

QUICK GUIDE

DIGITAL CONTROL 2024 v.1

DRUMFILTERS



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1 Basic requirements

Basic requirements every filter system must meet:

- The filter system should be placed on a ground surface with sufficient carrying capacity, for instance:
 - a well-vibrated sand bed of 10 cm, possibly with concrete tiles
 - a concrete floor

In the event of subsidence, the filter may not function properly!

- The filter system should be placed fully level.
- Leave sufficient space around the filter, to perform cleaning and maintenance work.
- The filter control should be in a dry area, preferably indoors.
- The drive motor must be protected against weather influences.

The filter system can be used as gravity-system or pump fed system.



IMPORTANT!

The correct placement and constant water level in the pond are important conditions for optimal and problem-free operation of the filter system.



IMPORTANT!

The use of salt in the pond can cause stainless steel components of the filter to oxidize.

1.1 Control unit

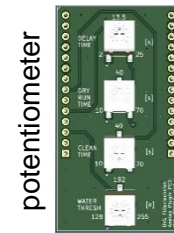
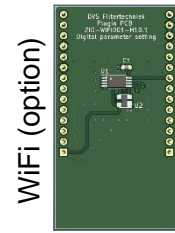
Controller is not waterproof, please keep it out of the water. Place it under cover from the rain!



1.2 Configuration

Log in to the WiFi module:
 Look for new networks: **DVS FILT**
 Password: **Welkom123#**

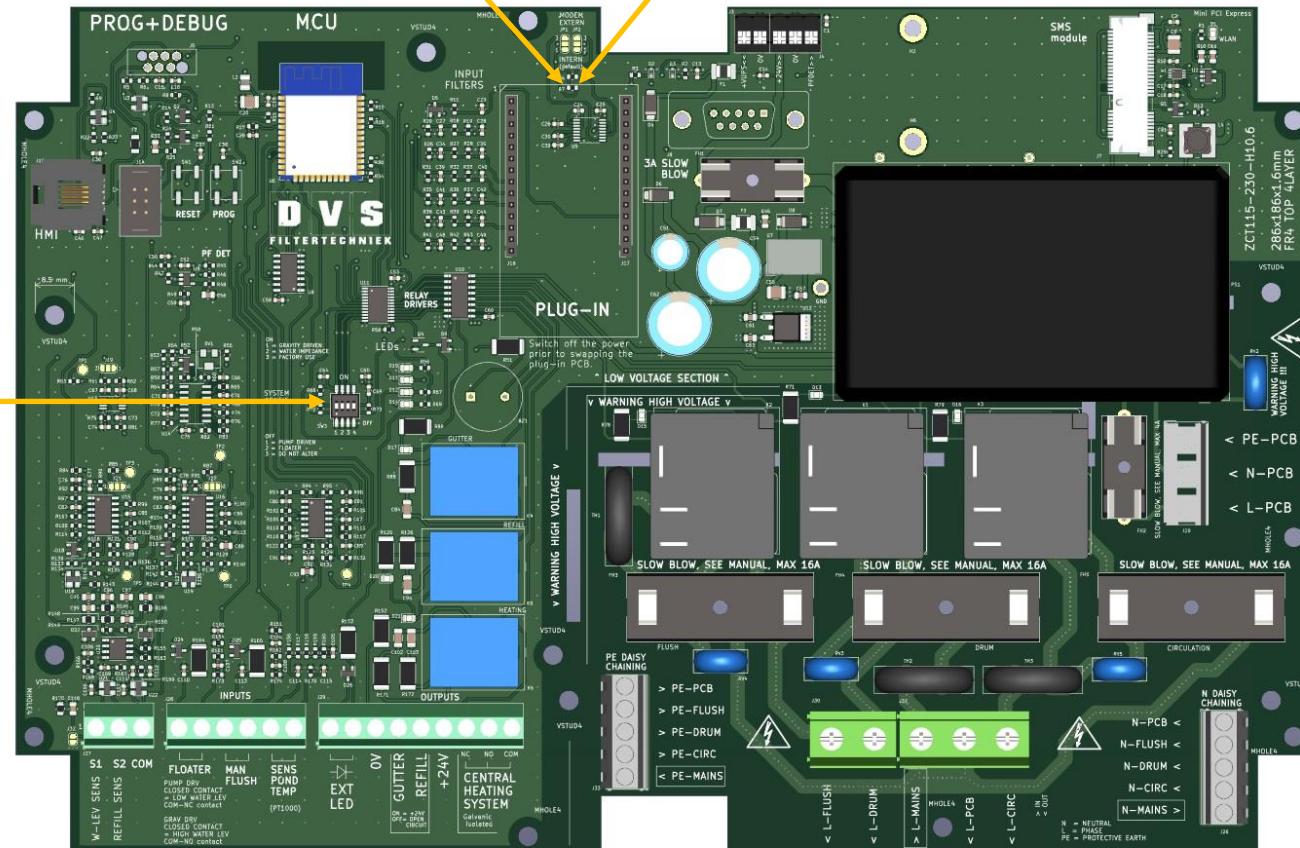
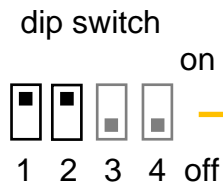
Go to the internet browser,
 log in at the following address: **192.168.1.1**



