



Manuals.plus /

› Liberty Pumps /

› Liberty Pumps 293 Wide Angle Float 3/4 HP Mid Range Head Submersible Sump/Effluent Pump with Series Plug User Manual

Liberty Pumps 293

Liberty Pumps Model 293

Submersible Sump/Effluent Pump User Manual

1. INTRODUCTION

This manual provides essential information for the safe and efficient operation, installation, and maintenance of your Liberty Pumps Model 293 submersible sump/effluent pump. Please read this manual thoroughly before installation or operation to ensure proper function and to prevent injury or damage.

The Liberty Pumps Model 293 is designed for residential and light commercial sump and effluent applications, capable of handling solids up to 3/4 inch. It features a wide-angle float switch for automatic operation.

2. SAFETY INFORMATION

WARNING: Risk of electric shock. This pump is supplied with a grounding conductor and grounding-type attachment plug. To reduce the risk of electric shock, be certain that it is connected only to a properly grounded, grounding-type receptacle.

- Always disconnect power to the pump before handling or servicing.
- Do not operate the pump in an explosive atmosphere.
- Ensure all electrical connections are made by a qualified electrician and comply with local codes.
- Do not pump flammable liquids or chemicals.
- Keep hands clear of the impeller and moving parts.
- Wear appropriate personal protective equipment (PPE) during installation and maintenance.

Failure to follow these warnings could result in serious injury or death.

3. PRODUCT OVERVIEW

The Liberty Pumps Model 293 is a robust submersible pump designed for reliable water removal. Key components include the motor housing, pump body, wide-angle float switch, and discharge port.



Figure 3.1: Liberty Pumps Model 293 Submersible Sump/Effluent Pump.

This image displays the Liberty Pumps 293 submersible sump/effluent pump. It features a durable, bronze-colored cast iron body, a black motor housing at the top, and a gray wide-angle float switch attached to its side. A black power cord extends from the top of the motor housing. The pump also includes a threaded discharge port at its base, designed for efficient water expulsion.

The wide-angle float switch ensures automatic operation, turning the pump on when water levels rise and off when they fall to a predetermined level.

4. SETUP AND INSTALLATION

Proper installation is critical for the pump's performance and longevity. Consult a qualified professional if you are unsure about any steps.

1. **Sump Pit Preparation:** Ensure the sump pit is clean and free of debris. The pit should be large enough to accommodate the pump and allow the float switch to operate freely without obstruction.
2. **Discharge Piping:** Connect a discharge pipe (typically 1-1/2" or 2" NPT) to the pump's discharge port. Use a check valve in the discharge line to prevent backflow of water into the pit.
3. **Positioning the Pump:** Place the pump on a solid, level surface at the bottom of the sump pit. Ensure the pump is stable and cannot tip over.
4. **Float Switch Adjustment:** Adjust the wide-angle float switch to ensure it activates and deactivates

the pump at desired water levels. The float must have full range of motion.

5. **Electrical Connection:** Connect the pump's power cord to a properly grounded 115 Volt, 60 Hz electrical outlet. Do not use extension cords. Ensure the circuit is protected by a ground fault circuit interrupter (GFCI).
6. **Testing:** After installation, fill the sump pit with water to test the pump's operation. Verify that the pump turns on when the water level rises and turns off when it drops.

5. OPERATING INSTRUCTIONS

The Liberty Pumps Model 293 operates automatically via its wide-angle float switch.

- Once properly installed and connected to power, the pump will activate when the water level in the sump pit rises, causing the float switch to lift.
- The pump will continue to run until the water level drops and the float switch returns to its off position.
- Ensure the pump is always submerged when operating to prevent dry running, which can cause damage.
- Periodically check the sump pit for excessive debris that could interfere with pump or float operation.

6. MAINTENANCE

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

- **Monthly Check:** Disconnect power, then remove the pump from the pit. Inspect the impeller for any lodged debris (e.g., string, hair, small stones). Clean as necessary.
- **Float Switch Inspection:** Ensure the float switch moves freely and is not obstructed by debris or the pit walls.
- **Discharge Line:** Check the discharge pipe and check valve for any blockages or leaks.
- **Power Cord:** Inspect the power cord for any signs of damage, fraying, or cuts. Replace if damaged.
- **Sump Pit Cleaning:** Periodically clean the sump pit to remove sediment, dirt, and other debris that can accumulate and affect pump operation.

CAUTION: Always disconnect power before performing any maintenance or inspection.

7. TROUBLESHOOTING

Problem	Possible Cause	Solution
Pump does not run.	No power; tripped circuit breaker/GFCI; float switch stuck; motor overload.	Check power supply; reset breaker/GFCI; free float switch; allow motor to cool and reset.
Pump runs but no water is discharged.	Clogged impeller/discharge pipe; air lock; check valve installed backward.	Clear obstruction; prime pump (if applicable); correct check valve orientation.
Pump cycles too frequently.	Float switch set too low; backflow from discharge pipe; small sump pit.	Adjust float switch; check for proper check valve operation; consider larger pit.
Pump runs continuously.	Float switch stuck in "on" position; continuous water inflow; faulty float switch.	Free float switch; address water source; replace float switch.

If troubleshooting steps do not resolve the issue, contact Liberty Pumps customer support or a qualified service technician.

8. SPECIFICATIONS

Brand: Liberty Pumps

Model: 293

Color: Stainless Steel

Material: Stainless Steel

Style: Sump Pump

Power Source: 115 Volts, 60 Hz AC

Item Weight: 0.01 Ounces

Maximum Flow Rate: 84 Gallons Per Minute

Voltage: 115 Volts

Solids Handling: Up to 3/4 inch

Impeller Type: Semi-Open

Note: Specifications are subject to change without notice. Refer to product packaging or manufacturer's website for the most current information.

9. WARRANTY AND SUPPORT

Liberty Pumps products are manufactured to the highest quality standards and are backed by a limited warranty. For specific warranty terms and conditions, please refer to the warranty card included with your product or visit the official Liberty Pumps website.

For technical assistance, parts, or service inquiries, please contact Liberty Pumps customer support:

Website: www.libertypumps.com

Phone: Refer to manufacturer's website for current contact numbers.

When contacting support, please have your pump's model number (293) and serial number (if applicable) ready.