



- It is strongly recommended to call a **professional** for the installation of the devices.
- **First install the Biofilter and then the Biodynamizer** after the city water meter or after the main water supply to your home (legally drinkable water according to the local legislation in force in the country where the filter is installed). For the European Union this corresponds to the “European Drinking Water Directive 98/83CE 1998”) and attach them **vertically** to a hard & resistant wall (bricks, concrete, etc.) with a valve upstream of the Biofilter and a valve downstream of the Biodynamizer.
- The Biofilter and the Biodynamizer can only be connected to the **cold-water** network!
- Given that the Biodynamizer pipes are made of copper and brass, the customer will ensure, under their own responsibility, to run water with a **pH (degree of acidity) greater than 6.8 and a hardness greater than 15 °f (French degrees) or 150 ppm**, otherwise there is a risk of corrosion of the pipes and leaks or ruptures. Be sure to **properly adjust CO₂-based limescale treatment systems** in this regard, as they can acidify the water and lower its pH! It is also important to prevent it from containing **abrasive sediments** (sand, sludge, etc.) which could erode the Biodynamizer pipes.
- Be sure to connect the devices professionally and **comply with the specific installation standards in force in the country of installation**.
- The **fittings** of the 2 devices are made of **¾ inch threaded brass**. Where applicable, use discounts.
- Check that the materials constituting the pipes of the internal sanitary network (existing sanitary pipes to which the filtration and dynamization devices are connected) comply with local technical and health 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 to health.
- If the tap water is likely to contain sludge, particles, sediments or other, we recommend protecting the Biofilter upstream with a **particle/sediment prefilter** in order to protect and extend the longevity and effectiveness of the Biofilter.
- If your city water contains **more than 40°f hardness** (French degrees - very hard water) **400 ppm**, then it is advisable to provide additional limescale treatment adapted to this situation (for example our **Biolimescaler** which is **placed between the Biofilter and the Biodynamizer**: in this case provide a **non-return valve** after the Biolimescaler).
- The operating pressure of the devices is between **3 and 5 bars max**. If applicable, be sure to place a pressure reducer after the water meter and before the devices. This reducer must be set to max 5 bars.
- Since water filtration and dynamization devices do not soften the water, it is important to carry out **standard annual maintenance of boilers and waterheaters** (heat to be set between **40°C-max 55°C**)!
- Check that the devices will be placed in a place **protected from frost** (cellar, garage, etc.) ; Recommended temperature: between 1°C > 50°C)





The **Biofilter** **removes pollutants but does not remove minerals**—such as calcium and magnesium—that form limescale.

The **Biodynamizer** **breaks down limescale**, making it **less prone to adhering** to surfaces and thus harmless, as it is easy to clean away; however, it **does not remove the limescale itself** the way a water softener does. Consequently, the limescale remains present and visible in the water, albeit in the form of fragmented white powder. The **Biolimescaler** enhances this breakdown process—further fragmenting the limescale—and can therefore be viewed as an amplifier of the ecological limescale treatment provided by the Biodynamizer. It acts as a booster for the Biodynamizer when water is extremely hard (approx. 40°F) or if you are particularly sensitive to limescale issues. However, it does not remove the limescale.

Water treated by the Biofilter and Biodynamizer is **unsoftened water**—specifically, filtered water, which does not retain limescale, and dynamized water, which does not remove limescale.

This implies the following:

- For **pool professionals**: You must verify the compatibility of the swimming pool or jacuzzi filtration system with unsoftened water (water containing limescale).
- For **professional kitchens** (restaurants, hotels, spas, etc.)—where appliances such as dishwashers operate frequently and heat to high temperatures, thereby accelerating limescale buildup—consider installing a **water softener** upstream of these units to adjust water hardness to the levels specified by the manufacturers and suppliers of this professional equipment.
- For **private households**: If your appliances or installations are sensitive to limescale and require softened water (water from which limescale has been removed)—such as taps that rapidly heat or carbonate water, certain steam ovens, hammams, etc.—you should check with the manufacturer or supplier regarding the compatibility of unsoftened water with these devices. In such cases, it may be necessary to combine our units with a **water softener**. Please note that any reduction in limescale results in the addition of sodium (a component of salt that is tasteless) to your drinking water via the softener. This sodium is not removed by the Biofilter (it passes right through). For example, a reduction of 20°F (French degrees) adds 20 x 4.6 mg of sodium per liter of softened water, or approximately 100 mg/L. Given that European standards (Drinking Water Directive) limit sodium levels in drinking water to a maximum of 200 mg/L, and that the EFSA recommends a daily water intake of 2 liters, we therefore advise—whenever possible—adjusting your water softener settings based on these parameters (i.e., to between 15°F and 20°F).





- **Close the general valve of the city water meter** and empty the installation
- Check that there is a non-return valve after the city water meter as well as a pressure reducer (set to +/- max 5 bars)
- Place the devices **vertically** (for the Biodynamizer, the “Waterflow IN” inlet connection above and the “Waterflow OUT” outlet connection below; **for the Biofilter, respect the direction of the water flow using to the arrows provided for this purpose**).
- Placement > 80 cm from possible sources of electromagnetic pollution (electrical incoming cable, electrical panel, photovoltaic inverter, etc.)
- Be sure to reserve **sufficient space around the Biofilter in order to be able to replace the cartridge at the appropriate time** (cartridge capacity 150 m3 or max 1 year). Minimum 40 mm free under the Biofilter housing.
- Place **valves with purger before the Biofilter & after the Biodynamizer**
- Fix the wall hooks of the 2 devices with suitable plugs and screws on a sufficiently supporting wall considering the weight of the devices (Biofilter: +/- 7 Kgs, Biodynamizer: +/- 19 Kgs + 2.2 L of water = 21 .2 Kgs)
- **Connect the devices:**
 - Be sure to connect the devices with multi-layer dielectric pipes (**multiskin**) such as **Alpex** (Aluminium/Pex, preferably Ø 26 x 3 mm to avoid pressure losses) or **copper** or **galvanized steel** but then with dielectric fittings to avoid stray currents along 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):
 - ✓ making sure to have properly notched/scratched/grooved the male connections (inlet/outlet) so that the sealing thread (loctite 55 or equivalent) or hemp + kolmat or Teflon does not slip during connection
 - ✓ by checking that you have added seals(o-rings) in the female connections
 - ✓ by avoiding stray currents in the sanitary installation. To do this, be sure to connect the sanitary installation to the earth upstream of the devices (grounding)
 - **When connecting the Biodynamizer to the sanitary installation, be sure to use 2 clamps:**
 - ✓ **1 holding clamp** which allows you to immobilize the Biodynamizer fitting (be careful not to turn the Biodynamizer connection in an anti-clockwise direction otherwise you risk unscrewing certain internal parts and causing leaks!)
 - ✓ **1 clamp to tighten** (clockwise) the fitting of the Biodynamizer to the parts/pipes of the sanitary installation