- DELAY TIME : set time when pond pump switches off (delay to power off) 2-25s
- DRY RUN TIME : set the time that the pond pump remains off (delay to power on) 10-70s
- CLEAN TIME : set rinse time 10-70s
- WATER THRESH : set sensor sensitivity 0-100%

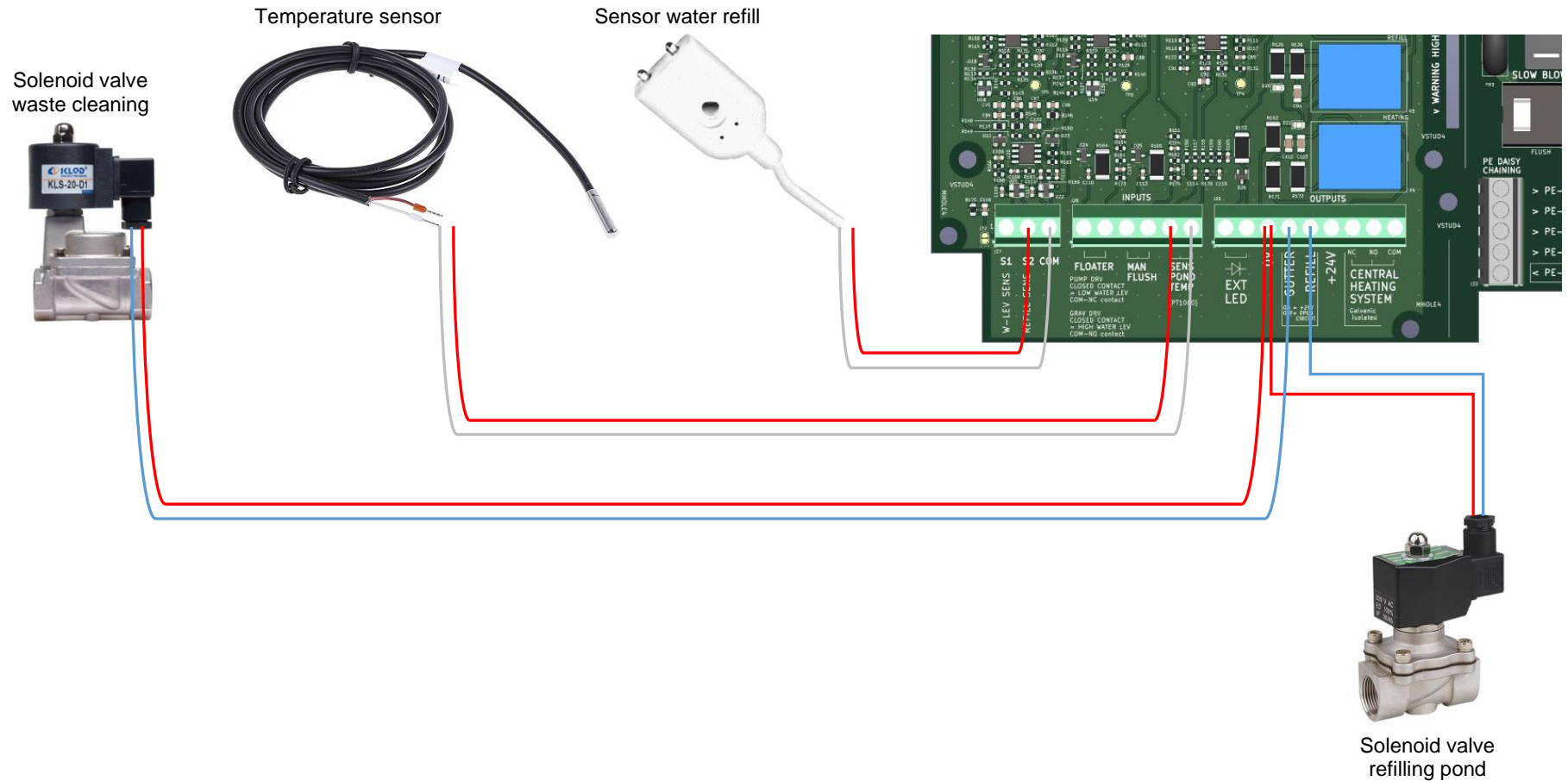
Dip switch

- 1 on → gravity
- 1 off → pump fed
- 2 on → sensor 2-pens
- 2 off → float switch



1.3 Options WiFi module

The options below are only possible in combination with a WiFi module.



2 A. Gravity-system

2.1 *Placing the filter system*

- Determine the maximum water level of the pond.
- Align the base plate horizontally (the filter should be placed fully level).
- The filter should be placed the height of the installation height (pic. 2.1) above water level. (installation height is the distance from maximum water level to top of filter).

