



HYDROMATIC[®] SP50 SUBMERSIBLE SEWAGE EJECTOR PUMP

SP50

Submersible Sewage Ejector Pump

Applications

- Continuous Duty Rated
- Residential Sewage
- High-Capacity Sump
- Septic Tank Effluent



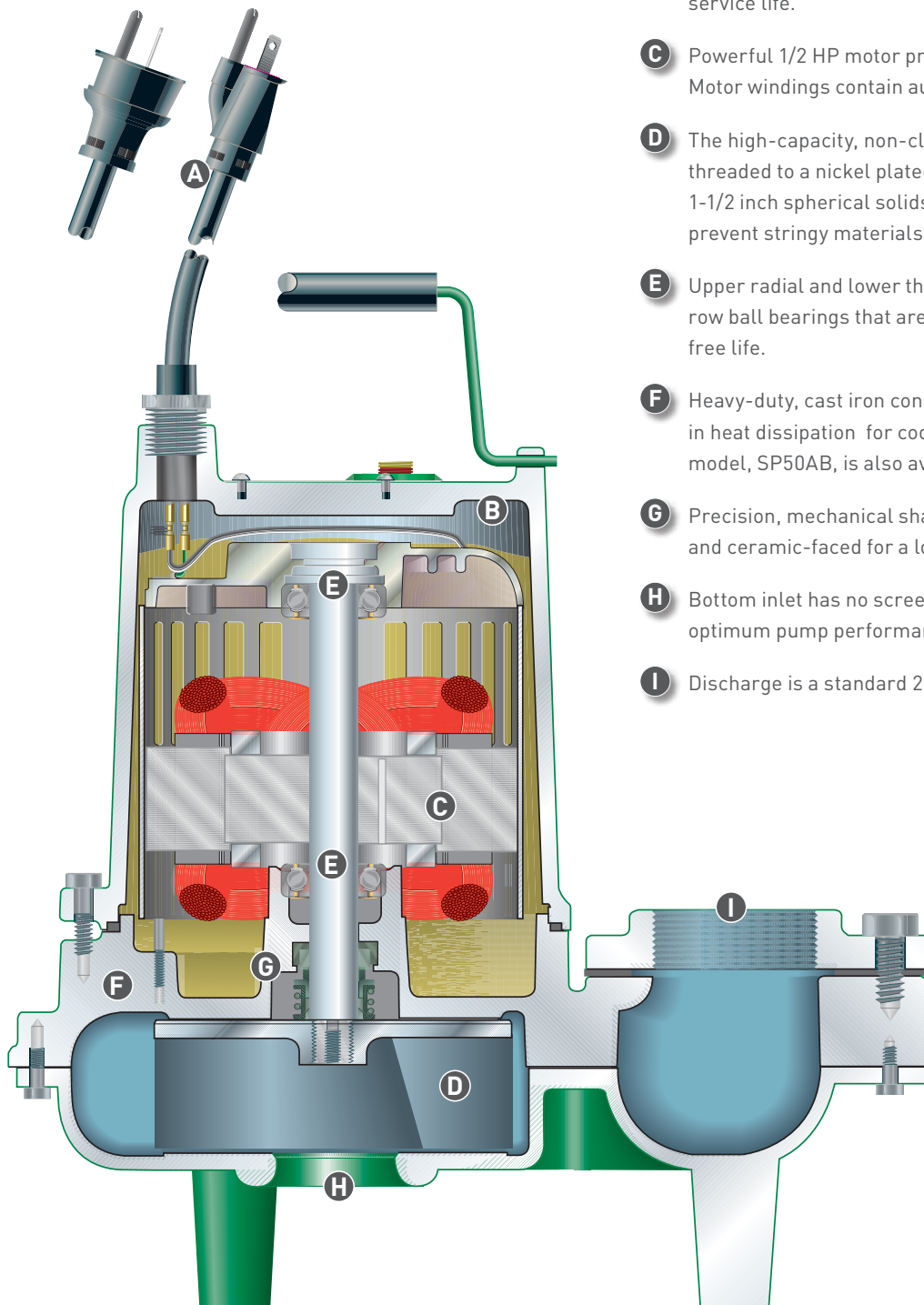
The Hydromatic SP50 submersible pump is specifically designed to meet the demands of handling wastewater and sewage in residential and commercial building applications. The 2 inch NPT discharge pump (3 inch discharge optional) is available with a powerful 1/2 horsepower motor, in both automatic and manual configurations; and can handle capacities up to 150 gallons per minute and heads to 29 feet.

The SP50 features a heavy-duty cast iron construction that provides durability in rugged applications, as well as assists in dissipating heat from the motor, for cooler operation. It is also available in an all bronze model. The pump's non-clog, non-corrosive, cast iron impeller, which is threaded to a nickel plated steel shaft, provides long life even in demanding applications; and is capable of handling spherical solids up to 1-1/2 inches and lint. The SP50 also features precision, carbon and ceramic-faced mechanical shaft seals that are extensively lapped, providing for a long, leakproof life.

The SP50'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 (1 Ø).

Water level is controlled on automatic models by Hydromatic's proven diaphragm type pressure switch, which is sealed in a water tight thermoplastic housing. Double diaphragm construction provides added protection by preventing liquid or foreign matter from entering switch.

