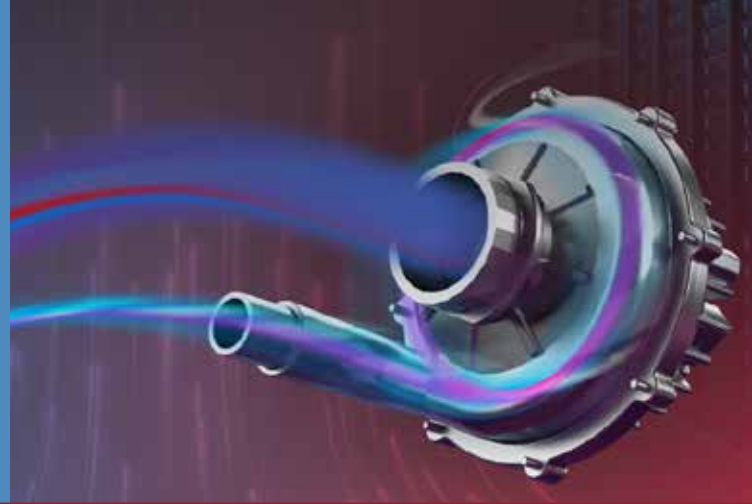


CoreMotion™ HIGH EFFICIENCY COOLANT PUMP (R-SERIES)

