

# Little GIANT®

## PRODUCT CATALOG

UTILITY PUMPS  
SUMP PUMPS  
EFFLUENT PUMPS  
SEWAGE PUMPS  
GRINDER PUMPS  
PACKAGE SYSTEMS



Franklin Electric

WASTEWATER

HVAC

INDUSTRIAL

WATER SYSTEMS

ENGINEERED PRODUCTS

## GIANT ADVANTAGES

Recognized as the world's leading manufacturer of submersible electric motors since 1944, Franklin Electric has grown into a water systems enterprise providing innovative products for a multitude of applications across the globe. North American markets include groundwater, plumbing, hvac, agriculture, and municipal. Franklin Electric provides pumping solutions to these primary markets, which include pumps, motors, drives, controls, protection equipment, and packaged systems.

For over 70 years professionals in the water transfer market have trusted the Little Giant brand for its reliable pump solutions, packaged system options, accessories, and total value. With a vast offering of sump, sewage, effluent products; dewatering and trash pumps; condensate pumps; magnetic drive pumps; low pressure sewer systems; water garden products and a wide variety of utility pumps, Little Giant is the brand of choice to hundreds of thousands worldwide representing Franklin's commitment to quality, innovation, availability, and service.

Corporate Headquarters  
Serving all corners of the world with more than  
14 manufacturing and distribution facilities.



Franklin Electric engineers design products for easy installation, high performance, long life, and exceptional value.



Our 200,000 sq ft centrally located warehouse in Oklahoma City enables fast and complete fill rates.



More than 4,300 responsive employees are ready to offer expert assistance.

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# UTILITY PUMPS

Whether it's for dewatering a waterbed or a storm cellar, circulating water for welding and pipe threading machines, pumping mild chemicals such as soaps or fertilizers, or meeting the highly specialized applications found in pressure-washers and carpet-cleaners, Little Giant's general purpose utility pumps are the true generals of efficiency and reliability.





### APPLICATIONS

- Commercial, industrial, and home uses where liquid must be transferred



### FEATURES

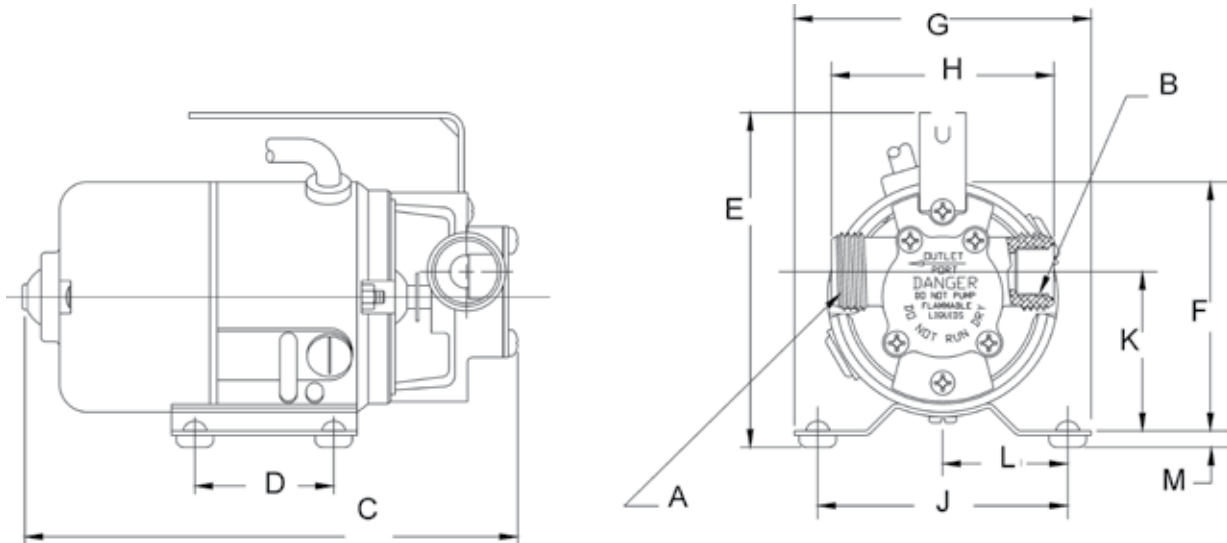
- Self-priming for instant delivery or dewatering up to 6' (1.8 m)
- Non-submersible stainless steel or plated brass pump body
- Rugged metallic handle or easy portability
- Dual threaded intake and discharge with both 3/4" (19 mm) male garden hose thread and 3/8" FNPT (9.5 mm)
- Model 360K includes pump, hose, strainer, and suction adapter
- Pump only models available with separate kit options
- cULus listing on models 555502, 555103, 555507, and 555122

### SERIES SPECIFICATIONS

Volts	Hz	Amps		Watts	Performance (GPH @ Height in Feet)				Shut-Off (ft)	PSI
		FLA	Start		1'	5'	10'	20'		
115	60	1.6	2.4	91	360	330	300	250	25'	20.9
12 VDC	-	7	14	84	300	270	240	202	25'	19.9

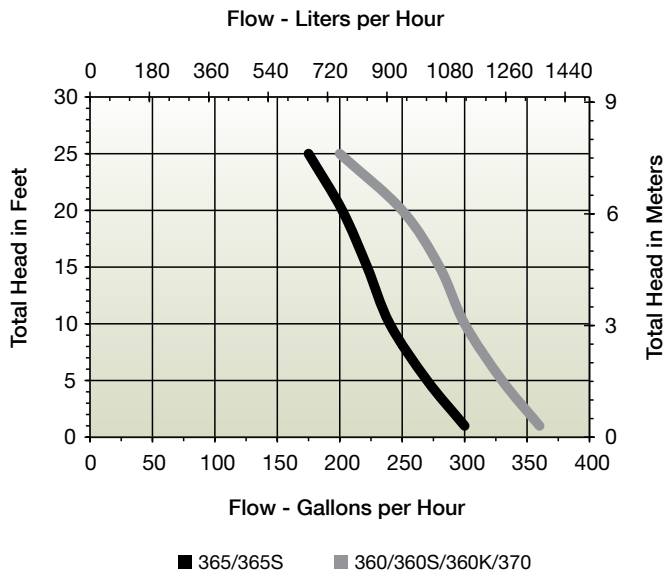
Item No.	Model	HP	Volts	Material	Operation	Cord	Weight
555502	360	1/10	115	Plated Brass	Self-Priming	6' 1.8 m	3.4 lbs 1.54 Kg
555103	360S	1/10	115	Stainless Steel	Self-Priming	6' 1.8 m	3.4 lbs 1.54 Kg
555507	370	1/10	115	Plated Brass	Self-Priming	6' 1.8 m	4.7 lbs 2.12 Kg
555602	365	1/10	12 VDC	Plated Brass	Self-Priming	12" Leads 30.5 cm	4.7 lbs 2.12 Kg
555203	365S	1/10	12 VDC	Stainless Steel	Self-Priming	12" Leads 30.5 cm	4.7 lbs 2.12 Kg
555122	360K	1/10	115	Plated Brass	Self-Priming	6' 1.8 m	4.7 lbs 2.12 Kg

SERIES SPECIFICATIONS CONT.



Model	A	B	C	D	E	F	G	H	J	K	L	M
115 V	3/4" MGHT 1.91 cm	3/8" FNPT 9.5 mm	6.62" 16.81 cm	1.87" 4.75 cm	4.5" 11.43 cm	3.35" 8.51 cm	4" 10.16 cm	3" 7.62 cm	3.37" 8.56 cm	2.14" 5.44 cm	1.69" 4.29 cm	0.22" 5.6 mm
12 VDC	3/4" MGHT 1.91 cm	3/8" FNPT 9.5 mm	5.93" 15.06 cm	1.87" 4.75 cm	4.18" 10.62 cm	3.13" 7.95 cm	4" 10.16 cm	3" 7.62 cm	3.37" 8.56 cm	1.82" 4.62 cm	1.69" 4.29 cm	0.22" 5.6 mm

PERFORMANCE DATA



REPLACEMENT & BRUSH KITS

Item No.	Model	Includes	Kit Used On
555702	HRK-360S	(2) Each - Buna Impeller with SST Insert, Buna Cover Gaskets (1) Each - SST Cam, SST Cam Screws, SST Volute Cover, Cam Gasket (4) Each - Volute Cover Screws	All Models
555706	IRK-360	(2) Each - Buna Impellers with Brass Insert, Buna Cover Gaskets	555502, 555122, 555602
555710	HW-360	(1) Each - 10' ft Garden Hose, SST Spring Strainer, Suction Adapter	All Models
555713	IRK-360S	(2) Each - Buna Impellers with SST Insert, Buna Cover Gaskets	555103, 555203, 555503
555714	ISRK-360S	(2) Each - Buna Impellers with SST Insert, Buna Cover Gaskets (1) Each - Slinger, Viton U-Cup Seal, Felt Washer, Retainer Ring	All Models
555705	WB-360	Brush Kit: (2) Each - White Caps, Brushes, Covers with Springs	All Models

### APPLICATIONS

- Pressure boosting for washing vehicles
- Flooded basements
- Watering lawns
- Draining water heaters



### FEATURES

- Non-submersible, inline, portable utility transfer pump with rugged one-piece cast iron housing and integral carrying handle
- Self-priming to 15' (4.6 m) when priming chamber is filled
- Can also be used to boost water pressure for washing vehicles, sidewalks, and more
- Convenient 3/4" (19 mm) brass garden hose adapters on intake and discharge
- Engineered thermoplastic impeller
- 3/4" (19 mm) FNPT discharge
- 140 °F (60 °C) liquid temperature rating
- cCSAus listed

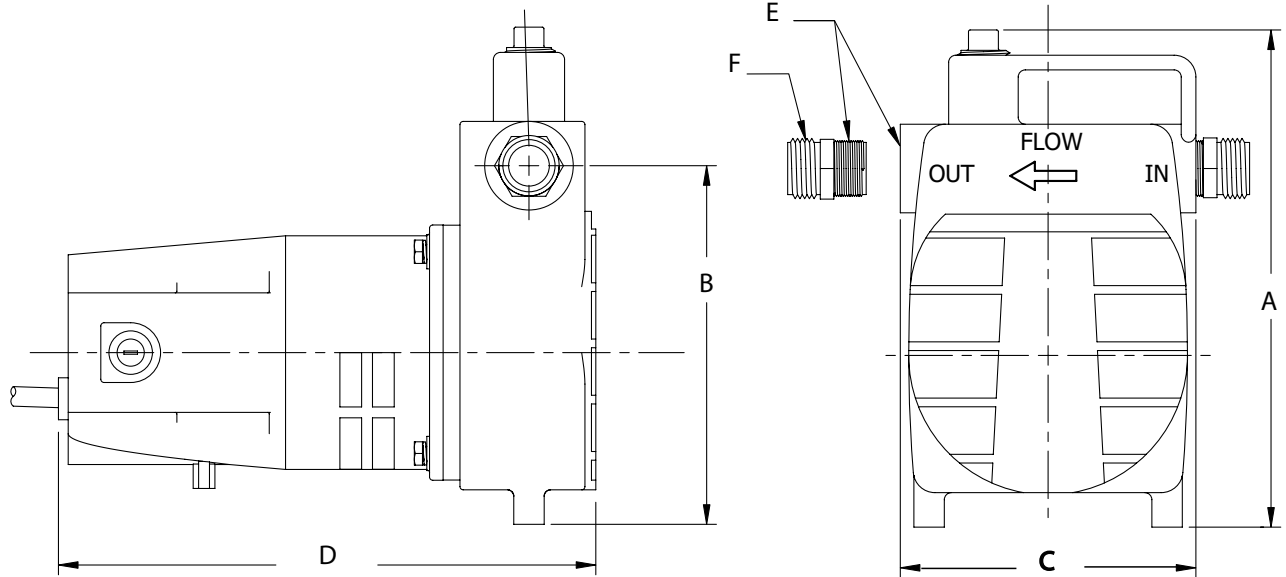
### SERIES SPECIFICATIONS

Volts	Hz	Amps		Watts	Performance (GPH @ Height in Feet)					Shut-Off (ft)	PSI
		FLA	Start		20'	40'	60'	80'	100'		
115	60	9	25	900	1152	912	648	372	90	105	45.4

Item No.	Model	Volts	Operation	Cord	Weight
555101	UPSP-5	115	Self-Priming	10' 3 m	17.8 lbs 8.07 Kg

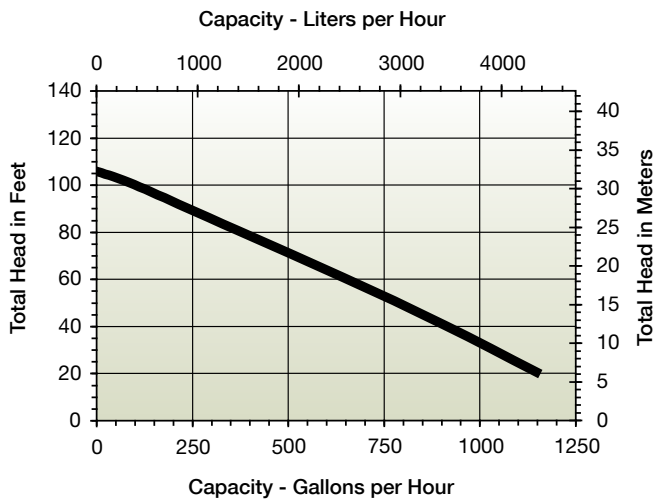


ENGINEERING DATA



A	B	C	D	E	F
9.15" 23.24 cm	6.6" 16.76 cm	5.5" 14 cm	9.9" 25.15 cm	3/4" MGHT 1.91 cm	3/4" MGHT 1.91 cm

PERFORMANCE DATA



CONSTRUCTION

Motor Housing	Cast iron
Impeller Material	Thermoplastic
Impeller Type	Semi-open
Volute	Cast iron
Motor Shaft	Carbon steel
Shaft Seal	Carbon/ceramic
Fasteners	Stainless steel
Bearings	Front and back ball bearings
Power Cord	SJT

### APPLICATIONS

- Commercial, industrial, and home uses where water must be transferred or recirculated

### FEATURES

- 1/6 hp shaded pole motor with overload protection
- Designed for continuous duty
- Pumps down to 1/8" (38 mm)
- 1" FNPT (25.4 mm) discharge
- Removable inlet screen for easy cleaning
- Multiple switch options for automatic operation
- Multiple power cord lengths available
- 120 °F (49 °C) liquid temperature rating
- cCSAus on models 505300, 505350, 505400, 505486, 505000, 505025, and 505176

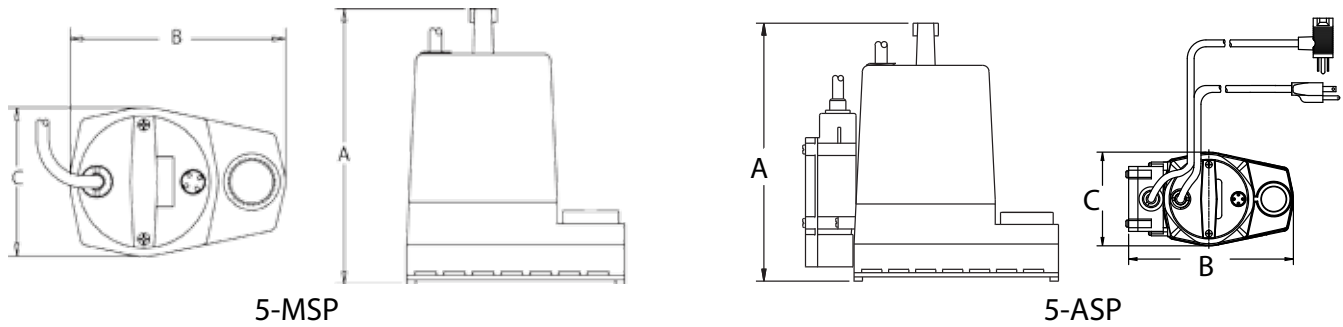


### SERIES SPECIFICATIONS

Volts	Hz	Amps		Watts	Performance (GPH @ Height in Feet)					Shut-Off (ft)	PSI
		FLA	Start		1'	3'	5'	10'	20'		
115	60	5	6.4	380	1200	1170	1100	1000	520	26.3'	11.4
230	60	2.5	6.4	380	1200	1170	1100	1000	520	26.3'	11.4

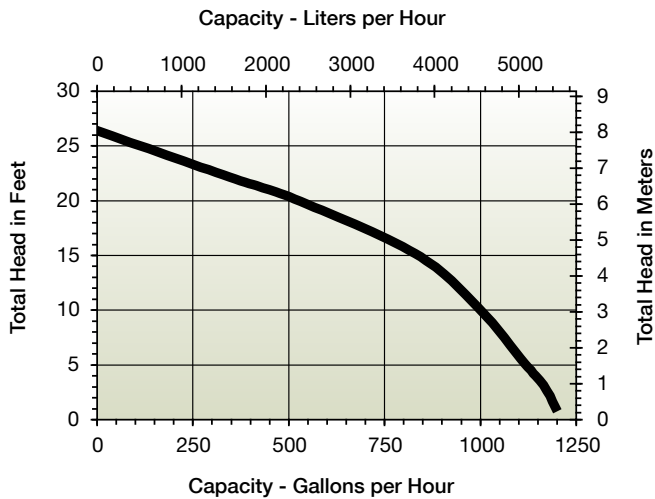
Item No.	Model	HP	Volts	Switch Type/ Operation	On Level	Off Level	Cord	Weight
505300	5-ASP	1/6	115	Piggyback Diaphragm	6" - 9" 15.2 cm - 23 cm	1" - 4" 2.5 cm - 10 cm	10' 3 m	9 lbs 4.08 Kg
505350	5-ASP-LL	1/6	115	Piggyback Diaphragm	2" - 3" 5 cm - 7.6 cm	0.5" - 1.5" 1.27 cm - 3.8 cm	18' 5.5 m	10.25 lbs 4.65 Kg
505400	5-ASP-FS	1/6	115	Integral Float Switch	10" - 12" 24.5 cm - 30.5 cm	2" - 4" 5.1 cm - 10.2 cm	10' 3 m	9 lbs 4.08 Kg
505486	5-MSPR (black pump)	1/6	115	Manual	-	-	10' 3 m	9 lbs 4.08 Kg
505000	5-MSP	1/6	115	Manual	-	-	10' 3 m	8.25 lbs 3.74 Kg
505500	5-MSP	1/6	115	Manual	-	-	10' 3 m	8.25 lbs 3.74 Kg
505025	5-MSP	1/6	115	Manual	-	-	25' 7.6 m	8.75 lbs 3.97 Kg
505176	5-MSP	1/6	115	Manual	-	-	10' 3 m	8.75 lbs 3.97 Kg
505202	5-MSP	1/6	230	Manual	-	-	12' 3.6 m (w/o plug)	8.25 lbs 3.74 Kg

ENGINEERING DATA



Model	A	B	C
5-MSP	7.78" 19.76 cm	6.1" 15.49 cm	4.13" 10.49 cm
5-ASP	7.78" 19.76 cm	7.75" 19.69 cm	4.13" 10.49 cm

PERFORMANCE DATA



CONSTRUCTION

Motor Housing	Epoxy-coated cast aluminum
Impeller Material	Nylon
Impeller Type	Semi-open
Volute	Nylon
Motor Shaft	Stainless steel
Shaft Seal	Fluoroelastomer (FKM)
Fasteners	Stainless steel
Bearings	Bronze sleeve
Power Cord	SJTW

### APPLICATIONS

- Commercial, industrial, and home dewatering and water transfer uses



### FEATURES

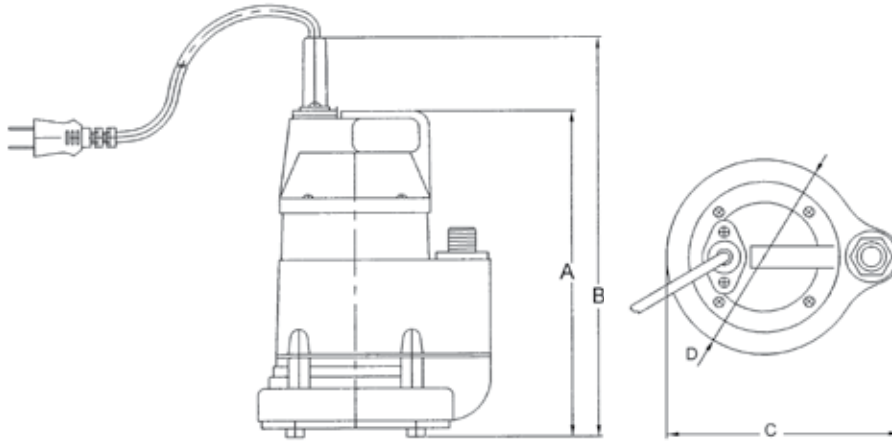
- 1/6 hp oil-filled motor with overload protection
- Designed for continuous duty
- Pumps down to 1/4"
- Removable filter screen for easy cleaning
- Garden hose adapter
- 120 °F (49 °C) liquid temperature rating
- cCSAus listed

### SERIES SPECIFICATIONS

Volts	Hz	Amps		Watts	Performance (GPM @ Height in Feet)			Shut-Off (ft)	PSI
		FLA	Start		5'	10'	15'		
115	60	2.1	5	200	20	14	7	19	8.2

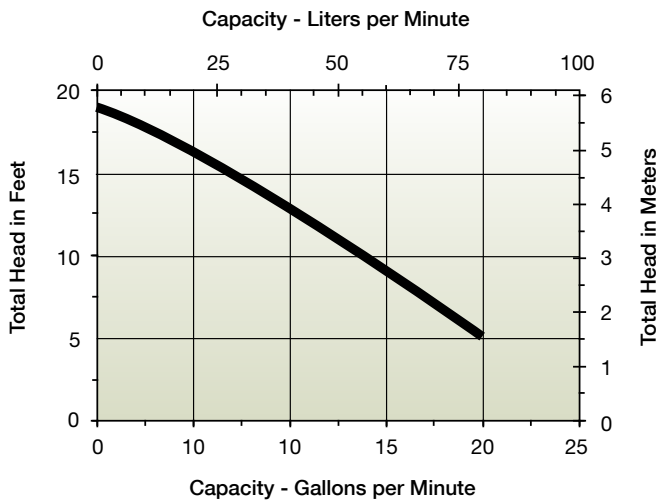
Item No.	Model	HP	Volts	Switch Type/ Operation	Cord	Weight
620137	UP16	1/6	115	Manual	10' 3 m	8 lbs 3.63 Kg

**ENGINEERING DATA**



A	B	C	D
8.7" 22.10 cm	10.67" 27.10 cm	6.2" 15.75 cm	5.2" 13.21 cm

**PERFORMANCE DATA**



**CONSTRUCTION**

<b>Motor Housing</b>	Aluminum
<b>Impeller Material</b>	Thermoplastic
<b>Impeller Type</b>	Semi-open
<b>Volute</b>	Aluminum
<b>Motor Shaft</b>	Stainless steel
<b>Shaft Seal</b>	Lip
<b>Fasteners</b>	Stainless steel
<b>Bearings</b>	Upper and lower ball bearings
<b>Power Cord</b>	SJTW 18/3

### APPLICATIONS

- Water transfer or recirculation and general construction dewatering

### FEATURES

- 1/2 hp or 1 hp permanent split capacitor (PSC) motor with overload protection
- Designed for continuous duty
- 2" MNPT discharge
- 120 °F (49 °C) liquid temperature rating
- cCSAus listed



FLS-400

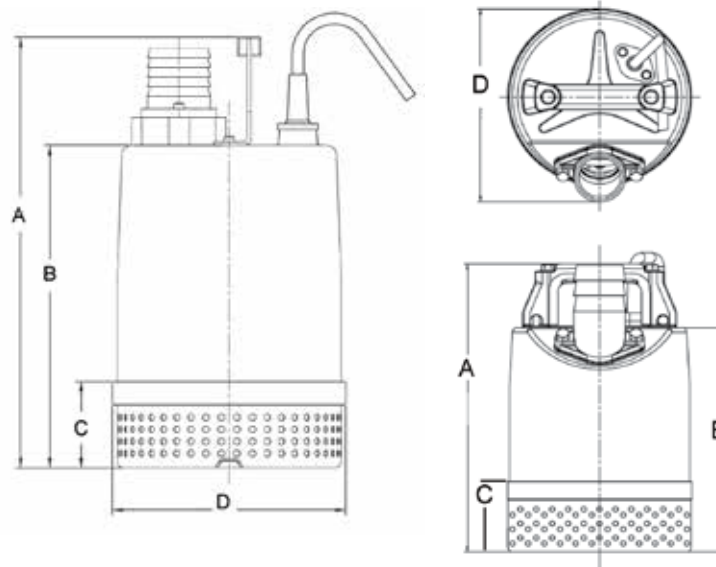
FL-750

### SERIES SPECIFICATIONS

HP	Volts	Hz	Amps		Watts	Performance (GPM @ Height in Feet)						Shut-Off (ft)	PSI
			FLA	Start		5'	10'	15'	20'	30'	40'		
1/2	115	60	5	24	488	60	54	42	20	-	-	37	16
1	115	60	10	47.6	950	80	76	73	68	54	38	52	22.5

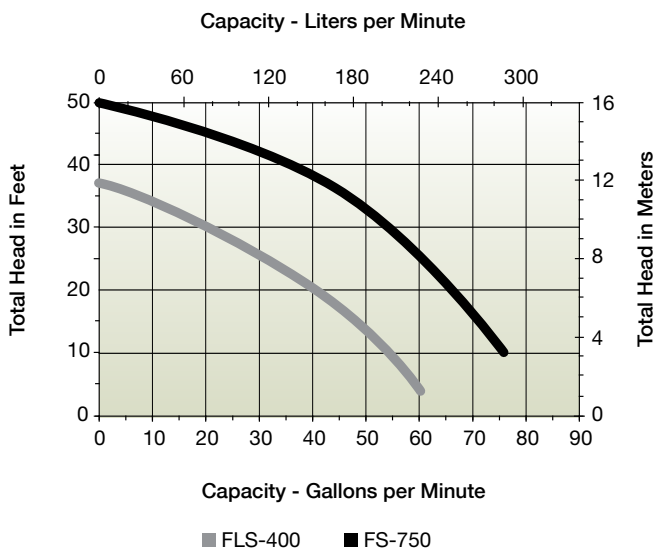
Item No.	Model	Volts	Switch Type/Operation	Cord	Weight
620240	FLS-400	115	Manual	20' 6.1 m	24 lbs 10.89 Kg
620241	FS-750	115	Manual	20' 6.1 m	35 lbs 15.88 Kg

ENGINEERING DATA



Model	A	B	C	D
FLS-400	11.93" 30.30 cm	9.3" 23.62 cm	2" 5.08 cm	7.99" 20.29 cm
FL-750	13.94" 35.41 cm	10.79" 27.41 cm	2.84" 7.21 cm	7.24" 18.39 cm

PERFORMANCE DATA



CONSTRUCTION

Motor Housing	Stainless steel
Impeller Material	Urethane rubber (620240) Balance ductile iron (620241)
Impeller Type	Semi-open
Volute	Cast iron
Motor Shaft	Stainless steel
Seals	Double mechanical seals (lower - silicon carbide on silicon carbide upper - carbon on ceramic)
Fasteners	Plated steel
Bearings	Upper and lower ball bearings
Power Cord	SJTW 14/3

### APPLICATIONS

- Dewatering and water transfer



### FEATURES

- 1/2 hp higher than NEMA service factor, dual compartment motor
- Cast iron casing with large chamber for self-priming
- Carbon/ceramic mechanical seal
- Semi-open, cast iron impeller
- Includes garden hose adapter
- 120 °F (49 °C) liquid temperature rating

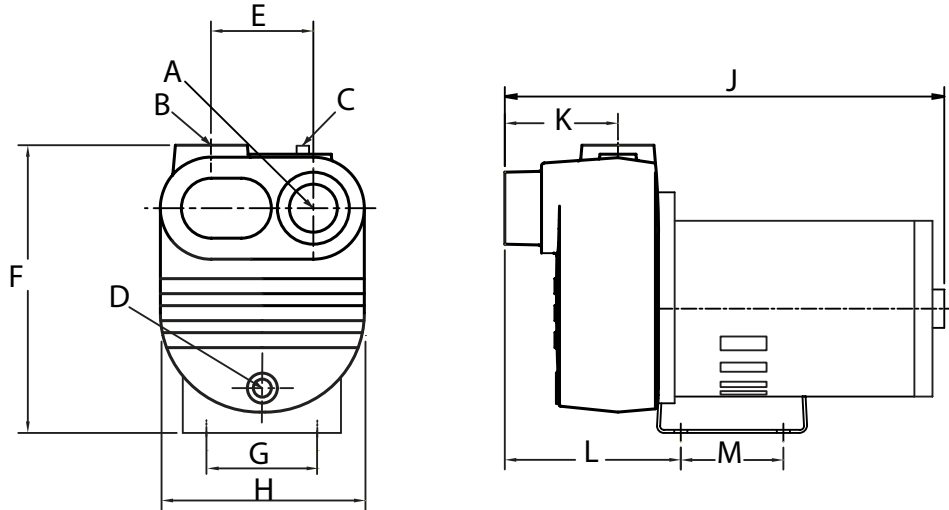
### SERIES SPECIFICATIONS

Volts	Hz	Amps		Watts	Performance (GPM @ Height in Feet)			Shut-Off (ft)	PSI
		FLA	Start		20'	30'	40'		
115/230	60	9.0/4.5	26.3	925	45	31	16	50	21.06

Item No.	Model	Volts	Switch Type/ Operation	Cord	Weight
621814	B50S	1/60/115/230 Capacitor Start	Manual	8' 20.32 cm	43 lbs 19.5 Kg

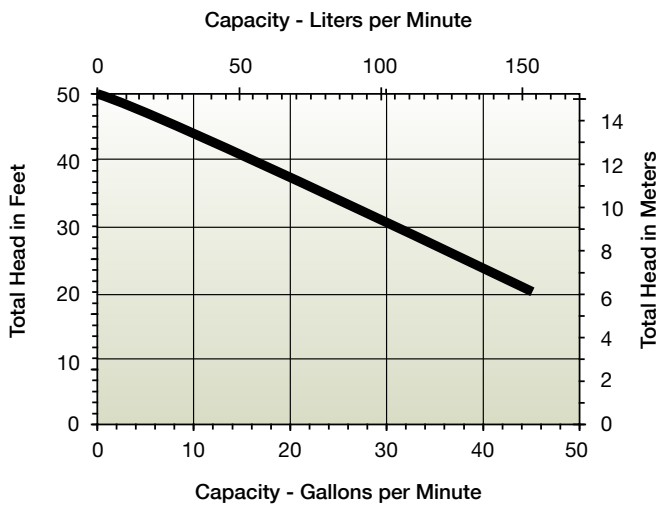


ENGINEERING DATA



A	B	C	D	E	F	G	H	J	K	L	M
1-1/4" NPT	1-1/4" NPT	1/2" NPT	1/2" NPT	4.25"	10.5"	4.9"	7.6"	20"	3.1"	6.8"	3"
3.18 cm	3.18 cm	1.27 cm	1.27 cm	10.8 cm	26.67 cm	12.45 cm	19.3 cm	50.8 cm	7.87 cm	17.27 cm	7.62 cm

PERFORMANCE DATA



CONSTRUCTION

Motor Housing	Cast iron
Impeller Material	Cast iron
Impeller Type	Semi-open
Volute	Cast iron
Motor Shaft	Stainless steel
Seals	Carbon/ceramic mechanical seals
Fasteners	Plated steel
Bearings	Ball
Power Cord	SJTW 16/3



# SUMP PUMPS

Removing standing water from a sump basin in a basement or crawl space are typical uses of Little Giant's sump pumps, but they can also be used in many other applications for general dewatering and water transfer such as storm shelters, transformer vaults, and laundry trays to name a few. With several horsepower, performance, and switch options, Little Giant sump pumps offer reliable solutions making them more than just sump pumps.



### APPLICATIONS

- Basement sumps

### FEATURES

- Shaded pole motor with thermal overload protection
- Oil-filled motor housing
- Integral snap-action float switch
- 1-1/4" FNPT (31.7 mm) discharge
- Screened inlet handles up to 3/8" (9.5 mm) solids
- 3/4" GHT (19 mm) garden hose adapter included
- 120 °F (49 °C) liquid temperature rating
- cCSAus listed

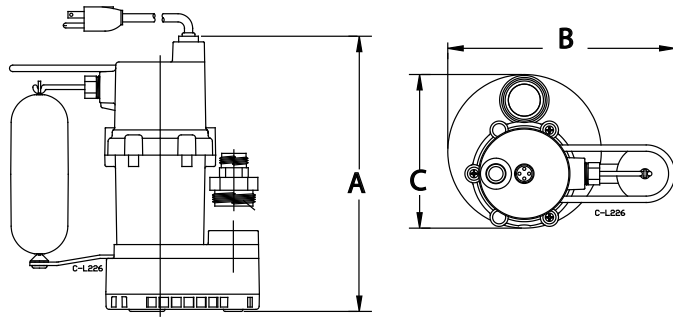


### SERIES SPECIFICATIONS

Volts	Hz	Amps		Watts	Performance (GPM @ Height in Feet)			Shut-Off (ft)	PSI
		FLA	Start		5'	10'	15'		
115	60	8.5	10.4	660	35	30	20	25	10.8

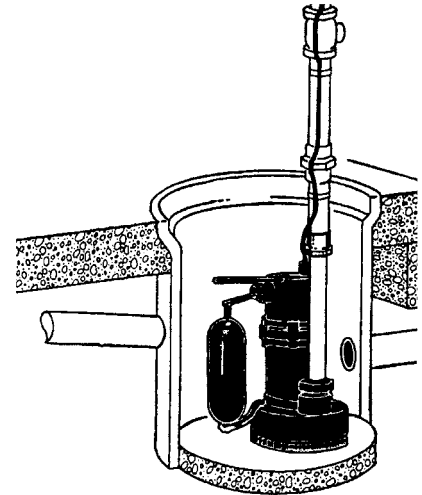
Item No.	Model	HP	Volts	Switch Type/ Operation	On Level	Off Level	Cord	Weight
505700	5.5-ASP	1/4	115	Integral Snap-Action Float	7" - 10" 17.8 cm - 25.4 cm	2" - 5" 5 cm - 12.7 cm	10' 3 m	10.25 lbs 4.65 Kg
505701	5.5-ASP	1/4	115	Integral Snap-Action Float	7" - 10" 17.8 cm - 25.4 cm	2" - 5" 5 cm - 12.7 cm	25' 7.6 m	11 lbs 5 Kg

ENGINEERING DATA

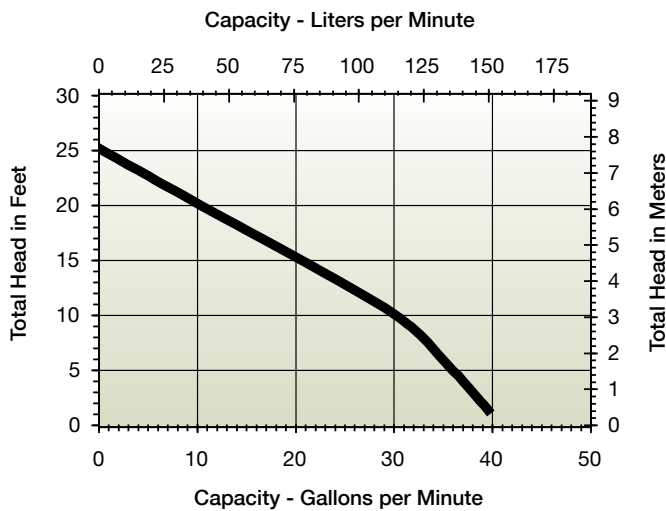


A	B	C
10.61" 26.94 cm	9.02" 22.91 cm	6.0" 15.24 cm

Typical Installation



PERFORMANCE DATA



CONSTRUCTION

Motor Housing	Die-cast zinc alloy
Impeller Material	Nylon
Impeller Type	Non-clog
Volute	Polypropylene
Motor Shaft	440C SS
Shaft Seal	Nitrile
Fasteners	Stainless steel
Bearings	Sleeve
Power Cord	SJTW-A

### APPLICATIONS

- Basement sumps • Dewatering • Water transfer



### FEATURES

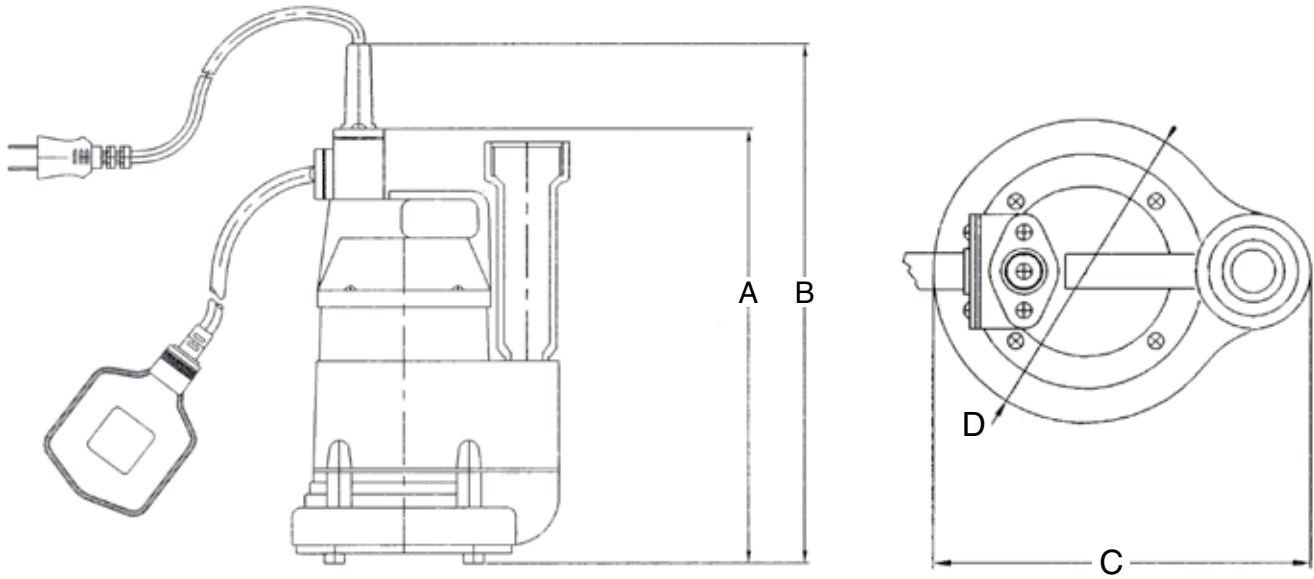
- Oil-free motor with thermal overload protection
- Designed for continuous duty
- 1-1/4" NPT (31.7 mm) discharge
- Handles up to 1/8" (3.18 mm) solids
- Built-in suction strainer
- Removable filter screen
- 120 °F (49 °C) liquid temperature rating
- cCSAus listed

### SERIES SPECIFICATIONS

Volts	Hz	Amps		Watts	Performance (GPM @ Height in Feet)			Shut-Off (ft)	PSI
		FLA	Start		5'	10'	15'		
115	60	3.2	6.5	290	24	19	12	21	9.1

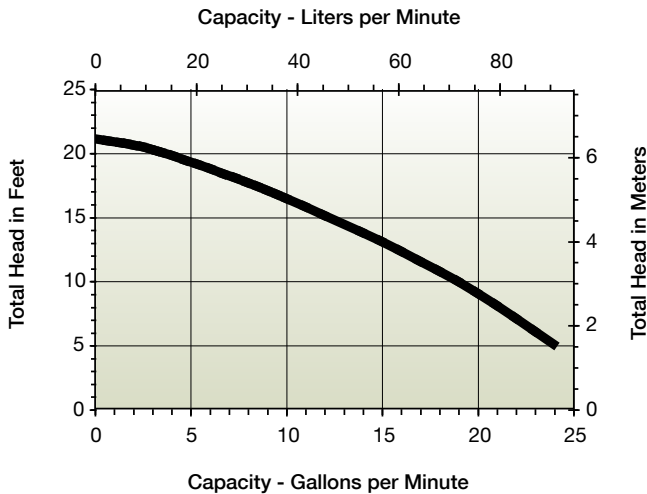
Item No.	Model	HP	Volts	Switch Type/ Operation	On Level	Off Level	Cord	Weight
620136	SP25A	1/4	115	Mechanical Float	13.4" 34 cm	7.5" 19 cm	10' 3 m	8.5 lbs 3.86 Kg

ENGINEERING DATA



A	B	C	D
10.16" 25.81 cm	12.13" 30.81 cm	6.44" 16.36 cm	5.2" 13.21 cm

PERFORMANCE DATA



CONSTRUCTION

Motor Housing	Aluminum
Impeller Material	Thermoplastic
Impeller Type	Semi-open
Volute	Thermoplastic
Motor Shaft	Stainless steel
Shaft Seal	Lip
Fasteners	Stainless steel
Bearings	Upper and lower ball bearings
Power Cord	SJTW

### APPLICATIONS

- Basement sumps • Dewatering • Water transfer

### FEATURES

- Oil-free motor with thermal overload protection
- Designed for continuous duty
- 1-1/4" NPT (31.7 mm) discharge
- Handles up to 1/4" (6 mm) solids
- Built-in suction strainer
- Removable filter screen
- 120 °F (49 °C) liquid temperature rating
- cCSAus listed



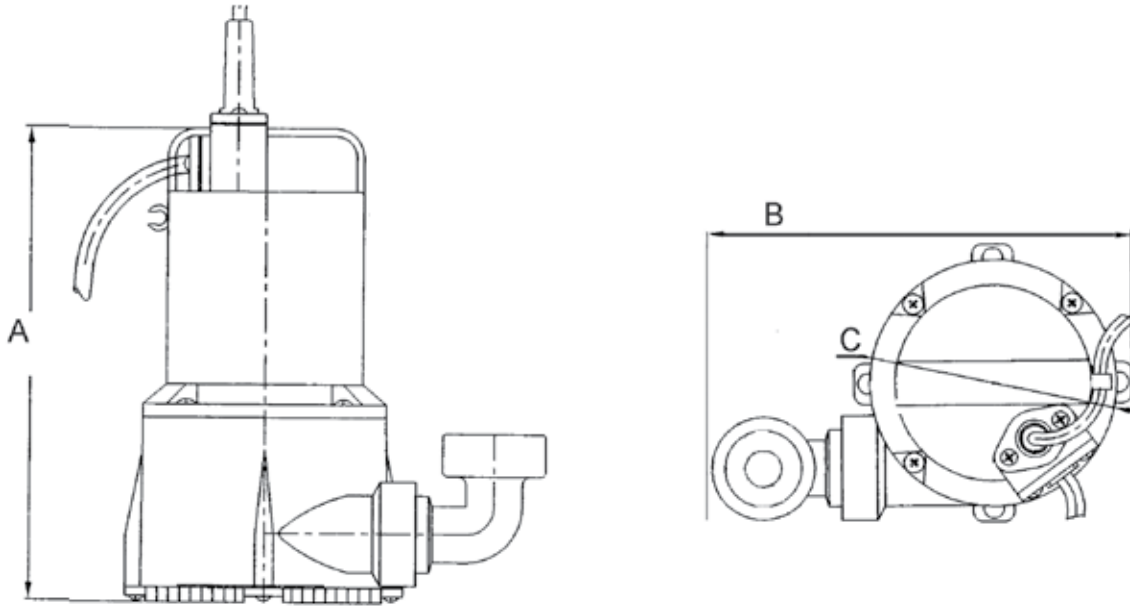
### SERIES SPECIFICATIONS

Volts	Hz	Amps		Watts	Performance (GPM @ Height in Feet)			Shut-Off (ft)	PSI
		FLA	Start		5'	10'	15'		
115	60	3.5	6.4	355	30	22	15	23	10

Item No.	Model	Volts	Switch Type/Operation	On Level	Off Level	Cord	Weight
620135	SP33A	115	Mechanical Float	11.8" 29.9 cm	5.9" 14.9 cm	10' 3 m	10 lbs 4.55 Kg

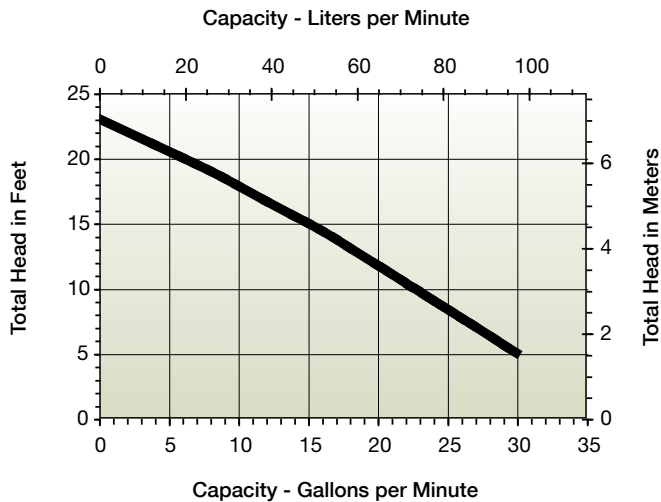


**ENGINEERING DATA**



A	B	C
10"	11.8"	5.87"
25.4 cm	29.97 cm	14.09 cm

**PERFORMANCE DATA**



**CONSTRUCTION**

<b>Motor Housing</b>	Thermoplastic
<b>Impeller Material</b>	Thermoplastic
<b>Impeller Type</b>	Semi-open
<b>Volute</b>	Thermoplastic
<b>Motor Shaft</b>	Stainless steel
<b>Shaft Seal</b>	Lip
<b>Fasteners</b>	Stainless steel
<b>Bearings</b>	Upper and lower ball bearings
<b>Power Cord</b>	SJTW

### APPLICATIONS

- Basement sumps • Dewatering • Water transfer • Light effluent

### FEATURES

- Oil-free motor with thermal overload protection
- Designed for continuous duty
- Cast iron or thermoplastic motor cover and casing options
- Permanently lubricated upper/lower ball bearings with double lip seal
- 5 vane impeller
- 1-1/2" FNPT (38 mm) discharge, 1-1/4" (31.7 mm) reducer bushing included
- Handles up to 1/2" (12.7 mm) solids
- Multiple switch options for automatic operation
- 120 °F (49 °C) liquid temperature rating
- cCSAus listed

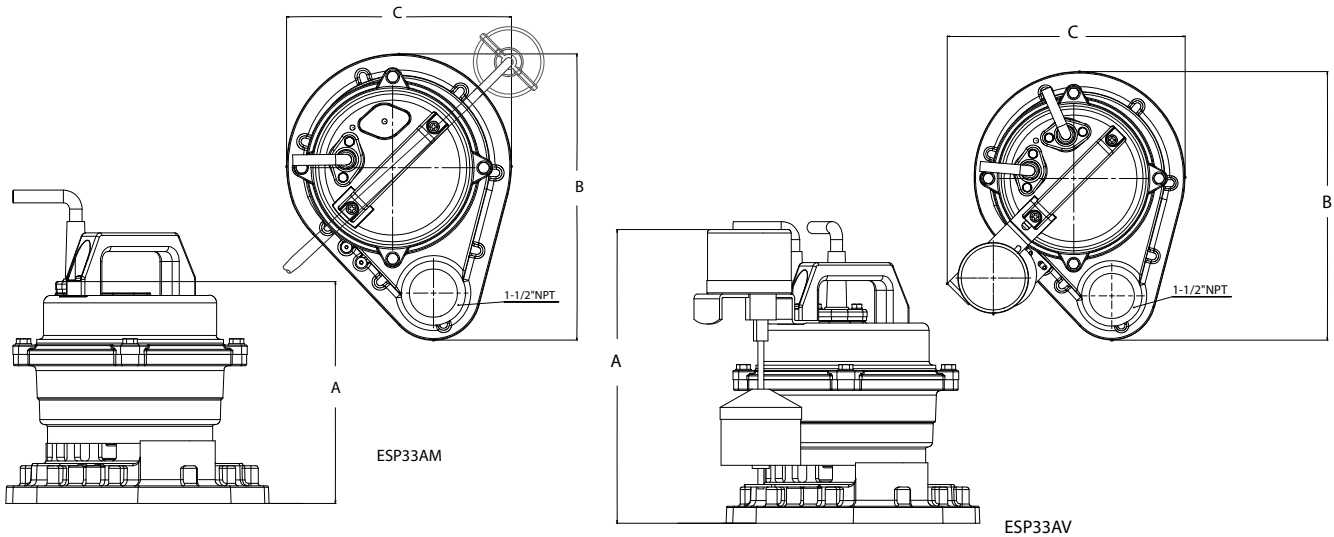


### SERIES SPECIFICATIONS

Volts	Hz	Amps		Watts	Performance (GPM @ Height in Feet)			Shut-Off (ft)	PSI
		FLA	Start		5'	10'	15'		
115	60	5.6	10.9	515	44	34	13	17.5	7.6

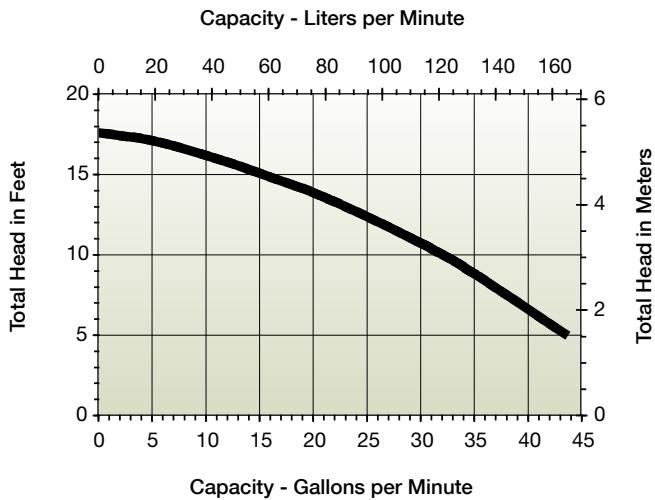
Item No.	Model	HP	Volts	Switch Type/ Operation	On Level	Off Level	Cord	Weight
620186	ESP33AM	1/3	115	Piggyback Mechanical	12" 30.5 cm	5" 12.7 cm	10' 3 m	20 lbs 9.07 Kg
620185	ESP33AM-P	1/3	115	Piggyback Mechanical	12" 30.5 cm	3.5" 8.9 cm	10' 3 m	20 lbs 9.07 Kg
620120	ESP33AV	1/3	115	Vertical Mechanical	5" 12.7 cm	3.5" 8.9 cm	10' 3 m	20 lbs 9.07 Kg
620121	ESP33AV-P	1/3	115	Vertical Mechanical	5" 12.7 cm	3.5" 8.9 cm	10' 3 m	20 lbs 9.07 Kg
620089	ESP33M	1/3	115	Manual	-	-	10' 3 m	20 lbs 9.07 Kg

ENGINEERING DATA



	A	B	C
ESP33AM	6.97" 17.7 cm	10.39" 26.4 cm	8.27" 21 cm
ESP33AV	9.57" 24.3 cm	10.51" 26.7 cm	9.33" 23.7 cm

PERFORMANCE DATA



CONSTRUCTION

Motor Housing	Cast iron models ending in -P are thermoplastic
Impeller Material	Polypro
Impeller Type	Semi-open
Volute	Cast iron models ending in -P are thermoplastic
Motor Shaft	Stainless steel
Shaft Seal	Double lip
Fasteners	Stainless steel
Bearings	Upper and lower
Power Cord	SJTW

### APPLICATIONS

- Basement sumps • Dewatering • Water transfer



### FEATURES

- Shaded pole motor with thermal overload protection
- Designed for continuous duty
- Oil-filled motor housing
- PVC riser legs (506162 only)
- 1-1/2" FNPT discharge (38 mm)
- 1-1/4" FNPT (31.7 mm) hose adapter included
- 3/4" GHT garden hose adapter included (506266, 506267, 506271, 506274 only)
- cCSAus listed (115 v models only)

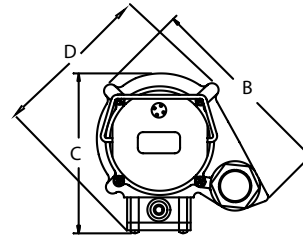
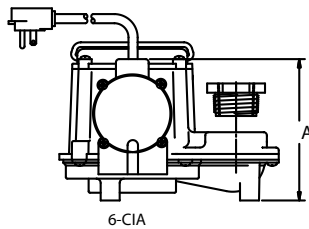
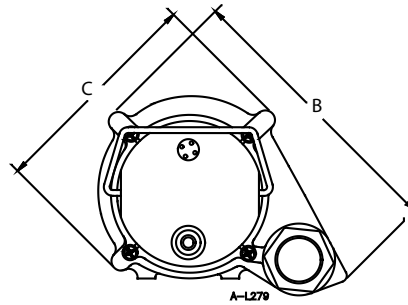
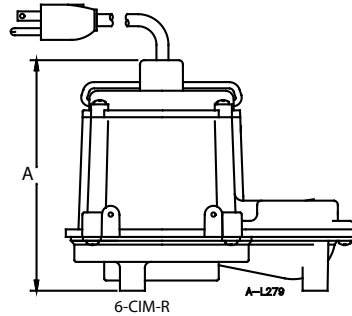
### SERIES SPECIFICATIONS

