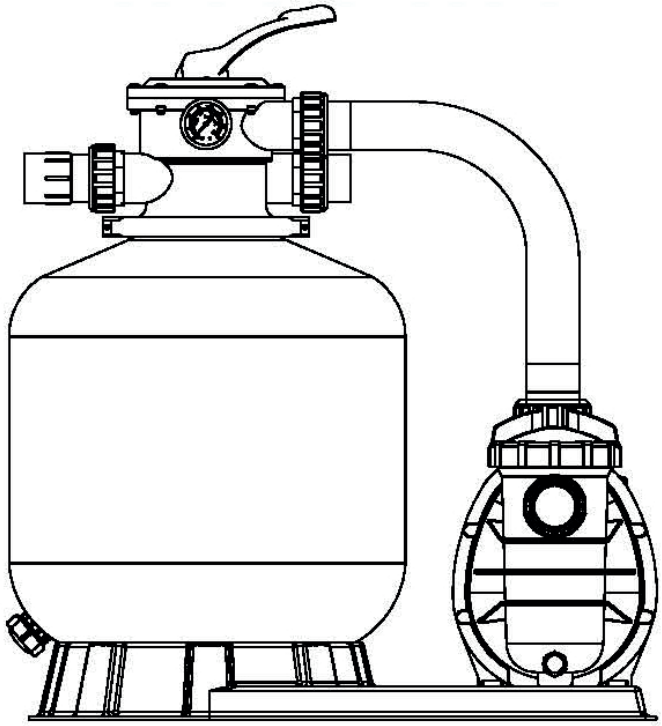
Complete sand filtration
with six-way valve and pump on base plate

(Models: FSP350, FSP450, FSP500, FSP650)



INSTALLATION AND USER GUIDE

ALBIXON

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Contents

1. Description of the functions of the filter container, six-way valve, circulation pump 3
2. Installation 3
3. Main dimensions 4
4. Installation/starting up the filtration 4
5. List of filtration components 5
6. List of six-way valve components 6
7. List of circulation pump components 7
8. Functions of six-way valve and meaning of its positions 9
9. Warranty conditions 11

Thank you for choosing our product and trusting our company. To help you to get the maximum pleasure from using this product, please read these instructions carefully before use and strictly follow the user manual to prevent damage to the device or unnecessary injuries.

Description of the functions of the filter container six-way valve, circulation pump

1.

The device is used for the maintenance and cleaning of swimming pool water. It consists of a custom filter container, six-way valve and circulation pump. The whole device is mounted on a plastic base which is part of the device. The water is cleaned by the flow of water through the filter container filled with filtration media using a circulation pump. The most widely used filter medium is silica sand. Untreated pool water is sucked through the circulation pump and subsequently drifted through the technology (pipes, fittings, valves) and the six-way valve into its own filter container. Part of the six-way valve is a pressure gauge which is used for visual inspection of impurities in the filter medium. The water passes through the filter medium where the impurities are trapped. Purified water is extruded into the technology through pipes, fittings and circulation nozzles back into the pool. This process of cleaning the pool water is highly efficient, smooth and provides a complete recirculation of the pool water.

Installation of the equipment

2.

If you do not use a professional service to install the device, we recommend to place the filter device as close as possible to the swimming pool shell, however, at least up to a distance of about 5 m. If it is necessary to install the filter device at a greater distance than 5 m contact an authorized service centre. For hassle-free maintenance and service we recommended installing the entire device under the level of the pool water. Proprietary technology (pipes), for both the suction and discharge, must be closed by shut-off valves. We recommend also making the drainage pipes in the place of installation of the device. Drainage pipes can be used for the operation and maintenance of the device.

CIRCULATION PUMP

The pump and the electric power line should only be installed by qualified and authorized persons.

