



HYDROMATIC[®]
MODELS S3SD/S4SD & SB3SD/SB4SD
SUBMERSIBLE SEWAGE
DUAL SEAL PUMPS



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Submersible Sewage Dual Seal Pumps

Hydromatic introduces a competitively priced line of quality 3" and 4" discharge solids handling sewage pumps. The S3SD/S4SD and SB3SD/SB4SD Series of 1 through 7-1/2 HP pumps feature horizontal or vertical discharge options for quick and easy installations. The quality double ball bearing, dual mechanical seal pumps incorporate a stainless steel shaft and internal heat sensor protection, coupled with strong performance capabilities up to 55' head and flows up to 700 gpm. Hydromatic's dual seal pumps are suited to wet-well installation in a wide variety of municipal, industrial and building trades applications.

The Hydromatic S3SD/S4SD and SB3SD/SB4SD sewage pumps are designed to transfer raw sewage with solids as large as 3" through pipes up to 4" in diameter.

Sewage pumps are necessary to move sewage from a building to the sewer system, and in many cases, from the sewer system to a treatment plant. In the case of larger commercial installations, collection systems are designed to accumulate and transfer the wastewater efficiently.

Examples of this are motels, apartment buildings, and industrial plants that tie in with sewer mains or on-site treatment facilities. For commercial or high volume applications, the usual procedure is to incorporate at least two pumps as a duplex system in conjunction with control panel, a guide system and quick disconnect discharge system. Hydromatic S3SD/S4SD pumps provide maximum value that can't be beat!



Model S3SD

Pump Features

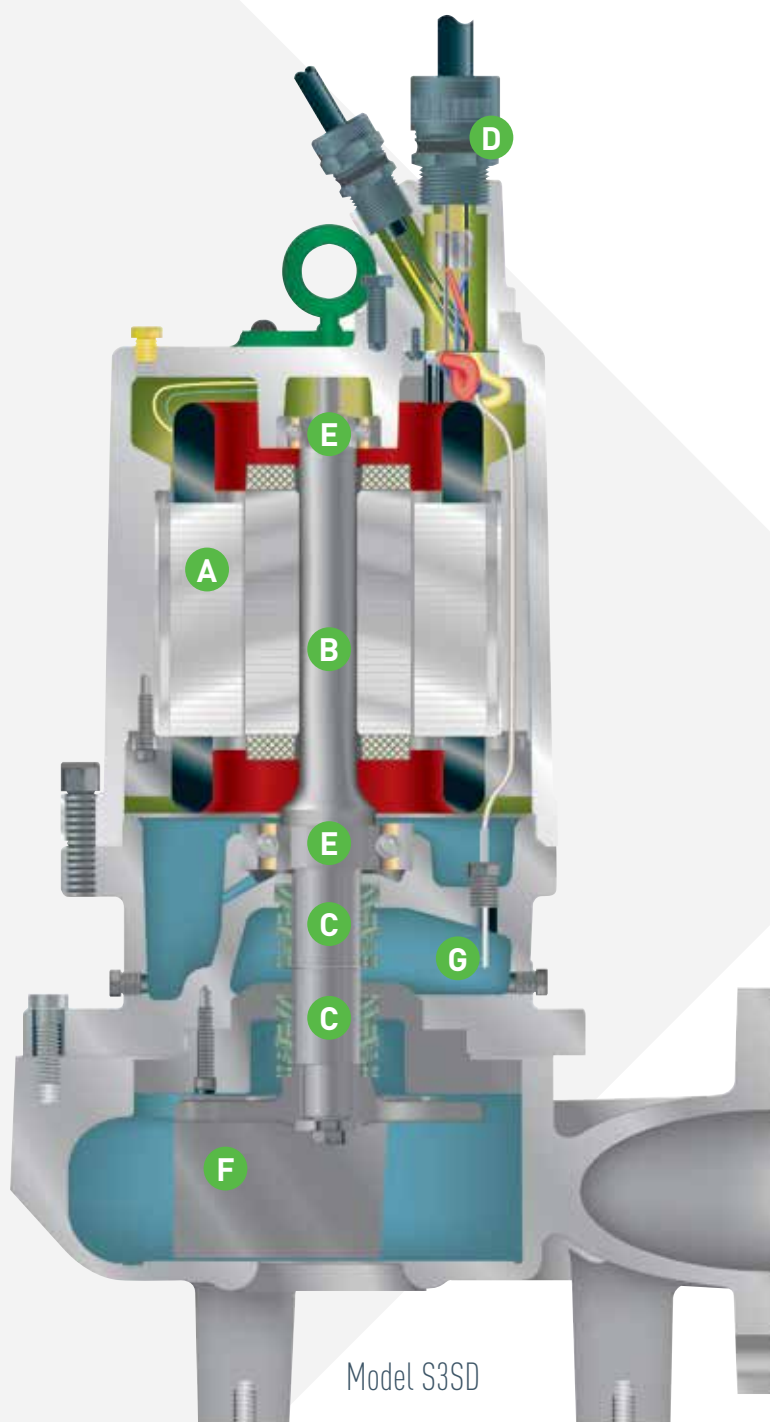
The Hydromatic® S3SD/S4SD can be used with the Hydromatic pultruded I-beam rail system for easy installations. The corrosion resistant rail system permits the pump(s) to be lowered into position without entering the wet well. An exclusive self-sealing flange eliminates the need to bolt pump to the piping system. When the pump is activated, a neoprene diaphragm forms an effective seal between the discharge flange and the base elbow flange. A Hydromatic control panel will ensure proper start components and equal pump alternation.

