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# HYDROMATIC<sup>®</sup>

## SUMP, SEWAGE AND EFFLUENT PUMPS FOR PLUMBING CONTRACTORS

[WWW.HYDROMATIC.COM](http://WWW.HYDROMATIC.COM)



## HYDROMATIC® – AN ESTABLISHED, PROVEN HISTORY...

Pentair's Hydromatic line of wastewater pumps has been a national leader for over a half-century. Today, Pentair continues to design and manufacture one of the most extensive and diversified lines of submersible wastewater sump, sewage, effluent, grinder and large solids handling pumps for the municipal, commercial and residential wholesaler market sectors. We market our Hydromatic line to the professional, exclusively – a business philosophy we've proudly maintained in our nearly half-century of continuing leadership.

## ENGINEERED TO LAST...

Comprehensive engineering, testing and production processes ensure that Hydromatic pumps will continue to be the most reliable and efficient in the wastewater industry. R&D, customer-certified testing and unmatched quality assurance standards give you the confidence that our pump installations will give your customers the performance they demand. Our commitment is to provide advanced engineering innovations for you and your business. It also guarantees Hydromatic pumps will perform as dependably and reliably in the future as they have for years.



### ASHLAND, OH USA

With a proud history as a national leader in the manufacture and distribution of submersible wastewater pumps, the Hydromatic line has established the standard for unexcelled quality and reliability. With over 50 years of design and manufacturing expertise applied over thousands of installations, the Hydromatic legacy is one of unsurpassed product confidence in terms of reliability, performance and longevity. We've earned a global reputation for pumps and pumping systems of exceptional quality that professionals know and trust.

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MODEL NUMBER	WARRANTY YEARS	CAPACITIES TO (GPM or GPH)	HEADS TO (TDH)	SOLIDS HANDLING	NPT DISCHARGE	MOTOR HP	ELECTRICAL PHASE - VOLTAGE	PAGE NO.
<b>SPECIAL PURPOSE PUMPS</b>								
HCU15/HCU155/HCU20S	2	200 GPH (757 LPH)	20 ft. (6.1 m)	-	-	-	1 - 115	4
HUP4	2	22 GPM (83.3 LPM)	22 ft. (6.7 m)	1/8"	1"	1/4	1 - 115	4
HY106	2	5 GPM (18.9 LPM)	10 ft. (3 m)	-	-	-	1 - 115	5
HPUSP125	2	40 GPM (151.4 LPM)	14 ft. (4.3 m)	-	1-1/4"	1/3	1 - 115	5
<b>SUMP PUMPS</b>								
FG-2200	1	32 GPM (129 LPM)	13 ft. (3.97 m)	-	1-1/2"	1/4	1 - 115	6
FG-2200C	1	32 GPM (129 LPM)	13 ft. (3.97 m)	-	1-1/4"	-	12V	6
FG-3100RF, FG-3100RC	2	45 GPM (170.3 LPM)	15 ft. (4.6 m)	-	1-1/4" or 1-1/2"	1/3" and 1/2"	12V	7
HS SERIES	3	75 GPM (284 LPM)	25 ft. (7.6 m)	1/4"	1/4 or 3/16"	1/3" and 1/2"	1 - 115	8 and 9
W-A1, D-A1, V-A1	3	48 GPM (2.8 LPS)	25 ft. (7.6 m)	1/2"	1-1/2"	3/10	1 - 115	10
HP33, HP50	3	62 GPM (235 LPM)	32 ft. (9.8 m)	1/2"	1-1/2"	1/3, 1/2	1 - 115	11
HP33M, HP50M	3	62 GPM (235 LPM)	32 ft. (9.8 m)	1/2"	1-1/2"	1/3, 1/2	1 - 115	11
HTS33A1	3	45 GPM (170 LPM)	21 ft. (6.4 m)	3/4"	1-1/2"	1/3	1 - 115	12
HTS50A1	3	100 GPM (378 LPM)	50 ft. (15.2 m)	3/4"	2"	1/2	1 - 115	13
P33A1	3	54 GPM (3.4 LPS)	18 ft. (5.5 m)	1/4"	1-1/4"	1/3	1 - 115	13
SW/SD/VS33	3	48 GPM (3.0 LPS)	26 ft. (7.9 m)	3/8"	1-1/2"	1/3	1 - 115	14
SW/SD/VS50	3	65 GPM (4.1 LPS)	29 ft. (8.8 m)	3/4"	1-1/2"	1/2	1 - 115	14
<b>EFFLUENT PUMPS</b>								
OSP50	3	60 GPM (3.8 LPS)	25 ft. (7.6 m)	5/8"	1-1/2" or 2"	1/2	1 - 115, 230	15
OSP50AB	3	60 GPM (3.8 LPS)	25 ft. (7.6 m)	5/8"	1-1/2"	1/2	1 - 115	15
SPX50	3	95 GPM (6.0 LPS)	25 ft. (7.6 m)	2"	2"	1/2	1 - 208, 230	16
SPX50H	3	73 GPM (4.6 LPS)	36 ft. (11.0 m)	3/4"	1-1/2"	1/2	1 - 208, 230	16
SPD50H	3	112 GPM (7.1 LPS)	50 ft. (15.2 m)	3/4"	2" or 3"	1/2	1 - 115, 230; 3 - 208, 230, 460, 575	17
SPD100H	3	140 GPM (8.8 LPS)	65 ft. (19.8 m)	3/4"	2" or 3"	1	1 - 230; 3 - 208, 230, 460, 575	17
SKHD150	3	55 GPM (3.5 LPS)	127 ft. (39 m)	3/4"	1-1/2"	1-1/2	1 - 230; 3 - 208, 230, 460, 575	18
SHEF30	3	44 GPM (2.8 LPS)	24 ft. (7.3 m)	3/4"	1-1/2"	3/10	1 - 115	18
SHEF40	3	70 GPM (4.4 LPS)	35 ft. (10.7 m)	3/4"	1-1/2"	4/10	1 - 115, 230	19
SHEF42	3	60 GPM (3.8 LPS)	40 ft. (12.2 m)	3/4"	2"	4/10	1 - 115	19
SHEF45	3	87 GPM (5.5 LPS)	44 ft. (13.4 m)	3/4"	2"	1/2	1 - 115, 230	20
SHEF50	3	63 GPM (4.0 LPS)	63 ft. (19.2 m)	3/4"	2"	1/2	1 - 115, 208, 230; 3 - 230, 460, 575	21
SHEF100	3	88 GPM (5.5 LPS)	90 ft. (27.4 m)	3/4"	2"	1	1 - 208, 230; 3 - 230, 460, 575	21
HE8-51 - HE35-51	2	50 GPM (189 LPM)	300 ft. (91.4 m)	-	1-1/2"	1/2, 1-1/2	1 - 115, 230	22
<b>SEWAGE PUMPS</b>								
SP40	3	120 GPM (7.5 LPS)	28 ft. (8.5 m)	1-1/4"	2"	4/10	1 - 115, 230	23
SP50/SP50AB	3	140 GPM (8.8 LPS)	28 ft. (8.5 m)	1-1/2"	2"	1/2	1 - 115, 208, 230; 3 - 208, 230, 460, 575	23
BV40	3	130 GPM (7.5 LPS)	26 ft. (7.9 m)	2"	2"	4/10	1 - 115	24
SKV40	3	78 GPM (4.9 LPS)	19.5 ft. (5.9 m)	2"	2"	4/10	1 - 115, 230	25
SKV50	3	180 GPM (11.3 LPS)	20 ft. (6.1 m)	2"	2"	1/2	1 - 115, 230	25
SKHS50	3	138 GPM (8.7 LPS)	45 ft. (13.7 m)	2"	2" / 3"	1/2	1 - 115, 208, 230; 3 - 208, 230, 460, 575	26
SKHS100	3	160 GPM (10.1 LPS)	58 ft. (17.7 m)	2"	2" / 3"	1	1 - 208, 230; 3 - 208, 230, 460, 575	26
SKHS150	3	146 GPM (9.2 LPS)	70 ft. (21.3 m)	2"	2" / 3"	1-1/2	1 - 208, 230; 3 - 208, 230, 460, 575	26
SKHS200	3	175 GPM (11.0 LPS)	75 ft. (22.9 m)	2"	2" / 3"	2	1 - 230; 3 - 208, 230, 460, 575	26
SK50	3	112 GPM (7.1 LPS)	24 ft. (7.3 m)	2"	2" / 3"	1/2	1 - 115, 230	27
SK60	3	120 GPM (7.5 LPS)	28 ft. (8.5 m)	2"	2" / 3"	6/10	1 - 115, 208, 230; 3 - 208, 230, 460, 575	27
SK75	3	150 GPM (9.5 LPS)	34 ft. (10.4 m)	2"	2" / 3"	3/4	1 - 208, 230; 3 - 208, 230, 460, 575	28
SK100	3	156 GPM (9.8 LPS)	38 ft. (11.6 m)	2"	2" / 3"	1	1 - 208, 230; 3 - 208, 230, 460, 575	28
<b>GRINDER PUMPS</b>								
HPGR200	1	58 GPM (3.7 LPS)	105 ft. (32.0 m)	-	1-1/4"	2	1 - 230	29
Retrofit System	1							29
<b>SOLIDS HANDLING PUMPS</b>								
S3W	1	330 GPM (20.8 LPS)	92 ft. (28.0 m)	2"-2-1/2"	3"	1 to 3	1 - 208, 230; 3 - 208, 230, 460, 575	30
S3WR	1	280 GPM (17.7 LPS)	51 ft. (15.6 m)	2"-2-1/2"	3"	1-1/2 to 3	1 - 208, 230; 3 - 208, 230, 460, 575	31
S3S/SB3S	1	335 GPM (21.1 LPS)	40 ft. (12.2 m)	2-1/2"	3" / 3" Flange	1-1/2 to 3	1 - 208, 230; 3 - 208, 230, 460, 575	32
S3SD/SB3SD	1	385 GPM (24.3 LPS)	44 ft. (13.4 m)	2-1/2"	3"	1 up to 3	1 - 200, 230; 3 - 200, 230, 460, 575	33
S4S/SB4S	1	590 GPM (37.2 LPS)	55 ft. (16.8 m)	3"	4" / 4" Flange	3 up to 7-1/2	1 - 208, 230; 3 - 208, 230, 460, 575	34
S4SD/SB4SD	1	618 GPM (38.9 LPS)	58 ft. (17.7 m)	3"	4"	1 to 7-1/2	1 - 200, 230; 3 - 200, 230, 460, 575	35
<b>PACKAGED SYSTEMS</b>								
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<b>CONTROLS &amp; ACCESSORIES</b>								
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Double Wide-Angle Float Switch			41					

# HCU15/15S/20S

Designed for the automatic removal of condensate.



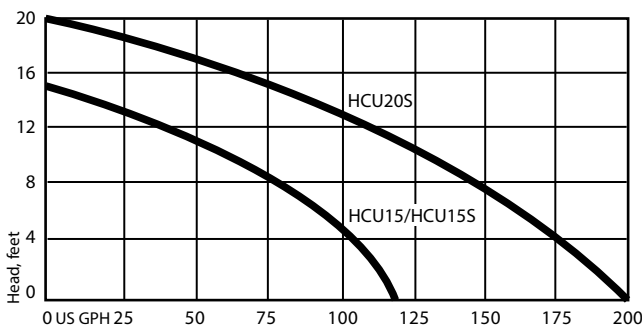
Typical Application	Air conditioner, dehumidifier, icemaker, high-efficiency furnaces, refrigeration systems, water coolers
Capacities	up to 200 GPH (757 LPH)
Heads	20 ft. (6.1 m)
Liquids	Drain water
Tank Capacities	2 quarts
Temperature	190°F (88°C)
Motor	Electrical bearingless sealed motor
Full Load Amps	1.45
Voltage	115
Hertz	60
Unit Weight	3.25 lbs.
Dimensions	11" x 5" x 4-3/4"
Housing	Thermoplastic
Power Cord	6'

## SUPERIOR FEATURES

### ADVANTAGES BY DESIGN:

- Lifts to 20' (HCU20S)
- Built-in safety switch (HCU15S and HCU20S only)
- Thermal overload protection
- High-temperature housing
- Built-in check valve
- Double-insulated enclosure
- Provides longer life than similar size condensate units
- Bearingless sealed motor offers a more reliable, longer life product
- For indoor use only

## PERFORMANCE



# HUP4

Ideal for a wide range of water drainage and circulation light-duty applications. Shallow flooded areas can be dewatered quickly and efficiently with this powerful and economical submersible utility pump.

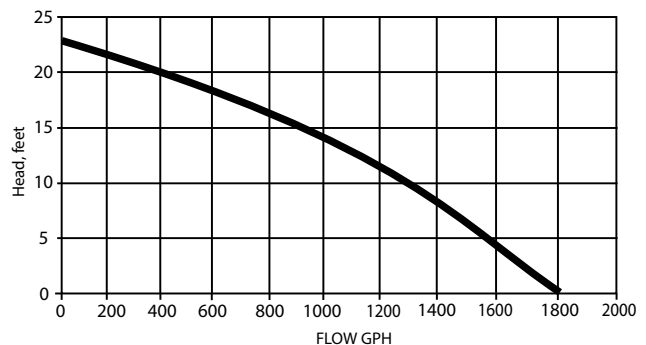


Typical Application	Light-duty drainage, flooded basements, flat roofs, swimming pool covers
Capacities	Flows at 10' Lift at 1260 GPH
Heads	up to 22 ft. (6.7 m)
Liquids	Drain water
Intermittent Liquid Temp.	up to 140°F (60°C)
Electrical	115V, 1ø, 60Hz FLA=8.5
Motor	1/4 HP PSC, air-filled & water-cooled
Acceptable pH Range	6-9
Operation	Manual
Materials of Construction	Thermoplastic
Discharge Size	1" Female (includes threaded garden hose adapter)
Housing	Flame-retardant polypropylene
Solids Handling	1/8" (3.18 mm)
Power Cord	8', SJTW, SJTW-A T-handle cord connector

## SUPERIOR FEATURES

- High-output performance for removing unwanted water down to 3/16" depth
- Thermoplastic construction for the highest corrosion-resistance
- Portable and versatile for use in window wells, basements, rooftops, etc.
- Removable inlet screen for easy cleaning
- Includes 8' power cord, garden hose adapter, detailed owner's manual

## PERFORMANCE



# HY106

Ideal for transferring water, filling tanks and draining shallow flooded areas



Typical Application	Non-submersible transferring water; filling tanks; draining shallow flooded areas; emptying water beds, aquariums or non-draining sinks
Capacities	5 GPM (18.9 LPM)
Shut-off Head	10 ft. (3.1 m)
Weight	4 lbs.
Liquids Handling	Drain water
Intermittent Liquid Temp.	104°F (40°C)
Motor	Air-cooled brush motor
Electrical Data	115V, 2A, 1Ø, 60Hz
Discharge	Standard garden hose
Power Cord	6'

## SUPERIOR FEATURES

### ADVANTAGES BY DESIGN:

- Up to 5 GPM with 10' head
- Connects to standard garden hose
- 115VAC with 6' power cord
- Removes standing water down to 1/8" depth
- Weighs only 4 lbs.
- Bearingless sealed motor offers a more reliable, longer life product
- For indoor use only
- Built-in carrying handle
- Includes 6' suction hose and floor drainer
- To operate, just attach a standard hose to pump discharge and plug into any 115V outlet
- Air-cooled, high-torque, non-submersible motor with overload protection

# HPUSP125

Designed to be used with a sink where gravity drain line is not available



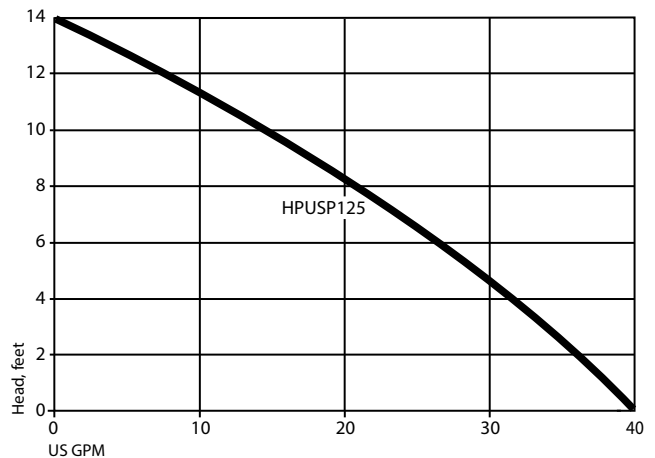
Typical Application	Perfect for basement wet bars, laundry and utility sinks
Capacities	up to 40 GPM (151.4 LPM)
Heads	up to 14 ft. (4.3 m)
Liquids	Drain water
Liquid Temp.	up to 120°F (49°C)
Electrical	115V, 15 amps, 1Ø, 60Hz
Motor	1/3 HP
Operation	Automatic
Materials of Construction	Thermoplastic
Discharge Size	1-1/4" NPT (31.8 mm)
Power Cord	8'

## SUPERIOR FEATURES

### ADVANTAGES BY DESIGN:

- Easy to install; eliminates the need for traps, vents and costly labor
- Quiet, trouble-free operation
- Easily mounts beneath your sink
- Complete compact system
- Fully automatic operation

## PERFORMANCE



# FG-2200 and FG-2200C

**NEW!**

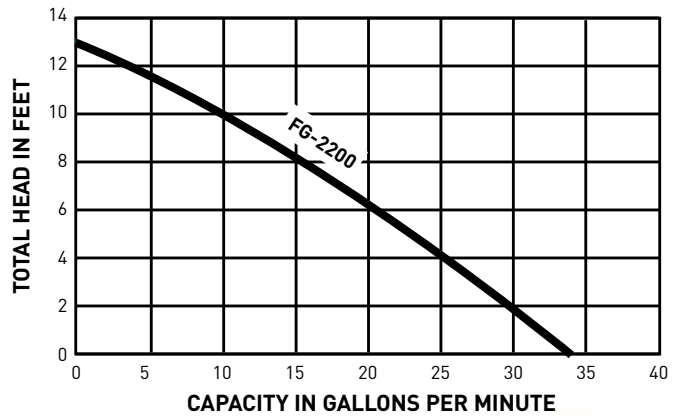
## 12 Volt Hydromatic CLASSIC Battery Backup Systems

