

AG-E Pump

Owner's Manual



AGE-15101S | AGE-15102S | AGE-15151S | AGE-15152S



Scan to register your
product warranty

GoPool

Warranty registration

Thank you for choosing GoPool! Register your product today to activate your warranty and get quick, hassle-free support when you need it.



Scan to register your product warranty



WARNING

This equipment must be installed and serviced according to the information found in this manual. Improper installation can create hazards which could result in property damage, serious injury or death. Improper installation will void the warranty.

Table of contents

Important safety instructions	1
Installation.....	2
Winterizing & water chemistry.....	5
Maintenance	6
Troubleshooting	7
Technical data	10
Pump structure & parts.....	12
Pump dimensions	13

Important safety instructions



Before installation, be sure to read all instructions and warnings carefully.

Refer to product dataplate(s) for additional operating instruction and specifications.

Inspection

Examine the equipment when received. Notify your dealer or carrier of any damage or missing parts. Verify that equipment is of size and model specified.

Important Safety Instructions

When installing and using this electrical equipment, basic safety precautions should always be followed, including the following:

01. READ AND FOLLOW ALL INSTRUCTIONS.

02. To reduce risk of injury, do not permit children to use this product unless they are closely supervised at all times.

For cord & plug connected units

03. Risk of Electrical Shock. Connect only to a grounding type receptacle protected by a ground-fault circuit-interrupter (GFCI). Contact a qualified electrician if you cannot verify that the receptacle is protected by a GFCI.

04. Do not bury cord. Locate cord to minimize abuse from lawn mowers, hedge trimmers and other equipment.

05. To reduce the risk of electric shock, replace damaged cord immediately.

06. To reduce the risk of electrical shock do not use an extension cord to connect unit to electrical supply; provide a properly located outlet.

CAUTION: For pumps with a 25 ft. (7.62m cord).

07. This pump is for use with storable pools only. Do not use with permanently installed pools. A storable pool is constructed so that it may be readily disassembled for storage and reassembled to its original integrity. A permanently installed pool is constructed in or on the ground or in a building such that it cannot be readily disassembled for storage.

CAUTION: For pumps with/without 3ft.(91m cord) or 6ft.(1.82m cord).

08. This pump is for use with permanently installed pools and may also be used with hot tubs and spas if so marked. Do not use with storable pools. A permanently installed pool is constructed in or on the ground or in a building such that it cannot be readily disassembled for storage. A storable pool is constructed so that it may be readily disassembled for storage and reassembled to its original integrity.

For hot tub and spa pumps

09. Do not install within an outer enclosure or beneath the skirt of the hot tub or spa, unless so marked.

10. SAVE THESE INSTRUCTIONS!

01. Location

Locate pump as close to pool/spa as possible, preferably in a dry, well ventilated area away from direct sunlight. It should be on a hard, level surface.

Give consideration to:

- Drainage - away from pump.
- Ventilation of pump motor.
- Access for future servicing and winterizing.
- Protection from the elements.

Pumps without strainer bodies are designed for flooded suction (all suction fittings and suction piping below water level) and will not self-prime. Consequently, the pump must be installed at an elevation that is below water level when pool or spa is filled; however, if suction line valves are installed, the pump may be closed for priming. Keep vertical distance to a minimum if you choose to mount pump above water level.

Pumps with strainer bodies are self-priming but should be mounted as close to the water level as possible or below for ease in priming.

02. General Plumbing

For solvent weld connection:

Rigid or flexible PVC pipe can be used. Pipe ends should be clean and free of any flash cause by the cutting operation. Be sure that the proper adhesive is used on the type of pipe specified.

NOTE -

A primer will assure that adhesive joints are superior. Suregard P-3000 has a purple tracer to qualify in areas where codes specify a primer must be used.

CAUTION: We recommend that you consider climatic conditions when applying adhesives. Certain atmospheric situations, such as high moisture content, make adhesive action of certain glues less effective. Check the manufacturer's instructions.

For threaded connections:

Use only Teflon tape or equivalent on threaded plumbing connections. Other pipe compounds may damage threads. We do not recommend the use of silicone or petroleum based compounds. DO NOT OVERTIGHTEN - HAND TIGHTEN PLUS ½ TURN IS SUFFICIENT.



