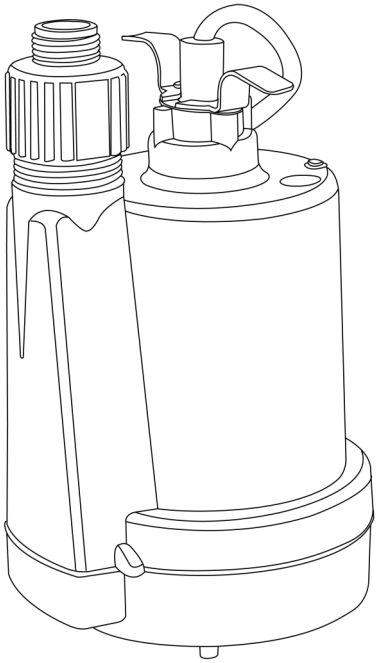
INSTALLATION & OPERATION MANUAL

UTILITY PUMP



C ETL LISTED US
Intertek

Safety Guidelines

Carefully read, understand and follow all safety instructions in this manual.

This is the safety alert symbol. When you see this symbol, look for one of the following signal words.

⚠ DANGER Indicates a hazardous situation which, if not avoided, will result in death or serious injury.

⚠ CAUTION Indicates a hazardous situation which, if not avoided, could result in death or serious injury.

⚠ WARNING Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

Safety Information

Read these warnings carefully. Know the application and limitations of this pump. Failure to follow these warnings could result in serious bodily injury and/or property damage.

⚠ DANGER RISK OF ELECTRICAL SHOCK. Disconnect and lockout power supply before removing old pump or installing or servicing this pump.

⚠ DANGER RISK OF ELECTRICAL SHOCK. This pump is supplied with a grounding conductor and grounding type attachment plug. To reduce the risk of electric shock, be certain that it is connected only to a properly grounded, grounding type receptacle. For added safety, it is highly recommended to connect this pump to a GFCI (Ground Fault Circuit Interrupter) outlet.

⚠ WARNING The installation of this pump must be in accordance with the National Electric Code (NEC), Uniform Plumbing Code (UPC), International Plumbing Code (IPC) as well as all applicable local codes and ordinances.

⚠ CAUTION Do not install this pump in any location classified as hazardous by the National Electrical Code, ANSI/NFPA70.

⚠ CAUTION Do not use this pump to pump flammable or explosive fluids such as gasoline, kerosene, etc. Do not use this pump in flammable or explosive environments. Use only with liquids compatible with pump component materials.

⚠ WARNING RISK OF ELECTRICAL SHOCK. This pump has not been investigated for use in swimming pool or marine areas.

⚠ WARNING RISK OF ELECTRICAL SHOCK. DO NOT use the power cord to install or carry the pump. Always use the handle. The cord may pull apart exposing bare wires which could cause a fire or electrical shock. Use the handle supplied with the pump for installing and transporting the pump.

⚠ WARNING Do not run pump dry. This pump relies on water for cooling. Running the pump dry can cause the pump to overheat and the possibility of burns to anyone that handles the pump. Running the pump dry will void the warranty.

⚠ WARNING Make certain that the electrical outlet is within the reach of the power supply cord. DO NOT USE AN EXTENSION CORD. Extension cords that are too long or too light do not deliver sufficient voltage to the pump motor. More importantly, they present a safety hazard if the insulation were to become damaged or the connection end were to fall into the water.

Safety Information (continued)

⚠ CAUTION This pump motor is equipped with an automatic resetting thermal protector and may restart unexpectedly.

⚠ WARNING Do not use this pump for potable/drinking water. Use only in applications for which the pump is designed for.

⚠ WARNING This pump is not intended to pump water softener discharge (brine) or condensate. Pumping these liquids could cause damage to the pump and will void the warranty.

⚠ WARNING This product can expose you to chemicals including vinyl chloride which is known to the state of California to cause cancer. For more information go to www.P65Warnings.ca.gov

⚠ WARNING Keep hands clear of suction & discharge openings. To prevent injury, never insert fingers into pump while it is plugged in.

