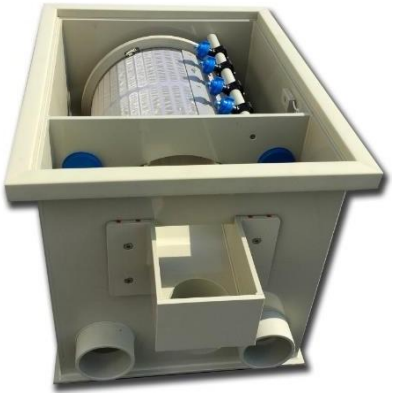
AQUA SOURCE PRODUCTS LTD

After all... It's aqualogical



# INSTALLATION MANUAL
# SYNERGY DRUM FILTERS

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## 1. Foreword

Thank you for purchasing a Synergy Drum Filter. This filter is a premium quality product with exceptionally high production standards. This manual is intended to assist with the installation of the filter, for usage and to advise you with regard to the necessary maintenance.

**KEEP THIS MANUAL IN A SAFE PLACE! IF THIS PRODUCT CHANGES OWNER, PLEASE PASS ON THE COMPLETE MANUAL!**

In order to be able to enjoy this product for a long time, we recommend that you carefully read this manual and strictly follow the guidelines stipulated in this manual. If you are uncertain about the content of this manual, or do not entirely understand the assembly instructions, or if you are not sure about certain parts of the product, please contact the shop where you purchased this product.

The manual also informs you about possible hazards that may be caused be the filter. The user, the installer and the maintenance technician are responsible for observing and checking the procedures, as described in this manual. This filter was built in accordance with the existing safety regulations. However, this filter may cause risks for individuals, if the filter is not used/installed professionally or is not being used for the purpose/use it was intended for, or if the safety regulations are ignored. If the filter is not used correctly, the manufacturer will accept no liability whatsoever. For reasons of safety, children and youngsters below the age of 16 years old, as well as people who are unable to recognise/estimate the possible risks involved in this product, or who are not familiar with this manual, are not permitted to use this device.

The combination of water and electricity may present an imminent danger, if the filter is not being installed in accordance with the instructions or when the filter is being used incorrectly.

The general terms of Aqua Source Products apply.

Shortcomings and claims for compensation, disclaimer

### 1.1 Shortcomings and claims for compensation

Aqua Source Products can only be held liable in case the delivered goods show shortcomings at the time of delivery to the user.
Small variations of the model/appearance that do not marginally influence the intended usage of the product, are excluded from this.

Warranty with regard to the usage and the suitability for an application, will be accepted only if they fall within the Aqua Source specifications stated in writing as, for instance, those stated in this manual. The customer is responsible for sending the warranty for the Oase flushing pump directly to Oase to register the warranty.

Any other agreements, for instance during preparatory discussions, advertisement, etc., in relation to the product are valid only as a part of a written agreement.

Only the terms and specifications stated by Aqua Source will be valid. Aqua Source will accept no terms and/or specifications from third parties. The specifications as set out in this manual, are prevailing.

If the customer wishes to use the product for purposes other than the intended purpose, they are obliged to thoroughly investigate the suitability for that particular other purpose. In any case, the customer will be entirely responsible and any liability will lapse if the product is not being used for the purpose intended by us, unless Aqua Source expressly agrees to a specific other purpose, in writing. In case of modifications to this product, made by the user, the warranty will expire, as well as all claims and entitlements.

Every user is personally responsible for the correct usage or the filter. The manual does not exempt the user from the responsibility for safe application, correct installation, operation and maintenance.

By using this manual, you agree that the manufacturer cannot be held liable for any personal injury or material damage whatsoever, as a possible consequence of the usage of the filter. This applies for damage as a result of using inadequate pipes or connections in particular.

Damage resulting from insufficient cleaning or maintenance intervals are not covered by the warranty.

**1.2**

The warranty for shortcomings is strictly limited to the additional efforts to remedy the shortcomings.

It is stated explicitly that the warranty is limited to the filter itself. Aqua Source cannot be held liable for consequential damage (flood, loss of livestock, etc.) due to non- functioning of the filter in whatever form, or as a result of a defect on or malfunction of the filter.

**1.3**2.3

The customer shall thoroughly inspect the goods immediately after delivery. (Apparent/possible) damage must be reported in writing. Any defects must be reported immediately after identification. The customer is

responsible for reporting any transport damage to the transporter and/or Aqua Source within 24 hours. The untimely checking and reporting of transport damage may lead to expiry of the warranty. Any goods not checked on delivery must be signed for "unchecked". Failure to do this will invalidate any claim.

**1.4**
Aqua Source is not responsible for the consequences of incorrect application, the use, maintenance and/or operation of the product by the customer, nor for normal wear. This applies to consequences of thermal, chemical, or electrical influences in particular, and also for failure to observe our user guide. The same applies for damage as a consequence of modifications or adjustments to the product which were not approved by Aqua Source in advance.

**1.5**
Damage that can be attributed to incorrect usage of the product, is the responsibility of and for the account of the user. In case of returning of the product, the customer shall ensure proper packing and shipment free of breakage/damage. The customer himself is responsible for damage caused by inadequate packaging.

**1.6**
Claims against Aqua Source become invalid within a year after delivery of the goods to the customer. The same applies to a claim for damage, regardless the legal cause. The period of limitation does not apply in case of concealment of damages, physical injury and other damage as a consequence of intent or deliberate negligence.

**1.7**
If, during the investigation of the reported damage or during the repair of the failure/defect by us, it appears that the reported damage or claims were intentional or a result of negligence, Aqua Source may charge a fee for the repair of the defects. The customer has the right to refuse a necessary repair and demand the return of the filter. In principle, every investigation is bound to a indemnity if the customer himself is responsible for the damage.

**1.8 Replacement parts**
The replacement parts are available after the delivery of the product. Prices apply, as set out by Aqua Source.

**1.9 Reservation of changes**
The manufacturer reserves the right to modify the product at all times without prior notification. No claims can be made if, e.g. the design, the functionality or performance of the filter is subject to modification. The specifications of the filter offer will prevail and are guaranteed.

## 2. GENERAL

### 2.1 Description of the drum filter

The RDF and/or the Combi consists of a drum sieve that is driven by an electro-motor. Additionally, control electronics and a rinse pump are included. The drum filter serves to filter and discharge floating particles, dirt particles and algal remains. Regarding the Combi Drum there is an additional bio section, fitted with an air stone or air disc, in which the bio media is placed.

This drum filter is a product that may be applied only in fresh water. The filter was designed for use in ponds.

