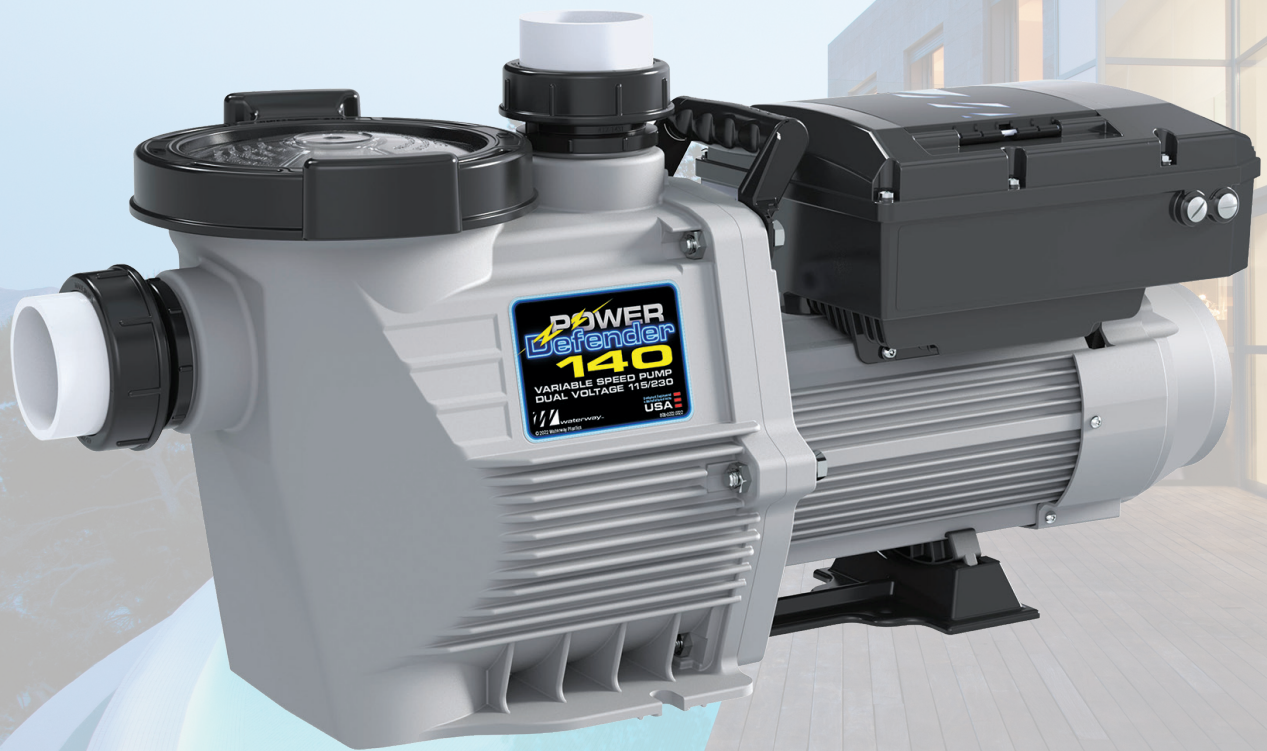


# VARIABLE SPEED & D.O.E. COMPLIANT PUMPS









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## RULES & REGULATIONS

A new U.S. Department of Energy (DOE) regulations will go into effect on July 19, 2021. Dedicated Purpose Pool Pumps manufactured in or imported into the U.S. with a Hydraulic Horse Power of 2.5 or less (approximately less or equal to 5 HP) must meet the new minimum energy-efficiency standards including but not limited to Weighted Energy Factor (WEF) requirements.\*

\*Non-compliant pump should not be manufactured or imported after July 18, 2021. However, all pumps available in supply chain as of July 18 (at manufacturer warehouse, distribution, stores,...) can be still distributed, sold, whether they meet the new requirements or not.

Power Defender Variable Speed  
Pumps are Energy Star Approved!



