

5 Disposal



Place the packaging material in the appropriate recycling waste bins, whenever possible. Consult a local recycling center or specialist dealer for details about how to dispose of the product in accordance with all applicable national and local regulations.

6 Warranty Information

Refer to the sections below for information about warranty and warranty support in the US, Canada, and all other regions. Note that self-repair or nonprofessional repair can have safety consequences and might void the warranty.

6.1 United States and Canada

LIMITED WARRANTY AVAILABLE AT [DOMETIC.COM/EN-US/TERMS-AND-CONDITIONS-CONSUMER/WARRANTY](https://www.dometic.com/en-us/terms-and-conditions-consumer/warranty).

IF YOU HAVE QUESTIONS, OR TO OBTAIN A COPY OF THE LIMITED WARRANTY FREE OF CHARGE, CONTACT:

DOMETIC CORPORATION
MARINE CUSTOMER SUPPORT CENTER
2000 NORTH ANDREWS AVENUE
POMPANO BEACH, FLORIDA, USA 33069
1-800-542-2477

6.2 Asia-Pacific (APAC) Countries

If the product does not work as it should, please contact your retailer or the manufacturer's branch in your country (see the back of this instruction manual for the web addresses to locate your region or retailer). The warranty applicable to your product is 1 year.

For repair and warranty processing, please include the following documents when you send in the device:

- A copy of the receipt with purchasing date
- A reason for the claim or description of the fault

6.2.1 Australia Only

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

6.2.2 New Zealand Only

This warranty policy is subject to the conditions and guarantees which are mandatory as implied by the Consumer Guarantees Act 1993(NZ).

6.3 All Other Regions

The statutory warranty period applies. If the product is defective, please contact the manufacturer's branch in your region or your retailer (see [dometic.com/dealer](https://www.dometic.com/dealer)).

For repair and guarantee processing, please include the following documents when you send in the device:

- A copy of the receipt with purchasing date
- A reason for the claim or description of the fault

Your Local Dealer
[dometic.com/dealer](https://www.dometic.com/dealer)

Your Local Support
[dometic.com/contact](https://www.dometic.com/contact)

Your Local Sales Office
[dometic.com/sales-office](https://www.dometic.com/sales-office)

A complete list of Dometic companies, which comprise the Dometic Group, can be found in the public filings of:

DOMETIC GROUP AB Hemvärnsgatan 15 SE-17154 Solna Sweden

DOMETIC MARINE PUMPS

PS250, PS500, PS1000

EN Submersible Pump Short Installation and Operation Manual

Please read these instructions carefully and follow all instructions, guidelines, and warnings included in this product manual in order to ensure that you install, use, and maintain the product properly at all times. These instructions **MUST** stay with this product.

By using the product, you hereby confirm that you have read all instructions, guidelines, and warnings carefully and that you understand and agree to abide by the terms and conditions as set forth herein. You agree to use this product only for the intended purpose and application and in accordance with the instructions, guidelines, and warnings as set forth in this product manual as well as in accordance with all applicable laws and regulations. A failure to read and follow the instructions and warnings set forth herein may result in an injury to yourself and others, damage to your product, or damage to other property in the vicinity. This product manual, including the instructions, guidelines, and warnings, and related documentation, may be subject to changes and updates. For up-to-date product information, please visit www.dometic.com.

Related Documents



Find the full installation and operating manual online at https://documents.dometic.com/?object_id=85345

1 Intended Use

The submersible pump (hereinafter referred to as pump) is a marine-grade, magnetic-drive, centrifugal pump designed to circulate seawater or fresh water through your marine air conditioning system. This pump is only suitable for the intended purpose and application in accordance with these instructions.

This manual provides information that is necessary for the proper installation and operation of the pump. Poor installation and/or improper operating or maintenance will result in unsatisfactory performance and a possible failure.

The manufacturer accepts no liability for any injury or damage to the product resulting from:

- Incorrect assembly or connection, including excess voltage
- Incorrect maintenance or use of spare parts other than original spare parts provided by the manufacturer

- Alterations to the product without express permission from the manufacturer
- Use for purposes other than those described in this manual

Dometic reserves the right to change product appearance and product specifications.

