

**CFE Effluent Pumps**



**SPECIFICATIONS:**

- DISCHARGE** ..... 1-1/2" NPT, Vertical
- LIQUID TEMPERATURE..** 104°F(40°C) Continuous
- VOLUTE** ..... Cast Iron ASTM A-48,Class 30
- MOTOR HOUSING** ..... Cast Iron ASTM A-48,Class 30
- SEAL PLATE** ..... Cast Iron ASTM A-48,Class 30
- IMPELLER** ..... Cast Iron ASTM A-48,Class 30  
10 Vane, Recessed Type  
Dynamically Balanced,ISO G6.3
- SHAFT** ..... 420 Stainless Steel
- O RING** ..... Buna-N
- SEAL** ..... Single Seal, Silicon Carbide  
Elastomer - Buna -N  
Hardware - 300 Series Stainless
- CABLE ENTRY** ..... 20 Ft Cord w/Plug  
UL &CUL 16AWG, Type SJTOW
- UPPER BEARING** ..... Single Row, Ball, Oil lubricated
- LOWER BEARING** ..... Single Row, Ball, Oil Lubricated
- MOTOR** ..... Single Phase, 3450 RPM, 115V, 60 Hz  
Includes Overload Protection in the  
Motor, Oil Filled,Class B  
Capacitor Start / Capacitor Run
- OPTIONAL EQUIPMENT:** Cord Length & Float Switch

**Solids Handling: Up to 3/4" Dia.**

**KEY FEATURES:**

**Model: CFE40A, 4/10HP**  
**CFE40M, 4/10HP**  
**CFE50A, 1/2HP**  
**CFE50M, 1/2HP**

- 3/4" Solids-Handling
- Heavy-Duty Mechanical Seal
- Recessed, Clog-Free Impeller
- Durable, All Cast Iron Construction
- Dependable Operation
- Automatic and Manual Models

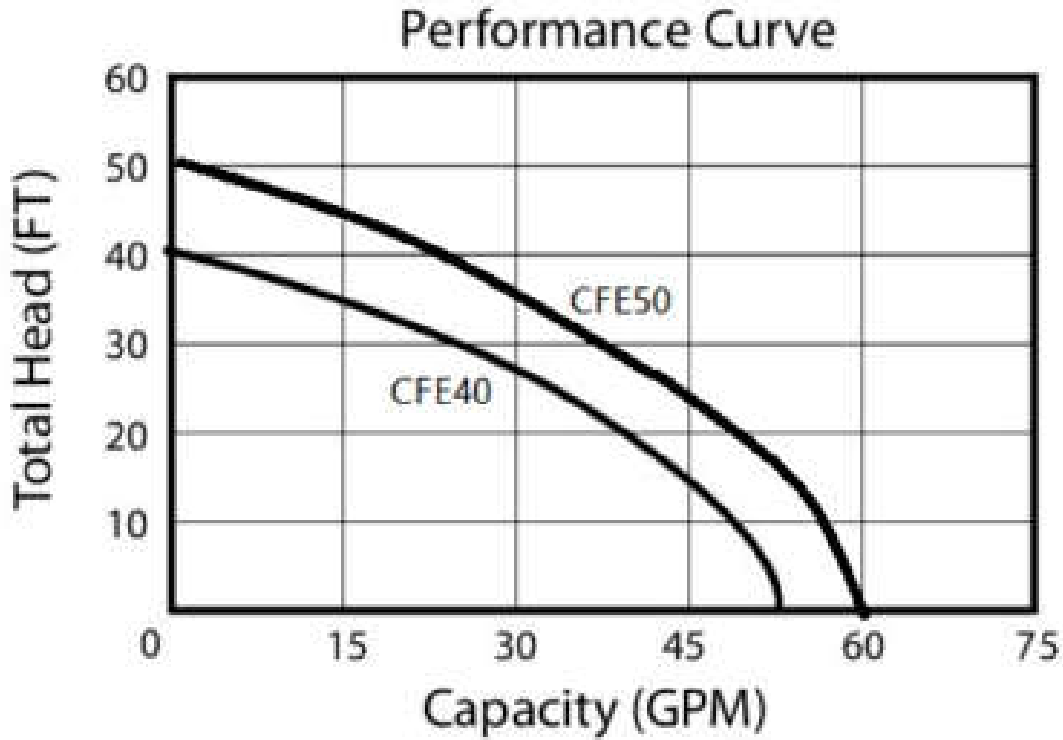


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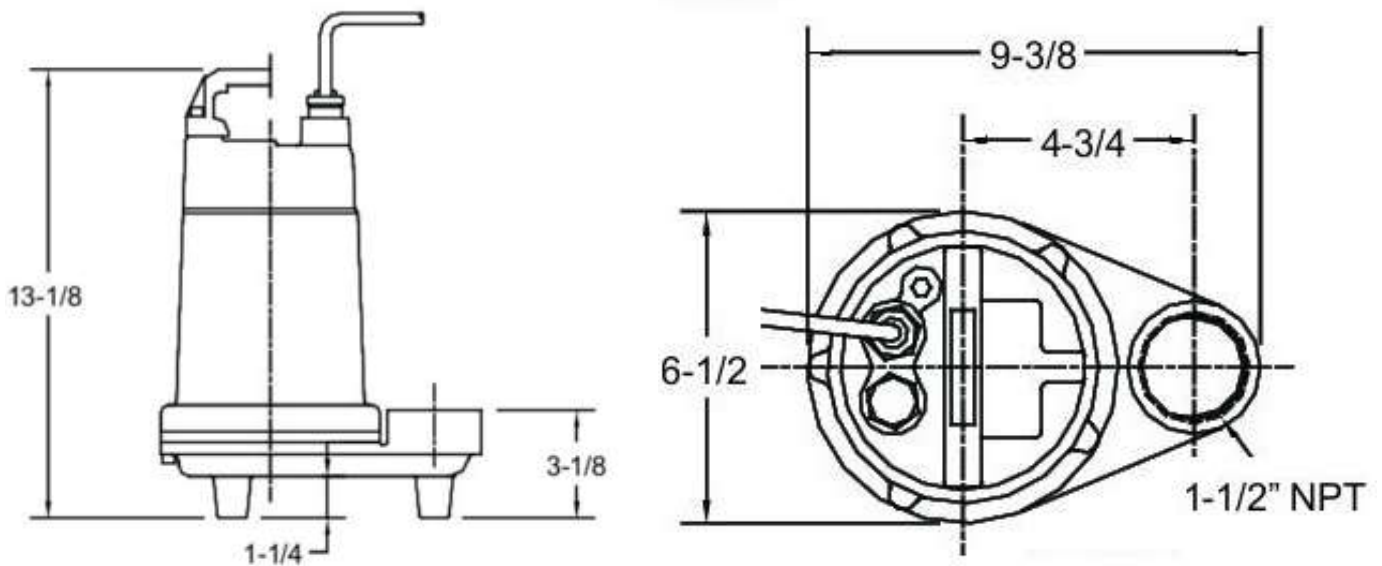
MODEL	HP	Volt.	Ph/Hz	RPM	Full Load Amps	Locked Rotor Amps	Switch Type	Cord Size	Weight (lbs)
CFE40M	4/10	115	1/60	3450	8	20	Manual	16/3	28
CFE40A	4/10	115	1/60	3450	8	20	Automatic	16/3	29
CFE50M	1/2	115	1/60	3450	8	20	Manual	16/3	29
CFE50A	1/2	115	1/60	3450	8	20	Automatic	16/3	30

**CFE Effluent Pumps**

**PERFORMANCE CURVE**



**PUMP SIZE**



**CFS50 1/2HP Sump Pumps**



**SPECIFICATIONS:**

- DISCHARGE** ..... 2" NPT,Vertical
- LIQUID TEMPERATURE** 104°F(40°C) Continuous
- VOLUTE** ..... Cast Iron ASTM A-48,Class 30
- MOTOR HOUSING** ..... Cast Iron ASTM A-48,Class 30
- SEAL PLATE** ..... Cast Iron ASTM A-48,Class 30
- IMPELLER** ..... Cast Iron ASTM A-48,Class 30  
10 Vane, Recessed Tyoe  
Dynamically Balanced,ISO G6.3
- SHAFT** ..... 420 Stainless Steel
- O RING** ..... Buna-N
- SEAL** ..... Single Seal, Silicon Carbide  
Elastomer - Buna -N  
Hardware - 300 Series Stainless
- CABLE ENTRY** ..... 20 Ft Cord w/Plug  
UL &CUL 16AWG, Type SJTOW
- UPPER BEARING** ..... Single Row, Ball, Oil lubricated
- LOWER BEARING** ..... Single Row, Ball, Oil Lubricated
- MOTOR** ..... Single Phase, 3450 RPM, 115V, 60 Hz  
Includes Overload Protection in the  
Motor, Oil Filled,Class B  
Capacitor Start / Capacitor Run
- OPTIONAL EQUIPMENT:** Cord Length & Float Switch

**This high-performance sump/effluent pump is useful for a variety of applications such as dewatering, sump, effluent and utility.**

**Solids Handling: Up to 2" Dia.**

**Model: CFS50A,1/2HP  
CFS50M.1/2HP**



**KEY FEATURES:**

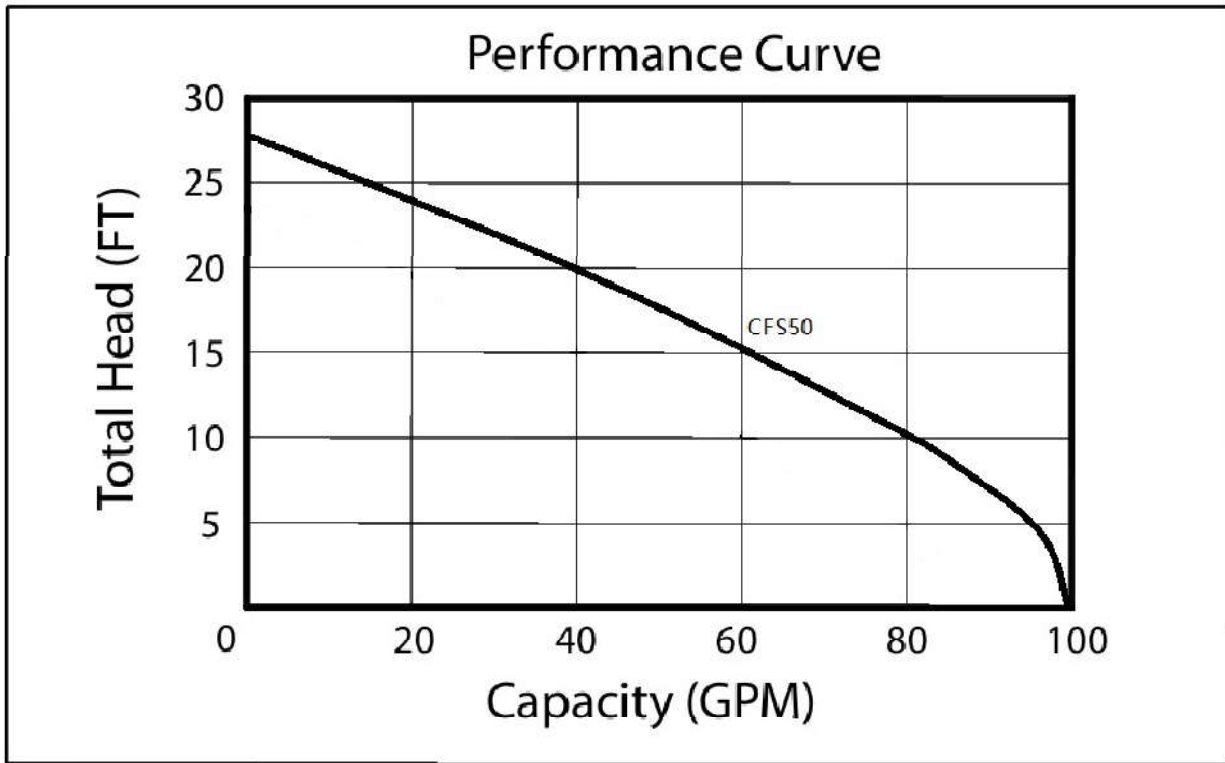
- 2" Solids-Handling
- Heavy-Duty Mechanical Seal
- Recessed, Clog-Free Impeller
- Durable, All Cast Iron Construction
- Dependable Operation
- Automatic and Manual Models

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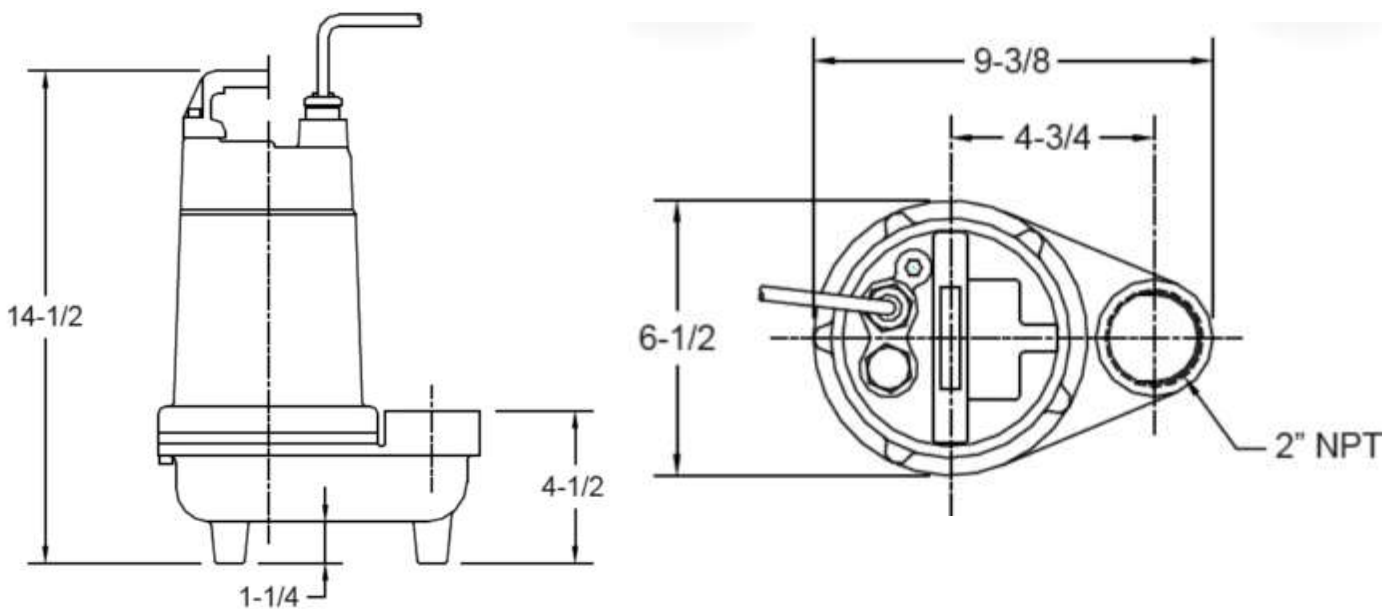
MODEL	HP	Volt.	Ph/Hz	RPM	Full Load Amps	Locked Rotor Amps	Switch Type	Cord Size	Weight (lbs)
CFS50M	1/2	115	1/60	3450	10.5	20	Manual	16/3	38
CFS50A	1/2	115	1/60	3450	10.5	20	Automatic	16/3	39

**CFS50 1/2HP Sump Pumps**

**PERFORMANCE CURVE**



**PUMP SIZE**



**50WQ-2P 2" Sewag Pumps**

**SPECIFICATIONS:**



<b>DISCHARGE</b> .....	2" NPT,Vertical
<b>LIQUID TEMPERATURE..</b>	104°F(40°C) Continuous
<b>VOLUTE</b> .....	Cast Iron ASTM A-48,Class 30
<b>MOTOR HOUSING</b> .....	Cast Iron ASTM A-48,Class 30
<b>SEAL PLATE</b> .....	Cast Iron ASTM A-48,Class 30
<b>IMPELLER</b> .....	Cast Iron ASTM A-48,Class 30 10 Vane, Vortex design Dynamically Balanced,ISO G6.3
<b>SHAFT</b> .....	420 Stainless Steel
<b>O RING</b> .....	Buna-N
<b>SEAL: Design</b> .....	Dual Mechanical Seals
<i>Motor Side</i> .....	Rotating Face - Carbon Stationary Face - Ceramic
<i>Pump Side</i> .....	Rotating Face - Silicon Carbide Stationary Face - Silicon Carbide Elastomer - Buna -N Hardware - 300 Series Stainless
<b>CABLE ENTRY</b> .....	20 Ft Cord With Pressure Grommet for Sealing, UL listed SJTOW
<b>UPPER BEARING</b> .....	Single Row, Ball
<b>LOWER BEARING</b> .....	Single Row, Ball
<b>MOTOR</b> .....	Single Phase, 3450 RPM, 115V, 60 Hz Includes Overload Protection in the motor, Oil Filled,Class B Capacitor Start / Capacitor Run
<b>OPTIONAL EQUIPMENT:</b>	Cord Length & Float Switch

**Solids Handling: 1.5"**

**Model: 50WQ0.37-2P  
50WQ0.55-2P  
50WQ0.75-2P**

**KEY FEATURES:**

- 1.5" Solids-Handling
- Stainless Steel "Keyed" Shaft
- Flows to 160 GPM
- Heads to 33 Feet
- 1/2 HP - 1 HP, 3450 RPM
- 2" NPT Discharge
- Optional Piggyback Float Switch

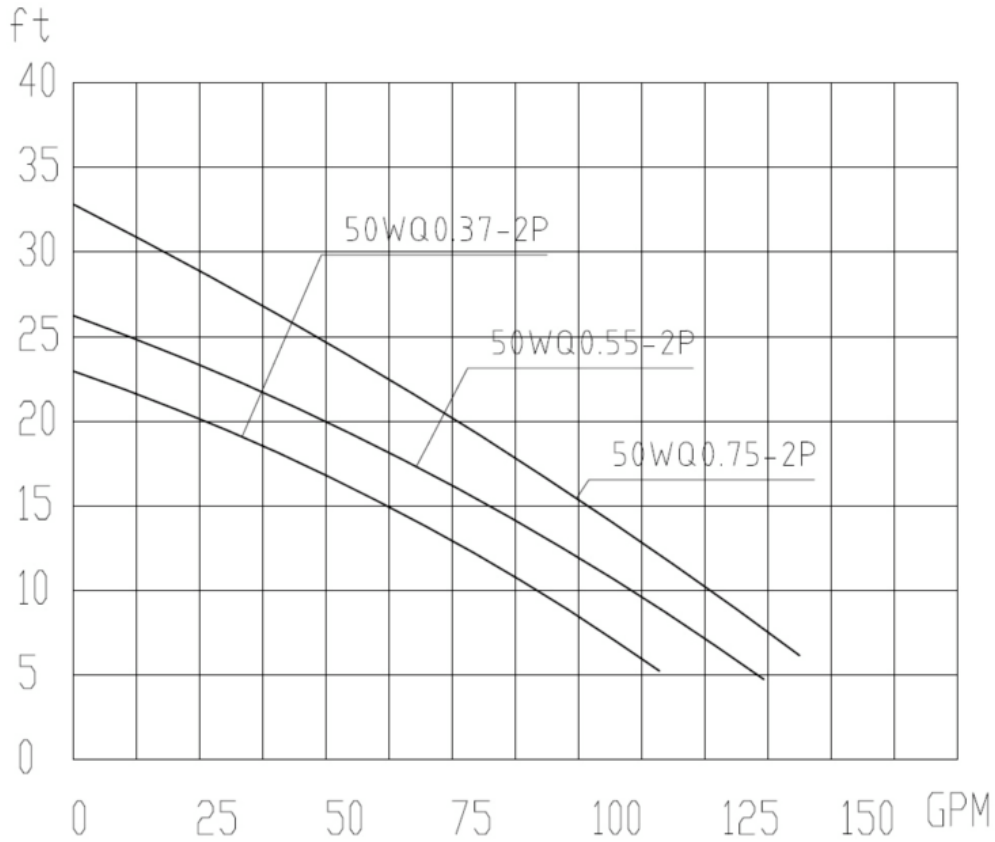


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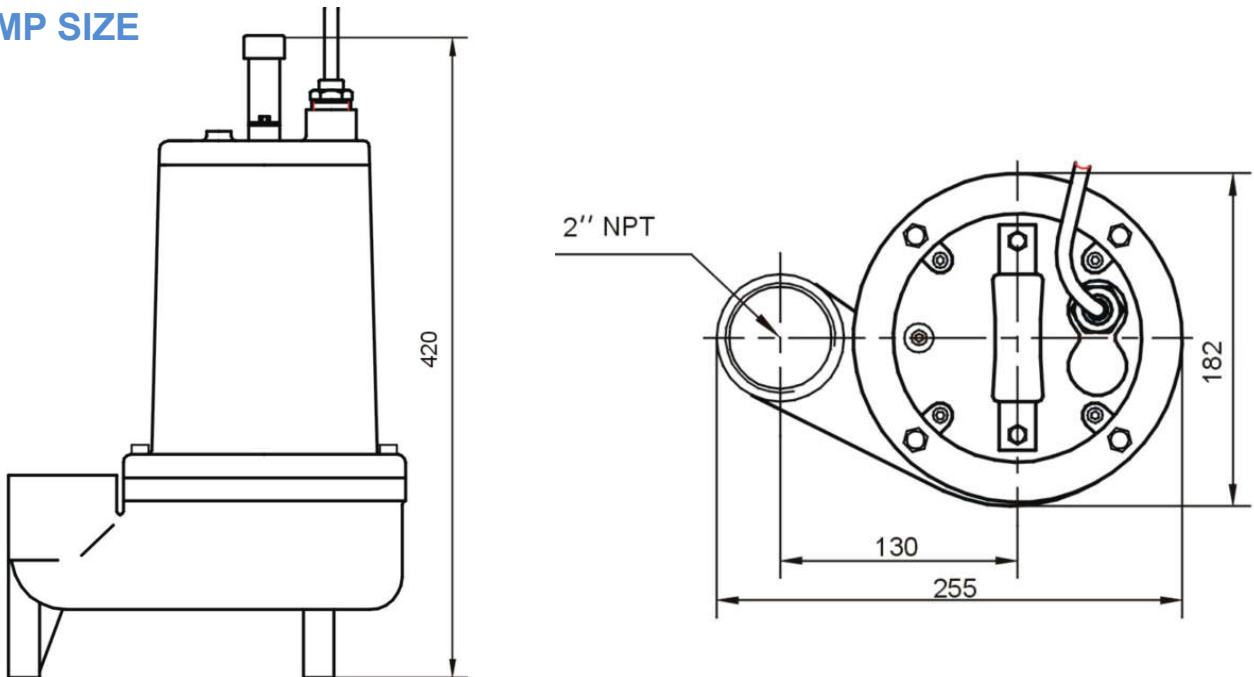
MODEL	HP	VOLT	Ph/Hz	RPM	FULL LOAD AMPS	LOCKED ROTOR AMPS	CORD SIZE	CORD TYPE	WEIGHT (LBS)
50WQ0.37-2P	1/2	115/127	1/60	3450	10	37	14/3	SJTOW	57
50WQ0.55-2P	3/4				12	45			58
50WQ0.75-2P	1				15	45			59

