

Gre FS300

Gre FS300 Sand Filter System Instruction Manual

Model: FS300 | Flow Rate: 4m³/h | Pump Power: 0.24 HP

1. INTRODUCTION

This manual provides essential information for the safe installation, operation, and maintenance of your Gre FS300 Sand Filter System. Please read these instructions carefully before attempting to install or operate the unit. Proper installation and maintenance are crucial for optimal performance and longevity of the system.

2. SAFETY INFORMATION

Always observe basic safety precautions to reduce the risk of fire, electric shock, and injury. This equipment must be installed and serviced by a qualified professional in accordance with all applicable local and national codes.

- **Electrical Safety:** Ensure the power supply matches the pump's requirements. Always connect to a grounded outlet. Do not operate the pump if the power cord or plug is damaged. Never operate the pump when people are in the pool.
- **Water Safety:** Do not operate the filter system without water. Ensure all connections are secure to prevent leaks.
- **Pressure Safety:** Never attempt to open the filter tank or multi-port valve while the pump is running and the system is under pressure. Always turn off the pump and relieve pressure before servicing.
- **Chemical Handling:** Exercise caution when handling pool chemicals. Follow manufacturer's instructions for safe use and storage.

3. PRODUCT OVERVIEW

The Gre FS300 Sand Filter System is designed to effectively filter impurities from your pool water, ensuring a clean and healthy swimming environment. The system consists of a durable filter tank, a powerful pump, and a multi-port valve for various operational modes. It incorporates a pre-filter to capture larger debris, protecting the pump from damage.



Image 1: The Gre FS300 Sand Filter System, showing the light blue filter tank, black pump, and multi-port valve with connecting hose.

Key components include:

- **Filter Tank:** Houses the sand filter media, where impurities are trapped.
- **Pump:** Circulates water through the filter system. Features a pre-filter basket to catch large debris.
- **Multi-Port Valve:** Controls the water flow direction for different operations (filter, backwash, rinse, waste, recirculate, closed).
- **Pressure Gauge:** Indicates the internal pressure of the filter system.

4. SETUP AND INSTALLATION

Follow these steps for proper installation of your sand filter system:

1. **Unpacking and Inspection:** Carefully unpack all components. Inspect for any shipping damage. If damage is found, contact your supplier immediately.
2. **Placement:** Position the filter system on a firm, level surface, preferably concrete, as close to the pool as possible. Ensure adequate ventilation and protection from direct sunlight and harsh weather. Allow sufficient space around the unit for maintenance.
3. **Adding Filter Media (Sand):**
 - Remove the multi-port valve from the top of the filter tank.
 - Place a plastic bag or cover over the standpipe opening inside the tank to prevent sand from entering it.
 - Carefully pour the recommended amount and grade of filter sand into the tank. Refer to the specifications for the correct sand type and quantity.
 - Remove the plastic bag/cover and clean any sand from the tank's rim.
4. **Multi-Port Valve Installation:** Carefully place the multi-port valve onto the filter tank, ensuring the standpipe aligns correctly with the valve's opening. Secure the valve to the tank using the provided clamp or bolts. Do not overtighten.
5. **Pump Connection:** Connect the pump to the multi-port valve's 'PUMP' port using the provided hose and fittings. Ensure all connections are tight to prevent air leaks.
6. **Hose Connections to Pool:**
 - Connect the hose from the pool's skimmer (suction line) to the pump's inlet.
 - Connect the hose from the multi-port valve's 'RETURN' port to the pool's return inlet.
 - Connect a backwash hose to the 'WASTE' port of the multi-port valve, directing it to an appropriate drainage area.
7. **Electrical Connection:** Plug the pump's power cord into a grounded electrical outlet. Ensure the outlet is protected by a Ground Fault Circuit Interrupter (GFCI) for safety.

5. OPERATING INSTRUCTIONS

The multi-port valve has several settings for different operations. Always turn off the pump before changing the valve position.

