LIN ENGINEERING
MOTOR SPECIALISTS IN MOTION
A MOONS' COMPANY

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MOTOR SPECIFICATIONS

Part Number	**BL34E21-02D-03RO**
Length Dimension	50 mm [1.97 in]
Rated Voltage	48 VDC
Rated Output Power	100 W
Pole Number	8
Phase Number	3
Rated Speed	4000 RPM
Max Speed	4500 RPM
Rated Torque	0.24 N-m [33.99 oz-in]
Rated Current	2.43 Amps
Back EMF Constant	6.88 Vrms/krpm [9.73 Vpeak/krpm]
Moment of Inertia	0.000038 kg-m^2 [2.08 oz-in^2]
Resistance	0.71Ohms
Inductance	1.35 mH
Weight	0.98kg [2.16 lb]

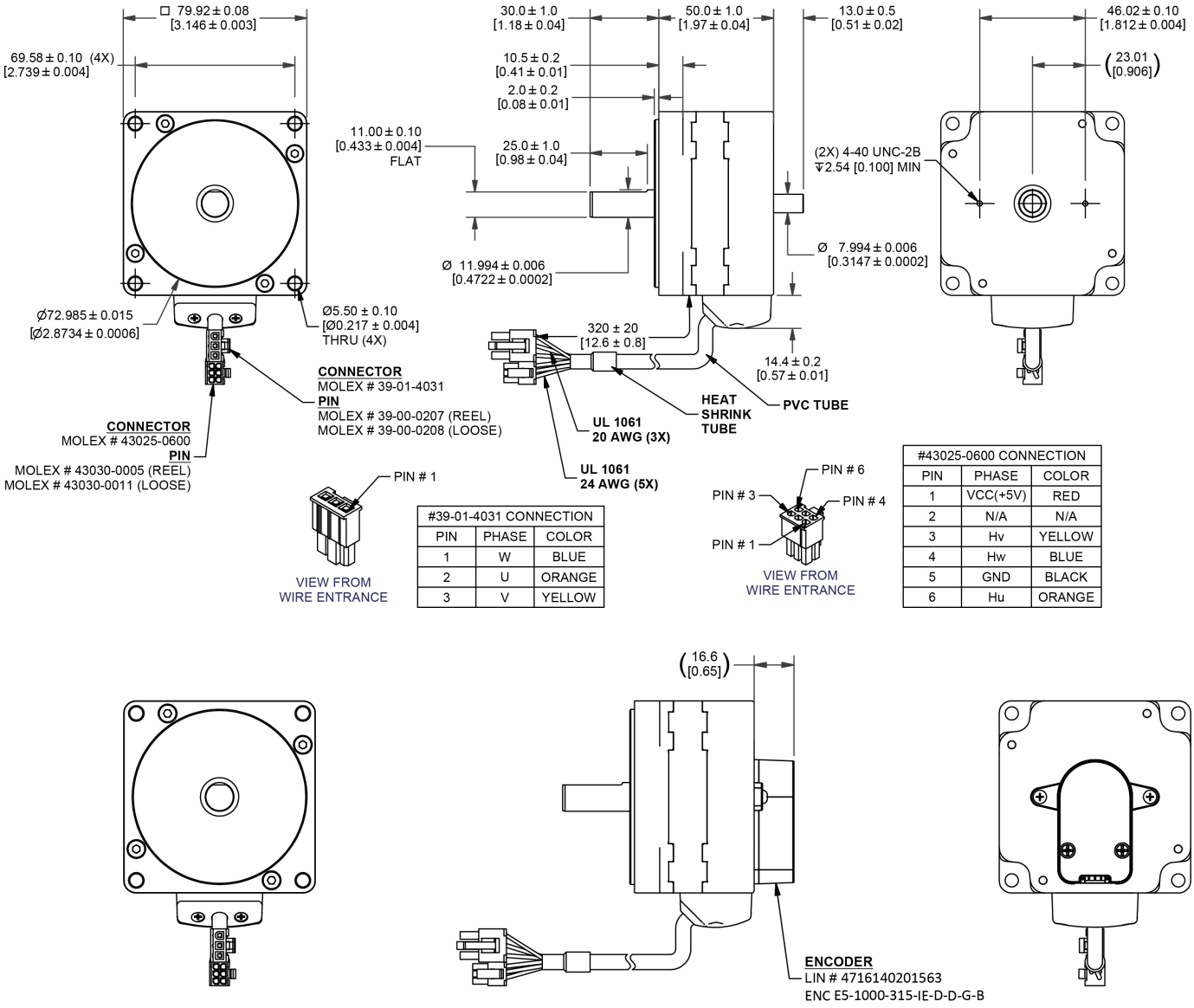
ENCODER SPECIFICATIONS

Part Number	**E5 Encoder**
Type	Optical Incremental Encoder
Resolution	1000 CPR
Index	Yes
Output Type:	Differential

