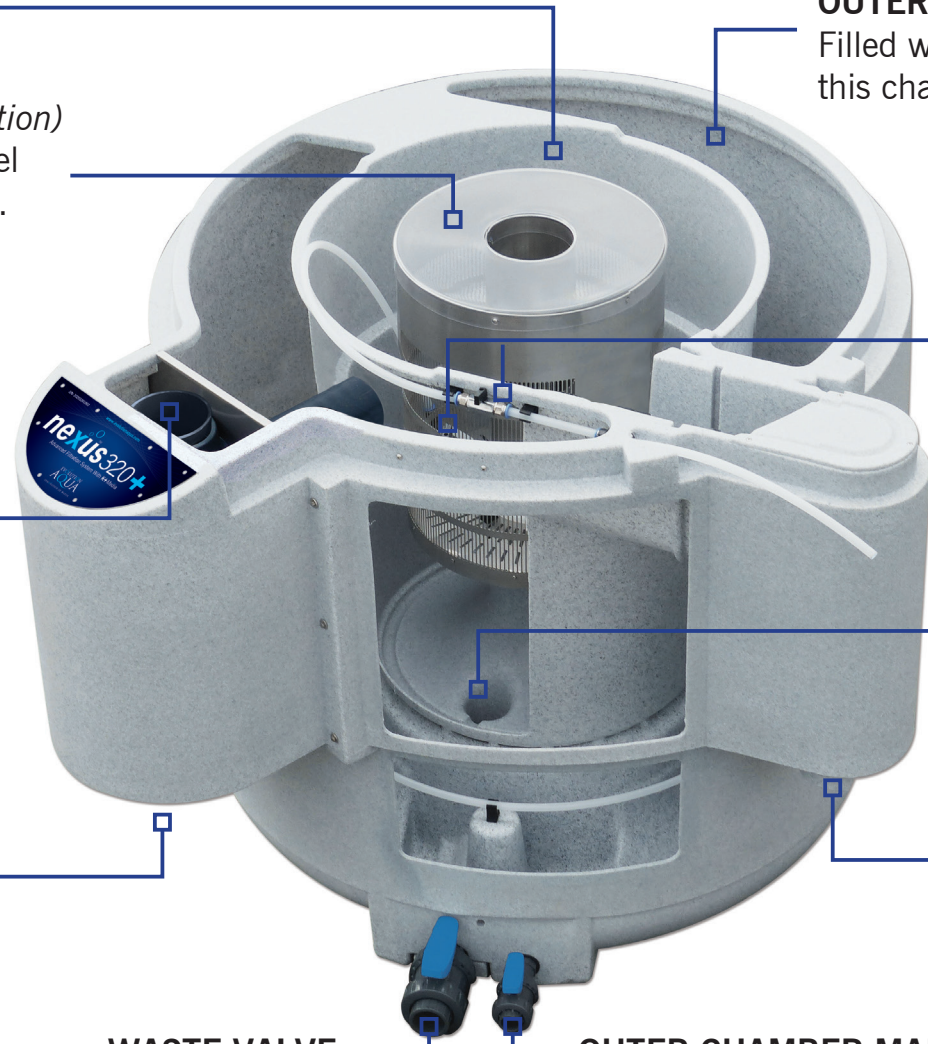
Return to pond. Eazyconnector fitted to connect to pressure pipe.

INLET

Water enters filter. Eazyconnector fitted to connect to pressure pipe.

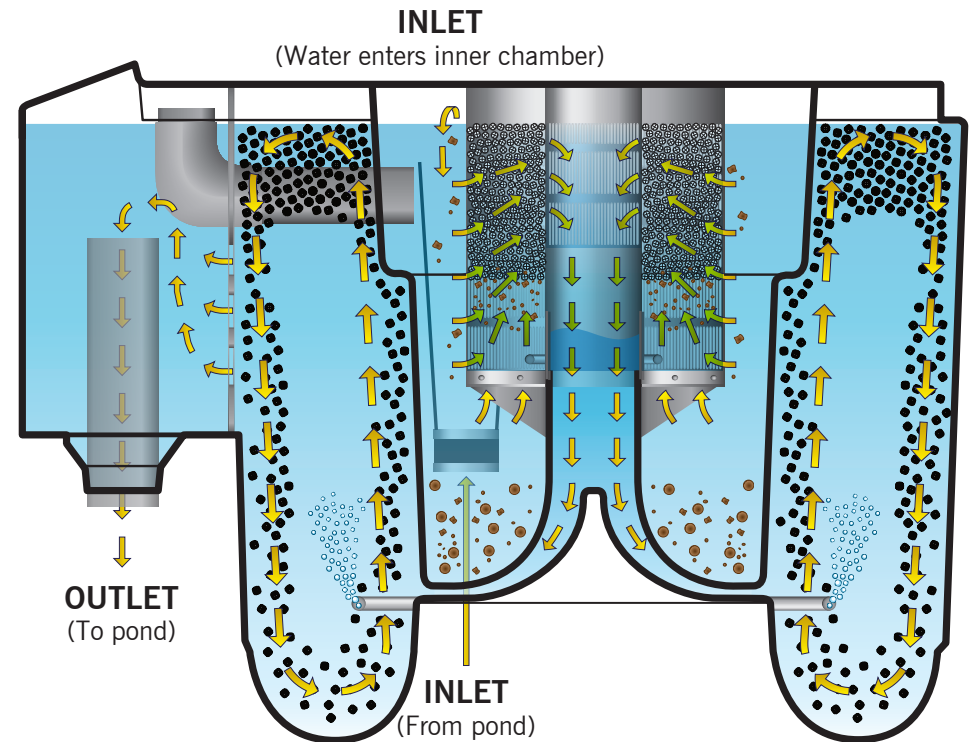
WASTE VALVE
1½" ball valve.

OUTER CHAMBER MAINTENANCE VALVE
¾" ball valve.



How the Nexus works

- Water from the pond enters the Nexus via the inlet into the inner chamber.
- Larger waste particles are captured on the grill of the EAZY, which then settle in the first chamber, (*mechanical filtration*).
- Finer particles that pass into the Eazy are then captured in the static bed of K1 Micro filter media.
- The pond water then enters the outer chamber where biological filtration takes place.
- An air pump injects air into this chamber causing the chaotic movement of K+Media, referred to as Moving Bed technology, aiding biological filtration.
- Bateria and micro-organisms living on the protected surface area of each piece of K+Media help to convert harmful Ammonia and Nitrite, caused by waste, into harmless Nitrate.
- Water then passes through a final stainless steel grill plate and returns to the pond.
- Cleaning is a simple process - divert the air into the Eazy to dislodge any waste and then drain the waste by opening a ball valve for the centre chamber.



Specifications

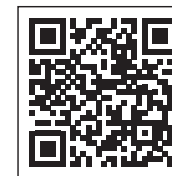
Model	Max. pond size	Max. flow rate	Recommended flow rate	Volume of water in nexus	Amount of K1 Micro supplied in EAZY filter	Amount of K+ Media supplied in Bio Chamber	Max. capacity for K+ Media
nexus220+	18000 Litres 4000 UK Gallons 4800 US Gallons	10000 Litres/hr 2200 UK Gallons/hr 2640 US Gallons/hr	6000 Litres/hr 1320 UK Gallons/hr 1585 US Gallons/hr	510 Litres 112 UK Gallons 135 US Gallons	18 Litres of K1 Micro inside the EAZY	50 Litres of K+ Media in bio chamber	150 Litres of K+ Media in bio chamber
nexus320+	34000 Litres 7500 UK Gallons 9000 US Gallons	13000 Litres/hr 2859 UK Gallons/hr 3431 US Gallons/hr	11000 Litres/hr 2420 UK Gallons/hr 2905 US Gallons/hr	840 Litres 185 UK Gallons 222 US Gallons	20 Litres of K1 Micro inside the EAZY	100 Litres of K+ Media in bio chamber	300 Litres of K+ Media in bio chamber



Automatic Cleaning Upgrade

Nexus can be upgraded with the addition of automatic cleaning systems that fit onto the filter. The cleaning cycle can then be programmed to automatically start when you need to, or you can push the button to initiate the cleaning cycle when you need it.

Scan the QR code to learn more about the Nexus Automatic Cleaning System.



Specifications

AIR PUMP REQUIREMENTS

You can increase the biological capacity of your Nexus+ by adding additional K+Media into the outer chamber. However, you will need to ensure that you have the correct size of air pump to enable the K+Media to move sufficiently. The table (*right*) shows the recommended size of air pump needed for the amount of media used.



Total amount of K+Media in the outer chamber	Recommended Evolution Aqua Air Pump
50 - 75 litres	Air Pump 75
75 - 100 litres	Air Pump 95
100 - 150 litres	Air Pump 130
150 - 300 litres	Air Pump 150



Set-up

- More than one Nexus can be installed on the same pond.
- It is advised to have one filter per bottom drain.
- Ideal flow rate is to pass the full volume of your pond through the Nexus once every two to three hours.

We recommend flow rates of:

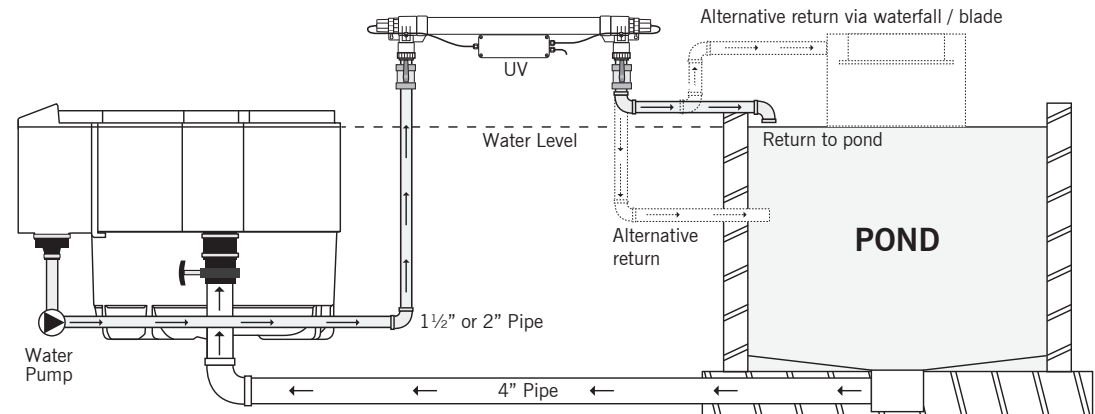
- **6,000 litres per hour for Nexus 220+**
 - **11,000 litres per hour for Nexus 320+**
- Slower flow is better for trapping waste.
 - Install evoUV after a gravity-fed Nexus.
 - Tempest, Eazypod or K+Advanced Filters can be installed on a separate skimmer line to work in conjunction with the Nexus.
 - Install a Cetus Sieve as a pre-filter to remove larger debris from the pond water before it enters the Nexus.



Installation

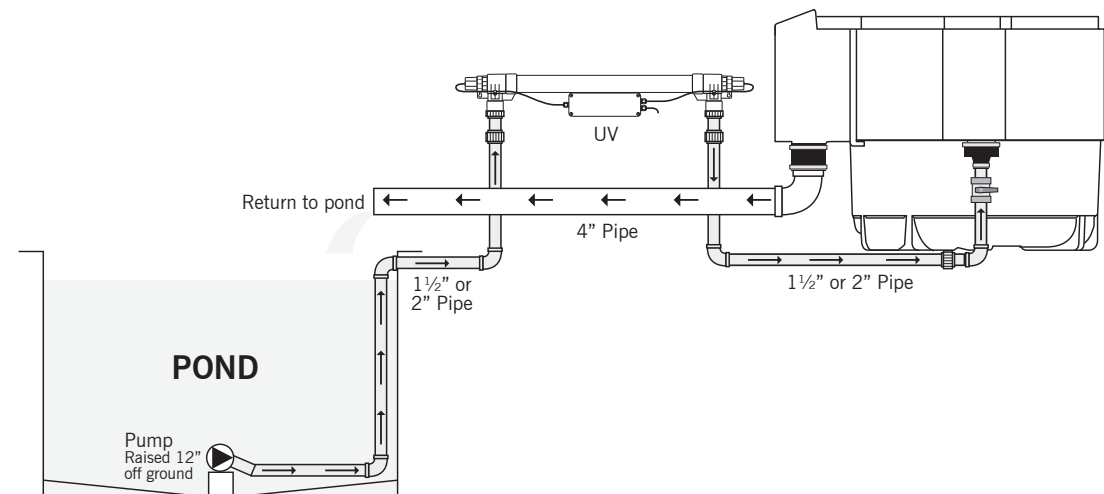
GRAVITY-FED INSTALLATION

- Most common type of installation of Nexus filters is gravity-fed.
- The water level in the Nexus is set at the same height as it is in the pond.
- Water is pulled from the bottom drain into the Nexus via the circulating pump.
- Filtered water then returns to the pond.



PUMP-FED INSTALLATION

- Nexus filters can also be installed on pump-fed set-ups, but user needs to swap fittings around on inlet and outlet.
- Pump in the pond and pushes water into the Nexus.
- Filtered water then returns to the pond via gravity



Installation

GRAVITY-FED INSTALLATION - EXAMPLES



PUMP-FED INSTALLATION - EXAMPLES



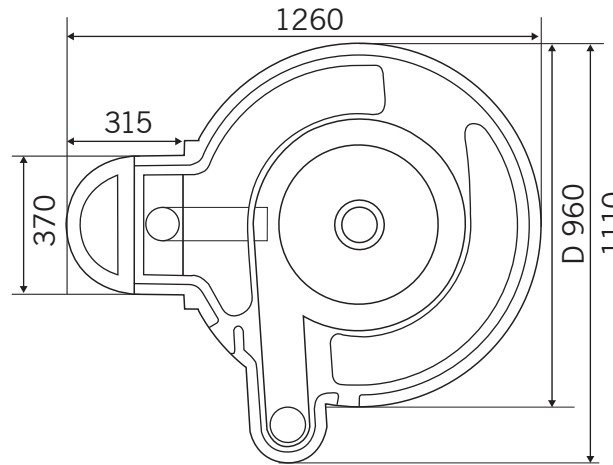
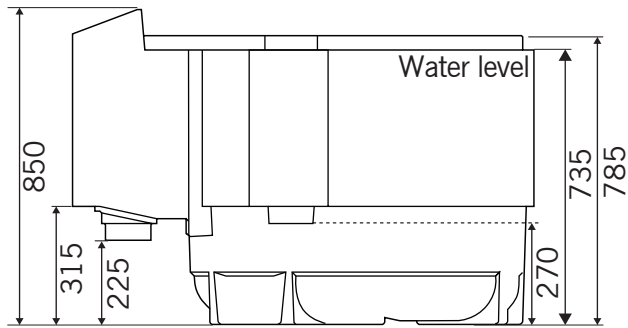
Mandatory installation considerations

- Adequate space is needed to install the Nexus alongside the pond.
- Nexus must be installed on a solid, flat base, a minimum size of 1.2 metre x 1 metre.
- We recommend a 100mm thick concrete base.
- Nexus 220+ weighs in excess of 510kg when filled with water.
- Nexus 320+ weighs in excess of 840kg when filled with water.
- On gravity fed set-ups the user must ensure that lip at the top of the Nexus is level with the proposed surface water level in the pond. We advise:
 - On Nexus 220+ set the concrete base 735mm below where you want the finished pond water surface to be.
 - On Nexus 320+ set the concrete base 950mm below where you want the finished pond water surface to be.
- Nexus are supplied ready to install onto pump-fed set-ups. In order to install it on a gravity-fed set-up the user needs to swap over the eazyconnectors on the inlet and outlet.
- In addition, the stand pipe fitted inside the Nexus outlet must be removed to allow gravity-fed installation.



Dimensions

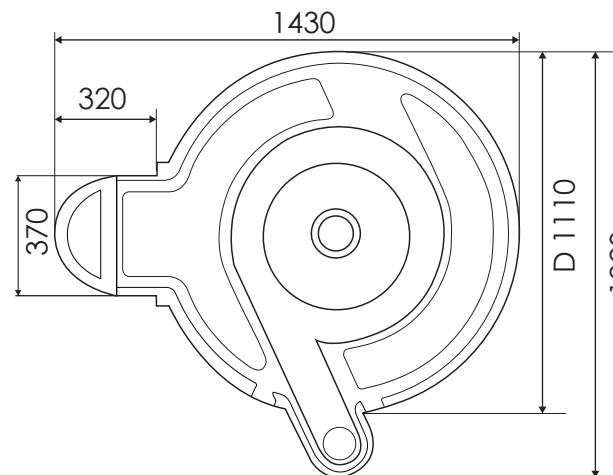
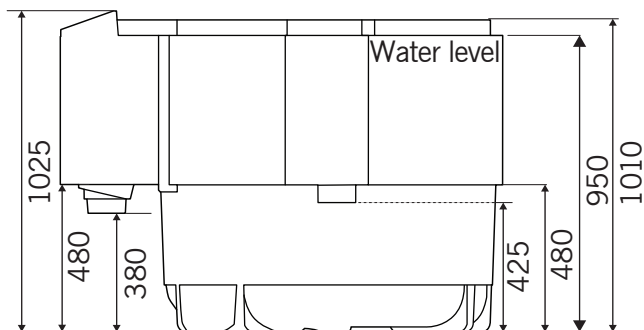
nexus220



NEXUS 220 SHIPPING DIMENSIONS:

- Nexus are shipped on a pallet, with a cardboard sleeve and lid.
- Packaged dimensions are:
1200mm (l)
1000mm (w)
1000mm (h)
(including pallet)
- Shipping weight = 70kg.

nexus320



NEXUS 320 SHIPPING DIMENSIONS:

- Nexus are shipped on a pallet, with a cardboard sleeve and lid.
- Packaged dimensions are:
1300mm (l)
1200mm (w)
1400mm (h)
(including pallet)
- Shipping weight = 90kg.

Cleaning the Nexus

When to clean

The inner chamber with the Eazy is the part of the filter that requires regular cleaning.



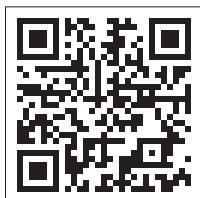
K1 Micro traps fish waste and debris which needs to be flushed to waste.

We recommend cleaning the Eazy every 1 to 2 weeks.

If however, during this time water is flowing out of the overflow, then the Eazy is blocked and requires cleaning.

Normally we would not recommend leaving the filter more than 3 weeks. The filter can be left longer if absolutely necessary but use the overflow / by-pass pipe.

The step by step cleaning process differs if the Nexus is installed on pump-fed or gravity-fed set-ups. See following pages for details. The parts needed to manually clean the Nexus (cleaning pipe and inlet slide plate) are supplied.



Scan the QR code
to watch a cleaning video on YouTube



Click the link for cleaning video:

<https://tinyurl.com/yckvrnev>

Longer time between cleaning

At times, you may want to leave your filter for longer than you would normally want between cleaning, perhaps if you go on holiday.

In these instances, your Nexus incorporates a manual by-pass, which will prevent the biological stage from emptying, and therefore potentially starving your pump of water, should your Eazy become full of debris

The by-pass pipe should be turned 90 degrees, when you need to leave your filter for longer periods of time such as holidays etc. This will allow the water to bypass the Eazy should it become blocked.

On return from your holiday - turn the bypass back to 12 o'clock.



Cleaning the Nexus - Pump Fed

Cleaning instructions if the Nexus is installed on a pump-fed setup when a pump is pumping water into your Nexus.



Insert cleaning pipe into the centre of the Eazy. Water level in the filter will start to rise.



Once the water level has risen to the height indicated just below the overflow, **close** the inlet valve.



Switch water pump off.



Insert inlet slide plate.



Open air valve to the **inner chamber**.



Close the air valve to the **outer chamber**.



Allow the K1 Micro in the Eazy to **agitate** for **5 minutes**.



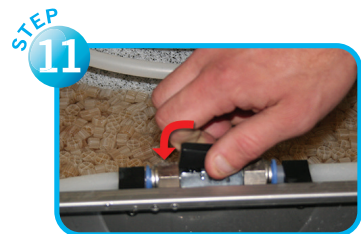
Open the larger waste valve and wait for the **inner chamber** to empty.



At this stage you may want to **hose down** any debris from underneath the Eazy.



Close the waste valve.



Open the air valve to the **outer chamber**.



Close the air valve to the **inner chamber**.



Open Nexus inlet valve.



Remove inlet slide plate and then **switch** pump on.

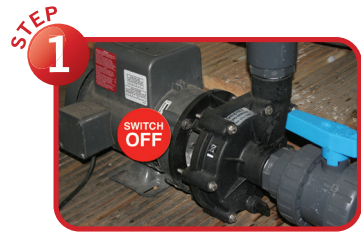


When water level rises to the same level as the **outer chamber**, **remove** the cleaning pipe.

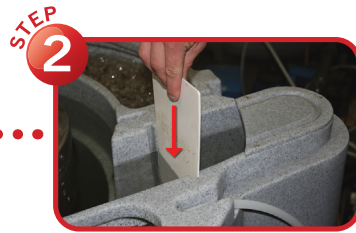
Steps 2 to 14 should be repeated until the Eazy is clean.

Cleaning the Nexus - Gravity Fed

Cleaning instructions if the Nexus is installed on a gravity-fed setup when a bottom drain delivers water into your Nexus.



Switch the circulation pump **off**.
Wait for 1 minute.



Insert the inlet slide plate.



Insert the cleaning pipe into the centre of the Eazy.



Open air valve to the **inner chamber**.



Close the air valve to the **outer chamber**.



Allow the K1 Micro in the Eazy to **agitate** for **5 minutes**.



Open the larger waste valve and wait for the **inner chamber** to empty.



At this stage you may want to **hose down** any debris from underneath the Eazy.



Close the waste valve.



Open the air valve to the **outer chamber**.



Close the air valve to the **inner chamber**.



Remove the inlet slide plate and wait until the **inner chamber** has filled with water.

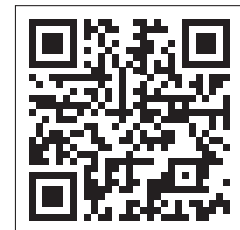


Once **inner chamber** has filled, **remove** the cleaning pipe.



Switch the circulation pump **on**.

Scan QR code to watch cleaning video



YouTube

Steps 2 to 13 should be repeated until the Eazy is clean.

Common FAQs

What size pump do I need for my Nexus?

Maximum recommended flow on the 220 is 10,000 lph and the 320 is 13,000 lph, however suggested flow rates are lower. Slower is better for fine removal and clearer water. Aim to turn over your pond volume every two to three hours. The Evolution Aqua Varipump range are adjustable, and consume less energy when you turn them down.

How often do I need to change the media in my Nexus?

You should never need to change the media in your filter, as the filter media will mature over time, which increases the biological performance of the filter. You can add more to the outer chamber of your filter if required.

How quickly will my filter media mature?

A typical filter can take approximately 8 weeks to mature. The amount of food used and the amount of waste the filter needs to handle will affect this timescale. This is at the point a bio-film will start to form on the media and the media will start to discolour.

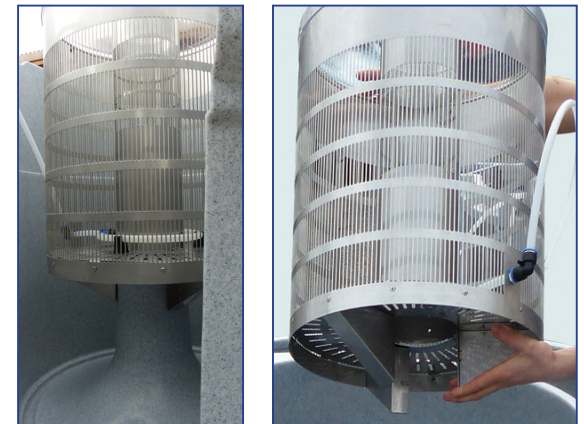
Why does the K1 Micro in the Eazy not move well during the cleaning cycle.

The reasons for this could be one of the following:

- The air pump is not powerful enough.
- There isn't enough water in the Nexus – check that you used the cleaning pipe to maintain the level on a pump-fed system.
- Check all air fittings and air line for leaks and blockages.
- Please ensure that the correct amount of K1 Micro is in the Eazy. If the media is not moving well enough you can take a few small handfuls out if needed.

Can I remove the Eazy?

Yes. On Nexus models manufactured after 2014, it is possible to fully remove the Eazy for maintenance.



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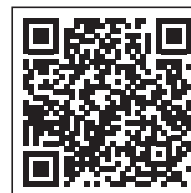
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eazypodTM

Easy to use filter system

- Mechanical and biological filtration
- Delivers crystal clear and healthy water
- Simple to install, easy to maintain
- In Grey or Granite Green colour
- Pump or gravity-fed set-up



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more on
our website



www.evolutionaqua.com



Eazypod Filters

- Eazypod are a smaller, compact version of the Nexus, but the major difference is that there is no moving bed.
- Instead the Eazypod has a static bed of K1 Micro.
- Filters are simple to install, pump-fed or gravity-fed.
- For ponds up to 10,000 litres / 2,200 gallons.
- Automatic cleaning versions are also available.
- Scan QR code to watch videos about Eazypod.



Click on the link below for videos:

<https://tinyurl.com/2ktmaazz>



Eazypod Filters



eazypod™

Maximum pond size: 10,000 litres / 2,200 gallons

Recommended flow rate: 5,000 lph / 1,100 gph

Maximum flow rate: 10,000 lph / 2,200 gph

Volume of water in Eazypod: 80 litres / 18 gallons

Amount of K1 Micro: 18 litres

Air Pump 70 is required

This is only supplied with EazyPodAir and EazyPod Complete models



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QR code**

to learn more
on our website



Overview of the Eazypod

OUTER CHAMBER

Pond water flows around the outside of the filter. Larger solids get trapped on the stainless steel grill, so settle in the base of the outer chamber.



AIRLINE AND AIR VALVE

Once the air pump is connected, the air valve is used during cleaning to inject air into the centre chamber which agitates and cleans the K1 Micro.

INLET FROM POND

Water from pond enters the Eazypod. On pump-fed set-up, use 1½" pipe. On gravity-fed set-up, use 4" pipe.

WASTE OUTLET

1½" slide valve (factory fitted) with stepped hosetail.

STATIC K1 MICRO

18 litres of static K1 Micro captures finer mechanical waste particles and also delivers biological filtration.



OUTLET / RETURN PIPE

Clean water passes through a second grill plate, rises up the centre column and then flows down the return pipe where it exits the filter and returns back to the pond.

