

Installation and Maintenance Manual
ECO Filtration Unit with 6-way-Top-Mount-Valve

Art. Nr. 300100 – 300101 – 300102





Important Details:

- Using of this filtration unit for swimming pools and its guard band if they are constructed in VDE 0100-49D.
- Please ask your specialised dealer or your electrician.
- More details you will find in the manual for the pump.

Attention to avoid damages:

- Never let the pump run dry.
- Only use the 6-way-valve if the the pump is switched off.

BEFORE CONNECTING THE FILTER

1 .1 LOCATION ***Serie ECO***

Place the filter on a flat, solid surface at a minimum distance of 3,5 metres from the pool, (in accordance with standard of the region or country) and at the same level as the bottom of the pool to prevent air from entering the cleansing circuit and the filter from becoming unprimed. The filter should be protected from sun and rain, and kept it in an area with sufficient ventilation during operation. Never cover it during operation.

1.2 ASSEMBLY

After the filter has been set into place, proceed as follows:

You will find instructions sheets with the equipment which show you the steps to follow when starting to assemble the equipment

- Before putting in sand, place the inner collector properly centered on the bottom of the filter.
- Sand filling:
The silica sand lasts for an unlimited period of time and should only be replaced in the event of sand loss. Record the sand level for future replacement. Keep the remaining sand in the bag in a dry place.
- Eliminate the remains of sand from the filter opening and remove the protective plastic.
- Place the TOP selector valve with its coupling and secure with the plastic band or seal following the diagrams in the instructions attached to the metal plastic.
- Tighten firmly the screw on the plastic ban, which joins the valve to the filter.
- Cover the opening of the inner collector tube with protective plastic in order to prevent sand from entering the tube.
- Connect the suction and discharge hoses to the suction and discharge terminals on the valve, tightening them firmly with the clamps.
- Insert the Teflon supplied with the thread of the skimmer terminal and connect the other end of the suction hose. Tighten firmly with a clamp. Repeat the same procedure with the feedback nozzle terminal and connect the discharge hose.
- Following installation, the first cycle of filter backwash should be performed. In order to do so, follow the instructions in the section 4.3.

2 ELECTRIC CONNECTION

***All electrical Installations should comply with the following standard:
NF C15-100 – NF EN 60-335-2-41
that refers “to the construction of the electrical Installations, both in indoor and outdoor swimming pools”, or the equivalent standard in force in each region or country.***

The pump must be connected to a 220/230 V. alternating current and 50 Hz power point, with earth connection. Consumption: 240 W.

An omnipolar switch must be used to ensure there is no power feed to the filter when it is not in use. A 30 mA differential must also be used to protect from electrical breakdowns. (Not supplied. These items can be purchased at electricity shops.)

3 TOP SELECTOR VALVE

The selector valve is responsible for selecting the 6 different filter functions: backwash, recirculation, rinse, filter, waste, and close for the model Bali.

To change the valve setting, proceed as follows for model Bali:

- Always disconnect the power socket.
- Press firmly on the upper valve control until the front rib is released from its housing and it can turn on its own axis.
- Gently turn the control until the front rib is aligned with housing for the desired operation.
- Release the control gradually and check that the front rib is fully inserted in the appropriate housing.

4 OPERATION

The operation of this filter is based on the filtration capacity of the silica sand which is inside. The water in the pool is driven by the filter pump and forced to pass through the sand. The sand acts as filtering element which retains the impurities in the water. The environment, trees, pollen, insects and frequency of bathing, as well as other factors, determine the dirtiness of the water in the pool. Depending on the dirtiness, the sand in the filter should be cleaned with greater or less frequency. To maintain the pool water in good condition, use the chemical products recommended by the manufacturer (chlorine, alga protection, flocculant etc.),.

The chemical product should never be placed in the basket or through the filter, this would deteriorate the materials of the unit and limit its efficacy.

4.1 PRIMING THE FILTER

The filter must be correctly primed at all times. If the filter is not primed this means that an air chamber has been created inside which causes defective circulation of water. This fact prevents proper filtration of the water by the sand and is detrimental to the motor.