MOTOR OPERATING SPECIFICATIONS

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 Temp.	-20°C to 50°C
Storage Temperature	-20°C to 100°C
Humidity Range (%)	85% (RH) non-condensing

DIMENSIONS



#39-01-4031 CONNECTION		
PIN	PHASE	COLOR
1	W	BLUE
2	U	ORANGE
3	V	YELLOW

#43025-0600 CONNECTION		
PIN	PHASE	COLOR
1	VCC(+5V)	RED
2	N/A	N/A
3	Hv	YELLOW
4	Hw	BLUE
5	GND	BLACK
6	Hu	ORANGE

RECOMMENDED PRODUCTS



BLDC DRIVER
BLDC50-BL34E21-02



BLDC EXTENSION CABLE
4201-100/300

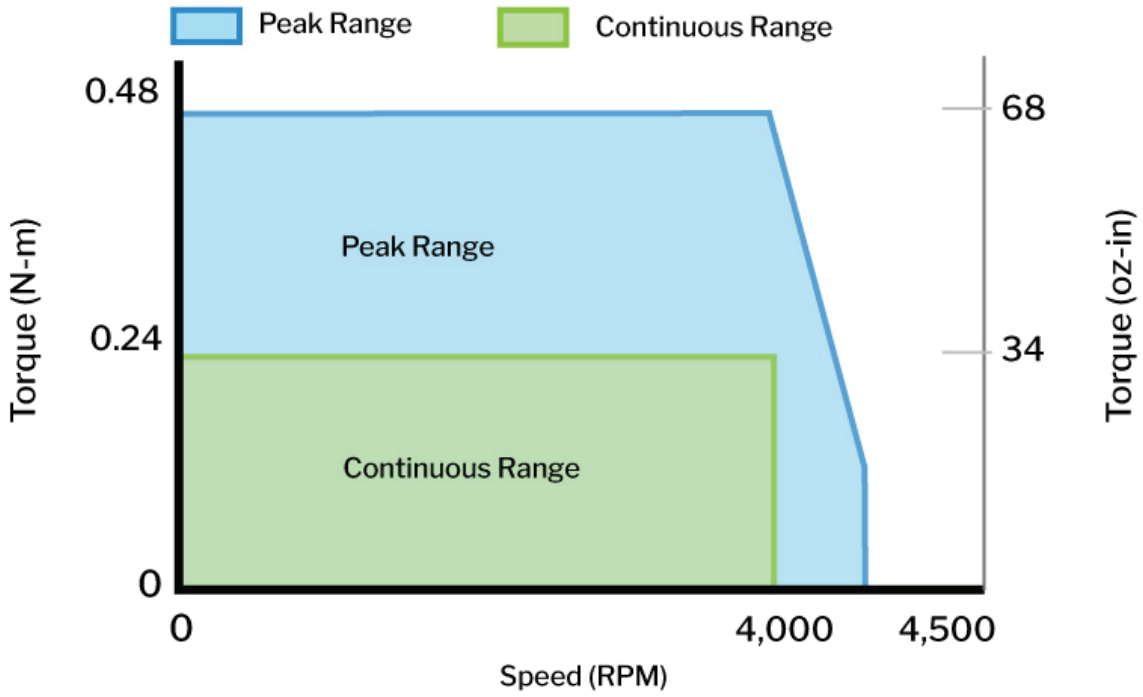


E5 ENCODER CABLE
CA-FC10-SH-NC-10-PKG

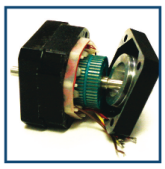
PERFORMANCE CURVE

BL34E21-02

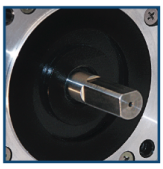
Rated Voltage: 48 Volts, Rated Current: 2.43 Amps



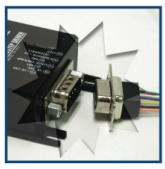
OPERATION & USAGE TIPS



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



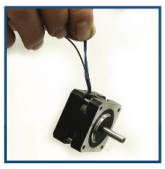
Do not machine shafts; this will have a negative effect on shaft run out and perpendicularity.



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

Optimized For Your Application

Quick Prototype Turnaround

Small Batch to OEM Volume Production

US Based Support & Manufacturing