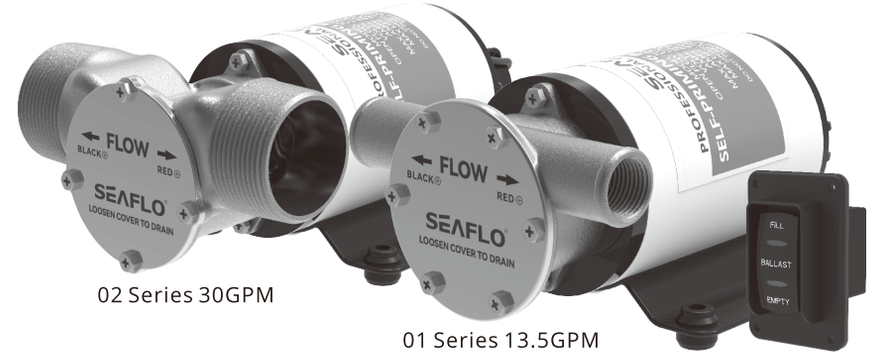
SEAFLO®

Ballast Pump

Instruction Manual



02 Series 30GPM

01 Series 13.5GPM

Reversing Polarity Switch
SFSP-030-08
Sold separately

A perfect solution specifically designed for use on yachts, ships, water skis, skis, or water systems with ballast tank structures, allowing for quick filling or emptying of ballast tanks when inverted; This pump can pump fresh or seawater, and its sturdy design makes it highly efficient and output, suitable for intermittent use; The pump is reversible, equipped with a "Reversing Polarity Switch" and has a built-in thermal overload function to provide additional protection.

STANDARD CONFIGURATIONS

Model	Voltage	GPM/LPM	Impeller	Current	Ports
SFSP1-050-003-01	12V	13.5/ 50	TPU	14A	1/2"FNPT
SESP2-050-003-01	24V	13.5/ 50	TPU	7A	1/2"FNPT
SFSP1-113-009-02	12V	30 / 113	TPU	25A	1-1/2”MNPT
SFSP2-113-009-02	24V	30 / 113	TPU	13.5A	1-1/2”MNPT
SFSP-030-08	12V/24V DC	/	/	30A @ 12V 15A @ 24V	/

SEAFLO®

INSTALLATION AND MAINTENANCE

INSTALLATION

Pump should be mounted in a dry, cool ventilated location.

Pump may be mounted in any position without loss of efficiency; however, it is suggested that the pump head be down if vertical mounting is desired. Mount motor as close as possible to power source to obtain full voltage.

The pump should be installed so that the motor is protected from rain, wash down or bilge water.

Please note that pump body can be turned 180° in relation to motor. This changes flow direction.

When using a AC vac-on-switch, mount it on the connection on the inlet side of the pump. When using a pressure switch, mount it on the connection on the outlet side of the pump.

Don't handle diesel fuel or other mineral oils with this pump.

This pump cannot run against a closed outlet. Risk for overheating.

PLUMBING

Use hose that does not kink when bent, and also with sufficient wall thickness preventing collapse when used on suction side, eg. reinforced hoses.

Hoses should be routed so that some water will remain in pump body to wet impeller for easy start up.

Use a strainer at intake hose to prevent from trash and solids entering the pump. In order to ensure good starting always keep connections airtight.

ELECTRICAL INSTALLATION

The pump must be installed according to ISO 10133 (Small craft - Electrical system- Extra low voltage DC installation for continuous current). Note: The fuse must be ignition protected. The motor is equipped with built in thermal protection to prevent the motor from over-heating. The protection is automatically restored when the motor is cooled. If the pump is connected with separate earth lead, this should be yellow/green and connected to the motor base.

