HYDROMATIC®
SUMP, SEWAGE AND EFFLUENT PUMPS FOR PLUMBING CONTRACTORS

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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SP40 3

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BV40 3

SV40 3

SKV50 3

SKV50S 3

SKHS100 3

SKHS150 3

SKHS200 3

SKS50 3

SKS60 3

SKS75 3

SKS100 3

SPD42 3

SPD45 3

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SW/SD/VS33 3

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**SOLIDS HANDLING PUMPS**

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HP3M, HP50M 3

HT533A1 3

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P33A1 3

SW/SD/VS33 3

SW/SQ/V533 3

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SP50/SP50AB 3

BV40 3

SV40 3

SKV50 3

SKV50S 3

SKHS100 3

SKHS150 3

SKHS200 3

SKS50 3

SKS60 3

SKS75 3

SKS100 3

SPD42 3

SPD45 3

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SW/SD/VS33 3

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**SUMP PUMPS**

FG-2200 1

FG-2200C 1

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HS SERIES 3

W-A1, D-A1, V-A1 3

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SP50/SP50AB 3

BV40 3

SV40 3

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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

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

PERFORMANCE
### HY106

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

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

**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**

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

**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**

![Performance Graph](image)
FG-2200 and FG-2200C

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

<table>
<thead>
<tr>
<th>MODEL</th>
<th>PERFORMANCE (GPM)</th>
<th>MAX LIFT</th>
<th>SOLIDS HANDLING</th>
<th>VOLTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0’</td>
<td>5’</td>
<td>10’</td>
<td>15’</td>
</tr>
<tr>
<td>FG-2200</td>
<td>34</td>
<td>23</td>
<td>10</td>
<td>-</td>
</tr>
<tr>
<td>FG-2200C</td>
<td>60</td>
<td>53</td>
<td>45</td>
<td>36</td>
</tr>
</tbody>
</table>

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

1 YEAR WARRANTY

NEW!
FG-3100RF and FG-3100RC

12 Volt Hydromatic PREMIUM Battery Backup Systems

Typical Application: Emergency dewatering

<table>
<thead>
<tr>
<th>Capacities</th>
<th>45 GPM (170 GPM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heads</td>
<td>15 ft. (4.6 m)</td>
</tr>
<tr>
<td>Liquids Handling</td>
<td>Sump drain water</td>
</tr>
<tr>
<td>Intermittent Liquid Temp.</td>
<td>77°F (25°C)</td>
</tr>
<tr>
<td>Motor</td>
<td>12V DC, 9.5A</td>
</tr>
<tr>
<td>Charger</td>
<td>Fully automatic, computerized monitoring and alarm system; input – 115V AC, 60Hz; output – 12V AC, 2A (5 stages)</td>
</tr>
<tr>
<td>Housing</td>
<td>Thermoplastic</td>
</tr>
<tr>
<td>Discharge NPT</td>
<td>1-1/4” or 1-1/2”</td>
</tr>
</tbody>
</table>

SUPERIOR FEATURES

- Link 2O™ 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

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

<table>
<thead>
<tr>
<th>MODEL</th>
<th>PERFORMANCE (GPM)</th>
<th>MAX LIFT</th>
<th>SOLIDS HANDLING</th>
<th>VOLTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0' 5' 10' 15' 20'</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FG-3100RF</td>
<td>45 34 21 - -</td>
<td>15</td>
<td>3/16&quot; For Backup Pump</td>
<td>12V DC For Backup Pump</td>
</tr>
<tr>
<td>FG-3100RC</td>
<td>75 66 56 44 28</td>
<td>Primary</td>
<td>1/4&quot; For Primary Pump and 3/16&quot; For Secondary Pump</td>
<td>115VAC For Primary Pump and 12V DC For Secondary Pump</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RECOMMENDED BATTERIES</th>
<th>BAT40</th>
<th>BAT75</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amp hours</td>
<td>40</td>
<td>75</td>
</tr>
<tr>
<td>Gallons per charge</td>
<td>4,800</td>
<td>11,500</td>
</tr>
<tr>
<td>Hours of continuous run time</td>
<td>5</td>
<td>11.5</td>
</tr>
</tbody>
</table>
SUMP PUMPS

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)

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

3 YEAR LIMITED WARRANTY

Piggyback Switch Plug

NEW!
## HS SERIES
### NEW!

