

# 2021 DOE REGULATION GUIDE

Starting July 19, 2021, the Department of Energy (DOE) is increasing the minimum energy efficiency standards for pool pumps.

## <.711 HHP = lower WEF requirements

Can be met by a single speed pump

## ≥.711 HHP = higher WEF requirements

Requires variable speed technology today

## DEFINITIONS

### WEF – WEIGHTED ENERGY FACTOR

Measure of energy efficiency. Similar to MPG in an automobile, the higher the WEF, the more efficient the pump. *Required to be labeled on pump.*

### HHP – HYDRAULIC HORSEPOWER

Measure of pump's performance. The amount of water your pump can push to, and through, the pool. **NOT** equivalent to the motor horsepower. *While not required, Pentair is adding HHP to pump labels.*

Rated 1 HP ≠ 1 HHP

### THP – TOTAL HORSEPOWER

Measure of the total HP created at the motor shaft, not at the wet-end. This represents the *potential* output, not the *actual* output. *Each pump must be labeled with its THP.*

## WHAT THEY SAY

"Many of our single speed pumps will still be DOE compliant."

VS.

## WHAT WE SAY

"Most single speed pumps will no longer be DOE compliant."

## IT'S HHP NOT RATED HP THAT DEFINES THE PERFORMANCE OF YOUR PUMP

Product	Rated HP	Average HHP	% more flow*
Pentair's .75 HP SS Pumps	0.75	0.672	6%
Pentair's 1 HP SS Pumps	1	0.972	22%
Competitor's 1 HP SS Pumps	1	0.553	

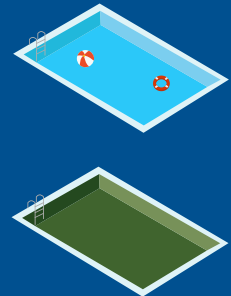
\*than equivalent competitor's average 1HP pump on a typical inground pool (20k gallon with a curve c system friction)

## THE WHOLE STORY:

- ▶ Competitors are putting higher HP motors on their pumps and smaller hydraulics (i.e. impellers) to govern them back so that the HHP is less than .711 output.
- ▶ Pentair's 1 HP SS pumps have nearly twice the HHP of the competitors 1 HP SS pump.
- ▶ Because of this, our current 1 HP pumps will need to transition to variable speed.

## LOW HHP CAN LEAD TO POOR PERFORMANCE\*

- Unsanitary pool
- Poor water clarity
- Requires more chlorine
- Increased wear & tear
- More frequent filter cleaning
- Shorter pump lifetime



\*pool size and other factors determine specific pool pump needs

## BOTTOM LINE:

# NOT ALL SINGLE SPEED PUMPS ARE CREATED EQUAL.

## WHY CHOOSE A VARIABLE SPEED PUMP?

### HIGHER PERFORMANCE



Improved circulation

### ENERGY & COST SAVINGS



Save money on energy bills\*

### QUIETER



Lower speed runs quieter

### LONGER LASTING



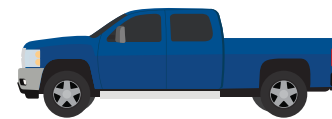
Less wear & tear

\*Actual savings may vary based on local utility rates, pool size, pump run time, pump horsepower, pump rpm, plumbing size and length, pump model, service factor and other hydraulic factors.

## HOW TO CHOOSE A VARIABLE SPEED PUMP

You need the right tool for the job. While WEF is important, the pump's performance (HHP) is just as important.

You would never choose a car based only on MPG, so don't choose a pump on WEF alone.



MPG: 24  
TOWING CAPACITY: 11,000 LBS



MPG: 58  
TOWING CAPACITY: 1,500 LBS

Pentair invented variable speed pool pump technology and remains the leader

## WHY CHOOSE PENTAIR?

Pentair offers high performing VS pumps with high WEF scores, giving you the right pump for your pool.



Energy Star® Partner Of The Year for seven consecutive years.