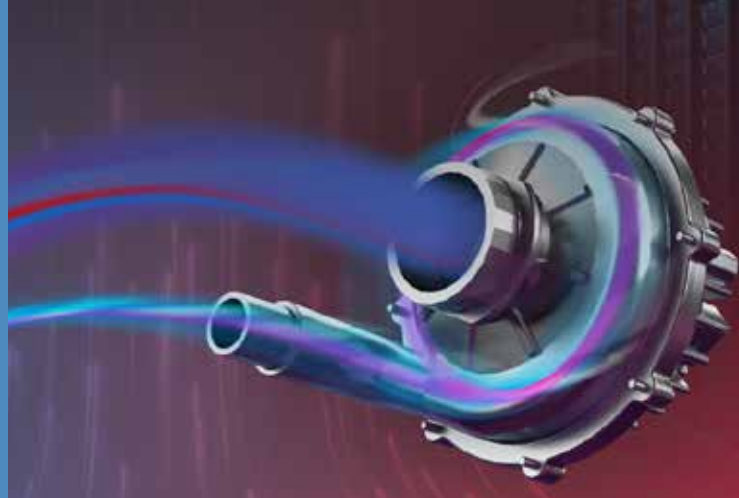


CoreMotion™ HIGH EFFICIENCY COOLANT PUMP (R-SERIES)

Liquid cooling pumps and controls



Moog's CoreMotion™ magnetic pump with matching pump controller is designed for pumping coolant through mainframe computing systems for heat removal. By integrating the rotor magnetics and the impeller into a single piece, we minimize the size of the pump and eliminate rotating seals, resulting in more compact pumps with reduced leak points. CoreMotion™ 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

