



Manuals.plus /

› Naturewater /

› Naturewater Booster Pump 50 GPD NW-R050-D1 GFP-50G Instruction Manual

Naturewater NW-R050-D1 GFP-50G

Naturewater Booster Pump 50 GPD NW-R050-D1 GFP-50G Instruction Manual

Model: NW-R050-D1 GFP-50G

1. INTRODUCTION

The Naturewater Booster Pump is designed to enhance the performance of reverse osmosis (RO) systems. It is particularly useful in situations where the existing water pressure is insufficient for optimal RO system operation or when an increase in high-purity water production is desired. This diaphragm booster pump integrates into your RO system to significantly improve water quality and quantity by increasing the internal system pressure.

This manual provides essential information for the proper installation, operation, and maintenance of your Naturewater Booster Pump.

2. PRODUCT OVERVIEW

The Naturewater Booster Pump is a robust component for your reverse osmosis system. Key features include:

- **Diaphragm Pump Technology:** Ensures efficient and reliable pressure boosting.
- **Vibration Dampening:** Equipped with rubber bumpers to minimize operational noise and vibrations.
- **Enhanced RO Performance:** Increases water pressure within the RO system, leading to improved water quality and increased pure water output.
- **Durable Construction:** Made with stainless steel components for longevity.



Figure 2.1: General view of the Naturewater Booster Pump.

This pump is suitable as a replacement part for various reverse osmosis systems, including WilTec-Art. 50808, and other compatible 50 GPD systems.

3. SPECIFICATIONS

Attribute	Value
Brand	Naturewater
Manufacturer	Wiltec
Model Numbers	NW-R050-D1, GFP-50G, 50811
Pump Type	Diaphragm
Material	Stainless Steel
Item Weight	4.11 pounds (1.87 kg)
Product Dimensions (L x W x H)	7.09 x 4.13 x 4.53 inches (18 x 10.5 x 11.5 cm)
Item Package Quantity	1
Batteries Required	No
Mains Adapter	Not included (sold separately)

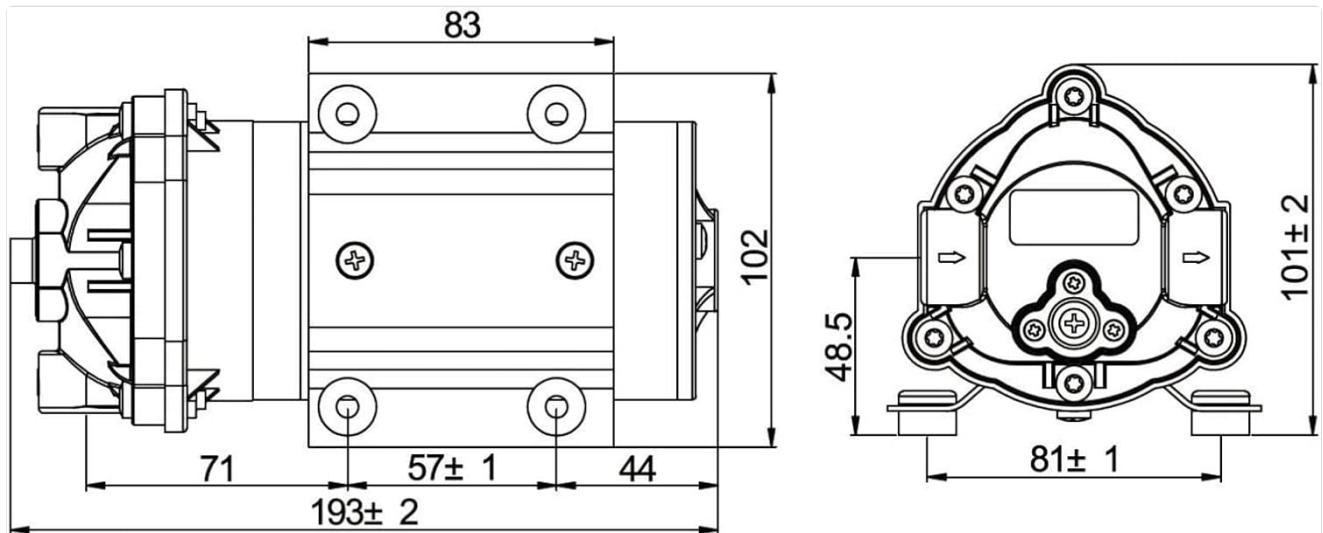


Figure 3.1: Technical drawing with detailed dimensions.

