

Albinus' series of submersible Cartridge Bilge Pumps and Twinport & Aerator Pumps are designed with the latest technology in order to meet the requirements and standards for the marine industry. Sport fishing, water sports, cruising as well as commercial duties.

Common for the series is the well-proven Albinus 12/24V cartridge motors for capacities 500 GPH, 750 GPH & 1100 GPH; the main differences being their intended use and manner of installation.

- Easy to install
- Detachable-port connections
- Straight and 90° elbow hose connections (1100 GPM straight only)
- Easy to clean, easy maintenance, low power consumption
- Replaceable cartridge motor
- Stainless steel shaft
- Tough Thermoplastic Housing
- Seawater resistant shaft seal

### Cartridge Bilge Pump 500 / 750 / 1100 GPH (32 / 50 / 75 L / min) Cartridge Bilge Pump Low 750 / 1100 GPH (50 / 75 L / min)

Submersible Cartridge Bilge Pump, compact and easy to install. Tough thermoplastic ABS housing with detachable universal base plate with strainer and pin (for "T-slot") to attach a level switch for automatic operation (not included). Replaceable cartridge motor. Easy maintenance and low power consumption. "Low" configuration available in 750 and 1100 GPM capacities for low height installations.

#### Installation

Please follow the installation instructions carefully to ensure maximum efficiency in your bilge pump operation.

1. Position the pump in the lowest part of the bilge on a flat, level surface so that the pump nozzle is oriented in the proper position to connect to the discharge hose.
2. Make sure the hull thickness is at least 1/2" thick. If not, place a block of 1/2" marine plywood (slightly larger than pump base) under the pump. Glue the plywood to the hull with a waterproof adhesive (epoxy, silicone adhesive, or fiberglass resin). See Figure 1. Mount the pump. If attaching the pump to wood, fasten with stainless steel screws. If attaching the strainer to metal or fiberglass, first mount a wooden block and then fasten the strainer to the wooden block.
3. Select a point where the bilge water is to be pumped overboard as high as possible above the water line and at the shortest distance from the pump. Install a 3/4" (19mm) OR 1 1/8" (28mm) (1100GPH) thru-hull fitting.
4. Fasten a 3/4" (19mm) OR 1 1/8" (28mm) fuel resistant hose from the pump outlet to the thru-hull fitting. Avoid sharp bends or loops. Support the hose if necessary. **Note:** in order to prevent air locks it is important that the hose is not allowed to dip below the pump outlet. The hose should be constantly rising.

### Twinport & Aerator Pumps – straight and angled Twinport Aerator Pumps – short stack 500 / 750 / 1100 GPH (32 / 50 / 75 L / min)

Twinport Aerator pump for combined Livewell/Live bait aeration and washdown pump applications from a single intake are compact and easy to install. Tough thermoplastic ABS housing with straight or angled intake. Replaceable cartridge motor. Easy maintenance and low power consumption. Twinport Aerator Pumps are equipped with an additional port for optional dual functionality.

#### Installation

Please follow the installation instructions carefully to ensure maximum efficiency in your Twinport Aerator pump operation. Albinus Twinport Aerator pumps are designed to thread directly into a 3/4" NPTF ball valve or seacock. The Twinport Aerator pumps may also be installed directly through the hull or transom; **however, it is STRONGLY advised to employ a ball valve or seacock, for safety!** The pumps are not self-priming and must be mounted below the water line to ensure adequate performance. Pumps mounted through the transom will only operate while the boat is at idle or a slow troll. Pumps mounted through the boat's bottom can provide continuous water flow while underway or idle when coupled with a high speed low or high flow water pick up. See Fig. 2.

In order to orientate the discharge ports for Livewell and Washdown applications in the desired direction, adjustments can be made to the intake pipe base before installation. By loosening the four screws that attach the intake pipe base to the pump body you can make small adjustments by turning the pump body ~25°. By removing the screws completely you can turn the pump 90° – 180° – 270°. See Fig. 3. Be sure to return the screws, tightening the base to the pump body.

#### Thru-bottom Installation

1. Install through-hull fittings with optional high speed low or high volume water pickup and either a ball valve or seacock as recommended by the manufacturer at least 3" – 4" (76 – 101 mm) below the water line in an accessible location. **Alternatively**, drill a 1 inch (25.4 mm) hole through the hull to fit the intake pipe directly through the hull (not recommended).
2. Thread intake of pump into valve and tighten by hand, aligning the discharge port in the direction of the live well. Use sealing tape or sealant on threads if necessary. **Alternatively**, place the pump into the hole drilled through the hull with locking ring and gasket and marine sealant on the inside of the boat. Tighten the nut on the outside of the hull until the gasket ring is tightly sealed. Do not over tighten. Saw off any excess intake tube flush with the outside surface of the nut.

