PENTAIR



SHEF100 Shown

HYDROMATIC® SHEF50/100 SUBMERSIBLE HIGH HEAD EFFLUENT PUMPS

WWW.HYDROMATIC.COM

SHEF50/100
Submersible High Head Effluent Pumps

Applications:

- Septic Tank Effluent
- High Head Sump
- Dewatering

SHEF100 Features:

- 1 HP
- 208-230 voltage (1ø) 208-230/460, 575 voltage (3ø)
- 2" discharge
- 3/4" solids handling
- Capacities to 87 GPM
- Heads to 90 feet
- Automatic or manual models

SHEF50 Features:

- 1/2 HP
- 115/208-230 dual voltage (1ø) 208-230/460, 575 voltage (3ø)
- 2" discharge
- 3/4" solids handling
- Capacities to 63 GPM
- Heads to 63 feet
- Automatic or manual models



SHEF100 Shown



SHEF50 Shown

The HYDROMATIC® SHEF50/100 submersible pumps are specifically designed to meet the demands of residential high head septic tank effluent or sump applications. The 2 inch NPT discharge pumps feature an energy-efficient 1/2 or 1 horsepower motor, automatic and manual versions, and a wide variety of voltages including dual voltage 208-230 volt single and three phase. The SHEF50 can handle capacities up to 63 gallons per minute and heads to 63 feet. The SHEF100 can handle capacities up to 87 gallons per minute and heads to 90 feet.

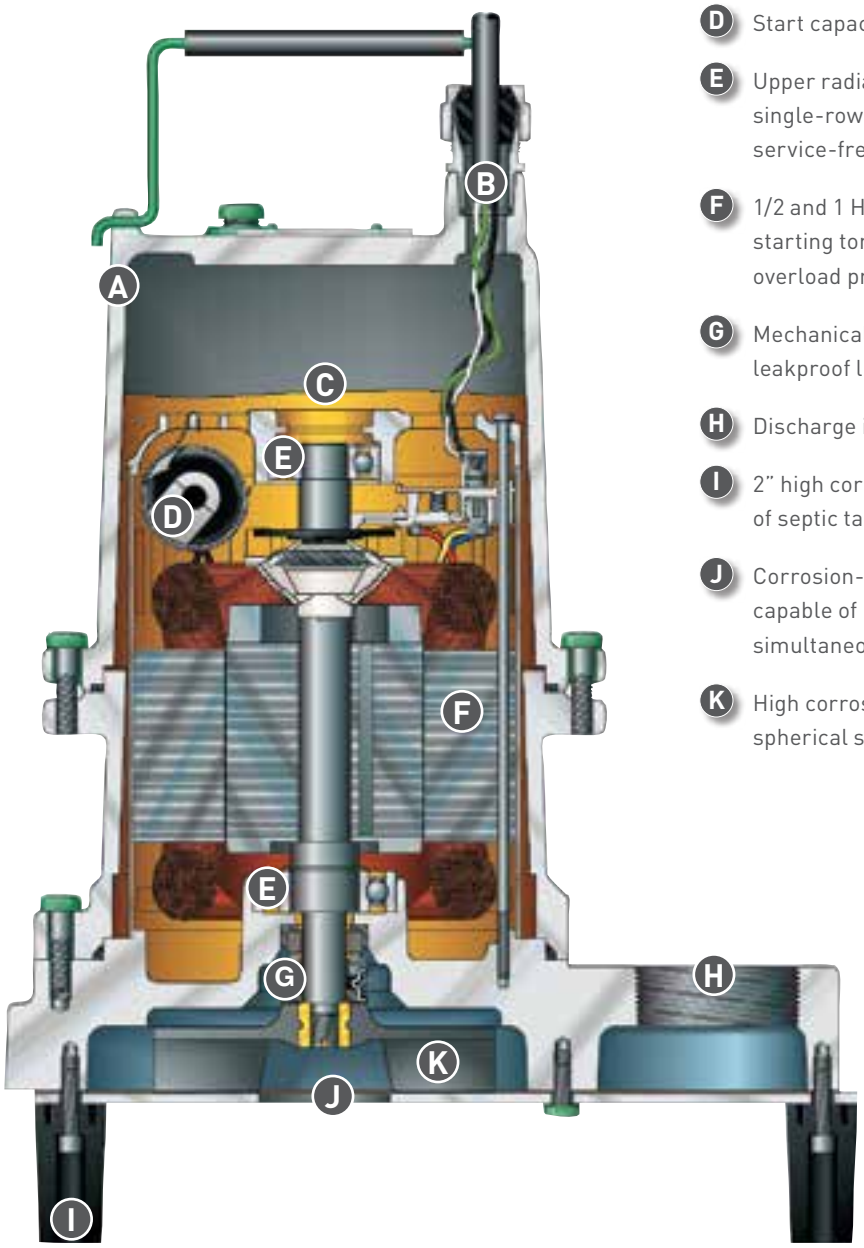
The SHEF50/100 features a heavy-duty cast iron construction that provides durability for a long service life, as well as dissipating heat from the motor for cooler operation. All fasteners are stainless steel for corrosion resistance. The pump's semiopen, nonclog design impeller passes 3/4" (spherical) solids and is made from a super tough engineered plastic that provides the highest level of corrosion resistance and the toughness to withstand the impact of solid materials. The impeller, molded to a bronze insert, also features pump-out vanes to preclude material from building up around the shaft and seal. The pump's unique (patent pending) nonclog design baseplate has an electrostatically applied polyester coating for corrosion resistance and provides a strainer-free inlet capable of passing two (2), 3/4" (spherical) solids simultaneously. The inlet area is raised off the bottom of the septic tank or sump basin by the pump's 2" high legs constructed of engineered thermoplastic material for maximum corrosion resistance.