Typical Application	Emergency dewatering
Capacities	34 GPM (129 LPM)
Heads	up to 13 ft. (3.97 m)
Liquids Handling	Sump drain water
Water Temp.	Up to 77°F (25°C)
Housing	Thermoplastic
Motor	12V DC, 9A
Charger	plug-in type wall-mounted transformer; input - 120V AC, 60Hz, 15W; output - 12V AC, 60Hz, 2A

- Backs up residential sump pump automatically during power outage or pump failure
- Proprietary Smart Charging Technology recharges battery up to 5X faster and extends battery life
- Alarm sounds when backup pump activates
- Works with flooded and sealed AGM deep cycle lead acid batteries
- Re-settable circuit breaker eliminates need for a fuse
- Dual battery capacity

\* Deep cycle marine-type battery (Group 24) recommended — not included with FG-2200 system  
 \* FG-2200C is a pre-plumbed combo unit and includes 1/3 HP primary pump model HS33V1- See page 9 for specifications

### PERFORMANCE



FG-2200

**1 YEAR**  
WARRANTY



FG-2200C

RECOMMENDED BATTERIES	BAT40	BAT75
Amp hours	40	75
Gallons per charge	2,900	7,000
Hours of continuous run time	3	7

MODEL	PERFORMANCE (GPM)					MAX LIFT	SOLIDS HANDLING	VOLTAGE
	0'	5'	10'	15'	20'			
FG-2200	34	23	10	-	-	13	3/16" For Backup Pump	12V DC For Backup Pump
FG-2200C	60	53	45	36	24	25 Primary Pump	1/4" For Primary Pump and 3/16" For Secondary Pump	115VAC For Primary Pump and 12V DC For Secondary Pump

# FG-3100RF and FG-3100RC

**NEW!**

## 12 Volt Hydromatic PREMIUM Battery Backup Systems

Typical Application	Emergency dewatering
Capacities	45 GPM (170 GPM)
Heads	15 ft. (4.6 m)
Liquids Handling	Sump drain water
Intermittent Liquid Temp.	77°F (25°C)
Motor	12V DC, 9.5A
Charger	Fully automatic, computerized monitoring and alarm system; input - 115V AC, 60Hz; output - 12V AC, 2A (5 stages)
Housing	Thermoplastic
Discharge NPT	1-1/4" or 1-1/2"



FG-3100RF

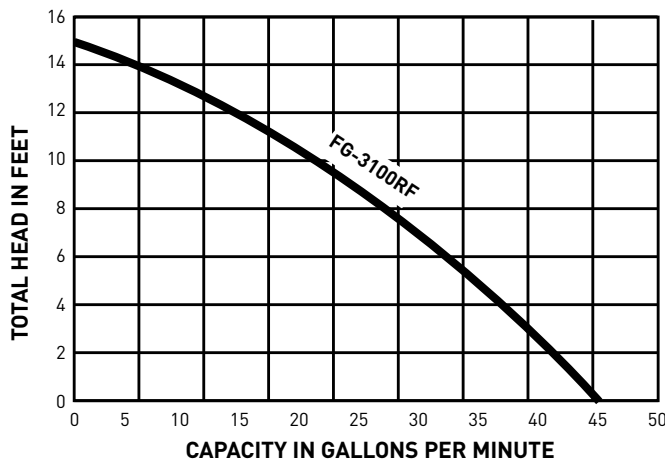


FG-3100RC

### SUPERIOR FEATURES

- Link<sub>2</sub>O™ Remote Monitoring continually monitors the backup system and sends text or email alerts if problems are detected
- Proprietary Smart Charging Technology recharges battery up to 5X faster and extends battery life
- Alarm sounds when backup pump activates
- Works with flooded and sealed AGM deep cycle lead acid batteries
- Re-settable circuit breaker eliminates need for a fuse
- Dual battery capacity
- Pre-plumbed combo unit includes 1/2 HP primary pump model HS50V1 - See page 9 for specifications

### PERFORMANCE



RECOMMENDED BATTERIES	BAT40	BAT75
Amp hours	40	75
Gallons per charge	4,800	11,500
Hours of continuous run time	5	11.5

**2 YEAR**  
WARRANTY



A cloud-based technology continually monitors the backup system and sends text or email alerts if problems are detected. For more information, go to [www.mylink2o.com](http://www.mylink2o.com)

MODEL	PERFORMANCE (GPM)					MAX LIFT	SOLIDS HANDLING	VOLTAGE
	0'	5'	10'	15'	20'			
FG-3100RF	45	34	21	-	-	15	3/16" For Backup Pump	12V DC For Backup Pump
FG-3100RC	75	66	56	44	28	25 Primary	1/4" For Primary Pump and 3/16" For Secondary Pump	115VAC For Primary Pump and 12V DC For Secondary Pump

# HS SERIES

**NEW!**

## 1/3 and 1/2 HP Residential Submersible Sump Pumps - Zinc and Plastic Construction

Typical Application	Basement sumps, dewatering
Pump/Motor Unit	Submersible sump pump
Heads	24 ft. (7.3 m)
Operation	Tethered: On 14" (356mm) Off 5" (127mm) Vertical: On 7.5" (191mm) Off 3" (76mm)
Capacities	70 GPM (265 LPM)
Motor	1/3 HP & 1/2 HP, PSC 3450 RPM, 115V, 1Ø, 60Hz FLA 1/3 HP = 4.0, 1/2 HP = 4.1
Water Temperature	140°F (60°C)
Discharge Size	1-1/2" NPT
Solids Handling	3/16" (4.78mm)
Liquids Handling	Drain Water
Unit Weight	10 lbs.
Power Cord	8' (2.4m)
Handle	Thermoplastic
Lubricating Oil	Dielectric oil
Construction	Zinc/thermoplastic
Shaft	Double Lip
Acceptable pH range	6-9
Housing	Zinc
Volute Case	Thermoplastic
Min. Basin Diameter	
Tethered:	14" (356 mm)
Vertical:	10" (254 mm)



**3 YEAR**  
LIMITED WARRANTY

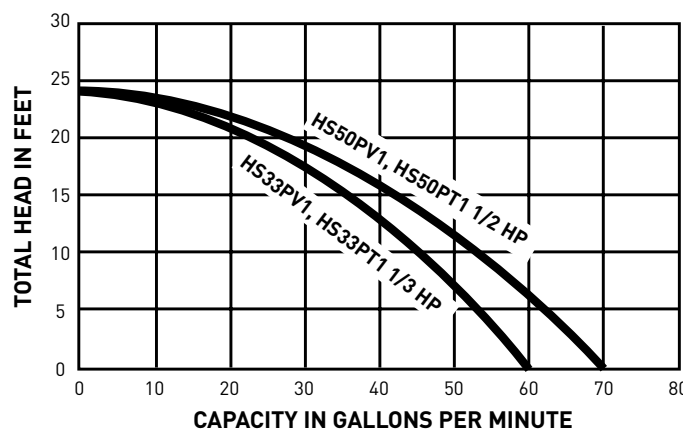


Piggyback Switch Plug

### SUPERIOR FEATURES

- Versatility for many light-duty jobs
- Designed for drain water removal or permanent applications with small amounts of debris
- Piggy-back style float for automatic or manual operation
- Maintenance-free operation
- Wide-angle or vertical mechanical switch for small 10" diameter sumps
- Dual ball-bearing motor and additional lip seal provide durability and longer pump life
- Durable PSC motor for years of service
- Thermal overload protection with automatic reset
- CSA Listed

### PERFORMANCE





# HS SERIES

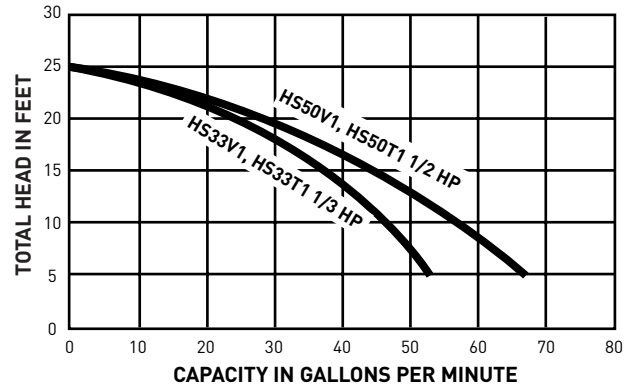
**NEW!**

## 1/3 and 1/2 HP Residential Submersible Sump Pumps - Zinc and Cast Iron Construction

Typical Application	Basement sumps, dewatering
Pump/Motor Unit	Submersible sump pump
Heads	25 ft. (7.6 m)
Operation	Tethered: On 14" (356mm) Off 5" (127mm) Vertical: On 7.5" (191mm) Off 3.0" (76mm)
Capacities	75GPM (284 LPM)
Motor	1/3 HP & 1/2 HP, PSC 3450 RPM, 115V, 1Ø; 60Hz FLA 1/3 HP = 4.0, 1/2 HP = 4.1
Water Temperature	140°F (60°C)
Discharge Size	1-1/2" FNPT
Solids Handling	1/4" (6.4mm)
Liquids Handling	Drain Water
Unit Weight	15 lbs.
Power Cord	SJTW, 10' std. (20' optional)
Handle	Thermoplastic
Lubricating Oil	Dielectric oil
Construction	Zinc/Cast Iron
Shaft	Double Lip
Acceptable pH range	6-9
Housing	Zinc
Volute Case	Cast Iron
Min. Basin Diameter	
Tethered:	14" (356 mm)
Vertical:	10" (254 mm)

### SUPERIOR FEATURES

- Versatility for many light-duty jobs
- Designed for drain water removal or permanent applications with small amounts of debris
- Maintenance-free operation
- Wide-angle or vertical mechanical switch for small 10" diameter sumps
- Dual ball-bearing motor and additional lip seal provide durability and longer pump life
- Durable PSC motor for years of service
- Oil-filled PSC motor for maximum heat dissipation, continuous bearing lubrication
- Thermal overload protection with automatic reset
- CSA Listed



Shown "T" Tether Float Switch



**3 YEAR**  
LIMITED WARRANTY

Shown "V" Vertical Float Switch



Piggyback Switch Plug

# W-A1/D-A1 & V-A1

The most popular series of Hydromatic® submersible sump pumps

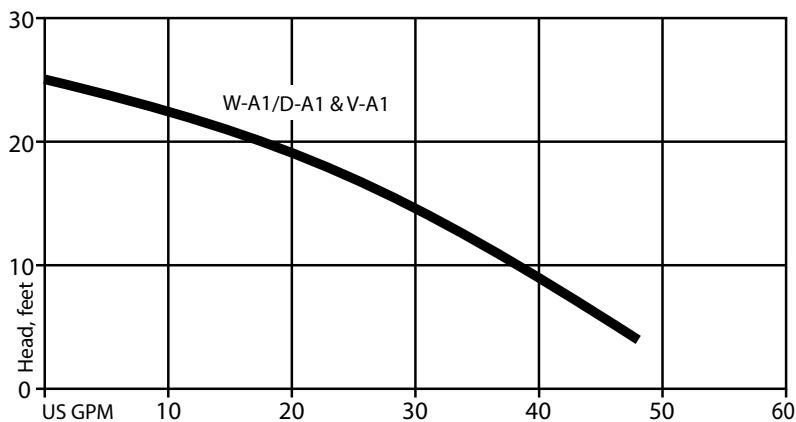
Typical Application	Basement sumps, dewatering	
Capacities	up to 48 GPM (2.8 LPS)	
Heads	up to 25 ft. (7.6 m)	
Electrical	115V, 1ø, 8 FLA, 60Hz	
Motor	3/10 HP shaded pole with thermal overload protection, 1550 RPM	
Intermittent Liquid Temp.	120°F (49°C)	
Minimum Recommended Sump Diameter	D-A1 = 12" (304.8 mm)	
	W-A1 = 18" (457.2 mm)	
	V-A1 = 12" (304.8 mm)	
Automatic Operation	W = Wide-angle float switch	on 9-1/2" off 3-1/2"
	D = Diaphragm pressure switch	on 10" off 4"
	V = Vertical float switch	on 7-7/8" off 3-7/8"
Materials of Construction	Cast iron and engineered thermoplastic	
Impeller	Thermoplastic vortex	
Discharge Size	1-1/2" NPT (38.1 mm)	
Solids Handling	1/2" (12.7 mm)	
Power Cord	10' SJTW (20' optional)	

## SUPERIOR FEATURES

- Carbon/Ceramic mechanical seal
- Oil-filled motor with automatic reset thermal overload
- Uses single-row ball-bearing construction
- Piggyback plug available for easy maintenance and replacement

**3 YEAR**  
LIMITED WARRANTY

## PERFORMANCE



**W-A1**  
Wide-Angle  
Float Switch



**D-A1**  
Diaphragm  
Pressure  
Switch



**V-A1**  
Vertical  
Float Switch



# HP33/HP50



**Ideal for applications with small diameter submersible sump pits**

Typical Application	Basement sumps, dewatering, light effluent, water transfer
Capacities	up to 62 GPM (235 LPM)
Heads	up to 32 ft. (9.8 m)
Electrical	1/3 HP, 115V, 1ø, 9.8A, 60Hz; 1/2 HP, 115V, 1ø, 12A, 60Hz
Motor	1/3 or 1/2 HP shaded pole with thermal overload protection, 1550 RPM
Continuous Liquid Temp.	130°F (54°C)
Minimum Recommended Sump Diameter	11" (25.4 cm)
Automatic Operation	2-pole float switch on 9" off 4"
Materials of Construction	Cast iron
Impeller	Thermoplastic, vortex type
Discharge Size	1-1/2" NPT (38.1 mm)
Solids Handling	1/2" (12.7 mm)
Power Cord	10', 20' or 30' 16/3, SJTW-A, SJTW

# HP33M/50M



**Ideal for submersible sump and effluent applications**

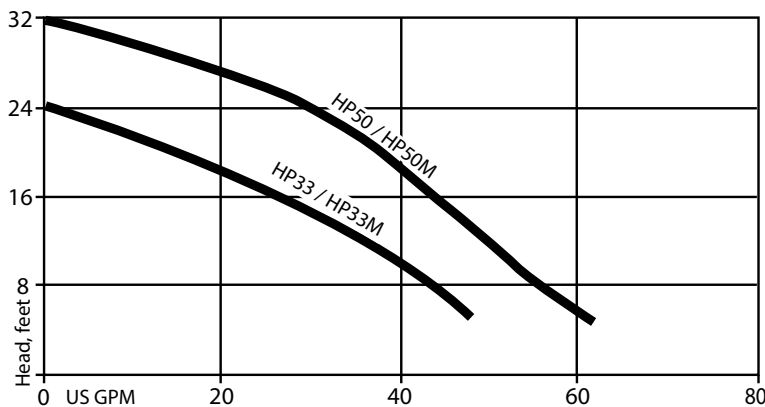
Typical Application	Basement sumps, dewatering, light effluent, water transfer
Capacities	up to 62 GPM (235 LPM)
Heads	up to 32 ft. (9.8 m)
Electrical	1/3 HP, 115V, 1ø, 9.8A, 60Hz; 1/2 HP, 115V, 1ø, 12A, 60Hz
Motor	1/3 or 1/2 HP shaded pole with thermal overload protection, 1550 RPM
Continuous Liquid Temp.	130°F (54°C)
Minimum Recommended Sump Diameter	12" (30.5 cm)
Operation	Manual
Materials of Construction	Cast iron
Impeller	Fiberglass-reinforced Noryl®
Discharge Size	1-1/2" NPT (38.1 mm)
Solids Handling	1/2" (12.7 mm)
Power Cord	20' 16/3, SJTW-A, SJTW

## SUPERIOR FEATURES

- 2-pole switch design permits easier fit in sump pits as small as 10" in diameter
- Oil-filled motor for maximum heat dissipation
- Thermal overload protection, shaded pole motor with no starting switch or relay
- Carbon/ceramic seal protects motor against water leakage
- Lubricated ball bearings and shaft seal for longer service life
- Easy field-serviceable pump, intake screen volute base, switch and power cord
- Anti-airlock hole in base reduces labor

**3 YEAR**  
LIMITED WARRANTY

## PERFORMANCE



# HTS33A1

**High temperature submersible sump pump designed for up to 194°F**

Typical Application	Boiler blow-down, condensate pits and hot water transfer
Capacities	up to 45 GPM (170 LPM)
Heads	up to 21 ft. (6.4 m)
Electrical	115V, 1 $\phi$ , 12 FLA, 60Hz
Motor	1/3 HP shaded pole with thermal overload protection, 1550 RPM
Continuous Liquid Temp.	194°F (90°C) with switch; 200°F (93°C) manual
Minimum Recommended Sump Diameter	18" (457.2 mm)
Automatic Operation	Wide-angle float switch (manual available)
Materials of Construction	Cast iron
Impeller	Cast iron
Discharge Size	1-1/2" NPT (38.1 mm)
Solids Handling	3/4" (19.1 mm)
Power Cord	20', 16/3, SJOOW-A/SJOW