Volts	Hz	Amps		Watts	Performance (GPM @ Height in Feet)			Shut-Off (ft)	PSI
		FLA	Start		5'	10'	15'		
115	50/60	9.0	14.3	720	46	29	12.5	18	7.8
230	50/60	4.5	6.3	720	46	29	12.5	18	7.8

Item No.	Model	HP	Volts	Switch Type/ Operation	On Level	Off Level	Cord	Weight
506158	6-CIA	1/3	115	Integral Diaphragm	7" - 10" 17.8 cm - 25.4 cm	1" - 4" 2.5 cm - 10.2 cm	10' 3 m	18 lbs 8.16 Kg
*506162	6-CIA	1/3	115	Integral Diaphragm	7" - 10" 17.8 cm - 25.4 cm	1" - 4" 2.5 cm - 10.2 cm	10' 3 m	18.5 lbs 8.39 Kg
506125	6-CIA	1/3	115	Integral Diaphragm	7" - 10" 17.8 cm - 25.4 cm	1" - 4" 2.5 cm - 10.2 cm	25' 7.6 m	18.5 lbs 8.39 Kg
506166	6-CIA	1/3	230	Integral Diaphragm	7" - 10" 17.8 cm - 25.4 cm	1" - 4" 2.5 cm - 10.2 cm	10' 3 m	18.5 lbs 8.39 Kg
506171	6-CIA-RFS	1/3	115	Piggyback Mechanical Float	7" - 10" 17.8 cm - 25.4 cm	1" - 4" 2.5 cm - 10.2 cm	10' 3 m	17.75 lbs 8.05 Kg
506267	6-CIA-RS	1/3	115	Integral Diaphragm	7" - 10" 17.8 cm - 25.4 cm	1" - 4" 2.5 cm - 10.2 cm	10' 3 m	17.5 lbs 7.94 Kg
506266	6-CIM	1/3	230	Manual	-	-	12' 3.6 m	18.75 lbs 8.50 Kg
506271	6-CIM-R	1/3	115	Manual	-	-	10' 3 m	16.5 lbs 7.48 Kg
506274	6-CIM-R	1/3	115	Manual	-	-	25' 7.6 m	18 lbs 8.16 Kg

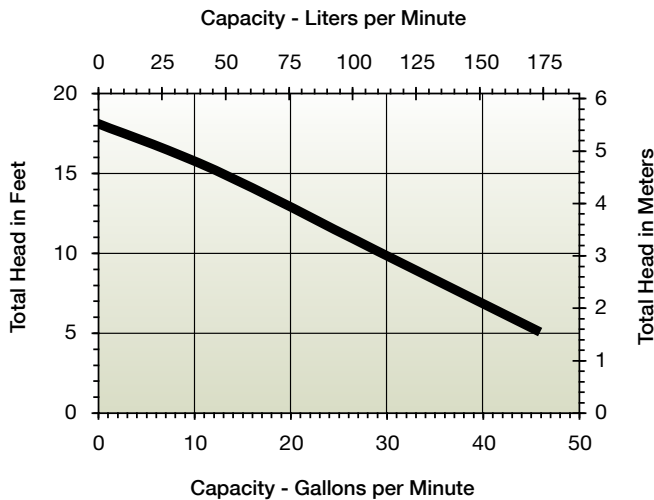
\* Leg kit included

ENGINEERING DATA



Model	A	B	C	D
6-CIM-R	7.25" 18.42 cm	9.5" 24.13 cm	7.2" 18.29 cm	-
6-CIA	6" 15.24 cm	9.5" 24.13 cm	8.5" 21.59 cm	8.2" 20.83 cm

PERFORMANCE DATA

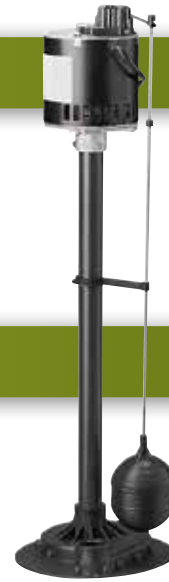


CONSTRUCTION

Motor Housing	Epoxy-coated cast iron
Impeller Material	Nylon
Impeller Type	Non-clog
Volute	Polypropylene
Motor Shaft	CRS
Shaft Seal	Mechanical shaft seal nitrile with carbon and ceramic faces
Fasteners	Stainless steel
Bearings	Upper: Sintered iron/copper, flanged sleeve Lower: Sintered iron/copper, flanged steel
Power Cord	18-3, SJOW-A

### APPLICATIONS

- Basement sumps • Dewatering • Water transfer



### FEATURES

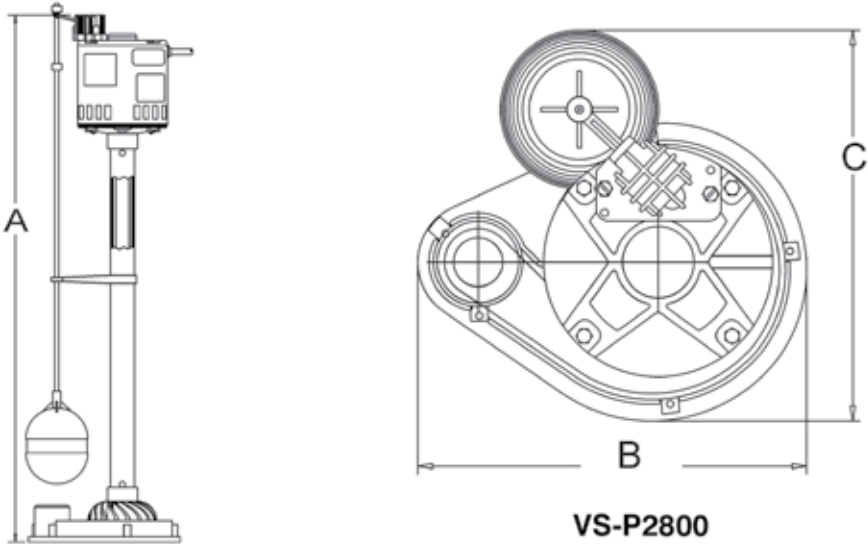
- Thermal overload protected motor
- Designed for continuous duty
- 1-1/4" FNPT (31.7 mm) discharge
- Handles up to 1/4" (6 mm) solids
- Adjustable snap-action float switch
- 140 °F (60 °C) liquid temperature rating
- cCSAus listed

### SERIES SPECIFICATIONS

Volts	Hz	Amps		Watts	Performance (GPM @ Height in Feet)			Shut-Off (ft)	PSI
		FLA	Start		5'	10'	15'		
115	60	4.0	11.2	316	47	34	10	17	7.4

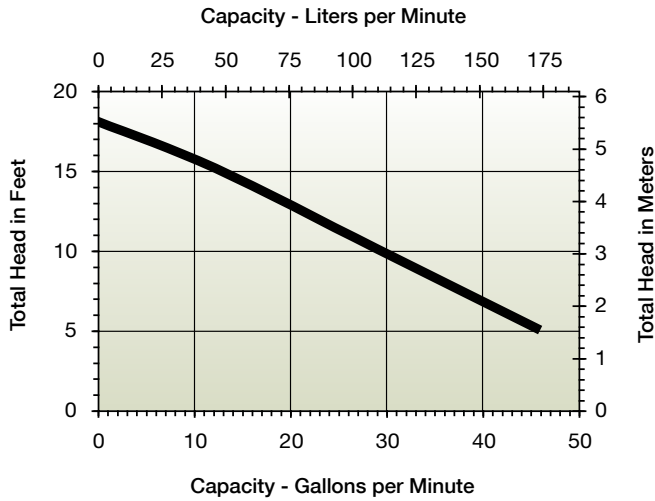
Item No.	Model	HP	Volts	Switch Type/ Operation	On Level	Off Level	Cord	Weight
547151	VS-P2800	1/3	115	Adjustable Snap-Action Float	10" - 5" 25.4 cm - 12.7 cm	9" - 4" 22.9 cm - 10.2 cm	8' 2 m	16 lbs 7.26 Kg

**ENGINEERING DATA**



A	B	C
33" 81.28 cm	9.52" 24.18 cm	9.55" 24.26 cm

**PERFORMANCE DATA**



**CONSTRUCTION**

Impeller Material	PVC
Impeller Type	Semi-open non-clog
Volute	ABS
Drive Shaft	PVC
Shaft Seal	N/A
Fasteners	Anodized steel
Power Cord	18-3, SJOW

### APPLICATIONS

- Basement sumps • Dewatering
- Water transfer • Light effluent

### FEATURES

- Permanent split capacitor (PSC) motor with thermal overload protection
- Designed for continuous duty
- 1-1/2" FNPT discharge (38 mm)
- Handles up to 1/2" (12.7 mm) solids
- Multiple switch options for automatic operation
- cCSAus listed



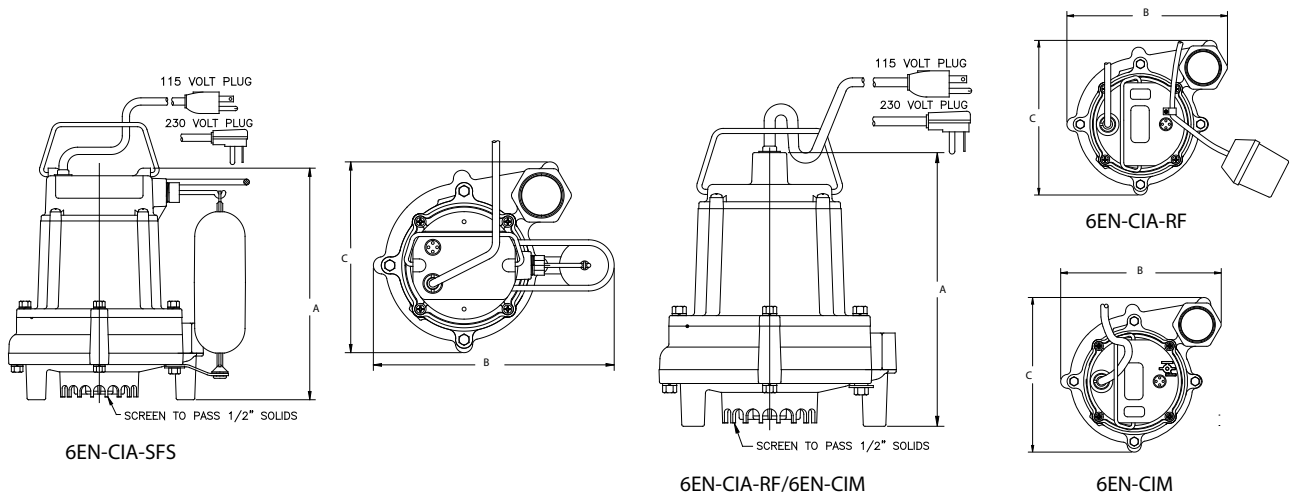
### SERIES SPECIFICATIONS

Volts	Hz	Amps		Watts	Performance (GPM @ Height in Feet)			Shut-Off (ft)	PSI
		FLA	Start		5'	10'	15'		
115	60	6	12	600	50	42	30	22	9.5
230	60	3	6.7	600	50	42	30	22	9.5

Item No.	Model	HP	Volts	Switch Type/ Operation	On Level	Off Level	Cord	Weight
506630	6EN-CIA-SFS	1/3	115	Integral Snap-Action Float	7" - 10" 17.8 cm - 25.4 cm	2" - 5" 5 cm - 12.7 cm	10' 3 m	28 lbs 12.70 Kg
506631	6EN-CIA-SFS	1/3	115	Integral Snap-Action Float	7" - 10" 17.8 cm - 25.4 cm	2" - 5" 5 cm - 12.7 cm	20' 6.1 m	28 lbs 12.70 Kg
506635	6EN-CIA-SFS	1/3	230	Integral Snap-Action Float	7" - 10" 17.8 cm - 25.4 cm	2" - 5" 5 cm - 12.7 cm	10' 3 m	28 lbs 12.70 Kg
506636	6EN-CIA-SFS	1/3	230	Integral Snap-Action Float	7" - 10" 17.8 cm - 25.4 cm	2" - 5" 5 cm - 12.7 cm	20' 6.1 m	28 lbs 12.70 Kg
506619	6EN-CIA-RF	1/3	115	Piggyback Mechanical Float	12" - 14" 30.5 cm - 35.6 cm	5" - 7" 12.7 cm - 17.8 cm	20' 6.1 m	28 lbs 12.70 Kg
506620	6EN-CIA-RF	1/3	115	Piggyback Mechanical Float	12" - 14" 30.5 cm - 35.6 cm	5" - 7" 12.7 cm - 17.8 cm	10' 3 m	28 lbs 12.70 Kg
506610	6EN-CIM	1/3	115	Manual	-	-	10' 3 m	27 (lbs) 12.25 Kg
506611	6EN-CIM	1/3	115	Manual	-	-	20' 6.1 m	27 (lbs) 12.25 Kg
506615	6EN-CIM	1/3	230	Manual	-	-	10' 3 m	27 (lbs) 12.25 Kg
506616	6EN-CIM	1/3	230	Manual	-	-	20' 6.1 m	27 (lbs) 12.25 Kg
506641	6EN-CIM (Black)	1/3	115	Manual	-	-	20' 6.1 m	27 (lbs) 12.25 Kg

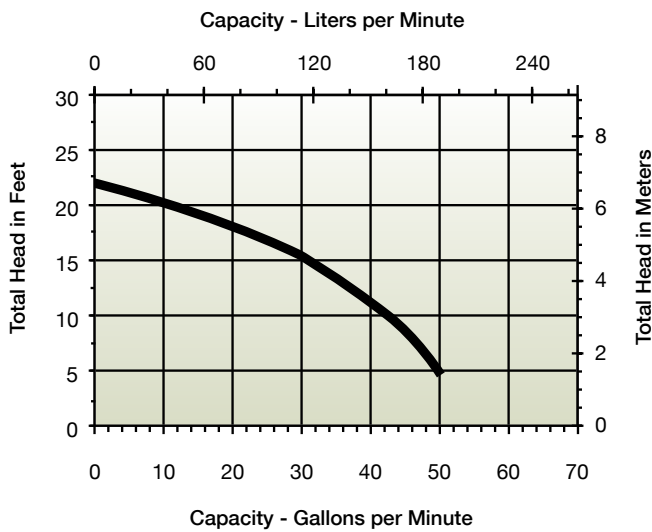


ENGINEERING DATA



Model	A	B	C
6EN-CIA-SFS	10.18" 25.86 cm	10.6" 26.92 cm	8.39" 21.31 cm
6EN-CIA-RF	9.88" 25.09 cm	8.72" 22.14 cm	8.38" 21.29 cm
6EN-CIM	9.88" 25.09 cm	8.72" 22.14 cm	8.38" 21.29 cm

PERFORMANCE DATA



CONSTRUCTION

<b>Cover</b>	Polycarbonate
<b>Motor Housing</b>	Epoxy-coated cast iron
<b>Impeller Material</b>	Nylon
<b>Impeller Type</b>	Vortex
<b>Volute</b>	Epoxy-coated cast iron/ polypropylene
<b>Motor Shaft</b>	Cold rolled steel
<b>Mechanical Shaft Seal</b>	Nitrile with carbon & ceramic faces
<b>Fasteners</b>	Stainless steel
<b>Bearings</b>	Upper and lower sintered sleeve bearings
<b>Power Cord</b>	SJTW (506612 with SJTOW)

# SUMP PUMPS

## HT-6E SERIES (HIGH TEMPERATURE) 1/3 HP

### APPLICATIONS

- Boiler blow-down sump pits • Transformer vaults
- Water transfer • Light effluent

### FEATURES

- Shaded pole motor with thermal overload protection
- Designed for continuous duty
- 1-1/2" FNPT discharge (38 mm)
- Handles up to 1/2" (12.7 mm) solids
- Integral mechanical float switch
- Up to 200 °F (93 °C)
- CSA listed

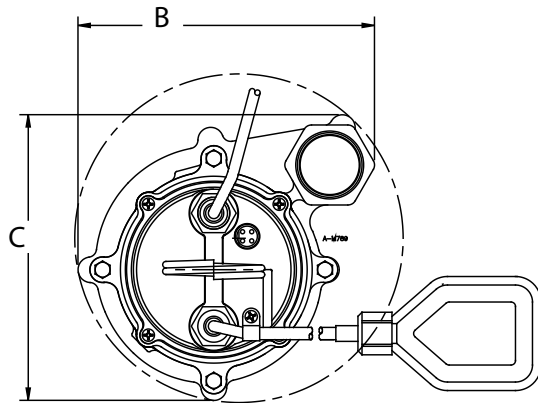
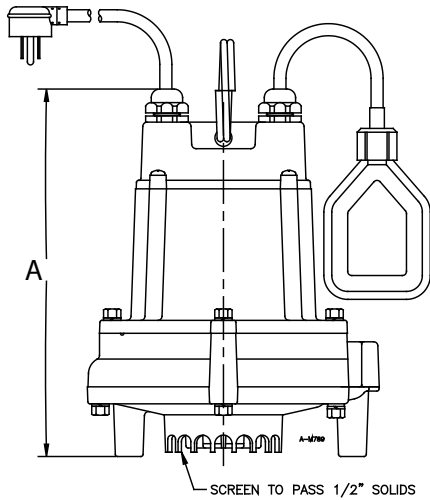


### SERIES SPECIFICATIONS

Volts	Hz	Amps		Watts	Performance (GPM @ Height in Feet)			Shut-Off (ft)	PSI
		FLA	Start		5'	10'	15'		
115	60	10.1	17	735	50	42	27	20	8.7

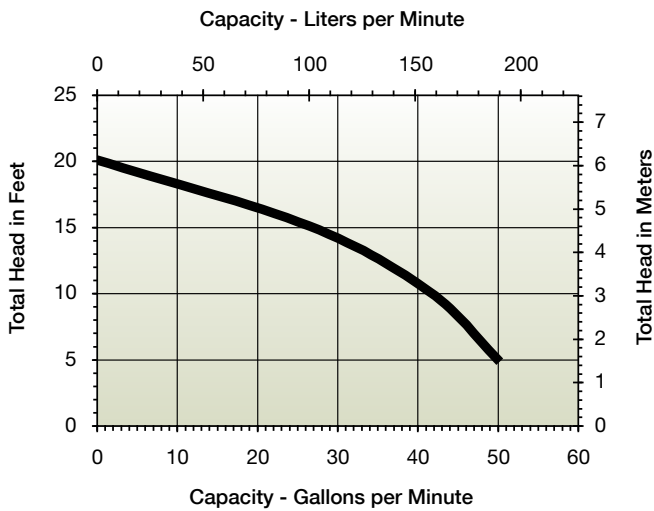
Item No.	Model	HP	Volts	Switch Type/ Operation	On Level	Off Level	Cord	Weight
506600	HT-6E-CIA-FS	1/3	115	Integral Mechanical Float	11" - 14" 27.94 cm - 35.56 cm	2" - 4" 5.08 cm - 10.16 cm	15' 4.6 m	32 lbs 14.52 Kg

ENGINEERING DATA



A	B	C
10.9" 27.7 cm	8.8" 22.4 cm	8.5" 21.6 cm

PERFORMANCE DATA



CONSTRUCTION

<b>Motor Housing</b>	Epoxy-coated cast iron
<b>Impeller Material</b>	Nylon
<b>Impeller Type</b>	Vortex
<b>Volute</b>	Epoxy-coated cast iron
<b>Motor Shaft</b>	Cold rolled steel
<b>Mechanical Shaft Seal</b>	Stainless steel, carbon, and Ni-Resist faces
<b>Fasteners</b>	Stainless steel
<b>Bearings</b>	Upper and lower: Oil-impregnated, porous iron/copper, flanged
<b>Power Cord</b>	16-3 SJOW-A, chlorinated polyethylene

### APPLICATIONS

- Basement sumps • Dewatering
- Water transfer • Light effluent

### FEATURES

- Permanent split capacitor (PSC) motor with thermal overload protection
- Designed for continuous duty
- 1-1/2" FNPT discharge (38 mm)
- Handles up to 3/8" (9.5 mm) solids
- Multiple switch options for automatic operation
- cCSAus listed

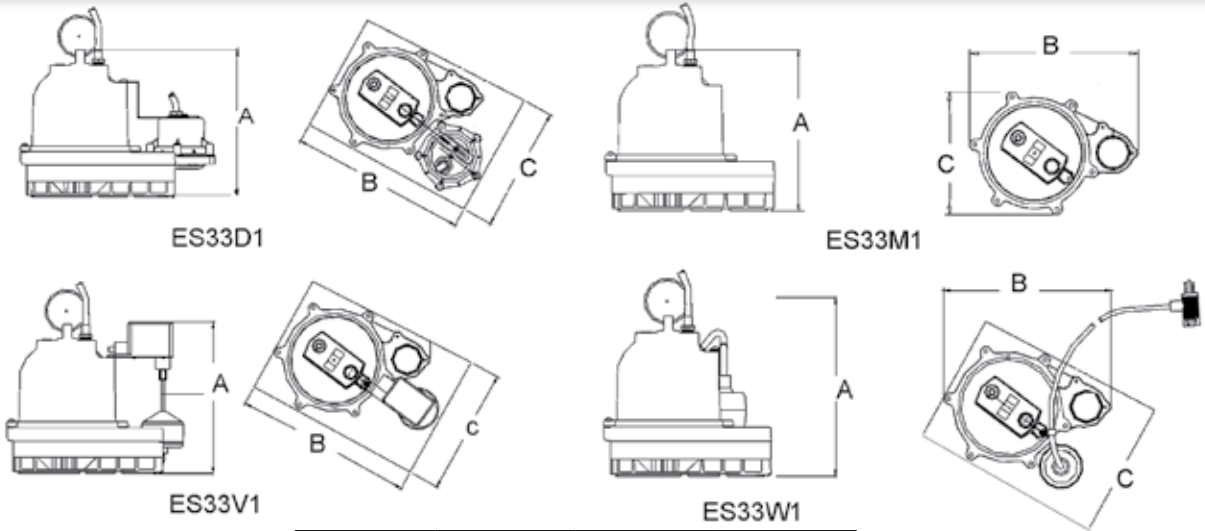


### SERIES SPECIFICATIONS

Volts	Hz	Amps		Watts	Performance (GPM @ Height in Feet)			Shut-Off (ft)	PSI
		FLA	Start		5'	10'	15'		
115	60	5.0	12	475	52	40	28	20	8.6

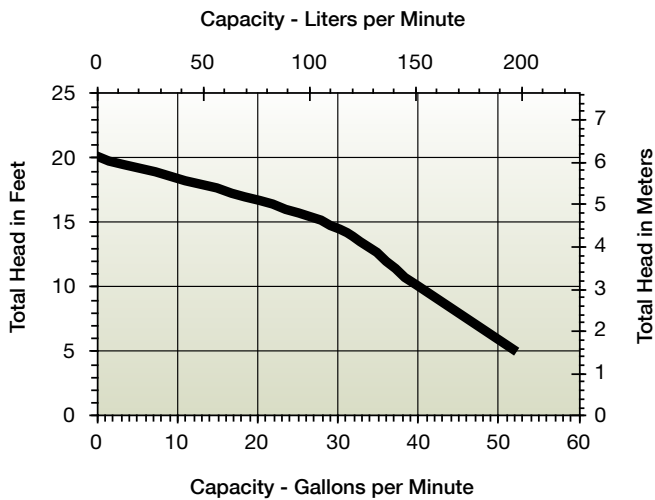
Item No.	Model	Volts	Switch Type/Operation	On Level	Off Level	Cord	Weight
506420	ES33D1-10	115	Piggyback Vertical Diaphragm	7" - 10" 17.8 cm - 25.4 cm	2" - 5" 5 cm - 12.7 cm	10' 3 m	30 lbs 3.61 Kg
506422	ES33V1-10	115	Piggyback Vertical Mechanical	7" - 10" 17.8 cm - 25.4 cm	2" - 5" 5 cm - 12.7 cm	10' 3 m	30 lbs 3.61 Kg
506424	ES33W1-10	115	Piggyback Mechanical Float	7" - 10" 17.8 cm - 25.4 cm	2" - 5" 5 cm - 12.7 cm	10' 3 m	30 lbs 3.61 Kg

ENGINEERING DATA



Model	A	B	C
ES33D1	9.5" 24.13 cm	11.25" 28.57 cm	9.75" 24.77 cm
ES33M1	9.5" 24.13 cm	10" 25.4 cm	8" 20.32 cm
ES33W1	10.5" 26.67 cm	11.25" 28.57 cm	10" 25.4 cm
ES33V1	9.5" 24.13 cm	10" 25.4 cm	8" 20.32 cm

PERFORMANCE DATA



CONSTRUCTION

<b>Motor Housing</b>	Epoxy-coated cast iron
<b>Impeller Material</b>	Engineered composite
<b>Impeller Type</b>	Recessed, Vortex
<b>Volute</b>	Glass-filled polypropylene
<b>Motor Shaft</b>	Cold rolled steel (not exposed)
<b>Mechanical Shaft Seal</b>	Nitrile with carbon and ceramic faces
<b>Fasteners</b>	Stainless steel
<b>Bearings</b>	Upper: Sintered iron/copper, flanged sleeve Lower: Ball bearing
<b>Power Cord</b>	16/3 SJTW-A

### APPLICATIONS

- Basement sumps • Dewatering • Water transfer

### FEATURES

- Shaded pole motor with thermal overload protection
- Designed for continuous duty
- Oil-filled motor housing
- Cast iron or cast bronze pump housing
- 1-1/2" FNPT discharge (38 mm)
- 140 °F (60 °C) liquid temperature rating
- cCSAus listed

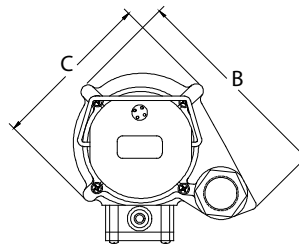
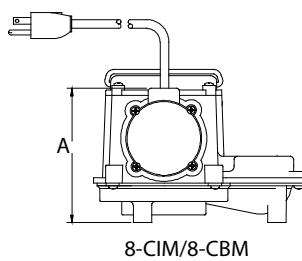
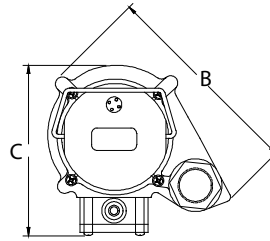
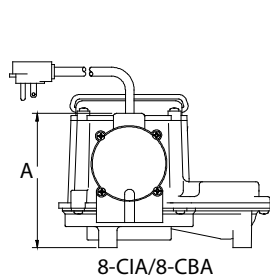


### SERIES SPECIFICATIONS

Volts	Hz	Amps		Watts	Performance (GPM @ Height in Feet)			Shut-Off (ft)	PSI
		FLA	Start		5'	10'	15'		
115	60	10	17	830	54	42	26	22.9	9.9

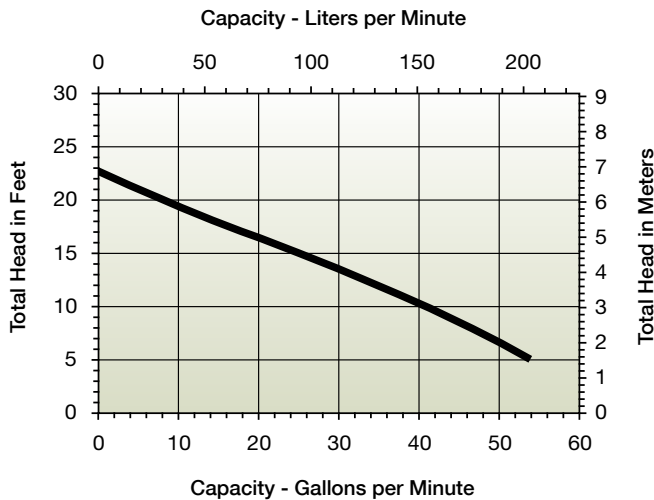
Item No.	Model	HP	Volts	Switch Type/ Operation	On Level	Off Level	Cord	Weight
508157	8-CIA	4/10	115	Integral Diaphragm	7" - 10" 17.8 cm - 25.4 cm	1" - 4" 2.5 cm - 10.2 cm	10' 3 m	19 lbs 8.62 Kg
508158	8-CIA	4/10	115	Integral Diaphragm	7" - 10" 17.8 cm - 25.4 cm	1" - 4" 2.5 cm - 10.2 cm	25' 7.6 m	20.25 lbs 9.19 Kg
508357	8-CBA	4/10	115	Integral Diaphragm	7" - 10" 17.8 cm - 25.4 cm	1" - 4" 2.5 cm - 10.2 cm	10' 3 m	21.25 lbs 9.64 Kg
508057	8-CIM	4/10	115	Manual	-	-	10' 3 m	18.75 lbs 8.50 Kg
508058	8-CIM	4/10	115	Manual	-	-	25' 7.6 m	19.75 lbs 8.96 Kg
508257	8-CBM	4/10	115	Manual	-	-	10' 3 m	21 lbs 9.53 Kg

ENGINEERING DATA



Model	A	B	C
8-CIA/8-CBA	6" 15.24 cm	9.5" 24.13 cm	8.5" 21.59 cm
8-CIM/8-CBM	6" 15.24 cm	9.5" 24.13 cm	7.25" 18.41 cm

PERFORMANCE DATA



CONSTRUCTION

<b>Motor Housing</b>	Epoxy coated cast iron (CI) or cast bronze (CBM and CBA models)
<b>Impeller Material</b>	Polypropylene
<b>Impeller Type</b>	Non-clog
<b>Volute</b>	Polypropylene
<b>Mechanical Shaft Seal</b>	Nitrile with carbon and ceramic faces
<b>Fasteners</b>	Stainless steel
<b>Shaft</b>	Cold rolled steel
<b>Bearings</b>	Upper and lower: Sintered, iron, flanged sleeve
<b>Power Cord</b>	18-3, SJTW

### APPLICATIONS

- Basement sumps • Flood control

### FEATURES

- Permanent split capacitor motor
- Designed to be installed suspended from basin cover
- Non-corrosive construction
- Integral IntelliPlug® provides high water alarm light and 85 dba alarm with run light built in
- Leg kit raises up 2-1/4" (5.7 cm) if not used in basin
- 1-1/2" FNPT (38 mm) discharge
- Side screened inlet
- 140 °F (60 °C) liquid temperature rating
- cCSAus listed



### SERIES SPECIFICATIONS

Volts	Hz	Amps		Watts	Performance (GPM @ Height in Feet)			Shut-Off (ft)	PSI
		FLA	Start		5'	10'	15'		
115	60	4.5	11.6	475	50	40	32	30	13.1

Item No.	Model	HP	Volts	Switch Type/ Operation	On Level	Off Level	Alarm Level	Cord	Weight
507700	TSW-SP	1/3	115	Integral Solid State Electronic	9.5" - 10.5" 24 cm - 27 cm	2.5" - 3.5" 6.4 cm - 9 cm	11" - 12" 28 cm - 30.5 cm	10' 3 m	17 lbs 7.71 Kg

### APPLICATIONS

- Basement sumps • Flood control

### FEATURES

- Eliminates need and cost of installing a "back-up" pump that operates when power is out.
- Converts pump to DC power in the event of a power failure
- Includes inverter, battery box, and battery cover strap (battery not included)



Item No.	Model
507701	TSW-APS



**SYSTEMS & COMPONENTS**

**TSW-A Series** - System includes: Pump, clear view cover, and discharge kit with clear check valve

507709, TSW-A22 (For use with 22" (56 cm) basin #507705, TSW-B1822A)

507710, TSW-A30 (For use with 30" (76 cm) basin #507707, TSW-B1830A)



**TSW-B Series** - System includes: Pump, 22" or 30" (56 cm or 76 cm) basin, clear view cover assembly, and discharge kit with clear check valve

507711, TSW-B22A [22" (56 cm) unit]

507713, TSW-B30A [30" (76 cm) unit]



**TSW-C Series** - System includes: Pump, clear view cover assembly, discharge kit with clear check valve, and Auxiliary Power System (TSW-APS)

507715, TSW-C22 [For use with 22" (56 cm) basin #507705, TSW-B1822A]

507716, TSW-C30 [For use with 30" (76 cm) basin #507707, TSW-B1830A]



**TSW-D Series** - System includes: Pump, 22" or 30" (56 cm or 76 cm) basin, clear view cover assembly, discharge kit with clear check valve, and Auxiliary Power System (TSW-APS)

507717, TSW-D22A [22" (56 cm) unit]

507719, TSW-D30A [30" (76 cm) unit]

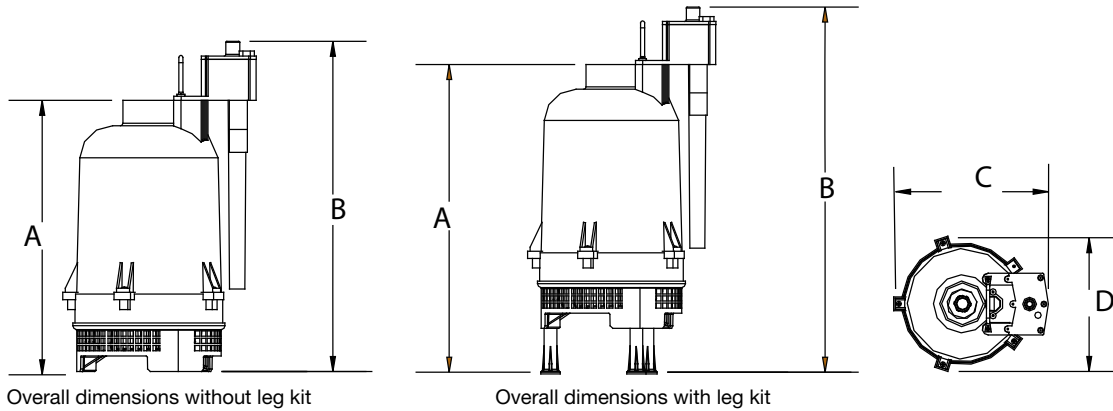


**Component Variations Available:**

Item	Model	Description
507700	TSW-SP	TSW Sump Pump
507701	TSW-APS	Auxiliary Power System
507702	TSW-CVC	Clear View Basin Cover
507703	TSW-DPK22	Discharge Kit for 22" (56 cm) Deep Basin
507704	TSW-DPK30	Discharge Kit for 30" (76 cm) Deep Basin
507705	TSW-B1822A	18" x 22" (45.7 cm x 56 cm) Poly Basin with Adapt-A-Flex Inlet Fitting
507707	TSW-B1830A	18" x 30" (45.7 cm x 76 cm) Basin with Adapt-A-Flex Inlet Fitting
507721	TSW-SP-C	TSW Sump Pump and Auxiliary Power Supply

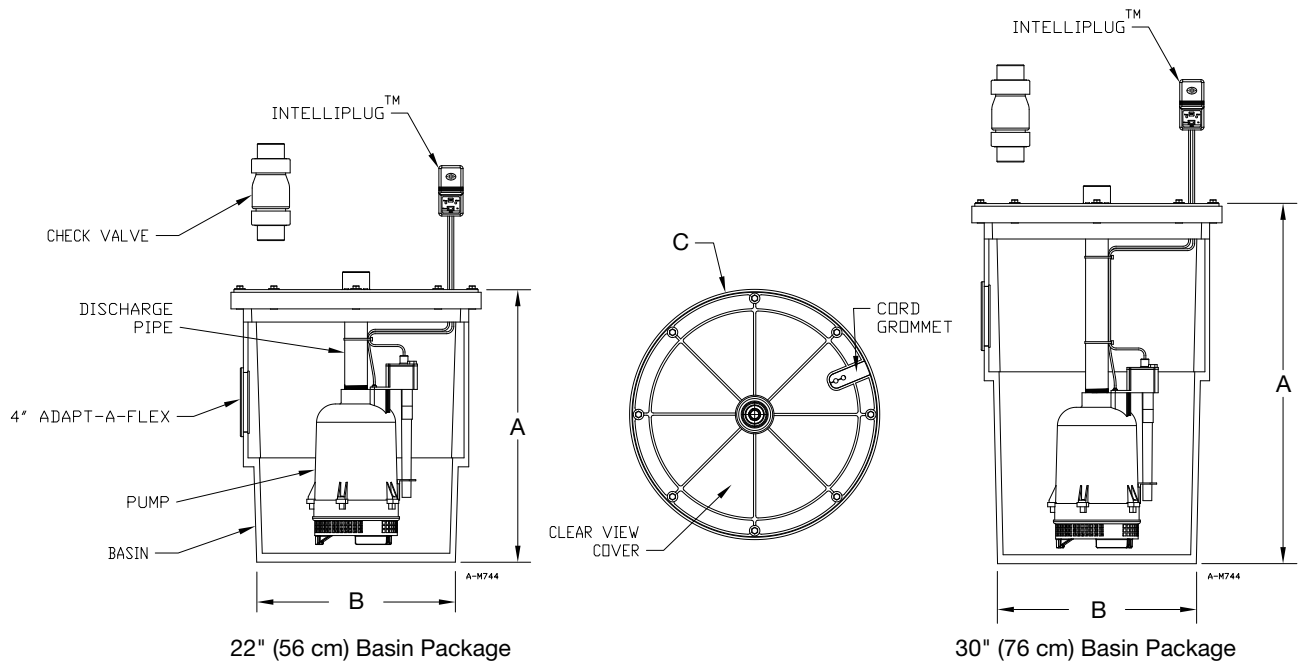
### ENGINEERING DATA

#### PUMP DIMENSIONS



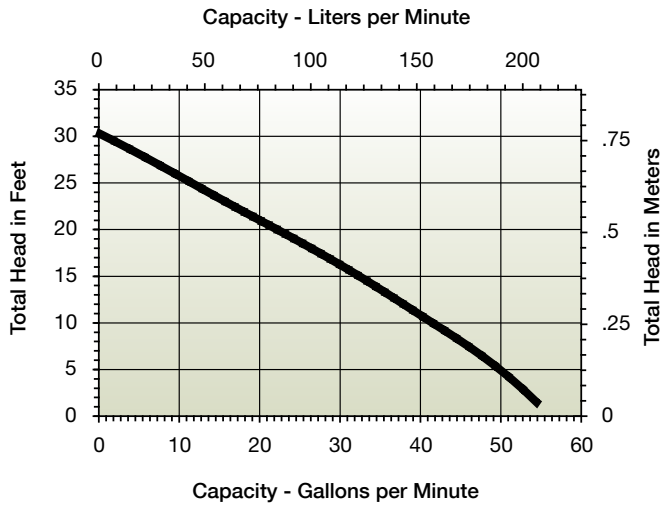
	A	B	C	D
W/O Leg Kit	10" 25.4 cm	11.8" 29.97 cm	9.3" 23.62 cm	8.12" 20.62 cm
W/ Leg Kit	13" 33.02 cm	18.3" 46.48 cm	9.3" 23.62 cm	8.12" 20.62 cm

#### BASIN DIMENSIONS



	A	B	C
22" 56 cm	22" 56 cm	15" 38 cm	21" 53 cm
30" 76 cm	30" 76 cm	15" 38 cm	—

**PERFORMANCE DATA**



**CONSTRUCTION**

<b>Motor Housing</b>	Engineered thermoplastic
<b>Impeller Material</b>	Engineered thermoplastic
<b>Impeller Type</b>	Vortex
<b>Volute</b>	Engineered thermoplastic
<b>Motor Shaft</b>	Stainless steel
<b>Shaft Seal</b>	Mechanical nitrile with carbon ceramic faces
<b>Fasteners</b>	Stainless steel
<b>Bearings</b>	Upper and lower ball bearings
<b>Power Cord</b>	SJTW-16

**BASIN CONSTRUCTION**

<b>Clear View Basin Cover</b>	ABS
<b>Basin</b>	Polypropylene
<b>Basin Capacity (approx.)</b>	22" (56 cm) basin – 22 gallons 30" (76 cm) basin – 30 gallons
<b>Discharge Size</b>	1-1/2" (38 mm)
<b>Intake Size</b>	4" Adapt-A-Flex**

\*\* 4" hub available as an option

## Drainosaur® & Drainosaur Jr.®

### APPLICATIONS

- Impractical drainage areas
- Under sinks
- Laundry trays



### FEATURES

#### BASIN FEATURES

- 3.5 and 5 gallon size options
- Polypropylene, lightweight, corrosion resistant
- Designed with O-rings for water tight seal
- Cover includes removable filter for easy cleaning
- Cover includes 1 1/2" FNPT (38 mm) discharge and intake opening, and 2" FNPT (5 cm) vent opening
- IAPMO listed
- Pre-assembled, ready to install



#### PUMP FEATURES

- 1/6, 1/3, 4/10 hp options
- Multiple switch options
- cCSAus listed (pump only)

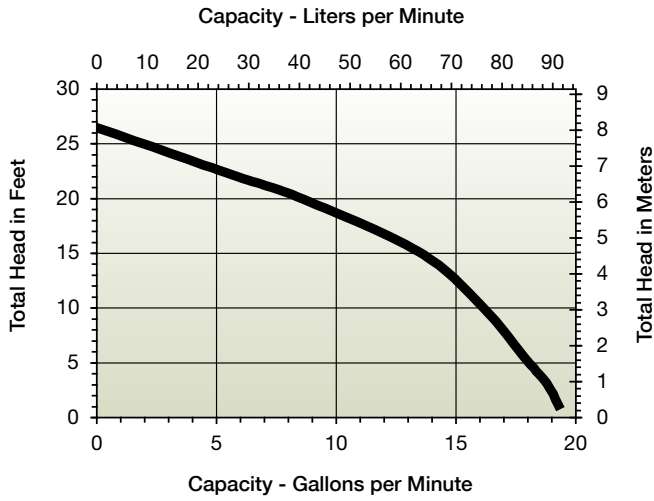
### SERIES SPECIFICATIONS

HP	Volts	Hz	Amps		Watts	Performance (GPM @ Height in Feet)				Shut-Off (ft)	PSI
			FLA	Start		5'	10'	15'	20'		
1/6	115	60	5	6.4	380	15	12	8	-	21.00	9.1
1/3	115	60	9	14.3	720	46	29	13	-	18.00	7.8
1/3	230	50/60	4.5	6.3	720	46	29	13	-	18.00	7.8
4/10	115	60	9	17	920	80	63	54	40	29.00	9.1

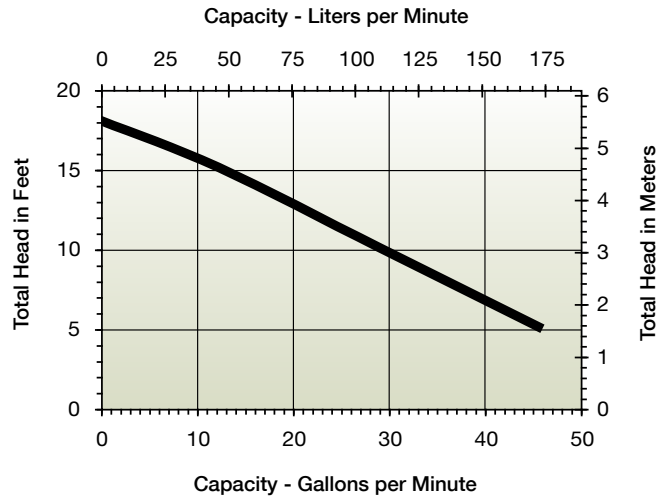
Item No.	Model	HP	Volts	Tank Size	Switch Type/Operation	On Level	Off Level	Cord	Weight
505055	WRS-5	1/6	115	5 Gallon	Piggyback Diaphragm	6" - 9" 15.2 cm - 23 cm	1" - 4" 2.5 cm - 10 cm	10' 3 m	19 lbs 8.62 Kg
506065	WRSC-6	1/3	115	3.5 Gallon	Integral Diaphragm	4" - 7" 10.2 cm - 17.8 cm	1" - 3" 2.5 cm - 7.6 cm	10' 3 m	24 lbs 10.89 Kg
506066	WRSC-6	1/3	230	3.5 Gallon	Piggyback Mechanical Float	4" - 7" 10.2 cm - 17.8 cm	1" - 3" 2.5 cm - 7.6 cm	10' 3 m	17.75 lbs 8.05 Kg
506055	WRS-6	1/3	115	5 Gallon	Integral Diaphragm	7" - 10" 17.8 cm - 25.4 cm	1" - 4" 2.5 cm - 10.2 cm	10' 3 m	26 lbs 11.79 Kg
506056	WRS-6	1/3	230	5 Gallon	Integral Diaphragm	7" - 10" 17.8 cm - 25.4 cm	1" - 4" 2.5 cm - 10.2 cm	10' 3 m	27 lbs 12.25 Kg
509268	WRS-9EN	4/10	115	5 Gallon	Piggyback Vertical Mechanical	7" - 10" 17.8 cm - 25.4 cm	2" - 5" 5 cm - 12.7 cm	10' 3 m	35 lbs 15.88 Kg

PERFORMANCE DATA

WRS-5

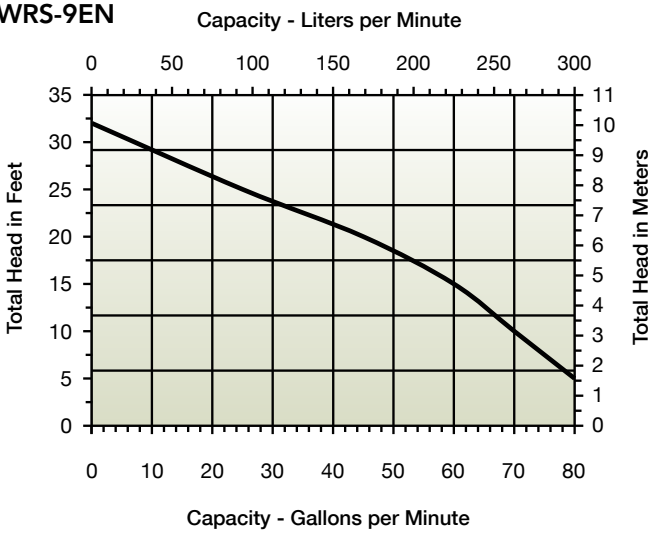


WRS-6 & WRSC-6

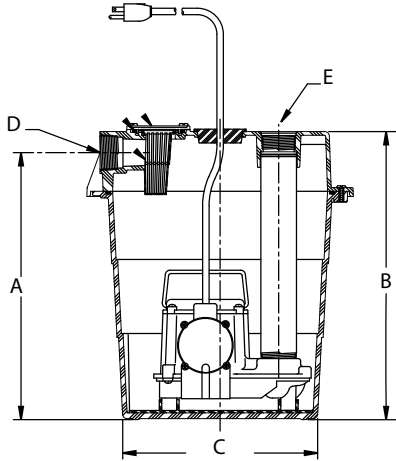


PERFORMANCE DATA

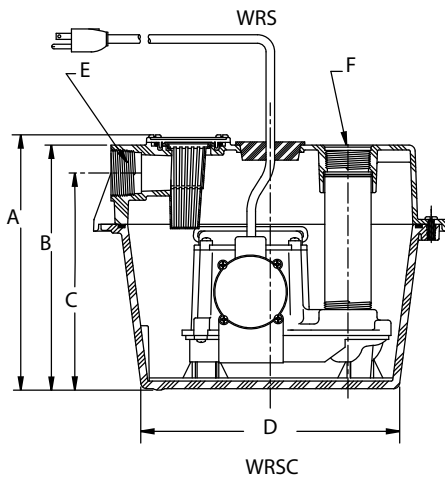
WRS-9EN



### ENGINEERING DATA

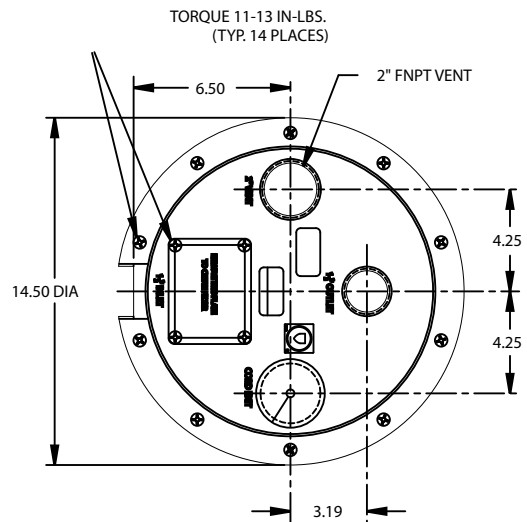
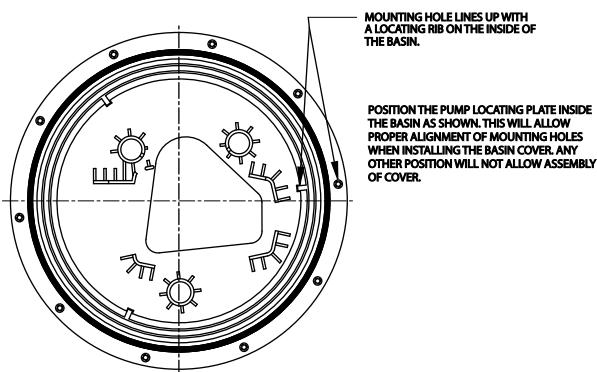


Model	A	B	C	D	E	F
WRS-5	14.75" 37.74 cm	15.68" 39.83 cm	10.63" 27 cm	1-1/2" FNPT 3.81 cm	1-1/2" FNPT 3.81 cm	-
WRS-6	14.75" 37.74 cm	15.68" 39.83 cm	10.63" 27 cm	1-1/2" FNPT 3.81 cm	1-1/2" FNPT 3.81 cm	-
WRS-9EN	14.75" 37.74 cm	15.68" 39.83 cm	10.63" 27 cm	1-1/2" FNPT 3.81 cm	1-1/2" FNPT 3.81 cm	-

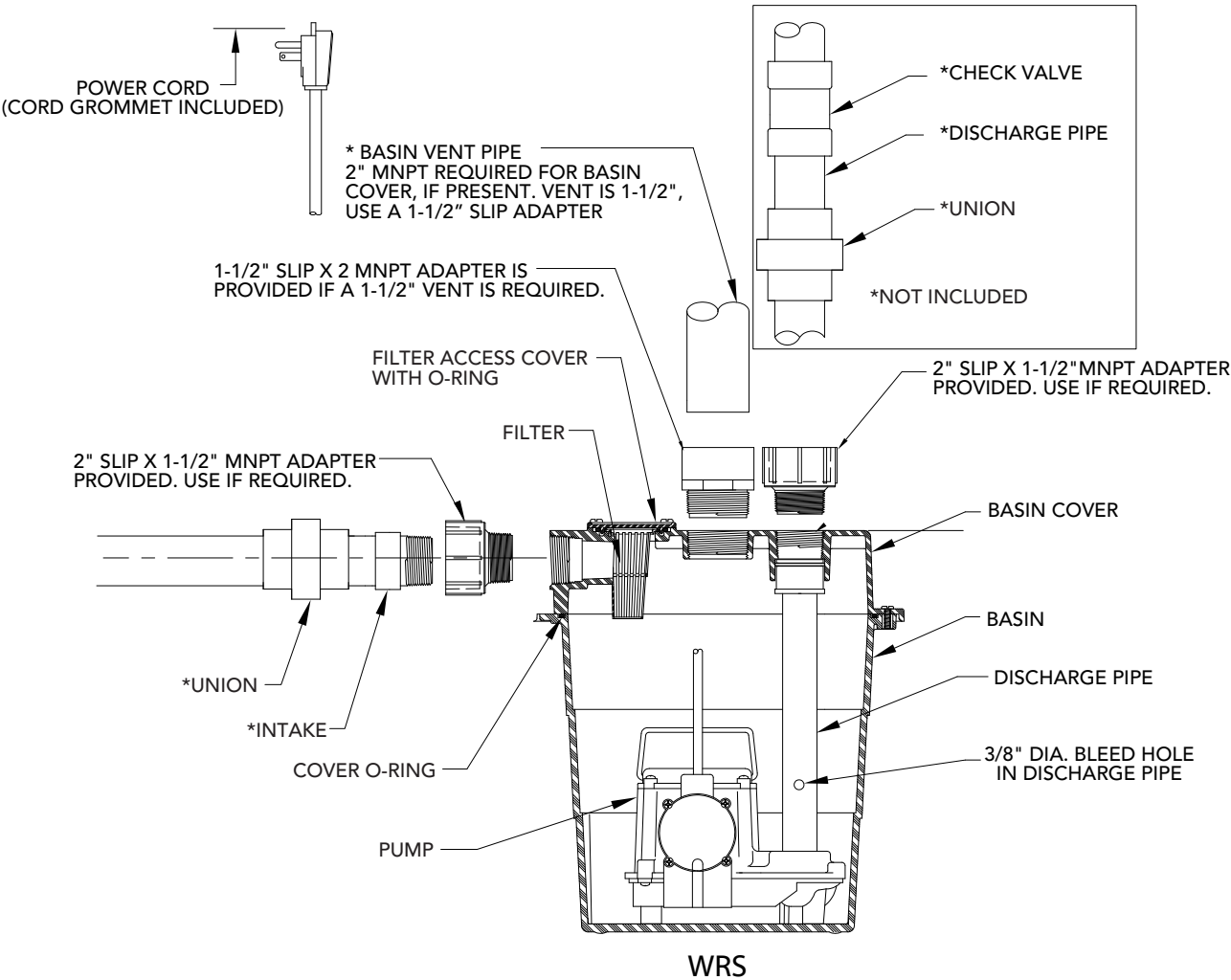


Model	A	B	C	D	E	F
WRSC-6	10.55" 26.8 cm	10.06" 25.55 cm	8.9" 22.61 cm	10.63" 27 cm	1-1/2" FNPT 3.81 cm	1-1/2" FNPT 3.81 cm

