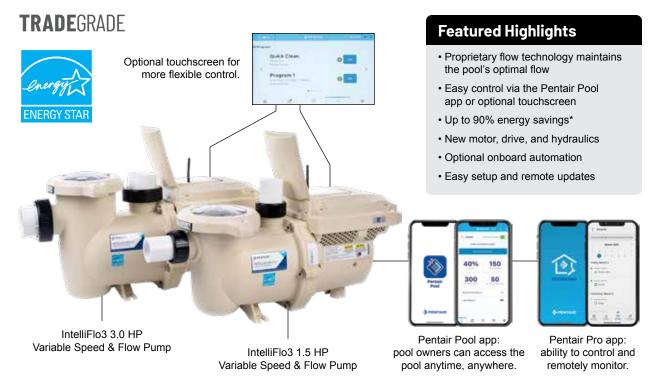


# **INTELLIFLO3° VSF**

## VARIABLE SPEED AND FLOW POOL PUMP



This pump combines true set-it-and forget-it patented flow technology paired with smart connectivity of the Pentair Pool app. The proprietary combination of variable speed plus auto-regulated flow means all good things flow from the IntelliFlo3 pool pump—for your customers and for your business. Small pool or big, this pump is a simple, smart, worry-free way to give pool owners the effortless, inviting pool experience they expect.

#### **Ordering Information**

PART #	DESCRIPTION	THP	WEF	Maximum Input Voltage	Frequency	Full Load AMPs	Port Size (NPT)	Weight	Certification <sup>3</sup>
	11	NTELL	.IFLO3	VARIABLE SPEE	ED AND FLOW P	OOL PUMP (3 HF	MODEL)		
011075	IntelliFlo3 VSF 3.0 HP*	3	7.1	208V-230V	50 Hz or 60 Hz	12.4–11.2 Amps	2" x 2" or 2.5" x 2.5" or (optional) 3" x 3"	55 lbs	UL <sup>1</sup> , NSF <sup>2</sup>
011076	IntelliFlo3 VSF 3.0 HP with relay board*	3	7.1	208V-230V	50 Hz or 60 Hz	12.4–11.2 Amps	2" x 2" or 2.5" x 2.5" or (optional) 3" x 3"	55 lbs	UL <sup>1</sup> , NSF <sup>2</sup>
011077	IntelliFlo3 VSF 3.0 HP with touchscreen*	3	7.1	208V-230V	50 Hz or 60 Hz	12.4–11.2 Amps	2" x 2" or 2.5" x 2.5" or (optional) 3" x 3"	55 lbs	UL <sup>1</sup> , NSF <sup>2</sup>
011078	IntelliFlo3 VSF 3.0 HP with touchscreen and relay board*	3	7.1	208V-230V	50 Hz or 60 Hz	12.4–11.2 Amps	2" x 2" or 2.5" x 2.5" or (optional) 3" x 3"	55 lbs	UL <sup>1</sup> , NSF <sup>2</sup>
	IN	TELL	IFLO3	VARIABLE SPEE	D AND FLOW PO	OOL PUMP (1.5H	P MODEL)		
011065	IntelliFlo3 VSF 1.5 HP*	1.5	9.4	115/208–230V	50 Hz or 60 Hz	12/6.4–5.9 Amps	1.5" x 1.5" or 2" x 2"	48 lbs	UL <sup>1</sup> , NSF <sup>2</sup>
011066	IntelliFlo3 VSF 1.5 HP with relay board*	1.5	9.4	115/208–230V	50 Hz or 60 Hz	12/6.4–5.9 Amps	1.5" x 1.5" or 2" x 2"	48 lbs	UL <sup>1</sup> , NSF <sup>2</sup>
011067	IntelliFlo3 VSF 1.5 HP with touchscreen*	1.5	9.4	115/208–230V	50 Hz or 60 Hz	12/6.4–5.9 Amps	1.5" x 1.5" or 2" x 2"	48 lbs	UL <sup>1</sup> , NSF <sup>2</sup>
011068	IntelliFlo3 VSF 1.5 HP with touchscreen and relay board*	1.5	9.4	115/208–230V	50 Hz or 60 Hz	12/6.4–5.9 Amps	1.5" x 1.5" or 2" x 2"	48 lbs	UL <sup>1</sup> , NSF <sup>2</sup>

- <sup>1</sup> 'UL' indicates that pump bears a UL mark signifying evaluation to U.S. Standards UL1081 for Permanently Connected Swimming Pool and Spa Pumps and to Canadian Standards CAN/CSA C22.2 No. 108-01 Liquid Pumps For Swimming Pools Only (Enclosure 3).
- 2 'NSF' indicates that pump bears a mark signifying evaluation to NSF Standard 50 For Self-Priming Centrifugal Pumps For Swimming Pools, Spas and Hot Tubs.

<sup>&</sup>lt;sup>3</sup> Product may have been evaluated to other state and local regulatory standards. Listing status may change. Always confirm status with appropriate agency if in doubt.

<sup>\*</sup>Savings based on variable speed pump compared to a single-speed pump running 12 hours per day at an average of \$0.16 per kWh in a 20,000 gallon pool. 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. Individual Weighted Energy Factor (WEF) scores and savings may vary by model.

# **INTELLIFLO3° VSF**

# VARIABLE SPEED AND FLOW POOL PUMP (CONT'D)

# **Ordering Information**

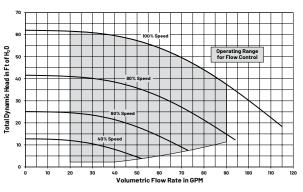
PART #	DESCRIPTION
	INTELLIFLO3 ADD ONS
356159Z	IntelliFlo3 VSF Universal Touchscreen Add On
356365Z	IntelliFlo3 VSF Optional Universal Relay Board Kit
358163Z	50 ft 2 Conductor Automation Cable
410009	2.5" Sweep Elbow Pump Kit
410029	3" Union Kit for 3 HP Pumps
351157	1-1/2" Internal Slip x 2" External Slip Union Kit for 1.5 HP Pumps (includes 2 unions)
357831Z	Retrofit Riser Base Kit for 1.5 HP Models—IntelliFlo and WhisperFlo Models
357832Z	Retrofit Riser Base Kit for 1.5 HP Models—IntelliPro, Max-E-Pro, and Challenger Models
357833Z	Retrofit Riser Base Kit for 3.0 HP Models—IntelliPro, Max-E-Pro, and Challenger Models

#### **Dimensions and Performance**

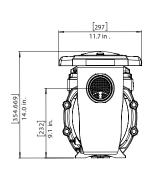
#### Pump Performance Curves (3 HP Models)

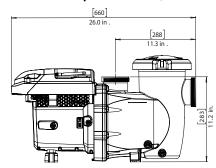
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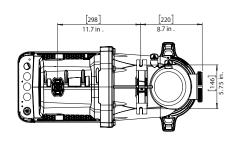
#### Pump Performance Curves (1.5 HP Models)



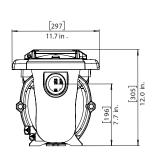
#### Pump Dimensions (3 HP Models)

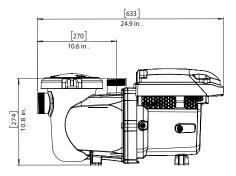


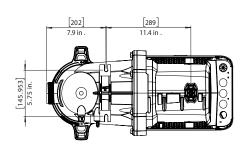




#### Pump Dimensions (1.5 HP Models)







# **INTELLIFLO® VS+SVRS**

#### HIGH PERFORMANCE PUMPS





IntelliFlo VS+SVRS
High Performance Pump

Patent Information: www.pentair.com/patents

IntelliFlo pumps combine variable speed technology, onboard digitial intelligence and permanent magnet motors (used in hybrid cars) to reduce pump-related energy costs by up to 90%\* compared to a single-speed pump. The IntelliFlo VS+SVRS pump includes a built-in Safety Vacuum Release System that detects drain blockage and automatically shuts the pump off.

#### **Featured Highlights**

- Ability to program exact pump speeds for specific operations – filtering, heating, cleaning, spa jets, water features, and more
- · SVRS complies with Virginia Graeme Baker Safety Act
- Built-in diagnostics helps protect the IntelliFlo pump from the most common causes of premature failure by alerting of the issue – overheating, freezing, and voltage irregularities
- Includes priming protection. No SVRS calibrations needed. Built-in SVRS cannot be turned off
- Safety lock-out feature (password protected) prevents pump speed settings from being changed by unauthorized personnel
- Ability to set minimum and maximum speeds so pump will only operate within the ranges set to help assure suitable operation for a longer life
- · Compatible with Pentair Automation Systems
- Compliant with the current ASME A112.19.17 Standard for Safety Vacuum Release Systems (SVRS)
- Operates seamlessly on 50 hz or 60 hz input power.
   Flow/speed are constant when operating on 50hz or 60 hz

#### **Ordering Information**

Product	Description	ТНР	WEF	ННР	Service Factor	Voltage	Frequency	Current	Port Size	Weight	Certifications <sup>3</sup>	
	Е	NERGY	EFFICIE	NT VARI	ABLE SPE	ED WITH S	SAFETY VACU	JUM RELEA	SE SYSTEM			
011057	IntelliFlo VS+SVRS	ntelliFlo VS+SVRS 3.95 6.9 1.88 1.0 230 50/60 16.0 2" x 2"										
	ACCESSORIES											
350122Z	Communication C	able - 50	ft Inclu	ided with	pump						2	
356198	Chemical/Salt/Ozone	emical/Salt/Ozone Resistant EPDM & SS Seal Quick Kit										
	UNIONS											
11201-0154	2 in. x 2 in. Union	(2 in. NP	T male x	2 in. fema	ale NPT qui	ck connect)	Note: two req	uired per pu	mp (sold individ	ually)	2	

- <sup>1</sup> 'UL' indicates that pump bears a UL mark signifying evaluation to U.S. Standards UL1081 for Permanently Connected Swimming Pool and Spa Pumps and to Canadian Standards CAN/CSA C22.2 No. 108-01 Liquid Pumps For Swimming Pools Only (Enclosure 3).
- 2 'NSF' indicates that pump bears a mark signifying evaluation to NSF Standard 50 For Self-Priming Centrifugal Pumps For Swimming Pools Only.
- <sup>3</sup> Product may have been evaluated to other state and local regulatory standards. Listing status may change. Always confirm status with appropriate agency if in doubt.

Note: Pump must be used with current collectors when installed on spas or hot tubs in Canada.

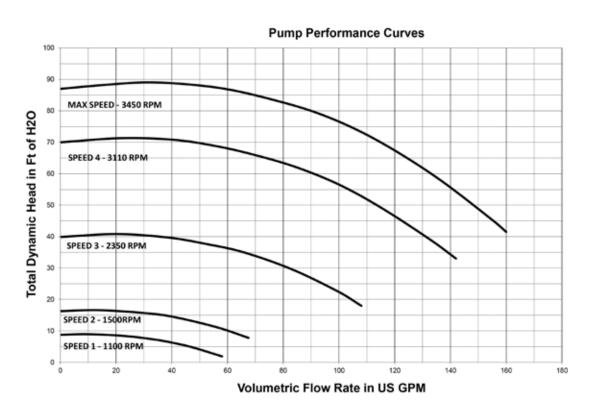
 Savings based on variable speed pump compared to a single-speed pump running 12 hours per day at an average of \$0.16 per kWh in a 20,000 gallon pool. Actual savings may vary based on local utility rates, pool size, pump run time, pump horsepower, pump rpm, plumbing size and length, pump model, service factor and other hydraulic factors. Individual Weighted Energy Factor (WEF) scores and savings may vary by model.

Refer to catalog page 25 for a selection of 2-Pole GFCI breakers which offer 6 milliamp personnel protection while meeting 2008 to Current NEC Standards for Pool Pumps.

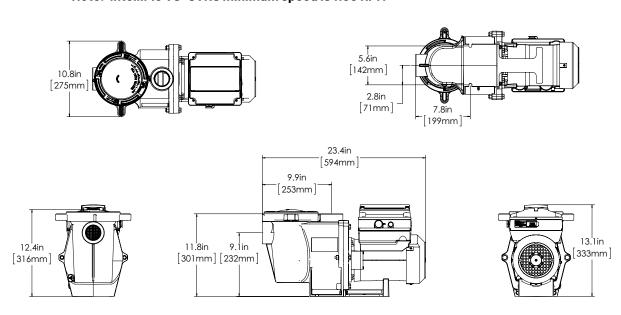
# INTELLIFLO° VS+SVRS

HIGH PERFORMANCE PUMPS (CONT'D)

#### **Dimensions and Performance**



#### Note: IntelliFlo VS+SVRS minimum speed is 1100 RPM



# INTELLIFLOXF° VSF

## VARIABLE SPEED AND FLOW PUMP

#### TRADEGRADE



#### IntelliFloXF VSF Variable Speed and Flow Pump

The IntelliFloXF VSF pump has built-in sensorless flow control that enables the pump to automatically adjust to changes in system conditions to maintain its programmed flow rate. With its available performance and efficiency, it is perfectly suited for large and feature-rich pools with high flow demand to power waterfalls, slides, negative edges, and more.

#### **Featured Highlights**

- Eight programmable speed or flow settings and built-in timer
- Rotatable keypad with optional wall mount kit (sold separately)
- Top-mounted field wiring compartment is easier to access and connect
- Totally enclosed fan-cooled design keeps motor shielded from the elements for extended life
- · Menus are easier than ever to use
- Union connectors included for connecting directly to 2.5" or 3" plumbing
- · Maintains system flow requirements
- · Compatible with Pentair automation systems

#### **Ordering Information**

Product	Description	THP	WEF	ННР	Service Factor	Voltage	Frequency	Current	Port Size	Weight	Certifications <sup>3</sup>		
		INTEL	LIFLOXF	VSF EN	IERGY EFF	ICIENT VA	RIABLE SPEE	ED AND FLC	W PUMP				
022056	IntelliFloXF VSF	3.95	5.6	2.10	1.0	230	50/60	16.0	2" x 2"	60	UL <sup>1</sup> , NSF <sup>2</sup>		
					AC	CCESSORI	ES						
400012	XF Riser Base - Simp	F Riser Base - Simplifies installation of XF-series pumps in applications where Challenger pumps are being replaced.											
350122	Communication Cabl	le - 50 ft.	- Included	with pum	р						2		
356904Z	Keypad Relocation K	ypad Relocation Kit 2											
410009	2.5" Sweep Elbow Pu	ump Kit											

- ¹ 'UL' indicates that pump bears a UL mark signifying evaluation to U.S. Standards UL1081 for Permanently Connected Swimming Pool and Spa Pumps and to Canadian Standards CAN/CSA C22.2 No. 108-01 Liquid Pumps For Swimming Pools Only (Enclosure 3).
- NSF' indicates that pump bears a mark signifying evaluation to NSF Standard 50 For Self-Priming Centrifugal Pumps For Swimming Pools Only.
- <sup>3</sup> Product may have been evaluated to other state and local regulatory standards. Listing status may change. Always confirm status with appropriate agency if in doubt.

Note: Pump must be used with current collectors when installed on spas or hot tubs in Canada.

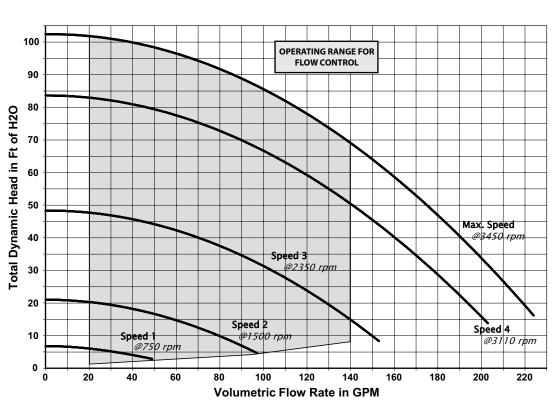
Patent Information: www.pentair.com/patents

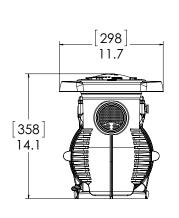
Refer to catalog page 25 for a selection of 2-Pole GFCI breakers which offer 6 milliamp personnel protection while meeting 2008 to current NEC Standards for Pool Pumps.

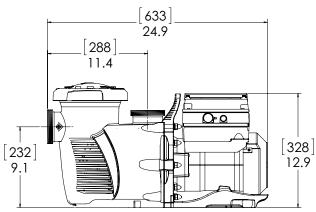
# **INTELLIFLOXF® VSF**

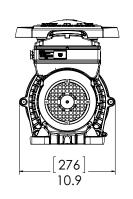
VARIABLE SPEED AND FLOW PUMP (CONT'D)

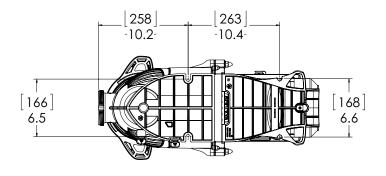
#### **Dimensions and Performance**











# **WHISPERFLOXF®**

# HIGH PERFORMANCE PUMPS

#### TRADEGRADE



WhisperFloXF Pump shown with TEFC Motor

Developed using advanced engineering tools - CFD (Computational Fluid Dynamics) and FEA (Finite Element Analysis). The impeller design delivers high level of precision concentricity for efficiency.

