

Pedrollo PSG 48TPM070A1U

Pedrollo Top Multi 2 Electric Submersible Pump User Manual

MODEL: PSG 48TPM070A1U

1. Introduction

This user manual provides comprehensive instructions for the safe and efficient installation, operation, and maintenance of the Pedrollo Top Multi 2 multi-stage submersible electric pump. This pump is specifically designed for handling clear water in various applications, including domestic, agricultural, and industrial uses. Please read this manual thoroughly before installation and operation to ensure proper use and longevity of the product.

2. Safety Information

Always adhere to local regulations and safety standards when installing, operating, or maintaining the pump. Failure to do so may result in injury, damage to the equipment, or property damage.

- **Electrical Safety:** Ensure the power supply matches the pump's specifications (220 Volts, Monophase). All electrical connections must be performed by a qualified electrician and comply with national and local electrical codes. Disconnect power before any installation or maintenance.
- **Water Safety:** This pump is designed for clear water. Do not use it for flammable, corrosive, or explosive liquids.
- **Handling:** The pump weighs approximately 9.4 kg. Use appropriate lifting techniques or assistance when moving the pump to prevent injury.
- **Children and Unauthorized Personnel:** Keep children and unauthorized personnel away from the pump during operation.
- **Overheating Protection:** The pump is equipped with thermal protection. If the pump stops unexpectedly, allow it to cool down before attempting to restart.

3. Product Overview



Image: Pedrollo Top Multi 2 Electric Submersible Pump. This image displays the orange and black submersible pump with its power cable and discharge outlet. The 'TOP MULTI' and 'pedrollo' logos are visible on the side.

The Pedrollo Top Multi 2 is a robust multi-stage submersible pump. Key features include:

- Flow rate up to 80 liters per minute (4.8 m³/h).
- Discharge head up to 42 meters.
- Motor power of 0.55 kW (0.75 HP).
- Constructed with technopolymer for durability.

4. Setup and Installation

4.1 Unpacking and Inspection

1. Carefully remove the pump from its packaging.
2. Inspect the pump for any visible damage that may have occurred during transit. Do not install if damaged.
3. Verify that all components listed in the packing list are present.

4.2 Electrical Connection

1. Ensure the power supply is 220 Volts, Monophase, and has adequate current capacity for a 0.75 HP motor.
2. Connect the pump to a grounded electrical outlet protected by a residual current device (RCD) for safety.
3. Do not use extension cords unless absolutely necessary, and ensure they are rated for outdoor use and the pump's power requirements.

4.3 Placement and Submersion

1. The pump must be fully submerged in clear water during operation. Ensure the water level is above the minimum operating level indicated on the pump or in the technical specifications.
2. Position the pump on a stable, flat surface to prevent it from tipping over. Avoid placing it directly on muddy or sandy bottoms to prevent clogging.
3. Connect the discharge hose or pipe securely to the pump's outlet. Ensure there are no kinks or obstructions in the discharge line.

5. Operating Instructions

5.1 Initial Start-up

1. Before starting, ensure the pump is correctly installed and fully submerged.
2. Connect the pump to the power supply. The pump should start automatically if equipped with a float switch, or manually if not.
3. Observe the pump for the first few minutes of operation to ensure it is pumping water smoothly and without unusual noises or vibrations.

5.2 Normal Operation

- The pump is designed for continuous operation within its specified limits.
- Monitor the water level to ensure the pump remains submerged. Running the pump dry will cause severe damage.
- The maximum flow rate is 7200 Liters per hour, and the maximum pressure is 4.2 Bars. Do not exceed these limits.

6. Maintenance

Regular maintenance ensures optimal performance and extends the life of your pump. Always disconnect the pump from the power supply before performing any maintenance.

6.1 Regular Checks

- Periodically check the power cable for any signs of damage or wear.
- Inspect the pump's intake screen for blockages from debris.
- Ensure the float switch (if present) moves freely and is not obstructed.

6.2 Cleaning

- If the pump's performance decreases, it may be due to debris accumulation. Remove the pump from the water and clean the intake screen and impeller area.

- Use clear water to rinse off any dirt or sediment. Do not use harsh chemicals or abrasive materials.

6.3 Storage

- If the pump will not be used for an extended period, especially in freezing temperatures, drain all water from the pump and hoses.
- Store the pump in a dry, frost-free location.

7. Troubleshooting

| Problem | Possible Cause | Solution |
|---|---|--|
| Pump does not start | No power supply; Thermal overload activated; Float switch stuck; Impeller jammed. | Check power connection and circuit breaker; Allow pump to cool down; Check float switch position; Clean impeller area. |
| Pump runs but no water is discharged or flow is low | Intake screen clogged; Discharge hose kinked or blocked; Water level too low; Air lock. | Clean intake screen; Clear hose obstruction; Ensure pump is fully submerged; Tilt pump to release air. |
| Pump stops frequently | Thermal overload due to overheating; Water level fluctuating; Debris interfering with float switch. | Check for blockages; Ensure adequate water level; Clean float switch area. |
| Unusual noise or vibration | Debris in impeller; Pump not stable; Worn bearings (professional service required). | Clean impeller; Secure pump on a stable surface; Contact qualified technician. |

8. Specifications

| Attribute | Value |
|--------------------|--------------------------------|
| Manufacturer | PEDROLLO |
| Brand | Pedrollo |
| Model Reference | PSG 48TPM070A1U |
| Color | Red |
| Material | Technopolymer |
| Power Supply Type | Monophase |
| Voltage | 220 Volts |
| Horsepower (HP) | 0.75 |
| Quantity of Items | 1 |
| Maximum Flow Rate | 7200 Liters per hour |
| Maximum Pressure | 4.2 Bars |
| Package Dimensions | 41 x 24 x 20 cm; 9.4 kilograms |

| Attribute | Value |
|--------------------------|--|
| ASIN | B00ITSN0ZC |
| UPC | 662425080472 |
| Spare Parts Availability | Information unavailable on spare parts |

9. Warranty and Support

Specific warranty information for the Pedrollo Top Multi 2 pump is not provided in the product details. Please refer to the warranty card included with your purchase or contact the retailer or manufacturer directly for details regarding warranty coverage and terms.

For technical support, spare parts, or service inquiries, please contact your authorized Pedrollo dealer or the seller from whom you purchased the product. Provide your model number (PSG 48TPM070A1U) and serial number (if applicable) when seeking assistance.