03. Pump Plumbing

Suction pipe should be as large or larger than discharge pipe. Avoid using suction pipe smaller than pump connection. Keep the piping as straight and short as possible, and of suitable size. Avoid connecting an elbow directly into the pump inlet (use a length of straight pipe to allow a proper entry for the water). Arrange horizontal runs to slope upward to the pump to prevent high spots that could form air pockets. Support the pipe independently so that it places no strain on the pump. Keep as much of the suction line as possible below the water level to reduce priming time. Install valves and unions in the pump suction and return lines to facilitate servicing. Valves are recommended for throttling maintenance if the system is installed below deck level. Suction valves are essential for priming all pumps without strainer bodies installed above water level. Pumps with strainer bodies are self-priming, nevertheless, we recommend the use of check valve in the suction pipe at or below the water level if the suction lift is more than five feet or if the dry suction is more than ten feet long. Keep the valve in the suction line fully open during operation.

04. Electrical Data

Refer to information on motor nameplate for electrical service data. All motors should have fused disconnect switch or circuit breaker. Be sure wire size is sufficient for pump HP and distance from power source. Wiring should be done in accordance with applicable codes by a competent electrician. We recommend the installation of a ground fault circuit interrupter for maximum safety.

05. Pump Start Up

Do not operate pump until it has been primed as water acts to cool and lubricate the seal. For pumps without strainer bodies and located above water, close suction line valve and fill pump with water in order to prime. For pumps with strainer bodies and located above water, prime by removing strainer cover and filling strainer body with water. Pumps located below water level will selfprime if all piping is also below water level. After pump has been primed, energize motor and open all suction and discharge line valves. It may take some time for pump to remove air from suction lines. If no flow is observed in five minutes, stop the motor and re-prime. If the pump fails to operate, check for air leaks. Refer to Trouble Shooting section.

After about ten minutes of operation, check the return fittings for air bubbles. A continuous flow of air indicates leaks in suction line. Locate and correct any leaks immediately.

Controlling the output:

Keep the gate valve in the suction line fully open during operation. Should it be necessary to control the output, use a valve in the return line.

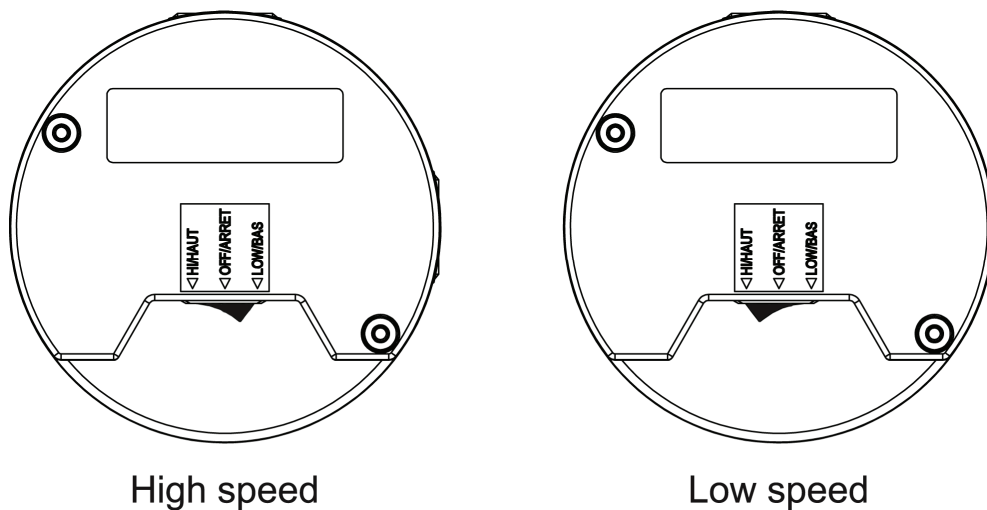
CAUTION: Do not retighten strainer Ring-Lok during operation. Do not operate pump with closed suction or discharge valves.

Two-Speed Pumps

Two-speed models are recommended in a swimming pool when high speed is needed for maximum filtration at peak periods and whenever turbidity levels are high. At other times, switch to low speed. For backwashing and vacuuming, high speed is required. In spas and hot tubs, use high speed to attain full performance in the hydro-therapy mode. At other times, such as filter/heat cycle mode, use low speed. Low speed provides sufficient flow to activate most spa heaters and provides sufficient flow for filtration.

