Ashland®

P U M P

OPERATION, PERFORMANCE AND SPECIFICATIONS

CPM Cistern Pump

- Thank you for purchasing this pump. Take the time to read the instructions carefully before using this product. We strongly recommend that you keep this instruction manual in a safe place for future reference.
- Please refer to our website and the Products Center for additional installation and operation instructions.

MARKS AND MEANING:

⚠ DANGER ***"Danger" indicates an imminent hazardous situation which, if not avoided, WILL result in death or serious injury.***

⚠WARNING ***"Warning" indicates an imminent hazardous situation which, if not avoided, MAY result in death or serious injury.***

⚠ CAUTION ***"Caution" indicates a potentially hazardous situation which, if not avoided, MAY result in minor or moderate injury.***

Cistern Pumps
Model: CPM Series
General Safety Information

Before installation, read the following instructions carefully. Failure to follow instruction and safety information could cause serious bodily injury, death and/or property damage. Each Ashland Pump is individually factory tested to ensure proper performance. Closely following these instructions will eliminate potential operating problems assuring years of trouble-free service.

Most accidents can be avoided by using common sense.

IMPORTANT - Ashland Pump is not responsible for losses, injury or death resulting from failure to observe these safety precautions, misuse, abuse or misapplication of pumps or equipment.

⚠ DANGER ***All returned products must be cleaned, sanitized, or decontaminated prior to shipment, to ensure employees will not be exposed to health hazards in handling said materials. All applicable laws and regulations shall apply.***

⚠WARNING Installation, wiring, and junction connections must be in accordance with the National Electric Code and all applicable state and local codes. Requirements may vary depending on usage and location.

⚠WARNING Installation and servicing is to be conducted by qualified personnel only.

⚠ DANGER ***Rotating machinery. Amputation or severe lacerations can result. Keep clear of suction and discharge openings. DO NOT insert fingers into pump with power connected.***

⚠WARNING Always wear eye protection when working on pumps. Do not wear loose clothing that may become entangled in moving parts.

⚠ DANGER Pumps build up heat and pressure during operation. Allow time for pumps to cool before handling or servicing.

⚠ DANGER ***Hazardous Voltage can shock, burn or cause death.*** This pump is not intended for use in swimming pools or water installations where human contact with pumped fluid is possible.

⚠ DANGER Risk of electrical shock. To reduce risk of electrical shock, always disconnect pump from power source before handling. ***Lock out power & tag.***

⚠WARNING Do Not use these pumps in water over 145°F. Do not exceed manufactures recommended maximum performance, as this could cause the motor to overheat.

⚠ DANGER Do not lift, carry or hang pump by the electrical cables. Damage to the electrical cables can cause shock, burns or death. Never handle connected power cords with wet hands. Use appropriate lifting device.

⚠WARNING Utility pumps often handle materials which could cause illness or disease. Wear adequate protective clothing when working on a used pump or piping. Never enter a basin after it has been used.

⚠ DANGER Failure to permanently ground the pump, motor and controls before connecting to power can cause shock, burns or death.

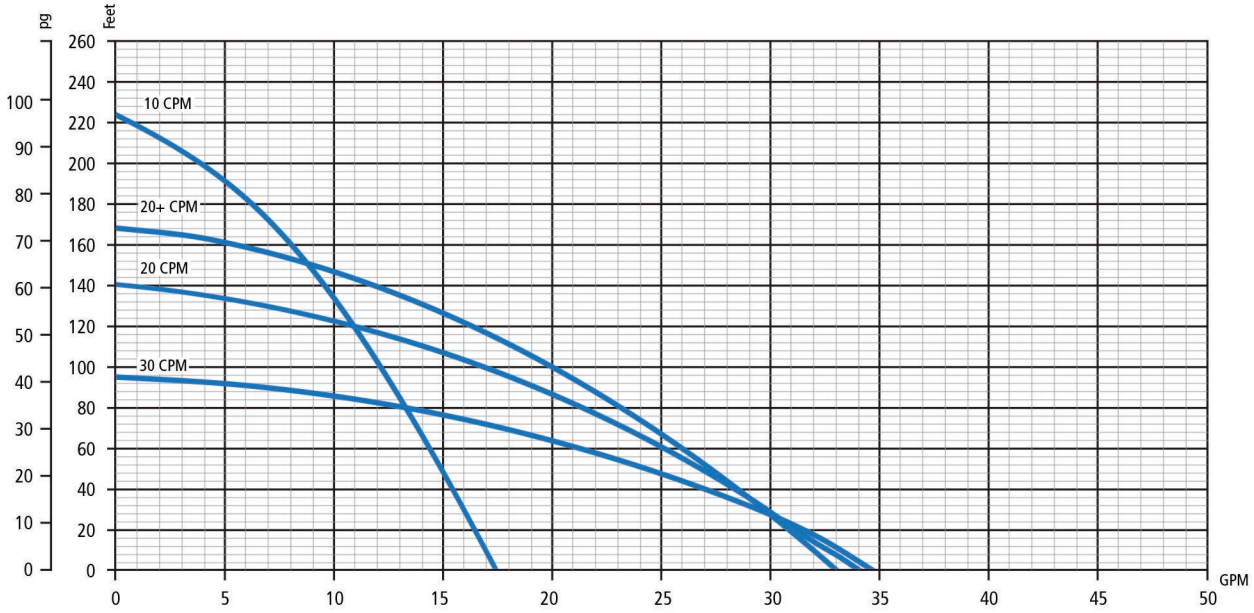
⚠ DANGER These pumps are NOT to be installed in locations classified as hazardous in accordance with the National Electric Code, ANSI/NFPA 70.

