



There when you need us most

SS Series

Stainless Steel Sewage Pump

Installation & Operating Manual



Congratulations on Your Choice in Purchasing this Webtrol Pump!

Its Quality is unsurpassed in material and workmanship and has been factory tested.
If properly installed, it will give many years of trouble free service.

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Introduction

This manual was prepared to assist the installer and/or operator in understanding the proper method of installing, operating and maintaining the SS Sewage Pump. We recommend that you thoroughly understand the proper installation and start-up procedures, prior to starting the pump. If these procedures are followed, you will have years of trouble-free service.

WARNING

Rules For Safe Installation And Operation

1. Read these rules and instructions carefully. Failure to follow them could cause serious bodily injury and/or property damage.
2. Check your local codes before installing.
3. For maximum safety, this product should be connected to a grounded circuit equipped with a ground fault interrupter device.
4. Before installing this product, have the electrical circuit checked by an electrician to make sure it is properly grounded.
5. Before installing or servicing your pump, BE CERTAIN pump power source is disconnected.
6. Make sure the line voltage and frequency of the electrical current supply agrees with the motor wiring. If motor is dual voltage type, BE SURE it is wired correctly for your power supply.
7. Complete pump and piping system MUST be protected against below freezing temperature. Failure to do so could cause severe damage and voids the Warranty.
8. Do not operate the pump in flammable and/or explosive atmosphere.

Specifications

Max. temperature of pumped fluid	140°F
Max. dimension of suspended solids	2 inch
Max. immersion depth33 feet
Length of power cable25 feet
Type of impeller	single channel vortex or backward facing vortex
Type of seal on shaft	double mechanical seal in an oil chamber
Type of bearing	shielded ball bearing
Discharge	2 inch thread or flange
Impeller material	stainless steel
Pump structure material	stainless steel
Motor structure material	stainless steel
Seal cover material	stainless steel
Intake side cover material	stainless steel
Pump body variable features	threaded with feet or flanged with feet

Recommended & Non-Recommended Use

Note: Failure to respect the prescribed limits constitutes a situation of use that is technically improper and endangers the safety of persons, relieving Webtrol of any responsibility in the event of accidents to persons or damage to objects or to the pump, and also rendering the guarantee invalid.

Recommended conditions of use

SS Series Sewage pumps may be used for handling dirty or semi-dirty water or water with suspended bodies with a diameter no greater than 2 inches; for draining garages, cellars, basements, swimming pools, basins, tanks, fountains, drains, cesspools, sewage collection drains from cesspools; for drain excavations, flowing irrigation from ditches, rainwater tanks or streams.

The pump may be used for continuous duty only if totally submerged. Use the pump in keeping with its technical characteristics.

Non-Recommended conditions of use

SS Series Sewage pumps cannot be used for handling water containing acids and corrosive liquids in general, water with temperatures higher than 60 degrees C, sea-water, flammable and generally dangerous liquids. Pumps must never be allowed to run without water.

Pump Handling & Transport

Unpacking

Check that there are no breaks or severe dents in the packing; if there are, point this out immediately to the person who delivers the material. After removing the pump from the package, check that it has not suffered any damage during transport; if damage is found, inform the distributor within 8 days of delivery. Then check that the characteristics stated on the plate of the pump are the same as you requested in your order.

Warning: Failure to follow these instructions may cause the pump to fail, suffering severe damage. Do not use the power cable to lift or drag the pump.

Handling and Disconnecting

To handle or disconnect the pump you must remove the plug from the power socket and/or turn off the switch, if provided. Roll up and hold the electric power cable in your hand. Lift the pump and the delivery pipe with the handle provided or with a cable fixed to the handle.

If the pump is set for fixed applications, perform the following operations before handling it:

- 1) Remove the plug from the power socket and/or turn off the switch, if provided.
- 2) Unscrew any clamps and remove the delivery pipe.
- 3) Roll up and hold the electric power cable in your hand.
- 4) Lift the pump with the handle provided or with a cable fixed to the handle.

Transport

The pump is packed in a cardboard box for transport; as its total weight and bulk are not excessive, transport presents no problems.

Installation

Warning: To lift or lower the pump use the handle or a rope fixed to the handle, never use the electric power cable.

Fixed Installation

- 1) The pump must be placed on a level surface.
- 2) Lower the pump with a cable fixed to the handle.
- 3) When positioning the pump, observe the minimum

required distances from walls, from the sides of the drain or other location, so as to allow functioning, use and maintenance operations in safe conditions.

4) It is recommended to use rigid pipes (metal or plastic), to be screwed onto the threaded delivery union of the pump.

5) It is recommended to fit a check valve on the delivery pipe.

Installation Flange Version

1) Fix the support onto the surface on which the pump is to stand.

2) Screw the delivery pipe onto the support.

3) The support has a rod with a guide along which runs the hook that is used to lower the pump.

4) Lower the pump, holding it with the cable, until the flange connects with the support.

5) The pump connects with the support thanks to its own weight.

Temporary Installation

1) The pump must be placed on a level surface.

2) When positioning the pump, observe the minimum required distances from walls, from the sides of the drain or other location, so as to allow functioning.

3) It is recommended to use flexible pipes, with couplings of the same size if required.

4) It is recommended to fit a check valve on the delivery pipe.

Assembly And Disassembly

The pump has no separate accessories, so no assembly is required for installation.

If the pump has to be disassembled (due to breakage or any other reason), the user must notify webtrol.

