

PLUMBING SOLUTIONS

Product Overview



Professional Plumbing Applications

Crane Pumps & Systems, headquartered in Piqua, Ohio, USA is a recognized leader in meeting the ever changing needs of today's worldwide marketplace. Our technical specialists can provide the expertise that's needed to accurately evaluate service conditions and specify the most efficient and cost-effective pumping solution for virtually any application. Our commitment to excellence is carried through to the manufacturing, sales, distribution and service components of our business, as well. For industry leading innovation - as well as quality, reliability and value - we have your solution.

Crane Pumps & Systems uses its decades of experience to be able to offer industrial grade quality products for the highest performance in the residential plumbing market.

Our Barnes residential products mirror the quality and reliability found in the industrial market, because they are made with the same high grade components including cast iron, ball bearing construction and permanent split capacitor motors.

Use our efficient and economical plumbing products and packages in homes to remove or transport water and/or wastewater.

- Sump
- Fountain
- Effluent
- Sewage & Grinder
- Package Systems

Our wide variety of products provide a level of value and superior, long-lasting performance unmatched by our competition.



Sump Pumps

Submersible pumps for general purpose residential, commercial and light industrial sump applications.

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Package Systems

Complete line of pre-assembled sewage ejector packages.

PAGE 7



Effluent Pumps

Submersible effluent pumps designed to efficiently handle septic tank effluent applications for the long term.

PAGE 14



Sewage & Grinder Pumps

Submersible sewage ejector and grinder pumps for a wide variety of relatively light through heavy duty wastewater services.

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Specialty Pumps

Vertical and unique horizontal submersible pumps designed for use in various specialty applications.

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Accessories

Complete line of level controls, control panels, break away fittings (BAF's) and other accessories.

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SHUR-Switch™

Model	SU33
Motor	1/3hp PSC
RPM	3450
Cord Length	9' SJTW 18 gauge
Construction	Cast Iron/ Thermoplastic
Impeller	Thermoplastic
Discharge	1.50" NPT, Female, Vertical
Automatic Operation	Vertical Float Integral to Pump
Seal Design	Single Mechanical, Type 11A
Min. Sump Dia.	14" (355mm)
Weight	10 lbs.
Liquid Temperature	104°F (40°C) Continuous

Features:

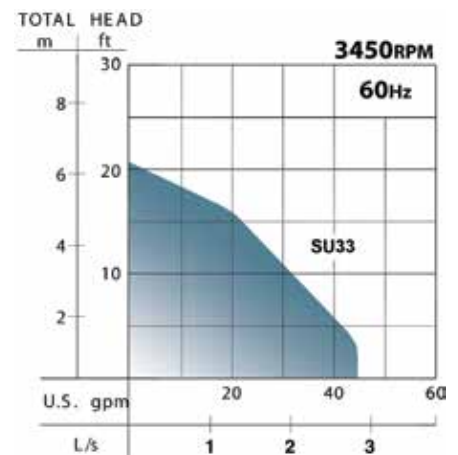
- Fully protected level switch eliminates float hang up in the basin
- Magnetic switch, on at 7.3" and off at 3.0"
- Cast iron motor enclosure provides better dissipation of heat
- Solid thermoplastic base with top suction eliminates air lock issues
- Small footprint for compact installation
- Permanent split capacitor (PSC) motor protects against nuisance tripping with GFCI installations
- GFCI Compatible for safety and NEC 210.8 (A) Compliance

Applications:
– Residential Sump

US Patent 8,167,578



Model	Part No.	F.L.A.	Phase	Voltage
SU33	130234	3.4	1	120



SP33 Series

Applications:

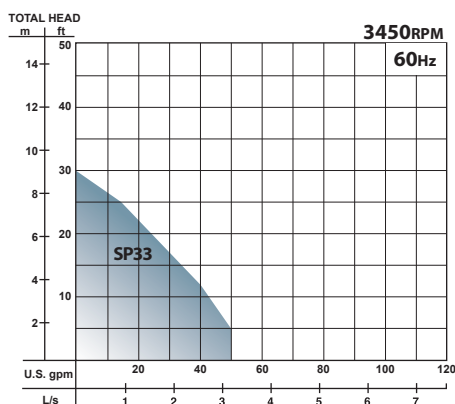
- Residential Sump
- Light Industrial
- Septic



Model	SP33
Motor	1/3hp PSC
RPM	3450
Cord Length	10' - 20' SJTOW/SJTW 18/3 gauge
Construction	Cast Iron
Impeller	Cast Iron Vortex
Discharge	1.50" NPT, Female, Vertical
Solids	.5"
Automatic Operation	Mechanical Float, Vertical Float, Diaphragm Switch
Seal Design	Single Mechanical, Type 21
Min. Sump Dia.	11" - 18" (Depending on switch type)
Weight	30 lbs.
Liquid Temperature	104°F (40°C) Continuous

Features:

- One piece motor/volute/housing avoids potential gasket failure
- Cast iron vortex impeller permits handling of typical sump debris
- Ball bearing construction for quieter run and longer life
- Permanent split capacitor (PSC) motor for more efficient operating range
- 30' of head shutoff provides broader operating range for most applications
- Available in high temperature model (SP33HTX) for 185°F intermittent service (See *High Temp pump in Specialty section*)
- GFCI Compatible for safety and NEC 210.8 (A) Compliance



Model	Part No.	F.L.A.	Phase	Voltage
SP33	112547	5.8	1	120
SP33X	112548	5.8	1	120
SP33A	112549	5.8	1	120
SP33AX	112550	5.8	1	120
SP33D	118371	5.8	1	120
SP33VF	112551	5.8	1	120
SP33VFX	112552	5.8	1	120
SP33VFAL *	112914	5.8	1	120

*SP33VFAL includes high water alarm.

'A' Designates piggy back mechanical float switch.

'D' Designates diaphragm switch.

'VF' Designates piggy back vertical float switch.

'X' Designates 20' cord.

SP50 • SP75 Series

Model	SP50	SP75
Motor	1/2hp PSC	3/4hp PSC
RPM	3450	3450
Cord Length	20' SJTOW/SJTW 18/3 gauge	20' SJTOW/SJTW 18/3 gauge
Construction	Cast Iron	Cast Iron
Impeller	Cast Iron Vortex	Cast Iron Vortex
Discharge	1.50" NPT, Female, Vertical	1.50" NPT, Female, Vertical
Solids	.5"	.5"
Automatic Operation	Mechanical Float, Vertical Float	Mechanical Float, Vertical Float
Seal Design	Single Mechanical, Type 21	Single Mechanical, Type 21
Min. Sump Dia.	Vertical Float 12", Mechanical Float 18"	Vertical Float 12", Mechanical Float 18"
Weight	34 lbs.	34 lbs.
Liquid Temperature	104°F (40°C) Continuous	104°F (40°C) Continuous

Applications:

- Residential Sump
- Light Industrial
- Septic



Features:

- One piece motor/volute/housing avoids potential gasket failure
- Cast iron vortex impeller handles typical sump debris
- Ball bearing construction for quieter run and longer life
- Permanent split capacitor (PSC) motor for more efficient operating range
- SP50 has 30' of head shutoff providing broader operating range for most applications
- SP75 has 33' of head shutoff to provide broader operating range for most applications
- GFCI Compatible for safety and NEC 210.8 (A) Compliance

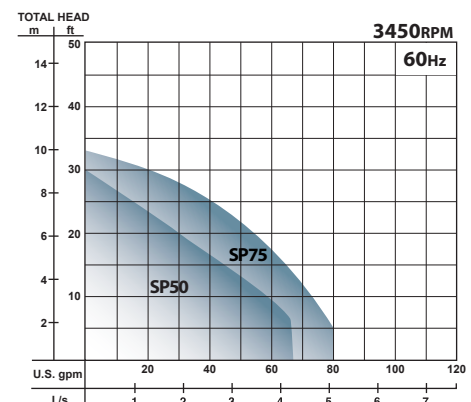
Model	Part No.	HP	F.L.A.	Phase	Voltage
SP50X	112875	.50	6.8	1	120
SP50AX	112877	.50	6.8	1	120
SP50VFX	112879	.50	6.8	1	120
SP75X	115368	.75	9.8	1	120
SP75AX	115369	.75	9.8	1	120
SP75VFX	115370	.75	9.8	1	120

'A' Designates piggy back mechanical float switch.

'D' Designates diaphragm switch.

'VF' Designates piggy back vertical float switch.

'X' Designates 20' cord.



Residential Laundry Tray Sump Pump System

Applications:

- Laundry Tray
- Sinks
- Dehumidifier water
- AC Condensate removal
- Wet bars



Model

SU33LT

Features:

- Basin components are durable, corrosion-resistant polyethylene
- Box and cover have a matching textured finish
- 1-1/2" threaded inlet and vent
- Grommet cord seal
- Accommodates 1-1/2" discharge piping
- Stainless steel bolts
- Large 6 gallon capacity
- Size: 15" x 15" x 14"
- Package weight 19-1/2 lbs. (Includes pump)
- Liquid temperature 104°F (40°C)

Model	Part No.	Pump Model	Part No.	F.L.A.	Phase	Voltage
SU33LT	131411	SU33	130234	3.4	1	120

Includes SU33 pump, 15" x 15" x 14" basin, 1.5" vent & discharge grommets, and check valve. Comes assembled complete and boxed.

Commercial Laundry Tray Sump Pump System

Applications:

- Laundry Tray
- Sinks
- Dehumidifier water
- AC Condensate removal
- Wet bars



Model

SP33LT

Features:

- All components are durable, corrosion-resistant polyethylene
- Box and cover have a matching textured finish
- 1-1/2" threaded "spin weld" insert for the inlet
- Grommet discharge, vent and cord seals
- Stainless steel bolts and encapsulated aluminum inserts
- Large 11 gallon capacity
- 1/8" thick black closed cell foam gasket
- Size: 12" x 16" x 14"
- Wall thickness 3/16"
- Package weight 34 lbs. (Includes pump)
- Liquid temperature 104°F (40°C)

Model	Part No.	Pump Model	Part No.	F.L.A.	Phase	Voltage
SP33LT	112900	SP33VF	112551	5.8	1	120

Includes SP33VF pump, 12" x 14" x 16" basin, 1.5" vent & discharge flanges, 1.5" x 16" discharge piping & adapter check valve. Comes assembled complete and boxed.

30 Gallon Sewage Systems

Pre-Assembled

Model	SE411	SEV412ASP
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Features: (Pre-Assembled)

- High strength polyethylene tank
- Box and cover have a matching textured finish
- Flexible 4" inlet flange
- Weep hole factory drilled on all pipes to prevent air lock
- Grommet discharge, vent and cord seals
- Accommodates 2" discharge piping
- Large 30 gallon capacity
- Liquid Temperature 104°F (40°C)

Applications:

- Lavatories
- Laundry tubs
- Floor drains
- Water closets

Model	Part No.	HP	F.L.A.	Phase	Voltage	Notes
SEV412ASP	102160C	.50	10.5	1	115	Steel Cover
SEV412ASPI	102161	.50	10.5	1	115	IAPMO Approved
SE411ASP	103135	.40	12.0	1	115	Poly Cover

Comes complete with, 18" x 30" basin, pump, level control, 4" inlet grommet, check valve, male adapter, 2" x 32" discharge piping, cover, boxed pre-assembled. SEV412ASPI basin approved by international Association of Plumbing and Mechanical Officials.

Un-Assembled

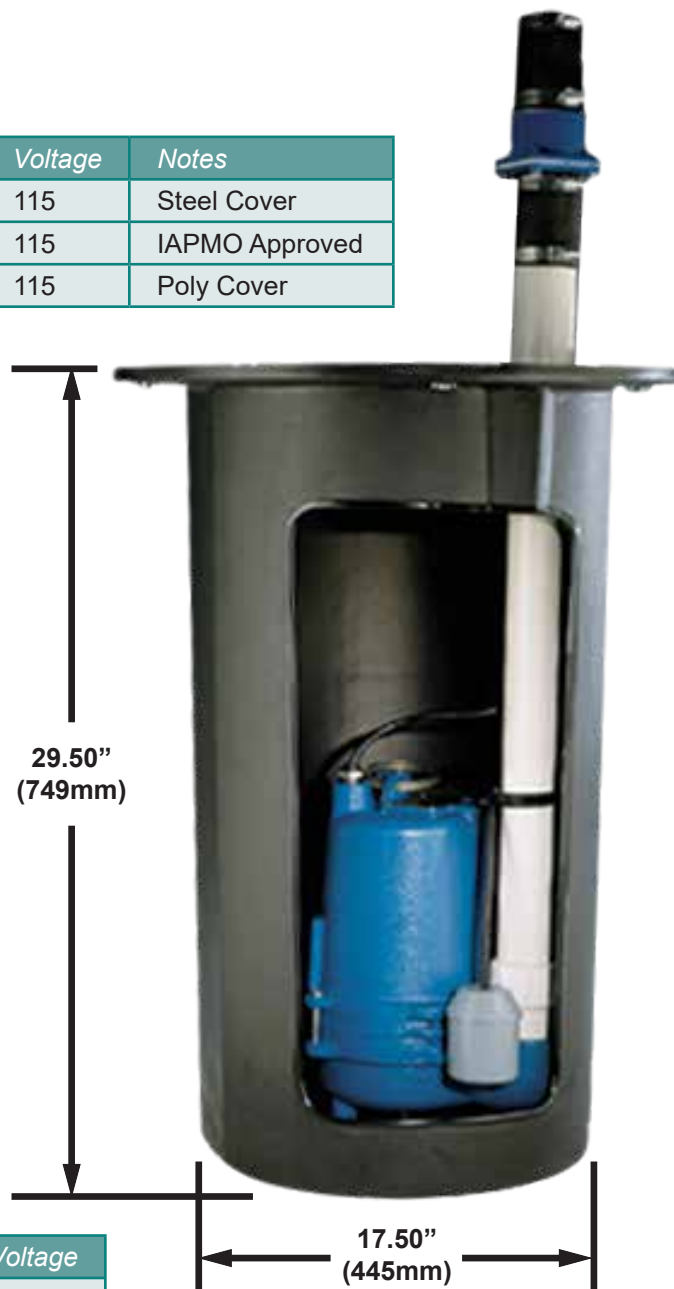
Model	SE-SP
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Features: (Un-Assembled)

- High strength polyethylene tank
- Box and cover have a matching textured finish
- Flexible 4" inlet flange
- Weep hole factory drilled on all pipes to prevent air lock
- Grommet discharge, vent and cord seals
- Accommodates 2" discharge piping
- Large 30 gallon capacity
- Liquid Temperature 104°F (40°C)

Model	Part No.	HP	F.L.A.	Phase	Voltage
SEV412-SP	105367	.50	10.5	1	115
SE411-SP	084283B	.40	12.0	1	115
SE51-SP	105086	.50	11.6	1	115

Comes complete with, 18" x 30" poly-basin, level control, steel lid, 4" inlet grommet, check valve, boxed un-assembled. SEV412SP has a structural foam basin.





