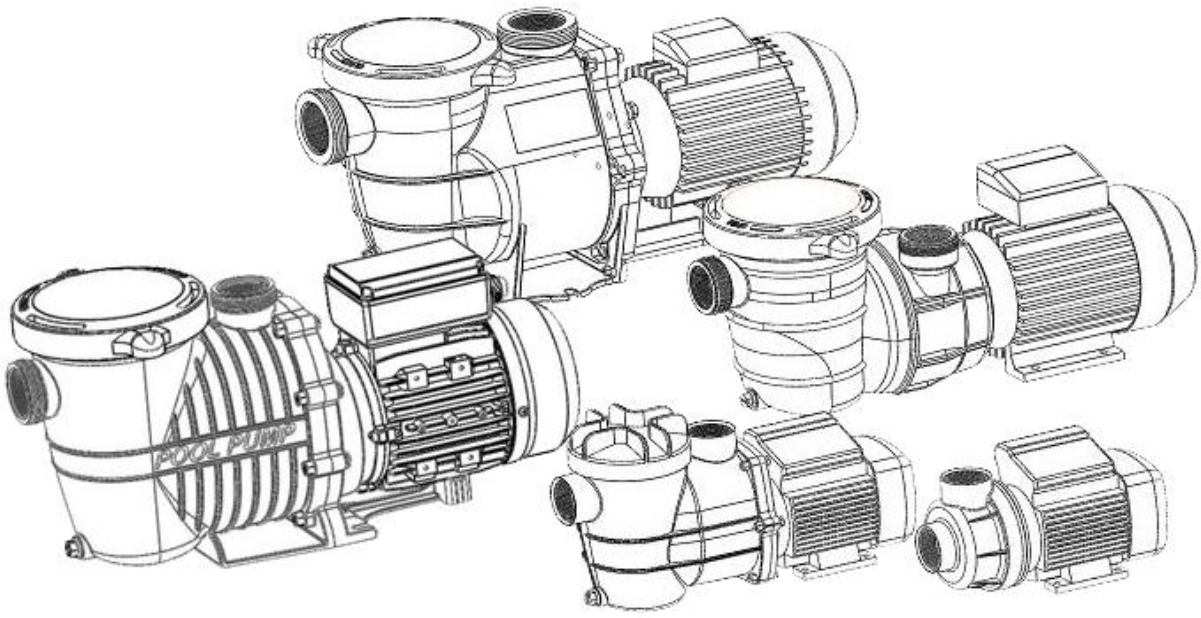
BIANCO PUMPZ

Pump Manual



CE

For your protection, please read these important instructions first.

WARNING

This equipment must be installed and serviced by a qualified technician. Improper installation can create electrical hazards which could result in property damage, serious injury or death. Improper installation will void the warranty.

GENERAL SAFETY RULES

1. The products mentioned in this manual are specially designed for the pre-filtering and re-circulation of water in swimming pools and spas.
2. They are designed to work with clean water at a temperature not exceeding **40°C**
3. Any modification of the pump requires the **prior consent of the manufacturer**. Original replacement parts and accessories authorized by the manufacturer ensure a high level of safety. The manufacturer of the pump assumes no liability for the damage and injuries **caused by un-authorised replacement parts and accessories**.
4. During operation, some parts of the pump are subject to dangerous electric voltage. Work may only be performed on each pump or on the equipment connected to it after **disconnecting them from the main power and after disconnecting the starting device.**
5. The user should make sure that assembly and maintenance tasks are carried out by **qualified authorized persons** and that these persons have first carefully read the instructions for service and installation.
6. The operating safety of the pump is only guaranteed if the installation and service instructions are correctly followed.
78. In the event of defective operation or fault, contact the technical support department of the manufacturer or its nearest authorized agents.
9. If the supply cord is damaged, it must be replaced by the manufacturer or its service agent or a similarly qualified person to avoid a hazard.
10. The pump must not be used when people are in the water.
11. The pump must be supplied through a residual current device (RCD) having a rated residual operating current not exceeding 30mA.
12. This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
13. Children should be supervised to ensure that they do not play with the appliance.
14. The pump must be protected from running dry.

LOCATION

The pump must be installed and placed to an enough distance away from the pool or water source, to avoid the water from the pool or water source, to avoid the water pouring or flowing onto the pump.
The pump must also be in a position that enables easy access for periodic servicing.
Care must also be taken to position the pump in an area that is **free from flooding in a well ventilated and dry area. Protect the pump from the elements!**

INSTALLATION

A few simple precautions during installation will ensure years of trouble free operation.

1. The pump suction line should not be smaller than 1 1/2" (40mm imperial) or 50mm true metric.
2. The suction line is to have as few bends or elbows as possible. There must not be an air trap on the suction line.
3. Installation shall arrange on a solid, flat foundation with the pump bolted securely to it.
4. **The pump electrical cable must be wired for the proper voltage and current in accordance with the wiring instructions.**
5. All wiring (electrical) work must be carried out **by licensed electricians** and must be installed in accordance to the local codes and standards.
6. The motor must be grounded.
7. The weight of any pipe work and fittings is to be independently supported and not carried by the pump.
8. The maximum total head (Hmax) of the pump (in metres) shown on the pump label should be noted by the installer.
9. The permissible temperature is **> 0˚C and < 40˚C (fluid temperature)**. The pump should never be operated outside of these temperatures, or damage may occur.

ELECTRICAL CONNECTION

Check that the information on the nameplate corresponds to the power supply.
Employ a competent electrician to ensure wiring installation is made in accordance with any local electrical codes. Every motor requires either a **fused disconnect switch or a circuit breaker.**
A SINGLE PHASE MOTOR has a built in thermal overload switch.

