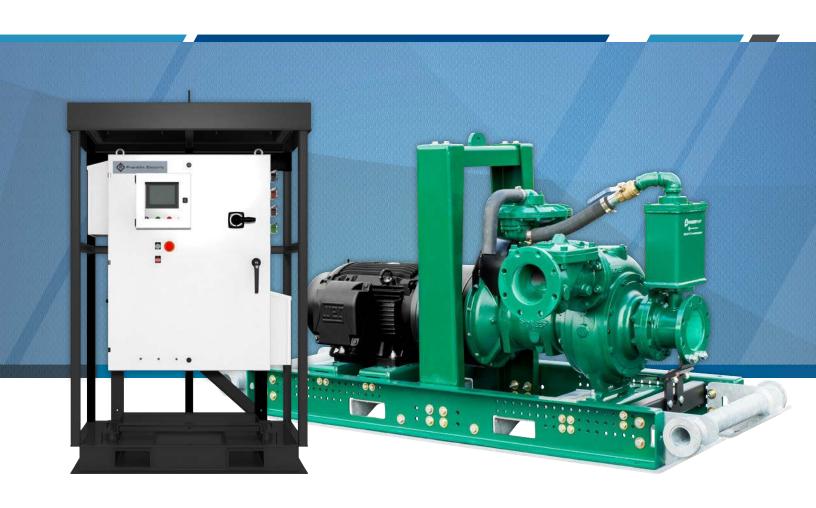


# **Electric PAK**ELECTRIC-DRIVEN PUMP PACKAGES





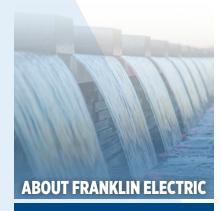
# **ELECTRICPAK ELECTRIC-DRIVEN PUMP PACKAGES**

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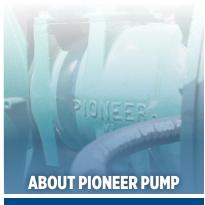
For the most up-to-date product information, visit **pioneerpump.com**.



# YOUR PARTNER FOR WATER SYSTEMS



Franklin Electric is a global provider of complete systems for the movement of water.



Pioneer Pump, a brand of Franklin Electric, specializes in the engineering and manufacturing of large centrifugal pumps and packages.



Transport water and wastewater for any sized job with our proven portfolio of centrifugal pumps.

#### **MODULAR DESIGN. QUICK TURNAROUND.**



The Pioneer Pump® ElectricPAK™ delivers more than just a modular design that can arrive on site and startup quickly. It's also engineered from the ground up to offer a fully streamlined experience for both owners and operators.

From initial selection, to installation, to a lifetime of operation: durability and performance are built into every component. Each configured assembly includes high-performance pumps and electric motors that provide better flow, higher head and greater efficiency.







#### **OVERVIEW**

#### AVAILABLE PUMP ENDS FOR YOUR ELECTRICPAK

	FL	DODED SUCTION (NO PRIMIN	IG)	VA	ACUUM-ASSISTED DRY PRIMII	NG
Pump End Configuration	CLEAR LIQUIDS	SOLIDS HANDLING	VORTEX (EXTREME SOLIDS HANDLING)	CLEAR LIQUIDS	SOLIDS HANDLING	VORTEX (EXTREME SOLIDS HANDLING)
PUMP SIZE	3-12" (80-300 mm)	4-12" (100-760 mm)	4-8" (100-200 mm)	3-12" (80-300 mm)	4-12" (100-300 mm)	4-6" (100-150 mm)
FLOW RANGE		00 gpm 0 m³/h)	1,450-3,600 gpm (329-818 m³/h)	100-10,2 (4-10,00	200 gpm 00 m³/h)	1,450-2,300 gpm (329-522 m³/h)
MAX HEAD	530+ feet (160+ meters)	420+ feet (130+ meters)	150+ feet (46+ meters)	530+ feet (160+ meters)	420+ feet (130+ meters)	130+ feet (40+ meters)
SOLIDS SIZE	0.5-2.3" (10-60 mm)	2-3.75" (50-95 mm)	3.15-5.12" (80-130 mm)	0.5-2.3" (10-60 mm)	2-3.75" (50-95 mm)	3.15-4.92" (80-125 mm)
WET END MATERIAL	Ductil	e Iron	Ductile Iron	Ductil	Ductile Iron	
IMPELLER MATERIAL	CA6NM Sta	inless Steel	Ductile Iron	CA6NM Sta	inless Steel	Ductile Iron

#### THE PIONEER PRIME ADVANTAGE

A true dry-prime pump, our self-priming system eliminates the need to prime the pump and is engineered to prevent product carryover. The Pioneer Prime hydraulic design maximizes lift capability and offers both quick initial priming and continuous, unattended reprime under auto stop/start conditions.