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

<table>
<thead>
<tr>
<th>Typical Application</th>
<th>Basement sumps, dewatering</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pump/Motor Unit</td>
<td>Submersible sump pump</td>
</tr>
<tr>
<td>Heads</td>
<td>25 ft. (7.6 m)</td>
</tr>
<tr>
<td>Operation</td>
<td>Tethered: On 1/4” (36mm)</td>
</tr>
<tr>
<td></td>
<td>Off 5” (127mm)</td>
</tr>
<tr>
<td></td>
<td>Vertical: On 7.5” (191mm)</td>
</tr>
<tr>
<td></td>
<td>Off 3.0” (76mm)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Capacities</th>
<th>75GPM (284 LPM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motor</td>
<td>1/3 HP &amp; 1/2 HP, PSC, 3450 RPM, 115V, 1Ø, 60Hz</td>
</tr>
<tr>
<td></td>
<td>FLA 1/3 HP = 4.0, 1/2 HP = 4.1</td>
</tr>
<tr>
<td>Water Temperature</td>
<td>140°F (60°C)</td>
</tr>
<tr>
<td>Discharge Size</td>
<td>1-1/2” (38mm)</td>
</tr>
<tr>
<td>Solids Handling</td>
<td>1/4” (6.4mm)</td>
</tr>
<tr>
<td>Liquids Handling</td>
<td>Drain Water</td>
</tr>
<tr>
<td>Unit Weight</td>
<td>15 lbs.</td>
</tr>
<tr>
<td>Power Cord</td>
<td>SJTW, 10' std. (20’ optional)</td>
</tr>
<tr>
<td>Handle</td>
<td>Thermoplastic</td>
</tr>
<tr>
<td>Lubricating Oil</td>
<td>Dielectric oil</td>
</tr>
<tr>
<td>Construction</td>
<td>Zinc/Cast Iron</td>
</tr>
<tr>
<td>Shaft</td>
<td>Double Lip</td>
</tr>
<tr>
<td>Acceptable pH range</td>
<td>6-9</td>
</tr>
<tr>
<td>Housing</td>
<td>Zinc</td>
</tr>
<tr>
<td>Volute Case</td>
<td>Cast Iron</td>
</tr>
</tbody>
</table>

| 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

![Graph](image)

**Shown "V" Vertical Float Switch**

**Shown "T" Tether Float Switch**

**3 YEAR LIMITED WARRANTY**

![Switch Plug](image)

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, 6 FLA, 60Hz

Motor
3/10 HP shaded pole with thermal overload protection, 1550 RPM

Intermittent Liquid Temp.
120°F (49°C)

Minimum Recommended
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

Graph showing US GPM vs. Head, feet for W-A1/D-A1 & V-A1
### HP33/HP50

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

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

### HP33M/50M

**Ideal for submersible sump and effluent applications**

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

### 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

### PERFORMANCE

![Graph showing performance characteristics](image-url)

---

**SUMP PUMPS**

**3 YEAR LIMITED WARRANTY**
HTS33A1

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

Table:

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

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:

- HTS33A1 (Performance @ 70°F water temperature)
- HTS33A1 (Performance @ 194°F water temperature)
## SUMP PUMPS

