- First install the Biofilter[®] and then the Biodynamizer[®] after the city water meter or at the main water supply to your home (legally potable water according to the local legislation in force in the country where the filter is placed). For the European Union this corresponds to the "European Directive on potable water 98 / 83CE 1998 ") and fix them vertically on a hard & resistant wall (bricks, concrete...) with a valve upstream of the Biofilter and a valve downstream of the Biodynamizer. Check that the city water has a pH (degree of acidity) greater than 6, this may cause corrosion of the copper and / or brass pipes of the Biodynamizer[®] (and this due to too high acidity water) risking leaks or ruptures of the pipes.
- The Biofilter is only connected to the arrival of cold water!
- Be sure to connect the devices properly and comply with the specific installation standards in force in the country of installation.
- The fittings of the 2 devices are ³/₄ inch threaded brass. If necessary, use reducers.
- Check that the materials constituting the pipes of the internal sanitary network (existing sanitary piping
 to which the filtration and dynamization devices are connected) comply with the local technical and
 sanitary regulations relating to interior sanitary installations (for Belgium http://www.belgaqua.be/).
 And in particular that these pipes are not made of lead, or any other metal dangerous for health
- Check that there is no softener upstream of the Biofilter or the Biodynamizer.
- If dynamized water is to supply a swimming pool: check with the pool technician, the compatibility of the filtration system for the pool with filtered and dynamized water which is unsoftened water.
- If city water is likely to contain sludge, particles, sediments or other, we recommend protecting the Biofilter upstream with a particle / sediment filter in order to protect and prolong the longevity and efficiency of the Biofilter.
- If your city water contains more than 40 ° f French degrees of water hardness, (very hard water), then it
 is advisable to plan an additional treatment of the limestone adapted to this situation (for example our
 Biolimescaler).
- Be sure to place a pressure reducer after the water meter and before the appliances. This reducer must be set at max 5 bars.
- In the case of galvanized or metal sanitary pipes, be sure to connect the devices with dielectric multiskin pipes or Alpex (Aluminum / Pex, preferably in minimum Ø 26 x 3 mm to avoid pressure drops) or with dielectric fittings in order to avoid stray currents along the pipes which can cause galvanic corrosion by electrolysis of the Biofilter and / or the Biodynamizer (the internal pipes of the Biodynamizer are made of copper, brass and silver and its fittings are made of brass).
- Make sure to place the devices more than 80 cm from an electrical source (arrival of the main electrical power supply to the home, electrical panel, photovoltaic inverter ... etc.) in order to avoid electromagnetic pollution. It is also recommended to avoid stray currents in the sanitary installation. To do this, make sure to connect the sanitary installation to earth upstream of the devices!
- Check that the place where the devices are placed is never subject to frost (recommended temperature: between 1 ° C >< 50° C).
- Be sure to connect the devices in a professional manner and comply with the specific installation standards in force in the country of installation.
- Since the water filtration and dynamization devices do not soften the water, it is important to carry out a standard annual maintenance of boilers and heating installation (heat to be set between **50** ° **C-60** ° **C**)!



PLACEMENT INSTRUCTIONS – TO READ BEFORE STARTING

Then follow the **placement instructions** concerning the Biofilter

- 1. Close the general value of the distribution water meter (legally potable) and empty the installation.
- 2. After the water meter, place a valve with drain as well as a pressure reducer (at max 5 bars).
- 3. Make sure to reserve sufficient space around the Biofilter in order to be able to change the cartridge at the appropriate time (cartridge capacity 150 m³ or max 1 year).
- 4. Attach the Biofilter vertically to a load-bearing wall.
- 5. Connect the Biofilter using dielectric pipes (eg Multiskin or Alpex), if necessary suitable brass elbows. Do not forget the joints so that the connections are tight.
- 6. Connect the Biofilter (fittings 3/4 inch ') respecting the direction of flow, see arrow on the Biofilter connection.



