

# HIGH EFFICIENCY COOLANT PUMP (R-SERIES)

Pump system for cooling applications



Moog's 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 eliminate rotating 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 rotating 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
- Multiple communication options
- Special sensors available:
  - Current feedback
  - Temperature feedback
  - Leak detection

## ADVANTAGES

- Low maintenance
- High reliability
- Long life expectancy
- Robust, compact construction
- No rotating seals
- Adjustable speed
- Direct drive, integrated motor

## APPLICATIONS

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



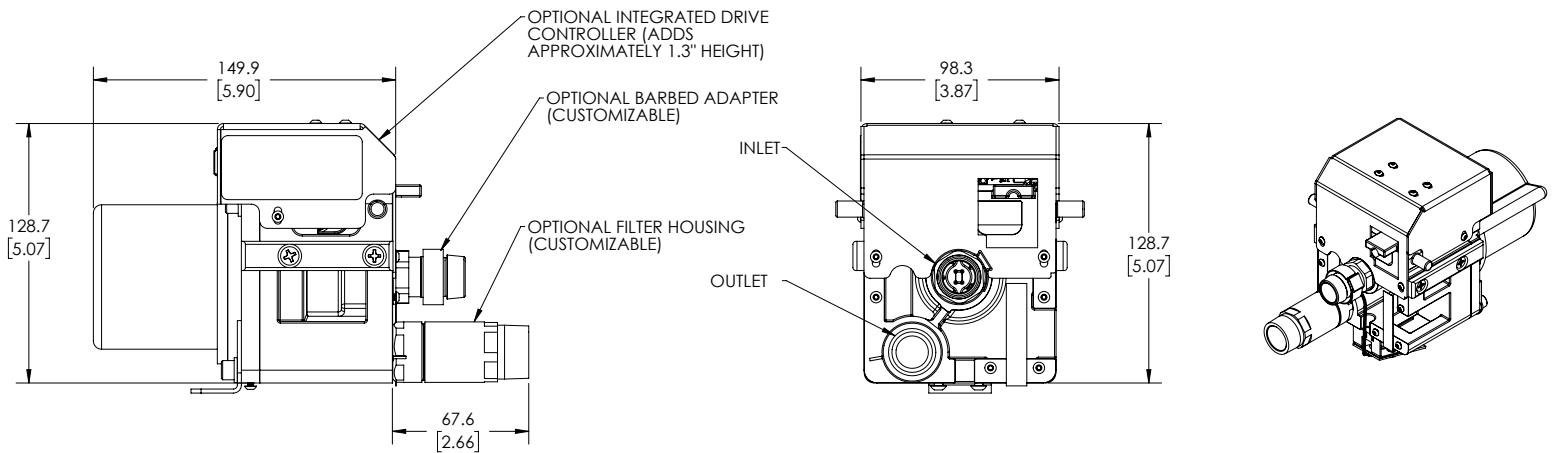
# SPECIFICATIONS

## TECHNICAL DATA

	RM-23	RM-30	RM-44	Notes
<b>Input voltage</b>	12 VDC	48 VDC	230 / 340 VAC	Customizable per application
<b>Power</b>	120 watts	480 watts	2,500 watts	Based on average AMP draw at provided flow rates
<b>Variable speed</b>	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
<b>Thermal safety</b>	Thermistor controlled	Thermistor controlled	Thermistor controlled	Customizable per application  Typically programmed for auto shutoff @ 125 °C
<b>Certification</b>	Contact factory			
<b>Flow rate range (GPM)</b>	0.5 - 7	5 - 37	10 - 65	Min./max. based on existing models
<b>Pressure range (PSI)</b>	10 - 16	12 - 26	35 - 65	Min./max. based on existing models
<b>Inlet/outlet</b>	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

