

LordsWorld 25465

Astral Sena Filtration Pump - User Manual

Brand: LordsWorld | Model: 25465

1. INTRODUCTION AND PRODUCT OVERVIEW

The Astral Sena filtration pump is engineered for durability and efficient performance in pool filtration systems. Constructed from highly resistant technical materials, it features a 2-liter pre-filter with a transparent lid, allowing for easy monitoring of debris levels. Designed for significant flow rates while maintaining low operational noise, this pump is also compatible with saltwater electrolysis treatments, making it a versatile choice for various pool environments.



Figure 1: Overview of the Astral Sena Filtration Pump. This image shows the main components of the pump, including the motor, pump housing, and pre-filter basket with its transparent lid.

- **Durable Construction:** Body and diffuser made from mineral-reinforced polypropylene and fiberglass.
- **Efficient Pre-filter:** 2L capacity with a transparent lid for easy inspection.
- **Quiet Operation:** Designed to minimize noise during use.
- **Saltwater Compatibility:** Suitable for use with saltwater pool systems.
- **Self-priming:** Capable of self-priming over 2 meters without a check valve.
- **High Protection:** Motor protection rated IP-55, insulation class F.

2. SETUP AND INSTALLATION

Proper installation is crucial for the optimal performance and longevity of your Astral Sena pump. Ensure the pump is placed on a stable, level surface in a well-ventilated area, protected from direct sunlight and adverse weather conditions. Always consult local electrical and plumbing codes before beginning installation.



Figure 2: Exploded view of the Astral Sena pump components. This diagram illustrates the internal structure, including the pre-filter basket (1), suction connection (2), drain plug (4), pump base (5), mechanical seal (7), impeller (8), and motor (9).

2.1 Plumbing Connections

The pump features 1.5-inch suction and discharge connections designed for 50 mm diameter sleeves. Use appropriate PVC fittings and primer/cement for a secure, leak-free connection. Ensure all connections are tight to prevent air leaks, which can affect pump performance and self-priming capabilities.

2.2 Electrical Connections

Connect the pump to a dedicated electrical circuit protected by a Ground Fault Circuit Interrupter (GFCI) or Residual Current Device (RCD). Verify that the power supply voltage matches the pump's requirements (230V for Mono models, 230V/400V for Tri models). All electrical work should be performed by a qualified electrician in accordance with local regulations.



Figure 3: Side view of the Astral Sena pump. This image provides a clear perspective of the pump's overall design and connection points.

3. OPERATING INSTRUCTIONS

Before starting the pump, ensure the pre-filter basket is clean and filled with water to aid in priming. The pump is designed for continuous operation within its specified parameters. Avoid running the pump dry, as this can cause severe damage to the mechanical seal and motor.

3.1 Priming the Pump

1. Ensure all valves are open to allow water flow to the pump.
2. Remove the transparent lid of the pre-filter and fill the basket with water until it overflows.
3. Replace the lid securely, ensuring the O-ring is properly seated to prevent air leaks.
4. Turn on the pump. The pump should self-prime within a few minutes. If it does not, turn it off, re-check connections for air leaks, and repeat the priming process.

3.2 Normal Operation

Once primed, the pump will operate continuously, circulating water through your filtration system. Monitor the pressure gauge on your filter (if applicable) to ensure it remains within the recommended operating range. Excessive pressure may indicate a clogged filter or return line obstruction.

4. MAINTENANCE

Regular maintenance is essential to ensure the longevity and efficient operation of your Astral Sena pump. Always disconnect power to the pump before performing any maintenance or cleaning.

4.1 Pre-filter Basket Cleaning

The transparent lid of the 2-liter pre-filter allows for easy visual inspection of debris accumulation. Clean the pre-filter basket regularly, especially when you notice reduced water flow or increased pressure on your filter gauge.

1. Turn off the pump and close any necessary valves to isolate the pump.
2. Unscrew the transparent lid of the pre-filter.

3. Remove the pre-filter basket and empty any collected debris.
4. Rinse the basket thoroughly with water.
5. Inspect the O-ring on the lid for cracks or wear. Replace if necessary.
6. Reinsert the clean basket and securely fasten the lid.
7. Re-prime the pump as described in Section 3.1 before restarting.

