

User Guide



Fixed Flow Pumps

FOR SUBMERSIBLE OR INLINE USE



FOR PUMP MODELS

100	185	264	396	633
#728492	#728300	#728305	#728310	#728315

1056	1267	1584	2245
#728320	#728325	#728330	#728333



Fixed Flow Pumps

FOR SUBMERSIBLE OR INLINE USE

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SAFETY INFORMATION

Before operating this pump, please read this User Guide carefully and keep it stored in safe place for future reference.

– IMPORTANT –

▼ **PLEASE READ ALL SAFETY INFORMATION PRESENTED IN THIS USER GUIDE** ▼

CAUTION:

1. Thermally protected enclosure: Type 3 for indoor and outdoor use.

Electrical Warning: Risk of electric shock

1. This pump has not been evaluated for use in swimming pools or marine areas.
2. This pump is supplied with a grounding conductor, grounding type attachment plug.
Be certain that it is connected only to a properly grounded, grounding type receptacle.

To reduce risk of electric shock:

1. Install only on a circuit protected by a ground-fault circuit interrupter (GFCI).
2. See “User Guide” section for proper installation.
3. Use only on portable self-contained tanks, reservoirs, ponds and fountains no larger than 5 feet in any dimension.

Warning:

1. Keep children away from this appliance and do not let them play with the product.
2. DO NOT operate unit if people are in water.
3. A high-voltage connector is in the unit. Be sure to turn off the main power supply prior to cleaning or performing any maintenance on the unit.
4. Never cut the power plug and replace it yourself. This may lead to serious injury or death.
5. Never open the pump housing or its components unless specified in this User Guide.
6. Unplug unit from power source immediately if it shows any sign of abnormal water leakage.
7. This appliance should not be used if the plug or receptacle is wet.
8. Do not operate if the power supply cord, plug or any other parts are damaged.
9. Close supervision is necessary when used by or near children. This appliance is not a toy.
Keep away from children.
10. To avoid injury, do not contact moving parts.
11. Never yank on the cord to pull plug from the outlet.
12. Do not use this pump for other than intended use. The use of certain attachments not recommended or sold by EcoPlus® may cause unsafe conditions and void product warranty.
13. Make sure pump is mounted securely to tank, reservoir or pond.

THIS APPLIANCE HAS LIMITED USER SERVICEABLE PARTS

The following restrictions apply to this unit:

- NEVER use this unit to pump fluids other than water.
- NEVER run this unit without water.
- DO NOT use for commercial or industrial purposes.
- DO NOT use in conjunction with chemicals, foodstuffs, easily flammable or explosive substances.

USAGE CAUTIONS:

A. Before operating pump:

1. Check that the power voltage and frequency conforms to the power ratings on the nameplate.
2. Don't lift, lower or carry pump by the power cable.
3. Always unplug the pump when not in use. Do not place hands in water where the pump is installed or before performing any maintenance and cleaning.
4. Do not add any lubricants to the pump.
5. Do not operate the pump without water as this will cause severe damage.
5. This pump is not self-priming. Make sure the water lines and pump(s) are filled with water prior to turning on.
6. Do not install or store the pump where it will be exposed to weather or temperatures below freezing.
7. Do not operate pump in water temperatures higher than 95° F.

B. The pump should not be used if:

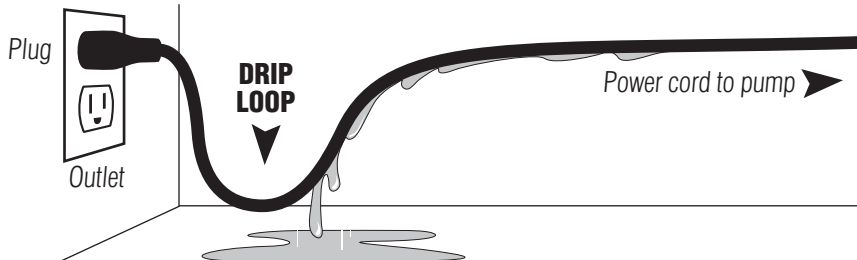
1. Do not operate pump if the power supply cord, plug or any other parts have any damage.
2. If cord is damaged, pump should not be used and disposed of properly.
3. Pump has a wet plug or a wet receptacle.
4. Water discharge from pump is reduced.
5. A part is broken and water leaks in.
6. Anything abnormal occurs.
7. If people or body parts are in the water.

C. During pump operation:

1. Shut off power immediately to prevent motor from burning out when overloaded due to clogging from foreign materials.
2. Please consult store where you purchased the pump or EcoPlususa.com if the pump is not working properly. DO NOT disassemble or assemble the pump, as this may result in severe damage.

ALWAYS SET UP A DRIP LOOP

A "Drip Loop" prevents the plug or electrical outlet from getting wet and should be set up for each cord connecting the pump to an electrical outlet (see diagram below). The Drip Loop itself is the part of the cord below the level of the outlet (or connector if an extension cord is used). This prevents any water from traveling along the cord and coming into contact with the outlet!



USER GUIDE

Introduction

EcoPlus® Fixed Flow Rate Submersible or Inline Pumps are quality products that are designed using the very latest pump technology. These pumps are suitable for use in hydroponic systems, ponds, aquariums, fountains and filter systems. The pumps are designed with "synchronous technology," where electrical parts are fully encapsulated in epoxy resin. This unit is constructed with high quality, fully tested and rated components to ensure the best performance possible.

Features include:

- Driven by a high power rare earth rotor magnet.
- Only 1 moving part for trouble-free operation.
- Built-in "sponge" filter protects ceramic shaft and impeller.
- Suitable for indoor or outdoor use with fresh or saltwater.
- Can be used in fully submersible or inline applications.
- Diverse selection of fittings are included with every pump.
- Quiet oil-free motor.
- 1 year warranty (see inside back cover).

Operating Instructions

HELPFUL HINTS

- Never let the pump run dry. Doing so will damage pump and could void the warranty.
- Place pump in minimum of 6 inches and a maximum of 3 feet below water surface.
- Always place on stable surfaces that are free from sludge, sand and other debris.