41 Gallon Pre Assembled Sewage Systems

Model

PITPRO

Features:

- Removable FloatTREE design for easy float maintenance; flange includes provision for optional alarm float
- Split cover allows simplified basin access
- Sidewall ribs lock basin in place when concrete floor is poured
- Inlet hubs easily connect to piping with flexible rubber connectors (provided by others)
- Ribbed floor limits pump torque rotation
- Liquid Temperature 104°F (40°C)

Applications:

- Lavatories
- Laundry tubs
- Floor drains
- Water closets



Package Systems

Model	Part No.	Size	HP	F.L.A.	Phase	Voltage
PITPRO25V-115	126920	25" Dia. x 24" Deep	.50	10.5	1	115
PITPRO20V-115	126914	20" Dia. x 30" Deep	.50	10.5	1	115
PITPRO25-115	126921	25" Dia. x 24" Deep	.40	12.0	1	115
PITPRO20-115	126915	20" Dia. x 30" Deep	.40	12.0	1	115
PITPRO25-230	126922	25" Dia. x 24" Deep	.40	6.2	1	230
PITPRO25-230	126916	20" Dia. x 30" Deep	.40	6.2	1	230
PITPRO25-BASIN	126891-2	25" Dia x 24" Deep	Basin and Lid only			
PITPRO20-BASIN	126890-2	20" Dia x 30" Deep				

41 Gallon sewage ejector basin - poly basin and split cover with float tree, automatic, piggy-back float, 4" pipe fitting inlet, check valve, box assembled.

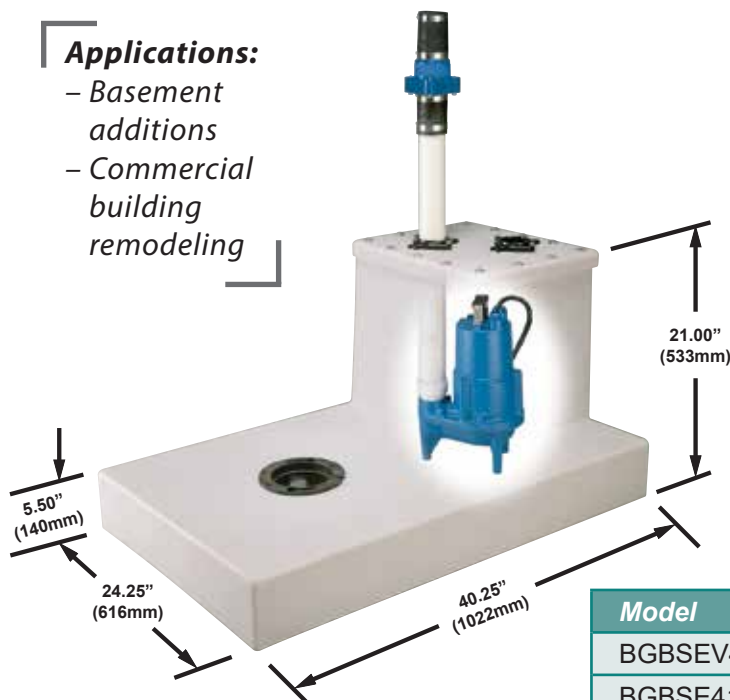
Basement Genie

Model

BGBSE411/SEV412

Applications:

- Basement additions
- Commercial building remodeling



Features:

- Allows for bathroom installation where gravity flow is unavailable
- Installed free standing on any level surface instead of breaking through concrete
- Tank and all piping can be hidden behind a wall or under the floor

Model	Part No.	HP	F.L.A.	Phase	Voltage
BGBSEV412	102147	.50	10.5	1	115
BGBSE411	102148	.40	12.0	1	115

System includes pump, basin, 2" PVC discharge pipe, 2" NPT vent flange, 2" straight discharge flange, 2" rubber gasket, cast iron closet flange, rubber cord grommet, 3/8" foam lid gasket, 2" check valve and hardware.

Fiberglass Lift Stations: Pipe Rail Simplex/Duplex

Features:

- Provides ease of pump installation and maintenance using the quick disconnect breakaway fitting and stainless steel guide rails
- Available in a variety of depths and diameters
- CP&S online configurator tool and technical sales staff makes the configuration process easy to select the right pump, control panel, basin, and cover for each unique application
- Available with a wide variety of Barnes pump options:
 - Grinders: PGPP, PGPH, SGV
 - Sewage Ejectors: SEV412, SE, 2SEV, 3SE, 3SEV
 - Effluent: EHV, EH, STEP

Construction Details:

- Comes pre-assembled with the following: schedule 80 PVC, isolation valve, check valve, BAF, control floats, pipe rails
- Heavy duty schedule 80 piping
- Environmentally friendly mercury free mechanical floats
- User adjustable float weights to set levels
- Stainless steel lifting chain, float bracket, pipe rails, mounting hardware
- Standard removable check valve offers ease of maintenance
- Filament wound fiberglass basin for extra strength

Applications:

- Residential construction
- Commercial construction
- Housing development



Simplex System



Duplex System

Fiberglass Lift Stations: Pipe Rail Simplex/Duplex

The CP&S online configurator tool and technical sales staff can provide the exact selection of pump, control panel, simplex or duplex basin and cover option for each unique application.

The most common configurations are available for order through pre-configured part numbers.

<i>Pipe Rail System Specifications</i>				
<i>Model</i>	<i>Pump Discharge x Basin Discharge</i>	<i>Part Number</i>	<i>Basin Diameter x Basin Depth</i>	<i>Simplex/Duplex</i>
S2460-1.25	1.25" x 1.25"	137686	24X60	Simplex
S2472-1.25	1.25" x 1.25"	137687	24X72	Simplex
S2484-1.25	1.25" x 1.25"	137688	24X84	Simplex
D3660-2	2" x 2"	137689	36X60	Duplex
D3672-2	2" x 2"	137690	36X72	Duplex
D3684-2	2" x 2"	137691	36X84	Duplex
D3696-2	2" x 2"	137692	36X96	Duplex
D4848-2	2" x 2"	137693	48X48	Duplex
D4860-2	2" x 2"	137694	48X60	Duplex
D4872-2	2" x 2"	137695	48X72	Duplex
D4884-2	2" x 2"	137696	48X84	Duplex
D4860-3	3" x 3"	137697	48X60	Duplex
D4872-3	3" x 3"	137698	48X72	Duplex
D4884-3	3" x 3"	137699	48X84	Duplex
D4896-3	3" x 3"	137700	48X96	Duplex

Includes basin, cover, piping, piggyback level controls, and alarm. Pump purchased separately. Female NPT Bulkhead Fitting.

EP52X • EP72X Series

Model	EP52X	EP72X
Motor	1/2hp PSC	3/4hp PSC
RPM	3450	3450
Cord Length	20' SJTOW 16/3 gauge	20' SJTOW 16/3 gauge
Construction	Cast Iron	Cast Iron
Impeller	Cast Iron Vortex	Cast Iron Vortex
Discharge	1.50" NPT, Female, Vertical	1.50" NPT, Female, Vertical
Solids	.75"	.75"
Automatic Operation	No	No
Seal Design	Single Mechanical, Type 21	Single Mechanical, Type 21
Min. Sump Dia.	12"	12"
Weight	35 lbs.	36 lbs.
Liquid Temperature	104°F (40°C) Continuous	104°F (40°C) Continuous

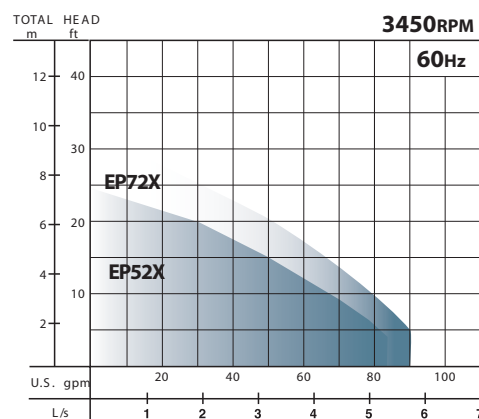
Applications:

- Sump
- Septic Tanks



Features:

- One piece motor/volute/housing avoids potential gasket failure
- Cast iron vortex impeller permits handling of typical sump debris
- 416 stainless steel shaft
- Ball bearing construction for quieter run and longer life
- Permanent split capacitor (PSC) motor for more efficient operating range



Model	Part No.	HP	F.L.A.	Phase	Voltage	Control Panel Simplex	Control Panel Duplex
EP52X	119330	.60	3.4	1	230	106480	106483
EP72X	119331	.75	4.3	1	230	106480	106483

EHV412 Series

Applications:

- Sump
- Septic Tanks

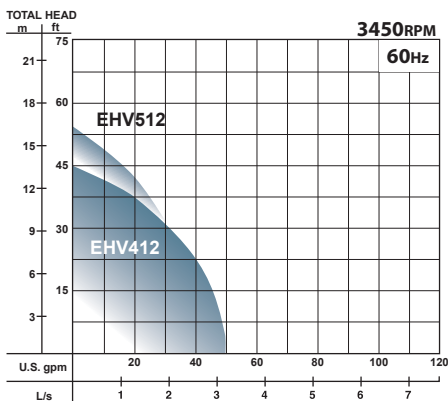


Model	EHV412
Motor	1/2hp PSC
RPM	3450
Cord Length	20' SJTOW 14/3 gauge
Construction	Cast Iron
Impeller	Cast Iron Vortex
Discharge	2.00" NPT, Female, Vertical
Solids	.75"
Automatic Operation	Mechanical Float Vertical Float
Seal Design	Single Mechanical, Oil Filled Reservoir
Weight	45 lbs.
Liquid Temperature	77°F (25°C) Continuous 122°F (50°C) Intermittent

Features:

- Cast iron housing and volute
- 420 stainless steel shaft to handle aggressive effluent
- Upper and lower ball bearing for quieter run and longer life
- Permanent split capacitor (PSC) motor for more efficient operation
- 2" discharge with high temperature overload on the motor for single phase operation
- Quick connect custom molded cord for sealing and strain relief

Effluent
Pumps



Model	Part No.	F.L.A.	Phase	Voltage	Control Panel Simplex	Control Panel Duplex
EHV412	101298	6.4	1	115	106480	106483
EHV512	144668	10	1	115	106480	106483
EHV412A	103542	6.4	1	115	106480	106483
EHV512A	144669	10	1	115	106480	106483
EHV412AT	103543	6.4	1	115	106480	106483

'A' Designates piggy back mechanical float switch.

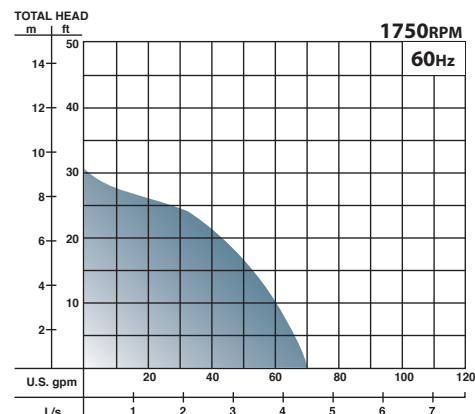
'AT' Designates piggy back mechanical float switch attached to pump.

'VF' Designates piggy back vertical float switch.

*Long cord length options available.

BP314 • BP324 Series

Model	BP314	BP324
Motor	1/3hp PSC	1/3hp PSC
RPM	1750	1750
Cord Length	15' SJTOW 14/3 gauge	15' SJTOW 14/3 gauge
Construction	Cast Iron Bronze Available	Cast Iron Bronze Available
Impeller	Polypropylene Bronze Available	Polypropylene Bronze Available
Discharge	2.00" NPT, Female, Vertical	2.00" NPT, Female, Vertical
Solids	.75"	.75"
Automatic Operation	Mechanical Float Vertical Float	Mechanical Float Vertical Float
Seal Design	Single Mechanical Carbon/Ceramic/ Buna-N	Single Mechanical Carbon/Ceramic/ Buna-N
Weight	52 - 53 lbs.	52 - 53 lbs.
Liquid Temperature	77°F (25°C) Continuous	104°F (40°C) Continuous



Features:

- Standard cast iron housing with an option for bronze
- Option for bronze seal plate
- 416 stainless steel shaft to handle aggressive effluent
- Ball bearing construction for longer life and quieter run
- Permanent split capacitor (PSC) oil filled motor

Applications:

- Sump
- Light Industrial

Model	Part No.	F.L.A.	Phase	Voltage	Control Panel Simplex	Control Panel Duplex
BP314	096727	8.0	1	115	106481	106484
BP314A	096728	8.0	1	115	106481	106484
BP314AU	096729	8.0	1	115	106481	106484
BP314BR	096732	8.0	1	115	106481	106484
BP314ABR	096733	8.0	1	115	106481	106484
BP314AUBR	093734	8.0	1	115	106481	106484
BP324	096730	4.0	1	230	106480	106483
BP324AU	096731	4.0	1	230	106480	106483
BP324BR	096735	4.0	1	230	106480	106483
BP324AUBR	096736	4.0	1	230	106480	106483

* Consult factory for additional models.

'A' Designates piggy back mechanical float switch.

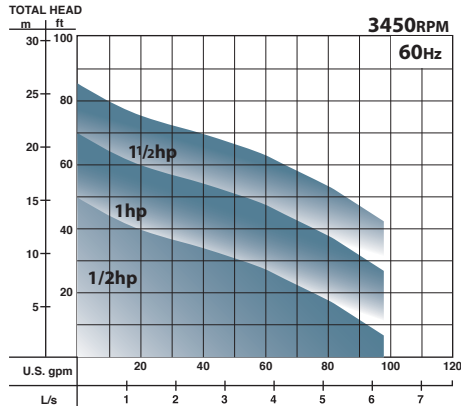
'AU' Designates integral mechanical float switch.

'BR' Designates bronze pump.

