Pedrollo Dm10

Pedrollo Dm10 1Hp Electric Pump User Manual

Model: Dm10 | Brand: Pedrollo

1. Introduction

This manual provides essential information for the safe and efficient installation, operation, and maintenance of your Pedrollo Dm10 1Hp Electric Pump. Please read this manual thoroughly before using the pump and retain it for future reference.

The Pedrollo Dm10 electric pump is designed for draining clear or slightly dirty water. It is suitable for domestic, civil, and professional applications, including dewatering flooded areas such as basements, garages, and for emptying swimming pools or bathtubs. This pump is also effective for the disposal of non-corrosive wastewater. Its reliability is a key feature, especially in fixed installations with automatic operation.

Key features include a flow rate of up to 300 liters/minute (18 m^3/h), a head of up to 16 meters, and a 0.75 kW (1 HP) motor. It comes with a 5-meter cable and a Schuko plug.

2. Safety Information

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

- **Electrical Safety:** Ensure the power supply matches the pump's voltage (220-240V AC). Always connect the pump to a properly grounded outlet. Do not operate the pump with damaged cables or plugs. Never touch the pump or its electrical connections with wet hands.
- **Water Quality:** This pump is designed for clear or slightly dirty water. Do not use it for flammable, corrosive, explosive, or chemically aggressive liquids.
- **Submersion:** The pump must be fully submerged during operation to ensure proper cooling. Operating the pump dry will cause severe damage.
- **Children and Pets:** Keep children and pets away from the pump and the area of operation.
- **Maintenance:** Always disconnect the pump from the power supply before performing any maintenance, cleaning, or inspection.
- **Installation:** Ensure the pump is placed on a stable, level surface. Do not suspend the pump by its power cable.

3. Product Overview

The Pedrollo Dm10 is a robust electric submersible pump designed for efficient water transfer and drainage. It features a durable construction and an integrated float switch for automatic operation.

Figure 1: Pedrollo Dm10 1Hp Electric Pump. This image shows the pump's silver body, blue base, orange handle, and power cable with a float switch, indicating its compact and functional design.

Key Components:

- **Pump Body:** Houses the motor and impeller.
- **Base/Inlet Grille:** Allows water entry and filters out larger debris.
- **Discharge Outlet:** Connects to the discharge hose.
- **Float Switch:** Automatically turns the pump on/off based on water level.
- **Power Cable:** Connects the pump to the electrical supply.
- **Handle:** For easy transport and positioning.

4. Setup

1. **Unpacking:** Carefully remove the pump from its packaging. Inspect for any signs of damage during transit.
2. **Placement:** Position the pump on a stable, flat surface in the area to be drained. Ensure the pump is fully submerged in water during operation. The float switch must have sufficient space to move freely to activate and deactivate the pump.
3. **Discharge Hose Connection:** Connect a suitable discharge hose to the pump's outlet. Ensure the connection is secure to prevent leaks. The hose should be routed to a safe drainage point, away from the area being dewatered.
4. **Electrical Connection:** Connect the pump's 5-meter power cable with the Schuko plug to a grounded 220-240V AC electrical outlet. Ensure the outlet is protected by a Residual Current Device (RCD) for added safety.

5. **Float Switch Adjustment:** Adjust the position of the float switch cable to set the desired ON/OFF water levels. The pump will start when the float rises to a horizontal position and stop when it drops below a certain level.

5. Operating Instructions

Automatic Operation:

The Pedrollo Dm10 pump is equipped with an integrated float switch for automatic operation. Once connected to power and submerged, the pump will automatically start when the water level rises and lifts the float switch. It will then pump water until the level drops sufficiently for the float switch to fall, turning the pump off.

- Ensure the float switch is free to move and not obstructed by walls or debris.
- Verify that the discharge hose is clear and properly routed.
- Plug the pump into a suitable electrical outlet. The pump will activate when the water level reaches the set 'ON' point of the float switch.
- The pump will stop automatically when the water level drops to the set 'OFF' point.

Manual Operation (if applicable):

While primarily designed for automatic use, some models may allow for manual override by securing the float switch in an 'ON' position. However, this requires constant supervision to prevent dry running and pump damage. Always refer to specific model instructions for manual operation.