SUBMERSIBLE APPLICATIONS:

This pump is designed to operate when completely submerged in water.

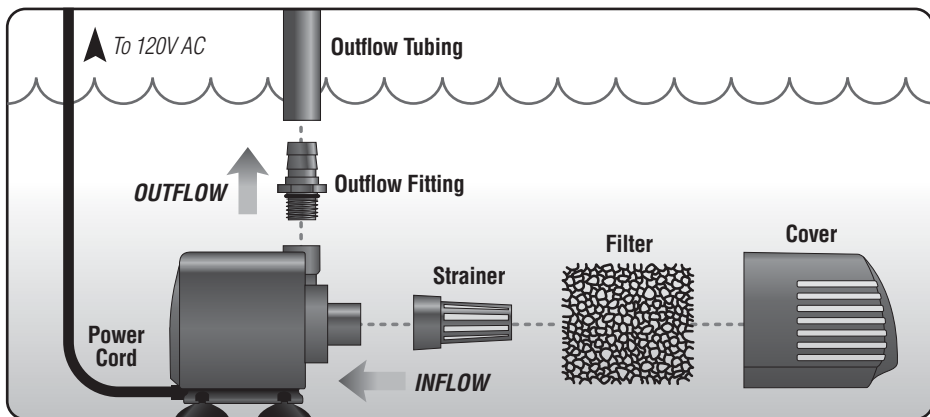
CAUTION: Do not put plug and pump into water together. If plug drops into water, power supply should be turned off to avoid electric shock. Pump can be used indoors or outdoors. Supply cord cannot be changed or replaced. It cannot be bent or used to carry the pump. If cord is damaged, do not use pump. Do not reach for pump while it is submerged and connected to a power supply.

Basic Setup:

1. Make sure your pump is sized correctly for the volume of water to be moved and that it can safely and effectively operate in your system.
2. Install outflow or inflow fittings onto the pump that are appropriate for your application and that correctly fit any tubing connected to them.
3. Connect tubing, making sure the inner diameter of the tubing matches the outside diameter of the fittings installed.
4. Double check to make sure all fittings are secure and that Strainer, Filter and Cover are installed correctly.
6. Fill your system with water.
6. Connect the pump's grounded power plug to a grounded electrical outlet.

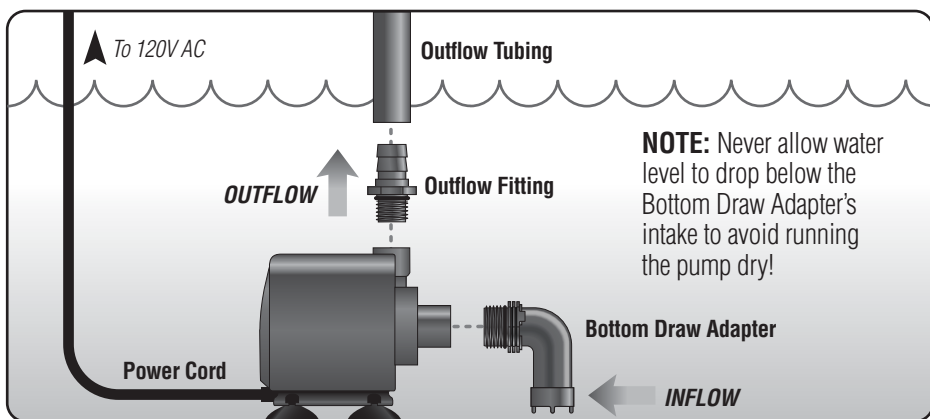
EXAMPLE 1: Typical Submersible Application

Pump fully submerged between 6 inches to 3 feet below water surface and secured to bottom or side of reservoir or tank. Pump operates with the Strainer, Filter and Cover installed.



EXAMPLE 2: Submersible Application with Bottom Draw

Pump fully submerged between 6 inches to 3 feet below water surface and secured to **BOTTOM** ONLY of reservoir or tank. Pump operates with Bottom Draw Adapter *replacing* the Strainer, Filter and Cover.



INLINE APPLICATIONS:

This pump is designed to operate in a system without being submerged in water.

CAUTION: This pump is not self-priming, which requires it to be filled with water and slightly lower than the water level in a reservoir, tank, pond or aquarium. If plug drops into water, power supply should be turned off to avoid electric shock. Pump can be used indoors or outdoors. Supply cord cannot be changed or replaced. It cannot be bent or used to carry the pump. If cord is damaged, do not use pump.

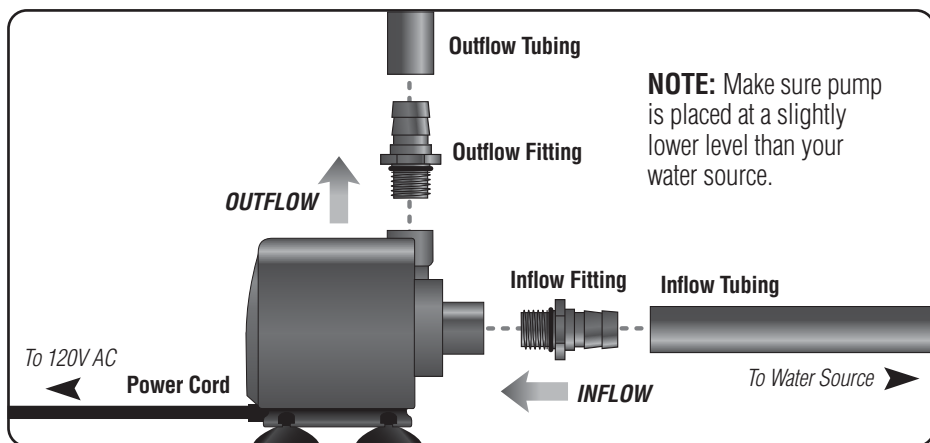
Basic Setup:

1. Make sure your pump is sized correctly for the volume of water to be moved and that it can safely and effectively operate in your system.