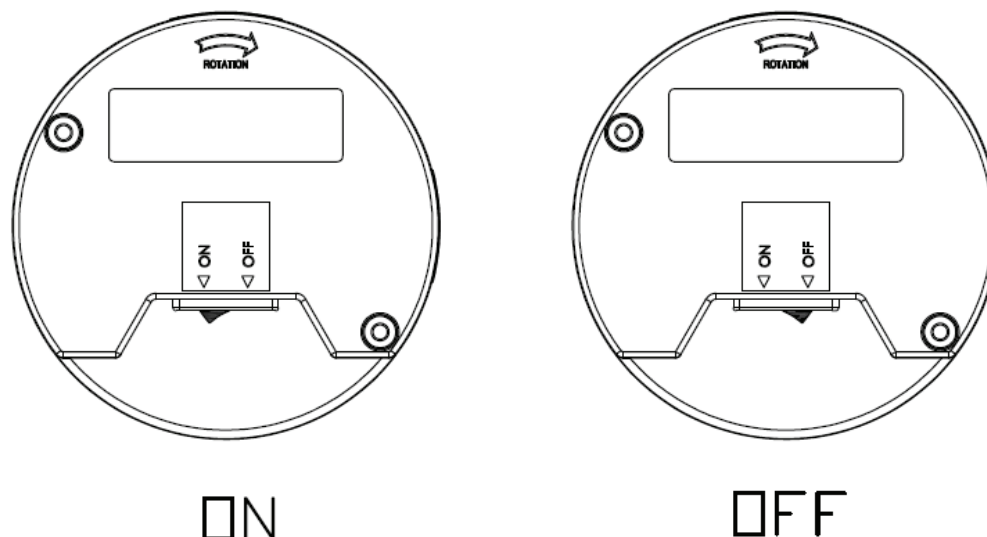
In jetted tubs, use high speed to attain full performance in the hydro-therapy mode and use low speed mode to prime.

The below picture shows how to switch between the high speed and low speed.



ON-OFF Single-Speed Pumps

In order to have a safer and quicker start of the swimming pool filtration systems (or pumps), it is very necessary to install ON-OFF switch. Without it, every start or shut down need to plug/unplug the power cord, it will cause a lot of safety risks, such as, spark occurs when plug/unplug the power cord and frequent plug/unplug will cause poor contact between plug and socket. The below picture shows how to switch between ON and OFF.





01. Winterizing

Consult your dealer for advice on winterizing your equipment if freezing temperatures occur in your locality. His knowledge of your equipment makes him the best qualified source of information. Follow his recommendations, and if these include draining the filter system, proceed as follows:

A) If your system does not contain a filter, proceed to step B.

- **For sand filters:** BACKWASH for 3 to 5 minutes and set dial valve to WINTERIZE.
- **For cartridge filters:** Clean the filter element and store in a dry place.

B) Drain system by loosening drain plugs (drain plugs will drain without completely removing the plug from unit) and/or removing pipe caps.

02. Water chemistry

A proper and consistent use of chemicals is necessary to maintain clean, sanitary water, prevent a spread of germ infection and control the growth of algae which can spoil the appearance and enjoyment of your pool or spa.

Chlorine is the most commonly used chemical to provide clean, sanitary water. Either dry or liquid chlorine (calcium or sodium hypochlorite) can be used which should be added daily as it is dissipated by dirt and germs as well as by the sun and wind.

It is also important that the correct level of acidity or alkalinity of the pool water be maintained. This is the pH of your pool with pH 7.0 being neutral.

Readings above 7.0 are alkaline and below are acid. A desirable range is 7.2 - 7.4.



01. Pump Maintenance

- Motors are self-lubricating - no lubrication required.
- Clean hair & lint strainer if you have a strainer body pump.
- Visually inspect motor for blockage of air vents on motor shell. Remove any debris after breaker off.
- Shaft seals may become worn and must be replaced if leakage is observed.

