



There when you need us most

IS Series

Stainless Steel Solid-Handling Pump

Installation & Operating Manual



Congratulations on your purchase of a WEBTROL pump

WEBTROL pumps are manufactured to high standards for quality, materials, and workmanship. Each pump is factory tested prior to shipment to help ensure reliable performance.

When properly installed, operated, and maintained in accordance with the instructions in this manual, your WEBTROL pump is designed to provide many years of dependable, trouble-free service.

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Introduction

This manual is intended to assist installers and operators in the proper installation, operation, and maintenance of the WEBTROL IS Solid-Handling Pump.

Before installing or starting the pump, carefully review and understand the installation and start-up procedures provided in this manual. Proper installation and operation are essential for safe, reliable performance and long service life.

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, **ENSURE** pump power source is disconnected.
6. Make sure the line voltage and frequency of the electrical current supply is compatible with the motor wiring. If motor is dual voltage type, **ENSURE** 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	122°F continuous 140°F intermittent
Max. dimension of suspended solids	2 inch
Max. immersion depth	18 feet
Length of power cable	30 feet
Type of impeller	open impeller
Type of seal on shaft	double mechanical seal in an oil chamber
Type of bearing	shielded ball bearing
Discharge	1.5 or 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 operate the pump within the specified limits is considered improper use and may create a safety hazard for personnel, equipment, or property.

WEBTROL is not responsible for personal injury, property damage, or damage to the pump resulting from operation outside the limits specified in this manual. Improper use may also void the product warranty.

Recommended conditions of use

IS Series Solid-Handling 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.

Non-Recommended conditions of use

IS Series Solid-Handling pumps cannot be used for handling water containing acids and corrosive liquids in general, water with temperatures higher than 140 °F, sea-water, flammable and generally dangerous liquids. Pumps must never be allowed to run without water.

Pump Handling & Transport

Unpacking

Inspect the packaging for tears, punctures, severe dents, or other visible signs of damage. If damage is present, report it immediately to the carrier.

After removing the pump from the packaging, inspect it carefully for any damage that may have occurred during shipment. If damage is found, notify the distributor immediately.

Verify that the information on the pump nameplate matches the model, ratings, and specifications shown on your order.

Warning: Failure to follow these instructions may cause the pump to fail. 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) Turn off the power.
- 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.

Installation

Warning: Use the pump handle or a properly secured lifting cable attached to the handle when lifting or lowering the pump.

Never lift, lower, or suspend the pump by the electrical power cable. Doing so may damage the cable and create a risk of electrical shock or equipment failure.

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, maintain the minimum

required clearances from walls, drain sides, and other surrounding structures. Adequate clearance is necessary to ensure proper operation and to allow safe access for use, inspection, and maintenance.

- 4) Rigid piping, either metal or plastic, is recommended for the discharge connection. Thread the piping securely onto the pump's threaded discharge connection, taking care not to overtighten or damage the threads.
- 5) A check valve is recommended in the discharge piping to help prevent reverse flow when the pump is not operating.

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.

Assembly and Disassembly

The pump is supplied fully assembled and requires no additional assembly prior to installation.

If disassembly is required due to damage, service needs, or any other reason, contact WEBTROL before proceeding. Unauthorized disassembly may void the product warranty.

Start-Up Procedures

For three-phase pumps, verify the motor rotation before final installation. When viewed from above, the impeller must rotate clockwise, as indicated by the directional arrow on the pump.

Because the impeller rotation cannot be checked visually during normal operation, verify rotation before connecting the pump to the piping system. With the pump secured and the piping disconnected, connect the power leads to the electrical panel and briefly energize the pump.

The pump will produce a slight starting recoil. When viewed from above, a counterclockwise recoil indicates that the impeller is rotating in the correct clockwise direction.

If the recoil is clockwise, disconnect power and have a qualified electrician correct the phase sequence before operating the pump.

Electric Connections

1) For connection to the power mains, the pump is provided with a 30 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) Single-phase pumps are supplied with a power cord and plug. To operate the pump, insert the plug into a properly grounded electrical receptacle that meets the electrical requirements specified for the pump.

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 lead 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 into the appropriate receptacle and/or turn on the power switch to start the pump.

The pump will continue operating until the water level drops to the minimum level controlled by the float switch. At that point, the pump will shut off automatically.

Manual Pumps

Insert the plug into the appropriate receptacle and/or turn on the power switch to start the pump.

Allow the pump to operate until the water level reaches the minimum operating level. Then disconnect the plug and/or turn off the power switch to stop the pump.

Maintenance And Repairs

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

To ensure proper operation and maximize pump service life, keep the pump intake free of obstructions and regularly inspect the impeller for debris or buildup. Clean the impeller as needed to maintain efficient performance.

1) If the pump intake becomes blocked, remove the obstruction before returning the pump to service. Always wear appropriate protective gloves when cleaning the intake to protect your hands from sharp objects, debris, or other hazards.

2) If the impeller is dirty, perform the following steps:

Wear appropriate protective gloves to prevent cuts or other hand injuries.

A) Remove the ten socket-head screws. Do not attempt to remove the welded nuts from the pump body.

B) Carefully remove the pump body.

C) Remove the O-ring.

D) With the impeller exposed, inspect it for debris, buildup, or other obstructions.

Inspect and clean the area between the impeller and the protective casing as needed.

To reassemble the pump, perform the steps above in reverse order. Ensure the O-ring is properly seated before reinstalling the pump body.

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 IS Series Solid-Handling 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 IS Series Stainless Steel Solid-Handling Pumps.



There when you need us most

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