2. Place pump in desired location, ensuring that the pump will operate at a slightly lower level than your water source.
3. Install inflow and outflow fittings onto the pump that are appropriate for your application and that correctly fit any tubing connected to them.
4. Install a connection on your water source using appropriately sized fittings.
5. Install tubing on all connections, making sure the inner diameter of the tubing matches the outside diameter of the fittings installed.
6. Double check to make sure that all connections are secure.
7. Fill your system with water.
8. Connect the pump's grounded power plug to a grounded electrical outlet.

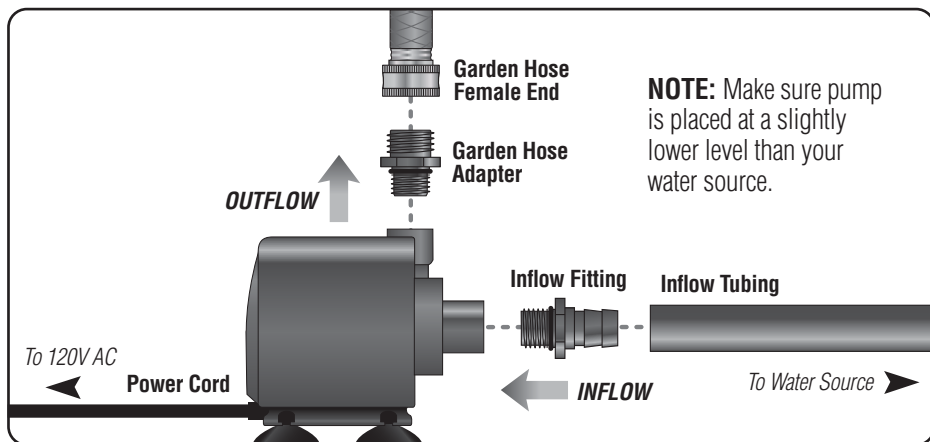
EXAMPLE 3: Typical Inline Application

Secured pump NOT submerged in water (note that the Strainer, Filter and Cover are not installed).



EXAMPLE 4: Inline Application with Garden Hose Adapter (Select Models Only)

Secured pump NOT submerged in water and operating *without* the Strainer, Filter and Cover installed.



Cleaning & Maintenance

EcoPlus® Fixed Flow Submersible or Inline Pumps do not require lubrication or any special maintenance. The following maintenance and cleaning will improve the pumps performance and life.

Cleaning: Pump should be cleaned when water flow is visibly reduced. First, unplug the pump's power cord, then remove the pump from the water (do not use power cord to lift the pump). Carefully and firmly pull the snap-on cover from the pump body. Remove the pre-filter sponge and wash thoroughly in fresh water (a blocked sponge will reduce the pump flow rate and performance). Cleaning frequency will depend upon water condition and use, but it is recommended to inspect the filter every 2-3 months.

Maintenance: The only serviceable parts are the impeller and filter. Remove the impeller assembly by turning the cover counterclockwise to release lock. Firmly pull away from the pump motor. Carefully remove impeller. Wash parts carefully with fresh water. Once you have cleaned the pump, reassemble it in reverse order.

Replacement Parts

MODEL	PART #	DESCRIPTION
Eco-100	728493	EcoPlus Eco-100 Replacement Shaft & Impeller
	728494	EcoPlus Eco-100 Replacement Filter
	748480	EcoPlus Eco-100 Submersible Pump Replacement Impeller Cap for 728492
Eco-185	728301	EcoPlus Eco-185 Replacement Shaft & Impeller
	728303	EcoPlus Eco-185 Replacement Filter
	748481	EcoPlus Eco-185 Fixed Flow Submersible/Inline Pump Replacement Impeller Cap for 728300
Eco-264	728306	EcoPlus Eco-264 Replacement Shaft & Impeller
	728308	EcoPlus Eco-264 Replacement Filter
	748482	EcoPlus Eco-264/396 Submersible Pump Replacement Impeller Cap for 728305/728310
Eco-396	728311	EcoPlus Eco-396 Replacement Shaft & Impeller
	728313	EcoPlus Eco-396 Replacement Filter
	748482	EcoPlus Eco-264/396 Submersible Pump Replacement Impeller Cap for 728305/728310
Eco-633	728316	EcoPlus Eco-633 Replacement Shaft & Impeller
	728318	EcoPlus Eco-633 Replacement Filter
	748483	EcoPlus Eco-633 Submersible Pump Replacement Impeller Cap for 728315
Eco-1056	728321	EcoPlus Eco-1056 Replacement Shaft & Impeller
	728323	EcoPlus Eco-1056 Replacement Filter
	748484	EcoPlus Eco-1056 Submersible Pump Replacement Impeller Cap for 728320
Eco-1267	728326	EcoPlus Eco-1267 Replacement Shaft & Impeller
	728328	EcoPlus Eco-1267 Replacement Filter
	748485	EcoPlus Eco-1267/1584 Submersible Pump Replacement Impeller Cap for 728325/728330
Eco-1584	728331	EcoPlus Eco-1584 Replacement Shaft & Impeller
	728338	EcoPlus Eco-1584/2245 Replacement Filter
	748485	EcoPlus Eco-1267/1584 Submersible Pump Replacement Impeller Cap for 728325/728330
Eco-2245	728334	EcoPlus Eco-2245 Replacement Shaft & Impeller
	728338	EcoPlus Eco-1584/2245 Replacement Filter
	748486	EcoPlus Eco-2245 Submersible Pump Replacement Impeller Cap for 728333

PUMP SPECIFICATIONS

All pumps listed on the following pages can be used indoors or outdoors with fresh or saltwater.

