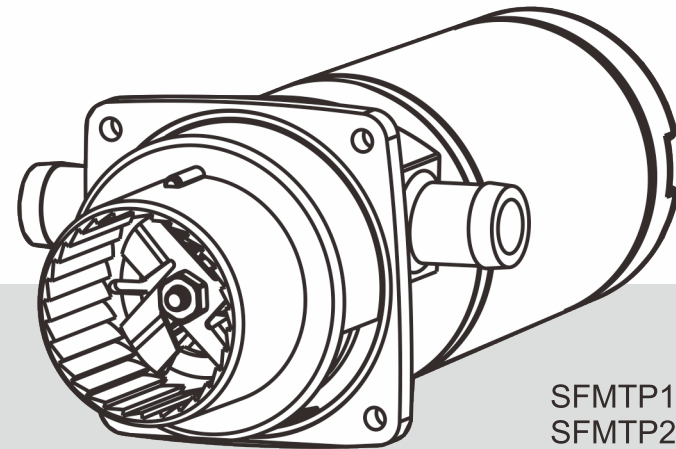


SEAFLO[®]

ELECTRIC TOILET FLUSH PUMP INSTALLATION MANUAL



SFMTP1-01
SFMTP2-01

A dual-function pump eliminates the need for hand pumps and dry-bowl valves. With the push of a button, the self-priming flush pump rinses the bowl as the Macerator and high-capacity scavenger pump grind up waste and pump it out.

FEATURES

- High Capacity Macerator and Bowl Scavenger Pump
- Flexible Impeller Flush Pump
- Fully Enclosed, with Stainless Steel Shaft
- Simply Operate by Pushing Button Switch
- All Corrosion Resistant Materials for Marine Use
- Thru Flow Approx. 1-1/2 Qts. per 5 Seconds of Operation

MODEL	
SFMP1-01 12 Volt	SFMP2-01 24 Volt

APPLICATION

The SEAFLO electric toilet may be installed above or below the waterline. Flush pump is self-priming with a vertical lift up to 4 feet; discharge macerator pump can operate against a vertical head up to 4 feet.

SEAFLO flush pump can be used to convert the Raritan PH or Compact, Wilcox-Crittenden "Head Mate", Groco HC, Brydon No. 9127, 9128, or No. 59128 and virtually any other model marine toilet using the "standard" bowl configuration with a 3-3/4" diameter bolt circle, 4 hole pattern in the base. Check the dimensional drawing to be sure the bowl will fit the flange dimensions as shown.

INSTALLATION INSTRUCTIONS

PLUMBING CONNECTIONS

Connect inlet hose using either 5/8" or 3/4" ID hose (a sleeve is included to adapt pump inlet from 5/8" to 3/4"). Make sure all inlet connections are airtight and free of sharp bends or restrictions.



NOTICE: The toilet inlet must not be connected to a pressurized water system.

Connect 1" or 1-1/2" hose to discharge port, and make suitable connection to holding tank or other discharge system. Avoid sharp bends or restrictions. If the toilet is, or can be, below waterline at any normal (including static) attitude of vessel heel and/or trim, a 3/4" Vented Loop Fitting must be installed in the length of hose connecting the flushing pump to the inlet seacock.

The Vented Loop Fitting must be positioned so it remains slightly* above the waterline at all angles of heel and trim.

*Recommended minimum height above waterline is 6".

For above waterline installations, a check valve may have to be installed in the flush water intake line to ensure rapid pump priming. To retain water in bowl, make a loop in the discharge line about 8 inches above base of bowl.

DO NOT CONNECT INLET HOSE TO A PRESSURIZED PORTION OF THE WATER SYSTEM.

ELECTRICAL CONNECTIONS

Select a location for the switch and instruction plate, making sure wire leads from both the toilet and power source can be routed to the switch. Ensure the panel where installing switch is no more than 1" thick. Drill a 5/8" mounting hole and install switch and instruction plate. Use stranded copper wire of the correct size (determined from the electrical specifications chart) to connect one side of the switch to the positive power source.

NOTICE: Correct wire size and secure wire connections are very important. Undersized wire and unsecured or corroded wire connections will cause a reduction in pump performance and possible pump failure. **An appropriate size fuse or equivalent circuit breaker (determined from electrical specifications chart) must be installed in the positive power lead within seven inches of the power source or in the electrical power distribution breaker /fuse panel.** Connect the other side of the switch to the orange (positive) motor lead. Connect the black (negative) motor lead to the negative side of the battery or grounded buss bar.

NOTICE: Correct motor polarity (red to positive, black to negative) is important. Reverse polarity can damage motor and void warranty. Full voltage at the motor is required to properly operate SEAFLO Electric Toilet. The toilet must be wired in a circuit independent of all other accessories.

OPERATING INSTRUCTIONS

Make sure inlet and outlet seacocks are all open; push switch button to operate. Operate until bowl is completely flushed and discharge pump has scavenged water from bottom of bowl.

The SEAFLO electric marine toilet will provide 1 year of trouble free service if properly used. It will handle waste and toilet tissue. It will not handle rags, sanitary napkins or hard solid objects.

Clean toilet with mild non-abrasive cleaners without strong aromatics. Cleaners having high concentrations of aromatics, such as pine cleaners and strongly scented degrease concentrates, can cause the pump's impeller to swell and possibly bind up.

If bowl does not pump out and begins to fill, partially close inlet valve until bowl is cleared and completely pumped out. Then operate for a few seconds with both valves open to clear entire toilet and discharge system. For maximum safety, when toilet is not in use or vessel is unattended, close both the inlet and discharge seacocks.

To drain for winter layup, close inlet valve and operate for a few seconds until all water is pumped out.

