

Pumps



Pool pumps circulate water through your pool and filter, mixing chemicals and helping keep the pool sanitary and free of debris. It's important to choose a pump that is the right size for your pool. Bigger is not always better when it comes to pool pumps—a pump too big for your pool can cause cloudy water and damaged filters, as well as wasting energy and money. The right sized pump for your pool will be big enough to work effectively, without causing problems or wasting energy.

To determine what size pump your pool needs, grab a calculator and follow these steps:

1. Calculate pool capacity.

Circular Pools

Diameter (ft.) x Diameter (ft.) x Average Depth (ft.) x 5.9 = Total Pool Capacity in Gallons

Oval Pools

Length (ft.) x Width (ft.) x Average Depth (ft.) x 6.7 = Total Pool Capacity in Gallons

Rectangular Pools

Length (ft.) x Width (ft.) x Average Depth (ft.) x 7.5 = Total Pool Capacity in Gallons

2. Calculate flow rate & turnover

Pool Volume in Gallons ÷ Turnover Rate in Minutes = Flow Rate

Example: If you have a 25,000 gallon pool, and you want the water to turnover once every 8 hours:

$25,000 \div 480$ (60 minutes x 8 hours) = 52 gpm

Your 25,000 gallon pool needs an output of 52 gallons per minute to circulate the water once every 8 hours.

3. Calculate maximum flow rate

Count the number of intake lines and follow this guideline:

For each 1.5" intake line, the maximum flow rate is 42 gpm.

For each 2.0" intake line, the maximum flow rate is 73 gpm.

4. Calculate resistance

Check the pressure of water flowing into the filter tank and multiply that number by 2.31.

Get a vacuum reading on the pump suction line and multiply that by 1.13.

Add the two numbers together and the result is the total dynamic head.

Now that you've figured out all of these numbers, you can use pump manufacturer performance charts to decide what pump is best for you. Or, if all of this sounds like too much work for you (or your calculator is out of batteries), you can contact us and we'll recommend a pump for you!

Our team can repair and replace any make or model of swimming pool pump.

We recommend and sell the most of:

- Pentair SuperFlo Pump
- Pentair WhisperFlo Pump
- Hayward Super Pump
- Pentair Variable Speed Pump (Energy Efficient) Install

Calculate your energy savings and spending via the Pentair calculator to determine if a variable speed pump would be a good choice for you. [Click Here](#)

Pump not working?

[Pump Troubleshoot Guide](#)