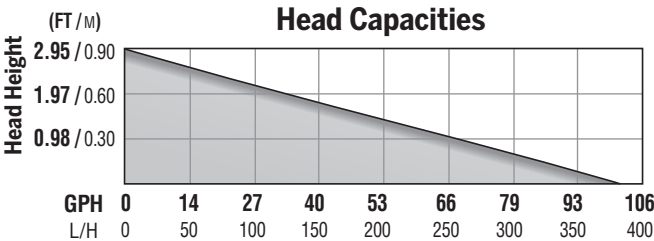
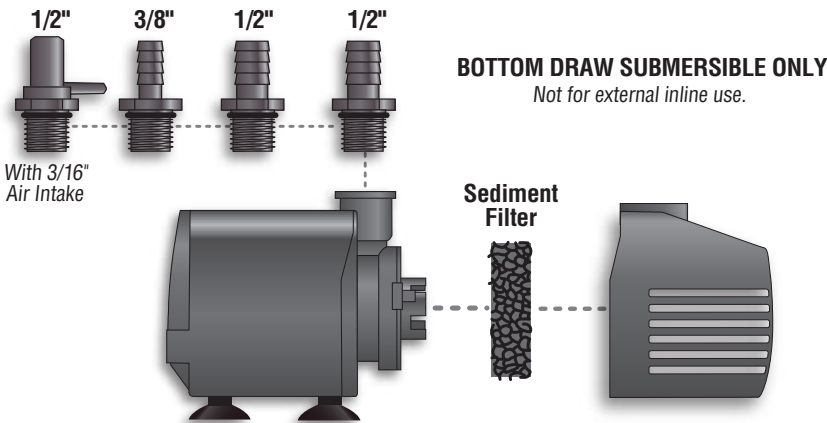
Maximum operating water temperature is 95° F (35° C).

Head capacities may vary depending on actual operating conditions.

NOTE: All fitting sizes shown in diagrams are Outside Diameter (O.D.)

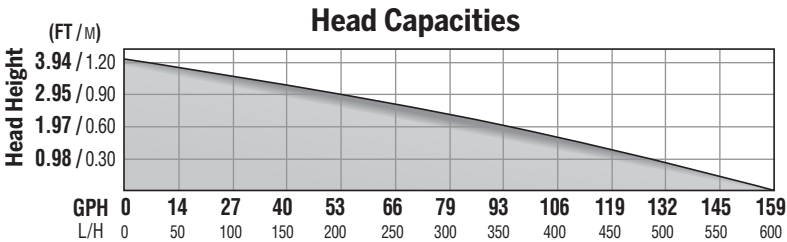
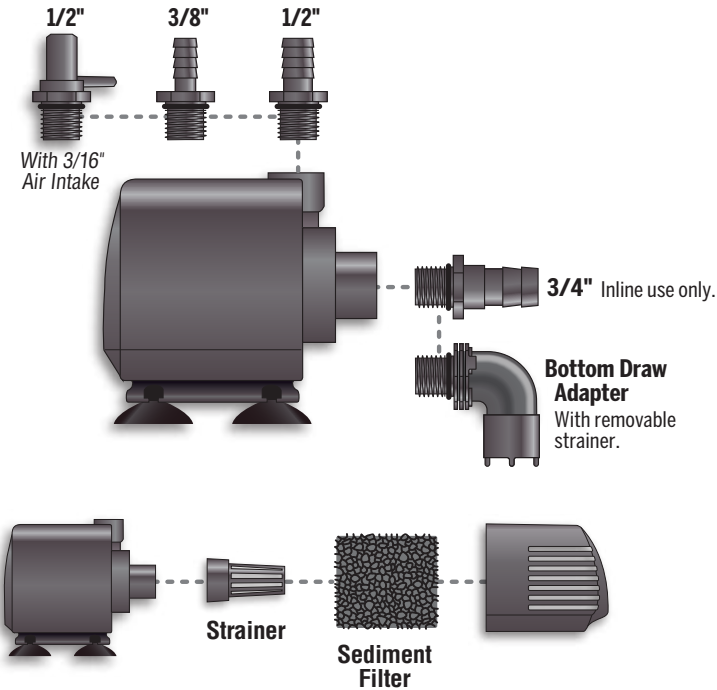
Eco-100

Product #	Power	Amps	Watts	GPH/LPH	H-Max (FT/M)	PSI	Dimensions (inch / mm)
728492	120 V / 60Hz	.085	5	100 / 378	3.0 / 0.9	1.32	3.0 x 1.6 x 2.1 / 76 x 40 x 53



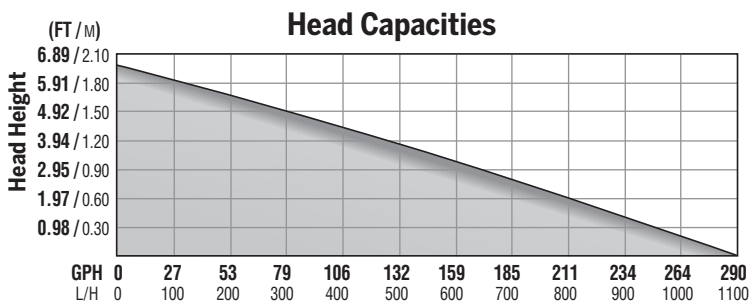
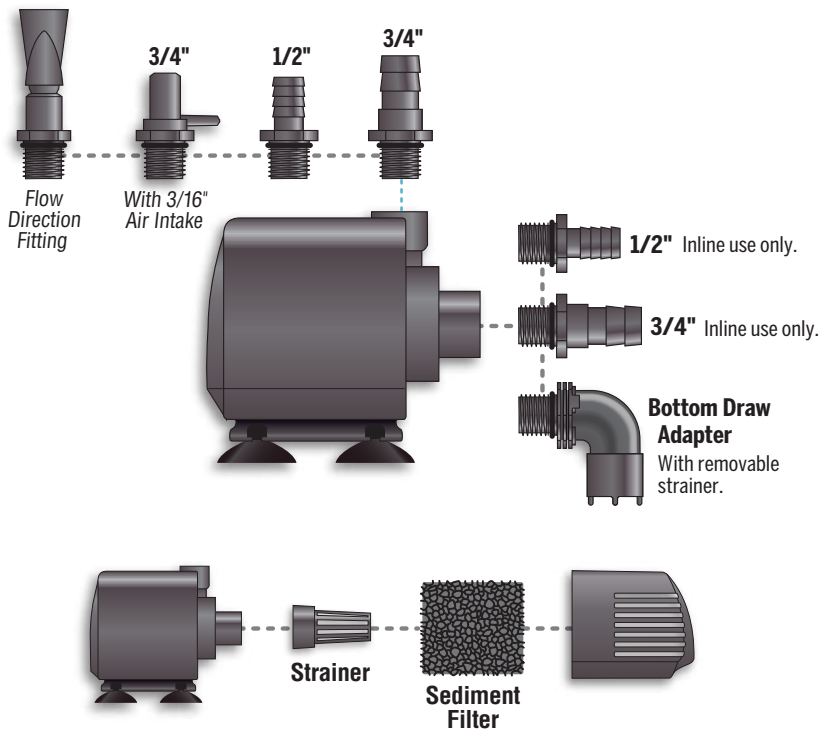
Eco-185

