

FG bobbin wound fibreglass Sand Filters

INSTALLATION AND OPERATING INSTRUCTIONS



Rainbow Pool Products

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Capacity Table						
Model No.	Tank Diameter	Filter Area	Port Size	6 Hr. Turnover	8 Hr. Turnover	Media Req'd.
FG 604	610 mm	0.29 Sq M	40 mm	85,000ltrs	114,000ltrs	125 kg
FG 704	700 mm	0.38 Sq M	40 mm	115,000ltrs	153,600ltrs	175 kg
FG 705	700 mm	0.38 Sq M	50 mm	130,000ltrs	173,000ltrs	175 kg
FG 805	760 mm	0.43 Sq M	50 mm	144,000ltrs	192,000ltrs	200 kg
FG 905	910 mm	0.65 Sq M	50 mm	180,000ltrs	240,000ltrs	300 kg

Dimensions With Valve Installed			
Model	Height	Width	Shipping Weight
FG 604	90 cm	63 cm	22 kg
FG 704	98 cm	71 cm	31 kg
FG 705	98 cm	71 cm	32 kg
FG 805	113 cm	77 cm	38 kg
FG 905	125 cm	92 cm	45 kg

GENERAL NOTES

1. When unpacking the filter be sure the unit is complete and no visible shipping damage has occurred.
2. Allow sufficient clearance around filter system for access and maintenance. If installed in a plant room, ensure there is sufficient access to remove filter at a later date.
3. Provide adequate ventilation for pumping equipment, installed in conjunction with filter.
4. Provide solid mounting for filter and pump. If installed outdoors, install the system on a slab or solid concrete base to avoid risk of settlement. Filter systems once located with media can exceed a weight of 250 kg. Pump, filter and other connecting equipment should be located on the same slab.
5. Installation of filters and pumps should be located as close to the pool as possible to avoid excessive piping friction loss.
6. If system is installed below pool level it is important to install isolating valves to prevent risk of flooding from back up water, from the pool or spa.
7. The proper media selection is critical to good filter performance. Ensure that the media is an approved Quartz Silica with a sizing range of 0.4 to 0.55 mm.
8. The installation of filters requires no special tools. An Alan key is provided with the filter to tighten the multiport valve clamps.
9. Confirm that plumbing lines from pool are correctly identified. This will ensure proper connection to markings on filter valve (i.e. "Pump", "Waste", and "Return").
10. The tank should be situated in such a way to allow easy access to **winter drain** on underside of filter.

LOADING FILTER MEDIA

Once the filter system has been positioned, the installation of filter media may be undertaken as follows:

1. Check filter size in order to determine necessary amount of media required.
2. Double check that the internal system consisting of a lateral hub and stand pipe are intact inside the tank.
3. Fill tank half full with water.
4. Place the disposable metal loading disc into the upper tank opening and the plastic cover over stand pipe to stabilise the filter and stand pipe. It is important that the stand pipe remains centered through the media loading procedure to ensure alignment with valve assembly opening.
5. Proceed to load correct volume of dry media slowly (if media is saturated loading can be difficult). Generally, a coffee can or funnel, can aid in the loading process.
6. Once media is loaded discard loading disc and check to determine if stand pipe is properly centered in tank opening.

INSTALLATION OF SELECTOR VALVE

1. Following the media loading, clean any media particles or debris from upper surface of tank opening.
2. Install six (6) position selector valve after placing **O-Ring** in cavity in underside of valve body. Place valve into tank opening while ensuring that the **O-Ring** has remained in position.

