

#### SITE DRAINER THE NON-CLOGGING SOLUTION

#### **INSTRUCTION MANUAL**

### SITE DRAINER PUMPS

MARCH 2020

#### WHAT IS THE SD 750V?

Site Drainer's<sup>TM</sup> SD 750V is a Corrosion-resistant, Stainless Steel, electric, submersible dewatering pump system using patented technology to remove water <u>without clogging</u>.

- It continues to perform when other pumps clog and fail
- $\checkmark$  It has virtually limitless applications
- It is patented in USA, EU, Japan, China, Australia, Canada, and Republic of South Africa; patents pending in additional countries
- $\checkmark$  It is made in the USA







# **HOW IT WORKS**

- Stainless Steel construction allows for use in difficult environments
- Canister surrounding the pump diffuses water suction pressure over a large area
- Fine mesh openings only allows particles
  <6.35mm (.25 inch) to pass</li>
- Patented, free-flow design technology allows water in, and leaves debris behind

- Has an integrated vertical float for continuous worry-free operation.
- Optional burlap sack accessory eliminates erosion concerns
- Uses standard electric current 110 Volt @ 60Hz
- Portable and easy to carry at 40 lbs.

### **SPECIFICATIONS**



Model	SD 750V
Туре	Submersible Pump
Impeller	Polyurethane
Discharge Size	2"
Maximum Pumping Capacity	4980 gallons/hr 83 gallons/min 49 feet Head
Discharge Height Above Pumping Level (Pump Head)	5', 4980 gal/hr 10', 4711 gal/hr 15', 4443 gal/hr 20', 4201 gal/hr 25', 3798 gal/hr 30', 3395 gal/hr 35', 2848 gal/hr 40', 2115 gal/hr 45', 1193 gal/hr 49', 0 gal/hr

## **SPECIFICATIONS**

Model	SD 750V
Power	1 HP (.750 kW)
Voltage	110 v
Power cable length	33' one-piece molded rubber
Running Amps	10.7 amps (capacitor start)
Thermal Overload Protection	Yes
Dimensions	14.5"H, 11" D
Dry Net Weight	39.8 lbs. (including cord)
Temperature	34 - 104 F Intermittent usage to 140 F (max. 5 min)
Safety	Pump motor is UL and CE listed

### **THINGS TO KNOW**

- Stainless Steel pump housing allows the pump to work in salt water, corrosive and PH imbalanced environments
- Internal integrated float switch for worry-free operation in debris filled water
- Turns on at 6.5 inches of water, turns off at 2 inches of water, automatically
- 304 Corrosion resistant Stainless Steel, 20 gauge thick cage
- 2" male discharge port at top of pump, accepts 2" NPT female hose
- For greater versatility, can come with quick connect coupling
- Powerful yet lightweight only 39.8 lbs
- Portable with durable carrying handle
- Debris larger than .25" remains outside of canister, not affecting water flow
- If grit, sand, or silt is present: Can't discharge into storm sewers? use available fitted Burlap Sack to filter and comply with local de-watering regulations

### THINGS TO KNOW

- Pump and motor section form a pressure-tight encapsulated unit
- Shaft is made of stainless steel
- Impeller made of Polyurethane (a very tough and corrosion resistant plastic)
- Watertight cable inlet connection chamber with wick-free cover and and built-in strain relief
- Water being pumped flows around the motor housing for optimum heat dissipation
- Motor is dynamically balanced with temperature monitor in the stator, which switches off the pump in the case of overheating and switches on again automatically after cooling down
- Environmentally safe oil-free motor with food-grade lubricant
- Air filled capacitor start motor

### **SAFETY INFORMATION**

- Pump water only
- Never use worn or damaged cables. Inspect for cuts in the insulation.
- Never attempt to use the power cord as a lifting or lowering device for the pump
- Always lift the pump by it's carrying handle or attached rope to carrying handle
- Always make sure electrical connections are properly grounded, GFCI is always recommended
- Do not allow a *partially* submerged pump to freeze. The expansion of water freezing in the volute may crack the pump. If there is danger of the pump being subjected to freezing temperatures, lift the pump from the water and allow it to drain thoroughly