⚠WARNING Do not introduce into any sewer, either directly, or through a kitchen waste disposal unit or toilet: Seafood Shells, Aquarium Gravel, Cat Litter, Plastic Objects, Sanitary Napkins or Tampons, Diapers, Rags, Disposable Wipes or Cloth, Medications, Flammable Material, Oil or Grease, Strong Chemicals, Gasoline.

- Operation against a closed discharge valve will cause premature bearing and seal failure on any pump.
- Any wiring of pumps should be performed by a qualified electrician.
- Cable should be protected at all times to avoid punctures, cuts, bruises, and abrasions-inspect frequently.
- Never handle connected power cords with wet hands.
- Never let cords or plugs lie in water outside the sump pit.

Ashland® PUMP

Cistern Pumps
Model: CPM Series
Performance



PERFORMANCE

Model	HP	GPM at Total Feet of Head									Max. Head (Feet)
		0	20’	40’	60’	80’	100’	140	180	220	
10CPM115 10CPM230	1/2	17	16.3	15.2	14.5	13.1	12.0	9.5	6.2	2.0	222'
20CPM115 20CPM230	1/2	34	31.4	28	25	21.3	17	-	-	-	139'
20+CPM115 20+CPM230	1/2	33	31	28	26	23	20	12	-	-	168'
30CPM115 30CPM230	1/2	35	32	27	21	13	-	-	-	-	95'

Cistern Pumps
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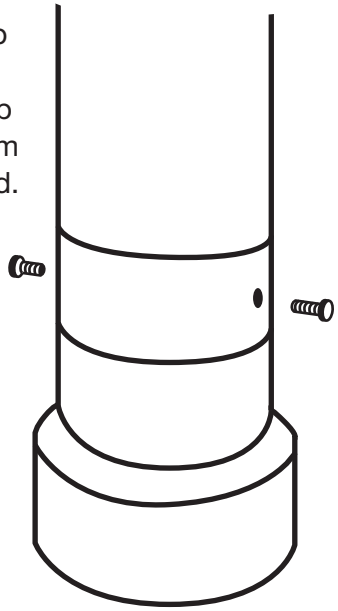
Installation

NOTE: The CPM pump is provided with a lift stand to raise the pump assembly off the bottom of the cistern if required.

To remove lift piece, remove the two side screws holding it in place.



⚠WARNING Risk of electrical shock. Do not remove or alter cord. Do not connect conduit to pump.

1. Only qualified personnel should install the pump and associated control equipment.
2. Vent sewage tank according to local code.
3. Do not install pump in location classified as hazardous by National Electrical Code, ANSI/NFA 70-1984
4. These pumps are intended for permanent connection only. Provide strain relief at control panel for power supply cord connection to box. All control components must be UL listed and suitable for end use application.
5. Do not pump flammable liquids, strong caustics or strong acids with this pump.
6. To prevent dropping or damage to pump, lower it by the drop pipe, not by the cables. The electrical cables will not hold the pump weight.
7. Discharge outlet is 1-1/4" NPT threaded. **NOTICE**: If installing external check valve, hold discharge with pipe wrench to prevent loosening discharge in shell.
8. If pump is to be operated with an open discharge, a discharge valve ***must be installed.*** Before startup, open this valve about 1/3 open. Start pump. ***Slowly*** open valve until the desired flow rate is reached. Final setting must be within pump's recommended operating range.

OPERATION

1. The pump must be submerged at all times during normal operation. **Do not run pump dry.**
2. Make sure that the float switches are set so that the pump stops before the pump runs dry or breaks suction. If necessary, adjust float switches to achieve this.
3. The motor bearings are lubricated internally. No maintenance is required or possible on the pump.

