

Series SM 909/959 Plastic AC Magnetically Driven Spherical Motor Centrifugal Pumps



Applications

Specifically designed for the following uses:

- Water Circulation
- Chiller Systems
- Liquid Transfer
- Ozone Treatment
- Saltwater and Freshwater Aquarium Circulation
- General Purpose Pumping

Specifications

Pump

- Max Capacities: 15 GPM
- Max Head: 20'
- Pipe Connections:
 - 3/4" and 1" Barb Suction and Discharge
 - 3/4" MPT Suction and Discharge
- Maximum Working Pressure: 50 PSI
- Maximum Temperature: 140° F
- Rotation: counter clockwise when viewed from the motor end

Motor

- AC Spherical Magnetically Driven Motor
- 115 or 230 Volt 65 Watts 60 Hz, 3450 RPM
- Automatic Overload Protection

Features

Compact Design

Close coupled, space saving design provides easy installation.

Mounting

Pump can be mounted horizontally or vertically with motor end down.

Motor Bracket

Integrated Thermoplastic motor bracket is adjustable to 4 different discharge angles.

Construction

Available in 316SS fitted thermoplastic or Titanium fitted thermoplastic.

Ceramic Bearing Ball and Carbon Bearing Cap

High density ceramic bearing ball and graphite impeller bearing cap designed for high efficiency and long life.

Impeller

Highly efficient and dynamically balanced with carbon bearing for smooth ultra quiet operation.

Casing

Casing is Thermoplastic Volute type construction.

Mechanical Seal

Unique patented design has no mechanical seal which is a potential leak path.

Motor

Patented spherical motor pump design is ultra quiet and is designed for continuous operation. All ratings are within working limits of the motor.

Noise level

Whisper quiet, less than 30 db

Weight

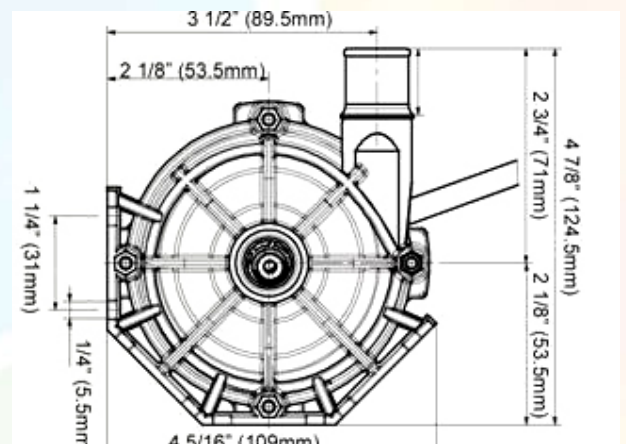
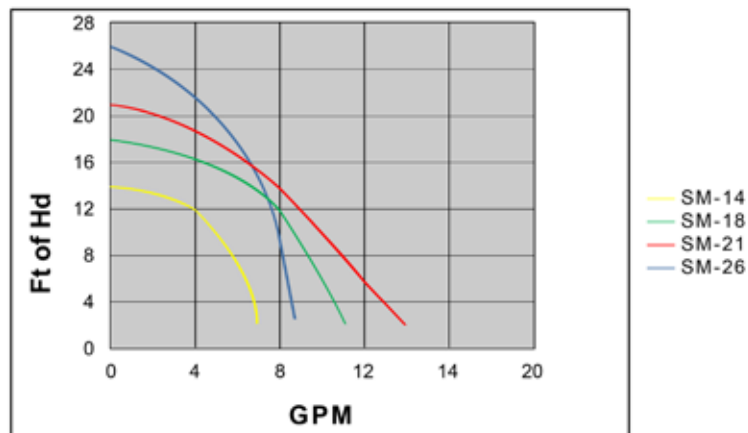
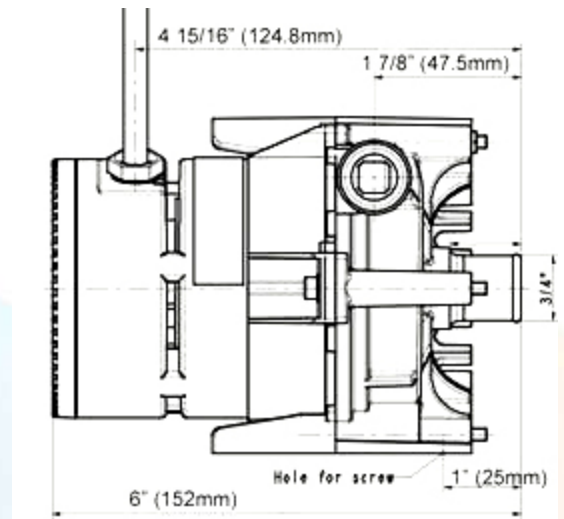
Lightweight construction weighs less than 5lbs.