**50WQ-2P 2" Sewag Pumps**

**PERFORMANCE CURVE**



**PUMP SIZE**





**1/2HP CFW50 Sewage Pumps**



**SPECIFICATIONS:**

- DISCHARGE** ..... 2" NPT,Vertical
- LIQUID TEMPERATURE** .. 104°F(40°C) Continuous
- VOLUTE** ..... Cast Iron ASTM A-48,Class 30
- MOTOR HOUSING** ..... Cast Iron ASTM A-48,Class 30
- SEAL PLATE** ..... Cast Iron ASTM A-48,Class 30
- IMPELLER** ..... Cast Iron ASTM A-48,Class 30  
2 Vane open with pump out vanes on back side. Dynamically Balanced
- SHAFT** ..... 420 Stainless Steel
- O RING** ..... Buna-N
- SEAL** ..... Single Seal, Carbon/Ceramic Elastomer - Buna -N  
Hardware - 300 Series Stainless
- CABLE ENTRY** ..... 20 Ft Cord w/Plug  
UL &CUL 14AWG, Type SJTOW
- UPPER BEARING** ..... Single Row, Ball, Oil lubricated
- LOWER BEARING** ..... Single Row, Ball, Oil Lubricated
- MOTOR** ..... Single Phase, 1750 RPM, 60 Hz  
115V, 12A; 230V, 6A  
Includes Overload Protection in the motor, Oil Filled,Class B  
Capacitor Start / Capacitor Run
- SWITCH TYPE** ..... Piggy-back Float Switch

**KEY FEATURES:**

- 2" Solids-Handling
- Heavy-Duty Mechanical Seal
- 2 Vane Open Impeller
- Durable, All Cast Iron Construction
- Dependable Operation
- Automatic and Manual Models



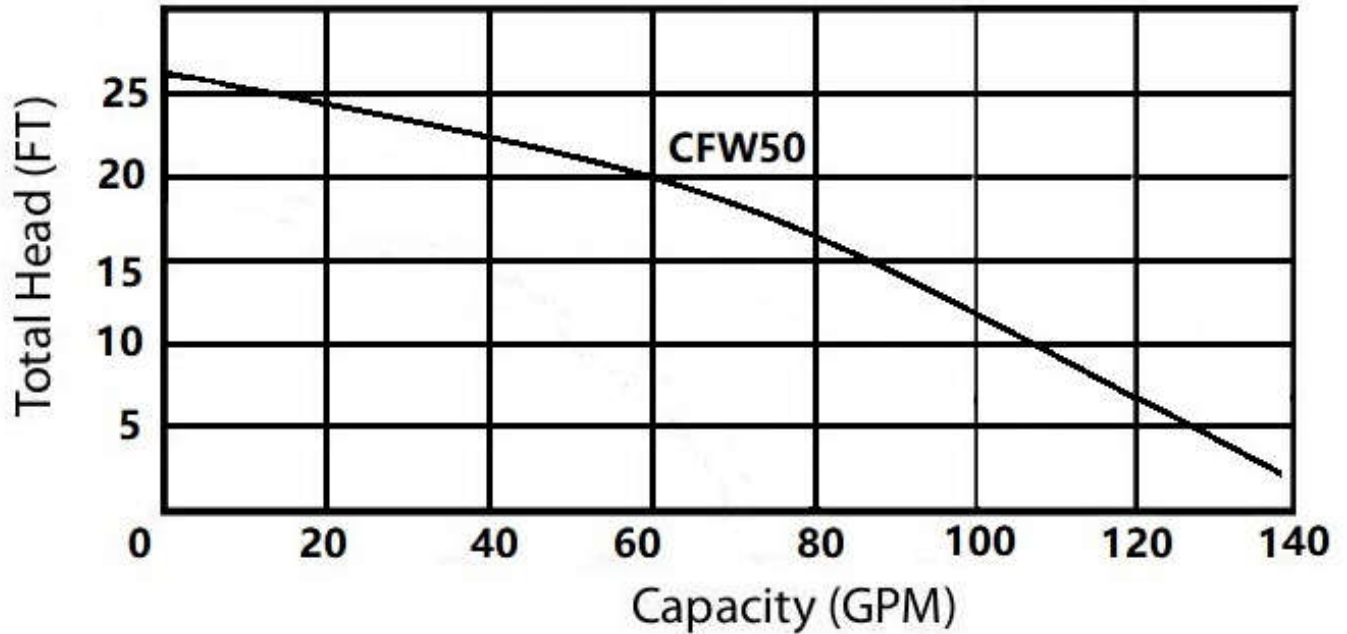
**SOLID HANDLING: 2" (50.8MM)**

**ELETRICAL DATA:**

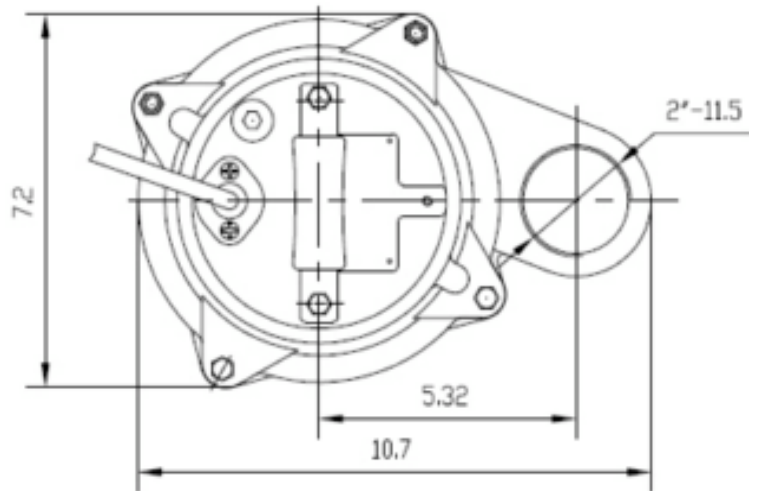
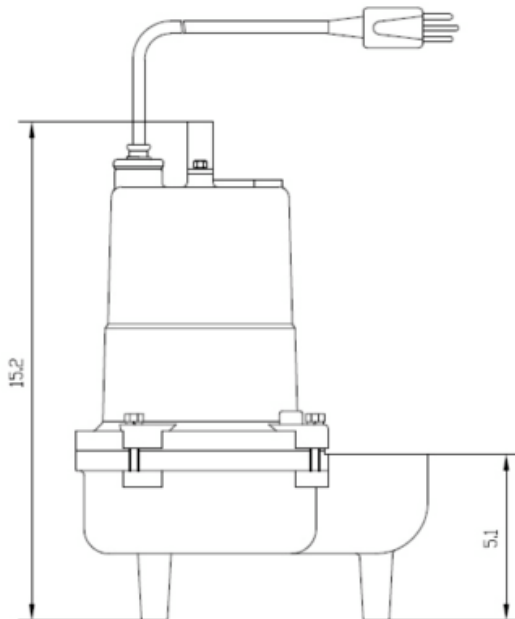
MODEL	HP	Volt.	Ph/Hz	RPM	Amps	Switch Type	Discharge Size	Cord Length	Weight Lbs.
CFW50M	1/2	115	1/60	1750	12	Manual	2"	20'	49
CFW50A	1/2	115	1/60	1750	12	Tethered Automatic	2"	20'	50
CFW502M	1/2	230	1/60	1750	6	Manual	2"	20'	49
CFW502A	1/2	230	1/60	1750	6	Tethered Automatic	2"	20'	50

**1/2HP CFW50 Sewage Pumps**

**PERFORMANCE CURVE**



**PUMP SIZE**





**1/2HP CFW50V Sewage Pumps**



**SPECIFICATIONS:**

- DISCHARGE** ..... 2" NPT,Vertical
- LIQUID TEMPERATURE** .. 104°F(40°C) Continuous
- VOLUTE** ..... Cast Iron ASTM A-48,Class 30
- MOTOR HOUSING** ..... Cast Iron ASTM A-48,Class 30
- SEAL PLATE** ..... Cast Iron ASTM A-48,Class 30
- IMPELLER** ..... Cast Iron ASTM A-48,Class 30  
10 Vane, Vortex impeller  
Dynamically Balanced
- SHAFT** ..... 420 Stainless Steel
- O RING** ..... Buna-N
- SEAL** ..... Single Seal, Carbon/Ceramic  
Elastomer - Buna -N  
Hardware - 300 Series Stainless
- CABLE ENTRY** ..... 20 Ft Cord w/Plug  
UL &CUL 14AWG, Type SJTOW
- UPPER BEARING** ..... Single Row, Ball, Oil lubricated
- LOWER BEARING** ..... Single Row, Ball, Oil Lubricated
- MOTOR** ..... Single Phase, 1750 RPM, 60 Hz  
115V, 12A; 230V, 5.5A  
Includes Overload Protection in  
the motor, Oil Filled,Class B  
Capacitor Start / Capacitor Run
- SWITCH TYPE** ..... Piggy-back Float Switch

**KEY FEATURES:**

- 2" Solids-Handling
- Heavy-Duty Mechanical Seal
- Clog-Free Vortex Impeller
- Durable, All Cast Iron Construction
- Dependable Operation
- Automatic and Manual Models



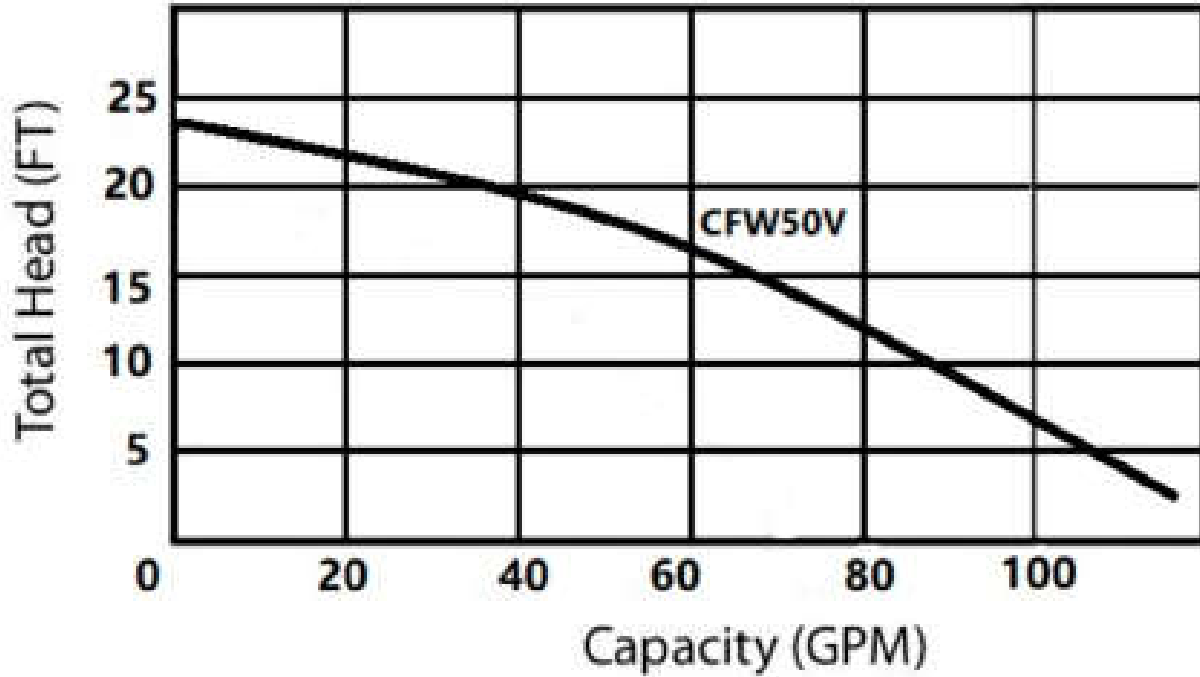
**SOLID HANDLING: 2" (50.8MM) VOTEX IMPELLER**

**ELETRICAL DATA:**

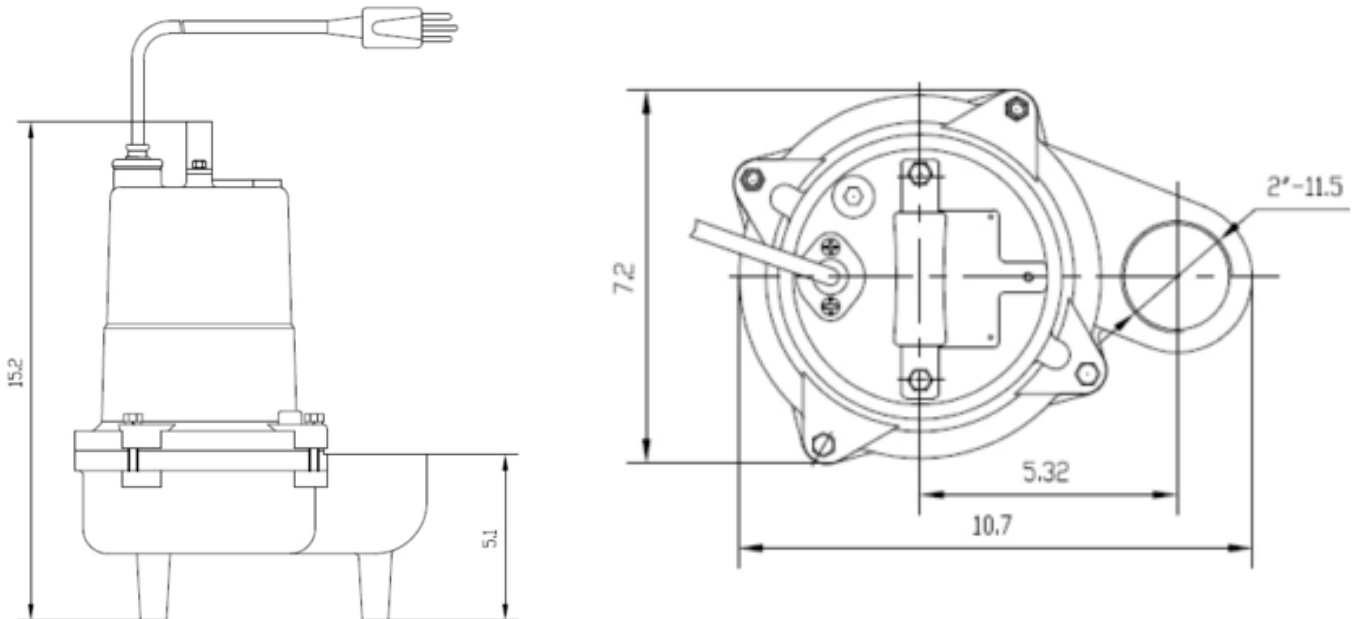
MODEL	HP	Volt.	Ph/Hz	RPM	Amps	Switch Type	Discharge Size	Cord Length	Weight Lbs.
CFW50VM	1/2	115	1/60	1750	12	Manual	2"	20'	49
CFW50VA	1/2	115	1/60	1750	12	Tethered Automatic	2"	20'	50
CFW502VM	1/2	230	1/60	1750	5.5	Manual	2"	20'	49
CFW502VA	1/2	230	1/60	1750	5.5	Tethered Automatic	2"	20'	50

**1/2HP CFW50V Sewage Pumps**

**PERFORMANCE CURVE**



**PUMP SIZE**



**80WQ-4P 3" Discharge Sewage Pumps**



**SPECIFICATIONS:**

- DISCHARGE** ..... 3" NPT,Vertical
- LIQUID TEMPERATURE** 104°F(40°C) Continuous
- VOLUTE** ..... Cast Iron ASTM A-48,Class 30
- MOTOR HOUSING** ..... Cast Iron ASTM A-48,Class 30
- SEAL PLATE** ..... Cast Iron ASTM A-48,Class 30
- IMPELLER** ..... Cast Iron ASTM A-48,Class 30  
2 Vane, open,Dynamically Balanced
- SHAFT** ..... 420 Stainless Steel
- O RING** ..... Buna-N
- SEAL** *Design* ..... Single Mechanical  
*Material* ..... Rotating Face - Silicon Carbide  
Stationary Face - Silicon Carbide  
Elastomer - Buna -N  
Hardware - 300 Series Stainless
- CABLE ENTRY** ..... 30 Ft Cord, UL listed SOOW
- UPPER BEARING** ..... Single Row, Ball, Oil lubricated
- LOWER BEARING** ..... Single Row, Ball, Oil Lubricated
- MOTOR: Single Phase** ...1750 RPM, 115V or 230V, 60 Hz  
Capacitor Start / Capacitor Run
- Three Phase** ... 1750 RPM, 230/460V, 60Hz  
Includes Overload Protection in the Motor  
Oil Filled,Class B

**OPTIONAL EQUIPMENT:** Cord Length & Float Switch

**Solids Handling: 2"**

**Models:**

- 80WQ0.37-4P, 115V or 230V**
- 80WQ0.55-4P, 115V or 230V**
- 80WQ0.75-4P, 115V or 230V**
- 80WQ1.1-4P, 115V or 230V**
- 80WQ1.5-4P, 230V**
- 80WQ1.5-4P, 230/460V,3 Phase**

**KEY FEATURES:**

- 2" Solids-Handling
- Stainless Steel "Keyed" Shaft
- Flows to 350 GPM
- Heads to 38 Feet
- 1/2 HP - 2 HP, 1750 RPM
- 3" NPT Discharge
- Optional Piggyback Float Switch