Product #	Power	Amps	Watts	GPH/LPH	H-Max (FT/M)	PSI	Dimensions (inch / mm)
728300	120 V / 60Hz	.22	10.5	160 / 605	4.0 / 1.2	1.77	5.6 x 3.0 x 3.0 / 143 x 76 x 76



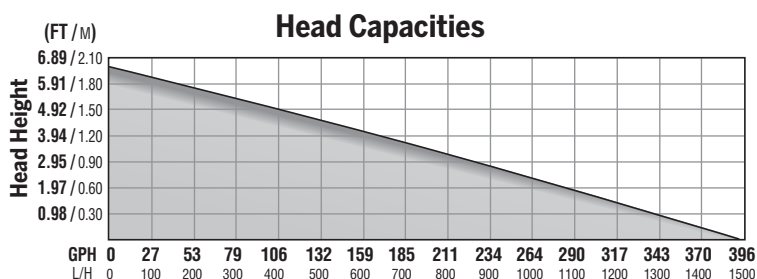
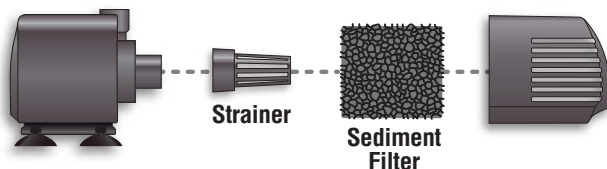
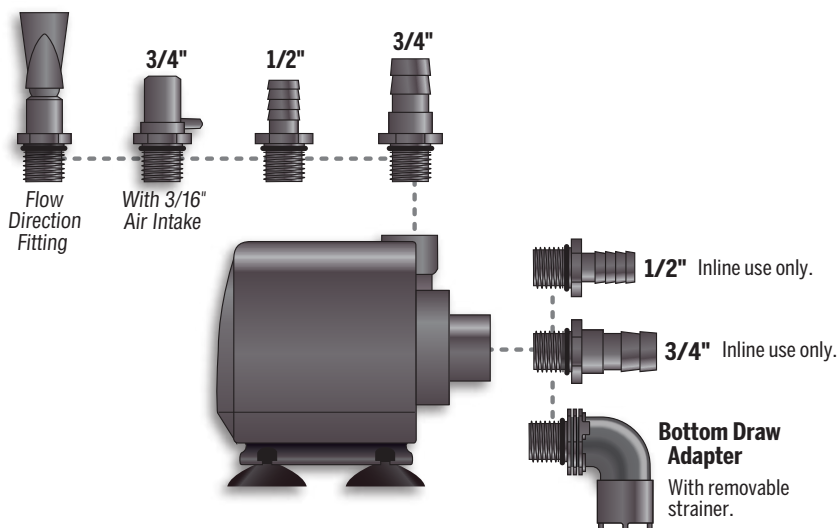
Eco-264

Product #	Power	Amps	Watts	GPH/LPH	H-Max (FT/M)	PSI	Dimensions (inch / mm)
728305	120 V / 60Hz	.23	17	290 / 1098	6.5 / 2.0	2.87	6.2 x 3.5 x 3.5 / 158 x 89 x 89



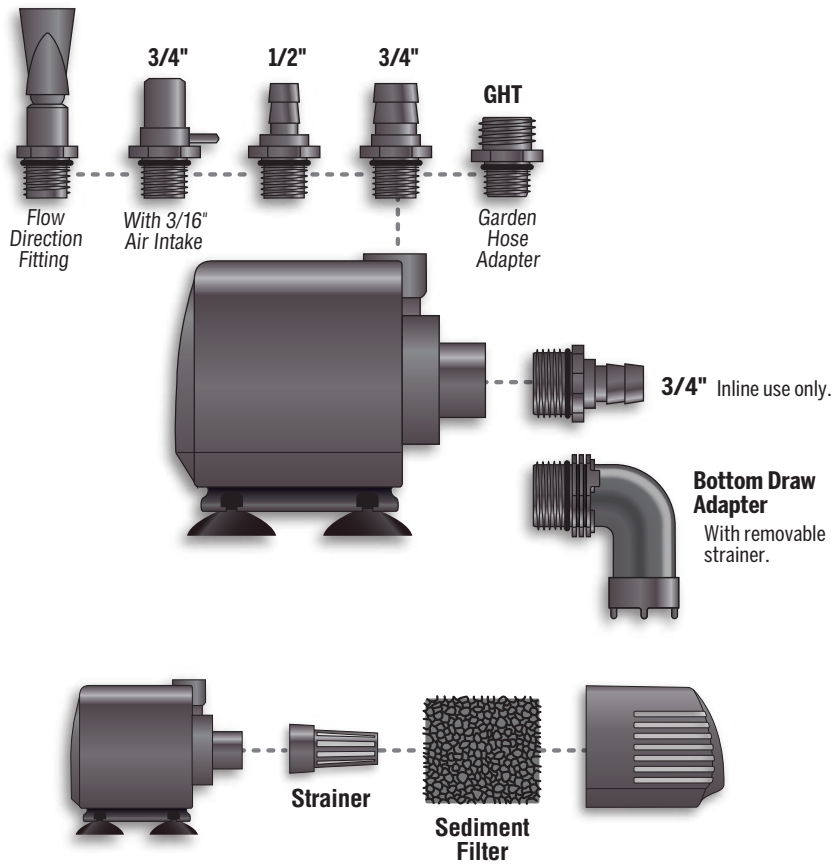
Eco-396

Product #	Power	Amps	Watts	GPH / LPH	H-Max (FT/M)	PSI	Dimensions (inch / mm)
728310	120 V / 60Hz	.30	20	396 / 1500	6.5 / 2.0	2.87	6.4 x 3.1 x 4.5 / 165 x 80 x 115