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



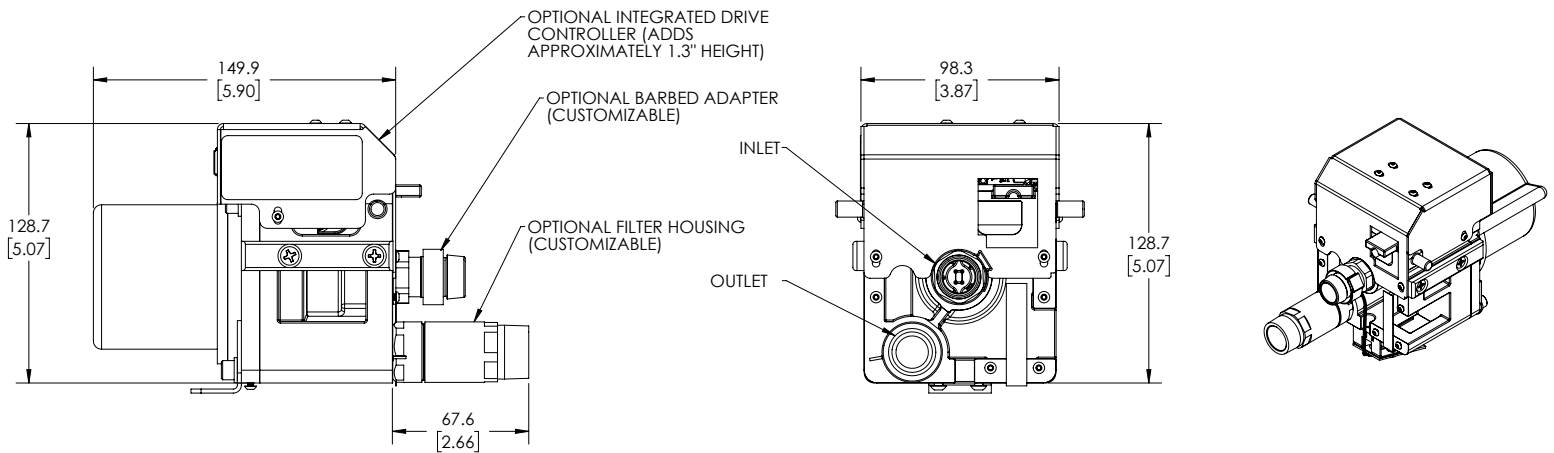
SPECIFICATIONS

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

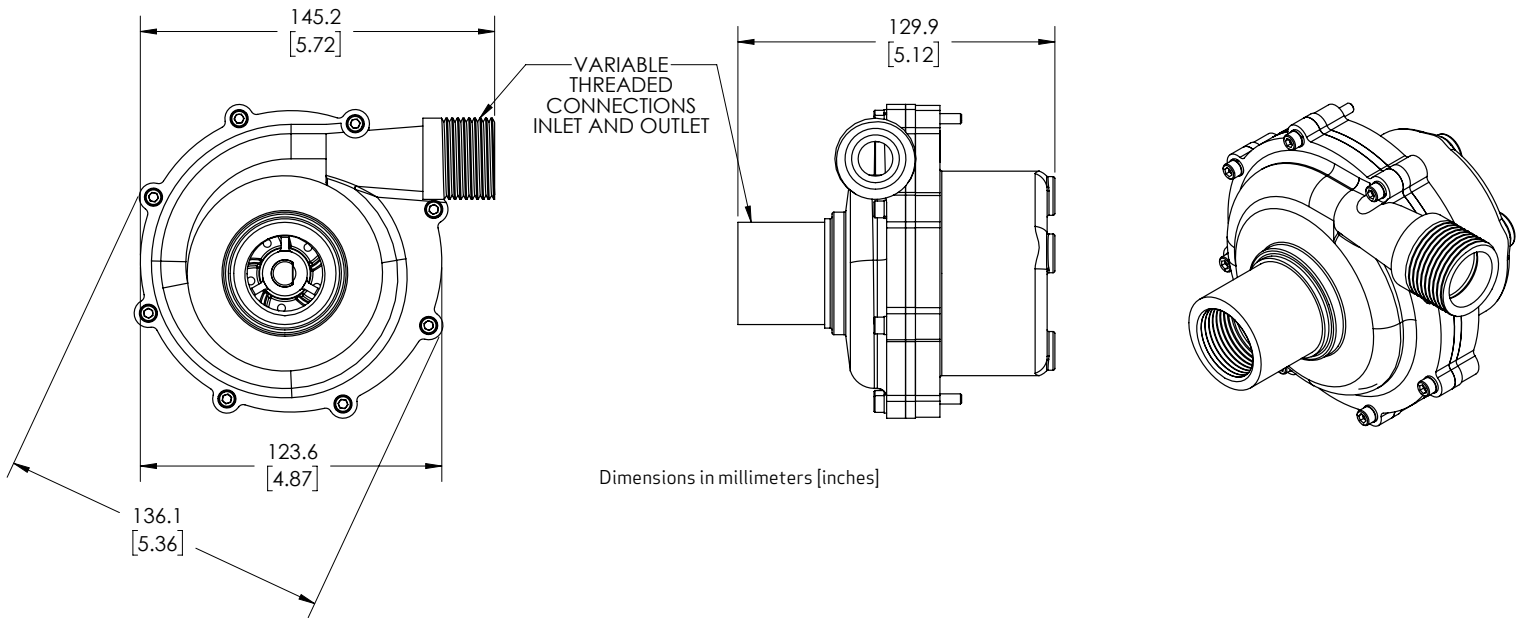


Dimensions in millimeters [inches]