### HTS50A1

**3 YEAR WARRANTY**

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

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

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

### P33A1

**Pedestal sump pump**

Ideal for basements needing frequent drainage

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

### 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

- **HTS50A1**
  - @ 70°F water temperature
  - @ 200°F water temperature

- **P33A1**
  - 30 US GPM
  - 20 Head ft.
## SUMP/EFFLUENT PUMPS

### SW/SD/VS33 & 50

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

<table>
<thead>
<tr>
<th><strong>33 SERIES</strong></th>
<th><strong>50 SERIES</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Typical Application</strong></td>
<td>Basement sumps, dewatering, light effluent</td>
</tr>
<tr>
<td><strong>Capacities</strong></td>
<td>( SW/SD/VS33 ) - to 48 GPM (3.0 LPS)</td>
</tr>
<tr>
<td><strong>Heads</strong></td>
<td>( SW/SD/VS33 ) - to 26 ft. (7.9 m)</td>
</tr>
<tr>
<td><strong>Electrical</strong></td>
<td>( SW/SD/VS33 ) - 115V, 1ø, 10 FLA, 60Hz</td>
</tr>
<tr>
<td><strong>Motor</strong></td>
<td>( SW/SD/VS33 ) - 1/3 HP shaded pole with thermal overload protection, 1550 RPM</td>
</tr>
<tr>
<td><strong>Intermittent Liquid Temp.</strong></td>
<td>120°F (49°C)</td>
</tr>
<tr>
<td><strong>Minimum Recommended Sump Diameter</strong></td>
<td>( SD/VS33 = 12&quot; (304.8 mm) )</td>
</tr>
<tr>
<td><strong>Automatic Operation (manual available)</strong></td>
<td>( SW = ) Wide-angle float switch On 9-1/2&quot; Off 3-1/2&quot;</td>
</tr>
<tr>
<td></td>
<td>( SD = ) Diaphragm pressure switch On 9&quot; Off 4&quot;</td>
</tr>
<tr>
<td></td>
<td>( VS = ) Vertical float switch On 7-1/4&quot; Off 4&quot;</td>
</tr>
<tr>
<td><strong>Materials of Construction</strong></td>
<td>Cast iron and engineered thermoplastic</td>
</tr>
<tr>
<td><strong>Impeller</strong></td>
<td>Thermoplastic vortex</td>
</tr>
<tr>
<td><strong>Discharge Size</strong></td>
<td>1-1/2&quot; NPT (38.1 mm)</td>
</tr>
<tr>
<td><strong>Solids Handling</strong></td>
<td>3/8&quot; (9.5 mm)</td>
</tr>
<tr>
<td><strong>Power Cord</strong></td>
<td>10', SJTW (20' optional)</td>
</tr>
</tbody>
</table>

### 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

---

**PERFORMANCE**

![Performance Graph for SW/SD/VS33](image1.png)

![Performance Graph for SW/SD/VS50](image2.png)
**OSP50**

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

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

**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

**OSP50AB**

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

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

**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

**PERFORMANCE**

[Graph showing performance curve for OSP50/OSP50AB]
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 BFT1C1

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

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

Package Systems Available which includes panel

Required panel sold separately.
### SPD50H

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

<table>
<thead>
<tr>
<th>Capacity Application</th>
<th>Effluent and dewatering</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacities</td>
<td>up to 112 GPM (7.1 LPS)</td>
</tr>
<tr>
<td>Heads</td>
<td>up to 50 ft. (15.2 m)</td>
</tr>
<tr>
<td>Electrical</td>
<td>115V, 1a, 7.0 FLA, 60Hz; 230V, 3a, 3.6 FLA, 60Hz; 440V, 3a, 1.8 FLA, 60Hz</td>
</tr>
<tr>
<td>Motor</td>
<td>[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</td>
</tr>
<tr>
<td>Intermittent Liquid Temp.</td>
<td>140°F (60°C)</td>
</tr>
<tr>
<td>Minimum Recommended Sump Diameter</td>
<td>Simplex = 24” (609.6 mm)</td>
</tr>
<tr>
<td>Automatic Operation</td>
<td>Diaphragm pressure switch (single phase only, manual available)</td>
</tr>
<tr>
<td>Materials of Construction</td>
<td>Class 30 cast iron</td>
</tr>
<tr>
<td>Impeller</td>
<td>Class 30 cast iron, two-vane</td>
</tr>
<tr>
<td>Discharge Size</td>
<td>2” NPT (50.8 mm) std.; 3” NPT (76.2 mm) opt. Optional 513520137</td>
</tr>
<tr>
<td>Solids Handling</td>
<td>3/4” (19.1 mm)</td>
</tr>
<tr>
<td>Power Cord</td>
<td>1a (without seal failure probe) - 10’, SJTW, STW-A; 20’ optional</td>
</tr>
</tbody>
</table>

