

## INSTALLING BOOSTER PUMP (Optional)



**WARNING :** Please read these Operational and Installation Guidelines before installing the Booster Pump.

### CAUTION:

1. The pump is equipped with either a fixed or adjustable bypass valve which controls the maximum operating pressure. Never subject the pump to pressures above 125 PSI (8.5 bars).
2. Never operate the pump in a harsh environment or hazardous atmosphere as the motor brush and switch may cause electrical arcing.
3. Pump head materials are designed for use with water only. Do not use with flammable products.
4. As long as there is feed water pressure, the pump will not stop forward flow of water even if the motor is turned off. Be sure the system has positive means of shutting off water supply.
5. Always consider electrical shock hazard when working with and handling electrical equipment. If uncertain, consult an Electrician. Electrical wiring should only be done by a qualified Electrician.

### MOUNTING:

- A. The pump should be mounted in a dry place and away from any sources of heat. If an enclosure is used, special provisions for cooling the motor may be necessary.
- B. Do not subject the pump to extreme high or low (freezing) temperatures while in operation. (Operating ambient temperature range is 32°F to 115°F).
- C. The pump may be mounted in any position. If wall mounted with the pumphead upside down, air entrapment may reduce the operational performance by up to 15%.

### PLUMBING:

- A. We recommend use of flexible tubing with proper pressure rating.
- B. Pump will prime only if all pressure is relieved from the outlet port.
- C. It is recommended that an in-line sediment filter (150 micron or 100 mesh) be installed at the inlet side to keep foreign debris out of the system.
- D. Avoid any sharp bends which may crimp tubing and restrict flow. Use 90° elbow fittings if necessary.

### ELECTRICAL:

- A. The Self Regulating series pumps are designed for intermittent duty. If used for long periods ensure these do not exceed 6 hours.

## **INSTALLATION PROCEDURE**

### **SELF REGULATING SERIES BOOSTER PUMPS**

The basic pump set consists of a pump and transformer unit. Systems may be supplied with other options: e.g. High pressure shut-off switch, low feed-water shut-off switch, membrane auto-flush valve or membrane auto-flush/flow restrictor valve.

1. Determine the optimum location for your pump before proceeding.
2. Turn off the water.
3. Cut the 1/4" or 3/8" O.D. flexible tubing in sufficient length to avoid any stress on the tubing where it connects to the pump or the fitting on any accessory.
4. Insert tubing into pump ports observing correct flow direction through the pump body, flow is usually signified by a direction arrow on the pump head.

If fittings are John Guest type, be sure tubing is inserted past the resistance point until it bottoms out against the port stop. If compression fittings with threaded nuts are used, insert tubing until it bottoms out in the port and hand tighten the compression nut until the connection is tight.

5. The Self Regulating pump is now ready for operation. Open the feed-water valve to allow water to flow through the R.O. system (Open flow-restrictor by-pass valve if part of R.O. system).
6. If the power source is a transformer, plug the appropriate supplied/approved transformer into the socket and connect the pump to the transformer. Allow water to circulate, purging any entrapped air.
7. The pump will now start building pressure. Operating pressure will vary with membrane flow rate, flow restrictor flow rate and feed-water pressure.

Check for fitting leaks.

8. If compression fittings with threaded nuts are used, observe any leaks after pump has run for approximately 15 minutes. Further tighten compression nuts approximately 1/8 to 1/4 of a turn on all fittings in the system. Wait 15 minutes and repeat the leak check.