OUTLET TO POND

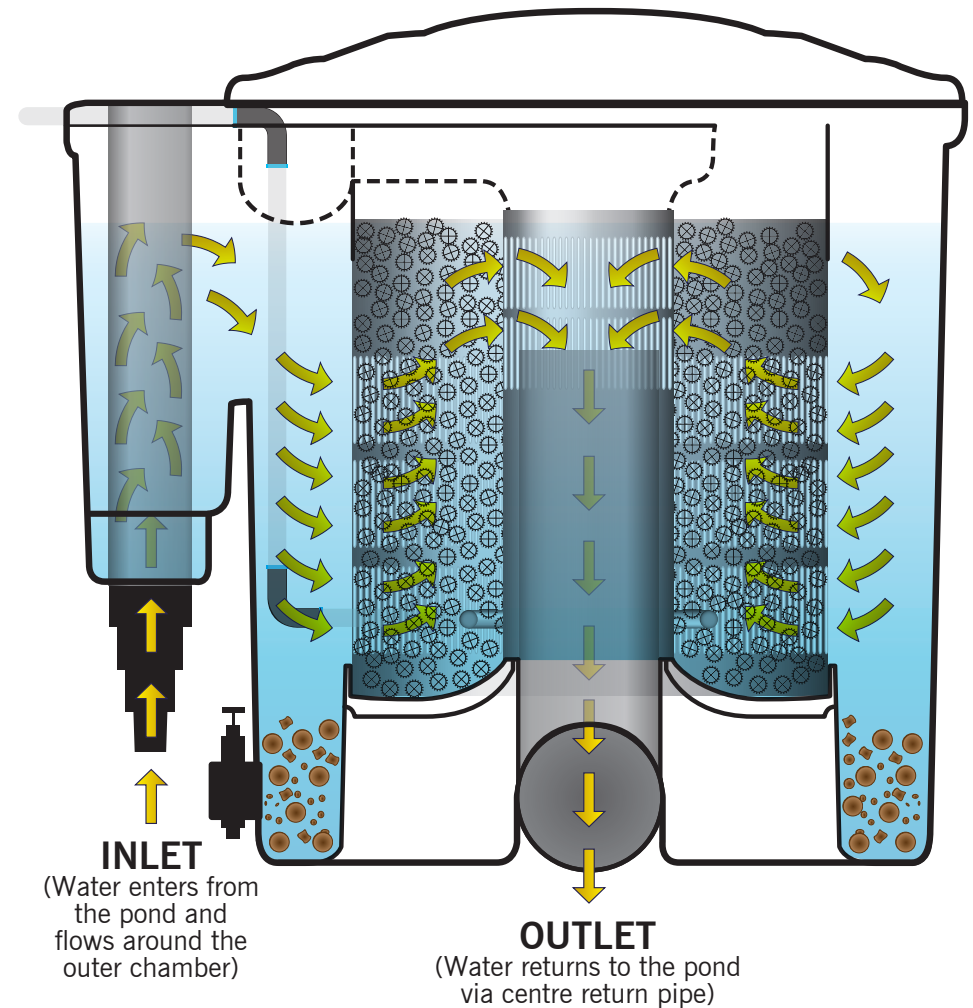
Water returns to pond via 90mm pipe.

On pump-fed set-up, use 4" to 3" eazy connector to connect to 4" pipe.

On gravity-fed set-up, use 4" to 1½" eazy connector to connect to 4" pipe.

How the Eazypod works

- Water enters via the inlet and enters the outer chamber, which runs around the entire circumference of the EazyPod.
- Between the outer chamber and the inner chamber, there is a stainless steel perforated screen. These perforations are situated in the lower half of the screen and around its entire face.
- This means that when the water passes from the outer to inner chamber, a downward flow is created. This causes many of the larger solids to settle in the base of the outer chamber, due to the force of gravity.
- The size of the perforations will not allow large mechanical waste to enter the central chamber, thus acting as a first stage mechanical filter.
- The central chamber holds **18 litres** of static K1 Micro. As the water enters the central chamber, the fine smaller solids become entrapped in the K1 Micro.
- After passing through the K1 Micro, the clean water then rises and overflows into the inner return pipe of the EazyPod. From here it returns to the pond via the return outlet.
- During cleaning, air is used to clean the K1 Micro. All the waste particles get flushed into the outer chamber. Open the waste valve to drain the waste water out of the filter.



Specifications



eazypod™



eazypodair™



eazypod complete™

Model	Max. Pond Size	Max. Feed Rate	Volume Of Water In Filter	Recommended Flow Rate	Recommended Air Pump	UV-C Bulb
eazypod™	10,000 litres 2,200 gallons 2,640 US gallons	100 - 125g per day	80 litres 18 gallons 21 US gallons	5,000 lph 1,100 gph 1,320 US gph	Air Pump 70 Kit (Not Supplied)	x
eazypodair™	10,000 litres 2,200 gallons 2,640 US gallons	100 - 125g per day	80 litres 18 gallons 21 US gallons	5,000 lph 1,100 gph 1,320 US gph	Air Pump 70 Kit (Supplied)	x
eazypod complete™	10,000 litres 2,200 gallons 2,640 US gallons	100 - 125g per day	80 litres 18 gallons 21 US gallons	5,000 lph 1,100 gph 1,320 US gph	Air Pump 70 Kit (Supplied)	18 W PL-L

Models are also available with automatic cleaning systems.



Set-up

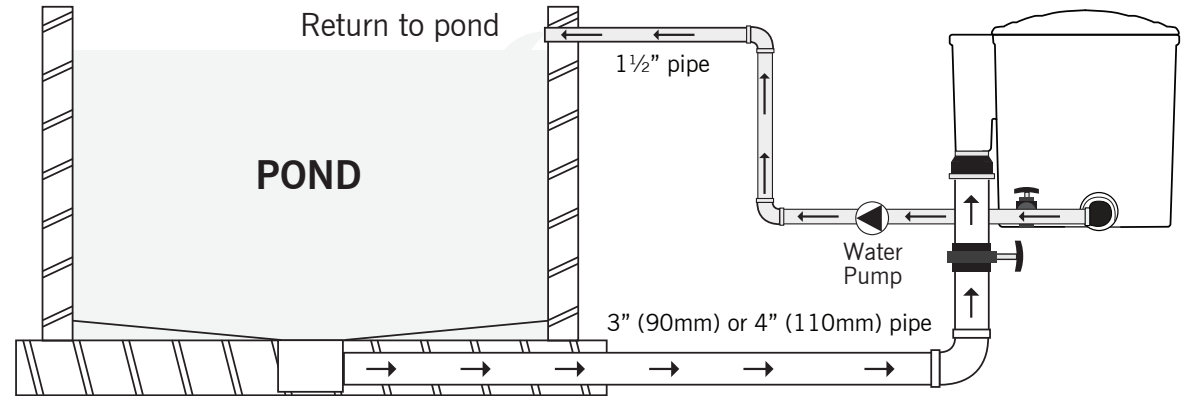
- Ideal for use on ponds up to 10,000 litres (2,200 gallons).
- We advise using an Eazypod on smaller ponds if the stocking levels are high and therefore feeding rates are high.
- Maximum feed rate is 100 to 120 grams per day.
- Ideal flow rate is to pass the full volume of your pond through the Eazypod once every one to two hours.
- We recommend a flow rate of **5,000 lph / 1,100 gph** .
- Use as a complete filter on a quarantine system, as a pre-filter at the front of any new or existing system, as a polisher at the end of any system, off a mid water feed to aid mechanical filtration, on a skimmer line as a mechanical filter.



Installation

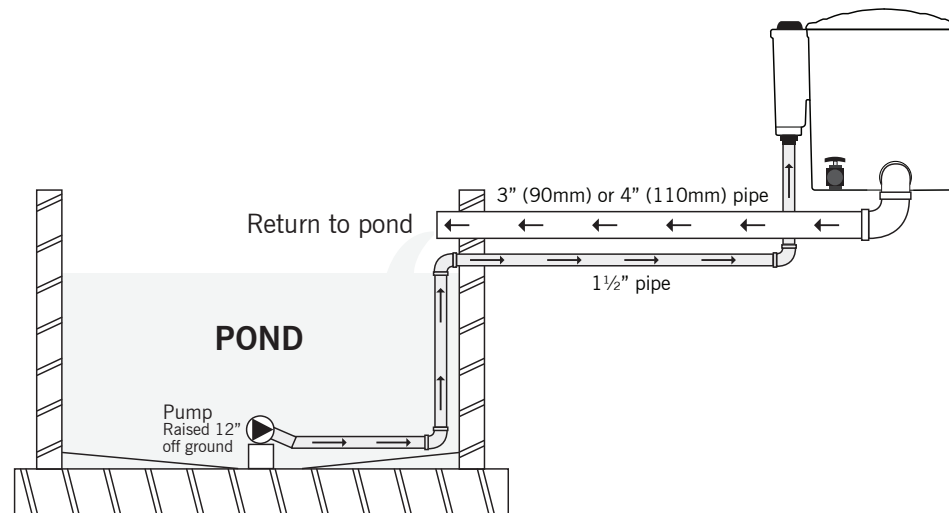
GRAVITY-FED INSTALLATION

- The water level in the Eazypod (just under the top lip) is set at the same height as it is in the pond.
- Water is pulled from the bottom drain through the Eazypod via the circulating pump.
- The same circulating pump then pumps the filtered water back to the pond.
- Slight modification to the filter is needed.



PUMP-FED INSTALLATION

- Eazypod filters are supplied ready for pump-fed installation.
- Pump in the pond pushes water into the Eazypod.
- Filtered water then returns to the pond via gravity.

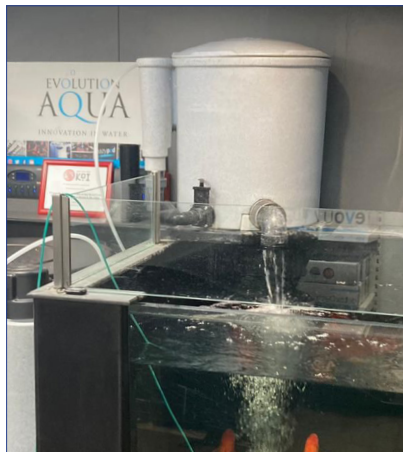


Installation

GRAVITY-FED INSTALLATION - EXAMPLES



PUMP-FED INSTALLATION - EXAMPLES



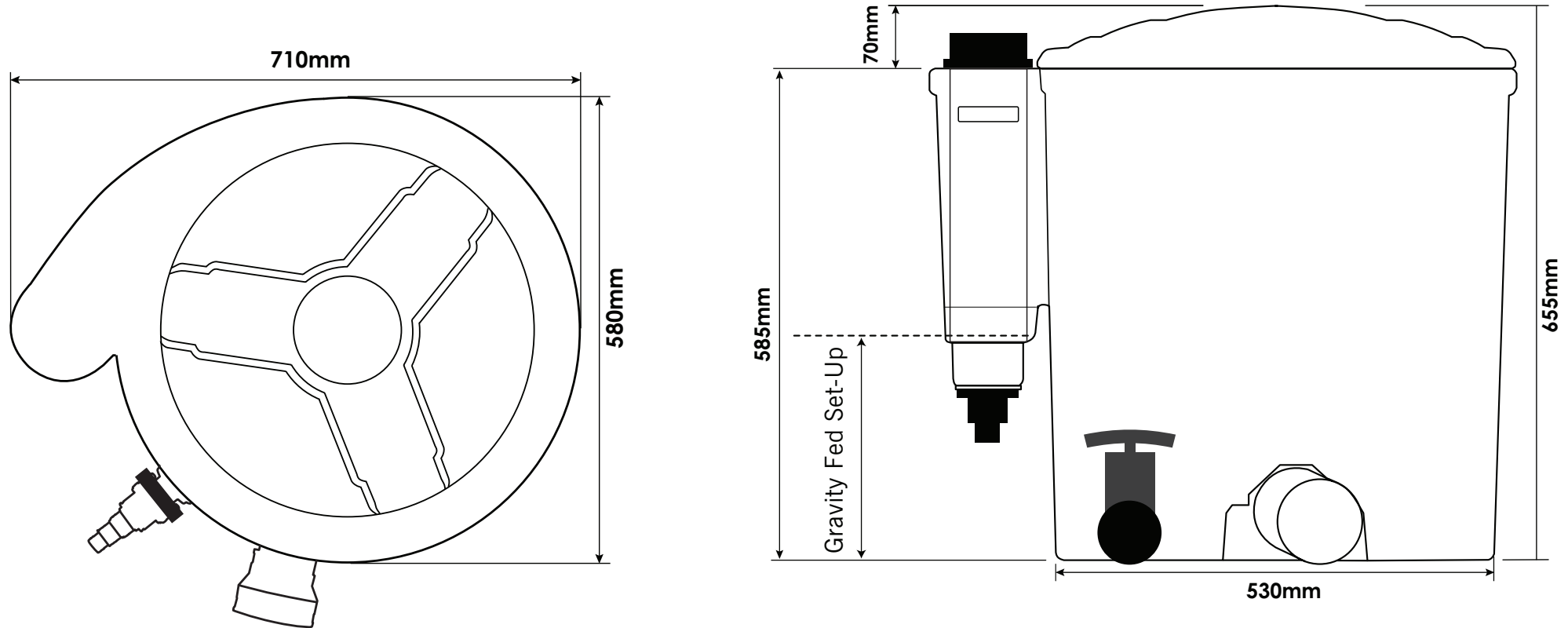
Mandatory installation considerations

- Eazypod must be installed on a solid, flat base, a minimum size of 600mm x 600mm, and allow for easy access to connections.
- Eazypod holds 80 litres of water when filled with water.
- Eazypod weighs around 100kg when filled with water.
- On gravity-fed set-ups the level of the surface water in the pond should be level with the underside of overflow assembly in the Eazypod, when the pump is switched off. We advise a measurement of 555mm from the floor to the water level inside the EazyPod.
- Eazypod is supplied ready to install onto pump-fed set-ups. In order to install it on a gravity-fed set-up the user needs to modify the internal part of the filter, cut the inlet section and install an eazyconnector. (See *instruction manual for details.*)
- It is important to install an isolating valve on your inlet line before the Eazypod, to allow for easy maintenance.
- On pump-fed set-ups, make sure the pump is raised at least 12” off the ground, or high enough to leave sufficient water in the pond in the extreme event of the pond completely draining.
- EazyPod Complete, with UV in inlet, can only be installed on pump-fed set-ups.



Dimensions

eazypod[™]



Cleaning the Eazypod

When to clean

To achieve optimum water quality and clarity we recommend that the EazyPod be cleaned once a week.

If the K1 Micro isn't cleaned regularly, it may become blocked.

In the event of a blockage, the circulation pump will become starved on a gravity system or the chamber will overflow on a pump-fed system. The overflow assembly is a built-in overflow. Should a blockage of the K1 Micro occur, water will bypass the stainless steel screen and return to the pond. This is a clear indication that the Eazypod needs to be cleaned.

If feeding rates are high, the Eazypod may need cleaning more frequently.



Cleaning the Eazypod - Pump Fed

Cleaning instructions if the Eazypod is installed on a pump-fed setup when a pump is pumping water into your Eazypod.

PUMP-FED CLEANING

1. Switch off the water pump.
2. Wait until water has stopped flowing back to the pond.
3. Turn on your air pump and open the air valve on the EazyPod.
In a few seconds the K1 Micro will start to 'agitate' and circulate, thereby self-cleaning.
4. After the K1 Micro has been aerated for a minimum of two minutes, open the drain valve and completely drain the EazyPod.
5. Once it is drained, close the drain valve.
6. Turn on your circulation pump back on to refill the EazyPod.
7. If you want to clean the EazyPod for a second time, repeat steps 1 to 6.

The new inlet configuration of the EazyPod means that it is not essential to use the cleaning pipe to maintain the water level during cleaning.

However, should you find that excessive debris is splashed down the return pipe during cleaning you can use the cleaning pipe provided to isolate the unit from your pond.

Insert the cleaning pipe then follow the steps 1 to 5 above.

Remember to remove the cleaning pipe before switching your pump back on.



Cleaning the Eazypod - Gravity Fed

Cleaning instructions if the Eazypod is installed gravity-fed.

Scan the QR code to watch a video of a customer cleaning an Eazypod:

GRAVITY-FED CLEANING

1. Stop the circulation pump.
2. Wait a short period of time to allow the water levels within the EazyPod to stabilise.
3. Insert the cleaning pipe into the plastic return pipe. This will prevent waste going back to the pond.
4. Isolate the pond from the EazyPod by closing the valve on the inlet line.
5. Close the slide valve which you have fitted after your circulating pump.
6. Turn on your air pump and open the air valve on the EazyPod. In a few seconds the K1 Micro media will start to 'agitate' and circulate, thereby self cleaning.
7. After the K1 Micro has been aerated for a minimum of two minutes, open the drain valve to completely drain the EazyPod.
8. When drained close the valve and open your inlet valve to refill the EazyPod.
9. Allow the K1 Micro to agitate again for a minimum of two minutes.
10. Open drain valve to drain again. If the water in the EazyPod is still not 100% clean, repeat the process.
11. Once the K1 Micro is clean, turn off your air pump or re-divert it and close the air valve on the EazyPod.
12. Remove the cleaning pipe.
13. Close drain valve.
14. Open the slide valve after the pump to refill the pod from the pond and start your circulation pump.



**Scan the
QR code**
to watch a
cleaning
video

Common FAQs

When does my Eazypod need cleaning?

To achieve optimum water quality and clarity we recommend that the EazyPod be cleaned once a week.

If the K1 Micro isn't cleaned regularly, it may become blocked.

In the event of a blockage, the circulation pump will become starved on a gravity system or the chamber will overflow on a pump-fed system. The overflow assembly is a built-in overflow. Should a blockage of the K1 Micro occur, water will by-pass the stainless steel screen and return to the pond. This is a clear indication that the Eazypod needs to be cleaned.

Do i need to use the cleaning pipe?

On models made after 2020, the running height of the EazyPod is now set by the inlet pipe configuration, it is no longer necessary to use the cleaning pipe during pump-fed cleaning. However, you can if you prefer, use the cleaning pipe provided during pump-fed cleaning.

On gravity-fed set ups, the cleaning pipe should be used during cleaning.

Automatic Cleaning

eazypodTM AUTOMATIC

- Eazypod Automatic function just the same as standard EazyPods but with the added benefit of an automatic cleaning system.
- A control box, with built-in air pump, and automated waste valve are pre-fitted to the Eazypod.
- Cleaning cycles start at pre-set times, or you can push the button to perform a cleaning cycle whenever you need.
- Only to be installed on pump-fed set-ups.
- Scan QR code to learn more.



Click on the link below for more info:
evolutionaqua.com/eazypodautomatic



eazypodTM
AUTOMATIC



eazypoduvTM
AUTOMATIC



Model	Max. Pond Size	Max. Feed Rate	Volume Of Water In Filter	Recommended Flow Rate	Air Pump	UV-C Bulb
eazypod TM AUTOMATIC	10,000 litres 2,200 gallons 2,640 US gallons	100 - 125g per day	80 litres 18 gallons 21 US gallons	5,000 lph 1,100 gph 1,320 US gph	Built-In Inside Control Box	x
eazypoduv TM AUTOMATIC	10,000 litres 2,200 gallons 2,640 US gallons	100 - 125g per day	80 litres 18 gallons 21 US gallons	5,000 lph 1,100 gph 1,320 US gph	Built-In Inside Control Box	18 W PL-L



K+AdvancedFilter

Advanced Pressure Filters With K+Media

- Economical to run - unique design
- Engineered to maximise pump efficiency
- Rota-moulded one piece body
- Pre-filled with K+Media
- Easy to operate and clean



Scan the
QR code
to learn
more on
our website



K+ Advanced Filters

- Deliver exceptional water clarity and are economical to run.
- Made using latest rotational moulding process for peace of mind.
- Supplied with advanced K+Media.
- Four sizes available - 20", 24", 30" and 36".
- Pipework, blower and multiport valve supplied.
- Scan QR code to see K+Advanced Filter videos.



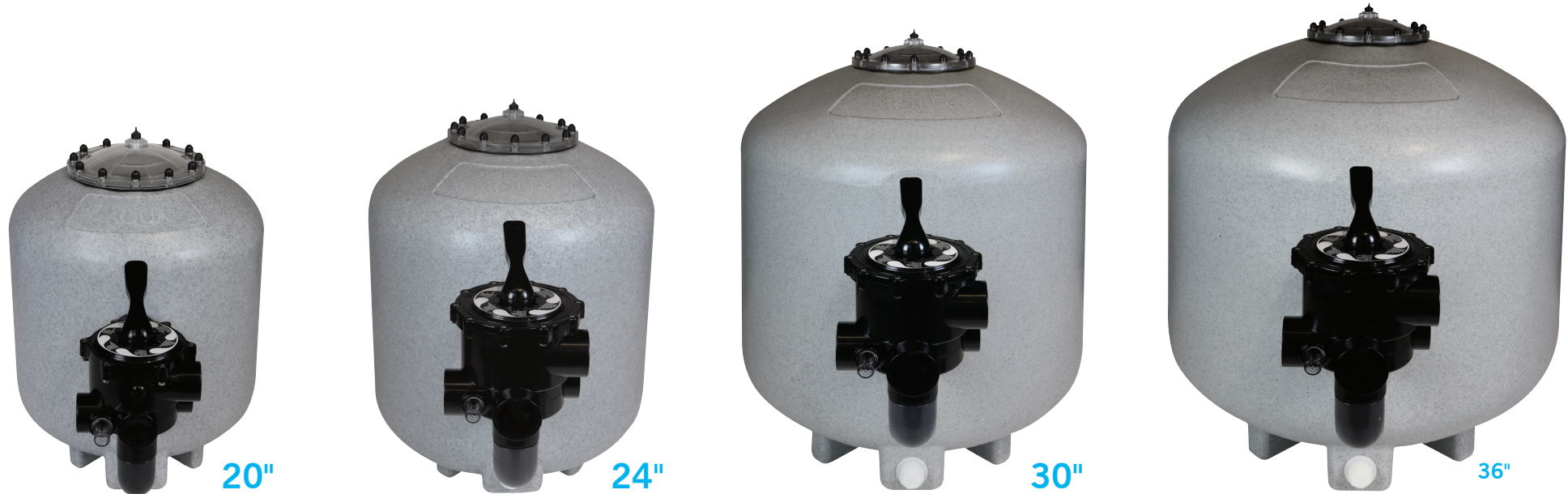
Click on the link below for videos:

<https://tinyurl.com/3y5f8vvb>

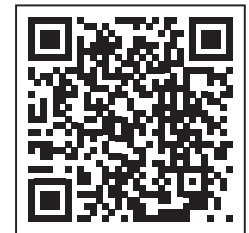


K+ Advanced Filters

K+ Advanced Filter



Scan the
QR code
to learn more
on our website



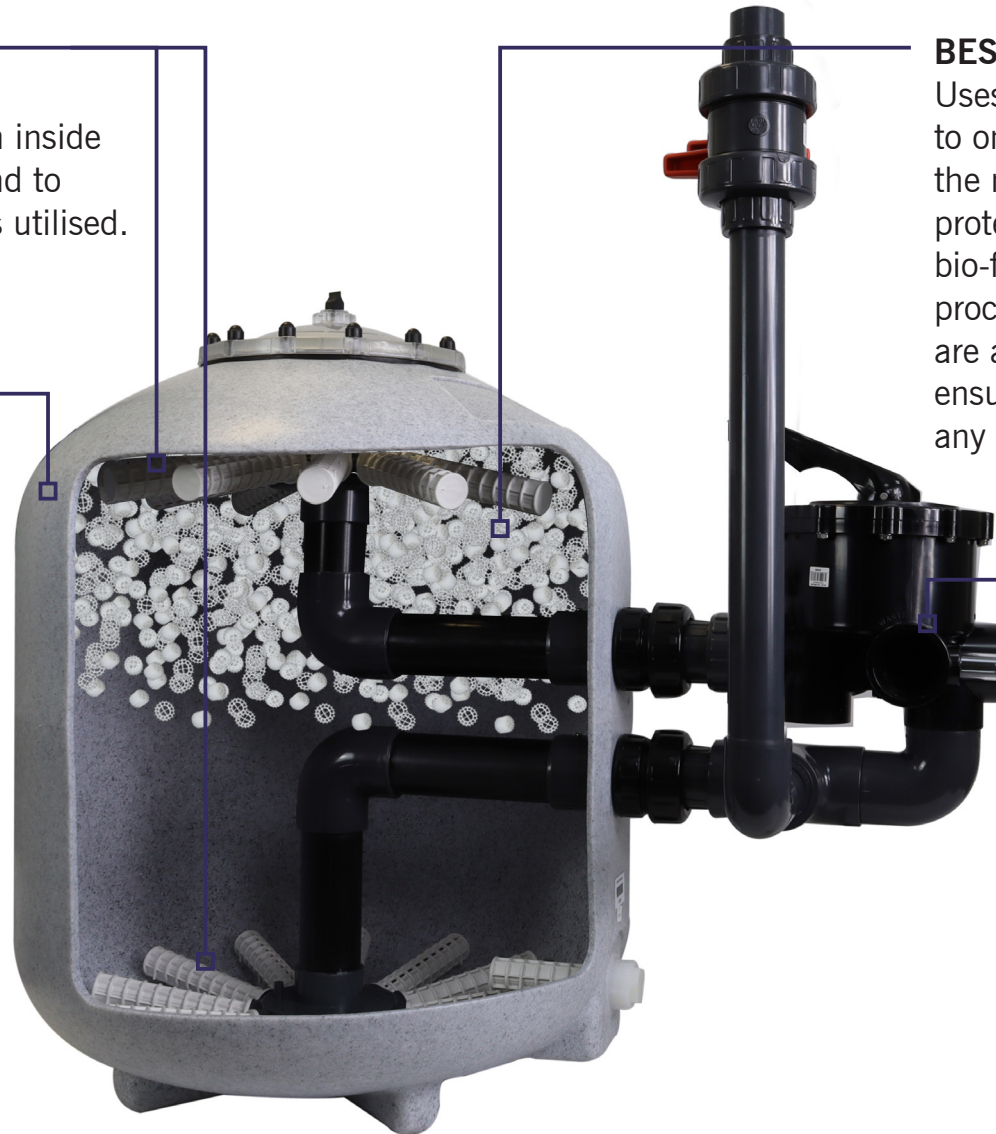
Overview of the K+ Advanced Filters

UNIQUE DOUBLE LATERALS DESIGN

Laterals at the top and bottom inside every filter, to improve flow and to ensure the entire media bed is utilised.

