# **GeyserMax-Flow Series**

# Waterfall Pump

## 115V/60Hz

- GM-3900 1/5HP 150W / Discharge 1-1/2"
- GM-4700 1/3HP 250W / Discharge 2"
- GM-5400 1/2HP 400W / Discharge 2"
- GM-6200 3/4HP 750W / Discharge 2"

## 230V/50Hz

- GM-3800 1/5HP 150W / Discharge 2"
  - GM-4700 1/3HP 250W / Discharge 2"
- GM-5300 1/2HP 400W / Discharge 2"
- GM-6200 3/4HP 750W / Discharge 2"

# Instruction and Maintenance Manual

### Introduction

Thank you for selecting the GeyserMax-Flow Series Waterfall Pump.

This instruction manual explains the product operations and gives important precautions regarding its safe use. In order to use the product to maximum benefit, be sure to read the instructions thoroughly and follow them carefully.

To avoid accident, do not use the pump in any way other than as described in this instruction manual especially when you see **! WARNING**. After reading this instruction manual, keep it nearby as a reference in case questions arise during use.

If this instruction manual should become lost or damaged, ask your nearest dealer or representative for another copy.

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### Construction and Parts List

NO.	Parts Name	Material	Qty	NO.	Parts Name	Material	Qty	
1	TOP COVER	NYLON+30%GF	1	16	OIL SEAL COVER	NBR	1	
2	MOTOR HOUSING	SUS304	1	17	O-RING	NBR	1	
3	SHAFT	SUS410	1	18	O-RING	NBR	1	
4	STATOR/COIL	C60	1	19	O-RING	NBR	1	
5	LOWER BEARING COVER	FC200	1	20	PACKING	NBR	1	
6	OIL SEAL COVER	NYLON+30%GF	1	21	SCREW	SUS304	1	
7	IMPELLER	NYLON+30%GF for		22	STRAINER	NYLON+30%GF	1	
		GM3900/GM4700	1	23	PUMP FEET	NBR	1	
		SUS430+PU for	I	24	WASHER	SUS304	1	
		GM5400/GM6200		25	WASHER	SUS304	1	
8	UPPER PUMP CASING	NYLON+30%GF	1	26	NUT	SUS304	1	
9	LOWER PUMP CASING	PP+30%GF	1	27	KEY	SUS304	1	
10	CAPACITOR		1	28	SCREW	SUS304	8	
11	UPPER BEARING		1	29	SCREW	SUS430	8	
12	LOWER BEARING		1	30	SCREW	SUS304	4	
13	MECH. SEAL	SIC/CE	1	31	SCREW	SUS304	6	
14	SLEEVE	SUS304	1	32	O-RING	NBR	1	
15	OIL SEAL COVER	NBR	1					





#### Prior to Operation

#### Check the following points upon receipt of your pump:

- Is the pump exactly what you ordered? Check nameplate. It is especially important that you check whether the pump is to be used with 50 or 60 Hz.
- > Has any damage occurred during shipment? Are any bolts or nuts loose?
- Have all necessary accessories been supplied? (For a list of standard accessories see Construction.)

# We recommend that you keep a spare pump on hand in case of emergencies. Keep this instruction manual in a place for future reference.

#### Specifications

#### Check the nameplate for your pump's specification as the table list. Be careful not to exceed the given specifications in the use of your pump.

Other specifications are noted in the chart below.

	Output		Discharge		Rated		Maximum		Dimension	Weight
Model	(Hp)	(W)	(Inch)	(mm)	Head (Ft./M)	Flow (GPH/LPH)	Head (Ft./M)	Flow (GPH/LPH)	L x W x H (Inch / mm)	lb/kg
115V/60Hz										
GM-3900	1/5	150	1-1/2"	38	11.5'	2026GPH	22.5'	3900GPH	9.4x6.5x14" 240×165×355mm	15.4 / 7
GM-4700	1/3	250	2"	50	13'	3480GPH	27.5'	4700GPH	9.4x6.5x14" 240×165×355mm	15.4 / 7
GM-5400	1/2	400	2"	50	16'	3600GPH	32.8'	5400GPH	9.4x6.5x14.8" 240×165×375mm	17.6 / 8
GM-6200	3/4	750	2"	50	25'	3800GPH	41'	6200GPH	9.4x6.5x15.4" 240×165×390mm	19.8 / 9
230V/50Hz										
GM-3800	1/5	150	2"	50	3.5M	7688LPH	6.4M	14400LPH	9.4x6.5x14" 240×165×355mm	15.4 / 7
GM-4700	1/3	250	2"	50	4.5M	9570LPH	7.5M	18000LPH	9.4x6.5x14" 240×165×355mm	15.4 / 7
GM-5300	1/2	400	2"	50	5M	14314LPH	9M	20060LPH	9.4x6.5x14.8" 240×165×375mm	17.6/8
GM-6200	3/4	750	2"	50	7M	12972LPH	12M	23500LPH	9.4x6.5x15.4" 240×165×390mm	19.8 / 9



## Installation

Symbol and Meaning :



DANGER

Keep the pump equipment out of the reach of children!