#### **Featured Highlights**

- Drop-in replacement for all WhisperFlo® Pump models.
   Simple replacement for Challenger® Pumps.\*
- Union connectors included for connecting directly to 2.5 in. or 3 in. plumbing
- Extra large, robust basket with smooth surface for easy debris removal
- Easy-carry handle; easily removable ergonomic lock ring; and see-through lid for easy basket inspection
- Three-Phase XF pumps are compatible with Pentair's Acu Drive XS VFDs

#### **Ordering Information**

Product	Rated HP	ТНР	WEF	ННР	Service Factor	Voltage	Frequency	Current	Port Size	Weight	Certifications <sup>3</sup>	Curve Key
						COMMER	CIAL SINGLE	-SPEED TEFC				
022034	5	5	N/A	N/A	1.00	208-230	60	20.0-18.8	2.5" x 2.5" or 3" x 3"	67	UL <sup>1</sup> , NSF <sup>2</sup>	Α
					TEF	C SINGLE-SP	EED—NOT F	OR SALE IN TI	HE USA			
022032-INT	2	2.60	N/A	N/A	1.30	208-230	60	11.1-9.5	2.5" x 2.5" or 3" x 3"	57	UL <sup>1</sup> , NSF <sup>2</sup>	D
022033-INT	3	3.45	N/A	N/A	1.15	208-230	60	14.6-12.7	2.5" x 2.5" or 3" x 3"	61	UL <sup>1</sup> , NSF <sup>2</sup>	В
						THRE	E-PHASE SUF	PER-DUTY				
022017	2	2.6	N/A	N/A	1.30	208-230/460	60	7.5-7.2/3.6	2.5" x 2.5" or 3" x 3"	60	UL <sup>1</sup> , NSF <sup>2</sup>	1
022018	3	3.25	N/A	N/A	1.15	208-230/460	60	9.8-9.4/4.7	2.5" x 2.5" or 3" x 3"	60	UL <sup>1</sup> , NSF <sup>2</sup>	Н
022019	5	5.00	N/A	N/A	1.00	208-230/460	60	13.9-13.1/6.6	2.5" x 2.5" or 3" x 3"	72	UL <sup>1</sup> , NSF <sup>2</sup>	G
							ACCESSORI	IES				

400012 XF Riser Base - Simplifies installation of XF-series pumps in applications where Challenger pumps are being replaced.

<sup>\*</sup>Optional riser base for Challenger pump replacements. Part # 400012 available separately.

<sup>&</sup>lt;sup>1</sup> 'UL' indicates that pump bears a UL mark signifying evaluation to U.S. Standards UL1081 for Permanently Connected Swimming Pool and Spa Pumps and to Canadian Standards CAN/CSA C22.2 No. 108-01 Liquid Pumps For Swimming Pools Only (Enclosure 3).

<sup>2 &#</sup>x27;NSF' indicates that pump bears a mark signifying evaluation to NSF Standard 50 For Self-Priming Centrifugal Pumps For Swimming Pools, Spas and Hot Tubs.

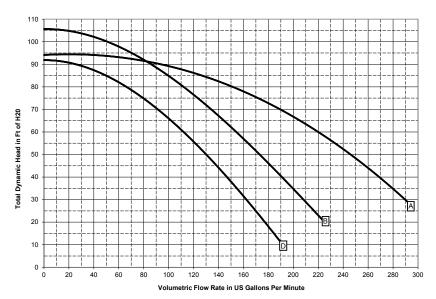
<sup>3</sup> Product may have been evaluated to other state and local regulatory standards. Listing status may change. Always confirm status with appropriate agency if in doubt.

# **WHISPERFLOXF®**

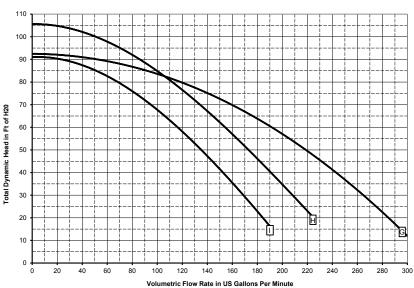
# HIGH PERFORMANCE PUMPS (CONT'D)

#### **Dimensions and Performance**

1 & 2-Speed Performance Curve

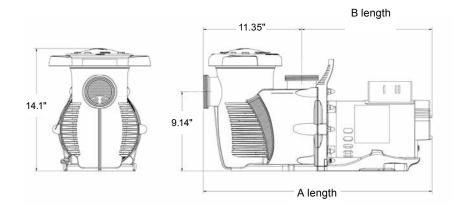


3 Phase Performance Curve



B-VARY	ING LENGTH								
HP	HP TEFC								
2	2 13.05								
3	13.65	13.05							
5	14.55	13.88							

A-VAR	YING LENGTH								
HP	HP TEFC								
2	2 24.4								
3	25	24.4							
5	25.9	25.23							



# WHISPERFLO® VST

# VARIABLE SPEED PUMP

#### TRADEGRADE





WhisperFlo VST Variable Speed Pump

The WhisperFlo VST pump brings features and benefits that are just right for a pool owners' needs. Ideal for new and standard pool pump replacement for pools requiring up to a 2.0 HP pump for filtration, water features, and higher head applications.

## **Featured Highlights**

- Improved mechanical seal and totally enclosed fan-cooled (TEFC) motor to help withstand harsh temperatures and chemicals
- RS-485 connectivity for improved interface with automation systems and IoT devices for more flexibility
- Advanced onboard digital display and real-time, 24-hour clock
- Select from three programmable speeds plus an override to meet specific needs
- Adapts to 115V to 230V and 50hz or 60hz power with no special wiring or switching

#### **Ordering Information**

Product	THP	WEF	ННР	Service Factor	Voltage	Frequency	Current	Port Size	Weight	Certifications <sup>3</sup>
				W	HISPERFLO VS	T VARIABLE	SPEED			
011533	2.6	8.4	1.64	1.0	115/208-230V	50/60	13.9/11.1-10.1A	2" x 2"	45	UL <sup>1</sup> , NSF <sup>2</sup>

- <sup>1</sup> 'UL' indicates that pump bears a UL mark signifying evaluation to U.S. Standards UL1081 for Permanently Connected Swimming Pool and Spa Pumps and to Canadian Standards CAN/CSA C22.2 No. 108-01 Liquid Pumps For Swimming Pools Only (Enclosure 3). UL 60730 Compliant.
- NSF' indicates that pump bears a mark signifying evaluation to NSF Standard 50 For Self-Priming Centrifugal Pumps For Swimming Pools Only.
- <sup>3</sup> Product may have been evaluated to other state and local regulatory standards. Listing status may change. Always confirm status with appropriate agency if in doubt.
- \*Savings based on variable speed pump compared to a single-speed pump running 12 hours per day at an average of \$0.16 per kWh in a 20,000 gallon pool. 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. Individual Weighted Energy Factor (WEF) scores and savings may vary by model.

CALIFORNIA PROPOSITION 65 WARNING

MARNING: Cancer and Reproductive Harm.

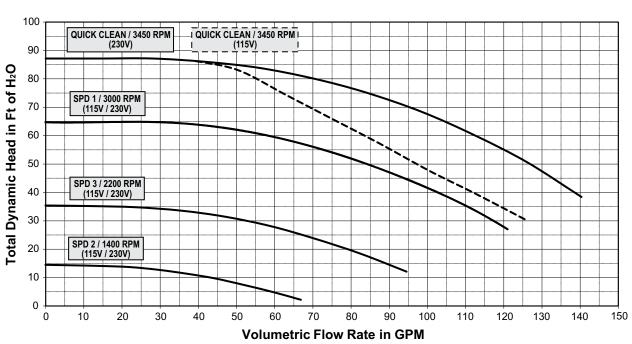
AVERTISSEMENT: Peut Causer le Cancer

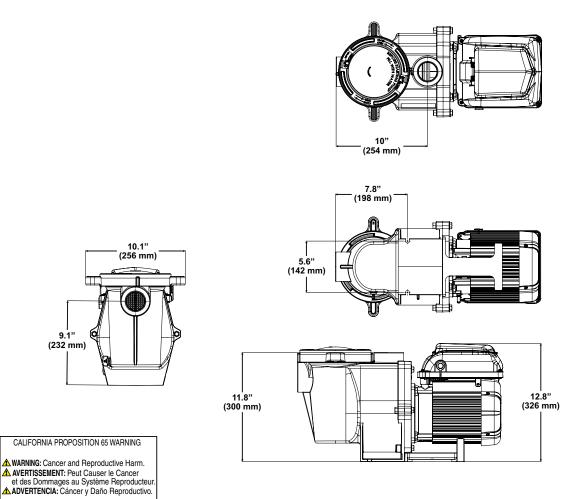
★ ADVERTENCIA: Cáncer y Daño Reproducteur
 ★ ADVERTENCIA: Cáncer y Daño Reproductivo.
 www.p65warnings.ca.gov.

# WHISPERFLO® VST

VARIABLE SPEED PUMP (CONT'D)

#### **Dimensions and Performance**





www.p65warnings.ca.gov.

# WHISPERFLO®

## HIGH-PERFORMANCE PUMPS

#### TRADEGRADE



WhisperFlo Pump shown with TEFC Motor

Robust thermoplastic with the Cam & Ramp™ See-Through Lid design. Self-priming, high flow with Funnel-Flo™ Diffusers. 2 in. suction and discharge ports. Motor features threaded shaft and durable commercial duty 56 frame motor.

#### **Featured Highlights**

- Oversized strainer basket and volute—industry standard in pool pumps
- · TEFC Motors available
- 2" NPT suction and discharge ports.
- Compatible with all cleaning systems, various filters and jet action spas
- · Heavy-duty/durable construction is designed for long life
- · Designed for residential and commercial applications

#### **Ordering Information**

Product	Rated HP	ТНР	WEF	ННР	Service Factor	Voltage	Frequency	Current	Port Size	Weight	Certifications <sup>3</sup>	Curve Key
						DOE COMPLIA	NT SINGLE-	SPEED TEFC				
015583	N/A	1.1	3.4	0.69	1.00	115/208-230	60	10.5/5.4-5.4	2" x 2"	50	UL <sup>1</sup> , NSF <sup>2</sup>	E
				ENI	RGY EFF	ICIENT SINGL	E-SPEED - N	OT FOR SALE I	N THE USA			
011512-INT	3/4	1.25	N/A	N/A	1.00	115/208-230	60	12.8/7.0-6.4	2" x 2"	44	UL <sup>1</sup> , NSF <sup>2</sup>	F
					TEFC	SINGLE-SPEE	D - NOT FOR	SALE IN THE U	JSA			
011527-INT	1	1.65	N/A	N/A	1.00	115/208-230	60	15.1/8.5-7.7	2" x 2"	50	UL <sup>1</sup> , NSF <sup>2</sup>	G
011528-INT	1 1/2	2.21	N/A	N/A	1.00	208-230	60	10.3-9.1	2" x 2"	53	UL <sup>1</sup> , NSF <sup>2</sup>	Н
011529-INT	2	2.60	N/A	N/A	1.00	208-230	60	11.7-10.3	2" x 2"	58	UL <sup>1</sup> , NSF <sup>2</sup>	1
011530-INT	3	3.45	N/A	N/A	1.00	208-230	60	14.6-12.7	2" x 2"	62	UL <sup>1</sup> , NSF <sup>2</sup>	J
						THREE-P	HASE SUPE	R-DUTY				
011641	1	1.65	2.9	1.10	1.65	208-230/460	60	4.9-4.5/2.3	2" x 2"	41	UL <sup>1</sup> , NSF <sup>2</sup>	G
011642	1.5	2.21	2.6	1.44	1.47	208-230/460	60	6.4-6.3/3.2	2" x 2"	43	UL <sup>1</sup> , NSF <sup>2</sup>	Н
011643	2	2.60	2.5	1.61	1.30	208-230/460	60	7.5-7.2/3.6	2" x 2"	47	UL <sup>1</sup> , NSF <sup>2</sup>	- 1
011644	3	3.45	2.1	2.02	1.15	208-230/460	60	9.8-9.4/4.7	2" x 2"	52	UL <sup>1</sup> , NSF <sup>2</sup>	J
						A	CCESSORIES	5				

11201-0154 2 in. x 2 in. Union (2 in. NPT male x 2 in. female NPT quick connect) \* Note: two required per pump (sold individually)

357156 Cover/Lid, Chemical Resistant, CAM & RAMP

356198 Chemical/Salt/Ozone/Resistant EPDM & SS Seal Quick Kit

CALIFORNIA PROPOSITION 65 WARNING

<sup>&</sup>lt;sup>1</sup> 'UL' indicates that pump bears a UL mark signifying evaluation to U.S. Standards UL1081 for Permanently Connected Swimming Pool and Spa Pumps and to Canadian Standards CAN/CSA C22.2 No. 108-01 Liquid Pumps For Swimming Pools Only (Enclosure 3).

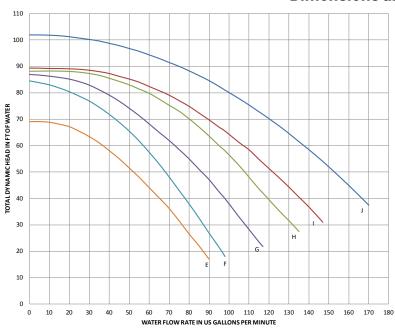
NSF' indicates that pump bears a mark signifying evaluation to NSF Standard 50 For Self-Priming Centrifugal Pumps For Swimming Pools, Spas and Hot Tubs.

<sup>&</sup>lt;sup>3</sup> Product may have been evaluated to other state and local regulatory standards. Listing status may change. Always confirm status with appropriate agency if in doubt.

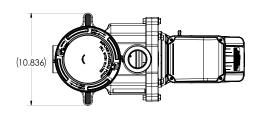
# **WHISPERFLO®**

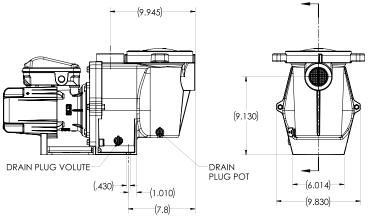
# HIGH PERFORMANCE PUMPS (CONT'D)

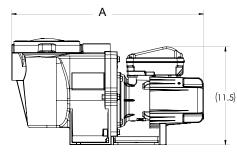
#### **Dimensions and Performance**



	A-	VARYING	LENGTH	
HP	EE	TEFC	DOE Compliant	3-PH
0.5	24.41	_	_	_
0.75	24.41	_	_	_
1	-	21.71	_	21.5
1.1	_	_	22.5	_
1.5	-	22.16	_	21.5
2		22.51	_	21.81
3	-	23.21	_	22.61







# SUPERFLO® VST

# VARIABLE SPEED PUMP

#### TRADEGRADE





SuperFlo VST Variable Speed Pump

The SuperFlo VST Variable Speed Pump features sophisticated technology in a simple to operate pump. Designed for the practical pool owner, the SuperFlo VST pump has a dependable and robust Totally Enclosed Fan Cooled motor and can adapt to 115V to 230V and 50hz or 60hz power with no special wiring or swiching.