ROTATIONALLY MOULDED IN THE UK

Manufactured in the UK by Evolution Aqua, the K+Advanced Filter is produced using rotational moulding process; the body is made of a single homogenous material meaning there is no joint line, the wall thickness is consistent throughout, there are no weak points, and the feet are built-in as part of the body.



BEST IN CLASS FILTRATION MEDIA

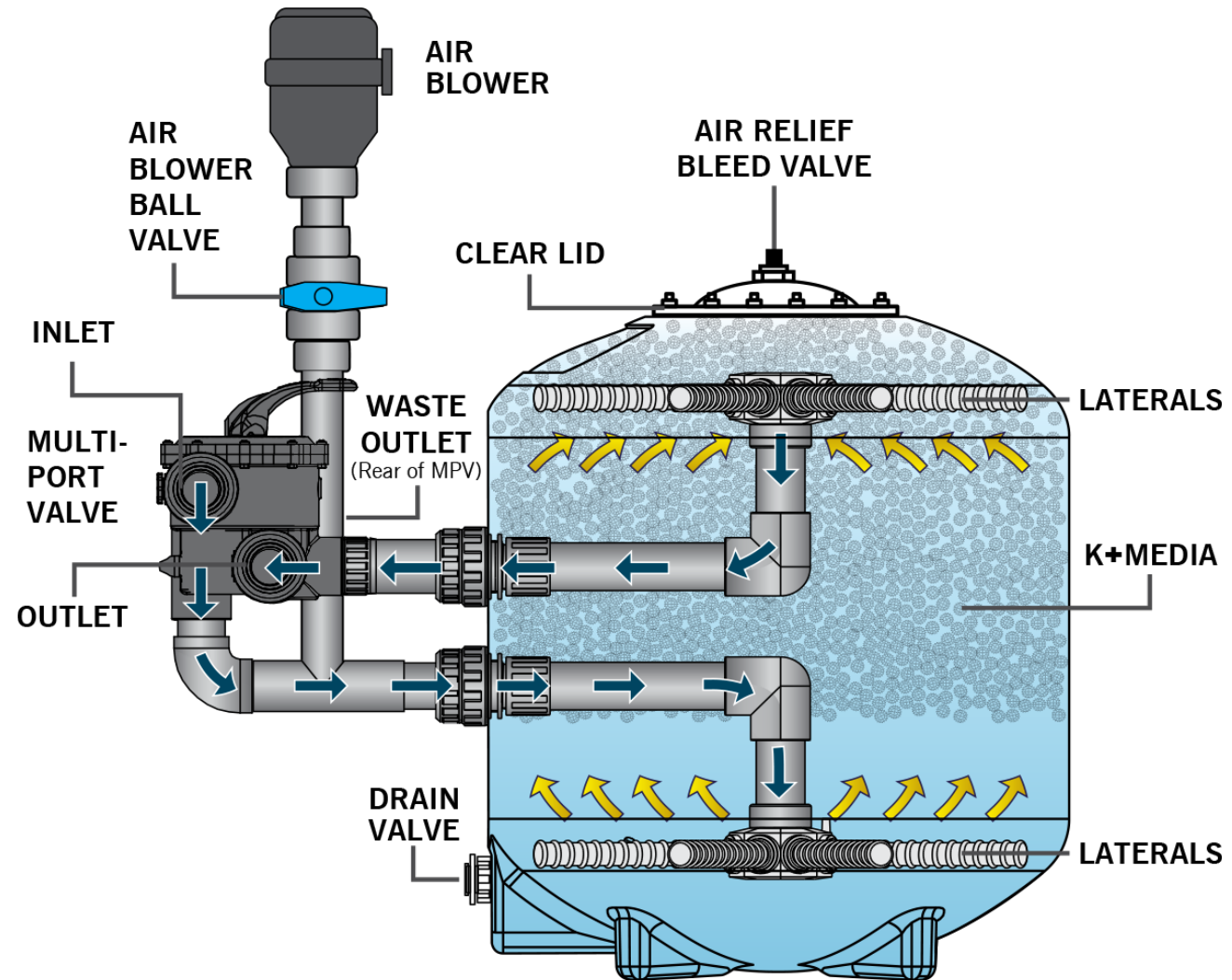
Uses K+Media to filter particles down to one micron. The design and profile of the media helps to improve flow, its vast protected surface area maintains stable bio-films and its unique manufacturing process where minerals and enzymes are added during the extrusion process, ensure K+Media matures faster than any other type of filtration media.

EASY TO OPERATE

They are simple to install and can be used as a standalone filter or as part of a larger filtration system with a Nexus+ or on a skimmer line. The K+Advanced Filters are incredibly easy to clean and are supplied with K+Media, pipework, air blower and multiport valve.

How the K+Advanced Filters work

- Water is pumped into the filter from the pond, through the multi-port valve where the internal pipework directs the water to the bottom laterals.
- As the water flows upwards inside the K+Advanced Filter, dirt, debris and waste are trapped within the mass of K+Media that floats at the top of the filter.
- The vast protected surface area provided by K+Media also provides a home for beneficial bacteria, delivering mechanical and biological filtration.
- The filtered water flows back through the laterals and pipework at the top of the filter, through the multi-port valve and back down the return line into the pond.



Specifications

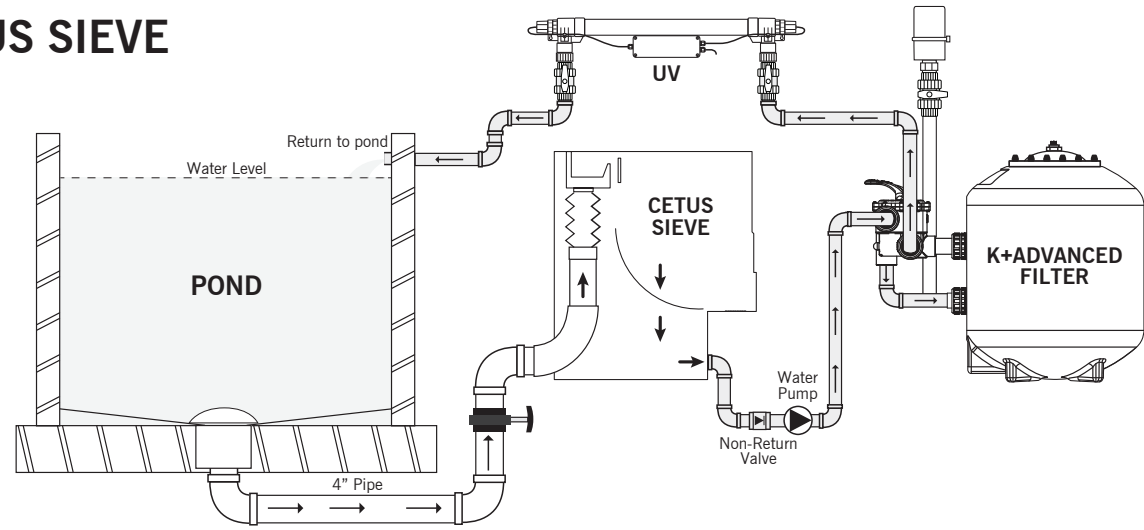
Model	Maximum Pond Size	Optimum Flow Rate	Quantity Of K+Media Included	Volume Of Water In Filter*	Diameter	Multiport Valve	Pipework Size
K+AdvancedFilter20	18,000 litres 4,000 UK gallons 4,800 US gallons	6,000 lph 1,320 gph 1,585 US gph	50 litres 11 gallons 13.2 US gals	135 litres 30 gallons	20" (500mm)	1½"	1½"
K+AdvancedFilter24	36,000 litres 8,000 UK gallons 9,600 US gallons	12,000 lph 2,640 gph 3,170 US gph	100 litres 22 gallons 26.4 US gals	240 litres 53 gallons	24" (620mm)	2"	2"
K+AdvancedFilter30	54,500 litres 12,000 UK gallons 14,500 US gallons	18,000 lph 3,960 gph 4,755 US gph	150 litres 33 gallons 39.6 US gals	435 litres 96 gallons	30" (750mm)	2"	2"
K+AdvancedFilter36	91,000 litres 20,000 UK gallons 24,000 US gallons	30,000 lph 6,600 gph 7,925 US gph	250 litres 55 gallons 66 US gals	660 litres 145 gallons	36" (900mm)	2"	2"

*Approximately the same volume of water is sent to waste during cleaning, excluding volume taken up by filter media

Installation

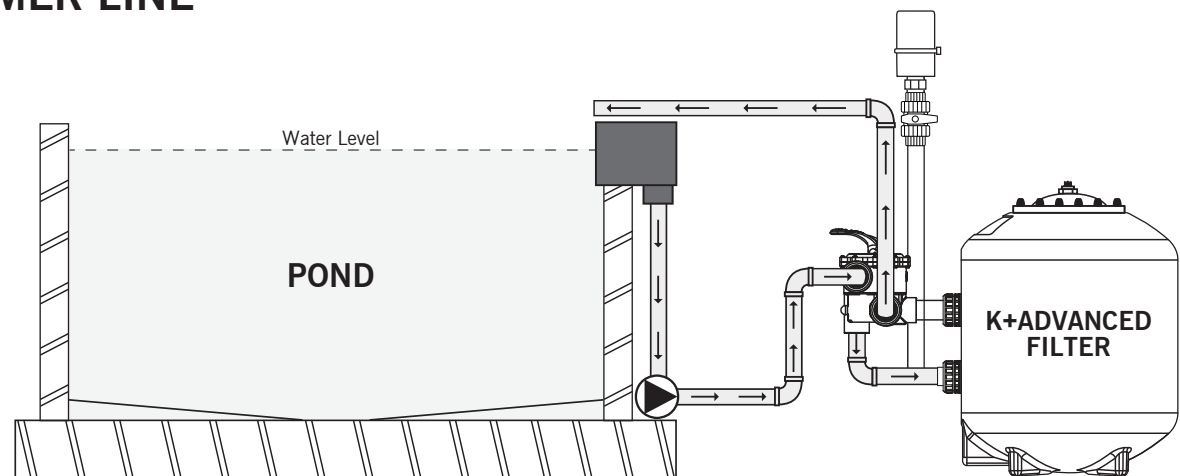
TYPICAL INSTALLATION WITH A CETUS SIEVE

- The K+Advanced Filter is a versatile unit. It can be installed on pump-fed or gravity-fed set-ups. It can be used as a stand alone filter, in conjunction with a pre-filter, it can be used on skimmer lines or as a polisher at the end of a system.
- We highly recommend installing a Cetus Sieve pre-filter and a evoUV in your set-up.



TYPICAL INSTALLATION ON A SKIMMER LINE

- The diagram shows a K+Advanced Filter installed on a skimmer line.
- On 24", 30" and 36" K+Advanced Filters it is recommended that 2" pipe is used on the pump side (*from the pump to the filter and back to the pond*).
- On 20" K+Advanced Filters it is recommended that 1½" pipe is used.

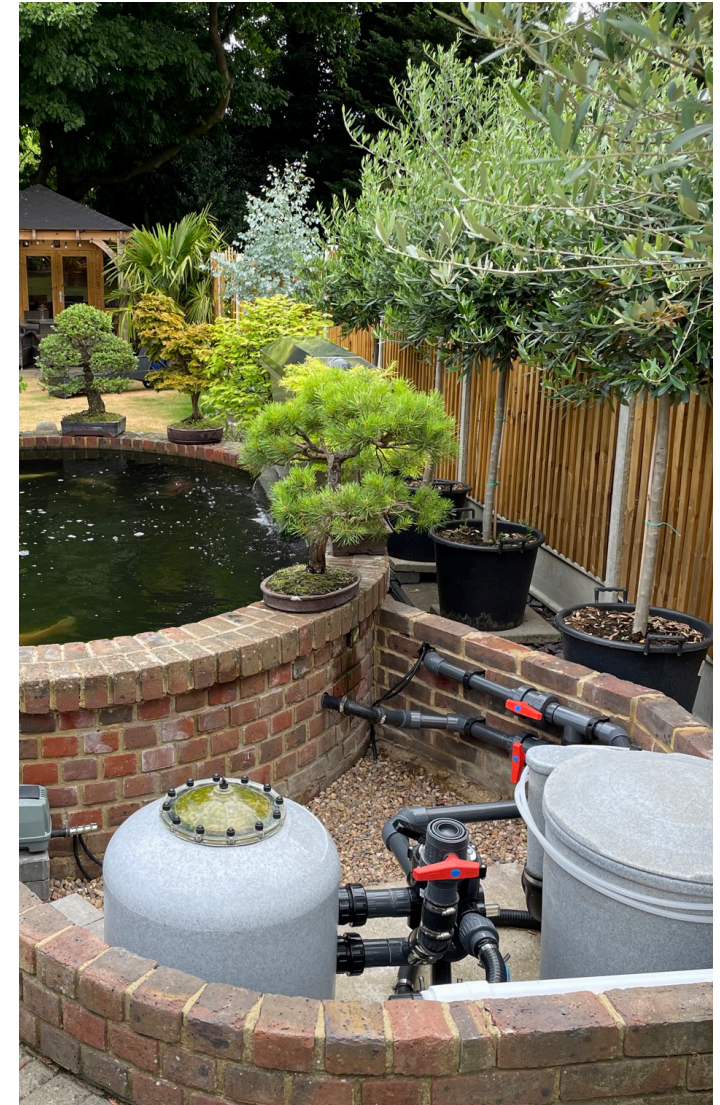


Installation examples



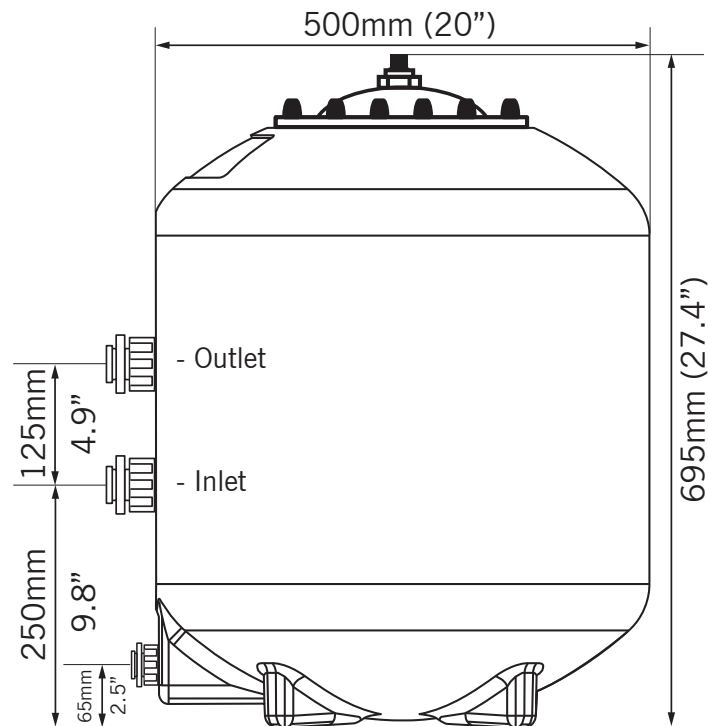
Installation advice

- When installing the K+Advanced Filter in low head room spaces be aware that when the blower is attached the overall height will be greater than shown.
- K+Advanced Filters are capable of flow rates over and above the optimum flow rate but the working pressure within the unit should not exceed 1.5 bar.
- The filter must be installed on a flat, level base, on firm ground or equivalent. Ensure the ground will not subside and strain pipework. We recommend using a flat solid concrete surface as a base large enough for the filter to sit on.
- On 24", 30" and 36" K+Advanced Filters it is recommended that 2" pipe is used on the pump side (*from the pump to the filter and back to the pond*).
- On 20" K+Advanced Filters it is recommended that 1½" pipe is used.
- It is good practice to "dry-fit" all the pipework for the MPV and blower, and then glue it once happy that all the pieces are cut correctly.
- A non-return valve **MUST BE** installed on the pumps suction line, prior to the pump. Alternatively a ball valve or slide valve can be used.
- Never open the air blower ball valve with the pump running.
- Do not operate the multiport valve when the pump is running.
- Air blower must always be above the water level of the pond.

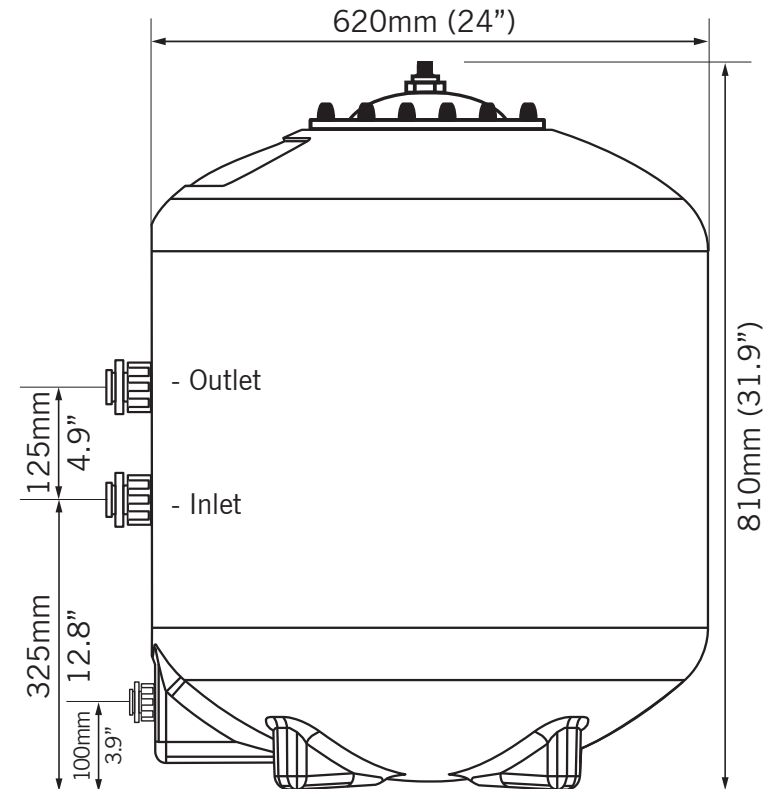


Dimensions

K+ADVANCED FILTER 20

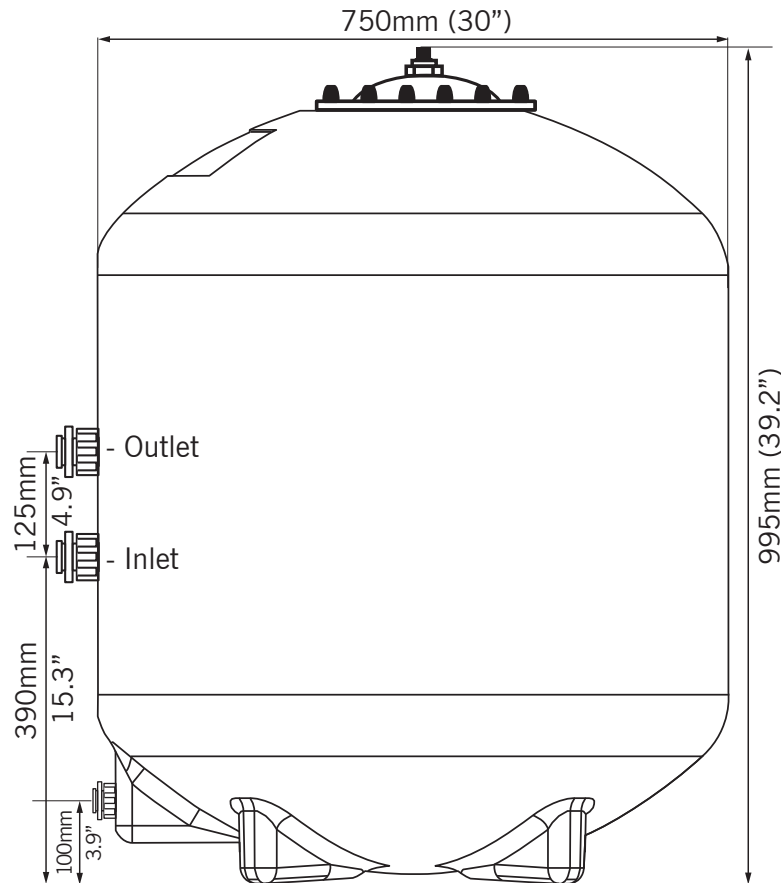


K+ADVANCED FILTER 24

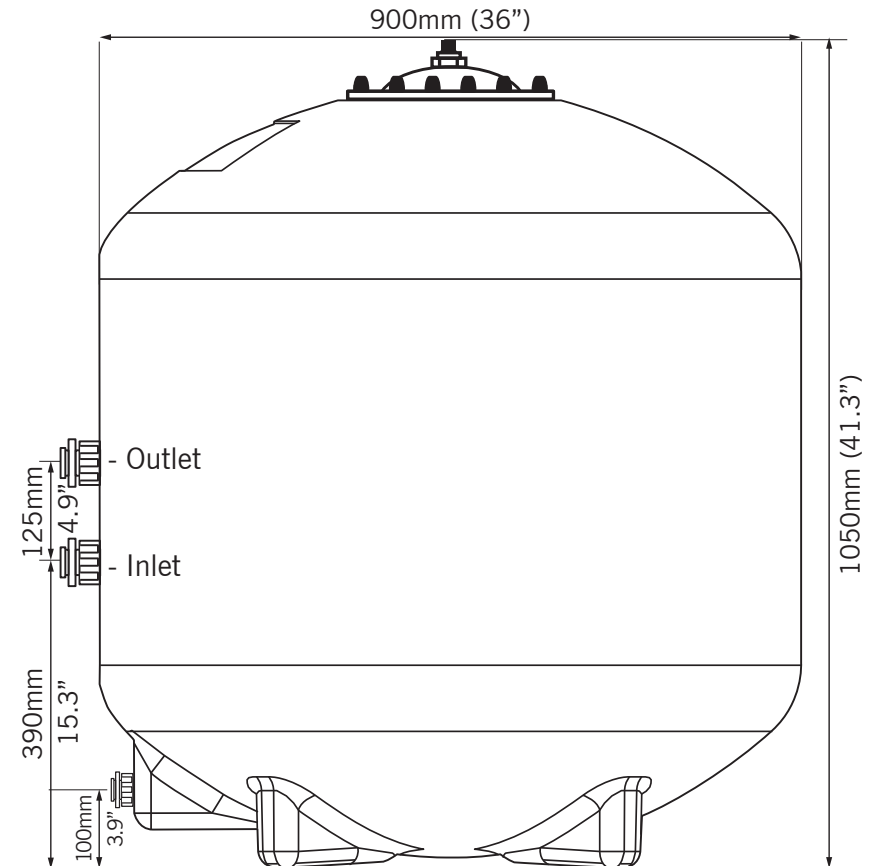


Dimensions

K+ADVANCED FILTER 30

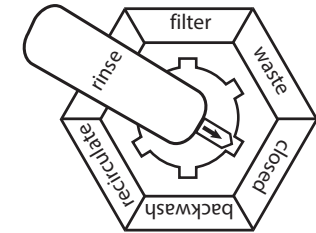


K+ADVANCED FILTER 36



Maintenance

- Multiport valve functions by pushing down on the handle, turning it and relocating it into one of the operating positions shown on the multiport valve.
- The valve must be operated with the circulating pump switched off.
- The ball valve positioned below the air blower must be closed when the pump is running.



- 1) FILTER:** Incoming water from the pond enters the MPV and then enters the vessel at point flowing upwards through the K+Media filter media to the top exit bar. The filtered water is returned through the multiport valve at point and back into the pond.
- 2) BACKWASH:** This is the position the multiport valve should be in for cleaning the K+Media. With the valve in this position, water flow is reversed through the filter bed so that the water flow is directed to the top of the unit and exits the unit at the bottom of the filter and goes out to the waste line.
- 3) RINSE:** This is the position the multiport valve should be in for agitating the K+Media. With the valve in this position, air (supplied by the air blower) is used to agitate the filter media. Later on in the cleaning process, water is used to rinse the K+Media and exit to waste.
- 4) WASTE:** This is the position the multiport valve should be in to allow water to by-pass the filter bed and drain to waste. With the multiport valve in this position, the water flow is directed straight to waste by-passing the unit. This function can be used to lower the water level or for vacuuming your pond without soiling the filter.
- 5) RE-CIRCULATE:** This is the position the multiport valve should be in to allow water to completely by-pass the filter. With the valve in this position, water is pumped from the pond to the multiport valve and directly back to the pond, without flowing through the K+Advanced Filter. This is particularly handy if you are treating your pond.
- 6) CLOSED:** This is the position the multiport valve should be in for closing all flow to the filter. This position is not to be used with the pump running.

Cleaning

- To clean the filter it is important to follow the cleaning steps in the sequence shown.
- Scan the QR Code to watch a cleaning video.



Click on the link below for videos:

<https://tinyurl.com/2webhruw>

1. Switch **PUMP OFF**.
2. If installed with a bottom drain, **CLOSE THE 4" BOTTOM DRAIN BALL VALVE**.
3. Turn the multiport valve handle to the **RINSE** position.
4. Switch the **AIR BLOWER ON**.
5. **OPEN AIR BLOWER BALL VALVE** .
6. **OPEN THE AIR RELIEF BLEED VALVE** on the lid to release air from the filter.
7. **LEAVE FOR 5 MINUTES** to agitate the K+Media.
8. **CLOSE THE AIR RELIEF BLEED VALVE** on the lid.
9. Switch the **AIR BLOWER OFF**.
10. **CLOSE AIR BLOWER BALL VALVE**.
11. Turn the multiport valve handle to the **BACKWASH** position.
12. If installed with a bottom drain, **OPEN THE 4" BOTTOM DRAIN BALL VALVE**.
13. Switch the **PUMP ON**.
14. **OPEN THE AIR RELIEF BLEED VALVE**. It is important when performing the backwash that the filter is full with water to remove the waste properly. Release any trapped air by using the air relief bleed valve. This will keep the filter filled with water.
15. Once all the air has bled from the filter and the water is up to the top of the filter. **CLOSE THE AIR RELIEF BLEED VALVE**.
16. The filter will **BACKWASH**. Water will pump through the laterals to clean the inside of the filter and water will go to waste. The level of the pond may drop at this stage. The first time you do this, observe the water level as you may need to adjust the skimmer plate height.
17. Switch the **PUMP OFF**.
18. Turn the multiport valve handle to the **RINSE** position.
19. Switch the **PUMP ON**. The filter will now rinse out.
20. Look at the **SIGHT GLASS** on the multiport valve as the water is going to waste.
21. Once clear water runs through the sight glass, switch the **PUMP OFF**.
22. Turn the multiport valve handle to the **FILTER** position.
23. Switch the **PUMP ON**.
24. **CAREFULLY OPEN THE AIR RELIEF BLEED VALVE** to allow water to rise to the top.
25. **CLOSE THE AIR RELIEF BLEED VALVE**.
26. The filter is now clean and fully operational.
27. Check the water level in the pond and adjust the height of the skimmer plate ready to top up your pond level.