PLATE ALIGNMENT DIAGRAM



# TYPICAL INSTALLATION



### APPLICATIONS

- Residential crawl spaces • Low lying areas

### FEATURES

#### PACKAGE FEATURES

- 1/3 hp cast iron pump with overload protection
- 18" x 22" (46 cm x 56 cm) light weight perforated polypropylene basin
- Structural foam cover with slip fit flanges
- 1-1/4" x 24' (31.7 mm x 7.3 m) discharge hose kit
- 1-1/2" MNPT (38 mm) barbed check valve
- cCSAus listed (pump only)



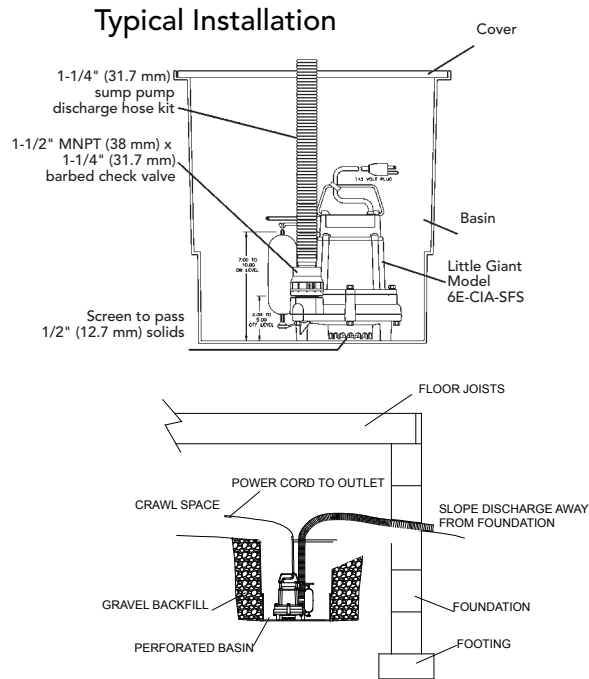
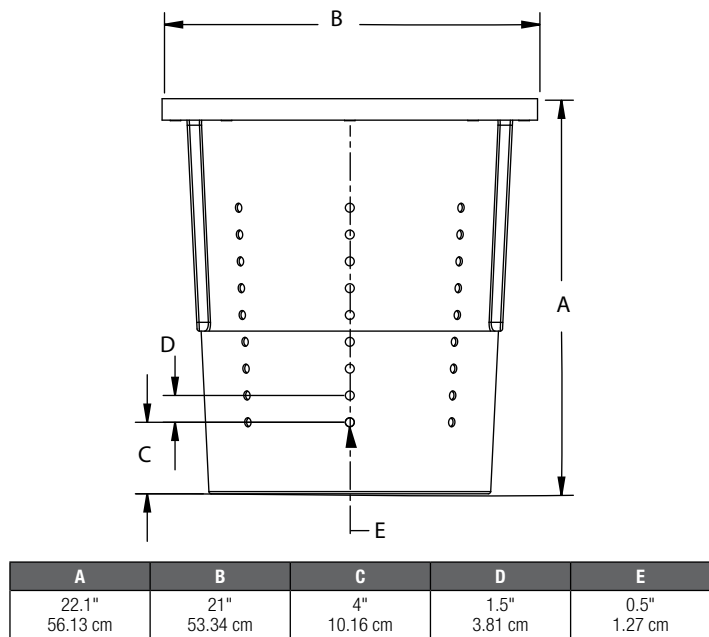
### SERIES SPECIFICATIONS

Volts	Hz	Amps		Watts	Performance (GPM @ Height in Feet)			Shut-Off (ft)	PSI
		FLA	Start		5'	10'	15'		
115	60	6	12	600	50	42	30	22	9.5

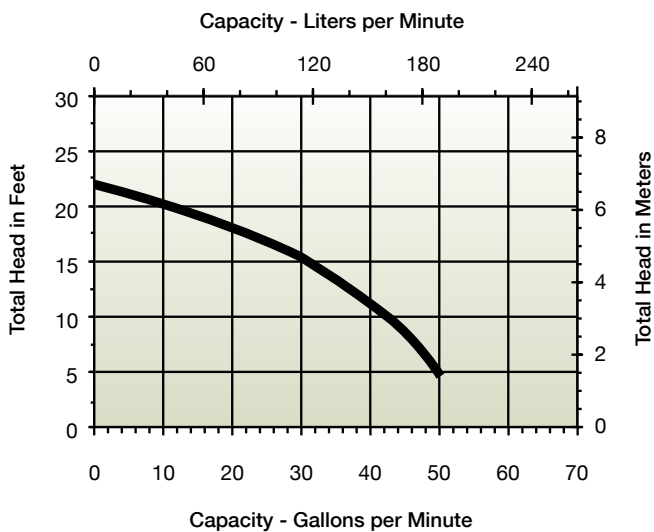
Item No.	Model	HP	Volts	Switch Type/ Operation	On Level	Off Level	Cord	Weight (lbs)
14940655	CS-SS	1/3	115	Integral Snap-Action Float	7" - 10" 17.8 cm - 25.4 cm	2" - 5" 5 cm - 12.7 cm	20' 6 m	41 lbs 18.60 Kg



ENGINEERING DATA



PERFORMANCE DATA



PUMP CONSTRUCTION

Motor Housing	Epoxy-coated cast iron
Impeller Material	Nylon
Impeller Type	Vortex
Volute	Epoxy-coated cast iron/ polypropylene
Motor Shaft	Cold rolled steel
Mechanical Shaft Seal	Nitrile with carbon and ceramic faces
Fasteners	Stainless steel
Bearings	Upper and lower sintered sleeve bearings
Power Cord	SJTW (506612 with SJTOW)

BASIN CONSTRUCTION

Basin	Polypropylene
Cover	Structural foam

### APPLICATIONS

- Sump, effluent, and sewage pump power backup system



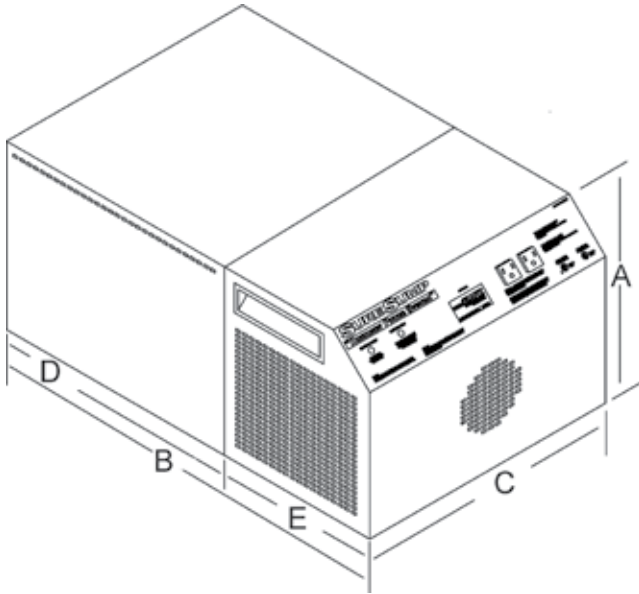
### FEATURES

- Fully automatic charging system
- Powers existing sump, effluent or sewage pump in the event of a power outage
- Operates 115 Volt pump up to 1/2 hp
- Advanced charging system that maintains battery voltage by timed increments resulting in maximized battery life
- Batteries not included
- Easy installation with no modification or piping changes to existing pumping system
- Microprocessor monitors all electrical functions
- Indicator lights (LED) for:
  - Inverter light
  - Charge light

### SERIES SPECIFICATIONS

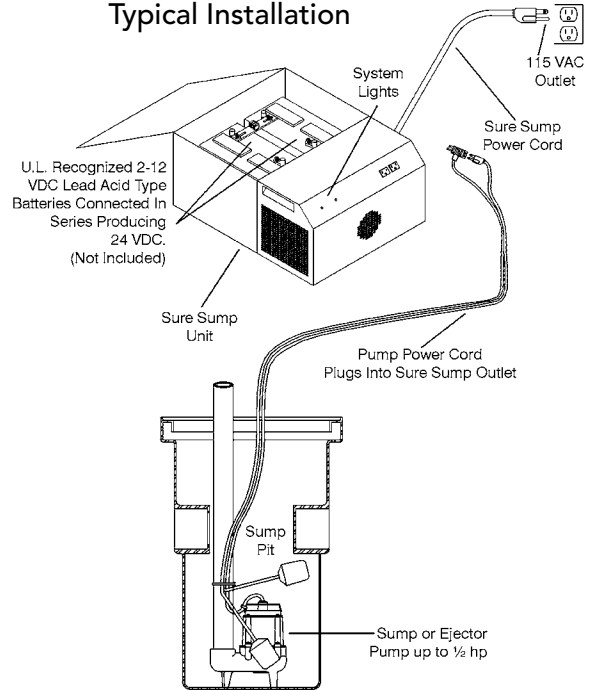
Item No.	Model	Input	Output	Max HP	Cord Length	Weight
513400	APS-115	60 Hz, 120 VAC, 12 Amps	120 VAC, 15 Amps at .80 Service factor (12 Amps)	1/2	9' 2.7 m	97 lbs 44 Kg

## ENGINEERING DATA

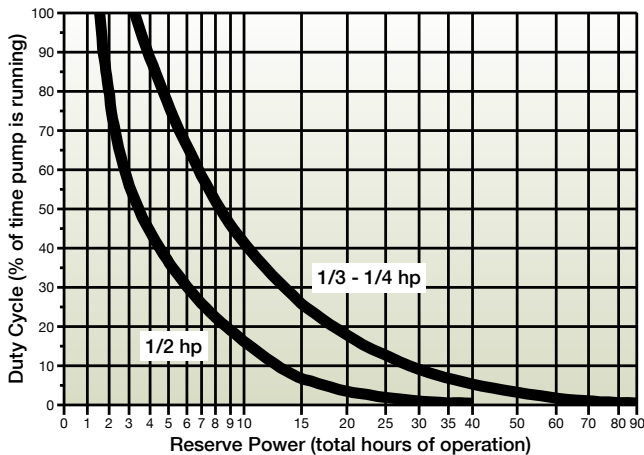


A	B	C	D	E
12" 30.48 cm	23" 58.42 cm	16-1/2" 41.91 cm	14-5/8" 37.15 cm	8-3/8" 21.27 cm

## Typical Installation



## PERFORMANCE DATA



## CONSTRUCTION FEATURES

- Quality 16 gauge steel enclosure
- Baked-on epoxy finish inside and out to prevent corrosion
- Hinged door for easy battery access
- Two piece construction for ease of installation
- Weight:
  - Power head weight 70 lbs
  - Battery enclosure weight 25 lbs

### APPLICATIONS

- Secondary sump pump
- Flood protection
- Emergency dewatering



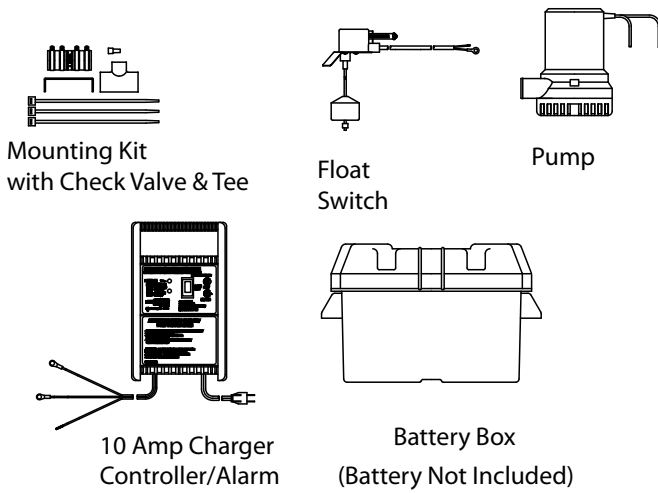
### FEATURES

- 12 Volt DC pump
- The back-up system is powered by a 12 Volt DC battery (not included). The battery used should be a deep cycle marine battery rated from 105 to 140 amp-hours. A 140 amp-hour battery can provide in excess of nine (9) hours of continuous operation.
- Controller/Charger/Alarm, 10 amp
- A controller/charger monitors the battery condition and charges the battery when required. It also alerts the homeowner when the system has operated or when possible flooding conditions exist.
- Audible alarm:
  - When pump runs (must be reset)
  - When battery is discharged
- Indicator lights (LED) for:
  - Power on
  - Battery charging
  - Battery fully charged
- Float switch
- Check valve for 12 volt pump
- PVC tee for connection to existing 1-1/2 discharge pipe of primary pump
- Battery box (battery not included)
- Pump mounting bracket and clamp

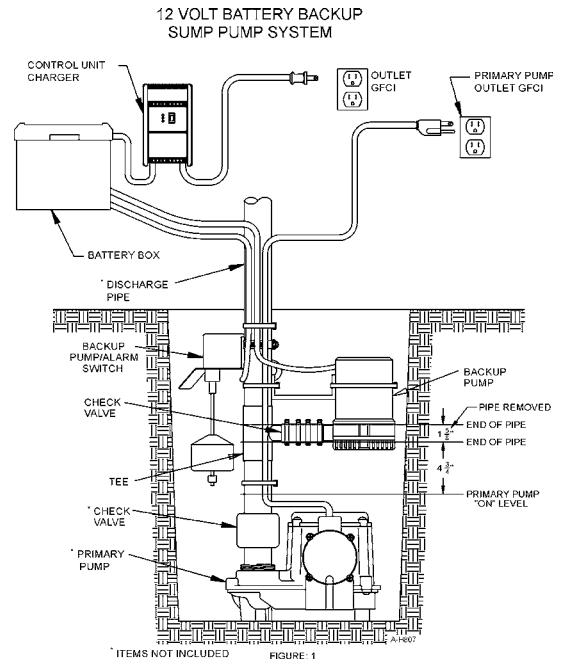
### SERIES SPECIFICATIONS

	Item No.	Model	Volts	Hz	Amps		Watts	Performance (GPH @ Head)			Shut-Off		Weight
					FLA	Start		5'	10'	15'	Feet	PSI	
Pump	506400	SPBS-12	12VDC	60	12	36	–	1360	1000	570	21	9.1	17.5 lbs 7.94 kg
Charge Input	–	–	120VAC	60	2	–	230	–	–	–	–	–	–
Charge Output	–	–	12VDC	–	10	–	–	–	–	–	–	–	–

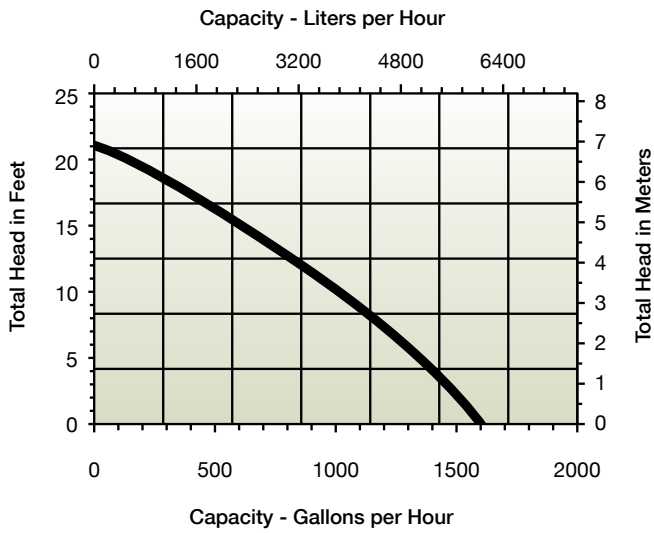
ENGINEERING DATA



Typical Installation



PERFORMANCE DATA



# OS3 SERIES (OIL SENSING SUMP SYSTEM)

## APPLICATIONS

- Ideal for elevator sump pits, transformer vaults, and water-and-oil prone confined spaces in accordance with ASME - A17

## FEATURES

- Multiple indicator lights; power, pump run, high-water; high oil, pump overload
- Single-piece sensor for easy installation
- ASME - A17 compliant
- Includes remote alarm
- Alarm panel can be connected to Oil Sensing Sump System's remote panel which contains audio/visual alarming
- Both the main panel and remote alarm panel have auxiliary contacts for connection to a building's automation system or SCADA system

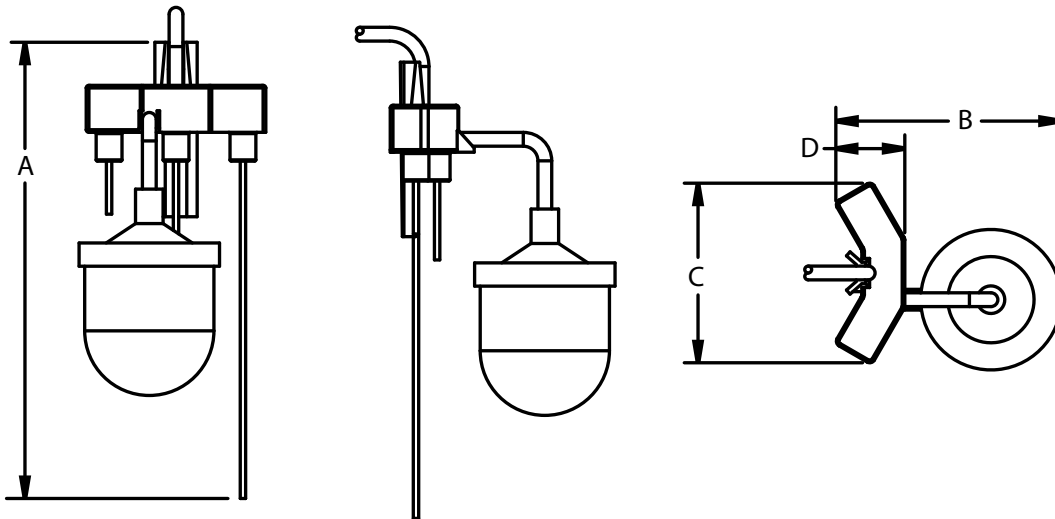


## SERIES SPECIFICATIONS

Item	Model	Volts	Hertz	HP	Overload Range
506612	6EN-CIM	115	60	1/3	N/A
509232	9ENH-CIM	115	60	4/10	N/A
511572	10ENH-CIM	115	60	1/2	N/A
511576	10ENH-CIM	208-230	60	1/2	N/A
513390	OS3-1	115	60	1 Max.	N/A
513391	OS3-1L-5-8	115	60	1 Max.	5-8 amps
513392	OS3-1L-7-10	115	60	1 Max.	7-10 amps
513393	OS3-1L-9-13	115	60	1 Max.	9-13 amps
513395	OS3-2	230	60	2 Max.	N/A
513396	OS3-2L-5-8	230	60	2 Max.	5-8 amps
513397	OS3-2L-7-10	230	60	2 Max.	7-10 amps
513398	OS3-2L-9-13	230	60	2 Max.	9-13 amps
513380	OS3-6E-1**	115	60	1/3	N/A
513383	OS3-9ENH-1**	115	60	4/10	N/A
513384	OS3-10ENH-1**	115	60	1/2	N/A
513385	OS3-10ENH-2**	230	60	1/2	N/A

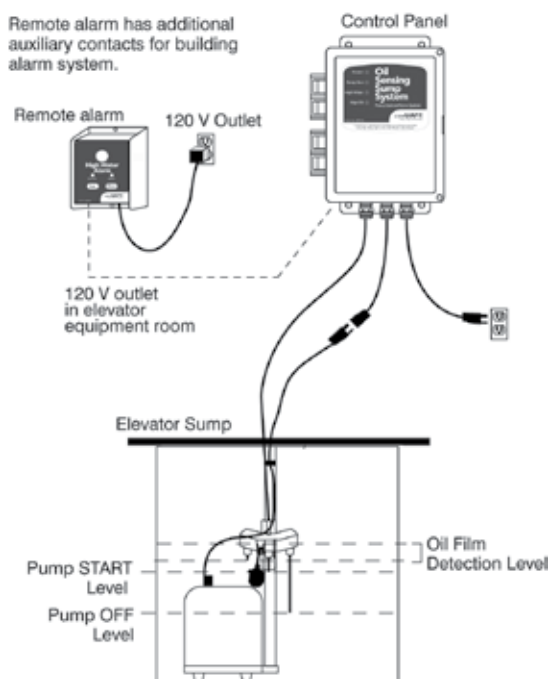
\*\* Includes pump in kit

## ENGINEERING DATA



A	B	C	D
10.6"	4.4"	4.2"	1.6"
26.92 cm	11.18 cm	10.67 cm	4.06 cm

## TYPICAL INSTALLATION



## CONSTRUCTION

<b>Sensor</b>	
<b>Housing</b>	ABS
<b>Probe</b>	Stainless steel
<b>Float</b>	PVC

<b>Control Panel</b>	
<b>Enclosure</b>	Type 1
<b>Power Cord</b>	6' SJT, 120 VAC
<b>Receptacle</b>	SJT, 120 VAC, 15 amp

<b>Alarm Panel</b>	
<b>Enclosure</b>	Type 1
<b>Power Cord</b>	Plug in transformer, 120 VAC
<b>Backup Power</b>	9 VDC battery back-up
<b>LED Indicators</b>	Trouble, high level, high oil
<b>Audible Alarm</b>	103 db buzzer, auto test/reset



# EFFLUENT PUM

Dewatering, water transfer, effluent and wastewater removal can all be handled with Little Giant effluent pumps. Ranging from 1/3 hp to 2 hp and shut-offs of 7' to 250', Little Giant offers more performance choices for the job.





PS

## APPLICATIONS

- Basement sumps • Dewatering
- Water transfer • Light effluent

## FEATURES

- Permanent split capacitor (PSC) motor with thermal overload protection
- Designed for continuous duty
- 1-1/2" FNPT discharge (38 mm)
- Handles up to 1/2" (12.7 mm) solids
- Multiple switch options for automatic operation
- cCSAus listed

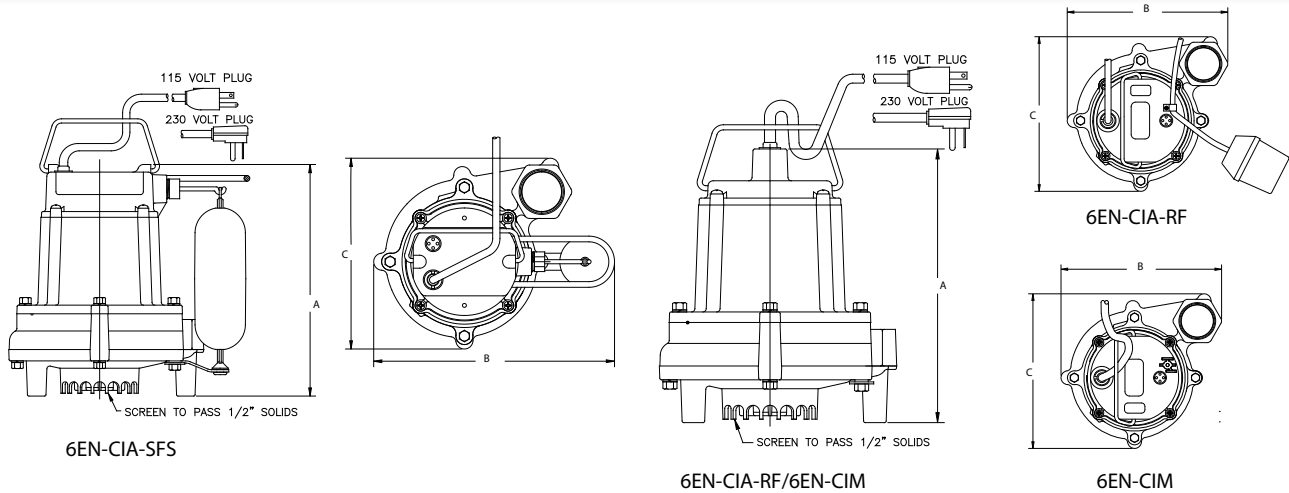


## SERIES SPECIFICATIONS

Volts	Hz	Amps		Watts	Performance (GPM @ Height in Feet)			Shut-Off (ft)	PSI
		FLA	Start		5'	10'	15'		
115	60	6	12	600	50	42	30	22	9.5
230	60	3	6.7	600	50	42	30	22	9.5

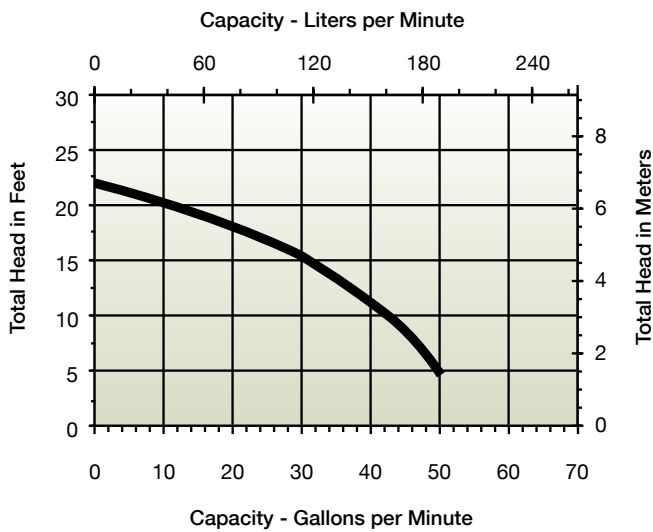
Item No.	Model	HP	Volts	Switch Type/Operation	On Level	Off Level	Cord	Weight (lbs)
506630	6EN-CIA-SFS	1/3	115	Integral Snap-Action Float	7" - 10" 17.8 cm - 25.4 cm	2" - 5" 5 cm - 12.7 cm	10' 3 m	28 lbs 12.70 Kg
506631	6EN-CIA-SFS	1/3	115	Integral Snap-Action Float	7" - 10" 17.8 cm - 25.4 cm	2" - 5" 5 cm - 12.7 cm	20' 6.1 m	28 lbs 12.70 Kg
506635	6EN-CIA-SFS	1/3	230	Integral Snap-Action Float	7" - 10" 17.8 cm - 25.4 cm	2" - 5" 5 cm - 12.7 cm	10' 3 m	28 lbs 12.70 Kg
506636	6EN-CIA-SFS	1/3	230	Integral Snap-Action Float	7" - 10" 17.8 cm - 25.4 cm	2" - 5" 5 cm - 12.7 cm	20' 6.1 m	28 lbs 12.70 Kg
506619	6EN-CIA-RF	1/3	115	Piggyback Mechanical Float	12" - 14" 30.5 cm - 35.6 cm	5" - 7" 12.7 cm - 17.8 cm	20' 6.1 m	28 lbs 12.70 Kg
506620	6EN-CIA-RF	1/3	115	Piggyback Mechanical Float	12" - 14" 30.5 cm - 35.6 cm	5" - 7" 12.7 cm - 17.8 cm	10' 3 m	28 lbs 12.70 Kg
506610	6EN-CIM	1/3	115	Manual	-	-	10' 3 m	27 (lbs) 12.25 Kg
506611	6EN-CIM	1/3	115	Manual	-	-	20' 6.1 m	27 (lbs) 12.25 Kg
506615	6EN-CIM	1/3	230	Manual	-	-	10' 3 m	27 (lbs) 12.25 Kg
506616	6EN-CIM	1/3	230	Manual	-	-	20' 6.1 m	27 (lbs) 12.25 Kg
506641	6EN-CIM (Black)	1/3	115	Manual	-	-	20' 6.1 m	27 (lbs) 12.25 Kg

ENGINEERING DATA



Model	A	B	C
6EN-CIA-SFS	10.18" 25.86 cm	10.6" 26.92 cm	8.39" 21.31 cm
6EN-CIA-RF	9.88" 25.09 cm	8.72" 22.14 cm	8.38" 21.29 cm
6EN-CIM	9.88" 25.09 cm	8.72" 22.14 cm	8.38" 21.29 cm

PERFORMANCE DATA



CONSTRUCTION

<b>Cover</b>	Polycarbonate
<b>Motor Housing</b>	Epoxy-coated cast iron
<b>Impeller Material</b>	Nylon
<b>Impeller Type</b>	Vortex
<b>Volute</b>	Epoxy-coated cast iron/ polypropylene
<b>Motor Shaft</b>	Cold rolled steel
<b>Mechanical Shaft Seal</b>	Nitrile with carbon & ceramic faces
<b>Fasteners</b>	Stainless steel
<b>Bearings</b>	Upper and lower sintered sleeve bearings
<b>Power Cord</b>	SJTW (506612 with SJTOW)

## APPLICATIONS

- Effluent wastewater removal • Dewatering
- Water transfer

## FEATURES

- Permanent Split Capacitor (PSC)
- Designed for continuous duty
- Energy-saving low amp draw
- Cooler running motor
- 1-1/2" FNPT (38 mm) discharge
- Handles solids up to 3/4" (19 mm) diameter
- Multiple switch options for automatic operation
- 140 °F (60 °C) liquid temperature rating
- cCSAus listed

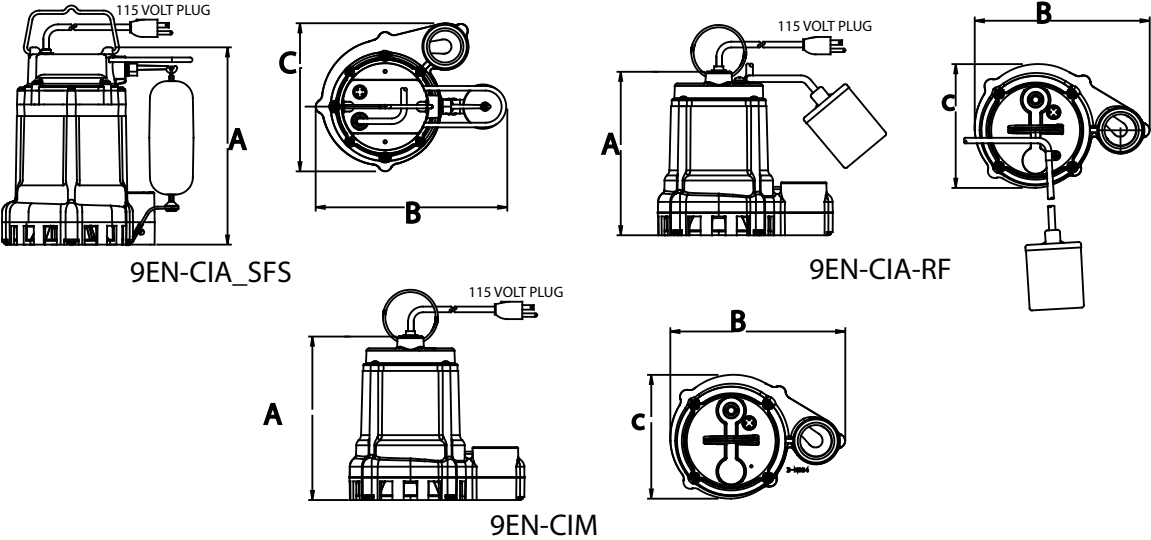


## SERIES SPECIFICATIONS

Volts	Hz	Amps		Watts	Performance (GPM @ Height in Feet)					Shut-Off (ft)	PSI
		FLA	Start		5'	10'	15'	20'	25'		
115	60	9	17	920	80	70	60	45	25	32	14.1
208/230	50/60	4	7.5	800	80	70	60	45	25	32	14.1

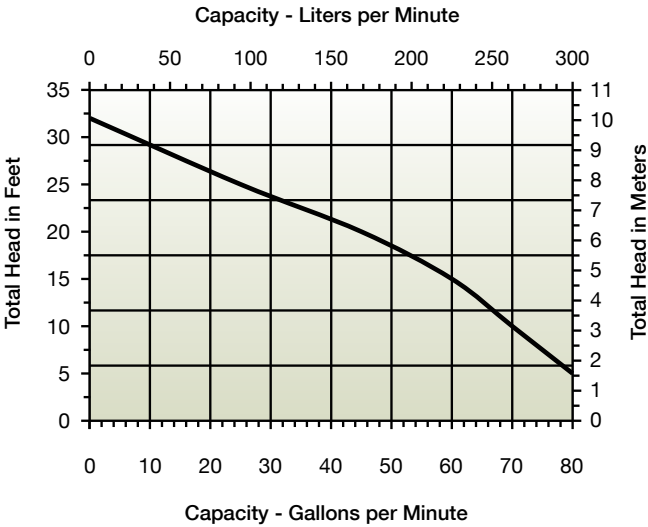
Item No.	Model	HP	Volts	Switch Type/Operation	On Level	Off Level	Cord	Weight
509260	9EN-CIA-SFS	4/10	115	Integral Float Switch	7" - 10" 17.8 cm - 25.4 cm	2" - 5" 5 cm - 12.7 cm	20' 6.1 m	27.5 lbs 12.47 Kg
509261	9EN-CIA-SFS	4/10	115	Integral Float Switch	7" - 10" 17.8 cm - 25.4 cm	2" - 5" 5 cm - 12.7 cm	30' 9.1 m	28.5 lbs 12.93 Kg
509209	9EN-CIA-RF	4/10	115	Piggyback Float Switch	9" - 14" 22.86 cm - 35.56 cm	2" - 6" 5 cm - 15.24 cm	20' 6.1 m	27.5 lbs 12.47 Kg
509210	9EN-CIA-RF	4/10	115	Piggyback Float Switch	9" - 14" 22.86 cm - 35.56 cm	2" - 6" 5 cm - 15.24 cm	30' 9.1 m	28.5 lbs 12.93 Kg
509221	9EN-CIA-RF	4/10	208-230	Piggyback Float Switch	9" - 14" 22.86 cm - 35.56 cm	2" - 6" 5 cm - 15.24 cm	20' 6.1 m	27.5 lbs 12.47 Kg
509207	9EN-CIM	4/10	115	Manual	-	-	20' 6.1 m	26.5 lbs 12.02 Kg
509208	9EN-CIM	4/10	115	Manual	-	-	30' 9.1 m	27.5 lbs 12.47 Kg
509219	9EN-CIM	4/10	208-230	Manual	-	-	20' 6.1 m	27 lbs 12.25 Kg

**ENGINEERING DATA**



Model	A	B	C
9EN-CIA-SFS	10.76" 27.33 cm	10.54" 26.54 cm	8.07" 20.49 cm
9EN-CIA-RF	9.15" 23.24 cm	9.6" 24.38 cm	6.8" 17.27 cm
9EN-CIM	9.15" 23.24 cm	9.6" 24.38 cm	6.8" 17.27 cm

**PERFORMANCE DATA**



**CONSTRUCTION**

<b>Cover</b>	Epoxy-coated cast iron/ *Thermoplastic
<b>Motor Housing</b>	Epoxy-coated cast iron
<b>Impeller Material</b>	Thermoplastic elastomer
<b>Impeller Type</b>	Non-clog
<b>Volute</b>	Epoxy-coated cast iron
<b>Motor Shaft</b>	Steel
<b>Mechanical Shaft Seal</b>	Nitrile with carbon and ceramic faces
<b>Fasteners</b>	Stainless steel
<b>Bearings</b>	Upper sintered sleeve and lower ball bearing
<b>Power Cord</b>	SJTW **SJTOW

\* On SFS models  
\*\* On 30' 9EN-CIA-RF and 9EN-CIM models

## APPLICATIONS

- Effluent wastewater removal • Dewatering • Water transfer

## FEATURES

- Permanent Split Capacitor (PSC)
- Designed for continuous duty
- Energy-saving low amp draw
- Cooler running motor
- 1-1/2" FNPT (38 mm) discharge
- Handles solids up to 3/4" (19 mm) diameter
- Multiple switch options for automatic operation
- 140 °F (60 °C) liquid temperature rating
- cCSAus listed

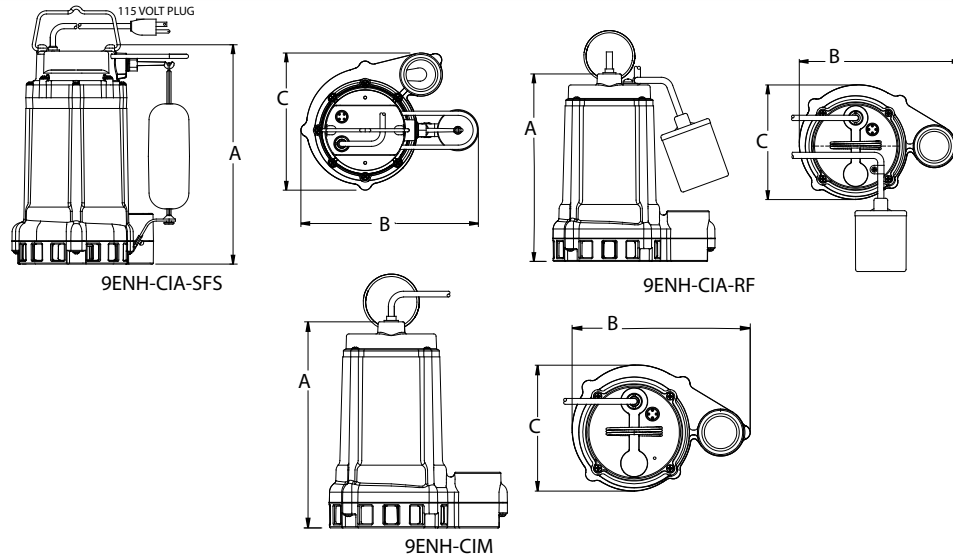


## SERIES SPECIFICATIONS

Volts	Hz	Amps		Watts	Performance (GPM @ Height in Feet)					Shut-Off (ft)	PSI
		FLA	Start		5'	10'	20'	30'	40'		
115	60	9	16	1045	70	60	50	30	10	45	19.5
208-230	60	9	8.2	1045	70	60	50	30	10	45	19.5

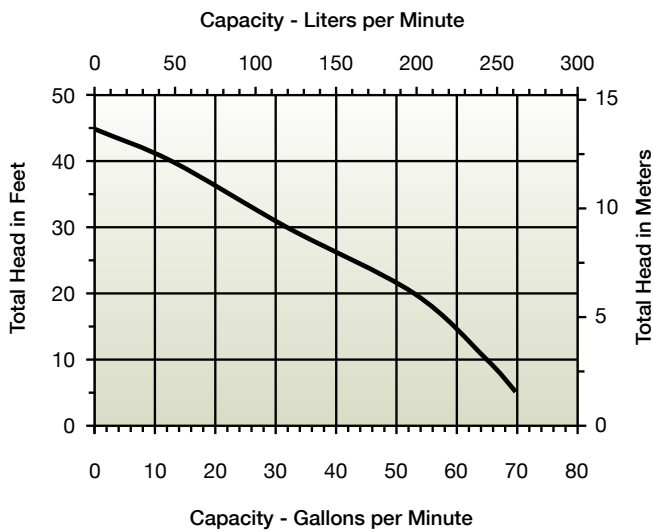
Item No.	Model	HP	Volts	Switch Type/ Operation	On Level	Off Level	Cord	Weight
509239	9ENH-CIA-SFS	4/10	115	Integral Float Switch	9" - 14" 22.86 cm - 35.56 cm	2" - 6" 5 cm - 15.24 cm	20' 6.1 m	38 lbs 17.24 Kg
509240	9ENH-CIA-SFS	4/10	115	Integral Float Switch	9" - 14" 22.86 cm - 35.56 cm	2" - 6" 5 cm - 15.24 cm	30' 9.1 m	39 lbs 17.69
509233	9ENH-CIA-RF	4/10	115	Piggyback Float Switch	9" - 12" 22.86 cm - 30.48 cm	3" - 6" 7.62 cm - 15.24 cm	20' 6.1 m	38 lbs 17.24 Kg
509234	9ENH-CIA-RF	4/10	115	Piggyback Float Switch	9" - 12" 22.86 cm - 30.48 cm	3" - 6" 7.62 cm - 15.24 cm	30' 9.1 m	39 lbs 17.69
509231	9ENH-CIM	4/10	115	Manual	-	-	20' 6.1 m	37 lbs 16.78 Kg
509232	9ENH-CIM	4/10	115	Manual	-	-	30' 9.1 m	38 lbs 17.24 Kg
509237	9ENH-CIA-RF	4/10	208-230	Piggyback Float Switch	9" - 12" 22.86 cm - 30.48 cm	3" - 6" 7.62 cm - 15.24 cm	20' 6.1 m	37 lbs 16.78 Kg
509238	9ENH-CIA-RF	4/10	208-230	Piggyback Float Switch	9" - 12" 22.86 cm - 30.48 cm	3" - 6" 7.62 cm - 15.24 cm	30' 9.1 m	38 lbs 17.24 Kg
509235	9ENH-CIM	4/10	208-230	Manual	-	-	20' 6.1 m	37 lbs 16.78 Kg
509236	9ENH-CIM	4/10	208-230	Manual	-	-	30' 9.1 m	38 lbs 17.24 Kg

ENGINEERING DATA



Model	A	B	C
9ENH-CIA-SFS	12.9" 32.77 cm	10.54" 26.54 cm	8.07" 20.49 cm
9ENH-CIA-RF	11.03" 28.01 cm	9.53" 24.21 cm	6.74" 17.12 cm
9ENH-CIM	11.03" 28.01 cm	9.53" 24.21 cm	6.74" 17.12 cm

PERFORMANCE DATA



CONSTRUCTION

<b>Cover</b>	Epoxy-coated cast iron/ *Thermoplastic
<b>Motor Housing</b>	Epoxy-coated cast iron
<b>Impeller Material</b>	Thermoplastic elastomer
<b>Impeller Type</b>	Non-clog
<b>Volute</b>	Epoxy-coated cast iron
<b>Mechanical Shaft Seal</b>	Nitrile with carbon and ceramic faces
<b>Fasteners</b>	Stainless steel
<b>Shaft</b>	Steel
<b>Bearings</b>	Upper and lower ball bearing
<b>Power Cord</b>	SJTW **SJTOW

\* On SFS models

\*\* On 30' 9ENH-CIA-RF and 9ENH-CIM models

## APPLICATIONS

- Effluent wastewater removal • Dewatering • Water transfer

## FEATURES

- Permanent Split Capacitor (PSC)
- Designed for continuous duty
- Energy-saving low amp draw
- Cooler running motor
- 1-1/2" FNPT (38 mm) discharge
- Handles solids up to 1/2" (12.7 mm) diameter
- Multiple switch options for automatic operation
- 140 °F (60 °C) liquid temperature rating
- cCSAus listed



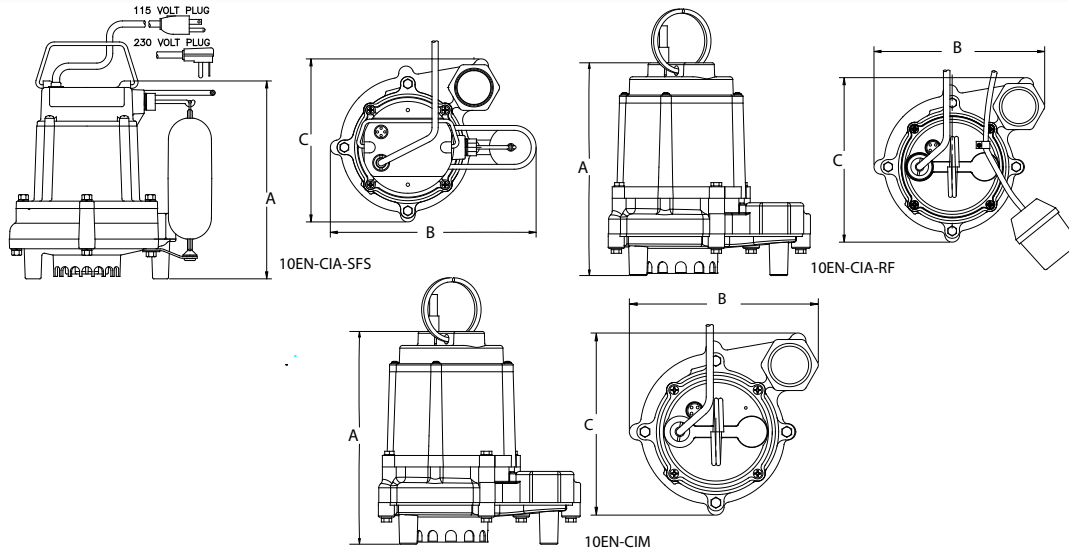
## SERIES SPECIFICATIONS

Volts	Hz	Amps		Watts	Performance (GPM @ Height in Feet)				Shut-Off (ft)	PSI
		FLA	Start		5'	10'	15'	20'		
115	60	8	12	850	67	61	50	40	30	13
230	60	4	6.7	850	67	61	50	40	30	13

Item No.	Model	HP	Volts	Switch Type/Operation	On Level	Off Level	Cord	Weight
511330	10EN-CIA-SFS	1/2	115	Integral Snap-Action Float	7" - 10" 17.8 cm - 25.4 cm	2" - 5" 5 cm - 12.7 cm	10' 3 m	29 lbs 13.5 Kg
511331	10EN-CIA-SFS	1/2	115	Integral Snap-Action Float	7" - 10" 17.8 cm - 25.4 cm	2" - 5" 5 cm - 12.7 cm	20' 6.1 m	29 lbs 13.5 Kg
511225	10EN-CIA-SFS	1/2	230	Integral Snap-Action Float	7" - 10" 17.8 cm - 25.4 cm	2" - 5" 5 cm - 12.7 cm	10' 3 m	29 lbs 13.5 Kg
511336	10EN-CIA-SFS	1/2	230	Integral Snap-Action Float	7" - 10" 17.8 cm - 25.4 cm	2" - 5" 5 cm - 12.7 cm	20' 6.1 m	29 lbs 13.5 Kg
511320	10EN-CIA-RF	1/2	115	Piggyback Mechanical Float	12" - 14" 30.48 cm - 35.56 cm	5" - 7" 12.7 cm - 17.78 cm	10' 3 m	29 lbs 13.5 Kg
511321	10EN-CIA-RF	1/2	115	Piggyback Mechanical Float	12" - 14" 30.48 cm - 35.56 cm	5" - 7" 12.7 cm - 17.78 cm	20' 6.1 m	29 lbs 13.5 Kg
511310	10EN-CIM	1/2	115	Manual	-	-	10' 3 m	28 lbs 12.7 Kg
511311	10EN-CIM	1/2	115	Manual	-	-	10' 3 m	28 lbs 12.7 Kg
511315	10EN-CIM	1/2	230	Manual	-	-	10' 3 m	28 lbs 12.7 Kg
511316	10EN-CIM	1/2	230	Manual	-	-	20' 6.1 m	28 lbs 12.7 Kg
511342	10EN-CBA-SFS	1/2	115	Integral Snap-Action Float	7" - 10" 17.8 cm - 25.4 cm	2" - 5" 5 cm - 12.7 cm	10' 3 m	28 lbs 12.7 Kg
511343	10EN-CBA-SFS	1/2	115	Integral Snap-Action Float	7" - 10" 17.8 cm - 25.4 cm	2" - 5" 5 cm - 12.7 cm	10' 3 m	28 lbs 12.7 Kg
511341	10EN-CBM	1/2	115	Manual	-	-	10' 3 m	27 lbs 12.25 Kg

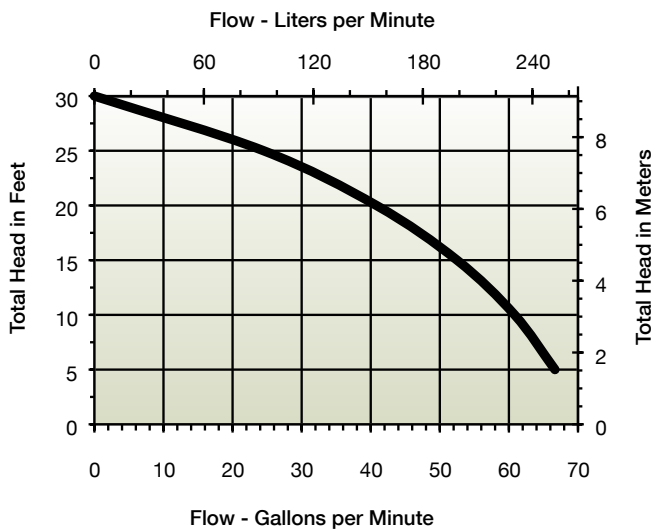


ENGINEERING DATA



Model	A	B	C
10EN-CIA-SFS	10.18" 25.86 cm	10.6" 26.92 cm	8.39" 21.31 cm
10EN-CIA-RF	9.87" 25.07 cm	8.72" 22.15 cm	8.38" 21.29 cm
10EN-CIM	9.87" 25.07 cm	8.72" 22.15 cm	8.38" 21.29 cm

PERFORMANCE DATA



CONSTRUCTION

<b>Cover</b>	Polycarbonate 10EN-CIA-SFS Models
<b>Cover</b>	Cast iron - 10EN-CIM and 10EN-CIA-RF models
<b>Motor Housing</b>	Epoxy-coated cast iron
<b>Impeller Material</b>	Nylon
<b>Volute</b>	Epoxy-coated cast iron/ polypropylene
<b>Mechanical Shaft Seal</b>	Nitrile with carbon and ceramic faces
<b>Fasteners</b>	Stainless steel
<b>Shaft</b>	Cold rolled steel
<b>Bearings</b>	Upper and lower sintered sleeve bearings
<b>Power Cord</b>	SJTW **SJTOW

\* On SFS models

\*\* On 30' 10EN-CIA-RF and 10EN-CIM models

## APPLICATIONS

- Effluent wastewater removal • Dewatering • Water transfer

## FEATURES

- Permanent Split Capacitor (PSC)
- Designed for continuous duty
- Energy-saving low amp draw
- Cooler running motor
- 1-1/2" FNPT (38 mm) discharge
- Handles solids up to 3/4" (19 mm) diameter
- Multiple switch options for automatic operation
- 140 °F (60 °C) liquid temperature rating
- cCSAus listed

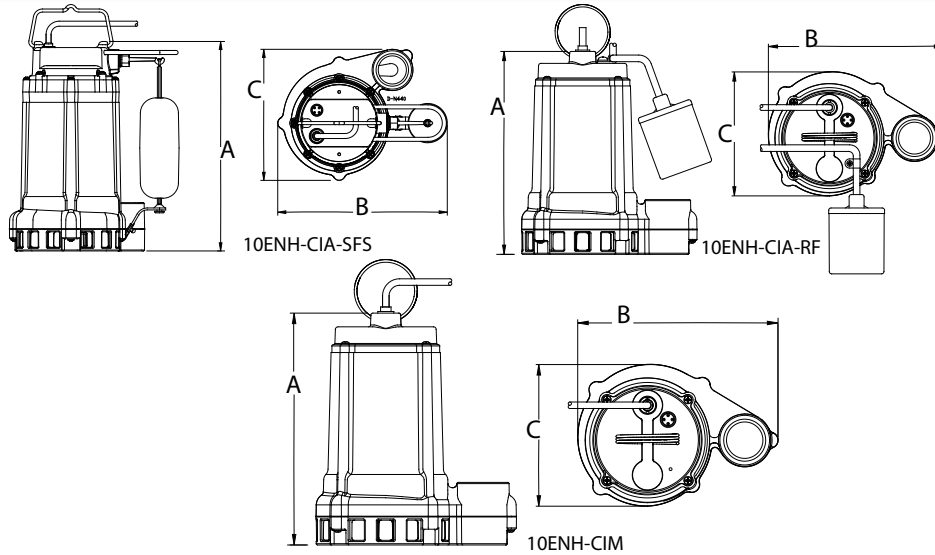


## SERIES SPECIFICATIONS

Volts	Hz	Amps		Watts	Performance (GPM @ Height in Feet)						Shut-Off (ft)	PSI
		FLA	Start		5'	10'	20'	30'	40'	50'		
115	60	9.5	16	1045	60	50	40	30	15	8	60	26
208-230	60	9.5	8.2	1045	60	50	40	30	15	8	60	26