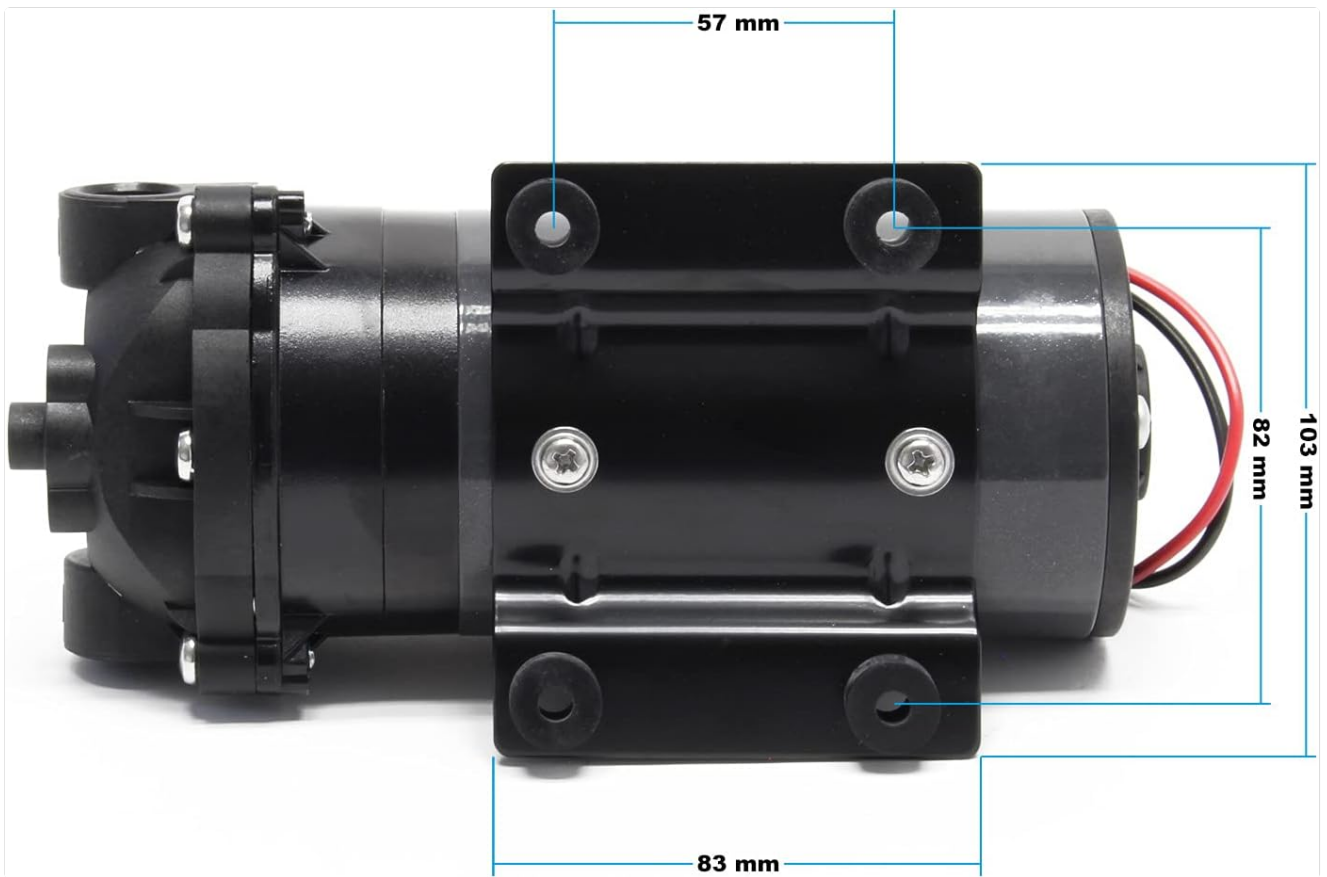


Figure 3.2: Side view with key dimensions (e.g., 57 mm, 82 mm, 103 mm).