The water to be filtered flows (due to gravity or pumping) into the inlet openings of the drum. On the inside of the drum, dirt will remain behind as a result of the mesh that was fitted across the drum. As the screen gets more polluted, less water will flow through the drum. The water level behind the drum will fall (in case of a gravity installation) and a sensor,measuring the water level, will subsequently activate the electronics. The electronics will send a signal to the motor of the drum and to the rinse pump. The drum will rotate, while the rinse pump will, under high pressure, control the nozzles that spray the screen on the rotating drum clean. The waste water is collected by a chute in the drum and will flow outside, via the shute, to a waste outlet. After the set rinsing time has elapsed (14 seconds as standard), the electronics will be deactivated again. The drum will stop rotating and the pump will stop spraying water towards the nozzles.

### 2.2 Warning

Only persons sufficiently knowledgeable about drum filters are permitted to perform maintenance activities on this equipment. The person must be familiar with the international regulations for accident prevention. Connection and settings must be in conformity with the applicable electrical regulations.

### 2.3 Used symbols and warnings

**WARNING – ELECTRICAL DANGER!**
**LIFE-THREATENING!**

Electric shocks may lead to death or serious physical injury for personnel, or damage to the equipment. Ensure that unauthorised persons are not able to get access or may come in contact with the device. Disconnect the device from the power supply before you start working on it. Do not put the filter in use if the power supply has not been correctly connected to the (protective) earth.

**PLEASE NOTE! ROTATING PARTS! AUTOMATIC RESTART!**

Take adequate measures to ensure that all rotating parts are secured against physical contact whenever the filter is in operation. Rotating parts may make the operation of the machine a source of danger for the service staff.

**CAUTION!**

Before connecting the filter, make sure it is not damaged. Carefully check the power cables and plugs before connecting them.

**Please note:**

In case of assembly works, disconnect all plugs of the device from the power supply. Also plugs of other equipment that are in contact with water, must be removed.

**Please note:**

Never put your hands in the water before the plug has been removed from the socket. This applies to all electric equipment that is immersed or in contact with water.

**Please note:**
Keep out of reach of children before and during assembly. Only suitable for people who are aware of the possible dangers of this device.

**Please note:**
Never try to stop the drum with your hands when it is rotating.

**Please note:**
Ensure that the rinse pump always has sufficient water during operation. It should not run dry.

**Please note:**
The drive motor and all electrical connections may not come in contact with water. If this happens, you must ensure that everything is thoroughly dry before putting the filter back into use.

**Please note:**
The control and rinse pump of this drum filter may only be connected to an earthed socket. This socket must be equipped with a 30mA residual current device.

**3. USAGE OF THE FILTER**

Use the filter only when no body parts are in contact with the water! Before touching the water you must always disconnect the filter from the socket.

Compare the electrical specifications on the type plate of the device with the specification of the connection on the power supply. Ensure that the device is connected to a socket with earth and a ground leak switch with a maximum residual current of 30 mA .Use the device only when connected to a correctly installed socket.

Keep the plug and the wiring dry! Ensure that the cables are protected to prevent damage and consequential short-circuit.

**THE ELECTRICAL WIRING AND/OR PLUGS MAY NOT BE CUT (THROUGH). DOING THIS WILL CAUSE THE MANUFACTURER'S WARRANTY TO EXPIRE IMMEDIATELY.**

Only use cables, installations, adapters, extension cables and connection cables with earthed plugs, that were approved for outdoor use, with sufficient cable diameter. If the wiring is damaged or broken, it must be replaced. Ensure that the plug will not fall into the water or get wet. A wet plug must be cleaned by use of demineralised water and dried. Protect the plug and cables against heat, oil, UV-light and sharp corners. The manufacturer is not responsible in any way for any damage, caused by incorrect installation or as a result of carelessness of the user or installer.

The cable may not be altered or replaced. Electrical installations must always comply with the national and international requirements/guidelines. Never open the casing of the control electronics. Never make technical modifications. Use only original parts and accessories, as set out in this manual. Only authorised dealers are permitted to perform repairs.

Never use the filter with other liquids than water.

**4. Application fields**

The Combi Drums and Single RDF Drums are suitable for the filtration of fresh or slightly brackish water.
Temperature water: 2-40 °C.
Ambient temperature: 2 °C to +50 °C
Protection class Electronics: IP54

**5. Installation/Connection**

Carefully read the manual before installing the filter. Damage as a result of failing to properly observe the manual, will not be covered by the warranty.

When unpacking the filter, check whether all parts are complete and undamaged. Any identified damage must be reported to your supplier within 24 hours. Check the filter for damage before you put it into service. Do not use the filter if it is damaged. If the filter has been used and is damaged, the warranty and liability will expire.

During installation, the filter should not be connected to the power supply. Remove the plug from the socket and make sure that the filter cannot be activated. In order to prevent injury, you must assure that you are absolutely unable to reach the rotating parts of the filter with your hands and fingers once it has been connected to the power supply.

## 6. Installation of the filter

**NEVER USE THE DEVICE WITHOUT WATER FLOW.**

### 6.1 Positioning of the filter

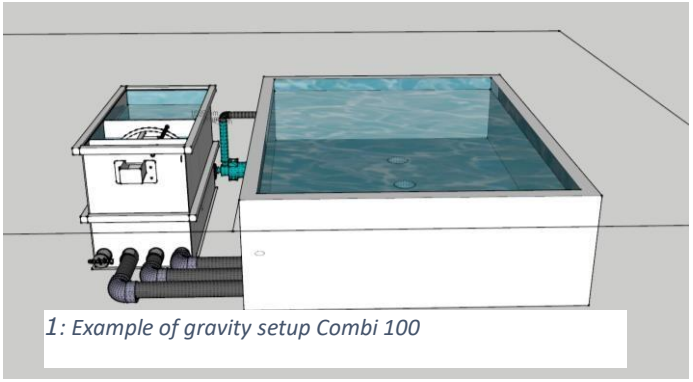
- You must strictly follow below mentioned regulations to work safely and prevent damage to the device.
  Make sure that the substrate is level and sufficiently solid; a concrete slab is preferred.
- When checking whether the rinse pump or motor of the drum still works, the lid must always be closed. Never put your hands in the filter, or try to stop the drum.
- The rinse pump must always be below the water level before it is activated. Otherwise it will be damaged irreparably due to running dry or overheating. Damage to the rinse pump as a result of running dry will not be covered by the warranty.
- The electronics must be sited in a dry and well ventilated space. The temperature of the space with the electronics must be between 2 and 30 °C. In case of higher temperatures, the electronics cannot get rid of its heat as a result of which it may get damaged.
- The electronics contain switching components and must be placed in an interference-free room.
- Certain pumps or UV-units may adversely affect the functioning of the electronics.
- In case of frost, the filter must be protected against freezing. If the filter is being activated outdoors, all pipes must be empty. If the filter remains operative, the pipes for the rinse water must be protected against freezing.