The SHEF50/100's oil-filled motor provides superior cooling characteristics, allowing the motor to run cool and quiet. The oil-filled design also provides permanent lubrication of the shaft bearings, minimizing maintenance and extending the service life of the pump. The oil-filled motor design allows for even heat dissipation. On single phase models the windings feature a built-in thermal overload that resets automatically.

Automatic models feature an easily adjustable wide-angle float switch, incorporating a unique piggyback plug arrangement. This plug allows for simple conversion to manual operation by simply removing the switch plug and inserting the pump's motor plug into the electrical outlet. This feature provides an easy way of periodically cycling the pump to ensure it is operating properly.

SHEF50/100

The SHEF50/100 are completely submersible "high head" pumps for use in residential septic tank effluent pumping applications and are available in automatic and manual configuration. Automatic models feature a wide-angle float switch with piggyback plug-in arrangements. Switch is adjustable, easy to service and allows for simple conversion to manual operations.



- **A** High quality cast iron construction of pump volute, motor housing and seal housing provides long life.
- **B** Water resistant power cord has a compression fit connection and an epoxy potting for double protection against water entry. Lengths of 20 and 30 feet are available with molded plugs, depending on model variations.
- **C** Oil-filled motor provides superior cooling and permanent lubrication of bearings, minimizing maintenance and extending service life.
- **D** Start capacitor 1ø models only.
- **E** Upper radial- and lower thrust bearings are heavy-duty, single-row ball bearings that are permanently lubricated for service-free life.
- **F** 1/2 and 1 HP capacitor-start (1ø) motors provide maximum starting torque. Motor windings contain automatic thermal overload protection (1ø).
- **G** Mechanical shaft seal is carbon and ceramic-faced for long leakproof life.
- **H** Discharge is standard 2" NPT.
- **I** 2" high corrosion-resistant legs raise pump's inlet from bottom of septic tank pump chamber.
- **J** Corrosion-resistant, nonclog base with strainer-free inlet capable of passing two (2), 3/4" diameter spherical solids simultaneously.
- **K** High corrosion-resistant, nonclog impeller passes two (2), 3/4" spherical solids.