EH-L • EH-DS Series

Applications:

- Sump
- Septic Tanks



Model	EH-L	EH-DS
Motor	1/2hp, 1hp, 1-1/2hp PSC	1/2hp, 1hp, 1-1/2hp PSC
RPM	3450	3450
Cord Length	20' 14/3 (1PH) 20' 14/4 (3PH)	20' 14/3 (1PH) 20' 14/4 (3PH)
Construction	Cast Iron	Cast Iron
Impeller	Polypropylene with stainless steel insert	Polypropylene with stainless steel insert
Discharge	2.00" NPT, Female, Vertical	2.00" NPT, Female, Vertical
Solids	.75"	.75"
Automatic Operation	Manual with panel	Manual with panel
Seal Design	Single Mechanical	Tandem Mechanical
Weight	81 lbs. (1/2hp) 86 lbs. (1hp) 97 lbs. (1-1/2hp)	105 lbs. (1/2hp) 110 lbs. (1hp) 121 lbs. (1-1/2hp)
Liquid Temperature	104°F (40°C) Continuous	104°F (40°C) Continuous
Dimensions	13.47L x 9.68W x 17.33H	13.47L x 9.68W x 17.33H

Features:

- Cast iron motor housing and volute
- 416 stainless steel shaft to handle aggressive effluent
- Upper and lower ball bearing for quieter run and longer life
- Permanent split capacitor (PSC) motor for more efficient operation
- 2" discharge with high temperature overload on the motor for single phase operation
- Quick connect custom molded cord for sealing and strain relief

Optional Equipment:

- Additional seal faces
- Impeller trim
- Cord lengths
- Normally closed temperature sensor and cord for 3 phase operation (requires relay in panel)

Model	Part No.	HP	F.L.A.	Phase	Voltage	Control Panel Simplex	Control Panel Duplex
EH512L	105058	.50	11.4	1	115	106481	106484
EH522L	105059	.50	4.9	1	230	106480	106483
EH592L	105060	.50	4.2/4.5	3	200/230	106491	106503
EH1022L	105068	1.00	8.1	1	230	106481	106484
EH1092L	105069	1.00	8.1/6.2	3	200/230	106494	106506
EH1522L	105076	1.50	10.9	1	230	106481	106484
EH1592L	105077	1.50	7.8/7.0	3	200/230	106494	106506

* Consult factory for additional models (including Double Seal (DS) models).

'L' Designates single seal.

If a control panel is used, use a pilot-duty control float with contacts normally open.

STEP-SS • STEP-DS Series

Model	STEP-SS	STEP-DS
Motor	1/2hp, 1hp PSC	1/2hp, 1hp PSC
RPM	3450	3450
Cord Length	20'	20'
Construction	Cast Iron	Cast Iron
Impeller	Polypropylene with stainless steel insert	Polypropylene with stainless steel insert
Discharge	2.00" NPT, Female, Vertical	2.00" NPT, Female, Vertical
Solids	.75"	.75"
Automatic Operation	No	No
Seal Design	Single Mechanical	Tandem Mechanical
Weight	80 lbs. (1/2hp) 91 lbs. (1hp)	90 lbs. (1/2hp) 101 lbs. (1hp)
Liquid Temperature	104°F (40°C) Continuous	104°F (40°C) Continuous
Dimensions	12.16L x 9.25W x 16.76H	12.16L x 9.25W x 16.76H

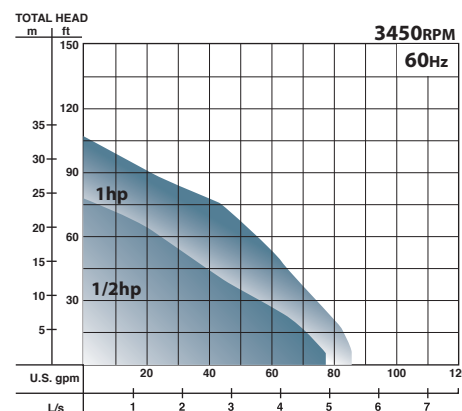
Applications:

- Sump
- Septic Tanks



Features:

- Cast iron motor housing and volute
- Impeller Type: single vane, enclosed
- 416 SS shaft to handle aggressive sewage
- Upper and lower ball bearing for quieter run and longer life
- Permanent split capacitor (PSC) motor for more efficient operation
- 2" discharge with high temperature overload on the motor for single phase operation
- Quick connect custom molded cord for sealing and strain relief
- Optional equipment additional seal faces, impeller trim, cord lengths and normally closed temperature sensor and cord for 3 phase operation (requires relay in panel)



Model	Part No.	HP	F.L.A.	Phase	Voltage	Control Panel Simplex	Control Panel Duplex
STEP512SS	105045	.50	11.9	1	115	106481	106484
STEP512SSA	105045A	.50	11.9	1	115	N/A	N/A
STEP522SS	105046	.50	5.1	1	230	106480	106483
STEP592SS	105047	.50	4.5/4.5	3	200/230	106492	106504
STEP1022SS	105054	1.00	8.3	1	230	106481	106484
STEP1092SS	105055	1.00	5.9/5.6	3	200/230	106493	106505

* Consult factory for additional models (including Double Seal (DS) models).

* Additional phase and voltage models available.

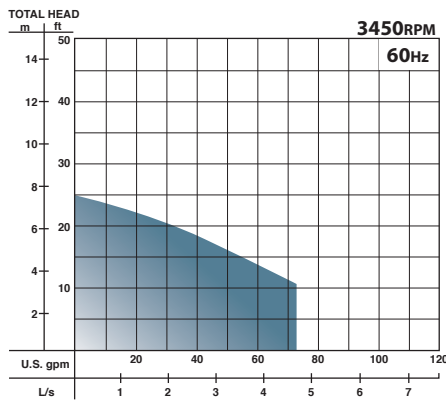
If a control panel is used, use a pilot-duty control float with contacts normally open.

'A' Designates piggy back mechanical float switch.

SEV412 Series

Applications:

- Raw sewage
- Residential wastewater
- Storm water
- Decorative water features



Model	SEV412
Motor	1/2hp PSC
RPM	3450
Cord Length	20' SJTOW 14/3 gauge
Construction	Cast Iron
Impeller	Cast Iron Vortex
Discharge	2.00" NPT, Female, Vertical
Solids	2.00"
Automatic Operation	Mechanical Float Vertical Float
Seal Design	Single Mechanical, Oil Filled Reservoir
Weight	44 lbs. (manual) 45 lbs. (with float)
Liquid Temperature	77°F (25°C) Continuous
Dimensions	9.63L x 7.00W x 16.30H

Features:

- Cast iron motor housing and volute
- Impeller Type: Cast iron multi-vane vortex
- 416 stainless steel shaft to handle aggressive sewage
- Upper and lower ball bearing for quieter run and longer life
- Permanent split capacitor (PSC) motor for more efficient operation
- 2" discharge with high temperature overload on the motor for single phase operation
- Quick connect custom cord molded for sealing and strain relief

Model	Part No.	F.L.A.	Phase	Voltage	Control Panel Simplex	Control Panel Duplex
SEV412	101292	10.5	1	115	106481	106484
SEV412A	101293	10.5	1	115	106481	106484
SEV412VF	101294	10.5	1	115	106481	106484
SEV412AT	103544	10.5	1	115	106481	106484
SEV412VFT	110404	10.5	1	115	106481	106484

'A' Designates piggy back mechanical float switch.

'T' Designates switch attached to pump.

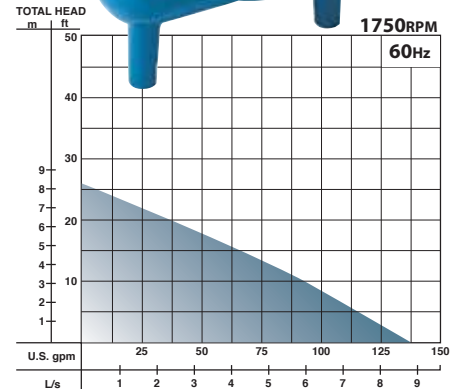
'VF' Designates piggy back vertical float switch.

SE411 • SE421 Series

Model	SE411	SE421
Motor	4/10hp PSC	4/10hp PSC
RPM	1750	1750
Cord Length	15' SJTOW 14/3 gauge	15' SJTOW 14/3 gauge
Construction	Cast Iron	Cast Iron
Impeller	Cast Iron	Cast Iron
Discharge	2.00" NPT, Female, Vertical	2.00" NPT, Female, Vertical
Solids	2.00"	2.00"
Automatic Operation	Mechanical Float Vertical Float	Mechanical Float Vertical Float
Seal Design	Single Mechanical, Oil Filled Reservoir	Single Mechanical, Oil Filled Reservoir
Weight	53 lbs. (manual) 55 lbs. (with float)	55 lbs. (manual) 57 lbs. (with float)
Liquid Temperature	77°F (25°C) Continuous	104°F (40°C) Continuous
Dimensions	10.75L x 7.75W x 16.76H	10.75L x 7.75W x 16.76H

Applications:

- Raw sewage
- Residential wastewater
- Storm water
- Decorative water features



Features:

- Oil filled motors for better heat dissipation
- Oil-lubricated bearings for quieter run and longer life
- Cast iron construction, stainless steel hardware, Buna-N O-rings
- Plug-in power cords simplify maintenance as the pumps are merely unplugged before service
- Standard seals are carbon/ceramic, Buna-N

Optional Equipment:

- Mechanical seal material
- Additional cord lengths

Model	Part No.	F.L.A.	Phase	Voltage	Control Panel Simplex	Control Panel Duplex
SE411	096747	12.0	1	115	106481	106484
SE411	096747B *	12.0	1	115	106481	106484
SE411	096747A *	12.0	1	115	106481	106484
SE411	096747K *	12.0	1	115	106481	106484
SE411A	096748	12.0	1	115	106481	106484
SE411AU	096749	12.0	1	115	106481	106484
SE411VF	100836	12.0	1	115	106481	106484
SE421	096750	6.2	1	230	106480	106483
SE421AU	096751	6.2	1	230	106480	106483

If a control panel is used, use a pilot-duty control float with contact normally open.

'A' Designates piggy back mechanical float switch.

'AU' Designates integral mechanical float switch.

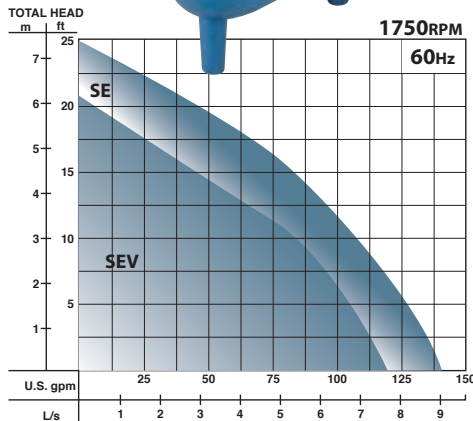
'VF' Designates piggy back vertical float switch.

* 'B' Designates 20' cord; 'A' Designates 30' cord; 'K' Designates 40' cord.

SE511 • SE521 Series

Applications:

- Raw sewage
- Residential wastewater
- Storm water
- Decorative water features



Model	SE511 • SEV511	SE521 • SEV521
Motor	1/2hp PSC	1/2hp PSC
RPM	1750	1750
Cord Length	15' SJTOW 14/3 gauge	15' SJTOW 14/3 gauge
Construction	Cast Iron	Cast Iron
Impeller	Cast Iron (SE) Bronze Vortex (SEV)	Cast Iron (SE) Bronze Vortex (SEV)
Discharge	2.00" NPT, Female, Vertical	2.00" NPT, Female, Vertical
Solids	2.00"	2.00"
Automatic Operation	Mechanical Float Vertical Float	Mechanical Float Vertical Float
Seal Design	Single Mechanical, Oil Filled Reservoir	Single Mechanical, Oil Filled Reservoir
Weight	58 lbs. (manual) 60 lbs. (with float)	60 lbs. (manual) 62 lbs. (with float)
Liquid Temperature	104°F (40°C) Continuous	104°F (40°C) Continuous
Dimensions	10.75L x 7.75W x 15.18H	10.75L x 7.75W x 15.18H

Features:

- Oil filled motors for better heat dissipation
- Oil-lubricated bearings for quieter run and longer life
- Cast iron construction, stainless steel hardware, Buna-N O-rings
- Plug-in power cords simplify maintenance as the pumps are merely unplugged before service
- Standard seals are carbon/ceramic, Buna-N

Optional Equipment:

- Mechanical seal material
- Additional cord lengths

Model	Part No.	F.L.A.	Phase	Voltage	Control Panel Simplex	Control Panel Duplex
SE511	096752	12.0	1	115	106481	106484
SE511A	096753	12.0	1	115	106481	106484
SE511AU	096754	12.0	1	115	106481	106484
SE511VF	100837	12.0	1	115	106481	106484
SE521	096755	6.2	1	230	106481	106484
SE521AU	096756	6.2	1	230	106481	106484
SEV511	096757	12.0	1	115	106481	106484
SEV511A	096758	12.0	1	115	106481	106484
SEV511AU	096759	12.0	1	115	106481	106484
SEV521	096760	6.2	1	230	106480	106483
SEV521AU	096761	6.2	1	230	106480	106483

* Consult factory for additional models. If a control panel is used, use a pilot-duty control float with contact normally open.

'A' Designates piggy back mechanical float switch. 'AU' Designates integral mechanical float switch. 'VF' Designates piggy back vertical float switch.

SE Series

Model	SE
Motor	1/2hp, 3/4hp, 1hp PSC
RPM	1750
Cord Length	20'
Construction	Cast Iron
Impeller	Cast Iron
Discharge	2.00" NPT, Female, Vertical, Bolt-on Flange
Solids	2.00"
Automatic Operation	Mechanical Float (1/2hp Only)
Seal Design	Single Mechanical
Weight	85 lbs. (1/2 hp) 90 lbs. (3/4 hp) 90 lbs. (1 hp)
Liquid Temperature	104°F (40°C) Continuous
Dimensions	12.63L x 9.75W x 18.63H

Applications:

- Raw sewage
- Residential wastewater
- Storm water
- Decorative water features



Features:

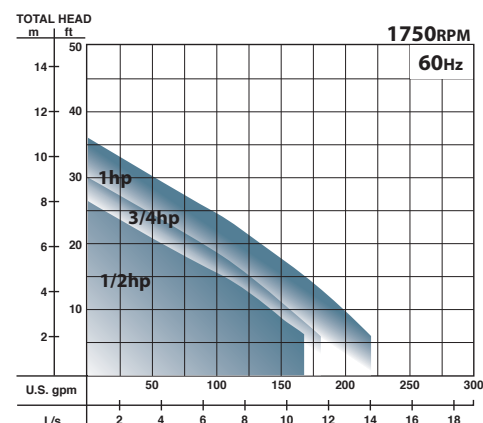
- Oil filled motors for better heat dissipation
- Oil-lubricated bearings for quieter run and longer life
- Cast iron construction, stainless steel hardware, Buna-N O-rings
- Plug-in power cords simplify maintenance as the pumps are merely unplugged before service
- Standard seals are carbon/ceramic, Buna-N

Optional Equipment:

- Additional seal faces
- Impeller trim
- Cord lengths
- Normally closed temperature sensor
- Cord for 3 phase operation

Accessories:

- Break Away Fitting (BAF)
- Check valve
- Control panel



SE Series cont.