4.2 Winterization

In regions subject to freezing temperatures, it is crucial to properly winterize your pump to prevent damage. Drain all water from the pump by opening the drain plug (4 in Figure 2) and disconnecting plumbing. Store the pump in a dry, frost-free location if possible, or ensure it is completely drained and protected from freezing.

5. TROUBLESHOOTING

This section provides basic troubleshooting steps for common issues. For more complex problems, contact a qualified technician or customer support.

Problem	Possible Cause	Solution
Pump does not start	No power; tripped breaker/GFCI; motor issue.	Check power supply; reset breaker/GFCI; consult electrician.
Pump runs but no water flow	Pump not primed; air leak in suction line; clogged pre-filter/impeller.	Re-prime pump; check all suction connections for leaks; clean pre-filter and inspect impeller.
Low water flow/pressure	Clogged pre-filter; dirty main filter; partially closed valve; air leak.	Clean pre-filter; backwash/clean main filter; ensure all valves are fully open; check for air leaks.
Excessive noise/vibration	Air in system; cavitation; worn bearings; debris in impeller.	Check for air leaks and prime; ensure adequate water supply; contact technician for internal issues.

6. TECHNICAL SPECIFICATIONS

The Astral Sena pump is available in various models with different power and flow characteristics. Refer to the table below for detailed specifications.

Characteristic	Description/Value
Brand	LordsWorld (Astralpool)
Model Number	25465-SENA
Material	Reinforced Polypropylene, Fiberglass, AISI-316 Stainless Steel (mechanical seal)
Color	Black
Power Source	Electric Cable
Voltage	230V (Mono), 230V/400V (Tri)
Motor Protection	IP-55
Insulation Class	F

Characteristic	Description/Value
Suction/Discharge Connections	1.5" for Ø 50 mm sleeve
Self-priming Capacity	Over 2m without check valve
Weight	Approx. 33.07 lbs (15 kg)
Product Dimensions (L x W x H)	30L x 30W x 50H cm (approximate)

6.1 Performance Data by Model

Model	Power (HP)	Voltage	Flow Rate (m ³ /h)
Sena Mono	0.33	230 V	7
Sena Mono	0.5	230 V	8.5
Sena Mono	0.75	230 V	9
Sena Tri	0.75	230 / 400 V	9
Sena Mono	1	230 V	11.8
Sena Tri	1	230 / 400 V	11.8
Sena Mono	1.25	230 V	14
Sena Tri	1.25	230 / 400 V	14

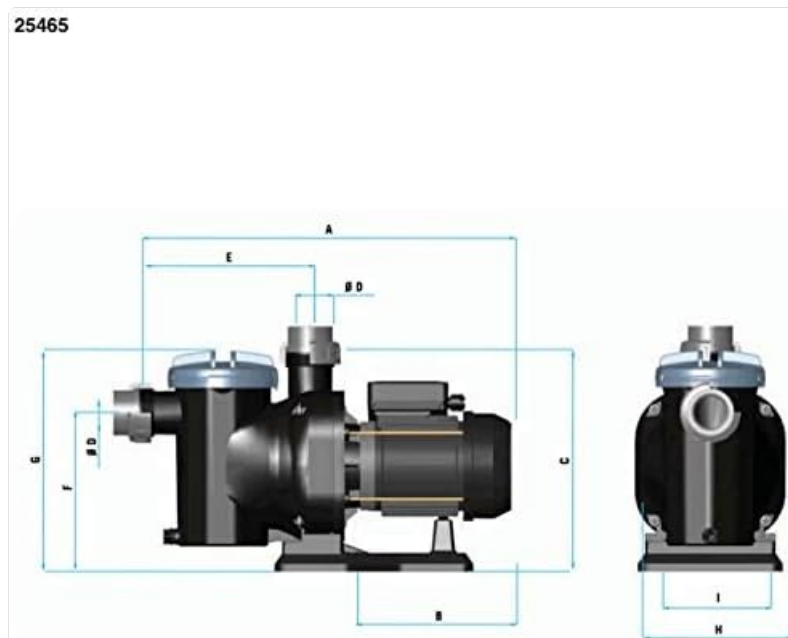


Figure 4: Dimensional drawing of the Astral Sena pump. This diagram provides key measurements for installation planning.