Common FAQs

What is the recommended flow rate for the K+Advanced Filter?

We specify optimum flow rates for the K+Advanced Filters:

- 6,000 litres per hour for the 20" K+Advanced Filter
- 12,000 litres per hour for the 24" K+Advanced Filter
- 18,000 litres per hour for the 30" K+Advanced Filter
- 30,000 litres per hour for the 36" K+Advanced Filter

.....

Do I need a high pressure circulation pump for my K+ Advanced Filter?

No, one of the great advantages of the K+Advanced Filters is they produce very little back pressure, so you can use a lower wattage pump saving you money!

.....

How often will the filter need cleaning?

Typically in summer the filter will require cleaning once or twice a week, however stocking density, exposure to sun and other variables can affect this.

Pond water is still dirty after backwashing

1. Insufficient filtration time
2. Low flow
3. Dirty filter requires rinsing and backwashing
4. Pump has blocked.
5. Inlet line is blocked.
6. Pump is not primed.
7. Incorrect water chemistry. Check pH and other water readings. Check UV is working correctly (replace UV bulbs older than 6 - 12 months).
8. Clogged or channelled media. Perform an extra long rinse and backwash

ea product training

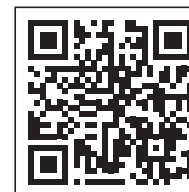
 MANUFACTURED
IN THE UK

EVOLUTION
AQUA
INNOVATION IN WATER

cetussieve™

Pre-Filter To Remove Waste & Debris

- Prevents debris entering pond filter
- Captures large mechanical waste
- Waste collection is easy to clean
- Weir adjusts to varying water levels
- Install pump or gravity-fed



Scan the
QR code
to learn
more on
our website



www.evolutionaqua.com



Cetus Sieve

- Cetus developed in 2008 with patented pondflow system.
- Often installed before a Nexus or K+Advanced Filter.
- Reduces back-washing frequency of pressure filters.
- Robust one piece mould with no welded joints.
- Sieve captures particles down to 300 micron.
- Scan QR code to watch videos about Cetus.

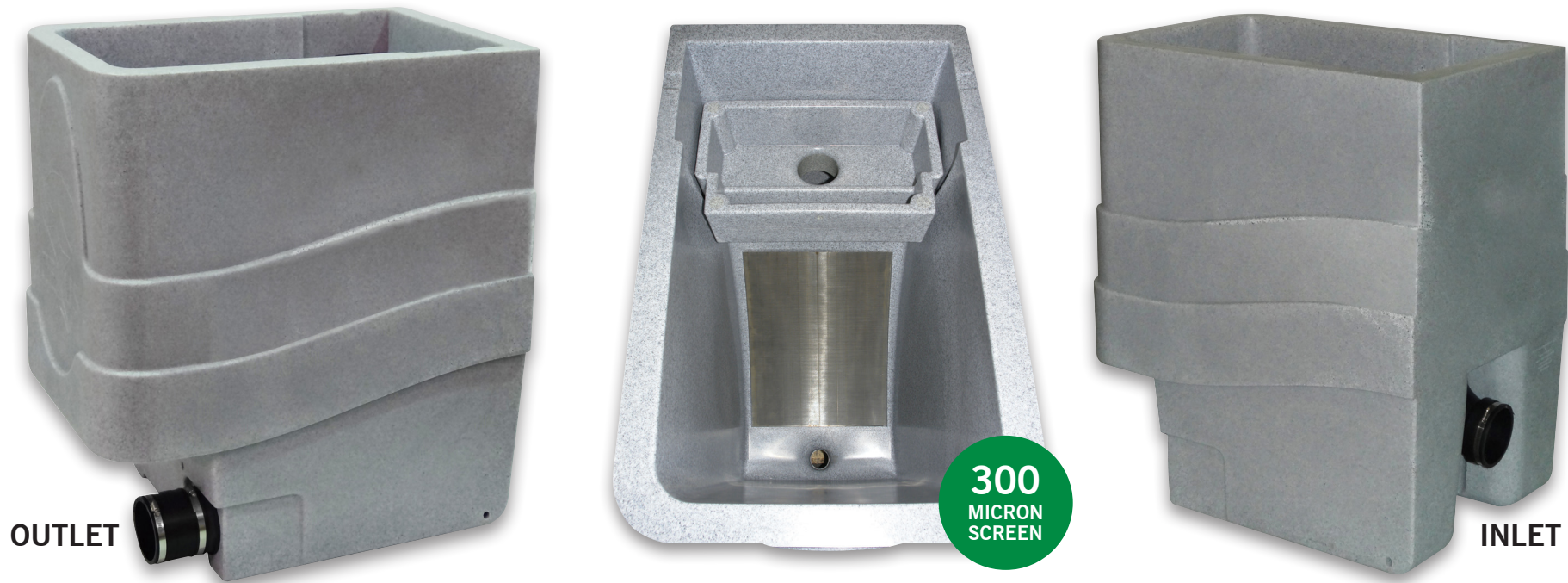


Click on the link below for videos:

<https://tinyurl.com/y9twk6tv>



Cetus Sieve



cetus^osieve

Maximum flow rate: 18,000 lph / 4,000 gph

Inlet connection: 4" on Cetus with additional 4" to 1½" EazyConnector

Outlet connection: 3" (90mm) on Cetus factory fitted with 4" EazyConnector

Waste outlet: 3" (90mm) EazyConnector

Dimensions: 945mm (H) x 850mm (L) x 570mm (W)

Screen size: 300 micron



Scan the
QR code

to learn more
on our website



Overview of the Cetus

ADJUSTABLE, FLOATING WEIR PLATE

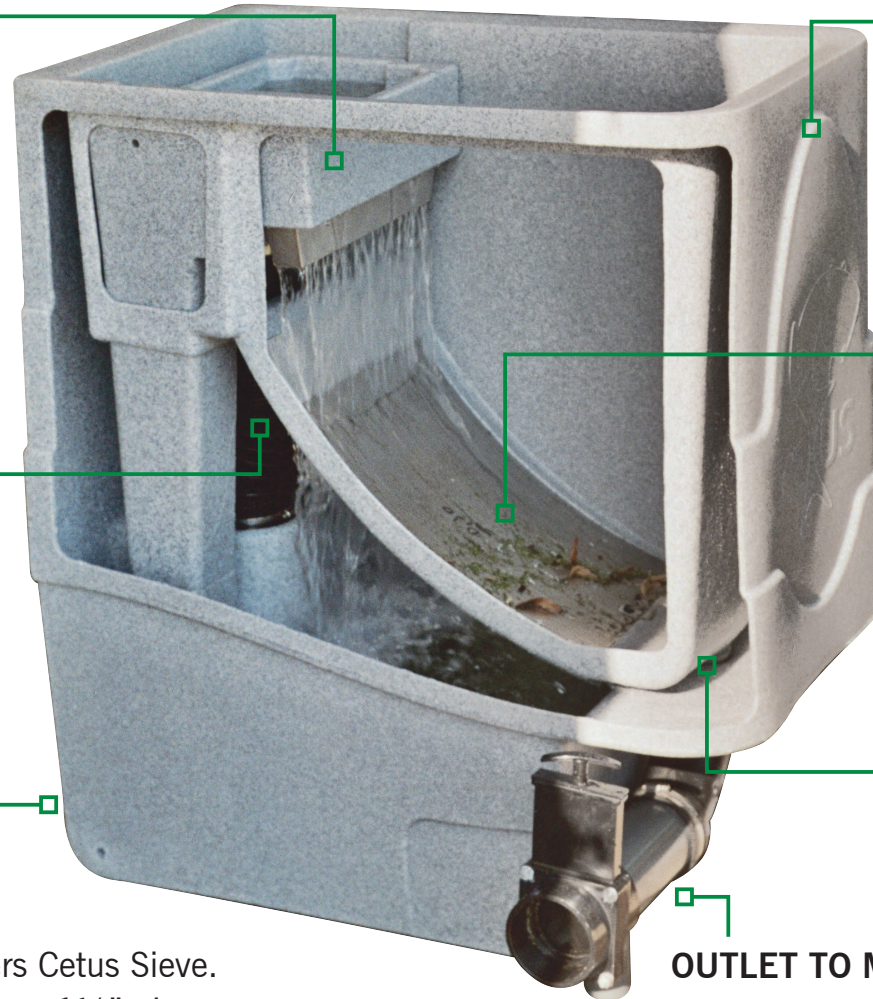
Allows water levels within the pond to drop without causing the circulating pump to be starved of water when installed on a gravity-fed set-up.

CETUS BELLOW

Rubber bellow expands and contracts as water levels rise and fall.

INLET FROM POND

Water from pond enters Cetus Sieve.
On pump-fed set-up, use 1½" pipe.
On gravity-fed set-up - use 4" pipe.



ROTATIONALLY MOULDED

A one piece, durable casing with no weld joints, rotationally moulded by Evolution Aqua.

300 MICRON SCREEN

Removable bow screen captures debris from the pond, preventing it flowing into the filter system. This screen can be lifted out when it needs to be cleaned.

WASTE OUTLET

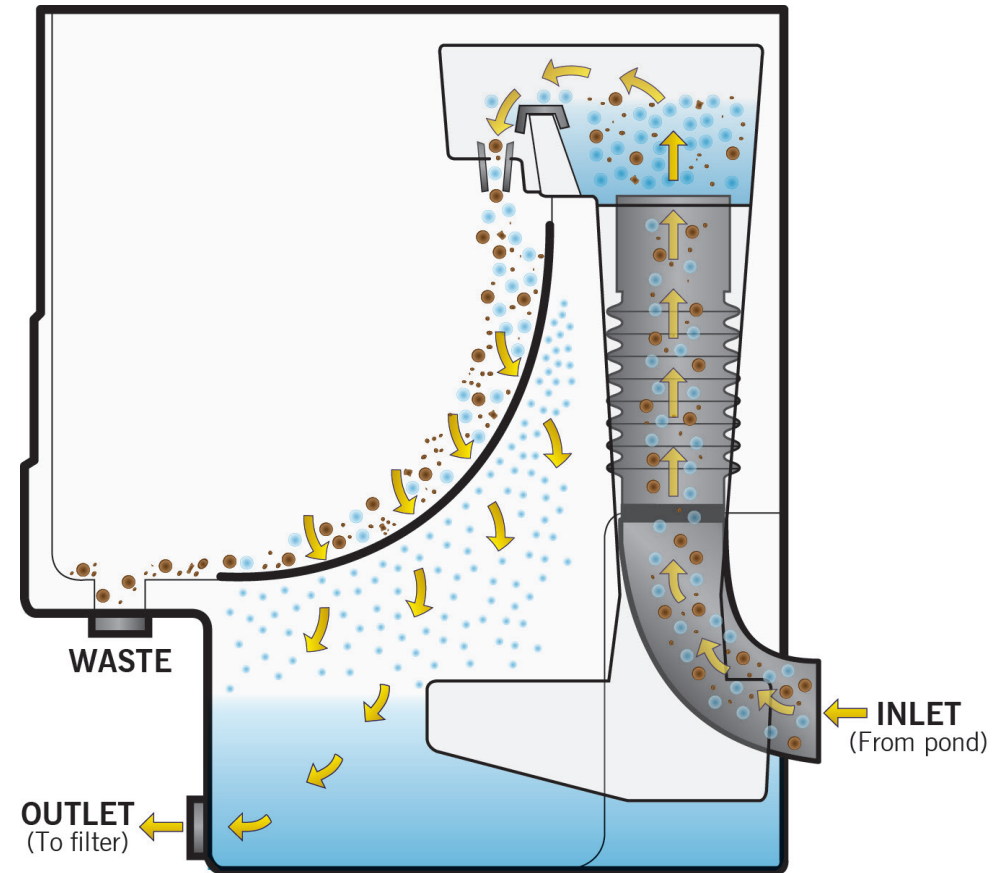
On pump-fed set-up, connect to 3" pipe.

OUTLET TO MAIN FILTER

On pump-fed set-up, connect to 4" pipe.
On gravity-fed set-up, connect to 1½" pipe.

How the Cetus works

- Water carrying debris from the pond enters the Cetus Sieve via the inlet and rises up through the rubber bellow to the top of the floating weir.
- This water then cascades over the weir, falling through the 300 micron, stainless steel, bow screen.
- Waste particles and debris are captured on the screen, which acts like a “sieve”, allowing “filtered” water to pass through ready to flow into the main filter system.
- As waste builds up on the screen, it remains there until the user cleans it off, flushing it to waste.
- If installed on a gravity-fed set-up the floating weir will automatically adjust to the flow rate of your pump (max. 18,000 litres / hour)
- When used in front of a biological / mechanical filter, the period in between cleaning will be extended.
- The biological filtration process is ultimately improved by the removal of organic matter which would otherwise consume oxygen and leach ammonia and other compounds into the water.



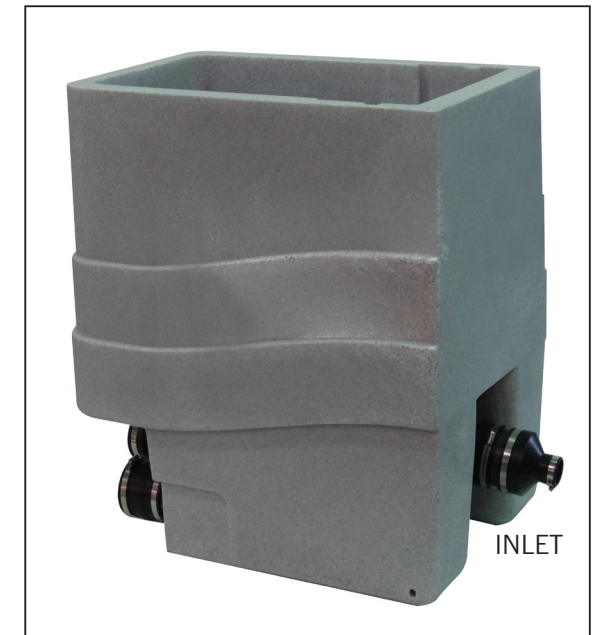
Specifications

Model	Max. flow rate	Inlet - Gravity-Fed	Inlet - Pump-Fed	Outlet - Gravity-Fed	Outlet - Pump-Fed	Screen Size
cetus sieve	18000 Litres/hr 4000 UK Gallons/hr 4755 US Gallons/hr	110mm / 4"	50mm / 1½"	1½"	4"	300 Micron

Set-up

PUMP-FED INSTALLATION

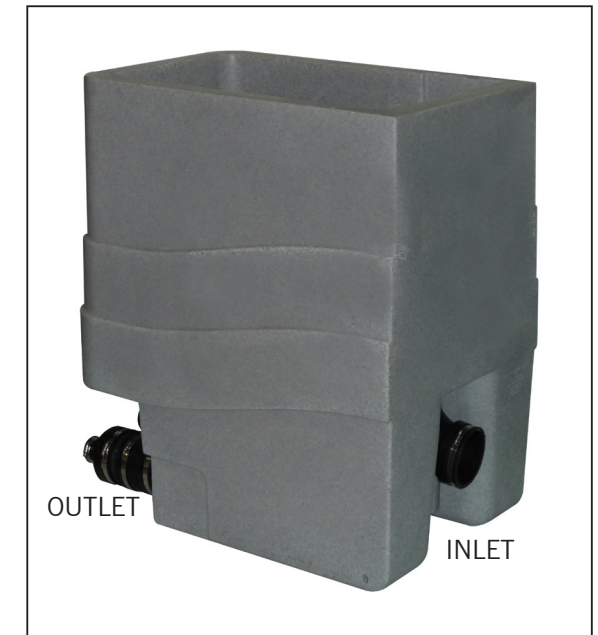
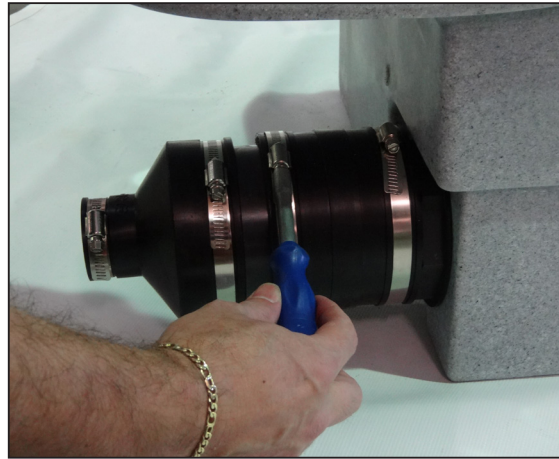
- To set up the Cetus Sieve so it is ready for a pump-fed installation you will need to fit the 4" to 1½" eazy connector and pipe assembly to the inlet.
- Use a nut runner to tighten up the jubilee clips to ensure a tight fit.
- The inlet on pump-fed is now reduced from 4" to take 1½" pipe.
- The outlet on pump-fed is ready to take 4" pipe as factory fitted.
- The waste connection is ready to connect to 3" pipe.



Set-up

GRAVITY-FED INSTALLATION

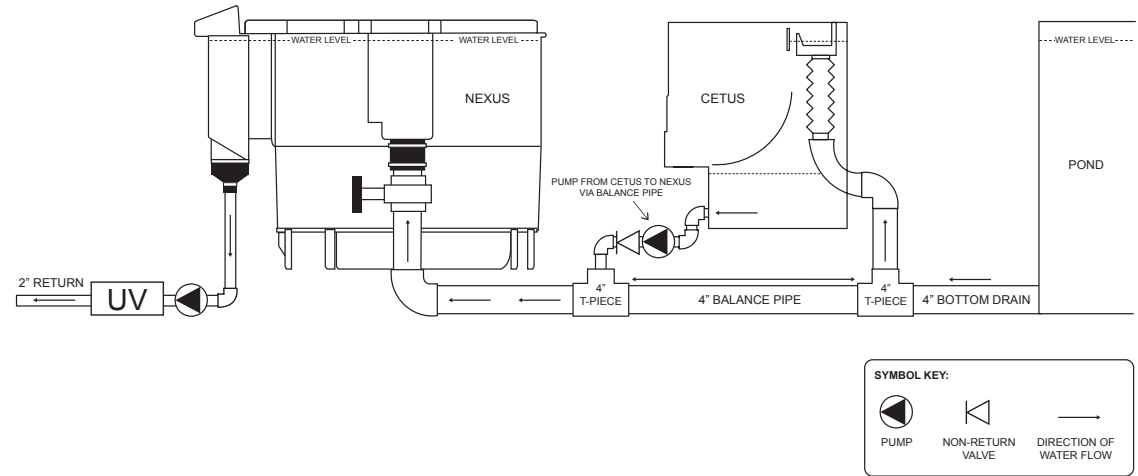
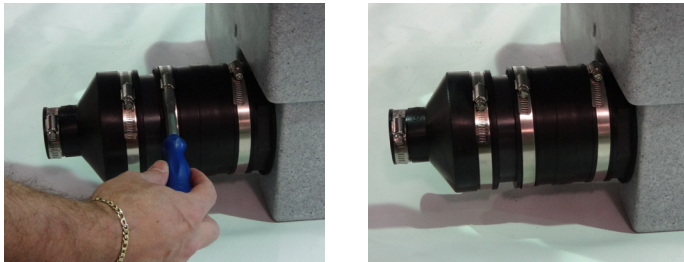
- To set up the Cetus Sieve so it is ready for a gravity-fed installation you will need to fit the 4" to 1½" eazy connector and pipe assembly to the outlet. Use a nut runner to tighten up the jubilee clips to ensure a tight fit.
- Use a nut runner to tighten up the jubilee clips to ensure a tight fit.
- The inlet on gravity-fed is factory supplied to take 4" pipe
- The outlet on gravity-fed is now ready to connect to 1½" pipe
- The waste connection is ready to connect to 3" pipe



Typical Installation

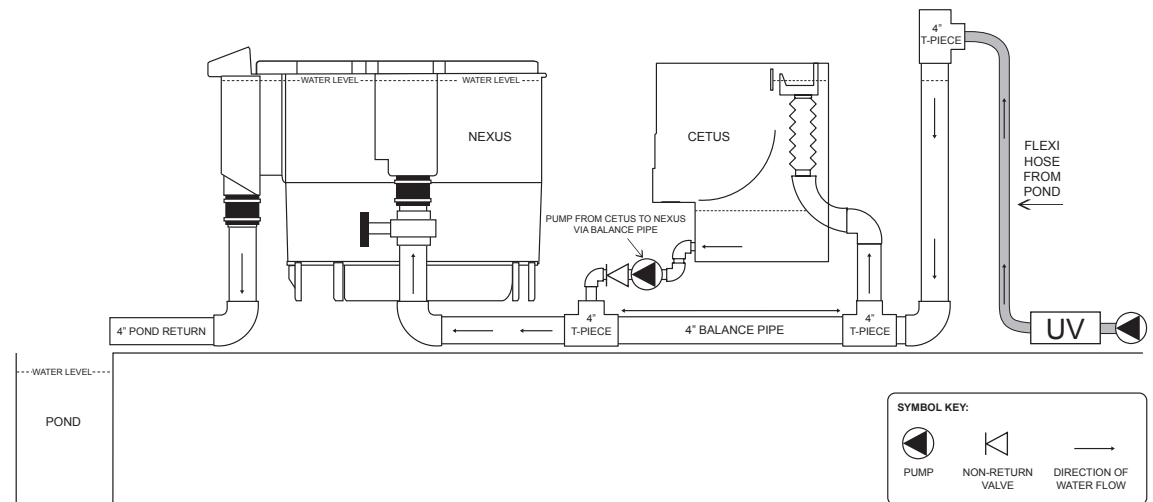
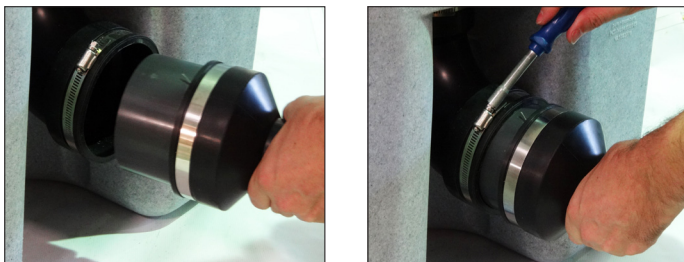
GRAVITY-FED INSTALLATION

- You will need to fit the 4" to 1½" EazyConnector and pipe assembly to the outlet.



PUMP-FED INSTALLATION

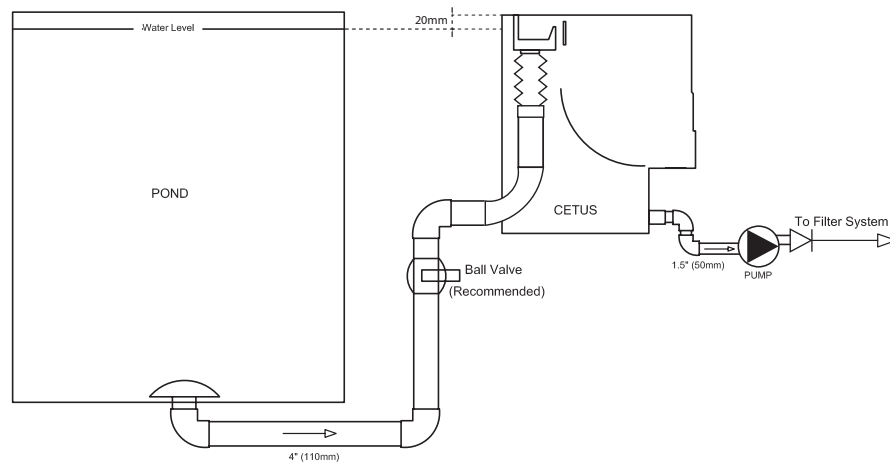
- You will need to fit the 4" to 1½" EazyConnector and pipe assembly to the inlet.



Installation Options

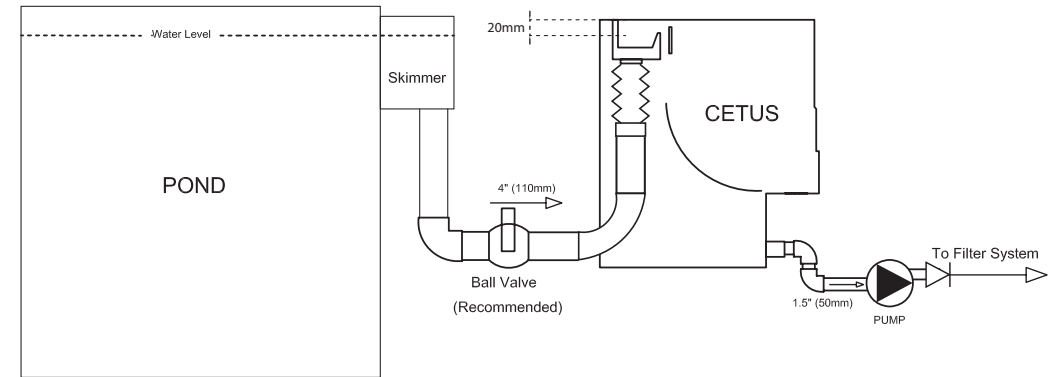
GRAVITY-FED INSTALLATION

- Bottom drain set-up.



GRAVITY-FED INSTALLATION

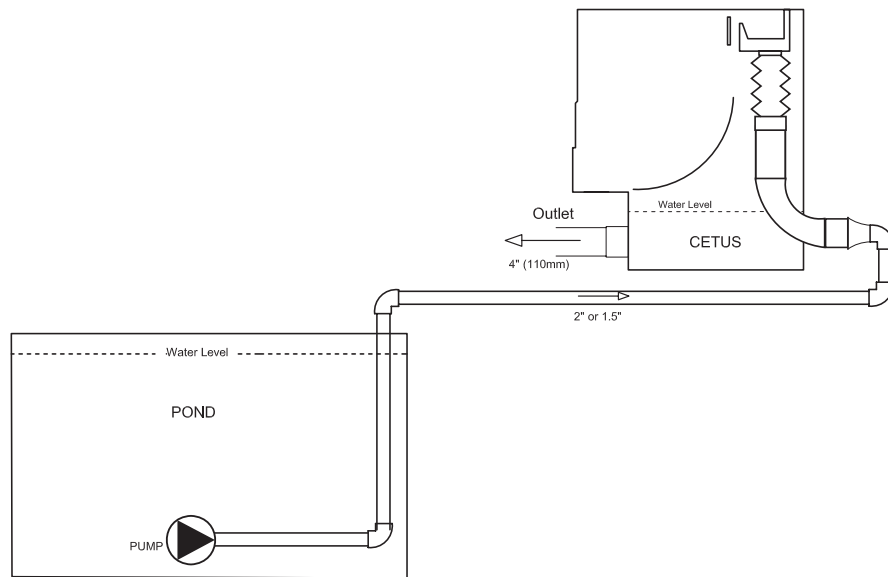
- Skimmer line set-up.