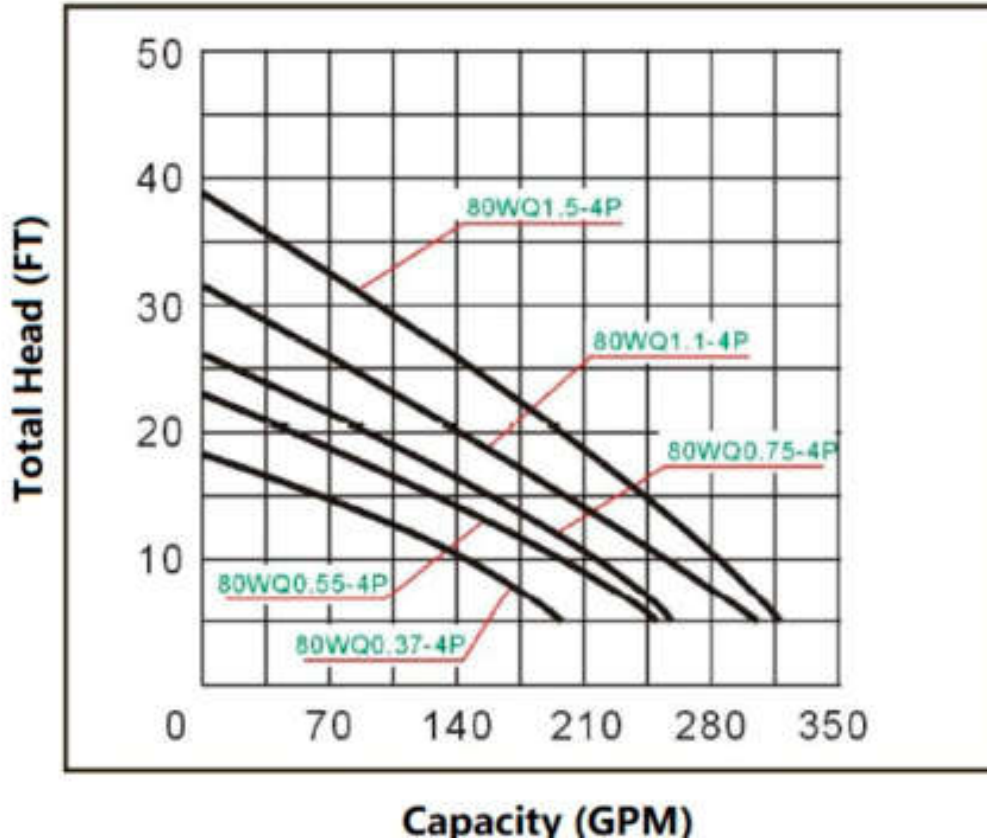


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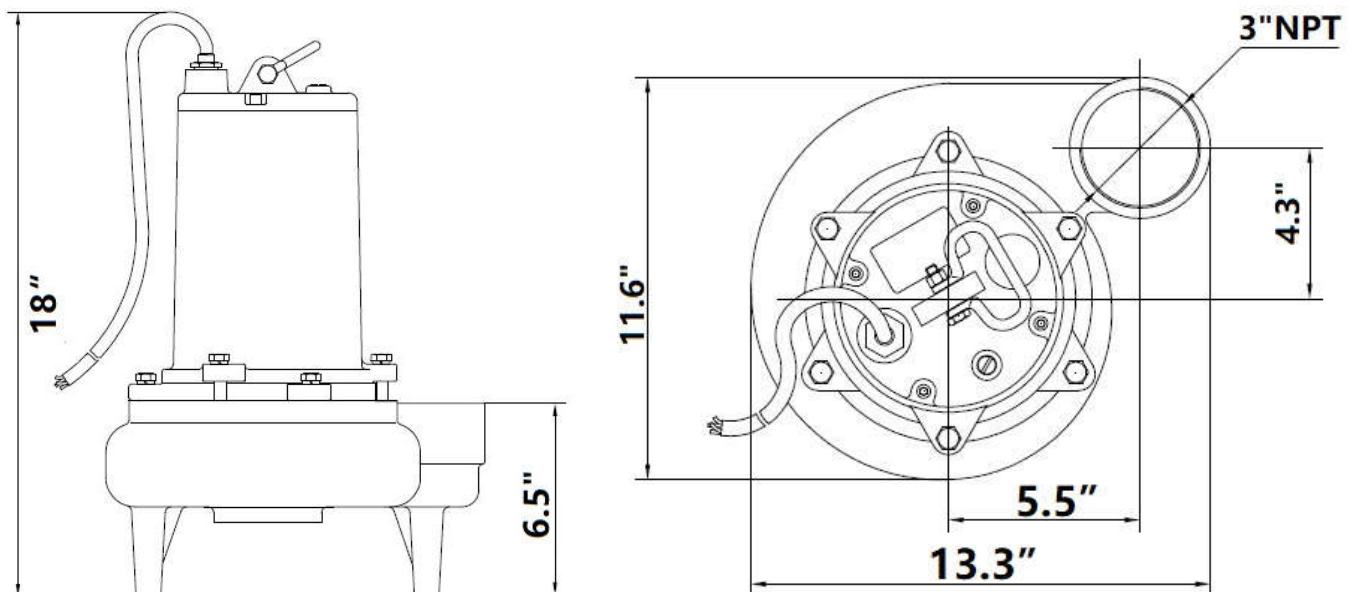
MODEL	HP	Volt.	Ph/Hz	RPM	Full Load Amps	Locked Rotor Amps	Cord Type	Cord Size	Weight(lb)
80WQ0.37-4P	1/2	115/230	1/60	1750	8/4	30/15	SOOW	14/3	80
80WQ0.55-4P	3/4	115/230	1/60	1750	11/5.5	41/20.5	SOOW	14/3	82
80WQ0.75-4P	1	115/230	1/60	1750	13/6.5	48/24	SOOW	14/3	84
80WQ1.1-4P	1-1/2	115/230	1/60	1750	16/8	52/26	SOOW	14/3	86
80WQ1.5-4P	2	230	1/60	1750	9	27	SOOW	14/3	88
80WQ1.5-4P	2	230/460	3/60	1750	6.5/3.2	32.5/16	SOOW	14/4	88

**80WQ-4P 3" Discharge Sewage Pumps**

**PERFORMANCE CURVE**



**PUMP SIZE**



**80WQ2.2-4P 3HP Sewage Pumps**

**SPECIFICATIONS:**

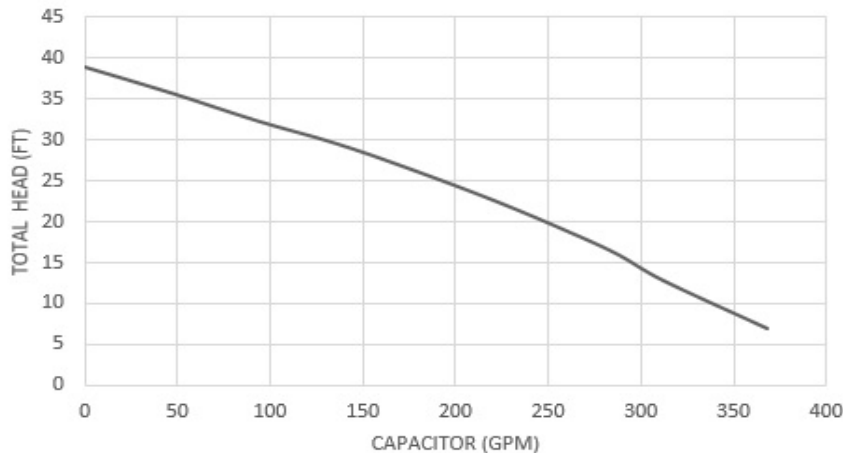


- DISCHARGE** ..... 3" NPT,Vertical
- LIQUID TEMPERATURE** 104°F(40°C) Continuous
- VOLUTE** ..... Cast Iron ASTM A-48,Class 30
- MOTOR HOUSING** ..... Cast Iron ASTM A-48,Class 30
- SEAL PLATE** ..... Cast Iron ASTM A-48,Class 30
- IMPELLER** ..... Cast Iron ASTM A-48,Class 30  
2 Vane, open,Dynamically Balanced
- SHAFT** ..... 420 Stainless Steel
- O RING** ..... Buna-N
- SEAL: Design** ..... Dual Mechanical Seals
  - Motor Side*..... Rotating Face - Carbon  
Stationary Face - Ceramic
  - Pump Side*..... Rotating Face - Silicon Carbide  
Stationary Face - Silicon Carbide  
Elastomer - Buna -N  
Hardware - 300 Series Stainless
- CABLE ENTRY** ..... 30 Ft Cord, UL listed SOOW
- UPPER BEARING** ..... Single Row, Ball, Oil lubricated
- LOWER BEARING** ..... Single Row, Ball, Oil Lubricated
- MOTOR** ..... Three Phase, 1750 RPM, 230/460V, 60Hz  
Includes Overload Protection in the Motor  
Oil Filled,Class B

**OPTIONAL EQUIPMENT:** Cord Length



**Solids Handling: 2"**  
**Model: 80WQ2.2-4P, 230/460V,3 Phase**



**KEY FEATURES:**

- 2" Solids-Handling
- Stainless Steel "Keyed" Shaft
- Flows to 390 GPM
- Heads to 39 Feet
- 3HP, 1750 RPM
- 3" NPT Discharge

**Pump Size: 19" X 14.5" X 11.8"**

MODEL	HP	Volt.	Ph/Hz	RPM	Full Load Amps	Locked Rotor Amps	Cord Type	Cord Size	Weight (Lbs)
80WQ2.2-4P	3	230/460	3/60	1750	7.1/3.5	36/17.5	SOOW	14/4	92



**80WQ-2P 3" Single-Vane Sewage Pumps**
**SPECIFICATIONS:**


<b>DISCHARGE</b> .....	3" NPT, Vertical
<b>LIQUID TEMPERATURE</b> .....	104°F(40°C) Continuous
<b>VOLUTE</b> .....	Cast Iron ASTM A-48, Class 30
<b>MOTOR HOUSING</b> .....	Cast Iron ASTM A-48, Class 30
<b>SEAL PLATE</b> .....	Cast Iron ASTM A-48, Class 30
<b>IMPELLER</b> .....	Cast Iron ASTM A-48, Class 30 Close, Single Channel Dynamically Balanced, ISO G6.3
<b>SHAFT</b> .....	420 Stainless Steel
<b>O RING</b> .....	Buna-N
<b>SEAL: Design</b> .....	Single Mechanical
<b>Material</b> .....	Rotating Face - Silicon Carbide Stationary Face - Silicon Carbide Elastomer - Buna -N Hardware - 300 Series Stainless
<b>CABLE ENTRY</b> .....	30 Ft (9.1m) Cord With Pressure Grommet for Sealing
<b>UPPER BEARING</b> .....	Single Row, Ball, Oil lubricated
<b>LOWER BEARING</b> .....	Single Row, Ball, Oil Lubricated
<b>MOTOR</b> .....	Includes Overload Protection in the Motor Oil Filled, Class F
	Single Phase ..... 3450 RPM, 60Hz, 200 / 230 V Capacitor Start / Capacitor Run
	Three Phase ..... 3450RPM, 60Hz, 230 / 460V
<b>OPTIONAL EQUIPMENT:</b> Cord Length	

**SINGLE PHASE:**

<i>Model</i>	<i>HP</i>	<i>Volts</i>	<i>Phase</i>	<i>FLA Amps</i>
80WQ10-21	1	208/230	1	13.0 / 11.9
80WQ15-21	1-1/2	208/230	1	14.0 / 12.8
80WQ20-21	2	208/230	1	14.4 / 13.1

**THREE PHASE:**

<i>Model</i>	<i>HP</i>	<i>Volts</i>	<i>Phase</i>	<i>FLA Amps</i>
80WQ10-23	1	208/230	3	7.0 / 6.4
80WQ10-43	1	460	3	3.2
80WQ15-23	1-1/2	208/230	3	7.7 / 7.0
80WQ15-43	1-1/2	460	3	3.5
80WQ20-23	2	208/230	3	8.5 / 7.7
80WQ20-43	2	460	3	3.9
80WQ30-23	3	208/230	3	10.4 / 9.0
80WQ30-43	3	460	3	4.5

**KEY FEATURES:**

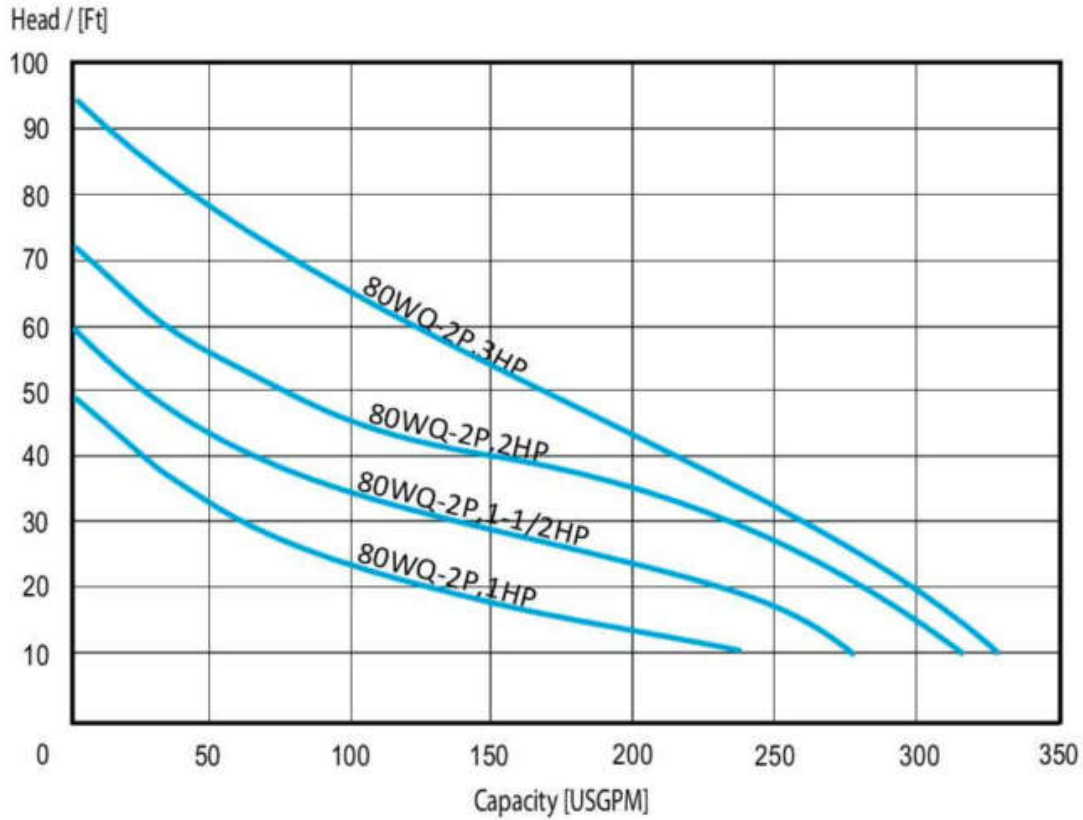
- Up to 2" Solids-Handling
  - Silicon Carbide Seals
- Stainless Steel "Keyed" Shaft
  - Flows to 325 GPM
  - Heads to 95 Feet
- 1 HP - 3 HP, 3450 RPM
  - Single or Three Phase
  - 3" NPT Discharge
- Optional Piggyback Float



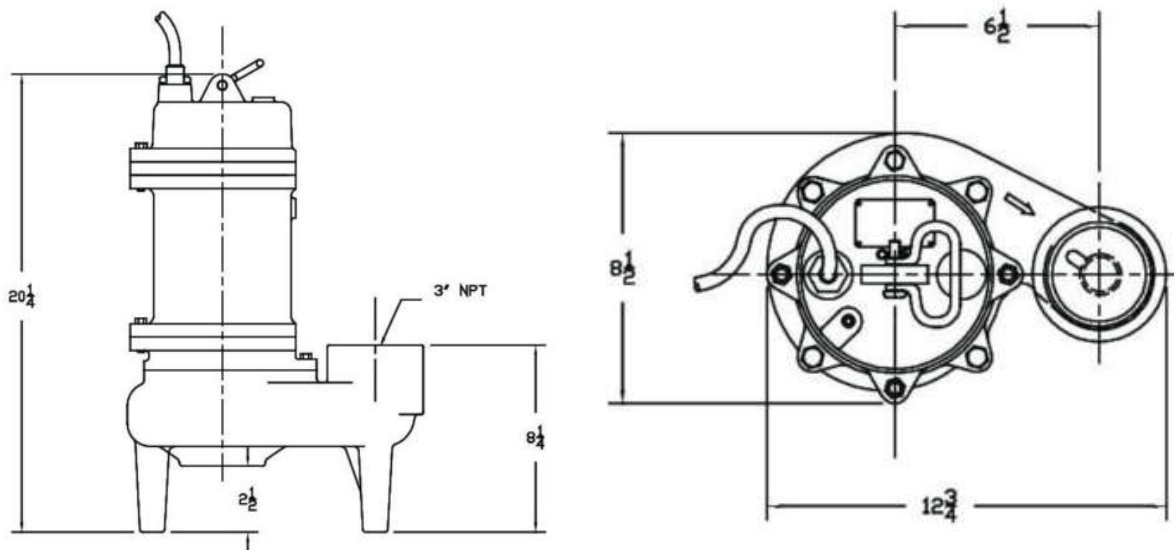


**80WQ-2P 3" Single-Vane Sewage Pumps**

**PERFORMANCE CURVE**



**PUMP SIZE**



**100WQ-4P 4" Discharge Sewage Pumps**



**SPECIFICATIONS:**

- DISCHARGE** ..... 4" 125lb., ANSI Flange, Horizontal
- LIQUID TEMPERATURE** ..... 104°F(40°C) Continuous
- VOLUTE** ..... Cast Iron ASTM A-48, Class 30
- MOTOR HOUSING** ..... Cast Iron ASTM A-48, Class 30
- SEAL PLATE** ..... Cast Iron ASTM A-48, Class 30
- IMPELLER** ..... Cast Iron ASTM A-48, Class 30  
2 Vane, open, Dynamically Balanced
- SHAFT** ..... 420 Stainless Steel
- O RING** ..... Buna-N
- SEAL: Design** ..... Dual Mechanical Seals
  - Motor Side*..... Rotating Face - Carbon  
Stationary Face - Ceramic
  - Pump Side*..... Rotating Face - Silicon Carbide  
Stationary Face - Silicon Carbide  
Elastomer - Buna -N  
Hardware - 300 Series Stainless
- POWER CORD** ..... 30 Ft Cord, UL listed SOW
- SENSOR CORD** ..... 30 Ft Cord, 18/5, 0.476" O.D SOW
- UPPER BEARING** ..... Single Row, Ball, Oil lubricated
- LOWER BEARING** ..... Single Row, Ball, Oil Lubricated
- MOTOR:** ..... 1750 RPM, three phase, 230/460V, 60Hz  
Includes Overload Protection in the motor, Oil Filled, Class B
- OPTIONAL EQUIPMENT:** Cord Length

**Solids Handling: 3" Dia**

**Model:**

- 100WQ2.2-4P, 230/460V**
- 100WQ3.7-4P, 230/460V**

**KEY FEATURES:**

- 3" Solids-Handling
- Stainless Steel "Keyed" Shaft
- Flows to 520 GPM
- Heads to 51 Feet
- 3HP & 5 HP, 230/460V Dual Voltage
- 4" 125lb ANSI Flange, Horizontal