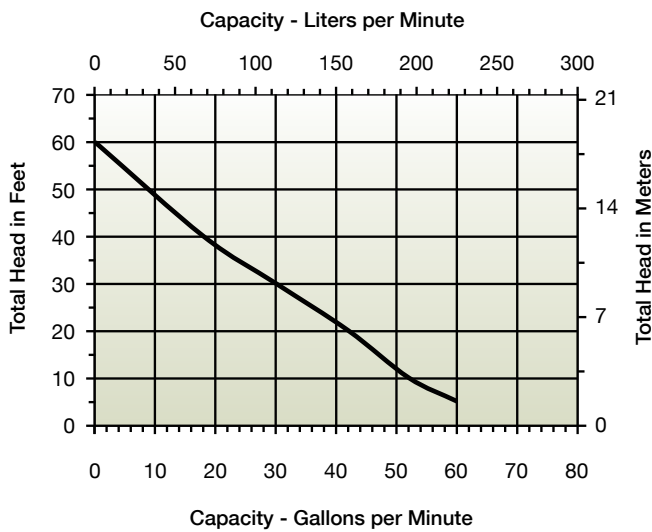
Item No.	Model	HP	Volts	Switch Type/ Operation	On Level	Off Level	Cord	Weight
511602	10ENH-CIA-SFS	1/2	115	Integral Float Switch	9" - 14" 22.86 cm - 35.56 cm	2" - 6" 5 cm - 15.24 cm	20' 6.1 m	38 lbs 17.24 Kg
511603	10ENH-CIA-SFS	1/2	115	Integral Float Switch	9" - 14" 22.86 cm - 35.56 cm	2" - 6" 5 cm - 15.24 cm	30' 9.1 m	39 lbs 17.69 Kg
511573	10ENH-CIA-RF	1/2	115	Piggyback Float Switch	9" - 12" 22.86 cm - 30.48 cm	3" - 6" 7.62 cm - 15.24 cm	20' 6.1 m	38 lbs 17.24 Kg
511574	10ENH-CIA-RF	1/2	115	Piggyback Float Switch	9" - 12" 22.86 cm - 30.48 cm	3" - 6" 7.62 cm - 15.24 cm	30' 9.1 m	39 lbs 17.69 Kg
511571	10ENH-CIM	1/2	115	Manual	-	-	20' 6.1 m	37 lbs 16.78 Kg
511572	10ENH-CIM	1/2	115	Manual	-	-	30' 9.1 m	38 lbs 17.24 Kg
511577	10ENH-CIA-RF	1/2	208-230	Piggyback Float Switch	9" - 12" 22.86 cm - 30.48 cm	3" - 6" 7.62 cm - 15.24 cm	20' 6.1 m	37 lbs 16.78 Kg
511578	10ENH-CIA-RF	1/2	208-230	Piggyback Float Switch	9" - 12" 22.86 cm - 30.48 cm	3" - 6" 7.62 cm - 15.24 cm	20' 6.1 m	37 lbs 16.78 Kg
511575	10ENH-CIM	1/2	208-230	Manual	-	-	20' 6.1 m	37 lbs 16.78 Kg
511576	10ENH-CIM	1/2	208-230	Manual	-	-	30' 9.1 m	38 lbs 17.24 Kg

ENGINEERING DATA



Model	A	B	C
10ENH-CIA-SFS	12.9" 32.77 cm	10.45" 26.54 cm	8.07" 20.50 cm
10ENH-CIA-RF	11.03" 28.02 cm	9.53" 24.21 cm	6.74" 17.12 cm
10ENH-CIM	11.03" 28.02 cm	9.53" 24.21 cm	6.74" 17.12 cm

PERFORMANCE DATA



CONSTRUCTION

<b>Cover</b>	Epoxy-coated cast iron/ *Thermoplastic
<b>Motor Housing</b>	Epoxy-coated cast iron
<b>Impeller Material</b>	Thermoplastic elastomer
<b>Impeller Type</b>	Non-clog
<b>Volute</b>	Epoxy-coated cast iron
<b>Mechanical Shaft Seal</b>	Nitrile with carbon and ceramic faces
<b>Fasteners</b>	Stainless steel
<b>Shaft</b>	Steel
<b>Bearings</b>	Upper and lower ball bearing
<b>Power Cord</b>	SJTW **SJTOW

\* On SFS models

\*\* On 30' 10ENH-CIA-RF and 10ENH-CIM models

## APPLICATIONS

- Boiler blow-down • Effluent wastewater removal • Sump pits
- Transformer vaults



## FEATURES

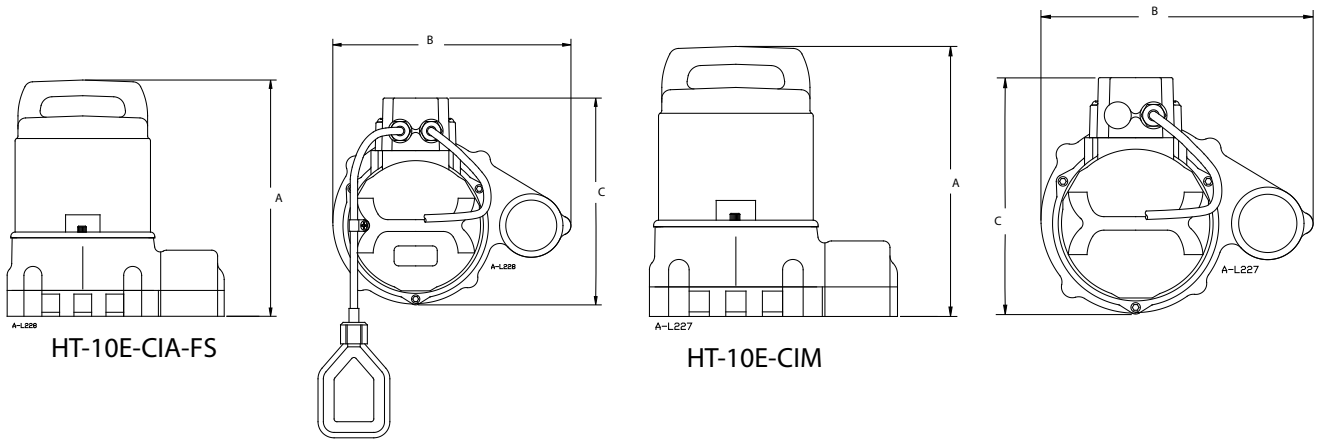
- Split-phase motor
- Oil-filled motor housing
- Designed for continuous duty
- Handles solids up to 3/4" (19 mm) diameter
- Up to 200 °F (93 °C)
- CSA listed

## SERIES SPECIFICATIONS

Volts	Hz	Amps		Watts	Performance (GPM @ Height in Feet)			Shut-Off (ft)	PSI
		FLA	Start		5'	10'	20'		
115	60	10.5	21	900	80	70	37	24	10.4

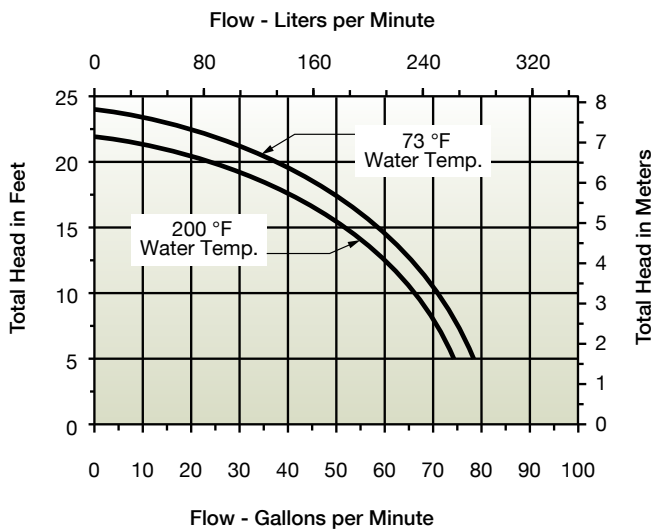
Item No.	Model	HP	Volts	Switch Type/ Operation	On Level	Off Level	Cord	Weight
511700	HT-10E-CIA-FS	1/2	115	Integral Mechanical Float	10" - 12" 25.4 cm - 30.5 cm	2" - 4" 5 cm - 10.2 cm	15' 4.6 m	38 lbs 17.24 Kg
511600	HT-10E-CIM	1/2	115	Manual	-	-	15' 4.6 m	38 lbs 17.24 Kg

ENGINEERING DATA



Model	A	B	C
HT-10E-CIA-FS	10.3" 26.16 cm	9.6" 24.38 cm	9.2" 23.37 cm
HT-10E-CIM	10.3" 26.16 cm	9.6" 24.38 cm	9.2" 23.37 cm

PERFORMANCE DATA



CONSTRUCTION

Motor Housing	Epoxy-coated cast iron
Impeller Material	Nylon
Impeller Type	Vortex
Volute	Epoxy-coated cast iron
Mechanical Shaft Seal	Fluoroelastomer, stainless steel, carbon, and Ni-resist faces
Fasteners	Stainless steel
Shaft	Cold rolled steel
Bearings	Upper and lower ball bearings
Power Cord	15' 16-3 SJOW-A, chlorinated polyethylene

## APPLICATIONS

- Effluent wastewater removal • Dewatering
- Water transfer

## FEATURES

- Oil-free motor
- Designed for continuous duty
- Handles solids up to 3/4" (19 mm) diameter
- 1-1/2" NPT (38 mm) discharge
- Multiple switch options for automatic operation
- 120 °F (49 °C) liquid temperature rating
- cCSAus listed

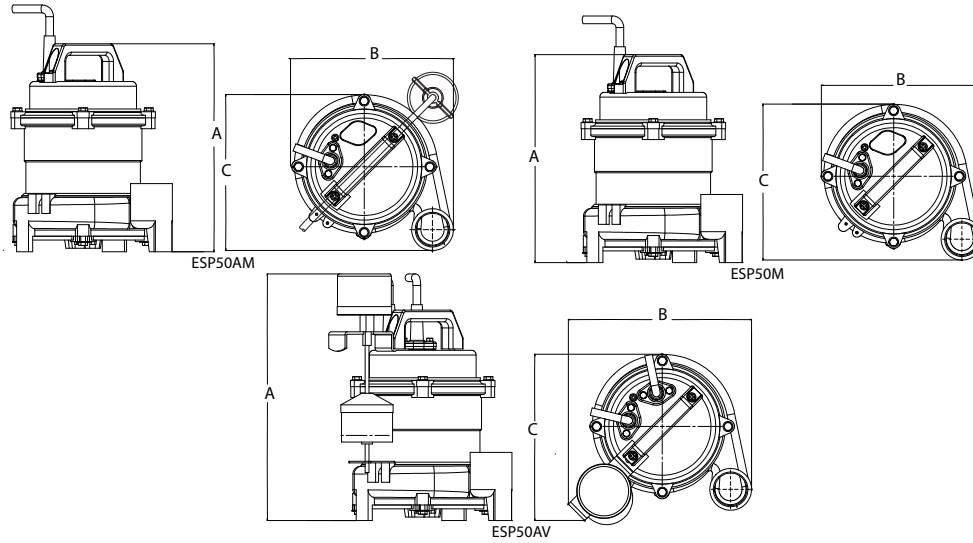


## SERIES SPECIFICATIONS

Volts	Hz	Amps		Watts	Performance (GPM @ Height in Feet)			Shut-Off (ft)	PSI
		FLA	Start		15'	20'	25'		
115	60	6.7	12.9	650	61	51	36	31	13.4

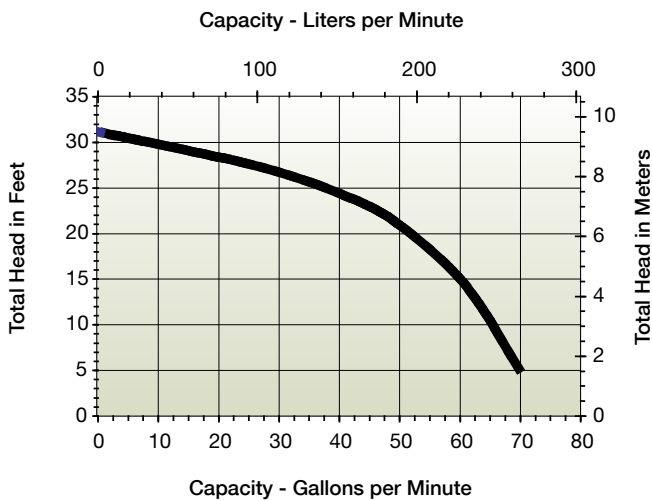
Item No.	Model	HP	Volts	Switch Type/ Operation	On Level	Off Level	Cord	Weight
620187	ESP50AM	1/2	115	Piggyback Mechanical	11.4" 28.9 cm	4.7" 11.9 cm	20' 6.1 m	24 lbs 10.89 Kg
620178	ESP50AV	1/2	115	Vertical Mechanical	7.5" 19.1 cm	4.5" 11.4 cm	20' 6.1 m	24 lbs 10.89 Kg
620174t	ESP50M	1/2	115	Manual	-	-	20' 6.1 m	24 lbs 10.89 Kg

ENGINEERING DATA



Model	A	B	C
ESP50AM	10.59" 26.9 cm	8.23" 20.9 cm	7.95" 20.2 cm
ESP50M	10.59" 26.9 cm	9.33" 23.7 cm	8.46" 21.5 cm
ESP50AV	10.3" 26.16 cm	8.23" 20.9 cm	7.95" 20.2 cm

PERFORMANCE DATA



CONSTRUCTION

Motor Housing	Polypropylene
Impeller Material	Polypropylene
Impeller Type	Non-clog
Volute	Polypropylene
Motor Shaft	Polypropylene
Shaft Seal	Carbon/ceramic
Fasteners	Stainless steel
Bearings	Upper and lower ball bearings
Power Cord	SJTW

### APPLICATIONS

- Effluent wastewater removal • Dewatering
- Water transfer

### FEATURES

- Permanent Split Capacitor (PSC) ball bearing motor
- High speed 3450 rpm
- Completely submersible, designed for continuous duty
- High head model
- 2" FNPT (51 mm) discharge
- Handles solids up to 3/4" (19 mm) diameter
- 140 °F (60 °C) liquid temperature rating
- cCSAus listed (514550 CSA only)



### SERIES SPECIFICATIONS

Pump	Volts	Hz	Amps		Watts	Performance (GPM @ Height in Feet)					Shut-Off (ft)	PSI
			FLA	Start		20'	30'	40'	50'	60'		
14EH	115	60	12.5	22	1450	60	40	20	-	-	50	21.6
	208-240	60	5.7	11	1275	60	40	20	-	-	50	21.6
16EH	230	60	10.2	30	2200	-	90	70	45	30	81	35.1
	208-240	60	6.6	25	1350	-	90	70	45	30	81	35.1
	460-380	60	3.2	12.5	1450	-	90	70	45	30	81	35.1
	575	60	2.5	9.8	1450	-	90	70	45	30	81	35.1

Item No.	Model	HP	Volts	Cord	Weight
514220	14EH-CIM	1/2	115	20' 6.1 m	82 lbs 37.19 Kg
514221	14H-CIM	1/2	115	20' 6.1 m	82 lbs 37.19 Kg

Item No.	Model	HP	Volts	Phase	Cord	Weight
514520	16EH-CIM	1/2	230	1*	20' 6.1 m	89 lbs 40.37 Kg
514530	16EH-CIM	1/2	208-240	3**	20' 6.1 m	82 lbs 37.19 Kg
514540	16EH-CIM	1/2	460-380	3**	20' 6.1 m	82 lbs 37.19 Kg
514550***	16EH-CIM	1/2	575	3**	20' 6.1 m	82 lbs 37.19 Kg

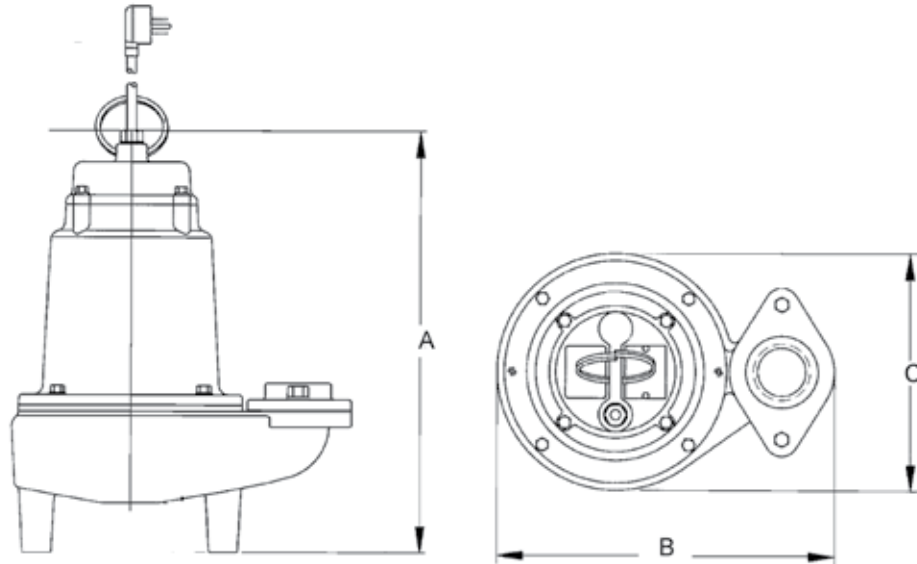
\* Single-phase pumps can use a mechanical float switch or a single-phase control panel for automatic on/off

\*\* Three-phase pumps must have a three-phase control panel for automatic or manual operation

\*\*\* CSA only

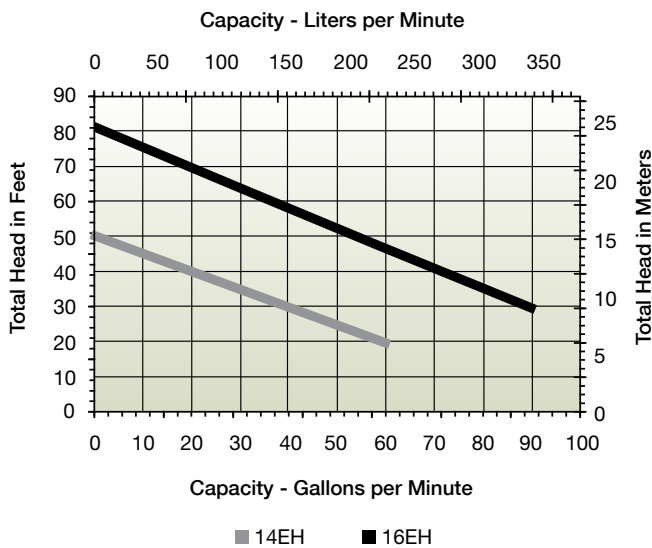


ENGINEERING DATA



A	B	C
16.2" 41.15 cm	14.1" 35.81 cm	9.9" 25.15 cm

PERFORMANCE DATA



CONSTRUCTION

Motor Housing	Epoxy-coated cast iron
Impeller Material	Epoxy-coated cast iron
Impeller Type	Non-clog
Volute	Epoxy-coated cast iron
Mechanical Shaft Seal	Nitrile with carbon and ceramic faces
Fasteners	Stainless steel
Shaft	Stainless steel
Bearings	Upper and lower ball bearings
Power Cord	SJTW-A (514220, 514221, and 514520) SOW-A (514530, 514540, and 514550)

# WS EFFLUENT SERIES 1/3 HP, 1/2 HP, 1 HP

## APPLICATIONS

- Effluent wastewater removal • Dewatering
- Water transfer

## FEATURES

- Oil-filled motor
- Designed for high torque with automatic reset
- Piggyback mechanical float option available for automatic operation
- 2" NPT (51 mm) discharge
- Handles solids up to 3/4" (19 mm) diameter
- 120 °F (49 °C) liquid temperature rating
- cCSAus listed

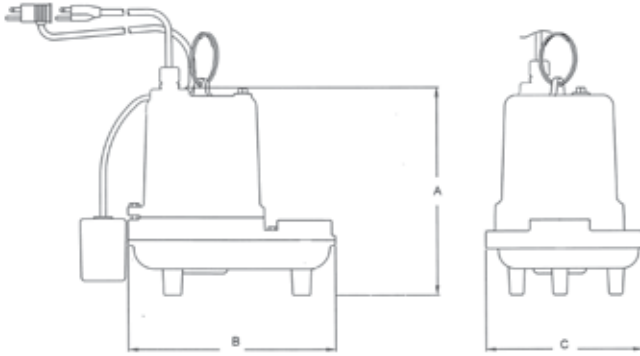


## SERIES SPECIFICATIONS

Item No.	Model	HP	Volts	Phase	HZ	Amps		Watts	Performance (GPM @ Height in Feet)											Shut-Off (ft)	PSI	
						FLA	Start		5'	10'	15'	20'	25'	30'	35'	40'	45'	50'	60'			80'
620010	WS30M	1/3	115	1	60	10.4	50.4	1000	-	-	70	45	15	-	-	-	-	-	-	-	28	12
620000	WS30AM	1/3	115	1	60	10.4	50.4	1000	-	-	70	45	15	-	-	-	-	-	-	-	28	12
620231	WS50M-20	1/2	115	1	60	11.6	26.9	950	105	92	80	64	50	-	-	-	-	-	-	-	42	18.2
620233	WS50AM-20	1/2	115	1	60	11.6	26.9	950	105	92	80	64	50	-	-	-	-	-	-	-	42	18.2
620251	WS50M-12-20	1/2	208-230	1	60	9.7	32.6	1100	105	92	80	64	-	-	-	-	-	-	-	-	42	18.2
620253	WS50AM-12-20	1/2	208-230	1	60	9.7	32.6	1100	105	92	80	64	50	-	-	-	-	-	-	-	42	18.2
620200	WS50HM	1/2	115	1	60	15	26.9	1100	-	-	107	98	88	78	67	57	43	30	-	-	63	27.3
620218	WS50HM-20	1/2	115	1	60	15	26.9	1470	-	115	107	98	88	78	67	57	43	30	-	-	63	27.3
620219	WS50HAM-20	1/2	115	1	60	15	26.9	1470	-	115	107	98	88	78	67	57	43	30	-	-	63	27.3
620220	WS50HM-12-20	1/2	208-230	1	60	9.7	32.6	1540	-	115	107	98	88	78	67	57	43	30	-	-	63	27.3
620221	WS50HAM-12-20	1/2	208-230	1	60	9.7	32.6	1540	-	115	107	98	88	78	67	57	43	30	-	-	63	27.3
620222	WS100HM-12-20	1	208-230	1	60	13.6	46.9	2660	-	150	145	140	134	128	121	115	106	97	76	27	90	39
620223	WS100HAM-12-20	1	208-230	1	60	13.6	46.9	2660	-	150	145	140	134	128	121	115	106	97	76	27	90	39
620207	WS100HM-32	1	208-230	3	60	6.2/6.4	16.7	2340	-	150	145	140	134	128	121	115	106	97	76	27	90	39
620206	WS100HM-34	1	460	3	60	3.1	16.7	2000	-	150	145	140	134	128	121	115	106	97	76	27	90	39

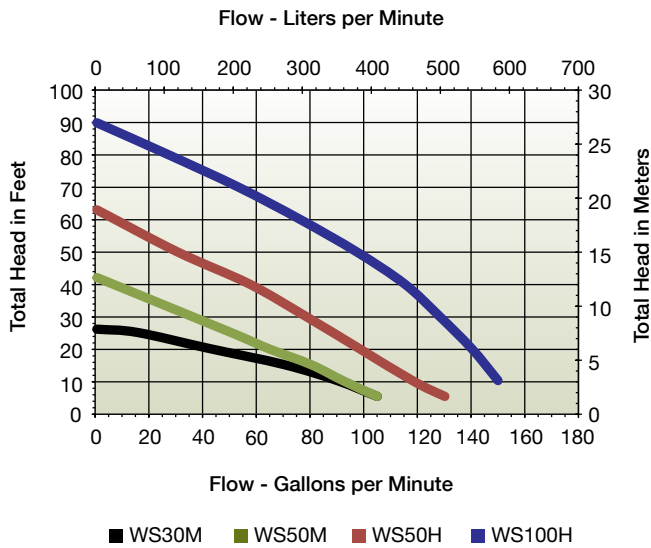
Item No.	Model	Volts	Switch Type/ Operation	On Level	Off Level	Cord	Weight
620010	WS30M	115	Manual	-	-	20' - 6.1 m	51 lbs - 22.68 Kg
620000	WS30AM	115	Piggyback Mechanical Float Switch	Adjustable		20' - 6.1 m	53 lbs - 24.04 Kg
620231	WS50M-20	115	Manual	-	-	20' - 6.1 m	55 lbs - 24.95 kg
620233	WS50AM-20	115	Piggyback Mechanical Float Switch	Adjustable		20' - 6.1 m	57 lbs - 25.85 Kg
620251	WS50M-12-20	208-230	Manual	-	-	20' - 6.1 m	56 lbs - 25.40 Kg
620253	WS50AM-12-20	208-230	Piggyback Mechanical Float Switch	Adjustable		20' - 6.1 m	58 lbs - 26.31 Kg
620200	WS50HM	115	Manual	-	-	30' - 9.1 m	57 lbs - 35.85 Kg
620218	WS50HM-20	115	Manual	-	-	20' - 6.1 m	56 lbs - 25.40 Kg
620219	WS50HAM-20	115	Piggyback Mechanical Float Switch	Adjustable		20' - 6.1 m	58 lbs - 26.31 Kg
620220	WS50HM-12-20	208-230	Manual	-	-	20' - 6.1 m	56 lbs - 25.40 Kg
620221	WS50HAM-12-20	208-230	Piggyback Mechanical Float Switch	Adjustable		20' - 6.1 m	58 lbs - 26.31 Kg
620222	WS100HM-12-20	208-230	Manual	-	-	20' - 6.1 m	57 lbs - 25.85 Kg
620223	WS100HAM-12-20	208-230	Piggyback Mechanical Float Switch	Adjustable		20' - 6.1 m	59 lbs - 26.76 Kg
620207	WS100HM-32	208-230	Manual	-	-	30' - 9.1 m	62 lbs - 28.12 Kg
620206	WS100HM-34	460	Manual	-	-	30' - 9.1 m	62 lbs - 28.12 Kg

ENGINEERING DATA



Model	A	B	C
WS30	11.25" 28.58 cm	4.68" 11.89 cm	9.38" 23.83 cm
WS50	13.75" 34.93 cm	4.68" 11.89 cm	9.38" 23.83 cm
WS50H	13.75" 34.93 cm	4.68" 11.89 cm	9.38" 23.83 cm
WS100H	13.75" 34.93 cm	4.68" 11.89 cm	9.38" 23.83 cm

PERFORMANCE DATA



CONSTRUCTION

Motor Housing	Cast iron
Impeller Material	Cast iron
Impeller Type	Non-clog
Volute	Cast iron
Motor Shaft	Stainless steel
Shaft Seal	Carbon/ceramic
Fasteners	Stainless steel
Bearings	Upper and lower ball bearings
Power Cord	SJOW

## APPLICATIONS

- Effluent wastewater removal • Dewatering
- Water transfer

## FEATURES

- Permanent Split Capacitor (PSC)
- Designed for high torque with automatic reset
- High head model
- Solids handling vortex impeller
- Piggyback mechanical float option available for automatic operation
- 2" NPT (51 mm) discharge
- Handles solids up to 3/4" (19 mm) diameter
- 120 °F (49 °C) liquid temperature rating
- cCSAus listed

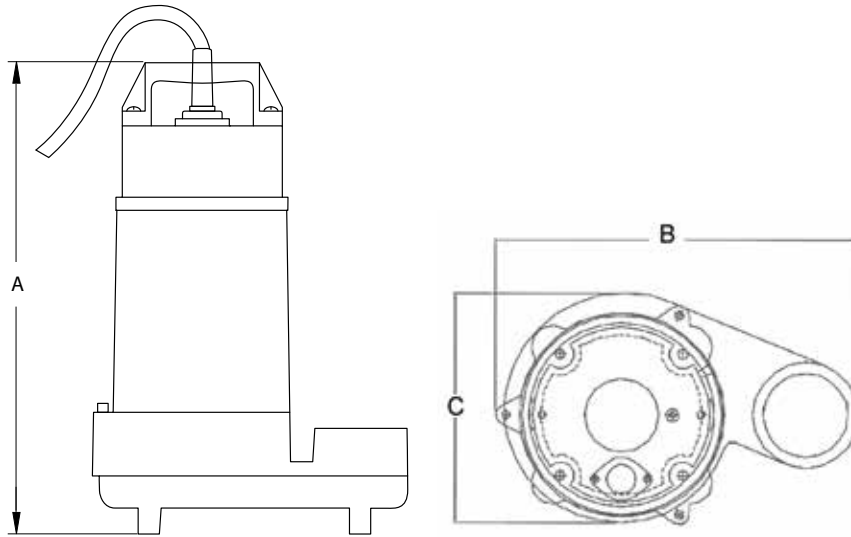


## SERIES SPECIFICATIONS

Volts	Hz	Amps		Watts	Performance (GPM @ Height in Feet)					Shut-Off (ft)	PSI
		FLA	Start		20'	25'	30'	35'	40'		
115	60	10.2	39	1100	83	74	62	48	30	45	19.5

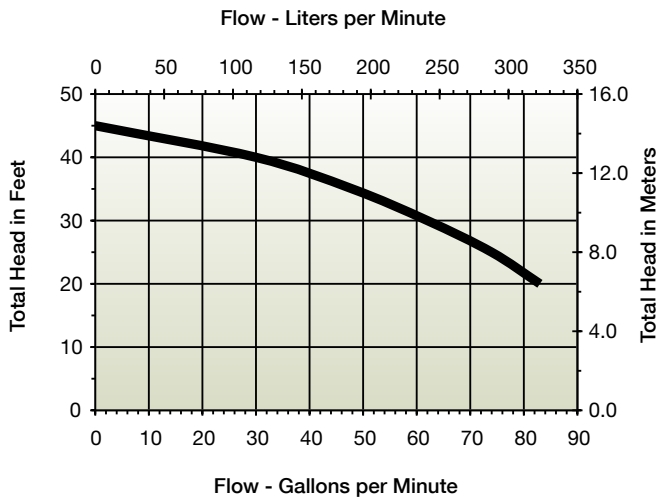
Item No.	Model	HP	Volts	Switch Type/ Operation	On Level	Off Level	Cord	Weight
620238	WSV50HM	1/2	115	-	-	-	20' 6.1 m	36 lbs 16.33 Kg
620239	WSV50HAM	1/2	115	Piggyback Mechanical Float Switch	Adjustable	Adjustable	20' 6.1 m	36 lbs 16.33 Kg

ENGINEERING DATA



A	B	C
14.49" 36.8 cm	6.13" 15.57 cm	9.67" 24.56 cm

PERFORMANCE DATA



CONSTRUCTION

Motor Housing	Cast iron
Impeller Material	Cast iron
Impeller Type	Vortex
Volute	Cast iron
Motor Shaft	Stainless steel
Shaft Seal	Carbon/ceramic
Fasteners	Stainless steel
Bearings	Upper and lower ball bearings
Power Cord	SJOW

## APPLICATIONS

- Effluent wastewater removal • Dewatering
- Water transfer

## FEATURES

- Permanent Split Capacitor (PSC)
- Completely submersible, designed for continuous duty
- 2" NPT (51 mm) discharge
- Handles solids up to 3/4" (19 mm) diameter
- 140 °F (60 °C) liquid temperature rating
- cCSAus listed



## SERIES SPECIFICATIONS

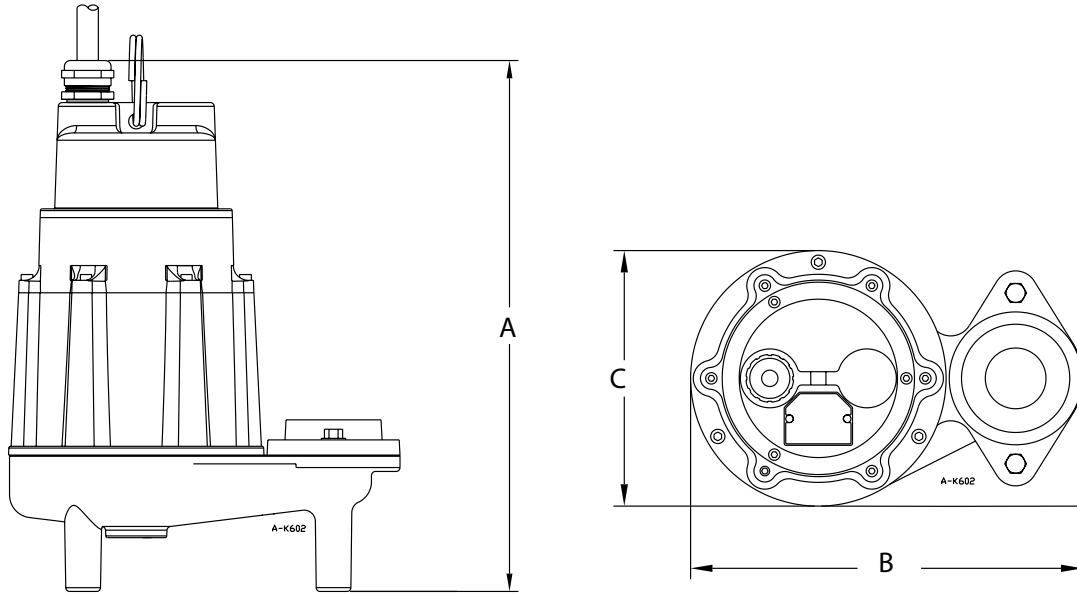
Volts	Hz	Amps		Watts	Performance (GPM @ Height in Feet)					Shut-Off (ft)	PSI
		FLA	Start		20'	30'	40'	60'	80'		
230*	60	16.4	31	3872	135	125	110	89	62	110	47.6
460**	60	5.75	7.5	2571	135	125	110	89	62	110	47.6
200-208**	60	13.1	32	2478	135	125	110	89	62	110	47.6
230**	60	11.64	28.3	2476	135	125	110	89	62	110	47.6

Item No.	Model	HP	Volts	Phase	Cord	Weight
520200	20E-CIM	2	230	1*	20' 6.1 m	92 lbs 41.47 Kg
520230	20E-CIM	2	230	3**	30' 9.1 m	93.5 lbs 42.41 Kg
520250	20E-CIM	2	230	3**	20' 6.1 m	92 lbs 41.47 Kg
520275	20E-CIM	2	460	3**	20' 6.1 m	92 lbs 41.47 Kg
520225	20E-CIM	2	200-208	3**	20' 6.1 m	92 lbs 41.47 Kg

\* Single-phase pumps can use a mechanical float switch or a single-phase control panel for automatic on/off

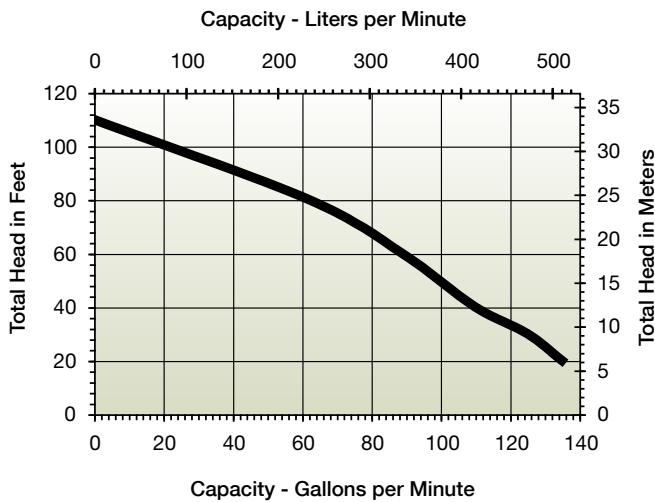
\*\* Three-phase pumps must have a three-phase control panel for automatic or manual operation

ENGINEERING DATA



A	B	C
17.75" 45.09 cm	12.93" 32.84 cm	8.42" 21.39 cm

PERFORMANCE DATA



CONSTRUCTION

<b>Cover</b>	Epoxy-coated cast iron
<b>Motor Housing</b>	Epoxy-coated cast iron
<b>Impeller Material</b>	Red brass
<b>Impeller Type</b>	Vortex
<b>Volute</b>	Epoxy-coated cast iron
<b>Mechanical Shaft Seal</b>	Carbon/ceramic
<b>Fasteners</b>	Stainless steel
<b>Shaft</b>	Stainless steel
<b>Bearings</b>	Upper and lower sintered sleeve bearings
<b>Power Cord</b>	S00W

## APPLICATIONS

- High head filter effluent
- Filtered effluent service
- Aeration
- Ornamental fountains
- Water fountains



## FEATURES

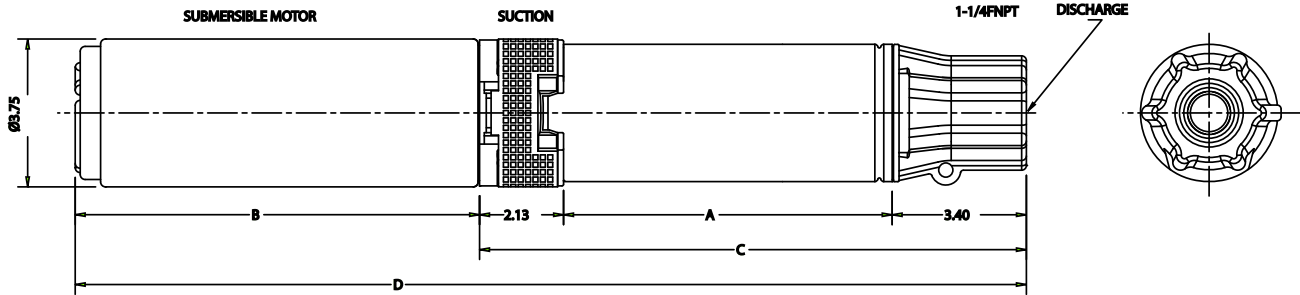
- Franklin Electric submersible motor
- Heavy duty, 300 V, 10' (3 m) SJOW motor stripped leads
- Removable built-in check valve
- Non-corrosive thermoplastic discharge and motor brackets
- Proven "PPO" staging allows close tolerances and increased performance
- High quality top bearing for maximum durability and years of reliable service
- Hex rubber bearing has extra-large surface for shaft stability and multiple flow channels for keeping particles away from bearing surfaces
- Stainless steel up thrust washer prevents excessive wear in service applications
- cCSAus listed

## SERIES SPECIFICATIONS

Item No	Model	HP	Volts	Hz	Amps		Watts	Wires	Well Size	Performance (GPM @ Height in Feet)				
					FLA	Start				50'	100'	150'	200'	250'
558221	WE10G05P4-21	1/2	115	60	10	64.4	670	2	4"	15	13	10	7	2
558222	WE10G05P4-22	1/2	230	60	5	23.2	670	2	4"	15	13	10	7	2
558223	WE20G05P4-21	1/2	115	60	10	64.4	670	2	4"	26	20	8	-	-
558224	WE20G05P4-22	1/2	230	60	5	23.2	670	2	4"	26	20	8	-	-
558225	WE30G05P4-21	1/2	115	60	10	64.4	670	2	4"	32	14	-	-	-
558226	WE30G05P4-22	1/2	230	60	5	23.2	670	2	4"	32	14	-	-	-

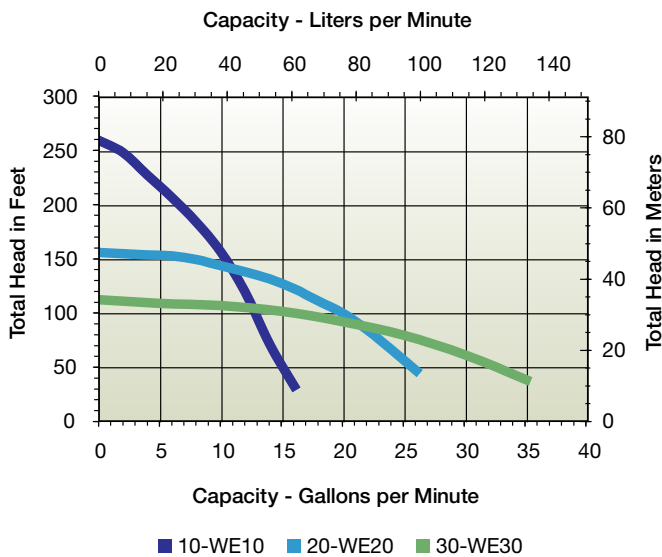


ENGINEERING DATA



Model	A	B	C	D
2-Wire 10 gpm	7" 17.78 cm	9.38" 23.83 cm	12.53" 31.83 cm	21.91" 55.65 cm
2-Wire 20 gpm	9" 22.86 cm	9.38" 23.83 cm	14.53" 36.91 cm	23.91" 60.73 cm
2-Wire 30 gpm	6.5" 16.51 cm	9.38" 23.83 cm	12.03" 30.56 cm	21.41" 54.38 cm

PERFORMANCE DATA



CONSTRUCTION

Motor Housing	Stainless steel
Impeller Material	Celcon
Diffuser	Glass-filled PPO
Power Cord	10' S.JOW
Check Valve	Celcon
Fasteners	Stainless steel
Shaft	Stainless steel
Bearings	PEEK
Discharge	Glass-filled polypropylene

### APPLICATIONS

- Dewatering • Flood irrigation • Livestock watering
- Installations with septic tanks in areas with drainage problems



### FEATURES

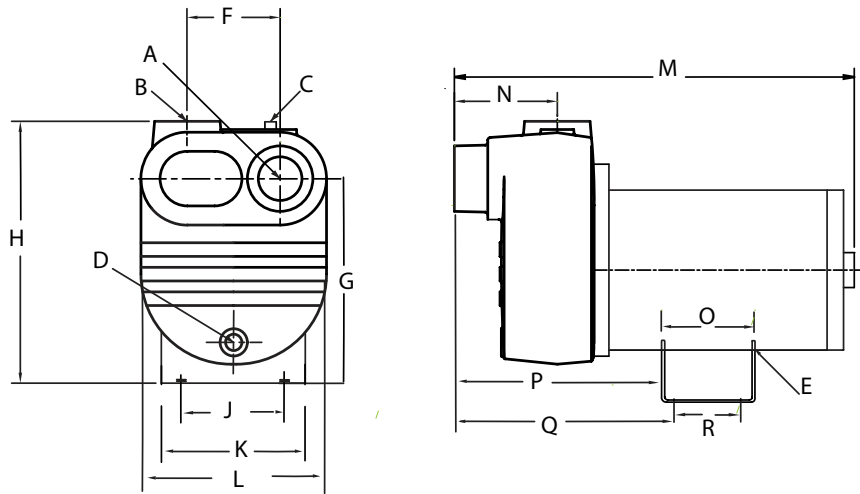
- Higher than NEMA service factor dual compartment motor
- Designed for continuous duty
- Built-in check valve
- Handles solids up to 1/4" (6.4 mm) diameter
- 1-1/4" (31.75 mm) NPT discharge
- 120 °F (49 °C) liquid temperature rating
- CSA listed

### SERIES SPECIFICATIONS

HP	Volts	Hz	Amps		Watts	Performance (GPM @ Height in Feet)								Shut-Off (ft)	PSI
			FLA	Start		20'	25'	30'	35'	40'	45'	50'			
1/2	115/230	60	12.4/6.2	26.3	810	45	39	31	24	16	8	-	50	21.6	
3/4	115/230	60	14.8/7.4	36.3	1000	58	53	44	36	29	18	10	56	23.8	

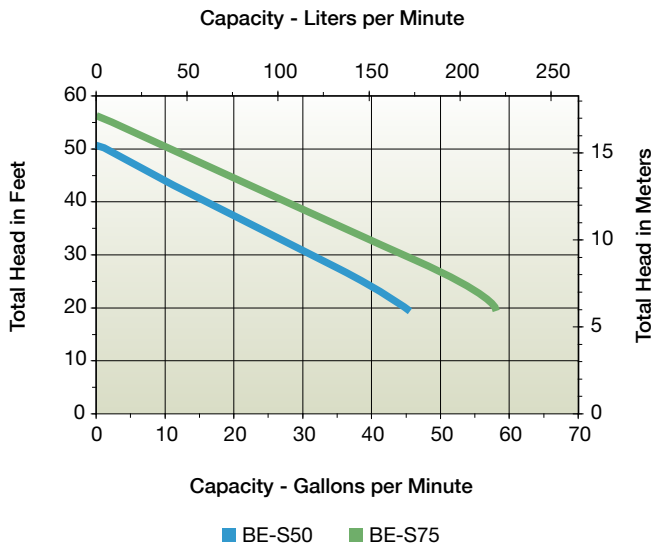
Item No.	Model	HP	Volts	Switch Type/ Operation	Weight
621815	BE-S50	1/2	115/230	Manual	42 lbs 19.05 Kg
621825	BE-S75	3/4	115/230	Manual	49 22.23 Kg

ENGINEERING DATA




Model	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P	Q	R
BE-S50	1-1/4" 3.18 cm	1-1/4" 3.18 cm	1/2" 1.27 cm	1/2" 1.27 cm	.43" x .93" 1.09 x 2.36 cm	4.25" 10.8 cm	7.25" 18.42 cm	10" 25.4 cm	4.9" 12.45 cm	6.5" 16.51 cm	7.6" 19.3 cm	15.3" 38.86 cm	3.1" 7.87 cm	4.9" 12.45 cm	5.5" 13.97 cm	6.8" 17.27 cm	3" 7.62 cm
BE-S75	1-1/4" 3.18 cm	1-1/4" 3.18 cm	1/2" 1.27 cm	1/2" 1.27 cm	.43" x .93" 1.09 x 2.36 cm	4.25" 10.8 cm	7.25" 18.42 cm	10" 25.4 cm	4.9" 12.45 cm	6.5" 16.51 cm	7.6" 19.3 cm	15.3" 38.86 cm	3.1" 7.87 cm	4.9" 12.45 cm	5.5" 13.97 cm	6.8" 17.27 cm	3" 7.62 cm

PERFORMANCE DATA




CONSTRUCTION

Motor Housing	Cast iron
Impeller Material	Cast iron
Impeller Type	Semi-open
Volute	Cast iron
Motor Shaft	Stainless steel
Shaft Seal	Carbon/ceramic
Fasteners	Plated steel
Bearings	Upper and lower ball bearings
Power Cord	None



# SEWAGE PUMP

It's a dirty job, but Little Giant sewage pumps are made for the tough and demanding task of effluent and wastewater transfer. For the home or in commercial or industrial applications, Little Giant sewage pumps are designed with durability, reliability, and efficiency as the number one key advantages over the competition. With choices between 4/10 to 2 hp, manual operation or automatic, multiple switch options, and the performance shut-off ranges between 18' and 130', these pumps are up to the task.





