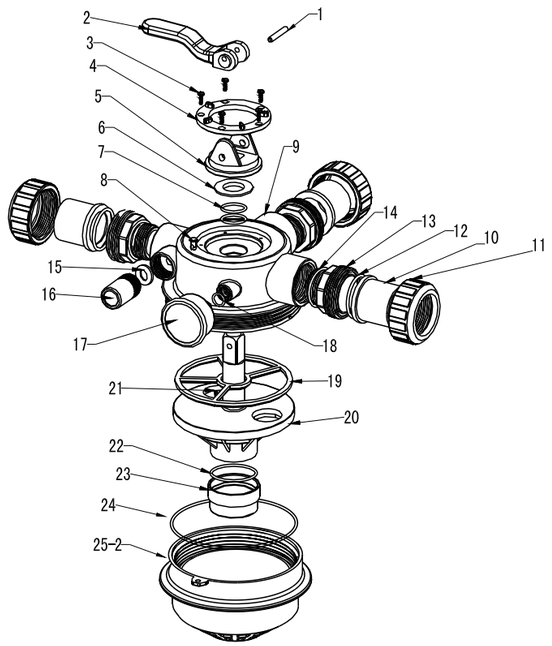
Opus® Water technology

EM-MV40B VALVE REPLACEMENT PARTS

Item	Part No.	Description	Qty
1	MPV-05W-02	Handle pin	1
2	MPV-05-01	Handle for 4-way valve	1
3	UL-03W-05	Round Screw	5
4	MPV-05-02	pressing ring	1
5	MPV-05-03	Supporting base	1
6	MPV-05-04	Washer	1
7	MPV-05W-03	O'ring for Diffuser	2
8	MPV-01B-005	Buckle	1
9	MPV-05-05	Body Diffuser assy for 4-way valve	1
10-1	MPV-01-010(A, E)	Union head	3
10-2	MPV-01-010(A, E)	Union head	3
11	FT-03-014	1.5" nut	3
12	MPV-01W-7	O'ring	3
13	MPV-03-004B	Bulkhead Fitting	1
14	MPV-01W-06	O'ring	3
15	MPV-03W-01	Washer for sight glass	1
16	MPV-04-010	Sight glass	1
17	MPV-03W-04	Pressure Gauge	1
18	MPV-03W-05	O'ring for Pressure gauge	1
19	MPV-05W-04	Spider gasket for diffuser	1
20	MPV-05-06	Diffuser	1
21	MPV-05-07	Cover for Diffuser	1
22	MPV-05W-05	O'ring	1
23	MPV-05-08	moving O'ring	1
24	MPV-01W-03	O'ring	1
25-2	MPV-05-009B	base for 1.5" 4-way valve	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.

Opus® Water technology

FILTER & PUMP COMBO

Installation & Operating Instruction

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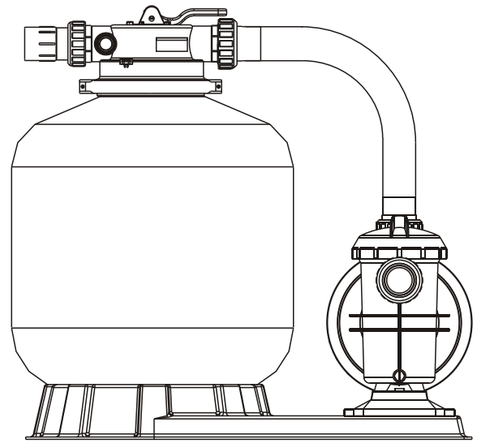

INSTALLATION

* Install filtration system including pump,filter tank and multiport valve.
* The filter system should be installed as close as possibie 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 MULTIPORT 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 may Be 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 screwdrive,tapping around clamp with screwdrive 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.

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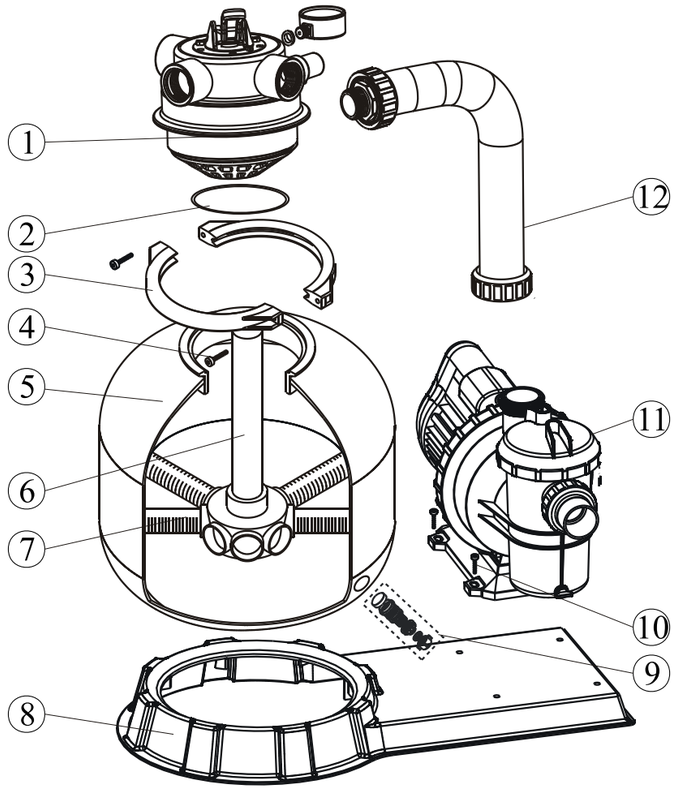
INSTALL/START-UP OF FILTRATION