Warns that the failure to follow the directions given could cause serious risk to individuals or objects.



WARING

This sign warns the operator that the failure to follow an instruction may damage the pump and/or the system.

#### Limitations:

This series of pumps are suitable to pump rain water and also can be used both for permanent and temporary installation.

The pump can be place for sump pit that means it could pump dirty water containing suspended solid particles 19mm/ 3/4inches diameter. (The screen size is 8mm/ 1/3inches).

**! WARNING :** The pump cannot be used for sea water and flammable, corrosive, explosive or dangerous liquids.

#### Installation :

**WARNING** : Do not work on pump until power is unplugged.

Do not cut off ground pin or use an adapter fitting.

Do not use an extension cord

The pump power cord should be connected to a separately fused, grounded line with a minimum capacity of 15 amps. It can be connect to non- fuse breaker at the recommended amperes. Never touch the pump when it is connected to electrical power.

- 1. Before installing or servicing this pump, be certain pump power source is disconnected.
- 2. Installation and electrical wiring must adhere to state and local codes and must be completed before priming pump. Check appropriate community agencies, or contact local electrical and pump professionals.
- 3. Call an electrician when in doubt. Pump should be connected to a separate 15 amps' circuit breaker or 15 amps' fuse block. Note that, plugging into existing outlets may cause low voltage at motor, causing blown fuses, tripping of motor overload, or burned out motor.
- 4. A permanent ground connection from pump to the grounding bar at the service panel is mandatory, Matala Pump sump pumps come with a grounding conductor and a grounding-type attachment plug. Do not connect pump to a power supply until permanently grounded. For maximum safety, connect pump to a circuit equipped with a Ground Fault Circuit Interrupter device when you position the pump's grounding wire.
- 5. Voltage of power supply must match the voltage of the pump.
- Before installing pump, clear sump basin of any water, debris, or sediment.
   WARNING: Sump basin must be vented in accordance with local plumbing codes. Matala Sump pumps are not designed for and CANNOT be installed in locations classified as hazardous.
- 7. **! WARNING :** The following may cause severe damage to pump and will void warranty:
  - (a) Using an extension cord.
  - (b) Cutting off the ground pin or using an adapter fitting.
  - (c) Working on pump or switch while plugged in.
  - (d) Removing motor housing, unscrewing impeller, or otherwise removing impeller seal.
  - (e) Pumping chemicals or corrosive liquids.
  - (f) Pumping gasoline or other flammable liquids.
  - (g) Piping: Plastic PVC pipe, drain hose, galvanized steel or copper pipe may all be used. All piping must be clean and free of all foreign matter to prevent clogging. Use thread compound on all threaded joints unless specified otherwise. Be sure to seal the thread connection with tape seal when you using the pipe fitting to connect the flange.

#### Electrical Wiring

#### **Electrical wire Connection :**

**WARNING :** Verify that the voltage and frequency of the electric pump shown on the nameplate correspond to those available on the mains.

The installer must make sure that the electric system is grounded in accordance with the law in force.

It is necessary to use cable with a length of 10m for outdoors using. The plug and connections should be protected from water splashes. Before using the pump, always inspect it visually (especially power cable and plug).

Do not use the pump if it is damaged.

If the pump is damaged, have it inspected by the specialized assistance service only.

Make sure that electric connections are protected from inundation. Protect the plug and the power cable from heat, oil or sharp edges.

! WARNING : The power cable must be replaced by qualified personnel only.

Grounding: The plug of the power cable has a double grounding contact, so that grounding can be performed by simply inserting the plug.

#### **Overload protection :**

This pump series have a built in thermal protection switch. The pump stops if an overload condition occurs. The motor restarts automatically after it has cooled down.

#### **Limited Warranty :**

Matala Pump will repair or replace for the original user any portion of a new Matala Pump product which proves defective due to materials or workmanship of Matala Pump within 2 years of purchase date. Contact the nearest authorized Matala Pump dealer for warranty service.