- 7. Attach the reinforced bracket to a load-bearing wall as well as the clamp to attach the Biodynamizer vertically, next to or below or above the Biofilter.
- 8. At the outlet of the Biofilter, connect it with a dielectric pipe to the fittings of the Biodynamizer (WaterflowIN inlet). Do not forget about seals.
- 9. Observe the input (= Waterflow IN ") and output (=" Waterflow OUT ") fittings of the Biodynamizer.
- 10. At the outlet of the Biodynamizer, connect its ¾ inch 'fittings with a dielectric pipe (eg Multiskin or Sanitary Alpex). Make the connection waterproof (for example with hemp or teflon).
- 11. Check all tightenings and tightness before commissioning the installation.
- 12. Let the water run from all the taps in the house installation for +/- 10 minutes.



Before installing the Biofilter, it is necessary to:

- 1. Take the Biofilter out of its box and plastic packaging
- 2. Unscrew the clamp and its bakelite black thumbwheel
- 3. Open the Biofilter and check the device from inside and outside.
- 4. Take out the blue tightness collar and the two black o-rings for visual verification
- 5. Place the filter cartridge correctly inside the Biofilter.
- 6. Replace the blue collar and the two black gaskets (o-rings) horizontally flat on the lower edge of the stainless-steel housing of the Biofilter
- 7. Tighten the black bakelite thumbwheel until adequate tightening is obtained
- 8. When opening the water valve, check the tightness of the Biofilter.
- 9. Repeat the process in the event of a leak and check if the O-Rings, blue collar and the 2 black gaskets, are correctly placed.



PLACEMENT INSTRUCTIONS BIOFILTER + BIODYNAMIZER + (BIOLIMESCALER)



Know more: <u>www.biodynamizer.com</u> or <u>team@biodynamizer.com</u>





Biodynamizer®

REPLACEMENT FILTER CARTRIDGE

Close the valves upstream and downstream of the Biofilter



Loosen the clamp by turning the black knob



If the 2 parts of the housing remain stuck (suction phenomenon due to the pressure inside the Biofilter), this pressure must then be released by opening the valve bleeder and retaining the lower part of the housing at the same time



Open the housing to replace the saturated cartridge





REPLACEMENT FILTER CARTRIDGE

 Check that the O-Ring is present: 2 black rubber gaskets coiled on either side (above and below) the blue plastic ring, intended to guarantee the tightness of the filter)



Properly **place (horizontally flat) the O-ring** on the lower edge of the Biofilter stainless steel housing and place the **filter cartridge of the Biofilter in the housing**



Make sure that the **stainless-steel strapping slide of the upper and lower housing** of the Biofilter follows the contours **in a flat and regular manner** as shown in the photo below on the right (and this all around the device -> check that this or also the case at the back, in the direction of the wall!)



Close the filter housing using the **black knob** (bakelite ring), by tightening the stainless-steel clamp very strongly to ensure the tightness of the Biofilter. There is still a small free space in the middle of the strapping (the 2 parts of the strapping do not touch, photo on the right below!)





Know more : <u>www.biodynamizer.com</u> or <u>team@biodynamizer.com</u>

REPLACEMENT FILTER CARTRIDGE

It is then necessary to **open progressively the valves**, first the one upstream (before the filter: the one on the side of the city water inlet meter) then, and **after having first opened a valve of the downstream hydraulic installation** (in order to avoid too much air in the pipes) **GRADUALLY OPEN THE VALVE DOWNSTREAM of the Biofilter**, in order to avoid producing too much pressure suddenly in the pipes which could have the consequence of loosening existing limestone particles inside the pipes resulting in blocked pipes or fittings!



Closed valve (perpendicular to the pipe)



Open valve (parallel to the pipe)

Then **open all the water taps in the home** (taps, showers, baths, etc.) for **a few minutes**. Air will escape through the open water taps (the cloudy appearance of water is actually air mixed with water, See photo below of water in the glass of water just after opening the water valves). After several minutes of water flow, the air in the pipes will disappear and the water will immediately be transparent again!



If you are going on vacation or after a prolonged period of absence (> 8 days), let the water run from a tap for +/- 5 minutes in order to purge the water that will have stagnated in the sanitary pipes!

All you have to do is taste and enjoy the freshly filtered and dynamized water comparable to mountain water!





