



SPD100H Shown

# HYDROMATIC<sup>®</sup> SPD50H/100H SUBMERSIBLE EFFLUENT PUMP

Septic Tank Effluent • High-Capacity Sump • High-Head Dewatering

# SPD50H/100H Submersible Effluent Pump



SPD100H

The Hydromatic SPD50H/100H submersible pumps are specifically designed to meet the demands of septic tank effluent applications that require a “high-head”, dual-seal pump. The SPD50H has a powerful 1/2 horsepower motor, while the SPD100H comes with a 1 horsepower motor. Both pumps are standard 2 inch NPT discharge pumps, with 3 inch versions optional, and available in automatic and manual configurations. The SPD50H can handle capacities up to 110 gallons per minute and heads to 50 feet, while the SPD100H handles capacities up to 140 gallons per minute and heads to 63 feet.

These pumps feature a high-quality cast iron pump volute, motor housing and seal housing construction that help to ensure a long service life. The pump’s non-clogging, two-vane, cast iron impeller, which is threaded to a stainless steel shaft, is capable of handling up to 3/4 inch spherical solids – providing long life in demanding applications. A seal-failure sensor probe (for connection to a seal failure alarm) is standard on three-phase units and available as an option on single-phase models. Two carbon- and ceramic-faced mechanical shaft seals are mounted in tandem to provide double protection against water entry for a long, leakproof life.

The SPD50H/100H’s oil-filled motor provides superior cooling characteristics, allowing the motor to run cool and quiet for years. This oil-filled design also provides permanent lubrication of the shaft bearings, minimizing maintenance and extending the service life of the pump. In addition, to protect against overheating, the motor windings contain an automatic reset thermal overload protection located in the accessory control panel.

Automatic models (1/2 HP) feature the exclusive Hydromatic diaphragm pressure switch, which provides proven reliability in installations where a float might hang up. It also incorporates a unique piggyback plug arrangement, which allows for simple conversion to manual operation by simply removing the switch plug and inserting the motor plug directly into the electrical outlet.