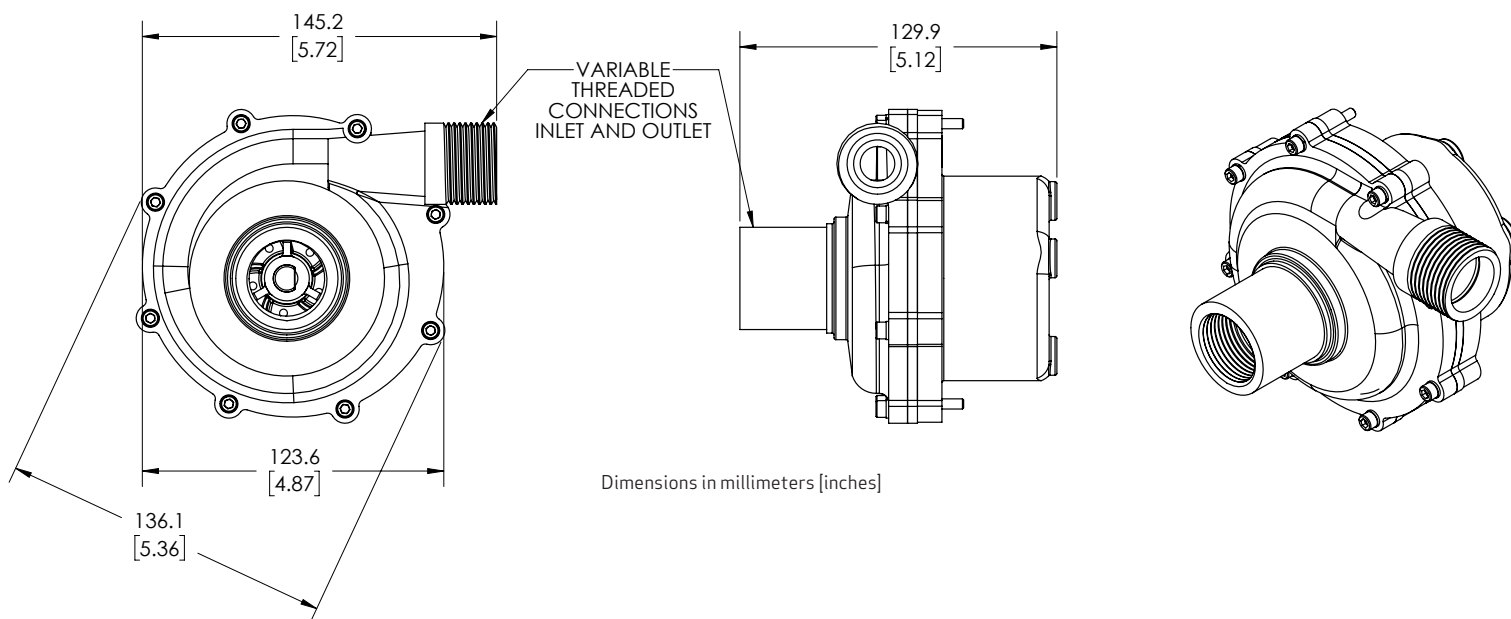
### RM-23 Micro Pump