2 General Information

The pump has a sealed motor casing and can function while completely submersed or when placed in a damp area, like a bilge.

At 3 ft (0.9 m) head pressure, the pump can operate air conditioning systems of the following capacity:

Pump Model	Air Conditioning System
PS250	up to 12,000 BTUs
PS500	24,000 BTUs
PS1000	48,000 BTUs

3 Installation

⚠ WARNING: MAGNETIC HAZARD.

Individuals with cardiac pacemakers, implanted defibrillators, other electronic medical devices, metallic prosthetic heart valves, internal wound clips (from surgery), metallic prosthetic devices, or sickle cell anemia must not handle or be in the proximity of the magnets inside this pump. Consult a health care provider before working with this pump. Failure to obey this warning could result in death or serious injury.

⚠️ AVERTISSEMENT : DANGER MAGNÉTIQUE

Les personnes équipées d'un stimulateur cardiaque, d'un défibrillateur implanté, d'autres appareils médicaux électroniques, de prothèses cardiaques métalliques, de clips pour plaies internes (suite à une intervention chirurgicale), de prothèses métalliques ou souffrant d'anémie falciforme ne doivent pas manipuler ou se trouver à proximité des aimants contenus dans cette pompe. Consultez un fournisseur de soins de santé avant de manipuler cette pompe. Le non-respect de cet avertissement pourrait entraîner de graves blessures, voire la mort.

⚠️ WARNING: ELECTRICAL SHOCK, FIRE, AND/OR EXPLOSION HAZARD. Failure to obey the following warnings could result in death or serious injury:

- Only qualified professionals who are familiar with the risks and relevant regulations should install or remove the pump.
- Electrical devices are not toys. **Always** keep the pump out of the reach of very young children. Children **must** be supervised to ensure that they do not play with the device. Do **not** allow children to perform cleaning or maintenance.

⚠️ AVERTISSEMENT : RISQUE DE CHOC ÉLECTRIQUE, D'INCENDIE OU D'EXPLOSION. Le non-respect de ces avertissements pourrait entraîner de graves blessures, voire la mort :

- Seuls des professionnels qualifiés, connaissant les risques et les réglementations en vigueur, doivent installer ou retirer la pompe;
- Les appareils électriques ne sont pas des jouets. Gardez **toujours** la pompe hors de portée des très jeunes enfants. Les enfants **doivent** être surveillés pour s'assurer qu'ils ne jouent pas avec l'appareil. Ne laissez **pas** les enfants effectuer le nettoyage ou l'entretien.

3.1 Mounting the Pump**⚠️ WARNING: FLOOD AND/OR LEAK HAZARD.**

Do **not** mount the pump such that high piping loads exist on the pump connections, or in a rigid system that does **not** allow the pipe to expand, causing the pump to be strained. Failure to obey this warning could result in death or serious injury.

⚠️ AVERTISSEMENT : RISQUE D'INONDATION OU DE FUITE.

Ne **pas** monter la pompe de façon à ce que des charges de tuyauterie élevées existent sur les raccords de la pompe, ou dans un système rigide qui ne permet **pas** à la tuyauterie de se dilater, ceci entraînerait une tension de la pompe. Le non-respect de cet avertissement pourrait entraîner de graves blessures, voire la mort.

i The pump can be mounted vertically or horizontally. If mounted vertically, the pump head should be positioned above the motor to prevent airlock.

1. Place the pump in the desired location and mark the position of the four mounting holes.
2. Drill holes for the mounting screws.
3. Tighten the screws to secure the pump into position.

3.2 Connecting the Piping

Use the following guidelines to connect the piping.