Type filter	Installation hight [cm]
ECO 20	16
ECO 22	16
PP35	17
PP40	12
PP65	12
PP65-P	12
PP100N	12

Type filter	Installation hight [cm]
ENTRY C25	17
ENTRY C25 low	17
ENTRY M25	17
C22	12
CL35	12
CL65	12

- For the operation of the gravity system a constant water level in the pond is necessary. A tolerance of up to 20 mm below maximum water level is allowed.
- Should the maximum water level in the pond exceed this, the excess water will be disposed of via the waste water drain, until the maximum water level has been reached

2.2 Schematic setup

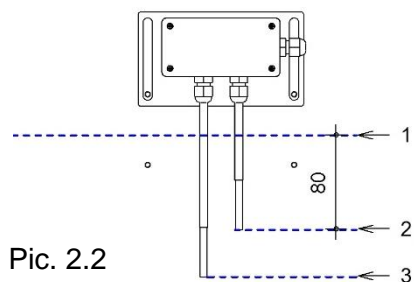
- To get the best out of the RDF, use all of the water inlets at 4". This result in good water turn over ratio for your pond.

2.3 Set level control

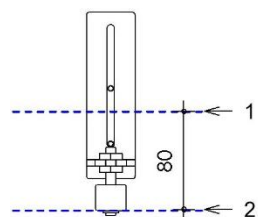
Sensor / float switch in clean chamber.