### SPD100H

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

<table>
<thead>
<tr>
<th>Capacity Application</th>
<th>Effluent and dewatering</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacities</td>
<td>up to 140 GPM (8.8 LPS)</td>
</tr>
<tr>
<td>Heads</td>
<td>up to 65 ft. (19.8 m)</td>
</tr>
<tr>
<td>Electrical</td>
<td>230V, 1a, 9.9 FLA, 60Hz; 208V, 3a, 5.5 FLA, 60Hz; 230V, 3a, 5.2 FLA, 60Hz; 460V, 3a, 2.5 FLA, 60Hz; 575V, 3a, 2.0 FLA, 60Hz</td>
</tr>
<tr>
<td>Motor</td>
<td>[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</td>
</tr>
<tr>
<td>Intermittent Liquid Temp.</td>
<td>140°F (60°C)</td>
</tr>
<tr>
<td>Minimum Recommended Sump Diameter</td>
<td>Simplex = 24” (609.6 mm)</td>
</tr>
<tr>
<td>Automatic Operation</td>
<td>Wide-angle float switch (single phase only, manual available)</td>
</tr>
<tr>
<td>Materials of Construction</td>
<td>Class 30 cast iron</td>
</tr>
<tr>
<td>Impeller</td>
<td>Class 30 cast iron, two-vane solids handling</td>
</tr>
<tr>
<td>Discharge Size</td>
<td>2” NPT (50.8 mm) std.; 3” NPT (76.2 mm) opt. Optional 513520137</td>
</tr>
<tr>
<td>Solids Handling</td>
<td>3/4” (19.1 mm)</td>
</tr>
<tr>
<td>Power Cord</td>
<td>1a (without seal failure probe) - 20’, SJTW-A; 3a – 30’, SJTW-A</td>
</tr>
</tbody>
</table>

### 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)

### Performance

![Graph showing performance of SPD50H and SPD100H]
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’, SJTW-A

SUPERIOR FEATURES
- Two (2) carbon/ceramic type 21 mechanical seals mounted in tandem
- Oil-filled motor with automatic reset thermal overload protection 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)

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

PERFORMANCE

SKHD150

SHEF30
### SHEF40

**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

**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’, 16G, 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

### PERFORMANCE

**SHEF40**

<table>
<thead>
<tr>
<th>Head, feet</th>
<th>US GPM</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>10</td>
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<td>10</td>
<td>20</td>
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<tr>
<td>20</td>
<td>30</td>
</tr>
<tr>
<td>30</td>
<td>40</td>
</tr>
</tbody>
</table>

**SHEF42**

<table>
<thead>
<tr>
<th>Head, feet</th>
<th>US GPM</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td>20</td>
<td>30</td>
</tr>
<tr>
<td>30</td>
<td>40</td>
</tr>
</tbody>
</table>

---

**3 YEAR LIMITED WARRANTY**

Piggyback Switch Plug

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**3 YEAR LIMITED WARRANTY**

Piggyback Switch Plug
SHEF45

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

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

**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

**PERFORMANCE**

![Performance Graph](image)