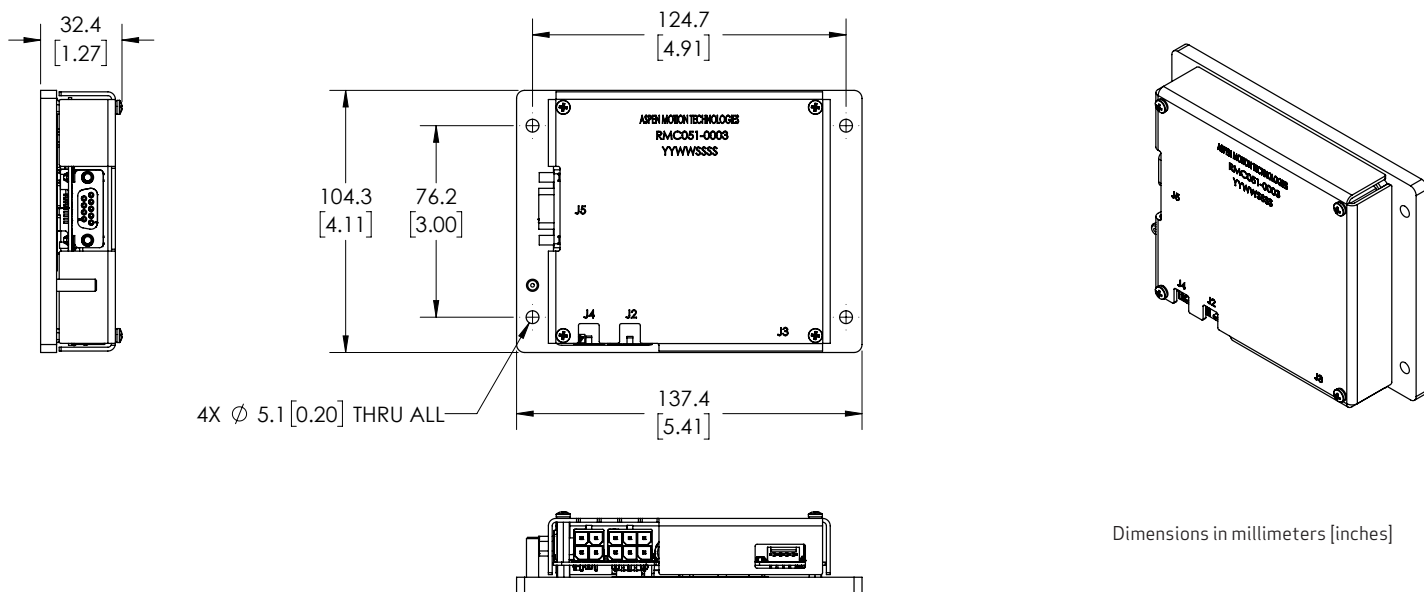
Dimensions in millimeters [inches]

