

TROUBLE SHOOTING

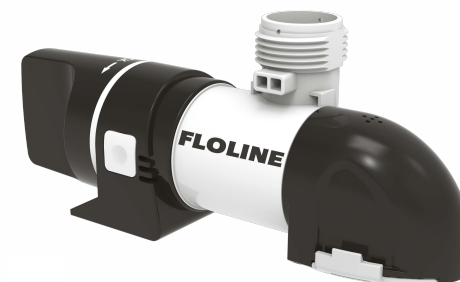
Problem	Possible Causes	Possible Solutions
Limited flow	Blocked or dirty filter and/or impeller	Check for blockages in filter/impeller. Clean with warm soapy water (Do not use any chemical cleaning agents)
	Blocked or dirty pipe work and/or connections	Disconnect pump and check flow through pipe work, unblock or clean as necessary
	Narrow pipe work or connections	Replace narrow aperture connections and any crushed or collapsed pipe work
	Low battery power	Check battery level, refill or recharge as necessary
No flow	Completely blocked filter and/or impeller	Check for blockages in filter/impeller. Clean with warm soapy water (Do not use any chemical cleaning agents)
	Blocked or dirty pipe work and/or connections	Disconnect pump and check flow through pipe work, unblock or clean as necessary
	Blown fuse	Check above two remedies first. Replace with appropriate fuse
	Flat battery	Check battery level, replace, refill or recharge as necessary
	Incorrectly located sensor	Consult Installation Instructions, available with product
	Pump failure	Check within warranty. Contact retailer and replace pump
Runs continuously	Switching error	Faulty on/off switch
		Incorrectly located automatic switch
		Faulty float switch/electric field switch
	Float switch stuck upright (Manual version)	Check there are no moving bodies within the bilge that may prevent movement of the float
		Ensure free movement of float switch
	Electric field sensor remains activated	Wrong pump orientation, consult Installation Instructions, available with product
		Check there are no moving bodies within the bilge that may cover the area where the sensor is located
		Sensor too close to pipe work, boat structure or other body of mass
		If there is thick debris on sensor - wipe clean

STANDARD ACCESSORIES



FLOLINE®

Low Profile Bilge Pump Manual



Auto Water Sensing

PURPOSE OF THIS MANUAL

The purpose of this manual is to provide necessary information for product installation, operation and maintenance.

⚠ CAUTION: Read this manual carefully before installing, using or servicing this product. Failure to follow the instructions within this manual could result in explosion, property damage, severe personal injury and/or death.

USER SAFETY

General safety rules. These are safety rules that apply:

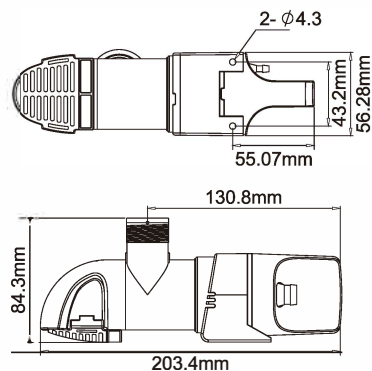
- Always keep work area clean.
- Pay attention to the risks presented by gas and vapors in the work area.
- Avoid all electrical dangers. Pay attention to the risks of electric shock or arc flash hazards.
- Always bear in mind the risk of drowning, electrical accidents and burn injuries.

⚠ DANGER: This product is not intended for damage control or to deal with flooding resulting from hull damage. This product is intended to be used in Bilge Pumping Systems for small craft with a hull length up to 24 meters. Bilge Pumping Systems are limited to normal amounts of water in an intact boat due to spray, rain, seepage, spillage, and occasional small amounts of water shipped from boat movements in heavy weather. Use of product in any other way could result in flooding, catastrophic damage to craft, serious personal injury, or death.

⚠ WARNING: This pump is designed for use with fresh water and salt water ONLY. Use with any other hazardous, caustic, or corrosive material could result in damage to the pump and the surrounding environment, possible exposure to hazardous substances and injury.