3.1

Designed, Engineered  
& Manufactured in the  
**USA**

# VARIABLE SPEED PUMPS

Welcome to the Waterway Power Defender Variable Speed Pump Lineup. Our pumps boast maximum efficiency and outstanding performance, at a tremendous value. These American made pumps utilize state of the art energy saving technology, while providing quiet, quality filtration for your pool



## **SIMPLE SETUP & PROGRAMING:**

- Factory Preset Option provides maximum energy savings while saving time at setup
- Fully programmable built-in timer and speed control for up to 7 different programs
- Convenient Quick Start guide located directly on controller lid
- User interface rotates to all four 90 deg positions for ease of access
- Onboard battery backup saves programming during power outages



## **AUTOMATION COMPATIBILITY:**

- Operates seamlessly with Waterway Oasis Control system
- Connects with other leading pool controllers via relay control option



## **EFFICIENT, PERMANENT MAGNET MOTOR OPERATION:**

- DOE and Energy Star compliant & qualifies for local energy rebates, where applicable
- Save up to 90% versus standard, single speed pump operation
- Energy saving low speed filtration dramatically reduces pump noise
- Improved system-wide hydraulics reduce wear on all pool equipment
- Longer filtration cycles produce cleaner water and better distribution of pool chemicals



## **EASY INSTALL:**

- Dual voltage wiring options for 115V or 220V installations
- Built-in handle for easy transport
- Totally Enclosed Fan Cooled (TEFC) finned aluminum motor enclosure shields electrical components from moisture and debris





# 110

## IN-GROUND SINGLE SPEED



PD-110

### DESCRIPTION:

- One of the quietest motors in the industry
- 1.10 HP
- 2" CPVC high temp fittings
- Silicon Carbide Viton Shaft Seals provide for superior wear and chemical resistance
- Direct drop-in replacement for Super Pump® / SuperFlo®

Comes with base for IntelliFlo®



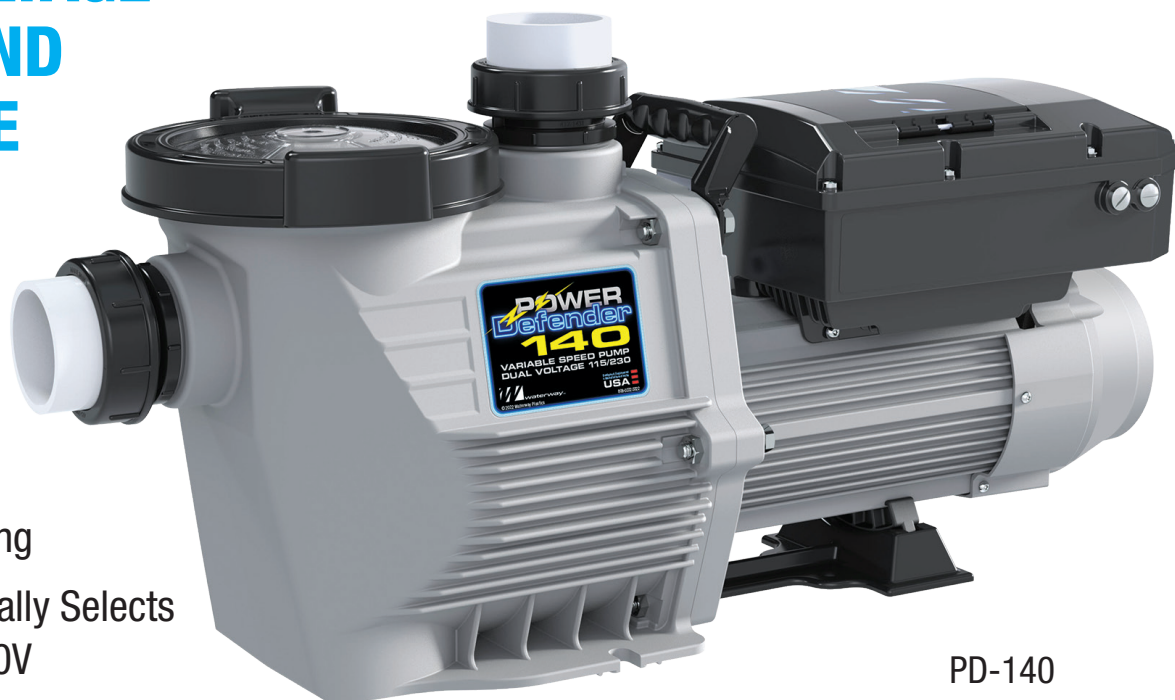
Individual Model Number Covered by Basic Model	Weighted Energy Factor (WEF) in kilogallons per kilowatt-hour (kgal/kWh)
PD-110	4.110