- For the Biofilter, check that the cartridge is well integrated into the housing and check the tightness of the clamp. To facilitate installation, the Biofilter housing can be installed on the support in two positions: inlet-outlet direction from left to right or from right to left.
ATTENTION! It is important not to confuse the water inlet and outlet of the Biofilter. The arrows on the black top of the Biofilter cap indicate the direction of water flow!
- Slide the Biofilter onto the wall hanger (guide rails) until the holes of the wall hanger and the Biofilter match. Place the black wing nut in its hole + check that the Biofilter clamp is sufficiently tight (by turning the black knob clockwise) to guarantee the tightness of the Biofilter.
- Biodynamizer: Fix the bracket in the desired location as well as the 2 clamps on the wall.
- Then place the Biodynamizer on the bracket and tighten the 2 clamps.
- Crimp and clean multiskin pipes
- **Indicate the placement date on the sleeve** of the Biodynamizer and take the packaging boxes
- Check all connections and tightness before commissioning the installation. If there is a leak, close the valves and repair the leaks.
- **Reopening of the valves: After having previously opened a tap in the sanitary installation downstream of the devices, you must then gradually open the valves: first the one upstream (before) the Biofilter. Let the 2 devices fill, then gradually open the valve downstream of the Biodynamizer**, this is to avoid producing too much sudden pressure in the pipes, which could have the consequence of loosening existing limescale particles inside the pipes, resulting in clogged pipes or taps!
- **Let the water run from a tap for 5 minutes** to purge the air in the devices and pipes (which makes the water cloudy-opaque for a few minutes = oxygen in the water which evaporates after a few seconds). This does not prevent you from drinking filtered and dynamized water.
- Never unscrew the connections without first closing the valves upstream and downstream of the devices.
- **All placements are made under the sole responsibility of the installer.**
- Then, all you have to do is enjoy this tap water which has been filtered and dynamized.



placement Instructions Biofilter + Biodynamizer



Pressure reducer not supplied



Pressure gauge (optional) not supplied



2 Valves with air vent not supplied



2 wall clamps + 2 x 2 screws + 2 studs & 2 plugs (**supplied**)



1 support bracket + 1 universal screw & 1 dowel (**supplied**)



Non-return valve (**not supplied**)



2 screws + 2 plugs for the Biofilter (**supplied**)

Photovoltaic inverter



Electrical panel



Main tube electrical supply

Grounding

Biolimescaler
(optional)

> 80 cm

Biodynamizer

Brass fittings 3/4"

Biofilter
Fittings 3/4"

Valve with air vent

606 mm X 225 mm – **6,9 kg**

Multiskin Ø 26 x 3 mm

Pressure reducer
Max 5 bars

Non-return valve
(Legally obligatory for all sanitary installations!)



City water meter

Grounding

Wall Clamp

822 mm X 160 mm – **19 kg** à vide + 2,2 L d'eau

Support Bracket

Brass fittings 3/4"