INSTRUCTIONS

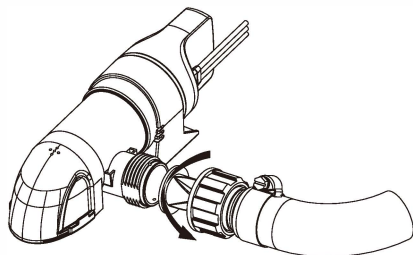
DIMENSIONAL DRAWING



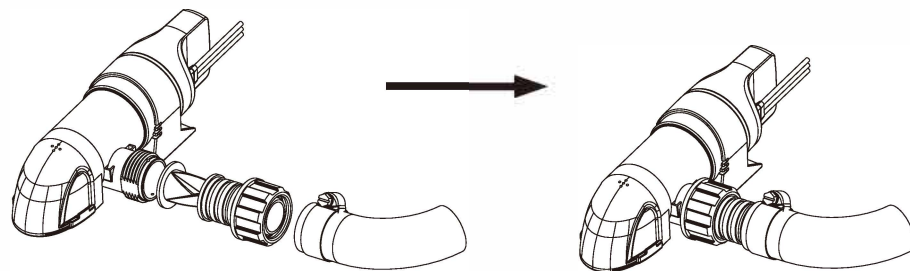
PLUMPING

The fittings are designed as a split quick connect joint, which adopts the split design of lock nut and hose barb connector. This solution can quickly disassemble and replace the fitting without dismantling the water pipe. Hose barb straight fittings and hose barb elbow fitting can meet the needs of most users. The lock nut is universal.

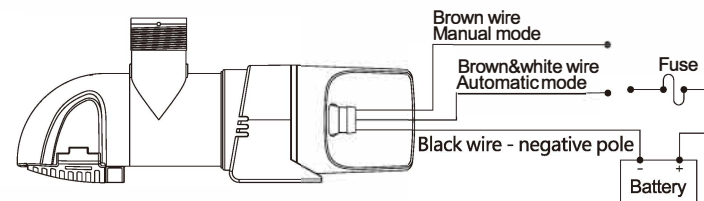
Demolition process of split quick connect fittings: Disassemble the lock nut --> Completed



Water pipe and Hose barb fitting installation process:



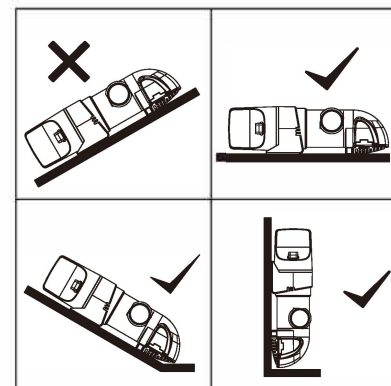
WIRING DIAGRAMS



INSTALLATION

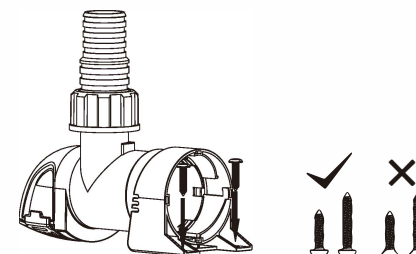
We recommend using #8 Stainless Steel screws of an adequate length as to secure the pump but not penetrate the entire thickness of the hull. Use a flexible sealant in the screw holes to prevent water from penetrating the screw holes.

Mounting Directions:

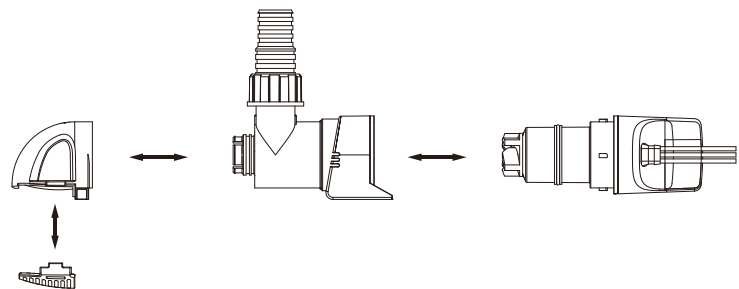


Screws:

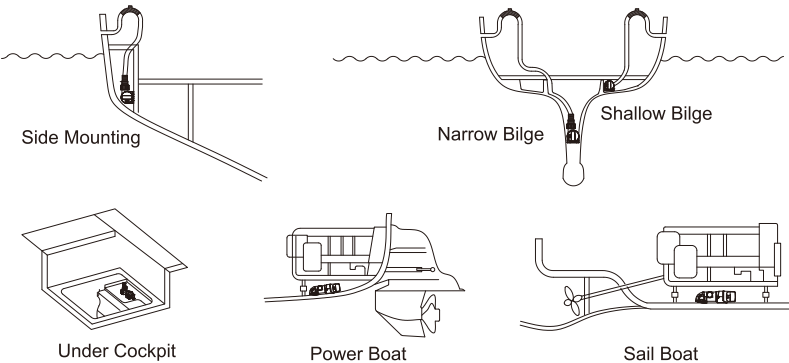
The installation method is as shown on the left: First remove the motor assembly; Second install 2*M4 screws on the base; Third install the motor assembly.



Disassembly and Reassembly:



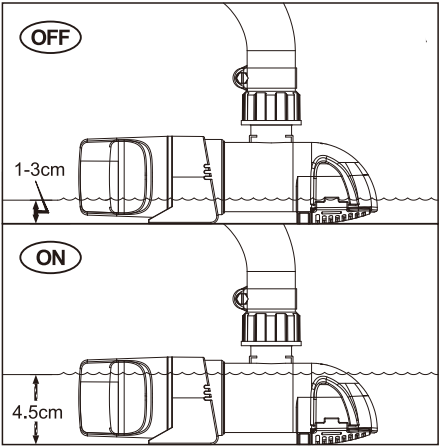
Typical Installation:



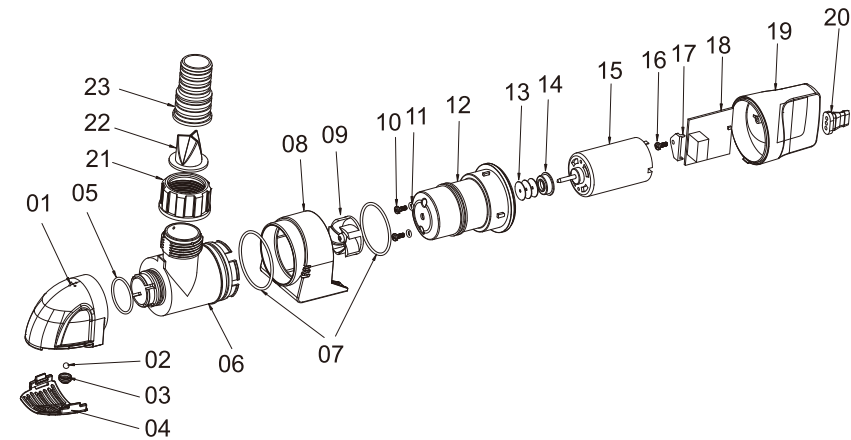
Operating Modes:

14A model features high or low water sensing automatic mode.

Pump starts when water reaches 4.5cm/1.77" level, and stops when the water level is lower than 1cm/0.39".



CONFIGURATIONS



Key	Description	Quantity
1	Filter Head	1
2	Exhaust Bead	1
3	Exhaust Valve	1
4	Filter Net	1
5	Inlet Seal Ring	1
6	Pump Chamber	1
7	Pump Chamber Seal	2
8	Pump Base	1
9	Impeller	1
10	Machine Screw M3*8	2
11	Screw Seal	2
12	Motor Cover	1
13	Oil Seal	3
14	Oil Seal Seat	1
15	Motor	1
16	Self-tapping Screw	1
17	Circuit Board Buckle	1
18	Circuit Board	1
19	Motor Back Cover	1
20	Three-hole Line Card	1
21	Lock Nut	2
22	Check Valve	1
23	25-29mm Straight Fitting	1