#### **FEATURES:**

1. Stainless Steel Air Separation Valve

Allows for rapid priming with no product carryover

2. Priming Chamber

Stainless steel internal parts for longer life

3. Reliable Sealing Components

Hybrid cassette seals simultaneously prevent leakage and eliminate shaft wear

4. Heavy-Duty Modular Bearing Housing

Designed to run at high speeds without risk of shaft or bearing failure

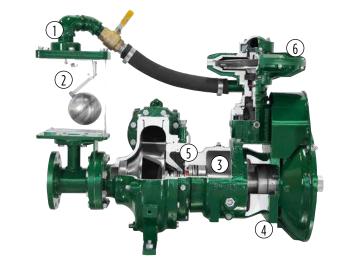
Run-Dry System

Oil-lubricated mechanical seal allows the pump to run completely dry without damage

6. Vacuum Pump

**Priming Chamber** 

Belt driven from pump shaft



#### PIONEER PRIME SYSTEM & OTHER SPECIFICATIONS

Priming System
Mechanically driven diaphragm-style wacuum pump
Mechanical Seal
Vacuum pump
So CFM
Mechanical Seal
Single seal w/tungsten carbide vs. silicon carbide seal faces, FKM elastomers, 300 series stainless steel hardware and spring, designed for indefinite

Single chamber w/positive sealing air

separation PosiValve™ with stainless steel
float ball and linkage

Pump End Bearing
Single row ball

Pump End Bearing
Double row angular contact

**Discharge Check Valve** Swing style: ductile iron w/nitrile disc **Shaft** 17-4 PH stainless steel

**SAE** Engine-mount bracket options available



#### **OVERVIEW**

#### POWERING YOUR ELECTRICPAK

Every ElectricPAK is engineered with heavy duty motors that are ideally suited for industrial applications:

- Totally Enclosed Fan Cooled (TEFC), Premium Efficiency (PE), severe duty rated (meets Class 1 Div 2)
- Inverter duty with insulated bearing for use with Variable Frequency Drive (VFD)
- Listed are 3-Phase, 60 Hz with voltage and frame size noted



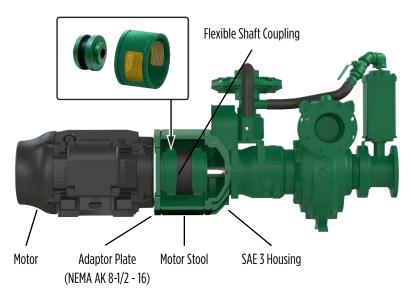
#### MOTOR SPECIFICATIONS

LID	Voltage		Frame Size	
HP		2-Pole (3600 RPM)	4-Pole (1800 RPM)	6-Pole (1200 RPM)
7.5	230/460	213T	213T	254T
10	230/460	215T	215T	256T
15	230/460	254T	254T	284T
20	230/460	256T	256T	286T
25	230/460	284T	284T	324T
30	230/460	286T	286T	326T
40	230/460	324T	324T	364T
50	230/460	326T	326T	365T
60	230/460	364T	364T	404T
75	230/460	365T	365T	405T
100	230/460	405T	405T	444T
125	230/460	444T	444T	447T
150	460	445T	445T	447T
200	460	447T	447T	447T
250	460	449T	449T	449T
300	460	449T	449T	L449T
350	460	449T	449T	N/A

NOTE: All motors are TEFC, premium efficiency, severe duty rated and inverter duty with insulated bearing for use with VFD; All motors listed are 3-Phase, 60 Hz with voltage and frame size noted

#### MOTOR STOOL DESIGN

The ElectricPAK uses a new bracket design that rigidly connects the pump and motor together. The bracket, also known as a motor stool, is engineered to precise tolerances to ensure that the coupling remains aligned and protected. ElectricPAK units can be moved and transported freely without the need to perform a realignment and are designed specifically with heavy-duty, suction lift applications in mind.







#### **OVERVIEW**

# MOTOR STOOL SPECIFICATIONS

HP	Platform Size	Pump SAE Size	Motor Stool
7.5	Small	SAE 5	NEMA A
10	Small	SAE 5	NEMA A
15	Small	SAE 5	NEMA A
20	Small	SAE 5	NEMA A
25	Small	SAE 5	NEMA A
30	Small	SAE 5	NEMA A
40	Small	SAE 5	NEMA A
50	Medium	SAE 3	NEMA B
60	Medium	SAE 3	NEMA B
75	Medium	SAE 3	NEMA B
100	Medium	SAE 3	NEMA B
125	Large	SAE 3	NEMA B
150	Large	SAE 3	NEMA B
200	Large	SAE 3	NEMA B
250	Large	SAE 3	NEMA B
300	Large	SAE 3	NEMA B
350	Large	SAE 3	NEMA B

#### VARIABLE FREQUENCY DRIVE OPTIONS

A variable frequency drive (VFD) on the job site needs to be as tough as the environment it's in. That's why we've taken the best features of our most popular VFD system and re-packaged it to withstand the demands of transport and deliver a more intuitive startup experience with our SmartPrime touchscreen interface. You get the operating performance you need, packaged the way that works best for you: full ElectricPAK system or standalone skid.