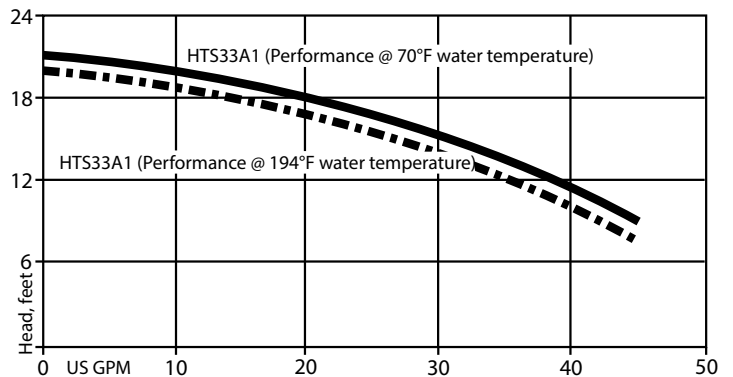
**3 YEAR**  
LIMITED WARRANTY



## SUPERIOR FEATURES

- Easily field-serviceable
- Oil-filled motor for bearing lubrication and maximum heat dissipation
- Thermal overload protection, shaded pole motor with no starting switch or relay
- Heavy cast-iron motor housing for cooler motor, which extends the life
- Maintenance-free operation
- Wide-angle, mercury-free, high-temperature mechanical float switch
- Automatic piggyback models available but can be operated manually by plugging directly into outlet
- Cast-iron vortex impeller and volute passes 3/4" solids

## PERFORMANCE



# HTS50A1

**3 YEAR**  
WARRANTY

High temperature submersible sump pump designed for up to 200°F

Shown with PW217-280 control panel required (sold separately)

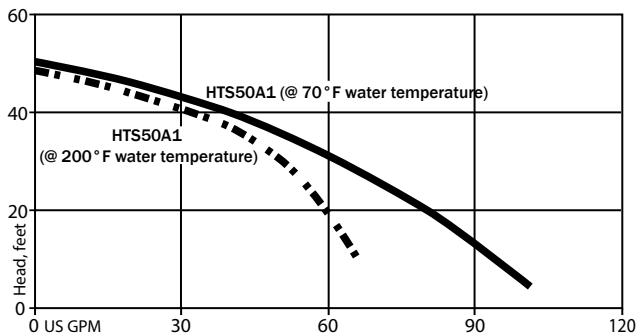


Typical Application	High-capacity sump, effluent, boiler blow-down
Capacities	up to 100 GPM (378 LPM)
Heads	up to 50 ft. (15.2 m)
Electrical	115V, 1ø, 12 FLA, 60Hz
Motor	1/2 HP PSC with thermal overload protection, 3450 RPM
Maximum Liquid Temp.	200°F (93°C)
Minimum Recommended Sump Diameter	18" (457.2 mm)
Automatic Operation	Wide-angle float with PW217-280 Control Panel
Materials of Construction	Cast iron
Impeller	Cast iron
Discharge Size	2" NPT (50.8 mm)
Solids Handling	3/4" (19.1 mm)
Power Cord	20', 16/4, SOOW-A/SOOW

## SUPERIOR FEATURES

- High-capacity sump, effluent, boiler blow-down
- Dual silicon carbide mechanical seals for longer life
- Oil-filled motor for bearing lubrication and maximum heat dissipation
- Thermal overload protection, PSC motor with no starting switch or relay
- Heavy cast-iron motor housing for cooler motor, which extends the life
- Maintenance-free operation
- Wide-angle, mercury-free, high-temperature mechanical float switch
- Cast-iron vortex impeller and volute passes 3/4" solids

## PERFORMANCE



# P33A1

**3 YEAR**  
LIMITED WARRANTY

Pedestal sump pump Ideal for basements needing frequent drainage

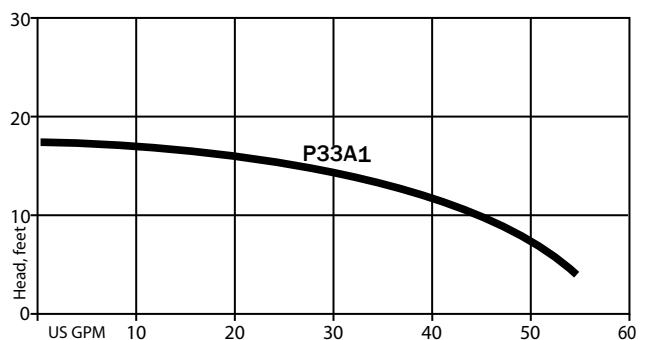


Typical Application	Basement sumps, dewatering
Capacities	up to 54 GPM (3.4 LPS)
Heads	up to 18 ft. (5.49 m)
Electrical	115V, 1ø, 3.5 FLA, 60Hz
Motor	1/3 HP shaded pole, 1725 RPM
Minimum Recommended Sump Diameter	12" (304.8 mm)
Automatic Operation	Mechanical float with rod
Materials of Construction	Engineered thermoplastic
Impeller	Thermoplastic
Discharge Size	1-1/4" NPT (31.8 mm)
Solids Handling	1/4" (6.4 mm)
Power Cord	6', 16/3, SJT

## SUPERIOR FEATURES

- Quick and easy installation
- Fits 12" diameter x 24" deep or larger sump pits
- Available with corrosion-resistant thermoplastic or cast-iron pump housing and base
- Built-in reliability, ease of operation
- Split-phase motors; no starting switches or relays required
- Thermal overload protection to prevent motor overload
- Adjustable float switch for easy accessibility
- Top-screened inlet to reduce clogging

## PERFORMANCE



# SW/SD/VS33 & 50

Durable 1/3 and 1/2 HP submersible sump pumps

VS Vertical  
Float Switch



SP Diaphragm  
Switch

SW Wide Angle  
Float Switch

## 33 SERIES

Typical Application	Basement sumps, dewatering, light effluent	
Capacities	SW/SD/VS33 - to 48 GPM (3.0 LPS)	
Heads	SW/SD/VS33 - to 26 ft. (7.9 m)	
Electrical	SW/SD/VS33 - 115V, 1 $\phi$ , 10 FLA, 60Hz	
Motor	SW/SD/VS33 - 1/3 HP shaded pole with thermal overload protection, 1550 RPM	
Intermittent Liquid Temp.	120°F (49°C)	
Minimum Recommended Sump Diameter	SD/VS33 = 12" (304.8 mm) SW33 = 18" (457.2 mm)	
Automatic Operation (manual available)	SW = Wide-angle float switch	On 9-1/2" Off 3-1/2"
	SD = Diaphragm pressure switch	On 9" Off 4"
	VS = Vertical float switch	On 7-1/4" Off 4"
Materials of Construction	Cast iron and engineered thermoplastic	
Impeller	Thermoplastic vortex	
Discharge Size	1-1/2" NPT (38.1 mm)	
Solids Handling	3/8" (9.5 mm)	
Power Cord	10', SJTW (20' optional)	

## 50 SERIES

Typical Application	Basement sumps, dewatering, light effluent	
Capacities	SW/SD/VS50 - to 65 GPM (4.1 LPS)	
Heads	SW/SD/VS50 - to 29 ft. (8.8 m)	
Electrical	SW/SD/VS50 - 115V, 1 $\phi$ , 12 FLA, 60Hz	
Motor	SW/SD/VS50 - 1/2 HP shaded pole with thermal overload protection, 1550 RPM	
Intermittent Liquid Temp.	120°F (49°C)	
Minimum Recommended Sump Diameter	SD/VS50 = 12" (304.8 mm) SW50 = 18" (457.2 mm)	
Automatic Operation (manual available)	SW = Wide-angle float	On 9" Off 4"
	SD = Diaphragm pressure switch	On 9" Off 4"
	VS = Vertical float switch	On 7-1/4" Off 4"
Materials of Construction	Cast iron and engineered thermoplastic	
Impeller	Thermoplastic two-vane semi-open	
Discharge Size	1-1/2" NPT (38.1 mm)	
Solids Handling	3/4" (19.1 mm)	
Power Cord	10', SJTW (20' optional)	

## SUPERIOR FEATURES

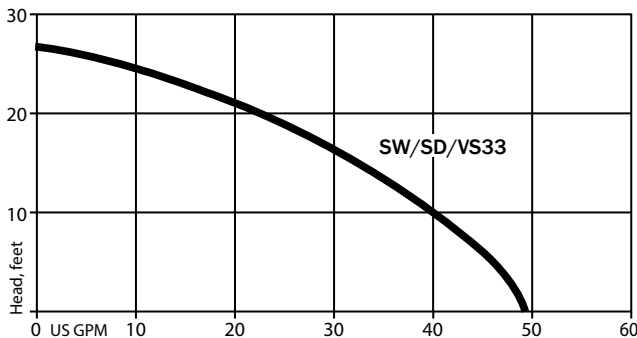
- Carbon/Ceramic mechanical seal
- Oil-filled motor with automatic reset thermal overload protection
- Uses single-row ball-bearing construction
- Piggyback plug available for easy maintenance and replacement

**3 YEAR**  
LIMITED WARRANTY

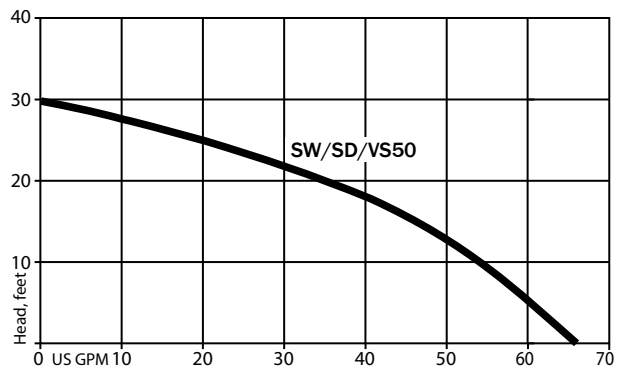


Piggyback Switch Plug

## PERFORMANCE



## PERFORMANCE



# OSP50

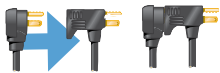
Cast iron submersible sump/effluent pump with continuous duty rated motor



Typical Application	Effluent and dewatering
Capacities	up to 60 GPM (3.8 LPS)
Heads	up to 25 ft. (7.6 m)
Electrical	115V, 1ø, 9.5 FLA, 60Hz 230V, 1ø, 5.2 FLA, 60Hz
Motor	1/2 HP split phase with thermal overload protection, 1750 RPM
Intermittent Liquid Temp.	140°F (60°C)
Minimum Recommended Sump Diameter	Simplex = 18" (457.2 mm) Duplex = 30" (762.0 mm)
Automatic Operation	Diaphragm pressure switch On 11-1/4" Off 2-3/4" (manual available)
Materials of Construction	Class 30 cast iron
Impeller	Open vane naval bronze or thermoplastic vortex
Discharge Size	1-1/2" NPT (38.1 mm); 2" NPT (50.8 mm)
Solids Handling	5/8" (15.9 mm)
Power Cord	10', SJTW (20' optional)

## SUPERIOR FEATURES

- Continuous duty rated
- Carbon/Ceramic type 21 mechanical seal
- Oil-filled motor with automatic reset thermal overload for maximum protection
- Upper and lower single-row ball-bearing construction
- Piggyback plug available for easy maintenance and replacement



Piggyback Switch Plug

**3 YEAR**  
LIMITED WARRANTY

# OSP50AB

Naval bronze corrosion resistant submersible sump/effluent pump with continuous duty rated motor



Typical Application	Corrosive liquids, effluent and dewatering
Capacities	up to 60 GPM (3.8 LPS)
Heads	up to 25 ft. (7.6 m)
Electrical	115V, 1ø, 9.5 FLA, 60Hz
Motor	1/2 HP split phase with thermal overload protection, 1750 RPM
Intermittent Liquid Temp.	140°F (60°C)
Minimum Recommended Sump Diameter	Simplex = 18" (457.2 mm) Duplex = 30" (762.0 mm)
Automatic Operation	Diaphragm pressure switch On 9-7/8" Off 3-3/4" (manual available)
Materials of Construction	Naval bronze
Impeller	Bronze
Discharge Size	1-1/2" NPT (38.1 mm); 2" NPT (50.8 mm)
Solids Handling	5/8" (15.9 mm)
Power Cord	20', STW-A

## SUPERIOR FEATURES

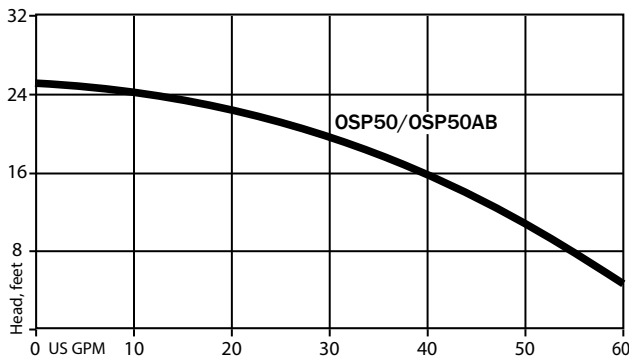
- Carbon/Ceramic type 21 mechanical seal
- Oil-filled motor with automatic reset thermal overload for maximum protection
- Upper and lower single-row ball-bearing construction



Piggyback Switch Plug

**3 YEAR**  
LIMITED WARRANTY

## PERFORMANCE



# SPX50/SPX50H

Rugged, submersible, hazardous location sump pumps for municipal, commercial and industrial use

Typical Application	Class I, Division I, Group D hazardous locations
Pump/Motor Unit	Submersible hazardous location pump
Phase	1Ø
Voltage	208/230
Horsepower	1/2 HP
Run Amps	4.5/4.9
Motor	Oil-cooled induction, capacitor start
RPM	1750
Temp. Stator	Max. design 266°F (130°C)
Operation	Intermittent
Coolant Oil	Oil flash pt. 390°F (199°C)
Hertz	60Hz
Heat Sensor	Bimetallic
Temperature	Max. water 140°F (60°C)
NEMA Design	SPX50: Type N SPX50H: Type N
Insulation	Class B
Discharge Size	SPX50 2" NPT SPX50H 1-1/2" NPT
Solids Handling	SPX50 - 2" SPX50H - 3/4"
Unit Weight	SPX50 80 lbs. SPX50H 77 lbs.
Power Cord	Type SOW-A, water-resistant, 20' 14/4 600V, 60°C, CSA approved
Motor Housing	Cast iron ASTM-48, 76
Pump Casting	Cast iron ASTM-48, 76
Coolant/Lubricant	Dielectric oil
Shaft	416 stainless steel
Mechanical	Dual: carbon/ceramic
Shaft Seal	Type 21 BF1C1
Impeller	Recessed, cast iron class 20 A-48-62
Upper Bearing	Ball radial 6203
Lower Bearing	Ball thrust 6306
Fasteners	316 stainless steel

**Other voltages & phases available**



**3 YEAR**  
LIMITED WARRANTY



**Package Systems Available which includes panel**

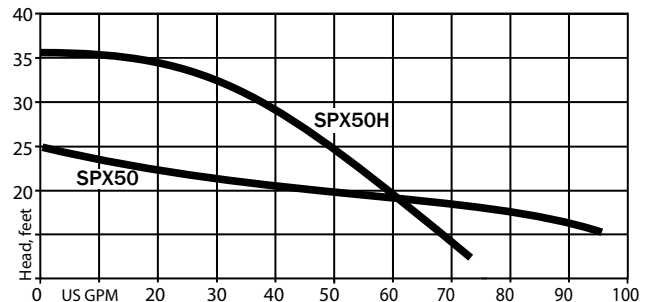
Required to be sold/used with the Hydromatic 913 listed control panel. Used with starting components included in panel.