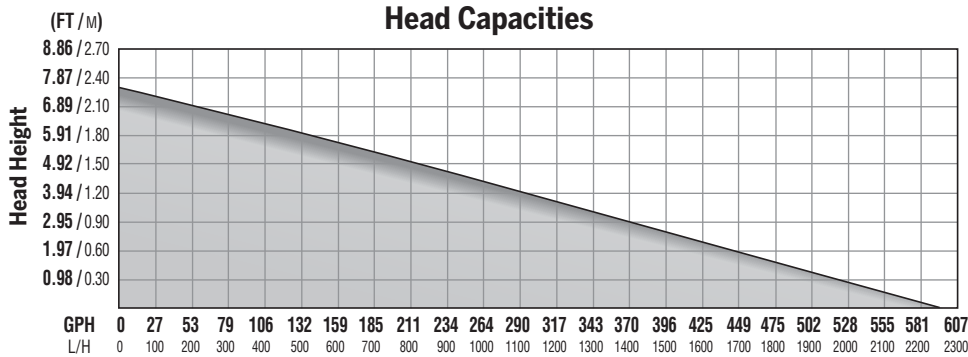


Eco-633

Product #	Power	Amps	Watts	GPH / LPH	H-Max (FT/M)	PSI	Dimensions (inch / mm)
728315	120 V / 60Hz	.45	40	590 / 2233	7.5 / 2.3	3.34	7.2 x 3.5 x 4.3 / 183 x 89 x 110

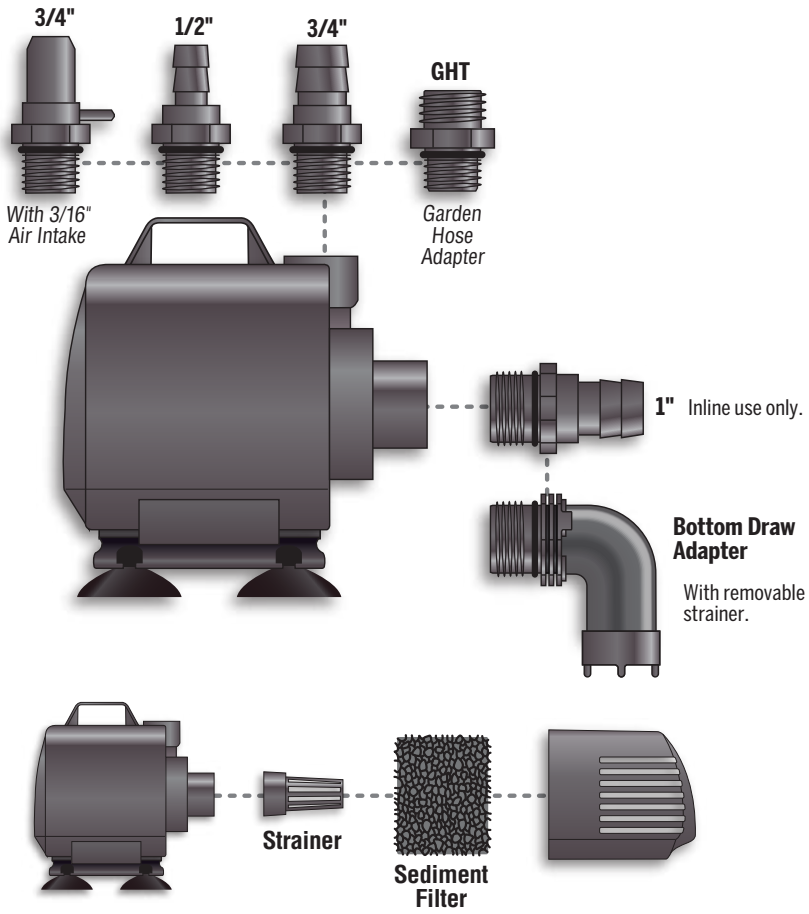


Head Capacities

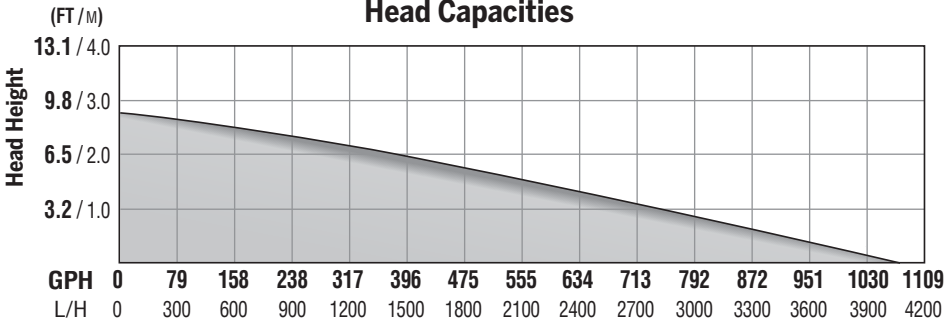


Eco-1056

Product #	Power	Amps	Watts	GPH/LPH	H-Max (FT/M)	PSI	Dimensions (inch / mm)
728320	120 V / 60Hz	.74	70	1000 / 3785	9.0 / 2.7	3.99	7.9 x 4.3 x 5.5 / 199 x 110 x 140