02. Cleaning

Switch power off. Close valves in suction and return line. Unscrew strainer Ring-Lok counterclockwise and remove the strainer cover from hair and lint strainer and lift out strainer basket. Clean and replace the basket. Take care to seat basket properly. Clean O-Ring and re-lubricate with petroleum jelly if necessary. Clean O-Ring seats on cover and strainer. Refit cover and strainer - hand tighten only - and open valves. Put pump back into operation.

CAUTION: Do not retighten strainer during operation.

03. Service & Repair parts

Refer all service to your local dealer as his knowledge of your equipment makes him the best qualified source of information. Order all repair parts through your dealer. Give the following information when ordering repair parts:

- Unit nameplate data.
- Description of part.



Problem

Possible cause

Motor does not start

Disconnect switch or circuit breaker in OFF position.

Fuses blown or thermal overload open.
Locked motor shaft.

Motor windings burned out.

Defective starting switch inside single-phase motor

Disconnected or defective wiring

Low voltage

Motor does not reach full speed

Low voltage

2 speed model set on low speed

Motor windings connected for wrong voltage on dual voltage model.

Motor overheats (Protect trips)

Low voltage

Motor windings connected for wrong voltage on dual voltage model.

Inadequate ventilation

Pump delivers no water

Pump is not primed

Closed valve in suction or discharge line

Leakage or air into suction system

Impeller clogged



Problem

Possible cause

Low pump capacity

Valve in suction or discharge line partly closed

Suction or discharge line partly plugged

Suction or discharge line too small

Pump running at reduced speed (see above)

Plugged basket in skimmer or hair and lint strainer

Dirty filter

Impeller clogged

Wrong rotation (3 phase only)

Low pump pressure

Pump running at reduced speed (see above)

Wrong rotation (3 phase only)

Discharge valve or inlet fittings closed too much

High pump pressure

Discharge valve or inlet fittings closed too much

Return lines too small

Dirty filters

Noisy pump and motor

Plugged basket in skimmer or hair in lint strainer

Worn motor bearings



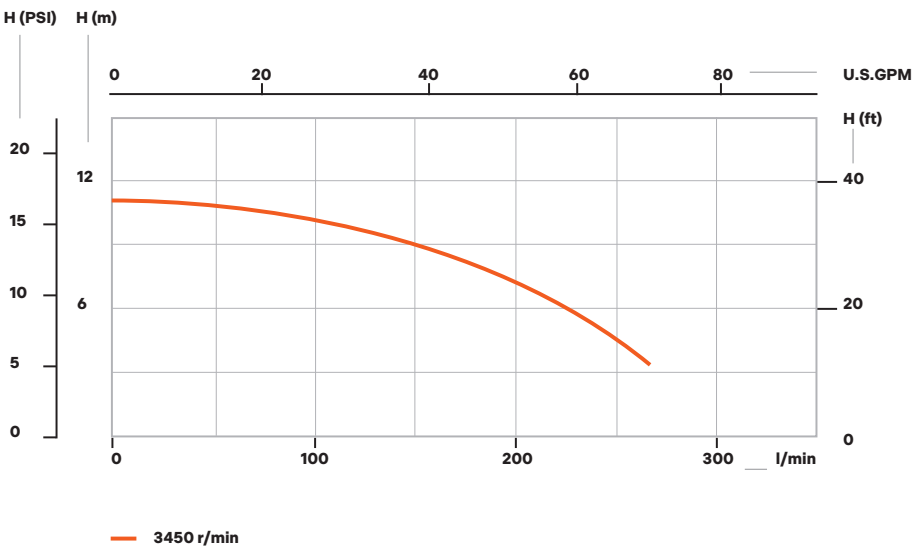
Problem	Possible cause
Noisy pump and motor	Valve in suction line partly closed
	Suction line partly plugged
	Vacuum hose plugged or too small
	Pump not supported properly
Leakage of water at shaft	Shaft seal requires replacement
Air bubbles at inley fittings	Leakage air into suction line at connections or valve stem
	Cover gasket of hair and lint strainer needs cleaning
	Restriction in suction line
	Low water level in pool

NOTE -
If the recommendations in the Trouble Shooting portion of this manual do not solve your particular problem(s), please contact your local dealer for service.



