ALL PRODUCTS MADE IN EUROPE

FilBlue

Self-cleaning filters

Model: FilBlue FBL2000A

Self-cleaning filter with suction nozzles FilBlue FBL2000A

A self-cleaning filter is a type of filter specially designed to remove all suspended solids in surface waters (rivers, lakes, seas), wells and spring waters while automatically removing suspended solids inside the filter and guaranteeing:

- **Time saving**
  Eliminates or reduces the time needed to replace cartridges and filtering bags
- **Cost saving**
  Eliminates or reduces the use of cartridges and filtering bags
- **Reduction of investment costs**
  Self-cleaning filters are much cheaper than classical sand filters
- **Reduced installation footprint**
  Self-cleaning filters take up less space compared to classical sand filters

MADE IN ITALY

MADE IN EUROPEAN UNION

The automatic self-cleaning filters with suction nozzles manufactured by Everblue, denominated **FilBlue FBL2000A** , are used to remove particles with diameter between 800 and 25 micron inside fresh, brackish and sea water in quantities that don't exceed 100 ppm of TSS (Total Suspended Solids).

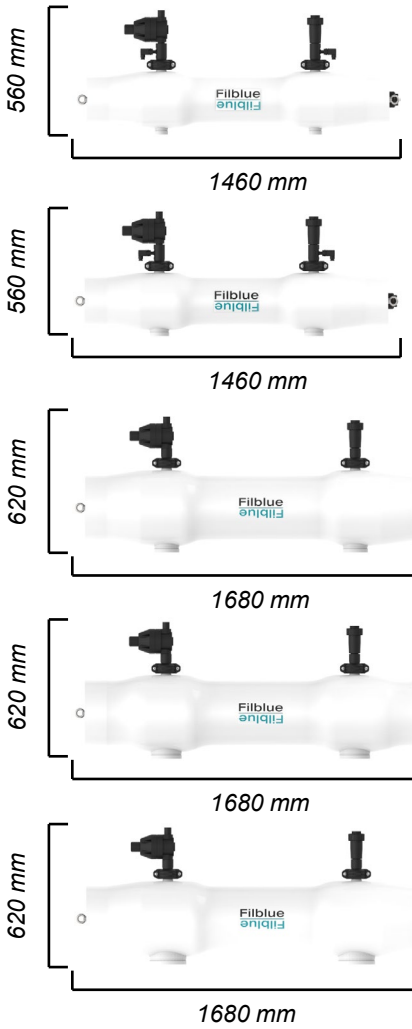
Depending on the applications, the functional limit parameters can be exceeded after verification and subsequent authorization by Everblue's technicians

The peculiarity of Everblue automatic self-cleaning filters is the ability, through a process called "regeneration", to rapidly clean themselves in complete autonomy using a very limited quantity of water.

versatile and efficient

Self-cleaning filter FilBlue FBL2000A

FilBlue FBL2000A self-cleaning filters are produced in different sizes:



2'' VICTAULIC
Flow rate up to 27 m³/h

3'' VICTAULIC
Flow rate up to m³/h

4'' VICTAULIC
Flow rate up to 108 m³/h

5'' VICTAULIC
Flow rate up to 144 m³/h

6'' VICTAULIC
Flow rate up to 198 m³/h

The main features of **FilBlue FBL2000A** self-cleaning filters are:

Versatile

Ideal to be installed both in brackish waters and in sea waters

Functional

Suitable for removing most suspended solids, thanks to special suction nozzles

Innovative

Deposit removal thanks to special suction nozzles. It is the first and only self-cleaning filter made with a fiberglass body

Why choose FilBlue FBL2000A: structure

FilBlue FBL2000A self-cleaning filters are made of 4 main parts:

1 BODY

Made of fiberglass (FRP) it is perfectly compatible with all kinds of waters. The body of the filter contains all the necessary components for the filtration process while ensuring a perfect pressure resistance (6 bar).