FILTER CONTAINER

1. First, fill the filter container with the filtration media. Before filling the filter container, place the plastic base in the chosen place and install (attach) the circulation pump. Mount the complete drainages valve at the bottom of the container and tighten it.
2. Remove the clamp flange, and gently pull upwards to remove the six-way valve. Remove the rubber seal from the groove at the neck of the sand container.
3. Cover the central tube with a plastic cover, or other suitable means and slowly pour the filter medium in the necessary quantity (about 3/4 of the sand container). When pouring the media be careful to avoid misalignment of the central tube. Straighten the medium in the container. Remove the plastic cover from the central tube.
4. Carefully clean the groove in the neck of the sand container. Remount the six-way valve including the rubber seal. Apply an appropriate water grease on the seal, we recommend silicon grease.
5. Attach the valve deploy carefully through the opening in its lower part to the central tube. When attaching the valve rotate it slightly. Replace the flange clamp and tighten the screws.
6. Install the pressure gauge. Screw down the pressure gauge including the seals, to which apply grease. Tighten the pressure gauge very carefully and gently screw into the inner plastic fittings.
7. Attach the connecting hose to the circulation pump discharge and to the six-way valve outlet moulding marked PUMP. The connecting hose is provided with fitting and sealing O-rings. Before assembly, apply grease to the O-rings, gently tighten the fittings.
8. Attach the six-way valve connected to the discharge pipe to the moulding marked RETURN. Connect the other technological parts.
9. We recommend that you also connect the six-way valve outlet marked WASTE to a suitable drainage pipe.
10. Irrigate the technology, and check the tightness of all the technology components. If you find water leaks, tighten the connections. It should be noted that all fittings and connections are made of plastic. In the case of excessive tightening of the connecting parts they could be damaged, we recommend you refer to installation experts.

3. Main Dimensions

maximum water temperature: 40° C
maximum operating pressure: 200 kPa
sand grain size: 0.5 - 0.8 mm

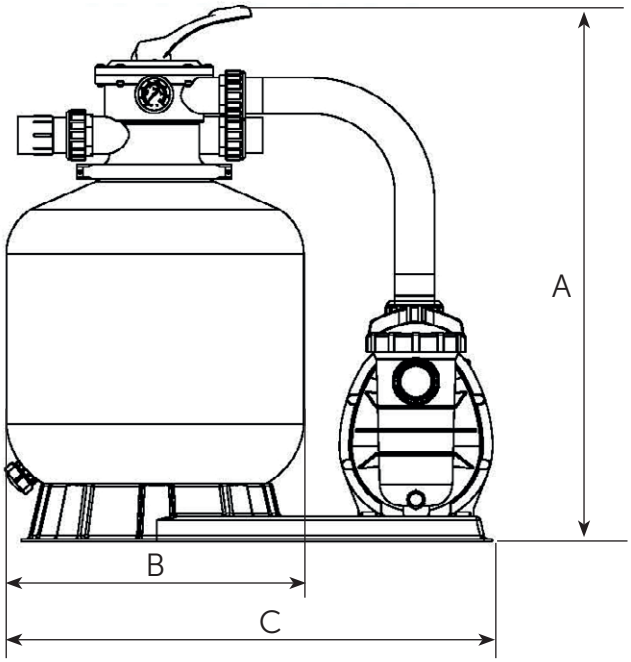


Table of dimensions

Model	Height A (mm)	Diameter B (mm)	Length C (mm)	Sand (kg)	Set flow rate (m^3/h)	Power input (kW)	Voltage (V)
FSP350	680	350	555	20	4	0,20	220
FSP450	813	449	760	45	8	0,50	220
FSP500	856	527	760	85	12	0,75	220
FSP650	961	627	760	145	16	1,00	220

4. Installation/starting the filtration

Before any handling of the six-way valve, especially when switching valve functions, the circulation pump must not be running!

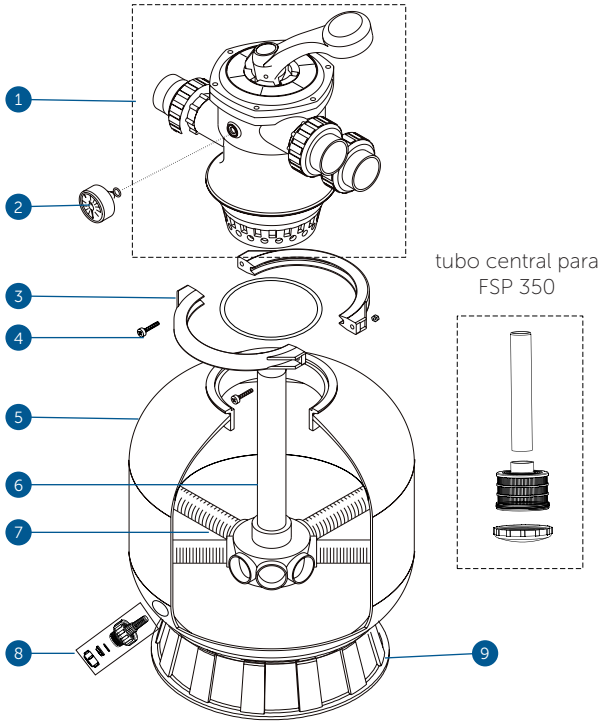
1. Press the lever of the six-way valve downwards and turn it in the position BACKWASH. You should note that when using this valve function a considerable amount of water will flow from the outlet!
2. Irrigate the pump and turn it on according to the instructions (make sure that all suction and reversing pipes are open) to fill the filtration container with water. When the water is running out through the WASTE hose, the system is irrigated. Before selecting any other function, you need to thoroughly rinse the new filter media. Rinsing media may take several minutes; you should count with the loss of pool water. Stop the Rinse function as soon as clean water flows through the outlet - observe the clean water in the transparent part of the pipeline – aperture.
3. Turn the pump off and set the valve to the position RINSE. Activate the pump and let it run for about half a minute to one minute until the water in the aperture is not clean. Turn the pump off, set the valve back to the FILTER position and re-activate the pump. The filtration is now running in the standard filtration mode and filters off the dirt from the pool water.