<i>Model</i>	<i>Part No.</i>	<i>HP</i>	<i>F.L.A.</i>	<i>Phase</i>	<i>Voltage</i>	<i>Control Panel Simplex</i>	<i>Control Panel Duplex</i>
SE51	104871	.50	11.6	1	120	106481	106484
SE51A	104872	.50	11.6	1	120	106481	106484
SE51AU	104873	.50	11.6	1	120	106481	106484
SE52	104874	.50	5.9	1	240	106480	106483
SE52AU	104875	.50	5.9	1	240	106480	106483
SE594L	104881	.50	3.2/3.0	3	200/240	106490	106502
SE774L	104884	.75	7.4/7.0	1	200/240	106481	106484
SE774L **	104884A	.75	7.4/7.0	1	200/240	N/A	N/A
SE794L	104885	.75	4.8/4.5	3	200/240	106492	106504
SE1074L	104888	1.00	8.8/8.3	1	200/240	106481	106484
SE1074L **	104888E	1.00	8.8/8.3	1	200/240	N/A	N/A
SE1094L	104889	1.00	5.1/4.9	3	200/240	106492	106504

* Consult factory for additional models (including Double Seal (DS) models).

** SE774 must be used with piggy-back float. SE1074 must be used with a piggy back float (float not included with pump).

If a control panel is used, use a pilot-duty control float with contacts normally open.

'A' Designates piggy back mechanical float switch.

'AU' Designates integral mechanical float switch.

'L' Designates single seal.

2SEV Series

Model	2SEV-L	2SEV-L
Motor	1/2hp, 1hp, 1-1/2hp, 2hp PSC	1/2hp, 3/4hp, 1hp PSC
RPM	3450	1750
Cord Length	20'	20'
Construction	Cast Iron	Cast Iron
Impeller	Cast Iron Vortex	Cast Iron Vortex
Discharge	2.00" NPT, Female, Vertical, Bolt-on Flange	2.00" NPT, Female, Vertical, Bolt-on Flange
Solids	2.00"	2.00"
Automatic Operation	No	No
Seal Design	Single Mechanical	Single Mechanical
Weight	80 lbs. (1/2 hp) 90 lbs. (3/4 hp) 95 lbs. (1-1/2 hp) 100 lbs. (2 hp)	75 lbs. (1/2 hp) 75 lbs. (3/4 hp) 85 lbs. (1 hp)
Liquid Temperature	104°F (40°C) Continuous	104°F (40°C) Continuous
Dimensions	12.63L x 9.75W x 19.07H	12.63L x 9.75W x 19.07H

Applications:

- Raw sewage
- Residential wastewater
- Storm water
- Decorative water features



Features:

- All pumps are oil filled for better motor heat dissipation
- Oil-lubricated bearings for quieter run and longer life
- Permanent split capacitor (PSC) motor for more efficient operation
- Cast iron construction, stainless steel hardware, Buna-N O-rings
- Vortex impeller
- Bolt-on flange (2", certain 3" discharge) simplifies piping
- Cast-in feet provide high clearance above inlet to reduce clogging potential
- Plug-in power cords simplify maintenance as the pumps are merely unplugged before service
- Double seals (DS) use Buna-N diaphragms to pressurize the seal chamber
- Pumps with double seals have two plug-in cords: one for power, one for temperature (3 phase) and moisture detector circuits, cords available in 30, 50 & 100 Ft
- Standard seals are carbon/ceramic/Buna-N
- Silicon carbide & tungsten carbide faces available

Optional Equipment:

- Additional seal faces
- Impeller trim
- Cord lengths (30', 50' or 100')
- Normally closed temperature sensor
- Cord for 3 phase operation
- 3" NPT discharge adapter

Accessories:

- Break Away Fitting (BAF)
- Check valve
- Control panel

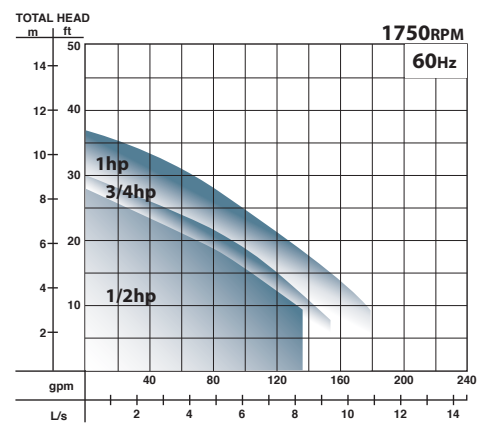
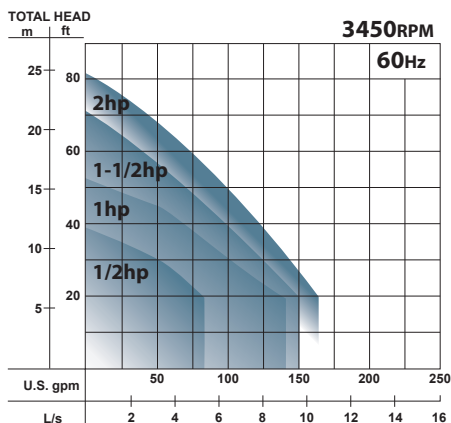
2SEV Series cont.

Model	Part No.	HP	F.L.A.	RPM	Phase	Voltage	Control Panel Simplex	Control Panel Duplex
2SEV512L **	104970	.50	12.6	3450	1	120	106481	106484
2SEV522L	104971	.50	6.0	3450	1	240	106480	106483
2SEV592L	104972	.50	5.8/5.3	3450	3	200/240	106493	106505
2SEV1022L	104982	1.00	10.7	3450	1	240	106481	106484
2SEV1092L	104983	1.00	7.9/7.5	3450	3	200/240	106494	106506
2SEV1522L	104187	1.50	13.5	3450	1	240	106480	106483
2SEV1592L	104188	1.50	10.8/9.8	3450	3	200/240	106495	106507
2SEV2022L	104190	2.00	16.0	3450	1	240	106482	106485
2SEV2092L	104191	2.00	13.2/12.0	3450	3	200/240	106496	106508
2SEV514L	104918	.50	12.0	1750	1	120	106481	106484
2SEV524L	104919	.50	6.3	1750	1	240	106480	106483
2SEV594L	104920	.50	3.7/3.8	1750	3	200/240	106491	106503
2SEV724L	104928	.75	7.1	1750	1	240	106480	106483
2SEV794L	104929	.75	4.8/4.6	1750	3	200/240	106492	106504
2SEV1024L	104936	1.00	8.5	1750	1	240	106481	106484
2SEV1094L	104937	1.00	5.3/5.1	1750	3	200/240	106492	106504

* Consult factory for additional models (including Double Seal (DS) models).

** Pump is CSA listed only.

'L' Designates single seal.



3SE Series

Model	3SE	3SE
Motor	1-1/2hp, 2hp, 3hp	1/2hp - 3hp
RPM	3450	1750
Cord Length	30'	25' (1-1/2hp - 3hp) 30' (1/2hp - 1hp)
Construction	Cast Iron	Cast Iron
Impeller	Cast Iron, 2 vane, semi-open	Cast Iron
Discharge	3.00" NPT, Female, Vertical	3.00" NPT, Vertical
Solids	1.50"	2.00" (1/2hp, 3/4hp, 1hp) 2.50" (1-1/2hp, 2hp, 3hp)
Automatic Operation	No	No
Seal Design	Single Mechanical, Oil Filled Reservoir	Single Mechanical (1/2hp - 2hp) Single Mechanical, Oil Filled Reservoir (3hp)
Weight	145 lbs. (1-1/2hp) 150 lbs. (2hp) 170 lbs. (3hp)	85 lbs. (1/2hp, 3/4hp) 95 lbs. (1hp) 145 lbs. (1-1/2hp) 150 lbs. (2hp) 170 lbs. (3hp)
Liquid Temperature	104°F (40°C) Continuous	104°F (40°C) Continuous
Dimensions	14.23L x 9.25W x 18.21H (1-1/2hp, 2hp) 14.68L x 11.05W x 21.78H (3hp)	16.70L x 12.63W x 21.07H

Applications:

- Raw sewage
- Residential wastewater
- Storm water
- Decorative water features



Single Seal



Double Seal

Features:

- Oil filled motors for heat dissipation
- Oil-lubricated bearings for quieter run and longer life
- Cast iron construction, stainless steel hardware, Buna-N O-rings
- 2 vane semi-open impeller with pump out vanes on back side dynamically balanced ISO G6.3
- Plug-in power cords simplify maintenance as the pumps are merely unplugged before service
- Standard seals are carbon/ceramic/Buna-N; Double Seals (DS) tandem mechanical
- Pumps with double seals have two plug-in cords: one for power, one for temperature (3 phase) and moisture detector circuits, cords available in 30, 50 & 100 Ft

Optional Equipment:

- Additional seal faces
- Impeller trim
- Cord lengths (30', 50', 100')
- Normally closed temperature sensor
- Cord for 3 phase operation

Accessories:

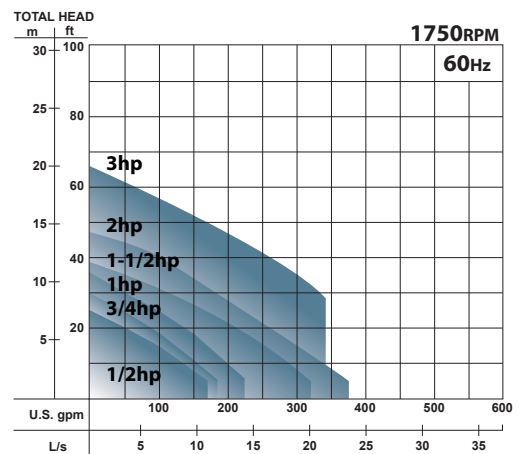
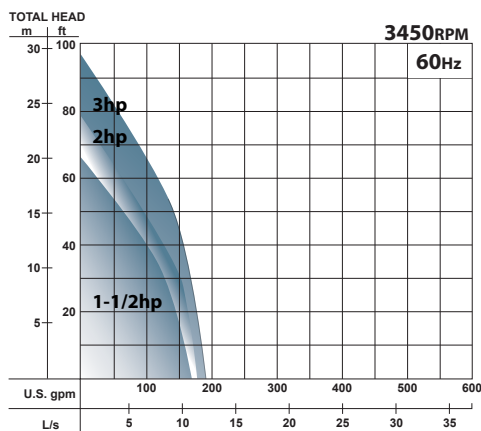
- Break Away Fitting (BAF)
- Check valve
- Control panel

3SE Series cont.

Model	Part No.	HP	F.L.A.	RPM	Phase	Voltage	Control Panel Simplex	Control Panel Duplex
3SE1522L	132775	1.50	12.0	3450	1	230	106481	106484
3SE1592L	132842	1.50	9.8/8.6	3450	3	200/230	106495	106507
3SE2022L	132848	2.00	13.5	3450	1	230	106481	106484
3SE2092L	132850	2.00	11.5/10.0	3450	3	200/230	106495	106507
3SE3032L	133153	3.00	16.4	3450	3	230	106497	106509
3SE514L	104892	.50	11.6	1750	1	120	106481	106484
3SE524L	104893	.50	5.9	1750	1	240	106480	106483
3SE594L	104894	.50	3.2/3.0	1750	3	200/240	106489	106501
3SE774L	104902	.75	7.4/7.0	1750	1	200/240	106481	106484
3SE794L	104903	.75	4.8/4.5	1750	3	200/240	106492	106504
3SE1074L	104910	1.00	8.8/8.3	1750	1	200/240	106481	106484
3SE1094L	104911	1.00	5.14/4.9	1750	3	200/240	106492	106504
3SE1524L	132725	1.50	16.0	1750	1	230	106482	106485
3SE1594L	132730	1.50	13.3/11.6	1750	3	200/230	106496	106508
3SE2024L	132750	2.00	19.0	1750	1	230	106482	106485
3SE2094L	132752	2.00	15.2/13.2	1750	3	200/230	106496	106508
3SE3024L	133115	3.00	28.0	1750	1	230	Consult Factory	Consult Factory
3SE3034L	133116	3.00	19.0	1750	3	230	106497	106509

* Consult factory for additional models (including Double Seal (DS) models).

'L' Designates single seal.



3SEV Series

Model	3SEV-L	3SEV-L
Motor	1/2hp, 1hp	1/2hp, 3/4hp, 1hp
RPM	3450	1750
Cord Length	15'	15'
Construction	Cast Iron	Cast Iron
Impeller	Cast Iron Vortex	Cast Iron Vortex
Discharge	3.00" NPT, Female, Vertical, Bolt-on Flange	3.00" NPT, Female, Vertical, Bolt-on Flange
Solids	2.00"	2.00"
Automatic Operation	No	No
Seal Design	Single Mechanical	Single Mechanical
Weight	85 lbs. (1/2hp) 95 lbs. (1hp)	85 lbs. (1/2hp) 90 lbs. (3/4hp) 95 lbs. (1hp)
Liquid Temperature	104°F (40°C) Continuous	104°F (40°C) Continuous
Dimensions	19.07L x 13.99W x 9.75H	19.07L x 13.99W x 9.75H

Applications:

- Raw sewage
- Residential wastewater
- Storm water
- Decorative water features

Features:

- Oil filled motors for better heat dissipation
- Oil lubricated bearings for quieter run and longer life
- Cast iron construction, stainless steel hardware, Buna-N O-rings
- Plug-in power cords simplify maintenance as the pumps are merely unplugged before service
- Standard seals are carbon/ceramic, Buna-N

Optional Equipment:

- Mechanical seal material
- Impeller trim
- Additional cord lengths
- Normally closed temperature sensor
- Cord for 3 phase operation

Accessories:

- Break Away Fitting (BAF)
- Check valve
- Control panel



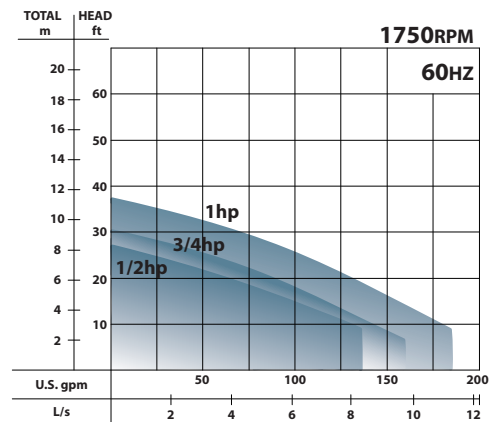
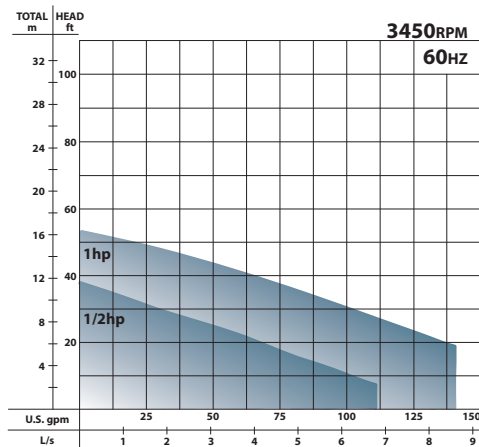
3SEV Series cont.