2 SELF-CLEANING BASKET

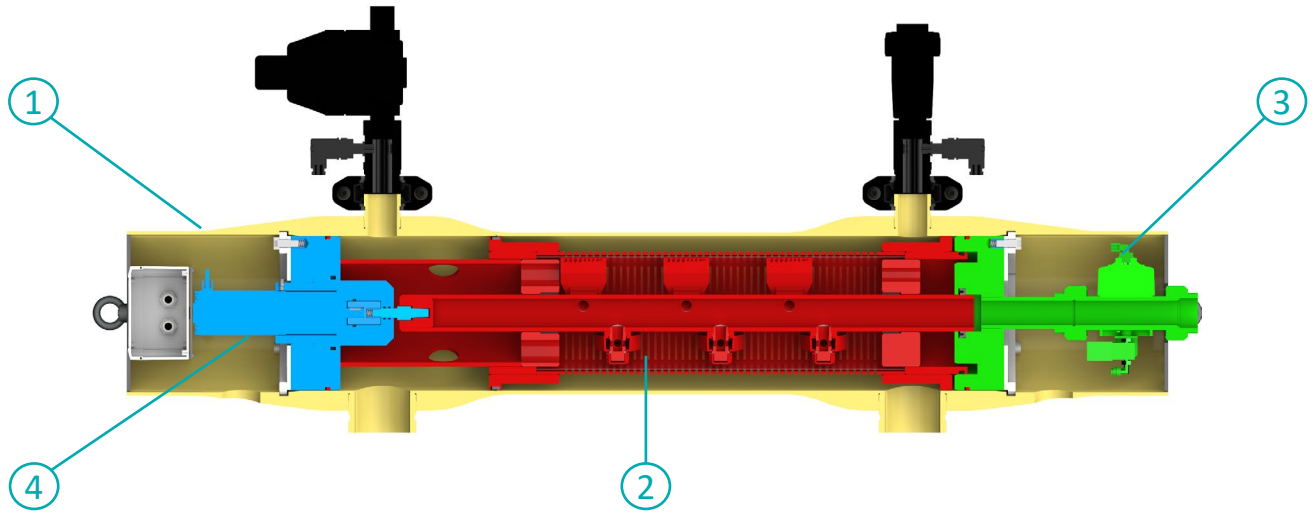
Completely made in plastic material (PVC and PP) it constitutes the set of elements necessary for the filtration and regeneration process. Inside, a rotating system in which the basic elements are the suction nozzles, allows the cartridge to continue filtering even during the regeneration and cleaning process of the net.

3 OUTLET SIDE CAP

Consisting of the closing cap and the drain valve. It is pneumatically controlled by the control unit and allows the drain water to come out.

4 INLET CAP

Consisting of the closing cap, the motor, the gearmotor and the control panel. What makes the filter autonomous and automatic to all effects, allows constant monitoring of operation and allows the management of all functions.



Why choose FilBlue FBL2000A: easy maintenance

The maintenance of **FilBlue FBL2000A** self-cleaning filter is very simple and takes just a few minutes.

1. Unscrew the eyelets and remove the locking plate to remove the control panel:

2. You can then unscrew the screws that hold the retaining ring in place and remove them from the filter body **FilBlue FBL2000A**:

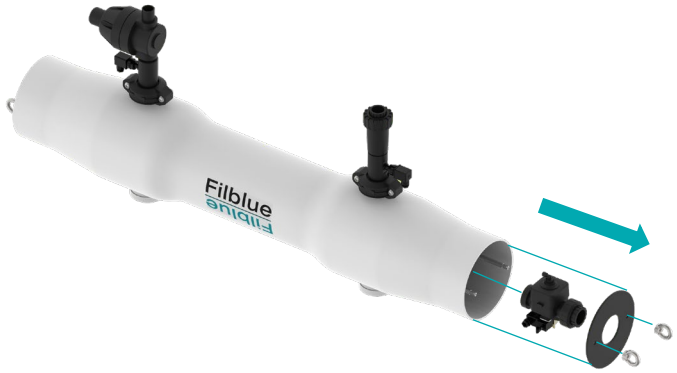
3. At this point, take the previously removed eyebolts and screw them on the threaded pins:

4. Now it is possible to remove the motor side closing cap as a single assembly:

Why choose FilBlue FBL2000A: easy maintenance

Repeat the above steps also on the opposite side of the **FilBlue FBL2000A** self-cleaning filter body.

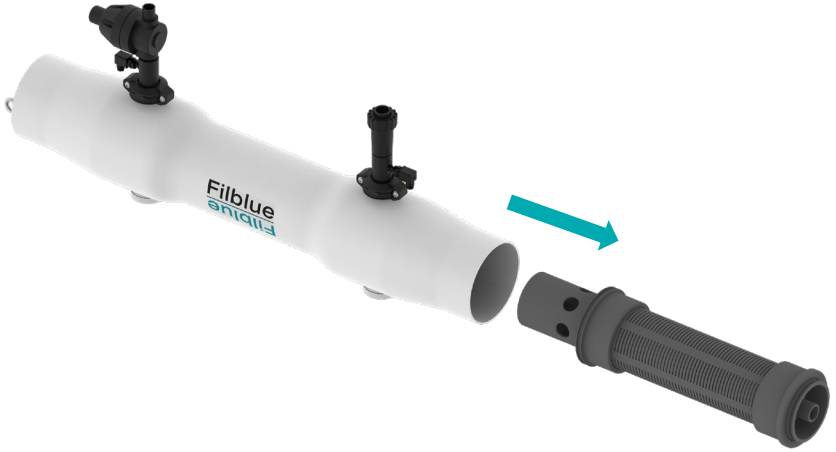
5 Unscrew the eyelets and remove the closing plate to remove the diaphragm discharge valve:



