



# Fully Automatic Bilge Pumps

## FEATURES

Through advanced electronic technology, Rule Automatic Bilge Pumps eliminate the need for a separate switch to activate the pump. Once power is supplied, starting and stopping is completely automatic. The pump checks for water every 2-1/2 minutes by running for a second and measuring load against the impeller. If water is present, the pump remains on until the water is removed. Thereafter it resumes its 2-1/2 minute check cycle. The pumps feature two positive leads, one which is automatic and one which can manually override the pump and turn it on at any time.

## MOUNTING

1. Press strainer base fingers inward and lift pump to remove from strainer
2. Mount the strainer to your boat with stainless steel screws. On a fiberglass boat you may prefer to bond a wooden block in place and then mount the strainer.
3. To assemble pump to strainer, align the clasps to the strainer fingers and press pump down to snap lock in place.
4. To mount this pump to a transom or a side surface, use Rule Model 66 vertical mounting bracket.

## ELECTRICAL

1. **Wire**—Normal installation requires 16-gauge wire. For installations over 25 feet from battery, use 14-gauge wire.
2. **Polarity**—Black pump wire connects to negative (-) side of the battery. Brown pump wire connects to the automatic side of the switch. Brown with white stripe wire connects to the manual side of the switch.
3. **Fuse**—Install recommended size fuse in the positive (+) Brown wire.

MODEL	500 GPH	500 GPH-24v	800 GPH	1100 GPH
FUSE SIZE	2.5	1.5	5.0	6.0

4. **KEEP ALL WIRE CONNECTIONS ABOVE HIGHEST POSSIBLE WATER LEVEL.** Wire connections should be sealed with Marine Grade Silicone Rubber, Liquid Electrical Tape, or Sudbury® Elastomeric Marine Sealant to prevent corrosion.
5. **NOTE**—When using two wire installation, eliminating the manual override option, the 3rd wire (Brown/White) must be sealed and secured high above the bilge water.

## PLUMBING

Bilge Pumps must be plumbed to a thru-hull fitting (see chart) that remains above the water line at all times. On sailboats, locate the thru hull fitting high enough on the center of the transom to be above the anticipated water line. To prevent water traps that can cause your pump to airlock the hose must rise continuously from the pump to the thru hull fitting with no dips where water can collect. Attach the discharge hose to the pump and thru hull fitting with stainless steel hose clamps.

## SPECIFICATIONS:

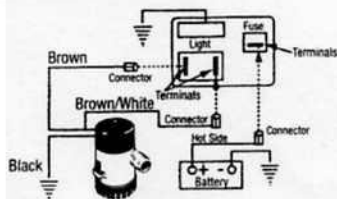
Model	Output Open Flow (GPH) (LPH)	Output 3.35' Flow (GPH) (LPH)	Output 6.7' Flow (GPH) (LPH)	Thru Hull & Hose Size
<b>500 GPH (12v)</b>	500 1890	360 1363	260 984	3/4" 19 mm
<b>500 GPH (24v)</b>	500 1890	360 1363	260 984	3/4" 19 mm
<b>800 GPH (12v)</b>	800 3030	615 2328	425 1609	3/4" 19 mm
<b>1100 GPH (12v)</b>	1100 4160	860 3255	600 1609	1-1/8" 28mm

## WARNING!

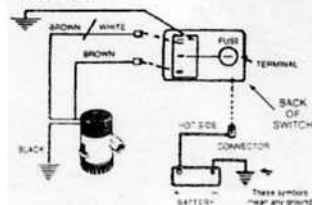
This pump is designed for use with fresh or salt water only. Use with any other medium, including particularly hazardous, caustic or corrosive substances, could result in damage to the pump, the surrounding environment and injury to persons or property, including possible exposure to hazardous substances. **This pump is for water applications only.**

## WIRING DIAGRAMS WITH RULE SWITCHES

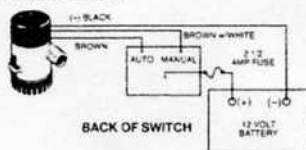
### Model 41 Panel Switch



### Model 43 Panel Switch



### Model 49 Panel Switch



**NOTE:** The installation must allow for complete drainage of the hose. All air/water pockets must be eliminated by having the discharge hose running level or continuously upward.



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