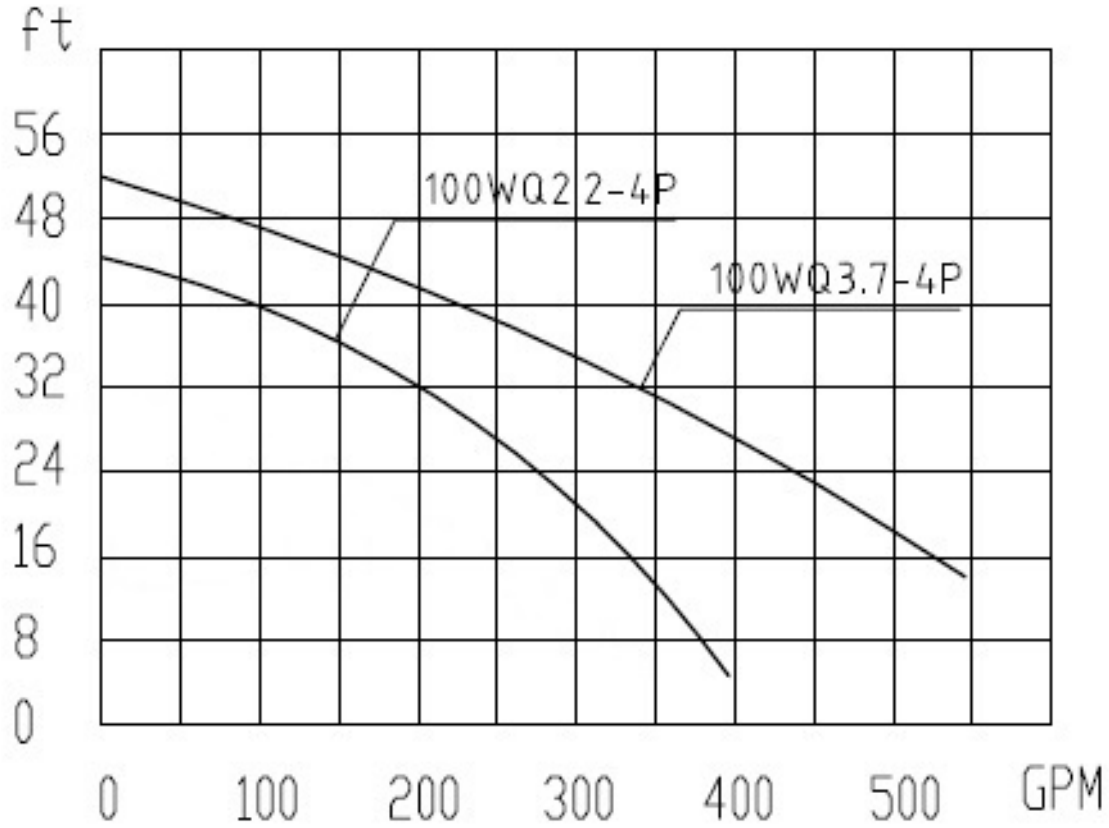


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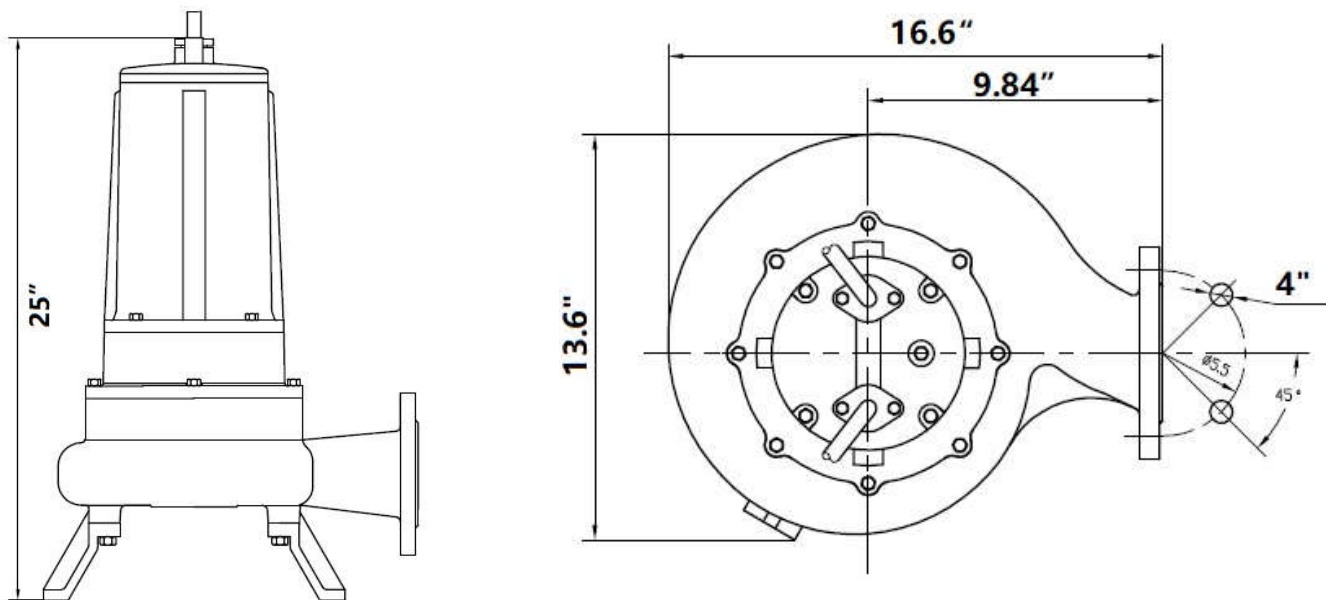
MODEL	HP	Volt.	Ph/Hz	RPM	Full Load Amps	Locked Rotor Amps	Cord Type	Cord Size	Weight (lbs)
100WQ2.2-4P	3	208~230/460V	3/60	1750	9.6/4.8	48/24	SOW	14/4	220
100WQ3.7-4P	5	208~230/460V	3/60	1750	13/6.5	65/32.5	SOW	14/4	250

**100WQ-4P 4" Discharge Sewage Pumps**

**PERFORMANCE CURVE**



**PUMP SIZE**



**3-7.5HP NON-CLOG SUBMERSIBLE SEWAGE PUMPS**



**SPECIFICATIONS:**

**DISCHARGE** ..... 4" 150lb., ANSI Flange, Horizontal  
**LIQUID TEMPERATURE** 104°F(40°C) Continuous  
**VOLUTE** ..... Cast Iron ASTM A-48, Class 30  
**MOTOR HOUSING** ..... Cast Iron ASTM A-48, Class 30  
**SEAL PLATE** ..... Cast Iron ASTM A-48, Class 30  
**IMPELLER** ..... Enclosed 2 Vane impeller  
**SHAFT** ..... 420 Stainless Steel  
**O RING** ..... Buna-N  
**SEAL: Design** ..... Dual Mechanical Seals  
*Motor Side*..... Rotating Face - Carbon  
Stationary Face - Silicon Carbide  
*Pump Side*..... Rotating Face - Silicon Carbide  
Stationary Face - Tungsten Carbide  
Elastomer - Buna -N  
Hardware - 300 Series Stainless  
**POWER CORD** ..... 40ft Cord, SOOW, Epoxy sealed  
**SENSOR CORD** ..... 40 Ft Cord, 18/5, SOOW  
**UPPER BEARING** ..... Single Row, Ball, Oil lubricated  
**LOWER BEARING** ..... Double Row, Ball, Oil Lubricated  
**MOTOR: Single Phase** ... 1750 RPM, 230V, 60 Hz  
Capacitor Start / Capacitor Run  
**Three Phase** ... 1750 RPM, three phase, 230/460V, 60Hz  
air-filled, squirrel cage induction.  
Insulation Class: H

**OPTIONAL EQUIPMENT:** Cord Length

**Solids Handling: 3" Dia.**

**Model:**

**Single Phase: F4V3-41, F4V5-41**

**Three Phase: F4V3-43**

**F4V5-43**

**F4V7.5-43**

- 3" Solids-Handling
- Stainless Steel "Keyed" Shaft
- Flows to 660 GPM
- Heads to 65 Feet
- 208 / 230 / 460 volt, 1 or 3 phase
- 4" 150lb ANSI Flange, Horizontal
- Ideal for higher flows, lower heads

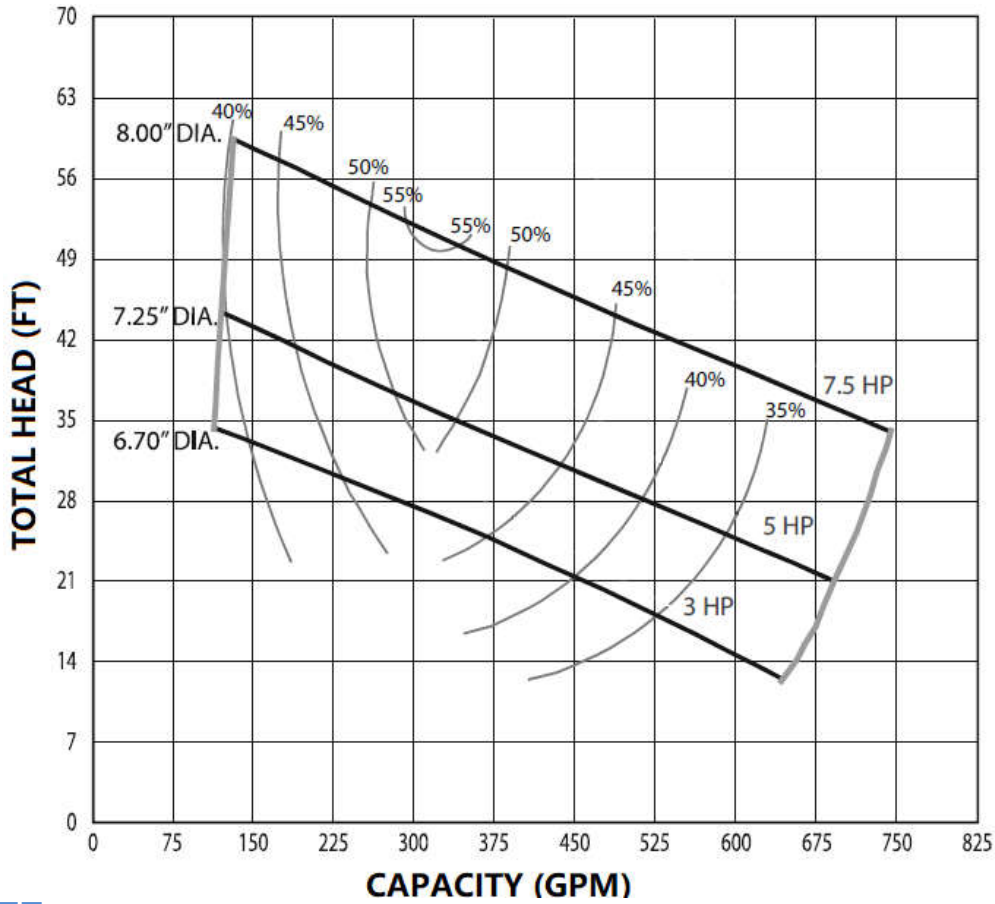


**ELECTRICAL DATA:**

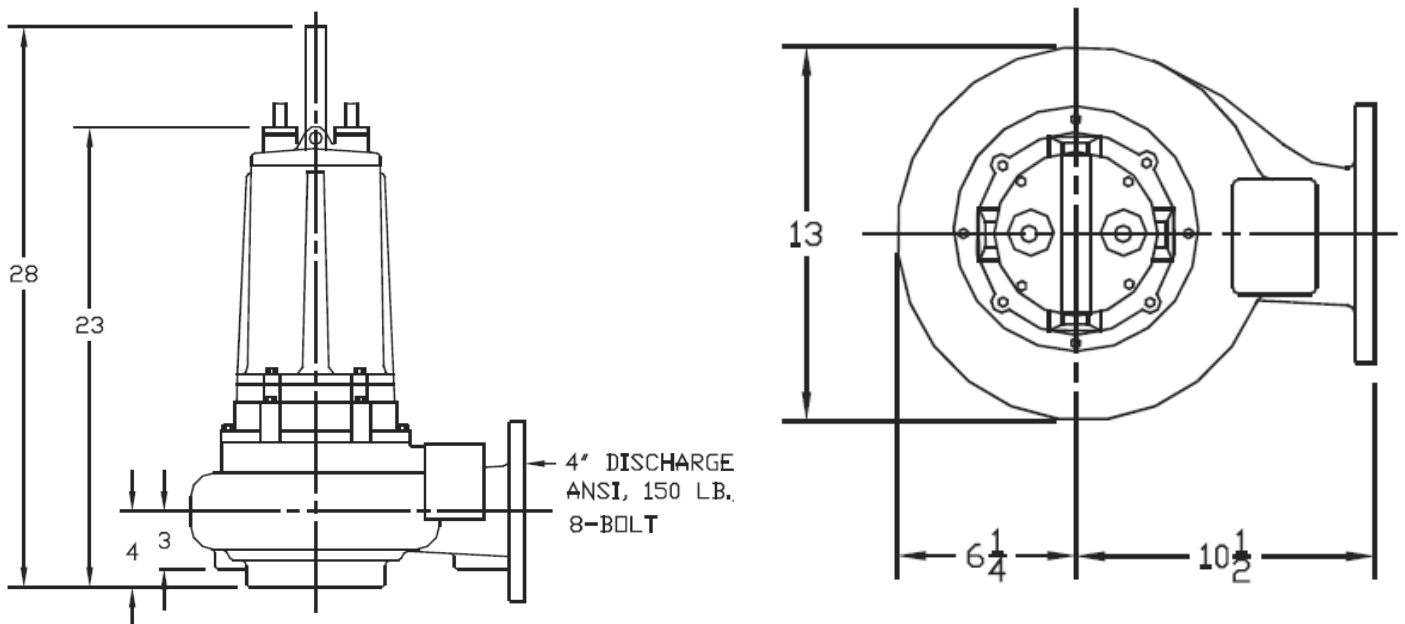
MODEL	HP	Volt.	Ph/Hz	RPM	Amps	Cord Size	Impeller Size	Weight (lbs)
F4V3-41	3	208~230V	1/60	1750	17	12AWG/4C	6.70"	205
F4V5-41	5	208~230V	1/60	1750	33	10AWG/4C	7.25"	255
F4V3-43	3	230/460V	3/60	1750	14/7	12AWG/4C	6.70"	200
F4V5-43	5	230/460V	3/60	1750	19/9.5	10AWG/4C	7.25"	250
F4V7.5-43	7.5	230/460V	3/60	1750	30/15	10AWG/4C	8.00"	300

**3-7.5HP NON-CLOG SUBMERSIBLE SEWAGE PUMPS**

**PERFORMANCE CURVE**



**PUMP SIZE**





**7.5-25HP NON-CLOG SUBMERSIBLE SEWAGE PUMPS**



**SPECIFICATIONS:**

- DISCHARGE** ..... 4" 150lb., ANSI Flange, Horizontal
- LIQUID TEMPERATURE** 104°F(40°C) Continuous
- VOLUTE** ..... Cast Iron ASTM A-48,Class 30
- MOTOR HOUSING** ..... Cast Iron ASTM A-48,Class 30
- SEAL PLATE** ..... Cast Iron ASTM A-48,Class 30
- IMPELLER** ..... Enclosed 2 Vane impeller
- SHAFT** ..... 420 Stainless Steel
- O RING** ..... Buna-N
- SEAL: Design** ..... Dual Mechanical Seals
  - Motor Side*..... Rotating Face - Carbon Stationary Face -Silicon Carbide
  - Pump Side*..... Rotating Face - Silicon Carbide  
Stationary Face - Tungsten Carbide
- ELASTOMER** ..... Elastomer - Buna -N, Hardware - 300 Series Stainless
- POWER CORD** ..... 40 Ft Cord, SOOW, Epoxy sealed
- SENSOR CORD** ..... 40 Ft Cord, 18AWG/5C, SOOW
- UPPER BEARING** ..... Single Row, Ball, Oil lubricated
- LOWER BEARING** ..... Double Row, Ball, Oil Lubricated
- MOTOR: Single Phase** ... 1750 RPM, 230V, 60 Hz,Capacitor Start / Capacitor Run
- Three Phase** ... 1750 RPM, three phase,230/460V, 60Hz
- INSULATION** ..... Air-filled, squirrel cage induction. Insulation Class: H
- MOTOR SPEED**..... 1150 / 1750 RPM
- OPTIONAL EQUIPMENT:** Cord Length

**Solids Handling: 3" Dia.**

**Model:**

**4 POLE: F4V10-43, F4V15-43**

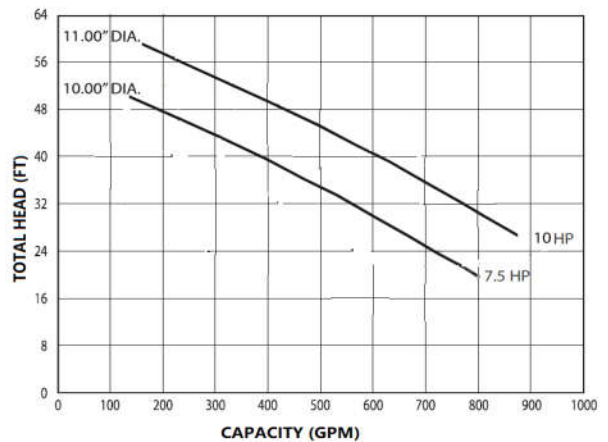
**F4V20-43, F4V25-43**

**6 POLE: F4V7.5-63, F4V10-63**

**KEY FEATURES:**

- 3" Solids-Handling
- Stainless Steel "Keyed" Shaft
- Flows to 1200 GPM
- Heads to 105 Feet
- 208 / 230 / 460 volt, 3 phase
- 4" 150lb ANSI Flange, Horizontal
- 1150/1750 RPM motor speed
- Ideal for higher heads

**6 POLE PUMPS PERFORMANCE CURVE**



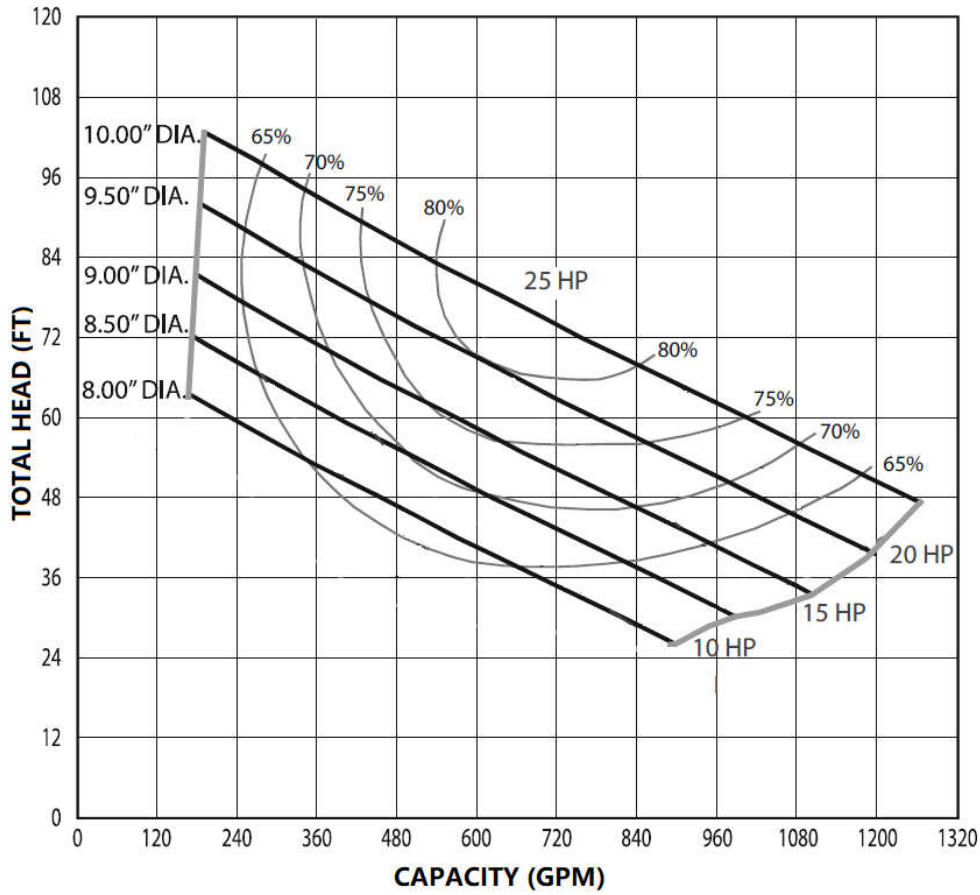
**ELECTRICAL DATA:**

MODEL	HP	Volt.	Ph/Hz	RPM	Amps	Cord Size	Impeller Size	Weight (lbs)
F4V10-43	10	230/460V	3/60	1750	34/17	6AWG/4C	8.00"	580
F4V15-43	15	230/460V	3/60	1750	44/22	5AWG/4C	9.00"	610
F4V20-43	20	230/460V	3/60	1750	50/25	5AWG/4C	9.50"	650
F4V25-43	25	230/460V	3/60	1750	64/32	5AWG/4C	10.00"	700
F4V7.5-63	7.5	230/460V	3/60	1150	24/12	6AWG/4C	10.00"	580
F4V10-63	10	230/460V	3/60	1150	29/14.5	6AWG/4C	11.00"	610