Damage as a result of freezing of water is not covered by the warranty.

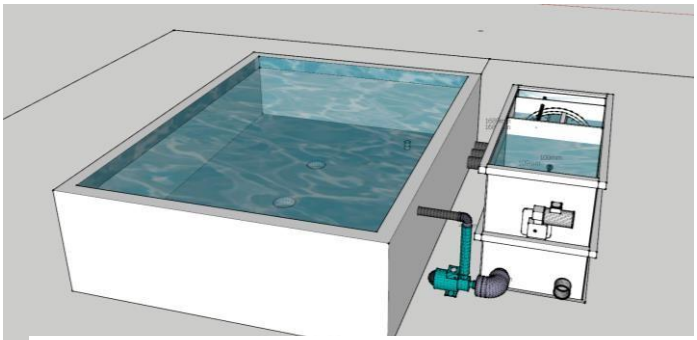
### 6.2 Connecting Gravity

If the water flows into the drum with gravity flow, the maximum water level must be properly aligned with the drum. The maximum and minimum water levels are indicated on the inside of the filter and it should be between them, preferably as close to the maximum level as possible (see image). The filter has 110 mm inlets and 110 mm outlets.(See specifications for water levels)

**Please note:**



*1: Example of gravity setup Combi 100*



*2: Example of gravity setup*

For installation on gravity-basis, sufficient water feed is very important for correct functioning of the filter.

If there is insufficient water supply, due to an incorrectly installed system, there is a risk of the rinse pump running dry and frequent activation of the rinse cycle.

A rule of thumb is that per 110 mm of pipe, approximately 10 m3/hour can be moved in a gravity-setup. However, this quantity largely depends on the length of the pipe and the maximum height difference between the pond water and the filter

**Please be aware of the following, with regard to a maximum flow per pipe:**

The pond water level should not fall too much. If the pond water level falls by 1 cm, the flow per pipe may fall by as much as 1 to 2 m3/hour. In case of large fluctuations of the pond water level (due to evaporation, replenishing or if you rinse the filter) there is a risk of insufficient water being supplied to the filter. If your pump pumps more water than flows into the filter, the drum will be pumped empty and the sensor will appear above the water level, which will cause the filter to go in rinse cycle.

If the supply pipes are of significant length, with many bends, there will be lots of friction loss and a lot less than 10 m3/hour may be supplied per pipe.

Inlets/ Outlets that are not used should be

sealed.

Discharge of waste:
The waste will be sprayed by the nozzles onto the screen, into the waste channel. The waste channel can be connected directly to the sewer or to a drainage point.

Return to pond:
The pump is connected to the 110 mm outlet. If necessary, make use of a flexible coupling, for a good transit to your pump. A flexible connection will also reduce vibrations.

Make sure that you never install a pump larger than recommended for the filter. As you go towards the maximum of the filter in terms of the selected pump, you should ensure that sufficient water is supplied and that the dry running function of the electronics is engaged. This is indicated on the display Siemens Logo in the Electronics Cabinet.

### 7.2.1 Setting for sensor/float

Upon delivery, the sensor has already been installed for use as gravity and in such a way that it will function properly in most situations. You may need to check for correct functioning after installation and adjust the float accordingly.

If the float is in lowest position (4), the filter will postpone the rinsing function, creating more pressure in the drum (not recommended), although in case of too little water supply from the bottom drains, this could be a temporary solution, so the filter can keep running. If the float is in highest position (image 5) the filter will rinse more quickly and more often. Image 3 represents the 'normal' position, recommended for most ponds.

The cables of the float must be connected to numbers 1 and 2 in the electronics box. The wires of the magnet contact must be connected to numbers 3 and 4.

### 7.2.3. Connecting the rinse pump

The Rinse pump is included with the Synergy drum filters and Synergy Combi, as standard. (Oase Garden Pro 3000)

*6:tank connector*

For fitting, you can use one of the 110 mm exits, by applying an adapter (ring) size 32 or 25 mm for the rinse pump. Or position yourself at a location of your choice, using a 1" tank connector. Make sure that you assemble this connector into the 'clean' side of the filter and not into the first chamber where the dirt enters. This is to prevent clogging of the spray nozzles.

The flushing pump (included) must be installed later with a coupling (included) to the threaded pipe protruding from the DRUM chamber. We recommend also using a header tank connected to an outside source, such as a garden tap to enable the pump to use clean water sprayed onto the DRUM Screen
The Pump takes 1" male threaded BSP fittings reduced down to ¾" (supplied) to feed the Spray Bar
All you need is ¾" Pressure pipe to finish the connection.
The feed pipe to the pump can be done with 1" pipe either from the Drum or from a freshwater header tank.
NB;Fittings/pipe will be needed to suit your own preference for the water feed to the pump and spray bar. ( 1" and ¾" pipe).
Fitting kit included to join Pump to Spray bar, (All other Connections/Pipe not included)

*3: Normal position (recommended)*

*4: Lowest position*

*5: Highest position*

You connect the exit of the Rinse pump with a hose (or even better, PVC pipe) to the ¾'' connection that is assembled to the pipe with the nozzles.

Ensure proper adhesion bonding! The pipe is under pressure during rinsing! Use high pressure PVC. The plug of the rinse pump must be connected to the electronics in the FLUSHING PUMP plug.

**7.2.4. Connecting motor drum filter**

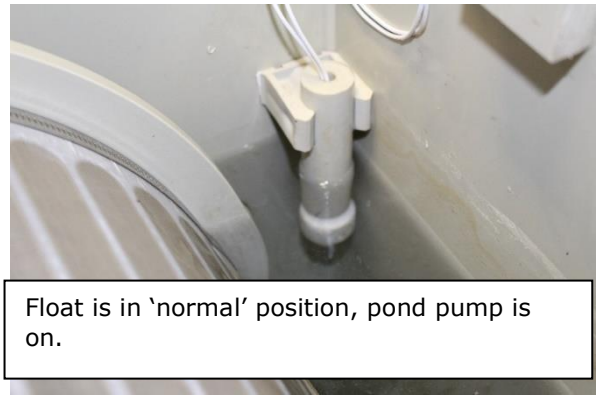
The plug of the motor of the drum filter must be connected with the control electronics. Use the plug connection 'MOTOR DRUM FILTER'.

**7.2.5 Wash frequency**

Make sure that the wash frequency is not too high. If the drum is installed in an existing system, the wash frequency will be high over the first days/weeks, because the pond is being 'cleaned'. In case of warm weather, the wash frequency will be higher (more feed and more algae growth) than in case of colder weather.