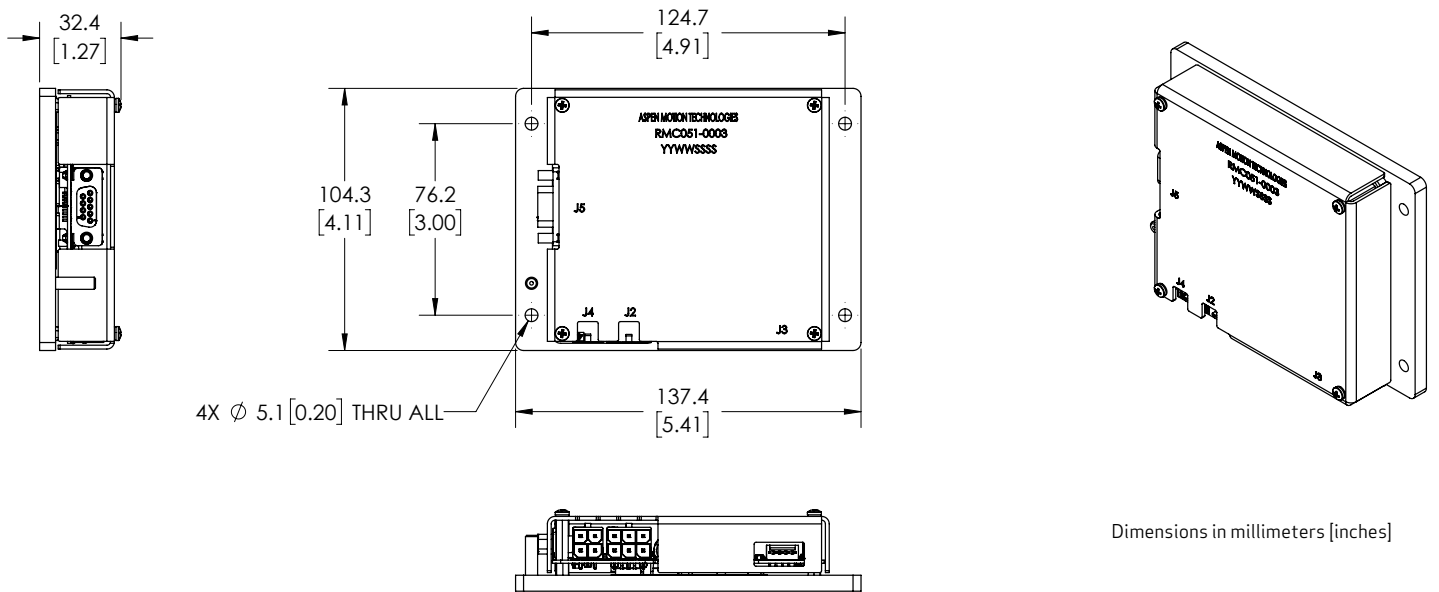
SPECIFICATIONS

TYPICAL OUTLINE DRAWING

RM30 Pump



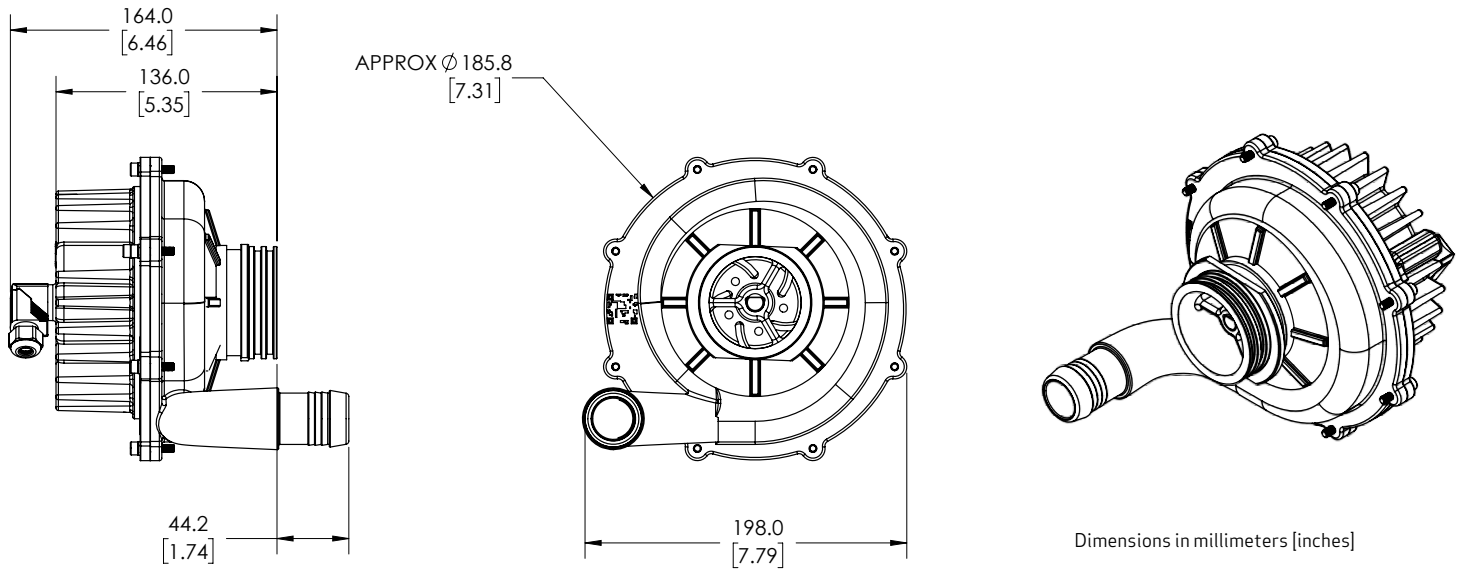
RMC051 Pump Controller



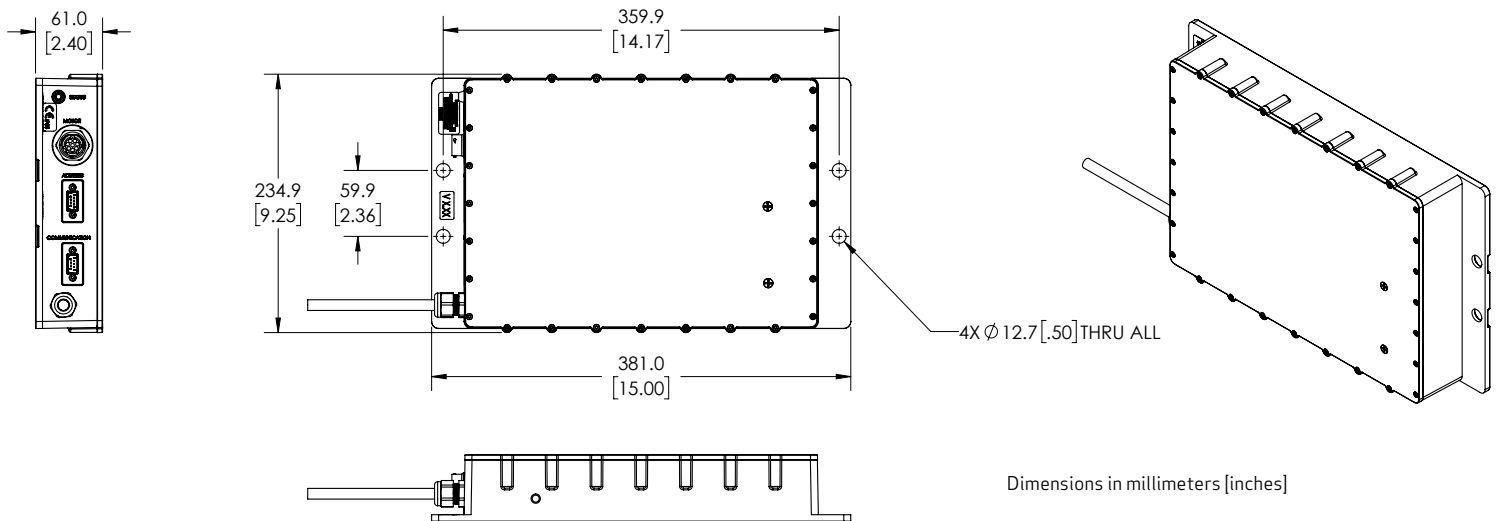
SPECIFICATIONS

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