4. Check that the water doesn't leak from the system and the filter and if necessary, tighten the connections, screws or nuts.
5. After some time of the filtering of the pool water the pressure gauge will display a higher pressure, this means that the filter medium is clogged with impurities. In this case it is necessary to perform a rinse. When rinsing the filter medium proceed in the same way as described above, including the settling function. Perform the rinsing when the pressure gauge shows a pressure of about 1.7-1.9 bar.

Note: During the first cleaning of the new pool water it might be necessary to rinse the filter medium more often because this water contains more dirt.

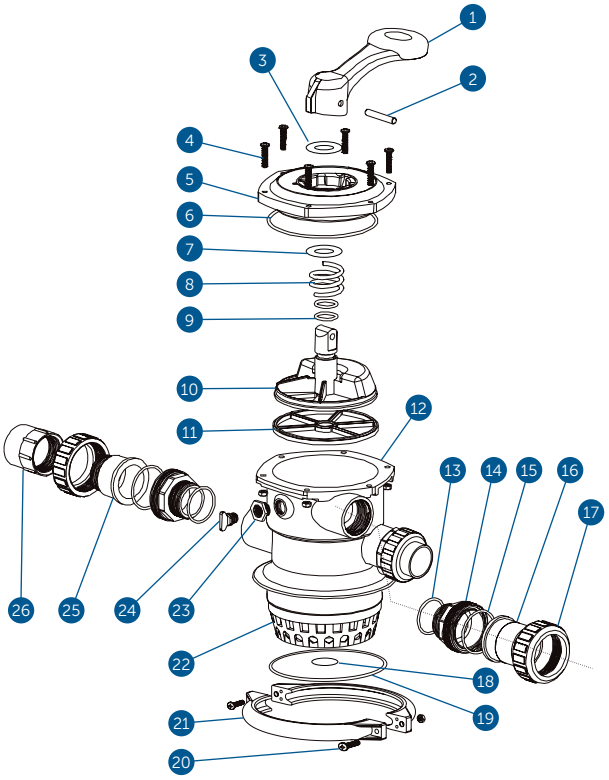
List of filter components

5.



Item	Product Description	Product code
1	six-way valve	BXNDFN048
2	pressure gauge with O-ring	BXNDFN009
3	flange clamp	BXNDFN027
4	screw with nut	
5	filtration container to P450 and FSP450	BXNDFN011
	filtration container to P500 and FSP500	BXNDFN012
6	central tube - P350	BXNDFN038
	central tube - P400	BXNDFN039
	central tube - P450	BXNDFN040
	central tube - P500	BXNDFN041
	central tube - P650	BXNDFN042
7	water drainage tube - P400-P450	BXNDFN043
	water drainage tube - P500-P700	BXNDFN044
	water drainage tube - SP450	BXNDFN045
	water drainage tube - SP500-SP700	BXNDFN046
8	drainage valve	BXNDFN050
9	stand under container FSP	BXNDFN018