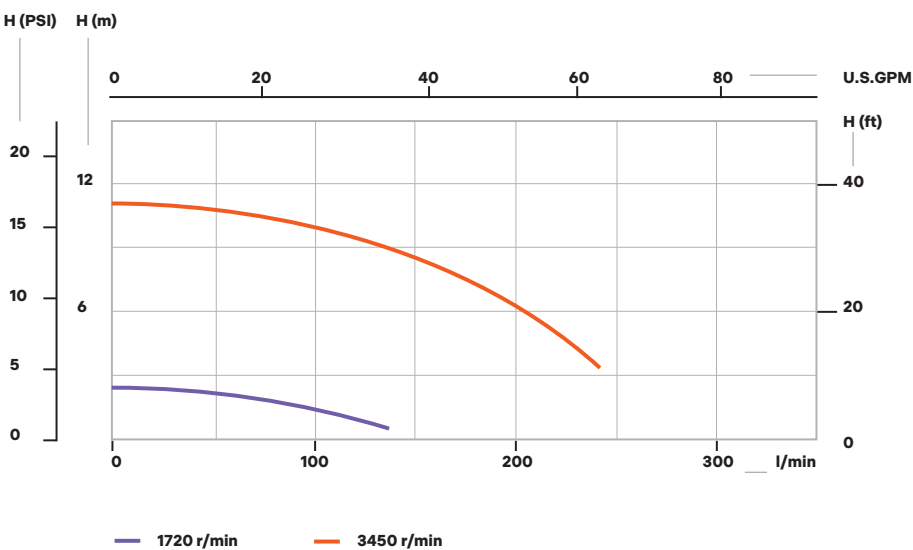
AGE-15101S

HP	1.0 HP
Volt/HZ	115V/60HZ
Amps	10
Q (GPM)	87
H (m)	10.2



AGE-15102S

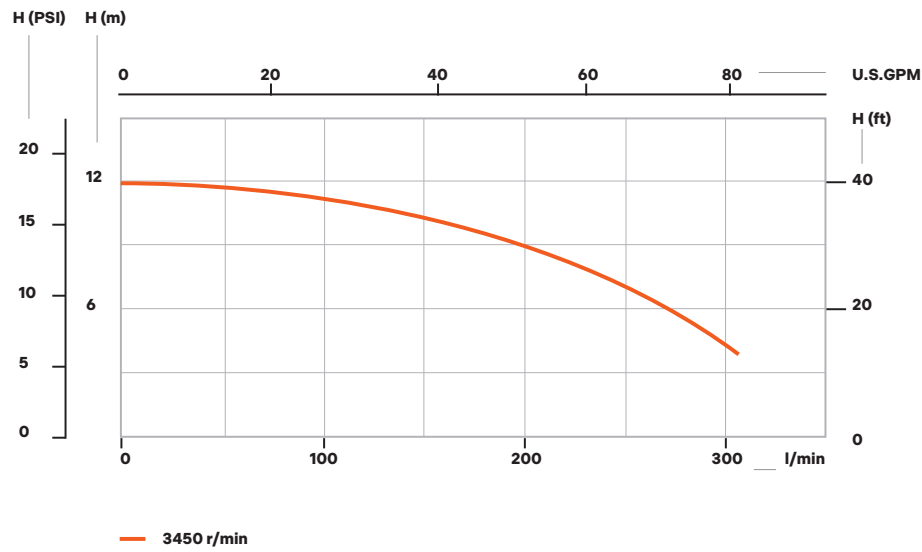
HP	1.0 HP
Volt/HZ	115V/60HZ
Amps	10A/3.2A
Q (GPM)	75
H (m)	10.5





