

GENERAL SAFETY INSTRUCTIONS (OSH)

Mobile fuel distribution sets "Mini CPN" by BAM

Applies to 12V and 24V DC models with electronic LCD counter:

PMP034, PMP035, PMP037, PMP038

1. Intended use of the device and absolute prohibitions

- **Permitted liquids:** Diesel fuel (DNF), kerosene, biodiesel, engine, heating and machine oils.
- **Strict prohibition of use for gasoline:** Sets they do not have ATEX explosion-proof certification for gasoline vapors. Pumping gasoline or other flammable liquids with a low flash point (including alcohols and solvents) may cause an explosion!
- **Prohibition of corrosive substances:** The devices are not designed for acids, alkalis, solvents or water-based fluids (e.g. AdBlue).
- **Prohibition of unsupervised work:** Leaving the pump running without constant operator supervision is prohibited.

2. Preparing the operator and the workstation

- **Personal protective equipment:** The operator must wear safety glasses, oil-resistant work gloves (e.g. nitrile) and protective clothing.
- **Fire protection:** Within a radius of 5 meters from the site, it is strictly forbidden to use open fire, smoke or perform work that causes sparks (e.g. grinding).
- **Fire and environmental protection:** The refueling station must be equipped with a working powder fire extinguisher (minimum 4 kg, ABC type) and a set of universal sorbents to neutralize any fuel leaks.
- **Ventilation requirement:** Work should only be carried out outdoors or in rooms with efficient forced/extract ventilation.

3. Electrical Safety (12V / 24V DC Power Supply)

- **Voltage Compatibility:** Before connecting, make sure that the voltage of the power source (battery) corresponds to the rated voltage of the pump stated on the nameplate (**12V or 24V**). Connecting a 12V pump to 24V may cause the motor to burn out and cause a fire!
- **Power connection order:** Before connecting the clamps ("frogs"), make sure that the main switch on the pump is in the off position (**0 / OFF**). This prevents sparking at the battery contacts in the fuel vapor zone.
- **Correct polarity:** Always connect the positive cable first (**red crocodile to "+"**), then the negative cable (**black crocodile clip for "-"**).
- **Condition of wires:** It is prohibited to use the device with damaged, worn or temporarily repaired insulation of power cables.

4. Principles of safe operation and protection of the pump

- **Dry-running protection:** The pump cannot run dry for more than 15–30 seconds. Diesel fuel lubricates and cools the working parts of the unit.
- **Limited Duty Cycle (Overheating):** Pump motors powered by DC (12V/24V) operate in intermittent mode. The maximum continuous operation time is **30 minutes**. After this time, it is essential to turn off the device for at least 15–20 minutes to allow the engine to cool down completely.
- **Correct installation of accessories:** Before starting, check the tightness of the hose clamps on the suction hose (with the basket filter) and the discharge hose (at the gun/meter). Leaks on the suction side cause air to enter and dry out the pump.

5. Safe operation and maintenance of the digital LCD counter

- **Protection against water hammer:** The filling nozzle should be opened and closed smoothly. A sudden, violent shutoff of flow while the pump is running generates a pressure surge that can damage the sensitive measuring turbine of the digital meter or rupture its housing.
- **Control panel operation (RESET / CAL):** The buttons on the LCD panel should be pressed with your finger, without using sharp tools (e.g. screwdrivers) that could puncture the protective membrane and damage the electronics.
- **Power supply and battery replacement:**
 - The LCD counter is powered by internal batteries (usually 2x AAA).
 - When the low battery icon appears on the display, replace the batteries immediately to avoid fuel count errors or the screen going blank during operation.
 - Only replace the battery in a clean and dry environment, ensuring that the battery cover seal is positioned correctly (protection against the ingress of moisture and fuel vapors).
- **Protection against moisture and flooding:** Although the meter housing protects it against splashes, it is prohibited to immerse the meter in liquids or wash it with pressure washers.
- **Cleaning the display:** The LCD screen should be cleaned with a soft, damp cloth. Avoid using harsh chemicals (e.g., nitro, acetone), which will permanently dull the display's plastic glass.
- **Calibration check:** The accuracy of electronic readings depends on the fluid's viscosity and temperature. Regularly verify the meter readings using a standard container (e.g., a measuring jug). If discrepancies occur, perform electronic calibration using the buttons (according to the factory instructions).

6. Emergency procedures

- **Power failure or leak:** If a hose bursts, a leaky meter or any other leak occurs, immediately turn off the pump using the main switch and remove the clamps from the battery.
- **Spill handling:** Immediately cover spilled fuel with sorbent, sand, or sawdust. Collect used materials in a sealed container and dispose of them according to regulations. Avoid contamination of soil and groundwater.
- **Fire:** Cut off the electrical supply (if safe to do so). Use only dry powder or carbon dioxide (CO₂) extinguishers to extinguish the fire. **Never extinguish burning engine oil or diesel fuel with water.**