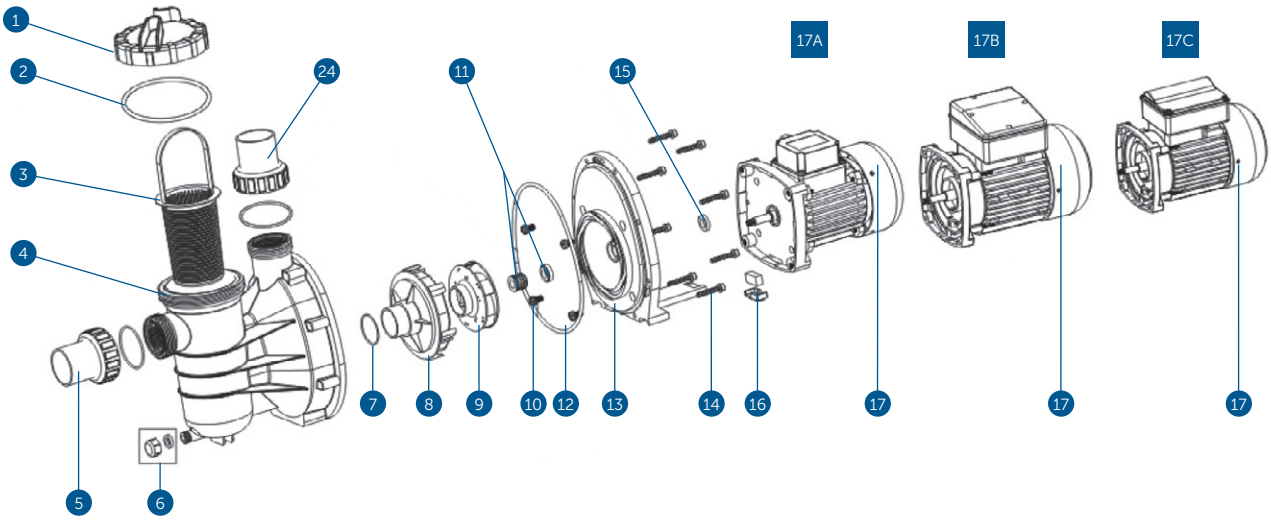
6. List of six-way valve components

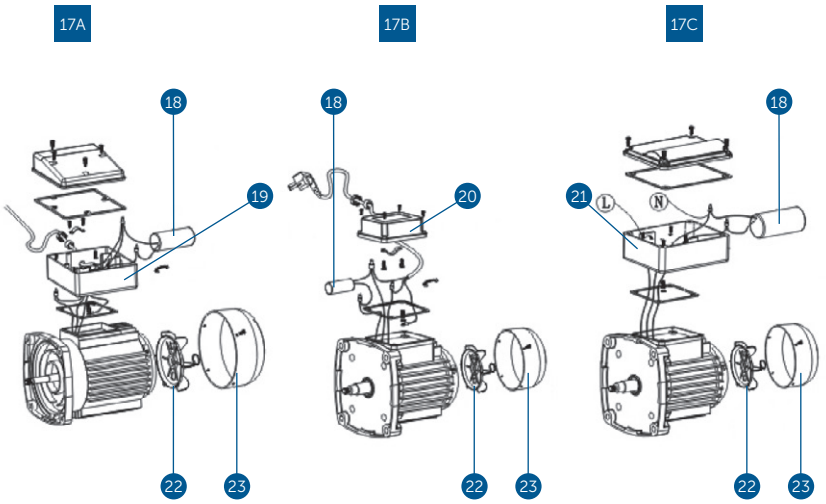


Item	Product Description	Product code
1	lever	BXNDFN014
2	lever pin	
3	washer	BXNDFN015
4	screw with nut, cover	
5	set cover	BXNDFN007
6	O-ring cover	
7	washer	BXNDFN016
8	spring	BXNDFN022
9	revolving wheel O-ring	BXNDFN032
10	revolving wheel	BXNDFN025
11	Spider - inner six-way valve seal (individual functions)	BXNDFN031
12	body-diffuser	BXNDFN030
13	threaded coupler O-ring	BXNDFN028
14	threaded coupler pipe fitting	BXNDFN028
15	threaded coupler O-ring	BXNDFN028
16	threaded coupler adaptor	BXNDFN028
17	threaded coupler cap nut	BXNDFN028
18	O-ring central tube	BXNDFN036
19	O-ring filter	BXNDFN035
20	screw with nut, terminal	
21	flange clamp	BXNDFN027
22	6-way valve diffuser - Brilix	BXNDFN001
23	nut, stopper (threaded part designed for mounting pressure gauge)	BXNDFN024
24	stopper with O-ring (use in case of pressure gauge failure)	BXNDFN054
25	waste aperture	BXNDFN052
26	connector	BXNDFN037

List of pump components

7.





