SEAFLO®

SUBMERSIBLE AND INLINE PUMP

INSTALLATION MANUAL

Description

The Submersible Inline Pump is able to function as a flooded suction water supply pump or as an inline booster pump. It is able to pump clean water or diesel.

Installation

Use suitable size of hose (check outlet dia of technical data below) to connect to the pump, use adaptor when you need it.

Note: Ensure that the adaptors are pressed on firmly. Once fitted the adaptors cannot be removed.

Install a check valve in the pipe when there is a long run of pipe between pump and faucet.

The In-line Booster Pump must be installed in the following ways:

1.The position of the pump is lower than the water tank, and pump the oil or water;

2.In conjunction with:

a) a hand-operated pump

b) a foot operated pump

c) in-line to boost another pump

Notes:

• Position the In-Line Booster pump in the suction pipe between the foot pump and the water tank, not between the foot pump and faucet.

• The In-Line Booster pump is light enough to suspend in the pipework.

• The In-Line Booster Pump is a sealed unit and can be submersed in water.

Operation

1.As the In-Line Booster pump is not self-priming, it is necessary to prime the system with either: a hand pump, a foot pump, by gravity.

2.When fully immersed in water the inline pump is primed and gives instant delivery of water.

Caution

1.Do not pump water above 60°C (140°F), or below 0°C (32°F).

2.Do not pump diesel above 50°C (122°F).

3.The pump is suggested to be installed vertically. The pump outlet should be higher than the inlet, if possible.

4.The duty cycle of the pump is continues.

Maintenance

To protect against damage during the winter, drain the water when the pump is not using.

Before usage

For efficient operation and maximum pump life, note the following points:

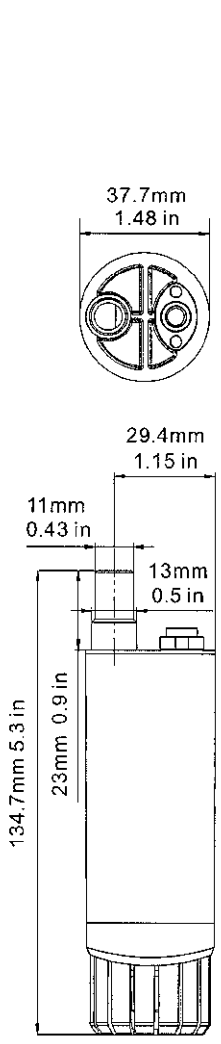
a) In order to avoid the trapped air inside the pump and to ensure the successful priming, place the pump in water and shake for a few seconds in a horizontal or inverted position before switching the pump on. (This action should be repeated after refilling the water tank.)

b) In order to avoid air leaks, securely fasten the hose connections.

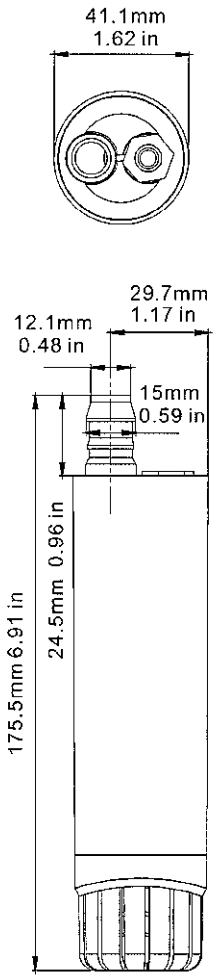
Technical data

Model	Voltage	Max Draw	Head	Flow rate	Duty Cycle	Outlet Dia	Pumping Liquid
SFSP1-G200-03B	12V	4.5A	7m/23'	200GPH	Intermittent	2/5"(11mm)&1/2"(13mm)	Water
SFSP1-G280-02A	12V	4.5A	10m/32'	280GPH	Intermittent	1/2"(13mm)	Water, Diesel
SFSP1-G280-02B							
SFSP1-G500-02A	12V	4.5A	10m/32'	500GPH	Intermittent	3/4"(20mm)	Water, Diesel
SFSP1-G500-02B							

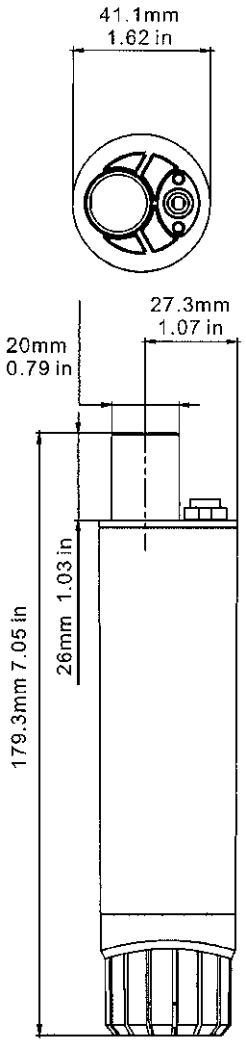
"A" refers to with clip and 5M cable. "B" refers to with only 1M cable.



