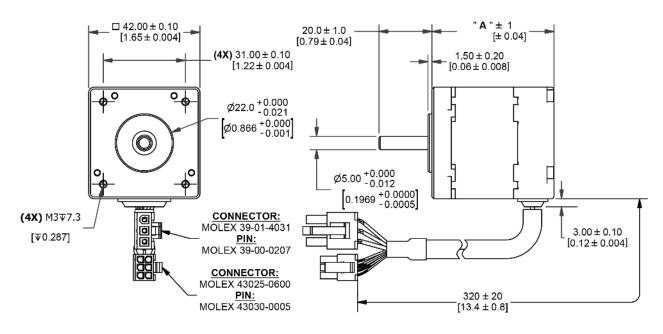
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## **Motor Specifications**

Part Number	BL17E19-02-RO	
Dimension "A" Max	1.85 in [47mm]	
Rated Voltage	48 VDC	
Rated Torque	10.2 oz-in [0.072N-m]	
Rated Speed	4000 RPM	
Rated Power	30 Watts	
Rated Current	0.81 Amps	
Peak Torque	20.4 oz-in [0.144N-m]	
Peak Current	1.62 Amps	
Torque Constant (kt)	12.6 oz-in/Amp	
Back EMF Constant (Ke)	8.64 Vp/KRPM	
Motor Constant (Km)	5.18 oz-in/√W [0.037 N-m/√W]	
Resistance	5.92 Ohms	
Inductance	5 mH	
Rotor Inertia	0.18 oz-in <sup>2</sup>	
Weight	0.71 lb [0.32 kg]	
Electrical Time Constant	0.8 ms	
Mechanical Time Constant	3.1 ms	

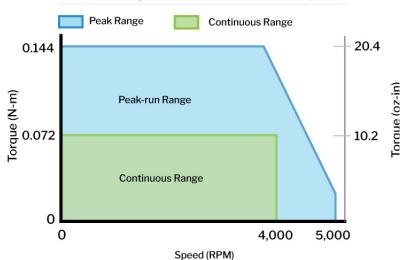
## **Dimensions**



#### **Performance Curve**

#### BL17E19-02

Rated Voltage: 48 Volts, Rated Current: 0.81 Amps



#### **Recommended Products**



**BLDC DRIVER** 

BLDC50-BL17E19-02





BLDC EXTENSION CABLE 4201-100/300

### **Motor Operating Specs.**

Hall Effect Angle	$120^\circ\Omega$ 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	0.394 in [ 10.00 mm] @ 3.37 lbs [1.53 kg]
Max. Axial Force	2.25 lbs [1.02 kg]
Insulation Class	Class B
Dielectric Strength	500 VDC for 1 minute
Insulation Resistance	$100\Omegamin,500VDC$
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	

## **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 wil burn the motor.

FAILURE TO COMPLY WITH THESE RECOMMENDATIONS WILL VOID ALL WARRANTY TERMS

# Motion Control, Solved.

**MOTOR ENGINEERING & MANUFACTURING** 







Small Batch to OEM Volume Production

