

ElectroSea's SeaStrong Pump features a seal-less magnetic drive to ensure reliable performance and unparalleled durability.

- Seal-less magnetic drive
- Centrifugal pump with high operating efficiency
- Inlet with 316L stainless reinforcing ring
- IP55 rated, washdown motor
- Totally enclosed fan cooled in single or three phase
- Stainless steel or white epoxy motor option

NOTICE Read all pump labels and ensure power supply meets the requirements and labeled specifications.

NOTICE Not intended for hazardous areas with flammable gases or combustible materials.

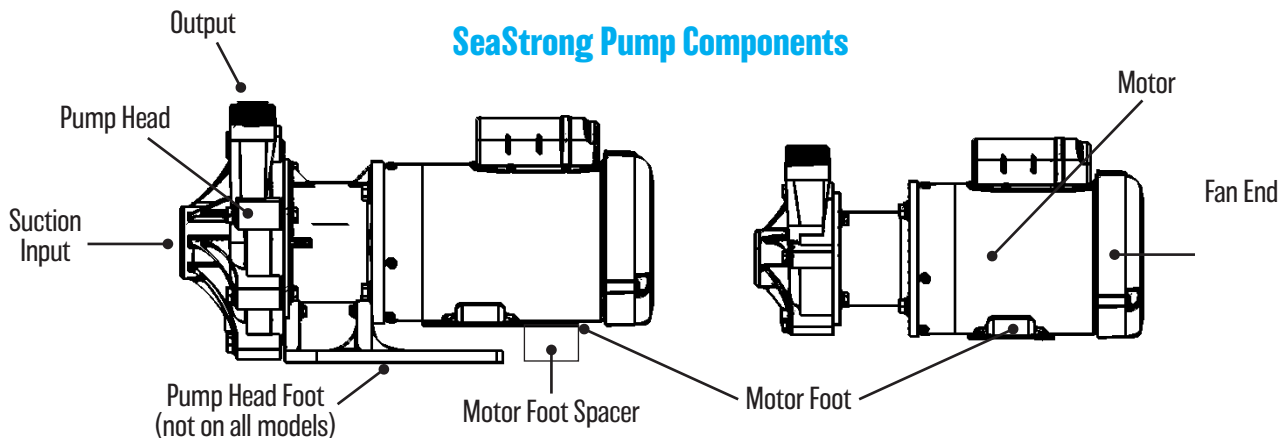
NOTICE Follow local and national laws and regulations including applicable electrical codes during installation and operation.

NOTICE Always disconnect the pump from power source before servicing, including all connected equipment.

NOTICE Rotating Parts. Lockout motor before servicing.

WARNING Motor is designed to run at temperatures up to 240F (115C) external. Do not touch during operation.

WARNING The pump is NOT submersible. Do NOT submerge the pump or operate in standing water.



Mounting

Pump head and motor feet must be securely fastened to a solid foundation. The pump is intended for horizontal mounting with the feet on the bottom. If other mounting is required contact ElectroSea.

• Below Water Line

The pump must be installed below the water line. Seawater must freely flow into the pump head.

• Motor Foot Spacer

If the pump has a pump head foot, two motor foot spacers (included) must be used to securely support the motor. Both the motor foot and the pump head foot must be securely fastened to a solid foundation.

• Mounting Hardware

Mounting hardware is not included. The bolts used to secure the pump to the packaging should not be used for mounting the pump.

• Ventilation

Location must allow for air flow around the pump for cooling.

Plumbing

Follow all national and local plumbing standards and codes for marine vessel plumbing. Ensure seacocks are closed before removing, changing, or fixing any plumbing. Plumbing should be performed by a qualified technician.

WARNING Failure to close all seacock valves can result in sinking the vessel and severe injury

• Unrestricted Suction

It is important to provide unrestricted flow to the pump on the suction side.

- Strainers and pipe/hose diameter should be the same size or larger than the input size of the pump.
- Avoid right angle fittings when possible. Suction line plumbing should be as straight as possible.
- Keep bends, valves, strainers, and other fittings at least ten (10) pipe diameters away from the suction input.
- Suction line distance from the thru-hull to the pump should be as short as possible.

Plumbing Cont.

- **Support Weight of Plumbing**

Input and output plumbing should be supported near the Pump Head to eliminate stress on the pump.

- **Flooded Suction**

The pump head must be below the waterline. Final plumbing must fill the pump head with water via gravity. The suction line should not have any high spots to avoid air pockets. The suction hose/piping should be as level as possible or angle slightly upwards toward the pump.

- **NPT Threaded Connections**

DO NOT overtighten fittings into the pump head. Connections should be hand tightened as much as possible and then tightened about ½ turn with a wrench. Extreme care should be taken if using metal fittings as they can be over tightened and crack the pump head.

WARNING **DO NOT overtighten fittings connected to the pump.**

WARNING **DO NOT use PTFE based tape or sealants because they lead to overtightening. Use a non-PTFE plastics compatible thread sealant such as Spears Blue 75 thread sealant.**

NOTICE **Metal fittings can damage the pump head; care must be taken if threading metal fittings into the pump.**

Electrical

To ensure the safety of the installer and the vessel, it is important to disconnect power from all systems and supply lines before working on electrical connections. Electrical work should be performed by a qualified technician.

- Motor must be connected to a circuit protection device, such as a fuse or circuit breaker of appropriate size per applicable codes. Three phase motors must have all three phases protected.
- Refer to the Labeling on the motor for proper electrical information for AC supply.
- Verify supply circuit matches the label voltage, phase and frequency. **DO NOT** install the pump if there are any differences.
- Connect AC lines per the label found inside the electrical junction box or on the side of the motor.
- Use appropriate electrical box connections to ensure the electrical junction box is watertight.

WARNING **Always disconnect the pump and all**

Operation

Check all connections. This pump is not self-priming and must be filled with water before starting.

- **Prime the Pump**

Open all valves and ensure pump and strainer fill with water on their own. Do not run the pump if it is not filling with water completely. If air is caught in the top of the strainer, bleed it out before continuing. If air is trapped inside the pump head it may become airlocked. Bleed air from head by slowly releasing air on output with water supply open. Secure all connections.

WARNING **Never start or run the pump dry. Always prime the pump before starting.**

- **Check Rotation**

Three (3) phase SeaStrong pumps must be checked for correct rotation. Incorrect rotation of the pump impeller will pump water but at greatly reduced flow and pressure. Single (1) Phase SeaStrong Pumps are prewired at the factory for correct rotation.

To verify correct rotation on three-phase pumps:

- Check plumbing and electrical connections.
- Open all supply and discharge valves, ensure seawater flows into pump head freely.
- Run the pump for a couple seconds while observing the motor fan. When looking at the pump from the Fan End, the fan should rotate clockwise, the same way shown on the arrow in the pump head.

If the rotation is incorrect, interchange any two (2) of the three (3) AC lines with each other to change the rotation. Only swap two (2) lines, one (1) line must stay unchanged. Retest rotation.

Service

SeaStrong Pumps should be kept clean and monitored to ensure proper operation. Do not operate the pump if there are leaks or damage to the pump.

- Clean pump with a damp rag. The pump is washdown rated and can be sprayed with low-pressure fresh water if needed.
- Remove pump and inspect after six months of service for signs of wear or issues.
- Contact ElectroSea for service or part information.

- **Seasonal**

If storing in a cold climate, drain all water from the pump to prevent damage from freezing.

WARNING **DO NOT spray with high-pressure liquids.**

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