

## 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

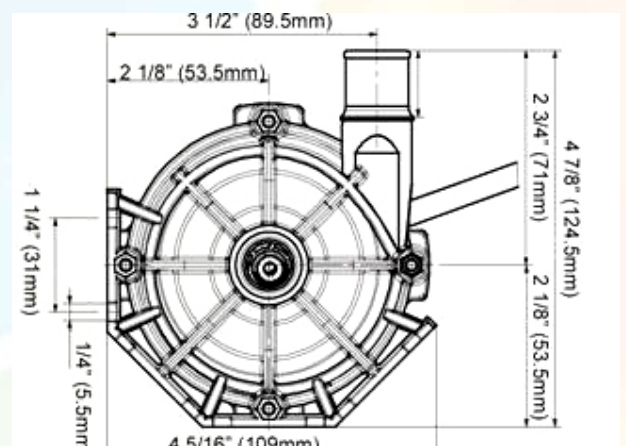
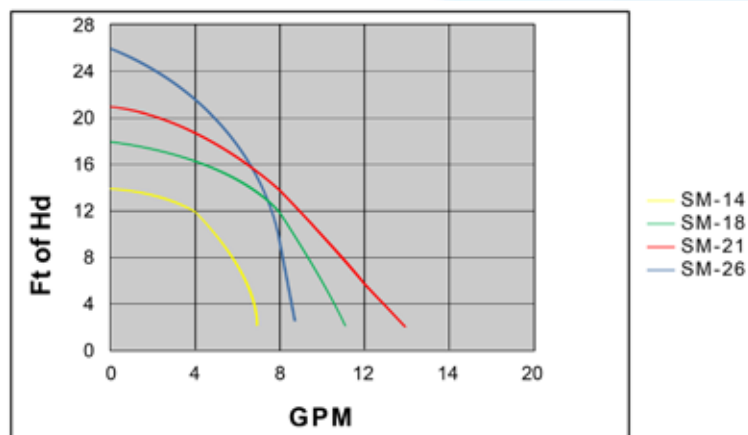
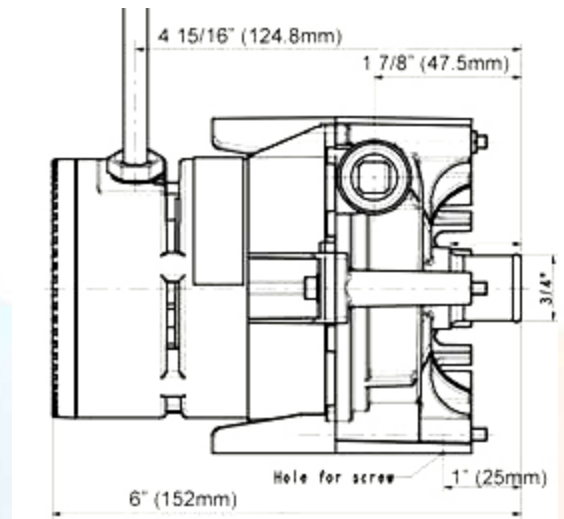
Lightweight construction weighs less than 5lbs.

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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



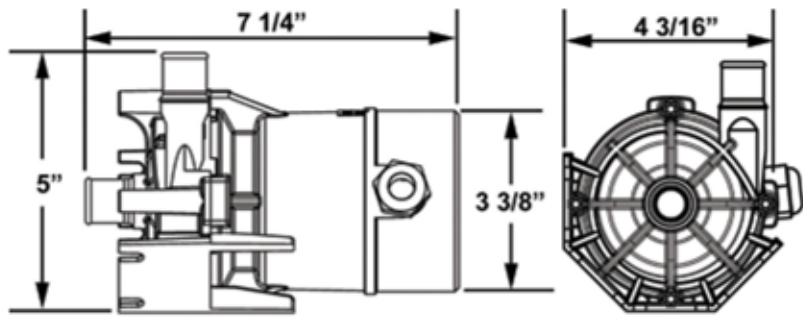
- spherical motor design
- self lubricating
- shaftless, sealless, & leakproof
- integrated mounting bracket
- whisper quiet
- compact design

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

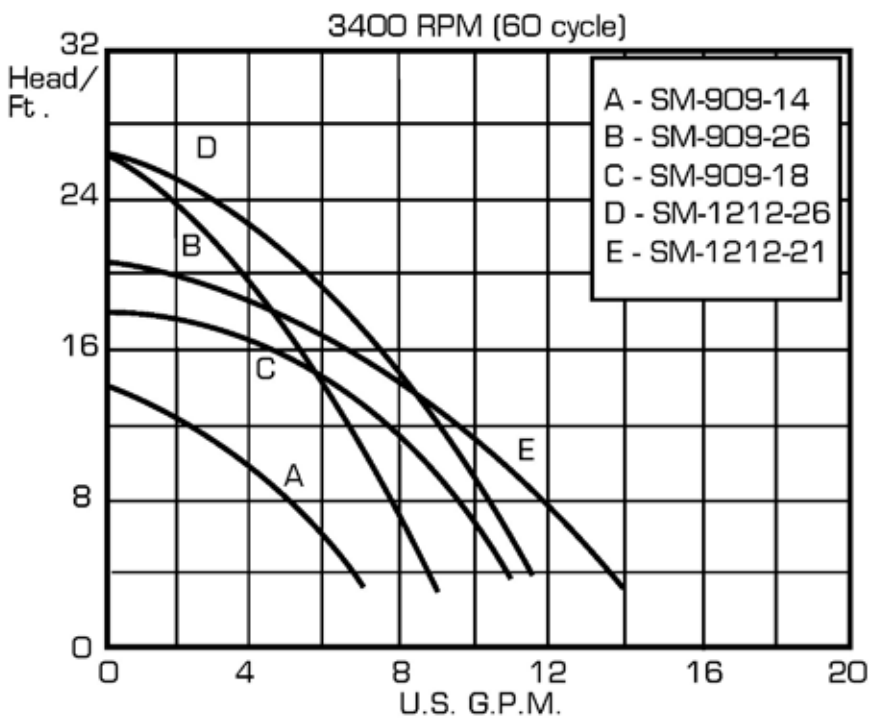
Dimension Drawing:



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