SP50



- A** Water-resistant power cord with molded plug is available in 10 or 20 foot lengths, and is easily field serviceable.
- B** Oil-filled motor provides superior cooling and permanent lubrication of bearings minimizing maintenance and extending service life.
- C** Powerful 1/2 HP motor provides cool and quiet operation. Motor windings contain automatic thermal overload protection.
- D** The high-capacity, non-clog, cast iron impeller, which is threaded to a nickel plated steel shaft, efficiently handles up to 1-1/2 inch spherical solids. Pump-out vanes on back of impeller prevent stringy materials from binding impeller or shaft.
- E** Upper radial and lower thrust bearings are heavy-duty, single-row ball bearings that are permanently lubricated for service-free life.
- F** Heavy-duty, cast iron construction provides long life and assists in heat dissipation for cooler motor operation. All-bronze model, SP50AB, is also available.
- G** Precision, mechanical shaft seal is extensively-lapped, carbon and ceramic-faced for a long leakproof life.
- H** Bottom inlet has no screen to become clogged, providing optimum pump performance and minimal maintenance.
- I** Discharge is a standard 2 inch NPT (3 inch is optional).

SP50

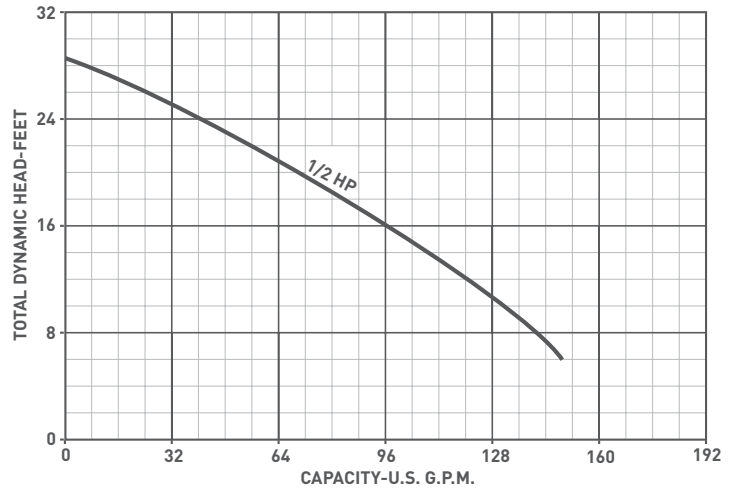
PUMP CHARACTERISTICS

| Pump/Motor Unit | Submersible | | | | | | |
|--------------------|---|-----|-----|-------------|-----|-----|-----|
| Manual Models | M1 | M7 | M2 | M6 | M3 | M4 | M5 |
| Automatic Models | A1 | - | A2 | - | - | - | - |
| Automatic All Brz. | AB1 | - | - | - | - | - | - |
| Horsepower | 1/2 | | | | | | |
| Full Load Amps | 12.0 | 5.7 | 6.0 | 4.1 | 3.5 | 1.9 | 1.4 |
| Motor Type | Split-Phase | | | Three-Phase | | | |
| R.P.M. | 1750 | | | | | | |
| Phase Ø | 1 | | | 3 | | | |
| Voltage | 115 | 200 | 230 | 200 | 230 | 460 | 575 |
| Hertz | 60 | | | | | | |
| Temperature | 140°F Ambient | | | | | | |
| NEMA Design | A | | | | | | |
| Insulation | Class B | | | | | | |
| Discharge Size | 2" NPT std. (3" opt.) | | | | | | |
| Solids Handling | 1-1/2" | | | | | | |
| Unit Weight | 70 lbs. (SP50AB1 77 lbs.) | | | | | | |
| Power Cord | 16/3, STWA, 1Ø 115V, 230V=10' std. (20' optional) 16/4, STWA, 3Ø 200V, 230V, 460V, or 575V = 20' std. | | | | | | |

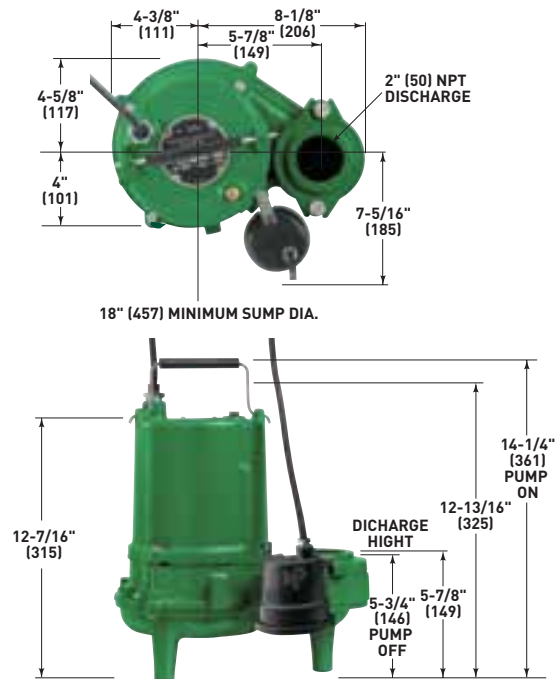
MATERIALS OF CONSTRUCTION

| | |
|-----------------------|--|
| Handle | Steel |
| Lubricating Oil | Dielectric Oil |
| Motor Housing | Cast Iron* |
| Pump Casing | Cast Iron* |
| Shaft | Nickel Plated Steel |
| Mechanical Shaft Seal | Seal Faces: Carbon/Ceramic Seal Body: Brass Spring: Stainless Steel Bellows: Buna-N |
| Impeller | Cast Iron |
| Upper Bearing | Bronze Sleeve |
| Lower Bearing | Single Row Ball Bearing |
| 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.



USA
293 WRIGHT STREET, DELAVAN, WI 53115 WWW.HYDROMATIC.COM
PH: 888-957-8677 ORDERS FAX: 800-426-9446

CANADA
269 TRILLIUM DRIVE, KITCHENER, ONTARIO, CANADA N2G 4W5
PH: 519-896-2163 ORDERS FAX: 519-896-6337

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