Figure 3.3: Top view with key dimensions (e.g., 100 mm, 200 mm).

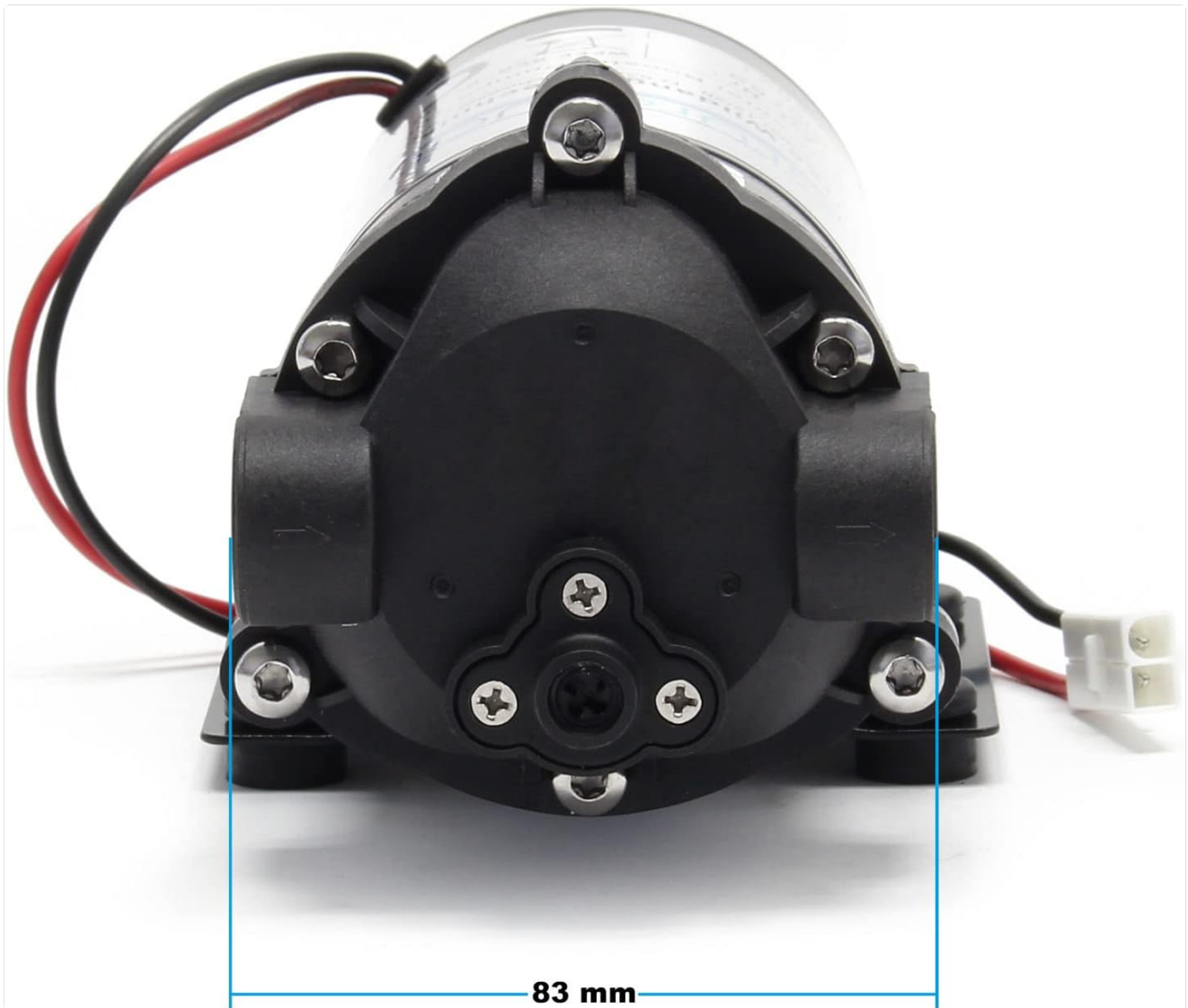


Figure 3.4: Front view with key dimensions (e.g., 83 mm).