- 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.
- The start and run capacitors are located in the control panel for single phase motors. Contact your Hydromatic distributor for proper Hydromatic control panel sizing.
- Standard construction is cast iron.
- 400 series stainless steel shafts.
- Field serviceable; pumps have 300 series stainless steel fasteners for easy teardown.
- Semiopen, two-vane sewage type impellers have pump-out vanes on back shrouds to prevent stringy materials from building up around shaft and seal.
- Manufactured with carbon and ceramic faced mechanical shaft seal for long leakproof life.
- All units given complete hydraulic test run before shipping.



Model SB4SD

Pump Features



A. Oil-Filled Motor

The fully enclosed oil-filled motor efficiently dissipates heat and locks out moisture so you receive reliable pumping service.

B. Stainless Steel Shaft

Eliminates corrosion and fatigue to give longer pump life. The minimum shaft overhang decreases deflection and increases seal life.

C. Mechanical Dual Seal

Constructed with a ceramic stationary face and a carbon rotating face for long service life.

D. PVC Jacketed Power Cord

Sealed by both the cord grip and additionally by the epoxy barrier.

E. Ball Bearings

The heavy duty ball bearings, upper (radial and lower (thrust), are submerged in oil to provide permanent lubrication and ensure long service life.

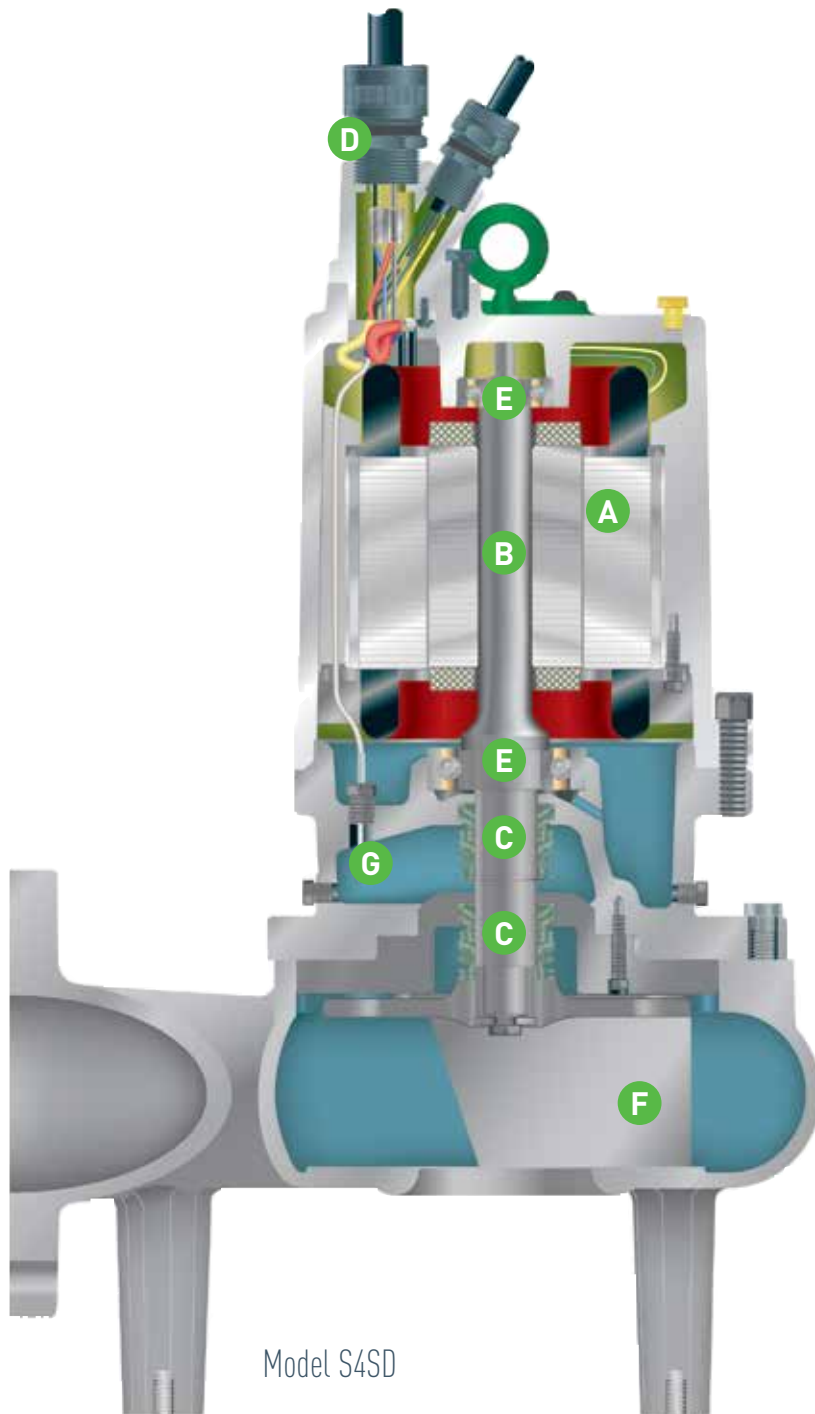
F. Impeller

The impeller is a two-vane semiopen design for efficient operation without clogging. The impeller has pump-out vanes to prevent material buildup around shaft and seal.

G. Sensor Probe

A seal-failure sensor probe (for connection to a seal failure alarm) is standard on three-phase units and available as a option on single phase models.

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Engineering & Dimensional Details

