

HIGH EFFICIENCY SEALLESS COOLANT PUMP (R-SERIES)

Sealless pump system for cooling applications



Moog's sealless magnetic pump is designed for pumping coolant through mainframe computing systems for heat removal. In the design, Moog integrated the rotor magnetics and the impeller into a single piece to both minimize the size of the pump and wearing seals. This has resulted in pumps that are more compact while reducing leak points. These pumps are paving the way for data center cooling solutions.

Features:

- Unique design that eliminates seals
- Compact footprint
 - High efficiency
 - High output
 - Direct drive integrated motor
- Customizable solution
 - Independent drive controller
 - Motor performance (speed / torque)
 - Adjustable speed
 - 230 / 240 volt 50 / 60 Hz, 12 VDC and 48 VDC operation - other input voltages may also be accommodated
 - Customizable interface
 - Three frame sizes
- Wet rotor
- Compatible with deionized water
- Hot-swap capability
- Multiple communication options
- Special sensors available:
 - Current feedback
 - Temperature feedback
 - Leak detection

ADVANTAGES

- Low maintenance
- High reliability
- Long life expectancy
- Robust, compact construction
- Sealless
- Adjustable speed
- Direct drive, integrated motor

APPLICATIONS

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



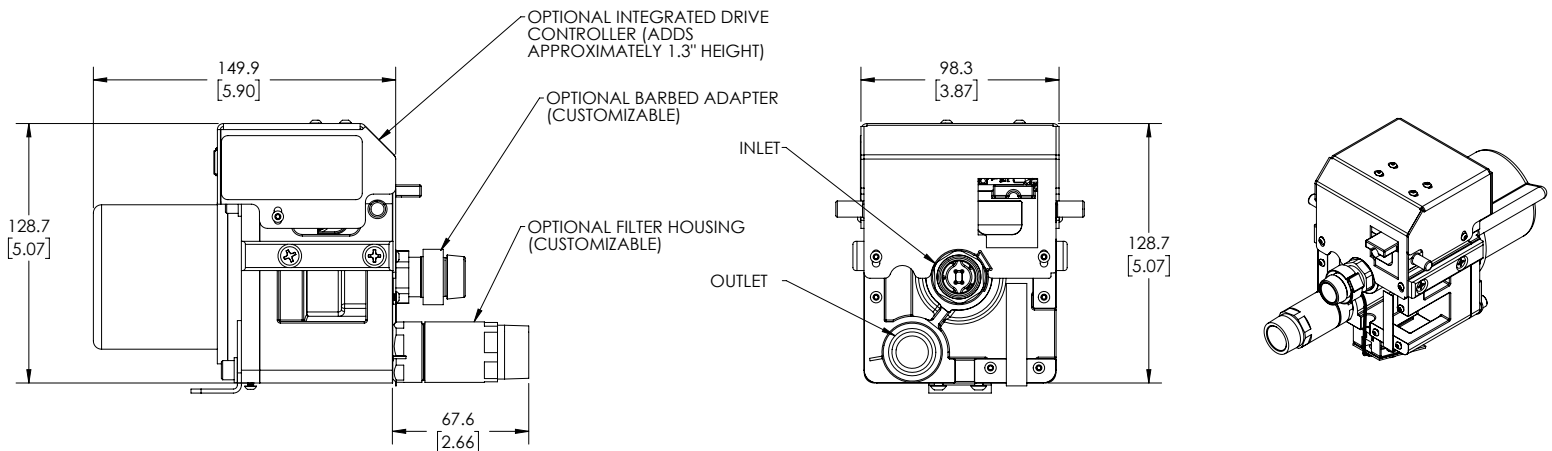
SPECIFICATIONS

TECHNICAL DATA

	RM-23	RM-30	RM-44	Notes
Input voltage	12 VDC	48 VDC	230 / 340 VAC	Customizable per application
Power	120 watts	480 watts	2,500 watts	Based on average AMP draw at provided flow rates
Variable speed	1,050 - 4,200 rpm	430 - 4,300 rpm	1,070 - 4,300 rpm	Based on 10 - 100% safe operating range Customizable rpm range based on application
Thermal safety	Thermistor controlled	Thermistor controlled	Thermistor controlled	Customizable per application Typically programmed for auto shutoff @ 125 °C
Certification	Contact factory			
Flow rate range (GPM)	0.5 - 7	5 - 37	10 - 65	Min./max. based on existing models
Pressure range (PSI)	10 - 16	12 - 26	35 - 65	Min./max. based on existing models
Inlet/outlet	22.22 mm [.875 in] threaded connections	Typical applications: 25.4 mm [1.0 in] - 292.1 mm [11.5 in] NPT external G1-6H BSPP external	Machined for flexible coupling with two O-ring grooves	Customizable per application

