SEAFLO SFDP1-013-100-22

SEAFLO 22-Series Water Pump Instruction Manual

Model: SFDP1-013-100-22

1. Introduction

This manual provides essential information for the safe and efficient installation, operation, and maintenance of your SEAFLO 22-Series 12V DC Diaphragm Water Pump. Please read these instructions thoroughly before installation and use. Retain this manual for future reference.



Image 1.1: The SEAFLO 22-Series 12V DC Diaphragm Water Pump.

2. Safety Information

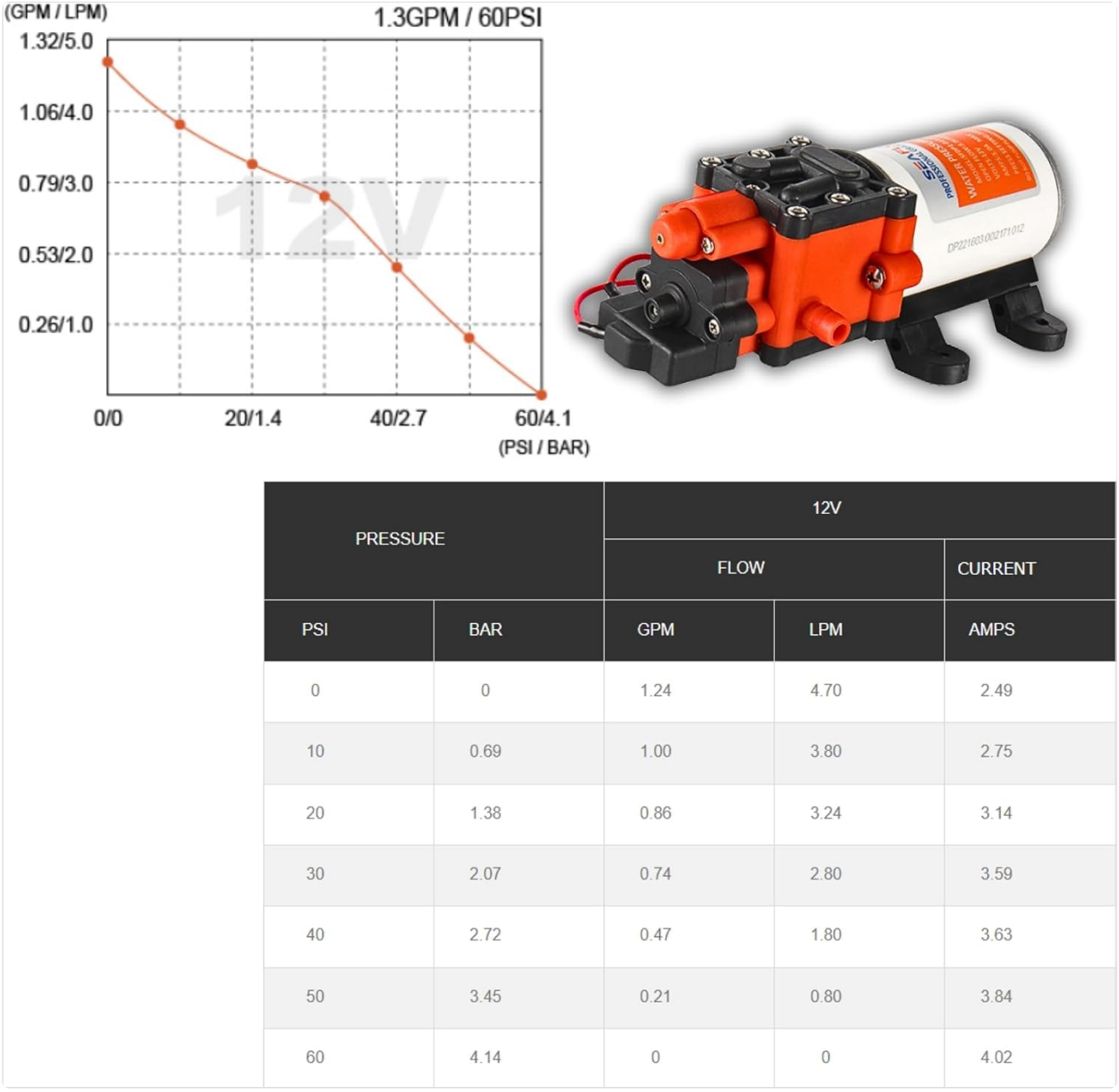
Always observe the following safety precautions to prevent personal injury and damage to the pump or system:

- Ensure the power supply is disconnected before performing any installation or maintenance.
- Verify that the voltage and current ratings of the pump match your power source.
- Do not pump flammable liquids.
- Protect the pump from freezing temperatures.
- Install a fuse or circuit breaker in the positive (+) lead as close to the power source as possible.
- Ensure proper ventilation around the pump.

3. Specifications

The SEAFLO 22-Series pump is designed for reliable water transfer in various applications.