<i>Model</i>	<i>Part No.</i>	<i>HP</i>	<i>F.L.A.</i>	<i>RPM</i>	<i>Phase</i>	<i>Voltage</i>	<i>Control Panel Simplex</i>	<i>Control Panel Duplex</i>
3SEV512L*	104992	.50	12.6	3450	1	120	106481	106484
3SEV522L	104993	.50	6.0	3450	1	240	106480	106483
3SEV592L	104994	.50	5.8/5.3	3450	3	200/240	106493	106505
3SEV1022L	105004	1.00	10.7	3450	1	240	106481	106484
3SEV1092L	105005	1.00	7.9/7.5	3450	3	200/240	106494	106506
3SEV514L	104944	.50	12.0	1750	1	120	106481	106484
3SEV524L	104945	.50	6.3	1750	1	240	106480	106483
3SEV594L	104946	.50	3.7/3.8	1750	3	200/240	106491	106503
3SEV724L	104954	.75	7.0	1750	1	240	106481	106484
3SEV794L	104955	.75	4.8/4.6	1750	3	200/240	106492	106504
3SEV1024L	104962	1.00	8.5	1750	1	240	106481	106484
3SEV1094L	104963	1.00	5.3/5.1	1750	3	200/240	106492	106504

* Consult factory for additional models (including Double Seal (DS) models).

* Pump is CSA Listed only.

'L' Designates single seal.



4SE Series

Model	4SE-L	4SE-L	4SE-L
Motor	1.9hp, 2.8hp	2.8hp, 3.7hp, 5.0hp	4.5hp
RPM	1150	1750	1150 & 1750
Cord Length	30'	30'	30'
Construction	Cast Iron	Cast Iron	Cast Iron
Impeller	Cast Iron, 2 Vane, Semi-Open	Cast Iron, 2 Vane, Semi-Open	Cast Iron, 2 Vane, Semi-Open
Discharge	4.00" Flange Horizontal	4.00" Flange Horizontal	4.00" Flange Horizontal
Solids	3.00"	3.00"	3.00"
Seal Design	Double Mechanical, Oil filled reservoir	Double Mechanical, Oil filled reservoir	Double Mechanical, Oil filled reservoir
Weight	204 lbs. (1.9hp) 180 lbs. (2.8hp)	204 lbs. (1.9hp) 180 lbs. (2.8hp)	204 lbs. (1.9hp) 180 lbs. (2.8hp)
Liquid Temperature	104°F (40°C)	104°F (40°C)	104°F (40°C)
Dimensions	25.52L x 15.69W x 12.62H	25.52L x 15.69W x 12.62H	25.52L x 15.69W x 12.62H

Features:

- Oil filled motors for better heat dissipation
- Oil lubricated bearings for quieter run and longer life
- Cast iron construction, stainless steel hardware, Buna-N O-rings
- Plug-in power cords simplify maintenance as the pumps are merely unplugged before service
- 2 vane semi-open impeller with pump out vanes on back side dynamically balanced ISO G6.3

Optional Equipment:

- Mechanical seal material
- Impeller trim
- Additional cord lengths
- Epoxy paint

Applications:

- Raw sewage
- Residential wastewater
- Storm water
- Decorative water features



1.9hp - 3.7hp



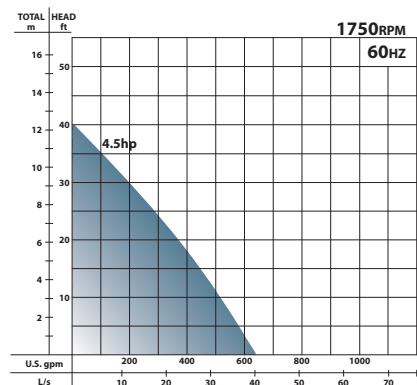
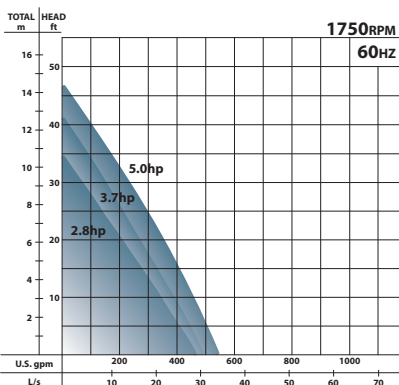
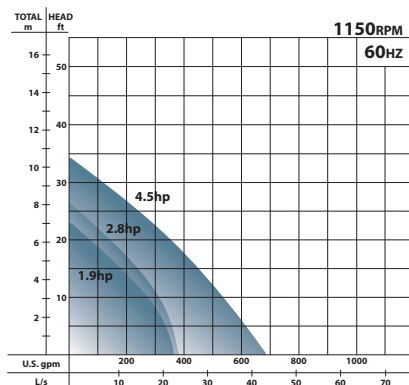
4.5hp

4SE Series cont.

Model	Part No.	HP	F.L.A.	RPM	Phase	Voltage	Control Panel Simplex	Control Panel Duplex
4SE1926L	133159	1.9	8.3	1150	1	230	106481	106484
4SE1996L	133160	1.9	5.8/5.0	1150	3	200/230	106492	106504
4SE1946L	133161	2.8	2.5	1150	3	460	106489	106501
4SE2826L	133163	2.8	13.5	1150	1	230	106481	106484
4SE2896L	133164	2.8	9.2/8.4	1150	3	200/230	106494	106506
4SE2846L	133165	2.8	4.2	1150	3	460	106491	106503
4SE2824L	133125	2.8	12.6	1750	1	230	106481	106484
4SE2894L	133141	2.8	9.2/8.0	1750	3	200/230	106494	106506
4SE2844L	133142	2.8	4.0	1750	3	460	106491	106503
4SE3724L	133145	3.7	20.0	1750	1	230	Consult Factory	Consult Factory
4SE3794L	133146	3.7	16.1/14.0	1750	3	200/230	106497	106509
4SE3744L	133147	3.7	7.0	1750	3	460	106493	106505
4SE5024L	133149	5.0	28.0	1750	1	230	Consult Factory	Consult Factory
4SE5094L	133150	5.0	20.9/19.0	1750	3	200/230	Consult Factory	Consult Factory
4SE5044L	133151	5.0	9.0	1750	3	460	106494	106506
4SE4596L	084615	4.5	16.6/14.4	1150	3	200/230	106497	106509
4SE4546L	084616	4.5	7.2	1150	3	460	106493	106505
4SE4524L	084623	4.5	26.0	1750	1	230	Consult Factory	Consult Factory
4SE4564L	084624	4.5	20.9	1750	3	200	Consult Factory	Consult Factory
4SE4534L	084625	4.5	18.2	1750	3	230	106497	106509
4SE4544L	084626	4.5	9.1	1750	3	460	106494	106506

* All above models are Double Seal (DS) pumps.

* Consult factory for additional models (including models 4SE-L 4.5hp and 4SE-DS .9hp-1.9hp).

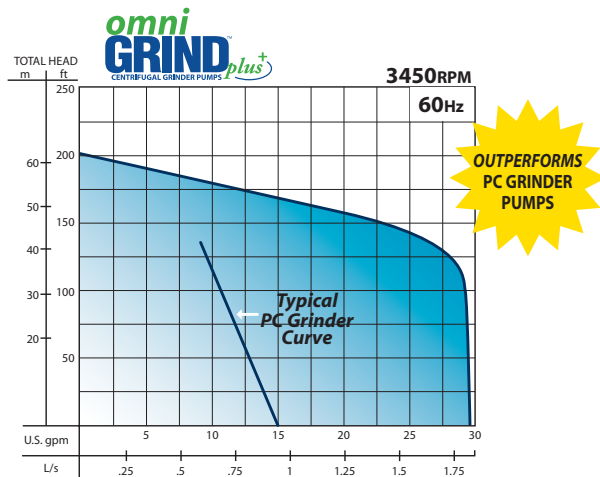


Upgrade Core

Model	OGP2022
Motor	2hp
RPM	3450
Construction	Cast Iron
Impeller	Bronze Vortex
Discharge	1.25" NPT, Tubing, Vertical, Bolt-on Flange
Seal Design	Single Mechanical
Weight	144 lbs.
Liquid Temperature	104°F (40°C) Intermittent

Features:

- Superior hydraulic design coverage versus many competitors 2hp grinder pumps
- Multiple assemblies available for a variety of applications
- Individual plug-n-play cords allow for modular component installation and upgrade needs
- Rigid piped



Applications:

- Designed to reduce domestic sewage to finely ground slurry



Model	Part No.	F.L.A.	Phase	Voltage	Cord Size	Optional EQD
OGP2022CO	131717	16.5	1	240	12/5 - 15'	N/A
OGP2022CO	131717XC	16.5	1	240	12/5 - 30'	N/A
OGP2022CO	131717E	16.5	1	240	12/5 - 15'	2000 Series
OGP2022CO	131717EXC	16.5	1	240	12/5 - 30'	2000 Series
OGP2022CO	131717T	16.5	1	240	12/5 - 15'	Extreme Series
OGP2022CO	131717TXC	16.5	1	240	12/5 - 30'	Extreme Series

Part numbers suffixes with 'E' have a factory installed EGD to mate with the E/One 2000 series stations.

Part numbers suffixes with 'T' have a factory installed EQD to mate with the E/One Extreme series stations.

Kit includes pump, pump bracket(s), ESPS-150 Level Control, and required cords.

For optional indoor remote alarm light, part numbers 130849BC (almond), 130849W (white), and 130849S (stainless steel) sold separately.

For optional circuit breakers part numbers 113291B (snap in breakers), and 105476 (rail breakers) sold separately.

PGPT Series



PGPT - D Series

PGPT - W Series



Extreme Series Quick Disconnect

Request Part number for adapter



2000 Series Quick Disconnect



Slicerator

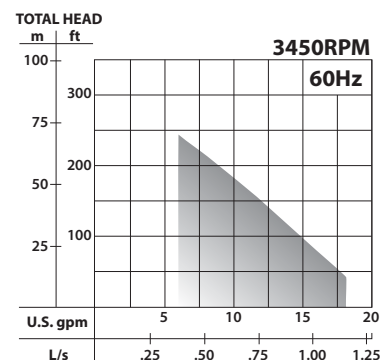
Applications:

- Designed to reduce domestic sewage to finely ground slurry

Model	PGPT (Pump Only)	PGPT Upgrade Core
Motor	1hp	1hp
RPM	3450	3450
Construction	Cast Iron	Cast Iron
Impeller	Stainless Steel	Stainless Steel
Discharge	1.25" NPT SCH 80, 300 Series SS	1.25" NPT, Tubing, Vertical, Bolt-on Flange
Seal Design	Single Mechanical	Single Mechanical
Weight	91 lbs.	150 lbs.
Liquid Temperature	104°F (40°C) Continuous	104°F (40°C) Continuous
Shredding Ring	Hardened 440C Stainless Steel Rockwell® C-55	Hardened 440C Stainless Steel Rockwell® C-55
Cutter	Hardened 440C Stainless Steel Rockwell® C-55	Hardened 440C Stainless Steel Rockwell® C-55

Features:

- Low amp, high torque motor
- Higher heads than progressing cavity and leading centrifugal pumps
- Exclusive Slicerator™ cutting system backed by over 40 years of excellence



Model	Part No.	F.L.A.	Cord Size	Cord Type	Optional EQD
PGPT1022	140708	12.5	14/3 - 20'	SOW	N/A
PGPT1022A	140709	12.5	14/3 - 20'	SOW	N/A

'A' Designates piggy back mechanical float switch.

PGPT Dry Well Series							
Barnes Model	Barnes Part No.	HP	Volts	Amps	Hz	Lbs	E/One Model
PGPT1022C0-EP	140843EP	1	230	12.5	60	101	Fits GP200/2000 D-Series
PGPT1022C0-TP	140843TP	1	230	12.5	60	101	Fits Extreme D-Series
OGT W-Series							
Barnes Model	Barnes Part No.	HP	Volts	Amps	Hz	Lbs	E/One® Model
PGPT1022AUF-E	143301E	1	230	12.5	60	101	Fits GP200/2000 D-Series
PGPT1022AUF-T	143301T	1	230	12.5	60	101	Fits Extreme D-Series

PGPP • PGPH Series

Model	PGPP / PGPH
Motor	2hp
RPM	3450
Cord Length	20' SOW Quick Connect 14/3 gauge
Construction	Cast Iron
Impeller	Cast Iron Vortex
Discharge	1.25" NPT, Female, Vertical, Bolt-on Flange
Automatic Operation	Mechanical Float or Manual
Seal Design	Single Mechanical
Weight	82 lbs.
Liquid Temperature	160°F (71°C) Intermittent
Dimensions	8.81L x 11.08W x 20.83H
Shredding Ring	Hardened 440C Stainless Steel, Rockwell® C-55
Cutter	Hardened 440C Stainless Steel, Rockwell® C-55
Legs	Removable and Adjustable

Applications:

- Domestic, commercial, institutional and light industrial sewage

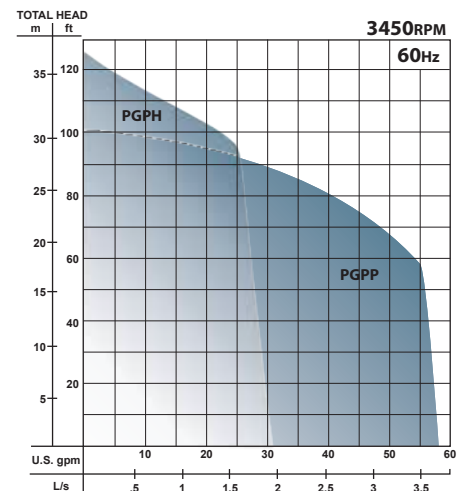


Slicerator



Features:

- Cast iron housing and vortex impeller
- 416 stainless steel shaft to handle aggressive sewage
- Upper and lower ball bearing for quieter run and longer life
- Piggyback float arrangement with legs eliminates need for control panel
- 1 ¼" discharge with high temperature overload on the motor for single phase operation
- "Slicerator" cutting mechanism to increase torque for preventing clogging



Model	Part No.	F.L.A.	Phase	Voltage	Control Panel Simplex	Control Panel Duplex
PGPP2022	110646	15.0	1	230	106482	106485
PGPP2022A	112916	15.0	1	230	N/A	N/A
PGPH2022	131467	15.0	1	230	106482	106485
PGPH2022A	131468	15.0	1	230	N/A	N/A

'A' Designates piggy back mechanical float switch.