See the wiring table for correct installation. Choose wire size in accordance with total wire length. The pump should be operated by a Polarity Reversing switch, through an over current protected distribution panel fitted with:

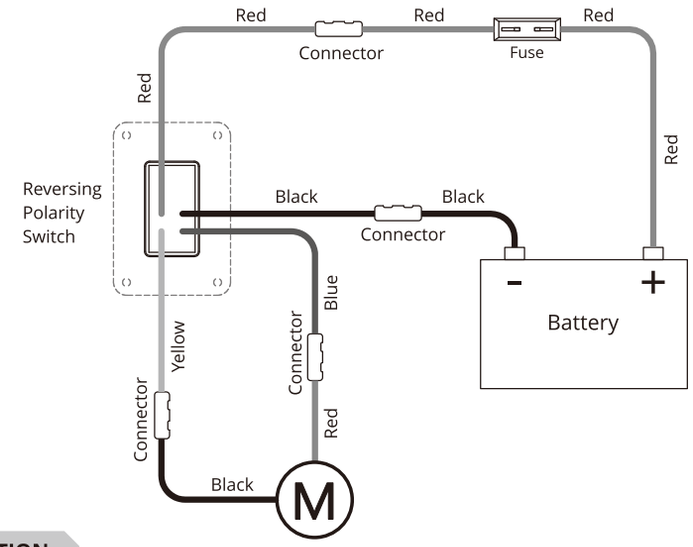
01 series Ballast pump : 25 Amp/12V or 15 Amp/24V circuit breaker or fuse

02 series Ballast pump : 50 Amp circuit breaker or fuse

The wire connections must be sealed or insulated.

Note: Before installation with electrical control systems, check that equipment to be used is of sufficient rated capacity to accept ampere draw of motor.

WIRING DIAGRAM



OPERATION

The SEAFLO Ballast pump is reversible so it can both add liquid ballast and then pump it overboard when needed. As an alternative you may pump liquid ballast from one tank to another and reversed.

At need for adding ballast you flip the switch to fill position and watch for indicators that tank is full, then switch pump off.

To reduce ballast, flip switch to drain position. The pump will reverse to pump ballast back over board. Watch indicator for an empty tank and switch pump off. The same operation is used for ballast transfer between two tanks.

SELF-PRIMING

The pump is self-priming up to 1.5m provided that the suction pipe is absolutely airtight. Note! The pump is self-priming when the impeller is dry, but to obtain suction heads up to 1.5m the impeller must be lubricated with the liquid to be pumped or impeller lubricant. For a permanent installation where the suction head exceeds 1.5m a foot valve should be fitted to ensure the pump can provide suction immediately after starting. Always use impeller lubricant (glycerin) for lubricating the impeller. Never use grease or mineral oils.

CONTINUOUS DUTY

For continuous duty 0,6 bar (60 kPa, 8,5 psi) maximum head is permissible. Max ambient temp is +60°C.

⚠ Do not run dry for more than 30 seconds. Lack of liquid will burn the impeller and damage the seals.

⚠ Do not pump gasoline, solvents, thinners or other flammable liquids. Do not handle highly concentrated or organic acids.

⚠ Never operate a motor which in any way has been manipulated and lost it's full enclosure.

TEMPERATURE

Max ambient temperature: +60°C. The life of the impeller depends on the temperature of liquid being pumped. Temperatures between +5°C and +55°C give normal life. Higher or lower temperature will reduce the life.

⚠ The normal working temperature of the motor may reach approx. +80°C (surface temperature) which may burn your skin.

FREEZING WEATHER

Drain unit by loosening the end cover. Glycol based anti-freezes can be used but do not use petroleum based anti-freeze compounds.

DISASSEMBLY

1. Back off the endcover screws, remove the endcover and O-ring.
2. Pull out the impeller using a slip joint plier.
3. Back off and remove the nuts and washers holding the body. Separate the body from the motor.
4. Remove the lip seal.
5. Do not disassemble the motor.

ASSEMBLY

1. Moisten the new lip seal with soapy water (5% soft soap), mount the seal with the lip facing towards the impeller.
2. Lubricate the motor shaft with glycerin of the like. Fit the body to the motor.
3. Lubricate inside the pump body where the impeller should be placed with Impeller Lubricant, provided with the spare Impeller. Also lubricate the surface of the end cover. Never use grease or mineral oils for lubrication.
4. Fit the impeller with a rotating movement in the intended direction of the pump rotation.
5. Lubricate the O-ring with glycerin and fit it in its position and fasten the end cover.

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 material.