3 YEAR LIMITED WARRANTY
**SHEF50**

High head submersible pump with inlet designed for better solids handling

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

**SHEF100**

High head submersible pump with inlet designed for better solids handling

<table>
<thead>
<tr>
<th>Typical Application</th>
<th>High-head effluent and dewatering</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacities</td>
<td>up to 88 GPM (5.5 LPS)</td>
</tr>
<tr>
<td>Heads</td>
<td>up to 90 ft. (27.4 m)</td>
</tr>
<tr>
<td>Electrical</td>
<td>208V, 1a, 13.6 FLA, 60Hz; 230V, 1a, 12.1 FLA, 60Hz; 230V, 3a, 5.6 FLA, 60Hz; 460V, 3a, 2.8 FLA, 60Hz; 575V, 3a 1.9 FLA, 60Hz</td>
</tr>
<tr>
<td>Motor</td>
<td>{single phase} - 1 HP split phase with start capacitor and thermal overload protection, 3450 RPM; (three phase) - 1 HP polyphase, 3450 RPM</td>
</tr>
<tr>
<td>Intermittent Liquid Temp.</td>
<td>140°F (60°C)</td>
</tr>
<tr>
<td>Minimum Recommended Sump Diameter</td>
<td>Simplex = 24” (609.6 mm)  Duplex = 30” (762.0 mm)</td>
</tr>
<tr>
<td>Automatic Operation</td>
<td>Wide-angle float switch (1ø only, On 1-1/4”, Off 3-1/2” (2ø only, On 1-1/4”, Off 3-1/2”) manual available)</td>
</tr>
<tr>
<td>Materials of Construction</td>
<td>Class 30 cast iron</td>
</tr>
<tr>
<td>Impeller</td>
<td>Thermoplastic</td>
</tr>
<tr>
<td>Discharge Size</td>
<td>2” NPT (50.8 mm)</td>
</tr>
<tr>
<td>Solids Handling</td>
<td>3/4” (19.1 mm)</td>
</tr>
<tr>
<td>Power Cord</td>
<td>1ø - 20’, SJTW, STW-A (30’ optional)  3ø - 20’, SJTW, STW-A (30’ optional)</td>
</tr>
</tbody>
</table>

**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}

**PERFORMANCE**

![Graph showing performance of SHEF50 and SHEF100 pumps]
HE8/HE12/HE20/HE25/HE35-51

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

Typical Application: High-head filtered effluent
Capacities: up to 50 GPM (189 LPM)
Heads: up to 300 ft. (91.4 m)
Electrical: 115V, 1ph, 14.5 A, 60Hz, 3450 RPM
Motor: Single phase - 1/2 HP 115V, 14.5 A, 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: 1ph - 10', 20', 30' or 50', 16-3 Jacketed Type SJOW-A UL

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

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

Performance

<table>
<thead>
<tr>
<th>US GPM</th>
<th>0</th>
<th>5</th>
<th>10</th>
<th>15</th>
<th>20</th>
<th>25</th>
<th>30</th>
<th>35</th>
<th>40</th>
<th>45</th>
<th>50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head, ft.</td>
<td>0</td>
<td>50</td>
<td>100</td>
<td>150</td>
<td>200</td>
<td>250</td>
<td>300</td>
<td>400</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Double Screened

3 YEAR LIMITED WARRANTY
SEWAGE PUMPS

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, 1a, 7.5 FLA, 1450 RPM, 60Hz; 230V, 1a, 3.8 FLA, 1450 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
10', SJTW (20' optional)

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

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, 1a, 12 FLA, 60Hz; 208V, 1a, 6.8 FLA, 60Hz; 230V, 1a, 6 FLA, 60Hz; 208V, 3p, 4.1 FLA, 60Hz; 230V, 3p, 3.5 FLA, 60Hz; 460V, 3p, 1.8 FLA, 60Hz; 575V, 3p, 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

PERFORMANCE

Graphs showing performance characteristics for SP40 and SP50 models.
**BV40**

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

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

**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

**PERFORMANCE**

![Performance Graph]