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### APPLICATIONS

- Sewage and effluent wastewater transfer • Dewatering

### FEATURES

- Permanent Split Capacitor (PSC)
- Energy-saving low amp draw
- Cooler running motor
- Designed for continuous duty
- 2" FNPT (51 mm) and 3" FNPT (76.2 mm) discharge models
- Handles solids up to 2" (51 mm) diameter
- Multiple switch options for automatic operation
- 140 °F (60 °C) liquid temperature rating
- cCSAus listed

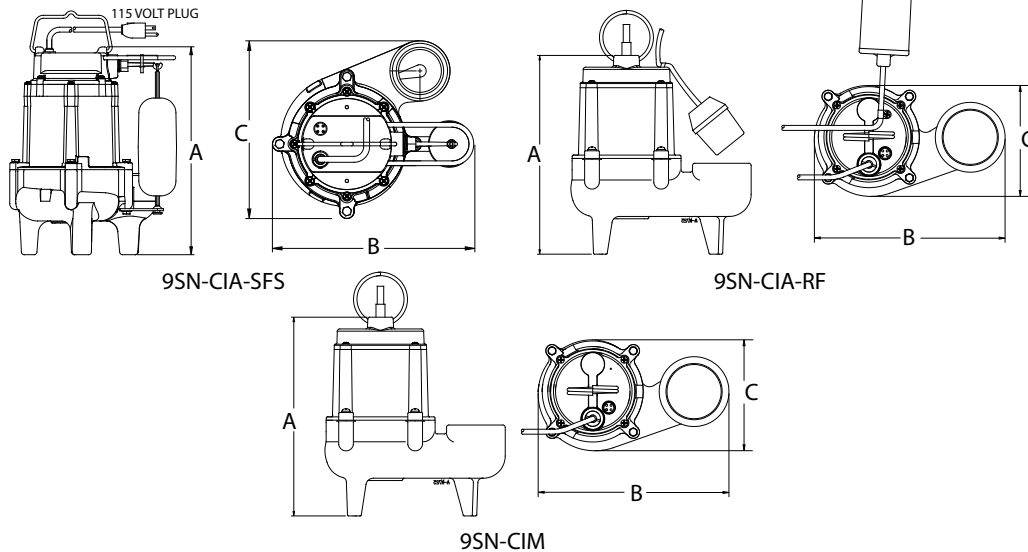


### SERIES SPECIFICATIONS

Volts	Hz	Amps		Watts	Performance (GPM @ Height in Feet)			Shut-Off (ft)	PSI
		FLA	Start		5'	10'	15'		
115	60	8.5	17	850	110	70	30	20	8.7
208/230	50/60	4	7.5	800	110	70	30	20	8.7

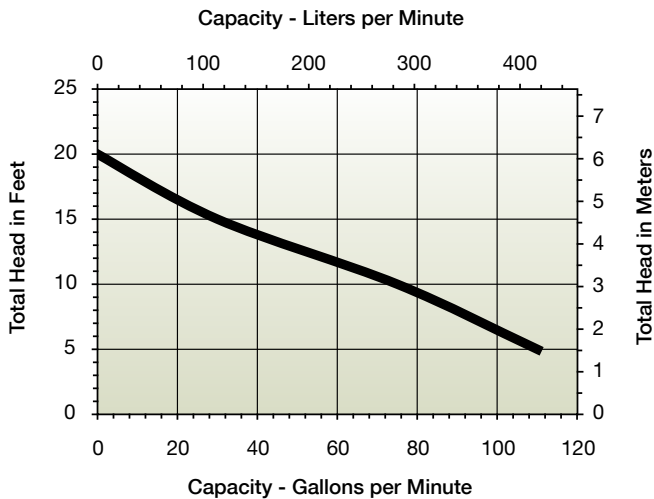
Item No.	Model	HP	Volts	Discharge	Switch Type/ Operation	On Level	Off Level	Cord	Weight
509228	9SN-CIA-SFS	4/10	115	2"	Integral Snap-Action Float	9" - 12" 22.26 cm - 30.48 cm	3" - 6" 7.62 cm - 15.24 cm	20' 6.1 m	35.5 lbs 16.1 Kg
509204	9SN-CIA-RF	4/10	115	2"	Piggyback Mechanical Float	9" - 14" 22.86 cm - 35.56 cm	2" - 6" 5 cm - 15.24 cm	20' 6.1 m	35.5 lbs 16.1 Kg
509215	9SN-CIA-RF	4/10	115	3"	Piggyback Mechanical Float	9" - 14" 22.86 cm - 35.56 cm	2" - 6" 5 cm - 15.24 cm	20' 6.1 m	35.5 lbs 16.1 Kg
509226	9SN-CIM	4/10	115	3"	Manual	—	—	20' 6.1 m	35.5 lbs 16.1 Kg
509203	9SN-CIM	4/10	115	2"	Manual	—	—	20' 6.1 m	34.5 lbs 15.65 Kg
509217	9SN-CIM	4/10	208-230	2"	Manual	—	—	20' 6.1 m	36 lbs 16.33 Kg
509227	9SN-CIM	4/10	208-230	3"	Manual	—	—	20' 6.1 m	36 lbs 16.33 Kg

ENGINEERING DATA



Model	A	B	C
9SN-CIA-SFS	13.12" 33.33 cm	10.54" 26.77 cm	9.25" 23.5 cm
9SN-CIA-RF	11.4" 28.96 cm	11.64" 29.5 cm	6.8" 17.27 cm
9SN-CIM	11.4" 28.96 cm	11.64" 29.5 cm	6.8" 17.27 cm

PERFORMANCE DATA



CONSTRUCTION

<b>Cover</b>	Epoxy-coated cast iron/ *Thermoplastic
<b>Motor Housing</b>	Epoxy-coated cast iron
<b>Impeller Material</b>	Nylon
<b>Impeller Type</b>	Vortex
<b>Volute</b>	Epoxy-coated cast iron
<b>Mechanical Shaft Seal</b>	Nitrile with carbon and ceramic faces
<b>Fasteners</b>	Stainless steel
<b>Shaft</b>	Steel
<b>Bearings</b>	Upper sintered sleeve and lower ball bearings
<b>Power Cord</b>	SJTW **SJTOW

\* On SFS models

\*\* On 30' 9SN-CIA-RF and 9SN-CIM models

### APPLICATIONS

- Sewage and effluent wastewater transfer • Dewatering

### FEATURES

- Permanent Split Capacitor (PSC)
- Energy-saving low amp draw
- Cooler running motor
- Designed for continuous duty
- 2" FNPT (51 mm) and 3" FNPT (76.2 mm) discharge models
- Handles solids up to 2" (51 mm) diameter
- Multiple switch options for automatic operation
- 140 °F (60 °C) liquid temperature rating
- cCSAus listed



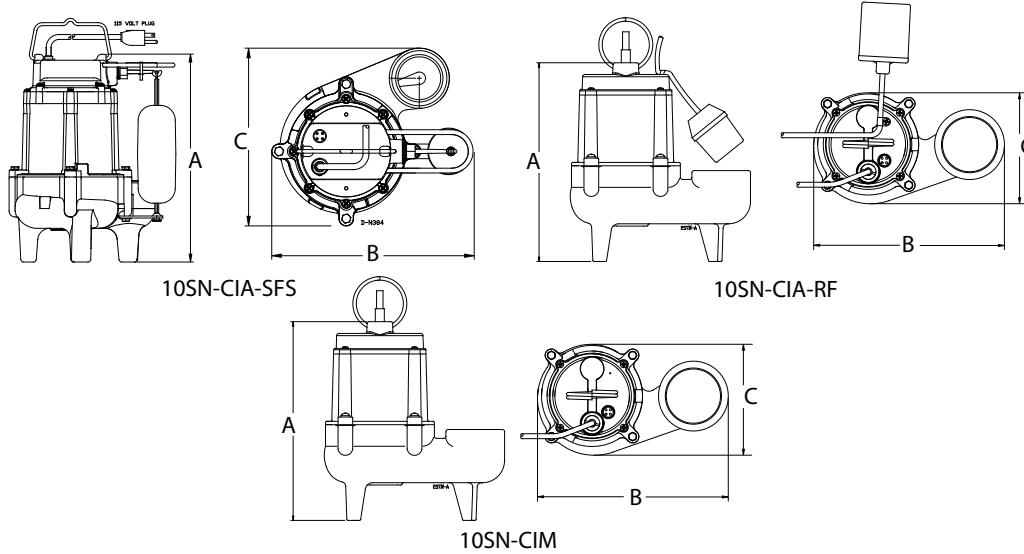
### SERIES SPECIFICATIONS

Volts	Hz	Amps		Watts	Performance (GPM @ Height in Feet)			Shut-Off (ft)	PSI
		FLA	Start		5'	10'	15'		
115	60	9.5	17	1000	120	95	70	25	10.9
208/230	50/60	4.5	7.5	900	120	95	70	25	10.8

Item No.	Model	HP	Volts	Discharge	Switch Type/ Operation	On Level	Off Level	Cord	Weight
511346	10SN-CIA-SFS	1/2	115	2"	Integral Snap-Action Float	9" - 12" 22.26 cm - 30.48 cm	3" - 6" 7.62 cm - 15.24 cm	20' 6.1 m	37.5 lbs 17.5 Kg
511323	10SN-CIA-RF	1/2	115	2"	Piggyback Mechanical Float	9" - 14" 22.86 cm - 35.56 cm	2" - 6" 5 cm - 15.24 cm	20' 6.1 m	36.5 lbs 16.56 Kg
511326	10SN-CIA-RF	1/2	115	2"	Piggyback Mechanical Float	9" - 14" 22.86 cm - 35.56 cm	2" - 6" 5 cm - 15.24 cm	20' 6.1 m	37.5 lbs 17.5 Kg
511344	10SN-CIM	1/2	115	3"	Manual	-	-	20' 6.1 m	36.5 lbs 16.56 Kg
511322	10SN-CIM	1/2	115	2"	Manual	-	-	20' 6.1 m	35.5 lbs 16.1 Kg
511328	10SN-CIM	1/2	208-230	2"	Manual	-	-	20' 6.1 m	36 lbs 16.33 Kg
511345	10SN-CIM*	1/2	208-230	3"	Manual	-	-	20' 6.1 m	36 lbs 16.33 Kg

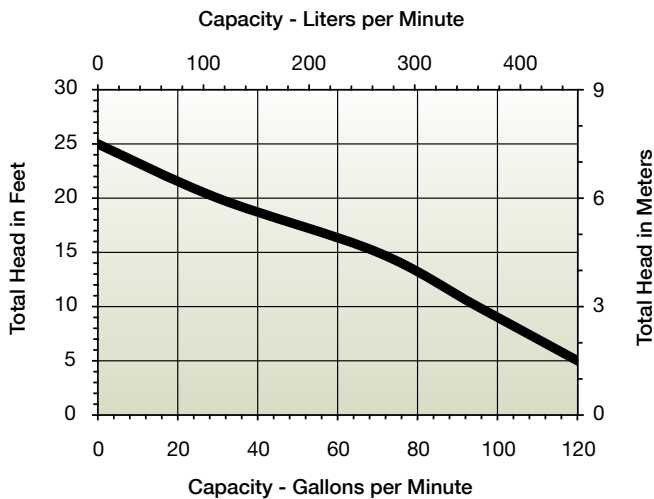


ENGINEERING DATA



Model	A	B	C
10SN-CIA-SFS	13.12" 33.33 cm	10.54" 26.77 cm	9.25" 23.5 cm
10SN-CIA-RF	11.4" 28.96 cm	11.64" 29.5 cm	6.8" 17.27 cm
10SN-CIM	11.4" 28.96 cm	11.64" 29.5 cm	6.8" 17.27 cm

PERFORMANCE DATA



CONSTRUCTION

<b>Cover</b>	Epoxy-coated cast iron/ *Thermoplastic
<b>Motor Housing</b>	Epoxy-coated cast iron
<b>Impeller Material</b>	Thermoplastic elastomer
<b>Impeller Type</b>	Non-clog
<b>Volute</b>	Epoxy-coated cast iron
<b>Mechanical Shaft Seal</b>	Nitrile with carbon and ceramic faces
<b>Fasteners</b>	Stainless steel
<b>Shaft</b>	Steel
<b>Bearings</b>	Upper sintered sleeve and lower ball bearings
<b>Power Cord</b>	SJTW **SJTOW

\* On SFS models

\*\* On 30' 10SN-CIA-RF and 10SN-CIM models

## APPLICATIONS

- Ideal for handling raw sewage
- Commercial dewatering sump applications with up to 2" solids

## FEATURES

- Oil-free permanent split capacitor (PSC) motor
- Designed for continuous duty
- 2" FNPT (51 mm) discharge
- Handles solids up to 2" (51 mm) diameter
- Power cord sealed at motor housing
- 140 °F (60 °C) liquid temperature rating
- cCSAus listed

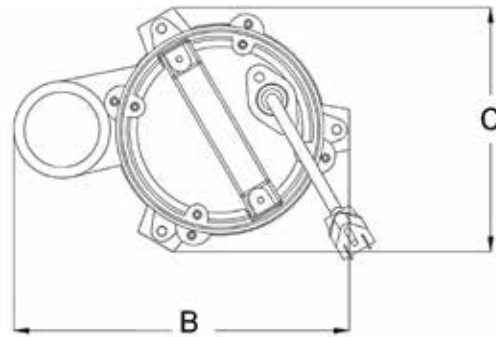
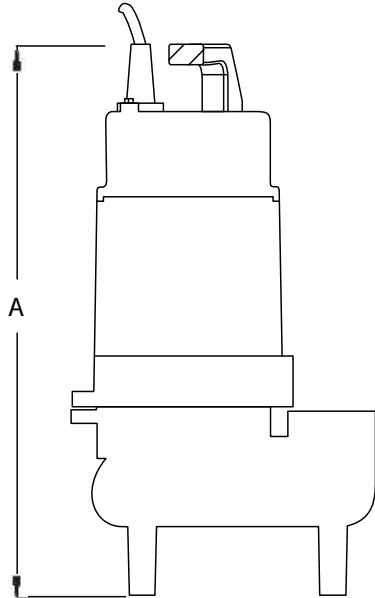


## SERIES SPECIFICATIONS

Volts	Hz	Amps		Watts	Performance (GPM @ Height in Feet)				Shut-Off (ft)	PSI
		FLA	Start		5'	10'	15'	20'		
115	60	6	12	650	90	75	57	35	25	10.8

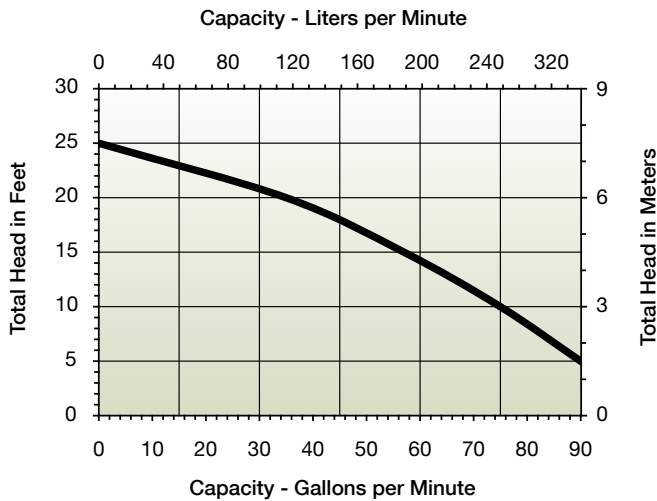
Item No.	Model	HP	Volts	Switch Type/ Operation	On Level	Off Level	Cord	Weight
620236	WSV52HAM	1/2	115	Piggyback Mechanical Float Switch	Adjustable	Adjustable	20' 6.1 m	57 lbs 25.85 Kg
620235	WSV52HM	1/2	115	Manual	-	-	20' 6.1 m	55 lbs 24.95 Kg

ENGINEERING DATA



A	B	C
15.75" 40 cm	8.78" 22.3 cm	6.38" 16.21 cm

PERFORMANCE DATA



CONSTRUCTION

Motor Housing	Cast iron
Impeller Material	Cast iron
Impeller Type	Vortex
Volute	Cast iron
Motor Shaft	Stainless steel
Shaft Seal	Carbon/ceramic
Fasteners	Stainless steel
Bearings	Upper and lower ball bearings
Power Cord	SJOW

### APPLICATIONS

- Sewage and effluent wastewater transfer • Dewatering

### FEATURES

- Permanent Split Capacitor (PSC)
- Designed for continuous duty
- 2" FNPT (51 mm) and 3" FNPT (76.2 mm) discharge models
- Handles solids up to 2" (51 mm) diameter
- 140 °F (60 °C) liquid temperature rating
- cCSAus listed

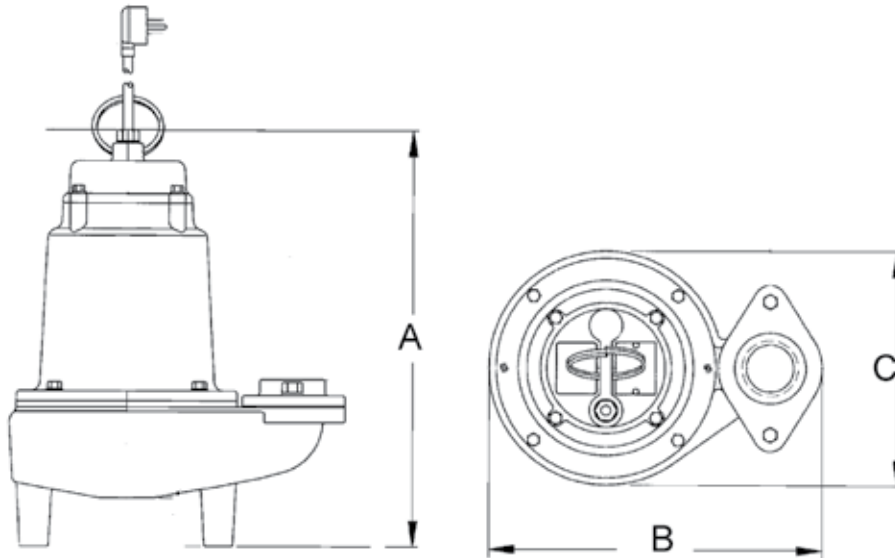


### SERIES SPECIFICATIONS

Volts	Hz	Amps		Watts	Performance (GPM @ Height in Feet)		Shut-Off (ft)	PSI
		FLA	Start		10'	20'		
115	60	11.6	21	1100	100	35	25	10.8
208-240	60	4.6	7.8	1100	100	35	25	10.8

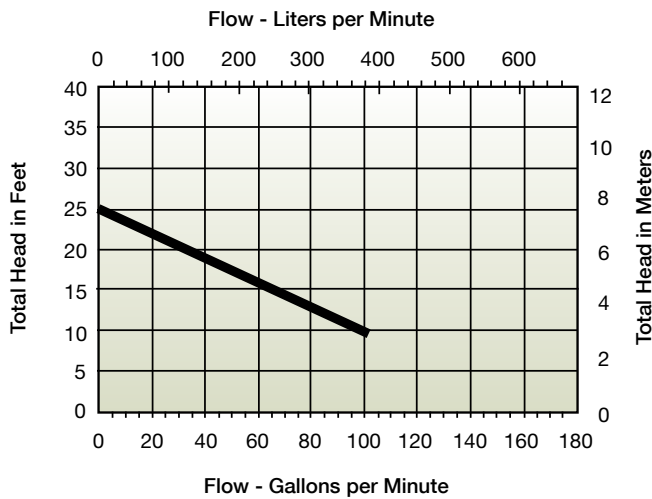
Item No.	Model	HP	Volts	Discharge	Switch Type/ Operation	Cord	Weight
514320	14S-CIM	1/2	115	2"	Manual	20' 6.1 m	87 lbs 39.46 Kg
514420	14S-CIM*	1/2	115	3"	Manual	20' 6.1 m	88 lbs 39.92 Kg
514321	14S-CIM	1/2	208 -240	2"	Manual	20' 6.1 m	88 lbs 39.92 Kg
14940726	14S-CIM*	1/2	208 - 240	3"	Manual	20' 6.1 m	88 lbs 39.92 Kg

ENGINEERING DATA



A	B	C
16.15" 41.02 cm	14.07" 35.74 cm	9.89" 25.12 cm

PERFORMANCE DATA



CONSTRUCTION

<b>Motor Housing</b>	Epoxy-coated cast iron
<b>Impeller Material</b>	Epoxy-coated cast iron
<b>Impeller Type</b>	Two-vane, non-clog
<b>Volute</b>	Epoxy-coated cast iron
<b>Mechanical Shaft Seal</b>	Nitrile with carbon and ceramic faces
<b>Fasteners</b>	Stainless steel
<b>Shaft</b>	Stainless steel
<b>Bearings</b>	Upper and lower ball bearings
<b>Power Cord</b>	16/3, STW

### APPLICATIONS

- Ideal for handling raw sewage
- Commercial dewatering sump applications with up to 2" solids



### FEATURES

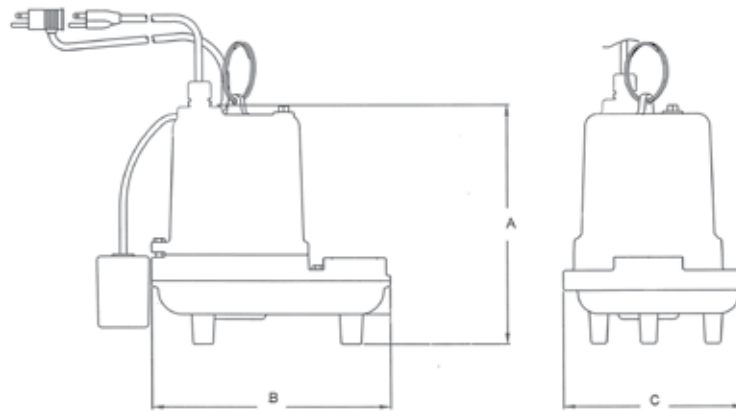
- All cast iron construction
- Oil-filled motor with double ball bearing capacitor start designed for high torque with automatic reset (single-phase only)
- Designed for continuous duty
- Switch options for automatic operation
- 2" (50 mm) NPT
- Handles solids up to 2" (51 mm) diameter
- Power cord sealed at motor housing
- 120 °F (49 °C) liquid temperature rating
- cCSAus listed

### SERIES SPECIFICATIONS

Item No.	Model	HP	Volts	Phase	HZ	Amps		Watts	Performance (GPM @ Height in Feet)						Shut-Off (ft)	PSI	
						FLA	Start		5'	10'	15'	20'	25'	30'			35'
620012	WS51M	1/2	115	1	60	11.6	47.4	940	155	120	83	52	14	-	-	27	11.7
620002	WS51AM	1/2	115	1	60	11.6	47.4	940	155	120	83	52	-	-	-	27	11.7
620013	WS52M	1/2	115	1	60	11.6	47.4	940	135	90	47	14	-	-	-	23	10
620003	WS52AM	1/2	115	1	60	11.6	47.4	940	135	90	47	14	-	-	-	23	10
620254	WS52HM	1/2	115	1	60	15	26.9	1520	-	128	97	68	32	-	-	29	12.5
620255	WS52HAM	1/2	115	1	60	15	26.9	1520	-	128	97	68	32	-	-	29	12.5
620256	WS52HM-12	1/2	208-230	1	60	9.7	32.6	1480	-	128	97	68	32	-	-	29	12.5
620257	WS52HAM-12	1/2	208-230	1	60	9.7	32.6	1480	-	128	97	68	32	-	-	29	12.5
620203	WS102M-12	1	208-230	1	60	9.8/10.7	26.7	1735	-	168	144	118	85	46	-	37	16
620215	WS102AM-12	1	208-230	1	60	9.8/10.7	26.7	1735	-	168	144	118	85	46	-	37	16
620208	WS102M-32	1	208-230	3	60	4.3/4.58	6.8	1550	-	168	144	118	85	46	-	37	16
620209	WS102M-34	1	460	3	60	2.15	3.4	1490	-	168	144	118	85	46	-	37	16
620258	WS102HM-12	1	230	1	60	13.6	37.0	2330	-	190	170	148	124	100	74	48	20.8
620259	WS102HAM-12	1	230	1	60	13.6	37.0	2330	-	190	170	148	124	100	74	48	20.8

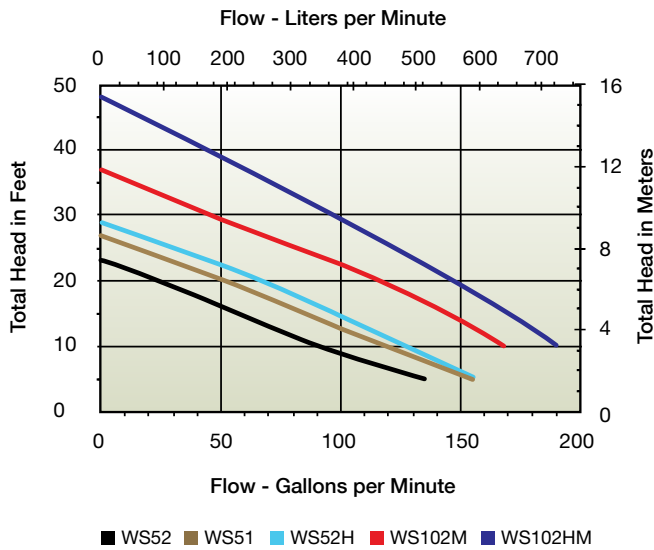
Item No.	Model	Volts	Switch Type/ Operation	On Level	Off Level	Cord	Weight
620012	WS51M	115	Manual	-	-	20' - 6.1 m	55 lbs - 24.95 Kg
620002	WS51AM	115	Piggyback Mechanical Float Switch	Adjustable		20' - 6.1 m	57 lbs - 25.85 Kg
620013	WS52M	115	Manual	-	-	20' - 6.1 m	57 lbs - 25.85 Kg
620003	WS52AM	115	Piggyback Mechanical Float Switch	Adjustable		20' - 6.1 m	59 lbs - 26.76 Kg
620254	WS52HM	115	Manual	-	-	30' - 9.1 m	58 lbs - 26.31 Kg
620255	WS52HAM	115	Piggyback Mechanical Float Switch	Adjustable		30' - 9.1 m	60 lbs - 27.22 Kg
620256	WS52HM-12	208-230	Manual	-	-	30' - 9.1 m	60 lbs - 27.22 Kg
620257	WS52HAM-12	208-230	Piggyback Mechanical Float Switch	Adjustable		30' - 9.1 m	60 lbs - 27.22 Kg
620203	WS102M-12	208-230	Manual	-	-	20' - 6.1 m	62 lbs - 28.12 Kg
620215	WS102AM-12	208-230	Piggyback Mechanical Float Switch	Adjustable		20' - 6.1 m	64 lbs - 29.03 Kg
620208	WS102M-32	208-230	Manual	-	-	20' - 6.1 m	63 lbs - 28.58 Kg
620209	WS102M-34	460	Manual	-	-	20' - 6.1 m	63 lbs - 28.58 Kg
620258	WS102HM-12	230	Manual	-	-	30' - 9.1 m	61 lbs - 27.67 Kg
620259	WS102HAM-12	230	Piggyback Mechanical Float Switch	Adjustable		30' - 9.1 m	63 lbs - 28.58 Kg

ENGINEERING DATA



Model	A	B	C
WS51	13.25" 33.66 cm	12.25" 31.12 cm	9.38" 23.83 cm
WS52	14" 35.56 cm	12.25" 31.12 cm	9.38" 23.83 cm
WS52H	15.1" 38.36 cm	12.25" 31.12 cm	9.38" 23.83 cm
WS102	15.1" 38.36 cm	12.25" 31.12 cm	9.38" 23.83 cm
WS102H	15.1" 38.36 cm	12.25" 31.12 cm	9.38" 23.83 cm

PERFORMANCE DATA



CONSTRUCTION

Motor Housing	Cast iron
Impeller Material	Cast iron
Impeller Type	Non-clog
Volute	Cast iron
Motor Shaft	Stainless steel
Shaft Seal	Carbon/ceramic
Fasteners	Stainless steel
Bearings	Upper and lower ball bearings
Power Cord	SJTW - 620012, 620002, 620013, 620254, 620255, 620256, 620257, and 620258 SJOW - 620003, 620203, 620215, 620208, 620209, and 620259

### APPLICATIONS

- Sewage and effluent wastewater transfer • Dewatering



### FEATURES

- Permanent Split Capacitor (PSC)
- Designed for continuous duty
- 3" FNPT (76.2 mm) discharge
- Handles solids up to 2" (51 mm) diameter
- 140 °F (60 °C) liquid temperature rating
- cCSAus listed

### SERIES SPECIFICATIONS

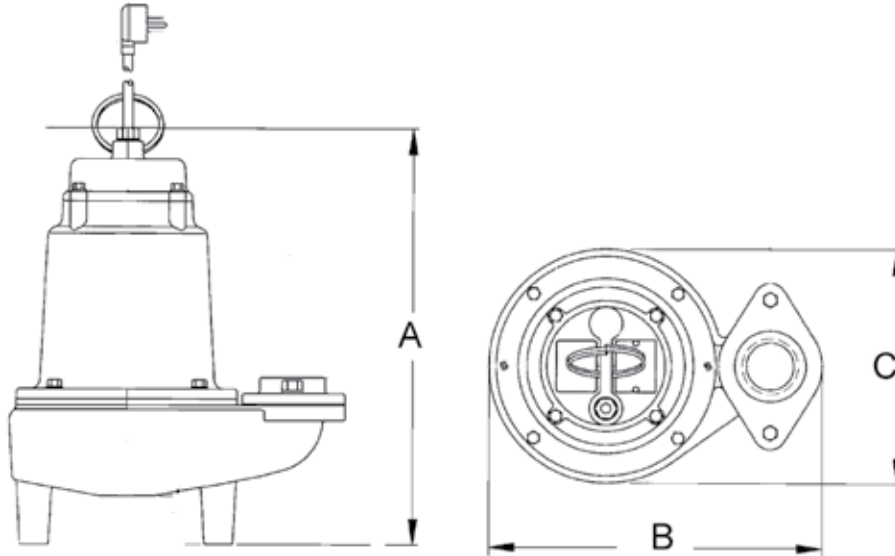
Volts	Hz	Amps		Watts	Performance (GPM @ Height in Feet)			Shut-Off (ft)	PSI
		FLA	Start		5'	10'	10'		
200-208	60	6.8	21	1500	160	100	40	35	15.1
208	60	11	18	2000	160	100	40	35	15.1
230	60	11	19.2	1900	160	100	40	35	15.1
230*	60	6.3	17.7	1500	160	100	40	35	15.1
380-460	50/60	3	9	850	160	100	40	35	15.1
575	60	2.5	7.2	1550	160	100	40	35	15.1

Item No.	Model	HP	Volts	Stages	Switch Type/ Operation	Cord	Weight
514750	16S-CIM	1	200-208	3	Manual	20' 6.1 m	88 lbs 39.92 Kg
514625*	16S-CIM	1	200-208	1	Manual	20' 6.1 m	88 lbs 39.92 Kg
514620	16S-CIM	1	230	1	Manual	20' 6.1 m	94 lbs 42.64 Kg
514720*	16S-CIM	1	230	1	Manual	20' 6.1 m	89 lbs 40.37 Kg
514630	16S-CIM	1	230	1	Manual	20' 6.1 m	95 lbs 43.09 Kg
514730	16S-CIM	1	380-460	3	Manual	20' 6.1 m	90 lbs 40.82 Kg
514740	16S-CIM	1	575	3	Manual	20' 6.1 m	88 lbs 39.92 Kg

\* 3-phase

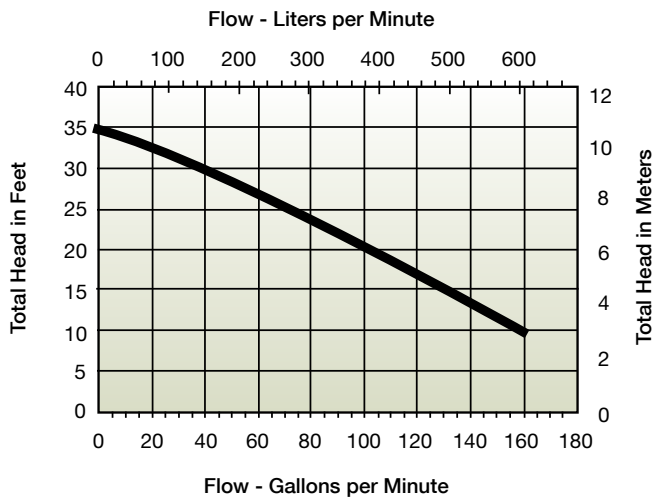


ENGINEERING DATA



A	B	C
16.15" 41.02 cm	14.07" 35.74 cm	9.89" 25.12 cm

PERFORMANCE DATA



CONSTRUCTION

<b>Motor Housing</b>	Epoxy-coated cast iron
<b>Impeller Material</b>	Epoxy-coated cast iron
<b>Impeller Type</b>	Two-vane, non-clog
<b>Volute</b>	Epoxy-coated cast iron
<b>Mechanical Shaft Seal</b>	Nitrile with carbon and ceramic faces
<b>Fasteners</b>	Stainless steel
<b>Shaft</b>	Stainless steel
<b>Bearings</b>	Upper and lower ball bearings
<b>Power Cord</b>	16/3 or 18/4, SOW or STW

### APPLICATIONS

- Sewage and effluent wastewater transfer • Dewatering



### FEATURES

- Permanent Split Capacitor (PSC)
- Designed for continuous duty
- Capacitor and power cord connections are isolated from oil-filled motor housing for ease of field maintenance
- 3" FNPT (761 mm) discharge
- Handles solids up to 2" (51 mm) diameter
- 140 °F (60 °C) liquid temperature rating
- cCSAus listed

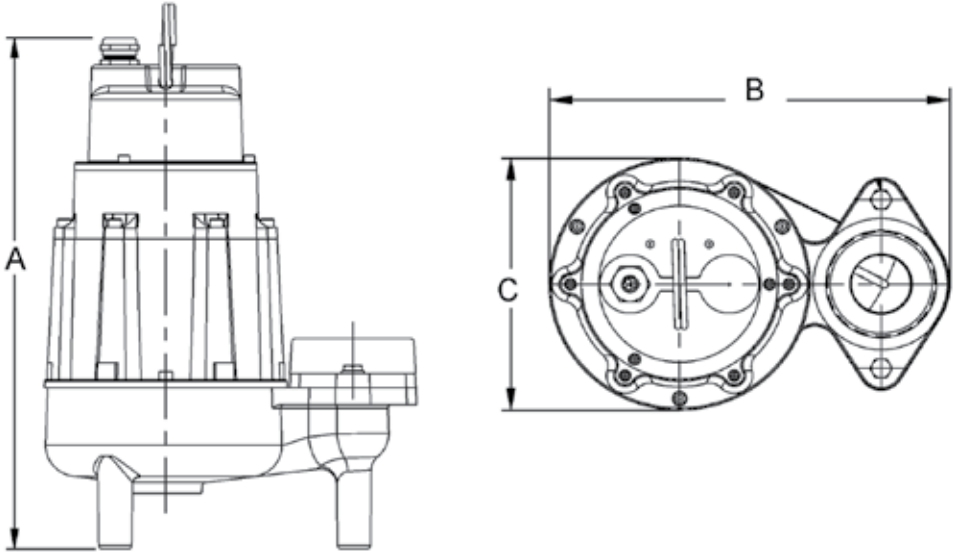
### SERIES SPECIFICATIONS

Volts	Hz	Amps		Watts	Performance (GPM @ Height in Feet)					Shut-Off (ft)	PSI
		FLA	Start		10'	20'	30'	40'	50'		
200-208	60	16	31.0	3229	160	137	111	84	50	64	27.7
200-208*	60	13.5	32.0	1644	160	137	111	84	50	64	27.7
230	60	15.5	31.0	3512	160	137	111	84	50	64	27.7
230*	60	11.5	35.0	1512	160	137	111	84	50	64	27.7
460	60	5.3	17.5	1474	160	137	111	84	50	64	27.7

Item No.	Model	HP	Volts	Phase	Switch Type/Operation	Cord	Weight
520300	18S-CIM	1-1/2	208	1	Manual	20' 6.1 m	94 lbs 42.64 Kg
520302	18S-CIM	1-1/2	200-208	3	Manual	20' 6.1 m	96 lbs 43.54 Kg
520301	18S-CIM	1-1/2	230	1	Manual	20' 6.1 m	96 lbs 43.54 Kg
520303*	18S-CIM	1-1/2	230	3	Manual	20' 6.1 m	94 lbs 42.64 Kg
520304	18S-CIM	1-1/2	460	3	Manual	40' 12 m	94 lbs 42.64 Kg

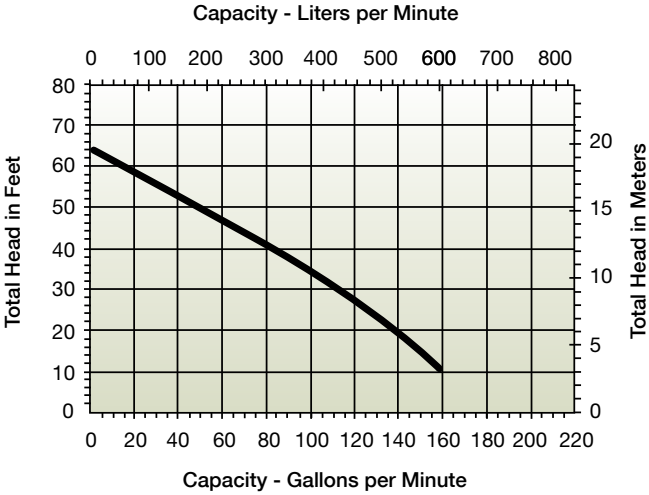
\* 3-phase

**ENGINEERING DATA**



A	B	C
18.4"	13"	8.4"
46.74 cm	33.02 cm	21.34 cm

**PERFORMANCE DATA**



**CONSTRUCTION**

<b>Cover</b>	Epoxy-coated cast iron
<b>Motor Housing</b>	Epoxy-coated cast iron
<b>Impeller Material</b>	Red brass
<b>Impeller Type</b>	Non-clog vortex
<b>Volute</b>	Epoxy-coated cast iron
<b>Mechanical Shaft Seal</b>	Carbon/ceramic
<b>Fasteners</b>	Stainless steel
<b>Shaft</b>	Stainless steel
<b>Bearings</b>	Upper and lower ball bearings
<b>Power Cord</b>	14/3, SOW (1-phase); 14/4, SOW (3-phase)

### APPLICATIONS

- Sewage and effluent wastewater transfer • Dewatering



### FEATURES

- Permanent Split Capacitor (PSC)
- Designed for continuous duty
- Capacitor and power cord connections are isolated from oil-filled motor housing for ease of field maintenance
- 3" FNPT (761 mm) discharge
- Handles solids up to 2" (51 mm) diameter
- 140 °F (60 °C) liquid temperature rating
- cCSAus listed

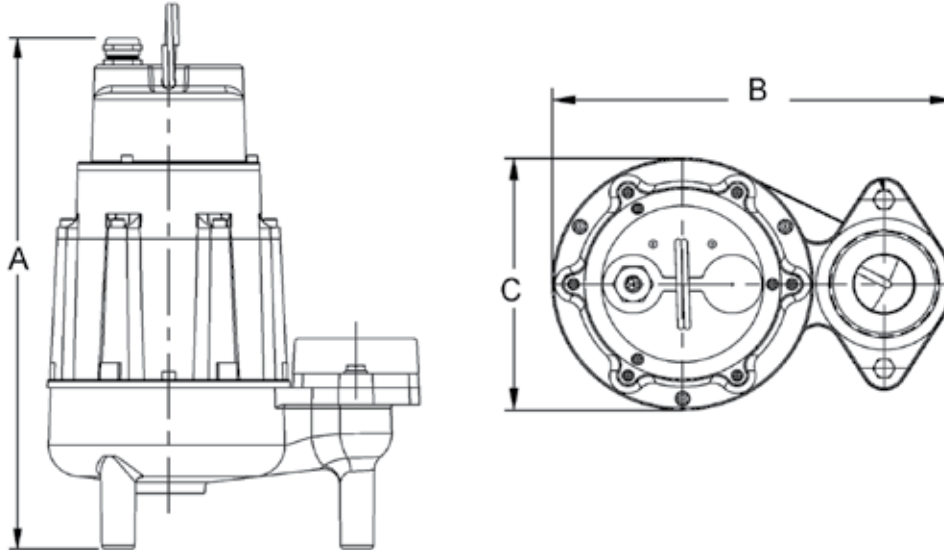
### SERIES SPECIFICATIONS

Volts	Hz	Amps		Watts	Performance (GPM @ Height in Feet)				Shut-Off (ft)	PSI
		FLA	Start		10'	20'	30'	40'		
200-208	60	14.5	32.0	2769	205	168	140	120	77	33.3
208-230	60	18	31.0	4118	205	168	140	120	77	33.3
230*	60	12.6	35.0	2686	205	168	140	120	77	33.3
460*	60	6.1	17.5	2771	205	168	140	120	77	33.3

Item No.	Model	HP	Volts	Phase	Switch Type/Operation	Cord	Weight
520125	20S-CIM	2	200-208	3	Manual	20' 6.1 m	96 lbs 43.54 Kg
520100	20S-CIM	2	208-230	1	Manual	20' 6.1 m	96 lbs 43.54 Kg
520150*	20S-CIM	2	230	3	Manual	20' 6.1 m	96 lbs 43.54 Kg
520175*	20S-CIM	2	460	3	Manual	20' 6.1 m	96 lbs 43.54 Kg

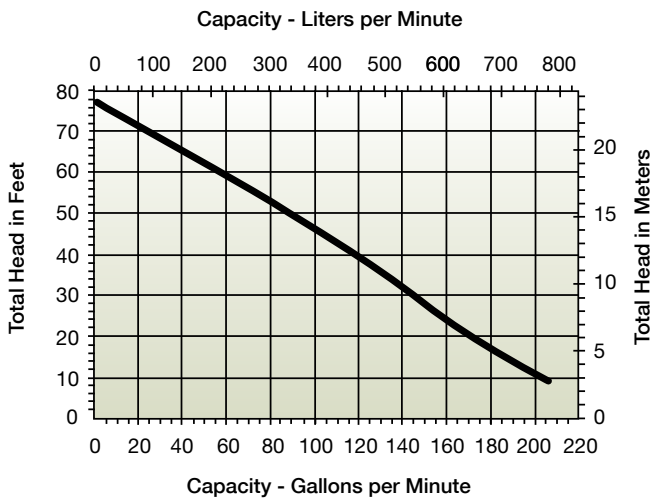
\* 3-phase

ENGINEERING DATA



A	B	C
18.4"	13"	8.4"
46.74 cm	33.02 cm	21.34 cm

PERFORMANCE DATA



CONSTRUCTION

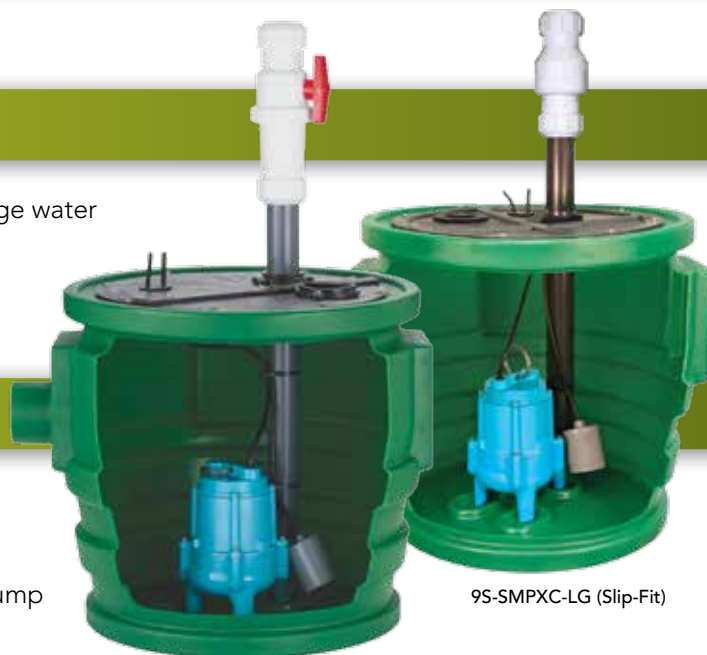
<b>Cover</b>	Epoxy-coated cast iron
<b>Motor Housing</b>	Epoxy-coated cast iron
<b>Impeller Material</b>	Red brass
<b>Impeller Type</b>	Vortex
<b>Volute</b>	Epoxy-coated cast iron
<b>Mechanical Shaft Seal</b>	Carbon/ceramic
<b>Fasteners</b>	Stainless steel
<b>Shaft</b>	Stainless steel
<b>Bearings</b>	Upper and lower ball bearings
<b>Power Cord (Stripped Leads)</b>	14/3, SOW (1-phase); 14/4, SOW (3-phase)

## APPLICATIONS

- Collection of sewage, effluent, drainage, or seepage water

## FEATURES

- Roto-molded polyethylene basin
- Radial rib design for extra strength
- 360° molded handle for easy handling
- Molded torque stops at basin bottom to secure pump
- Anti-flotation collar
- 4" molded external inlet hub for flexible coupling
- Structural foam or IAPMO approved steel cover options available
- One- or two-piece cover options available
- Slip-fit or bolt-on cover flange options available
- 4/10 hp or 1/2 hp sewage pump options available
- Basin size: 24" x 24" (61 cm x 61 cm)



9S-SMPXC-LG (Bolt-On)

9S-SMPXC-LG (Slip-Fit)

## SERIES SPECIFICATIONS

### Pre-Packaged

Item No.	Model	Style	Material	Cover			Check Valve	Alarm	Pump HP
				Flanges	Vent	Discharge			
509631	9S-SMPXC-LG	1-Piece	Structural Foam	Slip-Fit	2" or 3" 51 mm or 76 mm	2" 51 mm	2" 51 mm	-	4/10
509632	9S-SMPXC-LG	1-Piece	Structural Foam	Bolt-On	2" 51 mm	2" 51 mm	2" Check 51 mm Check	-	4/10
509637	9S-SMPXC-LG	2-Piece	Structural Foam	Bolt-On	2" 51 mm	2" 51 mm	2" Check 51 mm Check	-	4/10
509650	9S-SMPXC-LG	2-Piece	Structural Foam	Bolt-On	2" 51 mm	3" 76 mm	-	-	4/10
509652	9S-SMPXC-LG	1-Piece	Structural Foam	Slip-Fit	2" 51 mm	3" 76 mm	-	-	4/10
509654	9S-SMPXC-LG	1-Piece	Structural Foam	Bolt-On	2" 51 mm	3" 76 mm	-	-	4/10
511631	10S-SMPXC-LG	1-Piece	Structural Foam	Slip-Fit	2" or 3" 51 mm or 76 mm	2" 51 mm	2" 51 mm	-	1/2
511632	10S-SMPXC-LG	1-Piece	Structural Foam	Bolt-On	2" 51 mm	2" 51 mm	2" Check 51 mm Check	-	1/2
511637	10S-SMPXC-LG	2-Piece	Structural Foam	Bolt-On	2" 51 mm	2" 51 mm	2" Check 51 mm Check	-	1/2
511650	10S-SMPXC-LG	2-Piece	Structural Foam	Bolt-On	2" 51 mm	3" 76 mm	-	-	1/2
511652	10S-SMPXC-LG	1-Piece	Structural Foam	Slip-Fit	2" 51 mm	3" 76 mm	-	-	1/2
511654	10S-SMPXC-LG	1-Piece	Structural Foam	Bolt-On	2" 51 mm	3" 76 mm	-	-	1/2

**SERIES SPECIFICATIONS**

**Pre-Assembled**

Item No.	Model	Cover					Check Valve	Alarm	Pump HP
		Style	Material	Flanges	Vent	Discharge			
509633	9S-SMPXC-LG	1-Piece	Structural Foam	Slip-Fit	2" or 3" 51 mm or 76 mm	2" 51 mm	2" Check 51 mm Check	–	4/10
509634	9S-SMPXC-LG1A	1-Piece	Structural Foam	Slip-Fit	2" or 3" 51 mm or 76 mm	2" 51 mm	2" Check 51 mm Check	Indoor High Water Alarm	4/10
509635	9S-SMPXC-LG	1-Piece	Structural Foam	Bolt-On	2" 51 mm	2" 51 mm	2" Check 51 mm Check	–	4/10
509636	9S-SMPXC-LG1A	1-Piece	Structural Foam	Bolt-On	2" 51 mm	2" 51 mm	2" Check 51 mm Check	Indoor High Water Alarm	4/10
509638	9S-SMPXC-LG	2-Piece	Structural Foam	Bolt-On	2" 51 mm	2" 51 mm	2" Check 51 mm Check	–	4/10
509639	9S-SMPXC-LG1A	1-Piece	Structural Foam	Slip-Fit	2" or 3" 51 mm or 76 mm	2" 51 mm	2" Ball/Check 51 mm Ball/Check	Indoor High Water Alarm	4/10
509640	9S-SMPXC-LG	2-Piece	Structural Foam	Bolt-On	3" 76 mm	2" 51 mm	2" Ball/Check 51 mm Ball/Check	–	1/2
509651	9S-SMPXC-LG	2-Piece	Structural Foam	Bolt-On	2" 51 mm	3" 76 mm	–	–	4/10
509653	9S-SMPXC-LG	1-Piece	Structural Foam	Slip-Fit	2" 51 mm	3" 76 mm	–	–	4/10
509655	9S-SMPXC-LG	1-Piece	Structural Foam	Bolt-On	2" 51 mm	3" 76 mm	–	–	4/10
511633	10S-SMPXC-LG	1-Piece	Structural Foam	Slip-Fit	2" or 3" 51 mm or 76 mm	2" 51 mm	2" Check 51 mm Check	–	1/2
511634	10S-SMPXC-LG1A	1-Piece	Structural Foam	Slip-Fit	2" or 3" 51 mm or 76 mm	2" 51 mm	2" Check 51 mm Check	Indoor High Water Alarm	1/2
511635	10S-SMPXC-LG	1-Piece	Structural Foam	Bolt-On	2" 51 mm	2" 51 mm	2" Check 51 mm Check	–	1/2
511636	10S-SMPXC-LG1A	1-Piece	Structural Foam	Bolt-On	2" 51 mm	2" 51 mm	2" Check 51 mm Check	Indoor High Water Alarm	1/2
511638	10S-SMPXC-LG	2-Piece	Structural Foam	Bolt-On	2" 51 mm	2" 51 mm	2" Check 51 mm Check	–	1/2
511651	10S-SMPXC-LG	2-Piece	Structural Foam	Bolt-On	2" 51 mm	3" 76 mm	–	–	1/2
511653	10S-SMPXC-LG	1-Piece	Structural Foam	Slip-Fit	2" 51 mm	3" 76 mm	–	–	1/2
511655	10S-SMPXC-LG	1-Piece	Structural Foam	Bolt-On	2" 51 mm	3" 76 mm	–	–	1/2

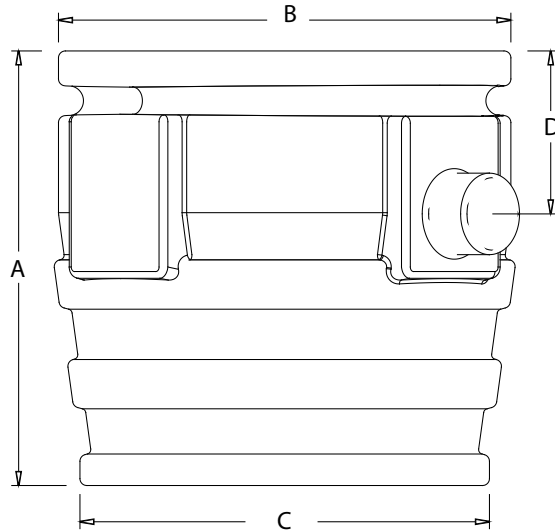
Note: Other Basin/Pump/Cover configurations are available. Please contact factory for information on package requirements not shown here.