6 You can then unscrew the screws that hold the retaining ring in place and remove them from the filter body **FilBlue FBL2000A**:

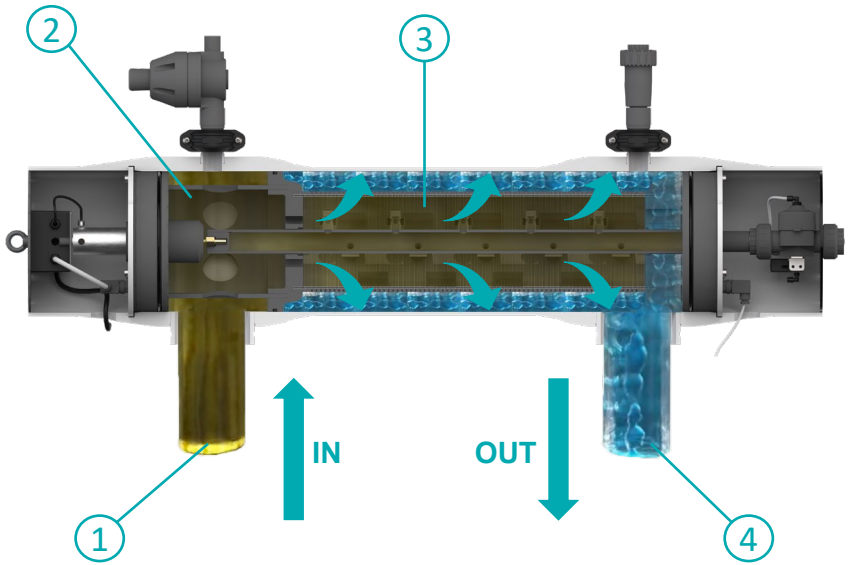
7 At this point, by screwing the previously removed eyebolts, it is possible to remove the discharge valve:

8 Finally, grab and pull out the self-cleaning basket (the basket must always be extracted from the EXIT side of the filter)



FilBlue FBL2000A: functioning

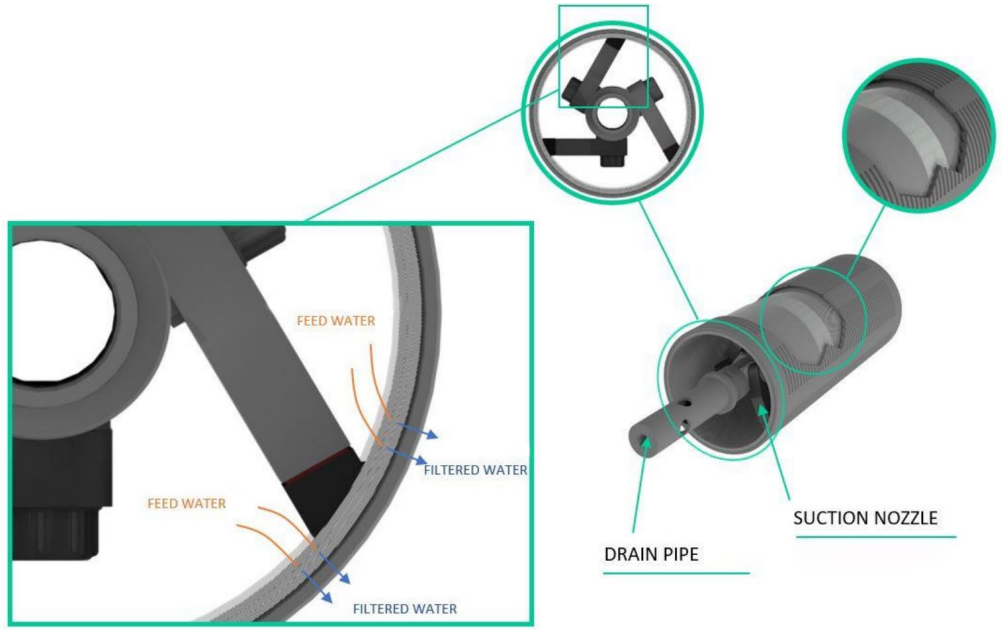
The water enters the filter through the input (*1*), goes through the inlet cylinder (*2*) from outside to inside and then the self-cleaning basket (*3*) from inside to outside. The filtering basket blocks all suspended solids larger or equal to the filtration degree installed. The filtered water flows out through the outlet tube (*4*).