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**USA**



# 140

## DUAL VOLTAGE IN-GROUND VARIABLE SPEED



PD-140

### DESCRIPTION:

- 2" Plumbing
- Automatically Selects 115V / 230V
- 1.40 HP
- Freeze Protection
- Auxiliary Relay Option
- Dual Voltage
- Silicon Carbide Viton Shaft Seals provide for superior wear and chemical resistance
- Direct drop-in replacement for Super Pump® / SuperFlo®

Comes with base for IntelliFlo®



### ALSO AVAILABLE IN ABOVE GROUND

PD-140ABG



Individual Model Number Covered by Basic Model	Weighted Energy Factor (WEF) in kilogallons per kilowatt-hour (kgal/kWh)
PD-140	9.58
PD-140ABG	10.295

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& Manufactured in the

USA







# 165

## DUAL VOLTAGE IN-GROUND VARIABLE SPEED



PD-165

### DESCRIPTION:

- 2" Plumbing
- Automatically Selects 115V / 230V
- 1.65 HP
- Freeze Protection
- Auxiliary Relay Option
- Dual Voltage
- Silicon Carbide Viton Shaft Seals provide for superior wear and chemical resistance
- Direct drop-in replacement for Super Pump® / SuperFlo®

Comes with base for IntelliFlo®



## VARIABLE SPEED PUMPS

Individual Model Number Covered by Basic Model	Weighted Energy Factor (WEF) in kilogallons per kilowatt-hour (kgal/kWh)
PD-165	7.796

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& Manufactured in the  
**USA**



# 225

## IN-GROUND VARIABLE SPEED



PD-225

### DESCRIPTION:

- 2" Plumbing
- 2.25 HP
- Freeze Protection
- Auxiliary Relay Option
- Silicon Carbide Viton Shaft Seals provide for superior wear and chemical resistance
- Direct drop-in replacement for Super Pump® / SuperFlo®

Comes with base for IntelliFlo®



## VARIABLE SPEED PUMPS

Individual Model Number Covered by Basic Model	Weighted Energy Factor (WEF) in kilogallons per kilowatt-hour (kgal/kWh)
PD-225	7.46

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& Manufactured in the

USA







# 270

## IN-GROUND VARIABLE SPEED



PD-270

### DESCRIPTION:

- 2" Plumbing
- 2.70 HP
- Freeze Protection
- Auxiliary Relay Option
- Silicon Carbide Viton Shaft Seals provide for superior wear and chemical resistance
- Direct drop-in replacement for Super Pump® / SuperFlo®

Comes with base for IntelliFlo®



## VARIABLE SPEED PUMPS

Individual Model Number Covered by Basic Model	Weighted Energy Factor (WEF) in kilogallons per kilowatt-hour (kgal/kWh)
PD-270	7.253

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& Manufactured in the  
**USA**



# 350

## IN-GROUND VARIABLE SPEED



PD-350

### DESCRIPTION:

- 2" Plumbing
- 3.50 HP
- Freeze Protection
- Auxiliary Relay Option
- Silicon Carbide Viton Shaft Seals provide for superior wear and chemical resistance
- Direct drop-in replacement for Super Pump® / SuperFlo®

Comes with base for IntelliFlo®



## VARIABLE SPEED PUMPS

Individual Model Number Covered by Basic Model	Weighted Energy Factor (WEF) in kilogallons per kilowatt-hour (kgal/kWh)
PD-350	7.46