TECHNICAL SHEET OF THE BIOFILTER



- Connection after the cold-water meter (max 38 ° C)
- Housing: stainless steel 316 (Cr18-N10)
- Capacity: 150 m³ and max 1 year
- Flow rate: 1.5 m³ / Hour (or 25 L / min) at 3 bars
- Operating pressure max: 6.5 bar, pressure loss 0.1 bar if city water pressure: 1.5 > < 6 bar
- Legal warranty: 2 years
- Connections: 3/4 inch (ext. Ø: 26 mm, thickness : 3 mm, int. Ø : 20 mm)
- Dimensions and weight:
 - Filter (stainless steel housing):
 Height: 600 mm x Diameter: 180 mm, weight: 4 kg
 - Cartridge: H: 505 mm x Diameter:
 144 mm, weight = max 3.5 kg
- Certificate of Sanitary Conformity issued by the Carso laboratory: n° 21 ACC LY 990
- Material conformity certifications according to European regulations: (EC) 1935/2004 & (EC) 1907/2006 (REACH) & (EC) 2023/2006 & (EC) 10/2011







TECHNICAL SHEET BIODYNAMIZER





- Mechanism: mechanical vortices & magnetic fields + transmission of natural mineral frequencies
- No maintenance, no consumables
- Flow: **3,4** m³ / hour or **58** l/mn at **3** bars, or a sufficient flow for a private house inhabited up to 8 people
- Operating **pressure**: min **3 bars max 5 bars**. The aquifer part of the device resists pressures up to 10 bars and complies with European Directive 97/23 / EC concerning pressure equipment
- Legal warranty (2 years)
- **Tightness test :** each Biodynamizer is tested at a pressure of 10 bars for 3 minutes under water in order to check its tightness
- 3/4-inch brass fittings (Ø ext. : 26 mm, thickness : 4 mm, Ø int. : 18 mm)
- Dimensions: cylinder + fittings: 910 mm (812 mm without fittings) x cylinder outer Ø: 160 mm, weight:
 +/- 16 kg + 2,2 L with water in the device
- The Biodynamizer is manufactured by
 S.A. Dynamized Technologies Sentier Muraes 10 at 1440 Braine le Château, Belgium
 VAT: BE 0646898542 -Company number at the ECB 0646898542
- Certificate for Conformity of the metals in contact with water issued by Eurofins : All materials in contact with water (copper & brass & silver) have sanitary compatibility in accordance with European Directive (EU) 2020/2184 relating to the quality of water intended for human consumption
- « CE » marking







Biodynamizer®





Biolimescaler®



Technical characteristics of the Biolimescaler®:

- Fittings: ¾ inch male diameter (placement can be done in both directions)
- Dimensions: 60 x 135 mm
- Weight: 1.6 Kg
- Capacity (flow): 60 liters / minute
- Use only on the **cold-water** circuit at max 35 °C!

Favorably tested by the

Scientific and Technical Center for Construction











- For the **iron**, use distilled water from the clothes dryer to prevent it from getting clogged (standard procedure),
- For **taps**, wipe a cloth (if necessary, with white vinegar) every 15-30 days at the outlet of your taps (this is a standard maintenance), immerse the faucet aerator in white vinegar,
- For **shower heads**, soak them every 6 months in white vinegar (this is standard maintenance).
- For kettles or coffee machines, do not allow the water to boil at 100 ° C (60-70 ° C is clearly sufficient), because water vapor tends to precipitate limescale. Renew the water for each boil + regularly clean the bottom of the container with white vinegar to descale it. This is a standard maintenance depending on the interior coating of the devices,
- Regarding the dishwasher, standard maintenance: program the washings at max 55 ° C !, add: rinsing liquid (cleaner & degreaser), dishwasher tablets for the shine of the glasses, regenerating salt; regular cleaning of the dishwasher filter; in case of very hard water, use crystallized citric acid (in combination with the tablets).
- For shower screens (normal cleaning),
- Water decanters, clean the bottom with white vinegar or citric acid in water,
- For the **washing machine** you can continue to use a softener (but it will be less necessary thanks to the Biodynamizer).
- For **steam ovens**, check with the supplier its compatibility with non-softened water (which is the case with dynamized water) and follow its maintenance recommendations
- For **boilers**, water heaters, please set them to a maximum of 55 ° C
- In general, please set your hot water devices to a maximum of 55 ° C