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 tun 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 back-washing 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



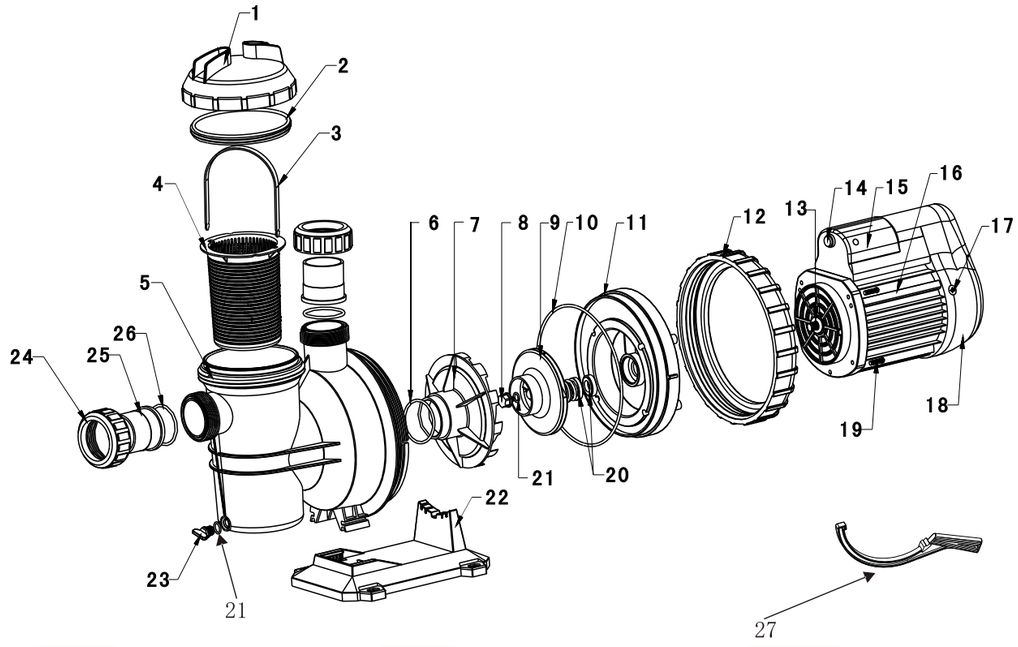
FSP500-4W
FSF500-4W

Item	Part No.	Description
1	0205	Valve
2	010104	O'ring
3	010107	Flange clamp
4	020108	Screw
	020107	Nut
5	0101055	V500 Filter tank
6	0101014	Lateral assembly With center pipe
7	010113	Lateral
8	0105062	Under drain
9	010106	Filter base
10	010507	Hexagon screw
	010508	Washer
	010509	Spring washer
	010510	Hexagon nut
11	SC075	Pump
12	0105134	Hose

FSP650-4W
FSF650-4W

Item	Part No.	Description
1	0205	Valve
2	010104	O'ring
3	010107	Flange clamp
4	020108	Screw
	020107	Nut
5	0101056	V650 Filter tank
6	0101015	Lateral assembly With center pipe
7	010118	Lateral
8	0105062	Under drain
9	010106	Filter base
10	010507	Hexagon screw
	010508	Washer
	010509	Spring washer
	010510	Hexagon nut
11	SC100	Pump
12	0105135	Hose

SC PUMP REPLACEMENT PARTS



Item	Part No	Description	Qty	Item	Part No	Description	Qty	Item	Part No	Description	Qty
1	030301	Lid Assembly	1	13	030312	Waterproof Washer	1	16	030316	Motor(0.5HP)	1
2	030302	Seal O'ring	1	14	030124	Over Load Switch	1		030317	Motor(0.75HP)	1
3	030303	Handle	1	15	030126	Irdome	1		030318	Motor(1.0HP)	1
4	030304	Basket	1		030127	Cover for irdome	1		030319	Motor(1.5HP)	1
5	030305	Pump Body	1		030128	Nut for irdome	1		030320	Motor(2.0HP)	1
6	030306	O'ring for Diffuser	1		030129	Cable placement code	1		030145	Impeller for motor (small)	1
7	030307	Diffuser	1		030130	Waterproof Washer for irdome	1	17	030144	Screw for cover	3
8	030115	Screw for Diffuser	1		030131	Waterproof plug for cable	1	18	030142	Cover	1
	0301151	Screw	1		030132	Screw for irdome	4	19	030232	Screw for flange	4
9	030308	Impeller	1		030133	Screw for cable placement code	2	20	030117	Shaft Seal	1
	0303081	Impeller(0.5HP)	1		030134	Cable for Over Load Switch	2	21	020130	O'ring	2
	0303082	Impeller(0.75HP)	1		030135	Earth cable	1	22	030321	Base	1
	0303083	Impeller(1.0HP)	1		030136	Safety pressing cable nut	3	23	020129	Plug	1
	0303084	Impeller(1.5HP)	1		030137	Belt	1	24	020123	Nut	2
	0303085	Impeller(2.0HP)	1		030313	Capacitance(0.5HP)	1	25	02012101	Union head(Φ 48mm)	2
	0301165	Copper nut	1		030314	Capacitance(0.75HP)	1		02012102	Union head(Φ 50mm)	2
10	030309	O'ring	1		030138	Capacitance(1.0HP-1.5HP)	1	26	030322	O'ring	2
11	030310	Flange	1		030139	Capacitance(2.0HP)	1	27	030323	Opening key	1
	0303101	S/S ring	1		030141	Cable	1				
	0303102	Copper nut	4		030315	Waterproof plug	1				
12	030311	Ring Lock Nut	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.