## **Featured Highlights**

- TEFC motor, can adapt to 115V to 230V or 50hz or 60hz power with no special wiring or switching
- Improved mechanical seal for long, dependable performance
- Simple, easy-to-use digital control keypad with three programmable speeds, override capability, and a real-time, 24 hour clock
- Easy to access electrical connections for simple installation
- Ideal for new and standard pool pump replacement for pools requiring up to a 1.5 HP pump
- SuperFlo pumps by Pentair are a direct replacement for the Hayward® Super Pump®\*

#### **Ordering Information**

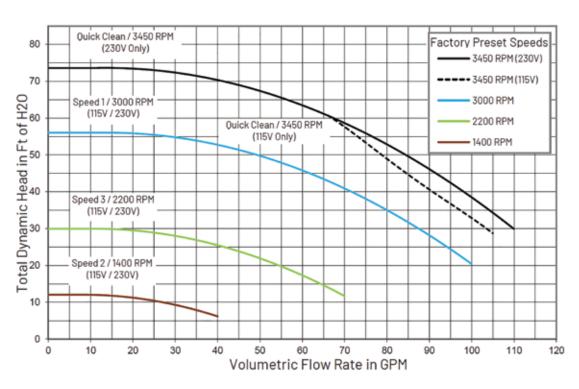
Product	ТНР	WEF	ННР	Service Factor	Voltage	Frequency	Current	Port Size	Weight	Certifications <sup>3</sup>			
	SUPERFLO VST VARIABLE SPEED												
342002	2.2	9.0	1.08	1.0	115/208-230	50/60	13.6/8.0-7.1	1.5" x 1.5"	53	UL <sup>1</sup> , NSF <sup>2</sup>			
					ACCES	SSORIES							
356324Z	External	External Control Wiring Kit											
356197	Chemica	l/Salt/Ozo	ne Resista	ant EPDM & S	Seal Quick Kit	(for pumps Mfg	. before June 20	19)					

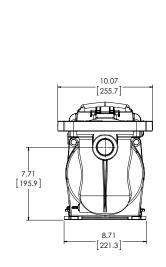
- <sup>1</sup> 'UL' indicates that pump bears a UL mark signifying evaluation to U.S. Standards UL1081 for Permanently Connected Swimming Pool and Spa Pumps and to Canadian Standards CAN/CSA C22.2 No. 108-01 Liquid Pumps For Swimming Pools Only (Enclosure 3). UL 60730 Compliant.
- YSF' indicates that pump bears a mark signifying evaluation to NSF Standard 50 For Self-Priming Centrifugal Pumps For Swimming Pools Only.
- <sup>3</sup> Product may have been evaluated to other state and local regulatory standards. Listing status may change. Always confirm status with appropriate agency if in doubt.
- \* Hayward® and Super Pump® are registered trademarks of Hayward Industries. Inc.

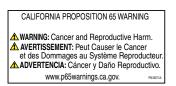
# **SUPERFLO® VST**

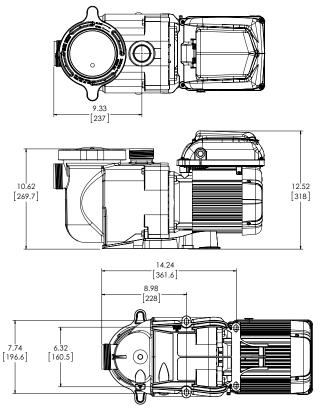
VARIABLE SPEED PUMP (CONT'D)

#### **Dimensions and Performance**









# **SUPERFLO®**

## HIGH-PERFORMANCE PUMPS



SuperFlo Pump

SuperFlo pumps feature thick walled body parts, a heavy-duty 56 square flange motor, and highly engineered hydraulics, SuperFlo pumps' silent running capability and small footprint allow it to easily drop into a compact equipment pad.

#### **Featured Highlights**

- SuperFlo pump by Pentair Aquatic Systems is a direct replacement for the Hayward® Super Pump® \*
- Extremely quiet operation
- Unionized fittings included (1-1/2 in. internal slip and 2 in. external slip)
- Cam and Ramp<sup>™</sup> Lid
- · Heavy-duty, high service factor 56 square flange motor
- · Integral volute and pot reduce hydraulic noise

#### **Ordering Information**

Product	Rated HP	ТНР	WEF	ННР	Service Factor	Voltage	Frequency	Current	Port Size	Weight	Certifications <sup>3</sup>	Curve Key
					[	DOE COMPLIA	ANT SINGLE-	SPEED TEFC				
348190	N/A	1.1	3.6	0.63	1.00	115/208-230	60	10.5/5.4-5.4	1.5" x 1.5"	50	UL <sup>1</sup> , NSF <sup>2</sup>	В
				EN	ERGY EFF	ICIENT SINGL	E-SPEED - N	OT FOR SALE	IN THE USA			
348022-INT	3/4	0.95	N/A	N/A	1.00	115/208-230	60	8.8/4.5-4.4	1.5" x 1.5"	44	UL <sup>1</sup> , NSF <sup>2</sup>	Α
					TEFC	SINGLE-SPEE	D - NOT FOR	SALE IN THE	USA			
348144-INT	1	1.65	N/A	N/A	1.00	115/208-230	60	15.1/8.5-7.7	1.5" x 1.5"	50	UL <sup>1</sup> , NSF <sup>2</sup>	С
348145-INT	1-1/2	2.21	N/A	N/A	1.00	208-230	60	10.3-9.1	1.5" x 1.5"	53	UL <sup>1</sup> , NSF <sup>2</sup>	D
348146-INT	2	2.60	N/A	N/A	1.00	208-230	60	11.7-10.3	1.5" x 1.5"	58	UL <sup>1</sup> , NSF <sup>2</sup>	Ε
						А	CCESSORIES	3				
351157	Union K	it – 1-1	1/2 in. lı	nternal S	Slip x 2 in. Ex	ternal Slip (inclu	ides 2 unions as	s pictured above)		·		

356197 Chemical/Salt/Ozone Resistant EPDM & SS Seal Quick Kit

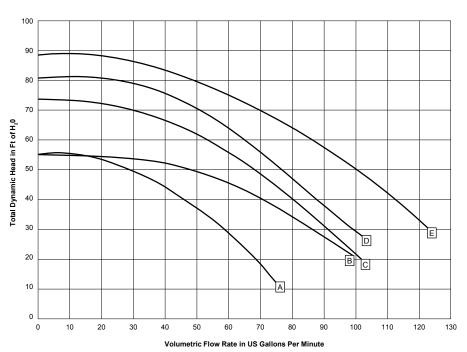
- YSF' indicates that pump bears a mark signifying evaluation to NSF Standard 50 For Self-Priming Centrifugal Pumps For Swimming Pools Only.
- <sup>3</sup> Product may have been evaluated to other state and local regulatory standards. Listing status may change. Always confirm status with appropriate agency if in doubt.
- Hayward® and Super Pump® are registered trademarks of Hayward Industries, Inc.

 $<sup>^{\</sup>mbox{\scriptsize 1}}$  'UL' indicates that pump bears a UL mark signifying evaluation to U.S. Standards UL1081 for Permanently Connected Swimming Pool and Spa Pumps and to Canadian Standards CAN/CSA C22.2 No. 108-01 Liquid Pumps For Swimming Pools Only (Enclosure 3).

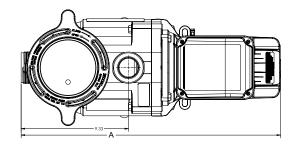
# **SUPERFLO®**

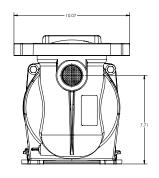
# HIGH PERFORMANCE PUMPS (CONT'D)

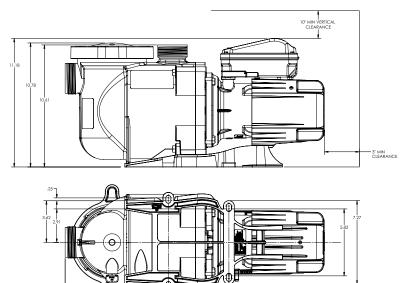
## **Dimensions and Performance**



A- VARYING LENGTH										
HP	EE TEFC DOE Compliant									
0.5	24.64	_	_							
0.75	24.64	_	_							
1	_	22	_							
1.1	_	_	22.55							
1.5		22.45	_							
2	_	22.9	_							







# **INTELLIPRO3° VSF**

## VARIABLE SPEED AND FLOW POOL PUMP



This pump combines true set-it-and forget-it patented flow technology paired with smart connectivity of the Pentair Pool app. The proprietary combination of variable speed plus auto-regulated flow means all good things flow from the IntelliPro3 pool pump—for your customers and for your business. Small pool or big, this pump is a simple, smart, worry-free way to give pool owners the effortless, inviting pool experience they expect.

#### **Ordering Information**

	•								
PART #	DESCRIPTION	THP	WEF	Maximum Input Voltage	Frequency	Full Load AMPs	Port Size (NPT)	Weight	Certification <sup>3</sup>
			INTE	LLIFLO3 VARIABI	E SPEED AND F	LOW POOL PUN	/IP		
013075	IntelliPro3 VSF 3.0 HP*	3	7.1	208V-230V	50 Hz or 60 Hz	12.4–11.2 Amps	2" x 2" or 2.5" x 2.5" or (optional) 3" x 3"	55 lbs	UL <sup>1</sup> , NSF <sup>2</sup>
013076	IntelliPro3 VSF 3.0 HP with relay board*	3	7.1	208V-230V	50 Hz or 60 Hz	12.4–11.2 Amps	2" x 2" or 2.5" x 2.5" or (optional) 3" x 3"	55 lbs	UL <sup>1</sup> , NSF <sup>2</sup>
013077	IntelliPro3 VSF 3.0 HP with touchscreen*	3	7.1	208V-230V	50 Hz or 60 Hz	12.4–11.2 Amps	2" x 2" or 2.5" x 2.5" or (optional) 3" x 3"	55 lbs	UL <sup>1</sup> , NSF <sup>2</sup>
013078	IntelliPro3 VSF 3.0 HP with touchscreen and relay board*	3	7.1	208V-230V	50 Hz or 60 Hz	12.4–11.2 Amps	2" x 2" or 2.5" x 2.5" or (optional) 3" x 3"	55 lbs	UL <sup>1</sup> , NSF <sup>2</sup>
	INTE	LLIFL	O3 VA	RIABLE SPEED A	AND FLOW POO	L PUMP WITH 1.5	5HP MODELS		
013065	IntelliPro3 VSF 1.5 HP*	1.5	9.4	115/208–230V	50 Hz or 60 Hz	12/6.4–5.9 Amps	1.5" x 1.5" or 2" x 2"	48 lbs	UL <sup>1</sup> , NSF <sup>2</sup>
013066	IntelliPro3 VSF 1.5 HP with relay board*	1.5	9.4	115/208–230V	50 Hz or 60 Hz	12/6.4–5.9 Amps	1.5" x 1.5" or 2" x 2"	48 lbs	UL <sup>1</sup> , NSF <sup>2</sup>
013067	IntelliPro3 VSF 1.5 HP with touchscreen*	1.5	9.4	115/208–230V	50 Hz or 60 Hz	12/6.4–5.9 Amps	1.5" x 1.5" or 2" x 2"	48 lbs	UL <sup>1</sup> , NSF <sup>2</sup>
013068	IntelliPro3 VSF 1.5 HP with touchscreen and relay board*	1.5	9.4	115/208–230V	50 Hz or 60 Hz	12/6.4–5.9 Amps	1.5" x 1.5" or 2" x 2"	48 lbs	UL <sup>1</sup> , NSF <sup>2</sup>

<sup>&</sup>lt;sup>1</sup> 'UL' indicates that pump bears a UL mark signifying evaluation to U.S. Standards UL1081 for Permanently Connected Swimming Pool and Spa Pumps and to Canadian Standards CAN/CSA C22.2 No. 108-01 Liquid Pumps For Swimming Pools Only (Enclosure 3).

<sup>&</sup>lt;sup>3</sup> Product may have been evaluated to other state and local regulatory standards. Listing status may change. Always confirm status with appropriate agency if in doubt.

<sup>2 &#</sup>x27;NSF' indicates that pump bears a mark signifying evaluation to NSF Standard 50 For Self-Priming Centrifugal Pumps For Swimming Pools, Spas and Hot Tubs.

<sup>\*</sup>Savings based on variable speed pump compared to a single-speed pump running 12 hours per day at an average of \$0.16 per kWh in a 20,000 gallon pool. 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. Individual Weighted Energy Factor (WEF) scores and savings may vary by model.

# INTELLIPRO3° VSF (CONT'D)

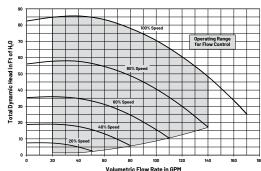
# VARIABLE SPEED AND FLOW POOL PUMP

## **Ordering Information**

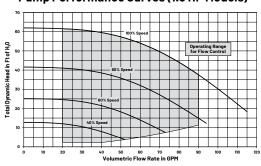
PART #	DESCRIPTION
	INTELLIFLO3 ADD ONS
356348Z	IntelliPro3 VSF Universal Touchscreen Add On
356365Z	IntelliPro3 VSF Optional Universal Relay Board Kit
358163Z	50 ft 2 Conductor Automation Cable
410009	2.5" Sweep Elbow Pump Kit
410029	3" Union Kit for 3 HP Pumps
351157	1-1/2" Internal Slip x 2" External Slip Union Kit for 1.5 HP Pumps (includes 2 unions)
357831Z	Retrofit Riser Base Kit for 1.5 HP Models—IntelliFlo and WhisperFlo Models
357832Z	Retrofit Riser Base Kit for 1.5 HP Models—IntelliPro, Max-E-Pro, and Challenger Models
357833Z	Retrofit Riser Base Kit for 3.0 HP Models—IntelliPro, Max-E-Pro, and Challenger Models

#### **Dimensions and Performance**

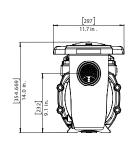
#### Pump Performance Curves (3 HP Models)

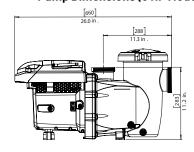


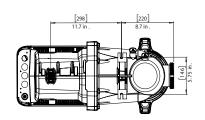
#### Pump Performance Curves (1.5 HP Models)



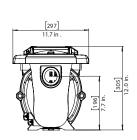
#### Pump Dimensions (3 HP Models)

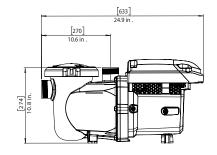


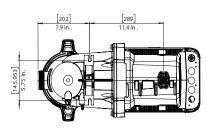




#### Pump Dimensions (1.5 HP Models)







CALIFORNIA PROPOSITION 65 WARNING

# **INTELLIPRO® VS+SVRS**

#### HIGH PERFORMANCE PUMPS







IntelliPro VS+SVRS Variable Speed Pump

Patent Information: www.pentair.com/patents

IntelliPro pumps combine variable speed technology, onboard digital intelligence and permanent magnet motors (used in hybrid cars) to reduce pump-related energy costs by up to 90%.\* compared to single-speed pumps The IntelliPro VS+SVRS pump models include a built-in Safety Vacuum Release System that detects drain blockage and automatically shuts the pump off.

## **Featured Highlights**

- Ability to program exact pump speeds for specific operations – filtering, heating, cleaning, spa jets, water features, and more
- · SVRS complies with Virginia Graeme Baker Safety Act
- Built-in diagnostics helps protect the IntelliPro pump from the most common causes of premature failure

   overheating, freezing, and voltage irregularities
- Includes priming protection. No SVRS calibrations needed. Built-in SVRS cannot be turned off
- Safety lock-out feature (password protected) prevents pump speed settings from being changed by unauthorized personnel
- Ability to set minimum and maximum speeds so pump will only operate within the ranges set to help assure suitable operation for a longer life
- · Compatible with Pentair Automation Systems
- Compliant with the current ASME A112.19.17 standard for Safety Vacuum Release Systems (SVRS)

#### **Ordering Information**

Product	Description	THP	WEF	ННР	Service Factor	Voltage	Frequency	Current	Port Size	Weight	Certifications <sup>3</sup>
	INTELLIPRO VS+ SVRS VARIABLE SPEED WITH SAFETY VACUUM RELEASE SYSTEM										
013002	IntelliPro VS+SVRS	3.95	6.9	1.88	1.0	230	50/60	16.0	2" x 2"	53	UL¹, NSF²
					ACCE	ESSORIE	S				
350122Z	Communication Cab	le - 50 ft.	- Included	with pum	р						2
356905Z	Optional Keypad Wa	II Mount K	Cit								
356196	Chemical/Salt/Ozon	e Resistar	nt EPDM 8	& SS Seal	Quick Kit						1
					U	NIONS					
11201-0154	2 in. x 2 in. Union (2	in. NPT m	ale x 2 in.	female N	PT quick conn	ect) * No	te: two required	per pump (so	ld individually)		2

- <sup>1</sup> 'UL' indicates that pump bears a UL mark signifying evaluation to U.S. Standards UL1081 for Permanently Connected Swimming Pool and Spa Pumps and to Canadian Standards CAN/CSA C22.2 No. 108-01 Liquid Pumps For Swimming Pools Only (Enclosure 3).
- NSF' indicates that pump bears a mark signifying evaluation to NSF Standard 50 For Self-Priming Centrifugal Pumps For Swimming Pools Only.
- <sup>3</sup> Product may have been evaluated to other state and local regulatory standards. Listing status may change. Always confirm status with appropriate agency if in doubt.

Note: Pump must be used with current collectors when installed on spas or hot tubs in Canada.

Refer to catalog page 25 for a selection of 2-Pole GFCI breakers which offer 6 milliamp personnel protection while meeting 2008 to Current NEC Standards for Pool Pumps

 Savings based on variable speed pump compared to a single-speed pump running 12 hours per day at an average of \$0.16 per kWh in a 20,000 gallon pool. 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. Individual Weighted Energy Factor (WEF) scores and savings may vary by model.