Matala Pump shall possess the sole right to determine whether to repair or replace defective equipment, parts or components.

THIS WARRANTY DOES NOT COVER DAMAGE DUE TO LIGHTNING OR OTHER CONDITIONS BEYOND THE CONTROL OF Matala Pump.

LABOR & COSTS : Matala Pump shall in no event be liable for the cost of field labor to other charges incurred by any customer in removing and/or reaffixing any Matala Pump product, parts or component.

THE WARRANTY WILL NOT APPLY:

- (a) to defects or malfunctions resulting from failure to properly install, operate, or maintain the unit in accordance with printed instructions provided.
- (b) to failures resulting from abuse, accident, or negligence.
- (c) to normal maintenance services and the parts used in connection with such service.
- (d) to units which are not installed in accordance with applicable local codes, ordinances, and good trade practices.
- (e) if unit is used for purposes other than for what it was designed and manufactured for.

#### WARRANTY EXCLUSIONS : Matala Pump

SPECIFICALLY DISCLAIMS THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE AFTER THE TERMINATION OF THE WARRANTY PERIOD.

#### Guarantee

The right to claim under guarantee must be proven by the purchaser by presentation of the purchase receipt.

Note :

- 1. Should your equipment not function correctly, please first check for other reasons, e.g.
- interruption of the power supply, or incorrect handling may be the cause.
- 2. Please note that it is imperative that the following documents and details are produced together with your faulty equipment :
  - (a) Purchase receipt
  - (b) Designation of the apparatus/ type/ brand
  - (c) Description of the noted defect (an accurate description of the defect makes a rapid repair easier for us)

In the case of a claim for guarantee or defects, please contact the place of purchase.

Troubleshooting

Problems	Possible Causes					
Pump dose not run and hums	<ul> <li>* Line circuit breaker is off, or fuse is burned or loosed.</li> <li>* Water level in sump has not reached turn-on level as indicated in installation drawing on the carton.</li> <li>* Pump cord is not making contact in receptacle.</li> <li>* Float (optional) is stuck. It should operate freely in basin.</li> <li>* If all of the above are OK and then the motor could be operate.</li> </ul>					
Pump runs but does not deliver water	<ul> <li>* Check valve (optional) is installed backwards. (Not included with pump) Arrow on valve should point in direction of flow.</li> <li>* Discharge shut-off valve (if used) may be closed.</li> <li>* Impeller or volute openings are fully or partially clogged. Remove pump and clean.</li> <li>* Pump is air-locked. Start and stop several times by plugging and unplugging cord. Check for clogged vent hole in pump case.</li> <li>* Inlet holes in pump base are clogged. Remove pump and clean the openings.</li> <li>* Vertical pumping distance is too high or the pipe size is too small. Reduce vertical distance or increase the pipe size fittings.</li> </ul>					
Pump runs and Pump out sump, but does not stop.	<ul> <li>* Float (optional) is stuck in up position. Be sure float operates freely in basin.</li> <li>* Defective float switch. Replace with float switch.</li> <li>* Defective vertical switch. Replace with vertical switch.</li> </ul>					
Pump runs but delivers only a small amount of water	<ul> <li>* Pump is air-locked. Start and stop several times by plugging and unplugging cord. Check for clogged vent hole in pump case.</li> <li>* Vertical pumping distance is too high or pipe size is too small. Reduce vertical distance or increase the pipe size.</li> <li>*Inlet holes in pump base are clogged.</li> <li>Remove pump and clean the openings.</li> <li>* Impeller or volute openings are fully or partially clogged.</li> <li>Remove pump and clean.</li> <li>* Pump impeller is partially clogged with debris, tar or paint, causing motor to run slow and overload. Remove pump and clean.</li> </ul>					
Fuse blows or circuit breaker trips when pump starts.	<ul> <li>* Pump impeller is partially clogged with debris, tar or paint, causing motor to run slow and overload. Remove pump and clean.</li> <li>* Motor stator may be defective.</li> <li>* Fuse size or circuit breaker may be too small. (Must be 15 amps).</li> <li>* Impeller or volute opening are fully or partially clogged. Remove pump and clean.</li> </ul>					
Motor runs for a short time, then stops.	<ul> <li>* Inlet holes in pump base are clogged. Remove pump and clean the openings.</li> <li>* Pump impeller is partially clogged with debris, tar or paint, causing motor to run slow and overload. Remove pump and clean.</li> <li>* Motor stator may be defective.</li> <li>* Impeller or volute openings are fully or partially clogged. Remove pump and clean.</li> </ul>					