Other causes of a (too) high wash frequency are:

- a pond pump that is too large
- too little water is supplied, due to a low pond water level or incorrect supply system from the pond, e.g. too long pipes, too few pipes or pipes with an insufficient diameter
- Float is set too high
- Clogged screen, due to e.g. dirt/ biofilm
- Too little pressure in rinse pump
- Too little flow from rinse pump



Float is in 'normal' position, pond pump is on.

**Air Connection**

The Air pump connects to the filter via a ½" to 3/8" BSP reducer and a 12mm Air Stud (Supplied as below and we advise they are glued to prevent leaks)
We recommend the use of rigid 12 mm Airline and fittings (available from your local Aqua Source dealer) to connect to the Air input
Once connected the Air Pump needs to be sited above water level to avoid back syphoning and damage to the pump.

**Maximum Water Levels**

Synergy 35 – 39.5cm , Installation 12.5cm above water level
Synergy 55 – 64.5cm , Installation 14.5cm above water level
Synergy 25 Combi – 73cm, Installation 12.5 cm above water level
Synergy 30 Combi – 73cm, Installation 12.5cm above water level
Synergy 35 Combi - 82.5cm, Installation 12.5cm above water level
Synergy 55 Combi - 82.5cm ,Installation 14.5cm above water level
Synergy 100 Combi – 83cm , Installation 14.5cm above water level

Float is in 'rinse' position, pond pump is on. Drum is rotating and rinse pump rinses the screen. If the float remains in this position for 30 seconds, the electronics will switch to DRY-RUNNING MODE.

If the float is floating, the system is on stand-by. If the float is in the lowest position, the process will commence (drum starts rotating and the rinse pump will rinse the screen). This will last for 14 seconds.

If the float remains in the lowest position (and the pond pump is on) there will be too little water supply from the pond. The drum will rinse for 30 seconds (standard value) and then switch to dry-running mode.
This is to protect your pond pump. Once the float goes back to normal position (it will float again because sufficient water flow into the filter) the pump will activate after 5 minutes (default value).


**7.2.6 Control electronics**

The control electronics has protection class IP54.

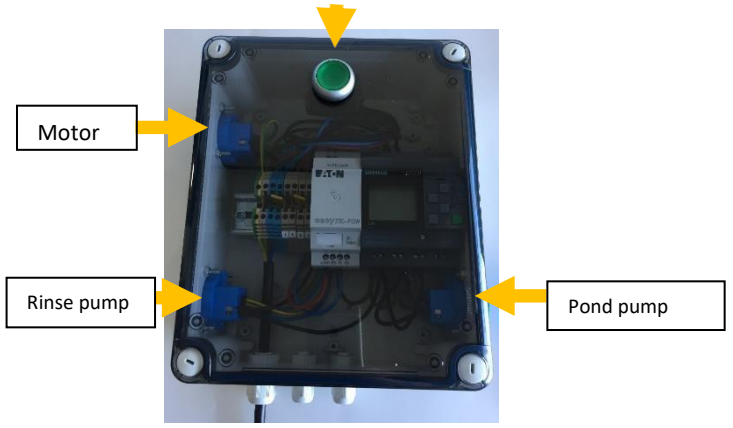
Electrical installations must always comply with the national and international requirements/guidelines.

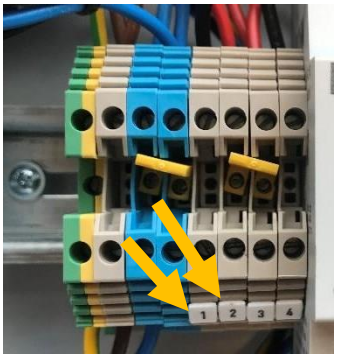
Only open the casing of the electronics to connect the float and magnet contact or to set the parameters. When connecting the float and magnet contact, disconnect the device from the power supply before connecting it! Changing the parameters is done at own risk in case the power supply is connected. Take care of electrical hazard when opening.

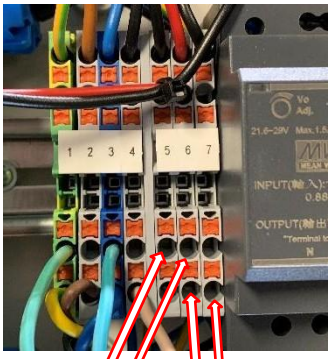
The control cabinet must be connected to an approved, earthed socket. The electronics must be installed vertically. The electronics may not be assembled unprotected during rain. Per connected side, a maximum of 660 W of auxiliary equipment may be connected.

Functions of the green button:

| | |
|---|---|
| Press 1 time: | Filter will start to rinse. |
| Quickly press 2 times: | Filter and chute will rinse* |
| Quickly press 4 times: | Filter into emergency mode<br>Periodic rinsing.<br>If float is defective. |
| Press for 3 seconds: | Rinse counter reset. |
| Press for 8 seconds: | Text message module sends (test) alarm. |
| While pressing: | Total number of rinses visible on screen. |





**Connection 1-2:** Float switch **OR 5-6 (new model)**

**Connection 3-4:** Lid of magnet contact. **Or 6-7 (new model)( Excludes drums supplied after August 2020)**
This is a protection for opening the lid. If the lid is opened, the drum filter will not rinse ( Pre 2020 models)

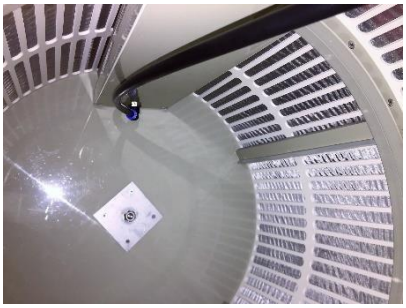
**Display on white:**
Filter is operational

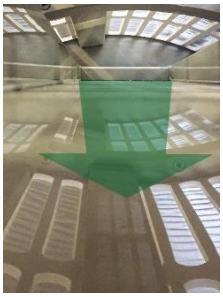
**Display red:**
Lid is open and drum filter will not rinse!
Pond pump will keep running. This is only when the magnet contact is connected to 3-4. If it is not connected, the drum will not respond to opening or closing the lid.

**Display flashes Red-White:**
Dry-running protection is engaged. You can reset this by pressing the button at the front of the cabinet (drum will then rinse 1 time) if the float is in upper position again.

### 7.2.7 Additional wash connection for Synergy Combi 100 .

The Synergy Combi 100 has an additional connection for a secondary rear waste chute flush. Simply connect the supplied connectors to the air stud connector for the rear chute. This is "Teed" off from the one flushing pump.





### 7.3 Connecting the pump-fed system

The Synergy Drum Filters can also be connected as a pump-fed system. The water will be pumped into the filter by the pump. Exits that are not used must be sealed.