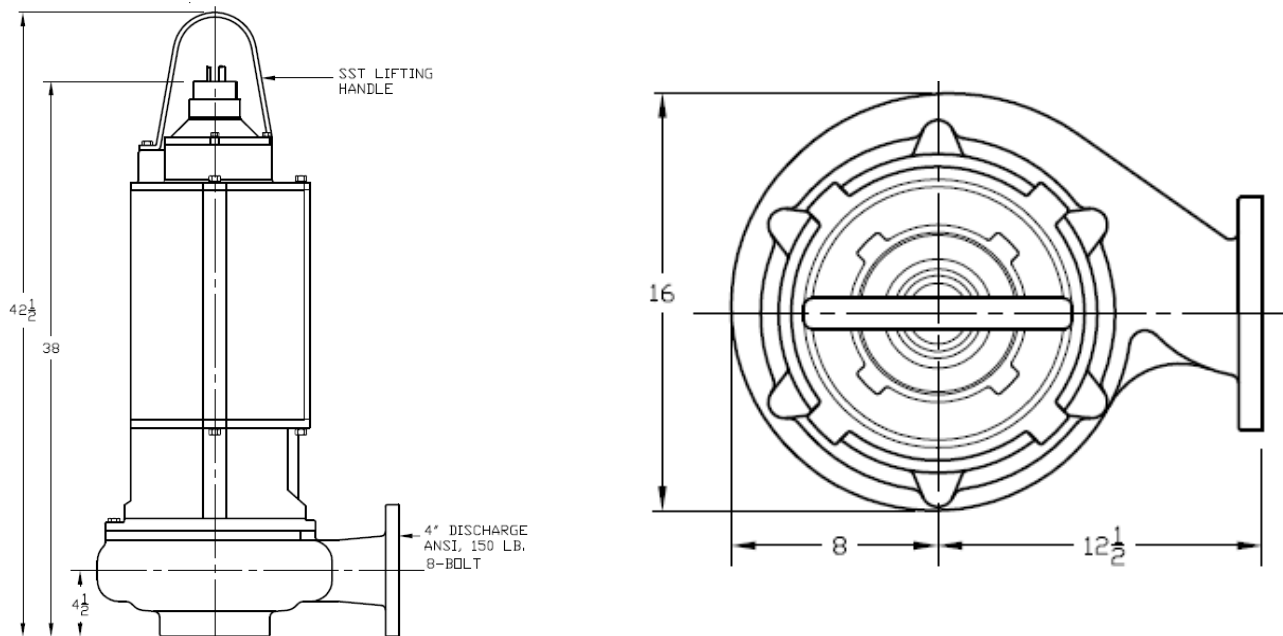


**7.5-25HP NON-CLOG SUBMERSIBLE SEWAGE PUMPS**

**PERFORMANCE CURVE**



**PUMP SIZE**



**WQ-0.75QG 1HP Grinder Pumps**



**SPECIFICATIONS:**

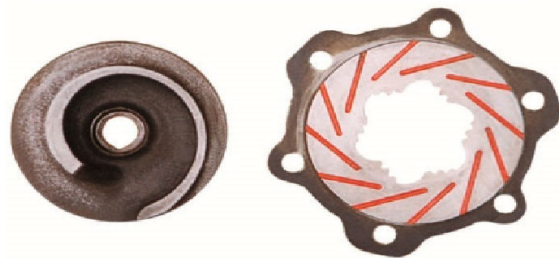
- DISCHARGE** ..... 2" NPT, Vertical
  - LIQUID TEMPERATURE** .. Up to 170°F(76°C) Continuous
  - VOLUTE** ..... Cast Iron ASTM A-48, Class 30
  - MOTOR HOUSING** ..... Cast Iron ASTM A-48, Class 30
  - SEAL PLATE** ..... Cast Iron ASTM A-48, Class 30
  - IMPELLER** ..... Carbon Steel
  - SHAFT** ..... 420 Stainless Steel
  - O RING** ..... Buna-N
  - SEAL: Design** ..... Dual Mechanical Seals
    - Motor Side*..... Rotating Face - Carbon  
Stationary Face - Silicon Carbide
    - Pump Side*..... Rotating Face - Silicon Carbide  
Stationary Face - Silicon Carbide  
Elastomer - Buna -N  
Hardware - 300 Series Stainless
  - CABLE ENTRY** ..... 20 Ft strain relief power cord
  - UPPER BEARING** ..... Single Row, Ball, Oil lubricated
  - LOWER BEARING** ..... Single Row, Ball, Oil Lubricated
  - MOTOR** ..... Includes Overload Protection in the Motor  
Air Filled
    - Single Phase ..... 3450 RPM, 60Hz, 115 or 230 V  
Capacitor Start / Capacitor Run
    - Three Phase ..... 3450RPM, 60Hz, 230 / 460V
- OPTIONAL EQUIPMENT:** Cord Length & Float Switch

**APPLICATIONS:**

Residential sewage / Commercial sewage  
Retail space / High-temp effluent

**Solids Handling: Up to 2" Dia.**

**Model: WQ-0.75QG1, 115V**  
**WQ-0.75QG2, 230V**  
**WQ-0.75QG3, 230/460V, 3PH.**



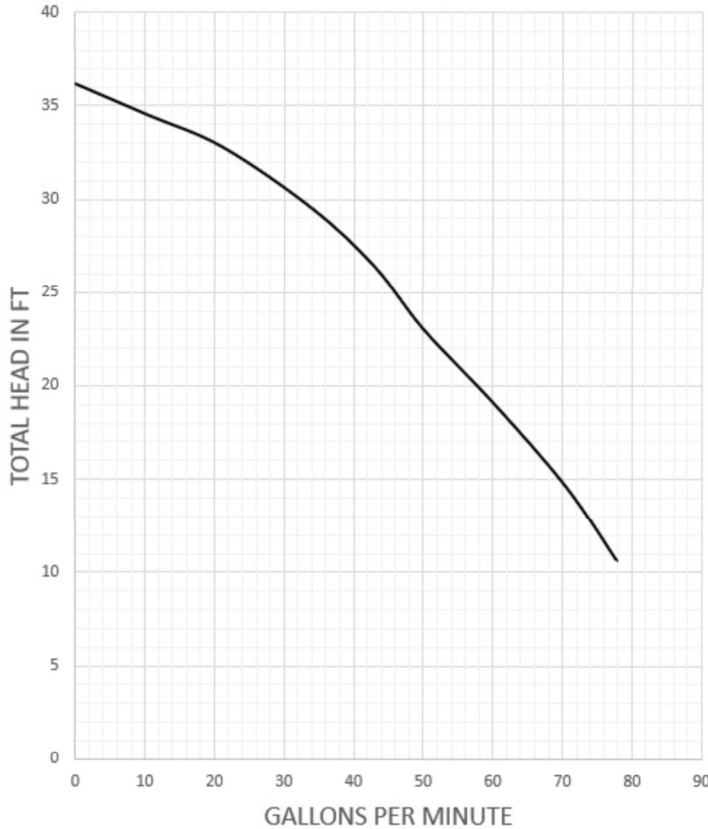
**Tungsten carbide tipped grinder impeller**

**ELECTRICAL DATA:**

MODEL	HP	Volt.	Ph/Hz	RPM	Full Load Amps	Float Switch	Cord Size	Weight (lbs)
WQ-0.75QG1	1	115	1/60	3450	16	Optional	14/3	71
WQ-0.75QG2	1	230	1/60	3450	8	Optional	14/3	71
WQ-0.75QG3	1	230/460	3/60	3450	4	None	16/4	70

**WQ-0.75QG 1HP Grinder Pumps**

**PERFORMANCE CURVE**

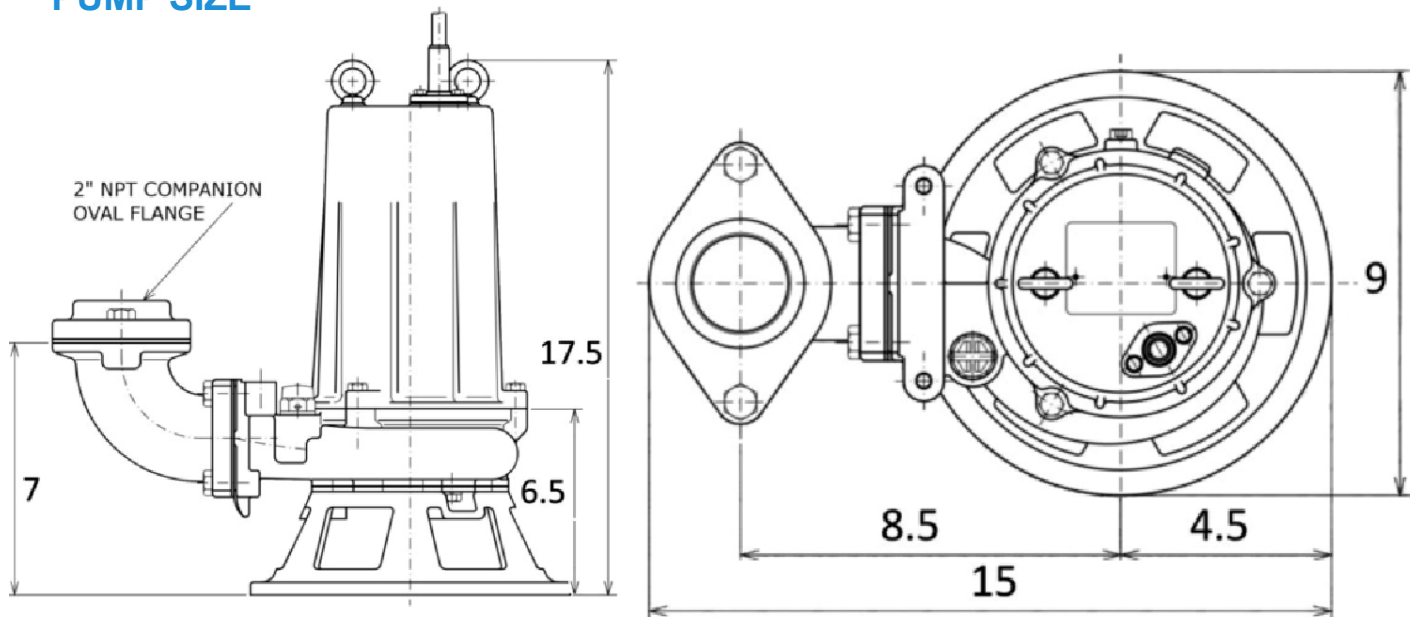


**KEY FEATURES:**

- All cast iron construction
- Air-filled sealed motor
- Auto-thermal overload reset
- 2" solid handling
- Up to 170F continuous operation
- Hardened cast iron suction plate
- 20-ft strain relief power cord
- Built-in high-temp automatic float switch
- 300 series stainless steel hardware
- Tungsten carbide tipped grinder impeller
- Rotatable elbow for tight installations



**PUMP SIZE**



**FC SERIES 2HP GRINDER PUMPS**



**Model: FC2-21      FC2-21C**  
**FHC2-21      FHC2-21C**  
**FC2-23      FHC2-23**



**SPECIFICATIONS:**

<b>DISCHARGE</b>	----- 1.25" NPT
<b>LIQUID TEMPERATURE</b>	--- 120 degrees F (Continuous) 140 degrees F (Intermittent)
<b>MOTOR HOUSING</b>	----- Cast Iron, ASTM A-48, Class 30
<b>CORD CAP</b>	----- Cast Iron, ASTM A-48, Class 30
<b>VOLUTE</b>	----- Cast Iron, ASTM A-48, Class 30
<b>SEAL PLATE</b>	----- Cast Iron, ASTM A-48, Class 30
<b>IMPELLER</b>	----- Ductile Iron, 10 vane, Open with Pump-out Vanes, Dynamically Balanced
<b>SLICER-IMPELLER</b>	----- Hardened 440C Stainless Steel 56-60 Rockwell C
<b>PLATE-SLICER</b>	----- Hardened 440C Stainless Steel 56-60 Rockwell C
<b>SHAFT</b>	----- 420 Stainless Steel
<b>SHAFT SEAL</b>	--- Mechanical Main (Motor) Secondary(Pump) Carbide – Rotating Face Silicon – Rotating Face Silicon– Stationary Face Silicon – Stationary Face Buna-N - Elastomer
<b>BEARING (UPPER)</b>	---- Single Row, Ball, Oil Lubricated
<b>BEARING (LOWER)</b>	---- Single Row, Ball, Oil Lubricated
<b>SLEEVE BEARING</b>	---- Bronze with Oil Groove
<b>HARDWARE</b>	----- 300 Series Stainless Steel
<b>O-RINGS</b>	----- Buna-N
<b>CORD ENTRY</b>	----- 30Ft Cord Triple Sealed Design Compression Grommet – Outer Jacket Seal Epoxy Potted – Inner Conductor Seal Butt Connector – Inner Wire Strand Wicking Blockage
<b>MOTOR (THREE PHASE)</b>	--- 2 HP, 3450 RPM, 60 Hz Tri-voltage, 200/230/460 volts. On-Winding temperature sensor Oil Filled, Class F
<b>MOTOR (SINGLE PHASE)</b>	--- 2 HP, 3450 RPM, 60 Hz Dual-voltage, 200/230 volts Overload Protection in the Motor Oil Filled, Class F Capacitor Start/Capacitor Run
<b>OPTIONAL EQUIPMENT</b>	--- Seal Materials Additional Cable Lengths Leg Kits

**Features:**

- *New Slicer cutter technology*
- *Stainless steel impeller*
- *Internal or external capacitor models*
- *300 Series SS Rotor Shaft*

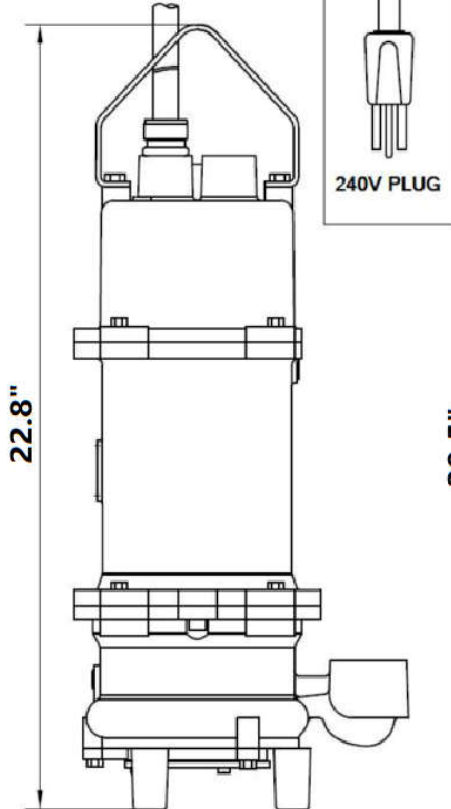




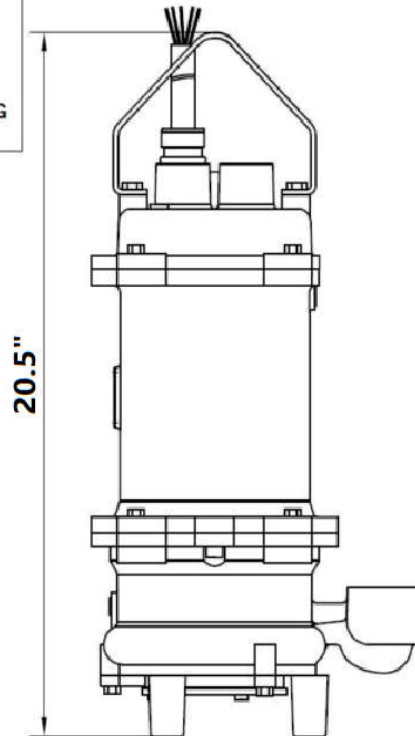


**FC SERIES 2HP GRINDER PUMPS**

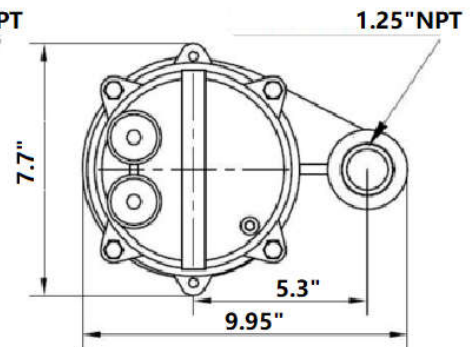
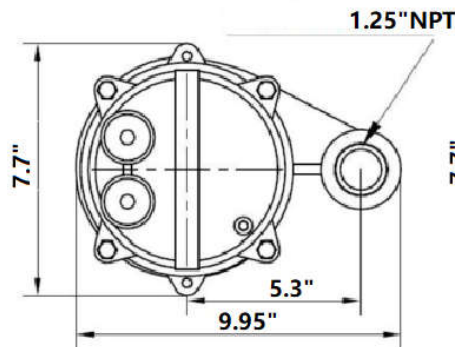
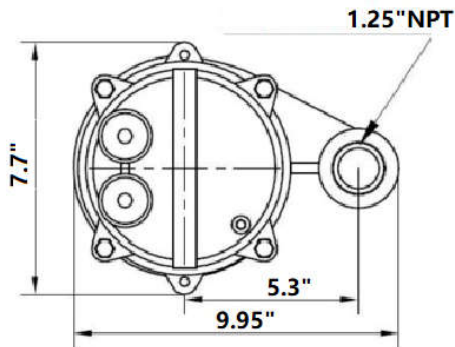
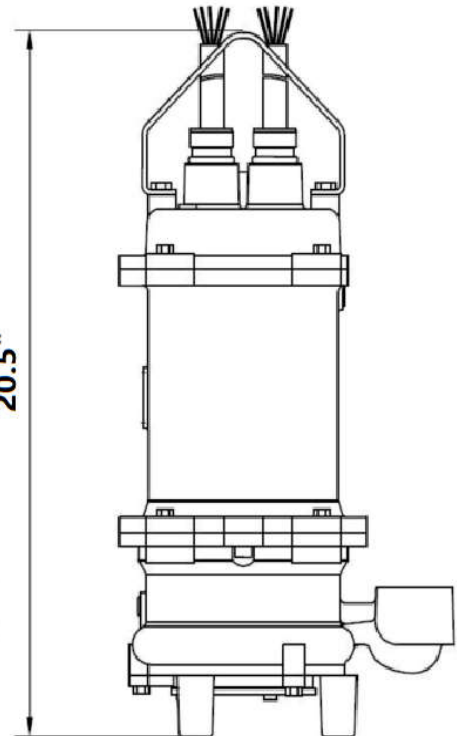
Internal Capacitor  
FC2-21C  
FHC2-21C



External Capacitor  
FC2-21  
FHC2-21



Three Phases  
FC2-23  
FHC2-23



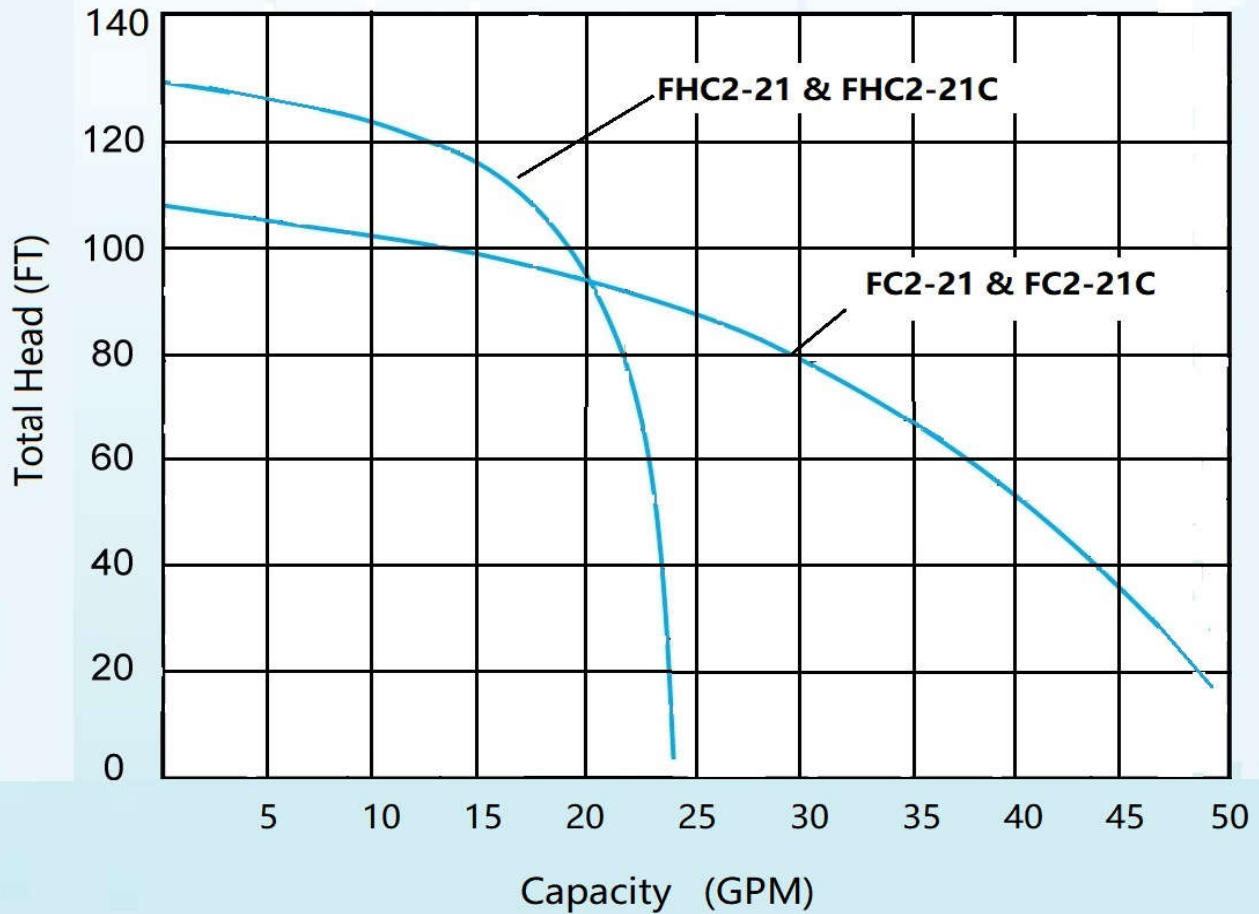
**IMPORTANT:**

- 1 PUMP MAY BE OPERATED "DRY" FOR EXTENDED PERIODS WITHOUT DAMAGE TO MOTOR AND/OR SEALS
- 2 THIS PUMP IS APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION II HAZARDOUS LOCATIONS.
- 3 THIS PUMP IS NOT APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CALSS I DIVISION I HAZARDOUS LOCATIONS.
- 4 INSTALLATIONS SUCH AS DECORATIVE FOUNTAINS OR WATER FEATURES PROVIDED FOR VISUAL ENJOYMENT MUST BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE ANSI/NFPA 70 AND/OR THE AUTHORITY HAVING JURISDICTION. THIS PUMP IS NOT INTENDED FOR USED IN SWIMMING POOLS, RECREATIONAL WATER PARKS, OR INSTALLATIONS IN WHICH HUMAN CONTACT WITH PUMPED MEDIA IS A COMMON OCCURRENCE.