⚠ WARNING Do not handle this pump with wet hands or while standing on wet or damp surfaces or in water.

⚠ NOTICE This pump is not designed as a waterfall, pond or fountain pump. Use of this pump for waterfalls, ponds or fountains will void the warranty.

Description

This non-automatic submersible utility pump is designed to remove water from, flooded basements, window wells and stock tanks, etc. The permanent split capacitor motor is oil filled and hermetically sealed for cooler operation. The pump comes equipped with a 3-prong grounding type power cord.

Specifications

Model	
HP	1/4
Volts	120 volt AC
Amps	3.8
Hz	60 Hz
Phase	1
Motor Duty	Continuous*
Circuit Requirements	15 Amp minimum
Discharge Size	1-1/4" FNPT & 3/4" GHT (with included
Max. Solids Handling	1/8" (3 mm) Spherical
Maximum Liquid Temperature	120°F (49°C)
Cord Length	10' (3m)
Minimum basin diameter	6" (15 cm)
Pump Construction	Thermoplastic
Impeller	Thermoplastic
Motor Shaft	Stainless Steel
Shaft Seal	Carbon/Ceramic/Stainless Steel

*For continuous operation, the water depth must be at least 6"(15cm) to prevent the motor from overheating.

Installation

1. Install the pump on a hard level surface in the water. If necessary, place bricks or patio blocks under the pump to raise it off the bottom. Do not place the pump directly in mud, sand or silt or on rocky surfaces as these materials can clog or cause damage to the pump.

2. Connect a hose to the pump discharge. Use either the supplied garden hose adapter or other hose fitting (sold separately). Choose the best size hose or pipe for your application. **NOTE:** *To keep friction loss as low as possible, do not use a hose that is smaller than 3/4"*

Operation

1. Connect the plug into a 120 volt AC grounded outlet. The use of a GFCI is strongly recommended.
2. The pump will start pumping in approximately 1" of water and will drain down to approximately 1/4" of the surface.
3. Do not let the pump run dry. The pump depends on water for cooling and lubrication. Operating the pump without water may cause the motor to overheat or cause damage to internal parts. It may also shorten the life of your pump.
4. This pump is equipped with an anti-airlock hole. A stream of water will emit from this hole when the pump is operating. This is a normal feature of this pump. The anti-airlock hole should be cleaned periodically to prevent the pump from becoming air locked.
5. The pump motor is thermally protected. It is not recommended for pumping liquids over 120° F (49° C). The thermal overload protector will automatically shut down the pump in an overheat/overload situation. The pump will reset itself once the pump cools down. This overload is designed as a safety device and it will fail after repeated use. Normal operation is for fluids between 32° F & 120° F (0° C - 49° C).

Airlock

When a pump airlocks, it runs but does not move any water. An airlock will cause the pump to overheat and fail. This pump has an anti-airlock hole in the bottom of the pump housing. If you suspect an airlock, unplug the pump, clean out the anti-airlock hole with a paper clip or piece of wire, and restart the pump.

Maintenance

⚠ DANGER Risk of electric shock. Always disconnect the power supply before attempting to install, service or perform maintenance on the pump.

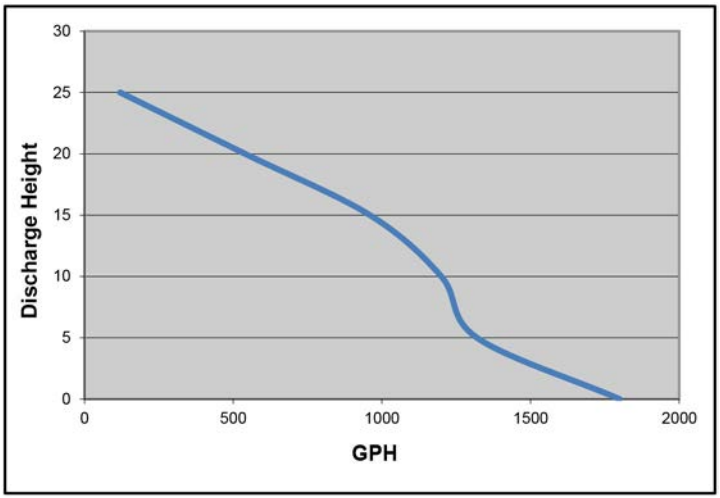
⚠ WARNING All repairs must be made by an authorized service center.

