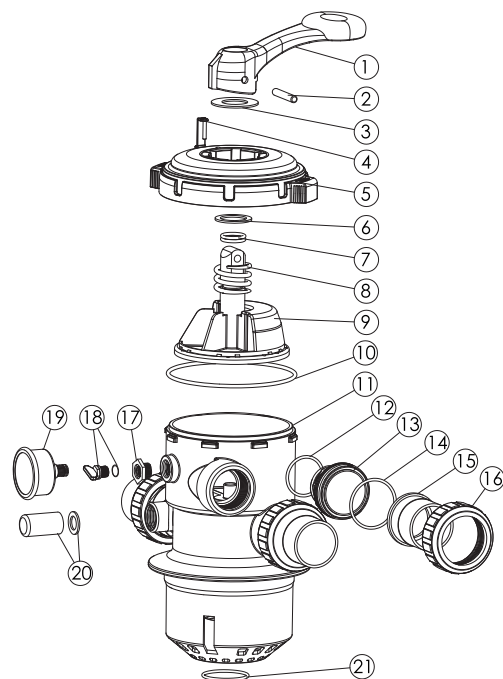


VALVE REPLACEMENT PARTS

Item	Part No.	Description	Qty
1	01013003	Handle (Big)	1
2	03018008	Pin for Handle	1
3	01181027	Washer for Handle	1
4	01181029	Defend Lock	1
5	01020003	1.5" Lid	1
6	01181002	Washer for Spring	1
7	02011022	O-Ring for Valve Rotor	2
8	03014001	Spring	1
9	89280701	1.5" Valve Rotor with Spider Gasket	1
10	02010002	O-Ring for Lid	1
11	E190136	1.5" Body with Diffuser	1
12	02020013	O-Ring for 1.5"Connector	3
13	01013015	1.5" Connector (Black)	3
13	01051013	1.5" Connector (White)	3
14	02011003	O-Ring for 1.5" Adaptor	3
15	01171153	1.5" Union (A/E)	3
16	01013017	1.5" Union Nut (Black)	3
16	01051014	1.5" Union Nut (white)	3
17	89280120	Drain Plug Fitting with O-ring	1
18	89021307	Drain Plug with O-Ring	1
19	06021013	Pressure Gauge with O-Ring (40Psi)	1
20	89280104	Sight Glass with O-Ring	1
21	02011001	O-Ring for Diffuser	1



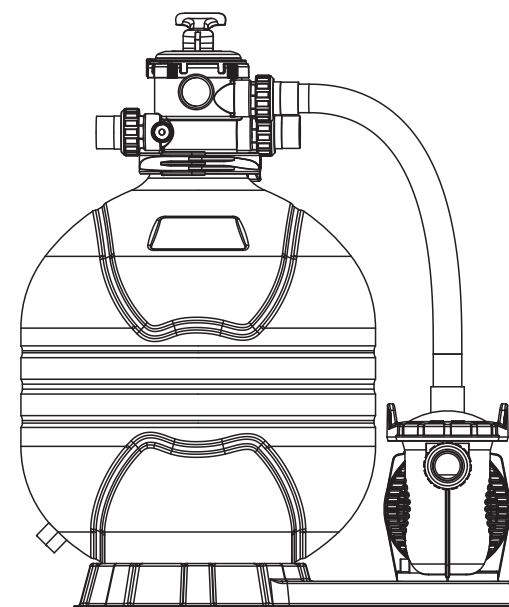
Valve Position	Function
FILTER	Normal Filtration and Vacuuming
BACKWASH	Cleaning Filter by reversing the flow
RINSE	Used after backwash to flush dirt from valve
WASTE	By-passes filter, used for vacuuming to waste or lowering water level
RECIRCULATE	By-passes filter for circulating water to pool
CLOSED	Shuts off all flow to filter or pool

WARNING

- ⚠ THIS FILTER OPERATES UNDER HIGH PRESSURE. WHEN ANY PART OF THE CIRCULATING SYSTEM (e.g., CLAMP, PUMP, FILTER, VALVES, ETC.) IS SERVICED, AIR CAN ENTER THE SYSTEM AND BECOME PRESSURIZED. PRESSURIZED AIR CAN CAUSE THE LID OR VALVE TO BE BLOWN OFF WHICH CAN RESULT IN SEVERE INJURY, DEATH, OR PROPERTY DAMAGE.
- ⚠ TURN PUMP OFF BEFORE CHANGING VALVE POSITION.
- ⚠ TO PREVENT DAMAGE TO THE PUMP AND FOR PROPER OPERATION OF THE SYSTEM.CLEAN PUMP STRAINER AND SKIMMER BASKETS REGULARLY.
- ⚠ DO NOT UNSCREW SCREWS OF FLANGE CLAMP WHILE PUMP IS RUNNING.

