

# HIGH EFFICIENCY SEALLESS COOLANT PUMP (R-SERIES)

Sealless pump system for cooling applications



Moog's sealless magnetic pump is designed for pumping deionized water through mainframe computing systems for heat removal. In the designs, Moog integrated the rotor magnetics and the impeller into a single piece to both minimize the size of the pump and eliminate moving seals. This has resulted in pumps that are both physically smaller than existing pumps on the market and inherently cannot leak. These pumps are paving the way for the liquid cooled IT industry.

## Features:

- Leakproof
- Unique design that eliminates seals
- High efficiency
- Smallest footprint available in power range
- Integral brushless DC drive
- Wet rotor
- Three frame sizes
- 230/240 volt 50/60 Hz, 12 VDC and 48VDC operation. Other input voltages may also be accommodated
- Customizable interface
- Compatible with deionized water
- Hot-swap capability
- MOD bus or other communication options
- Special sensors available:
  - Dry pump sensor
  - Accelerometer
  - Current feedback
  - Temperature feedback



## ADVANTAGES

- High reliability
- Long life
- Robust, compact construction
- Proven technology
- Sealless
- Leakproof
- Adjustable speed

## APPLICATIONS

- Data center electronics cooling
- Chemical pumps
- Cryogenics
- Petrochemicals
- Pharmaceuticals and biotech
- Semiconductor manufacturing

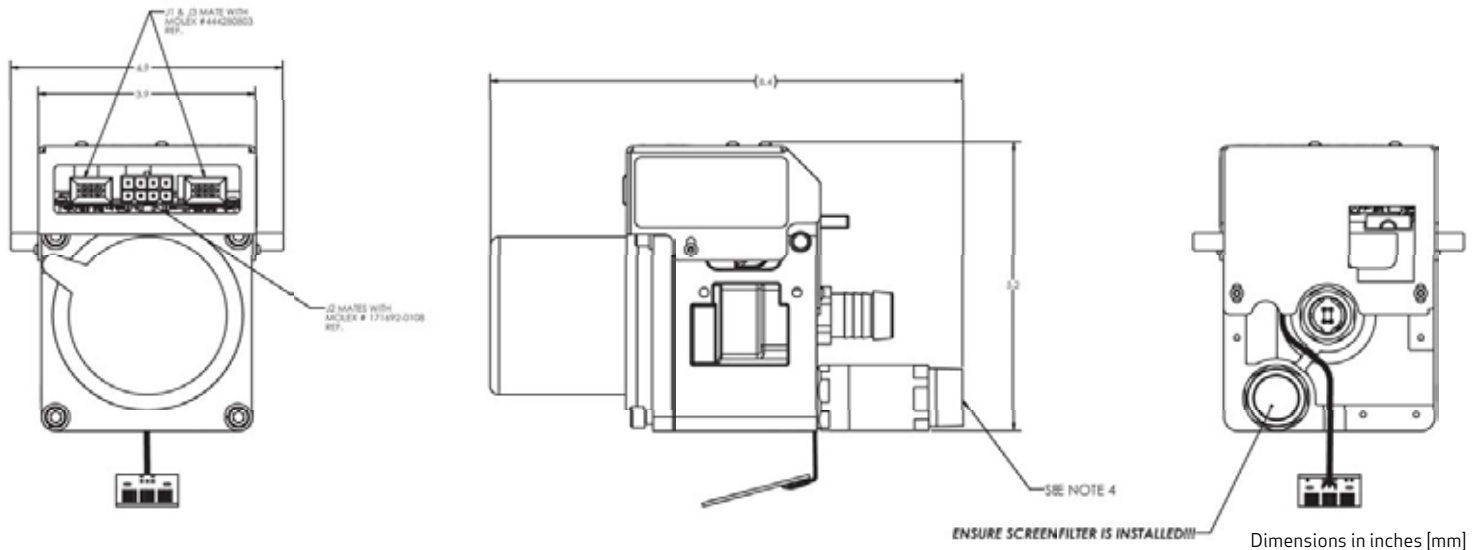
# SPECIFICATIONS

## TECHNICAL DATA

	RM-23	RM-30	RM-44	Notes
<b>Input voltage</b>	12 VDC	48 VDC	230/340 VAC	Customizable per application
<b>Power</b>	120 watts	480 watts		Based on average AMP draw at provided flow rates
<b>Variable speed</b>	1050 - 4200 rpm	1070 - 4300 rpm	1070 - 4300 rpm	Based on 25 - 100% safe operating range
<b>Temperature range</b>	Thermistor controlled	Thermistor controlled	Thermistor controlled	Customizable per application Typically programmed for auto shutoff @ 115 °C
<b>Certification</b>	CE / UL	CE / UL	CE / UL	
<b>Flow rate range (GPM)</b>	0.5 - 7	5 - 37	10 - 65	Min/max based on safe operating range
<b>Pressure range (IN PSI)</b>	10 - 16	12 - 26	35 - 65	Min/max based on safe operating range
<b>Input/output</b>	7/8 inch threaded connections	Typical applications: 1 inch - 1 1/2 NPT external  G1-6H BSPP external	Machined for flexible coupling with two O-ring grooves	Customizable per application

