

# **INSTALLATION & OPERATION GUIDE**



MODELS: SF500G, SF650G40, SF650G50, SF750G, SF900G

#### 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 PRESSURISED. PRESSURISED AIR CAN CAUSE THE LID OR VALVE TO BE BLOWN OFF WHICH CAN RESULT IN SEVERE INJURY, DEATH, OR PROPERTY DAMAGE.
- $\triangle$  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.
- ▲ UNDER LOW TEMPERATURE SHUT OFF CONDITION, IT IS STRONGLY RECOMMENDED TO TURN TO WINTERISE POSITION AND DISCHARGE ALL WATER INSIDE FILTER THROUGH THE BOTTOM DRAIN.

#### DIMENSIONS

Model	Height(A) mm	Diameter(B) mm	Valve Port Size inch	Sand kg
SF500G	886	500	1.5"	88
SF650G40	998	650	1.5"	158
SF650G50	1034	650	2.0"	158
SF750G	1159	750	2.0"	260
SF900G	1294	900	2.0"	422



#### FUNCTION

The filter uses special filter media to remove dirt particles from pool water. The filter media is loaded into the filter tank. When the multiport valve is in the FILTER position, the pool water which contains suspended dirt particles, is pumped through your piping system and is automatically directed by the patented filter multiport valve to the top of the filter tank. As the pool water is pumped through the filter, dirt particles are trapped by the media bed, and filtered out. The cleaned pool water is returned from the bottom of the filter tank, through the multiport valve and back to the pool through the piping system. This entire sequence is continuous and automatic. It provides for total recirculation 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 multiport 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 media, flushing the previously trapped dirt and debris out the waste line. Once the filter is back-washed of dirt, set multiport valve to RINSE position and run pump for approximately 15 to 30 seconds, and then set the multiport valve in the FILTER position.

## INSTALLATION

- 1. Only simple tools (screwdriver and wrenches), plus pipe sealant for plastic adapters, are required to install and service the filter.
- 2. The filter should be placed on a level concrete slab, very firm ground, or equivalent. The filter should be placed in the correct position so that the piping connections and multiport valve are convenient and accessible for operation and service. Position the tank with multiport valve in place to determine final position for piping.
- Filter media is loaded through the top opening of the filter.
  (a) For models 500G/650G40/650G50, loosen the flange clamp and remove filter control valve (if previously installed). For models 750G/900G, loosen the flange nuts and remove filter control valve (if previously installed).
  - (b) Cap internal pipe with plastic cap to prevent filter media from entering it.

(c) We recommend filling the tank approximately 1/2 way with water to provide a cushion effect when the filter media is poured in. This helps protect the under-drain laterals from excessive shock.

(d) Carefully pour in correct amount and grade of filter media. Ensure centre pipe remains centred in opening. Media surface should be levelled and should come to approximately the middle of the filter tank. Remove plastic cap from internal pipe.

4. Assemble multiport valve onto the filter tank.

(a) Insert multiport valve (with O-Ring or gasket in place) onto the tank neck, taking care that the centre pipe slips into the hole in the bottom of the valve.

(b) For models 500G/650G40/650G50, place clamp around valve flange and tank flange and tighten just enough so that the valve may be rotated on tank for final positioning. For models 750G/900G, place nuts on all studs around valve flange and tighten just enough so that the valve gasket seals. Do not over-tighten.

(c) Using thread tape, carefully screw pressure gauge (with O-Ring in place) into tapped hole in valve body. Do not over-tighten.

(d) Connect pump to multiport valve opening marked PUMP. After connections are made, tighten valve flange clamps/nuts, tapping around clamp/nuts with screwdriver handle to help seat valve flange clamp/nuts.

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

## **INSTALL/START-UP OF FILTER**

- 1. Make sure the correct amount of filter media is located in the tank and all connections have been connected and secured.
- 2. Depress multiport valve handle and rotate to BACKWASH position. (To prevent damage to multiport 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 at least 1 minute. The initial back-washing of the filter is recommended to remove any impurities or fine particles in the filter media.
- 4. Turn pump off and set valve to RINSE position. Start pump and operate until water in sight glass is clear, approximately 30 seconds. 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 and 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 of dirt in the filter will cause the pressure to rise and diminish the water flow. When the pressure gauge reading is 50kPa higher than the initial "clean" pressure you noted, it is time to backwash the filter (see BACKWASH under filter and multiport 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.



