

SHYLIYU 4SDM3/9-1.5HP0V1

SHYLIYU 4SDM3/9-1.5HP0V1 Deep Well Submersible Pump User Manual

Model: 4SDM3/9-1.5HP0V1

1. INTRODUCTION

This manual provides essential information for the safe and efficient operation, installation, and maintenance of your SHYLIYU 4SDM3/9-1.5HP0V1 Deep Well Submersible Pump. Please read these instructions thoroughly before installation and use to ensure proper function and longevity of the product.

The SHYLIYU Deep Well Submersible Pump is designed for extracting groundwater from deep wells, and can also be utilized in rivers, reservoirs, and canals for various water lifting applications. It is suitable for agricultural irrigation, industrial water supply, and domestic use in mountainous regions.

2. IMPORTANT SAFETY INSTRUCTIONS

Failure to follow these safety instructions may result in electric shock, fire, serious injury, or property damage. Keep this manual for future reference.

- **Electrical Safety:** Ensure the power supply voltage (110V, 60Hz) matches the pump's requirements. All electrical connections must be performed by a qualified electrician and comply with local codes.
- **Grounding:** The pump must be properly grounded to prevent electric shock.
- **Dry Running:** Never operate the pump without water. Dry running will cause severe damage to the pump and void the warranty.
- **Submersion:** The pump is designed for full submersion in water. Ensure it is always adequately submerged during operation.
- **Cable Protection:** Protect the power cable from sharp objects, heat, and oil. Do not use the

cable to lift or lower the pump.

- **Maintenance:** Disconnect power before performing any maintenance or repairs.
- **Children and Pets:** Keep children and pets away from the pump and its operating area.

3. PRODUCT OVERVIEW AND COMPONENTS

The SHYLIYU Deep Well Submersible Pump features a durable stainless steel body and a built-in control box for convenient operation. It is designed for deep dive applications, combining the motor and pump into a single unit.

Key Components:

- **Pump Body:** Constructed from stainless steel for rust resistance and durability.
- **Motor:** Integrated into the pump unit.
- **Power Cable:** 10m (33ft) cable for electrical connection.
- **Water Outlet:** 1.25-inch copper outlet.
- **Filter Screen:** Stainless steel filter screen to prevent debris entry.
- **Check Valve:** Built-in check valve (unsealed) to prevent backflow.



Figure 1: SHYLIYU Deep Well Submersible Pump, showing its elongated stainless steel body and integrated cable.



Figure 2: Close-up of the pump's label, displaying model type (4SDM3/7), voltage (110V), frequency (60Hz), power (1.1kW, 0.75HP), and flow/head specifications.

PREMIUM EXTERNAL DETAILS



Water Outlet
1.25" Copper Outlet



Stainless steel
filter screen



304 Stainless Steel Material
Rust-proof & Durable



65.61 FT Copper Wire
Strong Conductivity

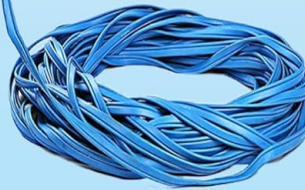


Figure 3: Detailed view of pump components, including the 1.25-inch copper water outlet, stainless steel filter screen, and 304 stainless steel material.

4. TECHNICAL SPECIFICATIONS

Parameter	Value
Model	4SDM3/9-1.5HP0V1
Voltage	110V
Frequency	60Hz
Rated Power	1.1KW / 1.5HP
Max. Flow Rate	5.2m ³ /h (23 GPM)
Max. Head	92m (302ft)

Parameter	Value
Outlet Diameter	1.25 inches
Pump OD Pipe	4 inches
Suitable Well Diameter	4.5 inches and above
Impeller Quantity	9 PCS
Cable Length	10m (33ft)
Material	Stainless Steel
Item Weight	12.7 kg (27.9 lbs)
Product Dimensions	33.46 x 3.94 x 3.94 inches

5. INSTALLATION GUIDE

5.1 Pre-Installation Checklist

- Verify that the well diameter is at least 4.5 inches to accommodate the 4-inch OD pump.
- Confirm that the power supply (110V, 60Hz) is compatible with the pump.
- Inspect the pump for any visible damage from shipping.
- Ensure all necessary piping (steel pipe, hose, or plastic pipe) and fittings are available and rated for the expected pressure.
- Prepare a secure method for lowering and retrieving the pump (e.g., safety rope attached to the pump's eyelets).