4. SETUP AND INSTALLATION

Before beginning installation, ensure your reverse osmosis system is depressurized and disconnected from its power source. The booster pump requires a separate mains adapter, which is not included and must be purchased separately.

4.1 Component Identification

Familiarize yourself with the pump's inlet and outlet ports, as well as the electrical connections.



Figure 4.1: Close-up view of the pump's inlet and outlet ports (3/8" or 16.41 mm) and electrical connection points.

4.2 Plumbing Connections

1. Identify the inlet and outlet ports on the booster pump. Arrows on the pump typically indicate the direction of water flow.
2. Connect the water supply line from your RO system's pre-filters to the pump's inlet port.
3. Connect the pump's outlet port to the RO membrane housing inlet.
4. Ensure all connections are secure and watertight. It is recommended to use PTFE (Teflon) tape on threaded connections to prevent leaks.

4.3 Electrical Connections

1. Connect the pump's electrical wires to a compatible 24-volt DC mains adapter (not included). Ensure correct polarity (red to positive, black to negative).
2. Secure all electrical connections to prevent accidental disconnection or short circuits.

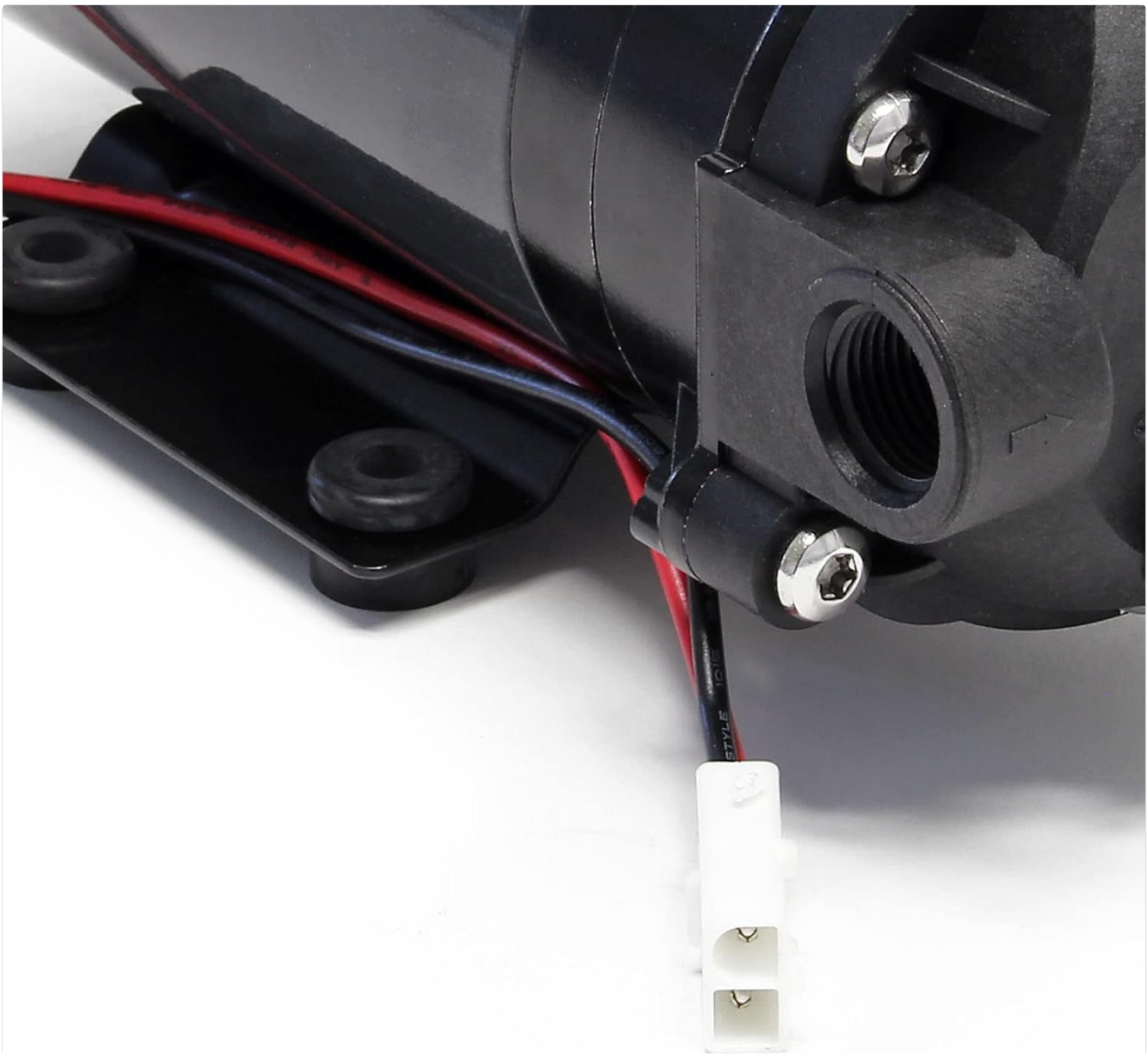


Figure 4.2: Detail of the pump's electrical wiring (red and black wires with connector).

4.4 Post-Installation Check

Once all connections are made, slowly turn on the water supply to the RO system and check for any leaks. Then, connect the mains adapter to a power outlet to energize the pump. Observe the system for proper operation.

5. OPERATING INSTRUCTIONS

The Naturewater Booster Pump operates automatically in conjunction with your reverse osmosis system. When the RO system demands water, the pump will activate to increase the incoming water pressure, optimizing the RO membrane's performance.

- Ensure the pump is always connected to a suitable 24V DC power supply.
- The pump should only operate when water is flowing through the RO system. Dry running can damage the pump.