SHEF50/100

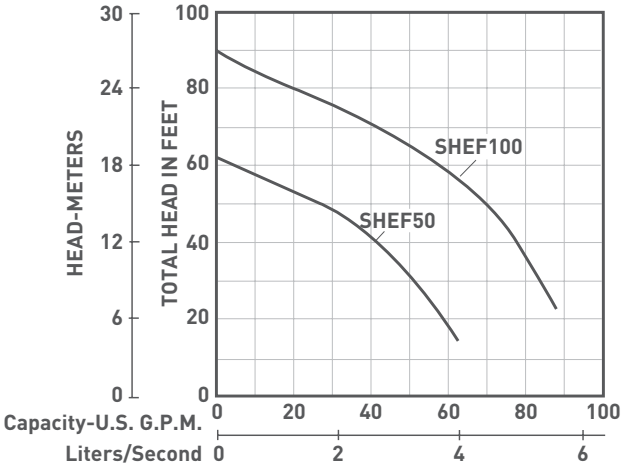
PUMP CHARACTERISTICS

Pump/Motor Unit	Submersible				
Manual Models (50)	M1	M2	M3	M4	M5
Automatic Models	A1	A2	-	-	-
Horsepower	1/2				
Full Load Amps	14.5	7.6/7.1	3.2/3.1	1.6	1.2
Motor Type	Capacitor Start				
R.P.M.	3450				
Phase Ø	1 Ø		3 Ø		
Voltage	115	208-230	208-230	460	575
Manual Models (100)		M2	M3	M4	M5
Automatic Models		A2	-	-	-
Horsepower	1				
Full Load Amps	13.6/12.1		6.0/5.8	2.8	1.9
Motor Type	Capacitor Start		3 Ø		
R.P.M.	3450				
Phase Ø	1 Ø		3 Ø		
Voltage	208-230		208-230	460	575
Hertz	60				
Temperature	140°F Max Fluid Temp.				
NEMA Design	L		B		
Insulation	Class B				
Discharge Size	2" NPT std.				
Solids Handling	3/4"				
Unit Weight	58 lbs. (50)		65 lbs. (100)		
Power Cord	115V, 14/3, SJTW-A; 230V, 1ø, 16/3 SWT-A; 3ø, 16/4, STW-A, All cords 20' std. with 30' opt.				

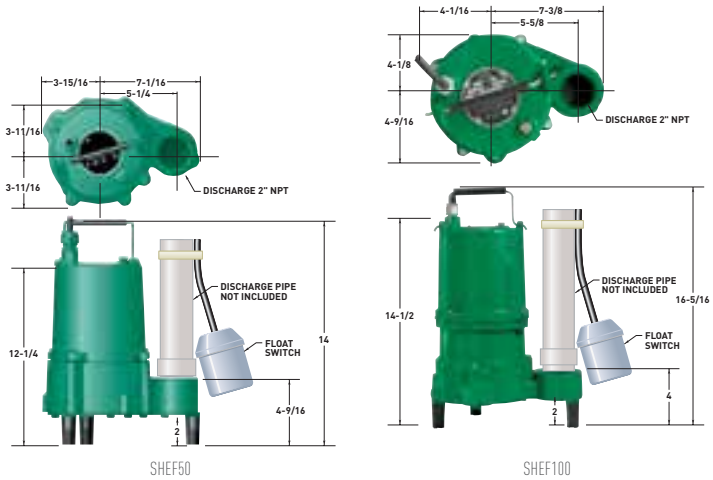
MATERIALS OF CONSTRUCTION

Handle	Stainless Steel
Lubricating Oil	Dielectric Oil
Motor 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	Engineered Thermoplastic
Upper Bearing	Single Row Ball Bearing
Lower Bearing	Single Row Ball Bearing
Bottom Plate	Single Row Ball Bearing
Fasteners	Stainless Steel
Legs	Engineered Thermoplastic

PERFORMANCE DATA



DIMENSIONAL DATA



SHEF50 SHEF100

All dimensions in inches. Metric for international use. Component dimensions may vary ± 1/8 inch.
Dimensional data not for construction purpose unless certified. Dimensions and weights are approximate.
On/Off level adjustable.

PENTAIR

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