



## **Manual for Sand Filter's.**

### **MODELS:**

[CC3040/CC3050/CC3060/CC3041/CC3051/CC3061/CC3045/CC3055/](#)

[CC3065/CC3030/CC3046/CC3056/ CC3066](#)

### **SAFETY INFORMATION**

The sand filters are designed to work with water at temperature >than 0°C and <than 45°C. The filter should never be operated outside of these temperatures or damage may occur.

The installation should be carried out in accordance to the safety instructions of swimming pools and the specific instructions for each facility

The user should make sure that the installation is carried out by qualified authorized persons and that these persons have first carefully read the following instructions. Incorrectly installed equipment may fail, causing severe injury or property damage

The operating safety of the filter is only guaranteed if the installation and operation instructions are correctly followed.

To reduce the risk of injury, do not permit children to use this product.

Chemical spills and fumes can weaken Swimming Pool/ Spa. Corrosion can cause filters and other equipment to fail, resulting in severe injury or property damage. Do not store pool chemicals near your equipment.

Any modification of the filter requires the prior consent from the supplier's original replacement parts and accessories authorized by the manufacturer ensure a high level of safety. The supplier assumes no liability for the damage and injuries caused by unauthorized replacement parts and accessories.

In the event of defective operation or fault, contact the supplier or nearest authorized service agent.

### **Sand Filtration**

Incoming water from the piping system is automatically directed by the Multiport Valve to the top of the filter bed. As the water is pumped through the filter sand, dirt and debris are trapped by the filter bed, and filtered out. The filtered water is returned from the bottom of the filter tank, through the Multiport Valve and back through the piping system

### Preparation before installation

Position the filter as close to the Swimming Pool/ Spa as possible.

The filter should be placed on a level concrete slab, very firm ground, or equivalent. Ensure that the ground will not subside, preventing any strain from the attached plumbing.

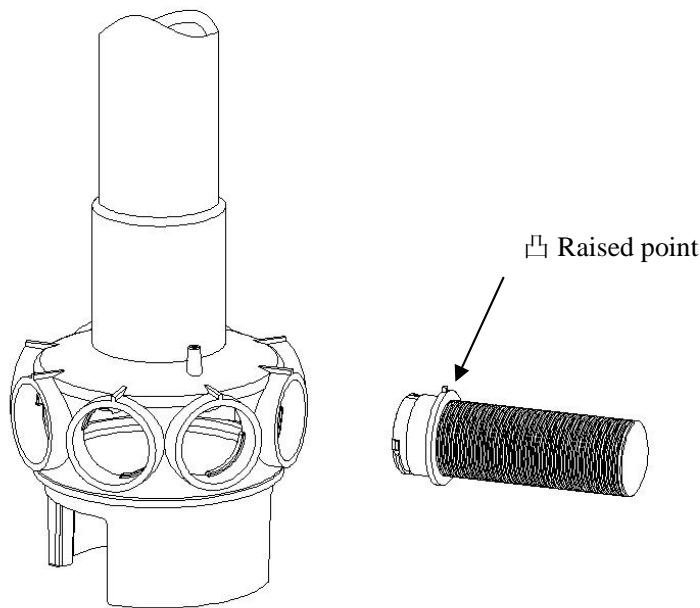
Position the filter under consideration of the piping connections, so that it is convenient for operating and servicing.

Ensure that the compliance label is facing the front to allow easy identification in the case of service difficulties.

### How to install the filter tank

1. Put the filter tank on the base, turn right to tight up. Position the outlet drain plug is facing outside for easy operation.

2. Before filling the filter media into the filter vessel, do a visual check of the laterals. Replace the broken or loose laterals if necessary. (The laterals of side-mount valve sand filter are all installed). And then install the laterals, match the Raised Point of laterals to Folding Umbrella lateral holder, insert the laterals and turn 90°clockwise, after hearing the sound, the lateral is well installed. Please refer to the following picture.