Item	Part no.	Product description	Qty	Product code
1	01041025	transparent cover	1	BXNDFC090
2	02011074	O-ring for cover	1	BXNDFC065
3	89022401	basket with handle	1	BXNDFC022
4	01021064	FXP pump pre-filter	1	BXNDFC058
5	89280105	threaded coupler 1.5"	2	BXNDFC052
6	89022402	drainage stopper with O-ring	1	BXNDFC094
7	02011004	O-ring on diffuser	1	
8	01111014	diffuser	1	BXNDFC007
9	01311015	impeller FXP150 (220V/50Hz)	1	BXNDFC078
	01311016	impeller FXP250 (220V/50Hz)	1	BXNDFC079
	01311017	impeller FXP370 (220V/50Hz)	1	BXNDFC080
	01311018	impeller FXP500 (220V/50Hz)	1	BXNDFC081
	01311019	impeller FXP750 (220V/50Hz)	1	BXNDFC082
	01311014	impeller FXP900 (220V/50Hz)	1	
	01311023	impeller FXP150 (220V/60Hz)	1	
	01311024	impeller FXP250 (220V/60Hz)	1	
	01311015	impeller FXP370 (220V/60Hz)	1	
	01311016	impeller FXP500 (220V/60Hz)	1	
	01311017	impeller FXP750 (220V/60Hz)	1	
	01311018	impeller FXP900 (220V/60Hz)	1	
	01311023	impeller FXP150 (110V/60Hz)	1	
	01311024	impeller FXP250 (110V/60Hz)	1	
	01311015	impeller FXP370 (110V/60Hz)	1	
	01311016	impeller FXP500 (110V/60Hz)	1	
	01311017	impeller FXP750 (110V/60Hz)	1	
	01311018	impeller FXP900 (110V/60Hz)	1	
10	89022403	screw M8*16 with washer	4	
11	04015002	mechanical seal ½"	1	
12	02011090	O-ring for flange	1	BXNDFC070
13	01021065	FXP pump flange	1	BXNDFC034
14	03011035	screw M6*30	8	
15	02011156	motor ring washer for FXP150, FXP250	1	
	02011153	motor ring washer for FXP370-FXP900	1	
16	89022404	motor holder	1	
17	89022109	Motor FXP 150 (220V/50Hz)	1	
	89022110	Motor FXP 250 (220V/50Hz)	1	
	89022105	Motor FXP 370 (220V/50Hz)	1	
	89022106	Motor FXP 500 (220V/50Hz)	1	
	89022107	Motor FXP 750 (220V/50Hz)	1	
	89022108	Motor FXP 900 (220V/50Hz)	1	
	89022201	Motor FXP 150 (220V/60Hz)	1	
	89022202	Motor FXP 270 (220V/60Hz)	1	
	89022203	Motor FXP 370 (220V/60Hz)	1	
	89022204	Motor FXP 500 (220V/60Hz)	1	
	89022205	Motor FXP 750 (220V/60Hz)	1	
	89022206	Motor FXP 900 (220V/60Hz)	1	
	89022305	Motor FXP 150 (110V/60Hz)	1	
	89022306	Motor FXP 250 (110V/60Hz)	1	
	89022301	Motor FXP 370 (110V/60Hz)	1	
	89022302	Motor FXP 500 (110V/60Hz)	1	
	89022303	Motor FXP 750 (110V/60Hz)	1	
	89022304	Motor FXP 900 (110V/60Hz)	1	

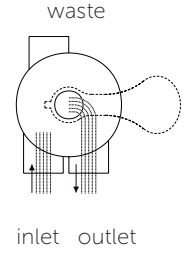
Item	Part no.	Product description	Qty	Product code
18	04016032	capacitor for pump FXP150	1	
	04016033	capacitor for pump FXP250	1	
	04016028	capacitor for pump FXP370	1	
	04016019	capacitor for pump FXP500	1	
	04016021	capacitor for pump FXP750	1	
	04016030	capacitor for pump FXP150	1	
	04016031	capacitor for pump FXP250	1	
	04016009	capacitor for pump FXP370	1	
	04016010	capacitor for pump FXP500	1	
	04016012	capacitor for pump FXP750	1	
19	89022110	cable box for FXP370-FXP900 pump	1	
20	89022111	cable box for FXP150-FXP250 pump	1	
21	89021505	cable box for FXP370-FXP500 pump	1	
	89022307	cable box for FXP750-FXP900 pump	1	
22	01031026	cooling valve for FXP150-FXP250 pump	1	
	01031027	cooling valve for FXP370-FXP900 pump	1	
23	01031011	fan cover for FXP150-FXP250 pump	1	
	01031010	fan cover for FXP370-FXP900 pump	1	
24	02011104	O-ring	2	

Functions of Six-Way Valve and Meaning of its Positions

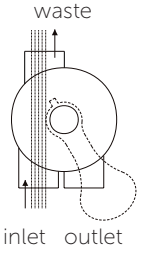
8.