**Basin/Cover Assemblies**

Item No.	Model	Cover Detail				
		Style	Material	Flanges	Vents	Discharge
513092	BC2424CS-LG	1-Piece	Structural Foam	Slip-Fit	2" or 3" 51 mm or 76 mm	2" or 3" 51 mm or 76 mm
513091	BC2424CS-LG	1-Piece	Structural Foam	Bolt-On	2" 51 mm	2" 51 mm

Note: Basin and cover only

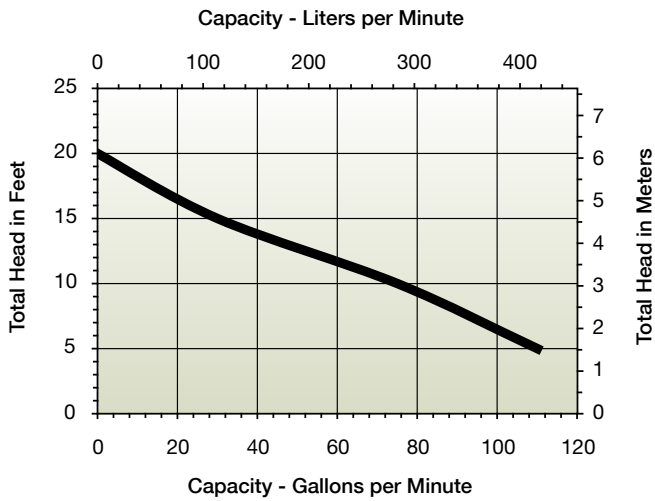
### ENGINEERING DATA



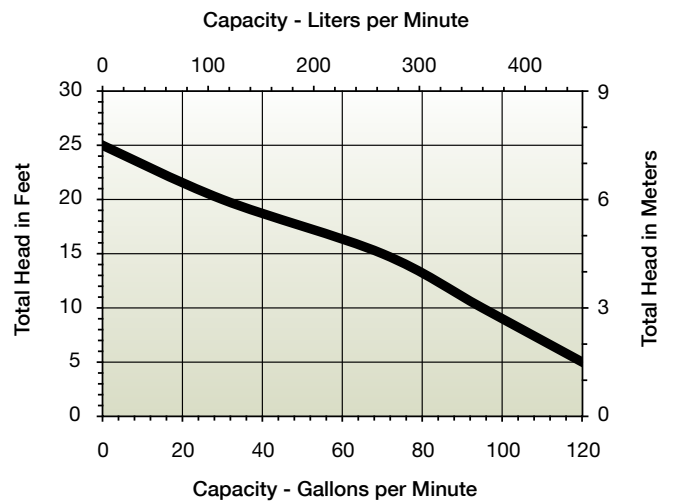
A	B	C	D
24" 60.96 cm	25" 63.5 cm	22" 55.88 cm	9" 22.86 cm

### PERFORMANCE DATA

**9SN**

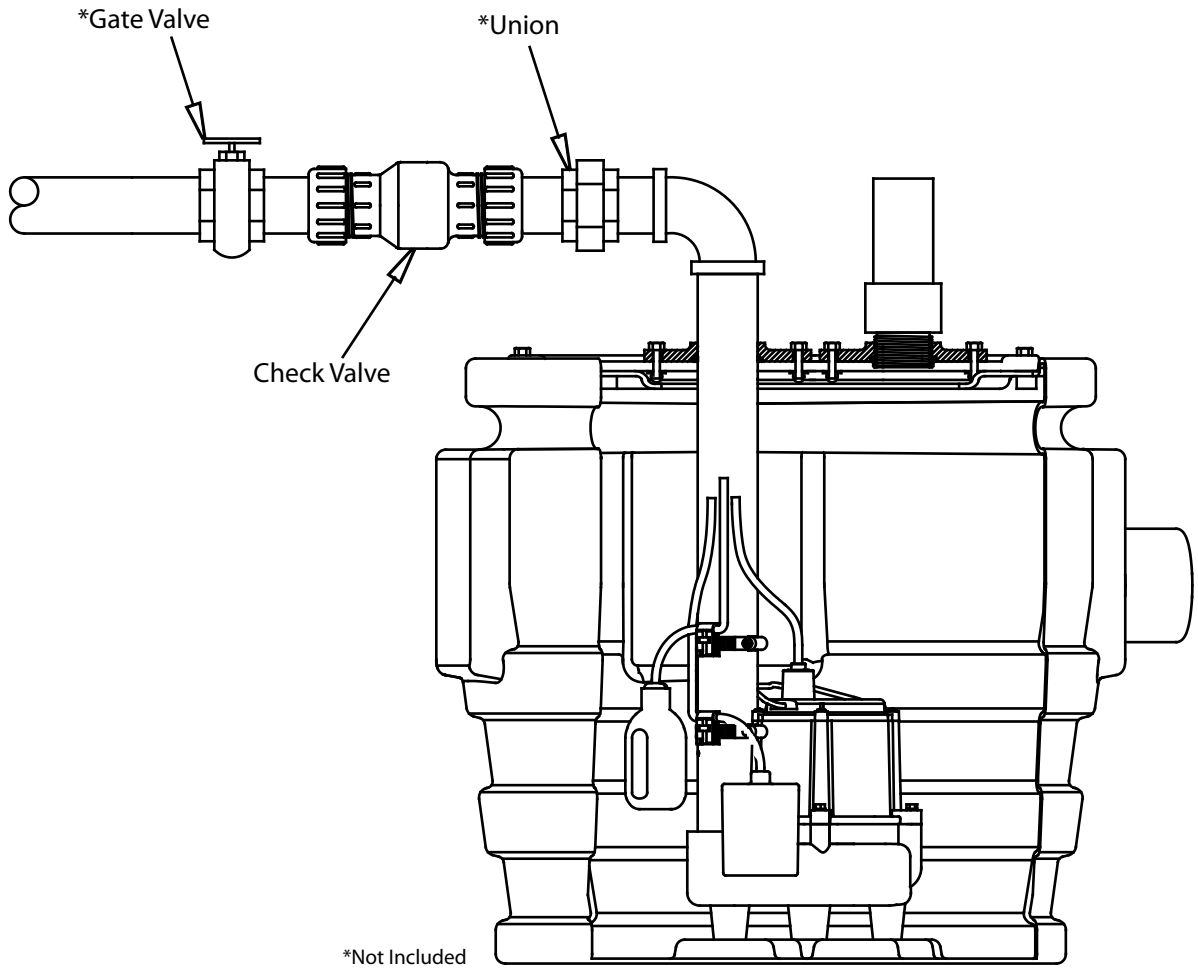


**10SN**





TYPICAL INSTALLATION



## APPLICATIONS

- Collection of sewage, effluent, drainage, or seepage water



## FEATURES

- Roto-molded polyethylene basin
- Radial rib design for extra strength
- 360° molded handle for easy handling
- Molded torque stops at basin bottom to secure pump
- Anti-flotation collar
- 4" molded external inlet hub for flexible coupling
- Structural foam or IAPMO approved steel cover options available
- One- or two-piece cover options available
- Slip-fit or bolt-on cover flange options available
- 4/10 hp or 1/2 hp sewage pump options available
- Basin size: 20" x 30" (51 cm x 76 cm)

## SERIES SPECIFICATIONS

### Pre-Packaged

Item No.	Model	Cover					Check Valve	Alarm	Pump HP
		Style	Material	Flanges	Vent	Discharge			
509010	9S-SMPX-LG	2-Piece	Structural Foam	Bolt-on	2" (51 mm)	2" (51 mm)	2" (51 mm) Ball/Check	–	4/10
509011	9S-SMPX-LG	2-Piece	Structural Foam	Bolt-on	2" (51 mm)	2" (51 mm)	2" (51 mm) Check	–	4/10
509012	9S-SMPX-LG	2-Piece	Structural Foam	Bolt-on	2" (51 mm)	3" (76 mm)	N/A	–	4/10
509013	9S-SMPX-LG	2-Piece	Structural Foam	Bolt-on	2" (51 mm)	3" (76 mm)	3" (76 mm) Check	–	4/10
509014	9S-SMPX-LG1A	2-Piece	Structural Foam	Bolt-on	2" (51 mm)	2" (51 mm)	2" (51 mm) Check	Indoor High Water Alarm	4/10
509015	9S-SMPX-LG3A	2-Piece	Structural Foam	Bolt-on	2" (51 mm)	2" (51 mm)	2" (51 mm) Check	Indoor/Outdoor High Water Alarm	4/10
*509088	9S-SMPX-LG	1-Piece	Structural Foam	Slip-fit	2" (51 mm) or 3" (76 mm)	2" (51 mm)	2" (51 mm) Ball/Check	–	4/10
*509090	9S-SMPX-LG	1-Piece	Structural Foam	Slip-fit	2" (51 mm) or 3" (76 mm)	2" (51 mm)	2" (51 mm) Check	–	4/10
509092	9S-SMPX-LG	1-Piece	Structural Foam	Slip-fit	2" (51 mm)	3" (76 mm)	N/A	–	4/10
509094	9S-SMPX-LG	1-Piece	Structural Foam	Slip-fit	2" (51 mm)	3" (76 mm)	3" (76 mm) Check	–	4/10
*509096	9S-SMPX-LG 1A	1-Piece	Structural Foam	Slip-fit	2" (51 mm) or 3" (76 mm)	2" (51 mm)	2" (51 mm) Check	Indoor High Water Alarm	4/10
*509098	9S-SMPX-LG 3A	1-Piece	Structural Foam	Slip-fit	2" (51 mm) or 3" (76 mm)	2" (51 mm)	2" (51 mm) Check	Indoor/Outdoor High Water Alarm	4/10
509106	9S-SMPX-LG	1-Piece	Structural Foam	Bolt-on	2" (51 mm)	2" (51 mm)	2" (51 mm) Ball/Check	–	4/10
509108	9S-SMPX-LG	1-Piece	Structural Foam	Bolt-on	2" (51 mm)	2" (51 mm)	2" (51 mm) Check	–	4/10
509110	9S-SMPX-LG	1-Piece	Structural Foam	Bolt-on	2" (51 mm)	3" (76 mm)	N/A	–	4/10
509112	9S-SMPX-LG	1-Piece	Structural Foam	Bolt-on	2" (51 mm)	3" (76 mm)	3" (76 mm) Check	–	4/10
509114	9S-SMPX-LG1A	1-Piece	Structural Foam	Bolt-on	2" (51 mm)	2" (51 mm)	2" (51 mm) Check	Indoor High Water Alarm	4/10
509116	9S-SMPX-LG3A	1-Piece	Structural Foam	Bolt-on	2" (51 mm)	2" (51 mm)	2" (51 mm) Check	Indoor/Outdoor High Water Alarm	4/10
511020	10S-SMPX-LG	2-Piece	Structural Foam	Bolt-on	2" (51 mm)	2" (51 mm)	2" (51 mm) Check	–	1/2
511021	10S-SMPX-LG1A	2-Piece	Structural Foam	Bolt-on	2" (51 mm)	2" (51 mm)	2" (51 mm) Check	Indoor High Water Alarm	1/2
511022	10S-SMPX-LG3A	2-Piece	Structural Foam	Bolt-on	2" (51 mm)	2" (51 mm)	2" (51 mm) Check	Indoor/Outdoor High Water Alarm	1/2
*511069	10S-SMPX-LG	1-Piece	Structural Foam	Slip-fit	2" (51 mm) or 3" (76 mm)	2" (51 mm)	2" (51 mm) Check	–	1/2
*511071	10S-SMPX-LG1A	1-Piece	Structural Foam	Slip-fit	2" (51 mm) or 3" (76 mm)	2" (51 mm)	2" (51 mm) Check	Indoor High Water Alarm	1/2
*511073	10S-SMPX-LG3A	1-Piece	Structural Foam	Slip-fit	2" (51 mm) or 3" (76 mm)	2" (51 mm)	2" (51 mm) Check	–	1/2
511135	10S-SMPX-LG	1-Piece	Structural Foam	Bolt-on	2" (51 mm)	2" (51 mm)	2" (51 mm) Check	–	1/2
511137	10S-SMPX-LG1A	1-Piece	Structural Foam	Bolt-on	2" (51 mm)	2" (51 mm)	2" (51 mm) Check	Indoor High Water Alarm	1/2
511139	10S-SMPX-LG3A	1-Piece	Structural Foam	Bolt-on	2" (51 mm)	2" (51 mm)	2" (51 mm) Check	Indoor/Outdoor High Water Alarm	1/2

**SERIES SPECIFICATIONS**

**Pre-Assembled**

Item No.	Model	Cover					Check Valve	Alarm	Pump HP
		Style	Material	Flanges	Vent	Discharge			
*509089	9S-SMPX-LG	1-Piece	Structural Foam	Slip-fit	2" (51 mm)	2" (51 mm)	2" (51 mm) Ball/Check		4/10
*509091	9S-SMPX-LG	1-Piece	Structural Foam	Slip-fit	2" (51 mm)	2" (51 mm)	2" (51 mm) Check		4/10
509093	9S-SMPX-LG	1-Piece	Structural Foam	Slip-fit	3" (76 mm)	3" (76 mm)	N/A		4/10
509095	9S-SMPX-LG	1-Piece	Structural Foam	Slip-fit	3" (76 mm)	3" (76 mm)	3" (76 mm) Check		4/10
*509097	9S-SMPX-LG1A	1-Piece	Structural Foam	Slip-fit	3" (76 mm)	2" (51 mm)	2" (51 mm) Check	Indoor High Water Alarm	4/10
*509099	9S-SMPX-LG3A	1-Piece	Structural Foam	Slip-fit	3" (76 mm)	2" (51 mm)	2" (51 mm) Check	Indoor/Outdoor High Water Alarm	4/10
†509118	9S-SMPX-LG	1-Piece	(IAPMO) Steel	Slip-fit	3" (76 mm)	2" (51 mm)	2" (51 mm) Check		4/10
509101	9S-SMPX-LG1A	1-Piece	Structural Foam	Slip-fit	2" (51 mm) or 3" (76 mm)	2" (51 mm)	2" (51 mm) Ball/Check	Indoor High Water Alarm	4/10
509107	9S-SMPX-LG	1-Piece	Structural Foam	Bolt-on	2" (51 mm)	2" (51 mm)	2" (51 mm) Ball/Check		4/10
509109	9S-SMPX-LG	1-Piece	Structural Foam	Bolt-on	2" (51 mm)	2" (51 mm)	2" (51 mm) Check		4/10
509111	9S-SMPX-LG	1-Piece	Structural Foam	Bolt-on	2" (51 mm)	3" (76 mm)	N/A		4/10
509113	9S-SMPX-LG	1-Piece	Structural Foam	Bolt-on	2" (51 mm)	3" (76 mm)	3" (76 mm) Check		4/10
509115	9S-SMPX-LG1A	1-Piece	Structural Foam	Bolt-on	2" (51 mm)	2" (51 mm)	2" (51 mm) Check	Indoor High Water Alarm	4/10
509117	9S-SMPX-LG3A	1-Piece	Structural Foam	Bolt-on	2" (51 mm)	2" (51 mm)	2" (51 mm) Check	Indoor/Outdoor High Water Alarm	4/10
509016	9S-SMPX-LG	2-Piece	Structural Foam	Bolt-on	2" (51 mm)	2" (51 mm)	2" (51 mm) Ball/Check		4/10
509017	9S-SMPX-LG	2-Piece	Structural Foam	Bolt-on	2" (51 mm)	2" (51 mm)	2" (51 mm) Check		4/10
509018	9S-SMPX-LG	2-Piece	Structural Foam	Bolt-on	2" (51 mm)	3" (76 mm)	N/A		4/10
509019	9S-SMPX-LG	2-Piece	Structural Foam	Bolt-on	2" (51 mm)	3" (76 mm)	3" (76 mm) Check		4/10
509020	9S-SMPX-LG1A	2-Piece	Structural Foam	Bolt-on	2" (51 mm)	2" (51 mm)	2" (51 mm) Check	Indoor High Water Alarm	4/10
509021	9S-SMPX-LG3A	2-Piece	Structural Foam	Bolt-on	2" (51 mm)	2" (51 mm)	2" (51 mm) Check	Indoor/Outdoor High Water Alarm	4/10
*511070	10S-SMPX-LG	1-Piece	Structural Foam	Slip-fit	3" (76 mm)	2" (51 mm)	2" (51 mm) Check		1/2
*511072	10S-SMPX-LG1A	1-Piece	Structural Foam	Slip-fit	3" (76 mm)	2" (51 mm)	2" (51 mm) Check	Indoor High Water Alarm	1/2
*511074	10S-SMPX-LG3A	1-Piece	Structural Foam	Slip-fit	3" (76 mm)	2" (51 mm)	2" (51 mm) Check	Indoor/Outdoor High Water Alarm	1/2
†511077	10S-SMPX-LG	1-Piece	(IAPMO) Steel	Slip-fit	3" (76 mm)	2" (51 mm)	2" (51 mm) Check		1/2
511136	10S-SMPX-LG	1-Piece	Structural Foam	Bolt-on	2" (51 mm)	2" (51 mm)	2" (51 mm) Check		1/2
511138	10S-SMPX-LG1A	1-Piece	Structural Foam	Bolt-on	2" (51 mm)	2" (51 mm)	2" (51 mm) Check	Indoor High Water Alarm	1/2
511140	10S-SMPX-LG3A	1-Piece	Structural Foam	Bolt-on	2" (51 mm)	2" (51 mm)	2" (51 mm) Check	Indoor/Outdoor High Water Alarm	1/2
511023	10S-SMPX-LG	2-Piece	Structural Foam	Bolt-on	2" (51 mm)	2" (51 mm)	2" (51 mm) Check		1/2
511024	10S-SMPX-LG1A	2-Piece	Structural Foam	Bolt-on	2" (51 mm)	2" (51 mm)	2" (51 mm) Check	Indoor High Water Alarm	1/2
511025	10S-SMPX-LG3A	2-Piece	Structural Foam	Bolt-on	2" (51 mm)	2" (51 mm)	2" (51 mm) Check	Indoor/Outdoor High Water Alarm	1/2

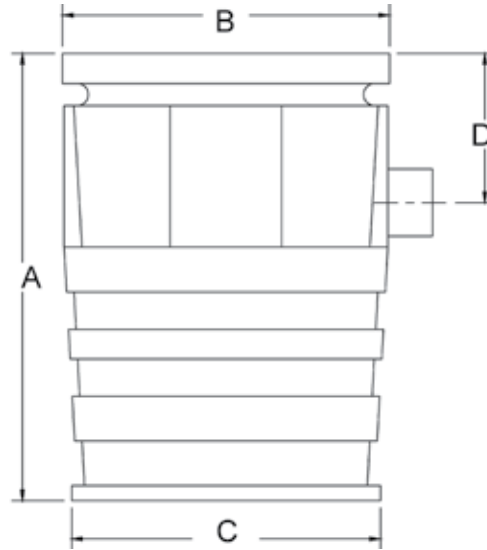
Note: Other Basin/Pump/Cover configurations are available. Please contact factory for information on package requirements not shown here.

**Basin/Cover Assemblies**

Item No.	Model	Cover Detail
513244	BC2030CSLG	Slip-fit, 2V2D, 2V3D or 3V2D
513245	BC2030CSLG	Bolt-on, 2V2D, 1-Piece
513340	BC2030CSLG	Bolt-on, 2V3D, 1-Piece
513341	BC2030CSLG	Bolt-on, 3V2D, 1-Piece
513342	BC2030CSLG	Bolt-on, 3V3D, 1-Piece
513343	BC2030CSLG	Bolt-on, 2V2D, 2-Piece
513344	BC2030CSLG	Bolt-on, 2V3D, 2-Piece
513345	BC2030CSLG	Bolt-on, 3V2D, 2-Piece
513346	BC2030CSLG	Bolt-on, 3V3D, 2-Piece
513246	BC2030CSLG	Slip-fit, 2V2D, 1-Piece

Note: Basin and cover only

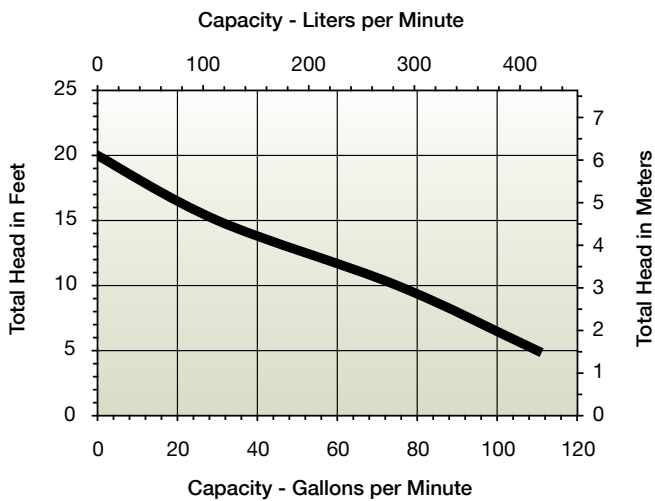
### ENGINEERING DATA



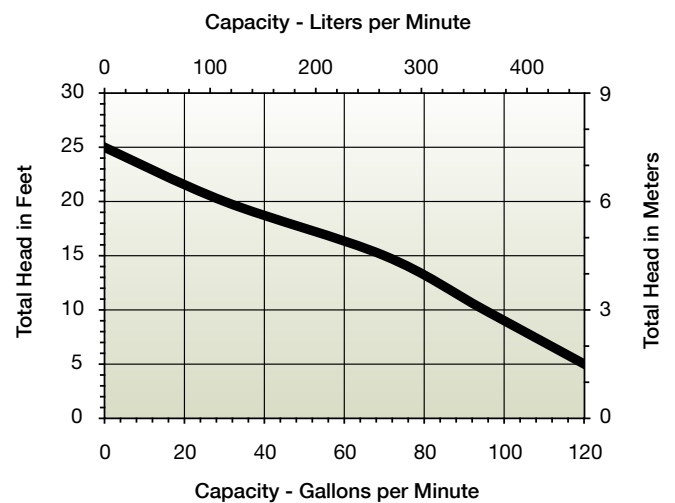
A	B	C	D
30" 76.20 cm	22" 55.88 cm	20.75" 52.71 cm	10" 25.40 cm

### PERFORMANCE DATA

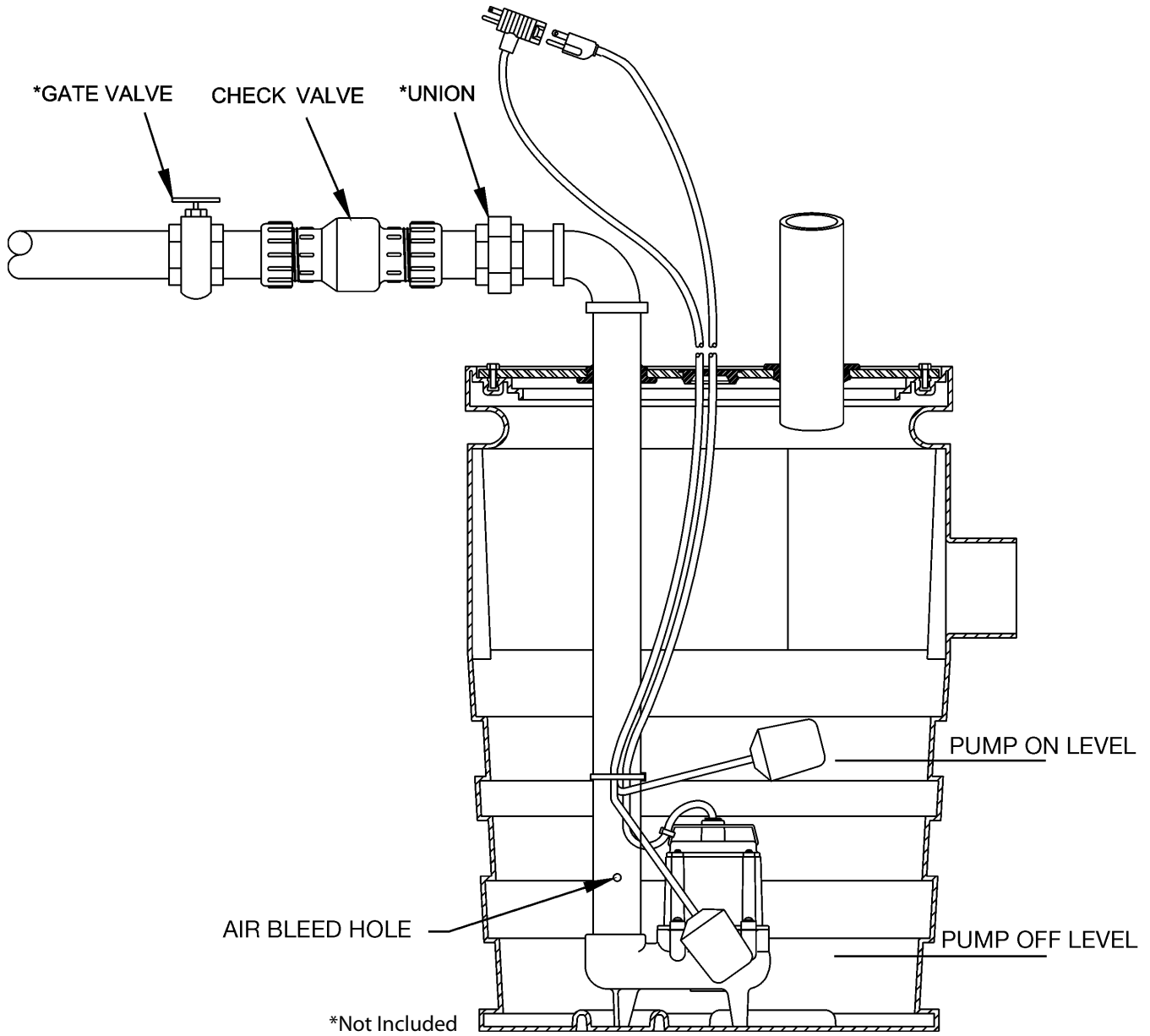
**9SN**



**10SN**



TYPICAL INSTALLATION



# SEWAGE PUMPS SIMPLEX AND DUPLEX SYSTEMS

## APPLICATIONS

- Collection of sewage, effluent, drainage or seepage water

## FEATURES

- Basins available in high density polyethylene structural foam [18" (46 cm), 24" (61 cm), & 30" (76 cm) dia.] or fiberglass [36" (9.14 cm) dia]
- Complete with necessary sealing hardware and flanges
- Available with 2" or 3" (51 mm or 76 mm) vent or discharge flange
- 4" inlet hub is included with the basin
- Water-tight and gas-tight when properly installed
- Durable steel gasketed cover standard on simplex and duplex basins
- One-piece, seam-free construction on basin
- Duplex covers include two access plates
- Ready-to-install for simple and economical installation
- Temperature rated up to 130 °F (54.4 °C)



## SERIES SPECIFICATIONS

### Pre-Packaged Simplex Systems (assembly required)

Item No.	Model	Basin			Cover					Pump			Check Valve
		Size	Style	Inlet Hub Included	Style	Material	Flanges	Vent	Discharge	Pump No	Pump Volts	Pump HP	
509007	9S-SMPX	18" x 30" 46 cm x 76 cm	Structural Foam	Snap-in Vinyl Hub	1-Piece	Steel	Slip-Fit	2" 51 mm	2" 51 mm	509204	115	4/10	940022 2" - 51 mm
509008	9S-SMPX	18" x 30" 46 cm x 76 cm	Structural Foam	Snap-in Vinyl Hub	2-Piece	Steel	Bolt-On	3" 76 mm	2" 51 mm	509204	115	4/10	940022 2" - 51 mm
509009	9S-SMPX	18" x 30" 46 cm x 76 cm	Structural Foam	Cast Iron Hub	1-Piece	Steel	Slip-Fit	2" 51 mm	2" 51 mm	509204	115	4/10	940022 2" - 51 mm
509029	9S-SMPX	18" x 30" 46 cm x 76 cm	Structural Foam	Snap-in Vinyl Hub	2-Piece	Steel	Bolt-On	2" 51 mm	3" 76 mm	509215	115	4/10	940022 2" - 51 mm
509030	9S-SMPX	18" x 30" 46 cm x 76 cm	Structural Foam	Cast Iron Hub	2-Piece	Steel	Bolt-On	2" 51 mm	3" 76 mm	509215	115	4/10	940022 2" - 51 mm
509041	9E-SMPX	18" x 30" 46 cm x 76 cm	Structural Foam	Snap-in Vinyl Hub	2-Piece	Steel	Bolt-On	2" 51 mm	2" 51 mm	509209	115	4/10	940022 2" - 51 mm
509042	9S-SMPX	18" x 30" 46 cm x 76 cm	Structural Foam*	Snap-in Vinyl Hub	2-Piece	Steel	Bolt-On	2" 51 mm	2" 51 mm	509204	115	4/10	940022 2" - 51 mm
509044	9S-SMPX	18" x 30" 46 cm x 76 cm	Structural Foam	Snap-in Vinyl Hub	2-Piece	Steel	Bolt-On	2" 51 mm	2" 51 mm	509204	115	4/10	940022 2" - 51 mm
509045	9S-SMPX	18" x 30" 46 cm x 76 cm	Structural Foam	Cast Iron Hub	2-Piece	Steel	Bolt-On	2" 51 mm	2" 51 mm	509204	115	4/10	940022 2" - 51 mm
509047	9S-SMPX	18" x 30" 46 cm x 76 cm	Structural Foam	Cast Iron Hub	2-Piece	Steel	Bolt-On	3" 76 mm	2" 51 mm	509204	115	4/10	940022 2" - 51 mm
509068	9S-SMPXRT-K	18" x 30" 46 cm x 76 cm	Roll Top Poly	4" Adaptaflex & Multi-tite Grommet	1-Piece	Structural Foam	Slip-Fit	2" or 3" 51 mm or 76 mm	2" 51 mm	509204	115	4/10	-
509069	9S-SMPXRT-K	18" x 30" 46 cm x 76 cm	Roll Top Poly	4" Adaptaflex & Multi-tite Grommet	1-Piece	Structural Foam	Slip-Fit	2" or 3" 51 mm or 76 mm	3" 76 mm	509215	115	4/10	940023 3" - 76 mm
509072	9S-SMPXRT-K	18" x 30" 46 cm x 76 cm	Roll Top Poly	4" Adaptaflex & Multi-tite Grommet	1-Piece	Structural Foam	2" or 3"	2" or 3" 51 mm	2" 51 mm	509204	115	4/10	940026 2" - 51 mm
509074	9S-SMPXRT-K	18" x 30" 46 cm x 76 cm	Roll Top Poly	4" Adaptaflex & Multi-tite Grommet	1-Piece	Structural Foam	Slip-Fit	2" or 3" 51 mm or 76 mm	2" 51 mm	509204	115	4/10	940022 2" - 51 mm
509076	9S-SMPXRT-K	18" x 30" 46 cm x 76 cm	Roll Top Poly	4" Adaptaflex & Multi-tite Grommet	1-Piece	Structural Foam	Slip-Fit	2" 51 mm	3" 76 mm	509215	115	4/10	-
509078	9S-SMPXRT-K	18" x 30" 46 cm x 76 cm	Roll Top Poly	4" Adaptaflex & Multi-tite Grommet	1-Piece	Structural Foam	Slip-Fit	2" 51 mm	3" 76 mm	509215	115	4/10	940023 3" - 76 mm
511017	10S-SMPX	18" x 30" 46 cm x 76 cm	Structural Foam	Cast Iron Hub	1-Piece	Steel	Slip-Fit	2" 51 mm	2" 51 mm	511323	115	1/2	940022 2" - 51 mm
511018	10S-SMPX	18" x 30" 46 cm x 76 cm	Structural Foam	Snap-in Vinyl Hub	1-Piece	Steel	Slip-Fit	2" 51 mm	2" 51 mm	509215	115	1/2	940022 2" - 51 mm

Note: Other configurations are available. Please contact factory for information on package requirements not shown here.

\* Inlet hole is not pre-cut

† Includes CVBV-2 (599160) check/ball combination

‡ Includes HWAB high water alarm (513288)

**SERIES SPECIFICATIONS**

**Pre-Packaged Simplex Systems (assembly required) [Continued]**

Item No.	Model	Basin			Cover					Pump			Check Valve
		Size	Style	Inlet Hub Included	Style	Material	Flanges	Vent	Discharge	Pump No	Pump Volts	Pump HP	
511019	10S-SMPX	18" x 30" 46 cm x 76 cm	Structural Foam	Snap-in Vinyl Hub	1-Piece	Steel	Slip-Fit	2" 51 mm	2" 51 mm	509215	115	1/2	940022 2" 51 mm
511042	10S-SMPX	18" x 30" 46 cm x 76 cm	Structural Foam	Snap-in Vinyl Hub	2-Piece	Steel	Bolt-On	2" 51 mm	2" 51 mm	511323	115	1/2	940022 2" 51 mm
511044	10S-SMPX	18" x 30" 46 cm x 76 cm	Structural Foam	Snap-in Vinyl Hub	2-Piece	Steel	Bolt-On	2" 51 mm	2" 51 mm	511323	115	1/2	940022 2" 51 mm
511045	10S-SMPX	18" x 30" 46 cm x 76 cm	Structural Foam	Cast Iron Hub	2-Piece	Steel	Bolt-On	2" 51 mm	2" 51 mm	511323	115	1/2	940022 2" 51 mm
511046	10S-SMPX	18" x 30" 46 cm x 76 cm	Structural Foam	Snap-in Vinyl Hub	2-Piece	Steel	Bolt-On	3" 76 mm	2" 51 mm	511323	115	1/2	940022 2" 51 mm
511047	10S-SMPX	18" x 30" 46 cm x 76 cm	Structural Foam	Cast Iron Hub	2-Piece	Steel	Bolt-On	3" 76 mm	2" 51 mm	511323	115	1/2	940022 2" 51 mm
511051	10S-SMPX	18" x 30" 46 cm x 76 cm	Structural Foam	Cast Iron Hub	2-Piece	Steel	Bolt-On	2" 51 mm	3" 76 mm	511344	115	1/2	940023 3" 76 mm
511054	10S-SMPX	18" x 30" 46 cm x 76 cm	Structural Foam	Snap-in Vinyl Hub	2-Piece	Steel	Bolt-On	2" 51 mm	3" 76 mm	511326	115	1/2	940023 3" 76 mm
511055	10S-SMPX	18" x 30" 46 cm x 76 cm	Structural Foam	Cast Iron Hub	2-Piece	Steel	Bolt-On	2" 51 mm	3" 76 mm	511326	115	1/2	940023 3" 76 mm
511065	10S-SMPXRT-K	18" x 30" 46 cm x 76 cm	Roll Top Poly	4" Adaptaflex & Multi-tite Grommet	1-Piece	Structural Foam	Slip-Fit	2" or 3" 51 mm or 76 mm	2" 51 mm	511323	115	1/2	940022 2" 51 mm

Note: Other configurations are available. Please contact factory for information on package requirements not shown here.

\* Inlet hole is not pre-cut

† Includes CVBV-2 (599160) check/ball combination

‡ Includes HWAB high water alarm (513288)

**Pre-Assembled Simplex Systems (ready to install)**

Item No.	Model	Basin			Cover					Pump			Check Valve	Alarm
		Size	Style	Inlet Hub Included	Style	Material	Flanges	Vent	Discharge	Pump No	Pump Volts	Pump HP		
509067	9S-SMPXRTA-K	18" x 30" 46 cm x 76 cm	Roll Top Poly	4" Adaptaflex & Multi-tite Grommet	1-Piece	Structural Foam	Slip-Fit	2" or 3" 51 mm or 76 mm	2" 51 mm	14940107	115	4/10	940022 2" 51 mm	513288 Indoor High Water
†509071	9S-SMPXRT-K	18" x 30" 46 cm x 76 cm	Roll Top Poly	4" Adaptaflex & Multi-tite Grommet	1-Piece	Structural Foam	Slip-Fit	2" or 3" 51 mm or 76 mm	2" 51 mm	14940107	115	4/10	940026 2" 51 mm	-
509073	9S-SMPXRTA-K	18" x 30" 46 cm x 76 cm	Roll Top Poly	4" Adaptaflex & Multi-tite Grommet	1-Piece	Structural Foam	Slip-Fit	2" or 3" 51 mm or 76 mm	2" 51 mm	14940107	115	4/10	940022 2" 51 mm	-
509075	9S-SMPXRT-K	18" x 30" 46 cm x 76 cm	Roll Top Poly	4" Adaptaflex & Multi-tite Grommet	1-Piece	Structural Foam	Slip-Fit	2" or 3" 51 mm or 76 mm	3" 76 mm	509215	115	4/10	-	-
509077	9S-SMPXRT-K	18" x 30" 46 cm x 76 cm	Roll Top Poly	4" Adaptaflex & Multi-tite Grommet	1-Piece	Structural Foam	Slip-Fit	2" 51 mm	3" 76 mm	509215	115	4/10	940023 3" 76 mm	-
509079	9S-SMPXRTA-K	18" x 30" 46 cm x 76 cm	Roll Top Poly	4" Adaptaflex & Multi-tite Grommet	1-Piece	Structural Foam	Slip-Fit	2" or 3" 51 mm or 76 mm	2" 51 mm	14940107	115	4/10	940022 2" 51 mm	513288 Indoor High Water
511064	10S-SMPXRT-K	18" x 30" 46 cm x 76 cm	Roll Top Poly	4" Adaptaflex & Multi-tite Grommet	1-Piece	Structural Foam	Slip-Fit	2" or 3" 51 mm or 76 mm	2" 51 mm	511323	115	1/2	940022 2" 51 mm	-
†511079	10S-SMPXRTA-K	18" x 30" 46 cm x 76 cm	Roll Top Poly	4" Adaptaflex & Multi-tite Grommet	1-Piece	Structural Foam	Slip-Fit	2" or 3" 51 mm or 76 mm	2" or 3" 51 mm or 76 mm	511323	115	1/2	940022 2" 51 mm	513288 Indoor High Water
620054	WSV52S-FP	18" x 30" 46 cm x 76 cm	Roll Top Poly	4" Adaptaflex & Multi-tite Grommet	1-Piece	Structural Foam	Slip-Fit	2" or 3" 51 mm or 76 mm	2" 51 mm	620236	115	1/2	940022 2" 51 mm	-

Note: Other configurations are available. Please contact factory for information on package requirements not shown here.

\* Inlet hole is not pre-cut

† Includes CVBV-2 (599160) check/ball combination

‡ Includes HWAB high water alarm (513288)

**Basin & Cover Assemblies - Simplex (pump not included)**

Item No.	Model	Basin			Cover				
		Size	Style	Inlet Hub Included	Style	Material	Flanges	Vent	Discharge
513100	BS1830CS2V2D	18" x 30" 46 cm x 76 cm	Structural Foam*	Snap-in Vinyl Hub	2-Piece	Steel	Bolt-On	2" 51 mm	2" 51 mm
513101	BS1830CS2V2D	18" x 30" 46 cm x 76 cm	Structural Foam	Snap-in Vinyl Hub	2-Piece	Steel	Bolt-On	2" 51 mm	2" 51 mm
513102	BS1830CS3V2D	18" x 30" 46 cm x 76 cm	Structural Foam	Snap-in Vinyl Hub	2-Piece	Steel	Bolt-On	3" 76 mm	2" 51 mm
513103	BB1830CS2V2D	18" x 30" 46 cm x 76 cm	Structural Foam	Cast Iron Hub	2-Piece	Steel	Bolt-On	2" 51 mm	2" 51 mm
513104	BB1830CS3V2D	18" x 30" 46 cm x 76 cm	Structural Foam	Cast Iron Hub	2-Piece	Steel	Bolt-On	3" 76 mm	2" 51 mm

\* Inlet hole is not pre-cut

## SERIES SPECIFICATIONS

## Basin &amp; Cover Assemblies - Simplex Systems (pump not included) [Continued]

Item No.	Model	Basin			Cover					
		Size	Style	Inlet Hub Included	Style	Material	Flanges	Vent	Discharge	
513119	BS1830CS2V2D	18" x 30" 46 cm x 76 cm	Structural Foam	Snap-in Vinyl Hub	1-Piece	Steel	Bolt-On	2" 51 mm	2" 51 mm	
513120	BS1830CS2V3D	18" x 30" 46 cm x 76 cm	Structural Foam	Cast Iron Hub	2-Piece	Steel	Bolt-On	2" 51 mm	3" 76 mm	
513122	BS1830CS2V3D	18" x 30" 46 cm x 76 cm	Structural Foam	Snap-in Vinyl Hub	2-Piece	Structural Foam	Bolt-On	2" 51 mm	3" 76 mm	
513127	BB1830CS2V2D-K	18" x 30" 46 cm x 76 cm	Fiberglass	Cast Iron Hub	1-Piece	Steel	Slip-Fit	2" 51 mm	2" 51 mm	
513128	BB1830CS3V2D-K	18" x 30" 46 cm x 76 cm	Fiberglass	Cast Iron Hub	1-Piece	Steel	Slip-Fit	3" 76 mm	2" 51 mm	
513240	BS1830CSRT-K	18" x 30" 46 cm x 76 cm	Roll Top Poly	4" Adaptaflex & Multi-tite Grommet	1-Piece	Structural Foam	Slip-Fit	2" or 3" 51 mm or 76 mm	2" or 3" 51 mm or 76 mm	
513241	BS1830CSRTNH-K	18" x 30" 46 cm x 76 cm	Roll Top Poly	4" Adaptaflex & Multi-tite Grommet	1-Piece	Structural Foam	Slip-Fit	2" or 3" 51 mm or 76 mm	2" or 3" 51 mm or 76 mm	
513105	BB2436CS2V2D	24" X 36" 61 cm x 91 cm	Structural Foam	Cast Iron Hub	1-Piece	Cast Iron	Bolt-On	2" 51 mm	2" 51 mm	
513106	BB2436CS3V2D	24" X 36" 61 cm x 91 cm	Structural Foam	Cast Iron Hub	1-Piece	Steel	Bolt-On	3" 76 mm	2" 51 mm	
513107	BB2436CS2V3D	24" X 36" 61 cm x 91 cm	Structural Foam	Cast Iron Hub	1-Piece	Steel	Bolt-On	2" 51 mm	3" 76 mm	
513108	BB2436CS3V3D	24" X 36" 61 cm x 91 cm	Structural Foam	Cast Iron Hub	1-Piece	Steel	Bolt-On	3" 76 mm	3" 76 mm	
513144	BB3036CS2V2D	30" x 36" 76 cm x 91.4 cm	Structural Foam	Cast Iron Hub	1-Piece	Steel	Bolt-On	2" 51 mm	2" 51 mm	
513145	BB3036CS3V2D	30" x 36" 76 cm x 91.4 cm	Structural Foam	Cast Iron Hub	1-Piece	Steel	Bolt-On	3" 76 mm	2" 51 mm	
513146	BB3036CS2V2D	30" x 36" 76 cm x 91.4 cm	Structural Foam	Cast Iron Hub	1-Piece	Steel	Bolt-On	2" 51 mm	3" 76 mm	
513147	BB3036CS3V2D	30" x 36" 76 cm x 91.4 cm	Structural Foam	Cast Iron Hub	1-Piece	Steel	Bolt-On	3" 76 mm	3" 76 mm	

\* Inlet hole is not pre-cut

## Pre-Packaged Duplex Systems (ready to install)

Item No.	Model	Basin			Cover				Pump			Check Valve	Control Panel
		Size	Style	Inlet Hub Included	Style	Material	Vent	Discharge	Pump No	Pump Volts	Pump HP		
14940697	9S-DPLX	24" x 36" 61 cm x 91.4 cm	Structural Foam	Cast Iron	1-Piece	Steel	2" 51 mm	2" 51 mm	509203	115	4/10	940022 2" - 51 mm	513258 1221W120H6A17A
14940698	9S-DPLX	24" x 36" 61 cm x 91.4 cm	Structural Foam	Cast Iron	1-Piece	Steel	2" 51 mm	2" 51 mm	509217	208-230	4/10	940022 2" - 51 mm	513258 1221W120H6A17A
14940728	9S-DPLX	24" x 36" 61 cm x 91.4 cm	Structural Foam	Cast Iron	1-Piece	Steel	2" 51 mm	3" 76mm	509226	115	4/10	940023 3" - 76 mm	513258 1221W120H6A17A
14940729	9S-DPLX	24" x 36" 61 cm x 91.4 cm	Structural Foam	Cast Iron	1-Piece	Steel	2" 51 mm	3" 76mm	509227	208-230	4/10	940023 3" - 76 mm	513258 1221W120H6A17A
14940699	10S-DPLX	24" x 36" 61 cm x 91.4 cm	Structural Foam	Cast Iron	1-Piece	Steel	2" 51 mm	2" 51 mm	511322	115	1/2	940022 2" - 51 mm	513258 1221W120H6A17A
14940700	10S-DPLX	24" x 36" 61 cm x 91.4 cm	Structural Foam	Cast Iron	1-Piece	Steel	2" 51 mm	2" 51 mm	511328	208-230	1/2	940022 2" - 51 mm	513258 1221W120H6A17A
14940701	10S-DPLX	24" x 36" 61 cm x 91.4 cm	Structural Foam	Cast Iron	1-Piece	Steel	2" 51 mm	3" 76mm	511344	115	1/2	940023 3" - 76 mm	513258 1221W120H6A17A
14940730	10S-DPLX	24" x 36" 61 cm x 91.4 cm	Structural Foam	Cast Iron	1-Piece	Steel	2" 51 mm	3" 76mm	14940725	208-230	1/2	940023 3" - 76 mm	513258 1221W120H6A17A
14940702	9S-DPLX	30" x 36" 76 cm x 91.4 cm	Structural Foam	Cast Iron		Steel	2" 51 mm	2" 51 mm	509203	115	4/10	940022 2" - 51 mm	513258 1221W120H6A17A
14940703	9S-DPLX	30" x 36" 76 cm x 91.4 cm	Structural Foam	Cast Iron		Steel	2" 51 mm	2" 51 mm	509217	208-230	4/10	940022 2" - 51 mm	513258 1221W120H6A17A
14940731	9S-DPLX	30" x 36" 76 cm x 91.4 cm	Structural Foam	Cast Iron		Steel	3" 76mm	3" 76mm	509226	115	4/10	940023 3" - 76 mm	513258 1221W120H6A17A
14940732	9S-DPLX	30" x 36" 76 cm x 91.4 cm	Structural Foam	Cast Iron		Steel	3" 76mm	3" 76mm	509227	208-230	4/10	940023 3" - 76 mm	513258 1221W120H6A17A
14940704	10S-DPLX	30" x 36" 76 cm x 91.4 cm	Structural Foam	Cast Iron		Steel	2" 51 mm	2" 51 mm	511328	208-230	1/2	940022 2" - 51 mm	513258 1221W120H6A17A
14940705	10S-DPLX	30" x 36" 76 cm x 91.4 cm	Structural Foam	Cast Iron		Steel	2" 51 mm	2" 51 mm	511328	208-230	1/2	940022 2" - 51 mm	513258 1221W120H6A17A
14940706	10S-DPLX	30" x 36" 76 cm x 91.4 cm	Structural Foam	Cast Iron		Steel	3" 76mm	3" 76mm	511344	115	1/2	940023 3" - 76 mm	513258 1221W120H6A17A
14940733	10S-DPLX	30" x 36" 76 cm x 91.4 cm	Structural Foam	Cast Iron		Steel	3" 76mm	3" 76mm	14940725	208-230	1/2	940023 3" - 76 mm	513258 1221W120H6A17A
14940707	14S-DPLX	30" x 36" 76 cm x 91.4 cm	Structural Foam	Cast Iron		Steel	2" 51 mm	2" 51 mm	514320	115	1/2	940022 2" - 51 mm	513258 1221W120H6A17A



## SERIES SPECIFICATIONS

## Pre-Packaged Duplex Systems (ready to install) [Continued]

Item No.	Model	Basin			Cover				Pump			Check Valve	Control Panel
		Size	Style	Inlet Hub Included	Style	Material	Vent	Discharge	Pump No	Pump Volts	Pump HP		
14940708	14S-DPLX	30" x 36" 76 cm x 91.4 cm	Structural Foam	Cast Iron		Steel	2" 51 mm	2" 51 mm	514320	208-240	1/2	940022 2" - 51 mm	513258 1221W120H6A17A
14940709	14S-DPLX	30" x 36" 76 cm x 91.4 cm	Structural Foam	Cast Iron		Steel	3" 76mm	3" 76mm	514420	115	1/2	940023 3" - 76 mm	513258 1221W120H6A17A
14940710	14S-DPLX	30" x 36" 76 cm x 91.4 cm	Structural Foam	Cast Iron		Steel	3" 76mm	3" 76mm	14940726	208-240	1/2	940023 3" - 76 mm	513258 1221W120H6A17A
14940711	16S-DPLX	30" x 36" 76 cm x 91.4 cm	Structural Foam	Cast Iron		Steel	3" 76mm	3" 76mm	514620	230	1	940023 3" - 76 mm	513258 1221W120H6A17A
14940712	20S-DLPLX	30" x 36" 76 cm x 91.4 cm	Structural Foam	Cast Iron		Steel	3" 76mm	3" 76mm	520100	208-230	2	940023 3" - 76 mm	513258 1221W120H6A17A
14940713	9S-DPLX	36" x 36" 91.4 cm x 91.4 cm	Structural Foam	Cast Iron		Steel	2" 51 mm	2" 51 mm	509203	115	4/10	940022 2" - 51 mm	513258 1221W120H6A17A
14940714	9S-DPLX	36" x 36" 91.4 cm x 91.4 cm	Structural Foam	Cast Iron		Steel	2" 51 mm	2" 51 mm	509217	208-230	4/10	940022 2" - 51 mm	513258 1221W120H6A17A
14940734	9S-DPLX	36" x 36" 91.4 cm x 91.4 cm	Structural Foam	Cast Iron		Steel	3" 76mm	3" 76mm	509226	115	4/10	940023 3" - 76 mm	513258 1221W120H6A17A
14940735	9S-DPLX	36" x 36" 91.4 cm x 91.4 cm	Structural Foam	Cast Iron		Steel	3" 76mm	3" 76mm	509227	208-230	4/10	940023 3" - 76 mm	513258 1221W120H6A17A
14940736	10S-DPLX	36" x 36" 91.4 cm x 91.4 cm	Structural Foam	Cast Iron		Steel	3" 76mm	3" 76mm	14940725	208-230	1/2	940023 3" - 76 mm	513258 1221W120H6A17A
14940715	10S-DPLX	36" x 36" 91.4 cm x 91.4 cm	Structural Foam	Cast Iron		Steel	2" 51 mm	2" 51 mm	511322	115	1/2	940022 2" - 51 mm	513258 1221W120H6A17A
14940716	10S-DPLX	36" x 36" 91.4 cm x 91.4 cm	Structural Foam	Cast Iron		Steel	2" 51 mm	2" 51 mm	511328	208-230	1/2	940022 2" - 51 mm	513258 1221W120H6A17A
14940717	10S-DPLX	36" x 36" 91.4 cm x 91.4 cm	Structural Foam	Cast Iron		Steel	3" 76mm	3" 76mm	511344	115	1/2	940023 3" - 76 mm	513258 1221W120H6A17A
14940718	14S-DPLX	36" x 36" 91.4 cm x 91.4 cm	Structural Foam	Cast Iron		Steel	2" 51 mm	2" 51 mm	514320	115	1/2	940022 2" - 51 mm	513258 1221W120H6A17A
14940719	14S-DPLX	36" x 36" 91.4 cm x 91.4 cm	Structural Foam	Cast Iron		Steel	2" 51 mm	2" 51 mm	514321	208-240	1/2	940022 2" - 51 mm	513258 1221W120H6A17A
14940720	14S-DPLX	36" x 36" 91.4 cm x 91.4 cm	Structural Foam	Cast Iron		Steel	3" 76mm	3" 76mm	514420	115	1/2	940023 3" - 76 mm	513258 1221W120H6A17A
14940737	14S-DPLX	36" x 36" 91.4 cm x 91.4 cm	Structural Foam	Cast Iron		Steel	3" 76mm	3" 76mm	14940726	208-240	1/2	940023 3" - 76 mm	513258 1221W120H6A17A
14940721	16S-DPLX	36" x 36" 91.4 cm x 91.4 cm	Structural Foam	Cast Iron		Steel	3" 76mm	3" 76mm	514620	230	1	940023 3" - 76 mm	513258 1221W120H6A17A
14940722	20S-DLPLX	36" x 36" 91.4 cm x 91.4 cm	Structural Foam	Cast Iron		Steel	3" 76mm	3" 76mm	520100	208-230	2	940023 3" - 76 mm	513258 1221W120H6A17A

## Basin &amp; Cover Assemblies - Duplex Systems (pump not included)

Item No.	Model	Basin			Cover				
		Size	Style	Inlet Hub Included	Style	Material	Flanges	Vent	Discharge
513129	BB2436CD2V2D	24" x 36" 61 cm x 91.4 cm	Structural Foam	Cast Iron Hub	1-Piece	Steel	Bolt-On	2" 51 mm	2" 51 mm
513130	BB2436CD3V2D	24" x 36" 61 cm x 91.4 cm	Structural Foam	Cast Iron Hub	1-Piece	Steel	Bolt-On	3" 76 mm	2" 51 mm
513148	BB3036CS2V2D	30" x 36" 76 cm x 91.4 cm	Structural Foam	Cast Iron Hub	1-Piece	Steel	Bolt-On	2" 51 mm	2" 51 mm
513149	BB3036CS3V2D	30" x 36" 76 cm x 91.4 cm	Structural Foam	Cast Iron Hub	1-Piece	Steel	Bolt-On	3" 76 mm	2" 51 mm
513150	BB3036CD2V3D	30" x 36" 76 cm x 91.4 cm	Structural Foam	Cast Iron Hub	1-Piece	Steel	Bolt-On	2" 51 mm	3" 76 mm
513151	BB3036CS3V3D	30" x 36" 76 cm x 91.4 cm	Structural Foam	Cast Iron Hub	1-Piece	Steel	Bolt-On	3" 76 mm	3" 76 mm
513117	BB3636CD3V2D	36" x 36" 91.4 cm x 91.4 cm	Fiberglass	Cast Iron Hub	1-Piece	Steel	Bolt-On	3" 76 mm	2" 51 mm
513118	BB3636CD3V3D	36" x 36" 91.4 cm x 91.4 cm	Fiberglass	Cast Iron Hub	1-Piece	Steel	Bolt-On	3" 76 mm	3" 76 mm
513125	BB3636CD2V2D	36" x 36" 91.4 cm x 91.4 cm	Fiberglass	Cast Iron Hub	1-Piece	Steel	Bolt-On	2" 51 mm	2" 51 mm
513126	BB3636CS2V3D	36" x 36" 91.4 cm x 91.4 cm	Fiberglass	Cast Iron Hub	1-Piece	Steel	Bolt-On	2" 51 mm	3" 76 mm

### SERIES SPECIFICATIONS

Hub kits come complete with all hardware required for installation.

