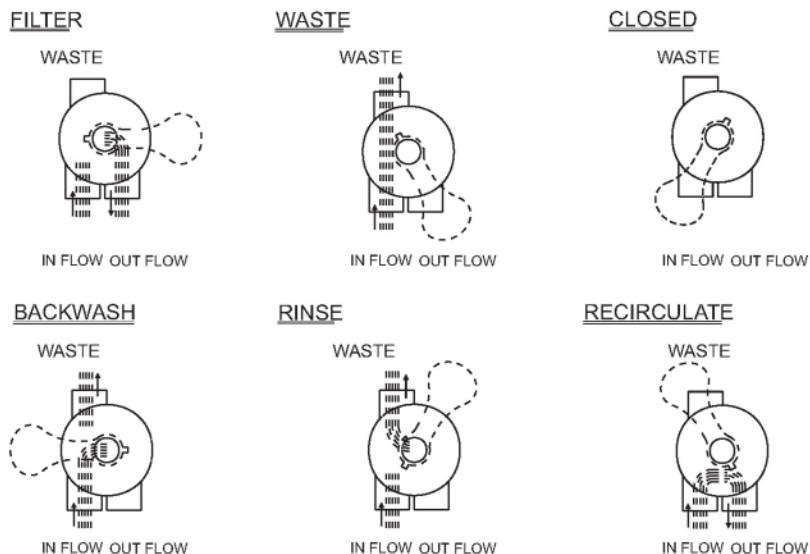


★ MULTIPOINT VALVE



FUNCTIONS OF VALVE POSITIONS

★ VALVE POSITION	Function
★ FILTER	Normal Filtration and Vacuuming
★ BACKWASH	Cleaning Filter by reversing the flow
★ RINSE	Used aner 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

★ GENERAL

1. A connector is provided for an optional installation of a pressure gauge.
2. Piping stops are provided to prevent over-tightening. Always use Teflon pipe tape for connections to provide a good, "living" seal. Add extra sealant if the male pipe fitting is undersized.
3. **SERVICING VALVE.** If it becomes necessary to service or gain access to the key or valve gasket:
 - a. Set the handle in the filter position.
 - b. Remove the cover screws.
 - c. Lift the cover and key assembly out.

★ TO ASSEMBLE

1. Place the valve key so that the wedge opening is at the TOP (handle in Filter position).
2. Check all accessories for the valve, match the connections, connect the unions, install the L pipe.
3. Finish the installation of the inlet and outlet unions, and connect the valve to the sand filter tank.

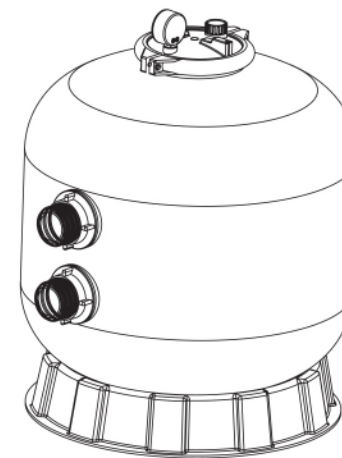
APS Series Berlin Fiberglass Side Mount Filter Product Manual APS 550/ APS 650



★ FUNCTION

The filter uses special filter sand to remove dirt particles from pool water. The filter sand is loaded into the filter tank and functions as the permanent dirt removing media. When the control valve is in the FILTER position, the pool water, which contains suspended dirt particles, is pumped through the piping system and is automatically directed by the patented filter control valve to the top of the filter tank. As the pool water is pumped through the filter, dirt particles are trapped by the sand bed and filtered out. The cleaned pool water is returned from the bottom of the filter tank, through the control valve, and back to the pool through the piping system. This entire sequence is continuous and automatic and provides for total re-circulation of pool water through your filter and piping system.

After a period of time, the accumulated dirt in the filter causes a resistance to flow, and the flow diminishes. This means it is time to clean your filter. With the control valve in the BACKWASH position, the water flow is automatically reversed through the filter so that it is directed to the bottom of the tank, up through the sand, flushing the previously trapped dirt and debris out the waste line. Once the filter is backwashed of dirt, set the control valve to the RINSE position and run the pump for about 1/2 to 1 minute, and then to FILTER to resume normal filtering.



NOTE: Turn pump off before changing valve position.

★ INSTALLATION

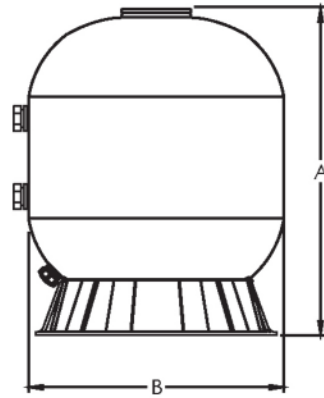
Only simple tools (screwdriver and wrenches), plus pipe sealant for plastic adapters are required to install and service the filter.