**3 YEAR LIMITED WARRANTY**
SKV40

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

<table>
<thead>
<tr>
<th>Typical Application</th>
<th>Sewage, high-capacity sump, effluent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacities</td>
<td>up to 76 GPM (4.9 LPS)</td>
</tr>
<tr>
<td>Heads</td>
<td>up to 19.5 ft. (5.9 m)</td>
</tr>
<tr>
<td>Electrical</td>
<td>115V, 1a, 12.6 FLA, 60Hz; 230V, 1a, 6.6 FLA, 60Hz</td>
</tr>
<tr>
<td>Motor</td>
<td>4/10 HP PSC split phase with thermal overload protection, 1550 RPM</td>
</tr>
<tr>
<td>Intermittent Liquid Temp.</td>
<td>120°F (49°C)</td>
</tr>
<tr>
<td>Minimum Recommended Sump Diameter</td>
<td>SKV40W = Wide-angle float switch SKV40AD = Diaphragm pressure switch</td>
</tr>
<tr>
<td>Automatic Operation</td>
<td>SKV40AW = Wide-angle float switch SKV40AD = Diaphragm pressure switch</td>
</tr>
<tr>
<td>Materials of Construction</td>
<td>Class 30 cast iron</td>
</tr>
<tr>
<td>Impeller</td>
<td>Thermoplastic recessed</td>
</tr>
<tr>
<td>Discharge Size</td>
<td>2&quot; NPT (50.8 mm)</td>
</tr>
<tr>
<td>Solids Handling</td>
<td>2&quot; (50.8 mm)</td>
</tr>
<tr>
<td>Power Cord</td>
<td>10', SJTW (20' optional)</td>
</tr>
</tbody>
</table>

SKV50

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

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

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

3 YEAR LIMITED WARRANTY
SKHS 50/100

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

<table>
<thead>
<tr>
<th>Typical Application</th>
<th>Sewage, high capacity - 2&quot; Discharge 3&quot; Optional</th>
</tr>
</thead>
</table>
| 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, 1A, 14.2 FLA, 60Hz, 208V, 1A, 9.2 FLA, 60Hz, 230V, 1A, 8.3 FLA, 60Hz; 208V, 3A, 6.6 FLA, 60Hz; 230V, 3A, 6.0 FLA, 60Hz, 460V, 3A, 3 FLA, 60Hz, 575V, 3A, 2.4 FLA, 60Hz |
                      | 1 HP  
                      | 208V, 1A, 12.5 FLA, 60Hz; 230V, 1A, 11.4 FLA, 60Hz; 208V, 3A, 8.8 FLA, 60Hz, 230V, 3A, 8 FLA, 60Hz, 460V, 3A, 4 FLA, 60Hz, 575V, 3A, 3.2 FLA, 60Hz |
| 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, 1A, 20' std.  
                      | 18/4, STWA, 3A, 20' std. |

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

3 YEAR LIMITED WARRANTY

SKHS 150/200

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

<table>
<thead>
<tr>
<th>Typical Application</th>
<th>Sewage, high capacity - 2&quot; Discharge 3&quot; Optional</th>
</tr>
</thead>
</table>
| 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, 1A, 15.3 FLA, 60Hz, 230V, 1A, 13.1 FLA, 60Hz, 208V, 3A, 8.5 FLA, 60Hz, 230V, 3A, 7.6 FLA, 60Hz, 440V, 3A, 3.9 FLA, 60Hz, 575V, 3A, 3.1 FLA, 60Hz |
                      | 2 HP  
                      | 230V, 1A, 18 FLA, 60Hz, 208V, 3A, 10.4 FLA, 60Hz, 230V, 3A, 9 FLA, 60Hz, 440V, 3A, 4.5 FLA, 60Hz, 575V, 3A, 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, 1A  
                      | 20' std., 18/4, STWA, 3A |