**FC SERIES 2HP GRINDER PUMPS**

**PERFORMANCE CURVE**

**MODEL: FC2-21 & FC2-21C  
FHC2-21 & FHC2-21C**



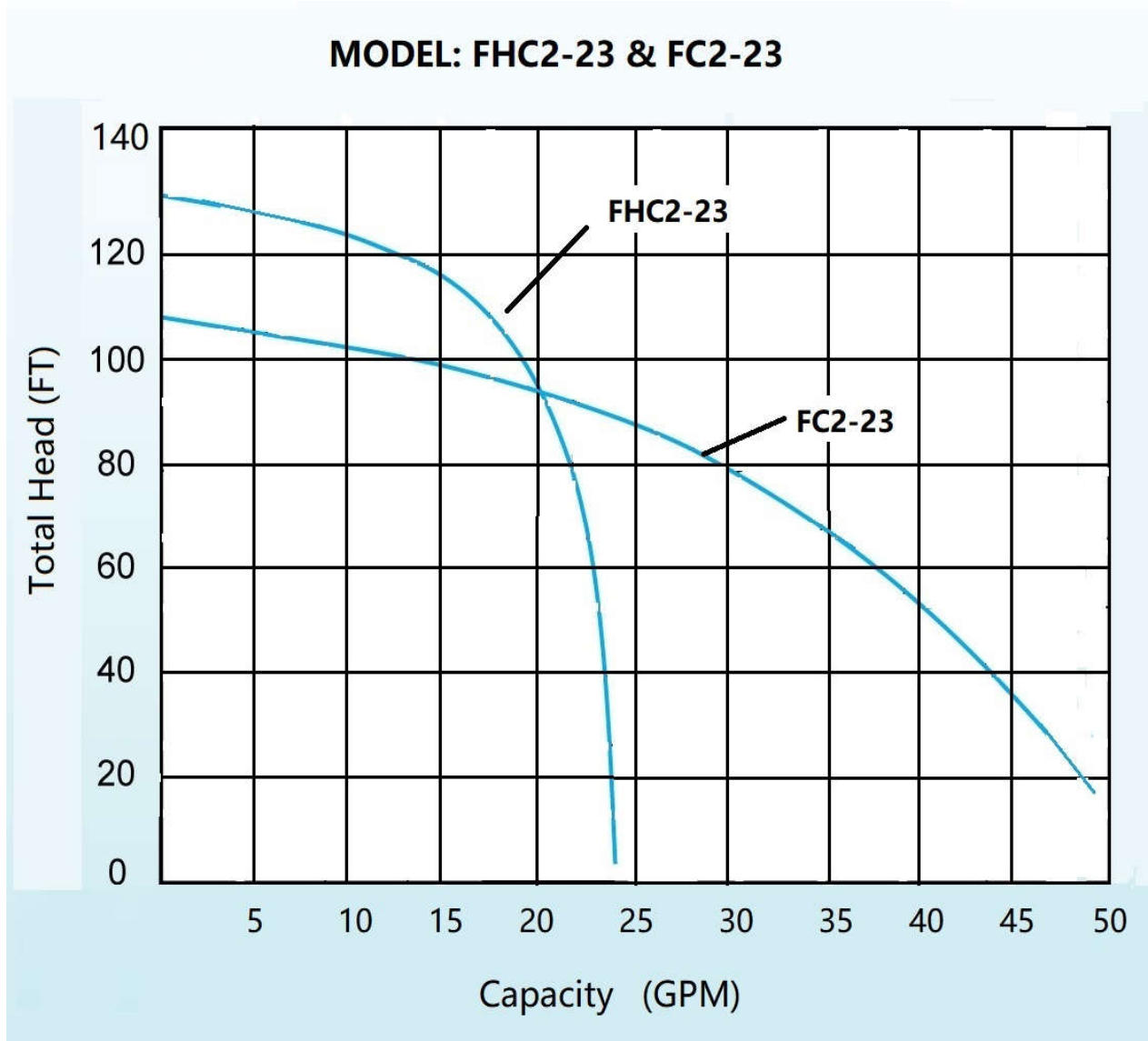
MODULE	HP	VOLT	PH/Hz	RPM	FULL LOAD AMPS	LOCKED ROTOR AMPS	CORD SIZE	CORD TYPE	WEIGHT (LBS)
FC2-21C	2	230	1/60	3450	14.5	23	14AWG/3	SOOW	75
FHC2-21C									75
FC2-21							14AWG/5		74
FHC2-21									74

- FC2-21C and FHC2-21C feature internal capacitors and do not require a separate control panel for operation.
- FC2-21 and FHC2-21 features external capacitors, requiring a panel with appropriately sized start and run capacitors.
- Testing is performed with water, specific gravity 1.0 @ 38°F @ (20°C), other fluids may vary performance.



**FC SERIES 2HP GRINDER PUMPS**

**PERFORMANCE CURVE**



MODULE	HP	VOLT	PH/Hz	RPM	FULL LOAD AMPS	LOCKED ROTOR AMPS	CORD SIZE	CORD TYPE	WEIGHT (LBS)
FC2-23	2	230	3/60	3450	8.8	22.5	14AWG/4	SOOW	74
FHC2-23									74

- 3-phase models require a properly sized control panel
- Testing is performed with water, specific gravity 1.0 @ 38°F @ (20°C), other fluids may vary performance.



**FG SERIES 2HP GRINDER PUMPS**



**Model: FG2-21C/FHG2-21C  
2HP, 3450RPM, 60Hz  
High-Flow & High Head**

**SPECIFICATIONS:**

<b>DISCHARGE</b> .....	1-1/4" NPT,Vertical
<b>LIQUID TEMPERATURE</b> .....	120°F(40°C) Continuous 140°F(40°C) Intermittent
<b>VOLUTE</b> .....	Cast Iron ASTM A-48,Class 30
<b>MOTOR HOUSING</b> .....	Cast Iron ASTM A-48,Class 30
<b>SEAL PLATE</b> .....	Cast Iron ASTM A-48,Class 30
<b>IMPELLER</b> .....	Cast Iron ASTM A-48,Class 30,12 Vane, Vortex with Pump-out Vanes, Dynamically Balanced,ISO G6.3
<b>SHAFT</b> .....	420 Stainless Steel
<b>O RING</b> .....	Buna-N
<b>SEAL: Design</b> .....	Single Mechanical in Oil-Filled
<b>Material</b> .....	Rotating Face - Silicon Carbide Stationary Face - Silicon Carbide Elastomer - Buna -N Hardware - 300 Series Stainless
<b>CABLE ENTRY</b> .....	30 Ft (9.1m) Cord . Compression Grommet-Outer Jacket Seal Epoxy Potted – Inner Conductor Seal Butt Connector – Inner Wire Strand Wicking Blockage
<b>UPPER BEARING</b> .....	Single Row, Ball, Oil lubricated
<b>LOWER BEARING</b> .....	Single Row, Ball, Oil Lubricated
<b>MOTOR</b> .....	Single Phase, 2 HP, 3450 RPM, 60 Hz Dual voltage, 200 / 230 volts Includes Overload Protection in the Motor Oil Filled,Class F Capacitor Start / Capacitor Run
<b>OPTIONAL EQUIPMENT:</b>	Cord Length, Impeller Trims

**KEY FEATURES:**

- Oil-filled motor for maximum motor cooling and constant bearing lubrication
- Recessed impeller reduces radial bearing loads and increases bearing life
- Capacitor start/run design for assured starting, strong torque and grinding under heavy load
- On-Winding current and temperature-sensitive overload
- Pressed stator for precise shaft / bearing alignment, long life
- Shredding ring and grinder impeller are replaceable without dismantling pump or motor
- 300 Series Stainless Steel fasteners

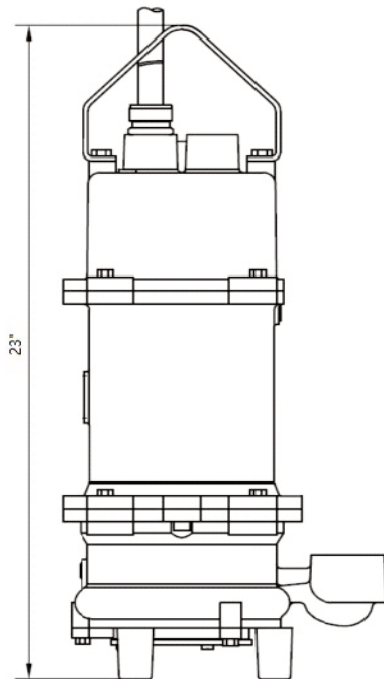
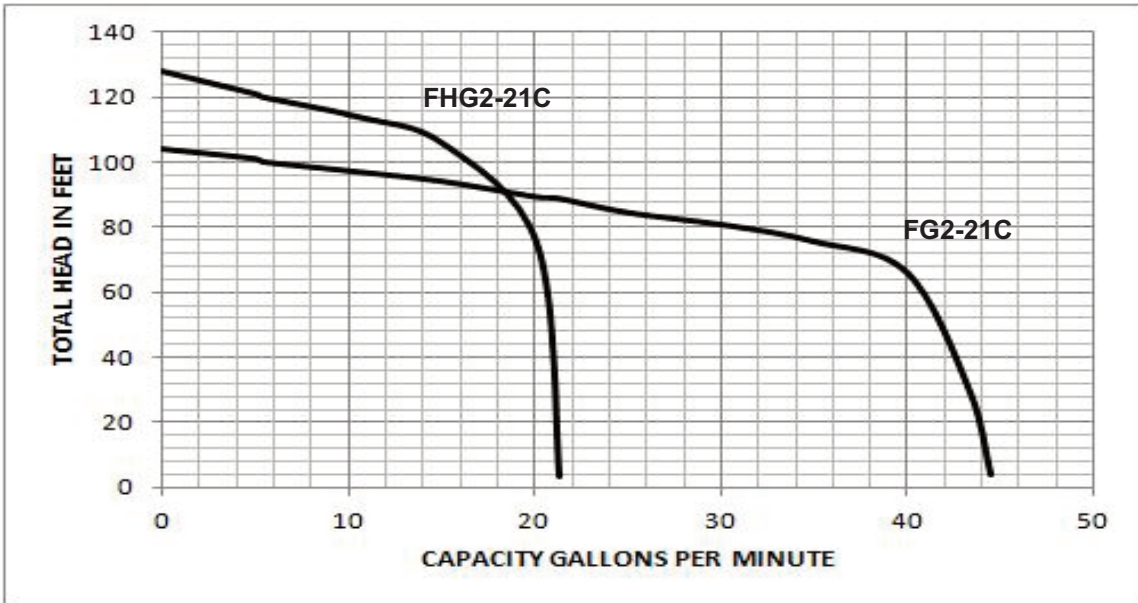
**WARRANTY:**

Whichever comes first:  
12 months from date of original installation, or  
18 months from date of manufacture

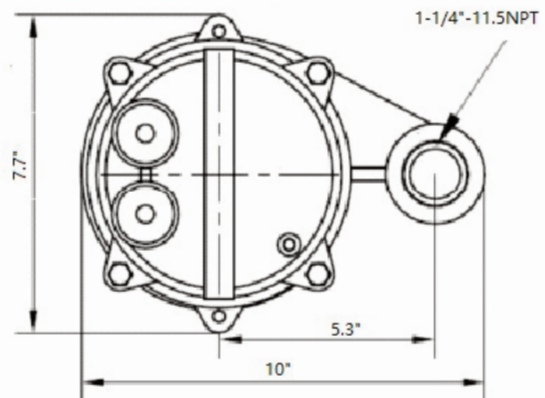


**FG SERIES 2HP GRINDER PUMPS**

**PERFORMANCE CURVE**



**PUMP SIZE**



MODULE	HP	VOLT	PH/Hz	RPM	FULL LOAD AMPS	LOCKED ROTOR AMPS	CORD SIZE	CORD TYPE	CORD O.D. in (mm)
FG2-21C	2	200~230	1/60	3450	14.5	23	14/4	SOOW	0.57 (14.5)
FHG2-21C									

**2HP EXTREMELY HIGH HEAD GRINDER PUMPS**



**Model: FNG2-21C**  
**2HP, 3450RPM, 60Hz**

**SPECIFICATIONS:**

<b>DISCHARGE</b> .....	1-1/4" NPT, Vertical
<b>LIQUID TEMPERATURE</b> .....	120°F(40°C) Continuous 140°F(40°C) Intermittent
<b>CORD CAP</b> .....	Cast Iron ASTM A-48,Class 30
<b>MOTOR HOUSING</b> .....	Cast Iron ASTM A-48,Class 30
<b>VOLUTE</b> .....	Ductile Iron
<b>SEAL PLATE</b> .....	Cast Iron ASTM A-48,Class 30
<b>IMPELLER</b> .....	440C Stainless Steel Two-sided turbine impeller, 60 Vane Dynamically Balanced,ISO G6.3
<b>GRINDER IMPELLER</b> ....	Hardened 440C Stainless Steel 56-60 Rockwell C
<b>SHREDDING RING</b> .....	Hardened 440C Stainless Steel 56-60 Rockwell C
<b>SHAFT</b> .....	420 Stainless Steel
<b>O RING</b> .....	Buna-N
<b>SEAL:</b> <i>Design</i> .....	Single Mechanical in Oil-Filled
<i>Material</i> .....	Rotating Face - Silicon Carbide Stationary Face - Silicon Carbide Elastomer - Buna -N Hardware - 300 Series Stainless
<b>CABLE ENTRY</b> .....	30 Ft (9.1m) Cord . Compression Grommet-Outer Jacket Seal Epoxy Potted – Inner Conductor Seal Butt Connector – Inner Wire Strand Wicking Blockage
<b>UPPER BEARING</b> .....	Single Row, Ball, Oil lubricated
<b>LOWER BEARING</b> .....	Single Row, Ball, Oil Lubricated
<b>MOTOR</b> .....	Single Phase, 2 HP, 3450 RPM, 60 Hz Dual voltage, 200 / 230 volts Includes Overload Protection in the Motor Oil Filled,Class F Capacitor Start / Capacitor Run
<b>OPTIONAL EQUIPMENT:</b>	Cord Length, Leg Kit Slicer cutter --FNC Version

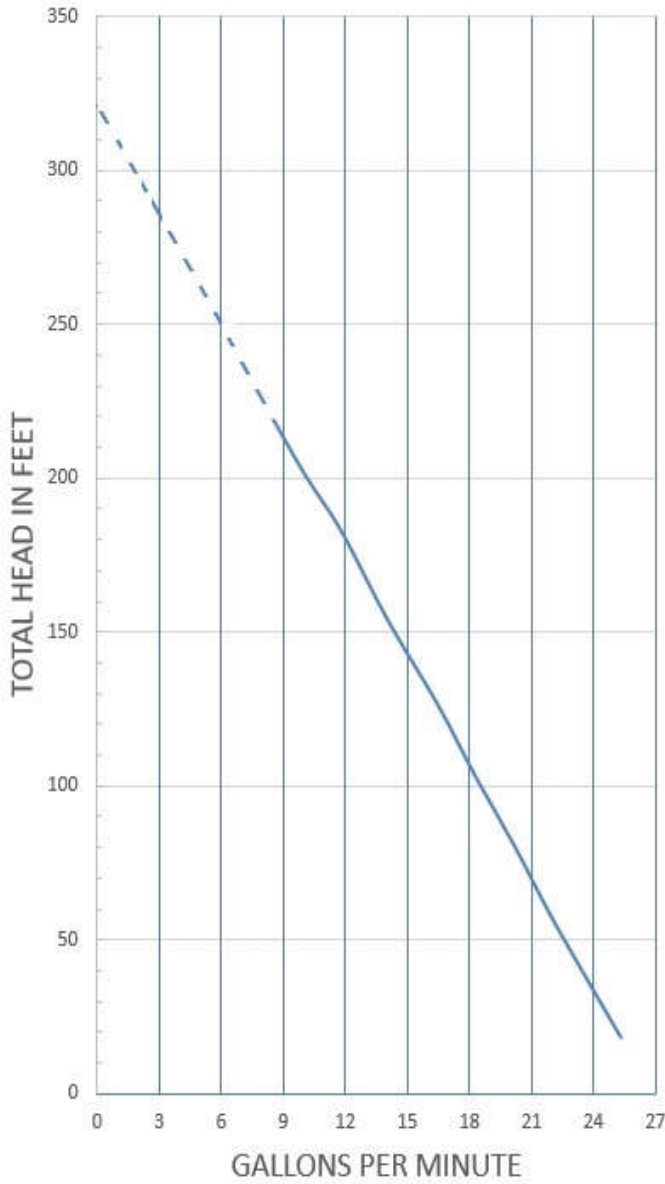
**KEY FEATURES:**

- Oil-filled motor for maximum motor cooling and constant bearing lubrication
- Capacitor start/run design for assured starting, strong torque and grinding under heavy load
- On-Winding current and temperature-sensitive overload
- Pressed stator for precise shaft / bearing alignment, long life
- Extremely high head up to 320 feet
- Revolutionarily Two-sided turbine impeller design
- Grinder impeller and shredding ring are made of 440C stainless steel hardened to 56-60 Rockwell C
- Clog-free volute design