3. Install selector valve into top tank opening and rotate valve to best suit plumbing lines. Once positioned, fit clamp band assembly around neck of filter and valve and tighten sufficiently for good engagement. **Note: An Alan key is provided to tighten the bolts in the clamp band.**
4. Double check that incoming pool lines are connected to appropriate valve openings as marked on valve port (i.e. pump, return (pool) and waste).
5. The threaded openings on valve are 40mm or 50mm thread which all accommodate Hurlcon barrel unions supplied with filter. O-rings are supplied to fit between the multiport valve and barrel union. It is only necessary to tighten by hand. **The use of Teflon tape is not required.**
6. Remove white plug from side wall of valve and install threaded pressure gauge using Teflon tape wrap (**do not over tighten**). Minimum hand tightening is adequate to provide a good seal.

VALVE OPERATION

The operation and the positions of valve settings are as follows:

Valve Settings	Direction of flow through Valve
Filter (also during vacuuming)	From pump down through valve, through sand bed, up through stand pipe to valve and back through pool return.
Back Wash	From pump, through valve, down through stand pipe, up through sand bed, and through valve to waste.
Rinse	Flow from pump, through valve, down through sand bed, up through stand pipe, through valve to waste. (Position also used for initial start-up and leveling sand bed after Back-wash)
Waste	From pump, through valve to waste. Also position for lowering water level or assist in draining pool.
Closed	From pump to valve without further circulation. Prevents any flow to filter and pool.
Recirculate	From pump through valve to pool. This position bypasses the filter and is used for circulation of pool water only.

NOTE: Always "STOP" pump when changing selector valve position.

PUMP PRIMING

1. With the pump OFF, remove the lid from the pump strainer and pour in approximately 4 litres of water.
2. Replace lid.
3. If valve has been installed on the pump suction line, close before filling strainer. Open again after lid has been securely fastened in place. Any valves on the return lines should be open. The pump should not need to be re-primed unless the pump has been drained for servicing, or winterizing (refer to complete pump operations manual provided with pump).

INITIAL START - UP

1. Make sure the correct amount of media is in the filter tank.
2. Prime pump.
3. Set valve handle in BACK WASH position.
4. Start pump and operate in BACK WASH cycle for three (3) minutes. This will purge the filter of excess fines in the media.
5. Turn pump OFF and set valve handle to RINSE. Start pump and run for one (1) minute.
6. Stop pump and set valve handle to FILTER. Restart pump. System is now operating on a normal FILTER cycle.
7. Adjust the valves in the skimmer and main drain lines (if provided) to achieve balanced flow rates.
8. When a pool is filled initially, the filter may have to be BACK WASHED once a day until the water becomes sparkling clear. From that point on, BACK WASH when pressure gauge indicates 30 to 40 kPa higher than at starting pressure.

OPERATIONAL & INSTALLATION TIPS

1. Always turn pump “OFF” before changing valve positions.
2. Never run pump dry as it depends on water for lubrication.
3. Always maintain minimum water level to ½ way up the skimmer mouth.
4. Clean pump strainer regularly.
5. Maintain a proper chemical balance in the pool.
6. Maximum operating pressure is 250kPa on FG Series and 140kPa on E-Series
7. Ensure pressure gauge on valve is positioned so that rain water cannot collect on glass face.
8. Back wash filter regularly for 5 minutes each time to ensure sand is completely cleaned.

WARRANTY – FG Series

Residential Pools

Your FG Filter is covered by a limited 10 year warranty against defects in materials and faulty workmanship from the date of purchase (plus 30 days to allow for installation)

Commercial Installations

Your FG Filter is covered by a limited 5 year warranty against defects in materials and faulty workmanship from the date of purchase (plus 30 days to allow for installation)

Limitations: In field labour warranty is covered for a period of 12 months from the date of purchase (plus 30 days to allow for installation). The valve, unions, gauge and internals are covered for a period of 12. Exclusions include but are not limited to; sanitiser in excess of 15 ppm, water pressure exceeding 250 kPa, inadequate access for service, use of filter other than swimming pool and spa filtration, water temperature above 40 deg. Celsius, incorrect filter media or misuse and abuse whether by accident or intention. AstralPool assumes no liability for consequential damages of any kind. No person is authorised to make any representations on behalf of AstralPool other than what is written here.