Designed, Engineered  
& Manufactured in the

USA







# SVL270

## IN-GROUND VARIABLE SPEED



PD-270A

### DESCRIPTION:

- 2 1/2" Plumbing
- 2.70 HP
- Freeze Protection
- Auxiliary Relay Option
- Silicon Carbide Viton Shaft Seals provide for superior wear and chemical resistance

## VARIABLE SPEED PUMPS

Individual Model Number Covered by Basic Model	Weighted Energy Factor (WEF) in kilogallons per kilowatt-hour (kgal/kWh)
PD-270A	7.716

Designed, Engineered  
& Manufactured in the  
**USA**



# BOOSTER

## IN-GROUND



### DESCRIPTION:

- Suitable for all swimming pool pressure cleaners
- Best replacement for any 3/4 HP booster pump
- Comes with a tall, versatile mounting base

3810430-XX

Individual Model Number  
Covered by Basic Model

3810430-XX

Weighted Energy Factor (WEF) in  
kilogallons per kilowatt-hour (kgal/kWh)

0.502

Designed, Engineered  
& Manufactured in the

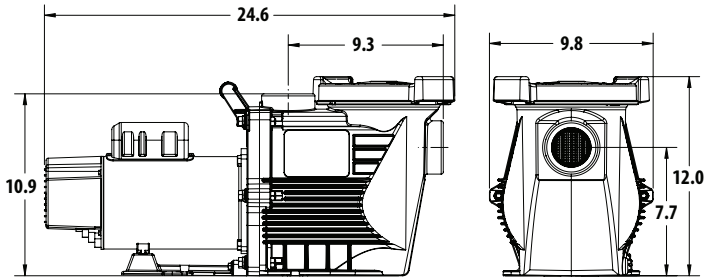
USA



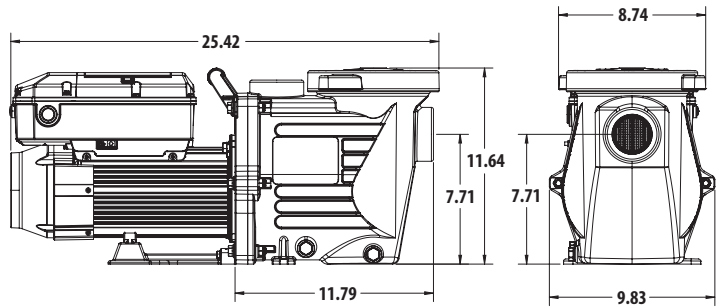


# SCHEMATICS

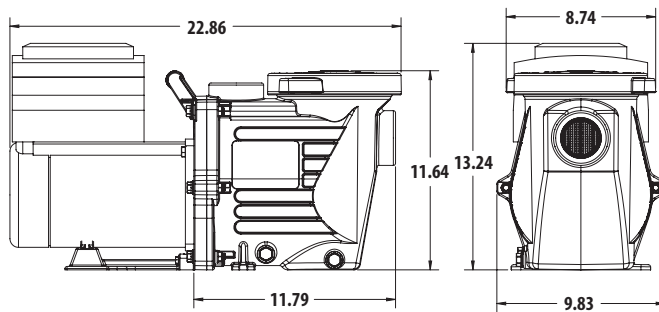
## 110



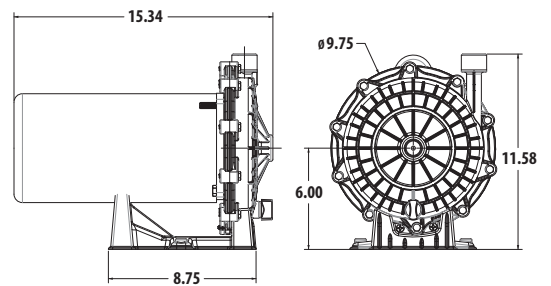
## 140



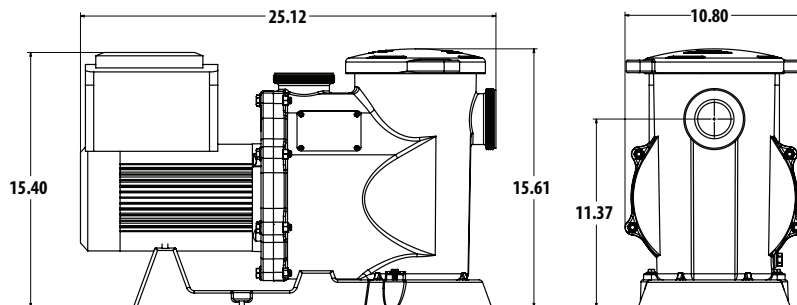
## 165, 225, 270 & 350



## BOOSTER

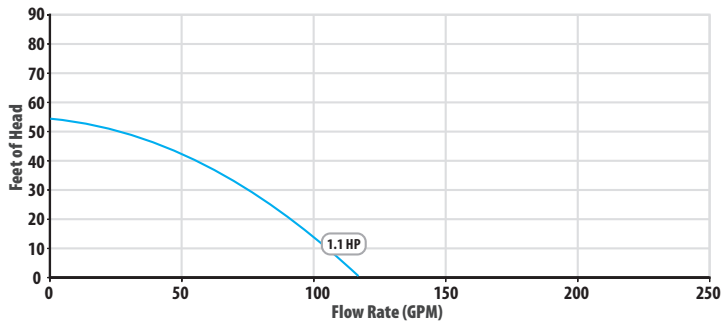


## SVL270

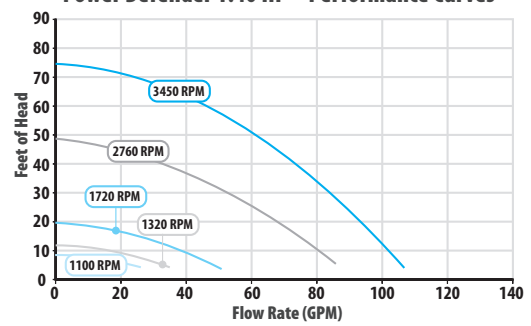


# PERFORMANCE CURVES

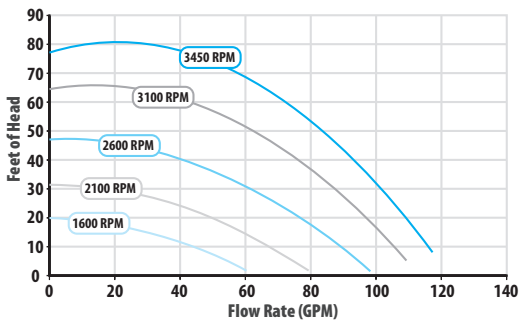
**Power Defender 1.10 HP – Performance Curves**



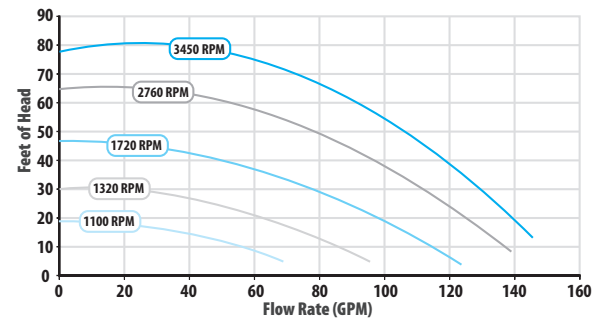
**Power Defender 1.40 HP – Performance Curves**



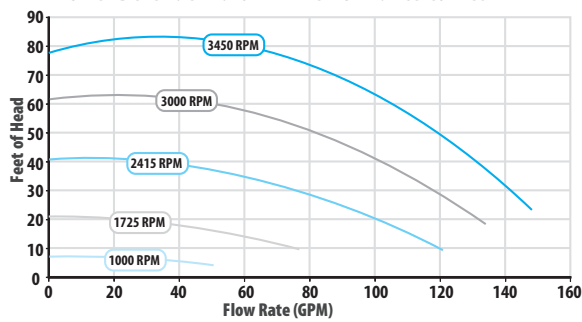
**Power Defender 1.65 HP – Performance Curves**