Pic. 2.2 / 2.3

1. Water level with running pump after rinse (8 cm above upper float switch)
2. Start rinsing
3. Pondpump switches off

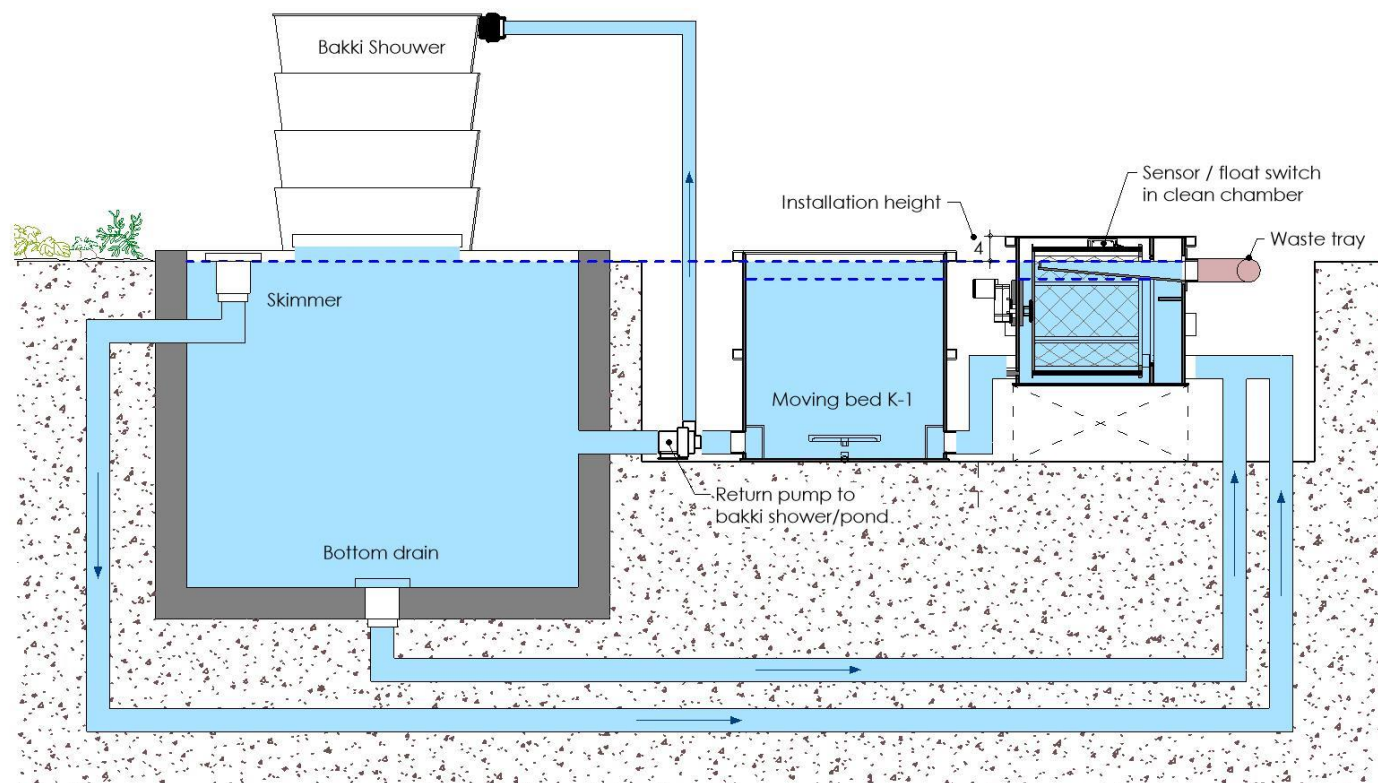


Pic. 2.2

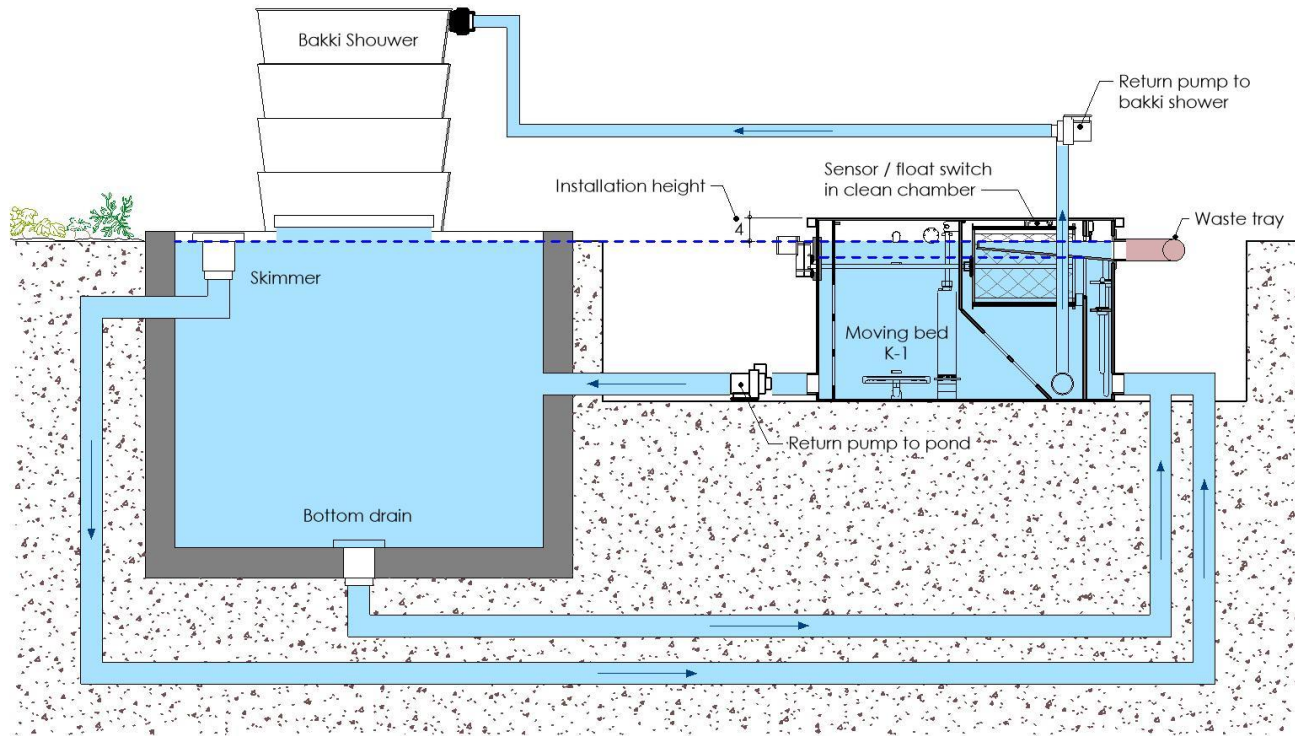


Pic. 2.3

- For Gravity, the water level of the pond must lined with the top of the RDF waste tray.
- The water outlets on the top or sides of the RDF must be closed as these outlets are for pump fed usage configuration.
- The return pump is determined by how much water flow from the pond to the RDF. For example if you have 2000GPH water flow from pond to RDF, but you are using 5000GPH pump to push water from RDF to shower or back to pond. This would not work, as you are missing 3000GPH. The flow must be balanced.