### 7.3.1 Assembly of float

In this case, you will need to assemble the float upside down for the drum section (at the inlet) 1st chamber:

Float is in 'normal' position, pond pump is on

**Please note:**

The float must be installed in reverse, because the circuit is to work in reverse. And the upper blue caps must be removed.
If the water rises in the drum filter, it becomes polluted and the rinse cycle will be activated. If, in the reversed situation, the float goes up and stays up, the system should deactivate after 30 seconds (default value - this can be adjusted manually in the electronics), otherwise the water will flow straight to the waste, via the waste chute, in which case your pond will run empty.
Therefore, the float must be assembled at the right height, so the system will be deactivated before the water flows into the waste chute.

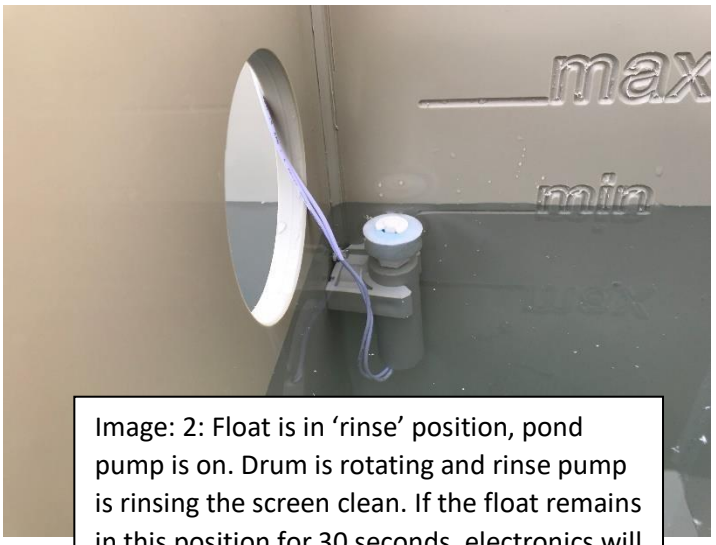



Image: 2: Float is in 'rinse' position, pond pump is on. Drum is rotating and rinse pump is rinsing the screen clean. If the float remains in this position for 30 seconds, electronics will switch to DRY RUNNING MODE.

As an additional safety precaution, the 2 blue caps of the upper sealed holes must be removed so, in case of emergency, the water will continue flowing unfiltered, eliminating the risk that water is pumped directly into the waste chute and potentially emptying the pond.

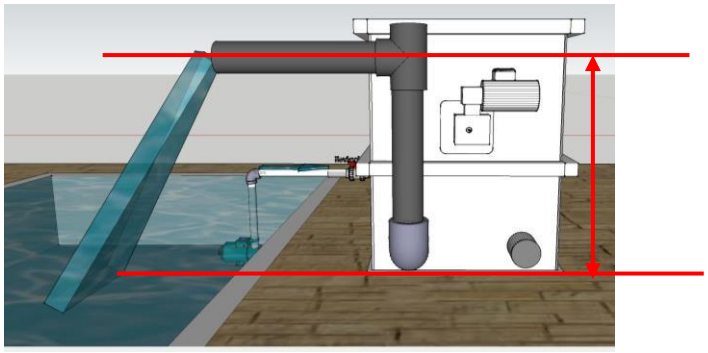
If the float is in the lowest position, the system is stand- by. If the float is in highest position (float is floating) then the process will commence (drum will start rotating and the rinse pump will spray-clean the screen). This will last for 14 seconds (standard value).

If the float remains in the position ,the drum will rinse for 30 seconds (standard value) and the electronics will switch to dry-running protection.

### 7.3.2 Connection of return to pond

The return after the filter should first go up to determine the desired height inside the filter. It should not be too low, in connection with the bio-filter media present.
Neither should it be too high, because this will lead to a high wash frequency of the filter. It may apply that the drum should be adjusted during operation. A rinse cycle will be started when the water level difference before and after the drum is approx. 10-15 cm.

If you wish to pump more water than 1x 110 mm pipe can handle concerning the gravity, you must add additional pipework. You should also connect the return to the pond by use of a wider diameter pipe.



| | |
|---|---|
| Maximum standpipe height<br>Combi25: 53cm<br>Combi 30; 53cm<br>Combi 35: 65cm<br>Combi55: 70 cm<br>Combi100: 70 | Drum 35: 20 cm<br>Drum 55: 40 cm |

**Please note:**
The outlet requires an open standpipe on pump fed, with a "T" piece at the top, the height of standpipe is from the middle of the outlet to the middle of the "T" piece" return, as per the above diagram and measurements for each filter.

## 8. Maintenance and cleaning ( also see Troubleshooting section)

The filters are low maintenance. However, maintenance and inspection tasks below are required for proper functioning:

- Check the correct functioning of the float every month.

Perform a manual rinse every month and check whether the nozzles perform good spraying. A nozzle may get clogged or calcified. Also, the rinse pump may give less pressure. Clean the nozzles if necessary. The spray nozzles can be cleaned when they are clogged simply by twisting and pulling off.
It is recommended this is done monthly (especially if in a hard water area to clean off any scale formed)

**9.** Clean the screen weekly, we recommend Aqua Source Drum Screen Cleaner for this purpose. After a while, biofilm and calcium deposits may build up, as a result of which the rinse frequency will increase.

**Technical specifications**

Rinse pump: Oase ProMax Garden Classic 3000 pressure: 4.1 bar.
P: 600 W
Qmax: 3,000 l/u
U: 220-230 V

Mesh size sieve: 60 micron

Electronics: Siemens Logo8
IP54
Max. capacity per side: 800 W Voltage: 220 V/50-60 Hz

**10. Declaration of distributor**

In addition to what is set out in this manual, the general terms of Aqua Source Products apply for any claims against Aqua Source Products with regard to the products in this manual.

Specifications may vary as a consequence of technical improvements.

Should you have any issues, then first contact the dealer where you purchased the filter, who may contact us should they be unable to resolve the issue.

Warranty is 12 months from date of purchase and/or 75,000 rinses. Screen warranty is at discretion of Aqua Source, dependant on fair use.

**11.1 Distributor**

Aqua Source Products

8 Merton St

St.Helens

WA9 1HX

Tel: 01744 586170

## Troubleshooting

**1. Drum does not flush**

Check that the lid is closed correctly, the drum will not function if the magnetic contact is open.

Check that the float switch is free from debris.

Check that the water level is correct in the first section, bottom drain blockages can cause the drum to go into dry run mode.