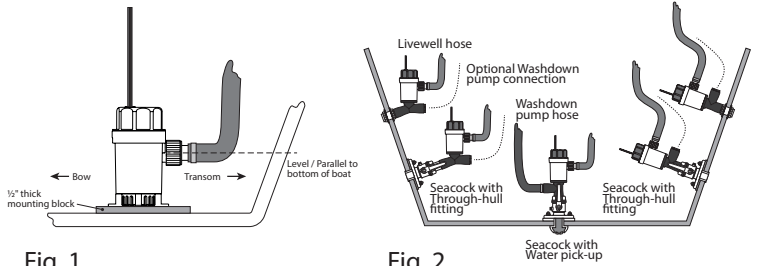


Fig. 1

Fig. 2

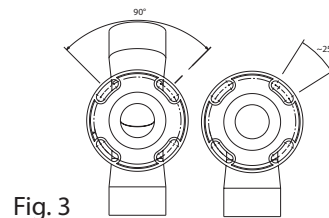


Fig. 3

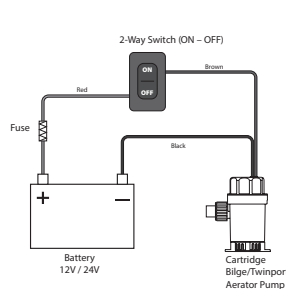


Fig. 4

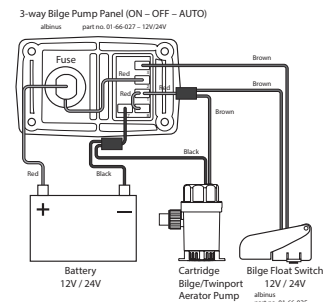


Fig. 5

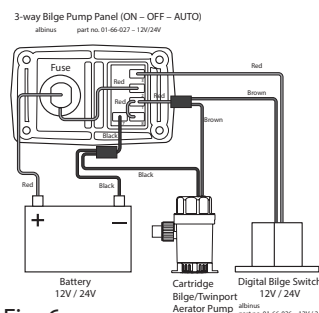
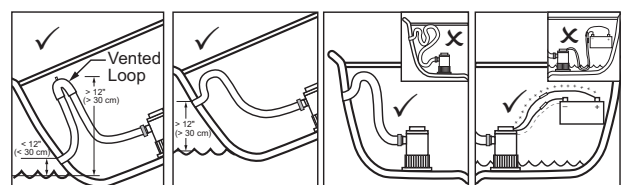
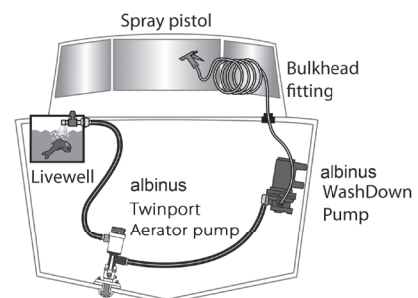


Fig. 6



### Thru-transom Installation

1. Install through-hull fittings and ball valve or seacock as recommended by the manufacturer at least 2" - 3" (51 - 76 mm) below the water line. **Alternatively**, drill a 1 inch (25.4 mm) hole through the hull to fit the intake pipe directly through the hull (not recommended).
2. Thread pump into valve and tighten by hand, making sure that the pumps discharge outlet is orientated upwards to allow trapped air to vent properly. Use sealing tape or sealant on threads if necessary. **Alternatively**, place the pump into the hole drilled through the hull with locking ring and gasket and marine sealant on the inside of the boat. Tighten the nut on the outside of the hull until the gasket ring is tightly sealed. Do not over tighten. Saw off any excess intake tube flush with the outside surface of the nut.

**Livewell Connection:** Connect a 3/4"(19mm) OR 1/2"(28mm)(1100 GPH) I.D. hose between the livewell and the discharge port (straight or 90° elbow connection) on the pump. Avoid sharp bends or loops. Support the hose if necessary. **Note:** in order to prevent air locks it is important that the hose is not allowed to dip below the pump outlet. The hose should be constantly rising.