Pic. 2.1 Schematic setup of the drum filter

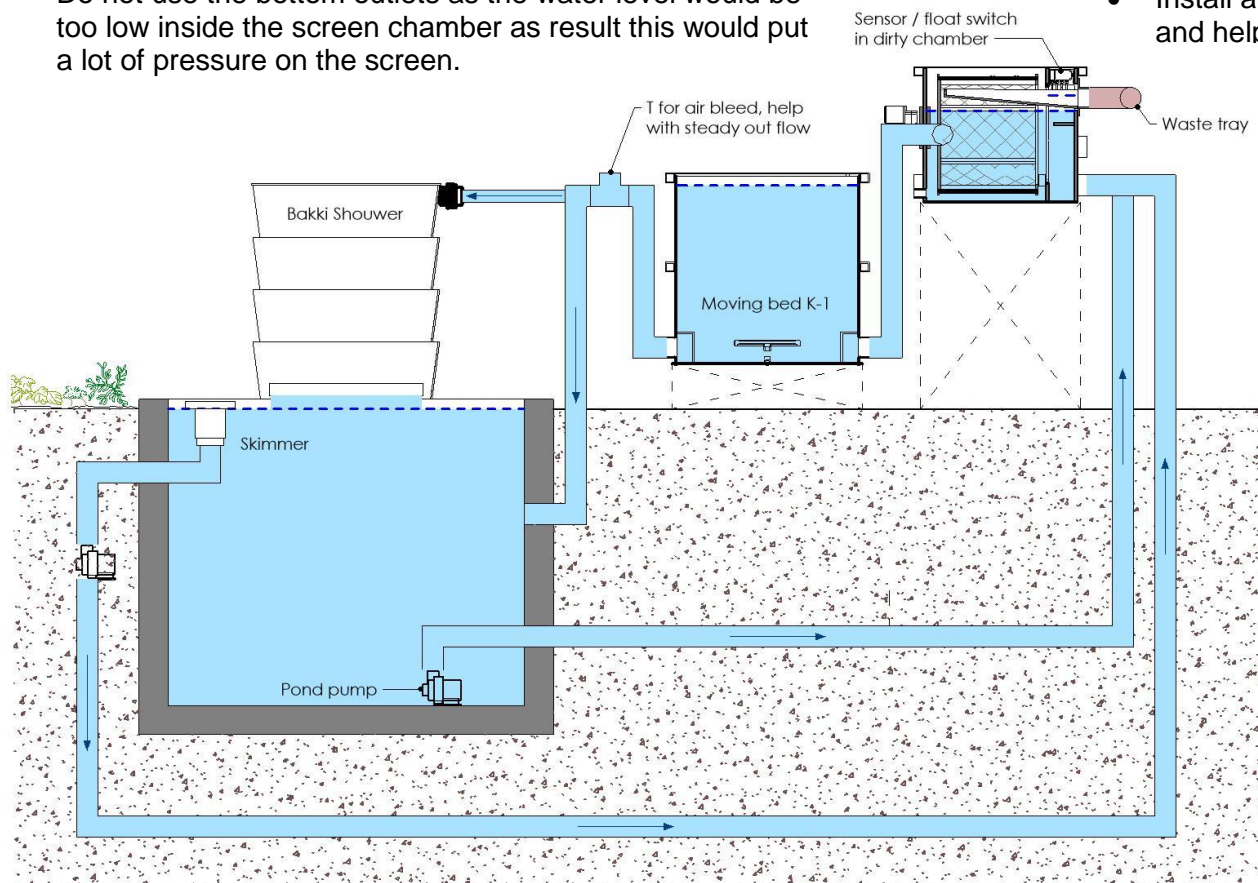


Pic. 2.4 Schematic setup of the combi filter

3 B. Pump fed system

3.1 Schematic setup

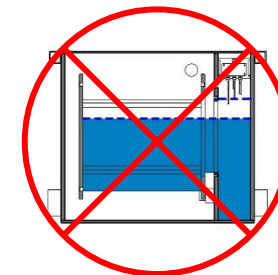
- For Pump fed, you can use a water pump to push water from the pond/skimmer into the RDF and from the RDF the water gravity flow back to the moving media K-1 filter or Bakki Shower, however the RDF unit must be above these units.
- For Pump fed, close all the bottom outlets and use the sides/top outlets. Do not use the bottom outlets as the water level would be too low inside the screen chamber as result this would put a lot of pressure on the screen.



Pic. 3.1 Schematic setup of the drum filter

3.2 Placing the filter system

- Determine the maximum water level of the pond
- The installation height is min. 30 cm (installation height is the distance from maximum water level to the top of the filter)
- Install a tee at the outlets help prevent air pressure build up and help with steady water out flow

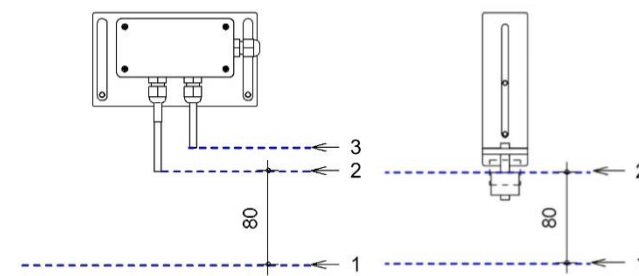


3.3 Set level control

Sensor / float switch in dirty chamber.