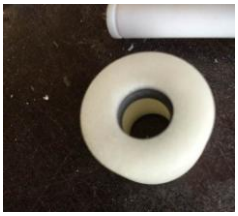
Remove the float switch and turn it upside down, the drum should flush. If it doesn't , then the magnetic lid contact may be faulty, or the float switch.

Perform a manual flush by pressing the button on the control panel. If it doesn't flush, again check the float switch and the magnetic lid contact.

If the float switch and magnetic contact are clean, then switch the unit off, ensure that the water level is at the " Max" mark, switch the unit back on after ten minutes, wait for the dry run to complete and then see if the drum starts to work.

If all of these checks fail, then please contact your Dealer.

The Floats can be removed for cleaning and maintenance
Please note which way up the magnet is before removing and replace the same way



**2. Poor pressure from spray nozzles**

Check that the nozzles are not clogged.

Check that the water supply to the flushing pump is adequate.

Check for leaks on the pipework.

It may be that the flushing pump may need replacing, if it is still under guarantee, then contact Oase for a replacement as per the guarantee.

**DRUM CHECK LIST**

All electrics tested for power, connections, float and magnet operation …….
Drum rotation, screen, motor running correctly ……
Lids fit correctly and magnets line up ……
Over flow plugs fitted and all in correct places ……..
Cleaning Pump …… Air Dome inside Media bay …….
Media (amount depends on Filter size) 50 ltr bags ……..
Dry running test carried out, Float, Magnet, Lid on/off all working correctly ……
Control box prewired before leaving factory ……
Filter and Box labelled up and logoed ……
Manual for installation ……..

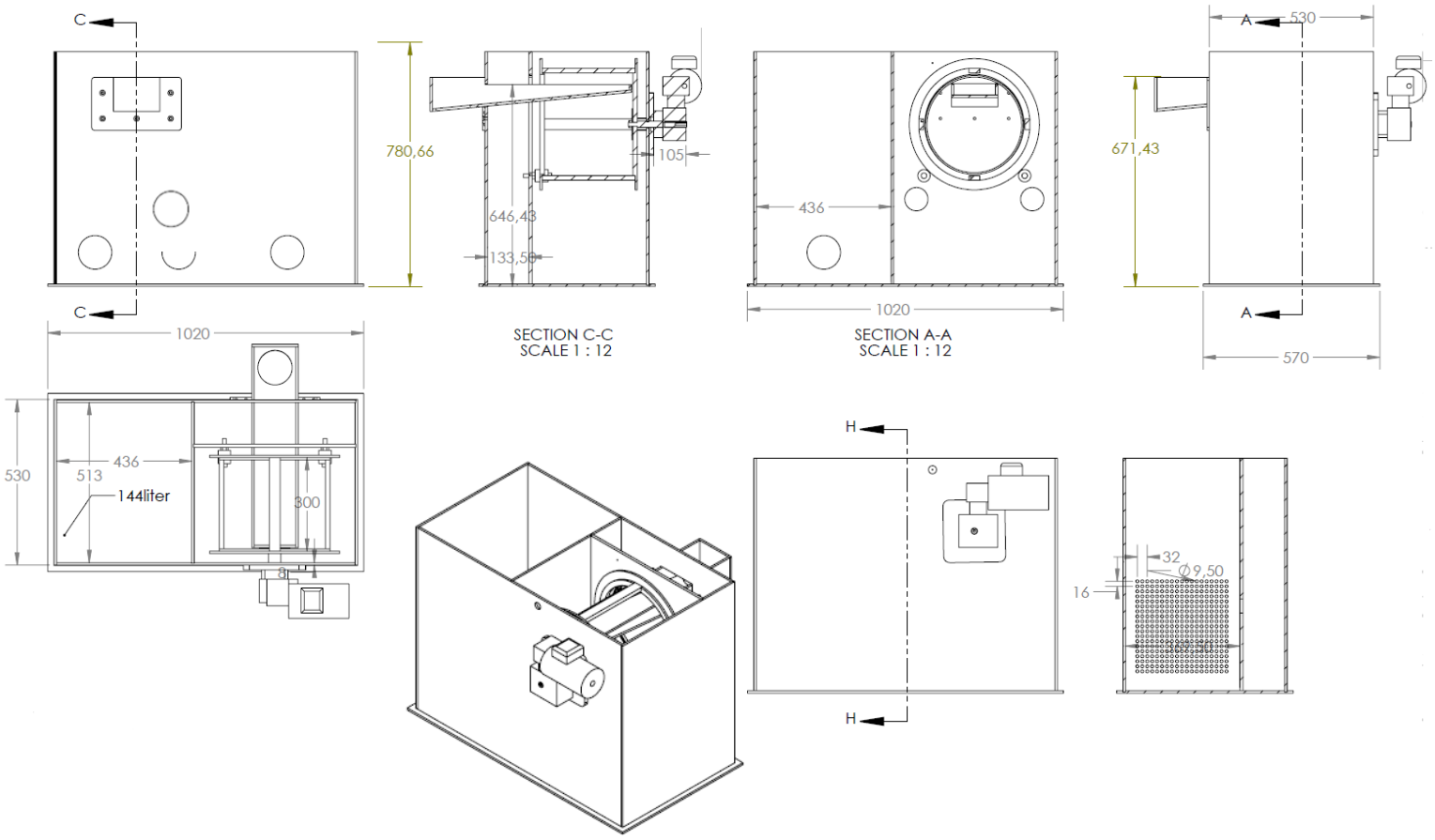
**Extra parts for assembly**

P22-SCTMPF **2** off 1" male thread sockets for pump ……
P11-90PE **1** off ¾" 90 Bend …….
P11-SCTFPF **1** off ¾" female Thread to plane socket……
P22-11RB **1** off 1"-3/4" reducer ……