IMPELLER

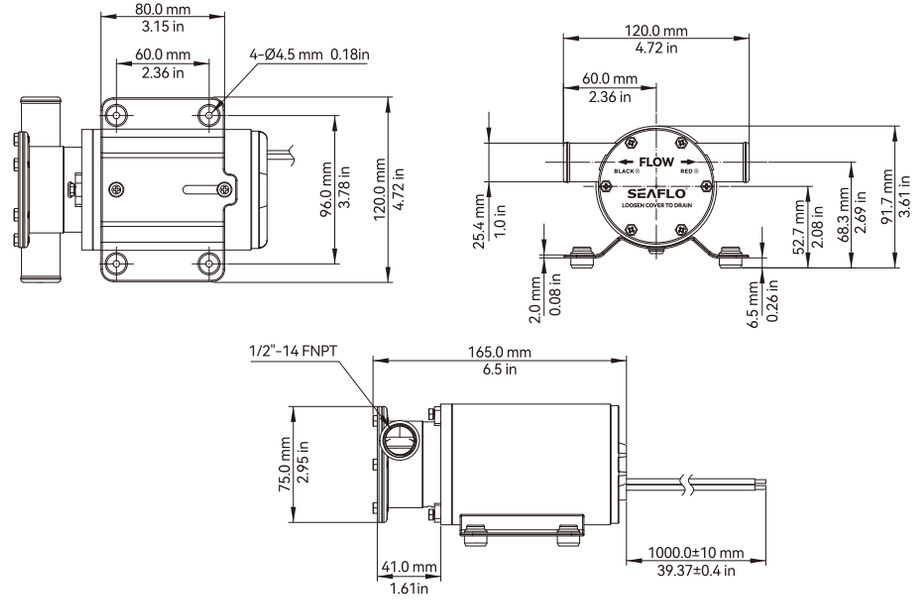
The impeller 0.87" (22mm) or 1.73" (44mm) is a very important safety accessory. The original SEAFLO impeller should be replaced every year. When replacing, always use impeller lubricant (glycerin) to lubricate the impeller. And configured as spare parts.

ACCESSORIES

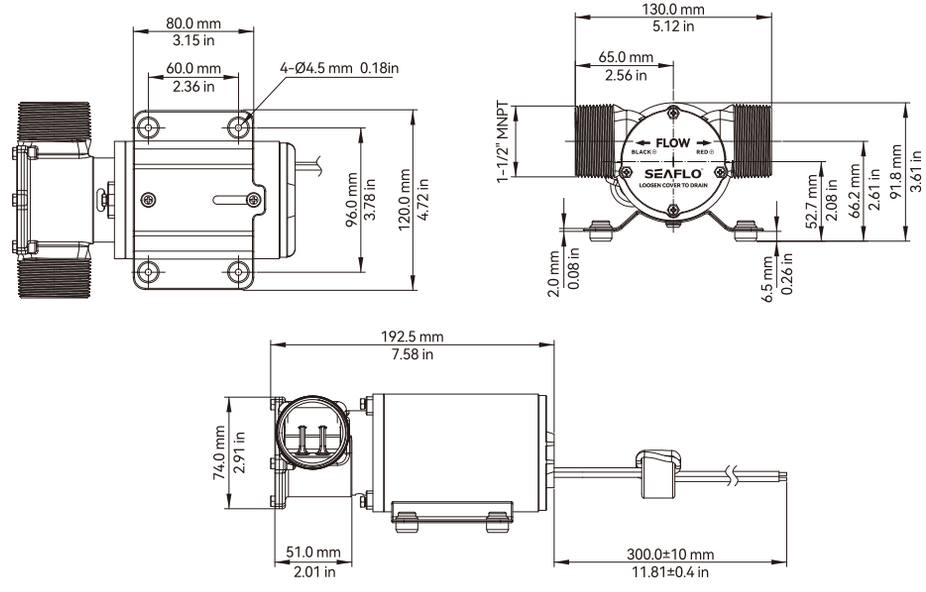
Reversing Polarity Switch(SFSP-030-08)