## TYPICAL OUTLINE DRAWING

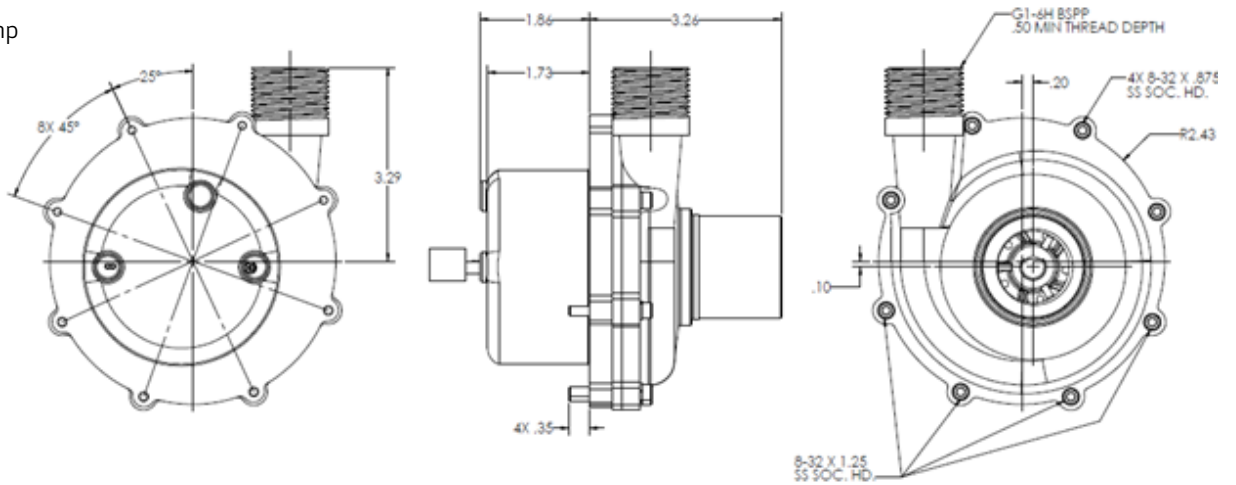
RM-23 Micro Pump



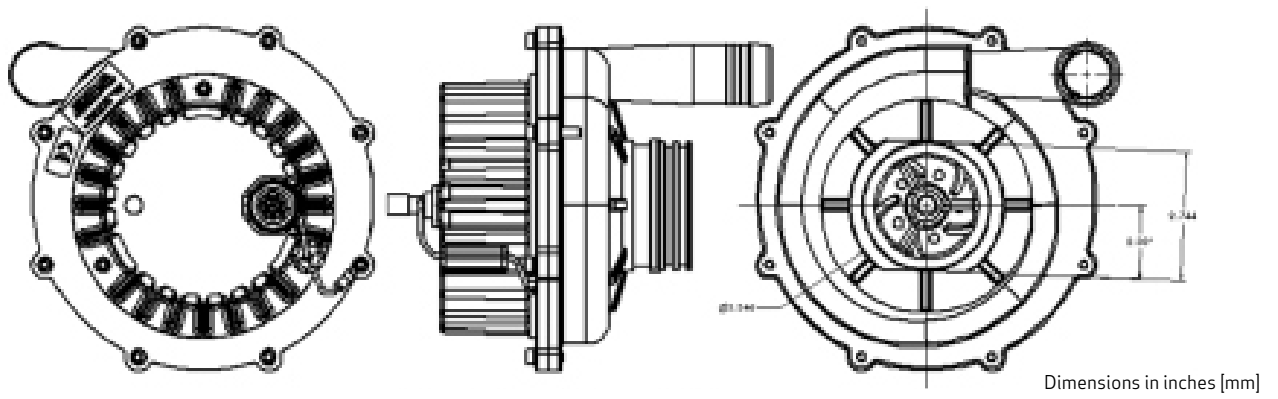
# SPECIFICATIONS

## TYPICAL OUTLINE DRAWING

RM-30 Mini Pump



RM-44 Mega Pump



For product information, visit [www.moog.com](http://www.moog.com)

For more information or the office nearest you, contact us online, [em-motioncontrol@moog.com](mailto:em-motioncontrol@moog.com)

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Moog High Efficiency Sealless Coolant Pump R-Series Technical Data Sheet  
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