⚠ CAUTION This submersible pump contains oil which may become pressurized and hot under normal operating conditions - allow the pump to cool for 2-3 hours before servicing.

1. The pump motor is hermetically sealed in the housing and does not require any service. Disassembly of the motor housing or modification of the power cord voids the warranty.
2. Periodically check the removable intake screen for obstructions. Clean if necessary.
3. Inspect the impeller for signs of wear and obstructions.
4. Inspect the power cord for signs of damage or wear. Do not operate the pump if the cord is damaged or worn.

Performances

Height, pipe diameter restriction and hose length will reduce the pump output performance. It is recommended to use the same size or larger pipe / hose as the pump discharge for optimum performance. The performances listed below were obtained by using 1-1/4" pipe. The use of a garden hose will reduce the output depending on size and length of hose used. To keep friction as low as possible, hose must be 3/4" or larger. Use the shortest length of hose possible for your application.



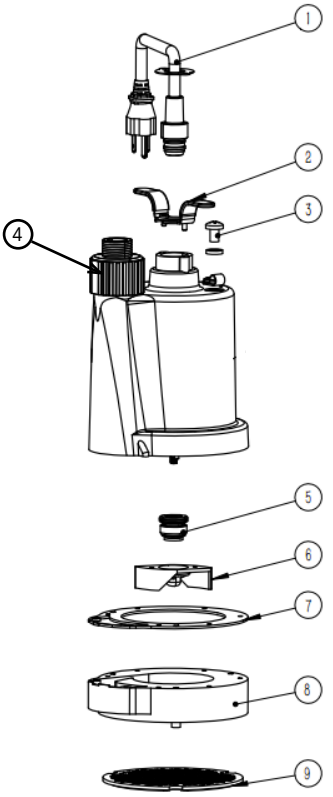
Model	Discharge Height	0′	5′	10′	15′	20′	25′
	Gallons Per Minute	25	22	20	16	9	2

Troubleshooting

⚠ DANGER Risk of electric shock. Always disconnect the power supply before attempting to install, service or perform maintenance on the pump.

PROBLEM	POSSIBLE CAUSES	HOW TO CORRECT
If the pump does not start or run	Pump is not plugged in, switch or breaker is off	Plug pump in or turn on switch/ breaker
	Check for blown fuses or tripped circuit breakers or tripped GFCI outlets	Replace fuse, reset breaker, reset GFCI outlet
	Motor thermal protector tripped	Allow pump to cool. Pump will automatically reset
If the pump runs but moves little or no water	Clogged intake screen	Clean or replace screen
	Clogged discharge hose/pipe	Remove clog
	Impeller obstructed	Remove obstruction/debris
	Frozen discharge hose/pipe	Allow hose/pipe to thaw
	Pump is air locked	Clean out airlock hole with a paper clip or pipe cleaner
	Low line voltage	Check wire size and increase if necessary
	Worn, damaged or clogged pump parts	Inspect for wear, damage or clog and clean or replace if necessary
	Discharge head exceeds pump capacity	If pumping height is over 25', the pump will not move water. See performance chart

Replacement Parts



Ref#	Description	
1	Power Cord	
2	Handle	
3	Oil Fill Plug w/O-ring	
4	Garden Hose Adapter	
5	Shaft Seal	
6	Impeller	
7	Gasket	
8	Pump Base/Volute	
9	Intake Screen	

*If motor fails, replace entire pump