Installation Options

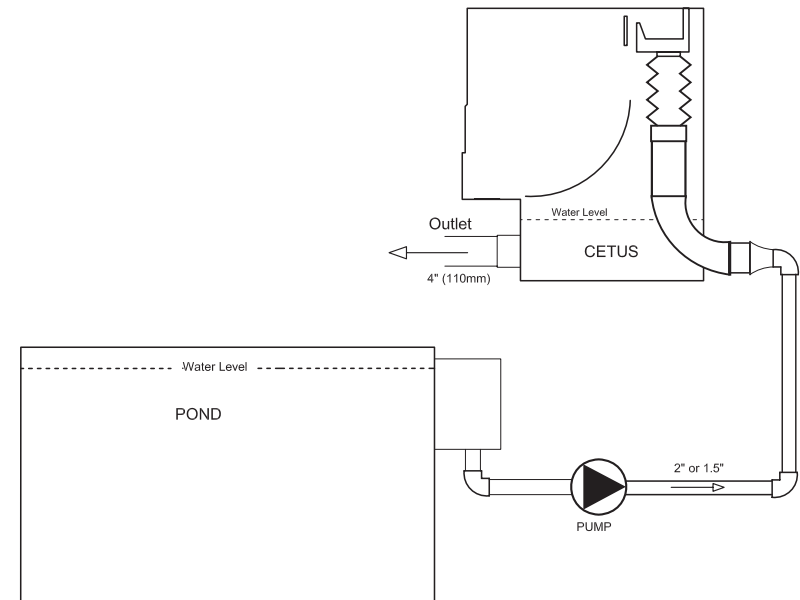
PUMP-FED INSTALLATION

- Pump in pond set-up.



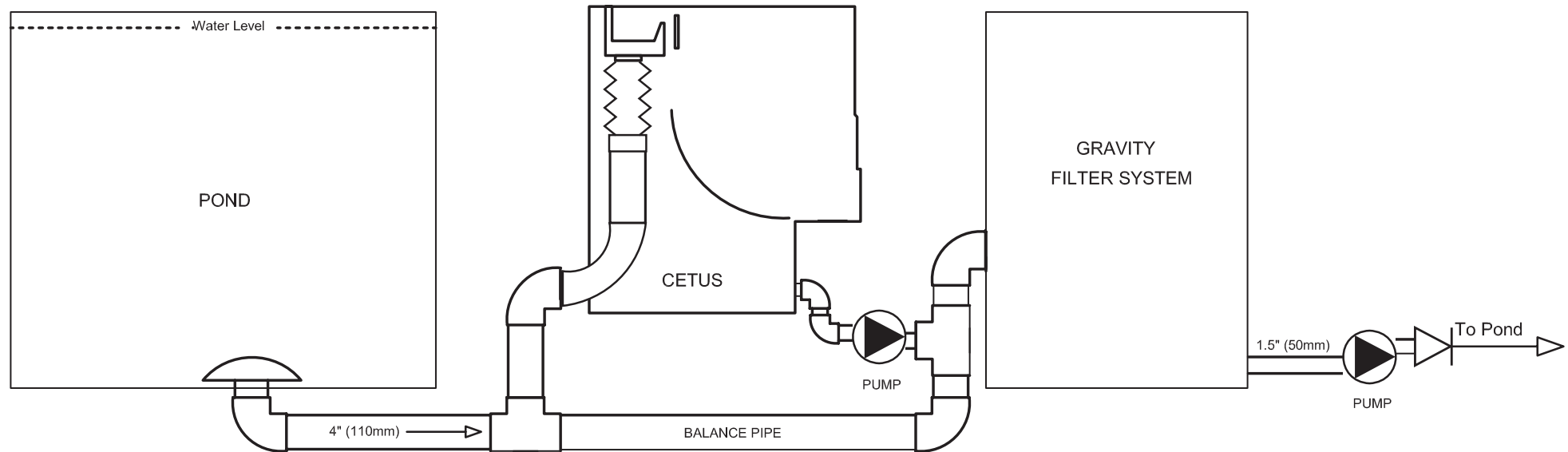
PUMP-FED INSTALLATION

- Skimmer line set-up.



Installation Options

GRAVITY-FED INSTALLATION - WITH BALANCE PIPE



This system can be installed with a balance pipe to allow the flow difference in pumps to equalize.

The 4" (110mm) pipe between the Cetus Sieve and the filter will allow water to pass in the direction of the higher demanding unit (*it is recommended that the pump from the Cetus Sieve has a higher flow rate than the pump from the filter.*)

- 1) Water leaves the pond via a 4" bottom drain and travels to the first T-piece.
- 2) Water then travels to the Cetus Sieve.
- 3) Water is pumped from the Cetus Sieve to the filter.
- 4) Water is pumped from the filter back to the pond.
- 5) Excess water flows through the balance pipe back to the Cetus Sieve.

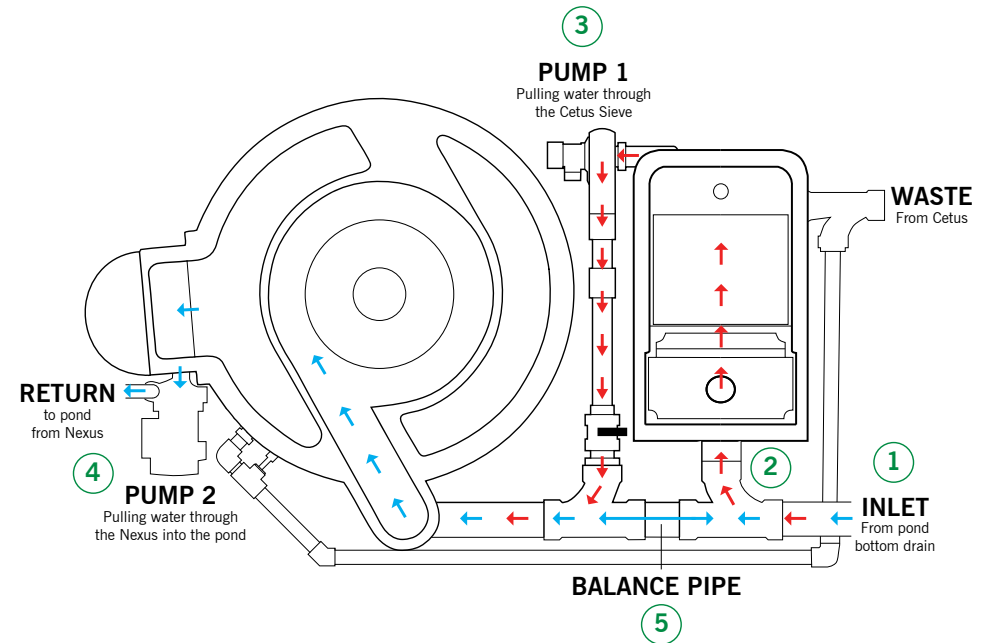
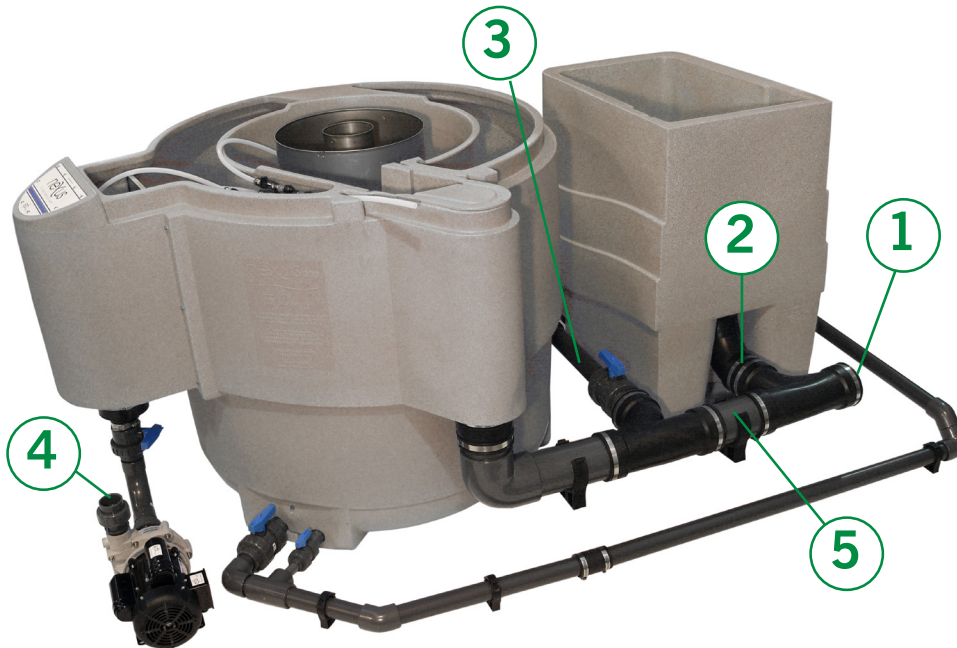
There are huge benefits to be gained by using this set-up.

Running these units in this configuration maximises the interval between cleans. Either unit can be switched off to carry out maintenance without affecting the other.

Both the Cetus Sieve and the filter can run independently of the other unit.

Installation Options

GRAVITY-FED INSTALLATION - WITH BALANCE PIPE



1) Water leaves the pond via a 4" bottom drain and travels to the first T-piece.

2) Water then travels to the Cetus Sieve.

3) Water is pumped from the Cetus Sieve to the filter.

4) Water is pumped from the filter back to the pond.

5) Excess water flows through the balance pipe back to the Cetus Sieve.

Installation

GRAVITY-FED INSTALLATION - EXAMPLES

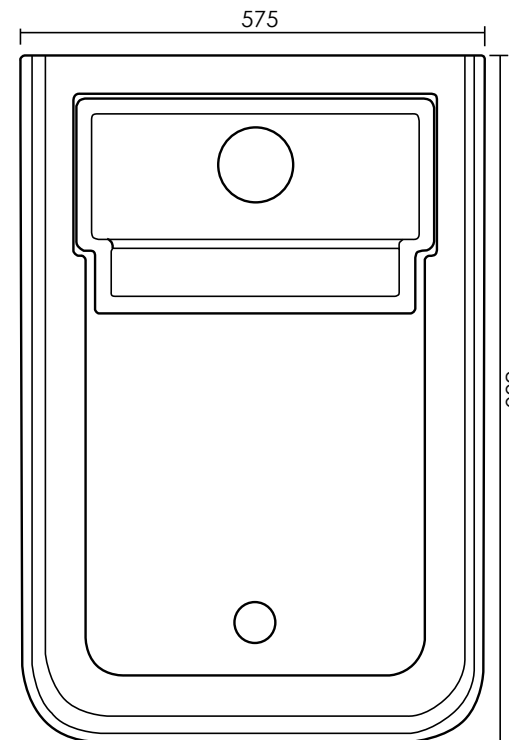
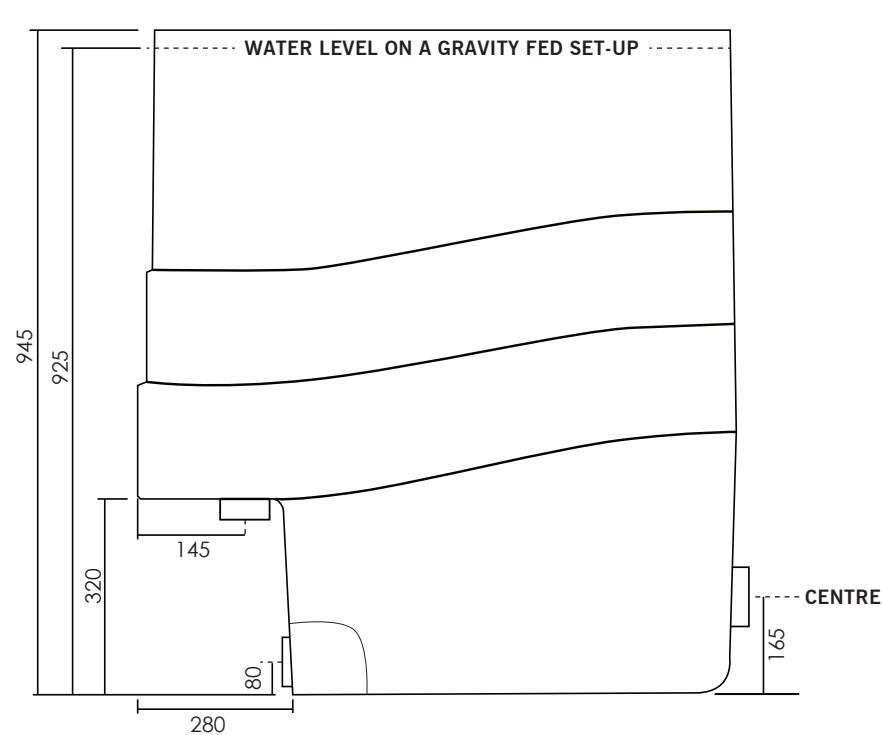


PUMP-FED INSTALLATION - EXAMPLES



Dimensions

cetus^osieve



CETUS SIEVE SHIPPING DIMENSIONS:

- Cetus are shipped in a cardboard box.
- Packaged dimensions are:
600mm (l)
880mm (w)
950mm (h)
- Shipping weight = 36kg.

Common FAQs

What kind of filter is works best with the Cetus Sieve?

The Cetus Sieve is suitable for use with both pressurised filters such as the K+Advanced Filter, and non-pressurised filters such as the Nexus, the Cetus Sieve can be used with most brands of filter following the same installation procedure as outlined in the manual for the Nexus.

Can the Cetus Sieve be used as a stand alone filter?

No, The Cetus Sieve is a mechanical filter only, it has no biological filtration.

ea product training

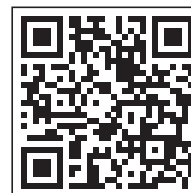
 MANUFACTURED
IN THE UK

EVOLUTION
AQUA
INNOVATION IN WATER

tempest

Innovative Polisher For Ponds

- Improves water quality and clarity
- Pre-filled with 7 litres of K+ Media
- Patented air backwash system
- Use in conjunction with any filter
- Install on ponds up to 5,000 litres



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QR code
to learn
more on
our website



www.evolutionaqua.com

nexus320+

EVOLUTION
AQUA
INNOVATION IN WATER

Tempest

- Launched in 2021, as a polisher to trap fine particles, after a larger, primary filter system, such as Nexus.
- Includes 7 litres of K+Media providing mechanical and biological filtration.
- Can be used as a standalone filter for ponds up to 5,000 litres / 1,100 gallons.
- Scan QR code to watch videos about Tempest.



Click on the link below for videos:

<https://tinyurl.com/3t2k87be>



Tempest

tempest

SIMPLE
TO
CLEAN

Optimum flow rate: 5,000 lph / 1,100 gph

Maximum flow rate: 7,500 lph / 1,650 gph

Volume of water in filter: 27 litres / 5.9 gallons

Amount of media supplied: 7 litres

Inlet size: 1½"

Outlet size: 1½"

Waste size: 1"



**Scan the
QR code**
to learn more
on our website



Overview of the Tempest

OUTLET TO POND 1½" SLIDE VALVE

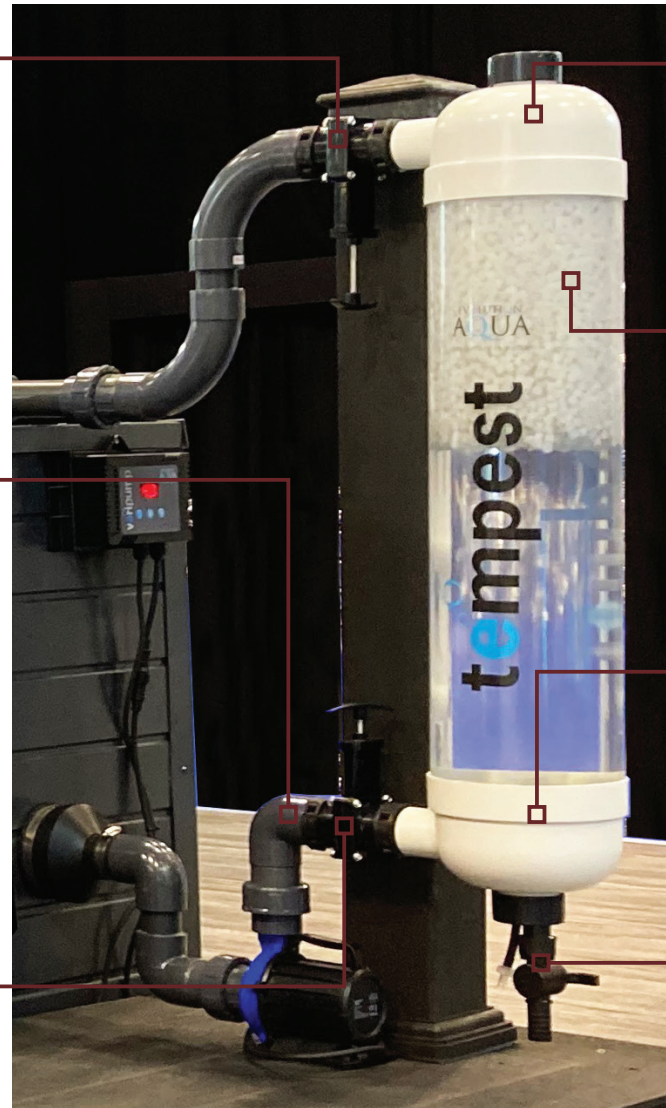
Water returns to pond.
User fits the slide valve during installation.
Mounting clips fit around this section of pipe to secure the filter.

PUMP INLET

Pump running at optimum speed of 5,000 litres per hour.
Can pump direct from pond, from a skimmer, or via the main filtration system.

INLET 1½" SLIDE VALVE

Water enters the pond.
User fits the slide valve during installation.
Mounting clips fit around this section of pipe to secure the filter.



OUTLET SECTION

Grill inside the cap prevents media escaping into the pond. Screw cap on top allows maintenance access.

K+MEDIA

Pre-filled with 7 litres of K+Media. This floating media sits at the top of the filter during operation, capturing fine particles down to one micron, providing mechanical and biological filtration.

BASE SECTION

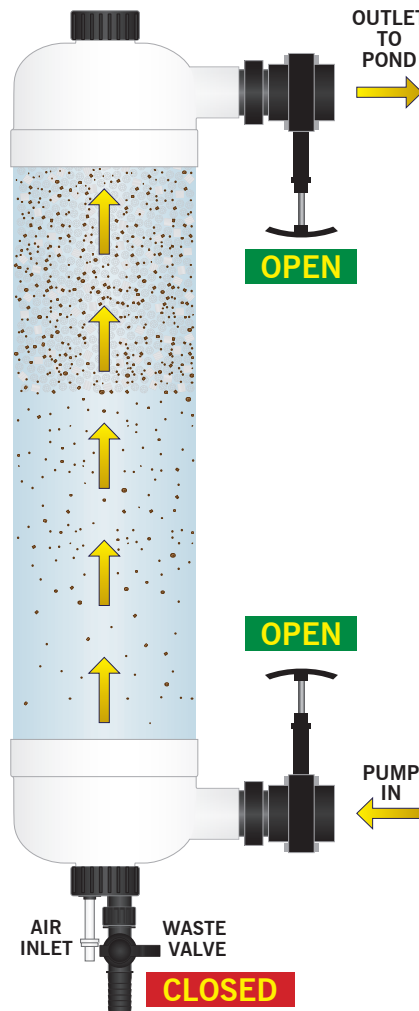
Includes grill that prevents media escaping during cleaning. Also captures any larger particles that enters the Tempest (e.g. *blanketweed*).

WASTE VALVE ASSEMBLY

Incorporates the air syphon mechanism that is used to clean the Tempest. Also features the drain valve to send water to waste.

How the Tempest works

- Water is pumped up through the Tempest Filter.
- The K+Media moves to the top of the filter, becoming a mechanical barrier that traps debris as it flows through the system.
- Waste is trapped in the K+Media until the cleaning cycle dislodges it and it gets flushed away.
- To clean the filter, turn the pump off and close the slide valves.
- Once the waste valve is opened, water leaves the Tempest, whilst air is drawn into the tube, agitating the K+Media.
- Debris and waste are dislodged from the K+Media and are flushed to waste.



NORMAL OPERATION



CLEANING

Specifications

Model	Optimum flow rate	Max flow rate	Max pond size	Inlet	Outlet	Waste Size	Amount of K+ Media	Volume of water in filter
tempest	5,000 Litres/hr 1,100 UK Gallons/hr 1,320 US Gallons/hr	7,500 Litres/hr 1,650 UK Gallons/hr 1,980 US Gallons/hr	5,000 Litres 1,100 UK Gallons 1,320 US Gallons	1½"	1½"	1"	7 Litres	27 Litres 5.9 UK Gallons 7.1 US Gallons

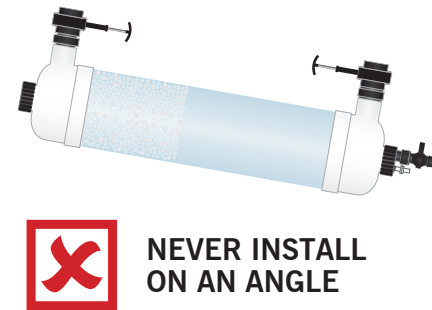
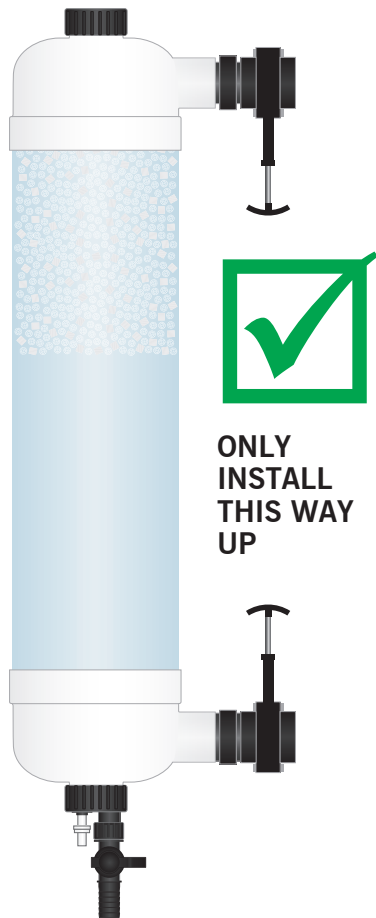
Installation Advice

- The customer needs to glue the slide valves (provided) onto the inlet and outlet pipes.
- Ideal flow rate is **5,000 litres per hour**.
- Slower flow is better for trapping waste.
- Install a by-pass pipe with a ball valve alongside the Tempest to control the flow rate through the Tempest and the pond.
- Tempest can be installed on a separate skimmer line to work in conjunction with the Nexus.
- Tempest can be installed on a quarantine system, or a standalone pond up to 5,000 litres.
- Multiple Tempest filters can be installed, but you must install the slide valves on each filter to clean them individually.
- We recommend using pressure pipe to connect the inlet and outlet, but flexi-hose can be used.



Installation Advice

The Tempest filter can only be installed vertically with the waste air valve assembly at the bottom of the filter. You can choose to have the slide valves facing the left or right, depending on your set-up.