TYPICAL OUTLINE DRAWING

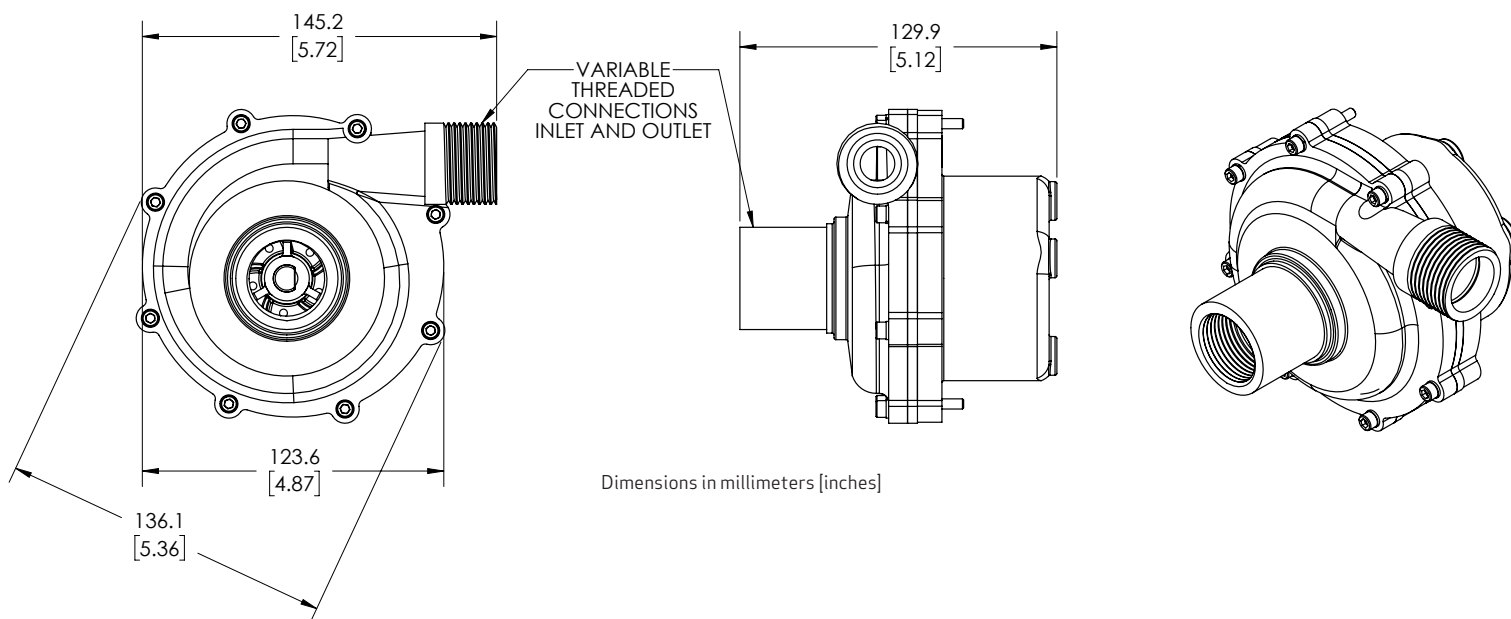
RM-23 Micro Pump