High Temperature Pumps

Applications:

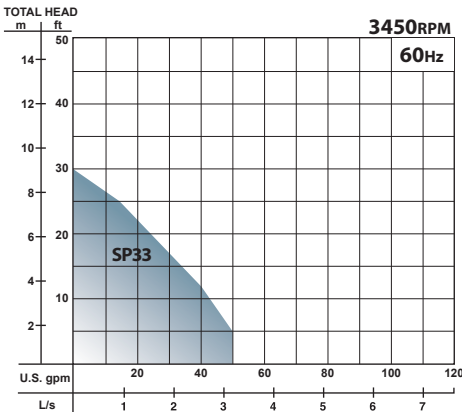
- Boiler blow down
- Light Industrial
- High temperature applications above 130°F



Model	SP33HT
Motor	1/3hp PSC
RPM	3450
Cord Length	20' SJTOW/SJTW 18/3 gauge
Construction	Cast Iron
Impeller	Cast Iron Vortex
Discharge	1.50" NPT, Female, Vertical
Solids	.50"
Automatic Operation	No
Seal Design	Single Mechanical, Type 21
Liquid Temperature	185°F (85°C) Continuous, Fully Submerged
Weight	24 lbs
Minimum Sump Dia.	12"

Features:

- One piece motor/volute/housing avoids potential gasket failure
- Cast Iron vortex impeller permits handling of small amounts of debris
- 416 stainless steel shaft handles aggressive sewage
- Ball bearing construction for quieter run and longer life
- Permanent split capacitor (PSC) motor for more efficient operating range
- 30' of head shutoff provides broader operating range for most applications



Model	Part No.	F.L.A.	Phase	Voltage	Control Panel Simplex	Control Panel Duplex
SP33HTX	113667	4.1	1	120	106480	106483

* Refer to Accessories section for floats and high-temp floats information.

High Temperature Pumps

Model	BP-HT
Motor	1/3hp PSC
RPM	1750
Cord Length	15' SOOW 14/3 gauge
Construction	Cast Iron (Bronze Available)
Impeller	Bronze
Discharge	2.00" NPT Female, Vertical
Solids	.75"
Automatic Operation	Mechanical Float Vertical Float
Seal Design	Single Mechanical, Oil Filled Reservoir
Liquid Temperature	200°F (93°C) Continuous
Weight	52 - 53 lbs.

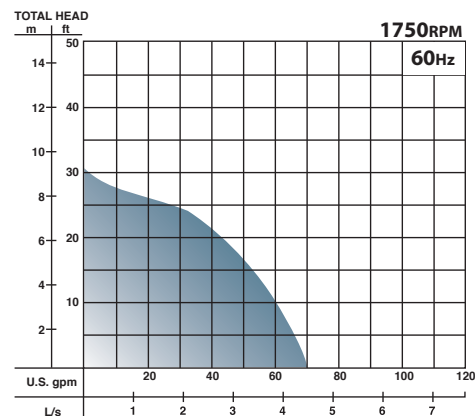


Applications:

- Boiler blow down
- Light Industrial
- High temperature applications above 130°F

Features:

- Standard cast iron housing with an option for bronze
- Option for bronze seal plate
- 416 stainless steel shaft to handle aggressive effluent
- Ball bearing construction for longer life and quieter run
- Permanent split capacitor (PSC) oil filled motor



Model	Part No.	F.L.A.	Phase	Voltage	Control Panel Simplex	Control Panel Duplex
BP314HT	096737	8.0	1	120	106481	106484
BP314HTA	096738	8.0	1	120	106481	106484
BP314HTAU	096739	8.0	1	120	106481	106484
BP314HTBR	096742	8.0	1	120	106481	106484
BP314HTABR	096743	8.0	1	120	106481	106484
BP314HTAUBR	096744	8.0	1	120	106481	106484
BP324HT	096740	4.0	1	240	106480	106483
BP324HTAU	096741	4.0	1	240	106480	106483
BP324HTBR	096745	4.0	1	240	106480	106483
BP324HTAUBR	096746	4.0	1	240	106480	106483

* Refer to Accessories section for floats and high-temp floats information.

'A' Designates piggy back mechanical float switch.

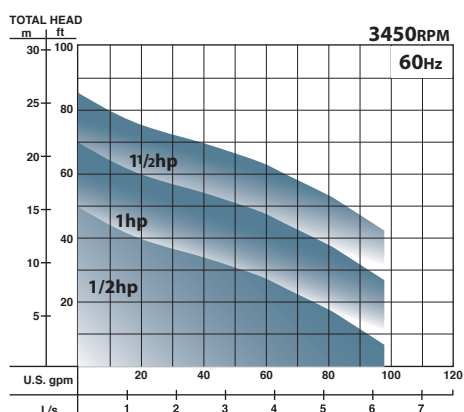
'AU' Designates integral mechanical float switch.

'BR' Designates bronze pump.

High Temperature Pumps

Applications:

- Boiler blow down
- Light Industrial
- High temperature applications above 130°F



Model	EH-HT
Motor	1/2 - 1-1/2hp PSC
RPM	3450
Cord Length	20' 14/3 (1 Phase) 20' 14/4 (3 Phase)
Construction	Cast Iron
Impeller	Cast Iron
Discharge	2.00" NPT, Female, Vertical
Solids	.75"
Automatic Operation	No
Seal Design	Single Mechanical
Liquid Temperature	200°F (93°C) Continuous
Weight	88 lbs. (1/2hp) 98 lbs. (1-1/2hp)
Dimensions	13.47L x 9.68W x 17.33H

Features:

- Cast iron housing and volute
- Semi-open impeller
- 416 stainless steel shaft to handle aggressive sewage
- Upper and lower ball bearing for quieter run and longer life
- Permanent split capacitor (PSC) motor for more efficient operation
- 2" discharge with high temperature overload on the motor for single phase operation
- Quick connect custom molded for sealing and strain relief
- Optional equipment additional seal faces, impeller trim, cord lengths and normally closed temperature sensor and cord for 3 phase operation (requires relay in panel)

Model	Part No.	HP	F.L.A.	Phase	Voltage	Control Panel Simplex	Control Panel Duplex
EH512HT	105084	.50	10.6	1	120	106481	106484
EH522HT	105085	.50	5.3	1	240	106480	106483
EH1522HT	105093	1.50	9.0	1	240	106481	106484
EH1592HT	105094	1.50	7.8/7.0	3	240	106494	106506
EH1542HT	105095	1.50	3.5	3	460	106491	106503

* Refer to Accessories section for floats and high-temp floats information.

High Temperature Pumps

Model	SE411/421HT	SE51/52HT
Motor	4/10hp PSC	1/2hp PSC
RPM	1750	1750
Cord Length	15' SOOW 14/3 gauge	15' SOW 14/3 gauge
Construction	Cast Iron	Cast Iron
Impeller	Cast Iron	Cast Iron
Discharge	2.00" NPT, Female, Vertical	2.00" NPT, Female, Vertical, Bolt-on Flange
Solids	2.00"	2.00"
Automatic Operation	Mechanical Float, Vertical Float	Mechanical Float, Vertical Float
Seal Design	Single Mechanical, Oil Fill Reservoir	Single Mechanical
Liquid Temperature	200°F (93°C) Continuous	200°F (93°C) Continuous
Weight	53 lbs. (manual) 55 lbs. (with float)	85 lbs.



SE411



SE51

Applications:

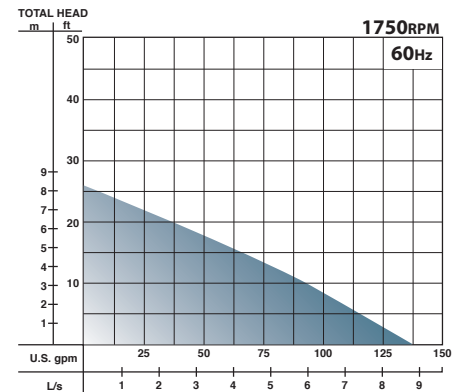
- Boiler blow down
- Light Industrial
- High temperature applications above 130°F

Features:

- All pumps are oil filled for better motor heat dissipation
- Oil-lubricated bearings for quieter run and longer life
- Permanent split capacitor (PSC) motor for more efficient operation
- Cast iron construction, stainless steel hardware, Buna-N O-rings
- Plug-in power cords simplify maintenance as the pumps are merely unplugged before service
- Standard seals are carbon/ceramic, Buna-N

Optional Equipment:

- Mechanical seal material
- Additional cord lengths



Model	Part No.	HP	F.L.A.	Phase	Voltage	Control Panel Simplex	Control Panel Duplex
SE411HT	096764	.40	10.0	1	115	106481	106484
SE411HTA	096765	.40	10.0	1	115	106481	106484
SE411HTAU	096766	.40	10.0	1	115	106481	106484
SE421HT	096767	.40	4.0	1	230	106480t	106483
SE421HTAU	096768	.40	4.0	1	230	106480	106483
SE51HT	104876	.50	17.0	1	120	106482	106485
SE51HTA	104877	.50	17.0	1	120	106482	106485
SE51HTAU	104878	.50	17.0	1	120	106482	106485
SE52HT	104879	.50	8.5	1	240	106481	106484
SE52HTAU	104880	.50	8.5	1	240	106481	106484

* Refer to Accessories section for floats and high-temp floats information.

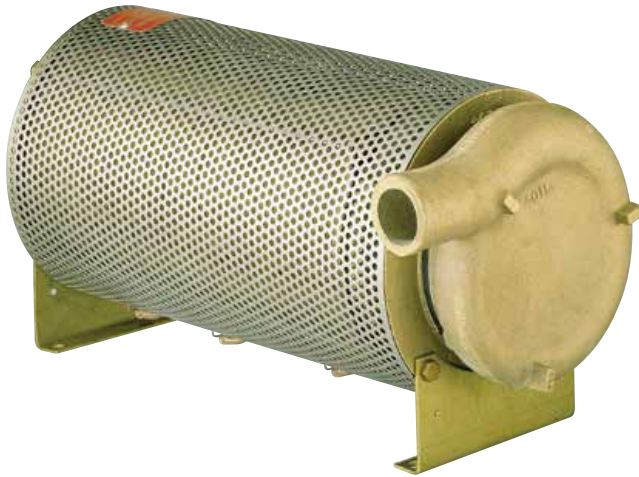
'A' Designates piggy back mechanical float switch.

'AU' Designates integral mechanical float switch.

SFU Series

Applications:

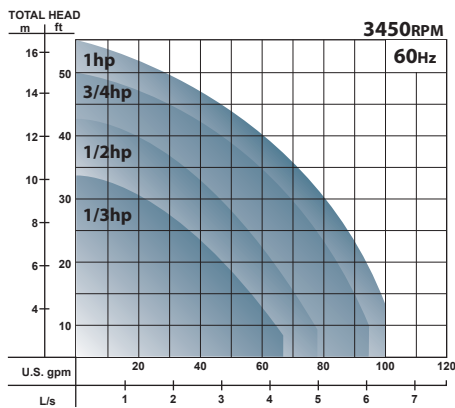
– Decorative water displays



Model	SFU
Motor	1/3hp - 1hp PSC
RPM	3450
Cord Length	12' SOW 16/3 gauge
Construction	Stainless Steel Shaft
Impeller	Brass
Discharge	1.75" (45mm) Hose Connection, 90° Rotation
Screen	.5/32" dia. mesh, Stainless Steel
Automatic Operation	No
Seal Design	Single Mechanical, Carbon/Ceramic/Buna-N
Weight	45 - 56 lbs.
Liquid Temperature	145°F (63°C) Continuous

Features:

- Thermal overload protection in motor
- Oil filled motor for better heat dissipation
- Permanent split capacitor (PSC) motor for more efficient operation



Model	Part No.	HP	F.L.A.	Phase	Voltage	Control Panel Simplex	Control Panel Duplex
SFU31	087781	.33	8.0	1	115	106481	106484
SFU51	087782	.50	9.5	1	115	106481	106484
SFU71	087783	.75	12.0	1	115	106481	106484
SFU72	087784	.75	6.0	1	230	106480	106483
SFU102	087785	1.00	7.0	1	230	106481	106484

SF Series

Model	SF411	SF51
Motor	.40hp PSC	1/2hp PSC
RPM	1750	1750
Cord Length	15' SJTOW 14/3 gauge	15' SJTOW 14/3 gauge
Construction	Cast Iron	Cast Iron
Impeller	Cast Iron	Cast Iron
Discharge	2.00" NPT, Female, Vertical	2.00" NPT, Female, Vertical, Bolt-on Flange
Automatic Operation	No	No
Seal Design	Single Mechanical, Oil Filled Reservoir	Single Mechanical
Weight	53 lbs.	85 lbs.
Liquid Temperature	77°F (25°C) Continuous	104°F (40°C) Continuous

Applications:

– Decorative water displays



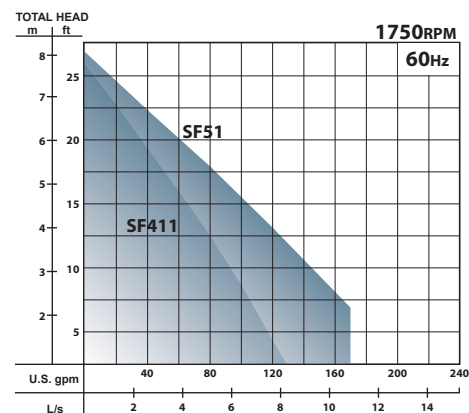
SF411

Features:

- Stainless steel shaft
- Thermal overload protection in motor for single phase operation
- Oil filled motor for better heat dissipation
- Permanent split capacitor (PSC) motor for more efficient operation



SF51



Model	Part No.	HP	F.L.A.	Phase	Voltage	Control Panel Simplex	Control Panel Duplex
SF411	109972	.40	12.0	1	115	106481	106484
SF51	109974	.50	11.6	1	120	106481	106484

3SF Series

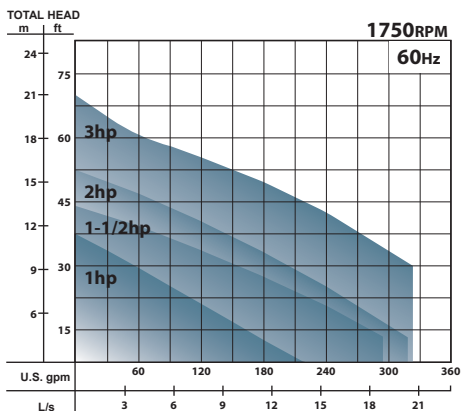
Model	3SF-HD	3SF-L	3SF-L
Motor	1-1/2hp, 2hp PSC	1hp	3hp
RPM	1750	1750	1750
Cord Length	25' SO 10/3 gauge	15' SOW 14/3 gauge	25' SO 10/3 gauge
Construction	Cast Iron	Cast Iron	Cast Iron
Impeller	Cast Iron	Cast Iron	Cast Iron
Discharge	3.00" NPT, Female, Vertical	3.00" NPT, Female, Vertical, Bolt-on Flange	3.00" NPT, Female, Vertical
Automatic Operation	No	No	No
Seal Design	Inboard Single Mechanical, Oil Filled Reservoir	Single Mechanical	Single Mechanical
Weight	145 lbs. (1-1/2hp) 150 lbs. (2hp)	95 lbs.	170 lbs.
Liquid Temperature	104°F (40°C) Continuous	104°F (40°C) Continuous	104°F (40°C) Continuous

Applications:

– Decorative water displays

Features:

- Stainless steel shaft
- Thermal overload protection in motor for single phase operation
- Oil filled motor for better dissipation operation of heat
- Inboard mechanical seal for superior continuous run
- Permanent split capacitor (PSC) motor for more efficient operation



Model	Part No.	HP	F.L.A.	Phase	Voltage	Control Panel Simplex	Control Panel Duplex
3SF1524HD	110952	1.5	12.6	1	230	106481	106484
3SF2024HD	110953	2.0	14.5	1	230	106481	106484
3SF1074L	109975	1.0	8.8/8.3	1	200/230	106481	106484
3SF3024L	109977	3.0	28.0	1	230	Consult Factory	Consult Factory

'HD' Designates heavy duty.