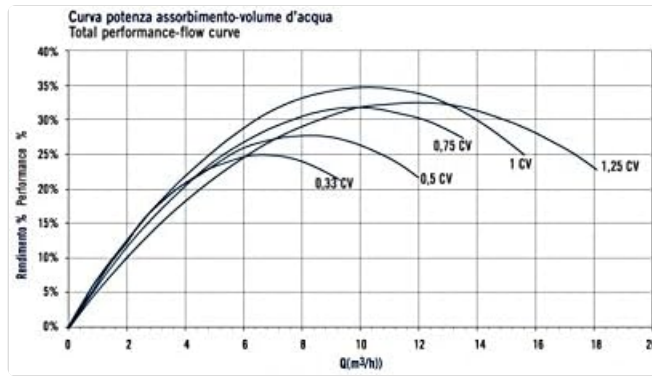


Figure 5: Total Performance-Flow Curve. This graph illustrates the overall performance percentage relative to the flow rate (m^3/h) for different pump power ratings (CV).

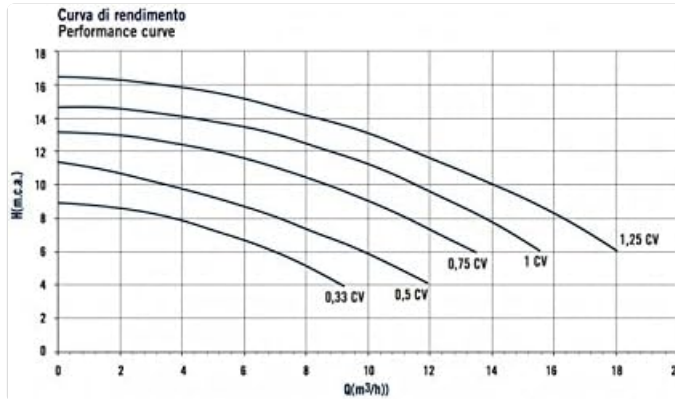


Figure 6: Performance Curve (Head vs. Flow). This graph shows the relationship between the pump's head (H in m.c.a.) and the flow rate (m^3/h) for various pump power ratings (CV).

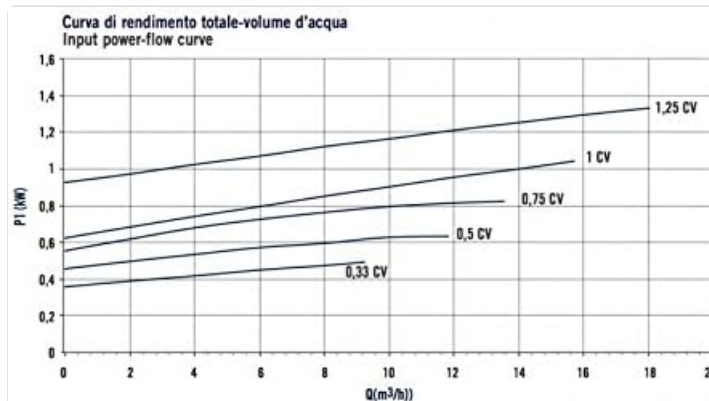


Figure 7: Input Power-Flow Curve. This graph displays the input power (P_1 in kW) required by the pump at different flow rates (m^3/h) for various pump power ratings (CV).

7. WARRANTY AND SUPPORT

For information regarding the product warranty, please refer to the documentation provided at the time of purchase or contact the seller directly. LordsWorld products are designed for reliability, but in case of any issues, professional assistance is recommended.

7.1 Customer Support

If you encounter problems that cannot be resolved using the troubleshooting guide, or require spare parts, please contact LordsWorld customer support or your authorized dealer. Provide your pump's model number (25465) and serial number (if available) for faster service.

Note: Availability of spare parts information is currently unavailable. Please inquire with the manufacturer or seller.