Performance

![Performance Graph](image)
### SK50

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

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

### SK60

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

<table>
<thead>
<tr>
<th>Typical Application</th>
<th>Sewage, dewatering</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacities</td>
<td>up to 120 GPM (7.5 LPS)</td>
</tr>
<tr>
<td>Heads</td>
<td>up to 28 ft. (8.5 m)</td>
</tr>
<tr>
<td>Electrical</td>
<td>115V, 1ø, 12 FLA, 60Hz, 208V, 3ø, 6.9 FLA, 60Hz, 230V, 3ø, 6 FLA, 60Hz, 208V, 3ø, 2.9 FLA, 60Hz, 230V, 3ø, 25 FLA, 60Hz, 460V, 3ø, 1.3 FLA, 60Hz, 575V, 3ø, 1.04 FLA, 60Hz</td>
</tr>
<tr>
<td>Motor</td>
<td>(single phase) - 6/10 HP split phase with thermal overload protection, 1750 RPM; (three phase) - 6/10 HP polyphase, 1750 RPM</td>
</tr>
<tr>
<td>Intermittent Liquid Temp.</td>
<td>140°F (60°C)</td>
</tr>
<tr>
<td>Minimum Recommended Sump Diameter</td>
<td>Simplex = 24&quot; (610.0 mm)</td>
</tr>
<tr>
<td></td>
<td>Duplex = 36&quot; (914.4 mm)</td>
</tr>
<tr>
<td>Automatic Operation</td>
<td>Diaphragm pressure switch on single phase only (manual available 16 &amp; 30)</td>
</tr>
<tr>
<td>Materials of Construction</td>
<td>Class 30 cast iron</td>
</tr>
<tr>
<td>Impeller</td>
<td>Class 30 cast iron two-vane</td>
</tr>
<tr>
<td>Discharge Size</td>
<td>2&quot; (50.8 mm) NPT; 3&quot; (76.2 mm) NPT optional</td>
</tr>
<tr>
<td>Solids Handling</td>
<td>2&quot; (50.8 mm)</td>
</tr>
<tr>
<td>Power Cord</td>
<td>1ø, 115V - 10', STW-A (20' optional); other 1ø and all 3ø - 20', STW-A</td>
</tr>
</tbody>
</table>

### 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

### PERFORMANCE

![Graph showing performance of SK50 and SK60 pumps](image-url)
**SEWAGE PUMPS**

**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.

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

**SK100**

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

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

**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)

**PERFORMANCE**

![Head vs. Flow Chart](chart.png)

**3 YEAR LIMITED WARRANTY**
**HPGR200**

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

Typical Application  | Residential sewage
---|---
Capacities  | up to 58 GPM (3.7 LPS)
Heads  | up to 105 ft. (32 m)
Electrical  | 230V, 1ø, 15 FLA, 60Hz
Motor  | 2 HP 1ø 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)

**SUPEIOR 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**

![Graph showing performance](image)

**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

**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**

- Prewired with electrical quick disconnect to easily wire into existing systems
- Package designed specifically for use in residential sewer applications
- 18/2 SJOW; UL Listed for use in sewage applications
- 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

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

**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)
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**

<table>
<thead>
<tr>
<th>RPM</th>
<th>HP 1Ø, 208V/230V, 60Hz</th>
<th>HP 3Ø, 208V/230V/460V/575V, 60Hz</th>
</tr>
</thead>
<tbody>
<tr>
<td>1750 RPM</td>
<td>1.5–3</td>
<td>1.5–3</td>
</tr>
<tr>
<td>3450 RPM</td>
<td>1.5–3</td>
<td>1.5–3</td>
</tr>
</tbody>
</table>

**Motor**

<table>
<thead>
<tr>
<th>RPM</th>
<th>HP 1Ø, 208V/230V, 60Hz</th>
<th>HP 3Ø, 208V/230V/460V/575V, 60Hz</th>
</tr>
</thead>
<tbody>
<tr>
<td>1750 RPM</td>
<td>1.5–3, enclosed, oil-cooled induction</td>
<td>1.5–3, enclosed, oil-cooled induction</td>
</tr>
<tr>
<td>3450 RPM</td>
<td>1.5–3, enclosed, oil-cooled induction</td>
<td>1.5–3, enclosed, oil-cooled induction</td>
</tr>
</tbody>
</table>

**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**

<table>
<thead>
<tr>
<th>RPM</th>
<th>Diameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>1750 RPM</td>
<td>2.5” (63.5 mm)</td>
</tr>
<tr>
<td>3450 RPM</td>
<td>2” (50.6 mm)</td>
</tr>
</tbody>
</table>

**Power Cord**

20’, type SJOW/SJOWA, SDOW

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)
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