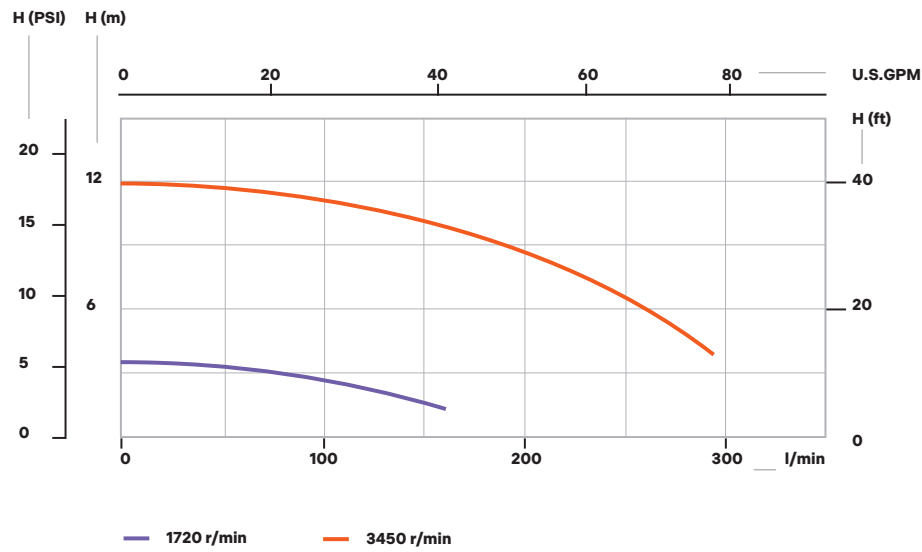
AGE-15151S

HP	1.5 HP
Volt/HZ	115V/60HZ
Amps	12
Q (GPM)	97
H (m)	12

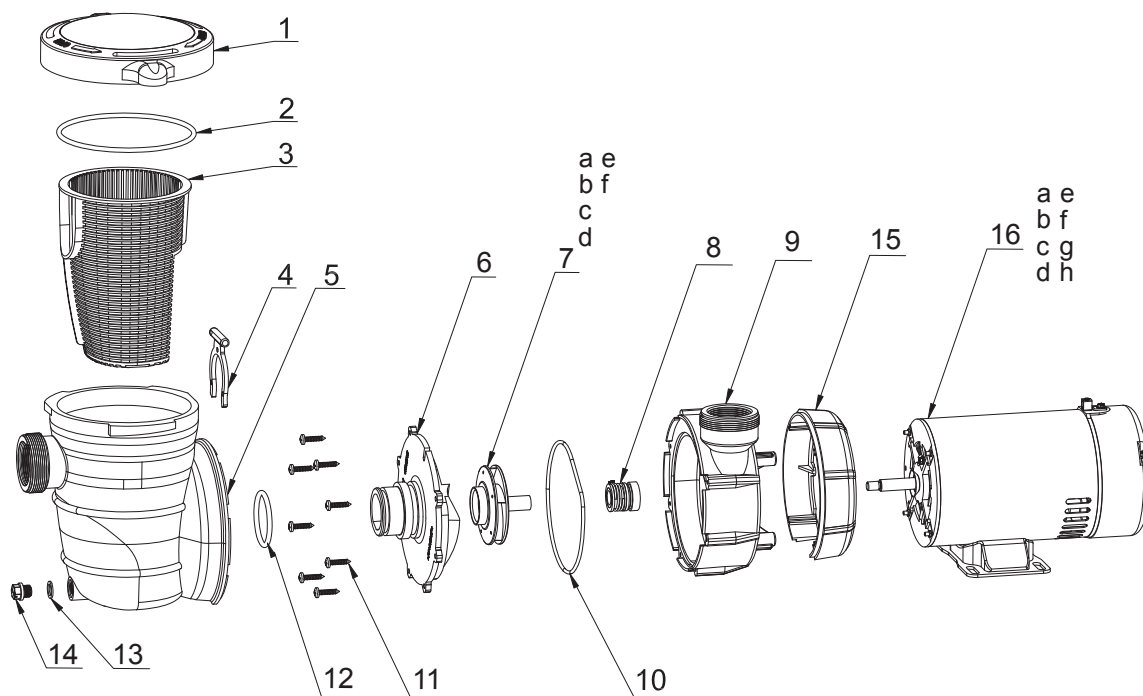


AGE-15152S

HP	1.5 HP
Volt/HZ	115V/60HZ
Amps	12A/3.6A
Q (GPM)	83
H (m)	13



Pump structure & parts



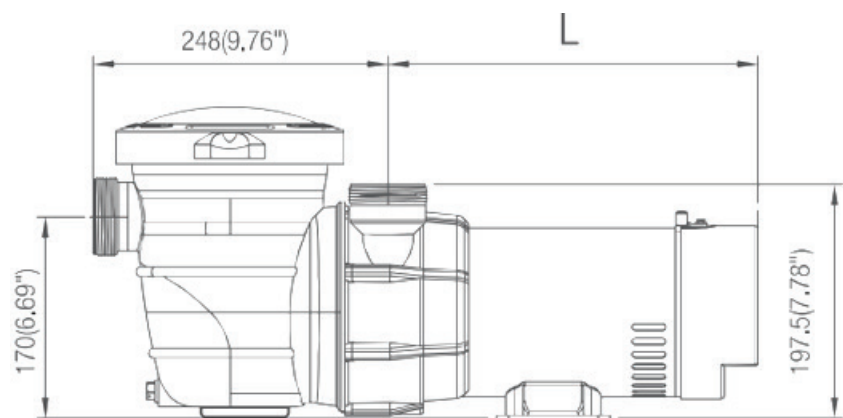
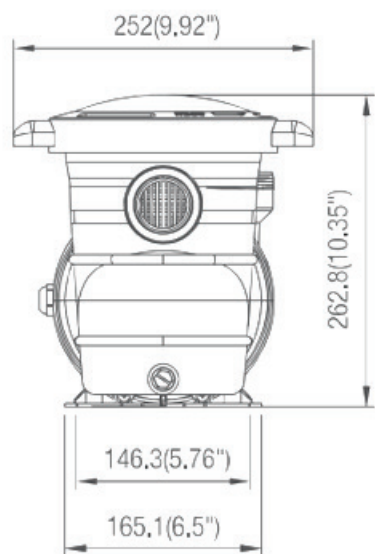
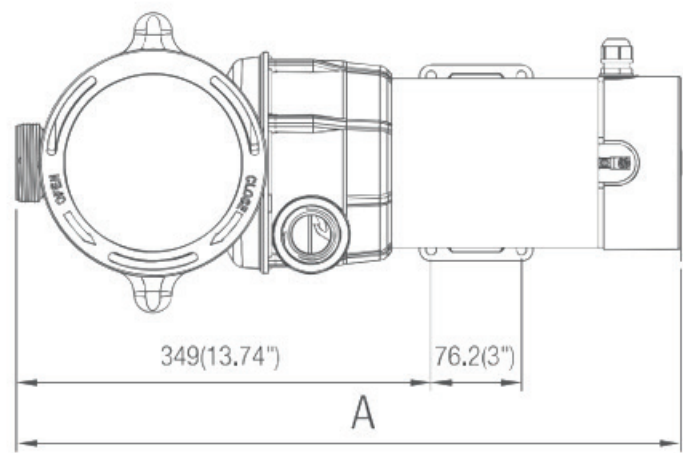
Ref. No.	Part No.	Description	Quantity
1	647252772000	Cover	1
2	65431042080	Cover O-ring	1
3	647252704001	Basket	1
4	647252705080	Retaining clip	1
5	647252703080	Housing	1
6	647252702080	Distributor	1
7b	647272971000	Impeller for AGE-15101S/AGE-15102S	1
7c	647252771000	Impeller for AGE-15151S/AGE-15152S	1
8	65025349000	Seal Assembly	1
9	647252701080	Pump casing	1
10	65431040080	O-ring	1
11	65212016000	Screw ST5.5X25	8
12	65431029080	Diffuser O-Ring	1
13	65432002080	Drain Plug Gasket	1
14	648860105080	Drain plug	1
15	647252708080	Motor Mount Plate	1
16a	65023006000	1.0HP motor for AGE-15101S	1
16b	65023081000	1.0HP two-speed motor for AGE-15102S	1
16c	65023007000	1.5 HP motor for AGE-15151S	1
16d	65023084000	1.5 HP two-speed motor for AGE-15152S	1

Use only GoPool genuine replacement parts.

Pump dimensions



Model	L	A
AGE-15101S	298.9 (11.77")	546.9 (21.53")
AGE-15102S	305.4 (12.02")	553.4 (21.79")
AGE-15151S	304.9 (12")	552.9 (21.77")
AGE-15152S	311.4 (12.26")	559.4 (22.02")



GoPool

Need parts or accessories ?
GoPool.com