DISASSEMBLY

Disconnect pump inlet and discharge hoses. Remove four screws, Key No. 11, pull out complete motor, pump and macerator assembly. Remove macerator housing from base.

Remove discharge port, and inspect joker valve. Unscrew chopper plate lock nut, Key No. 10, by turning counterclockwise, facing plate and remove chopper. Prevent shaft from turning by inserting a screw-driver in slot of shaft protruding from rear of motor. Loosen centrifugal impeller set screw and slide impeller off motor shaft.

Remove four flat head screws, wearplate, Key No.10, shaft sealing sleeve, gasket, Key No. 4; then slide pump assembly off motor shaft. Replace all worn or damaged parts, clean remaining parts.

ELECTRICAL SPECIFICATIONS

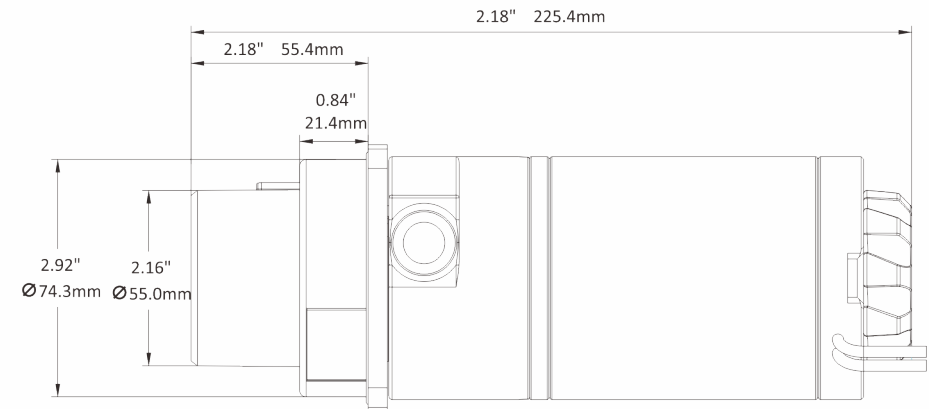
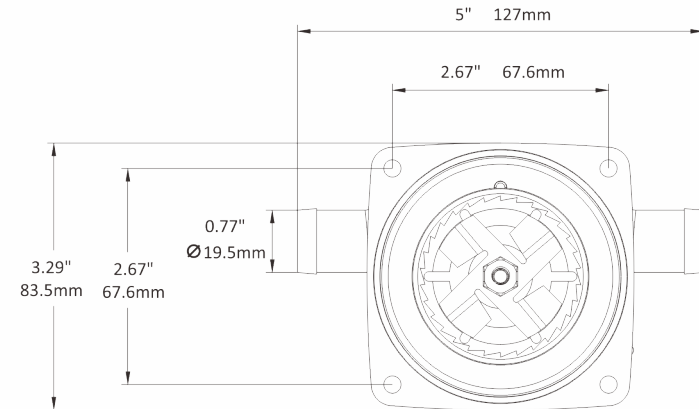
VOLTAGE	AMP	FUSE	WIRE SIZE PER FEET OF RUN				
	DRAW	SIZE	0'-10'	10'-15'	15'-25'	25'-40'	40'-60'
12	20	20	#12	#10	#10	#8	#6
24	10	15	#16	#14	#12	#10	#10

* Length of run is total distance from power source to product and back to ground.

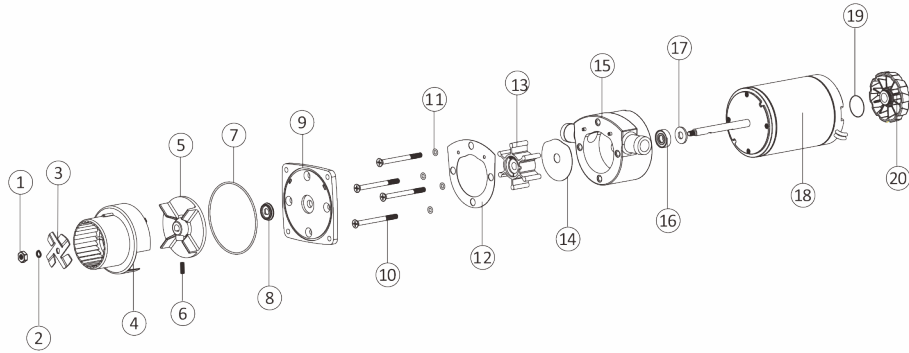
REASSEMBLY INSTRUCTIONS

Press seal into body with lip facing impeller; be careful not to cock seal in bore. Install pump body on motor and position on register; lubricate impeller bore with pump grease. Install impeller, gasket and wearplate. Make sure gasket surfaces are clean and smooth. Tighten wearplate screws. Slide shaft sealing sleeve onto shaft and seat in its bore in wearplate. Relocate centrifugal impeller about 1/8" from wearplate and secure with set screw. Position macerator housing around centrifugal impeller then put chopper plate on end of shaft and secure with lock nut. Install O-ring in O-ring groove in wearplate surface (a little grease will help hold in place). Aligning key on top of macerator housing with slot in base, slide macerator assembly into base. Secure pump assembly with the four screws.

DIMENSIONAL DRAWING



EXPLODED VIEW



1	Nim	8	Seal	15	Impeller casing
2	Spring pad	9	Pad	16	Oil seal
3	Blade	10	Screw	17	Shaft seal
4	Cover	11	Screw O-ring	18	Motor
5	Drainage impeller	12	Impeller cover seal	19	Pump knob O-ring
6	Screw	13	Pumping impeller	20	Pump knob
7	O-ring	14	Stainless steel sheet		