#### **ELECTRICPAK VFD**



#### **INTEGRATED ELECTRICPAK**



#### **SMARTPRIME CONTROL INTERFACE**



The SmartPrime interface handles all aspects of operations with easy-to-navigate graphics, eliminating the need for complex keypad setup.

3



# **SMALL PLATFORM**

# **GENERAL SPECIFICATIONS**

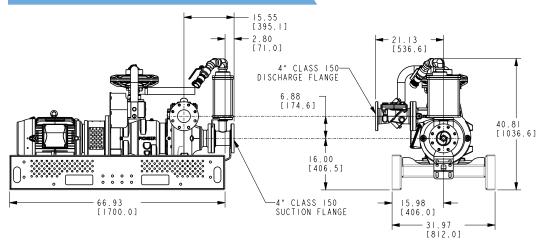
- 3-6" pump models
- Pioneer Prime & Standard Centrifugal Configurations:
  - Clear Liquids
  - Solids Handling
  - Vortex
- 7.5-30 hp motor models

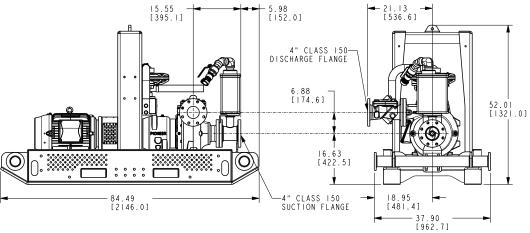
#### **APPLICATIONS**

- Site dewatering
- General bypass
- Jetting



#### **DIMENSIONS**









#### **SMALL PLATFORM**

# SIZING: PUMPS & IMPELLER TRIMS

	Model No.		2 F	Pole Motors	(3600 RF	PM)			41	Pole Motor	s (1800 RF	PM)		6	Pole Motor	s (1200 RPM	l)
Configuration	Motor HP	7.5	10	15	20	25	30	7.5	10	15	20	25	30	7.5	10	15	20
	Motor Frame	213T	215T	254T	256T	284T	286T	213T	215T	254T	256T	284T	286T	254T	256T	284T	286T
	44\$8								7"	7.75"	8.25"			8.25"			
	44S8B									7"	8"	8.25"		8.25"			
	44S10									8"	8.5"	9"	9.5"	9"	10"		
	64S12												9"		9"	10"	11"
	66S10									8"	8.25"	8.5"	9"	8.75"	9.25"	10"	
	66S12														9"	10"	11"
Solids Handling	88S12														9"	10"	11"
	66S14																
	64S17																
	86S17																
	108S17																
	1212S17																
	86S20																
	315C75	6.75"	7.5"														
	32C75	6"	6.5"	7.5"													
	425C75			6"	6.5"	7"	7.5"										
	43C75				6.5"	6.75"	7"										
	44C75					6"	6.25"	7.5"									
	54C75					6"	6.25"	7.25"	7.5"								
	32C10				8.5"	9"	9.5"										
	425C10							9.75"	10.25"								
	43C10							8.75"	9.5"	10.25"							
	64C10								8.5"	10.25"							
	86C10										8.75"	9.25"	9.5"	9.25"	9.75"	10.25"	
	53C14										11"	11.5"	12"	11.75"	13"	14"	
Clear Liquids	64C14																
	66C14															11"	12"
	86C14																
	1010C14																
	63C17																
	64C17																14"
	86C17																
	86C17B																
	1212C17																
	108C18																
	43C21																
	64C21																
	86C21																
	44V10																
Vortex	66V10												9.65"				
VOILEX	66V12																
	88V12																

NOTE: Impeller diameter shown in cross reference ensures full curve coverage at 60 Hz (1800 rpm) for a given motor and pump combination; for in depth selection, refer to FE Select NOTE: Model number listed in table is suitable for both Standard Centrifugal and Pioneer Prime configurations of each pump

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# **MEDIUM PLATFORM**

#### **GENERAL SPECIFICATIONS**

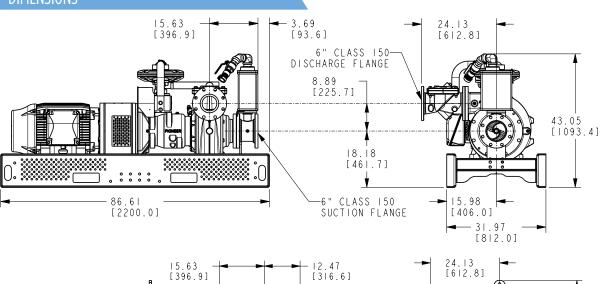
- 4-10" pump models
- Pioneer Prime & Standard Centrifugal Configurations:
  - Clear Liquids
  - Solids Handling
  - Vortex
- 40-125 hp motor models

