Non Mercury Combo Pack
Bilge Pump & Switch

Pump Features

- Submersible
- Ignition Protected
- Dry Run Capable
- High Efficiency Motor
- Maintenance Free
- CE and ISO 8849 Compliant

Switch Features

- Patent Pending Snap Switch Design
- Snap Switch Tested to Over 1,000,000 Cycles @ 12V
- Highly Abrasion Resistant Marine Grade Blocked Wire
- Exclusive Moisture Tight Seals
- Environmentally Friendly Mercury Free Design

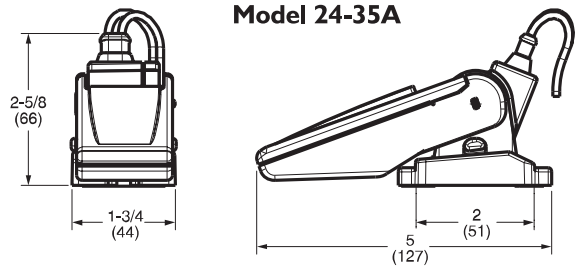
All switches will turn the pump on when the water level reaches 2" (51mm) and will turn the pump off when water level falls to 3/4" (19mm) +/- .25".

Capacity GPH	500 GPH	360 GPH
Volts	12DC	12DC
Amps @ 12v	2.1	2.1
Amps @ 13.6v	2.5	2.5
Fuse Size	2.5	2.5
Height (inches/mm)	3-1/2 (89)	3-1/2 (89)
Width (inches/mm)	2-3/8 (60.3)	2-3/8 (60.3)
Weight (lbs/kg)	0/9 (0.26)	0/9 (0.26)
Hose Diameter (inches/mm)	3/4 (19.0)	3/4 (19.0)

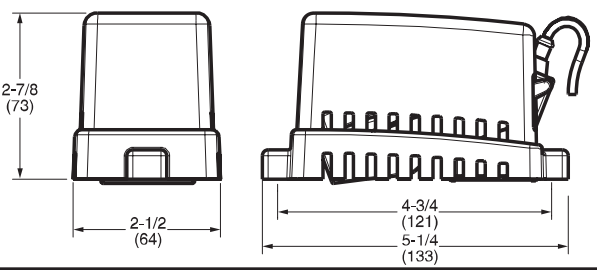
⚠ WARNING This pump is designed for use with fresh and salt water only. Use with any other medium, including particularly hazardous, caustic or corrosive substances, could result in damage to the pump, surrounding environment and injury to persons or property, including possible exposure to hazardous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

Dimensions in Inches (millimeters)

Model 24-35A



Model 25-40A



PUMP MOUNTING INSTRUCTIONS:

1. Disassemble as follows:
   - Press strainer base fingers inward to release body housing.
   - Remove pump from base.
2. On fiberglass boats, mount the blue strainer into the bilge with stainless steel screws. On aluminum or other thin material hulls, it is preferred to install the pump on a mounting block or bracket to avoid piercing the hull.
3. Re-assemble as follows:
   - Align pump clasps to accept strainer base and press down to snap into place.
4. Side bracket mount
   - To mount this pump against a transom or vertical surface, use bracket mount accessory Model 66 (not provided).

HOSE & THRU HULL

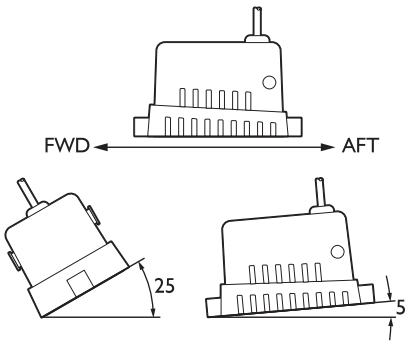
1. Use flexible Rule® hose (Model #81) or suitable non-collapsible hose with 3/4" I.D.
2. ***ROUTE THE HOSE CONTINUOUSLY UPWARDS FROM THE PUMP TO THE THRU-HULL FITTING. (THE HOSE RUN SHOULD BE AS SHORT AS POSSIBLE.)***
   - This will help eliminate air pockets which can cause an air-lock.
3. Locate Thru-Hull fitting at least 12" above the heeled water line to prevent water from coming back into the bilge. On transom mount, mount thru-hull high enough on the center of the transom to be above anticipated water line.