200 GPH



280 GPH



500 GPH

SEAFLO RV SUPREME

DIAPHRAGM PUMP MANUAL

SEAFLO RV SUPREME pump retains the raw power and pressure of its predecessors, but also can adapt to situations where huge flow is not needed. Compact but capable, it is a great fit for tight spaces. It also may be configured with different inlet types, each with their own unique fittings, to be sure that it fits any application you can find.

SEAFLO RV SUPREME

FEATURES

- 4 chamber diaphragm pump
- 5min on, 10min off
- Bypass: reduces cycling
- Encapsulated switch
- Run dry capable for normal workloads
- Automatic: controlled by pressure switch
- Industry standard mounting pattern
- Self priming
- Quiet Operation
- Ignition protected

APPLICATIONS

- Yacht/RV/caravan pressurized water system
- Sprayer fixtures (vehicle-mounted sprayers, electric sprayers)
- Cleaning machines, humidifier, water purification, medical apparatus
- Food beverage filling & liquid transfer
- Solar water system
- Any other pressurization system

INSTALLATION

Materials

1 diaphragm pump with related accessories

2 (at least) pieces of flexible, reinforced hose piping, with collapsing strength of twice the inlet collapsing pressure, hose must be minimum 1/2" ID(42 series) or 3/4" ID(43 series)

4 stainless steel hose clamps and screws

4 screws to fasten the pump to the mounting surface

1 electrical cutoff switch

1 fuse

1 screwdriver

1 strong cutting implement for tubing

(if desired) Teflon tape or sealant

Setup

1.The pump may be mounted in any position. If mounted vertically, the pump head should be in the down position to avoid leakage into the motor casing in the event of a malfunction.

2.Secure the feet, but do not compress them. Overtightening the securing screws may reduce their ability to dissipate noise and vibration.

3.Intake hose must be minimum 1/2" (13 mm) ID (42 series) or 3/4" (19 mm) ID (43 series) reinforced hose. Main distribution line from pump outlet should also be 1/2" (13mm) ID (42 series) or 1/2" (13 mm) ID (43 series) with branch and individual supply lines to outlets no smaller than 3/8" (10 mm).

4.Plumb the system using high pressure (2 x pump rating), braided, flexible tubing to minimize vibration/noise.

5.Do not apply inlet pressure in excess of 30psi. In general, try to avoid any inlet pressure completely.

6.Avoid any kinks or fittings which could cause excessive restrictions.

7.Strainer should be attached to the inlet side.

8.The fittings must be secured to avoid leakage.

9.Use clamps at both ends of hose to prevent air leaks into the water line.

10.If a check valve is installed in the plumbing, it must have a cracking pressure of no more than 2 psi.

11.If applying a sealer or plumbing tape, be careful to not overtighten, as they may be sucked into pump.

12.This pump should be wired on its own dedicated circuit. Connect the positive lead (red) to the positive terminal of your battery and the negative wire (black) to the negative terminal of your battery.

13.In an easily accessible location, install a switch to control electricity to the pump. Turn the pump off when not used for extended periods or when the tank is empty.

14.The electrical circuit should be protected with an over-current protection device (fuse) in the positive lead. This pump requires a 10 amp fuse.

15.The pump circuit should not include any other electrical loads.

16.As the water supply pump is non-essential, reference the wire Chart under the electrical information. Be sure to have the correct wire sizing for the length of wire you are using.

17.After installation, check the voltage at the pump motor. Voltage should be checked when pump is operating. Full voltage must be available at the pump motor at all times.

Notes

1.Flexible potable water hose or PEX tubing is recommended instead of rigid piping at pump. If you choose to use rigid piping, provide a short length of hose between pipe and the pump to avoid noise and vibration.

2.We do not recommend the use of metal fittings. When possible, use the provided plastic fittings.

3.Do not adjust the bypass personally without the help of technician.