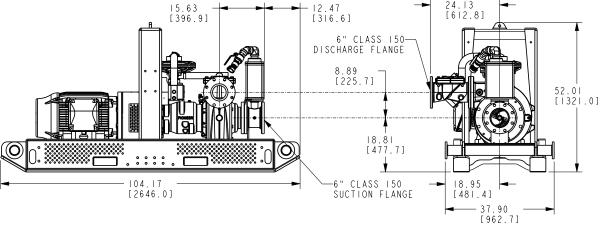
#### **APPLICATIONS**

- Site dewatering
- General bypass
- Jetting



#### **DIMENSIONS**









#### MEDIUM PLATFORM

# SIZING: PUMPS & IMPELLER TRIMS

	Model No.		2 F	ole Motors	s (3600 RF	PM)			4 Pole M	1otors (18	00 RPM)			61	Pole Motor	s (1200 RF	PM)	
Configuration	Motor HP	40	50	60	75	100	125	40	50	60	75	100	25	30	40	50	60	75
	Motor Frame	324T	326T	364T	365T	405T	444T	324T	326T	364T	365T	405T	324T	326T	364T	365T	404T	405T
	44\$8																	
	44S8B																	
	44S10							10"										
	64S12							10"	10.5"	11.25"	12"		12"					
	64S17											14"		14"	15"	16"	17"	
	66S10							10"										
Solids Handling	66S12							9.5"	10.5"	11"	12"		12"					
	66S14										11.5"	13"	12"	13"	14"			
	86S17														14"	15"	15.75"	17"
	86S20																	
	88S12								10.25"	11"	11.75"	12.25"	12.25"					
	108S17																	
	1212S17																	
	315C75																	
	32C75																	
	425C75																	
	43C75	7.5"																
	44C75	6.75"	7.25"	7.5"														
_	54C75	6.5"	7"	7.5"														
	32C10	10.25"																
	425C10	8.5"	9.25"	9.75"	10.25"													
	43C10		8.75"	9"	9.5"	10.25"												
	64C10				8.5"	9.5"	10.25"											
	86C10							10.25"										
	53C14							13.5"	14"	40.5"	47.05"		44.05"	440				
Clear Liquids	64C14							11"	12"	12.5"	13.25"	14"	11.25"	14"	4.411			
	66C14								11.25"	11.5"	12.5"	13.5"	12.5"	13" 12"	14" 13"	1.47		
	86C14										11.25"	12"	11.25"			14"	1.4"	
	1010C14 63C17								13.75"	14.75"	15 75"	11" 17"	16"	11" 17"	12"	13"	14"	
	64C17								15.75	14./5	15.75" 15"	16.75"	15"	16"	17"			
	86C17										15	10.75	15	10	14"	15"	16"	17"
	86C17B														15"	16"	17"	17"
	1212C17														13	10	17	
	1212C17 108C18															14"	15"	16"
	43C21											18.5"	17.75"	18.75"	21"	14	l)	10
	64C21											10.5	17.73	10.73	18"	19"	20"	21"
	86C21														10	13	20	- 21
	44V10							10.65"										
	66V10							10.03										
Vortex	66V12										10.24"							
-	88V12										10.24							

NOTE: Impeller diameter shown in cross reference ensures full curve coverage at 60 Hz (1800 rpm) for a given motor and pump combination; for in depth selection, refer to FE Select NOTE: Model number listed in table is suitable for both Standard Centrifugal and Pioneer Prime configurations of each pump

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# **LARGE PLATFORM**

#### **GENERAL SPECIFICATIONS**

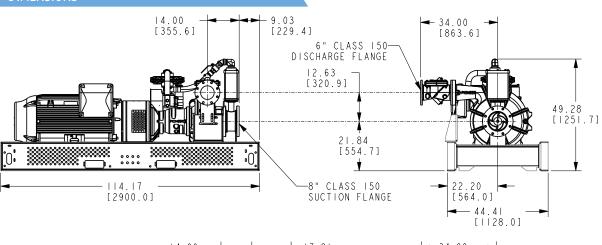
- 6-12" pump models
- Pioneer Prime & Standard Centrifugal Configurations:
  - Clear Liquids
  - Solids Handling
  - Vortex
- 125-350 hp motor models