The filter may become unprimed for several reasons:

- Starting up a new unit.
- Starting up a unit after an extended period of inactivity.
- Following use of a suction bottom cleaner.
- Air absorbed by the skimmer due to the low level of water in the pool.
- Due to incorrect use of the unit, suction cover or skimmer plug.

4.2 FILTRATION

NEVER HANDLE THE VALVE WHILE THE MOTOR IS RUNNING!!!

Before the first filtration operation, perform a backwash of the sand (section 4.3). The valve must be on the filtration setting. The service of the filter will be longer if the periods of continuous operation do not exceed 4 hours. The need for daily filtration is determined by the volume of water in the pool in m³ in comparison to the m³/h filter flow rate for a water temperature of around 21°C and placed at 3,5 m from the pool. Leave the motor at off for at least 2 h. Between each 4 h period of operation.

Volume of the pool in m³
Filter flow in m³/hr.

Example:

$\frac{42 \text{ m}^3}{5,5 \text{ m}^3/\text{h}} = 7.63 \text{ hours}$ 2 cycles of 4 hours with an intermediary cycle of hours rest

In the initial filtration treatment it is important to leave the filter off for the time indicated. It is recommended to increase the filtration time the higher the water temperature of the pool.

4.4 SAND FILTER BACKWASH

The backwash process cleans the sand from inside the filter. This process should be done regularly. For the purpose you should observe several factors which indicate the dirtiness of the sand:

- Decrease in the flow of feedback is detected, after checking that the pump is well primed.
- Pressure gauge indicates that there is excess pressure (needle pointing between yellow and red, or on red).

4.4 DRAINING THE SWIMMING POOL

The filter allows you to drain the pool almost completely after the bathing season has ended. To do so, place the upper selector valve on the waste setting. Before plugging in the filter, connect the d 38 mm x 1.5 m hose to the valve waste outlet and point the other end of the hose towards a drain or sewer.

4.5 CLEANING THE POOL BOTTOM

In order to clean the pool bottom, use the pump filter with one suction cleaner. You will also need a d 38 mm hose and the pole. To purchase these items, consult your establishment or ask the After-Sales Service provided by the pool manufacturer. Always use original replacements parts. A hose which extends beyond the length required to reach all points of the pool is more difficult to use. Cut off the section of the hose which is not needed. Check that the rubber terminals conserve their seal.

4.6 RINSING

After “WASHING” the filter and placing the installation in the “FILTERING” position, the water flowing to the pool will be cloudy for a few seconds. To avoid this cloudy water from circulating in the swimming pool, the “RINSING” operation should be performed as follows. Immediately after “WASHING”, stop the pump, place the selector valve in the “RINSING” Fig. 5, position and connect the pump for 1 minute. After this time, stop the pump and place the valve in the “FILTERING” position.

4.7 RECIRCULATION

In this position the selector valve allows the water from the pump to go directly to the swimming pool without passing through the inside of the filter.

4.8 CLOSED

The “CLOSED” setting of the selector valve is used to prevent water from circulating through the hoses and the filter.

5 MAINTENANCE

After the bathing season has ended, the filter should be kept in a dry place where it is protected from inclement weather. For this purpose, after performing a final backwash to clean the sand, dismount the hoses and drain the water in the filter through the tank drain plug until it is completely empty. After removing all of the water from the filter, carefully clean the remains of sand from the thread before replacing the plug. Failure to do so could damage the thread. The filter tank drain plug should only be used in this operation.

VERY IMPORTANT: Following an extended period of inactivity, before starting up the filter check that the drive shaft is not jammed. Remove the protective housing. After winding the motor, use a flat screwdriver to move it by the end which is visible through the metal ventilation cover, until it is released and the shaft turns to the right and the left. If it does not turn, clean the wheel of the turbine..

After stoppage for an extended period, it is also recommendable to make sure that the filter is primed before starting up.