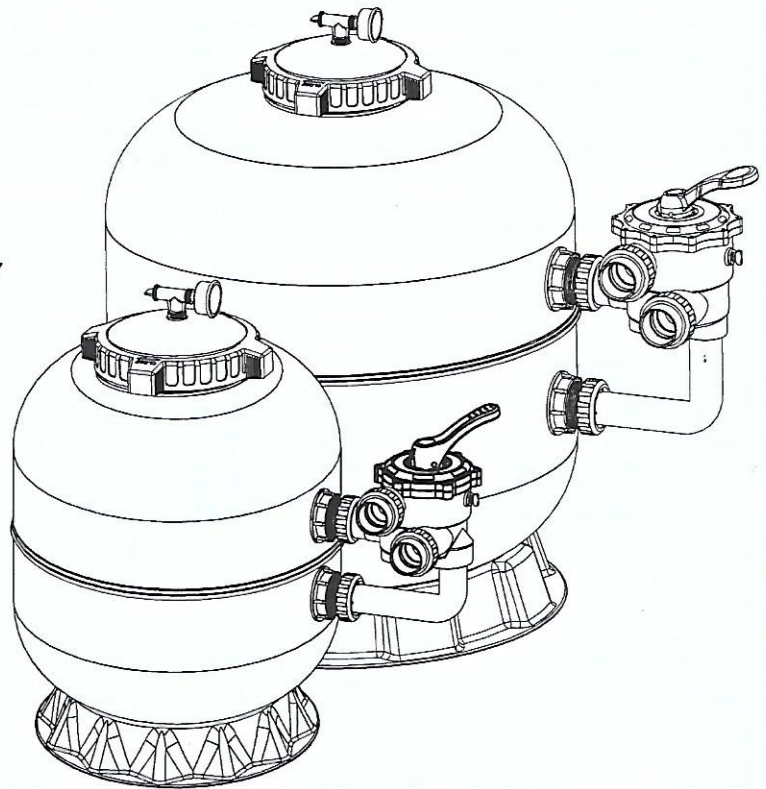




## LAMINATED POLYESTER SIDE MOUNT SAND FILTER

OWNER'S MANUAL



### FUNCTION

The filter uses silicon sand to remove dirt particles from pool water. The filtration material is mainly silicon sand (For different needs can choose other materials such as activated carbon, glass sand, etc.). The normal filtration process: firstly put the handle of multiport valve to (FILTER) normal filtration position (1#) (Note: in the first time to use or load the new sand inside, you must fully backwash), and then start the water pump, the water will be pressed into the water inlet of the multiport valve by the pump, and the water diffuser in the multiport valve will delivery the water into the filter body.

The pool water goes to the bottom of the filter through the filtration bed, and then is collected by the lateral go into the central pipe; water goes upward to the multiport valve's outlet, finally go back to the pool.

The backwash process is: after a period of filtration, the surface of the filtration media will trap too much dirt, which will cause difficulty for water flow and increase the pressure (it is recommended to backwash at least once a week even if the pressure does not change much, so as to avoid the hardening of the sand layer), then the filter should be backwashed. Firstly turn off the water pump, put the valve handle to backwash position (2#), turn on the water pump, and the water will be pressed into the water inlet by the pump, and the water will go into the center pipe through the diffuser in the valve. Then the water will come out from the bottom lateral and raise up through the filtration bed and the dirt in it will be flushed out to the waste outlet. We can observe the waste through the sightglass on the valve (generally backwashing time is 3-5 minutes), after backwashing, turn off the pump and put the valve handle to (RINSE) (3#) for washing. After 1-3 minutes, continue to normal filtration.

Note: Turn off the water pump first when changing the valve function.

### INSTALLATION

Using simple tools (screwdriver and wrenches), PVC piping is connected to the correct adaptors

1. The filter should be placed on a flat and firm floor. The space shall be adequate enough for piping system installation, and accessible for operation and maintenance.

2. Silicon sand is loaded from the top of the filter

- Remove the multiport valve to check if all the piping and lateral are fixed well.
- Please fix well the plastic cap to prevent sand going into the center pipe.
- To protect the lateral from excessive shock, filling water to 1/2 filter body before loading the sand inside.
- Make sure the sand weight shall be correct. The surface of media needs to be flat.

3. Multiport valve installation

- Before installing the multiport valve, clean the flange gasket well.
- Make sure all the screws are fixed well.
- Tight well the pressure gauge.
- Connect the pump with the valve.