#### Hub Kits for 18" (46 cm) Dia. Basins

Item No.	Model
113072	4" vinyl hub
113073	4" cast iron hub
113077	6" cast iron hub
113084	4" cast iron hub for 18" fiberglass basin

\* No pre-cut hub hole

#### Hub Kits for 24" (61 cm) Dia. Basins

Item No.	Model
113074	4" cast iron hub
113078	6" cast iron hub

#### Hub Kits for 30" (76 cm) Dia. Basins

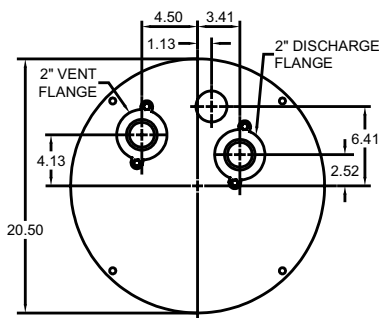
Item No.	Model
113075	4" cast iron hub
113079	6" cast iron hub

#### Hub Kits for 36" (91.4 cm) Dia. Basins

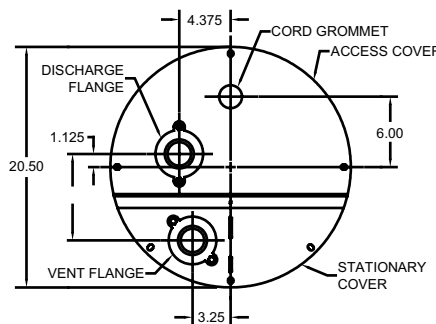
Item No.	Model
113076	4" vinyl hub
113080	6" cast iron hub
113081	8" cast iron hub

### ENGINEERING DATA

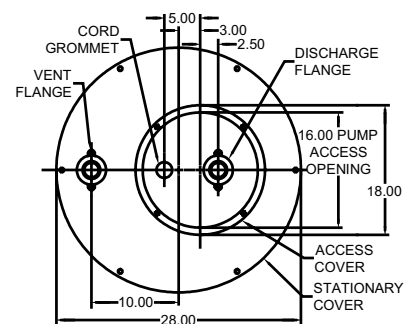
18" x 30" Cover



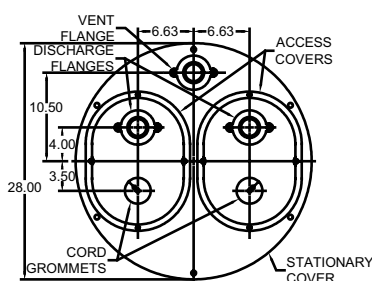
18" x 30" Cover



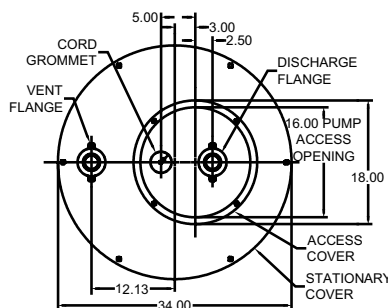
24" x 36" Simplex Cover



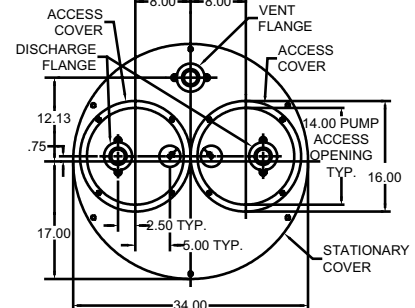
24" x 36" Duplex Cover



30" x 36" Simplex Cover

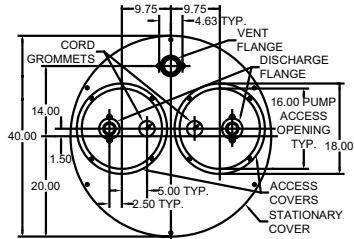


30" x 36" Duplex Cover

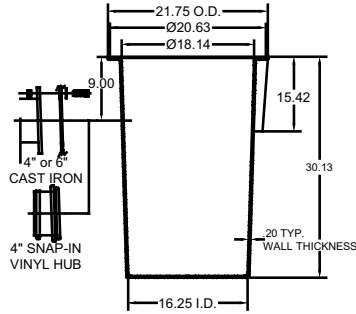


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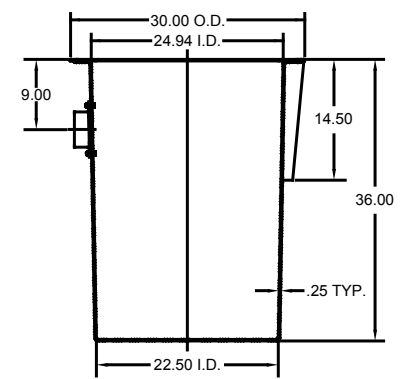
30" x 36" Duplex Cover



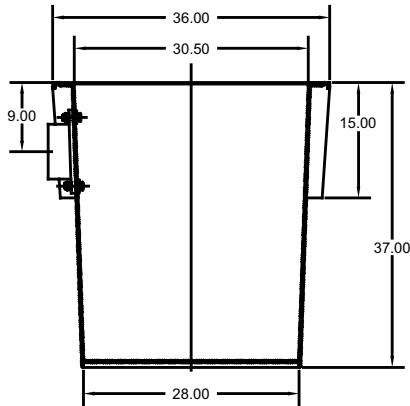
18" x 30" Basin



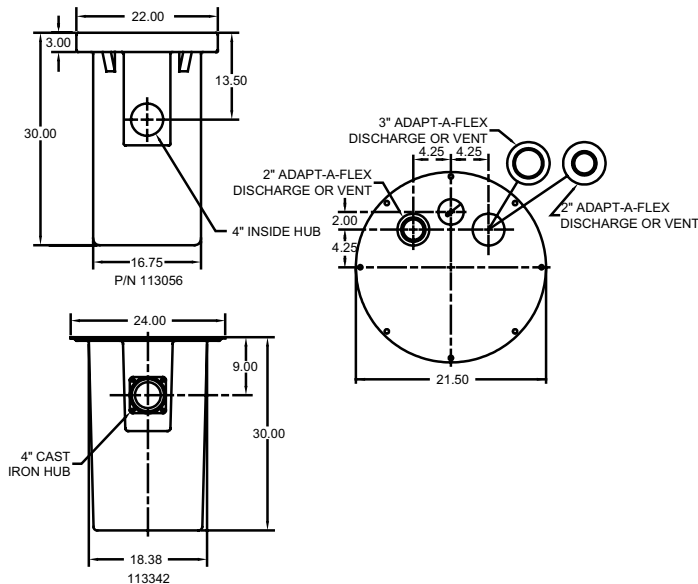
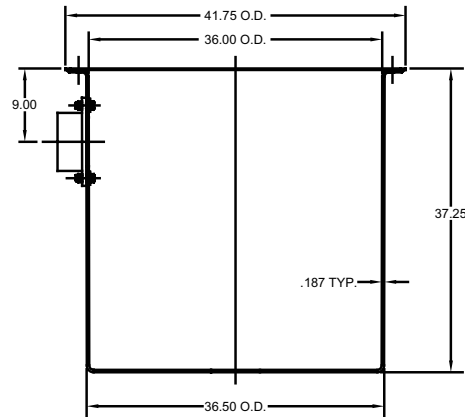
24" x 36" Basin



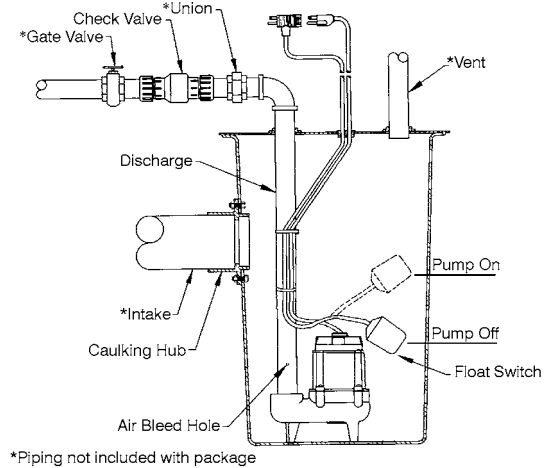
30" x 36" Basin



36" x 36" Duplex Basin



Typical Installation



## APPLICATIONS

- Collection of sewage, effluent, drainage or seepage water

## FEATURES

- Pre-packaged 20" x 30" (51 mm x 76 mm) polyethylene basin with 4/10 hp sewage pump
- Handles up to 2"(51 mm) solids
- Options of structural foam or steel covers
- Includes schedule 40 PVC discharge piping with pre-drilled air-bleed hole
- Designed with side outlets for discharge and electrical cords
- Includes 2" (51 mm) bulkhead fitting to easily route power cords out of basin
- Once installed, no digging required for system servicing
- cCSAus listed pump only



## SERIES SPECIFICATIONS

Item No.	Model	Basin Size	Cover	Pump HP	Pump Performance
509081	WCR-9SP	2" or 3" 51 mm or 76 mm	Structural Foam	4/10	110 gpm @ 5' 416.4 lpm @ 1.5 m
509082	WCR-9SS	2" or 3" 51 mm or 76 mm	Steel	4/10	110 gpm @ 5' 416.4 lpm @ 1.5 m

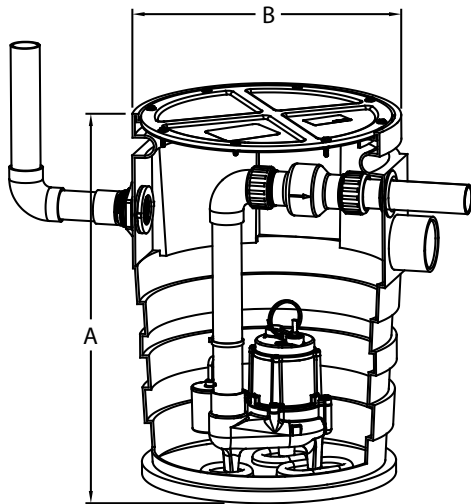
Item No.	Model	Discharge	Check Valve	Cover	Pump HP	Volts	Pump Performance	Weight
509081	WCR-9SP	2" 51 mm	2" Slip x Slip	Structural Foam	4/10	115	110 gpm @ 5' 416.4 lpm @ 1.5 m	65 lbs 29.5 kg
509082	WCR-9SS	2" 51 mm	2" Slip x Slip	Steel	4/10	115	110 gpm @ 5' 416.4 lpm @ 1.5 m	69 lbs 29.5 kg

## PUMP SPECIFICATIONS

Volts	Hz	Amps		Watts	Performance (GPM @ Height in Feet)			Shut-Off (ft)	PSI
		FLA	Start		5'	10'	15'		
115	60	8.5	17	850	110	70	30	20	8.7
208/230	50/60	4	7.5	800	110	70	30	20	8.7

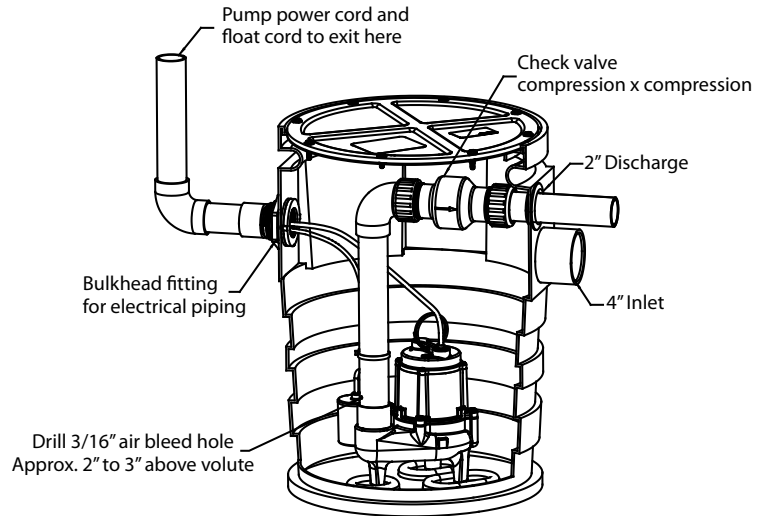
Item No.	Model	HP	Volts	Switch Type/ Operation	On Level	Off Level	Cord	Weight
509228	9SN-CIA-SFS	4/10	115	Integral Snap-Action Float	9" - 12" 22.26 cm - 30.48 cm	3" - 6" 7.62 cm - 15.24 cm	20' 6.1 m	35.5 lbs 16.1 Kg
509204	9SN-CIA-RF	4/10	115	Piggyback Mechanical Float	9" - 14" 22.86 cm - 35.56 cm	2" - 6" 5 cm - 15.24 cm	20' 6.1 m	35.5 lbs 16.1 Kg
509215	9SN-CIA-RF	4/10	115	Piggyback Mechanical Float	9" - 14" 22.86 cm - 35.56 cm	2" - 6" 5 cm - 15.24 cm	20' 6.1 m	35.5 lbs 16.1 Kg
509226	9SN-CIM	4/10	115	Manual	-	-	20' 6.1 m	35.5 lbs 16.1 Kg
509203	9SN-CIM	4/10	115	Manual	-	-	20' 6.1 m	34.5 lbs 15.65 Kg
509217	9SN-CIM	4/10	208-230	Manual	-	-	20' 6.1 m	36 lbs 16.33 Kg
509227	9SN-CIM	4/10	208-230	Manual	-	-	20' 6.1 m	36 lbs 16.33 Kg

ENGINEERING DATA

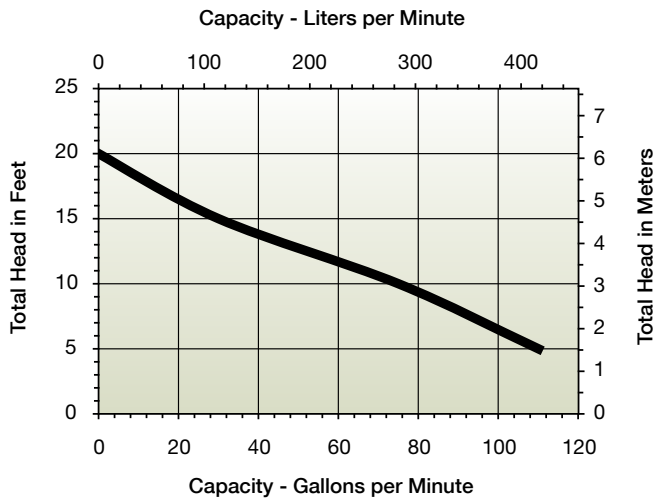



A	B
30"	22"
76.2 cm	55.88 cm

Typical Installation



PERFORMANCE DATA





# GRINDER PUMP

If you have an application with high head conditions or difficult soil topography... Little Giant grinder pumps are designed with over 414,000 cuts per minute and a shut-off of 130'. These pumps are equipped to handle the demands of grinding domestic sewage whether as a replacement pump or a packaged system...another trusted, reliable product for a tough, demanding job.



PS

### APPLICATIONS

- Low pressure sewer applications
- Sewage wastewater transfer for light commercial or residential applications

### FEATURES

- Patented cutting system providing tight cutting clearances for superior cutting action grinding 414,000 cuts per minute
- Single-phase, capacitor start/run motor with built-in overload protection against over-current and over-temperature damage
- Brass 7-vane, angled face, non-clogging and balanced designed impeller
- Case hardened to 60 HRc 440 stainless steel cutter system
  - Anti-ropeing design
  - Field replaceable
- Upper and lower ball bearings
- 140 °F (60 °C) liquid temperature rating
- GP-M grinder pumps require control panel or capacitor kit specifically matched to pump for proper operation and third-party approvals
- Compact and easier to lift only 75 lbs (34 kg)



### SERIES SPECIFICATIONS

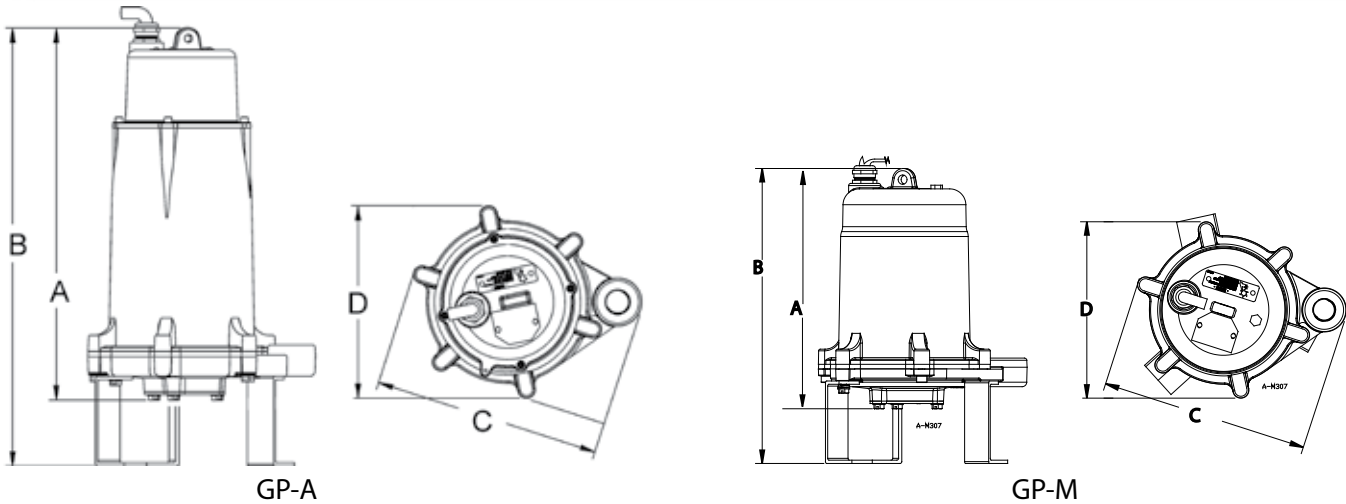
Volts	Hz	Amps		Watts	Performance (GPM @ Height in Feet)						Shut-Off (ft)	PSI
		FLA	Start		20'	40'	60'	80'	100'	120'		
208	60	13.9	68	3200	32	31	30	25	20	10	130	56
230	60	13.9	65	3200	32	31	30	25	20	10	130	56

Item No.	Model	HP	Volts	Switch Type/ Operation	On Level	Off Level	Cord	Weight
520885	GP-A201-20	2	208	Piggyback Mechanical Float (no panel required)	23" - 25" 58.4 cm - 63.5 cm	9" - 11" 23 cm - 28 cm	20' 6.1 m	100 lbs 45.63 Kg
520875	GP-A231-20	2	230	Piggyback Mechanical Float (no panel required)	23" - 25" 58.4 cm - 63.5 cm	9" - 11" 23 cm - 28 cm	20' 6.1 m	100 lbs 45.63 Kg
**520877	GP-A231-20	2	230	-	-	-	20' 6.1 m	100 lbs 45.63 Kg
520874	GP-A231-30	2	230	Piggyback Mechanical Float (no panel required)	23" - 25" 58.4 cm - 63.5 cm	9" - 11" 23 cm - 28 cm	30' 9.1 m	104 lbs 47.17 Kg
520884	GP-A201-30	2	208	Piggyback Mechanical Float (no panel required)	23" - 25" 58.4 cm - 63.5 cm	9" - 11" 23 cm - 28 cm	30' 9.1 m	104 lbs 47.17 Kg
520855	GP-M201-15	2	208	Manual	-	-	15' 4.6 m	82 lbs 37.19 Kg
520865	GP-M231-15	2	230	Manual	-	-	15' 4.6 m	81 lbs 36.74 Kg
520879	GP-M231-30	2	230	Manual	-	-	30' 9.1 m	81 lbs 36.74 Kg

\*\*No float or leg kit, no panel required

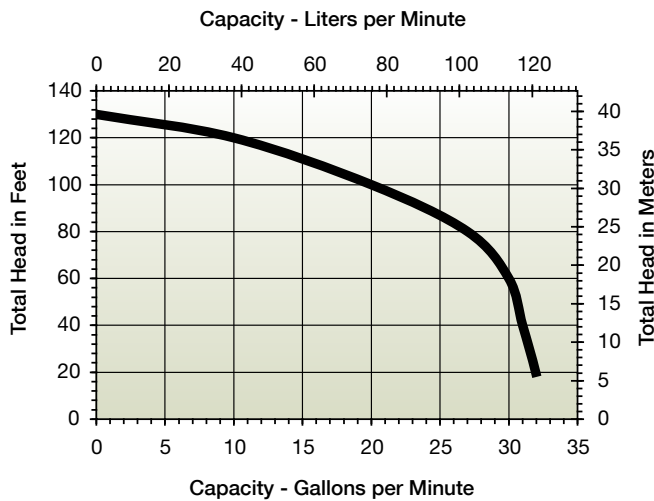


ENGINEERING DATA



Model	A	B	C	D
GP-A	18.61" 47.57 cm	21.56" 54.76 cm	11.5" 29.21 cm	9.63" 24.46 cm
GP-M	16.4" 41.66 cm	13.1" 33.27 cm	11.5" 29.21 cm	9.63" 24.46 cm

PERFORMANCE DATA



CONSTRUCTION

Motor Cover	Cast iron with epoxy coating
Motor Cover O-Ring	Nitrile
Motor Design	Single-phase, capacitor start, capacitor run
Insulation Class	F
Overload Protection	Internal, on winding thermal protector
Motor Shaft	AISI 300 series stainless steel
Ball Bearing-Upper	Single row ball, 6203
Ball Bearing-Lower	Single row ball, 6306
Seal Housing	Cast iron with epoxy coating
Mechanical Seal	Carbon/ceramic
Volute	Cast iron with epoxy coating
Impeller	Brass
Rotating Cutter	2 blade design, AISI 440C stainless steel, through-hardened to Rockwell 55-60C
Stationary Cutter	AISI 440C stainless steel, hardened to Rockwell 55-60C
External Hardware	300 series stainless steel
Power Cable	Type SOW or SOW 14/3 AWG

Spec Sheet 996569

### APPLICATIONS

- Low pressure sewer applications
- Sewage wastewater transfer for light commercial or residential applications

### FEATURES

#### PACKAGE SYSTEMS

- Pre-assembled with stainless steel rail system with sealing flange, discharge pipe disconnect, three pre-set control float switches, stainless steel lifting chain, junction box, ball check valve, and shut-off valve
- Includes GP series 2 hp grinder pump (installed in field), grinder control panel/alarm with starting component matched to grinder motor
- Cover structural foam



### SERIES SPECIFICATIONS

#### Simplex Grinder Package System\*\*

Item No.	Model	Basin		
		Size	Style	Description
520827	GP-SMPX2460	24" x 60" 61 cm x 152.4 cm	Fiberglass	BS2460FG
520828	GP-SMPX2472	24" x 72" 61 cm x 183 cm	Fiberglass	BS2472FG
520829	GP-SPMX2484	24" x 84" 61 cm x 213.4 cm	Fiberglass	BS2484FG

\*\*Multiple Grinder Package configurations and Basin/Cover assemblies available. Please call 1.800.701.7894 for information on additional package specifications not shown here.

#### Pumps

Item No.	Model	Volts
520865	GP-M231-15	230
520855	GP-M201-15	208

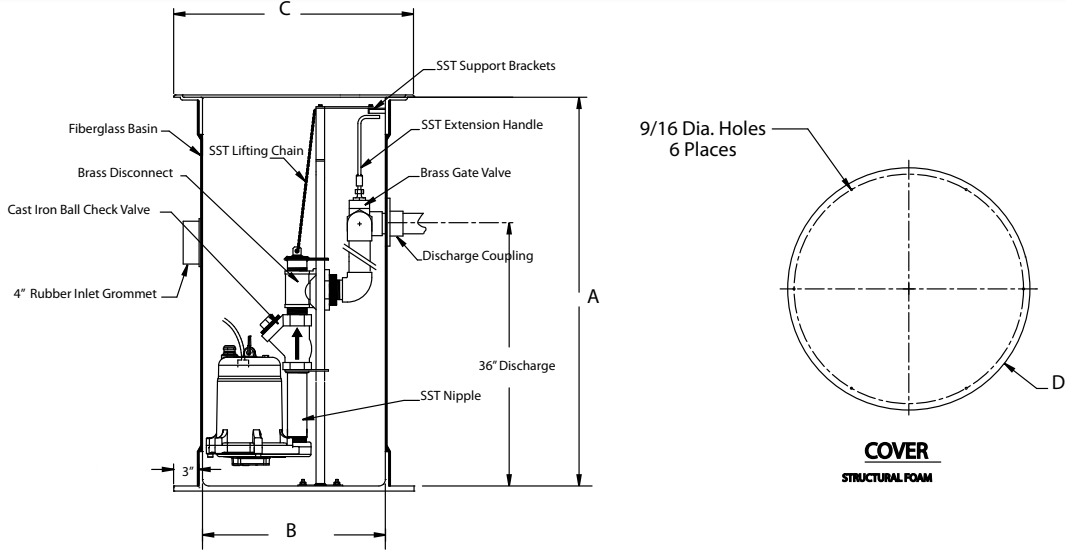
#### Control Panel

Item No.	Model	Volts
513374	MGP-1C18-2	208/230

#### Control Floats

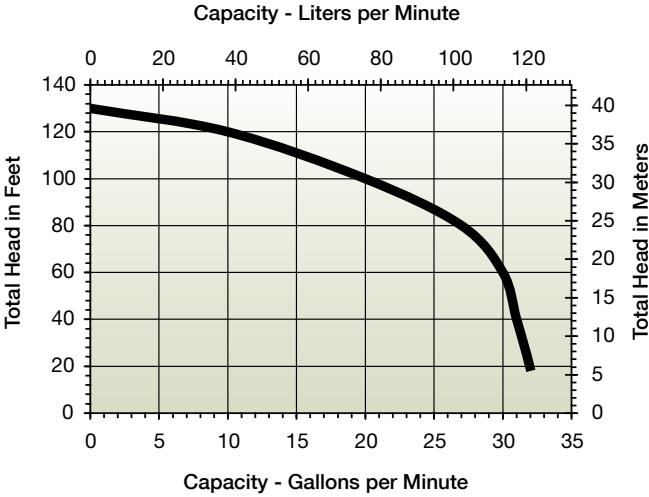
Item No.	Model	Volts
950266	CFSS	115/230

**ENGINEERING DATA**



Model	A	B	C	D
GP-SMPX2460	60" 152.4 cm	24" 60.96 cm	30" 76.2 cm	28" 71.12 cm
GP-SMPX2472	72" 182.88 cm	24" 60.96 cm	30" 76.2 cm	28" 71.12 cm
GP-SPMX2484	84" 213.36 cm	24" 60.96 cm	30" 76.2 cm	28" 71.12 cm

**PUMP PERFORMANCE DATA**



### APPLICATIONS

- Low pressure sewer applications
- Sewage wastewater transfer for light commercial or residential applications

### FEATURES

#### PACKAGE SYSTEMS

- Two cast iron ball check valves
- Control panel with integral pump starting components
- Four control float switches
- Stainless steel float bracket
- Junction box
- Basins are heavy-duty fiberglass material. Duplex basins are 36" diameter, and are available in 48", 60", 72", 84", 96", 108", and 120" depths
- 4" Adapt-A-Flex inlet hub
- Solid fiberglass cover, stainless steel rail system with sealing flange, discharge pipe disconnect, stainless steel lifting chain, ball check valve, and shut-off valve
- Easy-to-follow installation instructions



### SERIES SPECIFICATIONS

#### Duplex Grinder Package System\*\*

Item No.	Model	Basin		
		Size	Style	Description
520760	GP-DPLX3648	36" x 48" 91.4 cm x 121.9 cm	Fiberglass	BS3648FG
520761	GP-DPLX3660	36" x 60" 91.4 cm x 152.4 cm	Fiberglass	BS3660FG
520762	GP-DPLX3672	36" x 72" 91.4 cm x 182.9 cm	Fiberglass	BS3672FG
520763	GP-DPLX3684	36" x 84" 91.4 cm x 213.4 cm	Fiberglass	BS3684FG
520764	GP-DPLX3696	36" x 96" 91.4 cm x 243.8 cm	Fiberglass	BS3696FG
520765	GP-DPLX36108	36" x 108" 91.4 cm x 274.3 cm	Fiberglass	BS36108FG
520766	GP-DPLX36120	36" x 120" 91.4 cm x 304.8 cm	Fiberglass	BS36120FG
520840	GP-DPLX3648	36" x 48" 91.4 cm x 121.9 cm	Fiberglass	BS3648FG
520841	GP-DPLX3660	36" x 60" 91.4 cm x 152.4 cm	Fiberglass	BS3660FG
520842	GP-DPLX3672	36" x 72" 91.4 cm x 182.9 cm	Fiberglass	BS3672FG
520843	GP-DPLX3684	36" x 84" 91.4 cm x 213.4 cm	Fiberglass	BS3684FG
520844	GP-DPLX3696	36" x 96" 91.4 cm x 243.8 cm	Fiberglass	BS3696FG
520845	GP-DPLX36108	36" x 108" 91.4 cm x 274.3 cm	Fiberglass	BS36108FG
520846	GP-DPLX36120	36" x 120" 91.4 cm x 304.8 cm	Fiberglass	BS36120FG

\*\*Multiple Grinder Package configurations and Basin/Cover assemblies available. Please call 1.800.701.7894 for information on additional package specifications not shown here.

#### Pumps

Item No.	Model	Volts
520865	GP-M231-15	230
520855	GP-M201-15	208

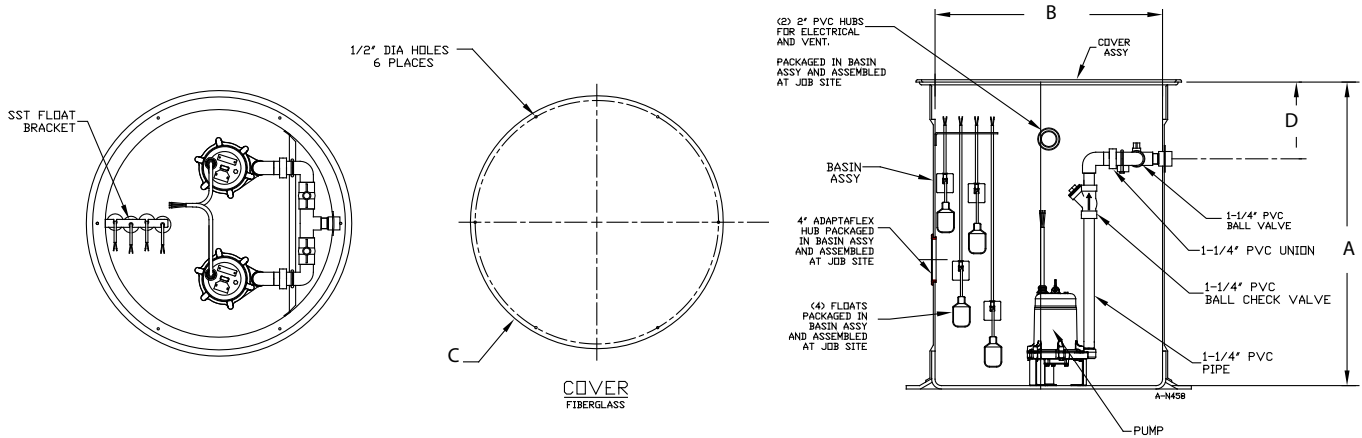
#### Control Panel

Item No.	Model	Volts
513375	MGPD-1C18	208/230

#### Control Floats

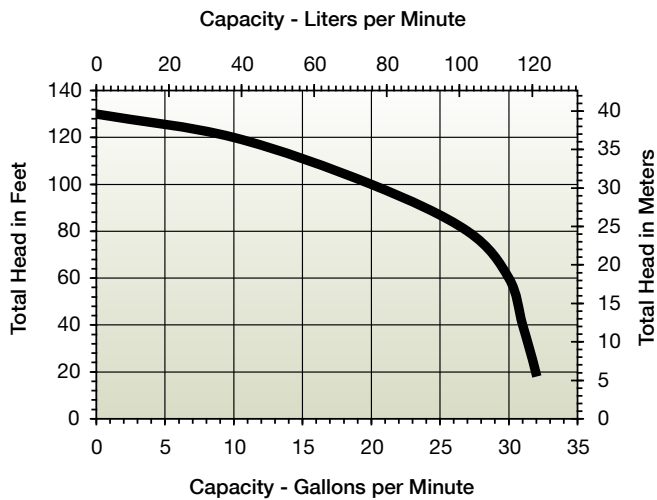
Item No.	Model	Volts
950266	CFSW	115/230

## ENGINEERING DATA



Model	A	B	C	D
GP-DPLX3648	48" 122 cm	12" 30.48 cm	42" 106.6 cm	40" 101.6 cm
GP-DPLX3660	60" 152.4 cm	36" 91.44 cm	42" 106.6 cm	40" 101.6 cm
GP-DPLX3672	72" 182.88 cm	36" 91.44 cm	42" 106.6 cm	40" 101.6 cm
GP-DPLX3684	84" 213.36 cm	36" 91.44 cm	42" 106.6 cm	40" 101.6 cm
GP-DPLX3696	96" 243.8 cm	36" 91.44 cm	42" 106.6 cm	40" 101.6 cm
GP-DPLX36108	108" 274.3 cm	48" 121.92 cm	42" 106.6 cm	40" 101.6 cm
GP-DPLX36120	120" 304.8 cm	48" 121.92 cm	42" 106.6 cm	40" 101.6 cm

## PUMP PERFORMANCE DATA



# GRINDER PUMPS

## SIMPLEX HARD PIPED PACKAGES

### APPLICATIONS

- Low pressure sewer applications
- Sewage wastewater transfer for light commercial or residential applications

### FEATURES

- Fiberglass basin comes configured with hard pipe installation
- 1-1/4" SCH 80 PVC check valve and ball valve
- SCH 80 PVC discharge piping with union disconnect
- 4" Adapt-A-Flex inlet hub
- Cover is ribbed structural foam and green in color to blend with terrain
- 1-1/4" FNPT discharge flange factory installed
- 2 hp GP Series automatic grinder pump eliminates the need for a control panel



### SERIES SPECIFICATIONS

#### Simplex Grinder Hard Piped Package System\*\*

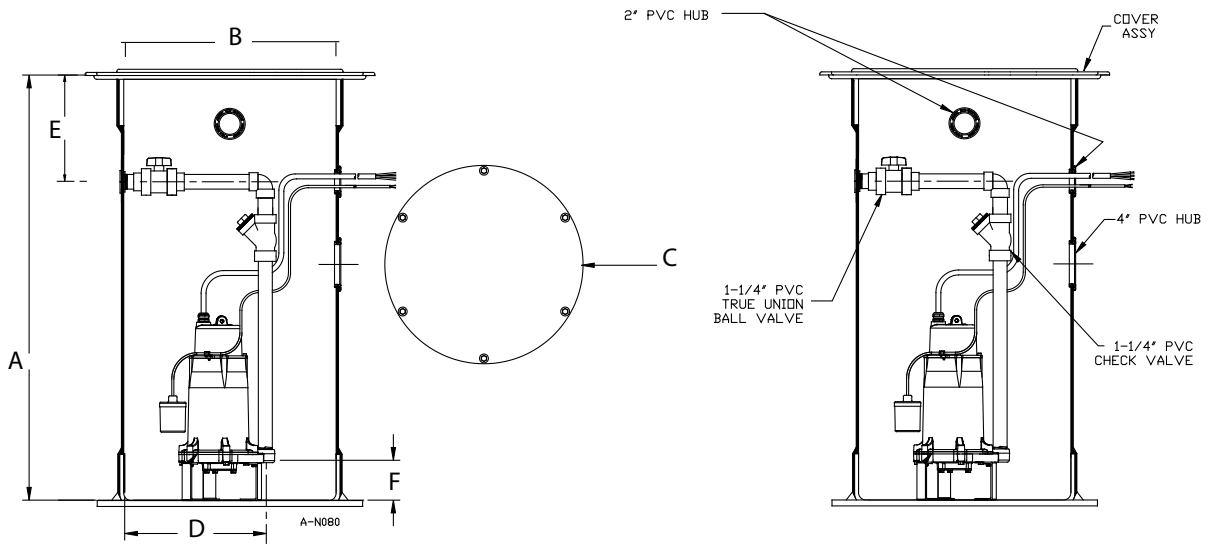
Item No.	Model	Basin		
		Size	Style	Description
520824	GP-SMPXFG-HP	24" x 48" 61 cm x 122 cm	Fiberglass	BS2448FGHP
520825	GP-SMPXFG-HP	24" x 60" 61 cm x 152.4 cm	Fiberglass	BS2460FGHP
520826	GP-SMPXFG-HP	24" x 72" 61 cm x 182.9 cm	Fiberglass	BS2472FGHP

\*\*Multiple Grinder Package configurations and Basin/Cover assemblies available. Please call 1.800.701.7894 for information on additional package specifications not shown here.

#### Pump

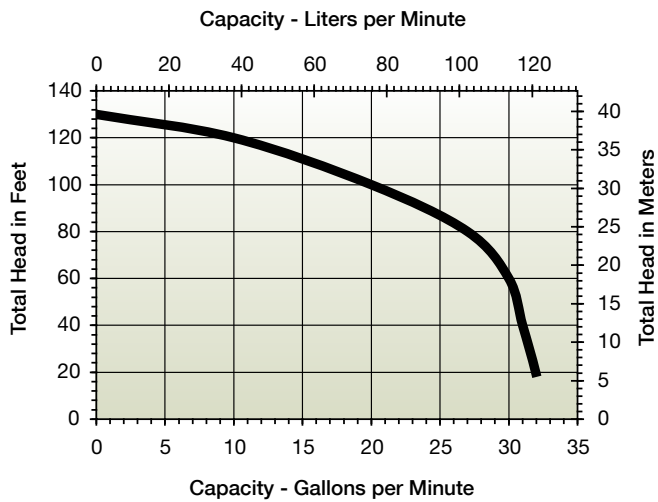
Item No.	Model	Volts
520875	GP-A231-20	230

## ENGINEERING DATA



Model	A	B	C	D
BS2448FG-HP	48" 122 cm	24" 60.96 cm	28" 71.2 cm	12" 30.48 cm
BS-2460FG-HP	60" 152.4 cm	24" 60.96 cm	28" 71.2 cm	24" 60.96 cm
BS2472FG-HP	72" 182.88 cm	24" 60.96 cm	28" 71.2 cm	36" 91.44 cm

## PERFORMANCE DATA



# GRINDER PUMPS

## DUPLEX HARD PIPED PACKAGES

### APPLICATIONS

- Low pressure sewer applications
- Sewage wastewater transfer for light commercial or residential applications

### FEATURES

- Solid fiberglass cover with non-skid surface and green in color to blend with terrain
- Basin comes configured with hard pipe installation
- 4" Adapt-A-Flex inlet hub
- 1-1/4" FNPT discharge flange factory installed
- Control panel with integral pump starting components
- Four weighted control floats
- 2 hp GP Series sewage grinder pumps



### SERIES SPECIFICATIONS

#### Duplex Grinder Hard Piped Package System\*\*

Item No.	Model	Basin		
		Size	Style	Description
520767	GP-DPLXFG-HP	36" x 48" 61 cm x 122 cm	Fiberglass	BS3648FGHP
520847	GP-DPLXFG-HP	36" x 48" 61 cm x 122 cm	Fiberglass	BS3648FGHP

\*\* Multiple Grinder Package configurations and Basin/Cover assemblies available. Please call 1.800.701.7894 for information on additional package specifications not shown here.

#### Pump

Item No.	Model	Volts
520855	GP-M201-15	208
520865	GP-M231-15	230

#### Control Panel

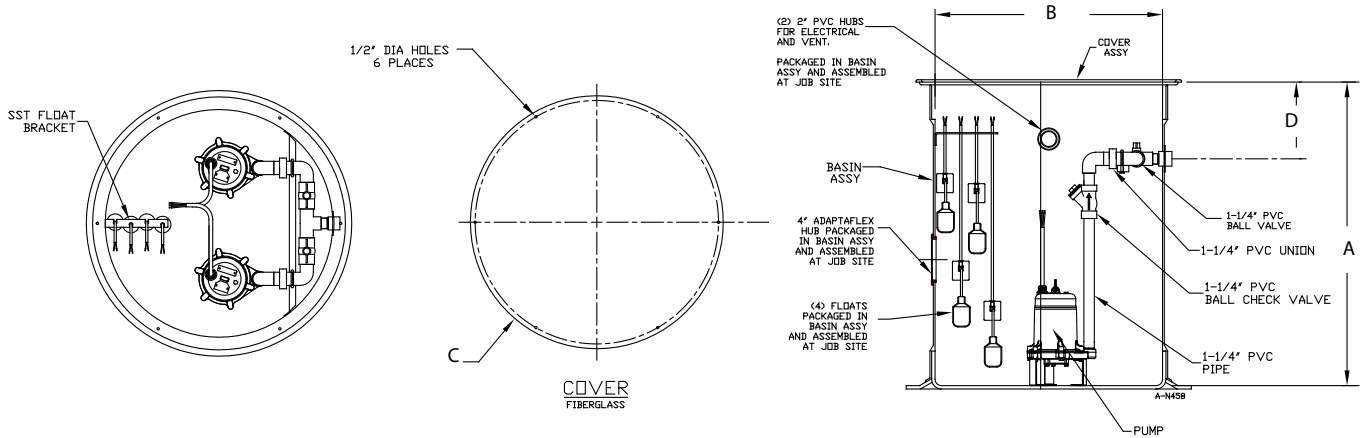
Item No.	Model	Volts
513375	MGPD-1C18	208/230

#### Floats

Item No.	Model	Volts
950266	CFSW	115/230

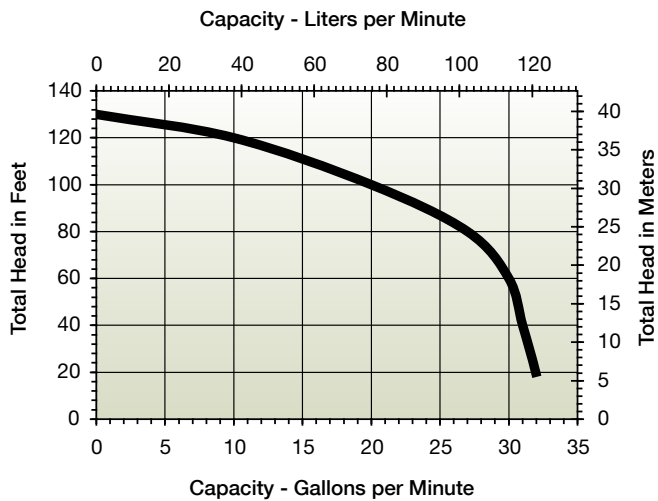


## ENGINEERING DATA



Model	A	B	C	D
GP-DPLX3648	48" 122 cm	36" 91.44 cm	40" 101.6 cm	18" 45.72 cm
GP-DPLX3660	48" 122 cm	36" 91.44 cm	40" 101.6 cm	18" 45.72 cm

## PUMP PERFORMANCE DATA



### APPLICATIONS

- Low pressure sewage
- Direct simplex replacement grinder for positive displacement grinder systems

### FEATURES

- Patented cutting system providing tight cutting clearances for superior cutting action grinding 414,000 cuts per minute
- Rigid construction for ease of handling
- Fast, simple, and easy installation
- Epoxy-coated steel cover
- Water-tight junction box for ease of installation
- 2 hp 3450 rpm, high starting torque, automatic grinder pump with mechanical float switch
- Higher head capability to cover more applications
- 1-1/4" cast iron anti-siphon/check valve
- 1-1/4" NPT piping
- Telescoping discharge (520835 only)
- Adjustable alarm float switch preset at factory
- Quick disconnect plug

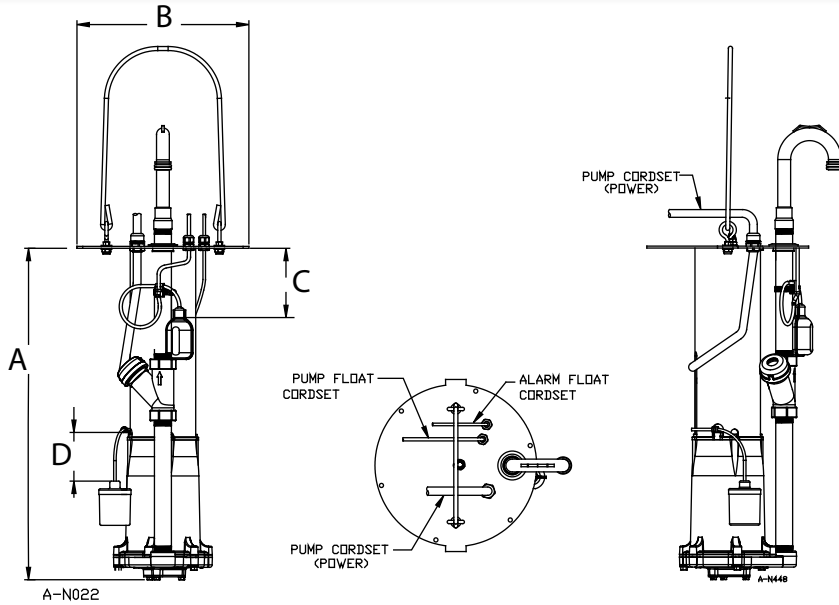


### SERIES SPECIFICATIONS

Volts	Hz	Amps		Watts	Performance (GPM @ Height in Feet)					Shut-Off (ft)	PSI
		FLA	Start		40'	60'	80'	100'	120'		
230	60	13.9	65	3200	31	30	25	20	10	130	56

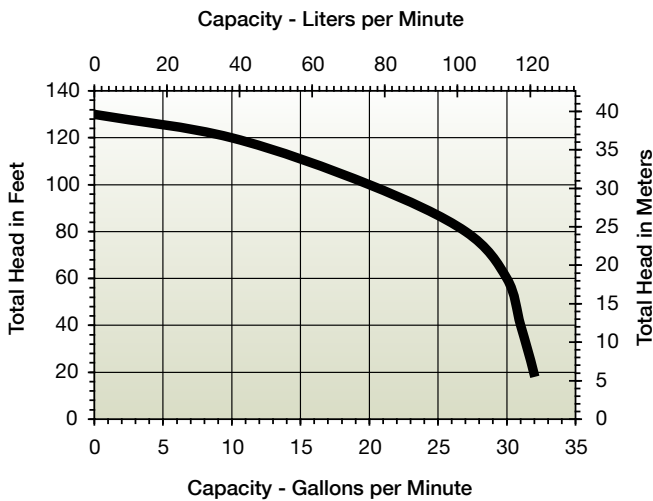
Item No.	Model	Volts	Switch Type/ Operation	On Level	Off Level	Cord	Weight
520835	GP-A-RFK	230	Piggyback Mechanical Float	23" - 25" 58.4 cm - 63.5 cm	9" - 11" 23 cm - 28 cm	20' 6.1 m	135 lbs 61.23 Kg
520836	GP-A-RFKT	230	Piggyback Mechanical Float	23" - 25" 58.4 cm - 63.5 cm	9" - 11" 23 cm - 28 cm	20' 6.1 m	135 lbs 61.23 Kg

## ENGINEERING DATA



Model	A	B	C	D
520835/ 520836	32.27" 81.97 cm	16.75" 42.55 cm	6.5" 16.51 cm	8" 20.30 cm

## PERFORMANCE DATA



## CONSTRUCTION

<b>Motor Cover</b>	Cast iron with epoxy coating
<b>Motor Cover O-Ring</b>	Nitrile
<b>Motor Design</b>	Single-phase, capacitor start, capacitor run
<b>Insulation Class</b>	F
<b>Overload Protection</b>	Internal, on winding thermal protector
<b>Motor Shaft</b>	AISI 300 series stainless steel
<b>Ball Bearing-Upper</b>	Single row ball, 6203
<b>Ball Bearing-Lower</b>	Single row ball, 6306
<b>Seal Housing</b>	Cast iron with epoxy coating
<b>Mechanical Seal</b>	Carbon/ceramic
<b>Volute</b>	Cast iron with epoxy coating
<b>Impeller</b>	Brass
<b>Rotating Cutter</b>	Multi-blade design, AISI 440C stainless steel, through-hardened to Rockwell 55-60C
<b>Stationary Cutter</b>	AISI 440C stainless steel, hardened to Rockwell 55-60C
<b>Power Cable</b>	Type SOOW or SOW 14/3 AWG

## PIGGYBACK MECHANICAL FLOAT SWITCH

### APPLICATIONS

- Residential sewage waste transfer

### FEATURES

- RFSN-6, RFSN-9, and RFSN-10 convert any manual pump, up through 1/2 hp (115 V) or 1 hp (230 V)
- RFSN-16 and RFSN-20 convert any manual pump, up through 3/4 hp (115 V), or 2 hp (230 V)
- UL and CSA listing



Item No.	Model	Volts	Max. Amps	Cord
599118	RFSN-6	115/230	13	10' 3 m
599117	RFSN-9	115/230	13	15' 4.6 m
599128	RFSN-9	208/230	13	15' 4.6 m
599210	RFSN-10	115/230	13	20' 6 m
599119	RFSN-10	115/230	13	20' 6 m
599211	RFSN-16	115/230	15	20' 6 m
599318	RFSN-20	125/230	20	20' 3 m (w/o plug)

## PIGGYBACK MECHANICAL VERTICAL FLOAT SWITCH

### APPLICATIONS

- Residential sewage waste transfer

### FEATURES

- Converts any manual pump, up through 1/2 hp (115 V) or 1 hp (230 V)
- Adjustable pumping range from 6.5" (16.5 cm) to .75" (1.9 cm)
- Designed for use in confined areas
- Not sensitive to turbulence
- UL/CSA listing



Item No.	Model	Volts	Max. Amps	Cord
599261	RVMS-10	115/230	13	10' 3 m
599262	RVMS-15	115/230	13	15' 4.6 m
599263	RVMS-20	115/230	13	20' 6 m

## PIGGYBACK DIAPHRAGM SWITCH

### APPLICATIONS

- Converts manual pumps to automatic operation

### FEATURES

- RS-5 converts any manual pump, up through 1/2 hp (115 V)
- RS-5-LL (low level) converts any manual pump, up through 1/3 hp (115 V)
- UL and CSA listing (115 V models only)



Item No.	Model	Volts	Max. Amps	Cord	Mounted to 5-MSP pump	
					On Level	Off Level
599008	RS-5	115	10	10' 3 m	6" - 9" 15.2 cm - 23 cm	1" - 4" 2.5 cm - 10.2 cm
599009	RS-5	115	10	18' 5.5 m		
599010	RS-5	230	10	8' 2.4 m (w/o plug)		
599014	RS-5LL	115	10	18' 5.5 m	2" - 3" 5 cm - 7.6 cm	1/2" - 1-1/2" 1.27 cm - 3.8 cm
599019	RS-5LL	115	10	25' 7.6 m		

**DOUBLE-FLOAT PIGGYBACK MECHANICAL FLOAT SWITCH**



**APPLICATIONS**

- Pump control

**FEATURES**

- Controls pumps up to 1 hp (120 V) and 2 hp (230 V)
- Adjustable pumping range of 1.75" (4.4 cm) to 48" (122 cm)
- Consists of two floats, one of which contains a holding relay, enabling the floats to function in series
- and CSA listing

Item No.	Model	Volts	Max. Amps
14940410	15DFMMD1WP	115	13
14940411	15DFMMD2WOP	230 (w/o plug)	13

**VERTICAL DIAPHRAGM SWITCH**



**APPLICATIONS**

- For automatic control of a pump in water and sewage effluent applications

**FEATURES**

- Designed to operate in applications with limited space, such as small sump chambers
- These models feature either a 6" (15.2 cm) or 10" (25.4 cm) pumping range, max 1/2 hp, 13 amps
- UL and CSA listing

Item No.	Model	Volts	Cord	Pumping Range
599188	EDS-6-1-10	115	10' 3 m	6" 15.2 mm
599190	EDS10-1-10	115	10' 3 m	10" 25.4 mm
599166	VDS1506	115	15' 4.6 m	6" 15.2 mm
599169	VDS1510	115	15' 4.6 m	10" 25.4 mm
599167	VDS2010	115	20' 6 m	10" 25.4 mm

**SUMP PUMP SWITCH REPAIR KIT**



**APPLICATIONS**

- Switch repair kit

**FEATURES**

- Includes pressure switch bracket assembly, screw, diaphragm, and O-ring

Item No.	Model	Volts	Housing
599300	SPRK-1	6-CIA, 8-CIA, and 8-CBA	√
599310	SPRK-1-ML	6-CIA-ML (used in WRSC-6)	√
599320	SPRK-2	5-ASP, 6-CIA, 8-CIA, and 8-CBA	–
599314	SPRK-2-ML	6-CIA-ML (used in WRSC-6)	–
599350	SPRK-3	10-CIA and 12-CBA	–

**SUMP PUMP DISCHARGE KITS**



**APPLICATIONS**

- Discharging water out of the basement sump

**FEATURES**

- Kit works with all types of sump pumps
- Kit includes 1-1/4" x 24' (31.7 mm x 7.3 m) corrugated polyethylene hose, ABS threaded 1-1/2" MNPT (38 mm) x 1-1/4" (31.7 mm) barbed adapter and 1-1/4" MNPT (31.7 mm) x 1-1/4" (31.7 mm) barbed adapter and galvanized steel clamp

Item No.	Model	NPT
599303	SPDK	1-1/4" 31.7 mm
		1-1/2" 38 mm

### HWAB ALARM



#### APPLICATIONS

- Indoor high water alarm

#### FEATURES

- NEMA 1 thermoplastic enclosure
- Mechanical float switch with 15' (4.6 m) cable
- Alarm has red LED warning light, horn with silence switch, and test button
- 9 VDC battery backup
- UL and CSA listing

Item No.	Model	Volts	Cord
513288	HWAB	115	6' 1.83 m

### 303HWXT ALARM



#### APPLICATIONS

- Indoor/outdoor high water alarm

#### FEATURES

- Type 3R watertight thermoplastic enclosure
- Mechanical float switch with 15' (4.6 m) cable
- Alarm has red warning light, horn with silence switch, and test button
- Includes pre-mounted terminal block so enclosure can also be used as a junction box
- UL and CSA listing

Item No.	Model	Volts
513273	303HWXT	115

### INDOOR DUPLEX PUMP CONTROL ALTERNATOR AND ALARM SYSTEM



#### APPLICATIONS

- Switch repair kit

#### FEATURES

- Easy-to-install, NEMA 1, 3/4 hp device
- Low-cost alternative to conventional duplex control panels
- Operates two manual sump, sewage or effluent pumps
- Alternates to standby pump if energized pump fails to turn on
- Audible alarm and red light indicator
- Operates single-phase pumps with 15 max. run amps
- cULus listing

Item No.	Model	Volts	Max. Amps	Cord
513289	IDC-115	115	15	9.5' 2.9 m

### LOW VOLTAGE WATER ALARM



#### APPLICATIONS

- Remote water sensor and alarm
- Warns of leaks and overflows in bath, kitchen, laundry, attic, basement, or anywhere there is a potential for leaks to occur

#### FEATURES

- Remote sensor detects water and sounds alarm
- 85 decibel alarm sounds for three days
- Sensor and alarm can be placed up to 6 ft apart
- Sensor has both suction cup and adhesive to secure in place
- Includes wall mounting hardware
- Space saving design
- Circuit test/reset button ensures system is working
- Low battery signal when battery needs replaced
- Requires one 9 V battery (not included)

Item No.	Model	Volts
513273	HW-9	9VDC

**CONTROLS (SIMPLEX SYSTEMS)**



**APPLICATIONS**

- Indoor/outdoor simplex alarm system and pump control

**FEATURES**

- Includes control panel with audible alarm, silence switch, and red alarm beacon
- Three floats, one each for high water, pump on and off
- Floats have 20' (6 m) power cords
- HOA switch offers either hand, off or automatic operations
- Two floats - pump on/off and alarm, 513257 only
- UL and C-UL listing

Single-Phase

Item No.	Model	Volts	Hz	Amps
513267	1121W120H17A	120/208/230	60	15-20
513257	1151W200H17A	115/230	60	0-15

Three-Phase

Item No.	Model	Volts	Hz	Amps
513265	3121W611H	208/240	60	13-18
513282	3121W201H17A	208/240/480	60	2.5-4
513284	3121W401H17A	208/240/480	60	6-10
513286	3121W511H17A	208/240/480	60	9-14

**CONTROLS (DUPLEX SYSTEMS)**

**APPLICATIONS**

- Indoor/outdoor duplex alarm system and pump control

**FEATURES**

- Includes duplex pump control and alarm devices
- Pump alternator
- Visual and audible alarm and light system with silence
- Three floats, one each for high water, pump on and pump off (513258 only)
- Floats have 20' (6 m) power cords
- HOA switch offers either hand, off or automatic operations
- UL and C-UL listing

Single-Phase

Item No.	Model	Volts	Hz	Amps
513258	1221W120H6A17A	120/208/230	60	0-20
14940605	1221W120X6A	120/208/230	60	0-20

Three-Phase

Item No.	Model	Volts	Hz	Amps
513283	3221W201H17A	208/240/480	60	2.5-4
513285	3221W401H17A	208/240/480	60	6-10
513287	3221W511H17A	208/240/480	60	9-14
513266	3221W611H17A	208/240/480	60	13-18

**JUNCTION BOXES**



**APPLICATIONS**

- Provides a convenient location to connect all wiring required for a typical pumping station, on-site system, or other electrical installation

**FEATURES**

- NEMA 4X waterproof fiberglass thermoplastic enclosure

Item No.	Model
513281	JB66-3

**LG PLUGGER**



**APPLICATIONS**

- For wiring a pumping station installation

**FEATURES**

- Utilizes a receptacle to accept a 120 V or 230 V piggyback plug and a pump plug
- Liquid-tight seal and strain relief for the cable entering the junction box from the pumping station
- Terminal strip that can be used for connecting an alarm system to the junction box
- UL and CSA listing

Item No.	Model	Volts	Alarm	Float
513290	JPB120V	120	-	-
513292	JBP120V-TA1	120	101HW	Yes
513294	JBP120V-TAXT	120	303HWXT	Yes
513295	JBP230V-TAXT	230	303HWXT	Yes

### PUMP DISCONNECT



#### APPLICATIONS

- When discharge is no lower than 18" (46 cm) below grade or where guide rails are not necessary

#### FEATURES

- Non guide rail disconnect
- Point of discharge should be above the liquid level

Item No.	Model	Disconnect
513302	PD-2	2" 51 mm

### GUIDE RAIL SYSTEMS



#### APPLICATIONS

- For installations with a total depth of over 5' (1.5 m) when the discharge pipe is 18" (46 cm) or more below grade, particularly when the liquid level is above the discharge level\*

#### FEATURES

- 3/4" (19 mm) IPS (iron pipe size) pipe rails should be used on the 1-1/4" (31.7 mm) and 2" (51 mm) system and 1-1/4" (31.7 mm) IPS pipe rail on the 3" (76 mm) system
- Brass foot guide supplied for use with steel pipe
- Guide rail brackets and steel stand-off brackets included with each system to support the upper end of the guide rail pipes
- One intermediate guide rail bracket is required for every 10' (3 m) of rail (guide rail pipes, lifting chain, and pull rod not included)

Item No.	Model	Discharge
513305	GR-3/4-114D	1-1/4" 31.7 mm
513301	GR-3/4	2" 51 mm
513300	GR-1-1/4	3" 76 mm

All guide rail products can be used with any of the Franklin Electric, Little Giant effluent and sewage pumps having a 1-1/4" (31.7 mm), 2" (51 mm), or 3" (76 mm) discharge.

