

Variable Speed Pumps Save Energy

The pool pump consumes more energy than any other piece of pool equipment. The addition of a variable-speed pump can reduce your energy costs of running your pool by over 75%.

The standard pool pump runs at only one speed, which is usually more than what is actually required to keep the water filtered. Variable speed pumps can be programmed to operate at set speed to deliver the correct flow for each task they perform, such as operating water features, cleaners, water treatment systems or heaters.

The bottom line is that slower pump speeds save energy. They also dramatically reduce the noise level associated with traditional pool pumps and reduce wear not only on the pump itself, but also on filters, heaters, chlorinators and other equipment that water flows through.

Even with all of these advantages, the price tag on these pumps may at first seem hard to justify. But compare the cost of a variable speed pump with the cost of doing nothing.

The Math

Cost of operation of a 1 HP pump (time of use)

Power Usage	Price kW/h	\$/hr	# hours per day	\$ per day	X 30 days/month	X 5 months/year
1633 W	\$0.09 (low)	\$0.147	12 Hrs	\$1.76		
1633 W	\$0.11 (mid)	\$0.180	6 Hrs	\$1.08		
1633 W	\$0.13 (high)	\$0.212	6 Hrs	\$1.27		
				\$4.11	\$123.36	\$616.80

Cost of operation of a variable speed pump

Power Usage	Price kW/h	\$/hr	# hours per day	\$ per day	X 30 days/month	X 5 months/year
1050 W	\$0.09 (low)	\$0.09	12 Hrs	\$1.13		
500 W	\$0.11 (mid)	\$0.137	6 Hrs	\$0.82		
1050 W	\$0.13 (high)	\$0.055	6 Hrs	\$0.33		
				\$2.28	\$68.40	\$342.00

*Please note this does not take into account the 24 low rates on weekends, and assumes pump will be running the equivalent of ¾ HP during the day to maintain the temperature for when children will be using the pool the most.

Minimum level of savings per season \$274.80