TRUPER BOS-1LM

Truper BOS-1LM 1 HP Submersible Bullet Pump for Clean Water User Manual

Model: BOS-1LM

1. Introduction

This manual provides essential information for the safe and efficient operation of your Truper BOS-1LM 1 HP Submersible Bullet Pump. This pump is designed for extracting clean water from wells, springs, or for irrigation systems. It features a durable stainless steel body, a copper-wound motor for extended life, and an integrated electrical control unit.

2. Safety Instructions

Read all safety warnings and instructions carefully before installation and operation. Failure to follow these instructions may result in electric shock, fire, or serious injury.

- **Electrical Safety:** Ensure the power supply matches the pump's specifications. Always disconnect power before performing any maintenance or installation. Do not operate the pump with damaged cables or plugs.
- **Water Quality:** This pump is designed for clean water only. Do not use it for flammable liquids, corrosive chemicals, or water containing large abrasive particles.
- **Submersion:** The pump must be fully submerged during operation to prevent overheating. Ensure adequate water level.
- **Installation:** Securely install the pump using appropriate suspension methods. Ensure all connections are watertight.
- **Children and Pets:** Keep children and pets away from the pump and its operating area.
- **Thermal Protection:** The pump is equipped with a thermal protector to prevent motor damage from overheating or blockage. If the pump stops unexpectedly, allow it to cool down before restarting and investigate the cause.

3. Product Components

Familiarize yourself with the main components of your Truper BOS-1LM pump:

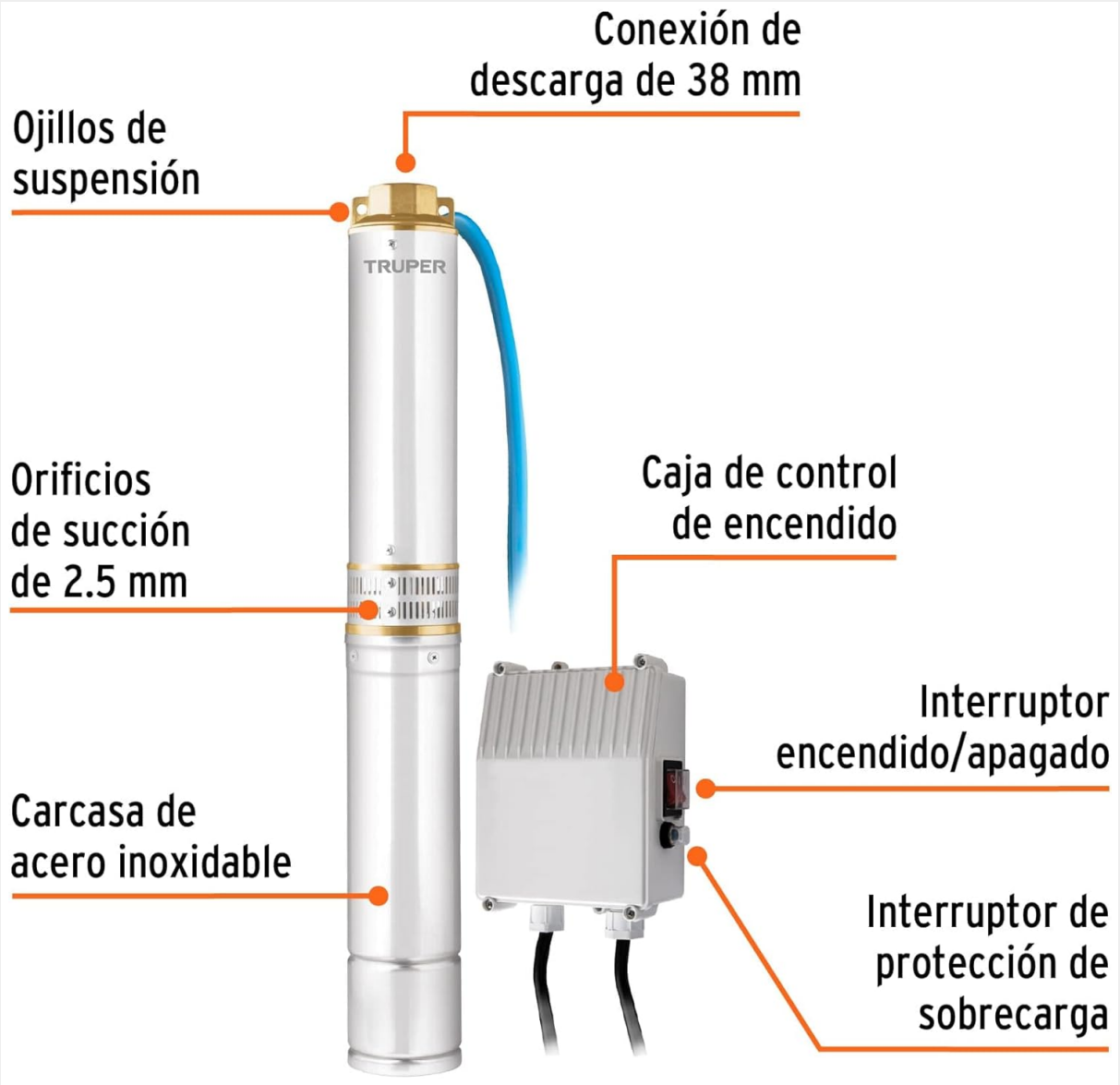

Image 3.1: Labeled diagram of the Truper BOS-1LM pump and its control unit. Key components include: Suspension Eyelets (Ojos de suspensión), 2.5 mm Suction Holes (Orificios de succión de 2.5 mm), Stainless Steel Casing (Carcasa de acero inoxidable), 38 mm Discharge Connection (Conexión de descarga de 38 mm), Power Control Box (Caja de control de encendido), On/Off Switch (Interruptor encendido/apagado), and Overload Protection Switch (Interruptor de protección de sobrecarga).

4. Setup

1. **Unpacking:** Carefully remove the pump and all accessories from the packaging. Inspect for any damage.
2. **Suspension:** Attach a strong rope or cable to the suspension eyelets at the top of the pump. This will be used to lower and retrieve the pump. Do not use the power cable for suspension.
3. **Discharge Connection:** Connect a 38 mm (1.5 inch) discharge hose or pipe to the pump's discharge connection. Ensure a secure and leak-free connection.
4. **Control Unit Placement:** Mount the electrical control unit in a dry, accessible location, away from direct water exposure.
5. **Electrical Connection:** Connect the pump's power cable to the control unit. Then, connect the control unit to a suitable grounded power outlet. Ensure the power supply matches the pump's voltage and frequency requirements.
6. **Lowering the Pump:** Slowly lower the pump into the water source using the suspension rope.

Ensure the pump is fully submerged and rests vertically, not touching the bottom or sides of the well/tank.