#### WARNING

- Do not operate near potentially explosive environment
- Do not use in presence of flammable liquids or gases
- Make sure product is properly grounded and provided with leakage breaker to prevent users from serious electric shock
- Always turn off the power before inspection, maintenance, and adjustment
- Never attempt to change the settings of all protective devices without consulting with licensed electrician
- The product is designed for moving water. The following shall not be handled for the pump and your safety:
  - Flammable, toxic, abrasive, crystallizing, and polymerizing liquid
  - Liquid chemical and food, alkaline and corrosive liquid
  - High temperature, high viscosity, and high solid matter content liquid

#### WARNING

- Always protect the electric plug or end of power cable from invasive moisture
- Never touch the piping or electrical connections while the pump is running
- Never touch the water while the pump is connected to electricity
- Never force the pump into operation if it has been partially disassembled
- Do not run the pump without water, do not operate the pump out of water or insufficient water
- Do not use the pump if the power cable is damaged

## **PRODUCT WARRANTY**

Site Drainer's sole obligation under this warranty shall be limited to the repair or replacement of any parts that the Seller determines, at its discretion, to be defective. The warranty is void if the damage is caused by the following factors:

- Improper installation
- Deficient maintenance
- Damage caused by improper use, or abuse
- Third party modifications made or attempted to alter the pump
- Normal wear and tear
- The pump has been used for purposes other than those for which it is intended

#### Site Drainer assumes no liability for the following:

- Bodily injuries
- Material damages
- Economic losses



## **PUMP INSTALLATION**

Before installation, check you local electrical and plumbing regulations. These regulations are for your safety

Use the pump dimensional drawing to ensure proper installation

Make sure the cables are not kinked or nipped

Ensure that hoses and valves are suitable for the pressure of the pump. Place the pump on a flat base and make sure it cannot fall over or sink

Make sure that the pump cannot rotate at the startup or during operation

Should there be any problems that occur during installation, please contact a Site Drainer representative

DO NOT dismantle the product before/during installation without any authorized instructions from Site Drainer

# **MAINTENANCE AND INSPECTION**

Regular checkups and preventive maintenance will ensure a more reliable and safe operation. An initial inspection of the pump within 3 to 4 months after installation is recommended. Subsequent inspections/maintenance can be carried out every 6 months

Always disconnect the pump from the power supply before inspecting the pump

Make sure that the pump cannot roll or fall over to injure people and damage property

Rinse the pump thoroughly with clean water before working on the pump

The pump should not be activated if it is partially dismantled

Worn impellers often have very sharp edges. Be very careful when replacing them.

#### **EU REGULATORY NOTICE AND UL LISTING**

The product complies with the following EU directives:

- 2006/42/EC Machinery Directive
- 2014/35/EU Low Voltage Directive
- 2014/30/EU Electromagnetic Compatibility Directive

UL 778 listing by May 1, 2020



### TROUBLESHOOTING

<u>Problems</u>	Possible Causes	Solutions
Pump fails to start	No electricity > Open circuit or poor connection > Impeller is clogged >	Check power source Check if there is an open circuit Inspect the impeller
Pump starts but stops immediately causing the motor protector to activate	Impeller is clogged > Motor abnormal > The pump is picking up too much sediment >	Inspect the impeller Repair the motor or replace Place the pump on a concrete surface to prevent sediment pickup
The pump's head and pumping volume is low Pump makes a noise or vibrates	Impeller is worn > Hose may be clogged > Motor bearings may be worn >	Replace impeller Unclog hose, reduce # of bends Replace bearings



#### **OPTIONAL ACCESSORIES**

#### Check Valve with Quick Connect



#### Burlap Sack



#### **Commercial Grade Discharge Hoses**



1-1/2" Double Male Threaded Aluminum Fittings





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