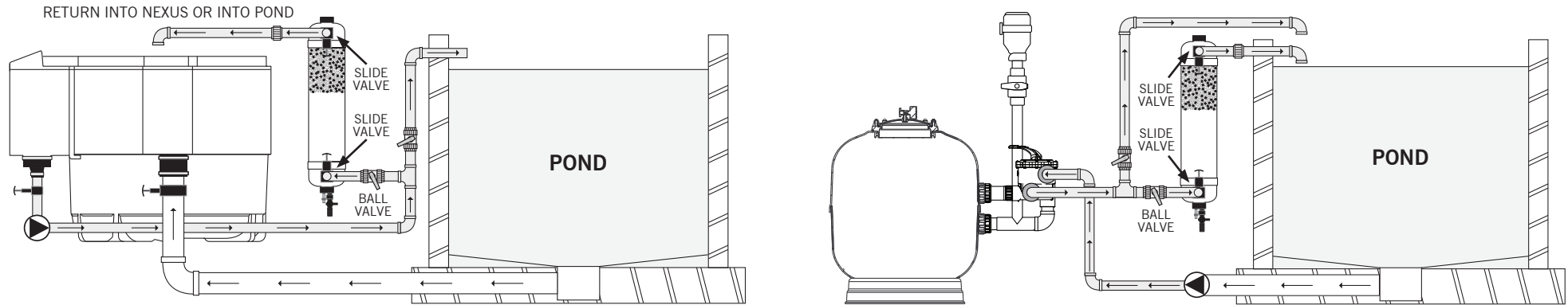


CAUTION

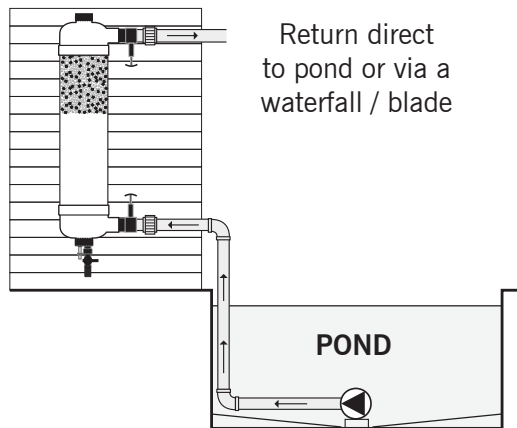
Approx. 30kg
when filled with
water

30
KG

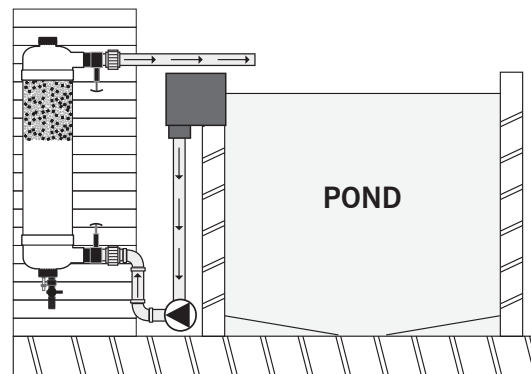
Installation Examples



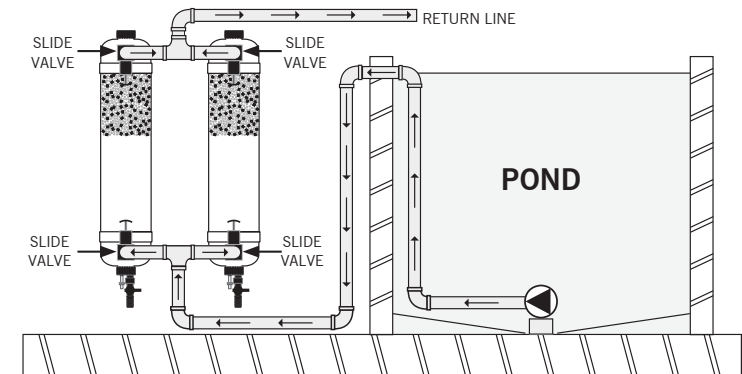
TYPICAL INSTALLATIONS WITH A GRAVITY FED FILTER



PUMP-FED INSTALL



SKIMMER LINE INSTALL



MULTIPLE TEMPEST FILTERS

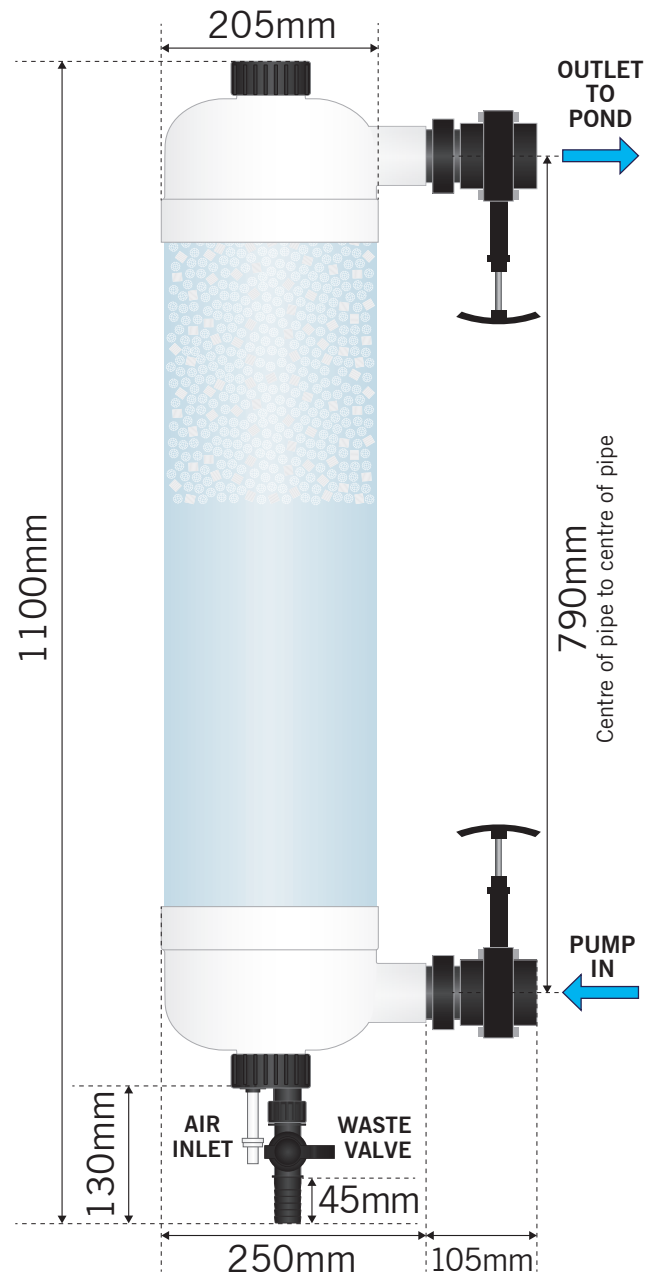
Installation Examples



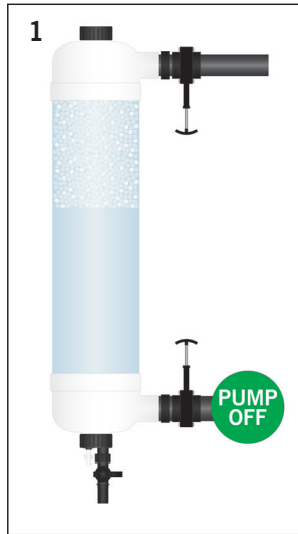
Dimensions

tempest

Weight = 30kg approx.
when filled with water.



Cleaning the Tempest



STEP 1
Switch pump off



STEP 2
Close both slide valves

This ensures the water is contained within the Tempest.



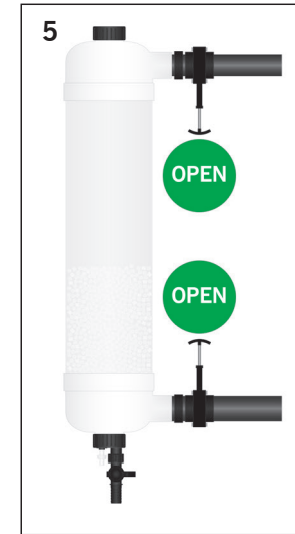
STEP 3
Open waste valve tap

Air enters the filter causing the filter media to move and clean as the water drains to waste.

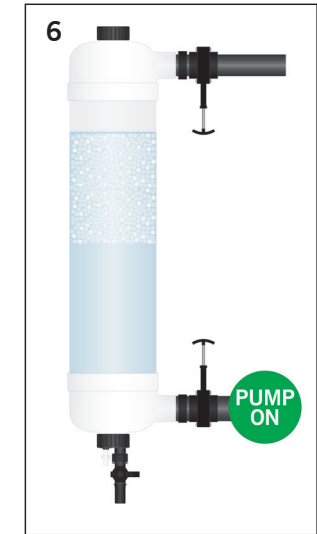


STEP 4
Close waste valve tap

All the water should have emptied from the filter and the media will be at the bottom.



STEP 5
Open all slide valves



STEP 6
Switch pump on

Water will re-fill the tube and media will rise to the top. Normal filtration resumes.

Cleaning the Tempest



The Tempest allows you to see particles that are trapped within the K+Media. This is an extreme example, but this is a clear indication that the filter is working, but also that it needs to be cleaned.



Once the dirty water is drained from the Tempest it can be re-filled. Over time the colour of the K+Media will naturally go brown, this is a good sign, as it indicates the development of bio-film on each piece of media.

Common FAQs

Filter media is not cleaning?

1. Check the air valve is not blocked.
2. Check the slide valves are fully closed.
3. If the media is very dirty this may cause the pack to clump together. Multiple cleans should clear this.
4. If the white end cap at the bottom of the filter is full of waste it is possible to clear this by switching off the pump and unscrewing the waste valve assembly, allowing the blockage to clear.

.....

Waste water does not drain when the tap on the waste valve assembly is open?

The white end cap at the bottom of the filter may be full of waste. It is possible to clear this by switching off the pump and unscrewing the waste valve assembly, allowing you to clear the blockage.

If I was to run 2 Tempest Filters split evenly off one pump feed at 10,000 lph would this then equal the optimum flow rate of 5,000 lph through both Tempests?

Yes, splitting the flow rate from a 10,000 Varipump through two Tempest filters is fine, as in theory it will provide a flow rate of 5,000 litres per hour through both filters.

However, we recommend installing a ball valve before each filter so you can control the flow rate specifically to maintain 5,000 lph through both filters. You can also control the flow via the Varipump controller if you need to turn the whole system down a bit.

During cleaning please ensure you clean each filter independently and turn off the pump before closing the slide valves, to avoid any chance of running 10,000 lph through one filter.

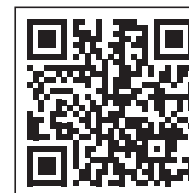
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airpumps™

Reliable and economical air pumps

- Provides consistent levels of oxygen in ponds
- High performance, reliable pumps
- Thermal protection as standard
- Airstones and airline also available
- 5 models (70, 75, 95, 130, 150)



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Airpumps

- Reliable air pumps manufactured for Evolution Aqua.
- Integral for use with Nexus for biological filtration (*moving bed*).
- Used with Nexus and Eazypod during cleaning process.
- Add air into the pond, via air stones and manifolds.
- Easy to service, with spare parts available.
- Scan QR code to watch videos about air pumps.

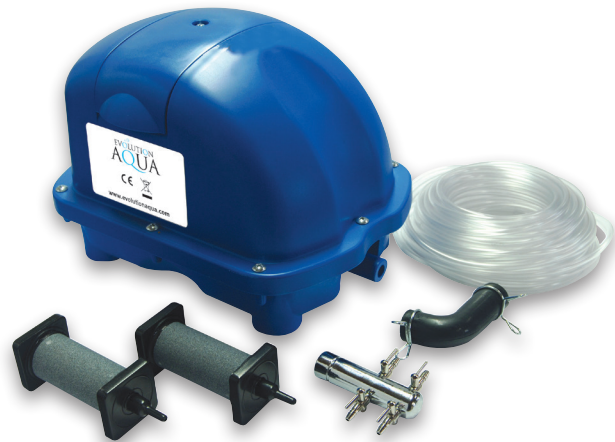


Click on the link below for videos:

<https://tinyurl.com/y5arw96d>



Specifications



Airpump 70



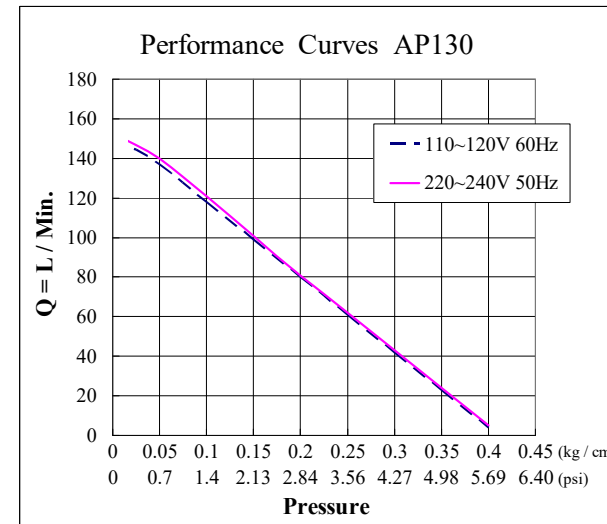
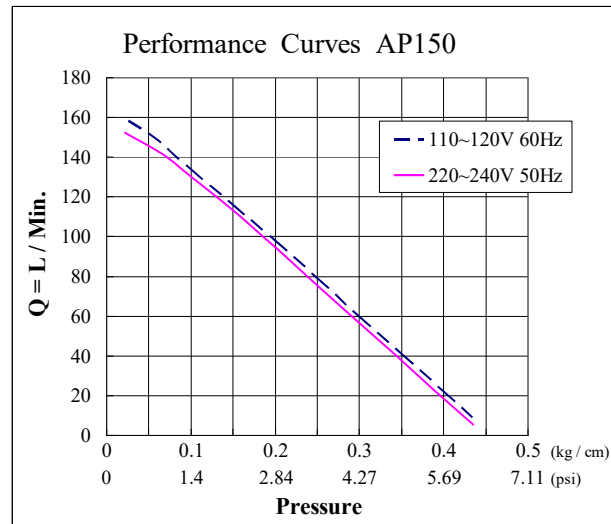
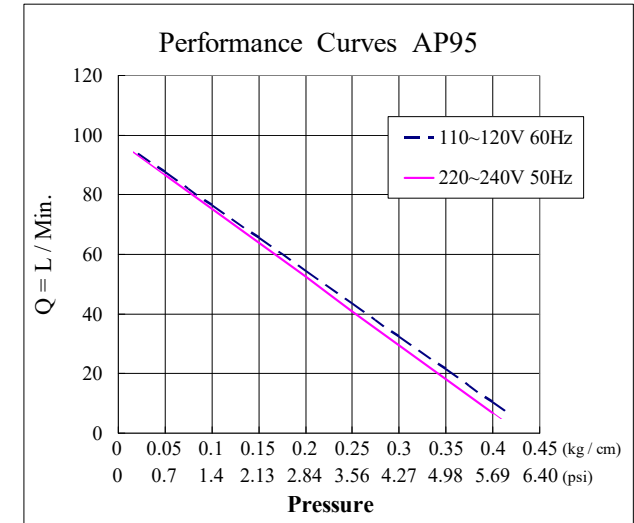
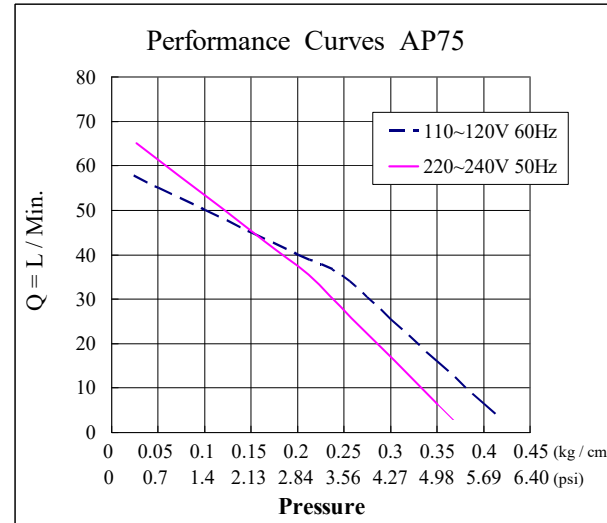
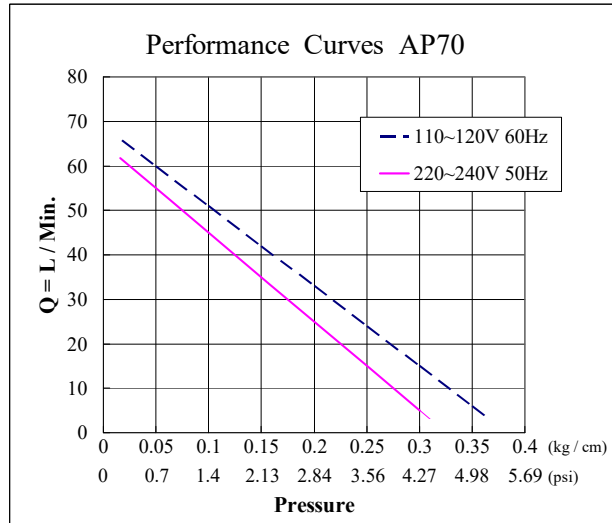
Airpump 75 / 95



Airpump 130 / 150

Model	Max. Output (Litres Per Minute)	Output At 1m Depth (Litres Per Minute)	Max. Operating Depth	Power Usage (Watts)	Noise Level (Dba)	Voltage (Vac)	Ea Code	Barcode
Airpump 70	70 lpm	52	3.2m	34W	<46	220V - 240V	AIRPUMP70	5060088870471
Airpump 75	75 lpm	59	3.9m	44W	<46	220V - 240V	AIRPUMP75	5060088870488
Airpump 95	95 lpm	78	4.35m	62W	<47	220V - 240V	AIRPUMP95	5060088870495
Airpump 130	130 lpm	110	4.7m	88W	<50	220V - 240V	AIRPUMP130	5060088870501
Airpump 150	150 lpm	130	5.5m	106W	<50	220V - 240V	AIRPUMP150	5060088870518

Air Pump Curves



Installation

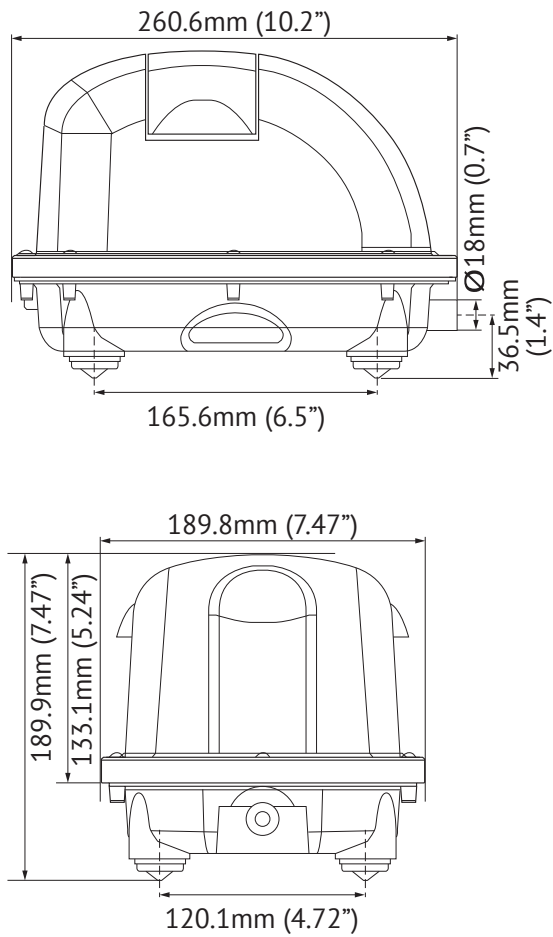
- The pump must be hard wired into a suitable power supply.
- A Residual Current Device (RCD), also known as the Residual Current Circuit Breaker (RCCB), with a tripping current not exceeding 30mA must be installed in the supply circuit.
- If the pump is mounted below the water level of a filter (e.g. *Nexus*) it MUST have a non-return valve fitted to prevent water siphoning into it if there's a power cut.
- The ambient operating temperature for this pump is between 41°F (5°C) and 104°F (40°C).
- Install this product where it will not come into contact with water or other liquids.



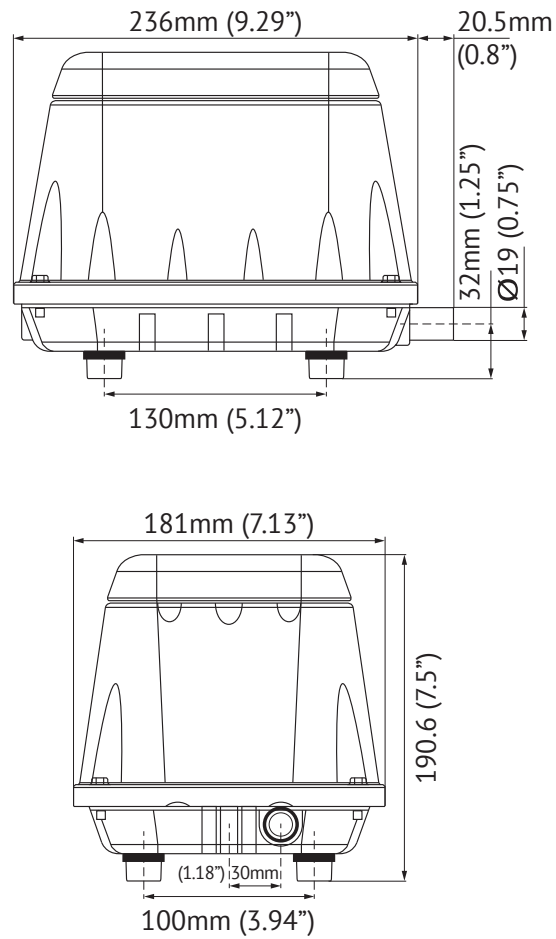
Dimensions

airpumps

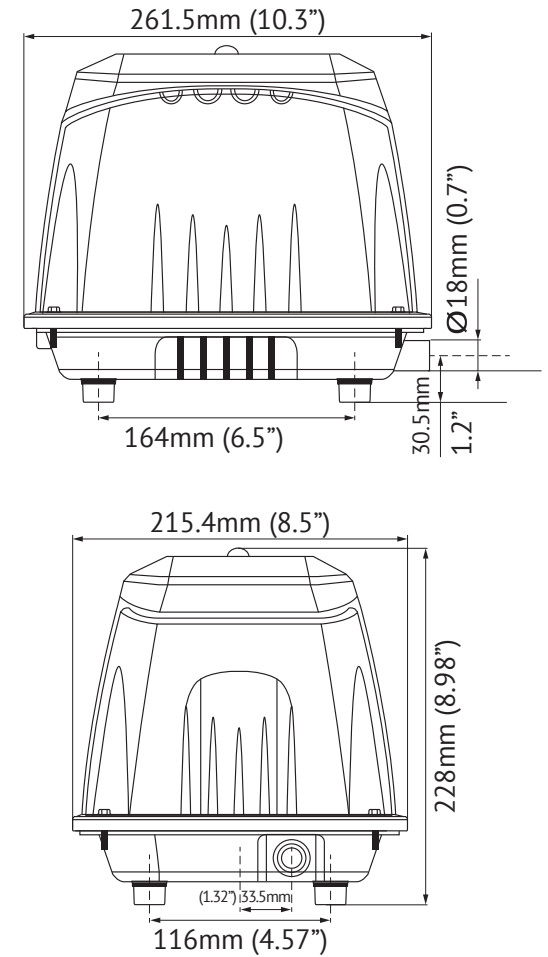
Airpump 70



Airpump 75 / 95

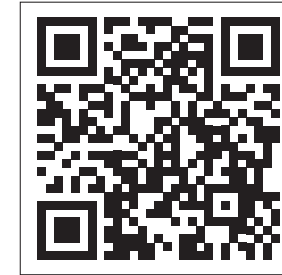


Airpump 130 / 150

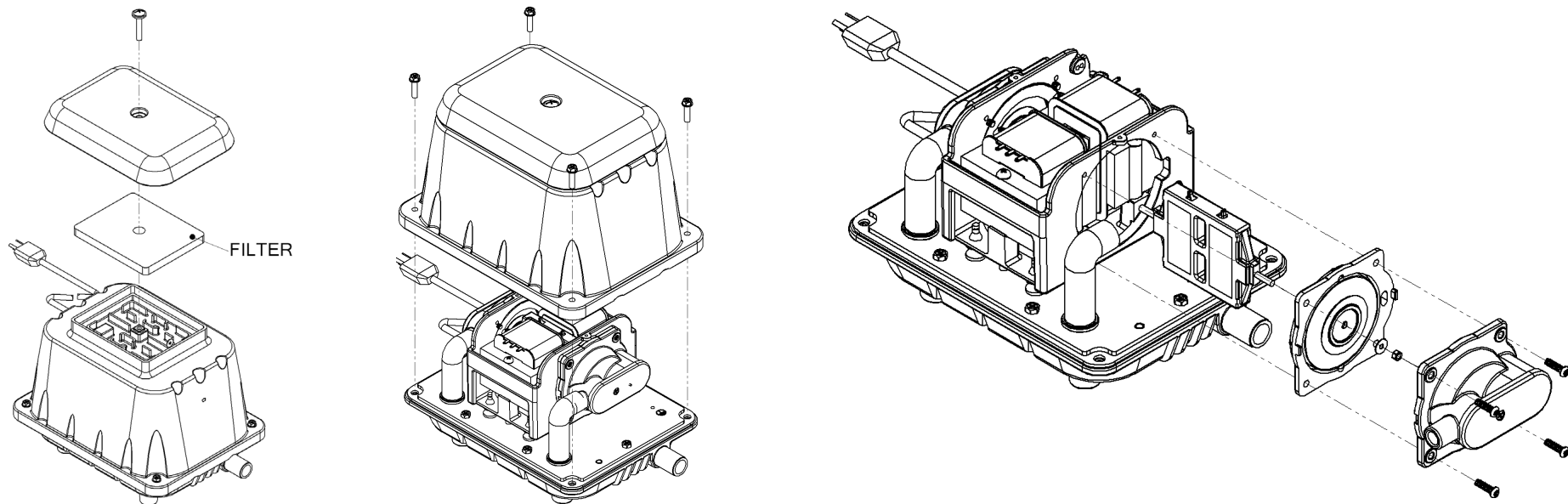


Maintenance

- Air pumps are easy to maintain and service.
- It is recommended to clean the filter pad once every six months.
- The diaphragms can be replaced if they ever fail.
- If the air pump is noisy, it could be that the diaphragms need replacing.
- Activating arms and electro-magnets are also replaceable.
- Refer to the instruction manual, website spare parts and YouTube videos for advice.



SCAN QR CODE
TO WATCH AIR PUMP
MAINTENANCE VIDEOS



Common FAQs

The air output has dropped on my air pump, why?

If there is no obvious blockage or restriction in the air line, it may be that the diaphragm needs to be replaced.

.....

Are the air pumps waterproof?

The airpumps are weather proof and can be used outside, they are not waterproof so do not situate in a position where they are likely to be flooded.

.....

How do I prevent water back-siphoning back into the Air Pump?

You must install a non-return air valve on the outlet of the air pump if the pump is situated lower than the water level.

Why has the air pump switched off?

There is thermal overload protection built into each pump, so if the motor overheats it will shut off.

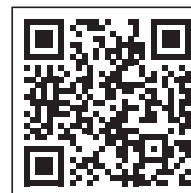
On Air Pump 130 and 150 models, there is also a safety switch system. If the magnet, in the centre of the air pump, slides over time; or when either diaphragm is broken, causing an unusual longer stroke of the magnet, the micro switch on top of the coil frame will automatically shut the power off.



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Ultraviolet clarifiers for ponds

- Eradicates green water in ponds
- Features highly efficient ballasts
- Removable, serviceable ballast box
- Connects to flexi-hose or rigid pipe
- 6 models (15, 25, 30, 55, 75, 110 Watt)



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evoUV

- Evolution Aqua evoUV first developed in 2010.
- Research and development as led to the current design.
- Robust design allowing consistent flow through the UV.
- Removable ballast box for complete serviceability.
- Connects using flexi pipe or pressure pipe.
- Scan QR code to watch videos about evoUV.