FSM-6W SERIES FILTER SYSTEM Installation & Operating Instruction

Models: FSM17-6W+SPH075
FSM20-6W+SPH100
FSM24-6W+SPH150



INSTALLATION

- * Install filtration system including pump,filter tank and multiport valve.
- * The filter system should be installed as close as possible to the swimming pool and preferably at a level of 0.50 metres below the surface of the water in the swimming pool. Make sure there is drainage available at the place where the filter is to be installed.
- * PUMP
 - 1) Only qualified,licensed personnel should install pump and wiring.
 - 2) Electrical Contractors Please Note:All 220 volt 50Hz pump must be wired to the main power supply trough an approved and correctly rated contractor.
 - 3) Allow for gate valve in suction piping.
 - 4) Pump suction and discharge connections have moulded in thread stops,do not try to screw pipe in beyond these stops.
- * FILTER TANK and MULTIPOINT VALVE
 - 1) Loading the sand media.Filter sand media is loaded through the top opening of the filter.
 - a) Loosen the plastic clamps from tank neck.
 - b) Cap internal pipe with plastic cap to prevent sand from entering it.
 - c) We recommend filling tank approximately 1/2 way with water to provide a cushion effect when the filter sand is poured in. This helps protect the under-drain laterals from excessive shock.
 - d) Carefully pour in correct amount and grade of filter sand. Be sure center pipe remains centered in opening. Sand surface should be leveled and should come to about the middle of the filter tank.Remove plastic cap from internal pipe.
 - 2) Assemble filter control valve to filter tank.
 - a) Insert filter control valve(with O'ring in place)into the tank neck, taking care that the center pipe slips into the hole in the bottom of the valve.
 - b) Place two plastic clamps around valve flange and tank neck and tighten just enough so that the valve mayBe rotated on tank for final positioning.
 - c) Carefully screw pressure gauge(with O'ring in place)into tapped hole in valve body.Do not over-tighten.
 - d) Connect pump to control valve opening marked PUMP with hose. After connections are made, tighten clamps with screwdriver, tapping around clamp with screwdriver handle to help seat valve flange clamp.
 - 3) Make return to pool pipe connection to control valve opening marked RETURN and complete other necessary plumbing connections, suction lines to pump,waste,etc.
 4. To prevent water leakage, be sure all pipe connections are tight.

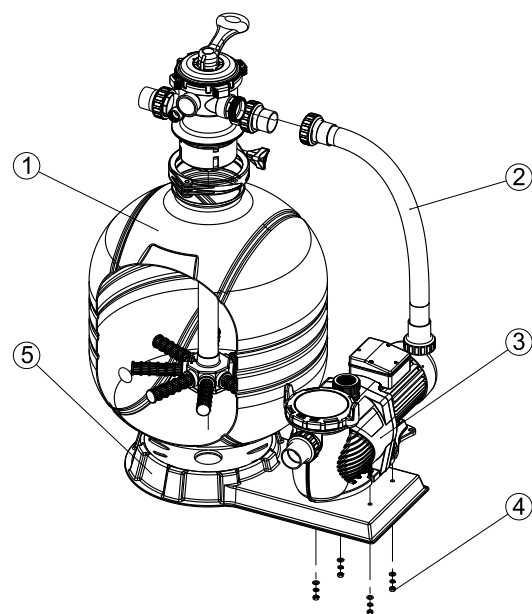
INSTALL/START-UP OF FILTRATION

- 1) Be sure correct amount of filter media sand is in tank and that all connections have been made and are secure.
- 2) Depress control valve handle and rotate to BACKWASH position. (To prevent damage to control valve seal, always depress handle before turning.)
- 3) Prime and start pump. Never run pump dry! Running pump dry may damage seals, causing leakage and flooding! Fill pump with water before starting motor. (be sure all suction and return lines are open), allowing the filter tank to fill with water. Once water is flowing out of the waste line, run the pump for at least 1 minute. The initial backwashing of the filter is recommended to remove any impurities or fine sand particles in the sand media.
- 4) 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 and set valve to FILTER position and restart pump. The filter is now operating in the normal filter mode, filtering dirt particles from the pool water.
- 5) Adjust pool suction and return valves to achieve desired flow. Check system and filter for water leaks and tighten connections, bolts, nuts, as required.
- 6) Note the initial pressure gauge reading when the filter is clean. (It will vary from pool to 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 1.5 bar, higher than the initial "clean" pressure you noted, it is time to backwash the filter (see BACKWASH under filter and control valve functions).