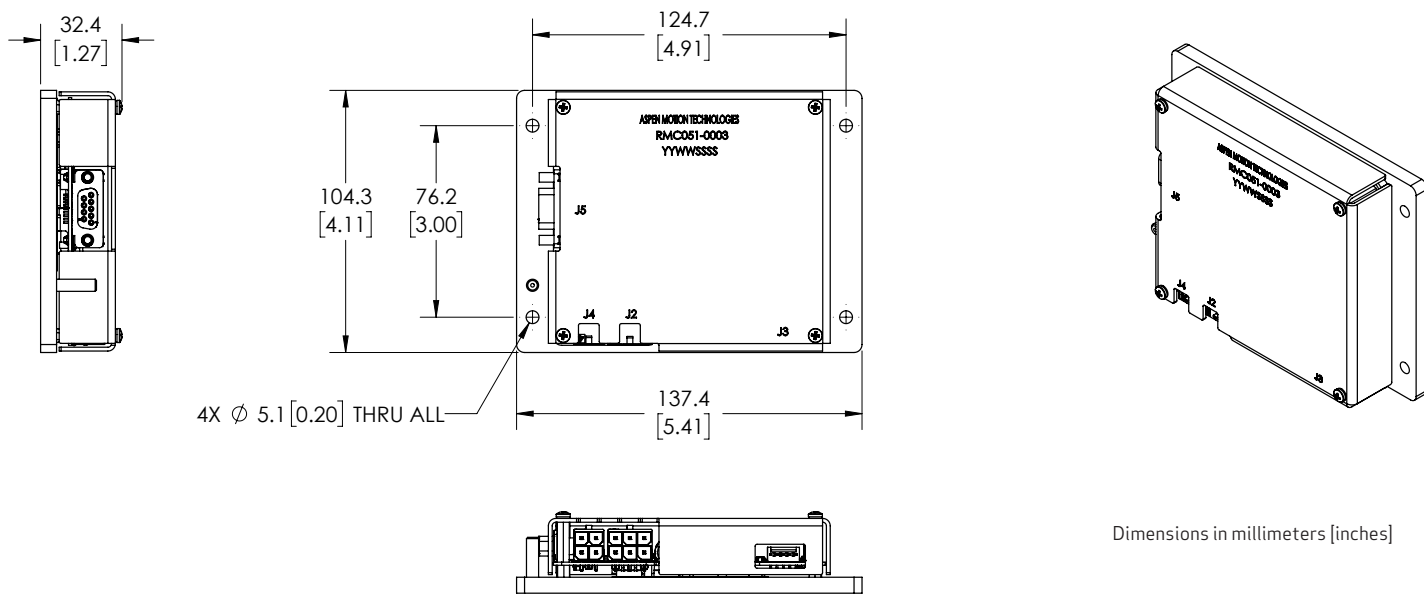
Dimensions in millimeters [inches]