4. Piping connection shall be matched the standard.

5. Check the electric circuit and then turn on the pump

6. To prevent the water leakage, be sure all pipe connection are tight.



## INSTALL / START-UP OF FILTER

1. Make sure the filtration media is loaded correctly and all the piping connection are correct.
  2. Put the valve handle to backwash position..To prevent the valve rotor to be damaged, please press the handle to change any positions.
  3. Turn on the pump(make sure all the inlet and outlet valve are opened).Take 3-5 minutes to backwash and observe the waste through the sightglass on the valve as it is the first time running.
  4. Stop the pump,change the valve function to Rinse.Then turn on the pump to run about 1min until the water is clear.Stop the pump again and change the function to Filter,turn on the pump again.
  5. Please write down the pressure changing.When the filter is running,the accumulated dirt will make the inside pressure increasing and flow slow.When the pressure increases 0.5bar,the filter needs to be backwash.
- Note:First using and changing media need to backwash.High running pressure also needs backwash.

## TECHNICAL APPENDIX

### 1. INSTALLATION INSTRUCTIONS

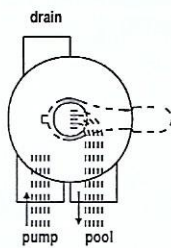
The installation of the valve is carried out by screwing or slipping in, of the available connections according to the installation scheme.

### Note:

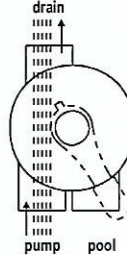
*It is recommended to use adapter unions. Maintenance works and replacement are also easier by using adapter unions.*

### 2. FUNCTION AND INSTALLATION SCHEME

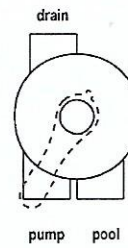
#### I. FILTER



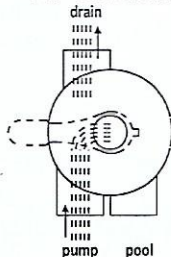
#### II. WASTE



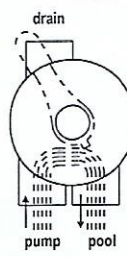
#### III. CLOSED



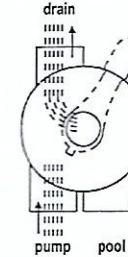
#### IV. BACKWASH



#### V. RECIRCULATE



#### VI. RINSE



#### I. Filtration of medium (i.e. water)

Pool → pump → valve (to filter)  
→ filter → valve (from filter) → pool

#### II. Drainage of pool with pump

Pool → pump → valve → canal

#### III. No circulation

Do not operate pump.  
Pool → pump → valve

#### IV. Cleaning of filter medium (i.e. sand) in upstream (reserved flow in filter)

Pool → pump → valve (from filter) →  
filter → valve (to filter) → waste

#### V. Recirculation of fluid without filter (by pass filter)

Pool → pump → valve → pool

#### VI. Cleaning of filter medium (i.e. sand) after backwash

Pool → pump → valve (to filter) →  
filter → valve (from filter) → waste

## WARNING

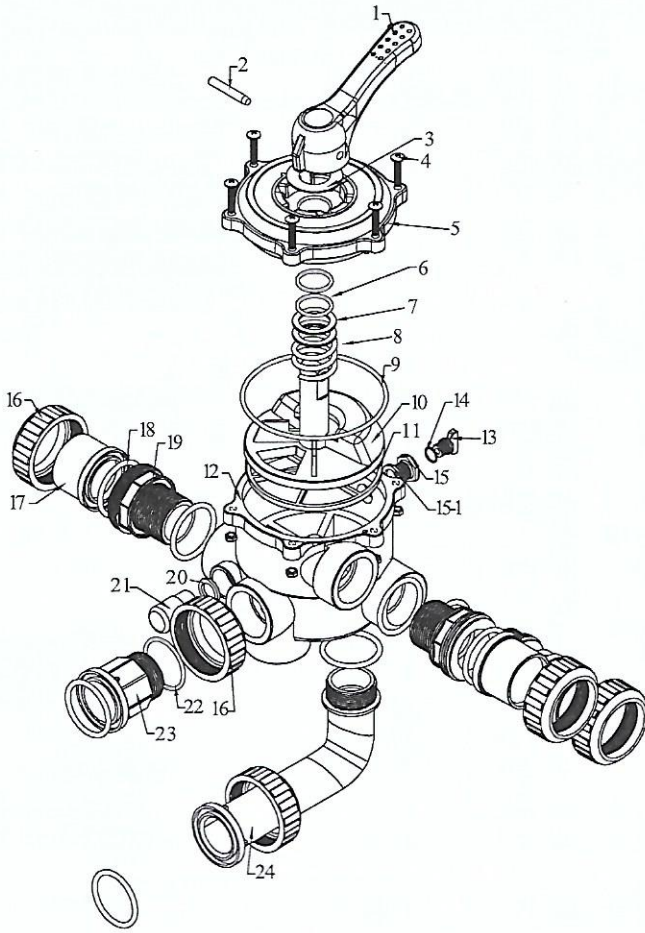
⚠ The filter operates under pressure. It is prohibited to loosen the piping and union. It should turn off the pump and ball valve before repairing.