PRIMING

The pump will prime and re-prime providing the filter tank water and there is sufficient supply from the suction point.
If you lose water from the filter tank it will be necessary to re-fill it before starting.

1. Remove the translucent lid and fill the filter tank with water.
2. Replace the lid ensuring **the o-ring is correctly** located and start the pump.

After you have done this allow a **few minutes (maximum) running** for the pump to start delivering water.

▲WARNING

High suction lift or long suction lines will require additional time to prime and can severely affect the performance of the pump. If the pump will not prime, repeat step 1 and 2 above.

Mechanical seals may need to be replaced if the pump is run without water.

ENSURE that there is always adequate water in the filter tank before you start up.
If you are unable to prime the pump please see the trouble-shooting guide.
ENSURE that all suction and discharge valves are open before you start the pump, otherwise this will result in damage to the pump.

MAINTENANCE

The strainer basket in the filter tank should be inspected and cleaned at **regular intervals**.

1. Remove lid and lift out basket.
2. Remove debris and hose off with clean water if necessary.
3. Inspect the lid gasket, lubricate with **SILICON** based grease only if needed. If it is damaged, please replace.
4. Replace the strainer.
5. Re-prime the filter tank.
6. Correctly locate the o-ring.
7. Replace the lid **(hand tighten)** only.
8. Switch on pump.

In Climates where the pump may be **exposed to frost or freezing**, care must be taken to ensure the pump is protected from damage.
It is **recommended** that if the pump is not used during the winter period it should be **drained completely** and stored in a dry location. Do not replace the drain plug. Store it in a safe place when not use. An example would be store plug in the filter tank basket.

When you re activate the pump after a period of rest, ensure all seals and o-rings are in operational condition, re-grease if necessary, replace if unsure of condition.
Check that the motor shaft moves freely before re-activation.

▲WARNING

1. When connecting electric cables to the motor of the pump, be careful to correctly arrange them inside the connection box, verify that no bits of cable are left inside the box on closing it. **See that the ground wire is correctly connected**. When connecting the motor, follow the wiring diagram supplied with the pump.
2. Be especially careful **that no water enters the motor or electrical parts under voltage**.
3. In the event that the planned use is not as specified, adaptations and supplementary technical rules may be necessary.
4. Before starting the pump, verify the calibration of the electrical protection devices of the motor and that the protections against electrical and mechanical contacts are correctly positioned and attached.

5. It is advisable to follow the steps listed below before handling the pump in any way.
   a) Turn off the voltage to the pump.
   b) Lock starting devices.
   c) Verify that there is no voltage in the circuits, including ancillary devices and auxiliary circuits.
   d) Wait until motor stops completely.

The above list should be considered indicative and not binding for the purpose of safety ;specific safety rules may exist in particular regulations.

INSPECT ON A REGULAR BASIS

1. The correct attachments of the mechanical parts and of the support screws of the pump.
2. The correct position, attachment and condition of the supply cables and of the insulating parts.
3. The temperature of the motor. In the event of any excessive high, stop immediately and have it repaired.
4. The vibration of the pump. In the case of any excessive high, stop immediately and have it repaired.

▲CAUTION

Owing to the complexity of the cases covered, the instructions for installation, use and maintenance contained in this manual do not attempt to examine all possible and imaginable cases of service and maintenance. If supplementary instructions are required or if special problems arise, do not hesitate to contact the distributor or to address directly the manufacturer of the pump.

TROUBLE SHOOTING

SYMPTOMS	PROBABLE CAUSE	WHAT TO DO
Pump will not prime	Suction air leak	Make sure water level is correct through suction points. Ensure baskets and strainers are free of debris. Tighten all fittings/unions on the suction side of the pump, remove and replace mechanical seal.
	No water in the pump	Make sure the filter tank if full
	Closed valves or blocked lines	Open all valves in system, clean skimmer and pump basket, check pump impeller of blockage
Motor will not run	No power to motor	Check that all electrical switches are on. Ensure the circuit breakers are properly set. Check if timer is set properly. Check motor wiring at terminals
	Pump jammed	With power switched off, turn pump shaft (this should spin freely).
Low flow	Dirty filter	Backwash or clean cartridge.
	Dirty skimmer and pump strainer	Clean skimmer and pump strainer.
	Suction air leak	Replace pipe work
	Closed valve or blocked line	Open valve or clear blockage
Motor runs hot	Low or incorrect voltage	Supply to be correct by electrician. Motor running hot to touch is normal. Thermal overload protector will function to turn them off if there is an overload or excessive high temperature problem.
	Installed in direct sunlight	Protect the pumps from the elements
	Poor ventilation	Do not tightly cover or enclose motor
Noise pump operation	Bad/Worn bearing	Have an electrician replace
	Air leak in suction	Replace suction hose
	Suction blockage	Locate and clean blockage
	Disturbance in impeller	Contact supplier
	Cavitations	Improve suction, reduce suction lift, reduce number of fittings, increase pipe size, increase discharge pressure and reduce flow by throttling discharge valve.
Motor overload cuts out	Motor not connected properly	Have electrician check wiring.
	Low incoming voltage	Voltage at motors should be no more than 6% above or below nameplate voltage. Have electrician check voltage, ensure pump is not running on an extension cord, Report low supply to authorities.
	Over load due to binding in pump or wrong size impeller	Contact supplier

▲WARNING

If the pump is within the stated warranty period and you experience faults always contact your supplier. Failure to do this may void warranty. Refer to warranty documentation supplied with pump.
All electrical work is to be carried out by a Qualified Electrician; under no circumstances should you attempt repairs on the electrical components of pumps unless you are qualified to do so.