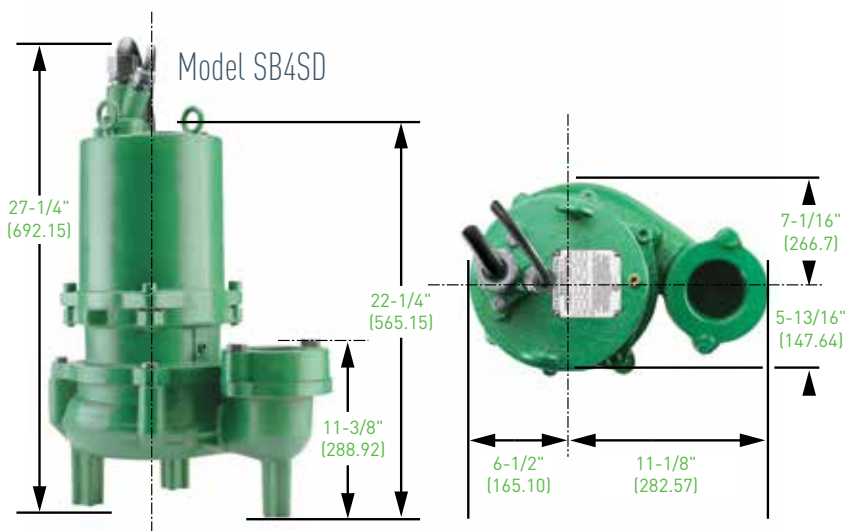
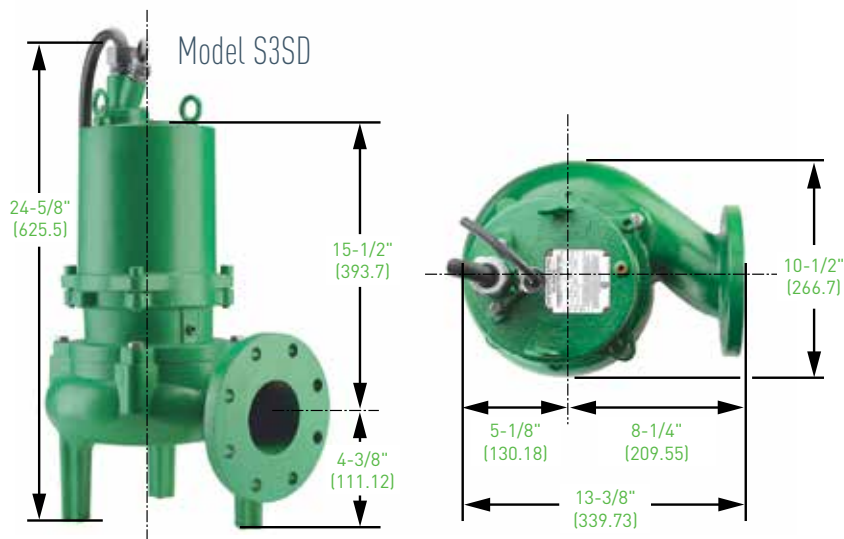
Pumps Characteristics

Pump/Motor Unit	Submersible-Sewage Ejector	
Phase	1 Ø	3 Ø
Voltage	208/230	208/230/460/575
Horsepower	1, 2, 3 & 5	2, 3, 5 & 7.5
Motor Type	Oil Cooled Induction 1 Ø = Capacitor Start	
RPM	1750/1150	
Temperature	140° F Ambient	
Operation	Intermediate	
Hertz	60 Hz	
Thermal Overload	Bi-Metallic	
Temperature	Maximum Water 140° F	
NEMA Design	Type B (3 Ø)	Type L (1 Ø)
Insulation	Class F	
Discharge Size	3" Flanged/4" Flanged	
NPT or Flanged	3"/4"	
Unit Weight	180 lbs.	
Power Cord	SOOW or W Water Resistant 600V, 90° C CSA Approved 35' Ft. Std.	

Materials of Construction

Description	Material of Construction
Motor Housing	Cast Iron ASTM-48, Class 30
Pump Casing	Cast Iron ASTM-48, Class 30
Coolant/Lubricant	Dielectric Oil
Shaft	Stainless Steel
Mechanical Shaft Seal	Seal Faces: Carbon/Ceramic Seal Body: Stainless Steel Spring: Stainless Steel Bellows: Buna-N
Impeller	Two-Vane Semiopen Cast Iron
Upper Bearing	Single Row Ball Bearing
Lower Bearing	Single Row Ball Bearing
Fasteners	Stainless Steel