CALIFORNIA PROPOSITION 65 WARNING

MARNING: Cancer and Reproductive Harm.

AVERTISSEMENT: Peut Causer le Cancer
et des Dommages au Système Reproducteu

et des Dommages au Système Reproducteur

ADVERTENCIA: Cáncer y Daño Reproductivo.

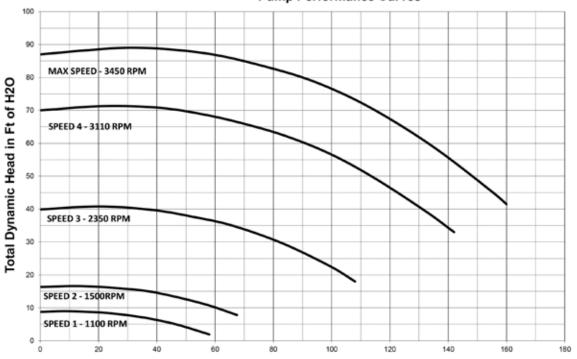
www.p65warnings.ca.gov.

# **INTELLIPRO® VS+SVRS**

HIGH-PERFORMANCE PUMPS (CONT'D)

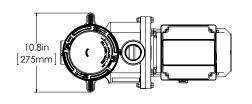
#### **Dimensions and Performance**

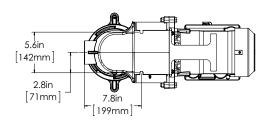




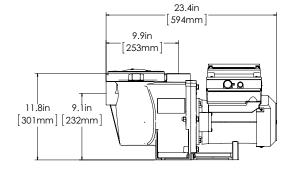
Volumetric Flow Rate in US GPM

#### \* IntelliPro VS+SVRS minimum speed is 1100 RPM











# MAX-E-PROXF°

# HIGH PERFORMANCE PUMPS





## **TRADE**GRADE

Max-E-ProXF Pump shown with TEFC Motor

Developed using advanced engineering tools - CFD (Computational Fluid Dynamics) and FEA (Finite Element Analysis). The impeller design delivers a high level of precision concentricity for efficiency.

\* Optional riser base for Challenger pump replacements, part #400012 available separately

## **Featured Highlights**

- Totally Enclosed Fan Cooled (TEFC) motor
- · Improved design
- 2" quick-disconnect plumbing union for faster disassembly and service
- 6", extra-large-capacity trap collects more debris
- Clear-view lid allows easy way to check for debris without lifting a finger
- Some models meet updated DOE minimum efficiency requirements

#### **Ordering Information**

Product	Rated HP	ТНР	WEF	ННР	Service Factor	Voltage	Frequency	Current	Port Size	Weight	Certifications <sup>3</sup>	Curve Key
						COMMERCIA	AL SINGLE-S	PEED TEFC				
023034	5	5	N/A	N/A	1.00	208-230	60	20.0-18.8	2.5" x 2.5" or 3" x 3"	67	UL <sup>1</sup> , NSF <sup>2</sup>	С
						THREE-F	PHASE SUPE	R-DUTY				
023017	2	2.6	N/A	N/A	1.30	208-230/460	60	7.5-7.2/3.6	2.5" x 2.5" or 3" x 3"	60	UL <sup>1</sup> , NSF <sup>2</sup>	- 1
023018	3	3.25	N/A	N/A	1.15	208-230/460	60	9.8-9.4/4.7	2.5" x 2.5" or 3" x 3"	60	UL <sup>1</sup> , NSF <sup>2</sup>	Н
023019	5	5.00	N/A	N/A	1.00	208-230/460	60	13.9-13.1/6.6	2.5" x 2.5" or 3" x 3"	72	UL <sup>1</sup> , NSF <sup>2</sup>	G
	ACCESSORIES											

400012 XF Riser Base - Simplifies installation of XF-series pumps in applications where Challenger pumps are being replaced.

CALIFORNIA PROPOSITION 65 WARNING

<sup>&</sup>lt;sup>1</sup> 'UL' indicates that pump bears a UL mark signifying evaluation to U.S. Standards UL1081 for Permanently Connected Swimming Pool and Spa Pumps and to Canadian Standards CAN/CSA C22.2 No. 108-01 Liquid Pumps For Swimming Pools Only (Enclosure 3).

<sup>2 &#</sup>x27;NSF' indicates that pump bears a mark signifying evaluation to NSF Standard 50 For Self-Priming Centrifugal Pumps For Swimming Pools, Spas and Hot Tubs.

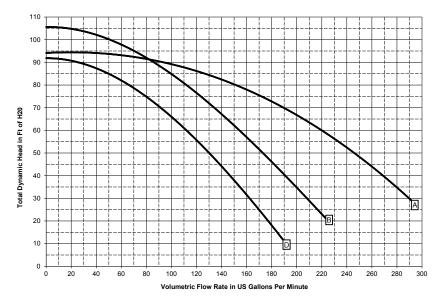
<sup>3</sup> Product may have been evaluated to other state and local regulatory standards. Listing status may change. Always confirm status with appropriate agency if in doubt.

# MAX-E-PROXF°

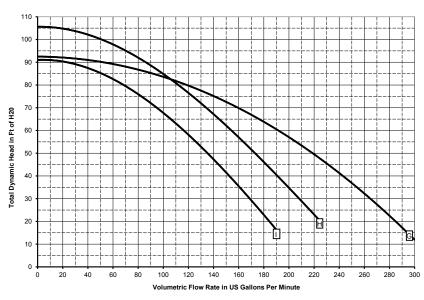
# HIGH-PERFORMANCE PUMPS (CONT'D)

#### **Dimensions and Performance**

1 & 2-Speed Performance Curve

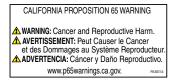


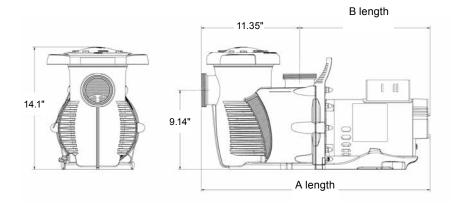
3 Phase Performance Curve



B-VAR	B-VARYING LENGTH							
HP	HP TEFC							
2	13.05	12.35						
3	13.65	13.05						

A-VAR	A-VARYING LENGTH							
HP	HP TEFC							
2	24.4	23.7						
3	25	24.4						





## SUPERMAX® VS

## VARIABI F SPFFD PUMPS



#### **TRADE**GRADE





SuperMax VS Variable Speed Pump

For pool owners who want to step-up to the energy and cost savings of variable speed technology, the SuperMax VS pump is a wise choice. SuperMax VS pump is engineered for easy installation, simple operation, and trouble-free service.

#### **Featured Highlights**

- Variable speed technology provides energy & costs savings \*
- Ideal for standard pools requiring up to 1.5 hp pump
- 110/230V and 50/60 Hz capability
- · Real-time clock with 24-hour memory retention
- Simple, intuitive user interface is easy to program and operate
- Easy to access electrical connections for simple installation
- Three operating speed settings plus override capability
- SuperMax pump by Pentair Aquatic Systems is a direct replacement for the Hayward® Super Pump® 4

#### **Ordering Information**

356197

Product	THP	WEF	ННР	Service Factor	Voltage	Frequency	Current	Port Size	Weight	Certifications <sup>3</sup>
					SUPERM	AX VS VARIA	BLE SPEED			
343001	2.2	9.0	1.08	1.0	115/208-230	50/60	13.6/8.0-7.1	1.5" x 1.5"	53	UL <sup>1</sup> , NSF <sup>2</sup>
						ACCESSORIE	ES			
356324Z	Externa	al Contro	Wiring K	it				_		_

Chemical/Salt/Ozone Resistant EPDM & SS Seal Quick Kit (for pumps Mfg. before June 2019)

- <sup>1</sup> 'UL' indicates that pump bears a UL mark signifying evaluation to U.S. Standards UL1081 for Permanently Connected Swimming Pool and Spa Pumps and to Canadian Standards CAN/CSA C22.2 No. 108-01 Liquid Pumps For Swimming Pools Only (Enclosure 3). UL 60730 Compliant.
- <sup>2</sup> 'NSF' indicates that pump bears a mark signifying evaluation to NSF Standard 50 For Self-Priming Centrifugal Pumps For Swimming Pools Only.
- <sup>3</sup> Product may have been evaluated to other state and local regulatory standards. Listing status may change. Always confirm status with appropriate agency if in doubt.
- 4 Hayward® and Super Pump® are registered trademarks of Hayward Industries, Inc.

\*Savings based on variable speed pump compared to a single-speed pump running 12 hours per day at an average of \$0.16 per kWh in a 20,000 gallon pool. 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. Individual Weighted Energy Factor (WEF) scores and savings may vary by model.

CALIFORNIA PROPOSITION 65 WARNING

MARNING: Cancer and Reproductive Harm.

AVERTISSEMENT: Peut Causer le Cancer

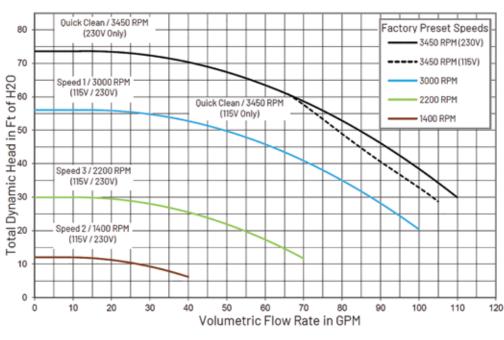
et des Dommages au Système Reproducteur ADVERTENCIA: Cáncer y Daño Reproductivo.

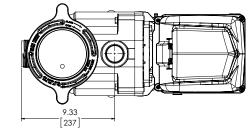
www.p65warnings.ca.gov.

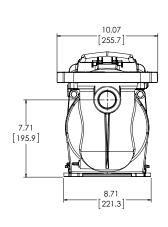
# **SUPERMAX® VS**

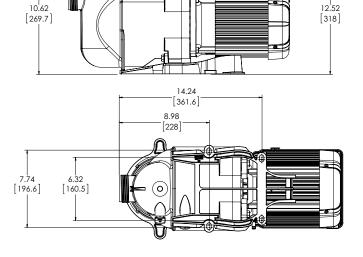
VARIABLE SPEED PUMPS (CONT'D)

#### **Dimensions and Performance**









## **SUPERMAX®**

## HIGH PERFORMANCE PUMPS



#### TRADEGRADE



SuperMax Pump shown with TEFC Motor

The SuperMax pump features a commercial grade, 56 square flange motor for top performance in residential swimming pools. Consumers enjoy its economical performance. Pool professionals benefit from its ease of installation and reliability.

#### **Featured Highlights**

- SuperMax pump by Sta-Rite is a direct replacement for the Hayward® Super Pump® \*
- Single and two-speed models ranging from 1/2 to 2-1/2 HP
- Cam and Ramp™ Lid locks and unlocks with a simple quarter turn
- Exterior thermoplastic resin withstands temperature extremes and delivers long life
- Unionized fittings included (1-1/2 in. internal slip and 2 in. external slip)

#### **Ordering Information**

Product	Rated HP	ТНР	WEF	ННР	Service Factor	Voltage	Frequency	Current	Port Size	Weight	Certifications <sup>3</sup>	Curve Key
					DOE CON	IPLIANT SING	LE-SPEED TE	EFC				
348191	N/A	1.1	3.6	0.63	1.00	115/208-230	60	10.5/5.4-5.4	1.5" x 1.5"	50	UL, NSF	В
			ENER	GY EFF	ICIENT S	INGLE-SPEED	- NOT FOR S	SALE IN THE	JSA			
PHK2E6D-101L-INT	3/4	0.95	N/A	N/A	1.00	115/208-230	60	8.8/4.5-4.4	1.5" x 1.5"	44	UL, NSF	Α
				TEFC	SINGLE-	SPEED - NOT F	OR SALE IN	THE USA				
348147-INT	1	1.65	N/A	N/A	1.00	115/208-230	60	15.1/8.5-7.7	1.5" x 1.5"	50	UL, NSF	С
348148-INT	1-1/2	2.21	N/A	N/A	1.00	208-230	60	10.3-9.1	1.5" x 1.5"	53	UL, NSF	D
348149-INT	2	2.60	N/A	N/A	1.00	208-230	60	11.7-10.3	1.5" x 1.5"	58	UL, NSF	E
						ACCESSOF	RIES					
351157	Union K	(it – 1-1	1/2 in. lı	nternal S	lip x 2 in. E	xternal Slip - inc	ludes 2			1		
356197	Chemic	al/Salt	/Ozone	Resista	nt EPDM &	SS Seal Quick K	it			1		

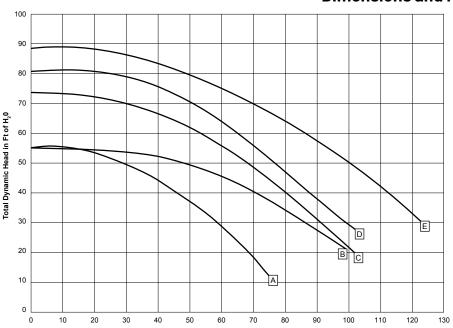
- ¹ 'UL' indicates that pump bears a UL mark signifying evaluation to U.S. Standards UL1081 for Permanently Connected Swimming Pool and Spa Pumps and to Canadian Standards CAN/CSA C22.2 No. 108-01 Liquid Pumps For Swimming Pools Only (Enclosure 3).
- 2 'NSF' indicates that pump bears a mark signifying evaluation to NSF Standard 50 For Self-Priming Centrifugal Pumps For Swimming Pools Only.
- <sup>3</sup> Product may have been evaluated to other state and local regulatory standards. Listing status may change. Always confirm status with appropriate agency if in doubt.
- \* Hayward® and Super Pump® are registered trademarks of Hayward Industries. Inc.

CALIFORNIA PROPOSITION 65 WARNING

# **SUPERMAX®**

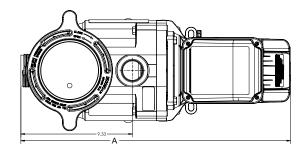
# HIGH-PERFORMANCE PUMPS (CONT'D)

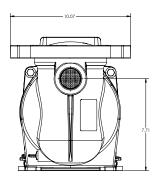
#### **Dimensions and Performance**

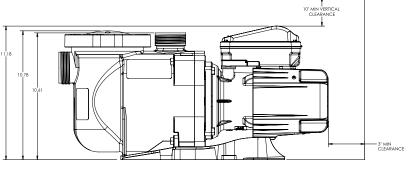


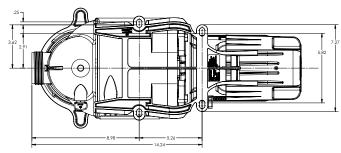
Volumetric Flow Rate in US Gallons Per Minute

A- VARYING LENGTH										
HP	EE TEFC DOE Compliant									
0.5	24.64	_	_							
0.75	24.64 — —									
1		22	_							
1.1		_	22.55							
1.5		22.45	_							
2	_	22.9	_							









# **WHISPERFLOXF® VS**

## COMMERCIAL VARIABLE SPEED PUMP

#### TRADEGRADE



WhisperFloXF VS Pump

WhisperfloXF pump is an economical, combined motor/drive solution for HMAC (hotel, motel, apartment, condominum) or large residential installations, providing sophisticated, energy-saving pump technology without the high costs typically associated with independent pump/external drive setups.

#### **Featured Highlights**

- Integrated 5HP motor/drive; no expensive external drive required
- Versatile power input capability; runs off a wide range of single- or three-phase power
- Speed or flow control for greater efficiency and pool performance\*
- External control capability through automation systems or relays
- · Intuitive programming and operation
- Meets commercial codes and agency requirements

#### **Ordering Information**

Product	THP	WEF	ННР	Service Factor	Voltage	Frequency	Current	Port Size	Weight	Certifications <sup>3</sup>
					WHISPERFLOX	F VARIABLE S	SPEED			
022035	5.0	5.0	2.09	1.00	Single-Phase: 208-230/277-460 Three-Phase: 208-460	50/60	Single-Phase: 20-21/17-11 Three-Phase: 13-6	2.5" x 2.5" or 3" x 3"	95	UL¹, NSF²
					ACCE	SSORIES				
356324Z	RS-485	Automati	ion Wiring	Kit, 25 ft.						
400012	XF Riser	Base - S	Simplies in	nstallation of	f XF-series pumps in a	application whe	ere Challenger Pum	ps are being repl	aced.	