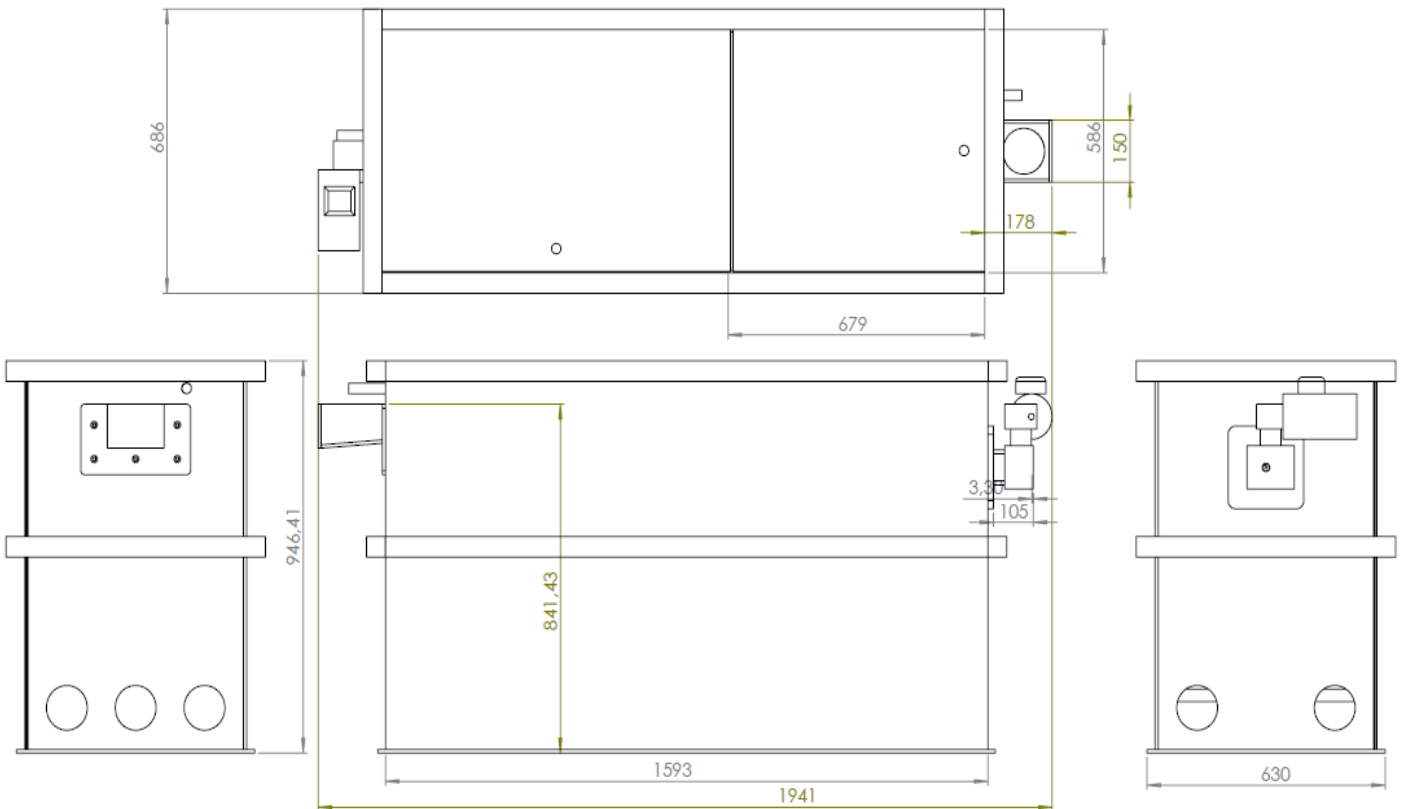
**The Following are only included with the Combi Drums for the Air connection**

P10-20MM-1/2" **1** off ½" to 20mm adaptor connector ……
P10-1/2"-3/8"FTRB **1** off ½" to 3/8" threaded reducer……
AIRSTUD-BSP **1** off Air Stud ……

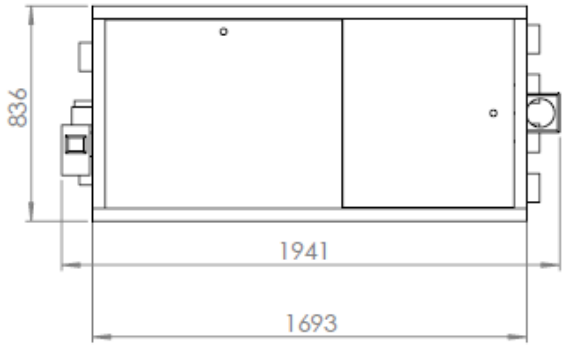
# ***SYNERGY*** Filter Dimensions
## Combi 25