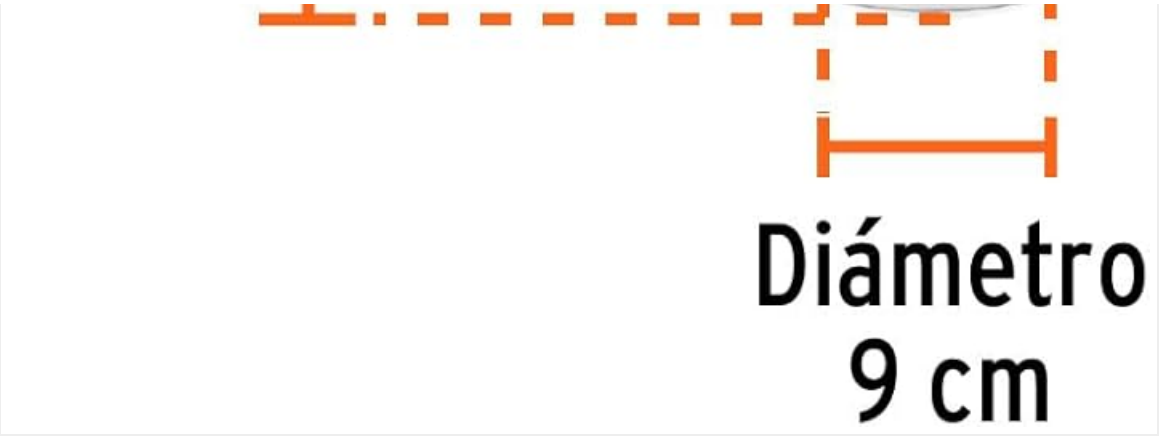

Image 4.1: The Truper BOS-1LM pump measures 71 cm in height and 9 cm in diameter, indicating its compact 'bullet' design suitable for narrow spaces.

5. Operating Instructions

Once the pump is properly installed and submerged, follow these steps for operation:

1. **Power On:** Ensure the overload protection switch on the control unit is in the 'ON' position. Press the 'ON' button on the control unit to start the pump.
2. **Monitor Flow:** Observe the water flow from the discharge. The pump should begin pumping water immediately.
3. **Power Off:** To stop the pump, press the 'OFF' button on the control unit.
4. **Performance Curve:** Refer to the performance curve to understand the pump's flow rate (L/min) at different discharge heights (m). This helps in optimizing usage for your specific needs.