- Place the piping with independent support near the pump to eliminate any strain on the pump casing.
- Use an intake strainer with a 10–50 (297–2000 µm) mesh on the inlet pipe to remove debris before the liquid enters the pump.
 - i** Dometic recommends a 20 (841 µm) mesh strainer.
- Position the piping on the suction side of the pump in a straight and short configuration to minimize pipe friction.
- Keep bends and valves at least ten pipe diameters away from the suction and discharge.
- Install the suction piping to be level or sloping slightly upward toward the pump. To prevent air pockets, the suction line should not have any high spots.
- Verify the suction line is at least as large as the suction inlet port or one pipe size larger so that it does not affect the Net Positive Suction Head available (NPSHa). Do not reduce the suction line size.
- Isolation valves on the suction and discharge lines can be used to make the pump accessible for maintenance.
- If flexible hose is preferred, use a reinforced hose rated for the proper temperature, pressure, and chemical resistance against the fluid being pumped.
- Use an appropriate pipe sealant or tape on the threads and other piping connections.
- Verify the suction valve is completely open to avoid restricting the suction flow.
- A flush system can be installed in the piping to allow the pump to be flushed before it is removed from service or for winterization of the seawater system.

3.3 Connecting the Electrical**⚠️ WARNING: ELECTRICAL SHOCK, FIRE, AND/OR EXPLOSION HAZARD. Failure to obey the following warnings could result in death or serious injury:**

- Before attempting to make any electrical connections, ensure the electrical power is off and the water valves are completely closed.
- Secure and seal all wire connections to protect from arcing.

⚠️ AVERTISSEMENT : RISQUE DE CHOC ÉLECTRIQUE, D'INCENDIE OU D'EXPLOSION. Le non-respect de ces avertissements pourrait entraîner de graves blessures, voire la mort :

- Avant d'essayer d'effectuer des connexions électriques, assurez-vous que l'alimentation électrique est coupée et que les vannes d'eau sont complètement fermées;
- Fixez et scellez toutes les connexions de fils pour les protéger des arcs électriques.

NOTICE: Do **not** use or install the pump if the voltage on the label is different than the supply voltage.

AVIS : Ne **pas** utiliser ou installer la pompe si la tension indiquée sur l'étiquette est différente de la tension d'alimentation.

When installing the pump, follow these important considerations regarding the electrical connections.

- Protect the motor with a fuse or circuit breaker rated for the pump model and usage.
- Use the proper minimum wire sizes.
- Match the pump voltage, frequency, and phase to the installation power source.
- Follow American Boat and Yacht Council (ABYC), national, and local installation codes.

4 Operation**⚠️ WARNING: FLOOD AND/OR LEAK HAZARD. Failure to obey the following warnings could result in death or serious injury:**

- Do **not** operate the pump beyond the pressure or temperature limits.
- Do **not** allow severe temperature changes to occur in a short time period within the pumping system.
- Do **not** continue to operate the pumping system when a known leak exists.

⚠️ AVERTISSEMENT : RISQUE D'INONDATION OU DE FUITE. Le non-respect de ces avertissements pourrait entraîner de graves blessures, voire la mort :

- Ne **pas** utiliser la pompe au-delà des limites de pression ou de température;
- Ne **pas** laisser de fortes variations de température se produire dans un court laps de temps dans le système de pompage;
- Ne **pas** continuer à faire fonctionner le système de pompage en cas de fuite connue.

NOTICE: Do **not** continue to operate the pump if an unusual noise or vibration occurs.

AVIS : Ne **pas** continuer à faire fonctionner la pompe si une vibration ou un bruit inhabituel se produit.

4.1 Priming the Pump

This pump is not self priming. Mounting the pump below the water line helps prime the pump head. While the pump is safe to run dry, it should be primed for optimal performance and to lubricate the impeller and cool the motor. The pump will not cool the air conditioner system if it is running dry. The pump can run continuously, when needed.

1. Connect the external water source to the pump.
2. Open the inlet (suction) and discharge valves completely, and allow the pump to fill with water.

4.2 Starting the Pump

i The pump requires positive suction at the pump head to prevent cavitation.

1. Ensure all valves are open and the pump connections are secure.
2. Turn the pump on.

4.3 Shutting Down the Pump

1. If shutting down the pump for maintenance or winterization:
 - a. Flush the pump to remove contaminants.
 - b. Drain it completely to remove internal pressure.
2. Turn off the power to the pump.