DIMENSION DRAWING

01 Series 13.5GPM

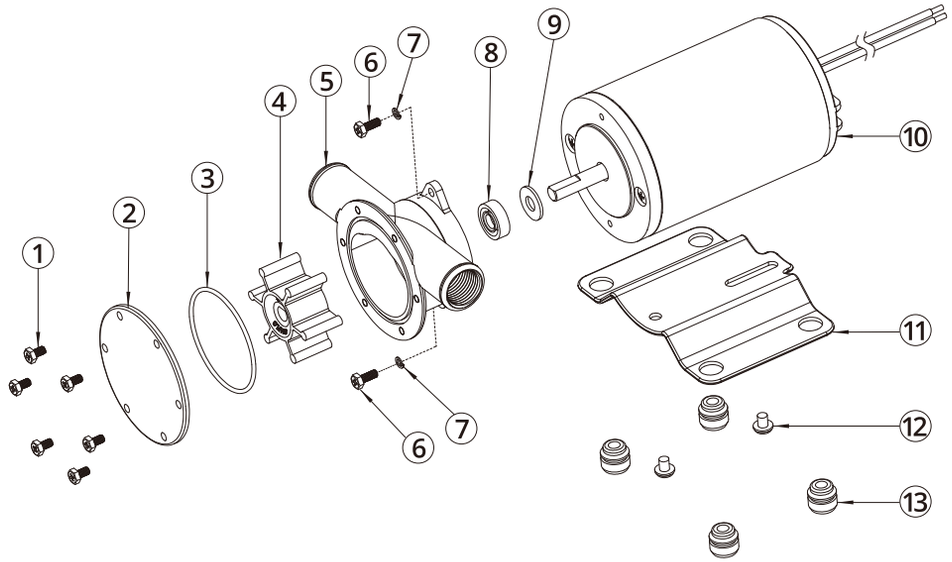


02 Series 30GPM



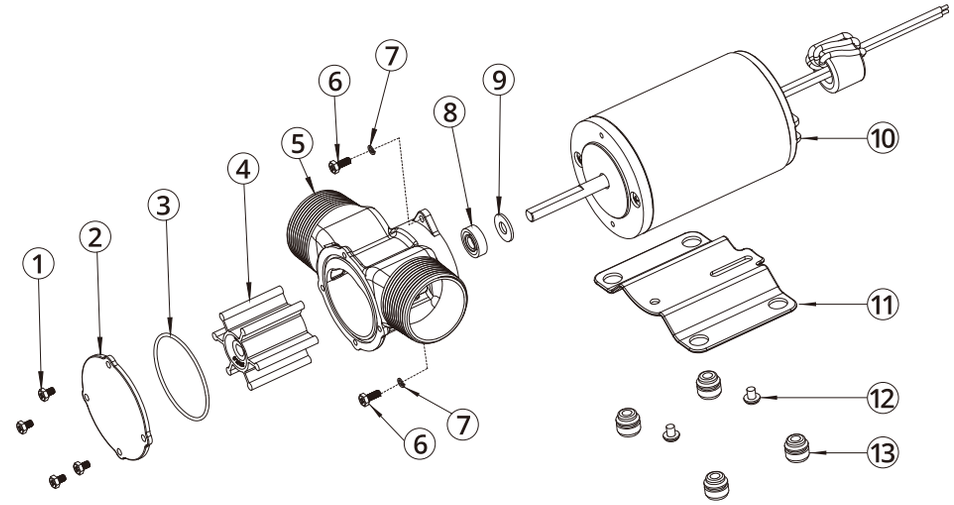
EXPLODE DRAWING

01 Series 13.5GPM



No.	DESCRIPTION	QUANTITY	No.	DESCRIPTION	QUANTITY
1	Pump Cover Screw	6	8	Sealing Ring	1
2	Pump Cover	1	9	Sealing Gasket	1
3	O-ring	1	10	Motors	1
4	Impeller	1	11	Iron Plate Feet	1
5	Pump Head	1	12	Iron Plate Foot Screws	2
6	Pump Head Screws	2	13	Foot Pads	4
7	Spring Pad	2			

02 Series 30GPM



No.	DESCRIPTION	QUANTITY	No.	DESCRIPTION	QUANTITY
1	Pump Cover Screw	4	8	Sealing Ring	1
2	Pump Cover	1	9	Sealing Gasket	1
3	O-ring	1	10	Motors	1
4	Impeller	1	11	Iron Plate Feet	1
5	Pump Head	1	12	Iron Plate Foot Screws	2
6	Pump Head Screws	2	13	Foot Pads	4
7	Spring Pad	2			