Before the self-cleaning filter you must install a pre-filtration filtering basket to block all solids larger than 3 mm that could obstruct the suction nozzles compromising the washing effectiveness and damaging the filtering net, compromising the effectiveness of the filter and its integrity

The self-cleaning basket (3) is made of a micro-fessured PVC basket that supports 3 different nets that allow effective and long-lasting filtration:

- Draining polypropylene net (placed between the PVC basket and the polyester filtering net)
- Polyester filtering net (carries out the filtration process)
- Separating net (protects the filtering net and maintains the correct distance between the filtering net and the filtering nozzle)

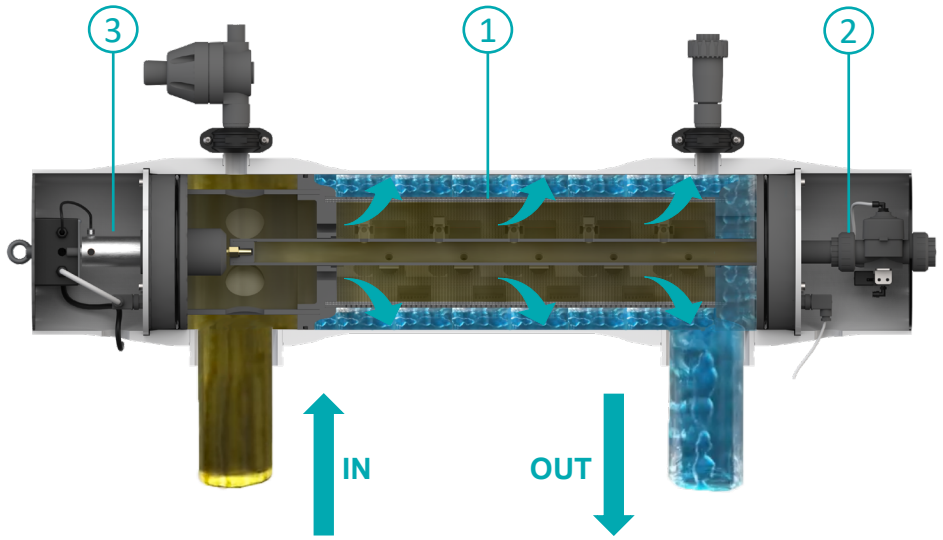


FilBlue FBL2000 A: regeneration

The solids that keeps settling inside the self-cleaning basket (*1*) don't allow the water to pass and create a difference of pressure (ΔP).

At a fixed ΔP value (adjustable between 0,3 ÷ 1 bar) we have an automatic cleaning cycle of the self-cleaning basket. This operation begins with a signal that opens the draining valve (2) and rotates the suction nozzle tube thanks to the electric motor (3).

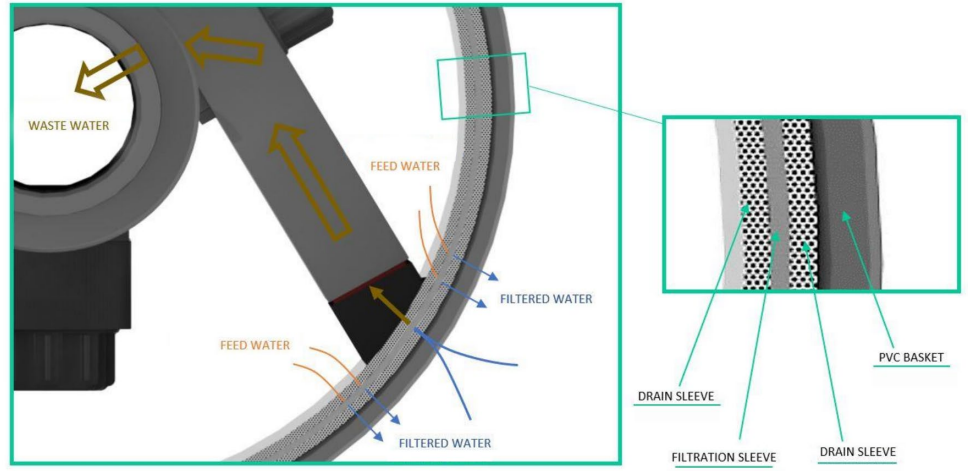
The dirt is sucked by the nozzles and ejected through the discharge valve. The cleaning cycle lasts about 14 seconds.



Suction through the suction nozzles is possible thanks to the differential pressure on the surface of the suction nozzles and the filtering basket.

The suction nozzles are connected, through the related supports, to the discharge pipe located inside the self-cleaning filter that is also connected to the discharge valve. When the discharge valve, connected to the cockpit or a pipe with no pressure opens, it generates a differential pressure compared to the inside of the filter (pressurized) creating the sucking effect on the nozzles. To create the suction the filter needs 1 bar of pressure only and can guarantee high energy savings.

FilBlue FBL2000A allows continuous flow even during the regeneration phase, while maintaining its productivity and reducing the waste of water to a minimum.



More Info

Data Sheet
FBL2000A

Video
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Case History
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Contact Us

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