\*NOTE: Not for duplex installations. For guide rail information on duplex installations, please consult the factory.

### INTERMEDIATE GUIDE RAIL BRACKETS



#### APPLICATIONS

- For use with guide rail systems

Item No.	Model	Guide Rail
513303	IQR-3/4	3/4" 19 mm (for use with GR-3/4)
513304	IQR-1-1/4	1-1/4" 31.75 mm (for use with GR-1-1/4)

### SA-1 (SACRIFICIAL ANODE)



#### APPLICATIONS

- Magnesium accessory for use with aluminum-body pumps

#### FEATURES

- Provides corrosion protection
- Lead wire

Item No.	Model	Wire
599002	SA-1	8" 20 cm



**CORD CONNECTORS**



**APPLICATIONS**

- Provides strain relief

**FEATURES**

- Cord connector is liquid tight
- Polyamide neoprene gland resist salt water, weak acids/alkalis and other chemicals

Item No.	Model	Cord	Wire/Cable (AWG)
599207	CC-1	.270" to .480" 6.9 mm - 12.2 mm	18/2, 18/3, 18/4, 16/2 16/3, 16/4, 14/2, 14/3
599213	CC-3	.545" to .709" 13.8 mm - 18 mm	14/2, 14/3, 14/4, 12/2 12/3, 12/4, 10/2, 10/3

**DISCHARGE ADAPTERS**



**APPLICATIONS**

- Allows use of garden hose with utility and sump pumps

**FEATURES**

- Polypropylene, rust resistant

Item No.	Model	Size
599030	GH-1 Adapter (fits 5-MSP/ASP)	1" MNPT x 3/4" GHT 2.54 mm x 19 mm
599025	GH-3/4 Adapter	1-1/4" MNPT x 3/4" GHT 31.7 mm x 19 mm
599026	AD-6 Adapter (6-pk)	1-1/2" MNPT x 1-1/4" FNPT 38 mm x 31.7 mm

**CAST IRON FULL FLOW CHECK VALVES**



**FEATURES**

- Vertical or horizontal installation
- Full-flow design
- Stops back flow of water
- Rated at 50 psi (115' [35 m] head) at 130 °F (55 °C)
- Cast iron NPT

Item No.	Model	Volts
599132	CVCI-112NPT	1-1/2" 38 mm
599133	CVCI-2NPT	2" 51 mm
599134	CVCI-3NPT	3" 76 mm

**CAST IRON SLIP X SLIP UNION CHECK VALVE**



**FEATURES**

- Vertical or horizontal installation
- Allows passage of 1-1/2" (38 mm) solids
- Checks backflow of water and sewer gas
- 2" (51 mm) ABS, PVC, steel pipe or copper piping
- Rated at 4.3 psi (10' [3 m] head) at 130 °F (55 °C)
- Cast iron NPT

Item No.	Model
599135	CVCI-2

### CV-112 CHECK VALVE



#### FEATURES

- Universal check valve for sump pumps
- 1-1/2" MNPT (38 mm) x 1-1/2" (38 mm) ID tubing

Item No.	Model	Material
577130	CV-112	PVC

### CV-114/112 CHECK VALVE



#### FEATURES

- Sump pump check valve fits both 1-1/4" (31.7 mm) and 1-1/2" (38 mm) pipe
- Full-flow, slip x slip design passes 1" (25.4 mm) solids

Item No.	Model	Material
559059	CV-114/112	ABS

### CV-SE CHECK VALVE



#### FEATURES

- Hose-connected check valve for 2" (51 mm) IPS pipe
- Allows passage of 3/4" (19 mm) solids

Item No.	Model	Material
940021	CV-SE	ABS

### CV-SE1 CHECK VALVE



#### FEATURES

- Uses compression gaskets to connect to 1-1/2" (38 mm) IPS pipe
- Full-flow design passes 1-1/2" (38 mm) solids

Item No.	Model	Material
940019	CV-SE1	PVC

### CV-SE2 CHECK VALVE



#### FEATURES

- Uses compression gaskets to connect to 2" (51 mm) IPS pipe
- Full-flow design passes 2" (51 mm) solids

Item No.	Model	Material
940022	CV-SE2	PVC

### CV-SE3 CHECK VALVE



#### FEATURES

- Uses compression gaskets to connect to 3" (76 mm) IPS pipe
- Full-flow design passes 3" (76 mm) solids

Item No.	Model	Material
940023	CV-SE3	PVC

### CVBV-2 CHECK VALVE



#### FEATURES

- PVC check valve/ball valve combination uses compression gaskets to connect to 2" (51 mm) IPS pipe
- Full-flow design passes 2" (51 mm) solids

Item No.	Model	Material
940021	CV-SE	ABS

### CVBV-2U CHECK VALVE



#### FEATURES

- PVC check valve/ball valve combination uses union fittings to connect 2" (51 mm) IPS pipe
- Full-flow design passes 2" (51 mm) solids
- Pressure rating: 100 psi @ 72BF

Item No.	Model	Material
940019	CV-SE1	PVC

**GP GRINDER SERIES  
(CONTROL PANEL AND ALARM)**



**APPLICATIONS**

- Designed exclusively for the GP Manual Grinder Series

**FEATURES**

- Properly sized start components maximize efficiency and service life of the GP grinders
- Color-coded terminal strip for ease of installation
- Circuit breaker, audible alarm, silence switch, and red flashing light are enclosed in a NEMA 4X waterproof enclosure
- Three floats (sold separately) control on, off, and alarm functions
- UL and CSA listing

Simplex

Item No.	Model	Volts	Floats
513374	MGP-1C18-2	208/230	3 floats required

Duplex

Item No.	Model	Volts	Floats
513375	MGPD-1C18	208/230	4 floats required

The GP Grinder Series requires a specific controller panel or capacitor kit from Franklin Electric specifically matched to the Little Giant pump for proper operation and third-party approvals.

**JUNCTION BOX ALARM KIT**



**APPLICATIONS**

- Designed specifically for auto grinder installations

**FEATURES**

- Circuit breaker
- Labeled terminal block
- Alarm block
- Alarm float

Item No.	Model
513297	JBAK

**CONTROL FLOATS**



**APPLICATIONS**

- For use with control panel and alarms

**FEATURES**

- Mechanically activated contacts
- Not sensitive to rotation
- 5 amp, 115/230 VAC, 50/60 Hz

Item No.	Model	Switch	Cord
950266	CFSW	Weighted control float switch	20' 6 m
950267	CFST	Control float switch with cable clamp	20' 6 m

**GRINDER LEG KIT**



**APPLICATIONS**

- Grinders

**FEATURES**

- Includes three stainless steel support legs with stainless steel hardware
- A special stainless steel leg kit is available for "hard-piped" installations
- Easy to install, the legs raise the pump inlet area to approximately 4" (102 mm) off the surface to ensure clearance for solids to enter

Item No.	Model	Use
599078	GLK	For GP series only

**CAPACITOR KIT**

**APPLICATIONS**

- For GP series

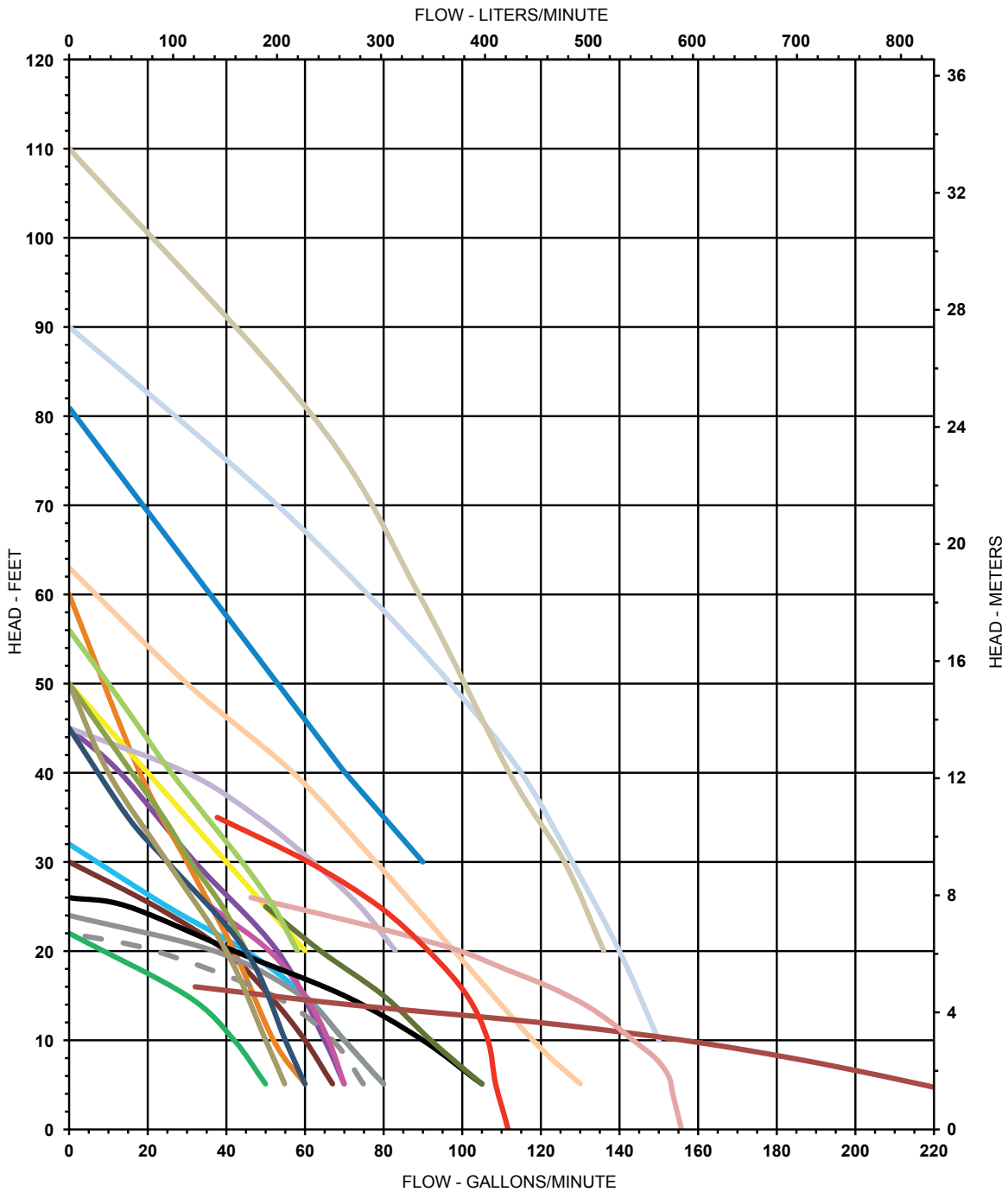
**FEATURES**

- Includes start capacitor, run capacitor, relay, end caps, and mounting hardware

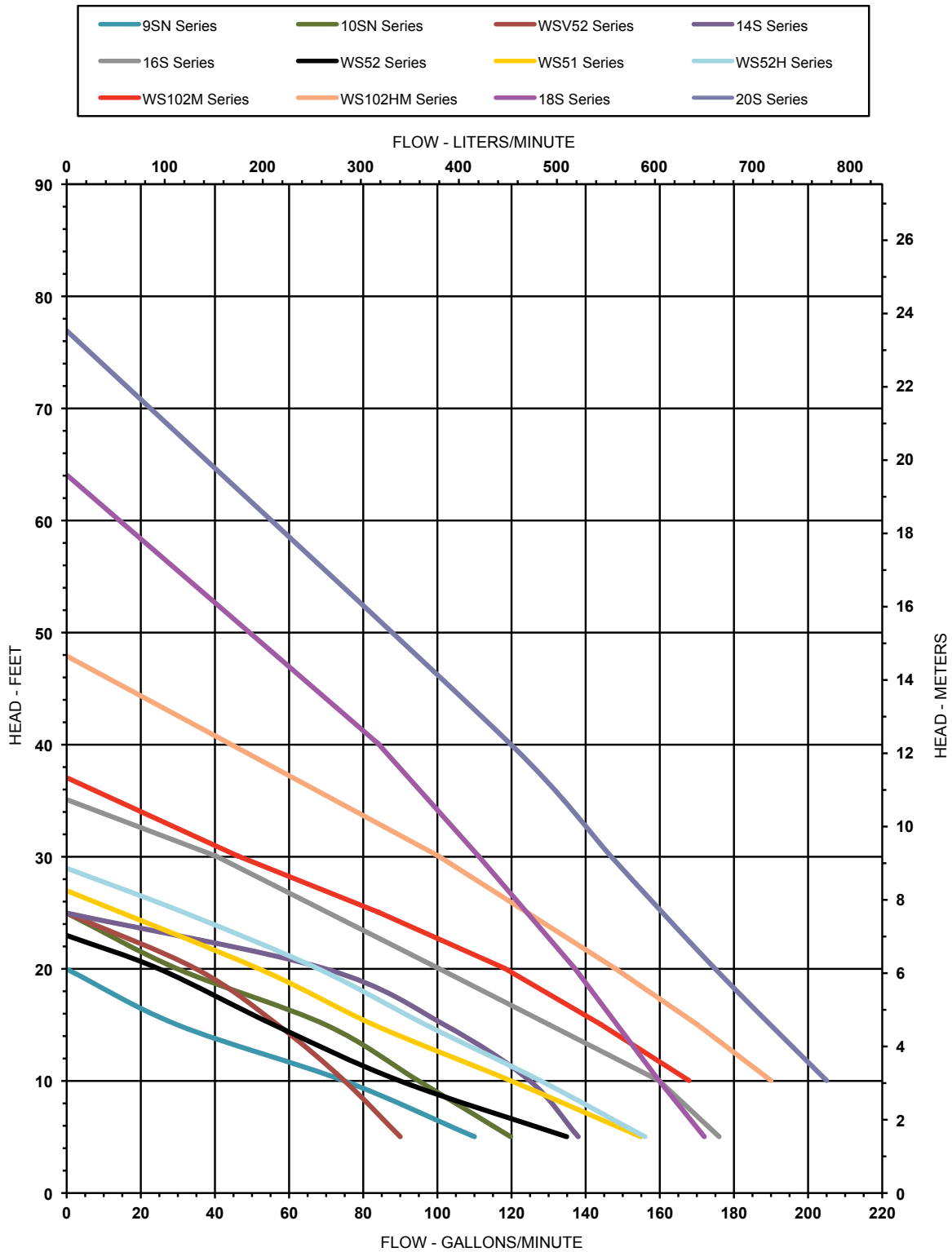
Item No.	Model	Volts
520857	GP-CK	208/230

## EFFLUENT COMPOSITE CURVES

6EN Series	9EN Series	9ENH Series	10EN Series
10ENH Series	HT-10E Series	HT-10E Series 200 °F	ESP50 Series
14EH Series	16EH Series	WS30 Series	WS50M Series
WS100 Series	WS50H Series	WSV50 Series	20E Series
WE10 Series	WE20 Series	WE30 Series	BE-S50 Series
BE-S75 Series	9ENH Series 208-230 V	10ENH Series 208-230 V	



## SEWAGE COMPOSITE CURVES

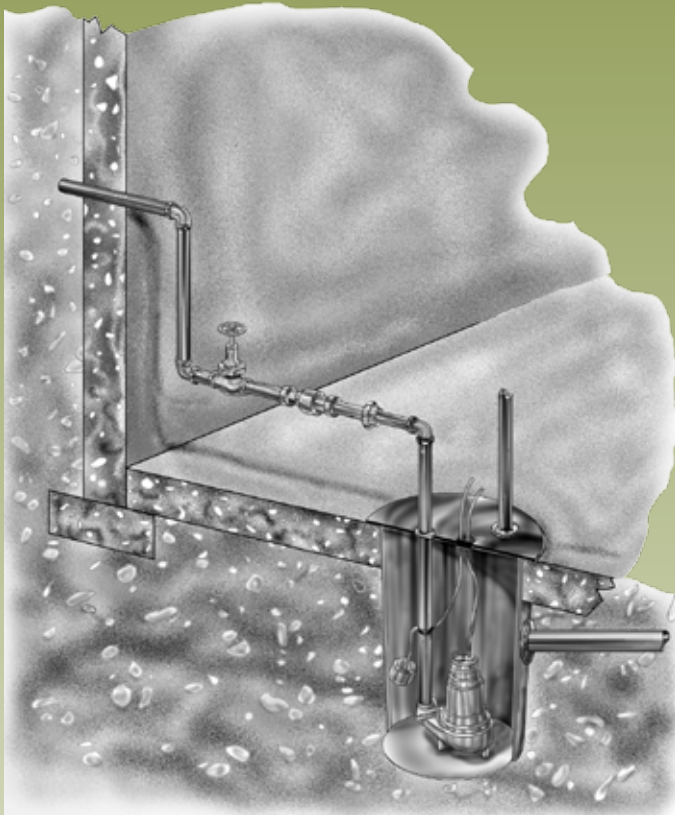


## APPLICATIONS

Sump/Dewatering Maximum Solids Size: 1/4"	Effluent Maximum Solids Size: 1/2"-3/4"	Sewage Maximum Solids Size: 2"	Under Counter/Utility Maximum Solids Size Shown	Aerobic System Maximum Solids Size: 0"
<b>6-CIA / 506158</b> 18' (5.5 m) shut-off 115 V, Automatic 1/3 hp, 1-1/2" (38 mm) discharge	<b>9EN-CIA-RF / 509209</b> 32' (9.8 m) shut-off 115 V, Automatic, 3/4" (19 mm) solids 4/10 hp, 1-1/2" (38 mm) discharge	<b>9SN-CIA-RF / 509204</b> 20' (6.1 m) shut-off 115 V, Automatic 4/10 hp, 2" (51 mm) discharge	<b>WRSC-6 / 506065</b> Maximum solids size 1/4" (6.35 mm) 3.5-gallon basin, 115 V, 1/3 hp, 1-1/2" (38 mm) discharge	<b>WE10G05P4-21 / 558221</b> 10 gpm, 115 V, 1/2 hp 4" submersible High head filtered effluent pump
<b>6-CIM-R / 506271</b> 18' (5.5 m) shut-off 115 V, Automatic 1/3 hp, 1-1/2" (38 mm) discharge	<b>9EN-CIA-SFS / 509260</b> 32' (9.8 m) shut-off 115 V, Automatic, 3/4" (19 mm) solids 4/10 hp, 1-1/2" (38 mm) discharge	<b>10SN-CIA-SFS / 511346</b> 25' (7.6 m) shut-off 115 V, Automatic 1/2 hp, 2" (51 mm) discharge	<b>WRS-6 / 506055</b> Maximum solids size 1/4" (6.4 mm) 5-gallon basin, 115 V, 1/3 hp	<b>WE10G05P4-22 / 558222</b> 10 gpm, 230 V, 1/2 hp 4" submersible High head filtered effluent pump
<b>8-CIA / 506157</b> 22' (6.7 m) shut-off 115 V, Automatic 4/10 hp, 1-1/2" (38 mm) discharge	<b>10EN-CIM / 511310</b> 30' (9.1 m) shut-off 115 V, Manual, 1/2" (12.7 mm) solids 1/2 hp, 1-1/2" (38 mm) discharge	<b>16S-CIM / 514620</b> 35' (10.7 m) shut-off 260 V, Manual 1 hp, 3" (6.2 mm) discharge, 20' (6.1 m) cord	<b>WRS-9EN / 509268</b> Maximum solids size 3/4" (19.1 mm) 5-gallon basin, 115 V, 4/10 hp	<b>WE20G05P4-21 / 558223</b> 20 gpm, 115 V, 1/2 hp 4" submersible High head filtered effluent pump
<b>8-CIM / 508057</b> 22' (6.7 m) shut-off 115 V, Manual 4/10 hp, 1-1/2" (38 mm) discharge	<b>10EN-CIA-RF / 511320</b> 30' (9.1 m) shut-off 115 V, Automatic, 1/2" (12.7 mm) solids 1/2 hp, 1-1/2" (38 mm) discharge	<b>9S-SMPX-LG / 509635</b> Pit-Plus Jr. Package 24" x 24" (61 cm x 61 cm) Green basin 4" inlet, 2" (51 mm) discharge with 2" (51 mm) check valve	<b>5-MSP / 505000</b> Not rated for solids 115 V, 1/6 hp, 1" (25.4 mm) discharge Pit dewatering	<b>WE20G05P4-22 / 558224</b> 20 gpm, 230 V, 1/2 hp 4" submersible High head filtered effluent pump
<b>6EN-CIM / 506610</b> 22' (6.7 m) shut-off 115 V, Manual 1/3 hp, 1-1/2" (38 mm) discharge	<b>10EN-CIA-SFS / 511330</b> 30' (9.1 m) shut-off 115 V, Automatic, 1/2" (12.7 mm) solids 1/2 hp, 1-1/2" (38 mm) discharge	<b>9S-SMPX-LG / 509109</b> Pit-Plus Package 20" x 30" (51 cm x 76 cm) Green basin 4" inlet, 2" (51 mm) discharge with 2" (51 mm) check valve	<b>5-ASP / 505300</b> Not rated for solids 115 V, 1/6 hp, 1" (25.4 mm) discharge Pit dewatering, Automatic	<b>WE30G05P4-21 / 558225</b> 30 gpm, 115 V, 1/2 hp 4" submersible High head filtered effluent pump
<b>6EN-CIA-RF / 506620</b> 22' (6.7 m) shut-off 115 V, Automatic 1/3 hp, 1-1/2" (38 mm) discharge	<b>14EH-CIM / 514220</b> 50' (15.2 m) shut-off 115 V, Manual, 3/4" (19.1 mm) solids 1/2 hp, 2" (51 mm) discharge	<b>9S-SMPRT-K / 509073</b> 18" x 30" (46 cm x 76 cm) Black RT basin 4" inlet, 2" (51 mm) discharge with 2" (51 mm) check valve	<b>360 / 555502</b> Not rated for solids, 115 V 1/10 hp, 3/4" GHT (19.1 mm) discharge Transfer pump	<b>WE30G05P4-21 / 558226</b> 30 gpm, 230 V, 1/2 hp 4" submersible High head filtered effluent pump
<b>6EN-CIA-SFS / 506630</b> 22' (6.7 m) shut-off 115 V, Automatic 1/3 hp, 1-1/2" (31.8 mm) discharge	<b>9EN-CIA-RF / 509209</b> 81' (24.7 m) shut-off 230 V, Manual, 3/4" (19.1 mm) solids 1 hp, 2" (51 mm) discharge	<b>GP-A231-20 / 520875</b> 130' (39.6 m) shut-off 230 V, Automatic 2 hp, 1-1/4" (31.8 mm) discharge 20' (6.1 m) cord without plug Grinder pump	<b>UPSP-5 / 555101</b> Not rated for solids 115 V, 1/2 hp, 3/4" (19.1 mm) GHT discharge Self-priming pump	

# Wastewater

## Guidelines for Sizing



### Features

- These guidelines cover the steps which need to be taken to accurately select the correct sewage pump and applicable systems to use in sewage ejectors.

Work through the five steps below to size the system:

- System capacity (gpm required)
- Total head
- Pump selection
  - Solids handling
- Basin size
- Simplex/Duplex system

## Guidelines for Sizing

### System Capacity

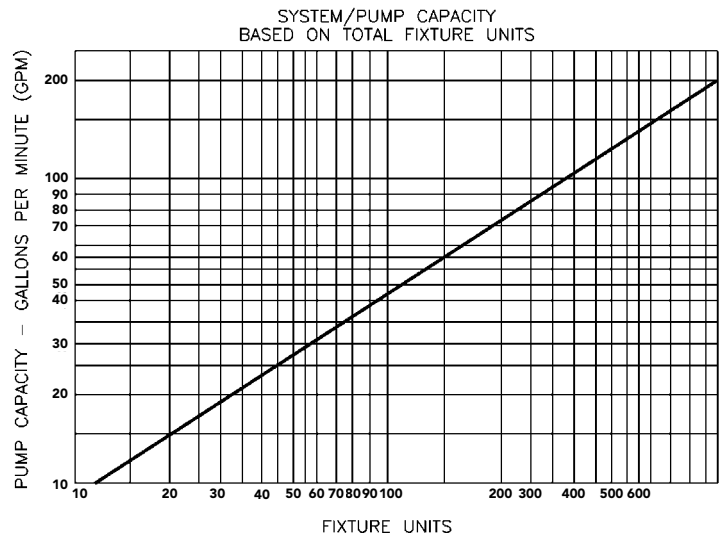
**System Capacity** refers to the rate of flow in gallons per minute (gpm) necessary to efficiently maintain the system. The "Fixture Unit" method is suggested for determining this figure. This approach assigns a relative value to each fixture or group of fixtures normally encountered. Determination of the required **System Capacity** is as follows:

- List all fixtures involved in the installation and using Figure 1, assign a Fixture Unit value to each. Add to obtain total.
- Referring to Figure 2, locate the total Fixture Unit amount along the horizontal axis of the graph and follow vertically until intersecting the plotted line. Read the **System Capacity** in gpm along the vertical axis.

Figure 1.

FIXTURE DESCRIPTION	UNIT VALUE	TOTAL USED
Bathroom group, consisting of lavatory, bathtub or shower and (direct flush) water closet	10	
Bathroom group, consisting of lavatory, bathtub or shower and (flush tank) water closet	6	
Bathtub with 1-1/2" trap	2	
Bathtub with 2" trap	3	
Bidet with 1-1/2" trap	3	
Dental unit or cuspidor	1	
Drinking fountain	1	
Dishwasher (domestic type)	2	
Kitchen sink (domestic)	2	
Kitchen sink (domestic with waste grinder)	3	
Lavatory with 1-1/2" trap	1	
Lavatory (barber or beauty shop)	2	
Laundry tray (2-compartment)	2	
Shower stall	2	
Shower (group), per head	3	
Sink (service type with floor drain)	3	
Sink (scullery)	4	
Sink (surgeons)	3	
Urinal (with flush valve)	8	
Urinal (with flush tank)	4	
Water closet (flush valve)	7	
Water closet (flush tank)	3	
Swimming pools (per 1000 gal. capacity)	1	
Unlisted fixture with 1-1/4" trap size	2	
Unlisted fixture with 1-1/2" trap size	3	
Unlisted fixture with 2" trap size	4	
Unlisted fixture with 2-1/2" trap size	5	
Unlisted fixture with 3" trap size	6	
Unlisted fixture with 4" trap size	7	
Water softener (domestic)	4	
Washing machine	2	
	TOTAL	

Figure 2.



### Total Head

**Total Head** is a combination of two components — static head and friction head — and is expressed in feet (refer to Typical Installation illustration, Figure 3).

**Static Head** is the actual vertical distance measured from the minimum water level in the **Basin** to the highest point in the discharge piping.

**Friction Head** is the additional head created in the discharge system due to resistance to flow within its components. All straight pipe, fittings, valves, etc. have a friction factor which must be considered. These friction factors are converted to, and expressed as, equivalent feet of straight pipe, which can then be totaled and translated to friction head depending on the flow and pipe size. Basically, this is reduced to four steps.

- It will be necessary to determine the discharge pipe size. In order to ensure sufficient fluid velocity to carry solids, (generally accepted to be 2' per second), flows should be at least:

- 9 gpm through 1-1/4" pipe
- 13 gpm through 1-1/2" pipe
- 21 gpm through 2" pipe
- 30 gpm through 2-1/2" pipe
- 46 gpm through 3" pipe

- The length of the discharge piping is measured from the discharge opening of the pump to the point of final discharge, following all contours and bends.
- To determine the equivalent length of discharge piping represented by the various fittings and valves, refer to Figure 5 and total all values. Add this to the measured length of discharge pipe and divide by 100 to determine the number of 100' increments.
- Refer to Figure 4 and find the required **Pump Capacity** (determined from Figure 2). Follow gallons per minute to pipe size being used. Multiply this number by the number of 100' increments.

Add the Static Head and Friction Head to determine **Total Head**.



## Guidelines for Sizing

Figure 3.

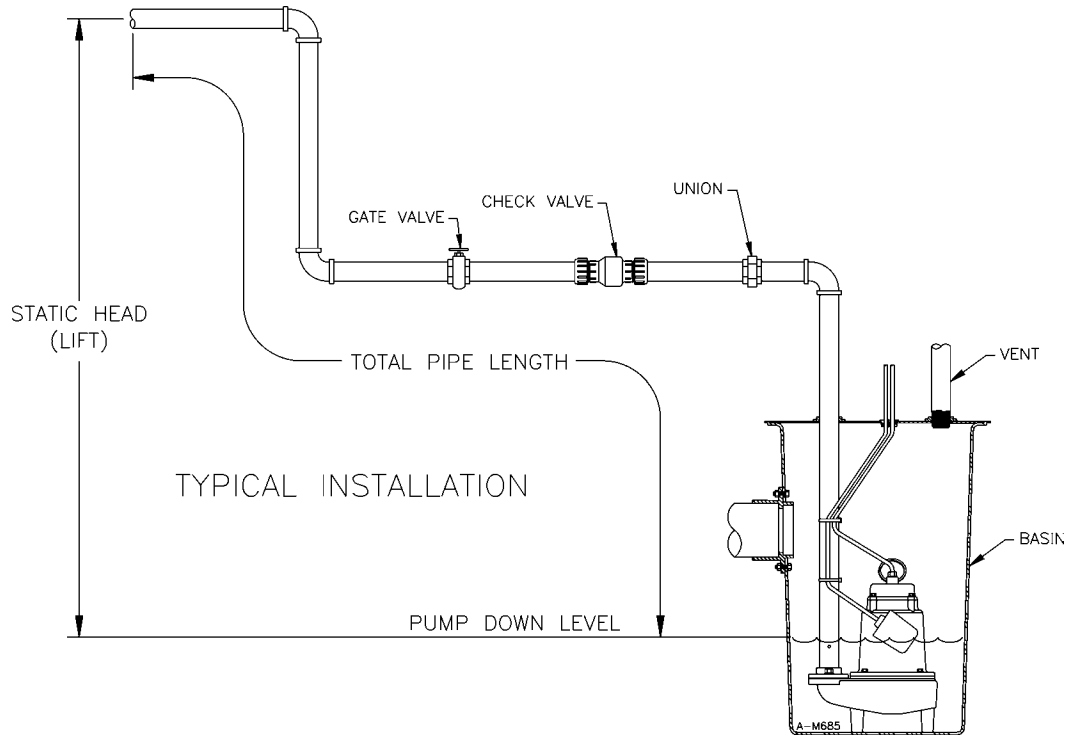


Figure 4.

PLASTIC PIPE: FRICTION LOSS (in feet of head) PER 100 FT						
REQ'D PUMP CAPACITY GPM	1-1/4"	1-1/2"	2"	2-1/2"	3"	4"
	ft	ft	ft	ft	ft	ft
1						
2	.10					
3	.21	.10				
4	.35	.16				
5	.51	.24				
6	.71	.33	.10			
8	1.19	.55	.17			
10	1.78	.83	.25	.11		
15	3.75	1.74	.52	.22		
20	6.39	2.94	.86	.36	.13	
25	9.71	4.44	1.29	.54	.19	
30	13.62	6.26	1.81	.75	.26	
35	18.17	8.37	2.42	1.00	.35	.09
40	23.55	10.70	3.11	1.28	.44	.12
45	29.44	13.46	3.84	1.54	.55	.15
50		16.45	4.67	1.93	.66	.17
60		23.48	6.60	2.71	.93	.25
70			8.83	3.66	1.24	.33
80			11.43	4.67	1.58	.41
90			14.26	5.82	1.98	.52
100				7.11	2.42	.63
125				10.83	3.80	.95
150					5.15	1.33
175					6.90	1.78
200					8.90	2.27
250						3.36
300						4.85
350						6.53

Figure 5.

FRICTION FACTORS FOR PIPE FITTINGS IN TERMS OF EQUIVALENT FEET OF STRAIGHT PIPE						
NOMINAL PIPE SIZE	90° ELBOW	45° ELBOW	TEE (THROUGH FLOW)	TEE (BRANCH FLOW)	SWING CHECK VALVE	GATE VALVE
1-1/4	3.5	1.8	2.3	6.9	11.5	0.9
1-1/2	4.0	2.2	2.7	8.1	13.4	1.1
2	5.2	2.8	3.5	10.3	17.2	1.4
2-1/2	6.2	3.3	4.1	12.3	20.3	1.7
3	7.7	4.1	5.1	15.3	25.5	2.0

TOTAL HEAD REQUIRED	
(A) STATIC HEAD	
(B) TOTAL LENGTH OF PIPING	
(C) TOTAL FRICTION FACTORS OF FITTINGS	
(D) TOTAL (B+C)	
(E) DIVIDED (D) BY 100	
(F) HEAD LOSS PER 100 FT. OF PIPE (from Figure 4)	
(G) FRICTION HEAD (E×F)	
(H) TOTAL HEAD (A+G)	

### Pump Selection

Every centrifugal pump has a unique performance curve. This curve illustrates the relationship of flow (**gpm**) to pressure (**Total Head**) at any point. The pump will operate at any point along this performance curve.

Pump capacity is therefore the flow the pump will generate at any specific pressure. The object is to select a pump whose performance curve passes either through or close to the design condition, preferably above. Refer to Figure 7.

### Solids Handling

**Solids Handling** requirements may be determined by local codes and/or by the type of application and types of solids anticipated. Unless otherwise stated by codes, a sewage pump should have the capability of handling spherical solids of at least 2" in diameter in installations involving a water closet.

### Basin Size

Basin selection is best accomplished by relating to required **System Capacity** as determined by the **Fixture Unit** method.

Figure 6 shows recommended basin diameters, assuming the normal pump differential (distance in inches between turn-on and turn-off), and running time ranges from 15 seconds to 4 minutes. **Basin** depth, however, should be at least 24" below basin inlet for most pumps and deeper where greater pumping differentials are anticipated.

NOTE: Since basin size is directly related to frequency of pump operation, it is important to select a basin of sufficient size to ensure that the pump does not short cycle.

The question of whether to use a **Simplex** or **Duplex** system depends on the type of installation and/or local codes. Generally, a determination can be made using the following guidelines.

1. Domestic: **Simplex System** is usually adequate.
2. Commercial: **Optional** — Depending on the type of business and the need for uninterrupted sanitary drainage facilities.
3. Public or Industrial: **Duplex System** is essential.

While you are sizing the system and before you select the pump, you will need to know and consider or make allowances for the following:

- Volts/Phase/Hertz — What is available?
- Will the pump share a circuit?
- Does the home, business, etc. have circuit breakers or fuses?
- What is the breaker or fuse Amp rating? Make sure it is enough.
- Check local or state codes for:
  - Solid size requirements
  - Amp ratings/circuit cord size/ratings or type
  - Pipe material/size/depth to bury
  - Tank size/location
- Are there plans for future expansion? As in, adding upstairs bath, basement plumbing, washing machine, etc.

Figure 6.

**BASIN SIZING**

		BASIN DIAMETER (inches)					
		18"	24"	30"	36"	42"	48"
<b>SYSTEM CAPACITY (GPM)</b>	20						
	25						
	30						
	35						
	40						
	45						
	50						
	60						
	70						
	80						
	90						
	100						
	125						
	150						
	175						
200							
225							
<b>GALLONS/FOOT OF BASIN DEPTH</b>		13.2	23.9	36.7	52.9	72.0	94.0
<b>GALLONS IN 2-1/2' OF BASIN DEPTH</b>		33.0	59.7	91.7	132.2	180.0	235.0

Select minimum basin depth so that 2-1/2' of basin depth in gallons = Pump capacity in **gpm**  
 = Acceptable basin size

## Guidelines for Sizing

### Example Sizing Problem

What **Pump Capacity** would be required to handle the drainage from a 4 bathroom home, also including a dishwasher, a washer, a laundry tray, a kitchen sink, water softener, basement shower, a 13,000 gallon pool, and a bar sink (1-1/2" trap)?

1. From Figure 1:

DESCRIPTION	FIXTURE UNITS
Four bathroom groups	24
Water softener	4
Dishwasher	2
Washing machine	2
Laundry tray	2
Kitchen sink with disposal	3
Basement shower	2
Swimming pool	13
Bar sink (unlisted 1-1/2")	3
<b>FIXTURE UNITS TOTAL</b>	<b>55</b>

2. Refer to Figure 2:

Find 55 fixture units on the horizontal axis. Follow vertically until intersecting the line then horizontally to the left. The **Pump Capacity** on the vertical axis is 30 gpm.

Determine the **Total Head** of the installation illustrated in Figure 3, the Typical Installation Illustration:

1. That Static Head in this instance is 7'.

2. Friction Head:

a. Since the required **Pump Capacity** in this illustration of 30 gpm is less than the 46 gpm necessary to carry solids through 3" pipe, 2" or 2-1/2" pipe should be used. If 3" pipe is preferred or required, a **Pump Capacity** of at least 46 gpm is required.

b. Measurement of the length of the discharge pipe totals 200'.

c. Refer to Figure 6 and note the friction factor in equivalent feet for each fitting:

3 - 90° elbows, 2"                      16 - equivalent feet

1 - gate valve, 2"                        1 - equivalent foot

1 - swing check valve, 2"                17 - equivalent feet

**Total:**                                        34 - equivalent feet

Adding 34' to the measured pipe length, the total effective pipe length becomes 234' or 2.34 100' increments.

d. Refer to Figure 4, find the 30 gpm required **Pump Capacity** on the left scale and follow over to the 2" PVC pipe size column. Friction Head is  $1.8 \times 2.34 = 4.2'$ .

3. Total Head Required:

Total Head = Static Head + Friction Head

Example:

Total Head = 7 + 4.2

Total Head = 11.2

Due to the existence of water closets in this installation, a pump with 2" **Solids Handling** capacity should be used unless otherwise specifically stated by applicable codes. Use Figure 7 to select pump.

To determine the **Basin** size, find the **Pump Capacity** (30 gpm) in the column on the left of Figure 6. Any **Basin** diameter of 18" or greater is acceptable.

Since this application is domestic, a **Simplex System** is sufficient.

**Summary:** Recommended selections for this installation would be a **Simplex System** utilizing an 18" or greater diameter **Basin** and a 2" **Solids Handling** pump capable of delivering at least 30 gpm at 11'.

## Guidelines for Sizing

### Summary Worksheet

<b>Number of Fixture Units</b>	
<b>Flow Rate - Gallons Per Minute</b>	
<b>Total Head Required</b>	
<b>Pump Selection</b>	

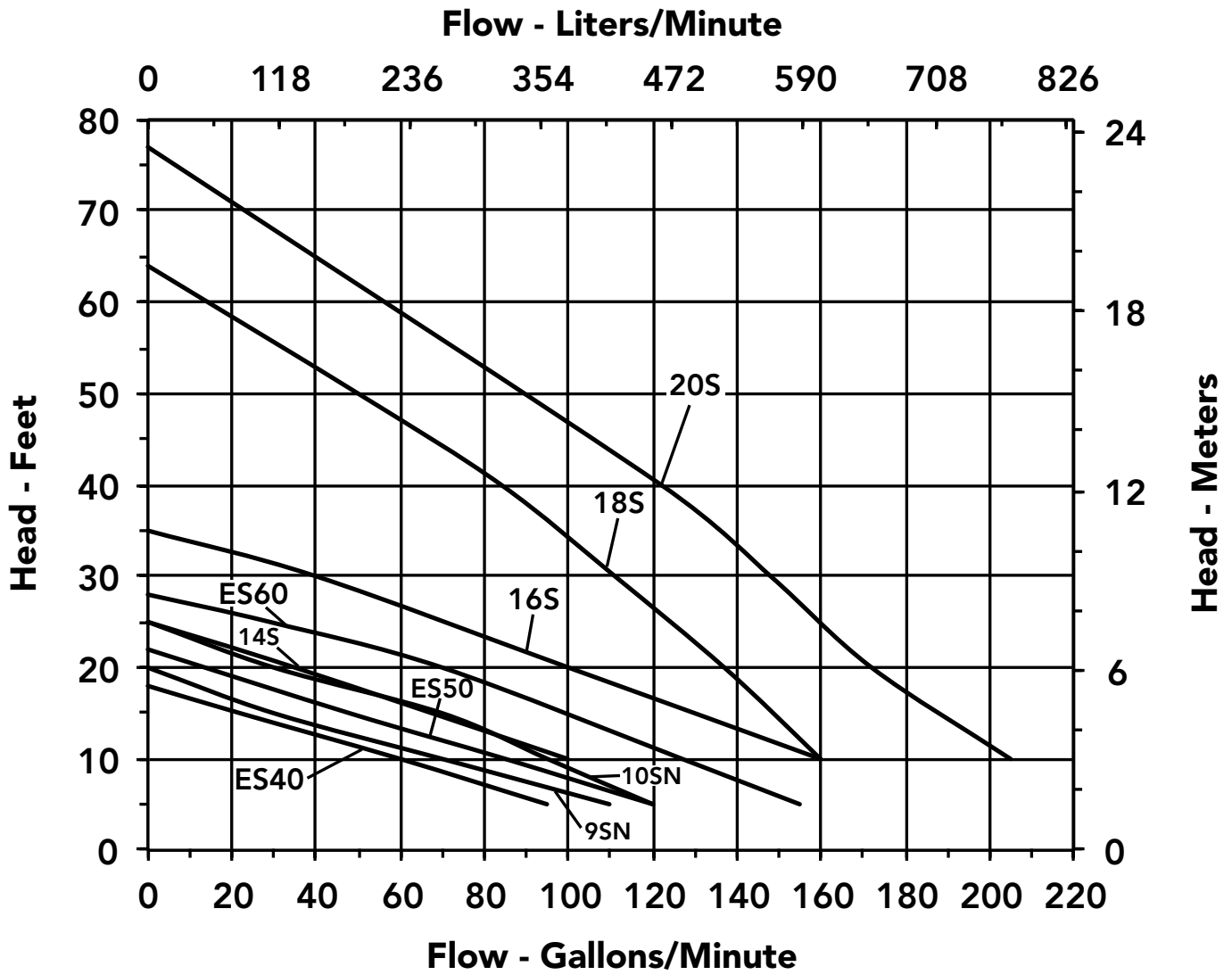
### Typical Single Family Dwelling Sewage Pump Chart

Note: The data contained herein is for reference only. Proper sizing and selection of sewage pumps requires consideration of many factors. Always consult applicable local codes before installing any equipment. This chart is based on a residential application with not more than 34 fixture units (values assigned to each plumbing fixture). The TDH (Total Dynamic Head) of the system is calculated based on total vertical lift, horizontal length of discharge piping, and the friction losses for 2" diameter plastic pipe (3" diameter plastic pipe where the 16S pump is shown).

#### Total Length of Discharge Pipe in Feet

TOTAL VERT. LIFT	100'	150'	200'	250'	300'	350'	400'	450'	500'	550'	600'	650'	700'	750'	800'
	TDH PUMP GPM	TDH PUMP GPM	TDH PUMP GPM	TDH PUMP GPM	TDH PUMP GPM	TDH PUMP GPM	TDH PUMP GPM	TDH PUMP GPM	TDH PUMP GPM	TDH PUMP GPM	TDH PUMP GPM	TDH PUMP GPM	TDH PUMP GPM	TDH PUMP GPM	TDH PUMP GPM
5'	6.3' 9SN 97 gpm	7.0' 9SN 95 gpm	7.5' 9SN 92 gpm	8.3' 9SN 88 gpm	8.9' 9SN 82 gpm	9.6' 9SN 77 gpm	10.2' 9SN 72 gpm	10.9' 9SN 67 gpm	11.5' 9SN 61 gpm	12.2' 9SN 54 gpm	12.8' 9SN 48 gpm	13.5' 9SN 43 gpm	14.1' 9SN 38 gpm	14.8' 9SN 32 gpm	15.4' 9SN 27 gpm
6'	7.3' 9SN 93 gpm	8.0' 9SN 89 gpm	8.6' 9SN 83 gpm	9.3' 9SN 78 gpm	9.9' 9SN 75 gpm	10.6' 9SN 69 gpm	11.2' 9SN 63 gpm	11.9' 9SN 57 gpm	12.5' 9SN 52 gpm	13.5' 9SN 43 gpm	13.8' 9SN 40 gpm	14.5' 9SN 33 gpm	15.1' 9SN 29 gpm	15.8' 9SN 25 gpm	16.4' 10SN 57 gpm
7'	8.3' 9SN 88 gpm	9.0' 9SN 81 gpm	9.6' 9SN 77 gpm	10.3' 9SN 70 gpm	10.9' 9SN 67 gpm	11.6' 9SN 59 gpm	12.2' 9SN 54 gpm	12.9' 9SN 47 gpm	13.5' 9SN 43 gpm	14.2' 9SN 36 gpm	14.8' 9SN 32 gpm	15.5' 9SN 26 gpm	16.1' 10SN 62 gpm	16.8' 10SN 54 gpm	17.4' 10SN 48 gpm
8'	9.3' 9SN 78 gpm	10.0' 9SN 76 gpm	10.6' 9SN 69 gpm	11.3' 9SN 62 gpm	11.9' 9SN 57 gpm	12.6' 9SN 50 gpm	13.2' 9SN 45 gpm	13.9' 9SN 39 gpm	14.5' 9SN 33 gpm	15.2' 9SN 28 gpm	15.8' 9SN 25 gpm	16.5' 10SN 56 gpm	17.1' 10SN 52 gpm	17.8' 10SN 46 gpm	18.4' 10SN 41 gpm
9'	10.3' 9SN 70 gpm	11.0' 9SN 65 gpm	11.6' 9SN 59 gpm	12.3' 9SN 53 gpm	12.9' 9SN 47 gpm	13.4' 9SN 44 gpm	14.2' 9SN 36 gpm	14.9' 9SN 30 gpm	15.5' 9SN 26 gpm	16.2' 10SN 60 gpm	16.8' 10SN 54 gpm	17.5' 10SN 48 gpm	18.1' 10SN 42 gpm	18.8' 10SN 39 gpm	19.4' 10SN 33 gpm
10'	11.3' 9SN 62 gpm	12.0' 9SN 56 gpm	12.6' 9SN 50 gpm	13.3' 9SN 44 gpm	13.9' 9SN 39 gpm	14.6' 9SN 33 gpm	15.2' 9SN 28 gpm	15.9' 10SN 62 gpm	16.5' 10SN 56 gpm	17.2' 10SN 50 gpm	17.8' 10SN 46 gpm	18.5' 10SN 40 gpm	19.1' 10SN 35 gpm	19.8' 10SN 32 gpm	20.4' 10SN 27 gpm
11'	12.3' 9SN 53 gpm	13.0' 9SN 46 gpm	13.6' 9SN 42 gpm	14.3' 9SN 35 gpm	14.9' 9SN 30 gpm	15.6' 9SN 25 gpm	16.2' 10SN 60 gpm	16.9' 10SN 53 gpm	17.5' 10SN 48 gpm	18.2' 10SN 42 gpm	18.8' 10SN 39 gpm	19.5' 10SN 33 gpm	20.1' 10SN 29 gpm	20.8' 10SN 25 gpm	21.4' 14S 27 gpm
12'	13.3' 9SN 44 gpm	14.0' 9SN 40 gpm	14.6' 9SN 33 gpm	15.3' 9SN 27 gpm	15.9' 10SN 62 gpm	16.6' 10SN 55 gpm	17.2' 10SN 50 gpm	17.9' 10SN 45 gpm	18.5' 10SN 40 gpm	19.2' 10SN 34 gpm	19.8' 10SN 32 gpm	20.5' 10SN 26 gpm	21.1' 14S 30 gpm	21.8' 14S 26 gpm	16.4' 16S 120 gpm*
13'	14.3' 9SN 35 gpm	15.0' 9SN 29 gpm	15.6' 9SN 25 gpm	16.3' 10SN 58 gpm	16.9' 10SN 53 gpm	17.6' 10SN 47 gpm	18.2' 10SN 42 gpm	18.9' 10SN 37 gpm	19.5' 10SN 33 gpm	20.2' 10SN 28 gpm	20.8' 10SN 25 gpm	22.0' 14S 25 gpm	17.6' 16S 113 gpm*	17.9' 16S 112 gpm*	18.2' 16S 111 gpm*
14'	15.3' 9SN 27 gpm	16.0' 10SN 61 gpm	16.6' 10SN 55 gpm	17.3' 10SN 49 gpm	17.9' 10SN 45 gpm	18.6' 14S 39 gpm	19.2' 10SN 34 gpm	19.9' 10SN 31 gpm	20.5' 10SN 26 gpm	21.2' 14S 29 gpm	21.8' 14S 26 gpm	17.6' 16S 113 gpm*	17.9' 16S 112 gpm*	18.2' 16S 111 gpm*	18.4' 16S 110 gpm*
15'	16.3' 10SN 58 gpm	17.0' 10SN 52 gpm	17.6' 10SN 47 gpm	18.3' 10SN 41 gpm	18.9' 10SN 37 gpm	19.6' 10SN 33 gpm	20.2' 10SN 28 gpm	20.9' 10SN 25 gpm	21.5' 14S 27 gpm	22.2' 14S 25 gpm	18.3' 16S 110 gpm*	18.6' 16S 109 gpm*	18.9' 16S 107 gpm*	19.2' 16S 105 gpm*	19.4' 16S 104 gpm*
16'	17.3' 10SN 49 gpm	18.0' 10SN 44 gpm	18.6' 10SN 39 gpm	19.3' 10SN 33 gpm	19.9' 10SN 31 gpm	20.6' 10SN 25 gpm	21.2' 14S 29 gpm	21.9' 14S 26 gpm	18.8' 16S 107 gpm*	19.1' 16S 105 gpm*	19.3' 16S 104 gpm*	19.6' 16S 103 gpm*	19.9' 16S 101 gpm*	20.2' 16S 98 gpm*	21.2' 16S 95 gpm*
17'	18.3' 10SN 41 gpm	19.0' 10SN 36 gpm	19.6' 10SN 33 gpm	20.3' 10SN 27 gpm	20.9' 10SN 25 gpm	21.6' 14S 26 gpm	22.2' 14S 25 gpm	19.5' 16S 103 gpm*	19.8' 16S 102 gpm*	20.0' 16S 100 gpm*	20.3' 16S 99 gpm*	20.6' 16S 98 gpm*	20.9' 16S 97 gpm*	21.2' 16S 95 gpm*	22.4' 16S 95 gpm*
18'	19.3' 10SN 33 gpm	20.0' 10SN 30 gpm	20.6' 10SN 25 gpm	21.3' 14S 28 gpm	21.9' 14S 26 gpm	19.9' 16S 101 gpm*	20.2' 16S 98 gpm*	20.5' 16S 98 gpm*	20.8' 16S 97 gpm*	21.1' 16S 96 gpm*	21.3' 16S 95 gpm*	22.6' 16S 93 gpm*	21.9' 16S 91 gpm*	22.2' 16S 90 gpm*	22.4' 16S 89 gpm*
19'	20.3' 10SN 27 gpm	21.0' 14S 30 gpm	21.6' 14S 26 gpm	22.3' 14S 25 gpm	20.7' 16S 98 gpm*	21.0' 16S 96 gpm*	21.2' 16S 95 gpm*	22.5' 16S 94 gpm*	21.8' 16S 92 gpm*	22.1' 16S 91 gpm*	22.3' 16S 90 gpm*	22.6' 16S 86 gpm*	22.9' 16S 84 gpm*	23.2' 16S 82 gpm*	23.4' 16S 81 gpm*
20'	21.3' 14S 28 gpm	22.0' 14S 25 gpm	21.6' 16S 95 gpm*	21.9' 16S 95 gpm*	22.2' 16S 95 gpm*	22.5' 16S 88 gpm*	22.8' 16S 85 gpm*	23.1' 16S 83 gpm*	23.4' 16S 81 gpm*	23.7' 16S 80 gpm*	24.0' 16S 79 gpm*	24.3' 16S 78 gpm*	24.6' 16S 77 gpm*	24.9' 16S 76 gpm*	25.2' 16S 75 gpm*

Figure 7.







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