Failure to comply with this rule renders the guarantee invalid.

Start-Up Procedures

Three-phase pumps, check the direction of rotation of the motor. The impeller must turn in a clockwise direction when viewing the pump from above. (see the arrow on the pump). As it is not possible to check the direction of rotation of the impeller visually, proceed as follows: before anchoring the pump in the system and without the pipes, connect the power

cables to the electric panel and switch on the main switch for a moment; the pump will start up immediately with a recoil. If the pump is turning in the right direction, the recoil will be counter clockwise, viewing the pump from the top.

Electric Connections

- 1) For connection to the power mains, the pump is provided with a 25 foot cable. When connecting, consider the installed power, the outlet voltage and the number of phases.
- 2) The outlet must have an efficient ground system complying with electrical standards.
- 3) The single-phase version has a plug itself when it is inserted in the socket.
- 4) The three-phase version has a three-pole power cable with ground and two leads with a smaller section colored respectively white and gray, connected to the thermal protection device inside the motor.

Connect the yellow/green led in the power cable to an efficient ground system which complies with electrical standards. Overload protection must be provided by the user, as well as the use of the signal provided by the thermal protection device.

For the thermal probe, the two white and gray leads must be connected to an electric circuit that is able to interrupt the power supply to the pump.

Automatic Pumps

Insert the plug and/or turn on the switch; the pump starts operating; once the pump has taken in water up to the minimum level regulated by the float, it will cut out automatically.

Manual Pumps

Insert the plug and/or turn on the switch; the pump starts operating; once the pump has taken in water up to the minimum level, remove the plug and/or switch off.

Maintenance And Repairs

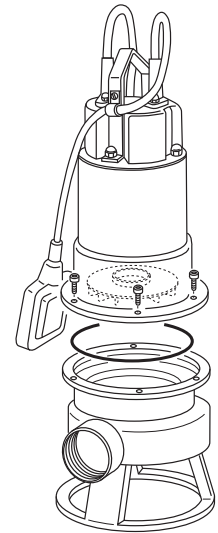
Warning: Always disconnect the electrical supply prior to any maintenance operations.

To ensure correct functioning and long life of the pump, the intake mouth must not be blocked and the impeller must be kept clean.

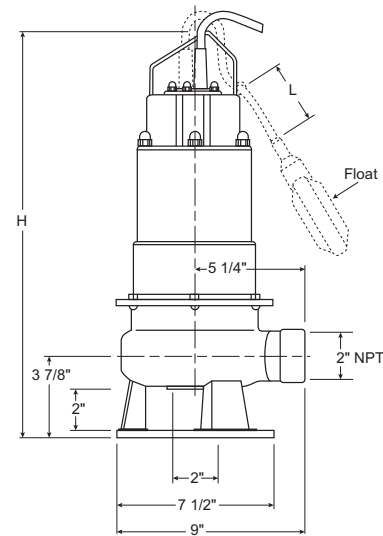
- 1) If the intake mouth is blocked it must be cleaned; always wear gloves to protect your hands.

- 2) If the impeller is dirty, proceed as follows:

- a) Wear protective gloves to avoid cutting your hands.
- b) Unscrew the six socket head screws (not the nut, because it is welded to the pump body).
- c) Slip off the pump body.
- d) Remove the O-ring.
- e) The impeller is now uncovered, check that it is clean; check also that the space between the impeller and the protective casing is clean.



To reassemble, perform the operations listed above in reverse order.



Pump Height		
Phase	HP	Pump Height (H)
Single	1/2	21 5/8"
	1	22 7/5"
	1 1/2	20 1/4"
	2	24"
Three	1/2	19 1/8"
	1	19 1/8"
	1 1/2	20 1/4"
	2	20 1/4"

Float Switch Length	
Volts	Tether Length (L)
115	10 1/4"
208/230	7 7/8"

System Trouble Shooting

Motor Fails To Start

Possible Cause Of Trouble	Corrective Action
No electric power	Check switch or contactor on the electric line
Plug not inserted	Check power connection to the line
Automatic switch has tripped	Reset switch and check the cause
Float blocked	Check that the float reaches ON level
Impeller blocked	Check cause of blockage
Thermal protection has tripped (single phase)	This resets automatically (single-phase only)
Protection fuses are burnt out (three-phase)	Replace the fuses with others of the same type
Incorrect electric connection	Check terminal board and electric panel
Faulty motor or capacitor	Contact Webtrol
Hole in the intake cover is blocked	Clean the hole
Check valve is blocked	Clean and check operation

The Pump Works At A Low Flow Rate

Possible Cause Of Trouble	Corrective Action
Dirty impeller or delivery pipes	Clean
Check valve blocked	Clean and check operation
Water level too low	Switch off the pump
Wrong direction of rotation (three-phase only)	Check direction of rotation, reverse any two of the leads
Wrong voltage	Supply with the correct voltage as indicated on data plate

The Pump Stops After Brief Periods Of Operation

Possible Cause Of Trouble	Corrective Action
Impeller blocked by foreign bodies	Remove the foreign bodies
Liquid temperature too high	The temperature exceeds the technical limits of the pump
Internal defect	Contact Weber Industries, Inc.

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Thank You for Purchasing an SS Series Sewage Pump

We at Webtrol are constantly working on new products to make your job easier, while making your systems more efficient, reliable and affordable.

Your opinion means a lot to us, so please let us know what you think about our SS Series Stainless Steel Sewage Pumps.



There when you need us most

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