<sup>&</sup>lt;sup>1</sup> 'UL' indicates that pump bears a UL mark signifying evaluation to U.S. Standards UL1081 for Permanently Connected Swimming Pool and Spa Pumps and to Canadian Standards CAN/CSA C22.2 No. 108-01 Liquid Pumps For Swimming Pools Only (Enclosure 3).

\*When connected to Pentair's inline 4-20mA flowmeter for 3" plumbing (P/N 97014-4203KIT–sold separately), or similar 4-20mA flowmeters, this pump is capable of maintaining a constant flow based on the needs of your pool system. To connect the flowmeter and pump, the digital input cable provided in the External Control Wiring Kit (P/N 356324Z sold separately) is required.

CALIFORNIA PROPOSITION 65 WARNING

WARNING: Cancer and Reproductive Harm.

▲ AVERTISSEMENT: Peut Causer le Cancer et des Dommages au Système Reproducteur ADVERTENCIA: Cáncer y Daño Reproductivo.

www.p65warnings.ca.gov.

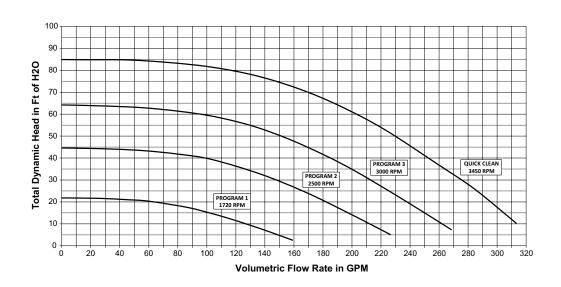
<sup>2 &#</sup>x27;NSF' indicates that pump bears a mark signifying evaluation to NSF Standard 50 For Self-Priming Centrifugal Pumps For Swimming Pools, Spas and Hot Tubs.

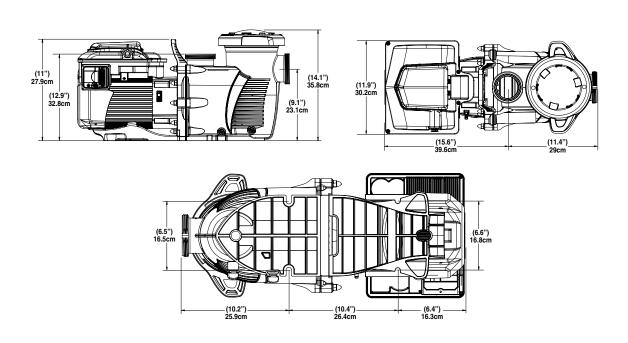
<sup>3</sup> Product may have been evaluated to other state and local regulatory standards. Listing status may change. Always confirm status with appropriate agency if in doubt.

# WHISPERFLOXF VS

# COMMERCIAL VARIABLE SPEED PUMP (CONT'D)

#### **Dimensions and Performance**





# MAX-E-PROXF° VS

# COMMERCIAL VARIABLE SPEED PUMP



#### **TRADE**GRADE



Max-E-ProXF VS Pump

Variable speed pump that runs on single-phase or three-phase power. It's economical, combined motor/drive solution for HMAC (hotel, motel, apartment, condominum) or large residential installations, providing sophisticated, energy-saving pump technology without the high costs typically associated with independent pump/external drive setups.

#### **Featured Highlights**

- Integrated 5HP motor/drive; no expensive external drive required
- Versatile power input capability; runs off a wide range of single- or three-phase power
- Speed or flow control for greater efficiency and pool performance\*
- External control capability through automation systems or relays
- · Intuitive programming and operation
- Meets commercial codes and agency requirements

#### **Ordering Information**

Product	THP	WEF	ННР	Service Factor	Voltage	Frequency	Current	Port Size	Weight	Certifications <sup>3</sup>
					MAX-E-PROXF	VARIABLE S	PEED			
023035	5.0	5.0	2.09	1.00	Single-Phase: 208-230/277-460	50/60	Single-Phase: 20-21/17-11	2.5" x 2.5"	95	UL¹. NSF²
023035	5.0	5.0	2.09	1.00	Three-Phase: 208-460	50/60	Three-Phase: 13-6	or 3" x 3"	95	OL', NSF
					ACCE	SSORIES				
356324Z	RS-485	Automati	on Wiring	Kit, 25 ft.						
400012	XF Riser	Base - S	Simplies i	nstallation of	XF-series pumps in a	pplication whe	ere Challenger Pum	ps are being rep	aced.	

<sup>1</sup> 'UL' indicates that pump bears a UL mark signifying evaluation to U.S. Standards UL1081 for Permanently Connected Swimming Pool and Spa Pumps and to Canadian Standards CAN/CSA C22.2 No. 108-01 Liquid Pumps For Swimming Pools Only (Enclosure 3).

- 2 'NSF' indicates that pump bears a mark signifying evaluation to NSF Standard 50 For Self-Priming Centrifugal Pumps For Swimming Pools, Spas and Hot Tubs.
- 3 Product may have been evaluated to other state and local regulatory standards. Listing status may change. Always confirm status with appropriate agency if in doubt.

\*When connected to Pentair's inline 4-20mA flowmeter for 3" plumbing (P/N 97014-4203KIT–sold separately), or similar 4-20mA flowmeters, this pump is capable of maintaining a constant flow based on the needs of your pool system. To connect the flowmeter and pump, the digital input cable provided in the External Control Wiring Kit (P/N 356324Z sold separately) is required.

CALIFORNIA PROPOSITION 65 WARNING

WARNING: Cancer and Reproductive Harm.

AVERTISSEMENT: Peut Causer le Cancer et des Dommages au Système Reproducte.

et des Dommages au Système Reproducteur

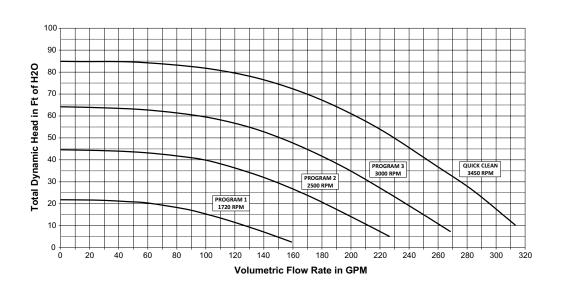
ADVERTENCIA: Cáncer y Daño Reproductivo.

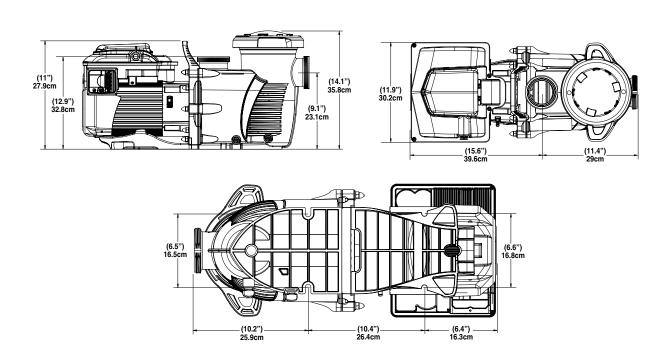
www.p65warnings.ca.gov.

# MAX-E-PROXF° VS

# COMMERCIAL VARIABLE SPEED PUMP (CONT'D)

#### **Dimensions and Performance**





# **COMMERCIAL ACU DRIVE™ XS**

# VARIABLE FREQUENCY DRIVE



#### **Featured Highlights**

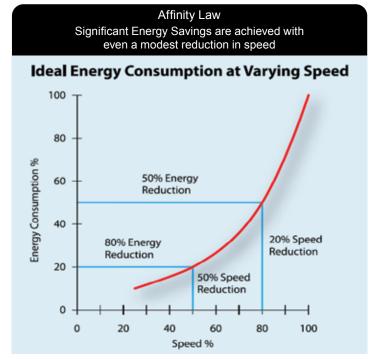
- Save up to 60% or more on pump's electricity usage\*
- "Right-size" your pump to the exact flow required
- Helps save energy with constant flow as the filters get dirty (with optional flow sensor)
- · Off-hour flow management capability
- Does not blow corrosive filter-room air across the circuitry
- High efficiency up to 98% adjusts drive input voltage for best efficiency point
- · Eliminates need for motor starters
- Integrated disconnects, fusing and optional bypasses
- 2-step ramps (Soft Start Feature)
- Real-time clock for time based functions

- Great match for 3-phase models of EQ Series® Pumps
- Overload trip protection helps protect motor and Acu Drive XS VF Drive from Voltage Spikes and phase unbalance
- Can connect to an IntelliTouch® Automation System
- 3-year manufacturers warranty, Optional 6-year warranty available
- Optional: Factory Start-up upgrade available
- Indoor & Outdoor-rated enclosures
- One drive type for the full power range
- · For use with 3 phase pumps only
- Acu Drive XS VF Drives with single phase input power available

The Acu Drive XS VF Drive offers built-in intelligence for increased performance in all aquatic pump applications. Specified for energy and cost savings, the Acu Drive XS VF Drive offers a fast return on investment. The Acu Drive XS VF Drive allows the pump to run at its most efficient point on the curve. Preventative maintenance costs may drop due to motor protection, motor soft start, and a significant decrease in water hammer protecting the shaft and impeller. Up to an additional 5% savings due to the Acu Drive XS VF Drive's ability to balance power phase and harmonic suppression. Built with powerful standard and optional features specifically designed for energy optimization, the Acu Drive XS VF Drive is perfectly matched with the full line of Pentair Commercial pumps.

CALIFORNIA PROPOSITION 65 WARNING





<sup>\*</sup>Savings based on single speed pool pumps traditionally configured without VFD's, up to 20% larger than actual required flow and head pressure. 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.

# **COMMERCIAL ACU DRIVE™ XS**

# VARIABLE FREQUENCY DRIVE (CONT'D)

#### Ordering Information

Horse Power (HP)	<u>Ni</u>	EMA-12 RATED (IP 54/5	<u>i5)</u>	NEMA-4X RATED (IP 66)				
	200-240 VAC	360-480 VAC	525-600 VAC	200-240 VAC	360-480 VAC	525-600 VAC		
3	AD030X-2303-N12	AD030X-4603-N12	AD030X-5753-N12	AD030X-2303-N4X	AD030X-4603-N4X	AD030X-5753-N4		
5	AD050X-2303-N12	AD050X-4603-N12	AD050X-5753-N12	AD050X-2303-N4X	AD050X-4603-N4X	AD050X-5753-N4		
7-1/2	AD075X-2303-N12	AD075X-4603-N12	AD075X-5753-N12	AD075X-2303-N4X	AD075X-4603-N4X	AD075X-5753-N4		
10	AD100X-2303-N12	AD100X-4603-N12	AD100X-5753-N12	AD100X-2303-N4X	AD100X-4603-N4X	AD100X-5753-N4		
15	AD150X-2303-N12	AD150X-4603-N12	AD150X-5753-N12	AD150X-2303-N4X	AD150X-4603-N4X	AD150X-5753-N4		
20	AD200X-2303-N12	AD200X-4603-N12	AD200X-5753-N12	AD200X-2303-N4X	AD200X-4603-N4X	AD200X-5753-N4		
25	AD250X-2303-N12	AD250X-4603-N12	AD250X-5753-N12	AD250X-2303-N4X	AD250X-4603-N4X	AD250X-5753-N4		

#### ICLUDES STANDARD DISCONNECT ONLY (NO FUSES), BATTERY BACKUP, & PENTAIR SMART START Horse **NEMA-12 RATED (IP 54/55)** NEMA-4X RATED (IP 66) Power 200-240 VAC 200-240 VAC (HP) 3 AD030X-2301-N12 AD030X-2301-N4X 5 AD050X-2301-N12 AD050X-2301-N4X 7-1/2 AD075X-2301-N12 AD075X-2301-N4X 10 AD100X-2301-N12 AD100X-2301-N4X

For 30HP and higher - Please contact factory.

15 - 20

3-PHASE Units available with Optional Bypass Contactor mounted to common back plate. Please contact factory.

#### \*Startup Services

AD200X-2301-N12

CERTIFIED START-UP ASSISTANCE BY TRAINED TECHNICIANS IS AVAILABLE FOR PURCHASE WITH ALL ACU DRIVE VFD's. USE PRODUCT NUMBERS AS FOLLOWS:

AD-SUFW01 Batch Startup for 4-6 standard drives (8 hr. onsite / day)

#### Optional Accessories and Warranties

AD200X-2301-N4X

"ENHANCED SERVICE WARRANTY - ON SITE\*
INCLUDES PARTS, LABOR, TRAVEL AND ON-SITE WARRANTY REPAIR.
USE PRODUCT NUMBERS AS FOLLOWS:"

	200-24	360-480 VAC			
DURATION	3 HP & Below	5-25 HP	10 HP & Below	15-40 HP	
6 YEARS	AD-EWW172	AD-EWW272	AD-EWW172	AD-EWW272	

#### Flow Sensor Options

	ACU DRIVE XS - FLOW SENSOR KITS											
Pipe Size		NEMA-12 RATED (IP 54/55)	NEMA-4X RATED (IP 66)									
(inches)	200-240 VAC	525-600 VAC	200-240 VAC	525-600 VAC								
2"	97014-4202KIT	Includes:	_	Includes:								
3"	97014-4203KIT	<ul> <li>Sch80 PVC Clamp-on Pipe Saddle.</li> </ul>	97014BL-03KIT	Sch80 PVC Clamp-on Pipe Saddle(3"-8").								
4"	97014-4204KIT	<ul> <li>100 linear feet shielded signal wire.</li> </ul>	97014BL-04KIT	• Iron Saddle (10"-14").								
6"	97016-4206KIT	Strain relief connector.	97016BL-06KIT	100 linear feet shielded signal wire.								
8"	97016-4208KIT	Does <u>not</u> include separate wall-mount flow display.	97016BL-08KIT	Strain relief connector.  Separate wall-mount flow display/transmitter.								
10"	_	non display.	97020BL-10KIT	Separate waii-mount now display/transmitter.								
12"	_		97020BL-12KIT									
14"	_		97020BL-14KIT									

\*Additional charges will apply if on-site start-up exceeds four hours (including round-trip travel) per Acu Drive XS Drive.

Other options and add-ons are available including "Bypass Contactors", and "Contact Motor Select" upgrades, and additional on-site technical training. For more information on these options, other sizes, or applications assistance call 1-800-831-7133.

Some pump motors (e.g. 230/460V versions) can be wired to accommodate multiple voltages. This is not true of VFDs. In order to ensure proper VFD selection, the actual pump motor input voltage must be consistent with the drives operating range as shown.

The Acu Drive VF Drive is recommended for use with all "High" or "Premium" efficiency motors and all motors that have Class F insulation or better. For all non-Class F motors, please contact the factory for proper selection of Acu Drive XS Drive and accessories.

Standard Acu Drive XS VF Drives can be returned within 12 months of invoice only if unused, in original packaging, and subject to a 35% restocking charge. Special drives are non-returnable.

Nema Rated 12 enclosure provides protection against dust, dirt and light splashing. Nema Rated 12 units may be used outdoors when sheltered from direct precipitation and sunlight.

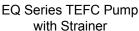
Nema Rated 4X enclosure provides a degree of protection against solid foreign objects(windblown dust), water(rain, sleet, snow, splashing water, and hose directed water), and an additional level of protection against corrosion; and that will be undamaged by the external formation of ice on the enclosure.

CALIFORNIA PROPOSITION 65 WARNING

# **EQ SERIES**°

# COMMERCIAL PLASTIC PUMP WITH AND WITHOUT HAIR AND LINT STRAINER







EQ Series Pump without Strainer

Commercial Plastic pump built specifically for commercial and large residential pools. Pump features electrical and hydraulic designs that helps reduce wear and tear on critical moving parts, and is lightweight for ease of installation.

CALIFORNIA PROPOSITION 65 WARNING

▲ WARNING: Cancer and Reproductive Harm.
 ▲ AVERTISSEMENT: Peut Causer le Cancer et des Dommages au Système Reproducteur.
 ▲ ADVERTENCIA: Cáncer y Daño Reproductivo.
 www.p65warnings.ca.gov.