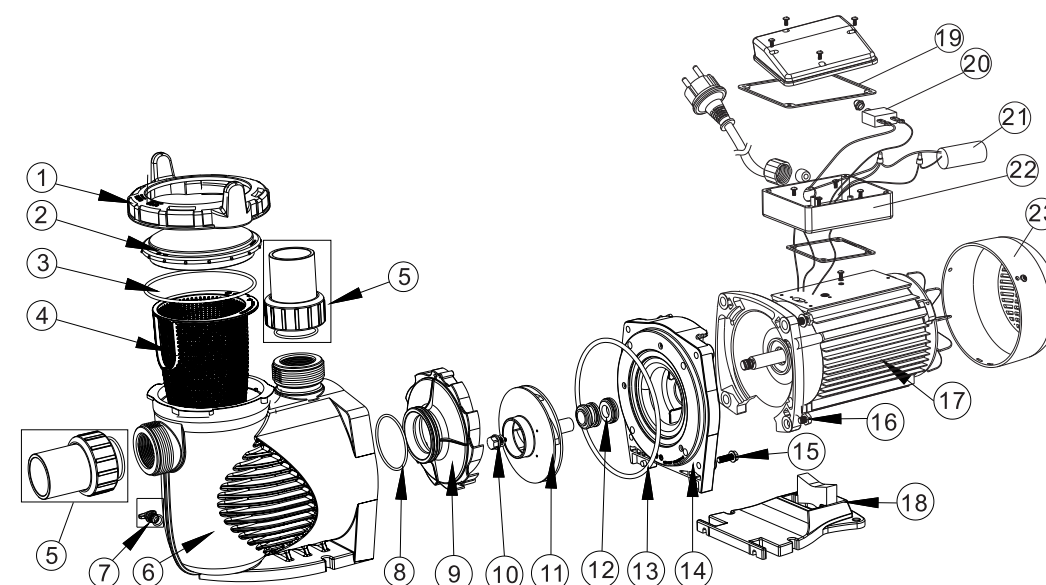
NOTE: During initial clean-up of the pool water it may be necessary to backwash frequently due to the unusually heavy initial dirt load in the water.

REPLACEMENT PARTS OF FILTER SYSTEM

Item	Part No.	Description	Qty
1	9010101	Φ17" Top Mount Plastic Filter, 1.5" Valve	1
	9010102	Φ20" Top Mount Plastic Filter, 1.5" valve	1
	9010103	Φ24" Top Mount Plastic Filter, 1.5" valve	1
2	E070602	FSM+SPH Plastic Hose with Nut	1
	E070603	FSM+SPH Plastic Hose with Nut	1
	E070604	FSM+SPH Plastic Hose with Nut	1
3	9023201	SPH075 pump	1
	9023202	SPH100 pump	1
	9023203	SPH150 pump	1
4	112192685	External hex screw	4
	112052659	Spring washer	4
	590003024	Gasket	8
	112102659	Outer hex nut	4
5	1111053	FSP/F400-6W - FSP/F650-6W Combo Base	1



REPLACEMENT PARTS OF SPH PUMP



Item	Part No.	Description	Qty	Item	Part No.	Description	Qty
1	01021143	Nut for Lid	1	14	01021145	Flange	1
2	01041057	Transparent Lid	1	15	89020720	M8*35 Screw with Washer for Motor	4
3	02010253	O-Ring for Lid	1	16	03011075	M8*30 Screw	4
4	01112080	Basket	1	17	04020116	Motor YYD-8022E for SPH075 220V 50/60Hz	1
5	89023801	1.5" Union	2	17	04020117	Motor YYD-8032E for SPH100 220V 50/60Hz	1
6	01021144	Pump body	1	17	04020118	Motor YYD-8042E for SPH150 220V 50/60Hz	1
7	89021307	Drain Plug With O-ring	2	18	01112082	Base	1
8	02010245	O-Ring for Diffuser	1	18	02010211	Arch Cushion for Base	1
9	01112081	Diffuser	1	19	02011073	Arch Cushion for Cable Box	1
10	89020719	Screw for impeller with O-ring	1	20	04015015	Overload Switch PE77-8A/250VAC for SPH150	1
11	01311057	Impeller for SPH075 (50Hz)	1	21	04016012	Capacitor for SS/SD/SQ/SP/ST100-120 & SC075 & SPH075 Pump	1
11	01311047	Impeller for SPH100 (50Hz)	1	21	04016014	Capacitor for SB/SR10,SB15 & SC100-150 & SPH100-150 Pump	1
11	01400103	Impeller for SPH150 (50Hz)	1	22	89022112	Cable Box	1
12	04015065	3/4" Mechanical seal	1	23	01321031	Fan Cover	1
13	02010246	O-Ring for Flange	1				

PRIMING PUMP

- ❖ Release all air from filter and piping system.
- ❖ In a flooded suction system (water source higher than pump), pump will prime itself when suction and discharge valves are opened.
- ❖ If pump is not in a flooded suction system, unscrew and remove trap cover; fill trap and pump with water.
- ❖ Clean and inspect Ring; re-install on trap cover.
- ❖ Replace trap cover on trap; turn clockwise to tighten cover.

NOTICE: Tighten trap cover by hand only .Pump should prime now. Priming time will depend on vertical length of suction lift and horizontal length of suction piping.