**Required panel sold separately.**

## SUPERIOR FEATURES

- Oil-filled motor for maximum heat dissipation and constant bearing lubrication
- Recessed impeller reduces radial bearing loads, increases bearing life
- High-torque capacitor start, single-phase motor for assured starting under heavy load
- On-winding heat sensors will stop motor in case of overheating to prevent costly motor damage

## PERFORMANCE





# SPD50H

Specifically designed to meet the demands of septic tank effluent applications that require a “high-head” dual seal submersible pump



Typical Application	Effluent and dewatering
Capacities	up to 112 GPM (7.1 LPS)
Heads	up to 50 ft. (15.2 m)
Electrical	115V, 1ø, 14 FLA, 60Hz; 230V, 1ø, 7.0 FLA, 60Hz 208V, 3ø, 3.6 FLA, 60Hz; 230V, 3ø, 3.5 FLA, 60Hz 460V, 3ø, 1.8 FLA, 60Hz; 575V, 3ø, 1.9 FLA, 60Hz
Motor	(single phase) - 1/2 HP split phase with solid-state switch, start capacitor and thermal overload protection, 3450 RPM (three phase) - 1/2 HP polyphase, 3450 RPM
Intermittent Liquid Temp.	140°F (60°C)
Minimum Recommended Sump Diameter	Simplex = 24" (609.6 mm) Duplex = 36" (914.4 mm)
Automatic Operation	Diaphragm pressure switch (single phase only, manual available)
Materials of Construction	Class 30 cast iron
Impeller	Class 30 cast iron, two-vane
Discharge Size	2" NPT (50.8 mm) std.; 3" NPT (76.2 mm) opt. Optional 513520137
Solids Handling	3/4" (19.1 mm)
Power Cord	1ø (without seal failure probe) - 10', SJTW, STW-A (20' optional) 1ø (with seal failure probe) & 3ø - 20', STW-A

# SPD100H

Specifically designed to meet the demands of septic tank effluent applications that require a “high-head” dual seal submersible pump



Typical Application	Effluent and dewatering
Capacities	up to 140 GPM (8.8 LPS)
Heads	up to 65 ft. (19.8 m)
Electrical	230V, 1ø, 9.9 FLA, 60Hz; 208V, 3ø, 5.5 FLA, 60Hz; 230V, 3ø, 5.2 FLA, 60Hz; 460V, 3ø, 2.5 FLA, 60Hz; 575V, 3ø, 2.0 FLA, 60Hz
Motor	(single phase) - 1 HP split phase with solid-state switch, start capacitor and thermal overload protection, 3450 RPM; (three phase) - 1 HP polyphase, 3450 RPM
Intermittent Liquid Temp.	140°F (60°C)
Minimum Recommended Sump Diameter	Simplex = 24" (609.6 mm) Duplex = 36" (914.4 mm)
Automatic Operation	Wide-angle float switch (single phase only, manual available)
Materials of Construction	Class 30 cast iron
Impeller	Class 30 cast iron, two-vane solids handling
Discharge Size	2" NPT (50.8 mm) std.; 3" NPT (76.2 mm) opt. Optional 513520137
Solids Handling	3/4" (19.1 mm)
Power Cord	1ø (without seal failure probe) - 20', STW-A 1ø (with seal failure probe) & 3ø - 20', STW-A

## SUPERIOR FEATURES

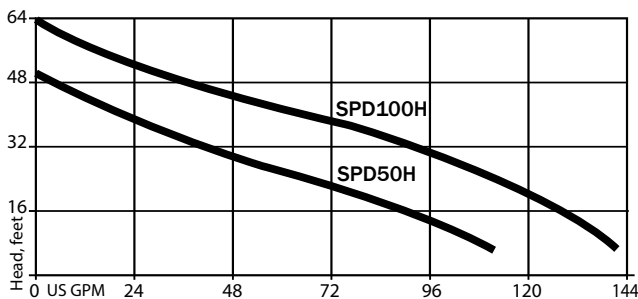
- Two (2) carbon/ceramic type 21 mechanical seals mounted in tandem
- Oil-filled motor with automatic reset thermal overload for maximum protection (one phase models)
- Upper & lower ball-bearing construction
- Piggyback plug available for easy maintenance and switch replacement (automatic models only)
- Seal failure probe warns of seal leak (optional)
- Capacitor start for increased starting torque (one phase models)

**3 YEAR**  
LIMITED WARRANTY



Piggyback Switch Plug

## PERFORMANCE



# SKHD150

Submersible pump with dual seals designed for higher heads



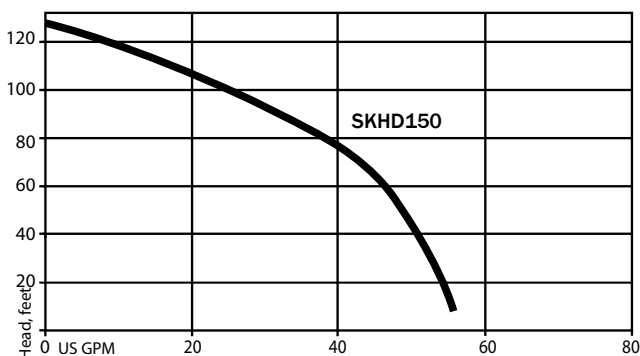
Typical Application	High-head effluent and dewatering
Capacities	up to 55 GPM (3.5 LPS)
Heads	up to 127 ft. (39 m)
Electrical	230V, 1ø, 12 FLA, 60Hz; 208V, 3ø, 6.1 FLA, 60Hz; 230V, 3ø, 6 FLA, 60Hz; 460V, 3ø, 2.5 FLA, 60Hz; 575V, 3ø, 2 FLA, 60Hz
Motor	(single phase) - 1-1/2 HP split phase with solid-state switch, start capacitor and thermal overload protection, 3450 RPM; (three phase) - 1-1/2 HP polyphase, 3450 RPM
Intermittent Liquid Temp.	140°F (60°C)
Minimum Recommended Sump Diameter	Simplex = 24" (609.6 mm) Duplex = 36" (914.4 mm)
Automatic Operation	Manual standard Optional - wide-angle float switch (1ø only)
Materials of Construction	Class 30 cast iron
Impeller	Thermoplastic semi-open
Discharge Size	1-1/2" NPT (38.1 mm)
Solids Handling	3/4" (19.1 mm)
Power Cord	1ø (without seal failure probe) - 20', STW-A 1ø (with seal failure probe) & 3ø - 20', STW-A

## SUPERIOR FEATURES

- Two (2) carbon/ceramic type 21 mechanical seals mounted in tandem
- Oil-filled motor with automatic reset thermal overload for maximum protection (one-phase models)
- Upper & lower ball-bearing construction
- Seal failure probe warns of seal leak (optional)
- Capacitor start for increased starting torque (one-phase models)

**3 YEAR**  
LIMITED WARRANTY

## PERFORMANCE



# SHEF30

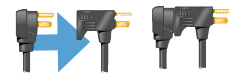
Submersible pump cast iron body and oil-filled motor provide superior cooling characteristics for longer pump life



Typical Application	Sump/Effluent pump
Capacities	up to 44 GPM (2.8 LPS)
Heads	up to 24 ft. (7.3 m)
Electrical	115V, 1ø, 8 FLA, 60Hz
Motor	3/10 HP shaded pole with thermal overload protection, 1550 RPM
Intermittent Liquid Temp.	120°F (49°C)
Minimum Recommended Sump Diameter	Simplex = 18" (457.2 mm) Duplex = 30" (762.0 mm)
Automatic Operation	Wide-angle float switch (manual available)
Materials of Construction	Class 30 cast iron and engineered thermoplastic
Impeller	Thermoplastic vortex
Discharge Size	1-1/2" (38.1 mm) NPT
Solids Handling	3/4" (19.1 mm)
Power Cord	20', SJTW

## SUPERIOR FEATURES

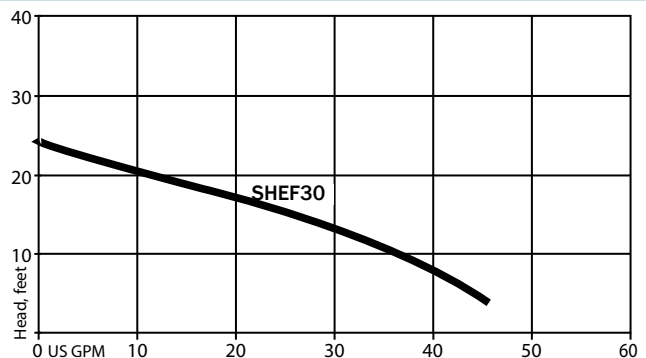
- Carbon/Ceramic mechanical seal
- Oil-filled motor with automatic reset thermal overload protection
- Uses single-row ball-bearing construction
- Piggyback plug available for easy maintenance and switch replacement



Piggyback Switch Plug

**3 YEAR**  
LIMITED WARRANTY

## PERFORMANCE



# SHEF40

High head submersible pump with inlet designed for better solids handling

Manual shown, automatic available.



Typical Application	High-head effluent and dewatering
Capacities	up to 70 GPM (4.4 LPS)
Heads	up to 35 ft. (10.7 m)
Electrical	115V, 1ø, 12 FLA, 60Hz; 230V, 1ø, 6 FLA, 60Hz
Motor	4/10 HP shaded pole with thermal overload protection, 1550 RPM
Intermittent Liquid Temp.	120°F (49°C)
Minimum Recommended Sump Diameter	Simplex = 18" (457.2 mm) Duplex = 30" (762.0 mm)
Automatic Operation	Wide-angle float switch (manual available)
Materials of Construction	Class 30 cast iron
Impeller	Thermoplastic two-vane semi-open
Discharge Size	1-1/2" (38.1 mm) NPT
Solids Handling	3/4" (19.1 mm)
Power Cord	20', SJTW (30' optional)

# SHEF42

High head submersible pump for domestic effluent and drain water

Automatic shown, manual version available.



Typical Application	High-head effluent and dewatering
Capacities	up to 60 GPM (3.8 LPS)
Heads	up to 40 ft. (12.2 m)
Electrical	115V, 1ø, 10 FLA, 60Hz
Motor	4/10 HP PSC with thermal overload protection, 3450 RPM
Continuous Liquid Temp.	130°F (54°C)
Minimum Recommended Sump Diameter	Simplex = 18" (457.2 mm) Duplex = 30" (762.0 mm)
Operation	Automatic or manual
Materials of Construction	Class 30 cast iron
Impeller	Thermoplastic, non-clog, vortex type
Discharge Size	2" (50.8 mm) NPT
Solids Handling	3/4" (19.1 mm)
Power Cord	20', 16/3, SJTW-A/SJTW

## SUPERIOR FEATURES

- Carbon/Ceramic mechanical seal
- Oil-filled motor with automatic reset thermal overload protection
- Uses single-row ball-bearing construction
- Piggyback plug available for easy maintenance and switch replacement



Piggyback Switch Plug

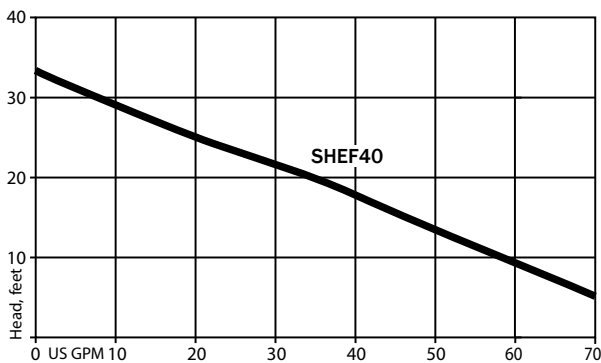


Piggyback Switch Plug

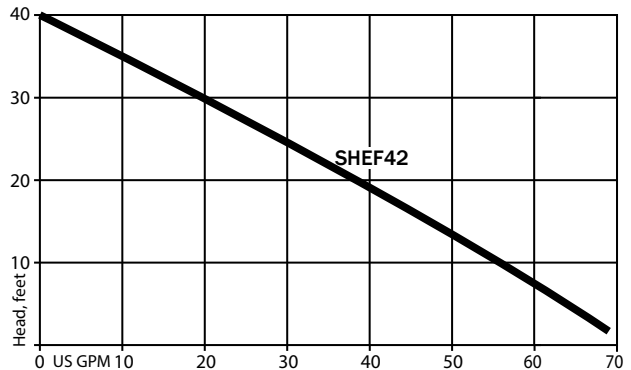
**3 YEAR**  
LIMITED WARRANTY

**3 YEAR**  
LIMITED WARRANTY

## PERFORMANCE



## PERFORMANCE



# SHEF45

High head submersible cast iron impeller pump with solids handling base design for superior solids handling

Typical Application	Septic tank effluent, high-head sump, dewatering	
Capacities	up to 87 GPM (5.5 LPS)	
Heads	up to 44 ft. (13.4 m)	
Electrical	115V, 1ø, 8.6 FLA, 60Hz; 230V, 1ø, 4.3 FLA, 60Hz	
Motor	1/2 HP Permanent Split Capacitor, 3450 RPM	
Maximum Liquid Temp.	140°F (60°C)	
Minimum Recommended Sump Diameter	Simplex = 24" (609.6 mm)	On 12-3/4 Off 4-1/4"
	Duplex = 30" (762.0 mm)	
Automatic Operation	Wide-angle float switch (manual available)	
Materials of Construction	Class 30 cast iron	
Impeller	Cast iron	
Discharge Size	2" NPT (50.8 mm)	
Solids Handling	3/4" (19.1 mm)	
Power Cord	20', 115V: SJTW-A; 230V 1ø: 16/3 SWT-A 30' (optional) 50' (optional)	



## SUPERIOR FEATURES

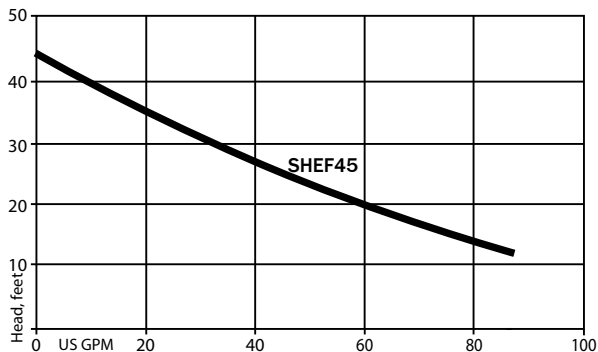
- Carbon/Ceramic mechanical seal
- Oil-filled motor with automatic reset thermal overload protection
- Uses single-row ball-bearing construction
- Piggyback plug available for easy maintenance and switch replacement



Piggyback Switch Plug

**3 YEAR**  
LIMITED WARRANTY

## PERFORMANCE



# SHEF50

High head submersible pump with inlet designed for better solids handling



Typical Application	High-head effluent and dewatering
Capacities	up to 63 GPM (4.0 LPS)
Heads	up to 63 ft. (19.2 m)
Electrical	115V, 1 $\phi$ , 14.5 FLA, 60Hz; 208/230V, 1 $\phi$ , 7.6 FLA, 60Hz; 230V, 3 $\phi$ , 3.1 FLA, 60Hz; 460V, 3 $\phi$ , 1.6 FLA, 60Hz; 575V, 3 $\phi$ , 1.7 FLA, 60Hz
Motor	(single phase) - 1/2 HP split phase with start capacitor and thermal overload protection, 3450 RPM; (three phase) - 1/2 HP polyphase, 3450 RPM
Intermittent Liquid Temp.	140°F (60°C)
Minimum Recommended Sump Diameter	Simplex = 24" (609.6 mm) Duplex = 30" (762.0 mm)
Automatic Operation	Wide-angle float switch (1 $\phi$ only. On 12-1/2" Off 4-1/2" manual available)
Materials of Construction	Class 30 cast iron
Impeller	Thermoplastic
Discharge Size	2" NPT (50.8 mm)
Solids Handling	3/4" (19.1 mm)
Power Cord	1 $\phi$ - 20', SJTW, STW-A (30' optional) 3 $\phi$ - 20', STW-A (30' optional)

# SHEF100

High head submersible pump with inlet designed for better solids handling



Typical Application	High-head effluent and dewatering
Capacities	up to 88 GPM (5.5 LPS)
Heads	up to 90 ft. (27.4 m)
Electrical	208V, 1 $\phi$ , 13.6 FLA, 60Hz; 230V, 1 $\phi$ , 12.1 FLA, 60Hz; 230V, 3 $\phi$ , 5.8 FLA, 60Hz; 460V, 3 $\phi$ , 2.8 FLA, 60Hz; 575V, 3 $\phi$ , 1.9 FLA, 60Hz
Motor	(single phase) - 1 HP split phase with start capacitor and thermal overload protection, 3450 RPM; (three phase) - 1 HP polyphase, 3450 RPM
Intermittent Liquid Temp.	140°F (60°C)
Minimum Recommended Sump Diameter	Simplex = 24" (609.6 mm) Duplex = 30" (762.0 mm)
Automatic Operation	Wide-angle float switch (1 $\phi$ only. On 1-1/4" 3-1/2" Off manual available)
Materials of Construction	Class 30 cast iron
Impeller	Thermoplastic
Discharge Size	2" NPT (50.8 mm)
Solids Handling	3/4" (19.1 mm)
Power Cord	1 $\phi$ - 20', SJTW, STW-A (30' optional) 3 $\phi$ - 20', STW-A (30' optional)

## SUPERIOR FEATURES

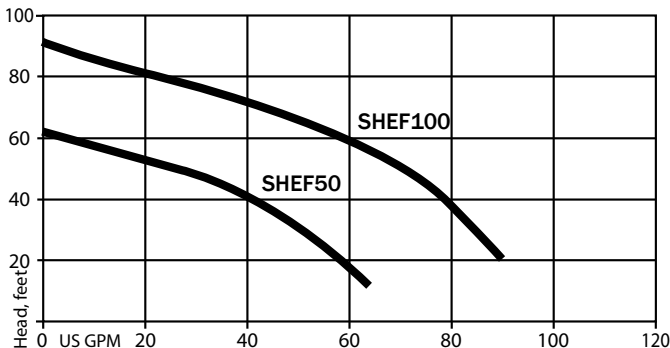
- Carbon/Ceramic type 21 mechanical seal
- Oil-filled motor with automatic reset thermal overload for maximum protection (one-phase models)
- Upper & lower ball-bearing construction
- Piggyback plug available for easy maintenance and switch replacement
- Capacitor start for increased starting torque (one-phase models)



Piggyback Switch Plug

**3 YEAR**  
LIMITED WARRANTY

## PERFORMANCE



# HE8/HE12/HE20/HE25/HE35-51

Submersible high-head filtered effluent pumps are designed specifically for high-pressure applications

## Pump Vault System

The Hydromatic® pump vault system includes the filter vault, a high-head submersible effluent pump, and float controls.