#### **Featured Highlights**

- Efficiency 3-phase motors
- Commercial grade, noncorrosive Plastic Parts for durability and long life
- Now available in TEFC and ODP 3-phase motor options
- Cam and Ramp<sup>™</sup>
   See -Through Lid
- Self-priming with Hair and Lint Strainer
- · Light weight

- 3-phase models compatible with Acu Drive<sup>™</sup> XS VF Drive
- Drop-in replacement for C Series<sup>®</sup> and CSP Series<sup>™</sup> Pumps
- Waterfall models great for low head, high flow applications
- Easy cleaning and serviceability
- 50 Hz models available -contact factory

#### **Ordering Information**

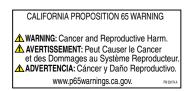
Product	Description	Voltage	Amps	НР	SF	SFHP	Primary Listings	Port Size	Motor Class	Carton	Curve
	•		•	ICIEN	ICV TU	DEE DU	and Certifications 6 ASE POOL PUMP W		IED TEEC	Wt.(Lbs.)	Key
<b>▶</b> 340608	EQKT-500		13.4-12.2/6.1	5	1.25	6.25	NSF 2, UL 7	6 in x 4 in	F	97	D
<b>340608</b>	EQKT-750	208-230/460		7.5	1.25	9.38	NSF <sup>2</sup> , UL <sup>7</sup>	6 in x 4 in	F	117	E
340610			26.4-23.5/11.7	10	1.25	12.50	NSF <sup>2</sup> . UL <sup>7</sup>	6 in x 4 in	F F	163	F
▶ 340611			39.0-36.0/18.0	15	1.25	18.75	NSF 2. UL 8	6 in x 4 in	F	177	G
V 3-10011							POOL PUMP WITHO	-	•		G
<b>340148</b>	EQK-500	575	5.1	5	1.15	5.75	NSF <sup>2</sup>	6 in. x 4 in.	F	77	D
<b>340149</b>	EQK-750	575	7.2	7.5	1.15	8.63	NSF <sup>2</sup>	6 in. x 4 in.	F	87	E
340150	EQK-1000	575	10.2	10	1.15	11.50	NSF <sup>2</sup>	6 in. x 4 in.	F.	117	F
<b>340151 340151</b>	EQK-1500	575	15.0	15	1.15	17.25	NSF <sup>2</sup>	6 in. x 4 in.	F	132	G
7 0 10 10 1	EQIT 1000						POOL PUMP WITH		•	102	
<b>340030</b>	EQ-500	230	20.0	5	1.15	5.75	NSF 3, ETL 5	6 in. x 4 in.	F	126	Α
<b>340032</b>	EQ-750	230	30.4	7.5	1.15	8.63	NSF <sup>3</sup>	6 in. x 4 in.	F	161	В
340238	EQ-1000	230	40.0	10	1.15	11.50	NSF <sup>3</sup>	6 in. x 4 in.	F	160	С
, , , , ,				FFICI	ENCY		PHASE POOL PUMP	-	R - ODP		
<b>340031</b>	EQK-500	208-230/460	13.5-12.3/6.2	5	1.15	5.75	NSF <sup>3</sup>	6 in. x 4 in.	F	106	D
<b>340033</b>	EQK-750	208-230/460	20.1-18.3/9.1	7.5	1.15	8.63	NSF <sup>3</sup>	6 in. x 4 in.	F	116	Е
340034	EQK-1000	208-230/460	27.0/26.2-13.1	10	1.15	11.50	NSF <sup>3</sup>	6 in. x 4 in.	F	146	F
▶ 340035	EQK-1500	208-230/460	40.0-36.0/17.8	15	1.15	17.25	NSF <sup>3</sup>	6 in. x 4 in.	F	161	G
		NEMA RATE	D PREMIUM E	FFICI	ENCY 1	THREE	PHASE POOL PUMP	WITH STRAINE	R - TEFC		
<b>340604</b>	EQKT-500	208-230/460	13.4-12.2/6.1	5	1.25	6.25	NSF 3, UL 7	6 in x 4 in	F	127	D
▶ 340605	EQKT-750	208-230/460	19.9-17.8/8.9	7.5	1.25	9.38	NSF 3, UL 7	6 in x 4 in	F	147	Е
▶340606	EQKT-1000	208-230/460	26.4-23.5/11.7	10	1.25	12.50	NSF 3, UL 7	6 in x 4 in	F	193	F
▶ 340607	EQKT-1500	208-230/460	39.0-36.0/18.0	15	1.25	18.75	NSF 3, UL 8	6 in x 4 in	F	207	G

# **EQ SERIES**°

# COMMERCIAL PLASTIC PUMP WITH AND WITHOUT HAIR AND LINT STRAINER (CONT'D)

Product	Description	Voltage	Amps	НР	SF	SFHP	Primary Listings and Certifications <sup>6</sup>	Port Size (ANSI Flange)	Motor Class	Carton Wt. (Lbs.)	Curve Key
	NEMA	RATED PREM	MIUM EFFIC	IENCY	THRE	E PHAS	E POOL PUMP WITH	STRAINER - ODP	- 575 VOLT		
▶ 340155	EQK-500	575	5.1	5	1.15	5.75	NSF <sup>3</sup>	6 in. x 4 in.	F	106	D
▶ 340156	EQK-750	575	7.2	7.5	1.15	8.63	NSF <sup>3</sup>	6 in. x 4 in.	F	116	Е
▶ 340157	EQK-1000	575	10.2	10	1.15	11.50	NSF <sup>3</sup>	6 in. x 4 in.	F	146	F
▶ 340159	EQK-1500	575	15.0	15	1.15	17.25	NSF <sup>3</sup>	6 in. x 4 in.	F	161	G
HAIR AND LINT STRAINER WITH CAM AND RAMP LID, BASKET AND HARDWARE											
340013	EQ 6X6 Straine	er					NSF ⁴	6 in. x 6 in.		33	J
EQ SERIES PUMP ACCESSORIES FLANGE ASSEMBLY KITS											
357262	Flange 4 in. w/ gasket and SS hardware <sup>1</sup> (See images on next page)									20	
357263	Flange 6 in. w/ gasket and SS hardware <sup>1</sup> (See images on next page)									23	
357212	Flange 6 in. w/	gasket and SS	hardware. <b>F</b>	or use	on EQ	Pumps	without Strainer.			23	

- <sup>2</sup> 'NSF' indicates that pump bears a mark signifying evaluation to NSF Standard 50 For Non Self-Priming Centrifugal Pumps For Swimming Pools, Spas and Hot Tubs.
- 3 'NSF' indicates that pump bears a mark signifying evaluation to NSF Standard 50 For Self-Priming Centrifugal Pumps For Swimming Pools, Spas and Hot Tubs.
- 4 'NSF' indicates that product bears a mark signifying evaluation to NSF Standard 50 For Materials and Components.
- <sup>5</sup> 'ETL' indicates that pump bears a specific ETL mark signifying evaluation to U.S. Standards UL1081 for Permanently Connected Swimming Pool and Spa Pumps and to Canadian Standards CAN/CSA C22.2 No. 108-01 Liquid Pumps For Swimming Pools And Spas. (Enclosure 3).
- <sup>6</sup> Product may have been evaluated to other state and local regulatory standards. Listing status may change. Always confirm status with appropriate agency if in doubt.
- UL' indicates that pump bears a UL mark signifying evaluation to U.S. Standards UL1081 for Permanently Connected Swimming Pool and Spa Pumps and to Canadian Standards CAN/CSA C22.2 No. 108-01 Liquid Pumps For Swimming Pools Only (Enclosure 3).
- 8 'UL' indicates that pump bears a UL mark signifying evaluation to U.S. Standards UL1081 for Permanently Connected Swimming Pool and Spa Pumps.



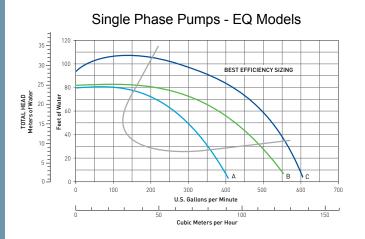
## Dimensions and Performance - See next page.

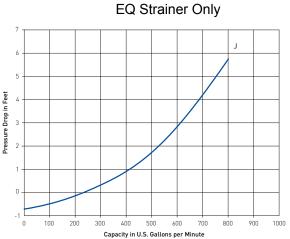
<sup>&</sup>lt;sup>1</sup> Thermoplastic PVC socket style.

# **EQ SERIES**°

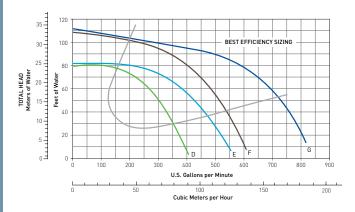
# COMMERCIAL PLASTIC PUMP WITH AND WITHOUT HAIR AND LINT STRAINER (CONT'D)

#### **Dimensions and Performance**





#### Three Phase Pumps - EQK Models



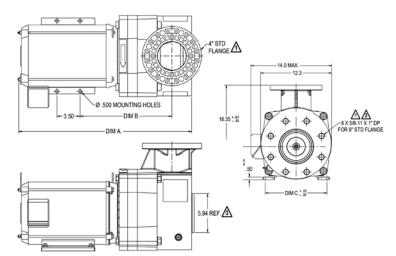
For detailed efficiency curves go to www.pentaircommercial.com

# **EQ SERIES**°

# COMMERCIAL PLASTIC PUMP WITH AND WITHOUT HAIR AND LINT STRAINER (CONT'D)

### **Dimensions and Performance**

#### EQ Series Commercial Pump without Strainer

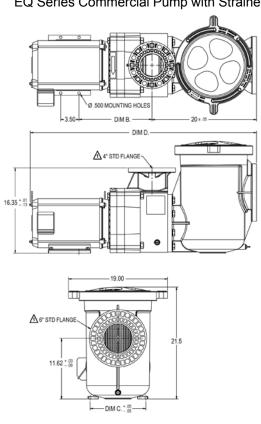


## CALIFORNIA PROPOSITION 65 WARNING ★WARNING: Cancer and Reproductive Harm. ▲ AVERTISSEMENT: Peut Causer le Cancer et des Dommages au Système Reproducteur. ▲ ADVERTENCIA: Cáncer y Daño Reproductivo. www.p65warnings.ca.gov.

#### **EQ Series Pump** Flange Assembly Kit



#### EQ Series Commercial Pump with Strainer



Product No W/0 Pot	Product No. W/ Pot	Dim A*	Dim B*	Dim C*	Dim D*
340014	340026	26.62	13.32	9.69	43.59
340017	340028	26.62	14.21	9.69	43.59
340019	340030	26.62	13.32	9.69	43.59
340021	340032	27.53	14.21	10.69	44.59
340237	340238	26.94	14.03	10.69	43.92
340016	340027	23.12	13.32	9.69	40.09
340018	340029	23.12	13.32	9.69	40.09
340020	340031	23.12	13.32	9.69	40.09
340022	340033	24.50	13.32	9.69	41.56
340023	340034	26.31	14.38	10.69	43.29
340024	340035	26.31	14.38	10.69	43.29
340148	340155	24.62	13.32	7.50	41.59
340149	340156	24.62	13.32	7.50	41.59
340150	340157	26.31	14.07	8.50	43.29
340151	340159	26.31	14.07	8.50	43.29
340608	340604	24.52	13.48	9.69	41.50
340609	340605	26.52	14.19	10.69	43.50
340610	340606	28.02	14.19	10.69	45.00
340611	340607	28.02	14.19	10.69	45.00
340086	340082	24.62	13.48	9.69	41.59
340085	340081	24.62	13.48	9.69	41.59
340084	340080	28.31	14.19	10.69	45.29
340083	340049	28.31	14.19	10.69	45.29
340048	340046	28.31	14.19	10.69	45.29
340047	340045	28.31	14.19	10.69	45.29

<sup>\*</sup> This value may vary slightly depending upon manufacturer and motor design.

A FASTENERS AND O-RING ARE INCLUDED WITH PENTAIR POOL PRODUCTS EQ 6X6 STRAINER TO CONNECT STRAINER DIRECTLY TO EQ SERIES PUMP. IF PUMP IS TO BE INSTALLED WITHOUT STRAINER MAKE BOTH CONNECTIONS PER NOTE 1.

USE ANSI CLASS 150 PLASTIC FLANGE AND 1/8 in. THICK CLASS 150 FULL FLANGE GASKET TO MAKE CONNECTION.

THIS DIAMETER FITS INSIDE 6 in. SCH 40 PIPE. DO NOT USE SCH 80 PIPE AS FINAL PIPE SIZE WHEN MAKING THIS FLANGE CONNECTION

# COMMERCIAL BRONZE PUMPS



C Series Commercial Bronze Pump

Bronze volute and pot, coated cast iron foot, flanged connections, 6 in. suction, 4 in. discharge.

## **Featured Highlights**

- · Large commercial pump with s/s basket
- · Easy serviceability
- · All-bronze construction for strength and durability
- 6 in. suction and 4 in. discharge for maximum capabilities
- Heavy-gauge stainless steel strainer basket with an open area 5 times the area of the suction port
- · Closed impeller for longer motor bearing life
- Heat-resistant seal capable of operation at up to 150°
- Available in single and three-phase, 50 and 60-Hertz models
- For 200-208v applications order 200-208v model pump

## **Ordering Information**

Product	Description	Voltage	Amps	HP	SF	SFHP	Primary Listings and Certifications <sup>2</sup>	Motor Class	Port Size (ANSI Flange)	Carton Wt. (Lbs.)	Curve Key
			NEMA RA	TED ST	ANDAF	RD EFFIC	CIENCY THREE PHASE	220/440	V		
▶011657	CHK-50	220/440	13.0/6.5	5	1.15	5.75	NSF 1	F	6 in. x 4 in.	336	Α
▶011658	CHK-75	220/440	18.4/9.2	7-1/2	1.15	8.63	NSF 1	F	6 in. x 4 in.	349	В
▶ 011659	CHK-100	220/440	25.3/12.6	10	1.15	11.50	NSF 1	В	6 in. x 4 in.	376	С
▶011660	CHK-150	220/440	37.5/18.8	15	1.15	17.25	NSF 1	В	6 in. x 4 in.	398	D
▶ 011661	CHK-200	220/440	49.0/24.6	20	1.15	23.00	NSF 1	F	6 in. x 4 in.	403	Е

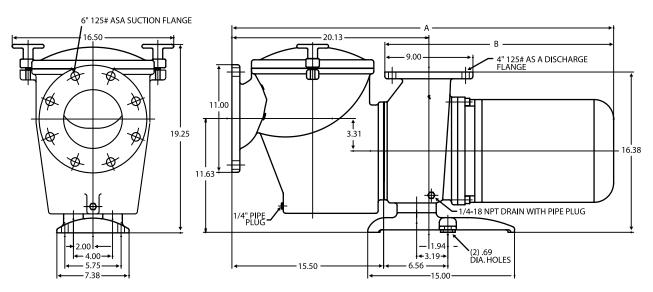
CALIFORNIA PROPOSITION 65 WARNING

# COMMERCIAL BRONZE PUMPS (CONT'D) WITH HAIR AND LINT STRAINER

Product	Description	Voltage	Amps	НР	SF	SFHP	Primary Listings and Certifications <sup>2</sup>	Motor Class	Port Size (ANSI Flange)	Carton Wt. (Lbs.)	Curve Key
			NEMA	RATE	D STAN	NDARD E	FFICIENCY THREE PH	HASE 575\	/		
▶347967	CHK-50	575	5.6	5	1.15	5.75	NSF 1	F	6 in. x 4 in.	336	Α
▶347935	CHK-200	575	19.5	20	1.15	23.00	NSF 1	F	6 in. x 4 in.	406	E
		1	NEMA RATE	D STA	ANDARI	D EFFICI	ENCY THREE PHASE	380-415V-	· 50 HZ		
▶014884	CHKL-200	380-415	28.0-26.0	20	1.15	23.00	NSF 1	F	6 in. x 4 in.	403	

<sup>▶</sup> This product either meets or is exempt from the DOE Dedicated Purpose Pool Pump regulation. This product will remain available after the DOE regulation takes effect in July 2021.

## **Dimensions and Performance**



PUN	NP DIMEN	ISIONS								
THREE-PHASE AMPS @ 220/440 & 380/415 V										
HP	AMPS A B									
5	14	34.88	19.50							
7.5	20 35.88 20.50									
10	26	22.50								
15	38	37.38	22.00							
20	46	23.50								

PUMP DIMENSIONS									
SINGLE-PHASE AMPS @ 230 VOLTS									
HP AMPS A B									
5	5 26 35.50 20.50								
7.5	37 35.88 20.50								

PUN	AP DIMEN	ISIONS							
SINGLE-PHASE AMPS @ 200 VOLTS									
HP AMPS A B									
5 29 35.50 20.50									
7.5	39.6 35.88 20.50								

#### NOTES:

1. BOTH "A" AND "B" DIMENSIONS ARE APPROXIMATE IT DEPENDS ON MOTOR MANUFACTURER.

2. ALL DIMENSIONS ARE IN INCHES AND MAY VARY  $\pm$  .25.

CALIFORNIA PROPOSITION 65 WARNING

<sup>1 &</sup>quot;NSF" indicates that pump has bee certified to NSF/ANSI 50, the Standard for Equipment for swimming pools, spas, hot tubs and other recreational water features.

<sup>&</sup>lt;sup>2</sup> Product may have been evaluated to other state and local regulatory standards. Listing status may change. Always confirm status with appropriate agency if in doubt.