SWITCH MOUNTING INSTRUCTIONS

To mount your float switch, follow these steps:

1. Locate the switch on a flat surface in the bilge at the desired location.
2. Position the switch parallel to the vessel's water line with the wire exiting toward the stern if possible.
3. Do not exceed the angles shown in Fig. 1 on any installation.
4. It is important that the switch be mounted 1/4" higher than the base of the pump strainer. This will assure positive shut off of the pump.
5. Attach the switch using stainless steel screws.

Figure 1



Operation

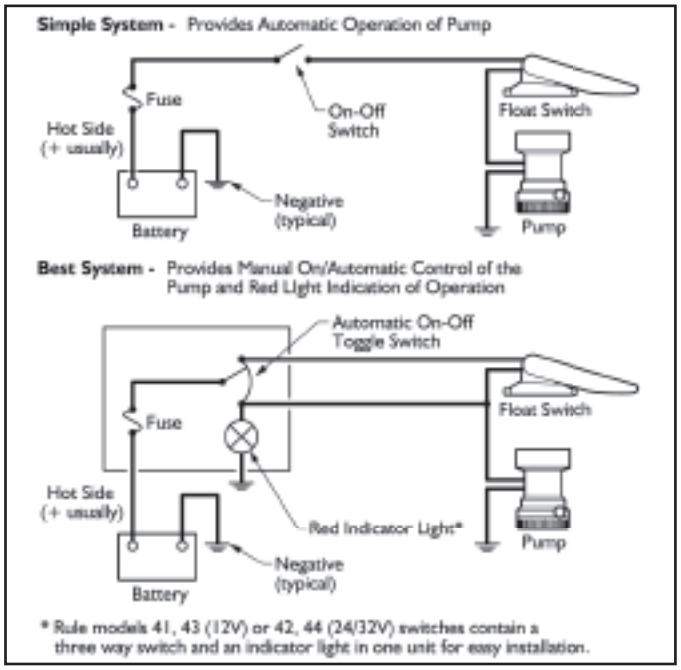
Rule float switches are designed to automatically turn the bilge pump on and off as required. If it is desired to pump the water level even lower, the pump can be operated by a 3-way Rule panel switch in the "manual" mode (see below diagram for illustration). To test the operation of the 25-40A switch and pump, press down on the lever located in the back of the switch. This will lift the float mechanism, which will activate the bilge pump. Periodically clean any accumulated debris from around the switch or integral switch guard. This will allow free flow of water to the float.

ELECTRICAL PUMP & SWITCH

1. In the simple system installation, the black wire of the pump is attached to the negative terminal of a battery or bus bar. The brown wire from the pump is attached to one grey wire on the switch. The other wire from the float switch will connect to a simple toggle switch, then to a 2.5 amp fuse, and finally to the positive terminal of the battery. Please see diagram below for more information.
2. The "Best System" diagram utilizes a three way panel switch (Rule models 41, 45, 43 (12V) and 42, 45, 44 (24/32V)) that allows the user to manually override the float switch in the event the switch becomes inoperable.

   The installation of the 2.5 amp fuse will prevent damage to the pump and switch should a short occur.

Wiring Diagrams



KEEP ALL WIRE CONNECTIONS ABOVE THE HIGHEST WATER LEVEL. CUTTING THE SWITCH OR PUMP WIRES MAY VOID THE WARRANTY AND/OR CAUSE PREMATURE FAILURE. ALL WIRE CONNECTIONS SHOULD BE SEALED WITH MARINE GRADE SEALANT TO PREVENT WIRE CORROSION.

IF FLOAT ACTION APPEARS SLUGGISH AND/OR THE FLOAT DOES NOT MOVE FREELY, INTERMITTENT OR SPORADIC OPERATION OF THE PUMP MAY OCCUR, THIS CONDITION IS USUALLY THE RESULT OF OIL AND/OR DIRT ACCUMULATION IN AND AROUND THE MOVEABLE PARTS OF THE SWITCH. TO CLEAN, TRY SOAKING THE ENTIRE SWITCH IN BILGE CLEANER OR MARINE GRADE CLEANER FOR 10 MINUTES, AGITATING SEVERAL TIMES AND CHECKING FOR SMOOTH AND FREE OPERATION OF THE FLOAT. REPEAT IF NECESSARY.

xylem
Let's Solve Water

For more information visit us online at www.rule-industries.com