- Monitor the RO system's output to confirm improved water production and quality.

6. MAINTENANCE

The Naturewater Booster Pump is designed for minimal maintenance. However, regular checks can help ensure its

longevity and optimal performance.

- **Leak Inspection:** Periodically check all plumbing connections for any signs of leaks. Tighten connections as necessary.
- **Noise and Vibration:** While the pump has dampening features, unusual increases in noise or vibration may indicate an issue.
- **Electrical Connections:** Ensure electrical connections remain secure and free from corrosion.
- **Replacement:** If the pump's performance significantly degrades or it becomes damaged, it may require replacement. This pump is designed to be an easy-to-replace spare part.

7. TROUBLESHOOTING

If you encounter issues with your Naturewater Booster Pump, refer to the following troubleshooting guide:

Problem	Possible Cause	Solution
Pump not running	No power supply Faulty mains adapter Loose electrical connections	Check power outlet and adapter connection Test mains adapter with another device or replace Secure electrical wiring
Low water pressure/output from RO system	Insufficient inlet pressure Clogged pre-filters or RO membrane Pump malfunction	Ensure adequate water supply to the RO system Replace filters or membrane as per RO system manual Contact support if pump is suspected to be faulty
Water leaks	Loose plumbing connections Damaged O-rings or fittings	Tighten all connections, use PTFE tape Inspect and replace any damaged seals or fittings
Excessive noise or vibration	Loose mounting Internal pump issue	Ensure pump is securely mounted If noise persists, pump may require replacement

8. WARRANTY AND SUPPORT

For warranty information or technical support regarding your Naturewater Booster Pump, please refer to the documentation provided with your purchase or contact your retailer. Ensure you have your model number (NW-R050-D1 GFP-50G or 50811) and purchase details available when seeking support.

For additional information, you may visit the manufacturer's website: www.wiltec.de