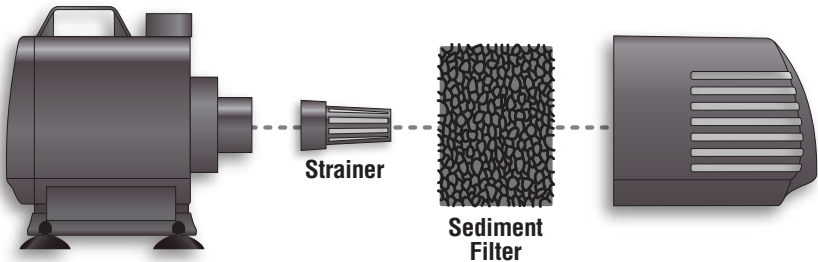
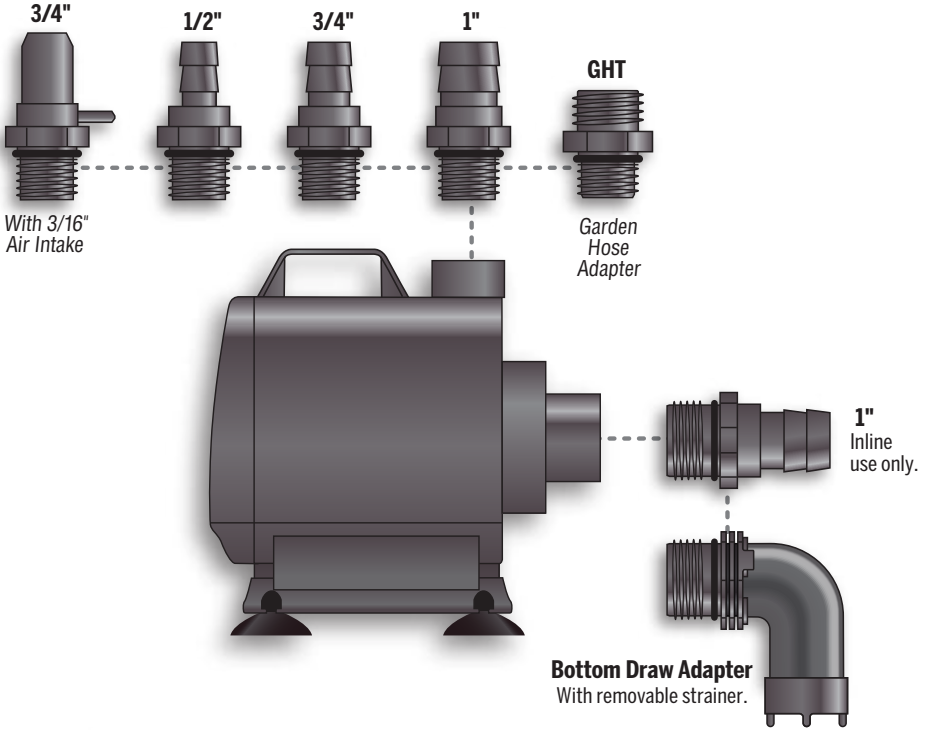


Head Capacities

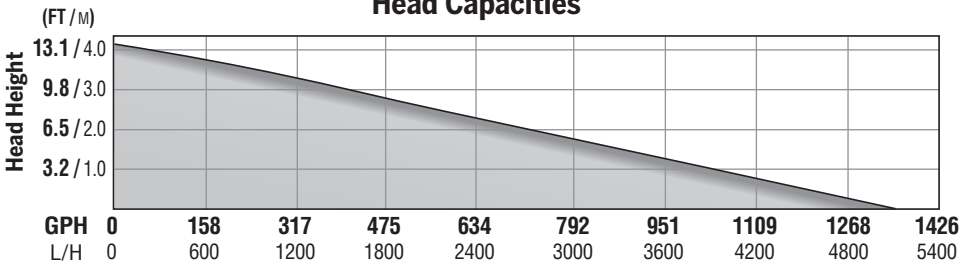


Eco-1267

Product #	Power	Amps	Watts	GPH/LPH	H-Max (FT/M)	PSI	Dimensions (inch / mm)
728325	120 V / 60Hz	1.60	125	1340 / 5072	13.5 / 4.1	5.95	9.0 x 5.1 x 6.2 / 229 x 130 x 158

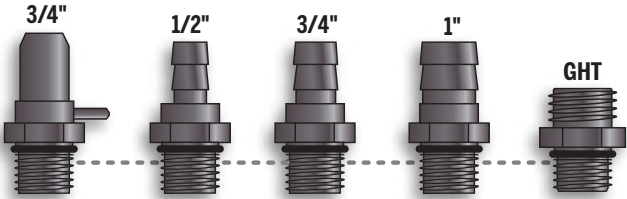


Head Capacities



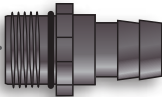
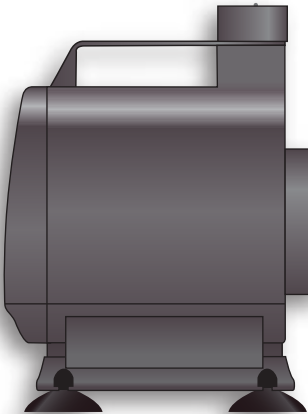
Eco-1584

Product #	Power	Amps	Watts	GPH/LPH	H-Max (FT/M)	PSI	Dimensions (inch / mm)
728330	120 V / 60Hz	2.046	145	1630 / 6170	12.5 / 3.8	5.52	9.3 x 5.1 x 6.9 / 237 x 130 x 176

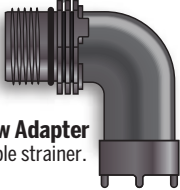


With 3/16" Air Intake

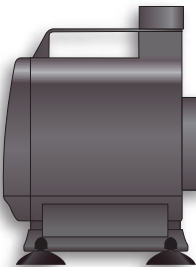
Garden Hose Adapter



1" Inline use only.



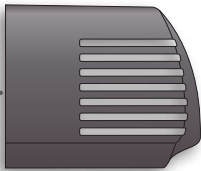
Bottom Draw Adapter
With removable strainer.