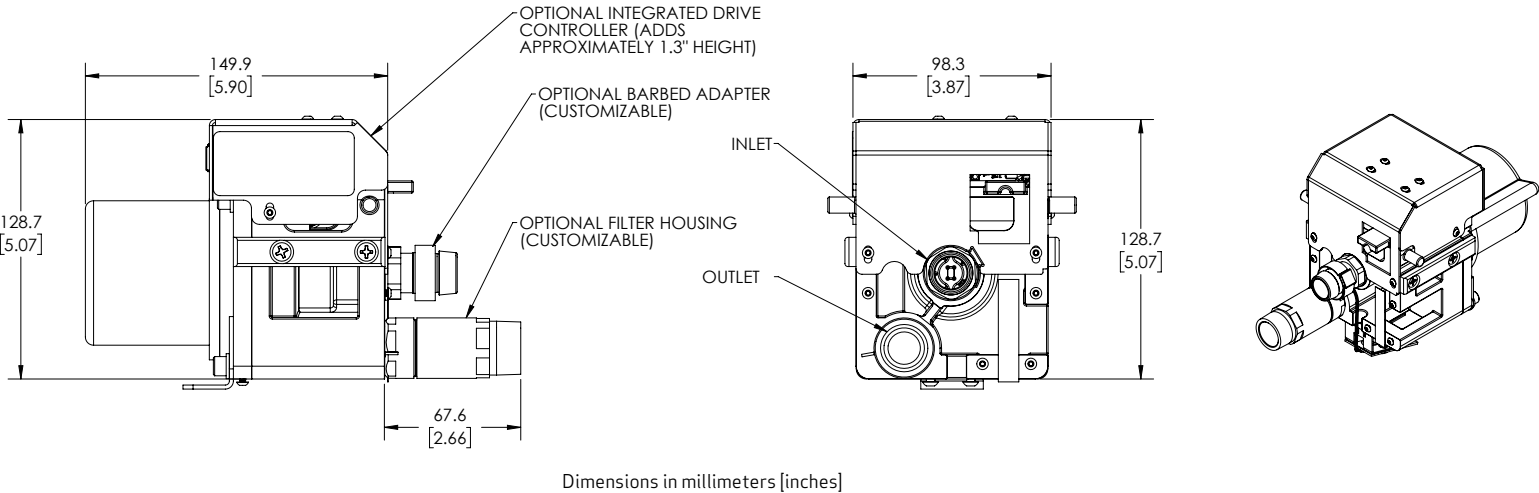
SPECIFICATIONS

TECHNICAL DATA

	RM23	RM30	RM44	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

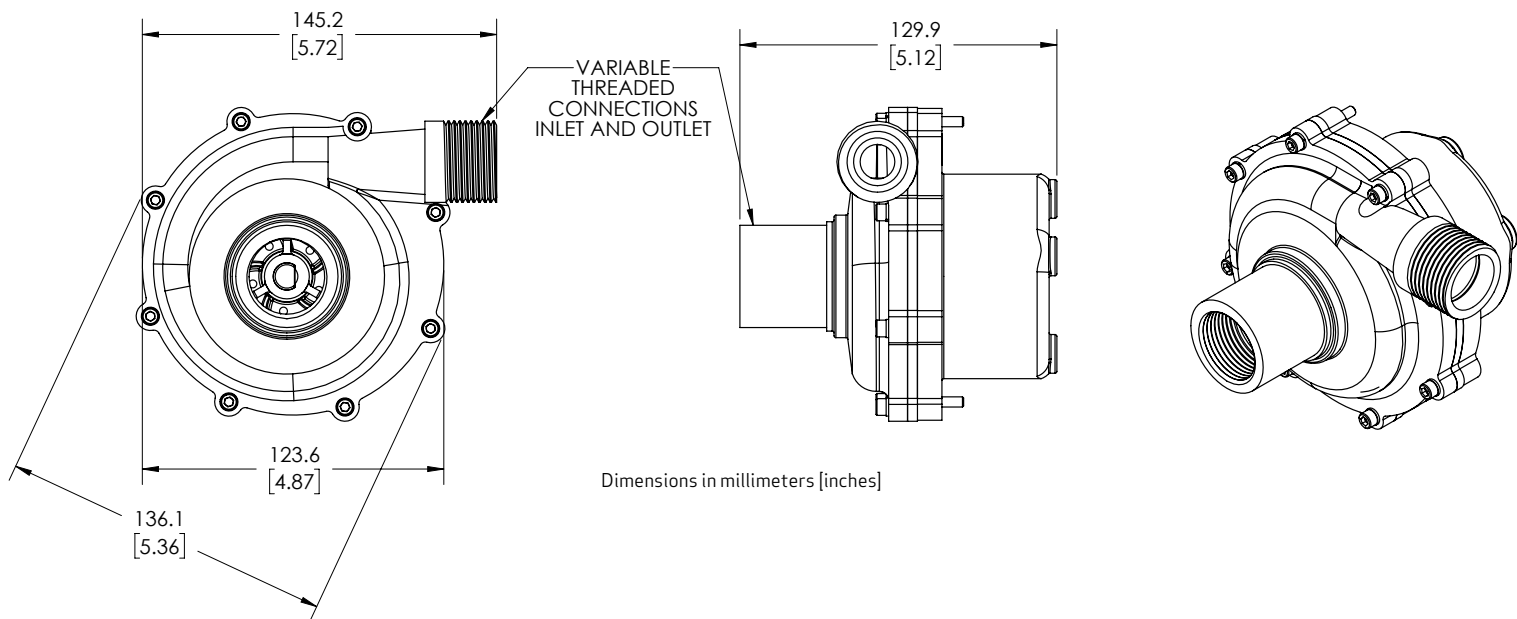
RM23 Pump



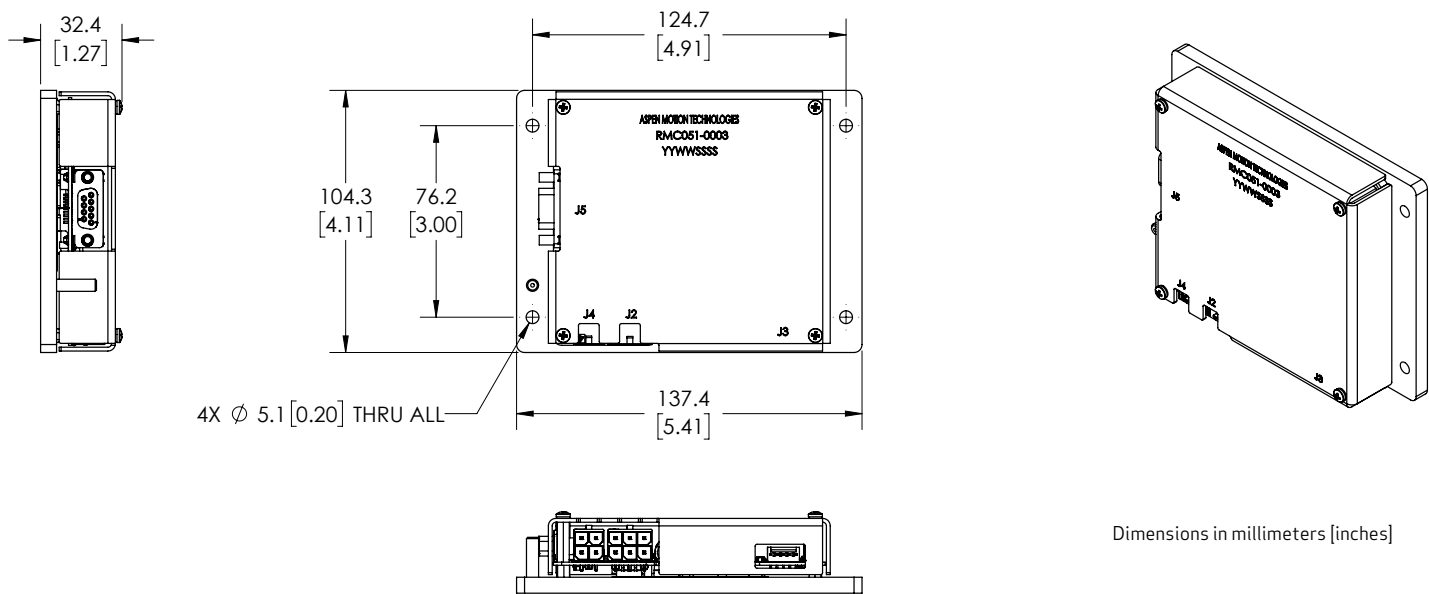