**Washdown hose Connection:** Connect a 3/4"(19 mm) marine grade, smooth bore, washdown hose directly to pump's twin port on the intake stem. Connect the other end of the hose to your washdown pump. Secure hose with clamps.

### Functionality

#### Livewell

To fill livewell open the ball valve or seacock and turn on the pump. Once the live well is filled the pump can run continuously for a continuous exchange of water or can be operated on a cycle timer. (Make sure that your livewell tank has a secure overflow) Thru-bottom mounted pumps with high speed pickups should provide a continuous water flow to the live well at all time during the boats operation. Thru-transom mounted pumps will provide water flow only when the boat is at idle or under a slow troll.

#### Washdown

To operate washdown pump it is only necessary to make sure the ball valve is open and that the washdown pump is turned on; the Twinport Aerator pump does not need to be running to use the wash down pump. Livewell/Washdown pump can be operated at the same time. **For safety concerns keep the ball valve or seacock closed while not in use.**

## For all Cartridge Pump Types

### Wiring

1. Connect the brown wire to the positive (+) terminal of the battery, and the black wire to the negative (-) terminal of the battery.
2. Install the proper size fuse; 500 : 3 A, 750, 1100 GPH : 5 A fuse.
3. For longer pump life, do not run dry
4. Wiring diagrams for 2-Way Switch and 3-Way Bilge Pump Panel in figures 4, 5 and 6.

**Important:** all electrical wiring must be clamped with the connections well above the bilge water level.

**Do not remove the insulation more than necessary. All wiring connections should be sealed with a marine sealant to avoid oxidation.**

### Replacement of Motor Cartridge

With Albinus' self-contained cartridge motors it is simplicity itself to replace a motor and/or upgrade to a higher capacity motor. (See table for part numbers)

1. **Make sure to close ball valve before removing the motor cartridge!**
2. Disconnect all wiring
3. The cartridge motor is held in place with a bayonet fastening. Grasp the pump body with one hand, rotate the cover clockwise with the other hand while pressing down slightly so that the "U" shape on the cover is to the left of the vertical bar shape on the pump body. Lift out the cartridge.
4. To reinstall make sure the O-ring is properly seated. Lightly coat the O-ring with vegetable oil or mineral oil.
5. Insert the cartridge into the pump body, engaging the tabs on the bottom of the cover with the slots in the pump body.
6. While pressing downward rotate the the cartridge counterclockwise so that the "U" shape on the cover is to the right of the vertical bar shape on the pump body.
7. Reconnect the wiring and open the ball valve / sea cock before use.



**Caution!** Keep all wired connections above the highest water level. Wires must be joined with butt connectors and a marine grade sealant to prevent wire corrosion.



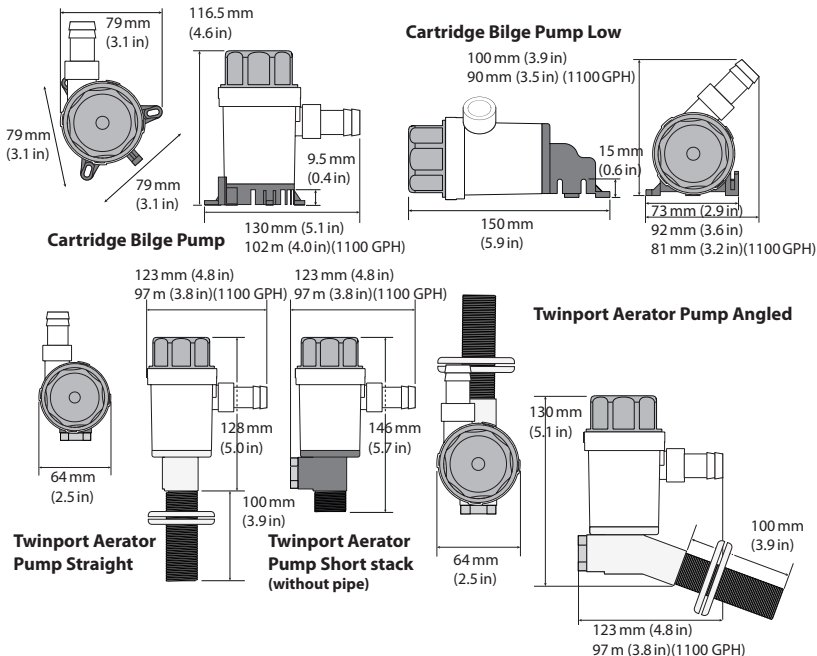
**Caution!** Do not allow to run dry



**Caution!** Always install proper fuse size to prevent damage to product should a short occur. Failure to install proper fuse could increase risk of pump malfunction, potentially resulting in personal injury and/or fire hazard.