3. Check the air release hose are fixed well on the body of lateral holder, and another end of the air release hose must be out of the sand. **DO NOT** embed the air release hose in the sand.

4. To eliminate stress on the laterals, fill the filter vessel with enough water to provide a cushioning effect when the filter sand is poured in.

5. Using the clear clamshell cover to protect the filter top mount and make sure the central stem pipe had been fully covered.

6. Carefully pour the sand into the filter vessel and make sure to prevent sand from entering the stem pipe. And meantime do not damage the filter top mount or it will cause the leakage. And please pour the quantity of sand according to the filter tank label.

7. Cleaning the filter top mount put the O-ring on the top mount valve and then installs the valve on the filter vessel. Make sure that the stem pipe had fixed well with the top mount valve, and tight the flange clamp to fix the valve. NOTE: the flange clamp should be well fixed, or it will cause the people injures.
8. Using screws from the pump hardware pack to fix the pump on the base, please reference the pump installation to operate the pump.
9. Adjust the valve position, using the white pressure hose to connect the pump output and input of the top valve (“TO PUMP” are written on the valve of input end).
10. The other two connection ends of the valve, one is connection to swimming pool (written “TO POOL” on it) and another one is connect with drain outlet hose.

#### **INSTALLATION NOTES:**

1. Make sure the filter is worked under the work pressure, and using a pressure control valve when the system is using a booster pump.
2. If the pump position is higher than the water level, it is requires that a one-way valve is installed unless the pump is “self” priming.
3. If the pump position is lower than the water level, it is recommended that an isolation valve is installed. This would stop the water returning back to the pool when general inspection/maintenance is carried out.
4. Reducing the connection adaptors and hose bending as much as possible. Will maximise flow effect.

Ensure solvents are not excessively applied to fittings as this could run into O-ring and create sealing problems.

Do not over tighten fittings or adapters

#### **HOW TO USE**

1. Inspect all the connections have been made correct and are secure.
2. Depress top mount valve handle and rotate to BACKWASH position.
3. Prime and start pump according to pump instructions.

NOTE: ALL SUCTION AND DISCHARGE VALVES MUST BE OPEN WHEN STARTING THE SYSTEM. FAILURE TO DO SO COULD CAUSE SEVERE PERSONAL INJURY.

MAKE SURE THE FILTER VESSEL IS FULL WITH WATER BEFORE START UP OF THE PUMP, OR IT WILL CAUSE THE PUMP DAMAGE.

4. Once water flow is steady out the waste line, run the pump for at least 2 minutes. The initial back-washing of the filter is recommended to remove any impurities of fine sand particles in the sand media.
5. Turn pump off and set valve to RINSE position. Start pump and operate until water in sight glass is clear----about 1/2 to 1 minute. Turn pump off, set valve to FILTER position and restart pump. Your filter is now operating in the normal filter mode, filtering particles from the pool water.

#### **NOTES:**

1. Note the initial pressure gauge reading when the filter is clean. (it will vary from pool depending upon the pump and general piping system). As the filter removes dirt and impurities from the pool water, the accumulation in the filter will cause the pressure to rise and flow to diminish. When the pressure gauge reading is 8-10 PSI (0.55-0.69 BAR) higher than the initial “clean” pressure you

noted, it is time to backwash (clean) the filter.

2. **IMPORTANT:** To prevent unnecessary strain on piping system and valve assemblies, always shut off pump before switching filter control valve position.

3. To prevent damage to the pump and filter and for proper operation of the system, clean pump strainer and skimmer baskets regularly.

You can proceed with the bottom cleaning using the proper tools even on **WASTE** position (only on the 6 ways valve version) to take off all impurities (for example seaweeds) that otherwise could pass again through the filter's sand. In this position the water is aspirated from the pool's bottom and directly leded on the outside.

After this operation add water to the swimming pool to restore the previous level.