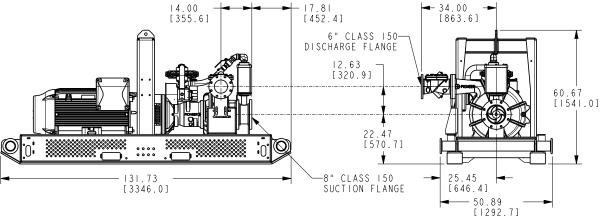
#### **APPLICATIONS**

- High head dewatering
- Long distance water transfer
- High volume bypass



#### **DIMENSIONS**









#### LARGE PLATFORM

# SIZING: PUMPS & IMPELLER TRIMS

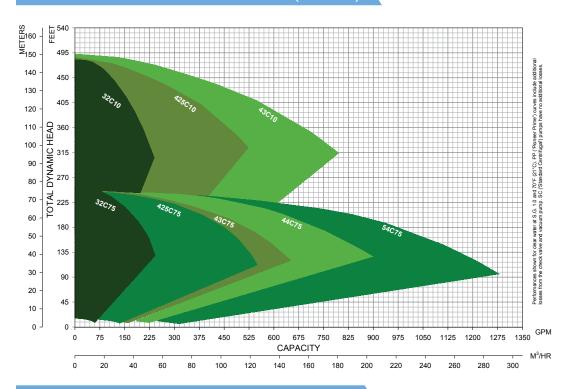
	Model No.			4 Pole Motor	rs (1800 RPM)			6 Pole Motors (1200 RPM)				
Configuration	Motor HP	125	150	200	250	300	350	100	125	150	200	
	Motor Frame	444T	445T	447T	449T	449T	449T	444T	445T	447T	449T	
	4458											
	44S8B											
	44S10											
	64S12											
	66S10											
	66S12											
Solids Handling	88S12											
	66S14	13.75"	14"									
	64S17	14.75"	15.5"	17"								
	86S17	14"	14.5"	15.75"	17"							
	108S17			14.75"	15.75"	16.5"	17.25"	17"	17.5"			
	1212S17					16"	17.25"	17.25"				
	86S20				17"	17.75"	18.5"	18.25"	19.25"	20"		
	315C75											
	32C75											
	425C75											
	43C75											
	44C75											
	54C75											
	32C10											
	425C10											
	43C10											
	64C10											
	86C10											
	53C14											
Clear Liquids	64C14											
	66C14	14"										
	86C14	12.75"	13.5"	14"								
	1010C14	12"	12.5"	13.75"	14"							
	63C17											
	64C17	17"	44.750	45.75"	470							
	86C17	15"	14.75"	15.75"	17"							
	86C17B	15"	15.75"	17"		11.05"	4475"		45.50	46.5"	47.05"	
	1212C17			15"	1611	14.25"	14.75"	17.05"	15.5"	16.5"	17.25"	
	108C18	10.75"	21"	15"	16"	16.75"	17.5"	17.25"	18.25"			
	43C21	19.75"	21"	20"	21"							
	64C21		18.25"	20"	21"	10"	10"	10"	2011	21//		
	86C21					18"	19"	19"	20"	21"		
	44V10 66V10											
Vortex	66V10 66V12											
			11 01//									
	88V12		11.91"									

NOTE: Impeller diameter shown in cross reference ensures full curve coverage at 60 Hz (1800 rpm) for a given motor and pump combination; for in depth selection, refer to FE Select NOTE: Model number listed in table is suitable for both Standard Centrifugal and Pioneer Prime configurations of each pump

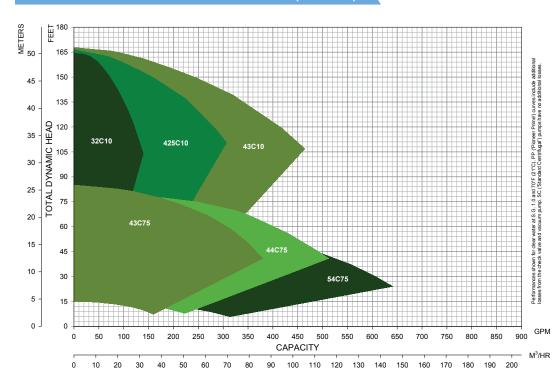


All performance curves cover both Standard Centrifugal and Pioneer Prime pump ends.

#### SMALL PLATFORM: CLEAR LIQUIDS 2-POLE 60 HZ (3600 RPM)



#### SMALL PLATFORM: CLEAR LIQUIDS 4-POLE 60 HZ (1800 RPM)

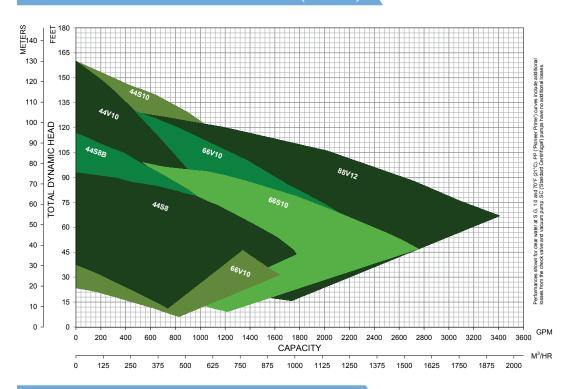




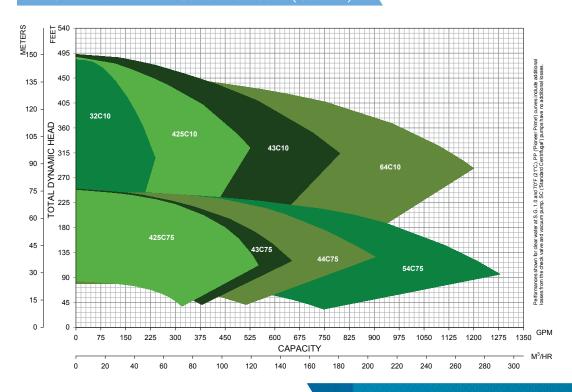


All performance curves cover both Standard Centrifugal and Pioneer Prime pump ends.