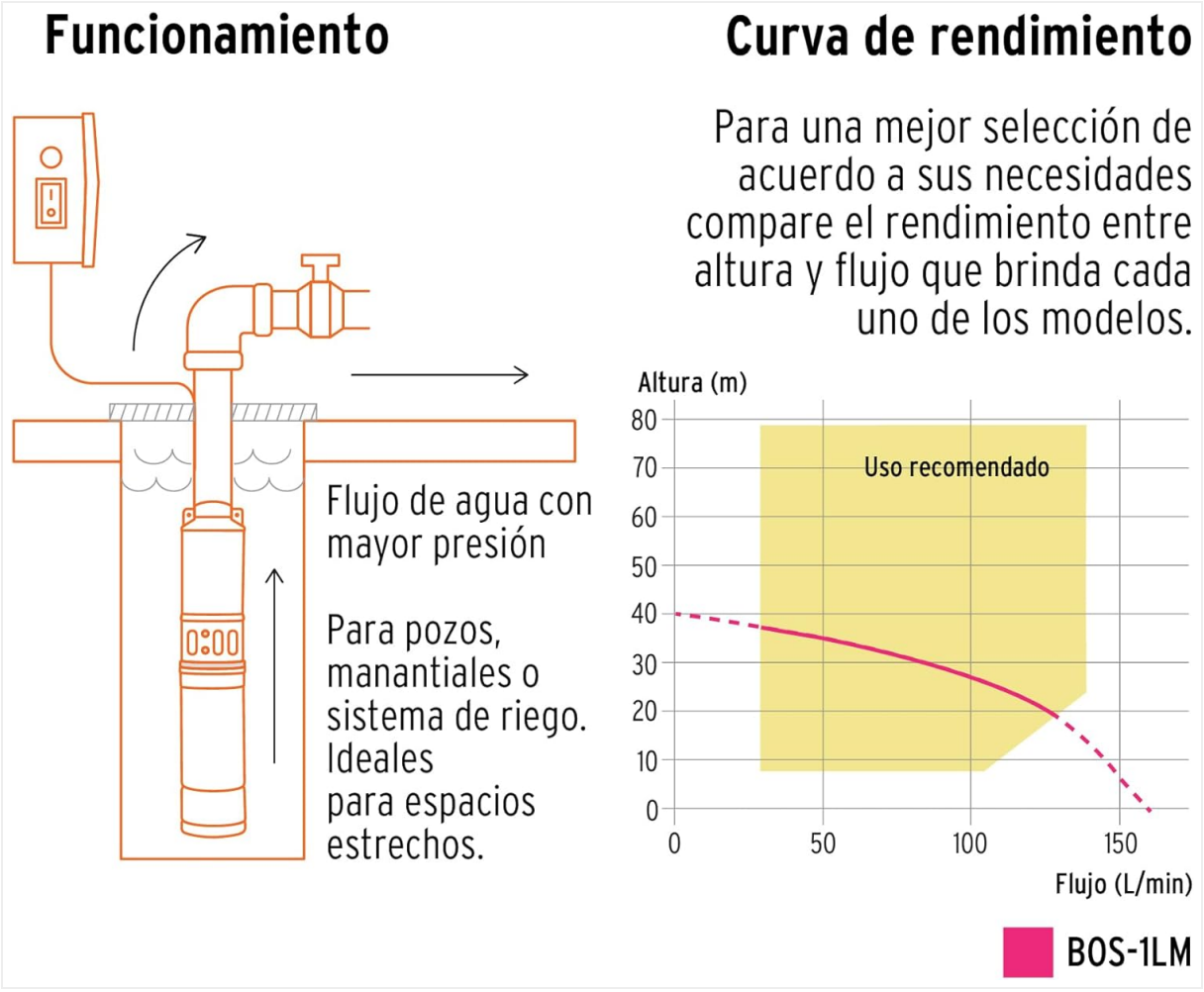

Image 5.1: This image illustrates the pump's operation, showing it submerged in a well, pumping water with increased pressure. It also includes a performance curve graph, indicating the recommended use area and the relationship between pumping height (Altura in meters) and flow rate (Flujo in L/min) for the BOS-1LM model.

6. Maintenance

Regular maintenance ensures the longevity and optimal performance of your pump.

- **Filter Cleaning:** The pump has a filtering grid for particles up to 1.5 mm. Periodically inspect and clean the suction holes and filter to prevent blockages and maintain efficient flow.
- **Inspection:** Regularly inspect the pump body, power cable, and discharge hose for any signs of wear, damage, or corrosion. Replace damaged components immediately.
- **Storage:** If the pump will not be used for an extended period, clean it thoroughly, drain all water, and store it in a dry, frost-free location.
- **Thermal Protector:** The thermal protector automatically shuts off the motor if it overheats. If this occurs, disconnect power, allow the pump to cool, and check for blockages or low water levels before restarting.

7. Troubleshooting

Before contacting support, review these common issues and solutions:

Problem	Possible Cause	Solution
Pump does not start	No power; Thermal protector tripped; Motor blockage	Check power supply and connections; Allow pump to cool and reset; Inspect for and clear any blockages.
Low or no water flow	Low water level; Clogged filter/suction; Kinked or blocked discharge hose	Ensure pump is fully submerged; Clean suction holes and filter; Check and clear discharge hose.
Pump runs but no water	Air lock; Pump not fully submerged	Raise and lower pump slightly to release air; Ensure full submersion.
Excessive vibration/noise	Pump not properly suspended; Debris in impeller	Adjust suspension; Disconnect power and inspect impeller for debris.

8. Specifications

Technical specifications for the Truper BOS-1LM pump:

Feature	Specification
Model Number	BOS-1LM
Power	1 HP (750 W)
Material	Stainless Steel, Copper
Power Source	Electric Cable
Max Flow Rate	6000 Liters per hour (9600 L/h on box, using 6000 L/h from specs)

Feature	Specification
Max Height (Head)	40 meters
Particle Filter Size	Up to 1.5 mm
Product Dimensions (L x W x H)	9 x 9 x 71 cm
Weight	13.72 kg
Discharge Connection	38 mm

9. Warranty and Support

For warranty information or technical support, please refer to the documentation included with your purchase or visit the official TRUPER website. Keep your purchase receipt as proof of purchase for any warranty claims.

TRUPER Contact Information:

- Website: www.truper.com (Please check for local contact details)