4.Lack of sanitizing and maintenance is one of the main reasons of under performance of the pump. Please do maintenance and winterize the pump at appropriate times, especially before and after a period of storage.

ABOUT THE BYPASS

Please consult a professional technician in the case that the bypass needs adjustment. Improper adjustment of the bypass may damage the pump.

The bypass comes preset for optimal operation of the pump. If your application calls for a different setting for the bypass, you may change it yourself. Carefully tighten the screw to increase or loosen the screw to decrease the minimum operational pressure of the bypass.

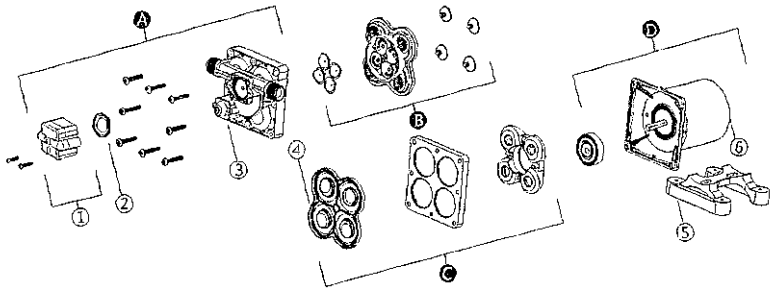
⚠ Caution

Please do follow the instruction manual to install the product. Any action outside what is recommended in this manual may bring damage to the pump. Any inappropriate installation or operation that causes the pump damage is not covered by warranty.

ELECTRICAL INFORMATION

Ft.(m)	AWG(mm2)
0-20 (0-6)	AWG16
20-30(6-9)	AWG14
30-50(9-15)	AWG12
50-65(15-19)	AWG10

REPAIR KITS



Key	Description	Quantity
A	Pump Head Assembly	1
B	Valve Assembly	1
C	Diaphragm Assembly	1
D	Motor Assembly	1
1	Encapsulated switch	1
2	Diaphragm of Pressure Switch	1
3	Pump Head	1
4	Diaphragm	1
5	Rubber Feet	1
6	Motor	1

TROUBLESHOOTING

PULSATING FLOW– PUMP CYCLES ON AND OFF

- Check lines for kinks.
- Plumbing lines or fittings may be too small.
- Clean faucets and filters.
- Check fitting tightness for air leaks.

NOISY

- Check if the mounting feet are compressed too tightly.
- Is the mounting surface flexible? If so, it may be adding noise.
- Check for loose head/screws.
- If the pump is plumbed with rigid pipe, then it may transmit noise more easily.

FAILURE TO PRIME BUT MOTOR OPERATES - NO PUMP DISCHARGE

- Restricted intake or discharge line.
- Air leak in intake line.
- Punctured pump diaphragm.
- Initial amp supply is not enough to sufficiently start the motor.
- Debris clogged in the valves.
- Crack in pump housing.

MOTOR FAILS TO TURN ON

- Loose or improper wiring.
- Pump circuit has no power.
- Blown fuse or thermal protection tripped.
- Failed pressure switch.
- Defective motor.

PUMP FAILS TO TURN OFF AFTER ALL FIXTURES ARE CLOSED

- Punctured diaphragm.
- Discharge line leak.
- Defective pressure switch.
- Insufficient voltage.
- Clogged valves in pump head.

LOW FLOW AND PRESSURE

- Air leak at pump intake.
- Accumulation of debris inside pump or plumbing.
- Worn pump bearing (possibly accompanied by loud noise).
- Punctured diaphragm.
- Defective motor.

SEAFLO®

3 YEAR LIMITED SERVICE AND WARRANTY POLICY

SEAFLO warrants its SEAFLO brand products to be free from material and workmanship defects under normal use and service for a period of three (3) years from the date of original consumer purchase with purchase receipt. In the absence of proof of purchase the warranty is three (3) years from the date of manufacture indicated on the motor nameplate or on the products indicated, not tc exceed three (3) years in any event.

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

Warranty claims may be resolved by an authorized dealer service center, or by a SEAFLO service center. Returns are to be shipped with charges pre-paid. Package all returns carefully. SEAFLO will not be responsible for freight damage incurred during shipping to a service center. SEAFLO's obligation under this warranty policy is limited to the repair or replacement of the products.

Products found not defective (under the terms of this limited warranty) are subject to charges to be paid by the returnee for the testing and packaging of "tested well" units. SEAFLO reserves the right to choose the method of transportation.

SEAFLO reserves the right to update specifications, change prices, or make substitutions without notice.