#### SMALL PLATFORM: SOLIDS HANDLING 4-POLE 60 HZ (1800 RPM)



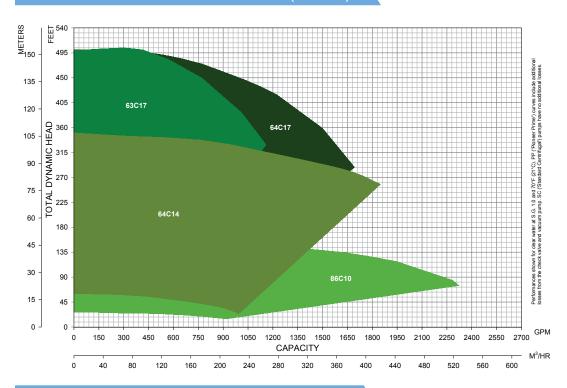
#### MEDIUM PLATFORM: CLEAR LIQUIDS 4-POLE 60 HZ (1800 RPM)



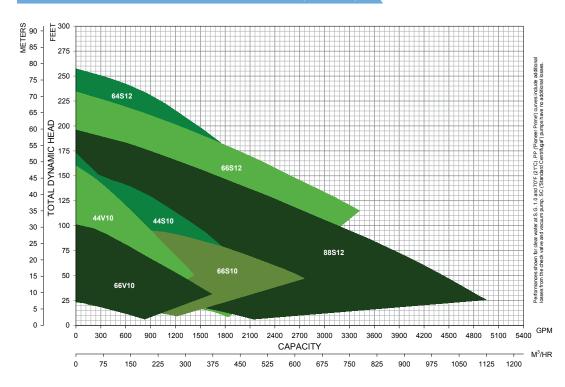


All performance curves cover both Standard Centrifugal and Pioneer Prime pump ends.

#### MEDIUM PLATFORM: CLEAR LIQUIDS 4-POLE 60 HZ (1800 RPM)



#### MEDIUM PLATFORM: SOLIDS HANDLING 4-POLE 60 HZ (1800 RPM)

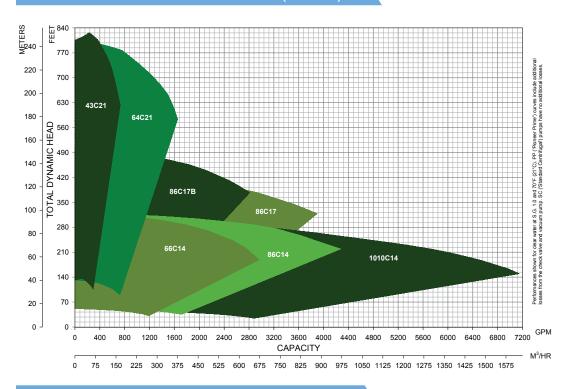




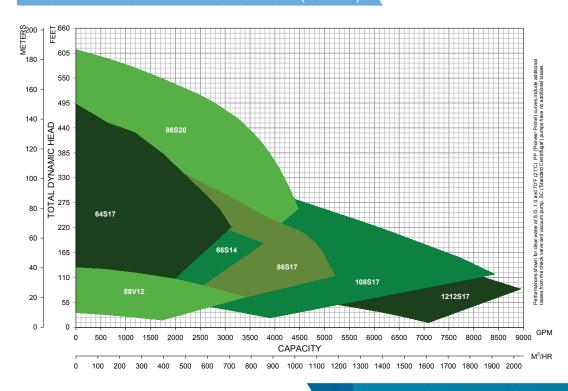


All performance curves cover both Standard Centrifugal and Pioneer Prime pump ends.

#### LARGE PLATFORM: CLEAR LIQUIDS 4-POLE 60 HZ (1800 RPM)



#### LARGE PLATFORM: SOLIDS HANDLING 4-POLE 60 HZ (1800 RPM)





# **INTEGRATED ELECTRICPAK**

The integrated ElectricPAK is a modular offering of electric-driven pump packages engineered from the ground up to offer a fully streamlined experience for owners and operators. Each configured assembly includes a high-performance pump, electric motor and variable frequency drive option that provides total system optimization.