⚠ Turn off the pump before changing the valve function

⚠ To prevent the pump damaged, clean the pump prefilter and skimmer regularly.

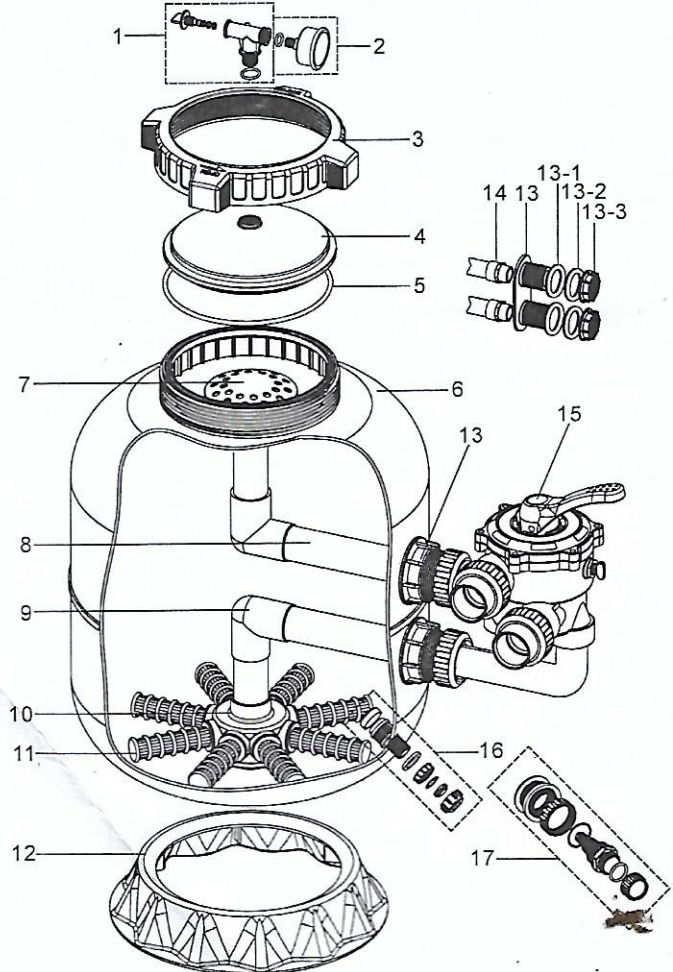


# REPLACEMENT PARTS OF FILTER Ø400~Ø700



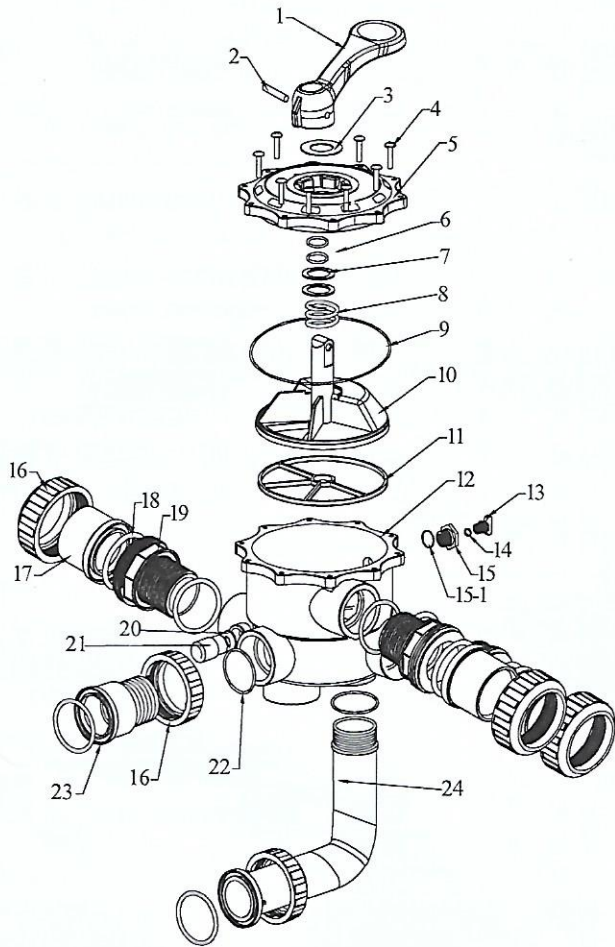
ID	CODE	DESCRIPTION	Qty
1	01-0101	Handle	1
2	01-0104	Pin, handle	1
3	01-0102	Washer	1
4	01-0103	Bolt	6
5	01-0105	Lid assy	1
6	01-0108	O-ring, lid	2
7	01-0106	Washer	2
8	01-0107	Spring	1
9	01-0128	O-ring, rotor	1
10	01-0204	Rotor	1
11	01-0205	Gasket, spider	1
12	01-0301	Body-diffuser assy	1
13	01-0119	Plug	1
14	01-0118	Plug O-ring	1
15	01-0117	Nut, plug	1
15-1	01-0128	Nut, Plug O-ring	1
16	01-0116	Nut, bulkhead	5
17	01-0115	Adaptor, bulkhead	3
18	01-0113	O-ring, bulkhead	8
19	01-0114	Adaptor, bulkhead	3
20	01-0121	Sight glass O-ring	1
21	01-0120	Sight glass	1
22	02-0305	O-ring	2
23	02-0306	1.5" Side Mount Adaptor	1
24	01-0304	Elbow Pipe	1