# COMMERCIAL BRONZE PUMPS (CONT'D) WITHOUT HAIR AND LINT STRAINER



C Series Commercial Bronze Pump without Hair and Lint Strainer

## **Featured Highlights**

- · High-performance motors for maximum flow
- · All-bronze construction for strength and durability
- 5 in. suction and 4 in. discharge for maximum capabilities
- · Closed impeller for longer motor bearing life
- Heat-resistant seal capable of operation at up to 150°
- Available in single and three-phase, 50 and 60-hertz models
- For 200-208v applications order 200-208v model pump

## **Ordering Information**

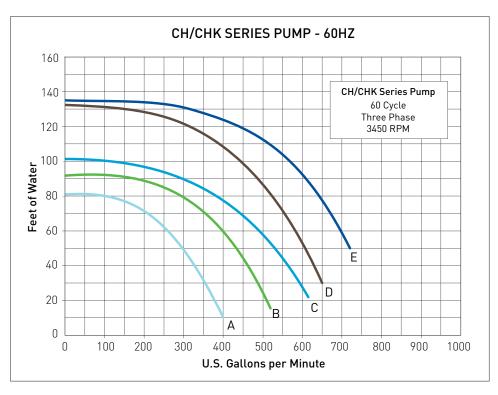
Product	Description	Voltage	Amps	HP	SF	SFHP	Primary Listings and Certifications <sup>3</sup>	Motor Class	Port Size (ANSI Flange)	Carton Wt. (Lbs.)	Curve Key
		С	SERIES &	AURO	RA PUI	MP ACC	ESSORIES FLANGE ASS	SEMBLY K	ITS		
357260	0 Flange 5 in. w/ gasket and SS hardware <sup>1</sup> for pump less strainer 22										
357262	Flange 4 in. w/ gasket and SS hardware <sup>1</sup>								20		
357263	Flange 6 in. w/	gasket and	SS hardwar	e <sup>1</sup>						23	

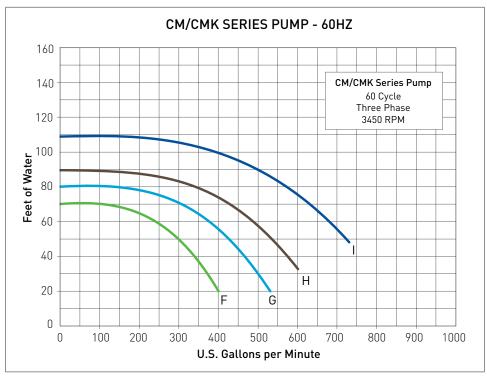
▶ This product either meets or is exempt from the DOE Dedicated Purpose Pool Pump regulation. This product will remain available after the DOE regulation takes effect in July 2021.

- <sup>1</sup> Thermoplastic PVC socket style
- <sup>2</sup> 'NSF(1)' indicates that pump bears a mark signifying evaluation to NSF Standard 50 For Non Self-Priming Centrifugal Pumps For Swimming Pools, Spas and Hot Tubs.
- <sup>3</sup> Product may have been evaluated to other state and local regulatory standards. Listing status may change. Always confirm status with appropriate agency if in doubt.

# COMMERCIAL BRONZE PUMPS (CONT'D) WITH HAIR AND LINT STRAINER

### **Dimensions and Performance**





For detailed efficiency curves go to www.pentaircommercial.com

CALIFORNIA PROPOSITION 65 WARNING

## **CSP/CCSP SERIES™**

# COMMERCIAL SELF-PRIMING PUMP





CALIFORNIA PROPOSITION 65 WARNING

▲ WARNING: Cancer and Reproductive Harm.
▲ AVERTISSEMENT: Peut Causer le Cancer et des Dommages au Système Reproducteur.
▲ ADVERTENCIA: Cáncer y Daño Reproductivo.

www.p65warnings.ca.gov.

\*\*\*Particulation\*\*

CSP/CCSP Series Commercial Self-Priming Pump with PKG 184 Strainer (sold separately)

## **Featured Highlights**

- Especially designed for commercial and public swimming pools and spas, aquatic facilities, water parks, and fountain applications where high performance and self-priming are required
- Pump has enclosed bronze impeller and standard 6 in. x 4 in. A.N.S.I. rated flange connections
- The pump strainer (order separately) has capacity of 1,100 cubic inches. Both pump and strainer can be ordered with optional epoxy coated castings to provide additional performance and corrosion resistance

## **Ordering Information**

Product	Voltage	Amps <sup>1</sup>	НР	SF	SFHP	Primary Listings and Certifications <sup>4</sup>	Port Size (ANSI Flange)	Carton Wt. (Lbs.)	Curve Key
	NEM	IA RATED STANDA	ARD EF	-ICIENC	Y SINGLE	PHASE EPOXY COATE	D CAST IRON		
CCSPHK-142	230	39	7.5	1.15	8.63	NSF <sup>2</sup>	6 in. x 4 in.	270	Е
CCSPHL-143	230	46	10	1.15	11.50	NSF <sup>2</sup>	6 in. x 4 in.	275	F
		NEMA RATE	STANE	ARD EF	FICIENC	THREE PHASE CAST I	IRON		
▶ CSPHK3-142	230/460	21.2-19.2/9.6	7-1/2	1.25	9.38	NSF <sup>2</sup>	6 in. x 4 in.	265	Α
▶ CSPHL3-143	230/460	27.6-24.4/12.2	10	1.25	12.50	NSF <sup>2</sup>	6 in. x 4 in.	270	В
▶ CSPHM3-144	230/460	44.2-40/20	15	1.25	18.75	NSF <sup>2</sup>	6 in. x 4 in.	280	С
CSPHN3-145	230/460	55.3-50/25	20	1.25	25.00	NSF <sup>2</sup>	6 in. x 4 in.	325	D
		NEMA RATED ST	ANDARI	D EFFICI	ENCY TH	REE PHASE CAST IRON	N - 200V <sup>6</sup>		
▶ CSPH2K3-142	200	22.1	7-1/2	1.15	8.63	NSF <sup>2</sup>	6 in. x 4 in.	265	Α
▶ CSPH2L3-143	200	28.1	10	1.25	12.50	NSF <sup>2</sup>	6 in. x 4 in.	270	В
CSPH2M3-144	200	42.3	15	1.25	18.75	NSF <sup>2</sup>	6 in. x 4 in.	280	С
CSPH2N3-145	200	57.3	20	1.25	25.00	NSF <sup>2</sup>	6 in. x 4 in.	350	D
	NEM	MA RATED STAND	ARD EF	FICIENC	Y THREE	PHASE EPOXY COATE	D CAST IRON		
CCSPHK3-142	230/460	21.2-19.2/9.6	7-1/2	1.25	9.38	NSF <sup>2</sup>	6 in. x 4 in.	265	Е
CCSPHL3-143	230/460	27.6-24.4/12.2	10	1.25	12.50	NSF <sup>2</sup>	6 in. x 4 in.	270	F
CCSPHM3-144	230/460	44.2-40/20	15	1.25	18.75	NSF <sup>2</sup>	6 in. x 4 in.	280	G
CCSPHN3-145	230/460	55.3-50/25	20	1.25	25.00	NSF <sup>2</sup>	6 in. x 4 in.	325	Н
	NEMA R	ATED STANDARD	EFFICIE	ENCY TH	IREE PHA	SE EPOXY COATED CA	AST IRON - 200 V <sup>6</sup>		
▶ CCSPH2K3-142	200	22.1	7-1/2	1.15	8.63	NSF <sup>2</sup>	6 in. x 4 in.	265	E
CCSPH2L3-143	200	28.1	10	1.25	12.50	NSF <sup>2</sup>	6 in. x 4 in.	270	F
▶ CCSPH2M3-144	200	42.3	15	1.25	18.75	NSF <sup>2</sup>	6 in. x 4 in.	280	G
CCSPH2N3-145	200	57.3	20	1.25	25.00	NSF <sup>2</sup>	6 in. x 4 in.	350	Н
			ACCES	SORIES	FOR CSP	CCSP SERIES			
PKG 184	Strainer for CS capacity)	SP/CCSP 6 in. ANSI	flange (1	I,100 cu. i	n.	NSF <sup>3</sup>	6 in. x 6 in.	180	I
PKG 184C	Same as PKG	184 Except Strainer	is Epox	y Coated		NSF <sup>3</sup>	6 in. x 6 in.	180	I
357262	Flange 4 in. w/	gasket and SS hard	dware 5					20	
357263	Flange 6 in. w/	gasket and SS hard	dware 5					23	

<sup>▶</sup> This product either meets or is exempt from the DOE Dedicated Purpose Pool Pump regulation. This product will remain available after the DOE regulation takes effect in July 2021.

<sup>&</sup>lt;sup>1</sup> Amp draw may vary depending on motor manufacturer.

YNSF(1)' indicates that pump bears a mark signifying evaluation to NSF Standard 50 For Self-Priming Centrifugal Pumps For Swimming Pools And Spas.

<sup>3 &#</sup>x27;NSF(2)' indicates that product bears a mark signifying evaluation to NSF Standard 50 For Materials and Components.

<sup>&</sup>lt;sup>4</sup> Product may have been evaluated to other state and local regulatory standards. Listing status may change. Always confirm status with appropriate agency if in doubt.

<sup>&</sup>lt;sup>5</sup> Thermoplastic PVC socket style.

<sup>&</sup>lt;sup>6</sup> For 208 volt applications, use 200v model options.

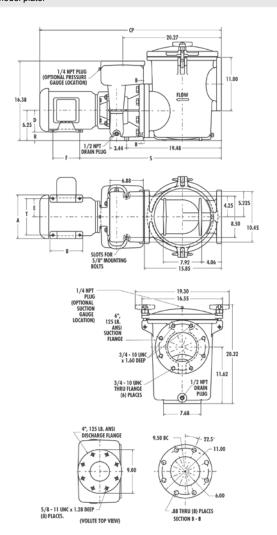
# **CSP/CCSP SERIES™**

# COMMERCIAL SELF-PRIMING PUMP (CONT'D)

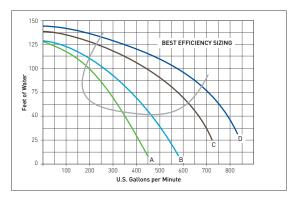
## **Featured Highlights**

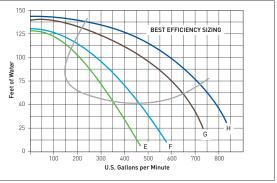
Options: CCSP Models feature special epoxy coated castings for maximum performance and corrosion resistance. 60 Hz T.E.F.C., 60 Hz premium efficiency, or 575 volt motors available. Inverter duty rated class F motors available for most models. Contact factory for details.

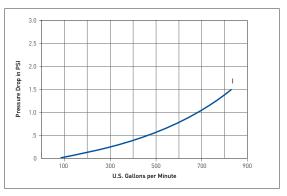
Note: Maximum ambient temperature for motor is 104°F (40°C). All pump motors require external overload protection (magnetic starter). Pump strainer must be ordered separately. Full load amps on motor model plate.



#### **Dimensions and Performance**







CALIFORNIA PROPOSITION 65 WARNING

▲ WARNING: Cancer and Reproductive Harm.
▲ AVERTISSEMENT: Peut Causer le Cancer et des Dommages au Système Reproducteur.
▲ ADVERTENCIA: Cáncer y Daño Reproductivo.

www.p65warnings.ca.gov.

Catalog Number	A	В	СР	D	E	F	R	S	Т
CSPHK, CCSPHK	10.62	7.00	39.44	5.25	4.25	5.50	1.00	30.00	8.50
CSPHK3, CCSPHK3, CSPH2K3	9.00	6.75	40.31	4.50	3.75	5.50	1.75	29.13	7.50
CSPHL, CCSPHL	10.35	8.26	42.69	5.25	4.25	7.00	1.00	30.00	8.50
CSPHL3, CCSPHL3	10.62	7.00	41.00	5.25	4.25	5.50	1.00	30.00	8.50
CSPHM3, CCSPHM3	10.62	8.50	42.50	5.25	4.25	7.00	1.00	30.00	8.50
CSPH2L3, CSPH2M3	10.62	8.50	42.50	5.25	4.25	7.00	1.00	30.00	8.50
CSPHN3, CCSPHN3	12.50	10.80	46.75	6.25	5.00	8.20	0.00	31.62	10.00
CSPH2N3, CCSPH2N3	13.38	12.44	48.50	6.25	5.00	10.00	0.00	31.65	10.00

All dimensions shown in inches.

## 5CSP/5CCSP SERIES™

# 50 HERTZ COMMERCIAL SELF-PRIMING PUMP



5CSP/5CCSP Series Commercial Self-Priming Pump with PKG 184 Strainer Pot (sold separately)

## **Featured Highlights**

- Especially designed for commercial and public swimming pools and spas, aquatic facilities, water parks, and fountain applications where high performance and self-priming are required
- Pump has enclosed bronze impeller and standard 6 in. x 4 in. A.N.S.I. flange connections
- The pump strainer (order separately) has capacity of 1,100 cubic inches. Both pump and strainer can be ordered with optional epoxy coated castings to provide additional performance and corrosion resistance
- Note: 50 hertz pumps cannot be used in North America.

### **Ordering Information**

Product	Voltage	Amps <sup>1</sup>	HP	SF	SFHP	Primary Listings and Certifications <sup>3</sup>	Port Size (ANSI Flange)	Carton Wt. (Lbs.)	Curve Key
		SINGLE I	PHASE	CAST IR	ON WIT	HOUT STRAINER- 50 HZ			
▶5CSPHJ-142	220-240	35.5-32.5	5	1.00	5		6 in. x 4 in.	270	Α
▶5CSPHK-143	220-240	43.0-39.4	7-1/2	1.00	7-1/2		6 in. x 4 in.	280	В
		THREE F	PHASE	CAST IR	ITIW NC	HOUT STRAINER- 50 HZ			
▶5CSPHJ3-142	220-240/380-415	13.0/6.9	5	1.00	5		6 in. x 4 in.	260	Α
▶5CSPHK3-143	220-240/380-415	20.7-21.5/12.0/12.4	7-1/2	1.00	7-1/2		6 in. x 4 in.	270	В
▶5CSPHL3-144	220-240/380-415	27.0-27.5/15.6- 15.9	10	1.00	10		6 in. x 4 in.	280	С
▶ 5CSPHM3-145	220-240/380-415	38.9-20.6	15	1.00	15		6 in. x 4 in.	300	D
	1	THREE PHASE EI	POXY	COATED	CAST IR	ON WITHOUT STRAINER	! - 50 HZ		
▶5CCSPHJ3-142	220-240/380-415	13.0/6.9	5	1.00	5		6 in. x 4 in.	260	Α
▶ 5CCSPHK3-143	220-240/380-415	20.7-11.0	7-1/2	1.00	7-1/2		6 in. x 4 in.	270	В
▶5CCSPHL3-144	220-240/380-415	26.9-14.3	10	1.00	10		6 in. x 4 in.	280	С
▶ 5CCSPHM3-145	220-240/380-415	38.9-20.6	15	1.00	15		6 in. x 4 in.	300	D
		A	CCESS	ORIES F	OR 5CS	P/5CCSP SERIES			
PKG 184	Strainer for CSP capacity)	CCSP 6 in. ANSI f	lange (	1,100 cu. iı	1.	NSF <sup>4</sup>	6 in. x 6 in.	180	I
PKG 184C	Same as PKG 18	34 Except Strainer	is Epox	y Coated		NSF ⁴	6 in. x 6 in.	180	1
357262	Flange 4 in. w/ ga	asket and SS hard	ware <sup>2</sup>					20	
357263	Flange 6 in. w/ ga	asket and SS hard	ware 2					23	

This product either meets or is exempt from the DOE Dedicated Purpose Pool Pump regulation. This product will remain available after the DOE regulation takes effect in July 2021.

CALIFORNIA PROPOSITION 65 WARNING

<sup>1</sup> Amp draw may vary depending on motor manufacturer. Full load amps on motor model plate.

<sup>&</sup>lt;sup>2</sup> Thermoplastic PVC socket style.

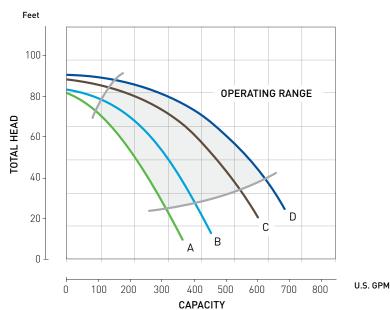
<sup>&</sup>lt;sup>3</sup> Product may have been evaluated to other state and local regulatory standards. Listing status may change. Always confirm status with appropriate agency if in doubt.

<sup>4 &#</sup>x27;NSF(2)' indicates that product bears a mark signifying evaluation to NSF Standard 50 For Materials and Components.

