



# Circulating Pumps

**Series 500**



**500-1x1-GPA-10F-VFD**

**INSTRUCTION MANUAL**

[www.flofab.com](http://www.flofab.com)

# Instruction Sheet

## Series 500

1. Maximum operating pressure is 125 PSI (862Kpa).
2. Maximum water temperature not to exceed nameplate rating.
3. Cast iron circulators are to be used for closed loop systems.  
Bronze circulators are to be used for open loop, fresh water, or potable water systems.
4. Flo Fab cartridge circulator pumps are for indoor use only.

- 1. Mounting position** - Circulator must be mounted with the motor in a horizontal position. They may be mounted vertically with the motor up, provided that the system pressure is at least 20 PSI (138 Kpa)
- 2. Rotating Body** - Body has an arrow on the front that indicates direction of flow. To rotate body remove the four body bolts, rotate body and replace bolts. Make sure that the junction box is NOT located underneath the circulator. (The junction box must NOT be located in the 6 o'clock position, as viewed from the motor end.)
- 3. Electrical connections** - Observe all applicable codes when connecting to power supply. The motor does not require overload protection. **WARNING:** Do not use in swimming pool or spa areas; pump has not been investigated for this application.
- 4. Fill system** - The system must be filled before operating the circulator. The bearings are water lubricated and should not be allowed to operate dry. Filling the system will result in immediate lubrication of the bearings. It is always good practice to flush a new system of foreign matter before starting the circulator. Fill the system with tap water.
- 5. Circulator operation** - Operate the circulator for 5 minutes immediately after filling system to purge remaining air from the bearing chamber; this is especially important when installing the circulator during the off season.

### **REPLACING MOTOR ASSEMBLY**

1. Disconnect the electrical supply.
2. Reduce system pressure to 0 PSI and allow system to return to room temperature isolate the circulator by closing the service valves or draining the system.
3. Remove body bolts and swing motor assembly away from the body.
4. Install replacement motor, and reassemble circulator using new gasket and bolts.
5. Follow the "Installation" procedure to start up the circulator

- CAUTION** -
1. The addition of petroleum based fluids or certain chemical additives to system utilizing Flo Fab equipment voids the warranty.
  2. Use supply wires suitable for 90°C.

# **Instruction Sheet Series 500 (Part 2)**

## **REPLACING CARTRIDGE ASSEMBLY**

1. Disconnect the electrical supply.
2. Reduce system pressure to 0 PSI and allow system to return to room temperature, isolate the circulator by closing the service valves or draining the system.
3. Remove body bolts and swing motor assembly away from the body.
4. Pull cartridge out of the motor housing.
5. Install replacement cartridge making sure that the cover plate is between the cartridge flange and motor.
6. Make sure that the circulator product number corresponds to the replacement cartridge part number indicated in the Replacement Parts sheet.
7. Reassemble circulator using the new gasket and new bolts.
8. Follow the «Installation» procedure to start up the circulator.

## **REPLACING CAPACITOR**

1. Replacement capacitor must have same rating as originally furnished, see instructions provided with replacement capacitor.

**LIMITED WARRANTY** - Flo Fab will repair or replace without charge any Flo Fab product or part which is prevent defective under normal use within one year of the date of the shipping.

# Long Term Storage

Here are some general suggestions for long term storage. The applicability of all, or some, of these suggestions depends on several factors such as type of equipment, length of storage, and condition of the environment.

## **GENERAL CARE**

Drain the casing completely and dry it thoroughly, including its bearing housing and stuffing box, or seal chamber. Apply a coat of soluble rust preventive solution both internally and externally.

Cover all openings. Flanged openings (such as suction and discharge nozzles) should be covered with blind flanges with elastomer gasket. Threaded openings should be covered with steel plugs or caps.

Protect the bearing housing from moisture by placing bags of vapor phase inhibitor crystals around the housing.

Cover the equipment with industrial strength plastic, preferably transparent to allow its visual inspection, including its nameplate, without uncovering the unit.

Store the unit in its normal position in a dry place.

Inspect the unit periodically and turn the shaft a few times at least 1/4 turn. Turning the shaft prevents pitting of finished surfaces. The extra 1/4 turn is to displace the sag and prevent the shaft from developing a permanent bow.

This needs to be done at least once a month

# FLO FAB'S SERIES 500 PUMPS - 500-1x1-GPA-10F-VFD