Multiskin pipe

Valve with air vent

Non-return valve if
Biolimescaler

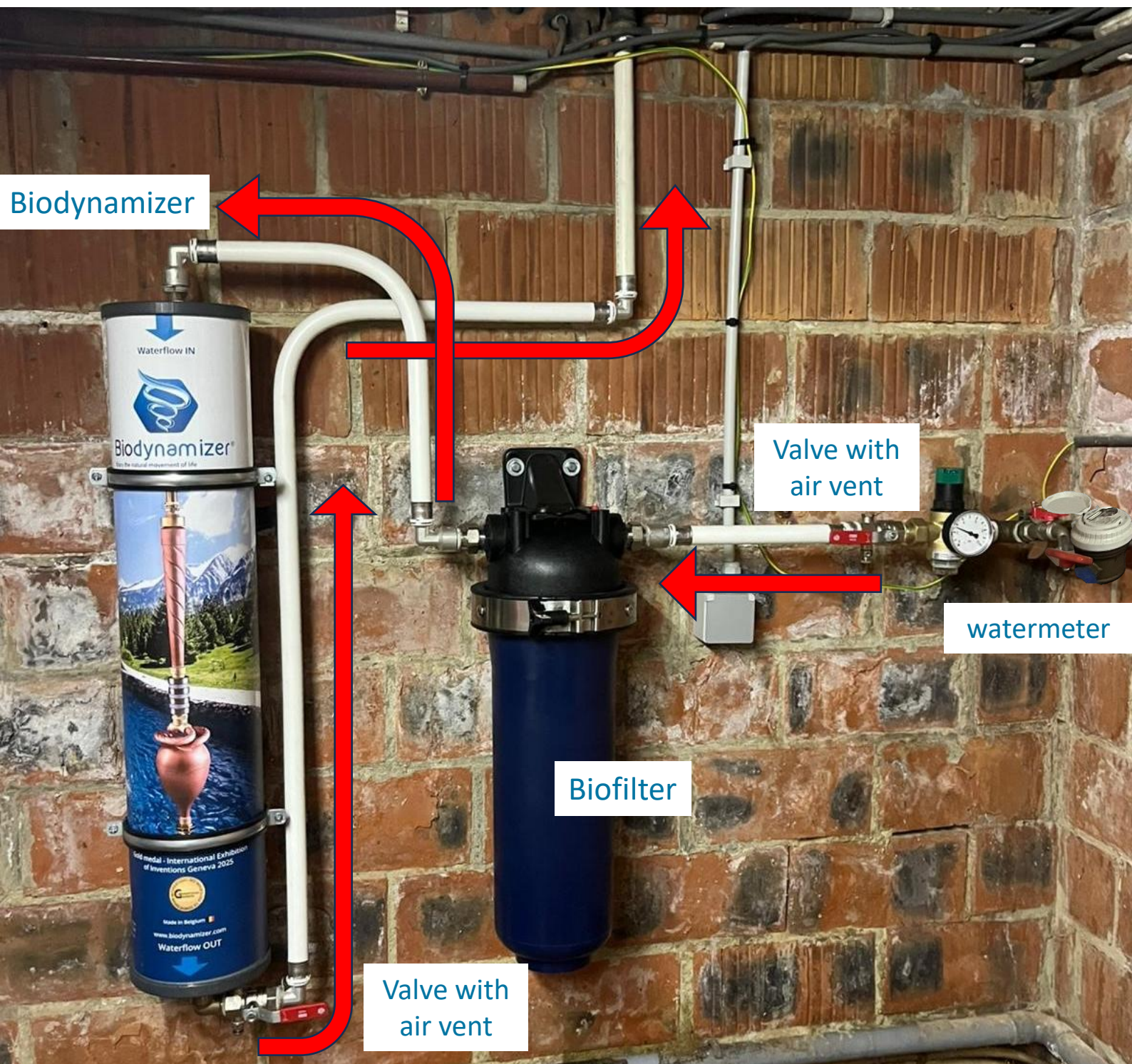
Biodynamizer®
Enjoy the natural movement of life