Cistern Pumps
Model: CPM Series
Troubleshooting

⚠WARNING Before servicing a pump, always shut off the main power breaker and then unplug the pump. Make sure you are not standing in water and are wearing insulated protective sole shoes, under flooded conditions. Contact your local electric company or a qualified licensed electrician for disconnecting electrical service prior to pump removal

SYMPTOM	POSSIBLE CAUSES/SOLUTIONS
PUMP WILL NOT START BUT FUSES DO NOT BLOW. NO VOLTAGE.	• No voltage at control panel. Ensure main power is connected. • Electrical cable bad. Consult licensed electrician or serviceman. • Control panel incorrectly wired. Reconnect control panel correctly.
FUSES BLOW OR OVERLOAD PROTECTOR TRIPS WHEN MOTOR STARTS.	• Wrong size fuse or wrong size time delay fuse. Install correct fuse or time delay fuse. • Low or high voltage. Check that line voltage is within +/-10% of nameplate rated voltage while pump is running. If voltage variation is greater than +10%, call power company to adjust voltage. • Broken wire in control panel. Examine all connections and wiring in panel. Disconnect power and repair or replace faulty wire. • Pump stuck or binding. Check for locked shaft in pump. If necessary, pull pump (make all possible above ground checks first). If pump is locked, replace it. Clean tank of all sand or lime, or solids before reinstalling pump. • Power supply wires or pump leads grounded, shorted, or open. Consult licensed electrician or qualified serviceman. Have a qualified serviceman or electrician make necessary cable repairs.
FUSES BLOW OR OVERLOAD PROTECTOR TRIPS WHEN MOTOR IS RUNNING	• Low or high voltage. Check that the line is within +/-10% of rated nameplate voltag while motor is running. If voltage variation is more than +/-10%, call power company to adjust voltage. • High ambient (atmosphere) temperature. Check temperature of tank. Protect tank from direct sunlight.
PUMP STARTS TOO FREQUENTLY	• Leaks in system. Check plumbing for leaks. • Level switch. Check for defective switch or switch out of adjustment. Re-adjust or replace level switch. • Check valves leaking. Make sure check valves are not leaking. Replace check valves if necessary.
LITTLE OR NO WATER DELIVERED	• Check valve stuck or installed backwards. Examine valve. If stuck, free valve; if installed backwards, reverse it. • Low voltage. Check voltage at control panel with pump running. Install larger wire from meter to control panel. If necessary, have power company raise supply voltage. • Plugged intake screen. Pull pump and check condition of screen. Clean and replace as necessary. • Check valve at pump discharge stuck. Pull pump and examine check valve. Free check valve. • Pump doesn't develop enough pressure. Check pump curve against operating conditions. Replace pump with 'higher head' pump.

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Warranty

For a period of time no greater than 12 months from date of installation or 24 months from date of manufacture, which ever comes first, of the subject product, and subject to the conditions of this Limited Warranty, Ashland Pump will repair or replace for the original purchaser only, any portion of your new Ashland Pump product that proves to contain defective materials or defective workmanship, provided the product is properly installed, serviced and operated under normal conditions and according to the manufacturer's instructions. Ashland Pump disclaims all liability, including liability under this Limited Warranty, for improper installation, application or use of its products. Ashland Pump shall have and possess the sole discretion to determine whether to repair or replace defective equipment, parts or components with a new or remanufactured part. Any item to be replaced under this Warranty must be returned to Ashland Pump, or such other place as Ashland Pump may designate, freight prepaid. In the absence of suitable proof of purchase date, the effective date of this warranty will be based upon the date of manufacture as evidenced by the serial number of the product.

There is no other express or implied warranty covering your Ashland Pump product. Without limiting the foregoing, Ashland Pump specifically disclaims the implied warranties of merchantability and fitness for a particular purpose. No warranties or representations at any time made by any representative of Ashland Pump shall vary or expand the provisions of this written Limited Warranty. This Limited Warranty contains the purchaser's exclusive remedy for any alleged defect in the product.

To the greatest extent permissible by applicable law, Ashland Pump shall not be liable or responsible for consequential, incidental or special damages resulting from or related in any manner to any Ashland Pump product or parts. Personal injury and/or property damage may result from improper installation, application or use of your Ashland Pump product. Ashland Pump shall not be liable for any loss, damage, or expenses resulting from the installation or use of its products other than as expressly set forth in this Limited Warranty. Ashland Pump shall in no event be responsible or liable for the cost of field labor or other charges incurred by any purchaser or user in removing and/or reaffixing any Ashland Pump product, part or component or any temporary pumping or other equipment. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.