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

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

![Performance Chart](image-url)
### S3SD/SB3SD

**Submersible sewage dual seal pumps**

<table>
<thead>
<tr>
<th>Typical Application</th>
<th>Light commercial</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacities</td>
<td>up to 385 GPM (24.3 LPS)</td>
</tr>
<tr>
<td>Heads</td>
<td>up to 44 ft. (13.4 m)</td>
</tr>
<tr>
<td><strong>Electrical</strong></td>
<td></td>
</tr>
<tr>
<td>[1150 RPM]</td>
<td>1–2 HP, 1a, 200V/230V, 60Hz;</td>
</tr>
<tr>
<td></td>
<td>1–2 HP, 3a, 200V/230V/460V/575V, 60Hz</td>
</tr>
<tr>
<td>[1750 RPM]</td>
<td>1.5–5 HP, 1a, 230V, 60Hz;</td>
</tr>
<tr>
<td></td>
<td>1.5–7.5 HP, 3a, 200V/230V/460V/575V, 60Hz</td>
</tr>
<tr>
<td><strong>Motor</strong></td>
<td></td>
</tr>
<tr>
<td>[1150 RPM]</td>
<td>1–2 HP, enclosed, oil-cooled induction</td>
</tr>
<tr>
<td>[1750 RPM]</td>
<td>1.5–7.5 HP, enclosed, oil-cooled induction</td>
</tr>
<tr>
<td>Intermittent Liquid Temp.</td>
<td>140°F (60°C)</td>
</tr>
<tr>
<td>Minimum Recommended Sump Diameter</td>
<td>Simplex = 30&quot; (762 mm)</td>
</tr>
<tr>
<td>Operation</td>
<td>Control panel required</td>
</tr>
<tr>
<td>Materials of Construction</td>
<td>Class 30 cast iron, ASTM A-48</td>
</tr>
<tr>
<td>Impeller</td>
<td>Ductile iron, ASTM 536</td>
</tr>
<tr>
<td>Discharge Size</td>
<td>3&quot; (76.2 mm) NPT</td>
</tr>
<tr>
<td>Solids Handling</td>
<td>2.5&quot; (63.3 mm)</td>
</tr>
<tr>
<td>Power Cord</td>
<td>35' STW cable</td>
</tr>
</tbody>
</table>

**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

**PERFORMANCE**

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

![Graph showing performance curves for S3SD/SB3SD pumps.](image-url)
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
Solids Handling  3.5" (88.9 mm)
Power Cord  50'; STW cable 8-4/10-4/12-4

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

![Performance graph](image)
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, 1ø, 200V/230V, 60Hz; 1–2 HP, 3ø, 200V/230V/440V/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  
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.

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

![Graph showing performance data for S4SD/SB4SD submersible sewage dual seal pumps]
**PACKAGED SUMP SYSTEMS**

### 118

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

**3 YEAR LIMITED WARRANTY**

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

**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**

<table>
<thead>
<tr>
<th>US GPM</th>
<th>0</th>
<th>10</th>
<th>20</th>
<th>30</th>
<th>40</th>
<th>50</th>
<th>60</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head, ft.</td>
<td>30</td>
<td>25</td>
<td>20</td>
<td>15</td>
<td>10</td>
<td>5</td>
<td>0</td>
</tr>
</tbody>
</table>

---

### 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**

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

**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**

<table>
<thead>
<tr>
<th>US GPM</th>
<th>0</th>
<th>10</th>
<th>20</th>
<th>30</th>
<th>40</th>
<th>50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head, ft.</td>
<td>30</td>
<td>25</td>
<td>20</td>
<td>15</td>
<td>10</td>
<td>5</td>
</tr>
</tbody>
</table>

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36
PACKAGED SEWAGE SYSTEMS

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)

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

PERFORMANCE

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, 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 76 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

PERFORMANCE

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

**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.

**PERFORMANCE**

![Graph showing flow rate vs. total head in feet]

**TYPICAL INSTALLATION/OPERATION**

- Remote alarm can be mounted 2500 ft. from control panel!
- Remote Alarm has additional auxiliary contacts for building alarm system.

**Figures**
- Figure 1: Control Panel and remote alarm setup
- Figure 2: Remote alarm and power cord connections
- Figure 3: Conduit diagram

**• 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
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 SJOW
- 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 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.

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Retain original receipt for your records