

# SHURflo

## MODEL 100 SINGLE FIXTURE PUMP INSTALLATION AND OPERATION

**WARNING:** Never operate the pump in an explosive environment. Arcing from the switch, motor brushes, or heat from the motor may cause an explosion. The Model 100 Nautilus is ISO 8846 and U/L Marine listed (ignition protected) for non-flammable liquids.

**CAUTION:** Model 100 pump should be only used in **positive prime (flooded inlet) applications**. Permanent damage will occur to the shaft seal if run dry. Maximum dry run time is less than one minute. Failure due to dry running is not covered by SHURflo's limited warranty.

**CAUTION:** **Do Not** assume pump compatibility with fluids other than water. If fluid is incompatible with pump materials, leaks may occur. SHURflo offers other pump models for various applications. Contact SHURflo for compatibility or application information.

### **MOUNTING**

The pump may be mounted in any position. **Always mount the pump level or below the bottom of the water tank. The pump should be as close as possible to the tank.** If there is positive head pressure from the water tank to the pump inlet, the pump will prime.

If mounted above the lowest water level, the pump **may** require forced priming before operation. Never mount the pump more than 4 inches [10 cm] above the lowest water level.

Secure the pump with screws through the rubber grommets (do not over compress). Use thread-locking compounds on machine screws if necessary.

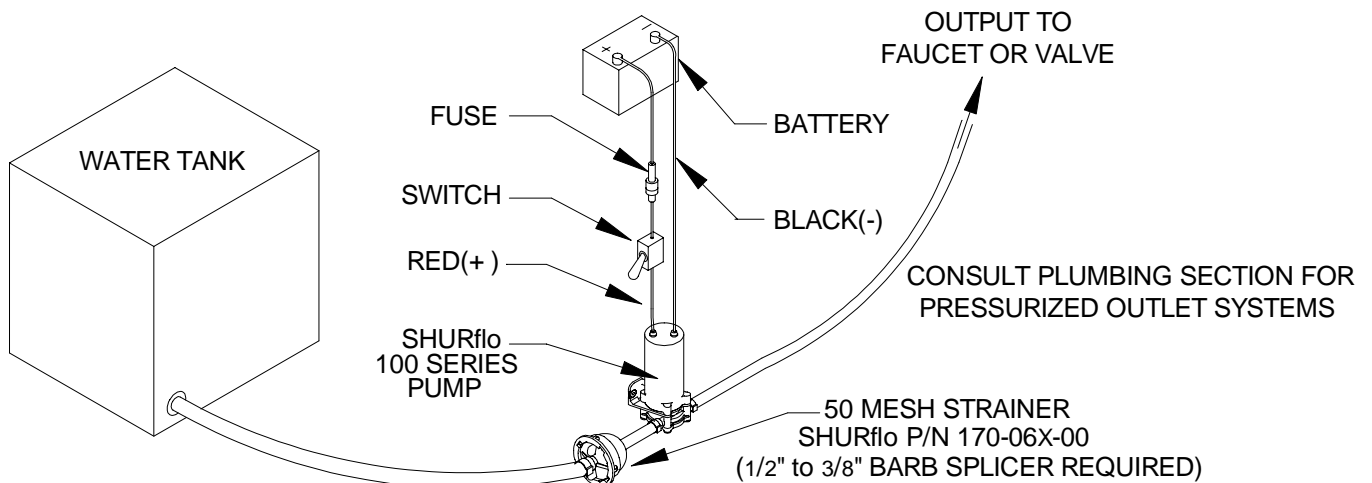
### **ELECTRICAL**

The pump should be on a dedicated (individual) circuit, and must be protected by a fuse/circuit breaker as listed on motor label. The positive (+) side should be fused between the power supply and on/off switch.

**NOTE:** Failure to provide proper overload/temperature safety devices may lead to motor failure that is not covered by SHURflo's limited warranty. Always install the pump per local and state electrical wiring codes.

A switch rated at or above 3.0 amps is recommend and must interrupt current flow on the positive (+ red) lead. Marine applications should use a U/L Marine approved (ignition protected) switch.

Recommended wire size is 16 gauge or larger [1.2 Mm<sup>2</sup>] wire. Negative (-) should be connected to a known ground. Ground wire must be the same (gauge/Mm<sup>2</sup>) as the positive wire.



## **PLUMBING**

When positive pressure is teed into the output plumbing (city water entry, water heater, etc.), it is necessary to install a one-way check valve (SHURflo P/N 340-001) after the pump. With positive pressure plumbed into the output side of the system all tubing and components should be suitable for higher pressure.

Use flexible  $\frac{3}{8}$ " I.D. [10mm] tubing with a pressure rating of 25 psi [1.7 bar] or higher. Tubing clamps should be used to secure the tubing over the barb fittings. Never plumb the pump with excessive stress on either port that could cause damage.

A 50 mesh strainer is essential to prevent foreign debris from entering the pump. The strainer should be installed within the inlet tubing between tank and pump inlet. Failure due to foreign debris is not covered by SHURflo's limited warranty.

**NOTE:** Never use ABS cement, pipe dope, or Teflon tape on inlet tubing. Foreign debris that enters the pump may cause premature pump failure or excess current.

At zero head, open flow will be approximately one gallon per minute [4 lt/min]. Maximum pressure is 10 psi [.68 bar] at zero flow.

## **LIMITED WARRANTY**

SHURflo warrants its 100 Series pumps to be free of defects in material and workmanship under normal use, for a period of one (1) year from the date of manufacture, or one (1) year of use, with proof of purchase. Under no circumstances will the terms of the limited warranty extend beyond two (2) years of manufacture date.

The limited warranty will not apply to pumps that were improperly installed, misapplied, or are incompatible with fluids or components not manufactured by SHURflo. Pump failure due to foreign debris is not covered under the terms of this limited warranty. SHURflo will not warrant any pump that is physically damaged, or altered outside the SHURflo factory.

Warranty claims may be resolved by an authorized dealer service center, or by a SHURflo service center. Returns are to be shipped postage prepaid. SHURflo will not be liable for freight damage incurred during shipping. Package returns carefully.

No credit or labor allowances will be allowed for items returned as defective. SHURflo's obligation under this warranty policy is limited to the repair or replacement of the pump. All returns will be tested per SHURflo factory criteria. Warranty replacements will be shipped freight prepaid. SHURflo reserves the right to choose the method of transportation.

This limited warranty is in lieu of all other warranties, expressed or implied, and no other person is authorized to give any other warranty or assume obligation or liability on SHURflo's behalf. SHURflo shall not be liable for any labor, damage or other expense, nor shall SHURflo be liable for any indirect, incidental or consequential damages of any kind incurred by the use or sale of any defective product or part. Authorized SHURflo distributors (ASD) have the right to their own return/freight policies. Consult with the local ASD for their specific procedures. This limited warranty covers Marine products distributed within the United States of America. Other world market areas should consult with the distributor for any deviation from this document.



\*ISO Certified Facility

# **SHURflo®**

*SHURflo reserves the right to update specifications, prices, or make substitutions.*

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