Transfer Pump Series

Model	BT12	BT50
Motor	1/12hp	1/2hp
RPM	3450	3450
Cord Length	8.5'	9.5'
Construct.	Plastic	Cast Iron
Impeller	Rubber	Thermoplastic
Discharge	.75" GHT Male, Vertical	.75" GHT Male, Vertical
Automatic Operation	No	No
Seal Design	High Speed Mechanical	High Speed Mechanical
Weight	6 lbs.	16 lbs.

Applications:

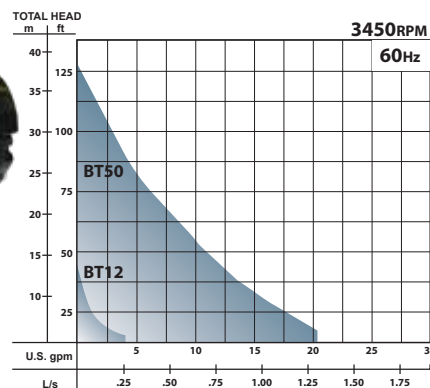
- Draining water heaters
- Charging polyglycol lines for radiant heating
- Pressure boosting
- Draining pool covers
- Dewatering flooded basements



BT50



LR16567



Features:

- Molded handles
- Suction strainer included
- 3/4" male outlet for use with standard garden hose
- 6' of garden hose included with BT12 model ONLY

Model	Part No.	HP	F.L.A.	Phase	Voltage
BT12	134677	.08	2.0	1	120
BT50	134678	.50	8.2	1	120

Dewatering Pumps

Applications:

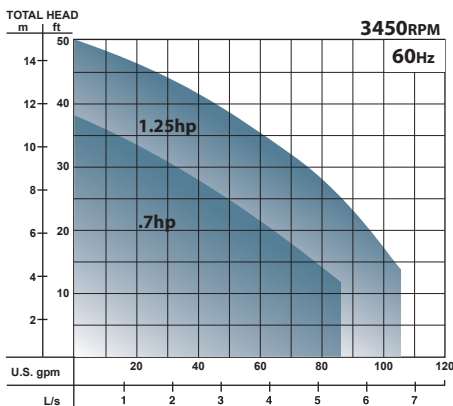
- Mining
- Dewatering
- Drainage water transfer
- Waterscapes
- Water treatment
- Landfill pollution control



Model	70/71	125/126
Motor	7/10hp	1-1/4hp
RPM	3450	3450
Cord Length	50'	50'
Construction	Stainless Steel	Stainless Steel
Impeller	Polyurethane	Polyurethane
Discharge	2.00" NPT, Male, Vertical	2.00" NPT, Male, Vertical
Automatic Operation	Yes	Yes
Seal Design	Double Mechanical, Oil Filled Reservoir	Double Mechanical, Oil Filled Reservoir
Liquid Temperature	140°F (40°C) Continuous	140°F (40°C) Continuous
Weight	30 lbs	30 lbs

Features:

- Slim-line design allows Barnes pumps to fit where other pumps can't
- Light weight for easy portability
- Require no priming, suction hose or foot valve, just submerge and they are ready to go
- Operate in any position
- Able to run dry for a reasonable period of time without damage
- Inline design ensures cool-running motor
- Inline suction and discharge allow pumps to operate doubling head at a given flow, which provides versatility in jobs site variations



Model	Part No.	HP	F.L.A.	Phase	Voltage
70	115070	0.70	8.0	1	120
71	115071	0.70	4.0	1	240
125	115125	1.25	15.0	1	120
126	115126	1.25	7.6	1	240

Utility Pumps

Model	UT17
Motor	1/6hp
RPM	3450
Cord Length	15' SJTW 18/3 gauge
Construction	Thermoplastic
Impeller	Thermoplastic
Discharge	.75" G.H.T. Male, Vertical
Solids	.13"
Automatic Operation	No
Seal Design	Single Mechanical, Type 6
Liquid Temperature	77°F (25°C) Continuous
Weight	7 lbs.

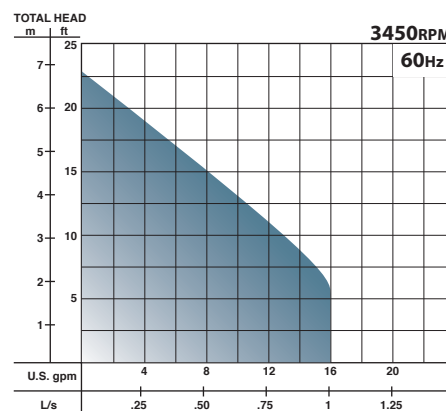
Features:

- Portable with molded handle
- Fully submersible design
- 3/4" male outlet connection for use with standard garden hose
- 15 foot power cord with molded 3-prong plug
- Can pump down to 1/4" from the floor surface
- Strainer prevents entry of solids and debris



Applications:

- Residential sump
- Pumping out shallow pools
- Draining pool covers



Model	Part No.	F.L.A.	Phase	Voltage
UT17	113824	2.0	1	120

Barnes Oil Sensor Switch

Applications:

- Elevator sump basins
- Transformer vaults
- Leachate wells
- Garages

Model	BOSS	BOSS PLUS
RPM	3450	3450
Oil Water Switch Cord Length	10'	10'
Enclosure Rated Options	NEMA 1, NEMA 4x	NEMA 1, NEMA 4x
Automatic Operation	No	Yes
Weight	10 lbs.	10 lbs.
Dimensions	8.50H x 8.75W x 4.75D	10H x 10W x 6D



Barnes BOSS



Barnes BOSS PLUS



Features:

- Models available with NEMA 1 rated enclosure for indoor use protection
- Models available with NEMA-4X rated enclosure for either indoor or outdoor use protection
- LED indicators for:
 - High water (red)
 - High oil (red)
 - Pump run (green)
 - Power on (green)
- Auxiliary contacts for remote alarms (high water and high oil), auto dialer for building automation system
- ** Factory-installed Oil Sensor Switch:
 - Pump activation probes (start and stop levels) 5 inch pumping range
 - High water alarm probe
 - Reference probe (ground)
 - High oil alarm float (mechanical)
- ** Receptacle to accept 120V, 15A pump plug
- ** Factory-installed 120V, 15A power cord (10 ft.)
- ** Plug-n-play - no wiring for easy installation

NOTE ** = NOT on NEMA 4X, 3 Phase or Plus units)

BOSS PLUS ASME A17.1 compliant as required by some states (AZ, TX, VT, WI, NV, CO)

Barnes BOSS PLUS model removes water and other fluids **automatically** from elevator pits without any human intervention while preventing oil from being pumped into the environment.

Barnes BOSS model will activate an alarm if water/oil levels reach past the high water probe or mechanical high oil float, but the water/oil will need to be **manually** pumped out by an operator.

Model	Part No.	Phase	Voltage	Enclosure
BOSS & HWA	135795	1	120	NEMA 1
BOSS with SP50X & HWA	135784	1	120	NEMA 1
BOSS with SP75X & HWA	135785	1	120	NEMA 1
BOSS with EHV412 & HWA	135786	1	120	NEMA 1
BOSS & HWA	137347	1	120	NEMA 4X
BOSS & HWA	136154	3	208/230/460	NEMA 4
BOSS PLUS & HWA	137040	1	120	NEMA 1
BOSS PLUS & HWA	137346	1	120	NEMA 4X
BOSS PLUS & HWA	137876	3	208/230/460	NEMA 4

* HWA - High Water Alarm

Battery Backup System

Model	BUS
Motor	Totally submersible, water cooled for longer life
RPM	3450
Cord Length	8'
Construction	Non-corrosive
Discharge	1.25" NPT, Female, Vertical
Automatic Operation	Yes
Weight	10 lbs.
Liquid Temperature	150°F (66°C) Continuous

Applications:
– Residential sump

Features:

- Switches automatically to battery power when the power fails
- Pumps along with your primary pump when there is more water coming into your sump than your main pump can handle
- Recharges automatically
- Monitors battery and power conditions constantly
- Detects irregularities
- Pinpoints problems and solutions on the control panel
- Non-corrosive, may be used in fresh or salt water (resulting from water softener residue)



Model	Part No.	Phase	Voltage
BUS	100940	1	120

Battery not included

Battery Backup Inverter System

Applications:

– Residential sump

Model	BB15-12
RPM	3450
Cord Length	5.5'
Battery Cables	3.0'
Automatic Operation	Yes
Weight	17 lbs.

Features:

- Allows standard 115 volt pump to automatically switch from AC power to battery power
- The AC line is protected with 15 amp slow acting fuse
- Modified sine wave output
- Green LED indicator On: lets operator know that the battery is not in use and the pump is running on AC power
- Green LED indicator Off: lets operator know that the battery is in use
- Red LED indicator On: lets operator know that the system is over heating or below 10.5 volts
- On/off switch



Model	Part No.	Phase	Voltage
BB15-12	135787	1	120

Battery not included

Polyethylene Basins

Model	1830F
Part Number	110699
Description	18" x 30" Deep Structural Foam
Temperature Rating	140°F Max.

Features:

- Basin constructed of durable, corrosion-resistant polyethylene structural foam
- Polyethylene encapsulated threaded inserts for cover bolts
- 5" dia. hole for 4" schedule 40 Inlet pipe (grommet included)
- Basin capacity, 30 US Gallons
- Wall thickness 1/4"
- Basin weight: 16 lbs.

Model	1830 IAPMO
Part Number	102167
Description	18" x 30" Deep IAPMO
Temperature Rating	140°F Max.

Features:

- Basin constructed of durable, corrosion-resistant polyethylene
- Polyethylene encapsulated threaded inserts for cover bolts
- 5" dia. hole for 4" schedule 40 Inlet pipe (grommet included)
- Basin capacity, 26 US Gallons
- Basin weight: 10 lbs.



Model	Part No.	Basin Dia.	Basin Depth	Weight
1830	076119	18"	30"	10lbs.
2436	100534	24"	36"	26lbs.
3036	102169	30"	36"	45lbs.
3636	102170	36"	36"	55lbs.

Features:

- Basin constructed of durable, corrosion-resistant polyethylene
- Polyethylene encapsulated threaded inserts for cover bolts
- 5" dia. hole for 4" schedule 40 Inlet pipe (grommet included)
- Wall thickness 3/16"

Fiberglass Basins

<i>Part No.</i>	<i>Basin Dia.</i>	<i>Basin Depth</i>	<i>Cover Dia.</i>	<i>Nominal Wall Thk.</i>	<i>Capacity Approx.</i>	<i>Shipping Weight</i>
093982	24	48	28	.19	94	51 lbs.
094688	24	60	28	.19	118	61 lbs.
094689	24	72	28	.19	141	71 lbs.
093972	24	78	28	.19	153	94 lbs.
093954	24	84	28	.25	165	100 lbs.
093975	24	90	28	.25	176	106 lbs.
094690	24	96	28	.25	188	112 lbs.
094121	36	48	40	.19	212	98 lbs.
094696	36	60	40	.25	264	116 lbs.
094697	36	72	40	.25	317	136 lbs.
094122	36	78	40	.25	344	160 lbs.
094123	36	84	40	.25	370	171 lbs.
094124	36	90	40	.31	397	205 lbs.
094698	36	96	40	.31	423	217 lbs.
094714	48	48	54	.19	376	134 lbs.
094700	48	60	54	.19	470	160 lbs.
094701	48	72	54	.25	564	186 lbs.
094239	48	78	54	.25	611	247 lbs.
094713	48	84	54	.25	658	262 lbs.
094240	48	90	54	.25	705	277 lbs.
094702	48	96	54	.25	752	295 lbs.

* Consult factory for 30" or 42" diameter basins.

Features:

- Custom molded fiberglass reinforced polyester resin
- Thickness sufficient to withstand a water-saturated sand load of 120 lbs per cubic foot with a 1.5 safety factor
- Ballast support flange extended to a minimum of 3" on radius of the basin
- Built to withstand a maximum temperature of 150°F/66°C



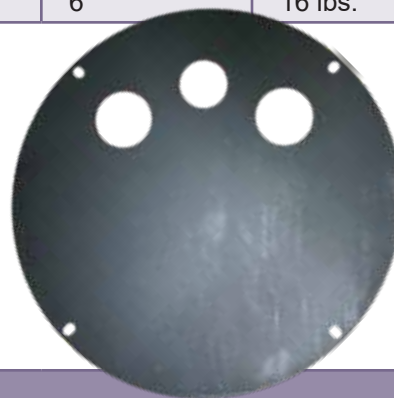
Basin Covers

Simplex Basin Covers

Model	Part No.	Material	Basin Dia.	Qty Holes	Weight
18SS	076120	Steel	18"	4	8 lbs.
18SSIAPMO	102221	Steel	18"	16	8 lbs.
18PS	102227	Polyethylene	18"	4	5 lbs.
24SS	100535	Steel	24"	6	16 lbs.

Features:

- Designed to be used with the 18" and 24" diameter basins
- Steel or polyethylene constructed
- Each cover includes: gasket, hardware, cord seal, and grommets for 2" discharge and 2" vent, except for 18SSSV which has only 1 grommet for 2" discharge and 1 cord seal
- Only available to use with polyethylene basins



Duplex Steel & Aluminum Basin Covers

Part No.	Material	Basin Dia.	Cover Dia.	Bolt Circle	Cover Thk.
094708	Steel	36	40	38.50	.37
094163	Steel	42	46	44.50	.37
094165	Steel	48	54	23	.37
094709	Aluminum	36	40	38.50	.25
094164	Aluminum	42	46	44.50	.25
102720	Aluminum	48	54	23	.37

Features:

- Designed to be used with 36", 42", and 48" diameter basins
- Basin covers have hinged access door, lifting handle, provisions for 2" NPT vent, stainless steel hinges and hardware.
- Load rating of 150 lbs/ sq.ft minimum
- Black powder coating

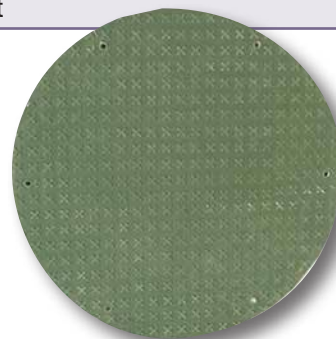


Fiberglass Basin Covers

Part No.	Basin Dia.	Cover Dia.	Bolt Circle	Cover Thk.
094487	24	28	26.50	.37
094488	30	34	32.50	.37
094489	36	40	38.50	.50
094017	42	46	44.50	.50
075831	Bug Free Vent			

Features:

- Designed to be used with 24", 30", 36" and 42" diameter fiberglass basins
- Covers are of reinforced fiberglass and are grass green in color
- Load rating of 150 lbs/ sq.ft minimum



Break Away Fittings (BAF)

4" Non-Clog Break Away Fittings

Model	Part No.	Weight
BAF-4x4	128281	161 lbs.
BAF-4x6	128280	169 lbs.