TYPICAL OUTLINE DRAWING

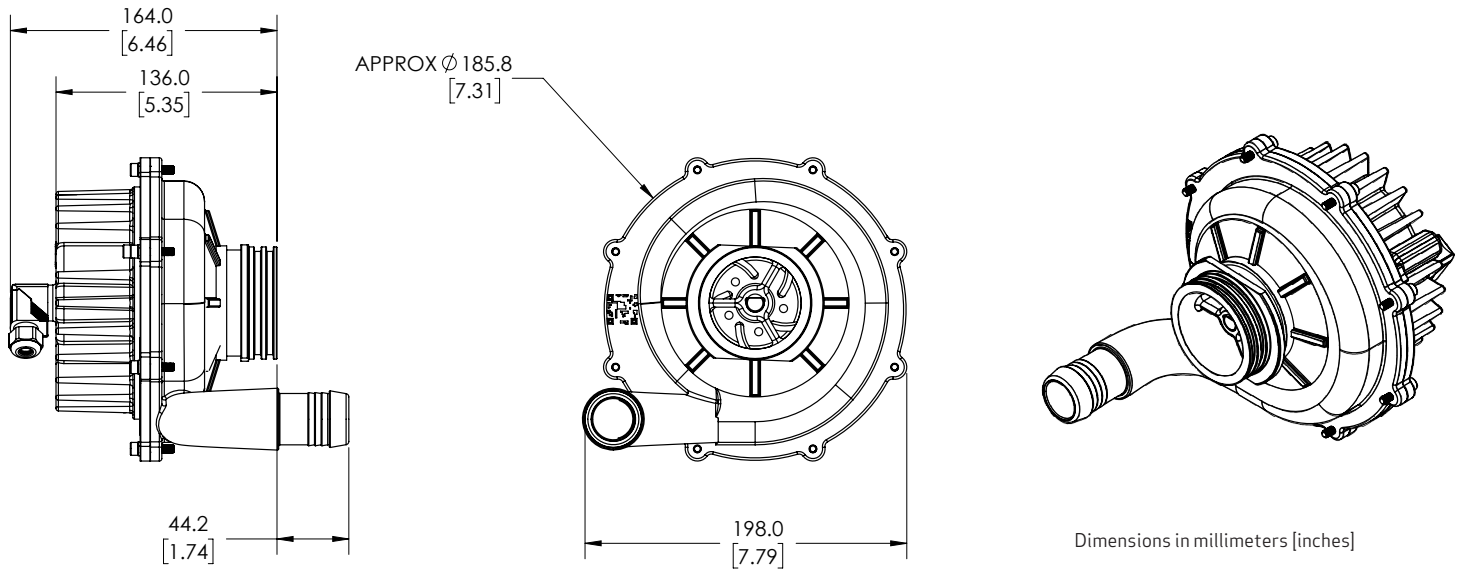
RM-30 Mini Pump



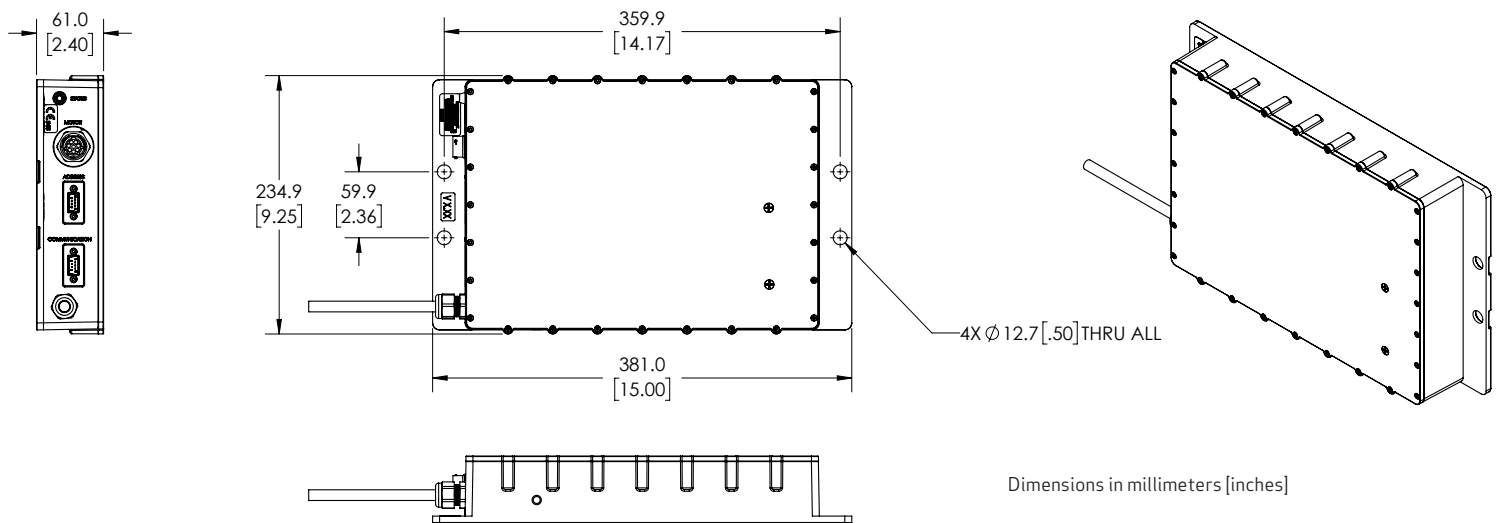
RMC051 Mini Pump Controller



## RM-44 Mega Pump



## RMC050 Mega Pump Controller



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

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 Coolant Pump R-Series Technical Data Sheet  
MCM/Rev. C, June 2024, Id. CDL66712 -en