### Use and functioning of the 4 or 6 ways valve.

4-WAY VALVE

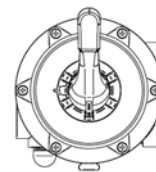
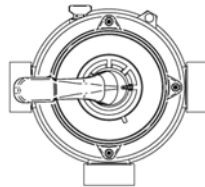
6-WAY VALVE

#### Filtration-FILTER.

Normal function.

The water of the swimming pool, after being through the filter's sand, is back to the pool cleaned.

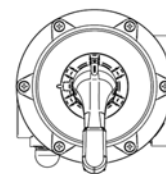
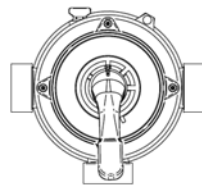
Use this same position for the bottom cleaning too.



#### BACKWASH.

The water pass through the sand in the opposite direction and overflow from the drain tube of the backwash.

Start it at least once a week for 2-3 min. and after each bottom cleaning.



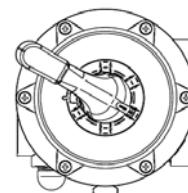
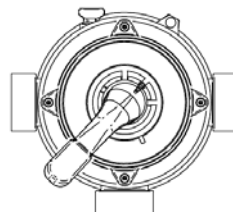
#### RINSE.

Through this procedure all the dirty waste are eliminated and the sand is compacted once again.

The dirty water overflow from the drain tube of the backwash.

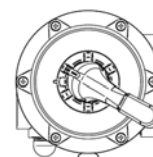
Operation time: around 30 seconds.

Start it after each backwash.



#### VALVE CLOSED (only for the 6 ways valve).

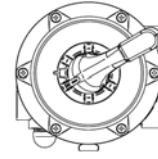
The passage between the filter and the pump is stopped. It is suggested to insert ball valves on the suction side and for the return.



**WASTE** (only for the 6 ways valve).

In this position, the water will flow directly from the drain tube.

Example: bottom cleaning

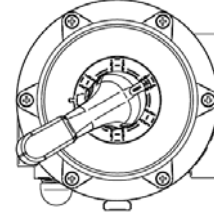


Re-circulate-**CIRCULATE** (only for the 6 ways valve).

The swimming pool water is aspirated and back to the pool without passing through the filter tank/sand.

This position allows a faster circulation of the water!

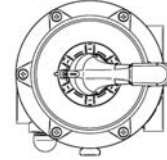
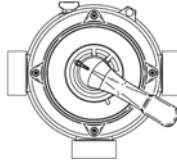
For example after a hard-impact treatment with chlorine.



**WINTER** time.

The valve is open so that it will not load on the O-Rings.

Position for winter storage to be set during the autumn time.



## SPECIFICATIONS

FILTER MODEL NUMBER	DESIGN FLOW RATE		MAXIMUM WORKING PRESSURE		FILTER AREA		MEDIA REQUIRED		
	GPM	M <sup>3</sup> /H	PSI	BAR	ft <sup>2</sup>	m <sup>2</sup>	TYPE	AMOUNT	
							FILTERSAND *	LBS	KG
CC3040	35	7.9	50	3.5	1.25	0.12	0.45-0.56mm (0.018-0.022in)	100	45
CC3050	40	9	50	3.5	2.0	0.19		175	75
CC3060	49	11	50	3.5	2.8	0.26		300	135
CC3041	35	7.9	50	3.5	1.25	0.12		100	45
CC3051	40	9	50	3.5	2.0	0.19		175	75
CC3061	49	11	50	3.5	2.8	0.26		300	135
CC3045	40	9	50	3.5	1.8	0.16		110	50
CC3055	45	10	50	3.5	2.5	0.23		220	100
CC3065	53	12	50	3.5	3.6	0.34		350	160
CC3030	26.4	6	50	3.5	0.78	0.07		42	19
CC3046	40	9	50	3.5	1.8	0.16		110	50
CC3056	45	10	50	3.5	2.5	0.23		220	100
CC3066	53	12	50	3.5	3.6	0.34		350	160