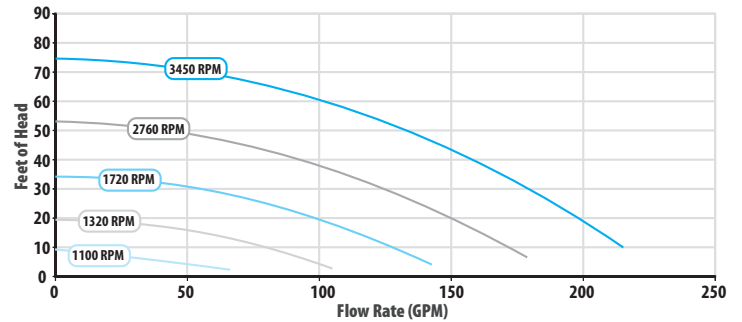
**Power Defender 2.25 HP – Performance Curves**



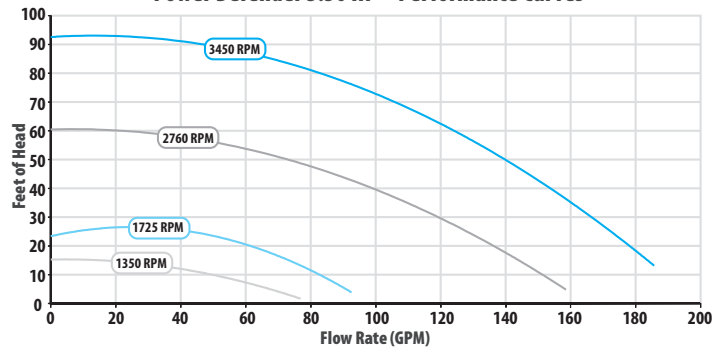
**Power Defender 2.70 HP – Performance Curves**



**Power Defender SVL 2.70 HP – Performance Curves**



**Power Defender 3.50 HP – Performance Curves**



# Maximizing the energy efficiency of your Waterway Power Defender Variable Speed Pump starts with correct plumbing & fittings.

## QUICK START GUIDE

### Set Time of Day:

1. Press MENU/ENTER to show the settings menu and press MENU/ENTER again to enter the Standard Settings menu.
2. Press MENU/ENTER on the TIME OF DAY screen to edit the hour.
3. Adjust flashing value with the up or down symbol. Press MENU/ENTER to confirm new hour, then change minutes and AM/PM in the same way.
4. Press MENU/ENTER to save settings and return to Time of Day screen.
5. Return to the Standard Settings menu by pressing START/PAUSE.
6. If a custom flow schedule is not desired, press START/ PAUSE twice to exit the settings menu.

### Set Daily Run Schedule:

1. Press MENU/ENTER to view the settings menu.
2. Press the up or down symbol to select Custom Settings and press MENU/ENTER to enter.
3. Press the up or down symbol to navigate the Timer 1-7 and press MENU/ENTER to edit the displayed Timer value.
4. Adjust flashing value with the up or down symbol and press MENU/ENTER to confirm and adjust next value.
5. Repeat steps 3 and 4 until all desired Timers, Durations, and Speeds are set. (Note: Setting the Duration to 0 deactivates the Timer)
6. Return to the Custom Settings menu by pressing START/PAUSE.
7. Press START/ PAUSE twice to return to normal operation mode.

## Waterway TruSeal Diverter and Serviceable Check Valves

### FEATURES:

- Unique manufacturing process called TruSeal results in a seal that never needs lubrication
- TruSeal Valves have deeper sockets than other valves providing better glue joint bonding
- The exclusive Click & Lock handle has 72 locking positions / points for virtually any setting desired
- Exclusive Flow Labels give your plumbing a professional look and more value
- Universal shaft spline pattern adapts to most actuators
- Made in the USA



## Waterway Long Sweep Ells

### FEATURES:

- Available in from 1.5" to as large 3"
- Available in both Slip x Slip or also Street Ells
- Utilizes more efficient hydraulics.







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