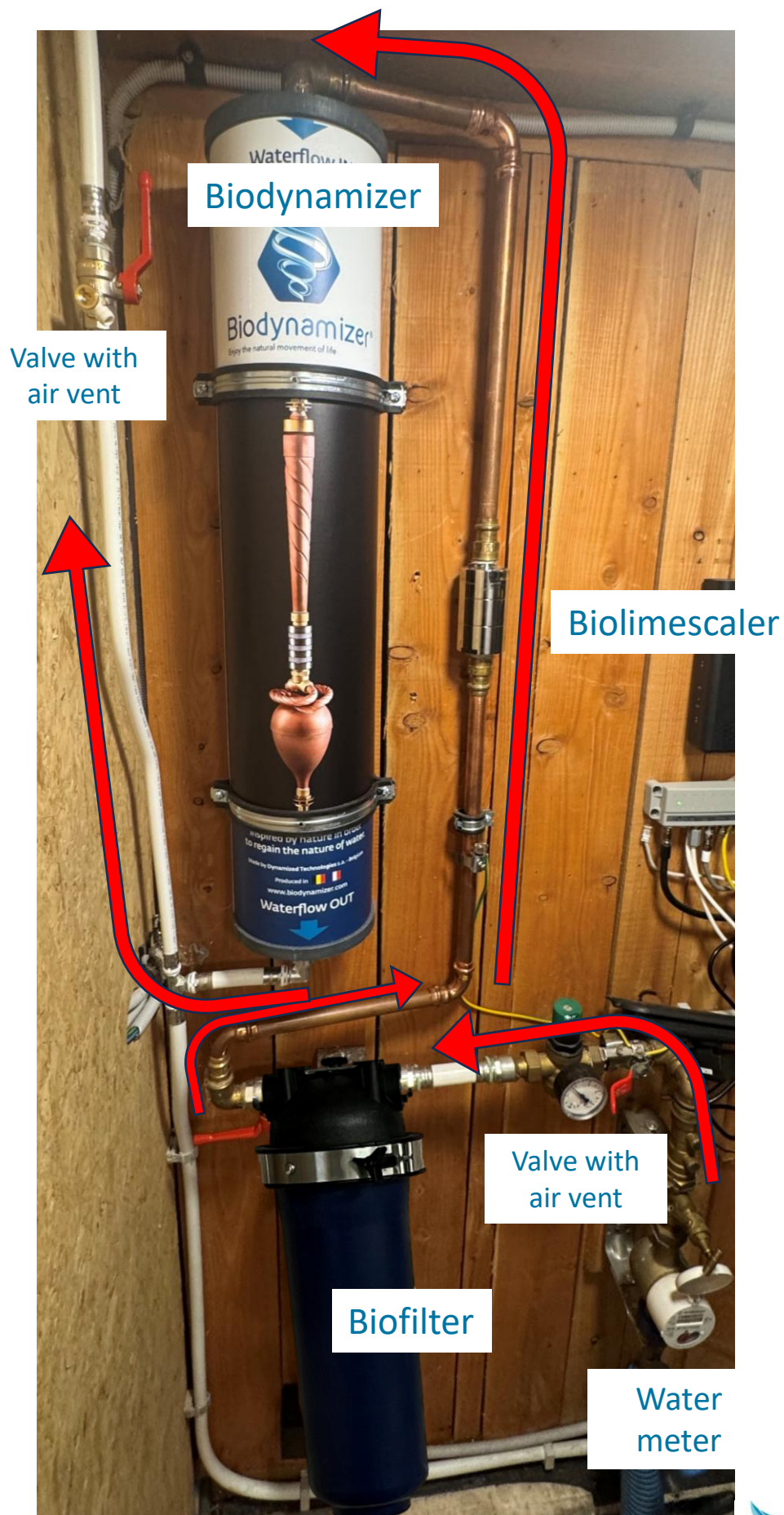
Placement Instructions Biofilter + Biodynamizer

When placing the Biodynamizer, you can choose the orientation:

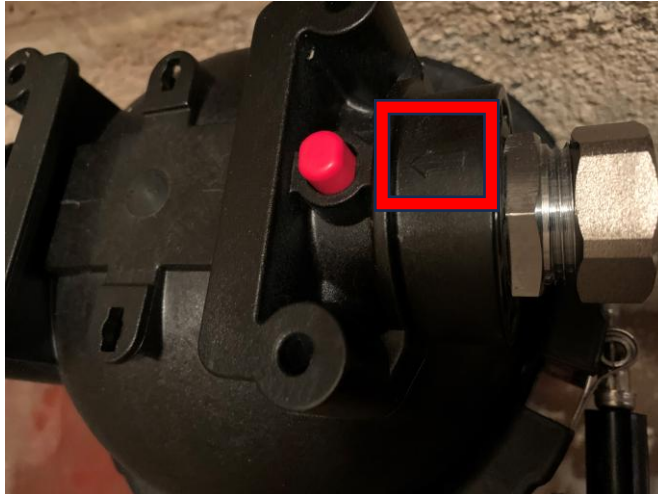
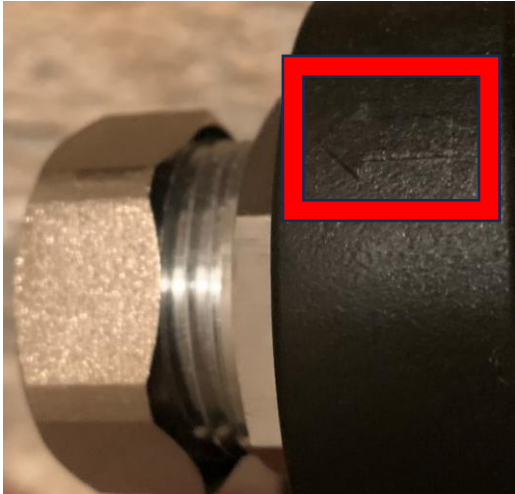
- Either the "flowing water fountain" side (assembly below)
- Or the "copper Biodynamizer" side (metal structure, assembly on the next page)