Features: (4")

- Designed to provide easy access to the non-clog horizontal pumps

Features: (1.25" - 3")

- Designed to provide easy access to all Barnes 1.25" thru 3" submersible pumps
- Available with check valve
- Available in non-spark design with Bronze moveable elbow to prevent sparking

Applications:

- Allows the submersible pump to be installed or removed without requiring personnel to enter the wet well



1.25" - 3.00"
Break Away Fittings



4" Non-Clog
Break Away Fitting

1.25" - 3.00" Break Away Fittings - Standard

Model	Part No.	Weight	Pump Discharge	Riser Pump
BAF-1212	127300	45 lbs.	1.25"	1.25"
BAF-1220	127301	45 lbs.	1.25"	2.00"
BAF-2020	127302	45 lbs.	2.00"	2.00"
BAF-2030	127306	61 lbs.	2.00"	3.00"
BAF-3030	127304	62 lbs.	3.00"	3.00"

1.25" - 3.00" Break Away Fittings - Standard & Non-Sparking with Check Valve

Model	Part No.	Weight	Pump Discharge	Riser Pump
BAF-1212CV	127307	46 lbs.	1.25"	1.25"
BAF-1220CV	127308	46 lbs.	1.25"	2.00"
BAF-2020CV	127309	46 lbs.	2.00"	2.00"
BAF-1212CVNS	127310	48 lbs.	1.25"	1.25"
BAF-1220CVNS	127313	48 lbs.	1.25"	2.00"
BAF-2020CVNS	127315	48 lbs.	2.00"	2.00"

'CV' Designates check valve.

'NS' Designates non-sparking.

Control Panels

Features:

- Includes: NEMA 4X enclosure, automatic reset high water alarm light and horn. Circuit breaker (1-per pump), H-O-A switch and run light (per pump), UL & C-UL approval, contactors, terminal block, alternator on duplex units, and 2 year warranty



Single Phase Panels:

Pump Full Load Amps	Circuit Breaker	Contactor	Simplex		Duplex	
			Part No.	Weight	Part No.	Weight
0-7	2 Pole, 15 A	2 Pole, 20 A	106480	19 lbs.	106483	20 lbs.
8-15	2 Pole, 20 A	2 Pole, 20 A	106481	19 lbs.	106484	20 lbs.
16-20	2 Pole, 25 A	2 Pole, 20 A	106482	19 lbs.	106485	20 lbs.

Three Phase Panels:

Pump Full Load Amps	Circuit Breaker	Contactor	Simplex		Duplex	
			Part No.	Weight	Part No.	Weight
1-1.6	Integral with Protector	17 A	106486	23 lbs.	106498	26 lbs.
1.4-2	Integral with Protector	17 A	106487	23 lbs.	106499	26 lbs.
1.8-2.5	Integral with Protector	17 A	106488	23 lbs.	106500	26 lbs.
2.2-3.2	Integral with Protector	17 A	106489	23 lbs.	106501	26 lbs.
2.8-4	Integral with Protector	17 A	106490	23 lbs.	106502	26 lbs.
3.5-5	Integral with Protector	17 A	106491	23 lbs.	106503	26 lbs.
4.5-6.3	Integral with Protector	17 A	106492	23 lbs.	106504	26 lbs.
5.5-8	Integral with Protector	17 A	106493	23 lbs.	106505	26 lbs.
7-10	Integral with Protector	17 A	106494	23 lbs.	106506	26 lbs.
9-12.5	Integral with Protector	17 A	106495	23 lbs.	106507	26 lbs.
11-16	Integral with Protector	17 A	106496	23 lbs.	106508	26 lbs.
14-20	Integral with Protector	25 A	106497	23 lbs.	106509	26 lbs.

Control Floats

Piggy Back Floats

Part No.	Cord Length (Ft)	Contacts	Voltage	Amperage
125150-XX	10, 20, 30	Normally Open	120	10 Amps Max. 100 Milliamps Min.
125151-XX	15, 30, 50	Normally Open	120	13 Amps Max. 100 Milliamps Min.
125152-XX	15, 30, 50	Normally Open	230	100 Milliamps Min.
125154-XX	15, 30, 50	Normally Open	230	15 Amps Max. 100 Milliamps Min.

* Weight float cable sold separately - part number 125170

-XX is for cord length

Features:

- Three prong plug that takes the full amp draw of the pump



High-Temp Piggy Back Floats

Part No.	Cord Length (Ft)	Contacts	Voltage
090269	15, 25, 30	Open	115
090270	15, 25, 30, 50	Open	230

* Weight float cable sold separately - part number 125170

** For all the above mechanical level controls state cord length when ordering

Direct Control Floats

Part No.	Cord Length (Ft)	Contacts	Voltage	Amperage
125153	15, 30, 50, 100	Open	120/240	13 Amps Max. 100 Milliamps Min.

* Weight float cable sold separately - part number 125170

Pilot Duty Control Floats

Part No.	Cord Length (Ft)	Contacts	Voltage	Amperage
125148-15	15	Normally Open	120/240	5 Amps Max. 100 Milliamps Min.
125148-30	30	Normally Open	120/240	
125148-50	50	Normally Open	120/240	
125148-100	100	Normally Open	120/240	
125149-15	15	Normally Closed	120/240	
125149-30	30	Normally Closed	120/240	
125149-50	50	Normally Closed	120/240	
125149-100	100	Normally Closed	120/240	

* Weight float cable sold separately - part number 125170

Features:

- Does not experience the full load amps of the pump

High Water Alarms

Model	NEMA 1 Indoor
Part No.	126306
Voltage	120 V with 6ft. line cord
Watts	4.8 Watts Alarm Condition
Construction	NEMA 1 metal enclosure with knock outs
Alarm Horn	86db (A) at 10ft.
Alarm Float	High impact resistant PVC housing
Alarm Cord	15ft. 18/2 SJOW water resistant neoprene (CPE) cord with pipe clamp
Liquid Temperature	140°F (60°C) Continuous

Features:

- NEMA 1 rated enclosure for indoor use
- Red LED warning light
- Green LED power on light
- Push-to-test alarm button
- Horn silence switch



High Water Alarms

Model	Water-tight Indoor/Outdoor
Part No.	126307
Voltage	120 V
Construction	Water-tight, Thermoplastic, Type 3R
Alarm Horn	85db (A) at 10ft.
Alarm Light	Top Mounted, Type 4X
Alarm Float	High impact resistant PVC housing
Alarm Cord	15ft. 18/2 SJOW water resistant neoprene (CPE) cord with pipe clamp
Liquid Temperature	140°F (60°C)

Features:

- Water-tight panel with a top mounted alarm light
- Test/silence switch
- Power on light
- 85db (A) alarm horn
- Horn silence switch



Junction Box

Part No.	Pump Cable (qty. 2)	Float Cable (qty. 4)	Control Cable (qty. 2)
076622	.625-.750	.250-.312	.437-.500*
076627	.625-.750*	.250-.312	Not used
076628	.750-.875	.250-.312	.437-.500
078158	.375-.437	.250-.312	N/A
085808	.500-.625	.250-.312	.437-.500

* Extra grommet and washer supplied for range .500 to .625

Features:

- The Duplex Junction Box and all connections have a NEMA 6 Rating to protect against occasional submersion and is used in conjunction with UL listed water-tight connectors suitable for use with UL listed Direct Burial Cable



Electrical Conduit Hub

Part No.	Description
078470	1 1/4" NPT Hub
078471	1 1/2" NPT Hub
078471D	2" NPT Hub

* Extra grommet and washer supplied for range .500 to .625

Features:

- Bolt-on hub. Constructed of glass filled nylon. Includes; gasket, stainless steel cap screws, sealing washers and hex nuts

Inlet Hub

Part No.	Description
063847	4" Caulking Type
063848*	6" Caulking Type
063850*	8" Caulking Type

* 6" schedule 40 inlet can only be used on 36" diameter and larger basin

Features:

- Cast iron inlet hubs are recommended for cast iron, ceramic, plastic or ductile iron gravity sewer pipe, designed to fit curvature of basin.
- Shipped loose for field installation.
- Includes gasket and four fasteners for mounting to basin



Discharge Coupling

Part No.	Description
094790	1 ¼" NPT, Female
094801	1 ½" NPT, Female
094802	2" NPT, Female
094964	2 ½" NPT, Female
094965	3" NPT, Female

* Stainless steel bolt-on couplings



Flexible Pipe Fittings



Part No.	Description
076149	4" PVC, Sch. 40-80
075898	4" PVC, SDR-35
076941*	6" PVC, Sch. 40-80

* 6" schedule 40 inlet can only be used on 36" diameter and larger basin

Features:

- The flexible pipe fitting is made of sanoprene for weather and corrosion resistance.
- The fitting has superior vapor and water leakproof sealing ability.
- Shipped loose for field installation

Lifting Chain

Part No.	Length (in)
097273	32"
097275	44"
097277	56"
097279	62"
097281	68"
097283	74"
097285	80"
097287	92"
097289	104"
102104	128"
102541	140"
102542	152"

Features:

- .18" diameter 300 series stainless steel
- 830 lb. working load
- 3750lb. Breaking Strength



Swing Check Valve

Model	Part No.	Connections	Weight
BCV150C	102163	1 1/2" Compression Fit	2 lbs.
BCV200C	102164	2" Compression Fit	2 lbs.



Features:

- No metallic parts, corrosion resistant
- Full flow design
- Angle seat and weighted flapper design for low pressure seal
- PVC weighted and shielded flapper will retain back pressure up to 125 psi
- Ideal for close working areas, easy pipe alignment
- Compression ends can be used as union connections
- Designed for horizontal or vertical use
- Pressure rated 125 psi @ 72°F

Applications:

- Waste water lines
- Sump pump disposal lines
- Sewage lift stations
- Ejector systems
- Swimming pools, hot tubs or spas

Flapper Style Check Valve

Part No.	Connections	Weight
1067	1.25" or 1.50" Slip Fit	1 lb.
066828	2.00" Slip Fit	2 lbs.



Features:

- Angle seat for hinge flapper to eliminate chatter
- Strong ABS body construction
- Solid lifetime self-cleaning flapper with ball type hinge
- Encased gasket between bodies eliminates all chances of leakage
- 4 stainless steel clamps
- Adjustable hose fits 1-1/4" IPS, 1-1/2" copper or 1-1/2" IPS (p/n 1067)

Applications:

- Waste water lines
- Sump pump disposal lines
- Sewage lift stations
- Ejector systems
- Swimming pools, hot tubs or spas

Ball Check Valve

Housing	ASTM Class 30 Cast Iron	PVC
Sizes	1-1/4", 2"	1-1/4", 1-1/2", 2"
Ball	Natural Rubber	Nitrile or Buna-N
Plug	Schedule 40 PVC	PVC
Temperature	80°C and a potential peak of 100°C	80°C and a potential peak of 100°C
Pressure Test	150 psi (10.6 kgs./sq. meter)	150 psi (10.6 kgs./sq. meter)

Features:

- Works both vertically and horizontally (in the latter case, place the "bulge" above the axis of flow- the ball can thus return to its seat by the pull of gravity)
- Ball has sufficient weight to seat tightly and moves freely to open
- Works in silence
- Supplied with clean out port and plug

Applications:

- Waste water
- Fluids of varying viscosity
- Liquid manure



Part No.	Connections	Size	Body	Weight
077881	NPT	1.25"	Cast Iron	4.50 lbs.
085448	NPT	1.25"	PVC	1 lb.
099727	NPT	1.50"	PVC	1.50 lbs.
077882	NPT	2.00"	Cast Iron	9 lbs.
189874	NPT	2.00"	PVC	1.50 lbs.

True Union Ball Valve

Part No.	Connections	Size	Weight
085115	NPT	1.25"	2 lbs.
089873	NPT	2.00"	4 lbs.

Features:

- Type 1 Schedule 80 PVC construction
- EDPM O-Rings for superior chemical and corrosion resistance
- Pressure rated 150 psi, non-shock @ 73°F (23°C)
- Quick disconnect design
- Repairable to the component level
- Full flow bore
- 1/4 turn leak tight shut-off
- Extension handles (if required)

Applications:

- Portable water service



Extension Handles for True Union Ball Valves

Part No.	Length (in)	Basin Depth (in)
094780	12	48
094781	27	60
094782	36	72
094783	42	78
094784	48	84
094785	54	90
094786	63	96

Features:

- Made from 3/8" (10 mm) diameter stainless steel
- Can be used with 1-1/4" (32mm) and 2" (51mm) true union ball valves
- Basin depths 48"-120"

Applications:

- Sewage ejector and non-clog lift stations



Level Control Rack

Part No.	Material	Qty. Float
059720	Steel	4
059720G	Steel	5
059720E	Stainless	4

Features:

- Made from steel or stainless steel
- Asphalt bituminous coating
- Includes: cord grips, conduit lock nuts 1/2-14 and qty. 2
- Corrosion resistant cap screws 5/16-18 x 1" (25mm) long
- Floats not included



Foot Valve

Part No.	021339
Length	7" (178mm)
Width	1-15/16 (49mm)
Size	3/4", 1", 1 1/4", 1 1/2"
Weight	6 oz
Body	Acetal Celcon
Screen	Acetal Celcon
Hardware	Stainless steel

Features:

- Positive sealing made possible by a spring-loaded valve poppet closing against a smooth tapered seat
- Made entirely of new molded materials and stainless steel so it won't corrode regardless of water conditions
- Withstands working pressures up to 200 psi
- Special design prevents sand scale from settling on the seating surface and fouling the valve
- Large screen area resists clogging, assures ample water passage, eliminates suction drag
- Tapered ribs on screen provide guide to eliminate pipe joint hang-up during installation



Crane Pumps & Systems

420 Third Street Piqua, Ohio 45356
(937) 778-8947 • Fax (937) 773-7157

Crane Pumps & Systems Canada

83 West Drive Brampton, Ont. Canada L6T 2J6
(905) 457-6223 • Fax (905) 457-2650

www.cranepumps.com



**Canadian Standards
Association File No. LR16567**

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