Typical Application	High-head filtered effluent
Capacities	up to 50 GPM (189 LPM)
Heads	up to 300 ft. (91.4 m)
Electrical	115V, 1 $\phi$ , 14.5 FLA, 60Hz, 3450 RPM 230V, 1 $\phi$ , 3.1 FLA, 60Hz, 3450 RPM
Motor	(single phase) - 1/2 HP 115V, single phase (single phase) - 1-1/2 HP 230V 60Hz, 3450 RPM
Diameter	Simplex = 4" (101.6 mm)
Materials of Construction	300 SST
Impellers	Thermoplastic
Discharge Size	1-1/2" (38.1 mm)
Power Cord	1 $\phi$ - 10', 20', 30' or 50', 16-3 Jacketed Type SJOW-A UL 1 $\phi$ - 100', 14-3 Jacketed Type SJOW-A UL



## SUPERIOR FEATURES

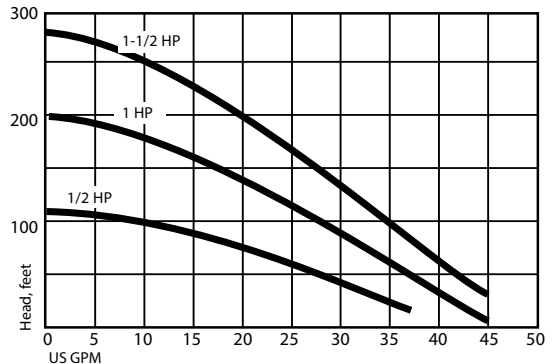
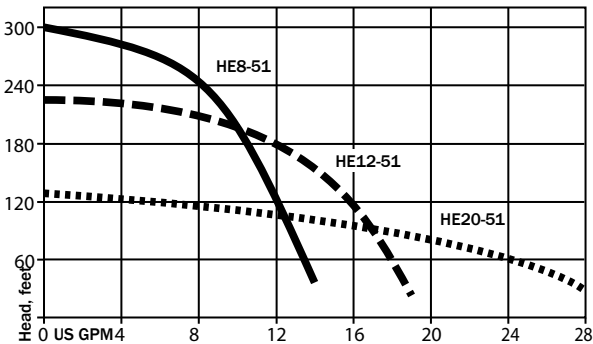
- High-pressure capacity
- Corrosion-resistant design for long life
- Dependable field-proven motor
- Stainless steel construction
- Built-in overload and electric surge protection
- Hermetically sealed windings
- Continuous duty rating
- Frequent cycling capabilities
- Powerful, yet lightweight
- Easy handling and installation



Double Screened

**3 YEAR**  
LIMITED WARRANTY

## PERFORMANCE



# SP40

Submersible sewage pump specifically designed to meet the demands of handling wastewater and sewage in residential applications



Typical Application	High-capacity sump/effluent, sewage
Capacities	up to 130 GPM (7.5 LPS)
Heads	up to 26 ft. (7.9 m)
Electrical	115V, 1Ø, 7.5 FLA, 1650 RPM, 60Hz; 230V, 1Ø, 3.8 FLA, 1650 RPM, 60Hz
Motor	4/10 HP PSC with thermal overload protection, 1650 RPM
Intermittent Liquid Temp.	140°F (60°C)
Minimum Recommended Sump Diameter	Simplex = 18" (457.2 mm) Duplex = 30" (762.0 mm)
Automatic Operation	Diaphragm pressure switch (manual available) On 12-1/4" Off 3-3/4"
Materials of Construction	Class 30 cast iron
Impeller	Thermoplastic
Discharge Size	2" NPT (50.8 mm)
Solids Handling	1-1/4" (31.8 mm)
Power Cord	1Ø, SJTW (20' optional)

# SP50

Submersible sewage pump, bronze version available for increased corrosion resistance



Typical Application	Cast unit for sewage, dewatering Bronze unit for sewage, saltwater, marine, corrosive liquids
Capacities	up to 140 GPM (8.8 LPS)
Heads	up to 28 ft. (8.5 m)
Electrical	115V, 1Ø, 12 FLA, 60Hz; 208V, 1Ø, 6.8 FLA, 60Hz; 230V, 1Ø, 6 FLA, 60Hz; 208V, 3Ø, 4.1 FLA, 60Hz; 230V, 3Ø, 3.5 FLA, 60Hz; 460V, 3Ø, 1.8 FLA, 60Hz; 575V, 3Ø, 1.4 FLA, 60Hz
Motor	(single phase) - 1/2 HP split phase with thermal overload protection, 1750 RPM (three phase) - 1/2 HP polyphase, 1750 RPM
Minimum Recommended Sump Diameter	Simplex = 24" (609.6 mm) Duplex = 30" (762.0 mm)
Automatic Operation	Diaphragm pressure switch On 14-1/4" Off 5-3/4" (single phase only, manual available)
Materials of Construction	Class 30 cast iron or all bronze
Impeller	Cast iron/Bronze on bronze model
Discharge Size	2" NPT (50.8 mm); 3" NPT (76.2 mm) opt.
Solids Handling	1-1/2" (38.1 mm)
Power Cord	1Ø - 10', STW-A (20' optional); 3Ø - 20', STW-A

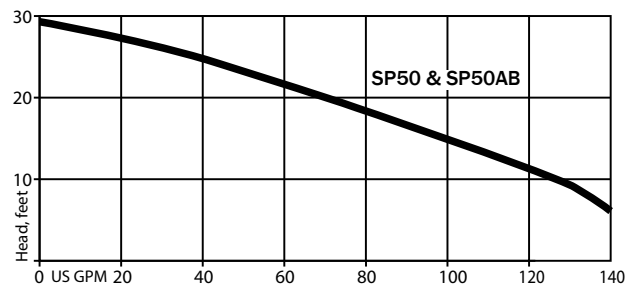
## SUPERIOR FEATURES

- Carbon/Ceramic type 21 mechanical seal
- Oil-filled motor with automatic reset thermal overload for maximum protection (one-phase models)
- Upper and lower single-row ball-bearing construction
- Piggyback plug available for easy maintenance and switch replacement

**3 YEAR**  
LIMITED WARRANTY



## PERFORMANCE



# BV40

Submersible sewage pump with recessed vortex impeller allows pumping of stringy material and reduces clogging

Typical Application	Sewage, dewatering
Capacities	up to 77 GPM (4.8 LPS)
Heads	up to 19 ft. (5.8 m)
Electrical	115V, 1ø, 12.6 FLA, 60Hz
Motor	(single phase) 4/10 HP split phase with thermal overload protection
Intermittent Liquid Temp.	120°F (49°C)
Minimum Recommended Sump Diameter	18" (457.2 mm)
Automatic Operation	BV40AW1 = Wide-angle float switch On 12-1/2" Off 6-1/2" BV40AD1 = Diaphragm pressure switch On 14-1/2" Off 6"
Materials of Construction	Cast iron & engineered thermoplastic
Impeller	Engineered thermoplastic
Discharge Size	2" NPT (50.8 mm) std.
Solids Handling	2" (50.8 mm)
Power Cord	10'/20' std., 18/3, SJTW



**BV40AW1**  
Wide-Angle  
Float Switch



**BV40AD1**  
Diaphragm  
Pressure Switch

## SUPERIOR FEATURES

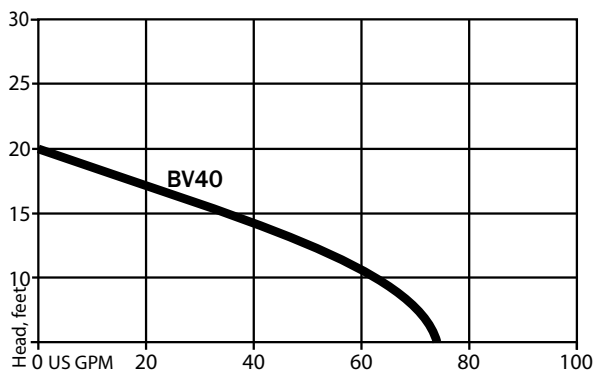
- Carbon/Ceramic type 21 mechanical seal
- Oil-filled motor with automatic reset thermal overload for maximum protection
- Lower single-row ball-bearing construction
- Piggyback plug available for easy maintenance and switch replacement



Piggyback Switch Plug

**3 YEAR**  
LIMITED WARRANTY

## PERFORMANCE





# SKV40

Submersible sewage pump with recessed vortex impeller allows pumping of stringy material and reduces clogging



Typical Application	Sewage, high-capacity sump, effluent
Capacities	up to 78 GPM (4.9 LPS)
Heads	up to 19.5 ft. (5.9 m)
Electrical	115V, 1ø, 12.6 FLA, 60Hz; 230V, 1ø, 6.4 FLA, 60Hz
Motor	4/10 HP PSC split phase with thermal overload protection, 1550 RPM
Intermittent Liquid Temp.	120°F (49°C)
Minimum Recommended Sump Diameter	Simplex = 18" (457.2 mm) Duplex = 30" (762.0 mm)
Automatic Operation (manual available)	SKV40AW = Wide-angle float switch SKV40AD = Diaphragm pressure switch
Materials of Construction	Class 30 cast iron
Impeller	Thermoplastic recessed
Discharge Size	2" NPT (50.8 mm)
Solids Handling	2" (50.8 mm)
Power Cord	10', SJTW (20' optional)

# SKV50

Submersible 1/2HP sewage pump with recessed vortex impeller allows pumping of stringy material and reduces clogging



Typical Application	Sewage, high-capacity sump, effluent
Capacities	up to 180 GPM (11.3 LPS)
Heads	up to 22 ft. (6.7 m)
Electrical	115V, 1ø, 12.0 FLA, 60Hz; 230V, 1ø, 6 FLA, 60Hz
Motor	1/2 HP PSC with thermal overload protection, 1650 RPM
Intermittent Liquid Temp.	140°F (60°C)
Minimum Recommended Sump Diameter	Simplex = 18" (457.2 mm) Duplex = 30" (762.0 mm)
Automatic Operation (manual available)	SKV50AW = Wide-angle float switch SKV50AD = Diaphragm pressure switch
Materials of Construction	Class 30 cast iron
Impeller	Thermoplastic recessed
Discharge Size	2" NPT (50.8 mm)
Solids Handling	2" (50.8 mm)
Power Cord	10', SJTW (20' optional)

## SUPERIOR FEATURES

- Carbon/Ceramic type 21 mechanical seal
- Oil-filled motor with automatic reset thermal overload for maximum protection
- Lower single-row ball-bearing construction
- Piggyback plug available for easy maintenance and switch replacement



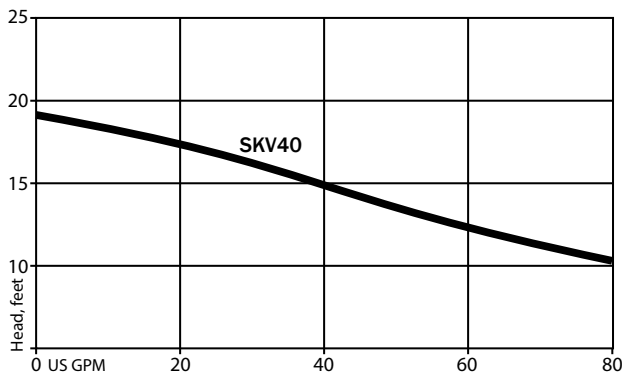
Piggyback Switch Plug



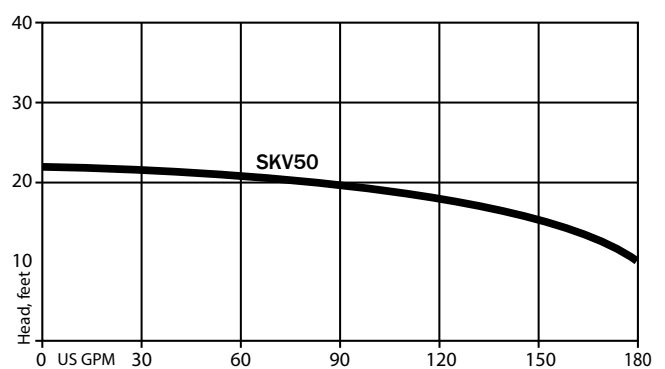
Piggyback Switch Plug

**3 YEAR**  
LIMITED WARRANTY

## PERFORMANCE



## PERFORMANCE



# SKHS 50/100

Submersible sewage pump specifically designed to meet the demands of wastewater and sewage handling in residential and commercial building applications



Typical Application	Sewage, high capacity - 2" Discharge 3" Optional	
Capacities	SKHS50 - up to 138 GPM (8.7 LPS) SKHS100 - up to 160 GPM (10.1 LPS)	
Heads	SKHS50 - up to 45 ft. (13.7 m) SKHS100 - up to 58 ft. (17.7 m)	
Electrical	1/2 HP	115V 1 $\phi$ , 14.2 FLA, 60Hz; 208V, 1 $\phi$ , 9.2 FLA, 60 Hz; 230V, 1 $\phi$ , 8.3 FLA, 60Hz; 208V, 3 $\phi$ , 6.6 FLA, 60Hz; 230V, 3 $\phi$ , 6.0 FLA, 60Hz; 460V, 3 $\phi$ , 3 FLA, 60Hz; 575V, 3 $\phi$ , 2.4 FLA, 60Hz
	1 HP	208V 1 $\phi$ , 12.6 FLA, 60Hz; 230V 1 $\phi$ , 11.4 FLA, 60Hz; 208V, 3 $\phi$ , 8.8 FLA, 60Hz; 230V, 3 $\phi$ , 8 FLA, 60Hz; 460V, 3 $\phi$ , 4 FLA, 60Hz; 575V, 3 $\phi$ , 3.2 FLA, 60 Hz
Motor	1/2 HP + 1 HP 3450 RPM	
Intermittent Liquid Temp.	140°F (60°C)	
Minimum Recommended Sump Diameter	Simplex = 24" (609.6 mm) Duplex = 30" (762.0 mm)	
Automatic Operation (manual available)	Wide-angle float switch	
Materials of Construction	Class 30 cast iron	
Impeller	Class 30 cast iron	
Discharge Size	2" NPT (50.8 mm) std. 3" NPT (76.2 mm) opt.	
Solids Handling	2" (50.8 mm)	
Power Cord	14/3, STWA, 1 $\phi$ , 20' std. 18/4, STWA, 3 $\phi$ , 20' std.	

# SKHS 150/200

Submersible sewage pump specifically designed to meet the demands of wastewater and sewage handling in residential and commercial building applications



Typical Application	Sewage, high capacity - 2" Discharge 3" Optional	
Capacities	SKHS150 - up to 146 GPM (9.2 LPS) SKHS200 - up to 175 GPM (11.0 LPS)	
Heads	SKHS150 - up to 70 ft. (21.3 m) SKHS200 - up to 75 ft. (22.9 m)	
Electrical	1-1/2 HP	208V, 1 $\phi$ , 15.3 FLA, 60Hz; 230V 1 $\phi$ , 13.1 FLA, 60Hz; 208V, 3 $\phi$ , 8.5 FLA, 60Hz; 230V, 3 $\phi$ , 7.6 FLA, 60Hz; 460V, 3 $\phi$ , 3.9 FLA, 60Hz; 575V, 3 $\phi$ , 3.1 FLA, 60Hz
	2 HP	230V, 1 $\phi$ , 18 FLA, 60Hz; 208V, 3 $\phi$ , 10.4 FLA, 60Hz; 230V, 3 $\phi$ , 9 FLA, 60Hz; 460V, 3 $\phi$ , 4.5 FLA, 60Hz; 575V, 3 $\phi$ , 3.6 FLA, 60Hz
Motor	1-1/2 HP + 2 HP 3450 RPM	
Intermittent Liquid Temp.	140°F (60°C)	
Minimum Recommended Sump Diameter	Simplex = 24" (609.6 mm) Duplex = 30" (762.0 mm)	
Automatic Operation (manual available)	Wide-angle float switch	
Materials of Construction	Class 30 cast iron	
Impeller	Class 30 cast iron	
Discharge Size	2" NPT (50.8 mm) std. 3" NPT (76.2 mm) opt.	
Solids Handling	2" (50.8 mm)	
Power Cord	20' std., 14/3, STWA, 1 $\phi$ 20' std., 18/4, STWA, 3 $\phi$	

## SUPERIOR FEATURES

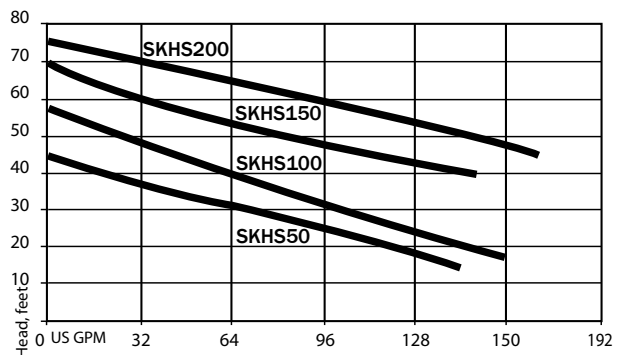
- Carbon/Ceramic type 21 mechanical seal
- Oil-filled motor with automatic reset thermal overload for maximum protection (one-phase models)
- Upper and lower single-row ball-bearing construction
- Submersible, two-vane, semi-open cast iron impeller
- Piggyback plug available for easy maintenance and switch replacement



Piggyback Switch Plug

**3 YEAR**  
LIMITED WARRANTY

## PERFORMANCE



# SK50

Submersible sewage pump designed to meet the demands of residential wastewater and sewage applications



Typical Application	Sewage, high-capacity sump
Capacities	up to 112 GPM (7.1 LPS)
Heads	up to 24 ft. (7.3 m)
Electrical	115V, 1 $\phi$ , 12 FLA, 60Hz; 230V, 1 $\phi$ , 6 FLA, 60Hz
Motor	1/2 HP split phase with thermal overload protection, 1750 RPM
Intermittent Liquid Temp.	130°F (54°C)
Minimum Recommended Sump Diameter	Simplex = 18" (457.2 mm) Duplex = 30" (762.0 mm)
Automatic Operation	Wide-angle float switch (manual available)
Materials of Construction	Class 30 cast iron
Impeller	Class 30 cast iron
Discharge Size	2" (50.8 mm) NPT; 3" (76.2 mm) NPT optional
Solids Handling	2" (50.8 mm)
Power Cord	10', SJTW (20' optional)

# SK60

Submersible sewage pump designed to meet the demands of residential wastewater and sewage applications



Typical Application	Sewage, dewatering
Capacities	up to 120 GPM (7.5 LPS)
Heads	up to 28 ft. (8.5 m)
Electrical	115V, 1 $\phi$ , 12 FLA, 60Hz; 208V, 1 $\phi$ , 6.9 FLA, 60Hz; 230V, 1 $\phi$ , 6 FLA, 60Hz; 208V, 3 $\phi$ , 2.9 FLA, 60Hz; 230V, 3 $\phi$ , 2.5 FLA, 60Hz; 460V, 3 $\phi$ , 1.3 FLA, 60Hz; 575V, 3 $\phi$ , 1.04 FLA, 60Hz
Motor	(single phase) - 6/10 HP split phase with thermal overload protection, 1750 RPM; (three phase) - 6/10 HP polyphase, 1750 RPM
Intermittent Liquid Temp.	140°F (60°C)
Minimum Recommended Sump Diameter	Simplex = 24" (609.6 mm) Duplex = 36" (914.4 mm)
Automatic Operation	Diaphragm pressure switch on single phase only (manual available 16 & 30)
Materials of Construction	Class 30 cast iron
Impeller	Class 30 cast iron two-vane
Discharge Size	2" (50.8 mm) NPT; 3" (76.2 mm) NPT optional
Solids Handling	2" (50.8 mm)
Power Cord	1 $\phi$ , 115V - 10', STW-A (20' optional); other 1 $\phi$ and all 3 $\phi$ - 20', STW-A