SPECIFICATIONS

TYPICAL OUTLINE DRAWING

RM30 Pump



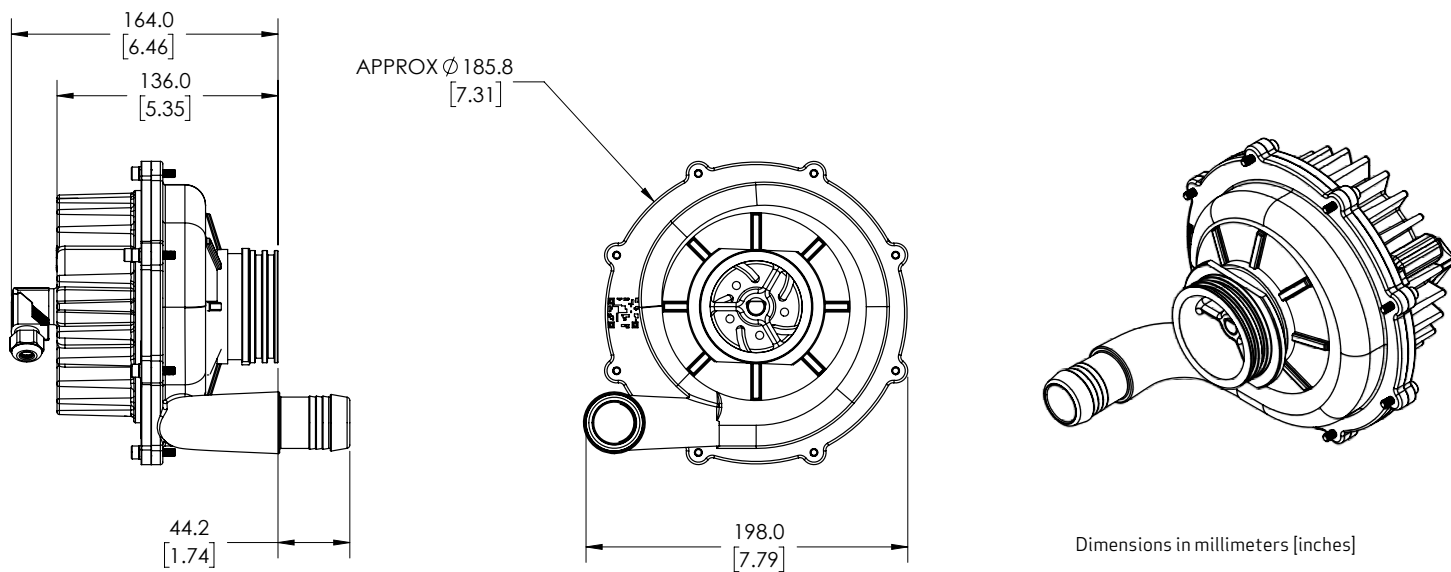
RMC051 Pump Controller



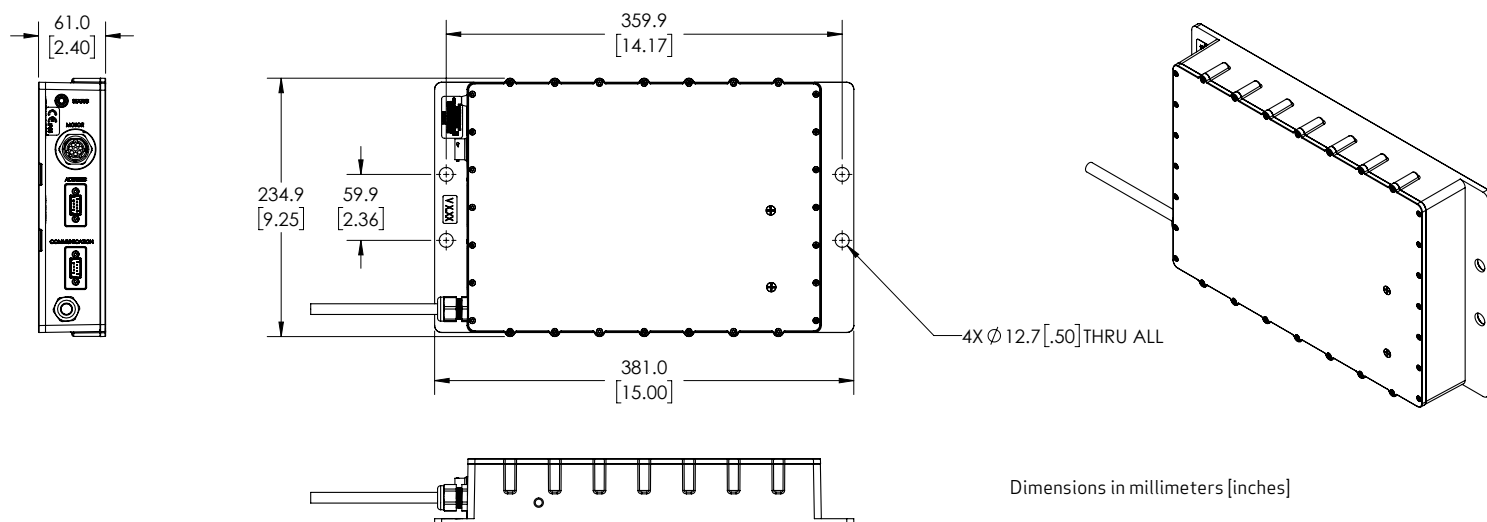
SPECIFICATIONS

TYPICAL OUTLINE DRAWING

RM44 Pump



RMC050 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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Moog High Efficiency Coolant Pump R-Series Technical Data Sheet
MCM/Rev. E, October 2024, Id. CDL66712-en

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CoreMotion™