TYPICAL OUTLINE DRAWING

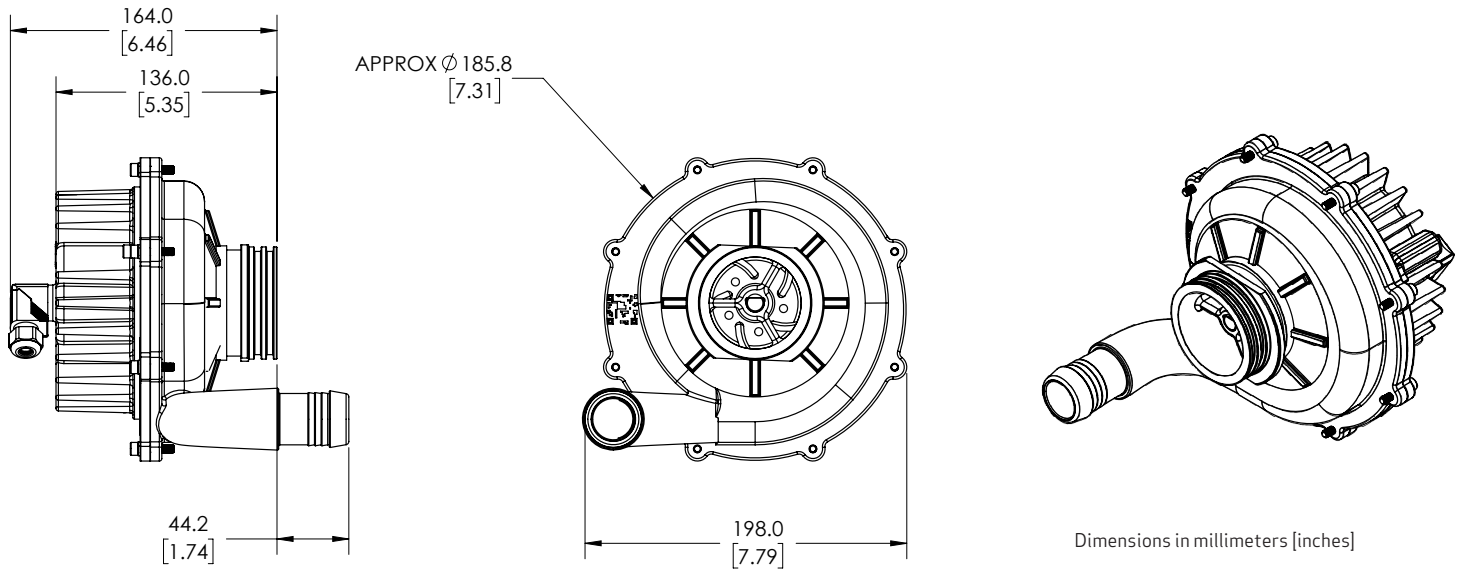
RM-30 Mini Pump



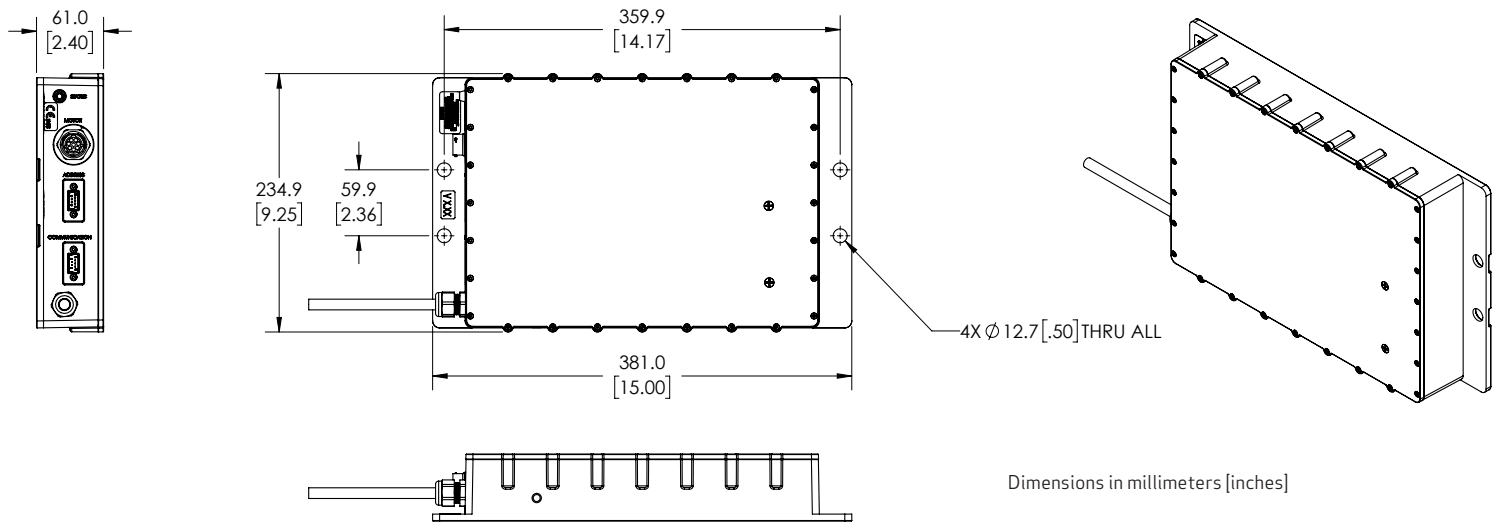
RMC051 Mini Pump Controller



RM-44 Mega Pump



RMC050 Mega Pump Controller



For product information, visit www.moog.com/cooling-pumps

For more information or the office nearest you, contact us online, em-motioncontrol@moog.com

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