## SUPERIOR FEATURES

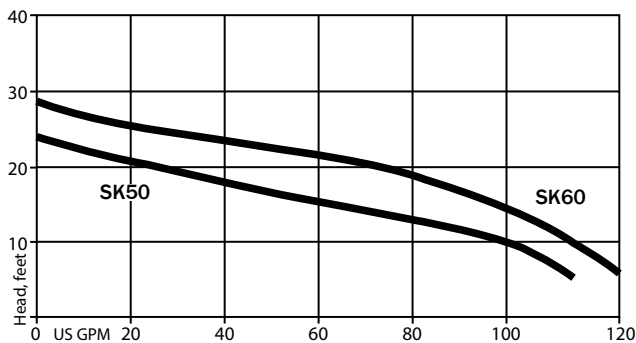
- Carbon/Ceramic type 21 mechanical seal
- Oil-filled motor with automatic reset thermal overload for maximum protection (one-phase models)
- Upper and lower single-row ball-bearing construction
- Piggyback plug available for easy maintenance and switch replacement
- Submersible, two-vane, semi-open cast iron impeller

**3 YEAR**  
LIMITED WARRANTY



Piggyback Switch Plug

## PERFORMANCE



# SK75

Submersible 3/4HP sewage pump with a two-vane, semi-open cast iron impeller design for reliability to meet the demands of sewage applications



Typical Application	Sewage, dewatering
Capacities	up to 150 GPM (9.5 LPS)
Heads	up to 34 ft. (10.4 m)
Electrical	208V, 1 $\phi$ , 10.4 FLA, 60Hz; 230V, 1 $\phi$ , 9 FLA, 60Hz; 208V, 3 $\phi$ , 4 FLA, 60Hz; 230V, 3 $\phi$ , 3.5 FLA, 60Hz; 460V, 3 $\phi$ , 1.8 FLA, 60Hz; 575V, 3 $\phi$ , 1.44 FLA, 60Hz
Motor	(single phase) - 3/4 HP capacitor start with thermal overload protection, 1750 RPM (three phase) - 3/4 HP polyphase, 1750 RPM
Intermittent Liquid Temp.	140°F (60°C)
Minimum Recommended Sump Diameter	Simplex = 24" (609.6 mm) Duplex = 36" (914.4 mm)
Operation	Manual standard Optional - wide-angle float switch
Materials of Construction	Class 30 cast iron
Impeller	Class 30 cast iron two-vane
Discharge Size	2" NPT (50.8 mm); 3" NPT (76.2 mm) optional
Solids Handling	2" (50.8 mm)
Power Cord	1 $\phi$ , 20', STW-A; 3 $\phi$ , 20', STW-A

# SK100

Submersible 1HP sewage pump with a two-vane, semi-open cast iron impeller design for reliability to meet the demands of sewage applications



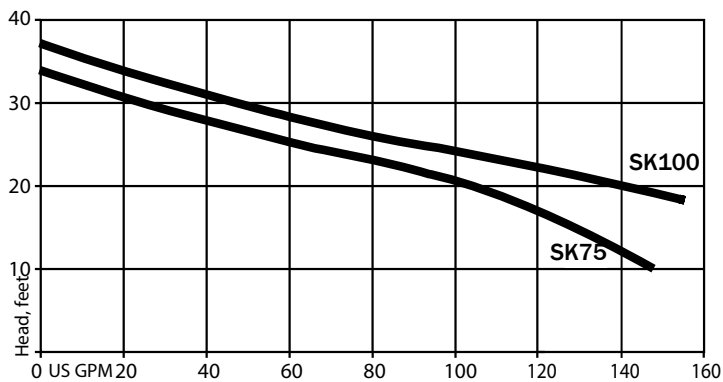
Typical Application	Sewage, dewatering
Capacities	up to 156 GPM (9.8 LPS)
Heads	up to 38 ft. (11.6 m)
Electrical	208V, 1 $\phi$ , 11.5 FLA, 60Hz; 230V, 1 $\phi$ , 10 FLA, 60Hz; 208V, 3 $\phi$ , 5 FLA, 60Hz; 230V, 3 $\phi$ , 4.4 FLA, 60Hz; 460V, 3 $\phi$ , 2.2 FLA, 60Hz; 575V, 3 $\phi$ , 1.7 FLA, 60Hz
Motor	(single phase) - 1 HP capacitor start with thermal overload protection, 1750 RPM (three phase) - 1 HP polyphase, 1750 RPM
Intermittent Liquid Temp.	140°F (60°C)
Minimum Recommended Sump Diameter	Simplex = 24" (609.6 mm) Duplex = 36" (914.4 mm)
Operation	Manual standard Optional - wide-angle float switch
Materials of Construction	Class 30 cast iron
Impeller	Class 30 cast iron two-vane
Discharge Size	2" NPT (50.8 mm); 3" NPT (76.2 mm) optional
Solids Handling	2" (50.8 mm)
Power Cord	1 $\phi$ , 20', STW-A; 3 $\phi$ , 20', STW-A

## SUPERIOR FEATURES

- Carbon/Ceramic type 21 mechanical seal
- Oil-filled motor with automatic reset thermal overload for maximum protection (one-phase models)
- Upper and lower single-row ball-bearing construction
- Capacitor start motor for improved starting torque and pump performance (one-phase models)

**3 YEAR**  
LIMITED WARRANTY

## PERFORMANCE



# HPGR200

Single seal submersible grinder pump designed for "high Head" single family residential applications



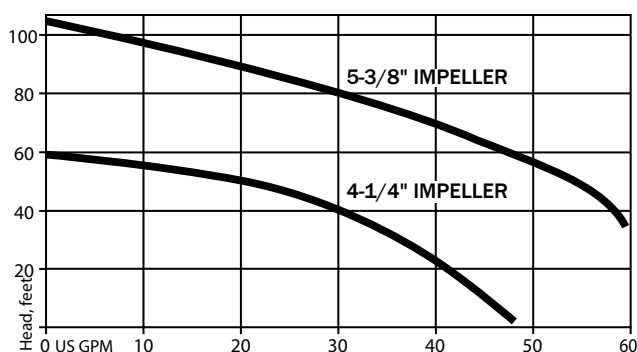
(Leg Kit Sold Separately)

Typical Application	Residential sewage
Capacities	up to 58 GPM (3.7 LPS)
Heads	up to 105 ft. (32 m)
Electrical	230V, 1 $\phi$ , 15 FLA, 60Hz
Motor	2 HP 1 $\phi$ PSC with start capacitor and thermal overload protection, 3450 RPM
Minimum Recommended Sump Diameter	Simplex = 24" (609.6 mm) Duplex = 30" (762.0 mm)
Automatic Operation	Wide-angle float switch (manual available)
Materials of Construction	Class 30 cast iron
Impeller	Engineered Valox
Discharge Size	1-1/4" (38.1 mm)
Solids Handling	Residential wastewater and sewage
Power Cord	20', STD; SJOW-A; water-resistant 600V 140°F (60°C)

## SUPERIOR FEATURES

- Hydromatic® dual cutter design
- Carbon/Ceramic type 2100 mechanical seal
- Oil-filled motor with automatic reset thermal overload for maximum protection
- Upper and lower ball-bearing construction
- Piggyback plug available for easy maintenance
- Self-adjusting cutters, no need to shim or reset

## PERFORMANCE



# Retrofit System

The HPGR200PCF Retrofit System is completely assembled and easily installs into an existing progressing cavity grinder system. The package system features the highly reliable HPGR200 submersible grinder pump with mercury-free float controls, and no additional plumbing is required.



## SUPERIOR FEATURES

- Completely assembled, ready to drop in place replacement package
- Featuring the dependable HPGR200 grinder pump
- Affordable
- Long life, dependable operation
- Retrofits existing progressing cavity grinder systems



Prewired with electrical quick disconnect to easily wire into existing systems

Typical Application	Package designed specifically for use in residential sewer applications
Floats	18/2 SJOW, UL Listed for use in sewage applications
Control Panel	NEMA 4 rated disconnect panel

## TL-PRO SYSTEM: GRINDER PACKAGES

Liftout rail system for centrifugal grinders provides ease of installation and removal for the pump. The TL-Pro System uses a cast iron discharge elbow with integrated ball check valve and is available with sparkproof rails for hazardous locations.

COMPLETE  
PACKAGED  
SYSTEMS ARE  
AVAILABLE



# S3W

## 3" discharge submersible solids handling wastewater pumps

Typical Application	Light commercial	
Capacities	up to 330 GPM (20.8 LPS)	
Heads	up to 92 ft. (28 m)	
Electrical	(1750 RPM)	1.5-3 HP, 1ø, 208V/230V, 60Hz; 1.5-3 HP, 3ø, 208V/230V/460V/575V, 60Hz
	(3450 RPM)	1-3 HP, 1ø, 208V/230V, 60Hz; 1-3 HP, 3ø, 208V/230V/460V/575V, 60Hz
Motor	(1750 RPM)	1.5-3 HP, enclosed, oil-cooled induction
	(3450 RPM)	1-3 HP, enclosed, oil-cooled induction
Intermittent Liquid Temp.	140°F (60°C)	
Minimum Recommended Sump Diameter	Duplex = 48" (1219.2 mm)	
Operation	Control panel required	
Materials of Construction	Class 30 cast iron; ASTM A48	
Impeller	Ductile iron; Class 65; ASTM A536	
Discharge Size	3" (76.2 mm) NPT vertical	
Solids Handling	(1750 RPM)	2.5" (63.5 mm)
	(3450 RPM)	2" (50.6 mm)
Power Cord	20'; type SJOW/SJOWA	

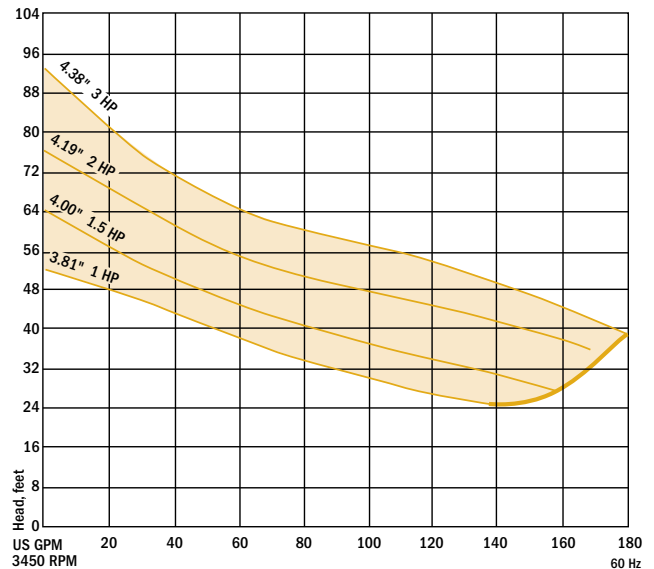
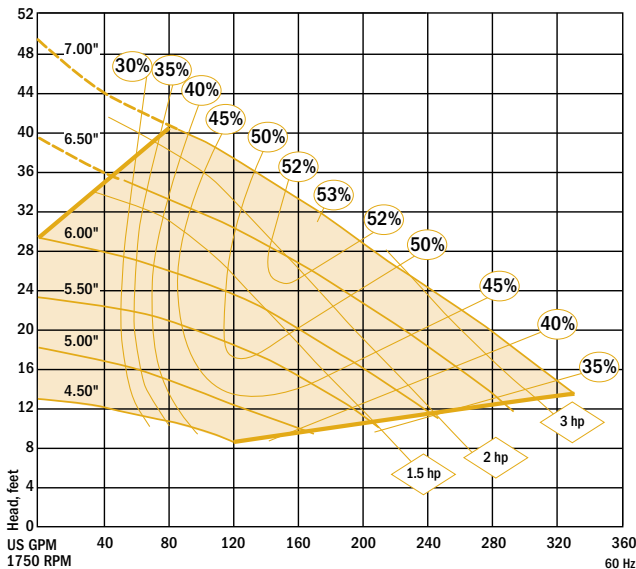


### SUPERIOR FEATURES

- Two-vaned rounded port impellers
- Offered in two speeds
- Hydraulic end virtually maintenance-free
- Volute seal ring replaceable in minutes
- Oil-filled motor for constant bearing lubrication
- High-torque, permanent split capacitor (PSC), single-phase motors; no starting switches or relays
- Optional seal leak probe (dual seal motors only)
- Current and temperature overload (single phase only)

Warranty: 12 months from date of original installation or 18 months from date of manufacturer, whichever comes first."

### PERFORMANCE



# S3WR

## 3" discharge submersible wastewater vortex pumps

Typical Application	Light commercial	
Capacities	up to 280 GPM (17.7 LPS)	
Heads	up to 51 ft. (15.6 m)	
Electrical	(1750 RPM)	1.5-3 HP, 1 $\phi$ , 208V/230V, 60Hz; 1.5-3 HP, 3 $\phi$ , 208V/230V/460V/575V, 60Hz
	(3450 RPM)	1.5-3 HP, 1 $\phi$ , 208V/230V, 60Hz; 1.5-3 HP, 3 $\phi$ , 208V/230V/460V/575V, 60Hz
Motor	(1750 RPM)	1.5-3 HP, enclosed, oil-cooled induction
	(3450 RPM)	1.5-3 HP, enclosed, oil-cooled induction
Intermittent Liquid Temp.	140°F (60°C)	
Minimum Recommended Sump Diameter	Duplex = 48" (1219.2 mm)	
Operation	Control panel required	
Materials of Construction	Class 30 cast iron; ASTM A48	
Impeller	Ductile iron; Class 65; ASTM A536	
Discharge Size	3" (76.2 mm) flanged horizontal	
Solids Handling	(1750 RPM)	2.5" (63.5 mm)
	(3450 RPM)	2" (50.6 mm)
Power Cord	20'; type SJOW/SJOWA, SOOW	

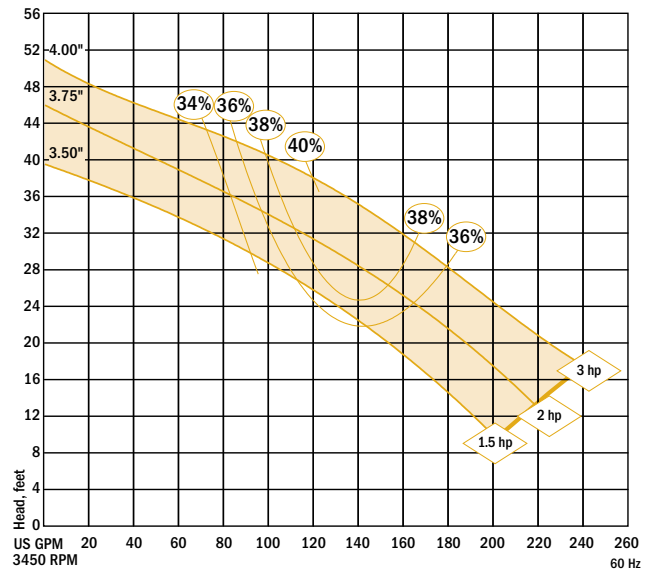
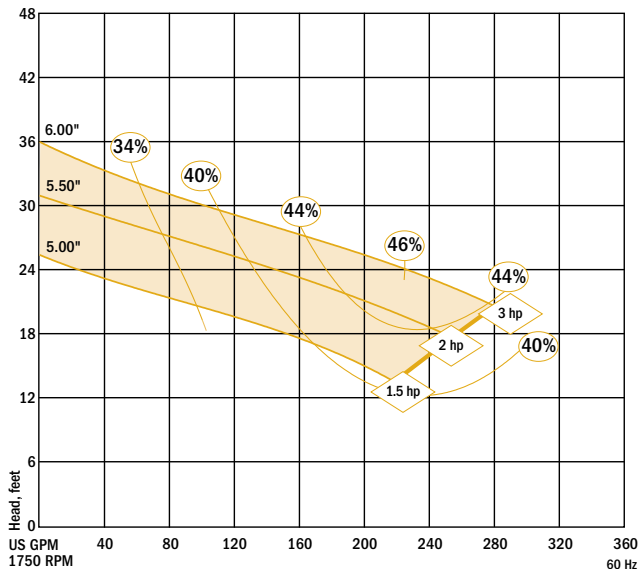
Warranty: 12 months from date of original installation or 18 months from date of manufacturer, whichever comes first."