- **Initial Startup (Priming the Pump):**
 - Ensure the pool is filled to the proper level.
 - Open all suction and return valves on the pool plumbing.
 - Set the multi-port valve to 'BACKWASH'.
 - Turn on the pump. Allow water to flow through the waste line until it runs clear. This removes fine particles from the new sand.
 - Turn off the pump.
 - Set the multi-port valve to 'RINSE'.
 - Turn on the pump for 30-60 seconds. This settles the sand.
 - Turn off the pump.
 - Set the multi-port valve to 'FILTER'.
 - Turn on the pump. The system is now operating in normal filtration mode. Note the initial pressure gauge reading.
- **FILTER:** This is the normal operating position for filtering pool water. Water flows from the pool, through the pump, into the filter tank, through the sand, and back to the pool.

- **BACKWASH:** Used to clean the filter sand. Water flows in reverse through the filter, flushing trapped debris out through the waste port. Perform backwash when the pressure gauge reads 8-10 PSI (0.5-0.7 bar) above the initial clean pressure.
- **RINSE:** Used after backwashing to flush any remaining dirty water from the filter and settle the sand bed. Always rinse for 30-60 seconds after backwashing before returning to 'FILTER' mode.
- **WASTE/DRAIN:** Bypasses the filter and sends water directly out the waste port. Useful for vacuuming heavy debris directly to waste or lowering the pool water level.
- **RECIRCULATE:** Bypasses the filter and circulates water directly back to the pool. Useful for mixing chemicals without filtering.
- **CLOSED:** Shuts off all flow to the filter and pump. Use this setting only when the pump is off and you are performing maintenance on the system or pool plumbing. Never operate the pump with the valve in the 'CLOSED' position.

6. MAINTENANCE

Regular maintenance ensures efficient operation and extends the life of your filter system.

- **Clean Pump Pre-Filter Basket:** Regularly check and clean the pump's pre-filter basket. Turn off the pump, close all valves, open the pre-filter lid, remove and clean the basket, then replace it and secure the lid.
- **Backwash Filter:** Backwash the filter when the pressure gauge indicates 8-10 PSI (0.5-0.7 bar) above the clean operating pressure, or when water flow to the pool noticeably decreases.
- **Inspect for Leaks:** Periodically check all connections and seals for leaks. Tighten or replace components as needed.
- **Sand Replacement:** Filter sand typically needs to be replaced every 3-5 years, depending on usage and water quality.
- **Winterization:** In cold climates, drain all water from the pump, filter, and plumbing to prevent freezing damage. Store the pump and multi-port valve in a dry, protected area.

7. TROUBLESHOOTING

Refer to the table below for common issues and their solutions.

Problem	Possible Cause	Solution
Low water flow / Low pressure	Clogged skimmer/pump basket; Dirty filter sand; Air leak in suction line; Low water level in pool.	Clean baskets; Backwash/rinse filter; Check and seal suction line connections; Add water to pool.
Cloudy pool water	Dirty filter sand; Insufficient filtration time; Improper chemical balance; Too much sand in filter.	Backwash/rinse filter; Increase filtration time; Test and adjust pool chemicals; Verify correct sand level.
Pump not priming / Air in system	Low water level; Air leak in suction line; Clogged skimmer/pump basket; Multi-port valve not sealed.	Add water to pool; Check and seal all suction connections; Clean baskets; Inspect multi-port valve O-ring.

Problem	Possible Cause	Solution
Water leaking from multi-port valve	Worn O-rings/gaskets; Loose clamp/bolts.	Inspect and replace O-rings/gaskets; Tighten clamp/bolts.

8. SPECIFICATIONS

Feature	Specification
Model Number	FS300
Flow Rate	4 m ³ /h
Pump Power	0.24 CV (HP)
Product Dimensions (L x W x H)	38 x 49 x 59 cm
Weight	10 kg
Recommended Filter Media	Silica Sand (specific grade and quantity as per manufacturer guidelines)

9. WARRANTY AND SUPPORT

This product is covered by a manufacturer's warranty. For specific warranty terms and conditions, please refer to the documentation provided with your purchase or contact Gre customer support. For technical assistance, spare parts, or further inquiries, please visit the official Gre website or contact their authorized service centers.