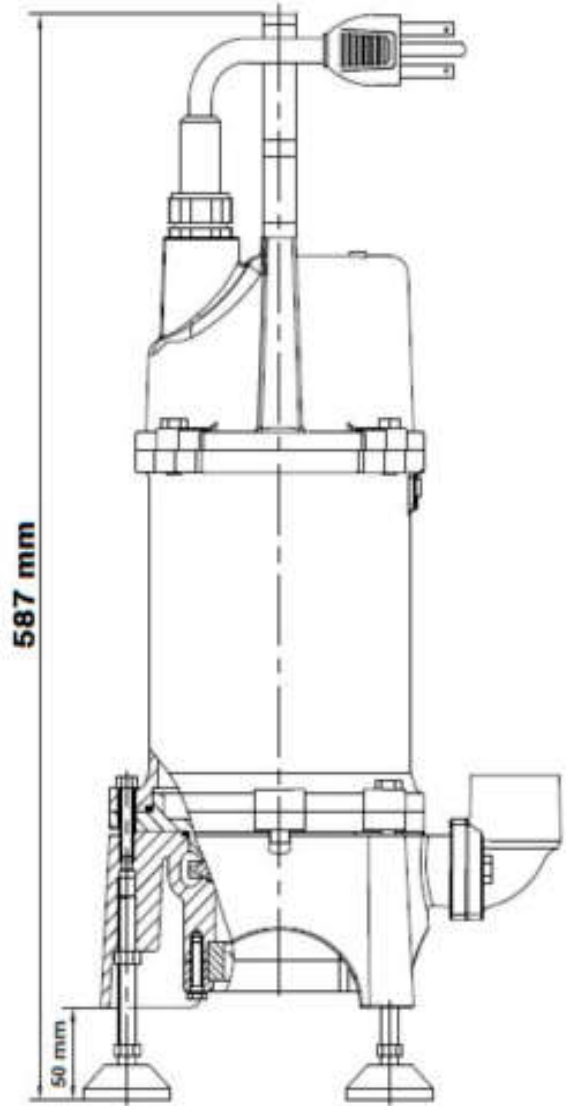


**2HP EXTREMELY HIGH HEAD GRINDER PUMPS**

**PERFORMANCE CURVE**



**PUMP SIZE**



**ELECTRICAL DATA:**

MODEL	HP	VOLT	PH/Hz	RPM	FULL LOAD AMPS	LOCKED ROTOR AMPS	CORD SIZE	CORD TYPE	WEIGHT (LBS)
FNG2-21C	2	200~230	1/60	3450	15	25	14/3	SOW	88



**FZG 5HP/7.5HP Submersible Grinder Pumps**



**SPECIFICATIONS:**

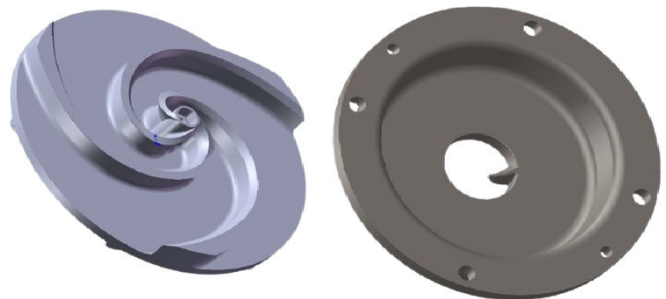
- DISCHARGE** ..... Horizontal Flange, Combination 2.5" & 3"
- LIQUID TEMPERATURE** .. 120 degrees F (Continuous)  
140 degrees F. (Intermittent)
- VOLUTE** ..... Cast Iron ASTM A-48, Class 30
- MOTOR HOUSING** ..... Cast Iron ASTM A-48, Class 30
- SEAL PLATE** ..... Cast Iron ASTM A-48, Class 30
- SHREDDING RING** ..... Hardened 440C Stainless Steel  
56-60 Rockwell C
- GRINDER IMPELLER** ..... Hardened 440C Stainless Steel  
56-60 Rockwell C
- SHAFT** ..... 420 Stainless Steel
- O RING** ..... Buna-N
- CORD ENTRY** ..... Triple Sealed Design  
Compression Grommet – Outer Jacket Seal  
Epoxy Potted – Inner Conductor Seal  
Butt Connector – Inner Wire Strand Wicking Blockage
- SEAL: Motor Side**..... Rotating Face - Graphite  
Stationary Face - Silicon Carbide  
*Pump Side*..... Rotating Face - Silicon Carbide  
Stationary Face - Silicon Carbide  
Elastomer - Buna -N  
Hardware - 300 Series Stainless
- UPPER BEARING** ..... Single Row, Ball, Oil lubricated
- LOWER BEARING** ..... Single Row, Ball, Oil Lubricated
- MOTOR** ..... 5 & 7.5 HP, 3450 RPM, 60 Hz  
Dual-voltage, 230 / 460 volts, Air Filled, Class F  
On-Winding temperature sensor and water leakage probe
- OPTIONAL EQUIPMENT:** Cord Length & Impeller Trim

**APPLICATIONS:**

The FZG series centrifugal grinder/Chopper pumps easily handle residential, commercial or industrial sanitary waste, reducing it to a fine slurry. The pump is designed for use in pressure sewer applications or any piping network. The recessed vortex impeller design provides trouble free, non-overloading operation over the entire performance curve.

The hardened stainless steel grinder assembly provides many years of dependable operation.

**Model: FZG-53, 230V/460V**  
**FZG-73, 230V/460V**



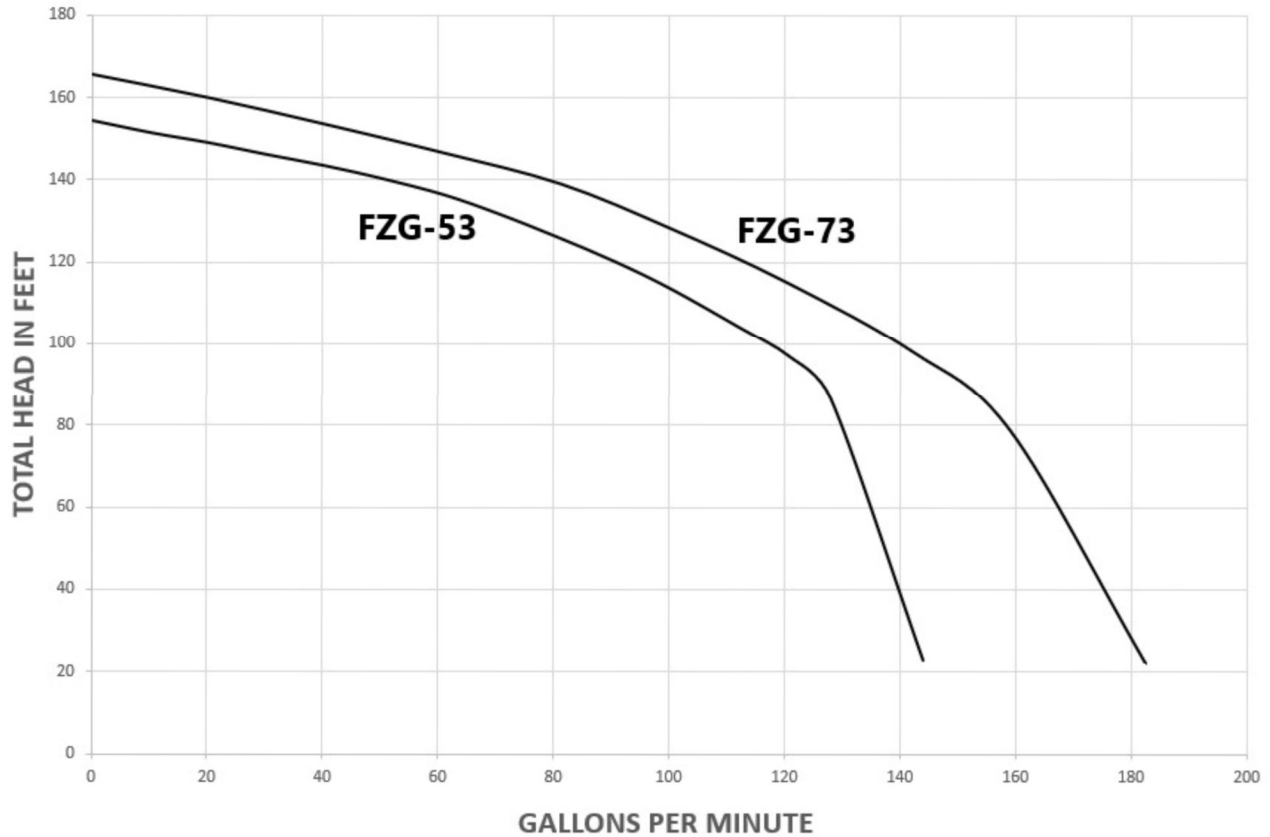
**ELECTRICAL DATA:**

MODEL	HP	Volt.	Ph/Hz	RPM	Full Load Amps	Impeller Size (mm)	Weight (lbs)
FZG-53	5	230/460	3/60	3450	22/11	152.4	191
FZG-73	7.5	230/460	3/60	3450	27/13.5	165.1	195

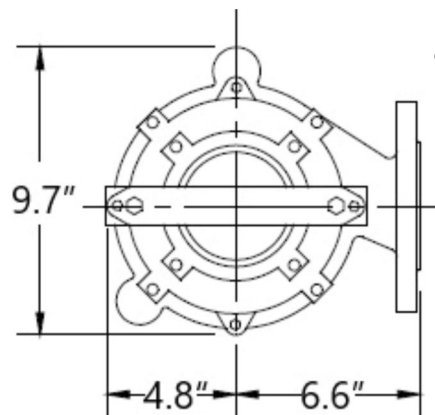
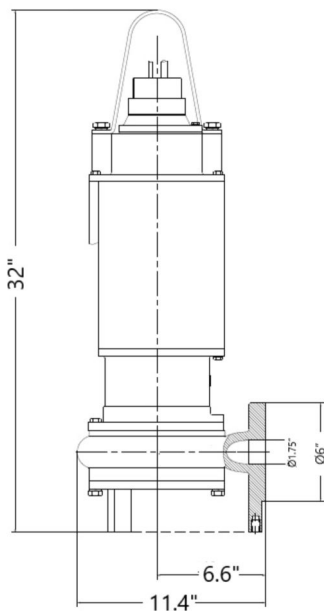


**FZG 5HP/7.5HP Submersible Grinder Pumps**

**PERFORMANCE CURVE**



**PUMP SIZE**



**KEY FEATURES:**

- Strong Air-filled sealed motor
- Dual Silicon-Carbide Mechanical Shaft Seals
- Pressed-In Motor with Internal Overload Protection
- Internal Moisture Detection



**140TY/180TY/210TY/250TY SUBMERSIBLE MOTORS**



**MODEL: 140TY, 1-3 HP  
180TY, 5-7.5HP  
210TY, 7.5-20HP  
250TY, 20-50HP**

**KEY FEATURES:**

- Energy efficient and Premium efficient designs
- 1.15 S.F. on Sine Wave, 1.0 S.F. on inverter
- Class F insulation
- Cast Iron Construction
- P-Base mounting flange
- 420 Stainless Steel Shaft
- Type 21 carbon ceramic mechanical shaft seals. O-rings and Sealed fits in stator housing and end plates
- Non-wicking, potted cable cap assembly securely attaches and seals the power leads to the frame. Cable cap design allows for easy removal and reconnection of the power cable.
- Drive end oil chamber provides a barrier against moisture ingress into the bearings as well as lubricating the upper seal. Oil chamber is filled prior to shipment.
- Moisture probes mounted in oil chamber to detect ingress of moisture. Moisture control relay supplied by customer.
- (2) Integral cast in lifting provisions for easy, balanced lifting and mounting of the motor
- Deep groove Conrad type ball bearings, Class 3 fit per AFBMA std. 20
- (2) N.C. Thermostats
- 404 Corrosion resistant stainless steel nameplate and exterior hardware
- 30 foot power & control cables
- Neoprene jacketed power and control cables
- 2 Year Prorated Warranty from date of Manufacture.

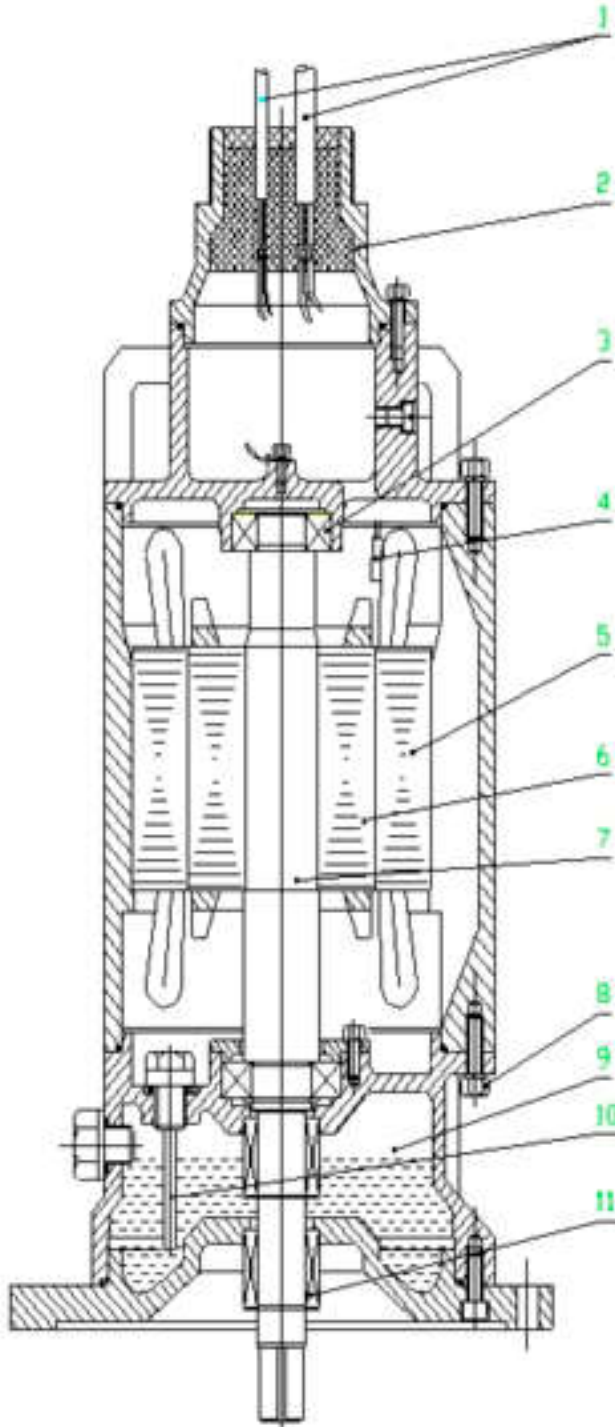
**Common Options:**

- *Class H insulation system*
- *Special paint (Coal tar epoxy paint)*
- *Inner and outer seals options*
- *Cable lengths to 100 feet (Longer lengths require approval)*
- *Shaft materials*
- *Water Jacket Design (to reduce frame size requirements)*
- *One size smaller flange and shaft*



**140TY/180TY/210TY/250TY SUBMERSIBLE MOTORS**

**Submersible Motor Construction**



**1. CABLE**

Specifically designed for submersible applications chloroprene cable withstands temperatures of up to 90°C.

**2. CABLE ENTRY POTTING**

Epoxy-filled, non-wicking cable cap assembly

**3. BEARINGS**

Single row, deep groove or double row angular contact, Conrad type

**4. THERMAL PROTECTOR**

Embedded in the motor windings with three automatic-resetting bimetallic thermostats

**5. MOTOR**

An air filled, three phase squirrel cage induction motor for submersible or dry pit duty.

**6. ROTOR**

Cast aluminum, dynamically balanced

**7. SHAFT**

420 stainless steel

**8. HARDWARE**

304 stainless steel.

**9. OIL CHAMBER**

Acts as a barrier to trap moisture and provide sufficient time for shut down. Also provides lubrication for upper seal

**10. LEAKAGE DETECTOR**

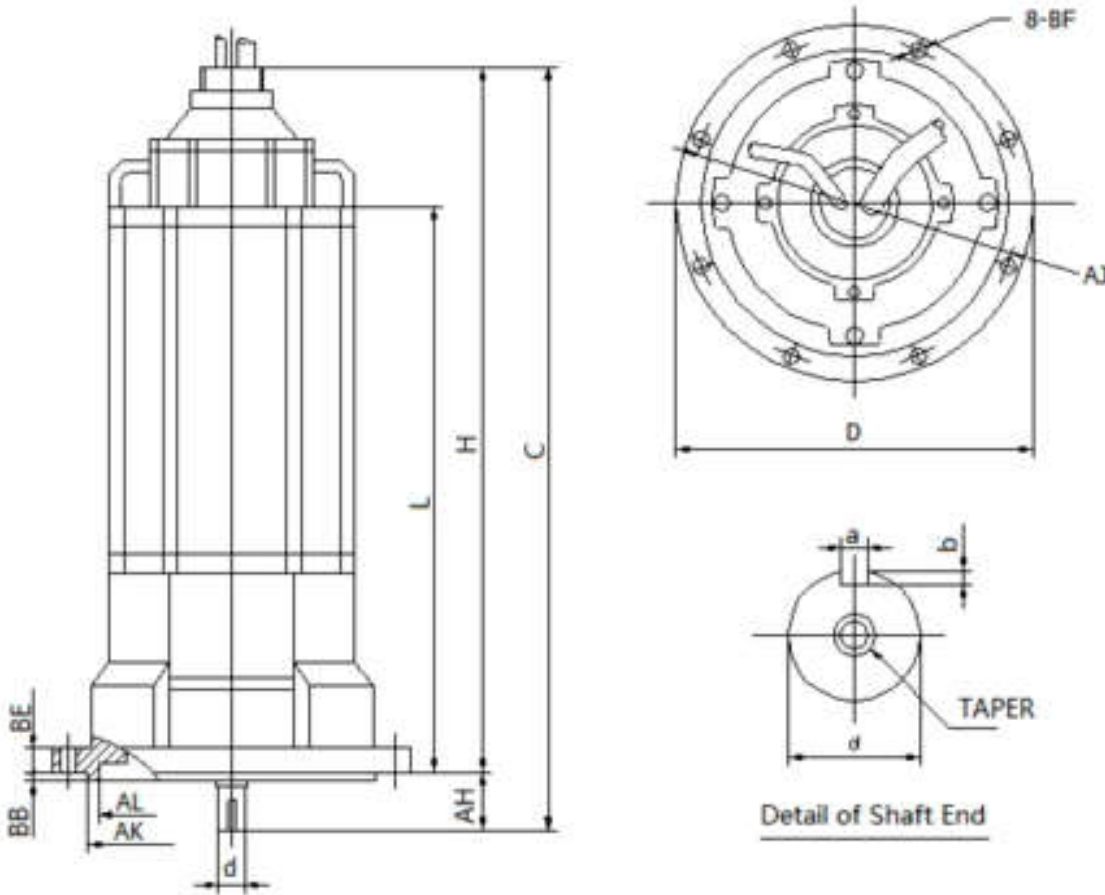
A single-electrode or dual-electrode leakage detectors are mounted in oil chamber to detect ingress of water.

**11. SHAFT SEALS**

Two independently mounted Type 21 mechanical face type seals.

**140TY/180TY/210TY/250TY SUBMERSIBLE MOTORS**

**Submersible Motor Size**



**DIMENSIONS: (INCHES)**

FRAME	C	H	AH	L	BB	BE	AK	AL	D	AJ	BF	d	KEYWAY	
													a	b
140TY	22.82	21.26	1.56	15.3		0.75		9.126	11.062	10.00	.044	0.875	0.187	0.09
180TY	26.66	24.38	2.28	17.3		0.75		10.63	12.375	11.5	0.56	1.25	0.25	0.12
210TY	32.03	30.47	1.56	24.1	0.25	0.75	13.125	12.00	15.25	14.12	0.56	1.438	0.375	0.19
250TY	38.93	36.61	2.32	26.65	0.25	0.88	15.00	14.00	17.00	16.00	0.69	1.75	0.375	0.19

(1)Tolerance is +0.00 inch , -0.06 inch (for"AK"&"d")

(2)L: Minimum submerged depth

**Dimensions of flange and shaft extension are optional**

**140TY/180TY/210TY/250TY SUBMERSIBLE MOTORS**

F&Q offers submersible motors serving both municipal and industrial wastewater markets for both wet & dry pit applications. Wet pit motors use the effluent for cooling and can run 15 minutes in air. Dry pit motors are designed to run continuously in air or submerged when properly applied. F&Q also offers designs suitable for rugged slurry pump applications, aerators and mixers.