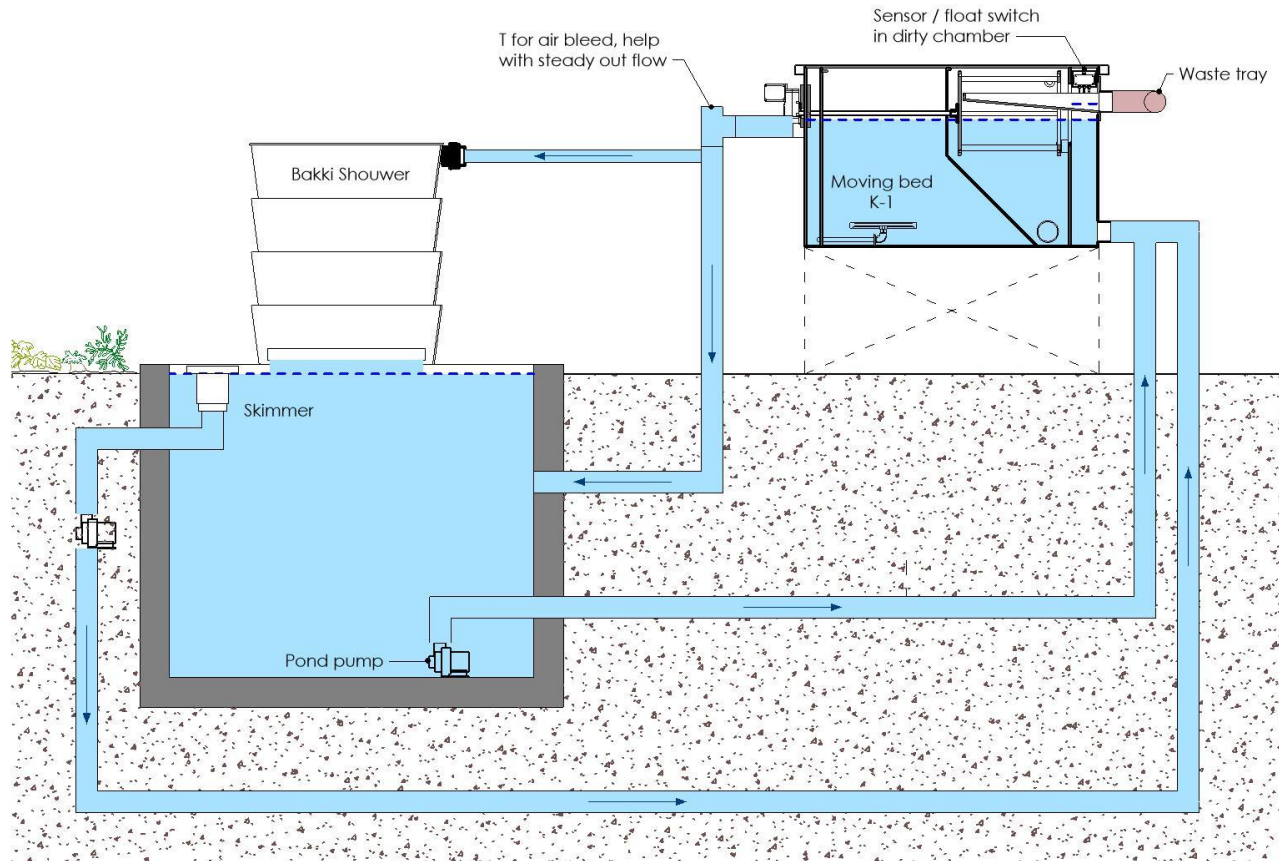
Pic. 3.2 / 3.3

1. Water level with running pump after rinse
2. Start rinsing
3. Pond pump switches off



Pic. 3.2

Pic. 3.3



Pic. 3.4 Schematic setup of the combi filter