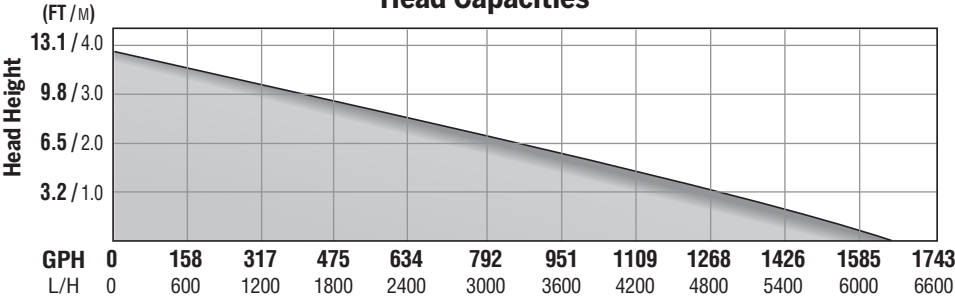
Strainer



Sediment Filter

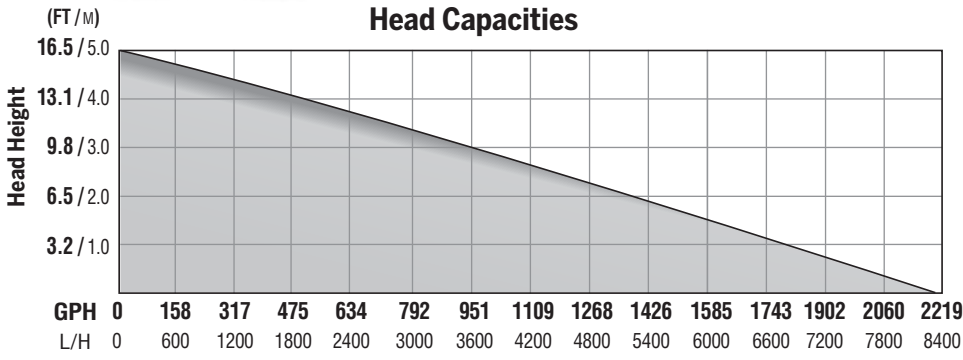
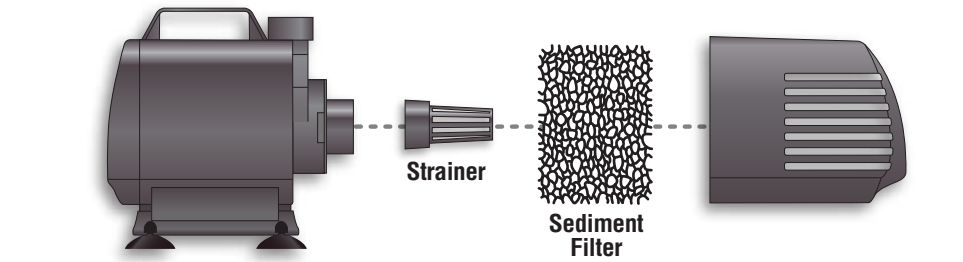
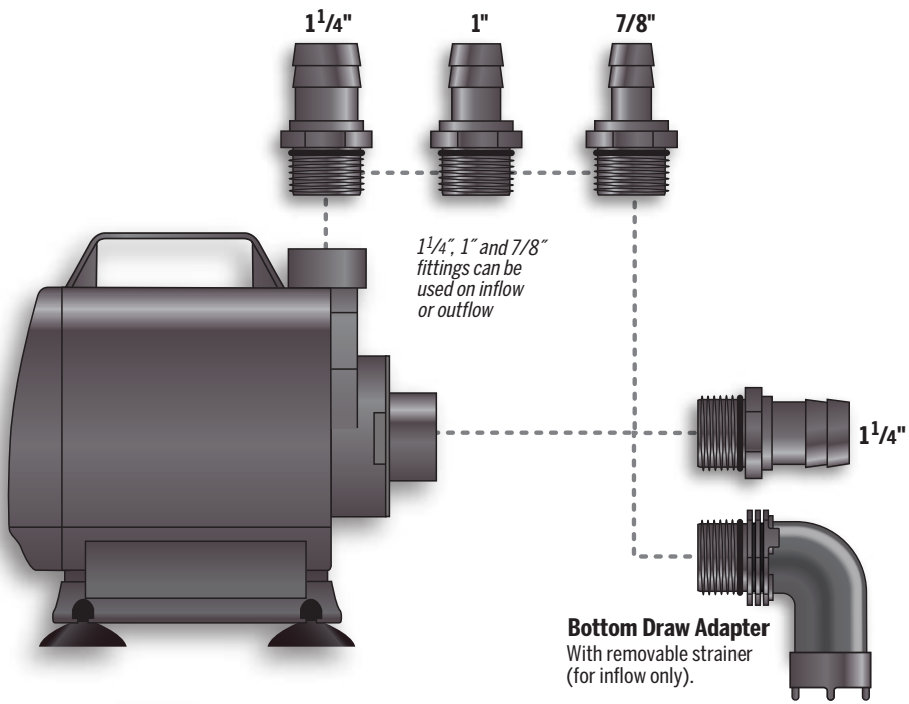


Head Capacities



Eco-2245

Product #	Power	Amps	Watts	GPH/LPH	H-Max (FT/M)	PSI	Dimensions (inch / mm)
728333	120 V / 60Hz	2.05	226	2160 / 8176	16.5 / 5.0	7.25	10.6 x 5.8 x 7.0 / 270 x 148 x 178



WARRANTY INFORMATION

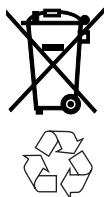
This product has a warranty of one year for any defects in materials or workmanship. Warranty is **NOT VALID** if the pump is not properly used, neglected, or there is a lack of maintenance or accidental damage either to the pump or to the impeller or impeller shaft. If the pump fails due to manufacturing fault within this warranty period, the pump will either be repaired or replaced free of charge. Please return the pump to the place of purchase with the original bill receipt.

The manufacturer or distributor shall not be held responsible for any damages caused by defective components or materials, or for loss incurred because of the interruption of services or any consequential, or incidental damages or expenses arising from the manufacture, sale, use or misuses of this product. The manufacturer shall not be held responsible for any loss of fish, plants or other livestock as a result of any failure or defect of this product.

This warranty excludes the sponge prefilter and impeller which may require replacing annually.

- Use with 120 volt power source.
- The pump is provided with a thermal protector that temporarily switches off the pump in case of overheating and the pump may automatically restart.

PLEASE BE RESPONSIBLE



DO NOT dispose of this product in the trash, on the landscape or into any unsorted waste stream! It may contain hazardous substances that can leach into groundwater and find their way into the food chain. This unit contains **VALUABLE RESOURCES** that can be recycled and re-used.



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