1. The filter should be placed on a level concrete slab, very firm ground, or equivalent position. Place the filter so that the piping connections and control valve are convenient and accessible for operation and service.
2. Loading the sand media. Filter sand media is loaded through the top opening of the filter.
 - a. Loosen the clamp lock, remove the lid (if previously installed).
 - b. Cover the diffuser (if needed) to prevent sand from entering it.
 - c. We recommend filling the tank approximately halfway with water to provide a cushion effect when the filter sand is poured in. This helps to protect the under-drain laterals from excessive shock.
 - d. Carefully pour in the correct amount and grade of filter sand. (Be sure the center pipe remains centered in the opening.) The sand surface should be leveled and should come to about the middle of the filter tank.
3. Replace filter coping (With O-ring in place).
 - a. Mount the O-ring for the filter neck, covered with the lid.
 - b. Lock the clamp lock, paying attention to ensuring the clamp lock clips on both sides are even.
 - c. Install the pressure gauge and air release valve to the lid. Do not over-tighten.
 - d. Ensure the air relief valve (with the Cring in place) fits tightly to the filter coping and turns easily.
 - e. Connect the pump outlet to the valve inlet. A preliminary combination has been completed.

4. Make return to pool pipe connection to control valve opening marked RETURN and complete other necessary plumbing connections, suction lines to pump, waste, etc.
5. Make electrical connections to pump per pump instructions.
6. To prevent water leakage, be sure all pipe connections are tight.

★ MAIN DIMENSION

Model	Dimension(mm)			
	High A mm	Diameter B mm	Valve (inch)	Sand (kg)
APS 550	640	530	1.5"	85
APS 650	770	640	1.5"	145



★ INSTALL/START-UP OF FILTER

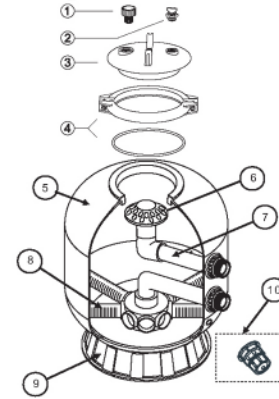
1. Make sure the correct amount of filter media sand is located in the tank and all connections have been connected and secured.
2. Depress control valve handle and rotate to BACKWASH position. (To prevent damage to control valve seal, always depress handle before turning.)
3. Prime and start pump according to pump instructions (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 1 minute or more. 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, for 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 filtering. (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 *filter- pressure you noted, it is time to backwash the filter (see BACKWASH under filter and control valve functions).

NOTE: During the 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.

★ WARNING

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

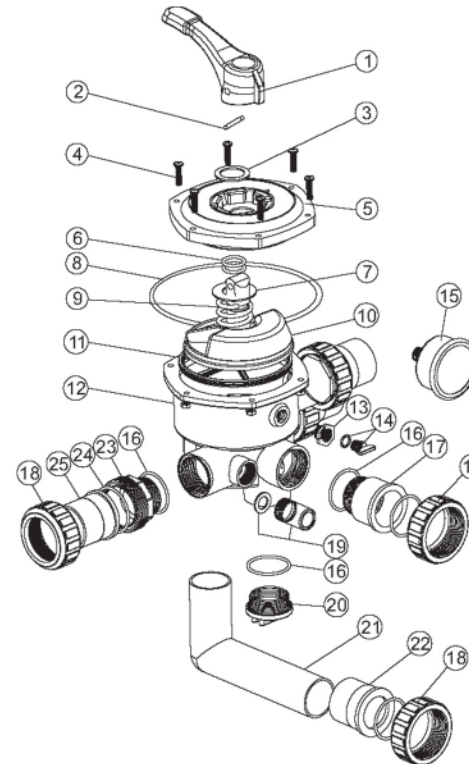
★ REPLACEMENT PARTS OF FILTER



FILTER PARTS TABLE

ITEM	PART NO.	DESCRIPTION
1	WS-01	Air Release Valve With Oring
2	WS-02	Connector for Pressure Gauge
3	WS-03	Cover
4	WS-04	Clamp Lock(with nut,screw and o-ring)
5	WS-05	FilterTank
6	WS-06	Funnel
7	WS-07	Lateral Assembly With Center PipeCenter Pipe
8	WS-08	Lateral
9	WS-09	Filter Base
10	WS-10	Under Drain (for both sand and water)

★ PLACEMENT PARTS OF MULTIPOINT VALVE



VALVE PARTS TABLE

ITEM	PART NO.	DESCRIPTION
1	WS-11	Handle (Small)
2	WS-12	Pin for Handle
3	WS-13	Washer for Handle
4	WS-14	M6x25 Screw with Nut for Camber Lid
	WS-15	M6X30 Screw with Nut for Standard Lid
5	WS-16	1.5"Side Mount Valve Standard Lid
6	WS-17	O-Ring for 1.5" Valve Rotor
7	WS-18	Washer for Spring
8	WS-19	O-Ring for 1.5" Valve Lid
9	WS-20	Spring for 1.5" Side Mount Valve
10	WS-21	1.5" Valve Rotor
11	WS-22	Spider Gasket
12	WS-23	1.5" Side Mount Valve Bottom Body
13	WS-24	connector for Pressure Gauge/Stopper, W/O-ring
14	WS-25	DRAIN PLUG WITH O-RING
15	WS-26	OIL PRESSURE GAUGE WITH O-RING (40PSI)
16	WS-27	O-Ring
17	WS-28	1.5"UNION TALE
18	WS-29	1.5" Union Nut
19	WS-30	Sight Glass with O-Ring
20	WS-31	1.5" Side Mount Valve Plug
21	WS-32	1.5" Elbow Tube 120mm
22	WS-33	1.5" Union Adaptor
23	WS-34	1.5" Connector with External Thread
24	WS-35	O-Ring Ø59xØ53XØ3
25	WS-36	1.5"Union Adaptor