Specification	Value
Model Number	SFDP1-013-100-22
Voltage	12V DC
Open Flow	1.3 GPM (5.3 LPM)
Shut-off Pressure	100 PSI (6.9 BAR)
Priming Capabilities	6 feet (1.8 m) suction lift
Valve Material	EPDM
Diaphragm Material	Santoprene
Ports	3/8" Hose Barb
Max Recommended Temperature	140°F (60°C)
Product Dimensions (L x W x H)	7.35" x 4.31" x 2.83"
Item Weight	2.43 Pounds
Power Source	DC



PRESSURE		12V		
		FLOW		CURRENT
PSI	BAR	GPM	LPM	AMPS
0	0	1.24	4.70	2.49
10	0.69	1.00	3.80	2.75
20	1.38	0.86	3.24	3.14
30	2.07	0.74	2.80	3.59
40	2.72	0.47	1.80	3.63
50	3.45	0.21	0.80	3.84
60	4.14	0	0	4.02

Image 3.1: Performance curve and dimensional drawing for the SEAFLO 22-Series pump.

4. Setup and Installation

Follow these steps for proper installation of your SEAFLO 22-Series water pump.

4.1 Included Components

- SEAFLO 22-Series 12V Water Pump
- 3/8" Hose Barb Fittings
- Pressure Switch (integrated)
- Quick Connect Wiring

4.2 Mounting

Mount the pump in a dry, well-ventilated area. The pump can be mounted horizontally or vertically. Utilize the integrated rubber mounting bracket base to minimize vibration and reduce noise levels during operation.

- Mounting Hole Pattern: 2.24" long x 3.11" wide.



Image 4.1: The rubber mounting bracket base minimizes vibration and noise.

4.3 Plumbing

Connect the inlet and outlet hoses to the 3/8" hose barb ports. Ensure all connections are secure and leak-free. The pump features self-priming technology with a 6-foot suction lift, allowing it to draw water even when installed above the water source.



Image 4.2: The pump features 3/8" hose barb connections and a durable copper core motor.

4.4 Electrical Connection

Connect the quick connect wiring to your 12V DC power source. Ensure correct polarity (red wire to positive, black wire to negative). Install an appropriate fuse or circuit breaker in the positive line to protect the pump and electrical system.

5. Operating Instructions

The SEAFLO 22-Series pump is designed for automatic on-demand operation.

5.1 Automatic Operation

The pump is equipped with a built-in pressure switch that automatically starts and stops the pump based on water demand. When a faucet or valve is opened, the pressure drops, and the pump activates. When the faucet or valve is closed, the pressure builds, and the pump shuts off.

5.2 Adjustable Pressure Switch

The pressure switch is adjustable, allowing you to fine-tune the shut-off pressure. The pressure range is typically 17-120 PSI. Refer to the pump label for specific adjustment instructions, usually involving a small screw on the switch.



Image 5.1: The pump is designed to provide sufficient flow for multiple fixtures.

5.3 Dry Run Capability

The pump is engineered to run dry without sustaining damage, providing peace of mind during low-water conditions or unmonitored use.

5.4 Applications

This versatile pump is suitable for a wide range of applications including:

- Marine vessels
- Recreational Vehicles (RVs) and motorhomes
- Agricultural spraying and irrigation
- Off-grid water systems and rain collection
- Potable freshwater systems

- Salt/freshwater washdown systems
- Shower sub-pumps
- General liquid transfer applications