# **5CSP/5CCSP SERIES™**

# 50 HERTZ COMMERCIAL SELF-PRIMING PUMP (CONT'D)

### **Dimensions and Performance**



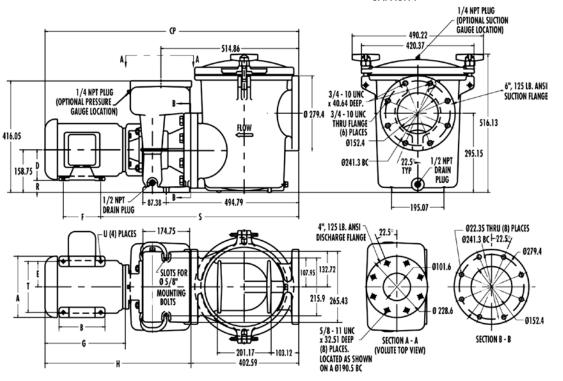
CALIFORNIA PROPOSITION 65 WARNING

WARNING: Cancer and Reproductive Harm.

AVERTISSEMENT: Peut Causer le Cancer et des Dommages au Système Reproducteur.

ADVERTENCIA: Cáncer y Daño Reproductivo.

www.p65warnings.ca.gov.



Catalog Number	Α	В	СР	D	Е	F	R	S	Т
5CSPHJ	269.75	177.8	1039.62	133.25	107.95	139.7	25.4	733.3	215.9
5CSPHK	269.75	215.9	1075.69	133.25	107.95	177.8	25.4	733.3	215.9
5CSPHJ3	228.6	171.45	988.82	133.25	95.25	139.7	44.45	734.06	190.5
5CSPHK3	269.75	177.8	1039.62	133.25	107.95	139.7	25.4	733.3	215.9
5CSPHL3	269.75	215.9	1075.69	133.25	107.95	177.8	25.4	733.3	215.9
5CSPHM3	317.5	274.32	1185.67	158.75	127.0	209.55	-	793.75	254.0

All dimensions shown in millimeters.

# **AURORA® 3800 SERIES AND 410 SERIES**

# END SUCTION AND SPLIT CASE PUMPS



## **Featured Highlights**

- · Multiple configurations available
- · Models to 100 ft. TDH
- Compatible with Acu Drive<sup>™</sup> XS VF Drive
- · Cast Iron Stainless Steel Fitted Models
- · Flooded Suction applications
- · Highly reliable performance
- · NSF certified models available
- · Various flow capabilities for all applications
- · Epoxy Coating option available
- ODP and TEFC motors in Standard and Premium efficiency available
- PS Series In-line Strainers match up to most Aurora pumps.

Pentair now offers the Aurora 3800 Series End Suction and the 410 Series Split Case Pumps for commercial pools, spas, and other water applications. The 3800 and 410 Series are available in horizontal and vertical configurations in horsepowers to 150 and flows to 8,000 GPM.

## **Ordering Information**

Product	Description	Carton Wt. (Lbs.)
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Please contact our factory (1-800-831-7133) for applications sizing, pricing, and availability.

	AURORA PUMP ACCESSORIES FLANGE ASSEMBLY KITS			
357259	Flange 2-1/2 in. w/ gasket and SS hardware <sup>1</sup>	16		
357260	Flange 5 in. w/ gasket and SS hardware 1	22		
357261	Flange 3 in. w/ gasket and SS hardware 1	18		
357262	Flange 4 in. w/ gasket and SS hardware 1	20		
357263	Flange 6 in. w/ gasket and SS hardware 1	23		

<sup>&</sup>lt;sup>1</sup> Thermoplastic PVC socket style.



# **HYDROBOOST® BOOSTER PUMP**

# PRESSURE-SIDE CLEANER PUMP

## **TRADE**GRADE





HydroBoost Booster Pump

## **Featured Highlights**

- Totally Enclosed Fan Cooled (TEFC) Motor to help reduce the chance of motor burnout
- Certified by ENERGY STAR®
- Quick installation
- Reliable operation
- THP: 0.8 WEF: 0.62

The HydroBoost Booster Pump provides high pressure water to your pressure side automatic pool cleaner. This booster pump is NOT self-priming and should not run unless the filter pump is running.

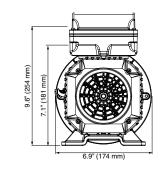
## **Ordering Information**

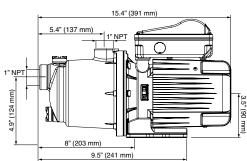
Product	Voltage	Full Load Amps	THP	WEF	Primary Listings and Certifications <sup>2</sup>	Port Size (NPT)	Carton Wt. (Lbs.)
			HYDR	OBOOST BO	OSTER PUMP		
360526	115/230	9.0/4.5	0.8	0.62	UL <sup>1</sup>	1"	29.18
				ACCESSO	RIES		

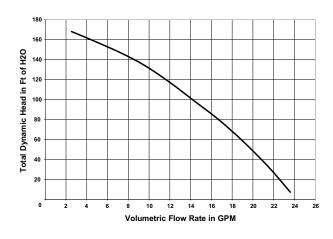
353040 Hose Kit (includes 3/4" - 1" Adapters (2); 6 ft. Hose (1)

- <sup>1</sup> 'UL' indicates that pump bears a specific UL mark signifying evaluation to U.S. Standards UL1081 for Permanently Connected Swimming Pool and Spa Pumps and to Canadian Standards CAN/CSA C22.2 No. 108-01 Liquid Pumps For Swimming Pools And Spas. (Enclosure 3).
- <sup>2</sup> Product may have been evaluated to other state and local regulatory standards. Listing status may change. Always confirm status with appropriate agency if in doubt.
- Pumps and replacement motors that are single speed and one (1) Total HP or greater cannot be sold, offered for sale, or installed in a residential pool for filtration use in California, Title 20 CCR sections 1601-1609.

#### **Dimensions and Performance**







## PCD-1000 SUBMERSIBLE PUMP

## STAINLESS STEEL SUBMERSIBLE POOL SERVICE PUMP



The PCD-1000 submersible, portable, high capacity pump designed for use by the professional in draining pools and spas as well as for general purpose applications, now has improved flow rates, and stainless steel casing, suction strainer, impeller and shaft for greater corrosion resistance and longer service life.

The PCD-1000 can pump water down to 1-3/8 inches in depth. Debris and stones up to 3/4 inch are able to pass through the pump. It also features a 1-1/4 inch discharge port for faster draining. Discharge port adapters are included. Optional float switch included; switch stops pump when low water level reached. Remove float switch for constant run.

### **Featured Highlights**

- 115V, 60 Hz single phase, permanent split capacitor motor
- · Automatic thermal overload protection
- · Clog-resistant cast stainless steel impeller
- Accommodates water temperatures ranging from 32 degrees F to 130 degrees F
- · Permanently lubricated ball bearings
- · Equipped with 15-foot, 18/3 grounding type power cord
- · Convenient top-mounted handle
- · Rubber feet to reduce scratching
- · Optional float switch included



Adaptors included:

- 1-1/4 in. Female NPT Elbow
- 1-1/4 in. Male NPT to 1-1/2 in. Female NPT Adaptor



CALIFORNIA PROPOSITION 65 WARNING

▲ WARNING: Cancer and Reproductive Harm.
▲ AVERTISSEMENT: Peut Causer le Cancer
des Dommages au Système Reproducteur.
▲ ADVERTENCIA: Cáncer y Daño Reproductivo.
www.p65warnings.ca.gov.

## **Ordering Information**

Product	Description	Voltage	Full Load Amps	НР	Carton Wt.(Lbs.)
	STAINLESS STEEL S	UBMERSIBLE WITH BRA	ASS BASE		
▶ PCD-1000	Submersible Utility Pump	115	6.4	3/4	15
	Д	CCESSORIES			
ZBR46760	Replacement Float Switch				

This product either meets or is exempt from the DOE Dedicated Purpose Pool Pump regulation. This product will remain available after the DOE regulation takes effect in July 2021.

### **Dimensions and Performance**

		Motor		Minimum	Liquid	Switch	Setting	Pumps
Model	HP	Full Load (Amps)	RPM	Circuit Req.	Temperature Range	On	Off	Down To
PCD-1000	3/4	6.4	3450	15 amps	32/130°F 0/54°C	12" 30 cm	6" 15.2 cm	1¾" 3.5 cm

Pump Performance TDH/GPM						Shut Off Head
TDH	5'	10'	15'	20'	25'	28
GPM	55	45.5	36.5	25	8.5	N/A

# PARTS-PAKS™ AND ACCESSORIES

# POINT-OF-SALE, STOCK ROOM, SERVICE VEHICLE

**OVERHAUL KITS** – Attractive, clamshell packaging contains recommended parts for seal/gasket servicing or complete overhaul of most swimming pool/spa pumps. Reduce the need for large parts inventories, protect parts from damage, and reduce paperwork.









#### Pump Model by HP PE, P2R PEA, P2RA Product PR PRA SEAL/GASKET KITS - Include shaft seal, gaskets, and O-rings PP1010 1/3 1/3, 1/2 1/2 PP1011 3/4 3/4 1/2 1/2 PP1012 3/4 1 PP1014 3/4 PP1016 1 1-1/2 PP1017 2 2-1/2 2 2-1/2 PP1018 1-1/2 PP1019 3

	Pump Model by HP			
Product	CH, LT, L1	LHA, LTA, L1A	PCD	
SEAL/GA		S – Include sl nd O-rings	haft seal,	
PP1080	1/6			
PP1081	1/3	1/2		
PP1082	1/2	3/4		
PP1682			1/2	

# **Ordering Information**

	Pum	p Model by	<u>/ HP</u>
Product	P4E, P4R	P4EA, P4RA	MPRA, MPEA
_	GASKET KI eal, gaskets,		
PP4010	3/4	1	
PP4011	1	1-1/2	
PP4012	1-1/2	2	
PP4013	2	2-1/2	
PP4014	3		
PP3010			3/4
PP3011			1
PP3012			1-1/2
PP3013			2

	CALIFORNIA PROPOSITION 65 WARN	IING
1	WARNING: Cancer and Reproductive H AVERTISSEMENT: Peut Causer le Can et des Dommages au Système Repro	cer oducteur.
4	ADVERTENCIA: Cáncer y Daño Repro	auctivo.
L	www.p65warnings.ca.gov.	PIN 200174.A

Product	Danish kina	0
Product	Description SEAL/GASKET KITS – Include shaft seal, gaskets, and O-rings	Carton Wt. (Lbs.)
PP1075	LH, LHA, LT, LTA, L1, L1A - All HP	
PP3000	MPRA, MPEA - All HP	
PP1000	PE, PEA, PR, PRA, P2R, P2RA (models with copper insert pre-1998) - All HP	
PP4000	P4E, P4EA, P4RA (models with copper insert pre-1998) - All HP	
PP1200	PE, PEA, P2R, P2RA (models without copper insert beginning 1998) - All HP	
PP4200	P4E, P4EA, P4RA, P4RA (models without copper insert beginning 1998) - All HP	
	TRAP LID KITS – Include trap lid and trap lid o-ring	
PP2075	PE, PEA, PR, PRA, P2R, P2RA (with 5 in. trap – standard) - ALL HP	
PP4075	P4E, P4EA, P4RA, P4RA, MPR, MPE (with 6 in. trap – standard) - ALL HP	
	PUMP CONNECTOR UNION HALF (WILL NOT FIT DJ OR TP SERIES PUMPS)	
PKG 188Z	2 in. Union x 2 in. Slip, 2 per Pkg.	1
PKG 189	2 in. Union x 2 in. FPT, 2 per Pkg.	1
77703-0100	2 in. Union x 1-1/2 in. FPT, 2 per Pkg.	1
77703-0101	2 in. Union x 1-1/2 in. Slip, 2 per Pkg.	1
	PUMP BASE NOISE REDUCER	
17350-0008	Rubber Pump Base Pad for MPR, P4R, P4E, TPR, TPE Models	1
	SEAL KIT - CHEMICAL/SALT/OZONE RESISTANT EPDM & SS SEALS	
356196	Seal Quick Kit Max-E-Pro / IntelliPro and VS Pumps Chemical/Salt/Ozone Resistant EPDM & SS	1
356197	Seal Quick Kit SuperFlo /SuperMax and VS Pumps Chemical/Salt/Ozone Resistant EPDM & SS	
356198	Seal Quick Kit WhisperFlo/IntelliFlo and VS Pumps Chemical/Salt/Ozone Resistant EPDM & SS	
356199	Seal Quick Kit Challenger Pumps Chemical/Salt/Ozone Resistant EPDM & SS	

# HAIR AND LINT STRAINER PACKAGES



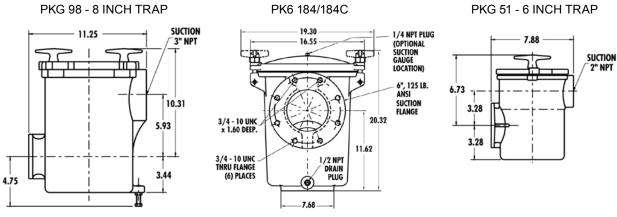
# **Ordering Information**

ADVERTENCIA: Cáncer y Daño Reproductivo.

www.p65warnings.ca.gov.

Product	Description	Suction Port Size	Carton Wt. (Lbs.)
	HAIR AND LINT STRAINER PACKAGES		
PKG 115	5 in. Trap with Basket (For Dura-Glas, Max-E-Glas and JWP Pumps)	1-1/2 in. NPT	5
PKG 51	6 in. Cast Iron Trap with Basket (For C, CC, and D Series Pumps)	2 in. NPT	20
PKG 98	8 in. Cast Iron Trap with Basket (For C, CC, and D Series Pumps)	3 in. NPT	40
PKG 161	6 in. PPO Resin Strainer (For P2R, PE Series, Dura-Glas and Max-E-Glas Pumps)	2 in. NPT	6
PKG 184	CSP Series Hair and Lint Strainer (1100 cu. in. capacity)	6 in. ANSI Flange	180
PKG 184C	CCSP Series Hair and Lint Strainer – Coated (1100 cu. in. capacity)	6 in. ANSI Flange	180

## **Dimensions and Performance** 6 5 Pressure Drop in PSI PKG 98 - 8 in. PKG. 51/56 6" TRAP PKG. 98/99 8" TRAP 0 20 100 140 180 U.S. Gallons per Minute CALIFORNIA PROPOSITION 65 WARNING ▲ WARNING: Cancer and Reproductive Harm. ▲ AVERTISSEMENT: Peut Causer le Cancer et des Dommages au Système Reproducteur



PKG 184 - 8 in.

PKG 51 - 5 in. OR 6 in.

# **CONVERSION REFERENCE CHARTS**

- 1 U.S. Gallon/Minute = 0.22712470704 Cubic Meter/Hour
- 1 U.S. Gallon/Minute = 0.83267418463 UK Gallon/Minute
- 1 Foot of Water/Head = 0.30487804878 Meter of Water/Head
- 1 Foot of Water/Head = 0.43352750193 Pound/Square Inch

Pressure to Head Conversion				
Feet of Water	Meters of Water	PSI		
10	3.05	4.34		
20	6.10	8.67		
30	9.15	13.01		
40	12.20	17.34		
50	15.24	21.68		
60	18.29	26.01		
70	21.34	30.35		
80	24.39	34.68		
90	27.44	39.02		
100	30.49	43.35		
110	33.54	47.69		
120	36.59	52.02		
130	39.63	56.36		
140	42.68	60.69		
150	45.73	65.03		

Volumetric Flow Rate Conversion				
US Gallons	Cubic Meters	British Gallons		
per Minute	per Hour	per Minute		
10	2.27	8.33		
20	4.54	16.65		
30	6.81	24.98		
40	9.09	33.31		
50	11.36	41.64		
60	13.63	49.96		
70	15.90	58.29		
80	18.17	66.62		
90	20.44	74.94		
100	22.71	83.27		
110	24.98	91.60		
120	27.26	99.92		
130	29.53	108.25		
140	31.80	116.58		
150	34.07	124.91		
160	36.34	133.23		
170	38.61	141.56		
180	40.88	149.89		
190	43.15	158.21		
200	45.43	166.54		
210	47.70	174.87		
220	49.97	183.19		
230	52.24	191.52		
240	54.51	199.85		
250	56.78	208.18		
260	59.05	216.50		
270	61.32	224.83		
280	63.60	233.16		
290	65.87	241.48		
300	68.14	249.81		
310	70.41	258.14		
320	72.68	266.46		
330	74.95	274.79		
340	77.22	283.12		
350	79.49	291.45		
360	81.77	299.77		
370	84.04	308.10		
380	86.31	316.43		
390	88.58	324.75		
400	90.85	333.08		