Click on the link below for videos:

<https://tinyurl.com/bdhtxc7h>





Max. Pond Size: 15,000 litres | **Max. Flow Rate:** 7,500 lph



Max. Pond Size: 20,000 litres | **Max. Flow Rate:** 10,000 lph



Max. Pond Size: 30,000 litres | **Max. Flow Rate:** 15,000 lph



Max. Pond Size: 55,000 litres | **Max. Flow Rate:** 20,000 lph



Max. Pond Size: 75,000 litres | **Max. Flow Rate:** 25,000 lph



Max. Pond Size: 75,000 litres | **Max. Flow Rate:** 25,000 lph

Specifications

Model	Max. Pond Size	Max. Flow Rate	Bulb Power	Inlet / Outlet	Dimensions (Excluding Hosetails)	Dimensions (Inlet To Outlet)
ev015	15,000 litres 3,300 UK gallons 3,963 US gallons	7,500 litres/hr 1,650 UK gallons/hr 1,982 US gallons/hr	15W (1 x 15W T8)	1½" Comes with hosetails	540mm (l) 116mm (w) 153mm (h)	319mm Centre of inlet to centre of outlet
ev025	20,000 litres 4,400 UK gallons 5,284 US gallons	10,000 litres/hr 2,200 UK gallons/hr 2,642 US gallons/hr	25W (1 x 25W T8)	1½" Comes with hosetails	540mm (l) 116mm (w) 153mm (h)	319mm Centre of inlet to centre of outlet
ev030	30,000 litres 6,600 UK gallons 7,925 US gallons	15,000 litres/hr 3,300 UK gallons/hr 3,962 US gallons/hr	30W (1 x 30W T8)	1½" Comes with hosetails	990mm (l) 85mm (w) 153mm (h)	768.5mm Centre of inlet to centre of outlet
ev055	55,000 litres 12,100 UK gallons 14,530 US gallons	20,000 litres/hr 4,400 UK gallons/hr 5,284 US gallons/hr	55W (1 X 55W T8)	1½" Comes with hosetails	990mm (l) 85mm (w) 153mm (h)	768.5mm Centre of inlet to centre of outlet
ev075	75,000 litres 16,500 UK gallons 19,815 US gallons	25,000 litres/hr 5,500 UK gallons/hr 6,605 US gallons/hr	75W (1 X 75W T8)	1½" Comes with hosetails	1293mm (l) 85mm (w) 153mm (h)	1071.5mm Centre of inlet to centre of outlet
ev0110	75,000 litres 16,500 UK gallons 19,815 US gallons	25,000 litres/hr 5,500 UK gallons/hr 6,605 US gallons/hr	110W (2 X 55W T8)	2" No fittings supplied	990mm (l) 195mm (w) 280mm (h)	768.5mm Centre of inlet to centre of outlet

Specifications

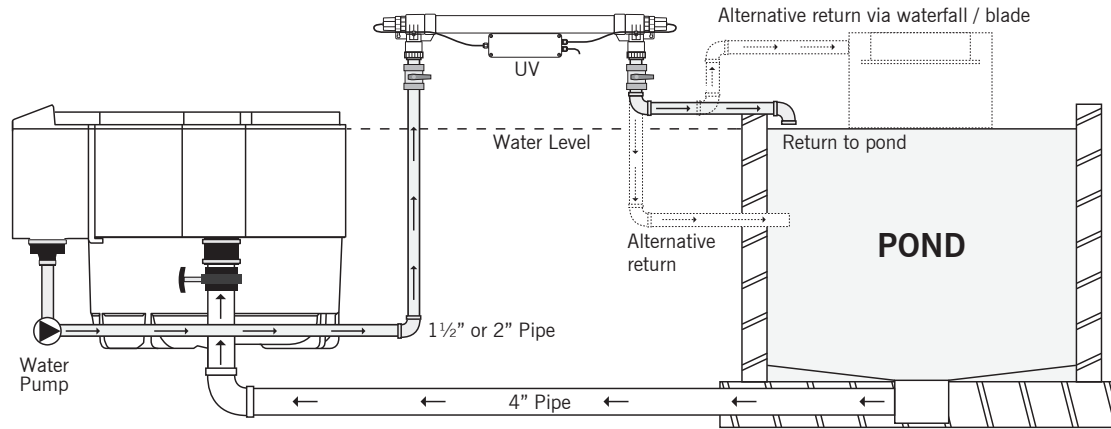
Use this selector tool to help when selecting the correct size UV for the pond.

POND SIZE		POND IS IN FULL SHADE		POND IS IN PART SHADE		POND IS IN FULL SUN	
		LOW STOCK	HIGH STOCK	LOW STOCK	HIGH STOCK	LOW STOCK	HIGH STOCK
		<7,500 Litres	<1,650 UK Gallons <1,982 US Gallons	evo15	evo15	evo15	evo15
<15,000 Litres	<3,300 UK Gallons <3,963 US Gallons	evo15	evo25	evo15	evo25	evo25	evo30
<20,000 Litres	<4,400 UK Gallons <5,284 US Gallons	evo25	evo30	evo30	evo30	evo30	evo55
<30,000 Litres	<6,600 UK Gallons <7,925 US Gallons	evo30	evo55	evo55	evo55	evo55	evo55
<55,000 Litres	<12,100 UK Gallons <14,530 US Gallons	evo55	evo75 / evo110*	evo75 / evo110*	evo75 / evo110*	evo75 / evo110*	evo75 / evo110*
<75,000 Litres	<16,500 UK Gallons <19,815 US Gallons	evo75 / evo110*	evo75 / evo110*	evo75 / evo110*	evo75 / evo110*	evo110	evo110

*evo110 offers even more UV per volume than the evo75 for more demanding situations

Installation

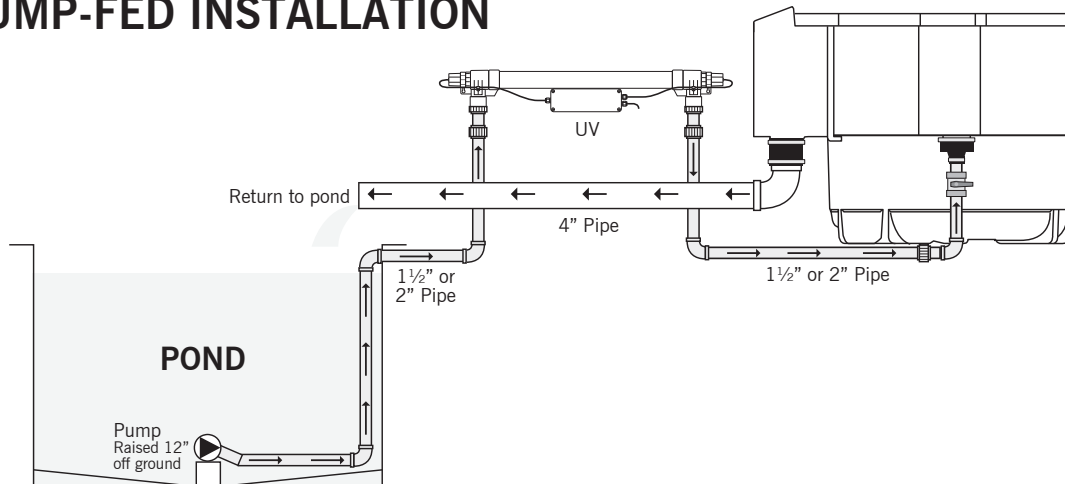
GRAVITY-FED INSTALLATION



We recommended installing a ball valve either side of the evoUV for maintenance.

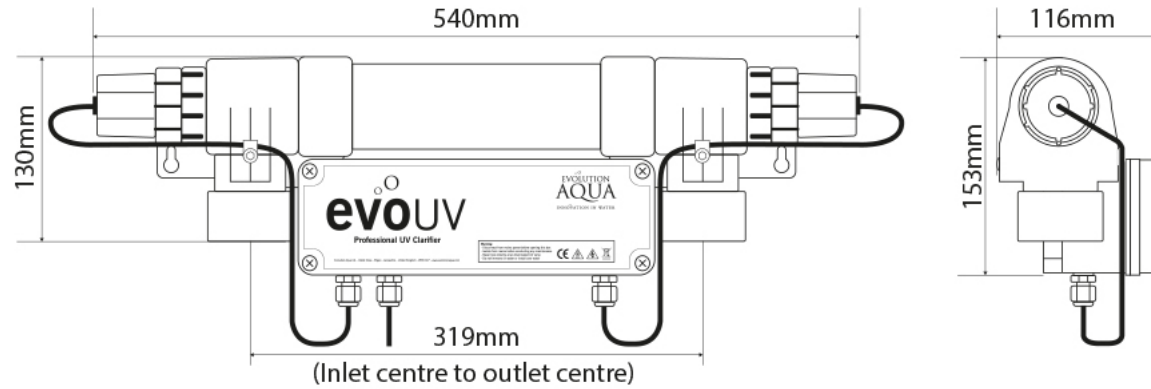


PUMP-FED INSTALLATION

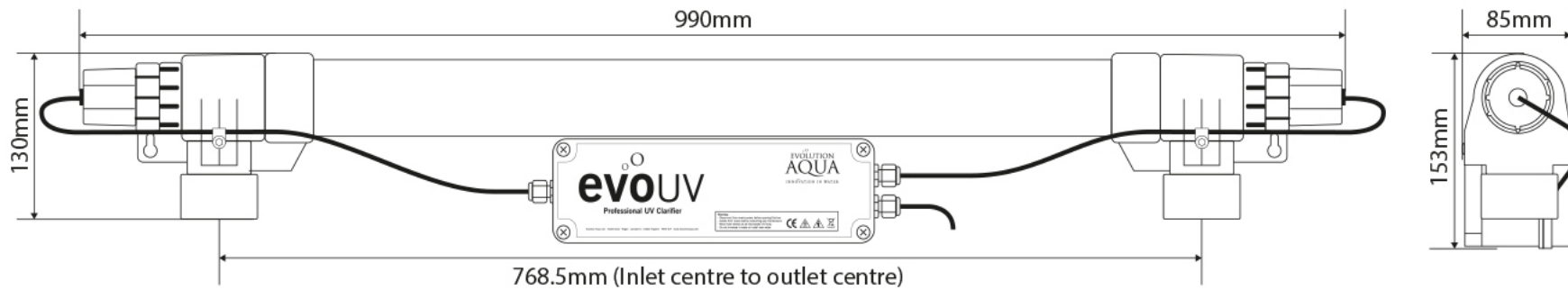


Dimensions

evo15 / 25

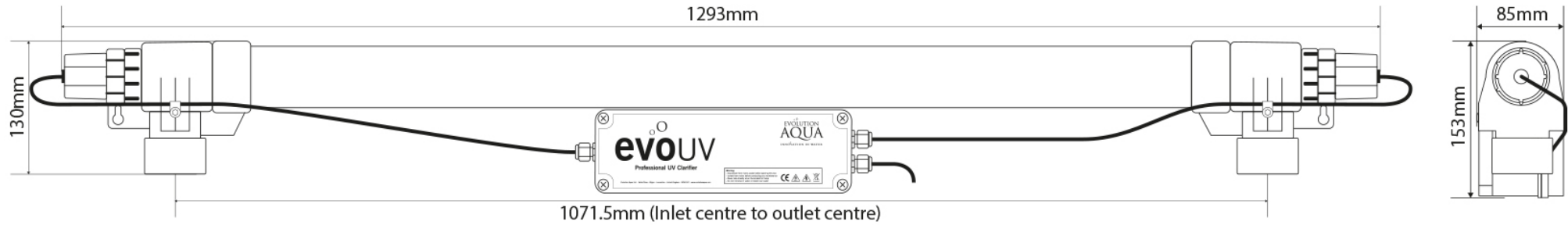


evo30 / 55

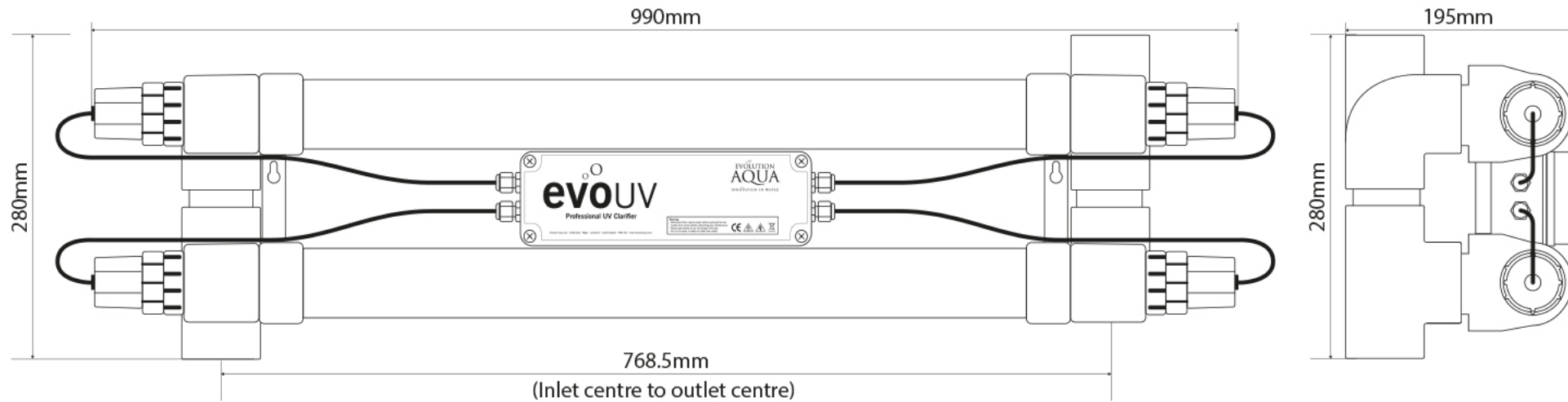


Dimensions

evo75

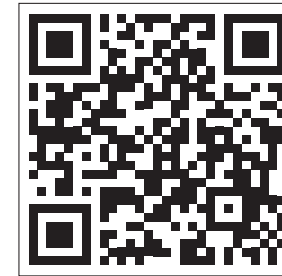


evo110

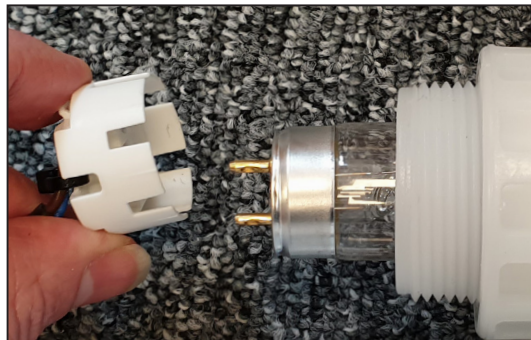


Maintenance

- evoUV maintenance generally involves replacing the UV bulbs and quartz sleeves.
- It is recommended to replace the UV bulb once a year, at the start of spring season.
- If the ballast fails, simply remove the entire control box and replace it with a new one.
- Ensure any washers and O-rings are fitted correctly during maintenance.
- Refer to the instruction manual, website spare parts and YouTube videos for advice.



SCAN QR CODE
TO WATCH EVO UV
MAINTENANCE VIDEOS



Common FAQs

Why will a 75W and 110W handle the same maximum pond size?

evo110 offers even more UV per volume than the evo75 for more demanding situations. The 75 Watt UV is longer than a 110 and in some cases it isn't practical to fit within a filter room. That said, a 75 Watt runs at a lower operating wattage than a 110 Watt, so can be more advantageous.

.....

The unit worked well when I first installed it but recently my pond has gradually gone green again – what is wrong?

Quartz sleeve may have become dirty and requires cleaning. Also make sure you have the right model for your pond size. Ensure your pond filtration is removing fish waste and debris efficiently. Dirt in ponds will affect the efficiency of the evoUV. Check that your pond water volume is pumping through the evoUV every 2 to 3 hours.

Only after you have carried out these checks should you contact your Evolution Aqua dealer, who will then be able to advise you further.

How long can I leave the unit running?

evoUVs have been designed and manufactured to the highest standards, and should be run 24 hours a day, every day, from mid March to early October, depending on the weather conditions. If the unit is frost protected it may be left running throughout the winter. Otherwise, the unit should be removed, drained and stored safely for the winter.

.....

If the UV bulb is not lit, then you need to investigate the power to your unit.

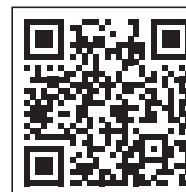
- Has your RCD tripped? If yes, check your wiring and reset.
- Examine the UV bulb for signs of failure, and replace if necessary.
- Is the UV bulb fitted correctly? Unscrew the end caps and ensure correct fitting as per the instructions as described in this manual.
- Are the end caps dry? If not, allow to dry thoroughly. We recommend the use of a hair-dryer for this.



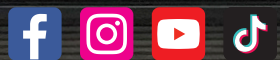
varipump

High Performance Controllable Pumps

- Adjustable flow control – via wired controller
- Energy efficient pump
- Quiet and reliable motor
- Install in our out of pond
- 10,000, 20,000 and 30,000



Scan the
QR code
to learn
more on
our website



Varipumps

- Easily adjust the flow rate, using the wired control box, to suit the application needs.
- Can be used as a submersible pond pump.
- Or use out of the pond as a circulating pump.
- Reliable motor and component parts.
- Ideal to use with Evolution Aqua Nexus, Eazypods etc.
- Scan QR code to watch videos about Varipumps.



Click on the link below for videos:
<https://tinyurl.com/yckmay92>



YouTube



Specifications

varipump

	INLET	OUTLET	MAX. FLOW (LITRES PER HOUR)	MAX. FLOW (GALLONS PER HOUR)	MAX. FLOW (US GALLONS PER HOUR)	MAX. HEAD	MAX. WATTS	DIMENSIONS
Varipump 10,000	1½"	1½"	10,000	2,200	2,642	3.1m	75W	267mm (L) 122mm (W) 162mm (H)
Varipump 20,000	2"	2"	20,000	4,400	5,283	5.5m	190W	319mm (L) 142mm (W) 181mm (H)
Varipump 30,000	2"	2"	30,000	6,600	7,925	5.5m	290W	370mm (L) 155mm (W) 205mm (H)

Installation

varipump

Varipump can be connected to flexi-hose using the stepped hosetail included or connected to hard pipe using the connectors provided. However, we strongly recommend connection to pressure pipe.

VARIPUMP 10,000 TO 1½" PRESSURE PIPE

To do this we recommend screwing a **1½" Single Union, Threaded Female To Plain Female (EA Code: K82-76-55)** onto the inlet and outlet of the Varipump. This also enables easy access to the pump for maintenance when on a gravity fed set-up. You can then glue **1½" Pressure Pipe (U15-050)** directly into these connectors, using **Solvent Weld Adhesive (EA Code: S79-0-500)**.

VARIPUMP 20,000 AND 30,000 MODELS TO 2" PRESSURE PIPE

To do this we recommend screwing a **2" Single Union, Threaded Female To Plain Female (EA Code: K82-76-66)** onto the inlet and outlet of the Varipump. This also enables easy access to the pump for maintenance when on a gravity fed set-up. You can then glue **2" Pressure Pipe (U15-063)** directly into these connectors, using **Solvent Weld Adhesive (EA Code: S79-0-500)**.

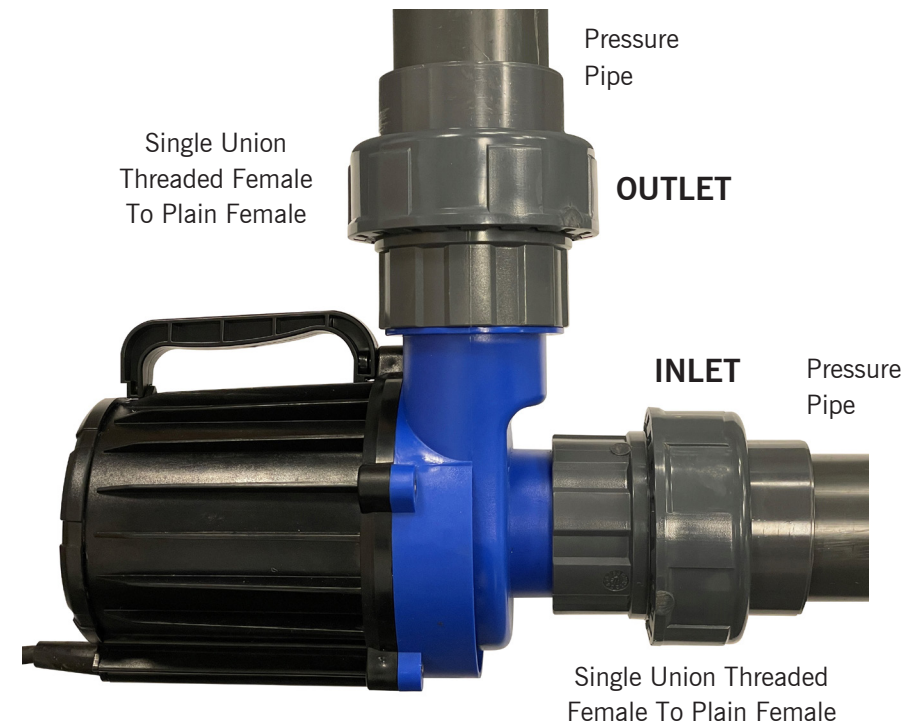
If you want to connect the Varipump 20,000 or 30,000 to **1½" Pressure Pipe**, follow steps above and add a **2" to 1½" Plain Reducing Bush (EA Code: R81-063)**.



Hosetails

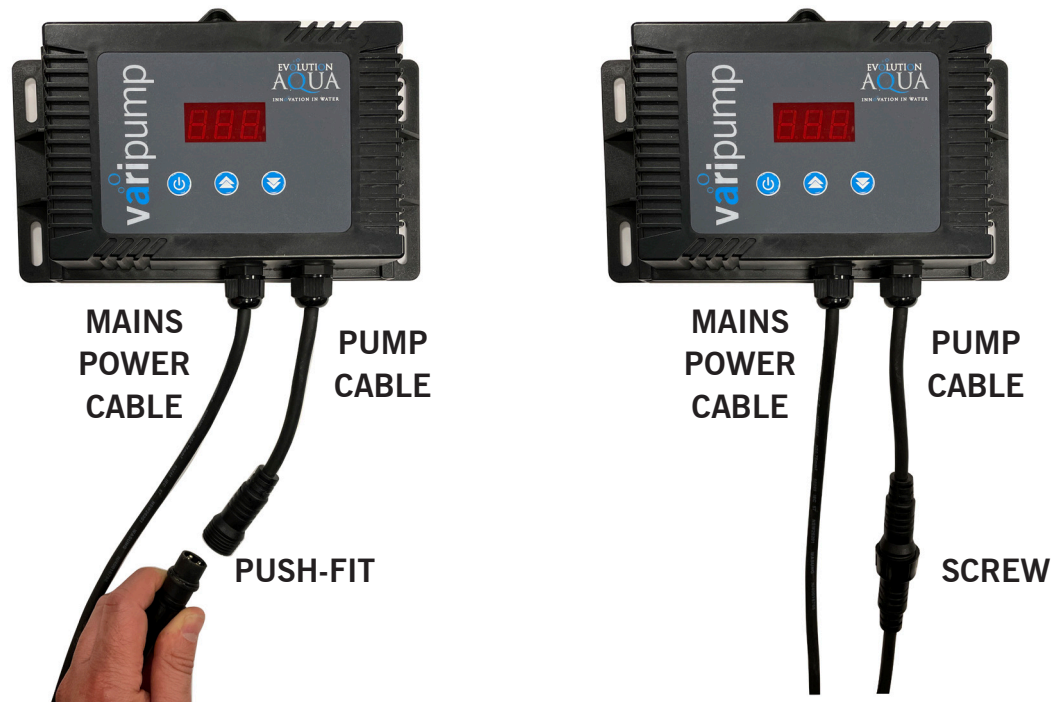


40mm Connectors (VP 10,000)
50mm Connectors (VP 20,000 / 30,000)



Installation

- The mains power cable must be hard wired into a suitable power supply.
- A Residual Current Device (RCD), also known as the Residual Current Circuit Breaker (RCCB), with a tripping current not exceeding 30mA must be installed in the supply circuit.
- Connect the pump cable to the controller using the weatherproof 4 pin, push-fit connector. Tighten up the collar to secure the connection.
- Use the control box to turn the pump on / off and turn the flow rate up and down.



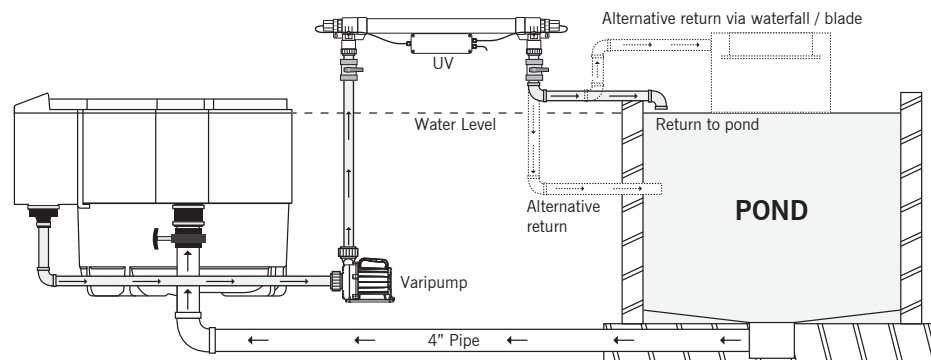
Level of power displays briefly when pressing ▲ or ▼



Wattage displays when Varipump is on. Press power button (⏻) to Varipump off.

GRAVITY-FED INSTALLATION

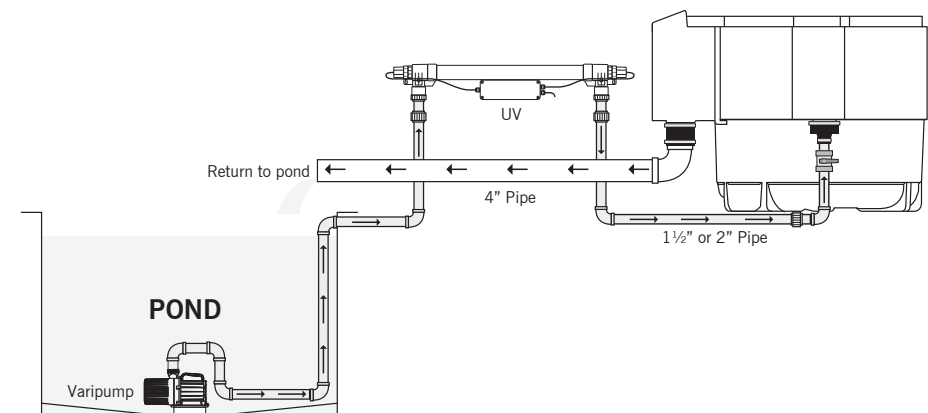
- The pump suction line should be not smaller than 1½” (40mm imperial) or 50mm true metric.
- The pump is not self-priming. Therefore, if the water level is below the pump, a non-return valve must be installed below water level. The pump and inlet line must be primed prior to start up. For non-flooded installations a check valve (non-return valve) is recommended.
- Do not operate the pump without water.