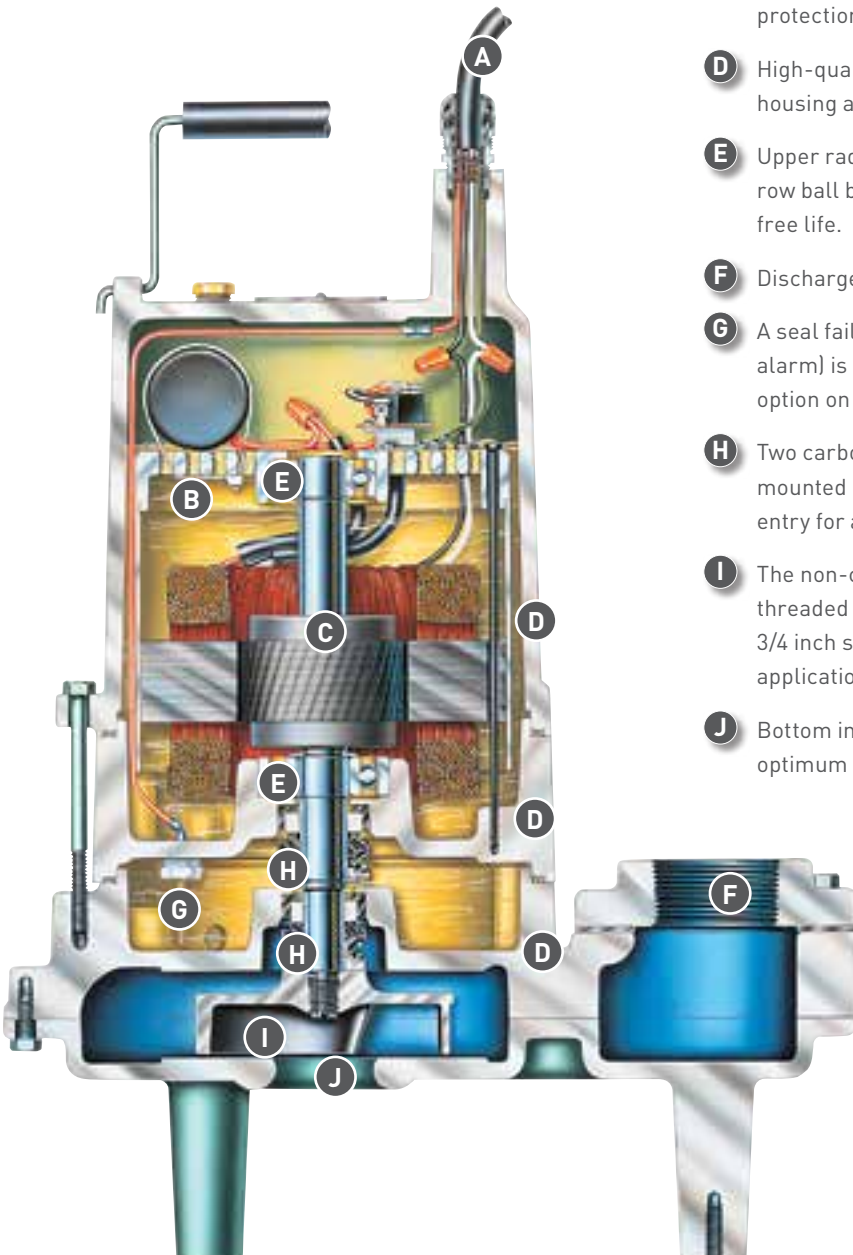


SPD50H

# SPD50H/100H

The SPD50H/100H are completely submersible, "high-head", dual-seal pumps for use in septic tank effluent applications.

Automatic models (1/2 HP) feature the exclusive Hydromatic diaphragm pressure switch with piggyback plug-in arrangement. Proven reliability for automatic operation in installations where a float might hang up. Switch is easily serviced and may be disconnected for manual operation.



- A** Water-resistant power cord has a compression-fit connection and an epoxy potting for double protection against water entry. Lengths of 10 and 20 feet are available with molded plugs, depending on model variations..
- B** Oil-filled motor provides superior cooling and permanent lubrication of bearings, minimizing maintenance and extending service life.
- C** 1/2 or 1 HP capacitor-start motors provide maximum starting torque. Motor windings contain automatic thermal overload protection (1Ø).
- D** High-quality cast iron construction of pump volute, motor housing and seal housing provides long life.
- E** Upper radial- and lower thrust bearings are heavy-duty, single-row ball bearings that are permanently lubricated for service-free life.
- F** Discharge is standard 2 inch NPT (3 inch is optional).
- G** A seal failure sensor probe (for connection to a seal failure alarm) is standard on three-phase units and available as an option on single-phase models.
- H** Two carbon- and ceramic-faced mechanical shaft seals are mounted in tandem to provide double protection against water entry for a long, leakproof life.
- I** The non-clogging, two-vane, cast iron impeller, which is threaded to a stainless steel shaft, efficiently handles up to 3/4 inch spherical solids – providing long life in demanding applications.
- J** Bottom inlet has no screen to become clogged, providing optimum pump performance and minimal maintenance.