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Materials of Construction (Wetted Parts)

Part	Materials
Pump Housing	Nylon/PPO
"O" Ring	EPDM or Viton
Impeller	Nylon/PPO
Bearing	Carbon/Allumina Ceramic
All Other Wetted Parts	316 Stainless Steel or Plastic



Laing Thermotech, Inc.

sm series spa circulation pumps

The leaders in spa circulation pumps and heaters for the past 20 years



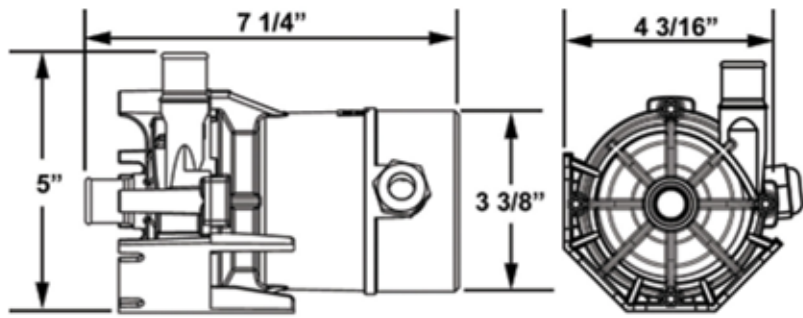
- spherical motor design
- self lubricating
- shaftless, sealless, & leakproof
- integrated mounting bracket
- whisper quiet
- compact design

Invented by Laing, the principle of the spherical motor is fundamentally different from conventional canned motor pumps. The single moving part in a spherical motor is a hemispherical rotor/impeller unit, which sits on an ultra-hard, wear-resistant ceramic sphere. There are no conventional shaft bearings or seals. This eliminates the possibility of bearing-play which is commonly associated with increased noise. These pumps are particularly robust and provide exceptionally long service life. The self-realigning bearing is lubricated and cooled by the fluid media. Maintenance is not necessary under normal conditions and even after lengthy shutdown periods a reliable start-up is virtually guaranteed. The parts exposed to the fluid are completely corrosion resistant and ensure safe application even with aggressive media.

LAING

simply the best • by design

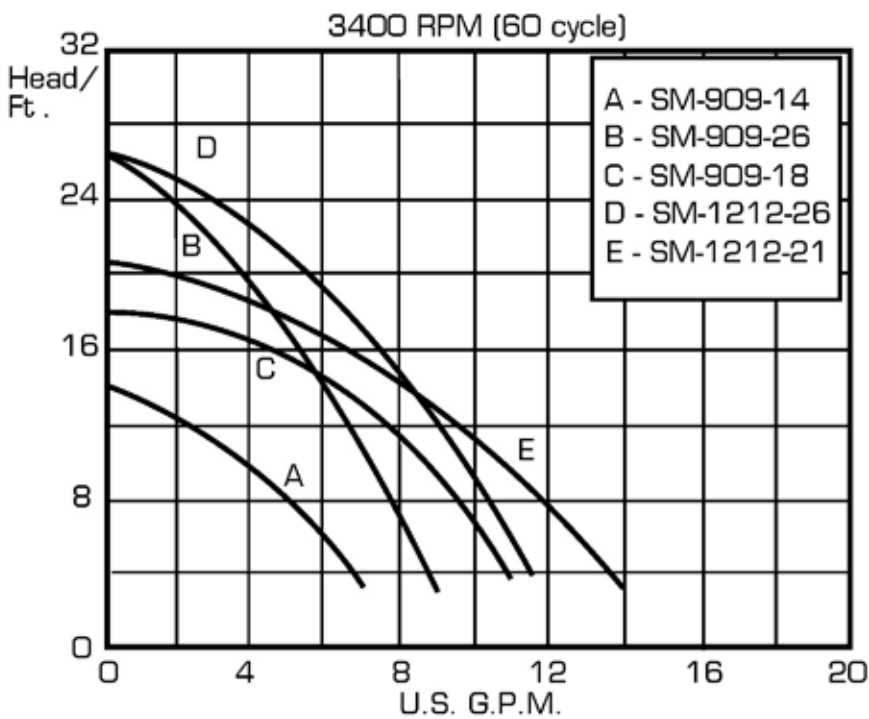
Dimension Drawing:



Exploded View:



Pump Curve:



Pump Models: 115V/60Hz (230V/60Hz and 230V/50Hz also avail.)

Model	HP	Inlet/Outlet	Watts	Amps	Max. Fluid Temp.	Max. Line Press.	Noise Level	Weight (lbs.)
SM-909-N-14	1/50	3/4" Hosebarb, 3/4" Male NPT	65	0.6	140F	50 PSI	30db	4.2
SM-909-N-18	1/20	3/4" Hosebarb, 3/4" Male NPT	98	0.9	140F	50 PSI	30db	4.2
SM-909-N-26	1/20	3/4" Hosebarb, 3/4" Male NPT	98	0.9	140F	50 PSI	30db	4.2
SM-1212-N-26	1/15	3/4" Hosebarb, 3/4" Male NPT	140	1.3	140F	50 PSI	30db	4.2
SM-1212-N-21	1/15	1" Hosebarb	140	1.3	140F	50 PSI	30db	4.2

* 1" Barb available on all models