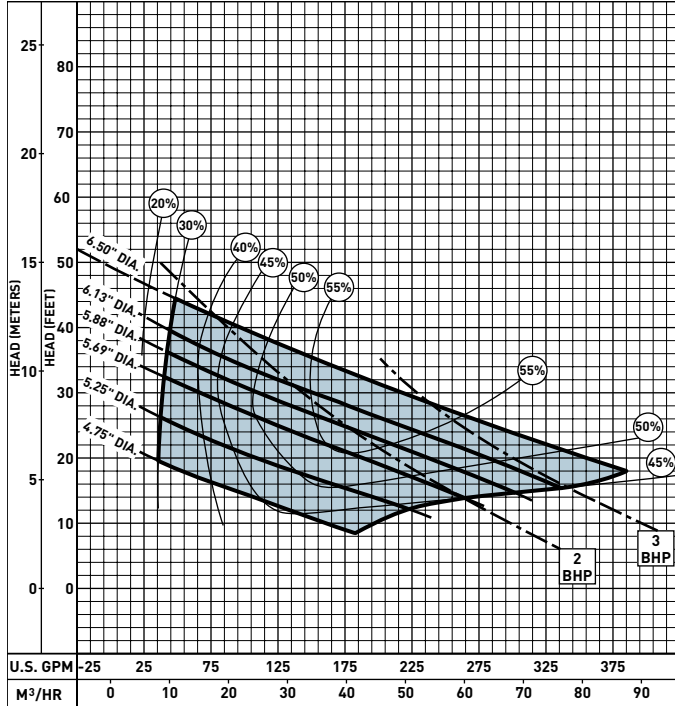
Dimensional Data



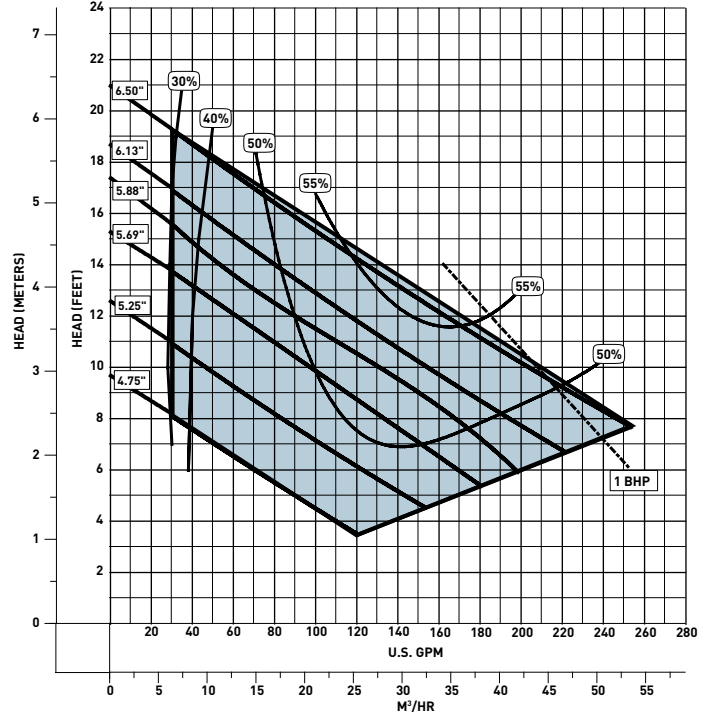
All dimensions in inches (mm). Metric for international use. Component dimensions may vary $\pm 1/8$ inch. Dimensional data not for construction purpose unless certified. Dimensions and weights are approximate. On/Off level adjustable. We reserve the right to make revisions to our product (s) and the product (s) specifications without notice.