6. Maintenance

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

- **Cleaning the Inlet Grille:** Periodically inspect and clean the inlet grille at the base of the pump to remove any debris (leaves, small stones, etc.) that may obstruct water flow.
- **Impeller Inspection:** If the pump's performance decreases, the impeller might be clogged. Disconnect power, remove the base plate (if accessible), and carefully clear any obstructions from the impeller.
- **Cable and Plug Inspection:** Regularly check the power cable and plug for any signs of damage, cuts, or fraying. Replace immediately if damage is found.
- **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.

7. Troubleshooting

Before contacting technical support, review the following common issues and solutions:

Problem	Possible Cause	Solution

Problem	Possible Cause	Solution
Pump does not start.	No power supply. Float switch not activated. Motor overload/thermal protection activated.	Check power connection, fuse, or circuit breaker. Ensure water level is high enough to lift the float switch. Check float switch movement. Disconnect power, let pump cool down for 30 minutes, then reconnect.
Pump runs but no water is discharged or flow is low.	Inlet grille or impeller clogged. Discharge hose kinked or blocked. Pump not fully submerged.	Disconnect power and clean the inlet grille and impeller. Check and clear the discharge hose. Ensure the pump is fully immersed in water.
Pump stops unexpectedly.	Water level too low (float switch deactivated). Thermal overload protection activated.	This is normal operation if the water level has dropped. Disconnect power, let pump cool down, check for obstructions, then restart.

If problems persist after following these steps, please contact qualified service personnel.

8. Specifications

Manufacturer	Pedrollo
Model Reference	Dm 10 5MT
Power	0.75 kW (1 HP)
Voltage	220-240 Volts (AC)
Max Flow Rate	300 Liters per minute (18 m^3/h)
Max Head	16 meters
Cable Length	5 meters
Power Source	Electric Cable
Item Weight	10 kilograms

9. Warranty and Support

Specific warranty details are typically provided at the point of purchase or within separate documentation accompanying the product. Please refer to your purchase receipt or contact the retailer for warranty information.

For technical support, spare parts, or service inquiries, please contact your authorized Pedrollo dealer or the customer service department of your retailer. When contacting support, please have your pump's model number (Dm 10 5MT) and purchase date available.

Related Documents - Dm10

	Pedrollo TRITUS Submersible Pumps with Grinder: Technical Specifications and Applications Explore the technical specifications, performance curves, dimensions, and installation guidelines for Pedrollo TRITUS submersible pumps with grinders. Ideal for domestic and civil wastewater management.
	Pedrollo BC BICANAL Submersible Pumps: Technical Specifications and Performance Data Detailed technical specifications, performance curves, dimensions, and construction characteristics for the Pedrollo BC BICANAL series of submersible pumps, designed for efficient wastewater and dirty water drainage in domestic, civil, and industrial applications. Features BICANAL impeller for solids up to 50mm.
	Pedrollo E1-E2 Electronic Electrical Panels for Pumps Comprehensive guide to Pedrollo E1 and E2 electronic control panels, designed for managing single or dual pump systems in residential, commercial, and industrial settings. Features include selectable operating modes, dry-running protection, and intuitive user interfaces for efficient pump operation.
	Pedrollo TOP-FLOOR Submersible Drainage Pumps: Performance and Specifications Explore the Pedrollo TOP-FLOOR series of submersible drainage pumps, designed for clear water applications. Learn about their performance range, application limits, construction details, and installation suitability for domestic emergencies.
	Pedrollo VX Vortex Submersible Pumps - Technical Specifications and Performance Curves Detailed technical specifications, performance curves, dimensions, and installation guidelines for Pedrollo VX Vortex submersible pumps. Covers models VX40/50, VX55/50, VX40/65, VX55/65, VX75/65, VX40/80, VX55/80, and VX75/80.


BC Submersible pumps TWO-CHANNEL

[BC TWO-CHANNEL Submersible Pumps: Technical Data, Performance, and Applications]

Comprehensive technical specifications, performance curves, installation details, and material information for the BC TWO-CHANNEL series of submersible pumps by Pedrollo. Ideal for sewage, civil, and industrial use.