#### **SPECIFICATIONS**

- Integrated drive option is available on 25-150 hp motor ElectricPAK models
- Includes camlock power input to the VFD that is directly wired to the motor for simple startup
- Features Pioneer Pump's easy-to-use SmartPrime interface
- VFD is vibration isolated to mounting points on the base and lifting bail to reduce transportation vibration and ensure panel stability

#### PANEL SIZING & DIMENSIONS

- 50 and 75 HP Panel Size: 48"x 36"x 16"
- 100 and 150 Panel Size: 60"x 36"x 16"
- For integrated ElectricPAK dimensional drawings, contact your Franklin Electric / Pioneer Pump representative







# **ELECTRICPAK VFD**

The ElectricPAK VFD is a rugged, portable variable frequency drive solution designed to withstand the demands of mobile dewatering applications. It features an industry-leading touchscreen interface, known as SmartPrime. Inside the unit, the VFD uses Franklin Electric's proven electronics to deliver dependable performance and optimized motor control.

#### 50 & 75 HP

■ Panel Size: 48"x 36"x 16"

■ Skid Platform: Small

■ Skid Size: 52"x 85"x 34"

#### 100 & 150 HP

■ Panel Size: 60"x 36"x 16"

■ Skid Platform: Small

■ Skid Size: 52"x 85"x 34"

#### 200 & 350 HP

■ Panel Size: 60"x 60"x 24"

■ Skid Platform: Large

■ Skid Size: 80"x 88"x 49"

#### MODEL INFORMATION

SKU	Max. HP	Voltage	HP Range	Operational HP Range
V050-PPI-01	50		25-50	25-50
V075-PPI-01	75		60-75	40-75
V100-PPI-01	100	460	100	50-100
V150-PPI-01	150	400	125-150	75-150
V250-PPI-01	250		200-250	125-250
V350-PPI-01	350		300-350	200-350



50 & 75 HP



100 & 150 HP



200 & 350 HP



# SMARTPRIME™ CONTROL INTERFACE

The SmartPrime control interface is exclusive to Pioneer Pump ElectricPAK systems and as intuitive to use as a mobile app. Users benefit from a fast startup and simple monitoring experience, eliminating the need for complex keypad setup, advanced programming skills or specialized training.

#### **SPECIFICATIONS**

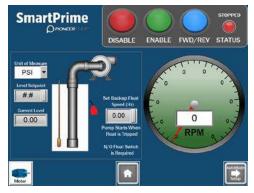
- Handle all aspects of operation from a streamlined central hub with easy-to-navigate graphics
- Two SmartPrime mode options help operators get packages up and running with just a few touches:
  - Manual mode lets users adjust basic pump parameters using simple on-screen tools and includes analog sensor monitoring for up to four control and data variables
  - Auto mode lets users fine tune parameters based on their specific surface dewatering telemetry: level transducers, float switches, pressure transducer or flow meter; this mode features clear graphic displays of real-time pump conditions
- Alternative Hand mode allows users to operate the panel with tactile push buttons and door mounted speed potentiometer; Hand mode tracks and logs alarms onto an SD card for future reference
- Float operation allows the user to control their pump on a single or dual float system, and to back up transducer operation to ensure system redundancy in critical applications
- Transducer modes allow the user to connect a transducer and control a system off level and pressure, enabling simple and precise application setup with a few simple taps
- The SmartPrime interface continuously monitors and stores data on an SD card to ensure that data backup is available to review in case of application issues



The SmartPrime home screen is designed to be intuitive and powerful, with the tools you need to operate your pumping system right at your fingertips.



Manual mode enables pump operators to start up quickly and precisely control speed with familiar touch screen controls.



Auto mode makes it easy to configure a float or transducer-based application, offering simplified menu options and easily configurable operation modes.





# **FE SELECT**

With 24/7 online and mobile-friendly availability, FE Select instantly helps you formalize your deliverables with printable and downloadable quotes: no waiting for a callback.

#### Getting what you need has never been easier.

FE Select is the industry-leading online tool from Franklin Electric that makes configuring a Pioneer ElectricPAK easy for contractors, engineers, fleet managers and wholesale distributors. In minutes you can download full technical specifications and generate pricing to order what you need. It's secure and free-to-use: input your performance requirements or specs, and FE Select will help you find the best Pioneer ElectricPAK to fit your needs.





FE Select USA

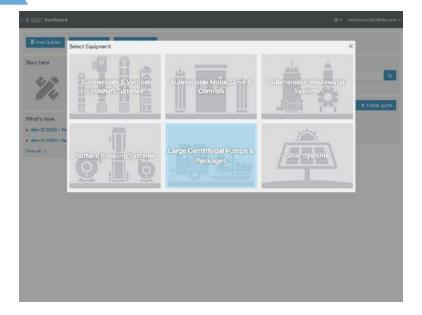
FE Select Canada

#### SIZE

#### Size & Select the Right Pump for the Job

Users input parameters and the tool does the rest: fully specifying what products are recommended, including the necessary components.