**Warning!** This pump is designed for use with freshwater and saltwater only. **DO NOT** use pump to remove gasoline, oil or other flammable liquids. 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.



### Albinus Marine Submersible Cartridge Bilge Pump series

Part no.	Description	Capacity straight	Capacity 3ft - 0.9 m	Amperage	Fuse size	Connection	Replacement Motor Cartridge
01-02-002	Cartridge Bilge Pump 500 GPH 12V	500 GPH - 32l/min	400 GPH - 25l/min	1.8 A	3 A	3/4" straight and 90° elbow	500 GPH 12V 01-92-083
01-02-003	Cartridge Bilge Pump 750 GPH 12V	750 GPH - 50l/min	660 GPH - 42l/min	2.7 A	5 A		750 GPH 12V 01-92-084
01-02-004	Cartridge Bilge Pump 750 GPH 24V	750 GPH - 50l/min	660 GPH - 42l/min	1.5 A			750 GPH 24V 01-92-085
01-02-005	Cartridge Bilge Pump 1100 GPH 12V	1100 GPH - 75l/min	1000 GPH - 65l/min	4 A	5 A	1 1/2" fixed	1100 GPH 12V 01-92-086
01-02-006	Cartridge Bilge Pump 1100 GPH 24V			2.5 A			1100 GPH 24V 01-92-087
01-02-007	Cartridge Bilge Pump Low 750 GPH 12V	750 GPH - 50l/min	660 GPH - 42l/min	2.7 A	5 A	3/4" straight and 90° elbow	750 GPH 12V 01-92-084
01-02-008	Cartridge Bilge Pump Low 1100 GPH 12V	1100 GPH - 75l/min	1000 GPH - 65l/min	4 A			1 1/2" fixed

### Albinus Marine Twinport & Aerator Pump series

Part no.	Description	Capacity straight	Capacity 3ft - 0.9 m	Amperage	Fuse size	Connection	Replacement Motor Cartridge
01-05-078	Twinport Aerator Pump 500 GPH 12V Angled	500 GPH - 32l/min	400 GPH - 25l/min	1.8 A	3 A	3/4" straight and 90° elbow	500 GPH 12V 01-92-083
01-05-080	Twinport Aerator Pump 750 GPH 12V Angled	750 GPH - 50l/min	660 GPH - 42l/min	2.7 A	5 A		750 GPH 12V 01-92-084
01-05-082	Twinport Aerator Pump 1100 GPH 12V Angled	1100 GPH - 75l/min	1000 GPH - 65l/min	4 A			1 1/2" fixed
01-05-077	Aerator Pump 500 GPH 12V Straight	500 GPH - 32l/min	400 GPH - 25l/min	1.8 A	3 A	3/4" straight and 90° elbow	500 GPH 12V 01-92-083
01-05-079	Aerator Pump 750 GPH 12V Straight	750 GPH - 50l/min	660 GPH - 42l/min	2.7 A	5 A		750 GPH 12V 01-92-084
01-05-081	Aerator Pump 1100 GPH 12V Straight	1100 GPH - 75l/min	1000 GPH - 65l/min	4 A			1 1/2" fixed
01-05-074	Twinport Aerator Pump 500 GPH 12V Short stack	500 GPH - 32l/min	400 GPH - 25l/min	1.8 A	3 A	3/4" straight and 90° elbow	500 GPH 12V 01-92-083
01-05-075	Twinport Aerator Pump 750 GPH 12V Short stack	750 GPH - 50l/min	660 GPH - 42l/min	2.7 A	5 A		750 GPH 12V 01-92-084
01-05-076	Twinport Aerator Pump 1100 GPH 12V Short stack	1100 GPH - 75l/min	1000 GPH - 65l/min	4 A			1 1/2" fixed

# Albin Group

since 1928



### Waste handling & material recycling

At the product's end of life, please dispose of the product according to applicable law. Where applicable, please disassemble the product and recycle the parts according to material.

**Albin Group AB**  
Kämpvägen 17  
55302 Jönköping, Sweden

info@albin.group  
www.albin.group

**Albin Group Marine LLC**  
65 Walnut Street  
Peabody, MA 01960, USA