### SUPERIOR FEATURES

- Recessed impeller design has completely open passage in volute
- Operates without vibration or cavitation over entire performance curve; operates near shutoff without harming pump
- Recessed impeller greatly increases bearing life by reducing radial load
- Oil-filled motor for maximum heat dissipation and constant bearing lubrication
- Heat sensor thermostats embedded in windings protect motor from overheat conditions
- Seal leak probes warn of moisture entry (dual seal only)

### PERFORMANCE



# S3S/SB3S

## Single-seal cast iron submersible sewage pumps

Typical Application	Light commercial
Capacities	up to 335 GPM (21.1 LPS)
Heads	up to 40 ft. (12.2 m)
Electrical	208-230V 1ø; 208-230V/460-575V 3ø
Motor	1-1/2 HP to 3 HP, 1750 RPM
Intermittent Liquid Temp.	140°F (60°C)
Minimum Recommended Sump Diameter	Simplex = 24" (609.6 mm)
Operation	Control panel required
Materials of Construction	Class 30 cast iron
Impeller	Class 30 cast iron
Discharge Size	3" (76.2 mm) NPT vertical 3" (76.2 mm) flanged horizontal
Solids Handling	2.5" (63.5 mm)
Power Cord	35'; STW cable 10-4/12-4

S3S Shown

SB3S Shown

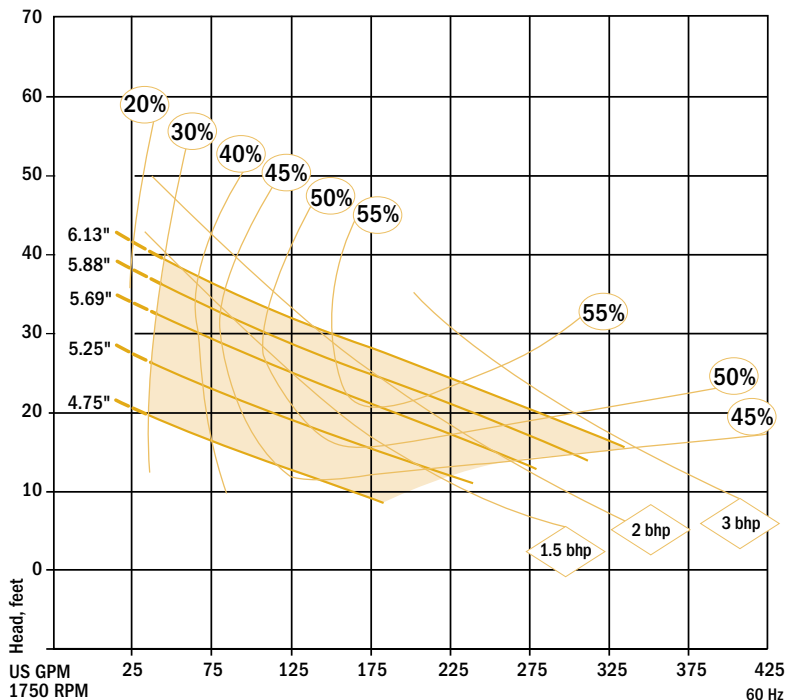


### SUPERIOR FEATURES

- Carbon/Ceramic type 21 mechanical seal
- Oil-filled motor
- Upper and lower single-row ball-bearing construction
- Submersible, two-vane, semi-open cast iron impeller

Warranty: 12 months from date of original installation or 18 months from date of manufacturer, whichever comes first."

### PERFORMANCE





# S3SD/SB3SD

## Submersible sewage dual seal pumps

Typical Application	Light commercial
Capacities	up to 385 GPM (24.3 LPS)
Heads	up to 44 ft. (13.4 m)
Electrical	(1150 RPM) 1-2 HP, 1ø, 200V/230V, 60Hz; 1-2 HP, 3ø, 200V/230V/460V/575V, 60Hz (1750 RPM) 1.5-5 HP, 1ø, 230V, 60Hz; 1.5-7.5 HP, 3ø, 200V/230V/460V/575V, 60Hz
Motor	(1150 RPM) 1-2 HP, enclosed, oil-cooled induction (1750 RPM) 1.5-7.5 HP, enclosed, oil-cooled induction
Intermittent Liquid Temp.	140°F (60°C)
Minimum Recommended Sump Diameter	Simplex = 30" (762 mm)
Operation	Control panel required
Materials of Construction	Class 30 cast iron; ASTM A-48
Impeller	Ductile iron; ASTM 536
Discharge Size	3" (76.2 mm) NPT
Solids Handling	2.5" (63.5 mm)
Power Cord	35' STW cable



S3SD Shown

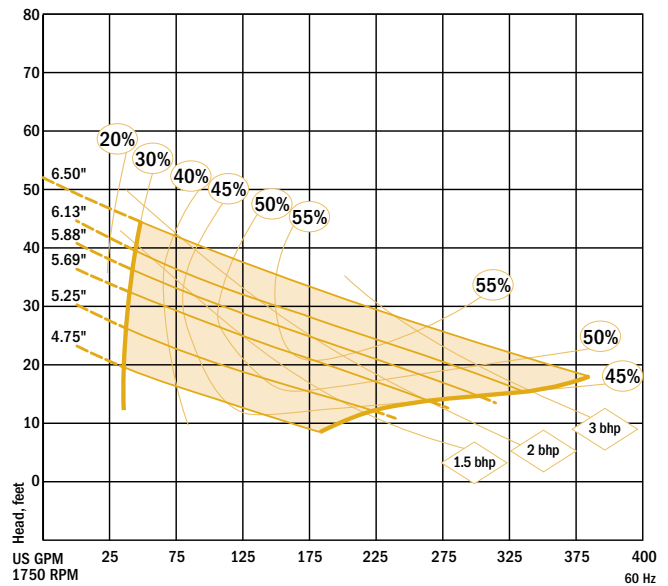
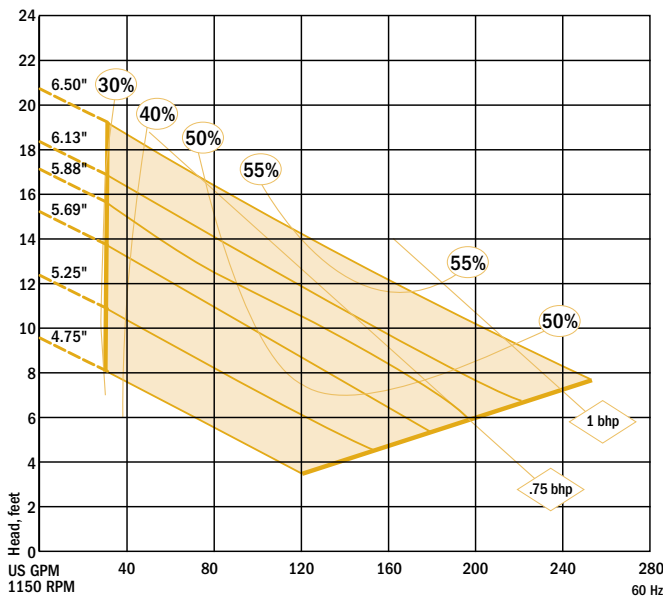
SB3SD Shown

### SUPERIOR FEATURES

- Quality double ball bearing, dual mechanical seal
- Oil-filled motor for cooler operation, longer life and less maintenance; the dielectric oil effectively dissipates heat and lubricates upper and lower ball bearings
- Field-serviceable; pumps have 300 series stainless steel fasteners for easy teardown
- Semi-open, two-vane sewage type impellers have pump-out vanes on back shrouds to prevent stringy materials from building up around shaft and seal

Warranty: 12 months from date of original installation or 18 months from date of manufacturer, whichever comes first."

### PERFORMANCE



# S4S/SB4S

## Single-seal cast iron submersible sewage pumps

Typical Application	Light commercial
Capacities	up to 590 GPM (37.2 LPS)
Heads	up to 55 ft. (16.8 m)
Electrical	208-230V 1Ø; 208-230V/460-575V 3Ø
Motor	3 HP to 7-1/2 HP 1750 RPM
Intermittent Liquid Temp.	140°F (60°C)
Minimum Recommended Sump Diameter	Simplex = 30" (762.0 mm)
Operation	Control panel required
Materials of Construction	Class 30 cast iron
Impeller	Class 30 cast iron solids handling
Discharge Size	4" (101.6 mm) NPT vertical 4" (101.6 mm) flanged horizontal
Solids Handling	3.5" (88.9 mm)
Power Cord	35'; STW cable 8-4/10-4/12-4

Warranty: 12 months from date of original installation or 18 months from date of manufacturer, whichever comes first."

S4S Shown

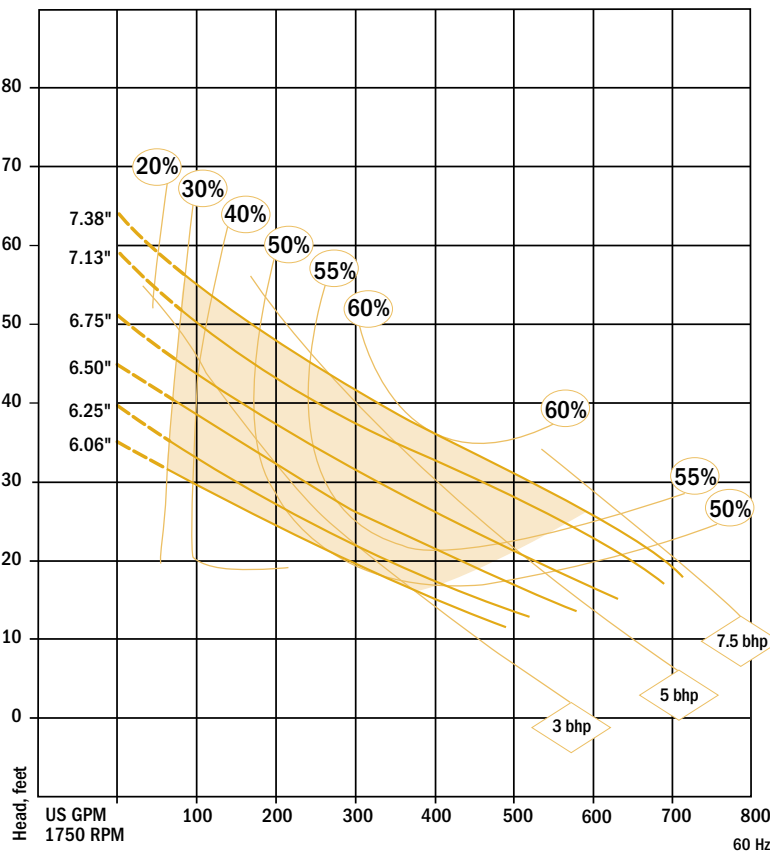
SB4S Shown



### SUPERIOR FEATURES

- Carbon/Ceramic type 21 mechanical seal
- Oil-filled motor
- Upper and lower single-row ball-bearing construction
- Submersible, two-vane, semi-open cast iron impeller

### PERFORMANCE



# S4SD/SB4SD

## Submersible sewage dual seal pumps

Typical Application	Light commercial
Capacities	up to 618 GPM (38.9 LPS)
Heads	up to 58 ft. (17.7 m)
Electrical	(1150 RPM) 1-2 HP, 1 $\phi$ , 200V/230V, 60Hz; 1-2 HP, 3 $\phi$ , 200V/230V/460V/575V, 60Hz (1750 RPM) 1.5-5 HP, 1 $\phi$ , 230V, 60Hz; 1.5-7.5 HP, 3 $\phi$ , 200V/230V/460V/575V, 60Hz
Motor	(1150 RPM) 1-2 HP, enclosed, oil-cooled induction (1750 RPM) 1.5-7.5 HP, enclosed, oil-cooled induction
Intermittent Liquid Temp.	140°F (60°C)
Minimum Recommended Sump Diameter	Simplex = 30" (762 mm)
Operation	Control panel required
Materials of Construction	Class 30 cast iron; ASTM A-48
Impeller	Ductile iron; ASTM 536
Discharge Size	4" (101.6 mm) NPT
Solids Handling	3" (76.2 mm)
Power Cord	35' STW cable

Warranty: 12 months from date of original installation or 18 months from date of manufacturer, whichever comes first."



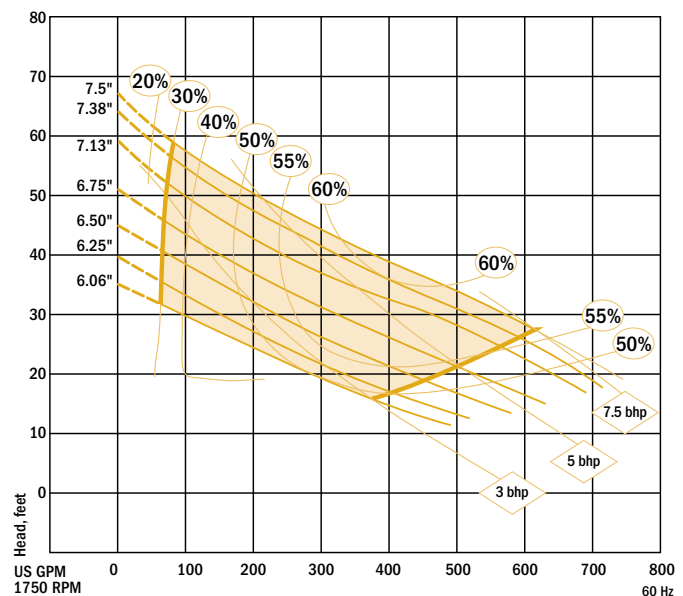
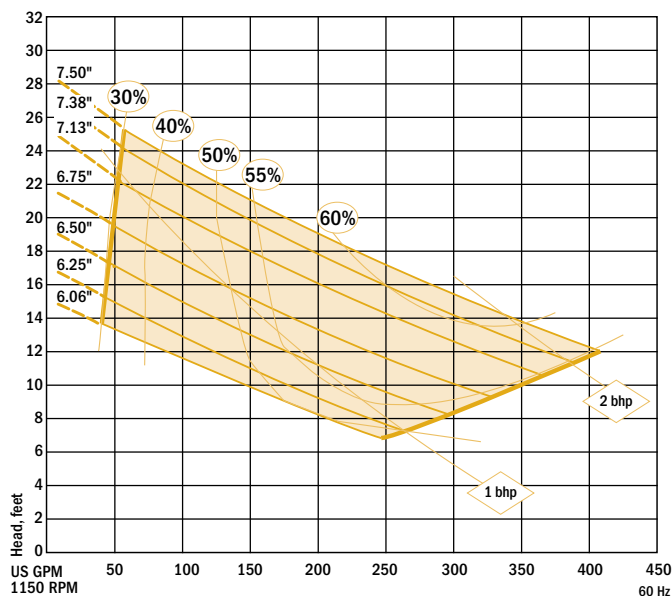
SB4SD Shown

S4SD Shown

### SUPERIOR FEATURES

- The fully enclosed oil-filled motor efficiently dissipates heat and locks out moisture so you receive reliable pumping service
- The mechanical dual seal is constructed with a ceramic stationary face and a carbon rotating face for long service life
- The impeller is a two-vane semi-open design for efficient operation without clogging; the impeller has pump-out vanes to prevent material buildup around shaft and seal
- The stainless steel shaft eliminates corrosion and fatigue to give longer pump life; the minimum shaft overhang decreases deflection and increases seal life

### PERFORMANCE



# 118

Packaged above-floor pump system perfect for basement wet bars, laundry and utility sinks



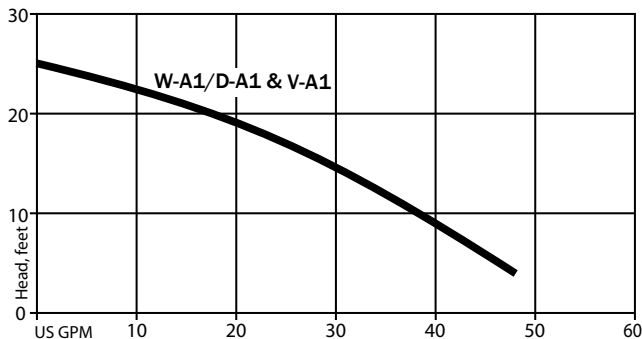
**3 YEAR**  
LIMITED WARRANTY

Typical Application	Perfect for basement wet bars, laundry and utility sinks
Capacities	up to 48 GPM (2.8 LPS)
Heads	up to 25 ft. (7.6 m)
Electrical	115V, 1ø, 8 FLA, 60Hz
Motor	1/3 HP shaded pole with thermal overload protection, 1550 RPM
Automatic Operation	V = Vertical float switch
Materials of Construction	Cast iron and engineered thermoplastic
Impeller	Thermoplastic vortex
Discharge Size	1-1/2" (38.1 mm) NPT
Solids Handling	1/2" (12.8 mm)
Power Cord	10', SJTW (20' optional)

## SUPERIOR FEATURES

- Package includes 10-gallon polyethylene sump box, cover, gasket package, discharge nipple, check valve and submersible sump pump
- The V-A1, 1/3 HP sump pump is the standard pump provided as a part of the package
- The 118 sump package gives the professional plumber the ability to add a drain without breaking concrete
- Ideal for wet bars, air conditioner/humidifier condensate and laundry trays
- Available assembled (as shown) or unassembled

## PERFORMANCE



# CSS-3D/CSS-3V

Pre-plumbed sump basin package is ready for field installation and includes check valve and side hub



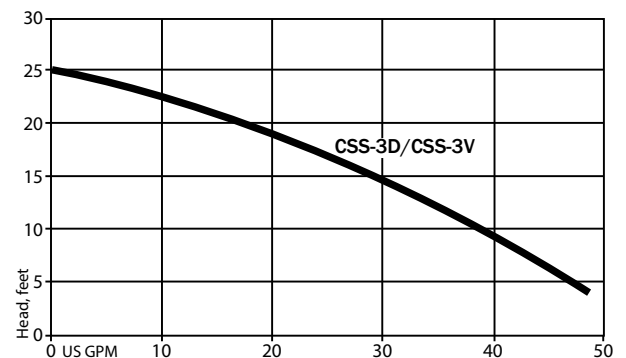
**3 YEAR**  
LIMITED WARRANTY

Typical Application	Basement sumps, dewatering, new or existing installations
Capacities	up to 48 GPM (181.7 LPM)
Heads	up to 25 ft. (7.6 m)
Liquid Temperature	up to 120°F (49°C)
Electrical	115V, 1ø, 8 FLA, 60Hz
Motor	3/10 HP single phase with built-in overload protection, 1550 RPM
Automatic Operation	D = Diaphragm pressure switch V = Vertical float switch
Materials of Construction	Cast iron and polyethylene
Impeller	Thermoplastic vortex
Discharge Size	1-1/2" (38.1 mm) NPT
Solids Handling	1/2" (12.7 mm)
Power Cord	10' (3 m)