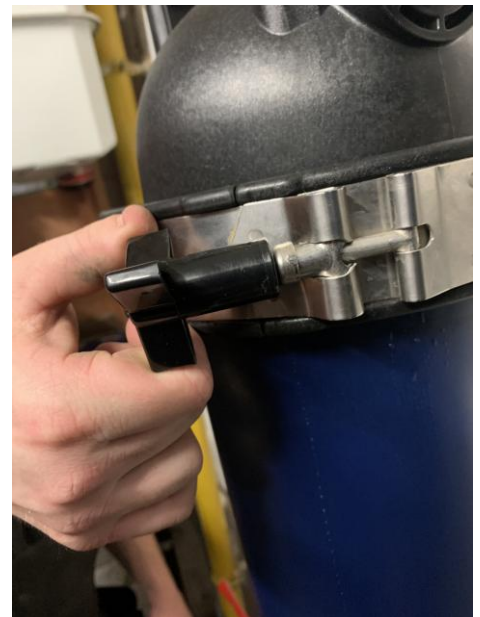
Placement Instructions Biofilter + Biodynamizer + Biolimescaler



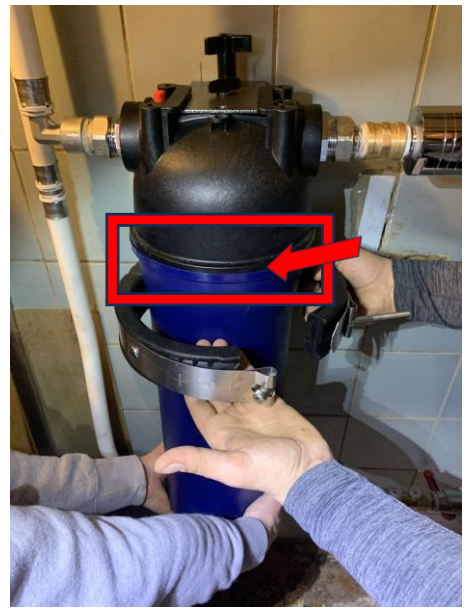
Placement Instructions Biofilter + Biodynamizer



Placement Instructions Biofilter + Biodynamizer



Check the Bio Pro filter cartridge included in the Biofilter



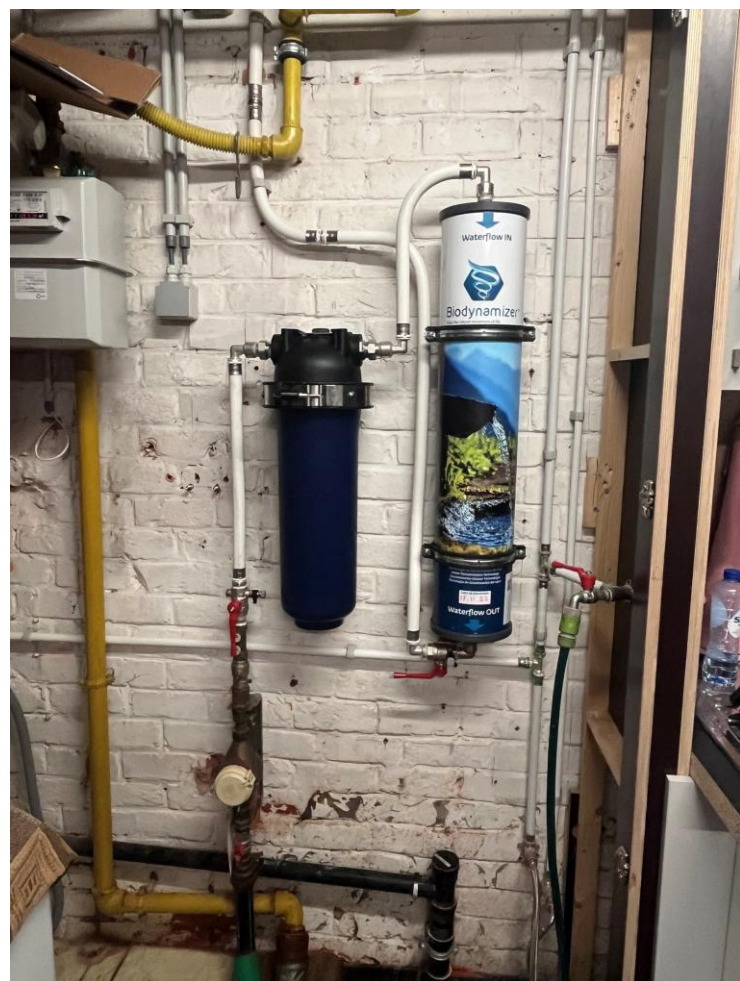
Placement Instructions Biofilter + Biodynamizer