## FUNCTIONS OF VALVE POSITIONS

WASTE



FILTER



WASTE



CLOSED



BACKWASH

WASTE

RINSE



WASTE

RECIRCULATE



IN FLOW OUT FLOW

IN FLOW OUT FLOW IN FLOW OUT FLOW IN FLOW OUT FLOW

SERVICING VALVE

- 1. Stop pump, close gate valve in suction and discharge before proceeding.
- 2. Set multiport valve to FILTER position.
- 3. Remove cover screws.
- 4. Lift cover and key assembly out.

#### **REASSEMBLE VALVE**

- 1. Place valve key so that wedge openinh is at TOP port (hand in FILTER position).
- 2. Flat edge of cover screw lug should align with flat edge of body screw lug.
- 3. Position cover O-Ring/gasket.
- 4. Secure assembly to body with cover screws. Tighten screws evenly and alternately. Do not over tighten.



ltem	Part No.	Description	Qty
1	MPV230G	SF500G / SF650G40 40mm MPV Complete	1
1	MPV300G	SF650G50 50mm MPV Complete	1
2	PGSC	Stainless Steel Oil Filled Back Centre Mount Pressure Gauge	1
3	MPV223	40mm MPV Union Set Without Sight Glass	1
3	MPV318	50mm MPV Union Set Without Sight Glass	1
4	N/A	Filter Tank	1
5	N/A	Filter Tube with Element	1
6	N/A	SF500G Laterals 115mm	1
6	N/A	SF650G Laterals 126mm	1
7	N/A	Filter Base	1
8	SF005G	40mm/50mm Clamp Kit	1 kit
9, 11	N/A	Clamp Nut and Bolt suits SF005G Clamp Assembly	1 set
10	N/A	Clamp Handle	1
12	N/A	MPV to Tank O-Ring	1

Note:

SF500G should have 8pcs of Lateral (115mm) SF650G40 should have 8pcs of Lateral (126mm) SF650G50 should have 4pcs of lateral (115mm) and 4pcs of lateral (185mm) SF750G/SF900G should have 8pcs of lateral (185mm) REPLACEMENT PARTS FOR 40mm MULTIPORT VALVE SF500G, SF650G40 1) 2 3 T2 4 5 22 6 7) 8 9 10 1L 11 12 13 14 15 16 19 18 17 0000  $\bigcirc$ 20 21)

Item	Part No.	Description	Qty
1, 2, 3	MPV201	MPV Handle Kit	1 kit
4	N/A	Defend Lock	1
5	N/A	40mm Lid	1
3, 6, 7, 8, 10	MPV209	40mm MPV Spring Kit	1 kit
7	OR905M	40mm O-Ring for Diverter/Rotor	4pk
9	MPV07	40mm Rotor and Gasket	1
10	OR911	O-Ring for MPV Cover	1
11	N/A	40mm Body with Diffuser	1
12	N/A	O-Ring for 40mm Connector	1
13, 14, 15, 16	MPV222	40mm MPV Union w/ Sight Glass	1 set
17, 18	MPV226	MPV Nut and Plug	1 set
19	PGSC	Stainless Steel Oil Filled Back Centre Mount Pressure Gauge	1
20	MPV321	Sight Glass with O-Ring	1 set
21	OR931M	O-Ring for MPV Diffuser	4pk
22	N/A	MPV Upper Part	1

