

SAFETY INSTRUCTIONS (PMP013 / PMP014)

1. General Rules and Mechanical Installation

- Read the instruction manual thoroughly before installation.
- The pump must be rigidly secured to the surface using the 4 mounting bolts in the base.
- The **brass connectors** must be screwed into the pump body after wrapping the threads with the included **Teflon tape** to ensure a tight seal and prevent air intake.
- Hoses on the brass barbs must be securely tightened using the **hose clamps set** to prevent them from slipping off under pressure.
- The **external filter** must be installed on the end of the suction hose. Operating without the filter risks sucking in solid particles, which can jam the impeller at 3600 RPM.

2. Electrical Safety and Connection

- The pump requires a proper DC power supply: **12V for the PMP013 model** and **24V for the PMP014 model**. Do not connect the devices directly to a 230V AC mains supply or incorrect voltage.
- When connecting the **2 battery clamps**, strictly observe correct polarity: red clamp to the **positive (+)** terminal, black clamp to the **negative (-)** terminal. Reverse connection can permanently damage the motor.
- Ensure the battery clamps are tightly gripped onto the power source terminals – a loose connection will cause sparking and overheating of the contacts.
- Always disconnect the clamps from the battery before performing any maintenance on the pump.

3. Operational Safety and Limitations

- **The maximum duty cycle is 30 minutes.** After this period, turn off the pump for at least 15-20 minutes to allow the motor to cool down completely.
- **Never run the pump dry.** Despite the self-priming capability up to 5 meters, the pump chamber must be primed with liquid before the first start.
- Do not exceed the maximum head lift (3-5 m) or suction depth (5 m) – doing so may overload the 180W motor.
- Pumping gasoline, alcohols, solvents, or any explosive and flammable liquids is strictly prohibited.
- The cast iron body can get hot during operation – avoid touching the housing without protective gloves.