# SP50

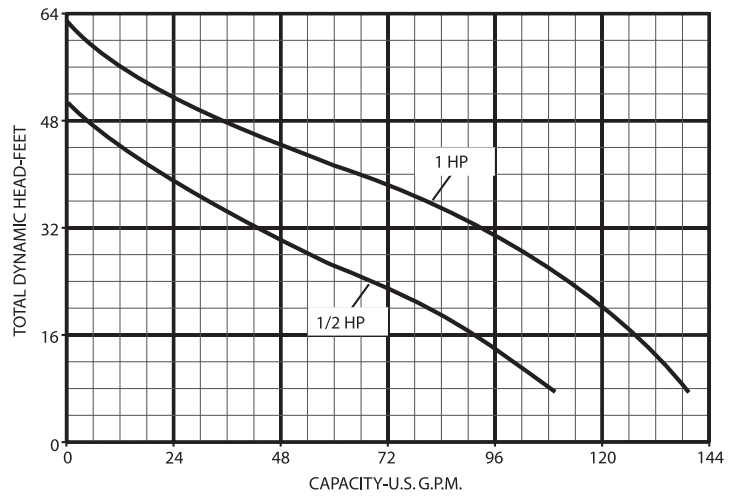
## PUMP CHARACTERISTICS

Pump/Motor Unit	Submersible				
Manual Models (50)	MH1	MH2	MH6	MH4	MH5
Automatic Models	AH1	AH2	-	-	-
Horsepower	1/2				
Full Load Amps	14.0	7.0	4.0	1.8	1.5
Motor Type	Capacitor Start			Three-Phase	
R.P.M.	3450				
Phase Ø	1		3		
Voltage	115	230	200	460	575
Manual Models (100)	MH2	MH6	MH3	MH4	M5
Automatic Models	AH2	-	-	-	-
Horsepower	1				
Full Load Amps	9.9	5.5	5.2	2.5	1.5
Motor Type	Cap. Three-Phase				
R.P.M.	3450				
Phase Ø	1		3		
Voltage	230	200	230	460	575
Hertz	60				
Operation	Intermittent				
Temperature	140°F Max Fluid Temp.				
NEMA Design	B				
Insulation	Class B				
Discharge Size	2" NPT (3" opt.)				
Solids Handling	3/4"				
Unit Weight	73 lbs.				
Power Cord: SPD50H 14/3, SJTW-A, 1Ø, 115V=10' std. (20' opt.)-14/4, STW-A, 1Ø, 115V=10' (20' opt.)-16/3, STW-A, 1Ø, 230V=20' std.-16/4, STW-A, 1Ø, 230V=20' std. SPD100H 16/3, STW-A, 1Ø, 230V=20' std.-16/4, STW-A, 1Ø, 230V=20' std.-18/5, STW-A, 3Ø, 200V, 230V, 460V or 575V=20' std.					

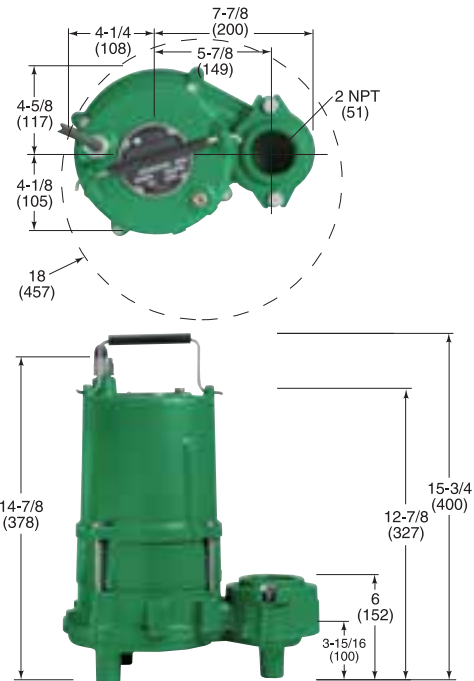
## MATERIALS OF CONSTRUCTION

Handle	Steel
Lubricating Oil	Dielectric Oil
Motor Housing	Cast Iron
Seal Housing	Cast Iron
Pump Casing	Cast Iron
Shaft	Stainless Steel
Mechanical Shaft Seal	Seal Faces: Carbon/Ceramic Seal Body: Brass Spring: Stainless Steel Bellows: Buna-N
Impeller	Cast Iron
Upper Bearing	Single Row Ball Bearing
Lower Bearing	Single Row Ball Bearing
Base	Cast Iron
Fastener	Stainless Steel

## PERFORMANCE DATA



## DIMENSIONAL DATA



All dimensions in inches. 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.



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