Range Charts

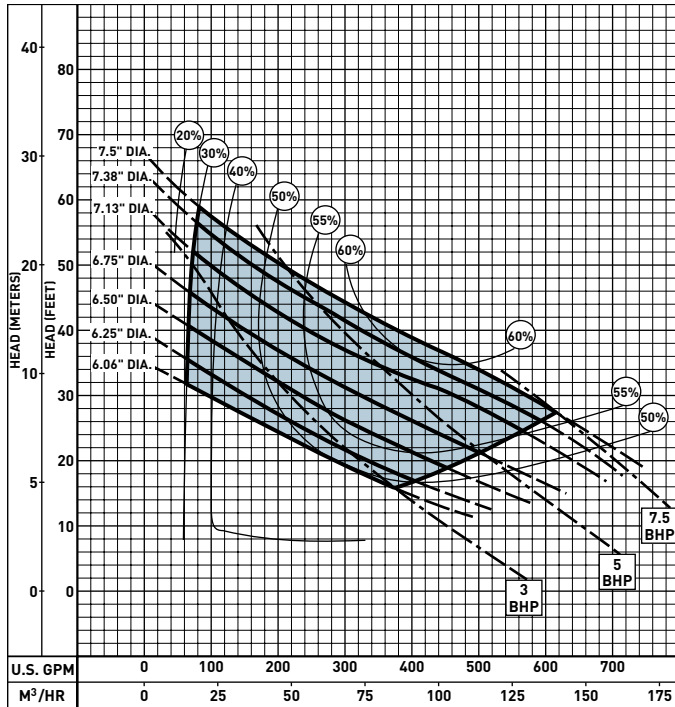
1750 RPM – Model S3SD/SB3SD



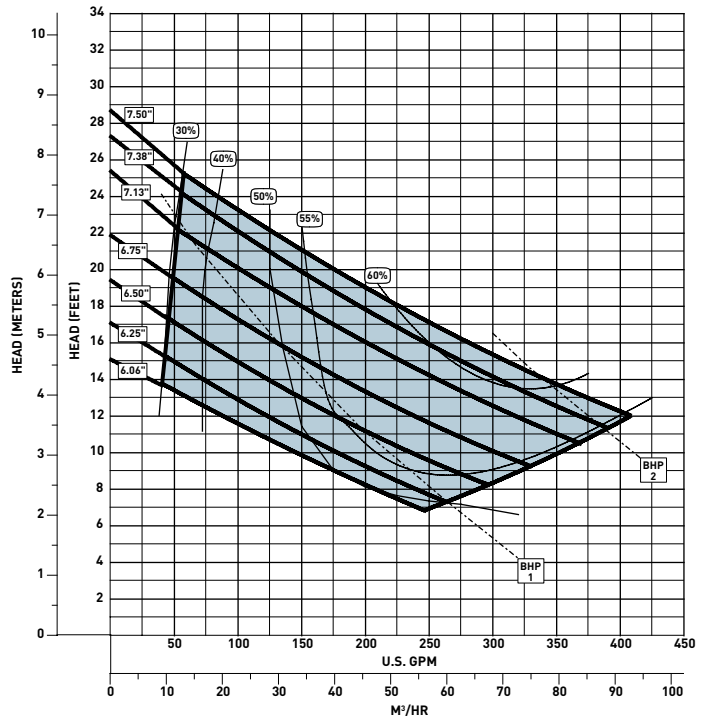
1150 RPM – Model S3SD/SB3SD



1750 RPM – Model S4SD/SB4SD



1150 RPM – Model S4SD/SB4SD



Order A Complete System

The Complete System

A complete system from Hydromatic® would include a dual seal pump, Hydromatic control panel, level controls, and rail system. For more information, please contact your local distributor or the Hydromatic sales office in Ashland, Ohio at 419-289-3042.



S4SD Sewage Pump



Control Panel



3900 Level Control Switch



Metal-to-Metal (M-T-M)
Rail System Shown



740 EAST 9TH STREET,
ASHLAND, OHIO 44805
WWW.HYDRAMATIC.COM

269 TRILLIUM DRIVE, KITCHENER,
ONTARIO, CANADA N2G 4W5
WWW.HYDRAMATIC.COM

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