Frame Size	Model No.	Poles	Out Power (Hp)	Rated C't (A)	Efficiency			Power Factor			Rated Speed (r/min)	Starting Characteristics		
					1/1 (%)	3/4 (%)	1/2 (%)	1/1 (%)	3/4 (%)	1/2 (%)		Is (A)	Ts (%)	Tm (%)
140TY	140TY-2P-3HP	2	3	4.5	74	71	64	85	81	73	3460	31	290	250
	140TY-4P-1HP	4	1	2	73	71	68	76	71	60	1760	13.5	340	260
	140TY-4P-1.5HP	4	1.5	2.7	74	72.5	68	78	73	61.5	1745	19	320	250
	140TY-4P-2HP	4	2	3.1	75	73.5	69	80.5	74	62.5	1735	23	350	270
	140TY-4P-3HP	4	3	4.3	77	76.5	73.5	83.5	77.5	66.5	1725	30	310	250
180TY	180TY-2P-7.5HP	2	7.5	10	76	73.5	67.5	92.5	91.5	88	3450	58	270	260
	180TY-4P-5HP	4	5	6.7	80	79	79	84	83	80	1765	47	290	230
	180TY-4P-7.5HP	4	7.5	10	84	83	81	86	81	70.5	1735	63	270	250
210TY	210TY-4P-10HP	4	10	15.5	87	86	84	85	82.5	75	1754	92	270	250
	210TY-4P-15HP	4	15	19.5	88	87	85	86	82	78	1750	135	250	240
	210TY-4P-20HP	4	20	24	89	87	85.5	88	84	80	1750	165	235	210
	210TY-6P-7.5HP	6	7.5	11.5	80	80	76.5	76	69.5	57.5	1143	62	190	205
	210TY-6P-10HP	6	10	15	81	81	78.5	77	71	59	1140	78	180	200
	210TY-6P-15HP	6	15	20.9	85	84.5	82.5	79	73	61.5	1160	112	190	210
	210TY-8P-10HP	8	10	14.8	82.5	82.5	80	76.5	69.5	57	860	72	170	205
250TY	250TY-2P-50HP	2	50	58	88	87.5	86	91.5	90	85	3460	402	220	250
	250TY-4P-50HP	4	50	61	90	90	88.5	85.5	82.5	74	1760	340	200	210
	250TY-6P-20HP	6	20	26.7	86.5	86	84	81	75.5	64.5	1160	140	180	210
	250TY-6P-25HP	6	25	34.1	87	86.5	84.5	79	73	62	1160	185	200	220
	250TY-6P-40HP	6	40	53	88	88	86.5	81	76.5	66	1165	285	170	200

Note: Starting Characteristics

Is: Locked Rotor Current

Tm: Breakdown Torque

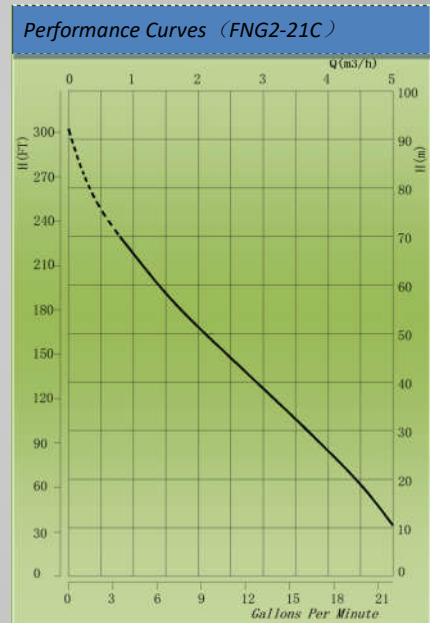
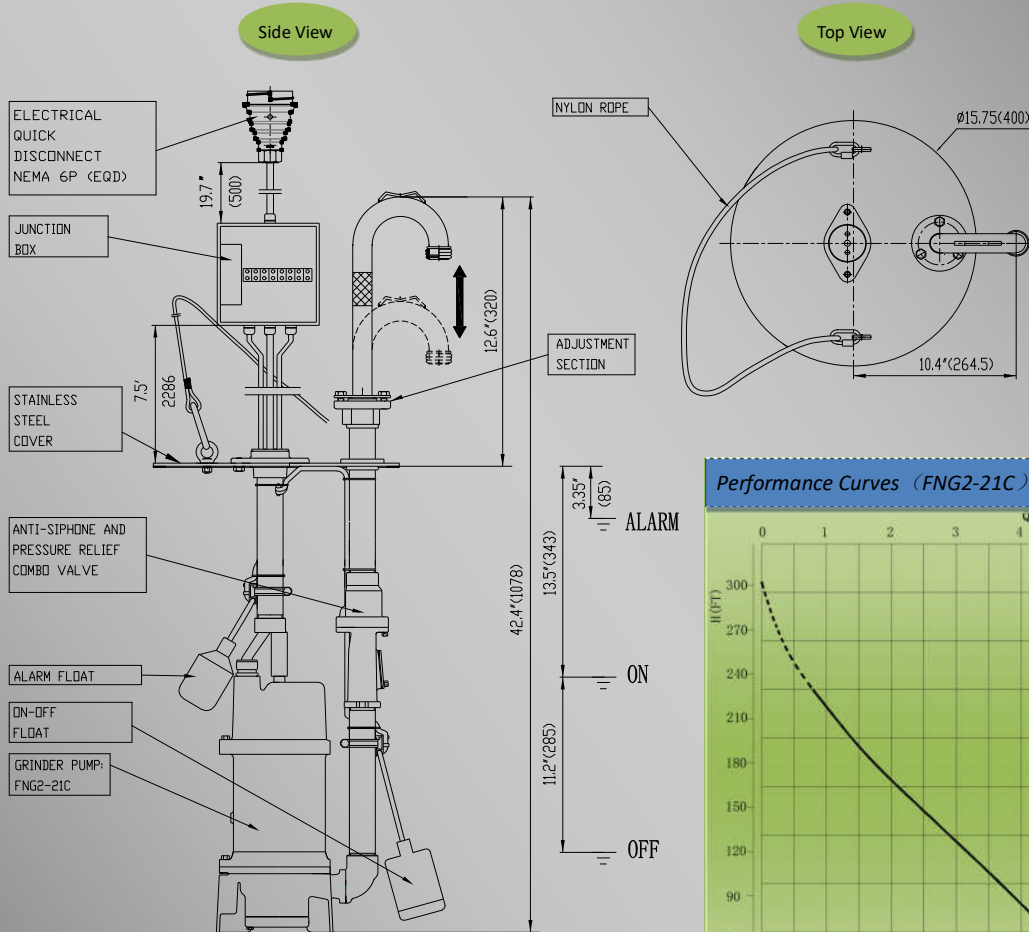
Ts: Locked Rotor Torque

DOL: Direct on Line Start



**SPECIFICATIONS**

Model	Pump	Volts	Amps	HP	PH	HZ	RPM	Weight(lbs)
FNG2-21C-SAJ	FNG2-21C	208-230	<17	2	1	60	3450	118
FNG2-21C-FAJ	FNG2-21C							
FC2-21C-SCJ	FC2-21C		<14.5					115
FC2-21C-FCJ	FC2-21C							
FNG2-21CFZ-FAN	FNG2-21CFZ		<17					115

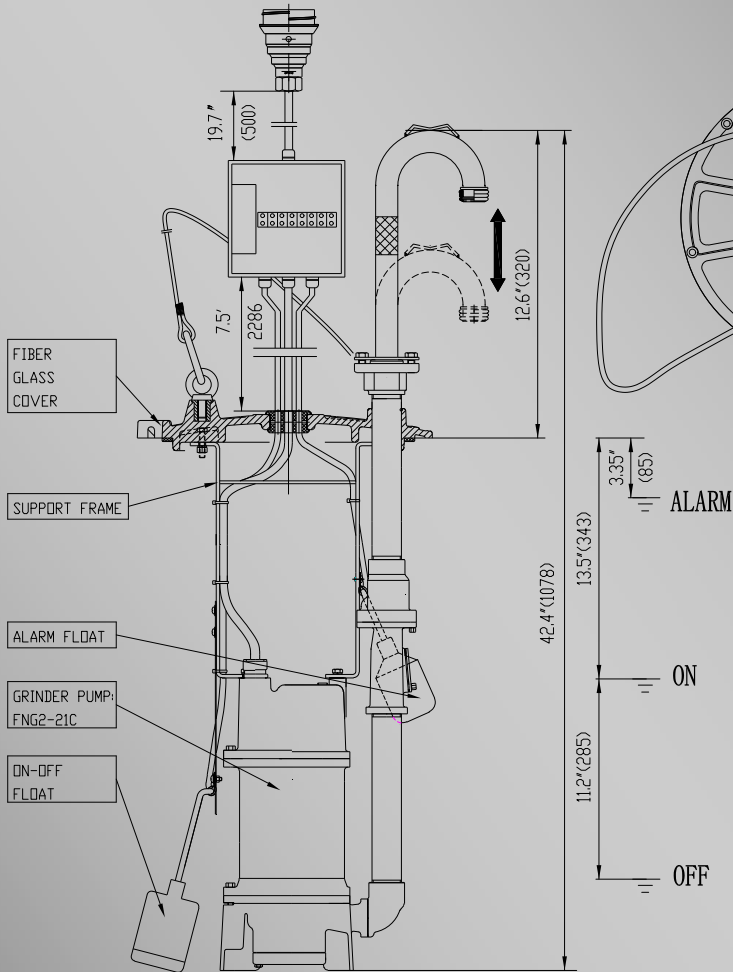


**Model: FNG2-21C-SAJ**

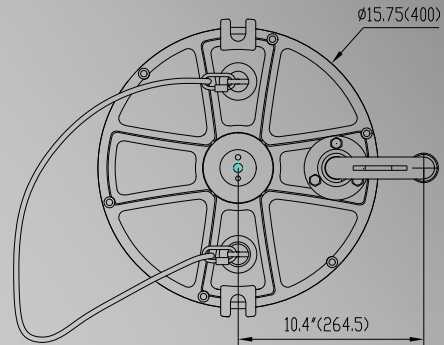
**Features:**

- Fast, simple, and easy installation
- Watertight junction box for ease of installation and servicing
- 1-1/4" SST anti-siphon and pressure relief combo valve
- 1-1/4" NPT SST piping
- Adjustable alarm float switch preset at factory
- High starting torque, automatic grinder pump (FNG2-21C) with mechanical float switch
- Quick disconnect plug
- Rigid construction for ease of handling
- Lightweight
- 316 Non-slip stainless steel cover

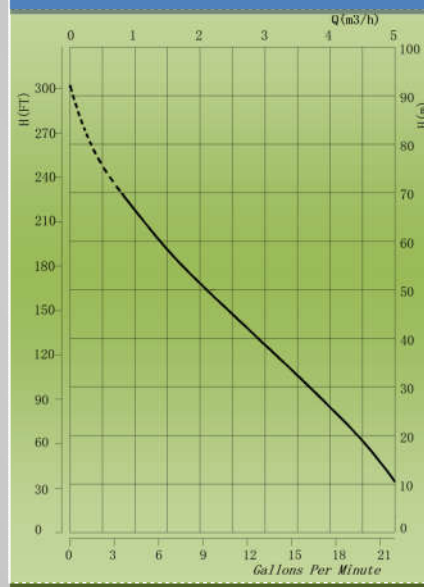
Side View



Top View



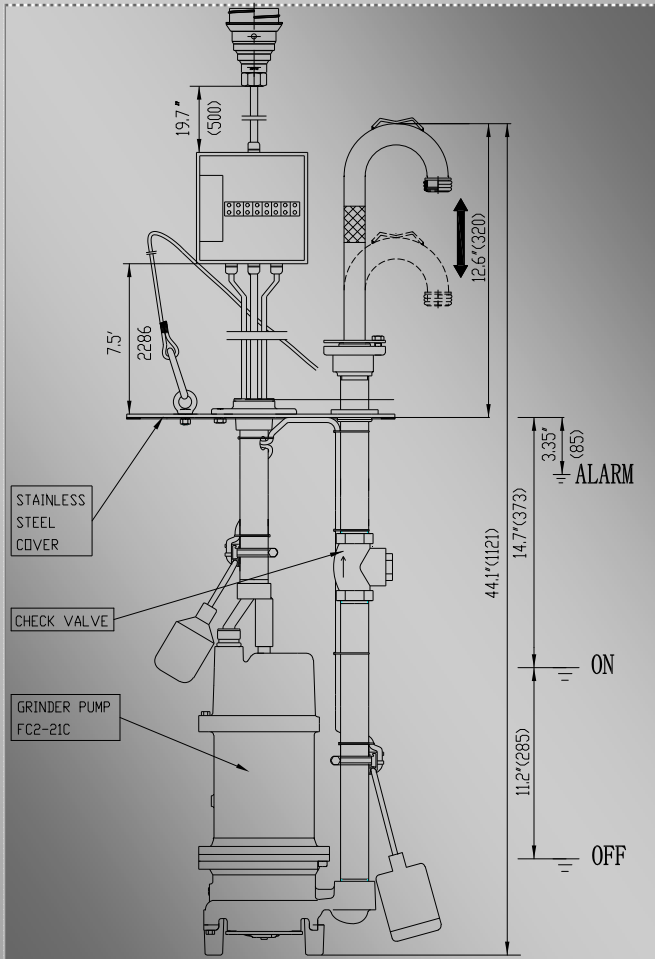
Performance Curves (FNG2-21C)



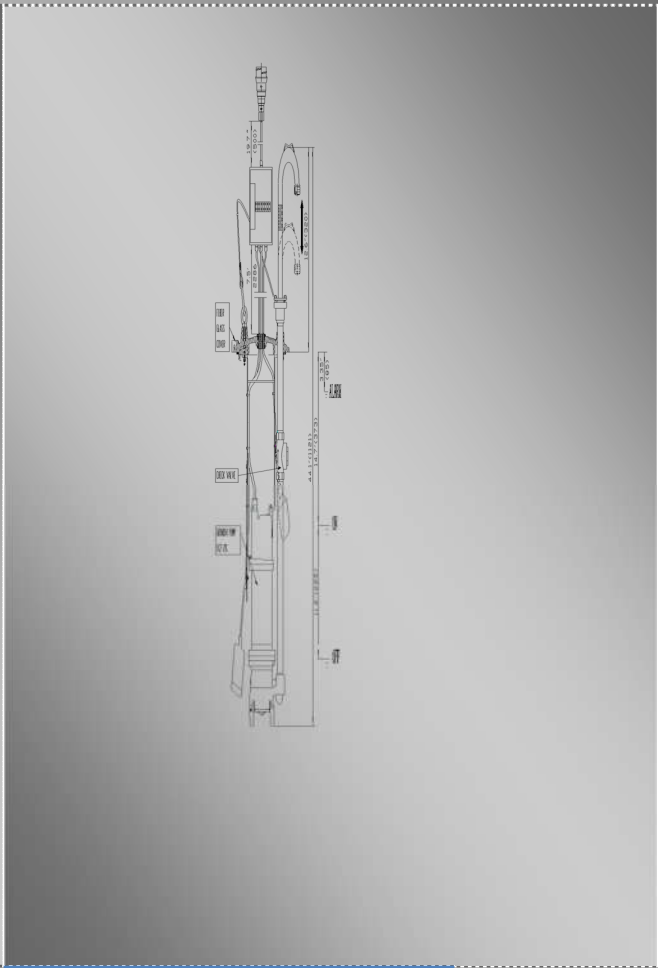
**Model: FNG2-21C-FAJ**

**Features:**

- Fast, simple, and easy installation
- Watertight junction box for ease of installation and servicing.
- 1-1/4" SST anti-siphon and pressure relief combo valve
- 1-1/4" NPT SST piping
- Adjustable alarm float switch preset at factory
- High starting torque, automatic grinder pump (FNG2-21C) with mechanical float switch
- Quick disconnect plug
- Rigid construction for ease of handling
- Lightweight
- Fiber glass cover



*Model: FC2-21C-SCJ*

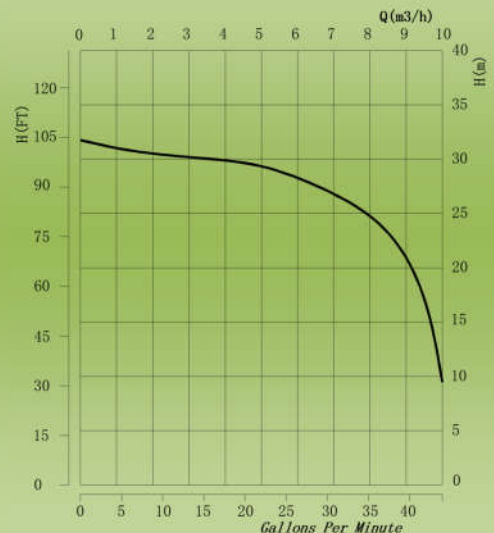


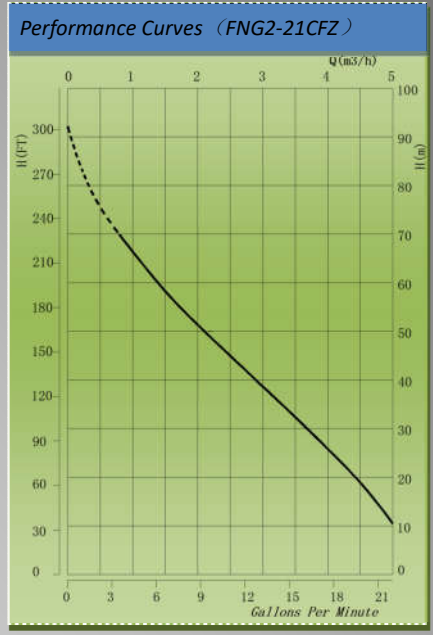
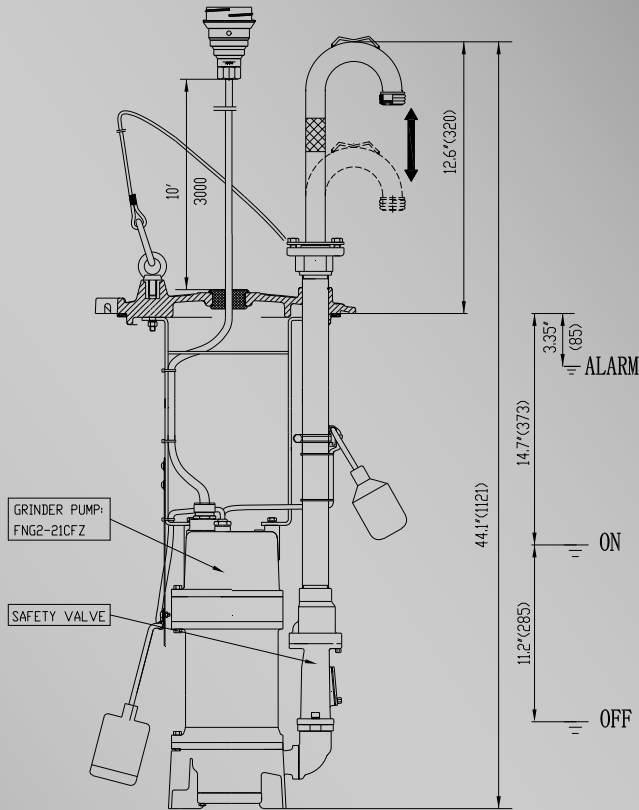
*Model: FC2-21C-FCJ*

**Features:**

- Fast, simple, and easy installation
- Watertight junction box for ease of installation and servicing.
- 1-1/4" SST check valve
- 1-1/4" NPT SST piping
- Adjustable alarm float switch preset at factory
- High starting torque, automatic grinder pump (FC2-21C) with mechanical float switch
- Quick disconnect plug
- Rigid construction for ease of handling
- Lightweight
- 316 Non-slip stainless steel cover / Fiber glass cover

**Performance Curves(FC2-21C)**





## Model: FNG2-21CFZ-FAN

### Features:

- Fast, simple, and easy installation
- No junction box, directly connect to E-one original equipment
- 1-1/4" SST anti-siphon and pressure relief combo valve
- 1-1/4" NPT SST piping
- Adjustable alarm float switch preset at factory
- High starting torque, automatic grinder pump (FNG2-21CFZ) with mechanical float switch
- Quick disconnect plug
- Rigid construction for ease of handling
- Lightweight
- Fiber glass cover



**SST cover with  
Anti-slip pattern**



**Fiber-glass cover**



**Adjustable goose-  
neck pipe**



**Anti-siphon and  
pressure relief  
combo valve**

## F&Q Pumps Inc.

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