- Enter primary application data, such as flow and total dynamic head demands, and the tool will recommend product selections for the job
- Narrow down the recommended products list based on the parameters such as suction/discharge size, power requirements and NPSHr
- Obtain quick access to related informational product documentation and performance curves





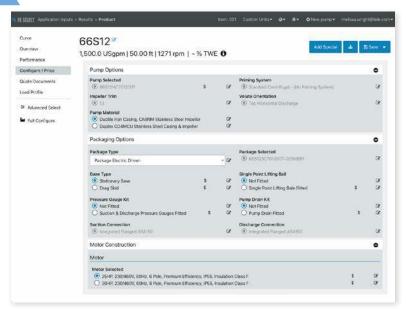
#### FE SELECT

#### **CONFIGURE**

#### **Simplify Configuration & Pricing Tasks**

FE Select offers a configurator tool that provides users with clear visibility of product selection, price breakdown, available options and overall product performance on the performance curve.

- Customize your ElectricPAK to meet application requirements after selecting the ideal pump and impeller size that fits your performance needs
- Select a VFD sized for your application and choose your mounting configuration
- Build out a unique quote with live line-item pricing updates to rapidly setup quotations
- Enhance your proposal documents with package drawings and specifications

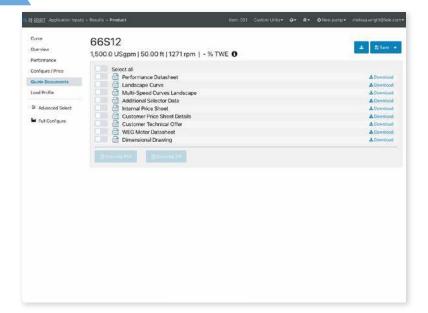


#### QUOTE

#### **Streamline Sales Efforts with Quotation Management**

After selecting and pricing an electric package, users can save their quote to either view later, or move their selection into the ordering process.

- Start your experience managing new or existing work on your dashboard
- Create and save quotations or projects using your FE account\*
- Keep track of your opportunities all in one place







# **ENGINEERED PACKAGES**

Engineered packages are available when application requirements exceed the size limits of the ElectricPAK offering for small, medium and large platforms. These packages are designed for projects that require larger pump or motor sizes and additional packaging options. Engineered packages have limited availability and are not available in FE Select for size, configure or quote. Please contact your Franklin Electric sales representative for more information.

#### **MOTOR OPTIONS**

- 575 voltage
- 400+ hp motor models
- Flameproof/explosion proof

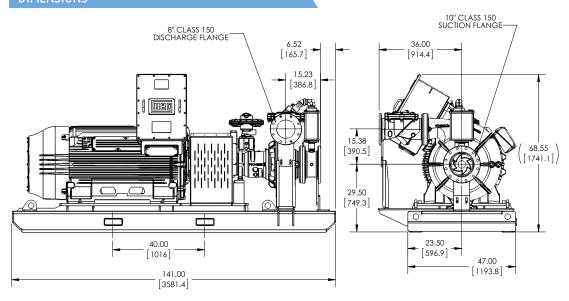
#### **AVAILABLE PUMP ENDS**

- **86C21**
- **■** 86S20
- **108C18**
- **1**08C24

#### PACKAGE CONFIGURATIONS

- Stationary base
- Drag skid
- Trailers
- Integrated lifting bail

#### **DIMENSIONS**



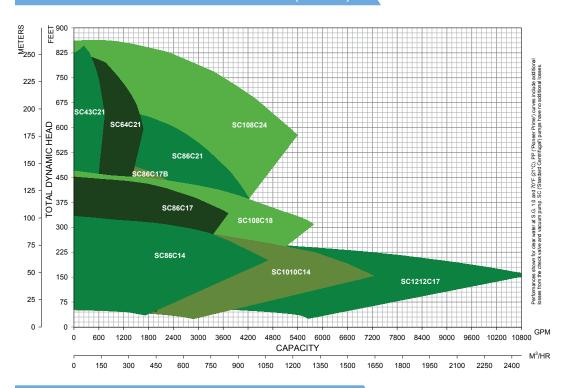




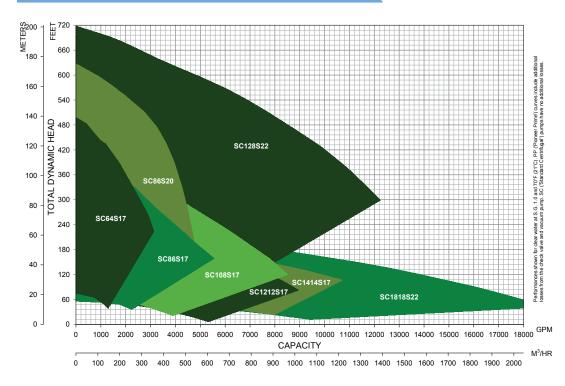
#### **ENGINEERED PACKAGES**

All performance curves represent pump performance for both Standard Centrifugal and Pioneer Prime configurations of each pump ends.

#### ENGINEERED PACKAGES: CLEAR LIQUIDS 4-POLE 60 HZ (1800 RPM)



#### ENGINEERED PACKAGES: SOLIDS HANDLING 4-POLE 60 HZ (1800 RPM)







NOTES	



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