ID	CODE	DESCRIPTION	QTY
1	02-0501	Release air for top cover valve	1
2	01-0127	Pressure Gauge	1
3	02-0502	Ring Lock	1
4	02-0503	Top Cover	1
5	02-0504	O'-ring	1
6	02-05J061	Filter Body Ø450	1
	02-05J062	Filter Body Ø500	1
	02-05J063	Filter Body Ø650	1
	02-05J064	Filter Body Ø700	1
7	02-0514	Water Distributor	1
8	02-0513	Top Elbow Assembly	1
9	02-0508	Bottom Elbow Assembly	1
10	02-0107	Lateral Assembly	1
11	02-0108	Lateral Ø450~Ø500	8
	02-0108-1	Lateral Ø650~Ø700	8
12	02-0113	Filter Support Stand Ø450~Ø500	1
	02-0110	Filter Support Stand Ø650~Ø700	1
13	02-0510	1.5" In/Outlet Uncon	1
13-1	02-05101	Lid	2
13-2	02-05102	PP Gasket	2
13-3	02-0511	Nut	2
14	02-0361	1.5" Adaptor	2
15	01-03	Side Mount Multiport Valve 1.5"	1
16	02-0111	Drain	1
17	02-0623	New Drain	1





# REPLACEMENT PARTS OF FILTER Ø800



ID	CODE	DESCRIPTION	Qty
1	01-0201	Handle	1
2	01-0104	Pin, handle	1
3	01-0102	Washer	1
4	01-0103	Bolt	10
5	01-0202	Lid assy	1
6	01-0108	O-ring, rotor	2
7	01-0106	Washer	2
8	01-0107	Spring	1
9	01-0203	O-ring, lid	1
10	01-0204	Rotor	1
11	01-0205	Gasket, spider	1
12	01-0401	Body-diffuser assy	1
13	01-0119	Plug	1
14	01-0118	Plug O-ring	1
15	01-0117	Nut, plug	1
15-1	01-0128	Nut, plug O-ring	1
16	01-0210	Nut, bulkhead	5
17	01-0209	Adaptor, bulkhead	3
18	01-0207	O-ring, bulkhead	8
19	01-0208	Bulkhead fitting	3
20	01-0121	Sight glass O-ring	1
21	01-0120	Sight glass	1
22	01-0404	O-ring	2
23	01-0405	2" Side Mount Adaptor	1
24	01-0403	Elbow Pipe	1

ID	CODE	DESCRIPTION	QTY
1	02-0501	Release air for top cover valve	1
2	01-0127	Pressure Gauge	1
3	02-0502	Ring Lock	1
4	02-0503	Top Cover	1
5	02-0504	O'-ring	1
6	02-05J065	Filter Body Ø800	1
	02-05J066	Filter Body Ø900	1
7	02-0514	Water Distributor	2
8	02-0604	Top Elbow Assembly	1
9	02-0612	2" In/Outlet Union	1
9-1	02-0608	Gasket	2
9-2	02-0626	PP Gasket	2
9-3	02-0606	Nut	2
10	02-0625	2" Adaptor	2
11	01-04	Multiport Valve 2"	1
12	02-0610	Bottom Elbow Assembly	1
13	02-0624	Transparent Tube	1
14	02-0205	Lateral Assembly	1
15	02-0206	Lateral	8
16	02-0208	Filter Support Stand	1
17	02-0623	New Drain	1

