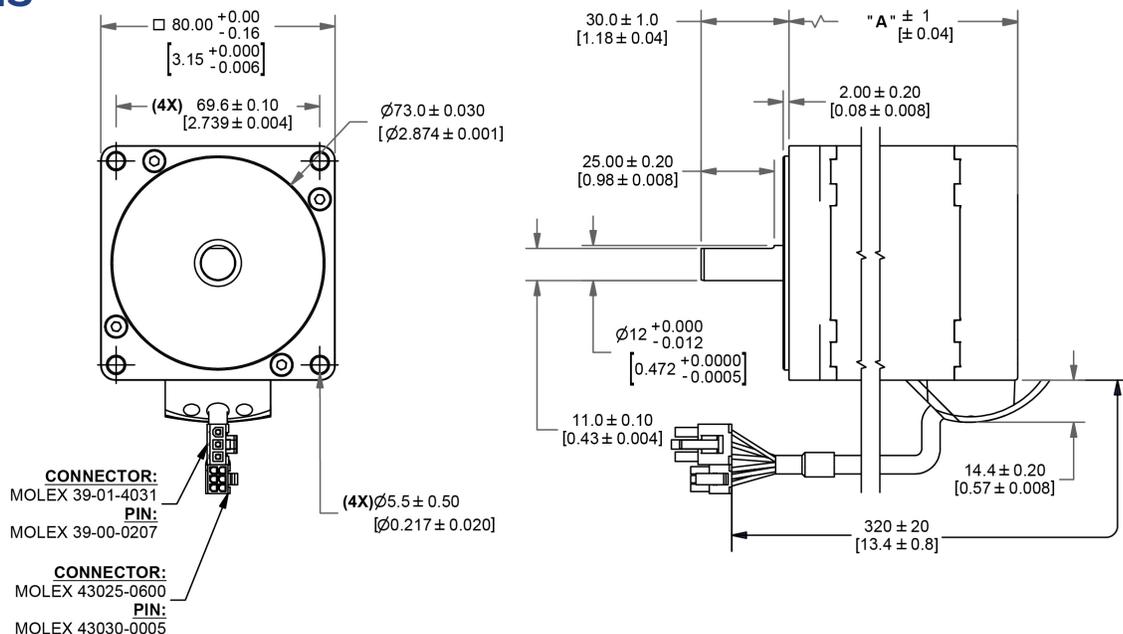




## MOTOR SPECIFICATIONS

Part Number	<b>BL34E27-02-RO</b>
Dimension "A" Max	2.68 in [68mm]
Rated Voltage	48 VDC
Rated Torque	67.97 oz-in [0.48N-m]
Rated Speed	4000 RPM
Rated Power	200 Watts
Rated Current	5.06 Amps
Peak Torque	136 oz-in [0.96N-m]
Peak Current	10.12 Amps
Torque Constant (kt)	13.45 oz-in/Amp
Back EMF Constant (Ke)	9.53 Vp/KRPM
Motor Constant (Km)	23.78 oz-in/√W [0.168 N-m/√W]
Resistance	0.32 Ohms
Inductance	0.7 mH
Rotor Inertia	4.05 oz-in <sup>2</sup>
Weight	3.44 lb [1.56 kg]
Electrical Time Constant	2.2 ms
Mechanical Time Constant	2.7 ms

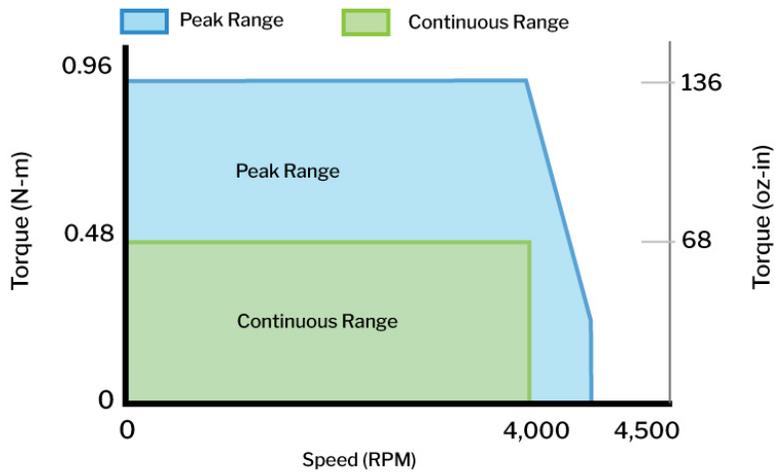
## DIMENSIONS



## Performance Curve

### BL34E27-02

Rated Voltage: 48 Volts, Rated Current: 5.06 Amps



## Motor Operating Specs.

Hall Effect Angle	120° electrical Angle
Radial Play	0.002 in [0.05 mm] @ 0.99 lbs [0.45 kg]
End Play	0.003 in [0.08 mm] @ 99.21 lbs [45.00 kg]
Max. Radial Force	0.787 in [20.00 mm] @ 16.80 lbs [7.62 kg]
Max. Axial Force	3.37 lbs [1.53 kg]
Insulation Class	Class B
Dielectric Strength	500 VDC for 1 minute
Insulation Resistance	100 Ω min. 500 VDC
Ambient Operating Temperature	-20°C to 50°C
Storage Temperature	-20°C to 100°C
Humidity Range (%)	85% (RH) non-condensing
Direction of Rotation	CCW

## Pin Out Charts

PIN #	COLOR	PHASE
1	RED	VCC (+5V)
2	YELLOW	HV
3	BLUE	HW
4	BLACK	GND
5	ORANGE	HU

PIN #	COLOR	PHASE
1	BLUE	W
2	ORANGE	U
5	YELLOW	V

## Recommended Products



BLDC DRIVER  
BLD100-BL34E27-02

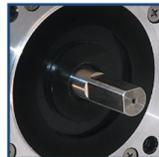


BLDC EXTENSION CABLE  
4201-100/300

## Operation & Usage Tips



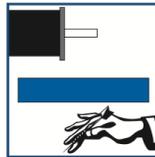
**Do not** disassemble motors; a significant reduction in motor performance will occur.



**Do not** machine shafts; this will have a negative effect on shaft run out and perpendicularity.



**Do not** disconnect motor from drive while in operation.



**Do not** use holding torque/detent torque of motor as a fail safe brake.



**Do not** hold motor by lead wires.



**Do not** exceed the rated current; this will burn the motor.

FAILURE TO COMPLY WITH THESE RECOMMENDATIONS WILL VOID ALL WARRANTY TERMS

# Motion Control, **Solved.**

## MOTOR ENGINEERING & MANUFACTURING



Optimized  
For Your  
Application



Quick  
Prototype  
Turnaround



Small Batch  
to OEM Volume  
Production



US Based  
Support &  
Manufacturing