Valve position	Functions
filtration	filtration and suction
backwash	cleaning the filtration media (reverse flow)
rinse	cleaning the remaining impurities from the filtration after the backwash
waste	lowering the pool water level, suction
recirculation	circulation of water
closed	valve closed

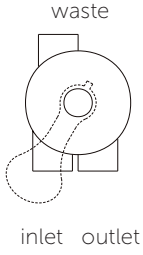
FILTRATION



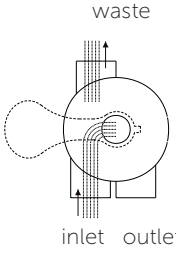
WASTE



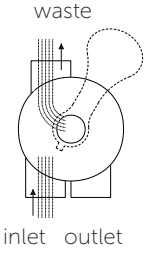
CLOSED



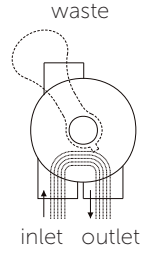
BACKWASH



RINSE



RECIRCULATION



Explanation of functions:

FILTER: Normal operation during cleaning and maintenance of the pool water, purified water passes through the filter medium.

BACKWASH: Cleaning the filter media. With this function, as compared with the filtering function, the direction of the flow of pool water is reversed through the filtration media, the impurities are rinsed out of the container. The period of water purification depends on the degree of impurities in the filter media and can take several minutes. Before running this function it is recommended to fill up at about $1m^3$ of water to the pool.
Caution: This function is necessary to ensure the drainage of the six-way valve (see Installation / startup).

RINSE: Thorough cleaning of the filtration media, the flow of water is the same as with the filtering.
Caution: When using this function it is necessary to ensure the drainage of water from the six-way valve (see Installation / startup).

WASTE: With this function it is possible to dynamically and rapidly drain the swimming pool water. The drained water is not lead through a filter medium. This function can be used for pool maintenance, while vacuuming. This method of vacuuming is recommended for use in the removal of larger quantities of impurities which settle on the bottom of the swimming pool shell, for instance following the use of flocculating products (flocculants).
Caution: When using this function it is necessary to ensure the drainage of the six-way valve (see Installation / startup).

RECIRCULATION: With this function, the water is guided outside of the filter medium and can be used for filling the filtration system up; any air is displaced by this system.

CLOSED: Water does not flow through the six-way valve. It is used for example in case of the necessity to disassemble the circulation pump technology.
Caution: When using this function the circulation pump must not be running!!
Recommendation: During the winter shutdown, set the lever of the six-way valve to any intermediate position to avoid excessive wear and tear on internal seals of the Spider. Never switch on a feature of the six-way valve when the pump is running!

CAUTION: If there is a faulty valve, contact an authorized service centre. We do not recommend removing the valve yourself. Dismantling of the valve must be done by a person with technical training from the manufacturer. If, despite the aforementioned, you decide to dismantle the valve, proceed with caution, there is a risk of injury.

⚠ WARNING

- Turn the pump off before changing the position of the six-way valve
- Never operate this device without water.
- Never connect the filter directly to the water source from the water supply system. The water pressure from the water supply system might be much higher than the maximum pressure of the filter.
- Never turn the pump of if the position on the six-way valve is set to the closed position or if pipes of the circulation system are impassable. There is a risk of a higher pressure than the working pressure which can lead to the damage, cracking, separation of the six-way valve cover that might cause injuries or damage to property.
- It is not permitted to sit or place a load on the device.
- Do not clean the filter cover or the filter container with a solvent, it could damage its surface (tarnishing, transparency, etc.)
- Clean the pump hair filter and the skimmer basket regularly in order to prevent damage to the pump and ensure the proper operation of the system.
- Do not unscrew flanged connectors if the pump is running.
- As all connectors are equipped with seals there is no need to screw the nuts too tightly, it could damage the plastic components.

Warranty conditions

9.

Warranty conditions
The warranty conditions are governed by the commercial and warranty conditions of your supplier.

Safe liquidation of the product at the end of its useful life
Once the product's useful life has ended, please ensure its ecological liquidation by a specialised company.

Complaints and Service
Claims are governed by the relevant acts on consumer protection.
In the event of any irreparable defects, please contact your supplier in writing.

Date .....

Supplier

Thank you for using ALBIXON products

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