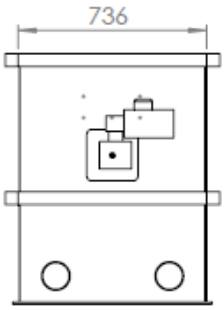


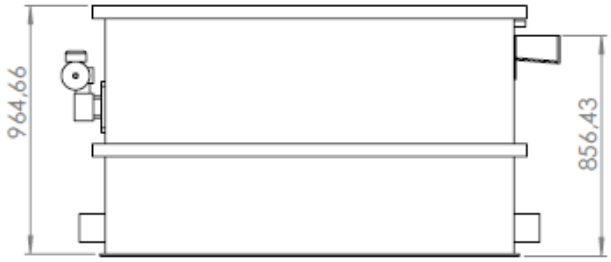

Synergy Combi 35

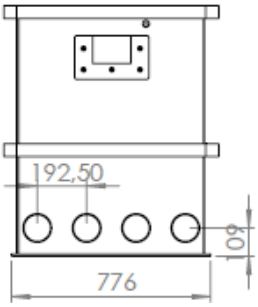


Synergy Combi 55



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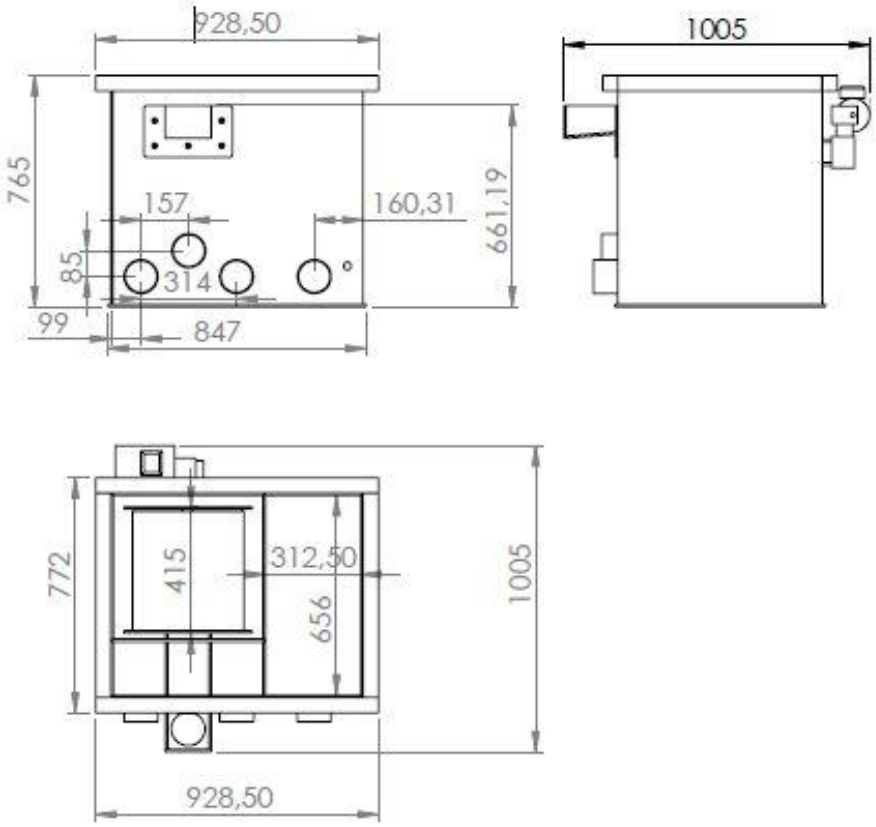
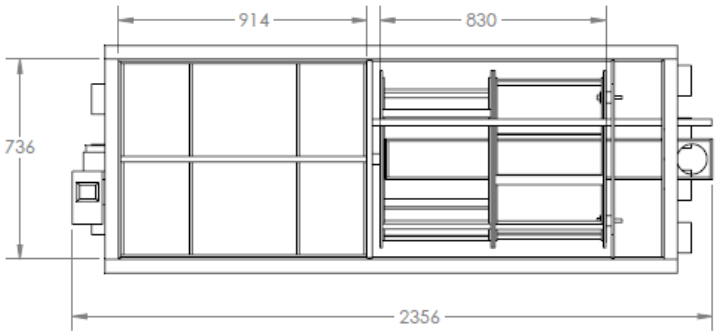
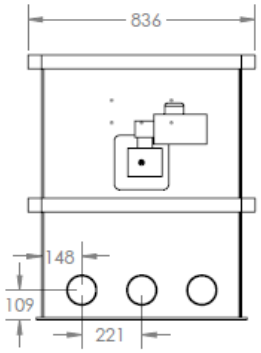
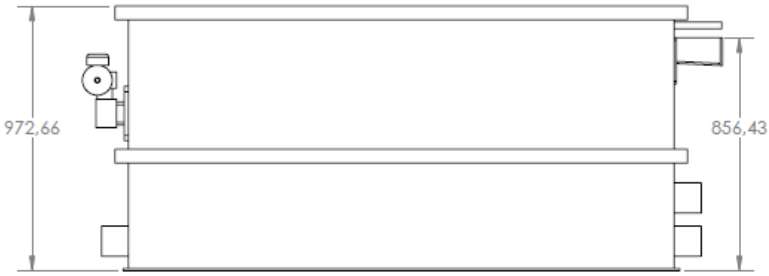
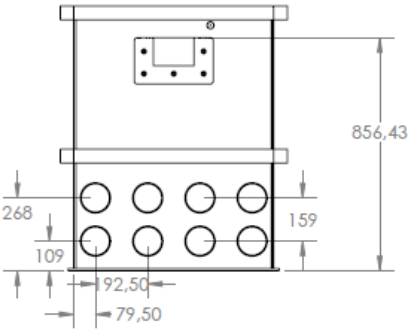


Synergy  Combi 100

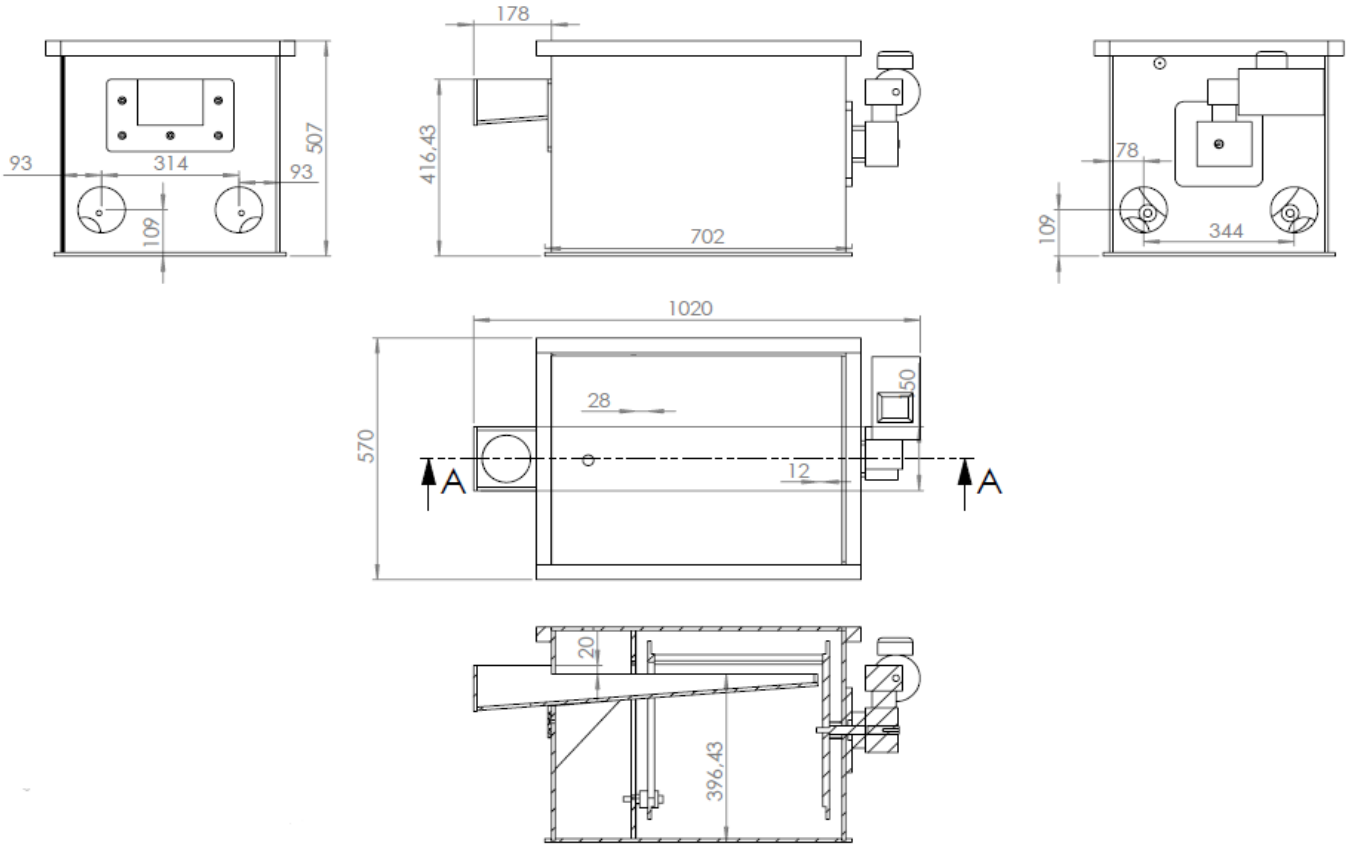


## Synergy 35




## Synergy 55