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ltem	Part No.	Description	Qty
1, 2, 3	MPV201	MPV Handle Kit	1 kit
3, 6, 7, 8, 10	MPV309	50mm MPV Spring Kit	1 kit
4	N/A	Defend Lock	1
5	N/A	50mm Lid	1
7	OR912	50mm MPV Diverter/Rotor O-Ring	4pk
9	N/A	50mm Rotor and Gasket	1
10	OR914M	50mm MPV Cover O-Ring	1
11	N/A	50mm Body with Diffuser	1
12, 13	MPV226	MPV Nut & Plug	1 set
14	PGSC	Stainless Steel Oil Filled Back Centre Mount Pressure Gauge	1
15	N/A	50mm Union Nut	1
16, 17, 18	MPV318	50mm Union Set	1 set
19	MPV321	Sight Glass with O-Ring	1 set
20	OR916M	O-Ring for 50mm MPV Diffuser	4pk
21	N/A	MPV Upper Part	1



Item	Part No.	Description	Qty
1	MPV400G	SF750G / SF900G MPV Complete	1
2	PGSC	Stainless Steel Oil Filled Back Centre Mount Pressure Gauge	1
3	MPV318	50mm MPV Union Set Without Sight Glass	1
4	N/A	Filter Tank	1
5	N/A	Filter Tube with Element	1
6	SF703	SF750G Laterals 185mm	8pk
6	SF803	SF900G Laterals 233mm	8pk
7	N/A	Filter Base	1
13	SF781	50mm MPV Tank Nut and Washer	12pk
14	MPV322	50mm MPV Tank Gasket	1



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1, 2, 3	MPV201	MPV Handle Kit	1 kit
2, 3	MPV302	50mm MPV Pin and Washer	1 set
4, 5, 7	MPV305	50mm MPV Top Mount Cover Kit	1 kit
3, 6, 7, 8, 9	MPV309	50mm MPV Spring Kit	1 kit
4	N/A	Screw and Nut	1 set
5	N/A	50mm MPV Lid	1
7	OR914M	MPV Cover O-Ring	1
8	OR915	50mm MPV Diverter/Rotor O-Ring	4pk
9	N/A	Washer for Spring	1
10	MPV311	50mm MPV Diverter/Rotor	1
11	MPG06	50mm MPV Gasket	1
12	N/A	50mm Body with Diffuser	1
13	OR916M	50mm MPV Diffuser O-Ring	4pk
14	OR917	50mm MPV Union & Threaded Tail O-Ring	6pk
15, 16, 17	MPV318	50mm Union Set	1 set
18	MPV321	Sight Glass with O-Ring	1 set
19	CF003	Internal Nut for Pressure Gauge	1
19, 20	MPV226	Drain Plug, Nut and O-Ring	1 set
21	PGSC	Stainless Steel Oil Filled Back Centre Mount Pressure Gauge	1
22	MPV50UP	MPV Upper Part	1

## WARRANTY & PRODUCT REGISTRATION

Pool Pro warrants the Neptune Gel Coat Sand Filters only for the original purchaser of the Sand Filter. The warranty is non-transferable and is only valid for the original purchaser. Pool Pro warrants the Sand Filter to be free of manufacturer defects in materials and workmanship for the following periods:

- Filter tank for a total period of ten (10) years, from date of original purchase.
- Multiport valve for a total period of (1) year, from date of original purchase.
- Internals (lateral assembly and centre pipe) for a total period of one (1) year, from date of original purchase.

• Pressure gauge for a total period of one (1) year, from date of original purchase. Warranty does not cover damage caused by negligence, improper use, improper maintenance, lack of care when using the product, incorrect installation, nor does it cover aggressive climate or location. Repairs under warranty can only be performed by an authorised Pool Pro repair agent. Proof of original purchase must be shown to validate warranty. Warranty is for domestic applications only. Commercial applications of this product and components are warranted for a period of twelve (12) months from date of original purchase, unless otherwise advised in writing by Pool Pro. Pool Pro will not be responsible for costs, losses or damages incurred whether directly or indirectly arising from Pool Pro products. Any action taken upon the product (such as disassembly) by any party not authorised to perform warranty repair on the product will void the warranty. Pool Pro products are warranted without exclusion to your rights under the Australian Consumer Law.

Please visit www.poolpro.com.au/serviceclaim to submit a warranty request.

Please register your product online at www.poolpro.com.au/product-registration within 30 days from date of purchase, or any warranty claim may be voided.