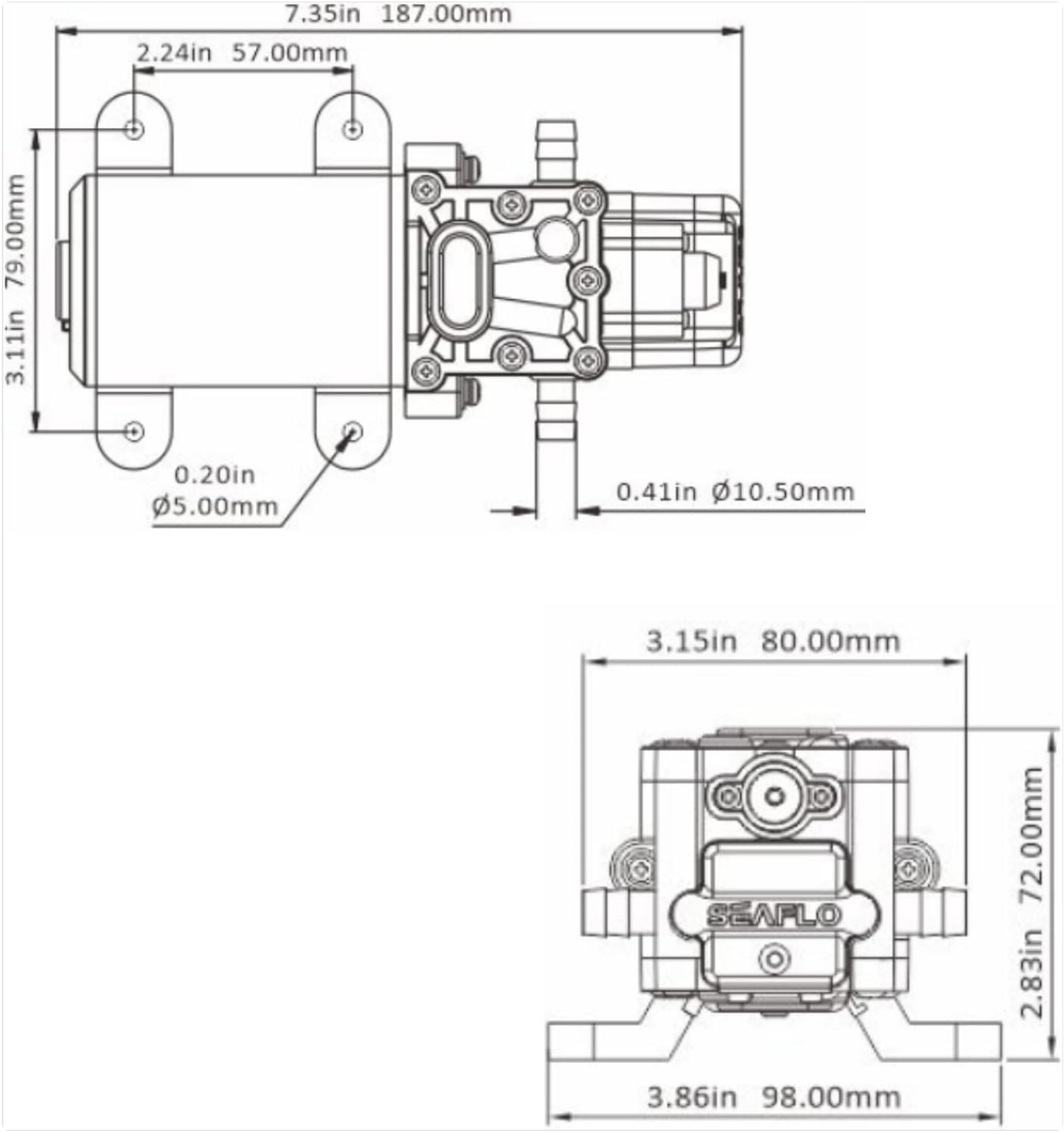


Image 5.2: The SEAFLO 22-Series pump is suitable for diverse water transfer applications.

6. Maintenance

Regular maintenance ensures optimal performance and extends the life of your pump.

6.1 General Care

- Keep the pump clean and free from debris.
- Periodically check all hose connections for leaks and tighten as necessary.
- Inspect wiring for any signs of wear or corrosion.

6.2 Winterization

If the pump will be exposed to freezing temperatures, it must be drained completely to prevent damage. Run non-toxic RV antifreeze through the system or remove the pump and store it in a warm, dry place.

6.3 Durable Materials

The pump is constructed with high-quality, durable materials including EPDM valves, a Santoprene diaphragm, and stainless steel screws, designed for longevity and resistance to corrosion.



Image 6.1: Components and materials used in the SEAFLO 22-Series pump, highlighting durability.

7. Troubleshooting

This section addresses common issues you might encounter with your SEAFLO 22-Series pump.

7.1 Pump Does Not Turn On

- **Check Power Supply:** Ensure the 12V DC power source is active and correctly connected. Verify fuse or circuit breaker is not tripped.
- **Check Wiring:** Confirm all electrical connections are secure and free from corrosion.

- **Pressure Switch:** If the system is pressurized, the pump will not turn on. Open a faucet to reduce pressure.

7.2 Low Flow or No Flow

- **Check Water Supply:** Ensure there is sufficient water in the tank or source.
- **Inspect Inlet Filter:** A clogged inlet filter can restrict flow. Clean if necessary.
- **Air in System:** Open all faucets to purge air from the system.
- **Kinked Hoses:** Check for any kinks or obstructions in the inlet or outlet hoses.
- **Voltage Drop:** Ensure adequate voltage is reaching the pump. Low voltage can reduce performance.

7.3 Pump Runs Continuously (Cycles On/Off Rapidly)

- **Leaks in System:** Check all plumbing connections, faucets, and fixtures for leaks. Even small leaks can cause the pump to cycle.
- **Pressure Switch Adjustment:** The pressure switch may need adjustment. Refer to section 5.2.
- **Accumulator Tank (if installed):** If an accumulator tank is part of your system, check its air pressure.

7.4 Excessive Noise or Vibration

- **Loose Mounting:** Ensure the pump is securely mounted.
- **Air in System:** Purge air from the system as described above.
- **Hose Contact:** Ensure hoses are not vibrating against hard surfaces. Use clamps or insulation if needed.

8. Warranty and Support

SEAFLO stands behind the quality of its products.

8.1 Warranty Information

The SEAFLO 22-Series Water Pump typically comes with a**4-year warranty**. Please refer to the warranty documentation included with your product for specific terms and conditions. Retain your proof of purchase for warranty claims.



Image 8.1: The SEAFLO 22-Series pump is backed by a 4-year warranty.

8.2 Customer Support

For technical assistance, warranty claims, or replacement parts, please contact SEAFLO customer support. Visit the

official SEAFLO website or refer to the contact information provided in your product packaging.

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Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

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