Gravity fed filter installation example shown

PUMP-FED INSTALLATION

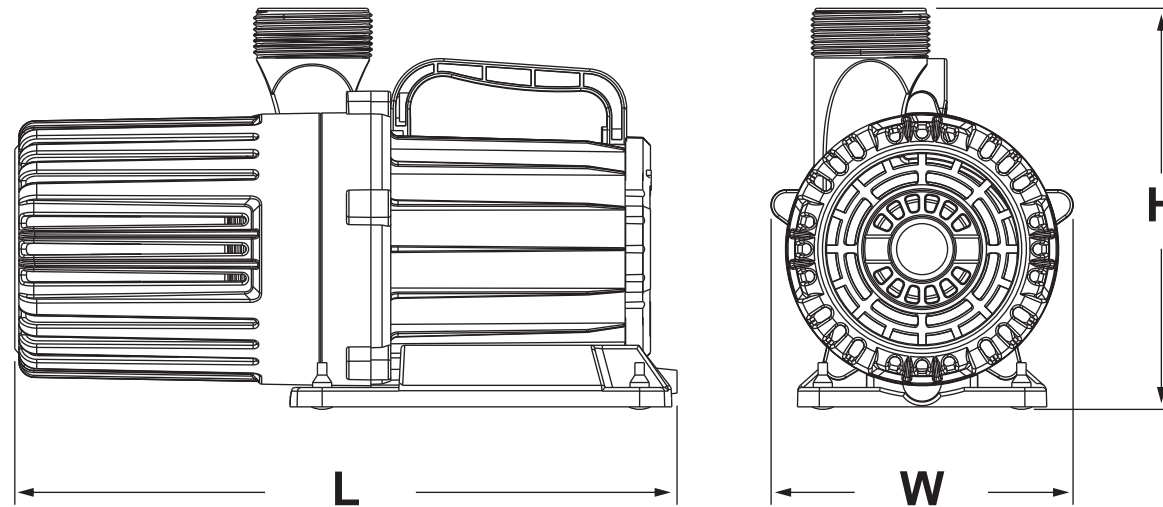
- Varipump can be submersed in water, as part of a pump-fed system. When installing on pump-fed systems we recommend using the hositails provided to connect up to flexible hose (not supplied).
- Do not operate the pump without water.



Pump fed filter installation example shown

Dimensions

varipump



Varipump 10,000

267mm (L)
122mm (W)
162mm (H)

Varipump 20,000

319mm (L)
142mm (W)
181mm (H)

Varipump 30,000

370mm (L)
155mm (W)
205mm (H)

Power cable length = 10 metres (control box to pump)

Power cable length = 2 metres (mains to control box)

Maintenance

- It is good practice to inspect the Varipump regularly and to clean it once or twice per year. Scan the QR code to watch a cleaning video.
- On gravity-fed installs, unscrew the collar on the unions to remove the inlet and outlet pipework.
- On pump-fed installs, use the handle to pull the pump out of the pond, do not pull on the cable.



Scan the QR code
to watch a
cleaning video
on YouTube



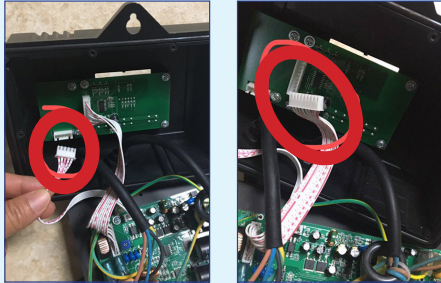
Click on the link for video:
<https://tinyurl.com/596shet3>

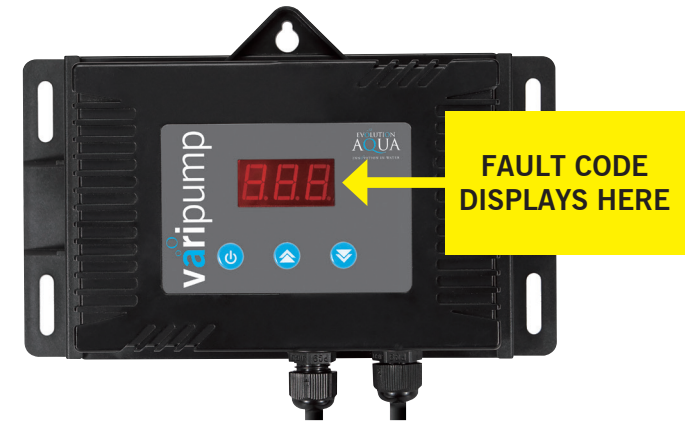


Fault Codes

FOR VARIPUMP MODELS MANUFACTURED BEFORE 2021

In the unlikely event of an issue developing with the pump, a 3 digit fault code may display on the controller screen. Use the chart below to understand what these codes mean.

FAULT CODE	FAULT	RESOLUTION
E01	Pump is out of water	The pump is working without water.
E02	Over current	Abnormal load over current protection. Please pull out the power plug and re-plug again.
E03	Default phase	Bad contact or loose connection in the motor.
E04	Issue with power cable connecting pump to the control box	<p>Check the cable for signs of visible damage. Or there maybe a loose connection inside the control box. Disconnect the pump from the mains, unscrew the control box and check the connections (see photos). If connections are fitted and the pump still does not work, the control box may be faulty and needs changing.</p> 
E05	Impeller stuck	Rotation clogging protection, if the pump still not working after restart for three times, please re-plug the power. Or clean the impeller (refer to manual)
E06	Over voltage	Over voltage protection when the working voltage is higher than the rated voltage.
E07	Under voltage	Low voltage protection when the working voltage is lower than the rated voltage.
HHH	Reduced mains power supply following a power cut	If the code HHH displays on the control box, it means there is not enough power being supplied to the pump following a power cut. It is likely that there has been mains power cut in your area and when the energy company have restored power the mains supply is not running at full power (e.g. 205 Volts instead of 230 Volts). If you wait a few hours the mains supply will return to normal (230 Volts) and the pump will re-start. This fault code does not mean the pump is faulty.

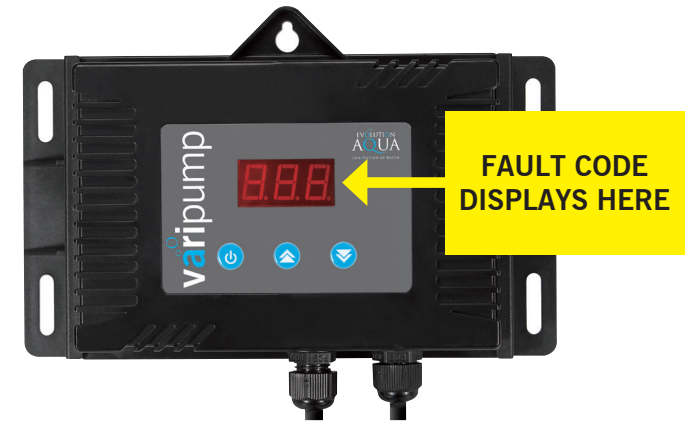


Fault Codes

FOR VARIPUMP MODELS MANUFACTURED AFTER 2021

In the unlikely event of an issue developing with the pump, a 3 digit fault code may display on the controller screen. Use the chart below to understand what these codes mean.

FAULT CODE	FAULT	RESOLUTION
E01	Low water protection	Ensure the pump is primed with water.
E02	Motor out of sync	Bad contact or loose connection in the motor. Please pull out the power plug and re-plug again.
E03	Over voltage protection	Check and fix the power source in accordance with the correct voltage supply.
E04	Low voltage protection	Check and fix the power source in accordance with the correct voltage supply.
E05	Impeller blocked	Check and make sure the rotor / impeller is not blocked by any dirt. Disconnect from the mains power and wash and clean the rotor / impeller part. Wait until the display on the LCD is off. Re-connect the power and re-start the pump.
E06	Overcurrent protection	Disconnect from the mains power. Wait until the display on the LCD is off. Re-connect the power and re-start the pump.
HHH	Reduced mains power supply following a power cut	If the code HHH displays on the control box, it means there is not enough power being supplied to the pump following a power cut. It is likely that there has been mains power cut in your area and when the energy company have restored power the mains supply is not running at full power (e.g. 205 Volts instead of 230 Volts). If you wait a few hours the mains supply will return to normal (230 Volts) and the pump will re-start. This fault code does not mean the pump is faulty.



ea product training

 MANUFACTURED
IN THE UK

EVOLUTION
AQUA
INNOVATION IN WATER

filtermedia

Engineered for maximum filtration

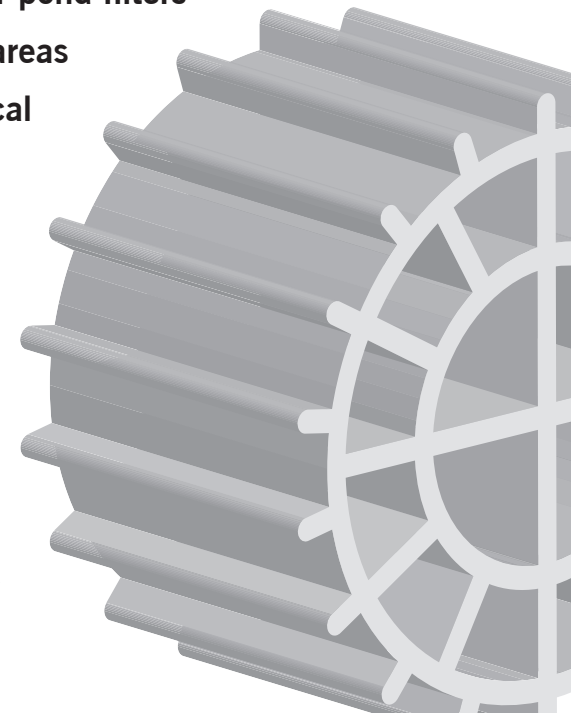
- Manufactured by Evolution Aqua in the UK
- Three types of media for pond filters
- Vast protected surface areas
- Mechanical and biological
- Independently tested



Scan the
QR code
to learn
more on
our website



www.evolutionaqua.com



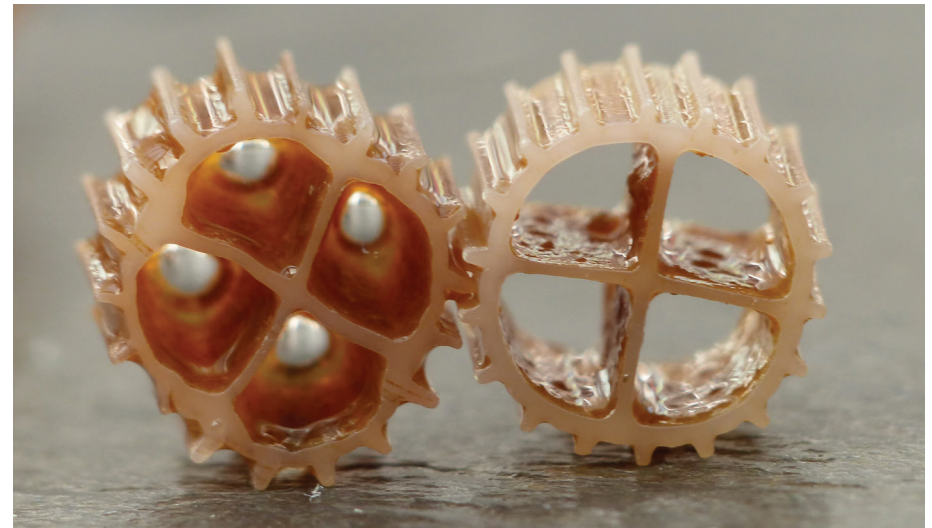
Filter Media

- K+Media, K1 Media and K1 Micro available from EA.
- All filter media is manufactured by EA in the UK.
- K+Media - 1,025m² per m³ Protected Surface Area.
- K1 Media - 500m² per m³ Protected Surface Area.
- K1 Micro - 950m² per m³ Protected Surface Area.
- Scan QR code to watch videos about our media.



Click on the link below for videos:

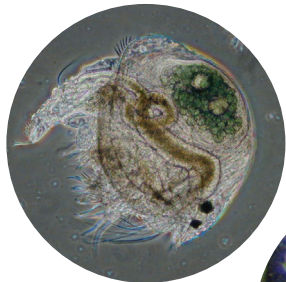
<https://youtu.be/m6POgTCBoCo>



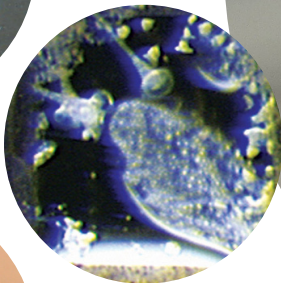
Anatomy Of Our Filter Media

STABLE BIO-FILM DEVELOPMENT

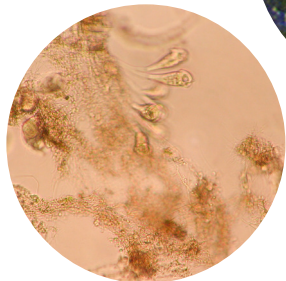
When maturing, a bio-film is created within the “quiet zones” of each piece of filter media. This bio-film is home to microscopic organisms and bacteria, that are beneficial to delivering biological filtration.



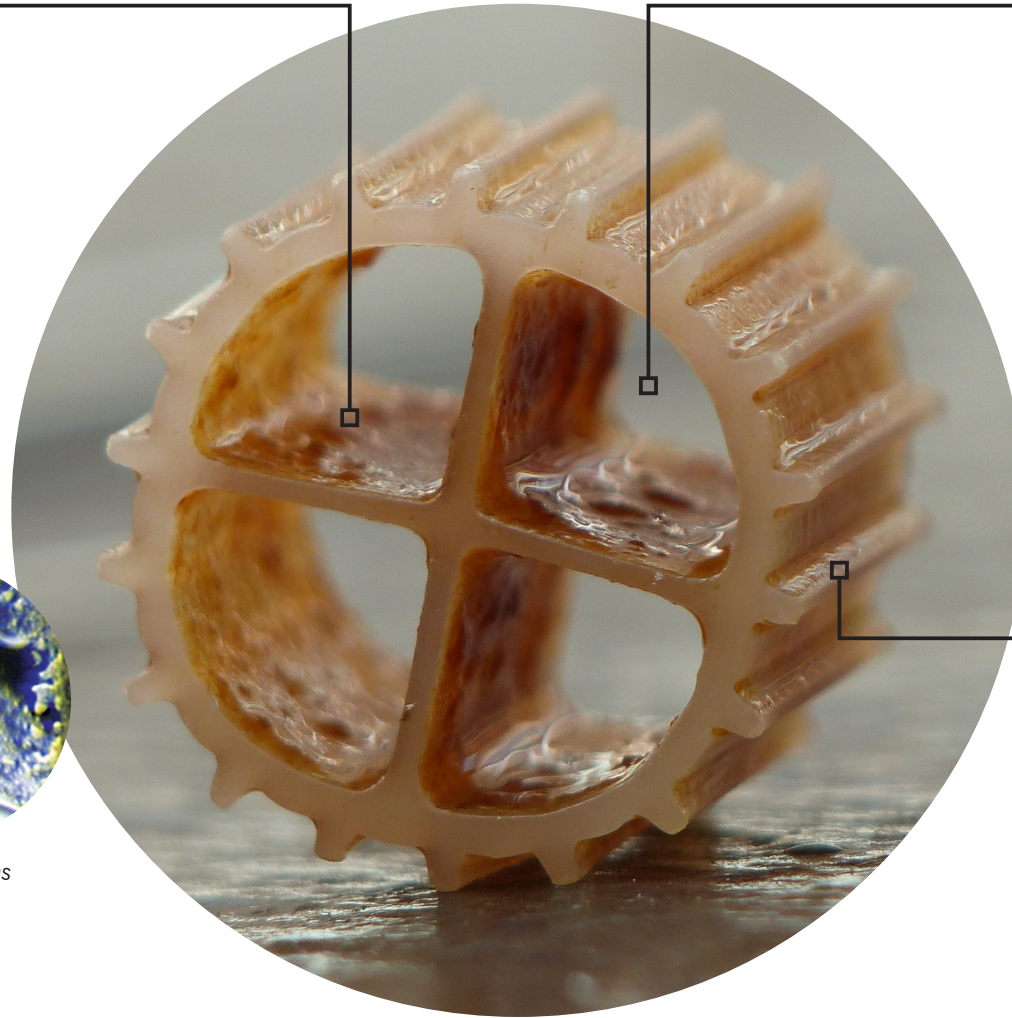
Daphnia



Micro-organisms



Vorticella spp.



REDUCES BACK PRESSURE ON PUMPS

Design of all our open cell media means water can flow through the channels within the media, reducing the resistance on the pump, ultimately saving energy and running costs.

OUTER FINS

The profile of all our filter media incorporates a number of “fins” around the outer surface of each piece. These fins not only help to trap waste, enabling quality filtration, but enable the waste to be easily removed when agitated during the cleaning cycles.

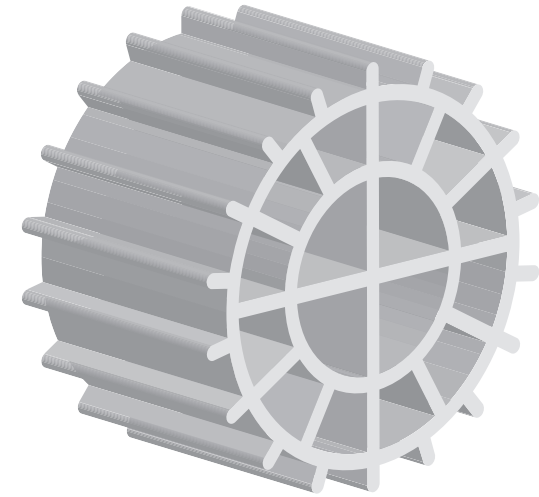
Bio-films also constantly re-generate on the outer surface of the media further enhancing filtration.

K+Media



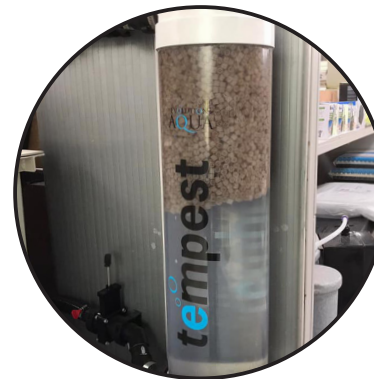
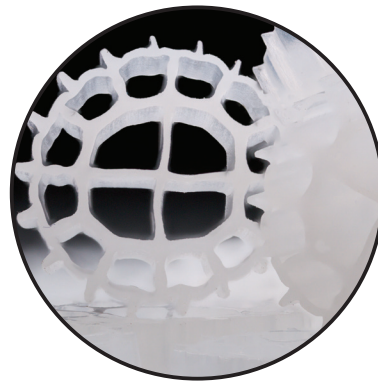
Scan the QR code to learn more on our website

- Class leading total surface area 1350m² per m³.
- Protected surface area 1025m² per m³.
- Filters mature faster with K+Media - Minerals, magnesium, calcium, salt and enzymes incorporated into each piece during extrusion process.
- Design and structure of K+Media allows a stable bio-film to form.
- Microscopic organisms such as Rotifers and Vorticella spp. thrive in “quiet zones”.
- Exceptional solids removal thanks to efficient design.
- Reduced energy consumption, less back pressure on pumps.
- Also used in Nexus+ and Tempest filters for improved filtration.
- EA filter media has been independently tested by IFTS and Cranfield University.



K+Media

	K+Media
DIAMETER	10.2mm
LENGTH	8mm
TOTAL SURFACE AREA	1350m ² /m ³
PROTECTED SURFACE AREA	1025m ² /m ³

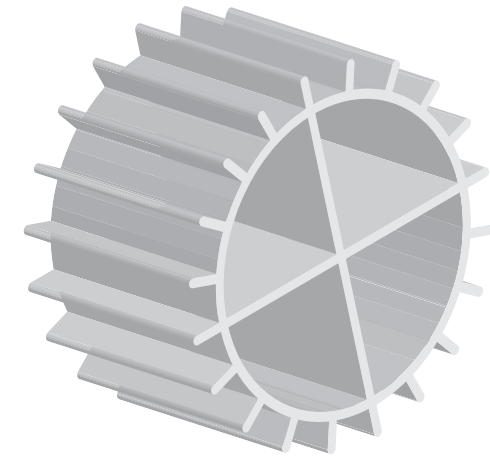


K1 Media



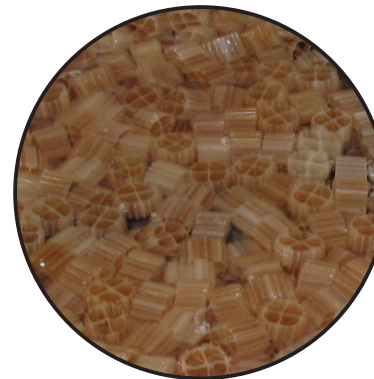
Scan the QR code to learn more on our website

- Total surface area 950m² per m³.
- Protected surface area 500m² per m³.
- The original “Moving Bed” filter media used by Evolution Aqua.
- Used in Nexus 210 & 310, EazyPods filters for many years.
- Also used in box filters, pressure filters and multi-bay filters.
- Dramatically increases the efficiency of filter systems.
- Provides a large protected surface area for bacteria to colonise.
- Many benefits when used as static filtration (mechanical) but preferred for use in moving bed for biological filtration.



K1 Media

	K1 Media
DIAMETER	10.5mm
LENGTH	8mm
TOTAL SURFACE AREA	950m ² /m ³
PROTECTED SURFACE AREA	500m ² /m ³

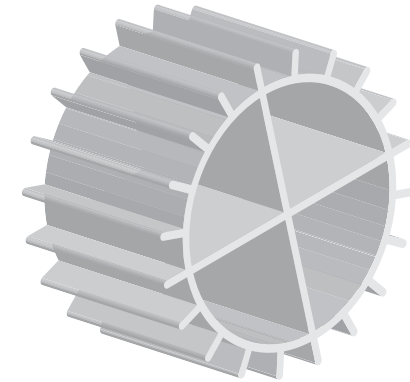


K1 Micro



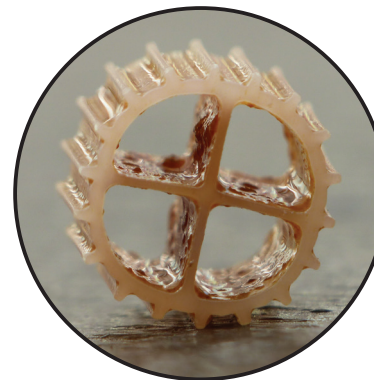
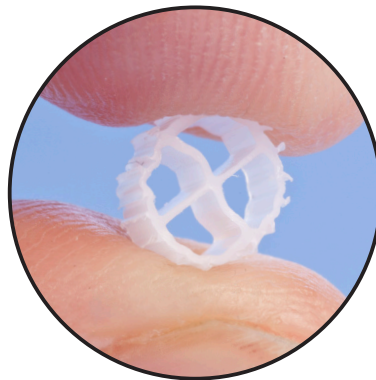
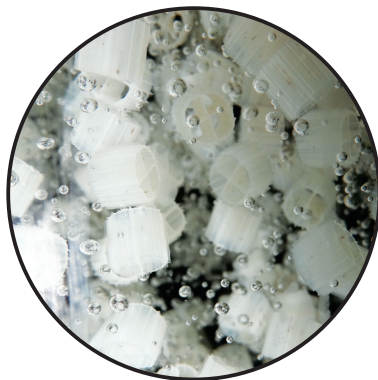
Scan the QR code to learn more on our website

- Total surface area 1400m² per m³.
- Protected surface area 950m² per m³.
- Smaller version of K1 Media.
- Used inside the EAZY in Nexus+ and current EazyPods.
- Ideal for use as a replacement for beads in conventional bead filters.
- Use in a variety of applications including aquariums.
- Provides a larger surface area and more protection for the bio-film.
- Reduces back pressure on pumps and increases flow rate.
- Preferred for use as mechanical filtration.

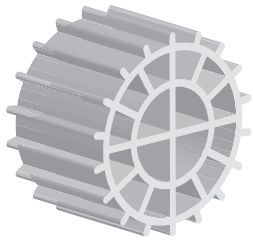


K1Micro

	K1 Micro
DIAMETER	7mm
LENGTH	9mm
TOTAL SURFACE AREA	1400m ² /m ³
PROTECTED SURFACE AREA	950m ² /m ³



Filter Media



K+ Media

Diameter: 10.2mm

Length: 8mm

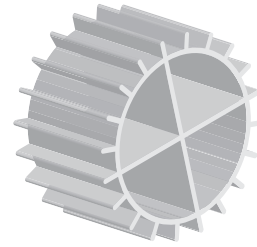
Total Surface Area: 1350m²/m³

Protected Surface Area: 1025m²/m³

Buoyancy: Floating

*Sinking version available

**CURRENTLY USED IN
NEXUS, TEMPEST &
K+ADVANCED FILTERS**



K1 Media

Diameter: 10.5mm

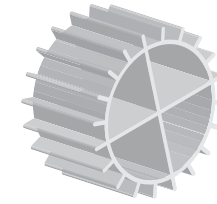
Length: 8mm

Total Surface Area: 950m²/m³

Protected Surface Area: 500m²/m³

Buoyancy: Floating

**PREVIOUSLY USED
IN NEXUS &
EAZYPOD FILTERS**



K1 Micro

Diameter: 7mm

Length: 9mm

Total Surface Area: 1400m²/m³

Protected Surface Area: 950m²/m³

Buoyancy: Floating

**CURRENTLY USED
IN EAZYPOD FILTERS**

Common FAQs

If I feed more do I need to increase the amount of media in my filter?

In the Nexus, as a rule of thumb, 50 litres of K+Media will break down 250 grams per day of average protein content food, in optimum conditions.

The outer chamber of the Nexus contains the moving bed of K+Media. This is where the final stage of biological treatment occurs. Biological breakdown occurs through different strains of bacteria living on the protected surface area on each piece of the K+Media.

These bacteria convert Ammonia and Nitrite into harmless Nitrate. The amount of Ammonia and Nitrite produced in the pond is dependant on feed rates and the type of food used.

For higher feed rates additional K+Media should be added into the outer chamber.

To ensure excellent biological filtration of a Nexus maintain a pond pH of 7 or higher. Bacteria conversion rates are reduced in cooler temperatures.

Why is our media so good in moving bed?

Moving bed media has many advantages over traditional static bed filters including a huge surface area which is always exposed to maximum oxygen and food for the bacteria, self cleaning media as it tumbles, and the world famous protected surface area, enabling bacteria and higher organisms to dwell in their preferred location inside the media, exposed to oxygen and food, but safe from harmful cleaning practices.

Moving bed bio film process has been designed specifically to create the most effective environment for the nitrification process to take place. Scientifically tried and tested in fish farming and waste water treatment for 20 years, this process provides consistent filter performance, whilst improving water quality.

Our media is engineered in a wheel shape with near neutral buoyancy allowing the media to circulate throughout the vessel with only a minimal water flow. This flow is created with your air pump and air stones or diffuser etc.

Maturing the media is important because a delicate eco-system is naturally developing for the bacteria involved in the nitrification process. It provides a high available surface area for the bacteria to colonise, more than other types of static media. It is this process which removes harmful ammonia and nitrite from the water.

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ea product training

A Guide To Evolution Aqua Pond Products



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