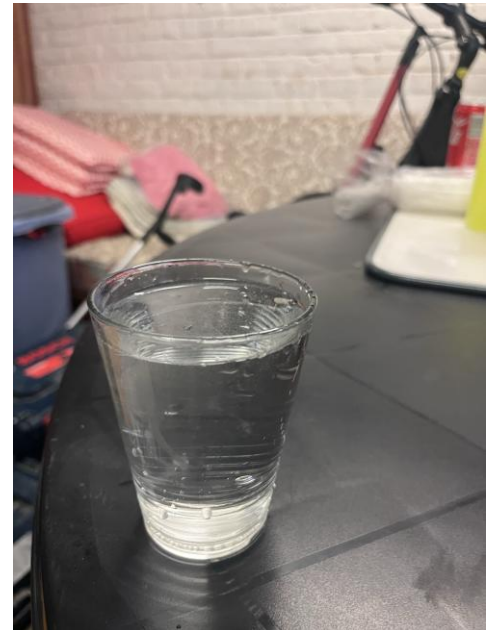
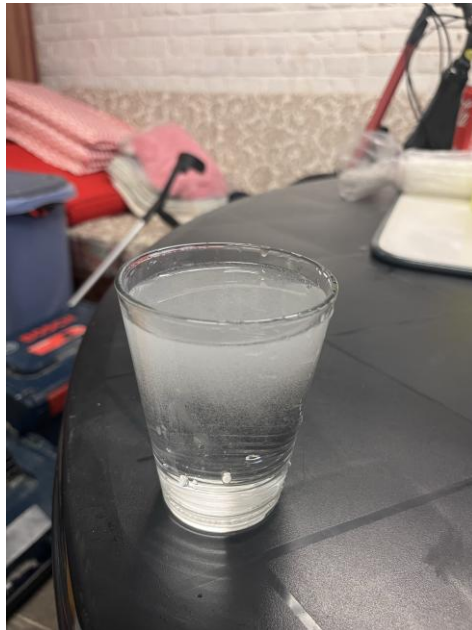
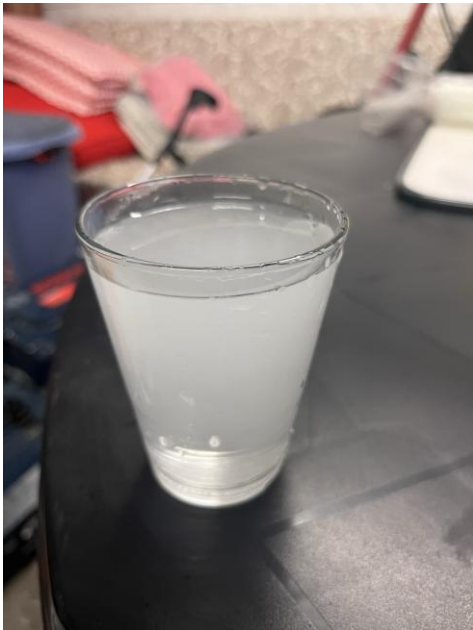
Placement Instructions Biofilter + Biodynamizer



Placement Instructions Biofilter + Biodynamizer



Placement Instructions Biofilter + Biodynamizer



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!