5.2 Installation Steps

1. **Connect Discharge Pipe:** Attach the appropriate discharge pipe (1.25-inch) to the pump's outlet. Ensure a watertight seal.
2. **Attach Safety Rope:** Securely fasten a non-corrosive safety rope to the designated eyelets on the pump. This rope will be used to lower and retrieve the pump and should bear the pump's weight.
3. **Lower the Pump:** Carefully lower the pump into the well using the safety rope and the discharge pipe. Ensure the pump remains vertical and does not get snagged. The pump must be fully submerged, with adequate clearance from the bottom of the well to avoid drawing in sediment.
4. **Secure the Pump:** Once at the desired depth, secure the discharge pipe and safety rope at the wellhead.
5. **Electrical Connection:** Connect the pump's power cable to the appropriate 110V, 60Hz power source. Ensure all connections are waterproof and properly insulated. A dedicated circuit with appropriate overcurrent protection is recommended.
6. **Check Valve:** The pump has a built-in check valve. For optimal performance and to prevent

water hammer, consider installing an additional in-line brass check valve if needed.

LARGE FLOW & HIGH HEAD LIFT

Meet large irrigation requirements



Max. Flow
5.2m³/h, 23GPM



Max. Head
92m/302FT



Figure 4: Diagram illustrating a submersible pump installation in a well, demonstrating water extraction for irrigation.
Note: Hose is not included.

6. OPERATING INSTRUCTIONS

6.1 Initial Start-up

- Before powering on, ensure the pump is fully submerged in water.
- Turn on the power supply to the pump. The pump should start operating.
- Monitor the discharge for water flow and check for any leaks in the piping system.
- Allow the pump to run for a few minutes to purge any air from the system.

6.2 Normal Operation

- The pump is designed for continuous operation within its specified limits.
- Avoid frequent on/off cycling, as this can reduce motor life.
- Regularly check the water level in the well to ensure the pump remains submerged.

- Monitor the pump's performance; any unusual noises or reduced flow may indicate an issue.

7. MAINTENANCE

Proper maintenance ensures the longevity and efficient operation of your submersible pump.

- **Regular Inspection:** Periodically inspect the power cable for any signs of wear, cuts, or damage. Check the discharge pipe for leaks or blockages.
- **Clean Filter Screen:** If the pump's performance decreases, the stainless steel filter screen may be partially blocked. Retrieve the pump and clean the screen of any accumulated debris.
- **Winterization (if applicable):** In regions with freezing temperatures, if the pump is not in continuous use, it should be removed from the well and stored in a frost-free environment to prevent damage from freezing water. Drain all water from the pump and piping.
- **Professional Service:** For internal repairs or complex issues, contact a qualified pump technician.



Figure 5: Close-up view of the stainless steel filter screen, which should be kept clear of debris for optimal pump performance.

8. TROUBLESHOOTING

This section provides solutions to common problems you might encounter with your pump.

Problem	Possible Cause	Solution
Pump does not start	No power; Blown fuse/tripped breaker; Motor overload; Damaged cable.	Check power supply; Reset breaker/replace fuse; Allow motor to cool; Inspect and replace cable if damaged.
Pump runs but no water or low flow	Pump not submerged; Clogged intake screen; Air in system; Leak in discharge pipe; Low well water level.	Ensure pump is submerged; Clean intake screen; Bleed air from system; Check and repair leaks; Wait for well to recharge or lower pump if possible.
Pump cycles on and off frequently	Low well water level; Faulty check valve; Pressure switch issue (if external).	Check well water level; Inspect/replace check valve; Consult a technician for pressure switch.
Excessive noise or vibration	Pump rubbing against well casing; Debris in pump; Worn bearings.	Adjust pump position; Retrieve and clean pump; Contact professional service.

9. WARRANTY AND CUSTOMER SUPPORT

9.1 Warranty Information

This SHYLIYU Deep Well Submersible Pump comes with a standard manufacturer's warranty. Please refer to the warranty card included with your purchase for specific terms, conditions, and duration. Keep your proof of purchase for warranty claims.

9.2 Customer Support

For technical assistance, spare parts, or warranty inquiries, please contact SHYLIYU customer support through the retailer where the product was purchased or visit the official SHYLIYU website for contact information.