## SUPERIOR FEATURES

- Package includes single-piece structural foam lid, 1-1/2" NPT threaded discharge flange, 2" NPT vent flange (adaptable to 3"), and a 1-1/2" sump check valve submersible sump pump
- Standard 18" x 22" basin has a 20 gallon capacity
- Has proprietary "Flush Mount" design for easy shipment and storage; allows for pallet stacking
- Injection-molded structural foam provides the highest quality construction for uniform wall thickness and strength
- Radon approved basin and cover for radon prevention

## PERFORMANCE



# 218

## Assembled sewage package basin system

**3 YEAR**  
LIMITED WARRANTY



Typical Application	Sewage, high-capacity sump, effluent
Capacities	up to 78 GPM (4.9 LPS)
Heads	up to 19.5 ft. (5.9 m)
Electrical	115V, 1ø, 12.6 FLA, 60H
Motor	4/10 HP split phase with thermal overload protection, 1750 RPM
Automatic Operation	SKV40AW = Wide-angle float switch SKV40AD = Diaphragm pressure switch
Materials of Construction	Class 30 cast iron
Impeller	Thermoplastic recessed
Discharge Size	2" (50.8 mm) NPT
Solids Handling	2" (50.8 mm)
Power Cord	10', SJTW (20' optional)

# 224

## Assembled sewage package basin system

**3 YEAR**  
LIMITED WARRANTY



Typical Application	Sewage, high-capacity sump, effluent
Capacities	up to 180 GPM (11.3 LPS)
Heads	up to 20 ft. (6 m)
Electrical	115V, 1ø, 12 FLA, 60Hz
Motor	1/2 HP split phase with thermal overload protection, 1750 RPM
Automatic Operation	SKV50AW = Wide-angle float switch
Materials of Construction	Class 30 cast iron
Impeller	Thermoplastic recessed
Discharge Size	2" (50.8 mm) NPT
Solids Handling	2" (50.8 mm)
Power Cord	10', SJTW (20' optional)

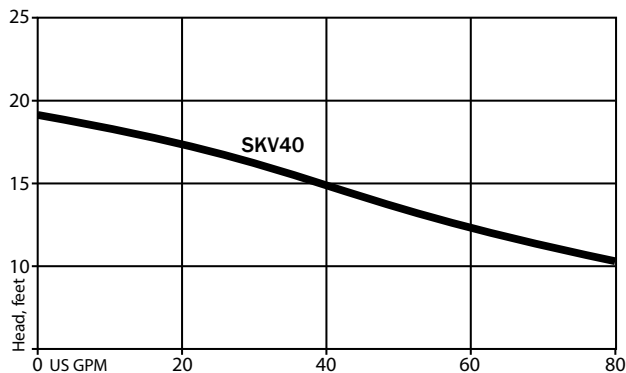
### SUPERIOR FEATURES

- Package includes basin, cover, check valve, discharge pipe, gasket package and submersible pump
- Features the BV40 & SKV40, 4/10 HP, 2" solids handling sewage ejector with recessed impeller
- 18" x 30" basin for greater capacity, reduced cycling and extended pump life
- Noncorrosive structural foam construction for high-impact resistance
- Unique Hydromatic® molded footprint provides pump stability



Package system available with Q-Alert™ High Water Alarm System

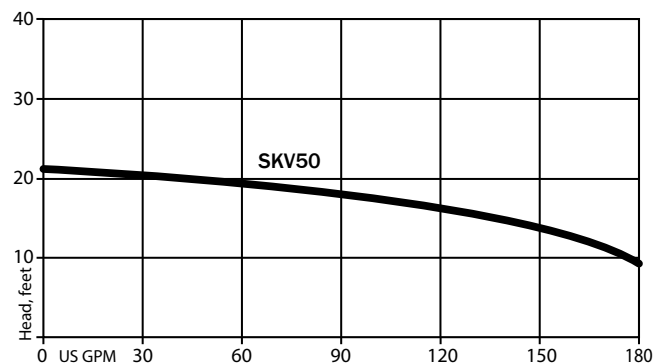
### PERFORMANCE



### SUPERIOR FEATURES

- Package includes basin, cover, check valve, gasket package and submersible pump
- Features the SKV50, 1/2 HP, 2" solids handling sewage ejector with recessed impeller
- Larger 24" x 32" polyethylene basin for greater capacity, reduced cycling and extended pump life
- Vent connection is molded into basin, allowing removal of the cover without disturbing the vent pipe
- Available with high water alarm

### PERFORMANCE



# HBB-SKV40



Fully assembled submersible sewage package system (4/10 HP pump) and includes Easy-Out™ rod for simple removal of float switch

**3 YEAR**  
LIMITED WARRANTY

Typical Application	Sewage, high-capacity sump, effluent
Capacities	up to 78 GPM (4.9 LPS)
Heads	up to 19.5 ft. (5.9 m)
Electrical	115V, 1ø, 12.6 FLA, 60Hz; 230V, 1ø, 6.4 FLA, 60Hz
Motor	4/10 HP split phase with thermal overload protection, 1550 RPM
Operation	SKV40 = Wide-angle float with Easy-Out Rod
Intermittent Liquid Temp.	up to 120°F (49°C)
Materials of Construction	Class 30 cast iron
Impeller	Thermoplastic recessed
Discharge Size	2" (50.8 mm) NPT
Solids Handling	2" (50.8 mm)
Power Cord	10', 18/3, SJTW, 115V (20' optional)

# HBB-SKV50



Fully assembled submersible sewage package system (1/2 HP pump) and includes Easy-Out™ rod for simple removal of float switch

**3 YEAR**  
LIMITED WARRANTY

Typical Application	Sewage, high-capacity sump, effluent
Capacities	up to 180 GPM (11.3 LPS)
Heads	up to 20 ft. (6.1 m)
Electrical	115V, 1ø, 12 FLA, 60Hz; 230V, 1ø, 6 FLA, 60Hz
Motor	1/2 HP split phase with thermal overload protection, 1750 RPM
Operation	SKV50AW = Wide-angle float with Easy-Out Rod
Intermittent Liquid Temp.	up to 140°F (60°C)
Materials of Construction	Class 30 cast iron
Impeller	Thermoplastic recessed
Discharge Size	2" (50.8 mm) NPT std.
Solids Handling	2" (50.8 mm)
Power Cord	10', 16/3, SJTW, 115V (20' optional)

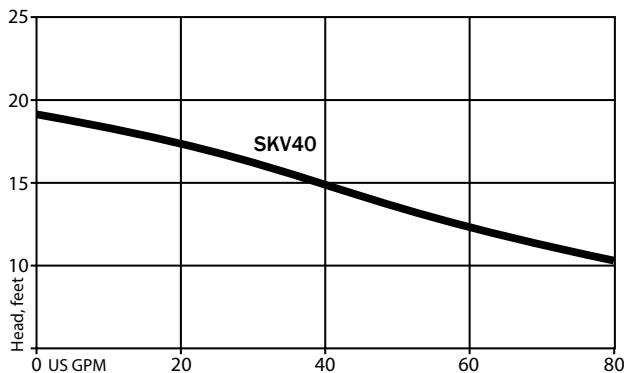
## SUPERIOR FEATURES

- Fully assembled submersible sewage – pump is pre-installed in basin, with integral torque stop to ensure stability
- Oil-filled motor with automatic reset thermal overload for maximum protection
- 24" x 24" basin provides 30% more capacity than standard 18" x 30" basin
- Concrete splash lip and unique basin shape keeps system from floating or becoming "un-installed"
- Concrete-proof cover insert protects the system from damage during rough-in and masonry work
- Integral 360° top grip for easy lifting and handling in tight spaces
- Extra protection with optional Q-Alert™ high water alarm system

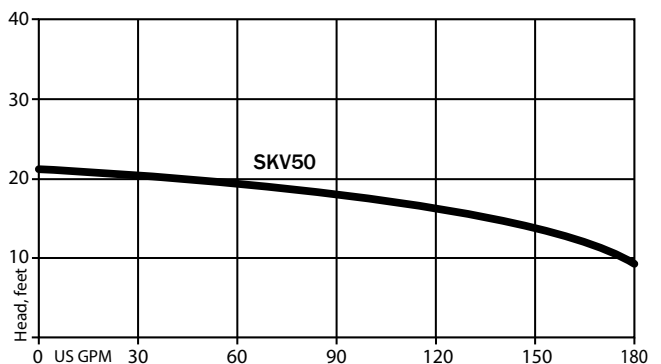


Package system available with Q-Alert™ High Water Alarm System

## PERFORMANCE



## PERFORMANCE



# EPC-115 OIL DETECTION SYSTEM

The elevator pump control and alarm notification activates the pump for removal of water from elevator pits in accordance with ASME17.1. The control will also shut down the pump before discharging harmful substances.

**Sensor**

Housing	ABS
Probe	Stainless steel
Float	PVC

**Control Panel**

Enclosure	Type 1
Power Cord	6', SJT, 120 VAC
Receptacle	6" SJT, 120 VAC, 15 amp

**Alarm Panel**

Enclosure	Type 1
Power Cord	Plug-in transformer, 120 VAC
Backup Power Cord	9 DVC battery backup

**Led Alarm Indicators**

Audible Alarm	103 db buzzer, auto test/reset
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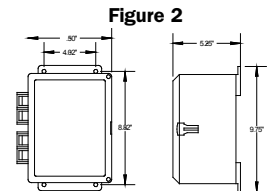
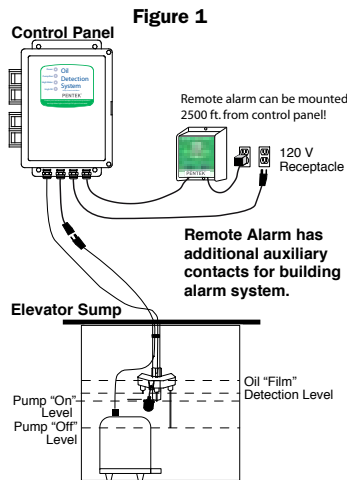
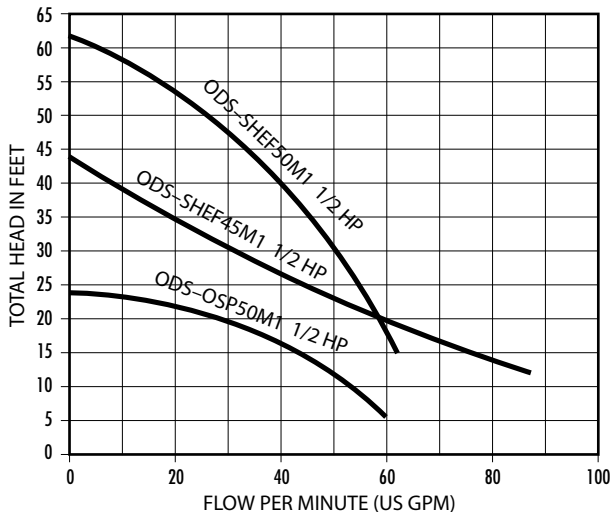


**CONTROL OPERATION**

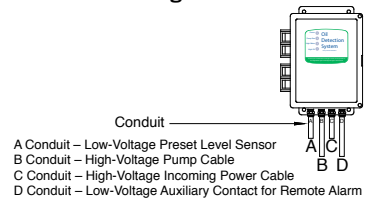
On water rise, fluid level reaches pump "start" probe to activate the pump. Pump remains on until fluid level is below the "off" probe. The "off" probe senses air or oil and turns the pump off so the oil layer (if present) will not be pumped out of the sump. If the liquid level reaches the "alarm" probe and mechanical float, the system will differentiate between water and oil and activate the remote alarm.

**TYPICAL INSTALLATION/OPERATION**

**PERFORMANCE**



**Figure 3**



**Elevator Pump Control**

- Complete packaged system
- 1/2 HP, 115V sump/effluent pump
- Remote alarm
- Easy clamp-mount installation, with plug-in ready wiring
- Compliant with ASME 17.1 and local building and safety codes
- Available with choice of OPF50, SHEF45 or SHEF50

# CUSTOM CONTROL PANELS

Pentair is a UL Listed manufacturer of industrial motor controls and is approved to label panels per UL 508.

Pentair is also an approved builder of panels with intrinsically safe circuit extensions for hazardous locations per UL 913 standards.

All of our control panels are designed with quality engineering, construction and quick delivery. The panel shop at Pentair has the capability to build control panels for pumps and motors rated up to 200 horsepower with thousands of option combinations.

Every panel is individually and thoroughly tested before shipment to ensure proper operation of all components. Each control panel maintains the industry-leading Pentair standard of quality at a competitive price.

Buy Pentair's Hydromatic® line of pumps and controls for the best possible system.



# HIGH-WATER ALARMS

- Small, residential high-water 82 decibels alarm is ideal for furnishing an inexpensive way to protect your home and valuables
- For use with indoor and outdoor (Q-Alert XT) and indoor only (Q-Alert) applications



**INDOOR/OUTDOOR  
Q-ALERT XT**

**NEMA 1**



**NEMA 3R**

**INDOOR  
Q-ALERT**



WIDE-ANGLE FLOAT SWITCH-WAPS

No switch arrangement on the market is more reliable!

- Tilt-sensitive mechanism is sealed inside a noncorrosive float
- Available in 10', 20' and 30' cord lengths
- Piggyback-style plug-in connector
- High reliability makes field servicing almost a thing of the past



DOUBLE WIDE-ANGLE FLOAT SWITCH-DWAPS



The double wide-angle switch consists of two floats and two cables molded to one piggyback cord.

- Both sealed floats contain a heavy-duty switch with a holding relay sealed inside one float
- The double wide-angle float switch offers direct operation of pumps up to 2 HP, 230V with a starting current of no more than 35 amps

VERTICAL MECHANICAL FLOAT-VMPS

This innovative switch design has all the dependability and serviceability that you have come to expect from Pentair.

- Large, heavy-duty switch contacts
- Longer life
- More reliable than similar types of switches that use micro-switch technology
- Piggyback-style plug-in connector



8300 LEVEL & UL LISTED CONTROLS

Designed for operating pumps through a magnetic starter or contactor to control liquid level in sumps or tanks.

- For use in sewage and many harsh chemical solutions
- Switch is sealed in a solid foam-filled polypropylene shell that is leakproof, shockproof and corrosion-resistant
- Can be used to operate alarms to indicate high-water conditions
- Cord weight is zinc-plated cast iron
- Hard wire is 18/2 SJ00W
- Dependable steel tube switch rated to 3 FLA at 115 or 230V



DIAPHRAGM PRESSURE SWITCH-DPS

- Compact design is perfect for small diameter basins
- Designed for ease of service
- Encapsulated in an engineered plastic housing
- Vented cord with a piggyback plug-in connector
- Available in a variety of settings for various sump, effluent and sewage applications
- Eliminates concerns about moving parts becoming entangled
- 15 AMP rating max





## LIMITED WARRANTY

### Limited Warranty Product Period

Hydromatic warrants to the original consumer purchaser "Purchaser" or "You" of the products listed below, that they will be free from defects in material and workmanship for the Warranty Period shown below.

#### Submersible Utility Pumps and Related Accessories:

12 months from the date of the original consumer purchase, or 18 from the date of manufacture, whichever occurs first.

#### Sump, Sewage, and Effluent Pumps:

24 months from the date of the original consumer purchase, or 36 from the date of manufacture, whichever occurs first.

#### Battery Backup Units:

FG-2200 and FG-2200C:

12 months from the date of the original consumer purchase, or 18 from the date of manufacture, whichever occurs first.

FG-3100RF and FG-3100RC:

24 months from the date of the original consumer purchase, or 30 from the date of manufacture, whichever occurs first.

#### Wastewater Solids Handling Pumps:

12 months from the date of the original consumer purchase, or 18 from the date of manufacture, whichever occurs first.

Our warranty applies only where such products are used in compliance with the requirements of the applicable product catalog and/or manuals. For additional information, please refer to the applicable standard limited warranty featured in the product manual.

Our warranty will not apply to any product that, in our sole judgment, has been subject to negligence, misapplication, improper installation, or improper maintenance. Without limiting the foregoing, operating a three phase motor with single phase power through a phase converter will void the warranty. Note also that three phase motors must be protected by three-leg, ambient compensated, extra-quick trip overload relays of the recommended size or the warranty is void.

**Your only remedy, and HYDROMATIC's only duty, is that HYDROMATIC repair or replace defective products (at HYDROMATIC's choice).**

**You must pay all labor and shipping charges associated with this warranty and must request warranty service through the installing dealer as soon as a problem is discovered.**

No request for service will be accepted if received after the Warranty Period has expired. This warranty is not transferable.

HYDROMATIC SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, OR CONTINGENT DAMAGES WHATSOEVER.

THE FOREGOING LIMITED WARRANTIES ARE EXCLUSIVE AND IN LIEU OF ALL OTHER EXPRESS AND IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

THE FOREGOING LIMITED WARRANTIES SHALL NOT EXTEND BEYOND THE DURATION PROVIDED HEREIN.

Some states do not allow the exclusion or limitation of incidental or consequential damages or limitations on the duration of an implied warranty, so the above limitations or exclusions may not apply to You. This warranty gives You specific legal rights and You may also have other rights which vary from state to state.

This Limited Warranty is effective February 2, 2015 and replaces all undated warranties and warranties dated after February 2, 2015.

**HYDROMATIC**  
293 Wright Street, Delavan, WI 53115  
Phone: 888-957-8677 • Fax: 800-426-9446 • Web Site: [hydromatic.com](http://hydromatic.com)

**Retain original receipt for your records**



**USA** 293 WRIGHT STREET, DELAVAN, WI 53115 [WWW.HYDROMATIC.COM](http://WWW.HYDROMATIC.COM)  
Tel: 888-957-8677 Orders Fax: 800-426-9446

**CANADA** CAMBRIDGE, ONTARIO CANADA  
Tel: 519-896-2163 Orders Fax: 519-896-6337

Because we are continuously improving our products and services, Pentair reserves the right to change specifications without prior notice.