- **Connection after the cold-water meter (max 38 ° C)**
- **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:**
 - ✓ **Biofilter housing:**
 - **PP:** Polypropylene reinforced with Glass Fiber (PP GF 10)
 - H: 606 mm x Diameter: 225 mm, weight of empty case: 3.4 Kg
 - ✓ **Bio Pro cartridge:** H: 505 mm x Diameter: 144 mm, max weight 3.5 kg of mixture of activated carbon, ionized silver and hollow fibers
- **Certificate of Sanitary Conformity issued by the Carso laboratory: n° 21 ACC LY 990**

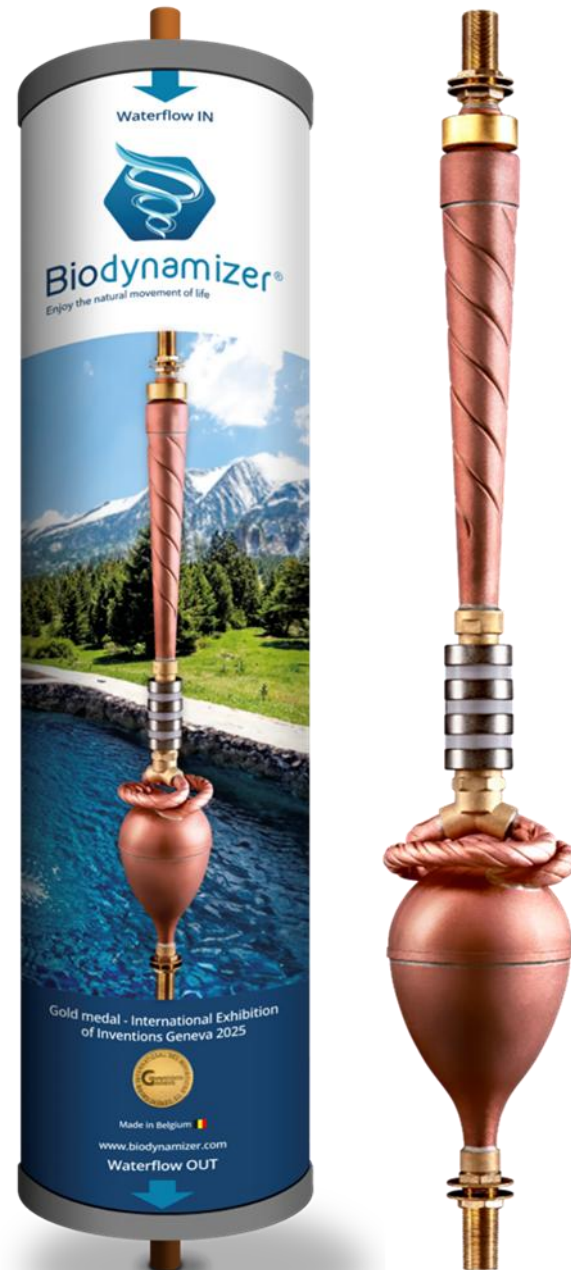




Biodynamizer®

Enjoy the natural movement of life

- **Mechanism:** mechanical vortices & magnetic fields + transmission of natural mineral frequencies
- **No maintenance, no consumables**
- Flow: **3,5 m³ / hour or +/- 60 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
- **Warranty 5 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: **895 mm** (822 mm without fittings) x cylinder outer Ø: **160 mm**, weight: +/- **19 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
- **Certified conform by Belgaqua (Belg 23/052/31b) according to standard EN1717** (protection in accordance with VIV0442023 - Conform, provided that a non-return valve is installed upstream of the Biodynamizer on the water pipe)



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