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100% Effective Natural Hormone Treatment
Menopause, Andropause And Other Hormone Imbalances
Impair Healthy Healing In People Over The Age Of 30!

How to choose a Pump

By Anonymous

How to choose a Pump

Pumps are available in both submersible and external (out-of-pond models). Reputable water garden suppliers have charts and other information available that can help you select the best model and connecting equipment for your purposes. For the smaller pond, a submersible pump is the most economical.

Pumps are sized by gallons per hour (GPH) output at one foot of lift or height. Larger capacity pumps are rated by horsepower (hp). Manufacturers offer charts that break down the power of each size pump according to incremental heights of one foot. Some companies label pumps by GPH while others assign letter or number designations that require cross-referencing to charts.

To determine the correct submersible pump for your pond, you should determine your pond's volume. It is recommended that you circulate your pond's water once at least every two hours. Hence, your pump should have GPH (gallons per hour) rating of at least half of your pond size. For example, if you had a 1000 gallon pond, then you will require a 500 GPH pump.

If you have many fish, or accessories such as fountains, waterfalls, or streams, you should account for this to be getting a larger pump (preferably one size larger). The general rule of thumb is that you should double the pump's capacity if you are planning to add fish.

Calculating the proper pump for waterfalls is a bit trickier, because waterfall pumps are rated by both GPH and maximum waterfall height. To estimate your waterfall's height, you must measure the vertical height from the top of your pump to the top of your waterfall or stream. In addition, you must add another foot of height or lift for every ten feet of hosing you will be using (this will allow for loss of volume from resistance within the hose). To calculate the required pump GPH, a general rule of thumb is that each inch of width of the channel will require an extra 100 GPH. For example, if your stream or waterfall spillway will be 10 inches wide, you will need a pump that produces an excess flow of 1000 GPH at your waterfall's height.

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Choosing a pump that is too small will result in poor filtration and surface skimming, excessively long filter cycles and in the case of a bigger pond, poor action from the circulation jets. You must also remember that as dirt is removed by the filter, the pressure goes up, increasing dynamic head and slowing flow rate. Therefore, you must allow for that increase in pressure when choosing a pump.

Choosing a pump that is too large can result in damage to the plumbing and equipment. It can also result in cavitation, which can seriously damage the pump itself. Cavitation is the formation of bubbles in the water, very near the impeller, that occurs when the water is intensely vibrated. As the bubbles pop, shock waves are created within the pump that not only make noise but also burst with enough force to damage the impeller and other pump parts. Pressures caused by cavitation have been calculated to be in the range of 30,000 psi!

An oversized pump can also create excessive flow, which can cause erosion of the system's piping. According to NSF and IAPMO standards, the flow rate in 1 1/2-inch pipe should never exceed eight

feet per second for copper and ten feet per second for PVC.

So when it comes time to buy a pump, the key factor should be performance rather than size. Determine the flow requirements of the system, then consult the pump curves provided by one or more manufacturers to choose a pump that meets your performance needs.

That way, you'll be replacing the pump truly " the numbers."

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Tips On How To Choose The Best Pond Pump

By Grange Aquatics

It often comes as a surprise to the budding pond enthusiast but the simple fact about owning a pond is that pond maintenance is not as simple as many people at first imagine it to be. Below we take a closer look at how to make sure that you get the best pump for your pond.

There are a lot of pond pumps on the market. So, how do you know which pump is the best for your pond? Follow our step by step guide for the answers:

Pond Pump Size Before you even visit your local pond specialist or look at pond pumps on the internet, the first thing you need to do is to accurately measure the size of your pond as this will

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determine how big a pump you will need. Many pond owners prefer to have a larger pump than is necessary and this is something which you should discuss with the pond specialist shop when you tell them the size of your pond.

Pond Features Another aspect of choosing the correct pond pump will revolve around the amount of pond features such as waterfalls and fountains that your pond has. The higher number of features the higher power pond pump your pond will require. If you have several pond features your pond specialist may even suggest having a separate smaller pond pump for each feature. This will have the advantage of working as a back-up system should any of the pumps fail.

Pond Pump Features When it comes to buying the actual pump, make sure that the pump has the recommended amount of biological filtration and that the pump will turn the water over a minimum of twice per 24 hours. Discuss the advantages and disadvantages of each pond pump with the pond specialist before agreeing to purchase the product.

Pond Pump Maintenance In order to get the best out of your pond pump you will need to ensure that it is being correctly maintained and care for. You need to check that the pump is working 24 hours a day and clean the pre-filters regularly. The cables attached to the pond pump should also be regularly maintained to ensure that they are not damaged and are performing correctly.

Grange Aquatics have been in business for over 20 years and have a dedicated team of staff on hand to share their expertise. Visit their website

<http://www.grangeaquatics.com>



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