

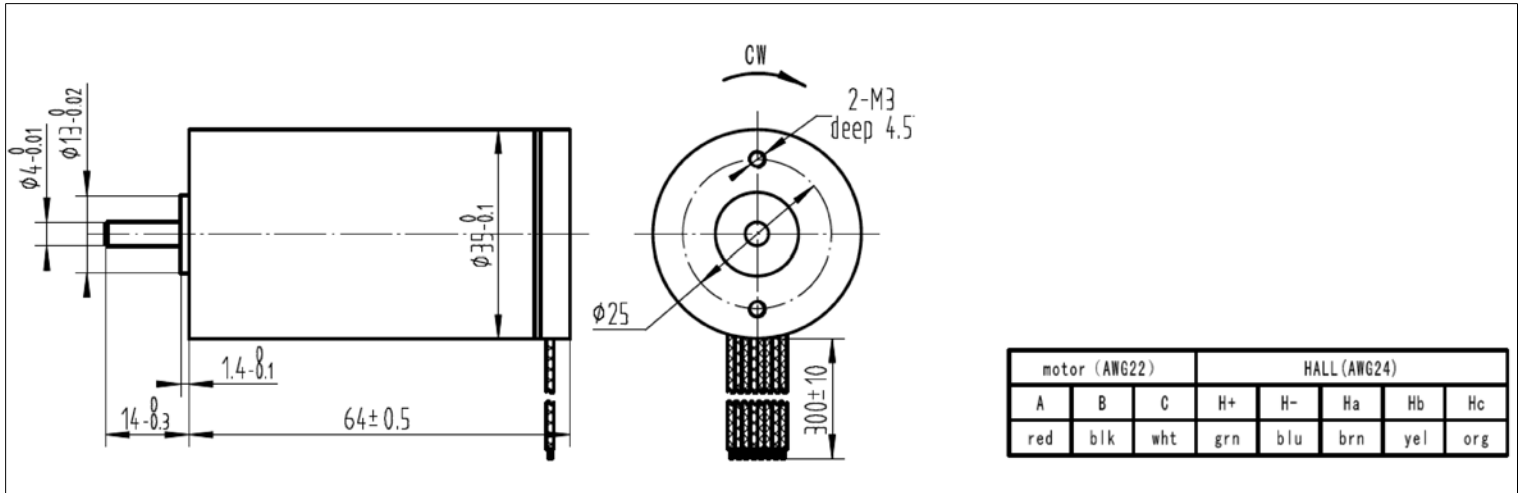
BLDC Slotless Motor - 35 mm Ø x 64



B30E24BZ050

56.8 Watts Peak Power

Global Motion Products



Not to Scale - Dimensions in millimeters (mm)

	motor (AWG22)	HALL (AWG24)
Nominal Voltage	24.0 Volts	24.0 Volts
No-Load Speed	7,200 rpm	7,200 rpm
Stall Torque	304.5 mNm	3,105.0 gcm
No-Load Current	0.110 Amps	0.110 Amps
Peak Output Power	56.8 Watts	56.8 Watts
Torque Constant	31.47 mNm/A	320.90 gcm/A
Terminal Resistance	2.48 Ohms	2.48 Ohms
Back-EMF Constant	3.30 V/krpm	3.30 V/krpm
Inductance	0.430 mH	0.430 mH
Rotor Inertia	41.000 kg-m ² x10-7	41.000 gm cm ²
Mechanical Time Constant	10.3 msec	10.3 msec
Slope of Speed/Torque Curve	23.6 rpm/mNm	2.3 rpm/gcm
Speed Constant	303 rpm/Volt	303 rpm/Volt
Motor Constant	19.98 mNm/√Watt	203.77 gcm/√Watt

Zero Cogging 3 Phase Brushless DC Motor featuring High Temperature Neodymium Iron Boron Magnets.

Part Number:	How to Order	B30E24BZ050	Characteristics - Specifications at	22 °C
Radial Load Rating	Radial Play		Max Temperature	100 °C
Radial Load Distance	Thrust Play		Min Temperature	-30 °C
Axial Load	Magnet Type	NdFeB	Max Winding Temp	125 °C
Press Fit Force - Max	Bearing Type	Preloaded Ball	Mass	300.0 grams
Gearbox Options	Planetary and Spur Gearboxes.			
Encoder Options	Optical Encoder. 3 Channel.			
Options - Other	Sensorless Versions. Rear Shaft. Special lubrication. Customer Shaft Lengths. Windings.			

Global Motion Products
 Distributed by:
 Precision Motion Distributors: (925) 803-9565
 Technical Support: (760) 451-2723
 http://www.gmpwebsite.com Email: info@gmpwebsite.com

Commutation Type: **Manufactured under a Certified ISO 9001:2008 Quality System**
 Electronic - Hall Effect

RoHS Compliant

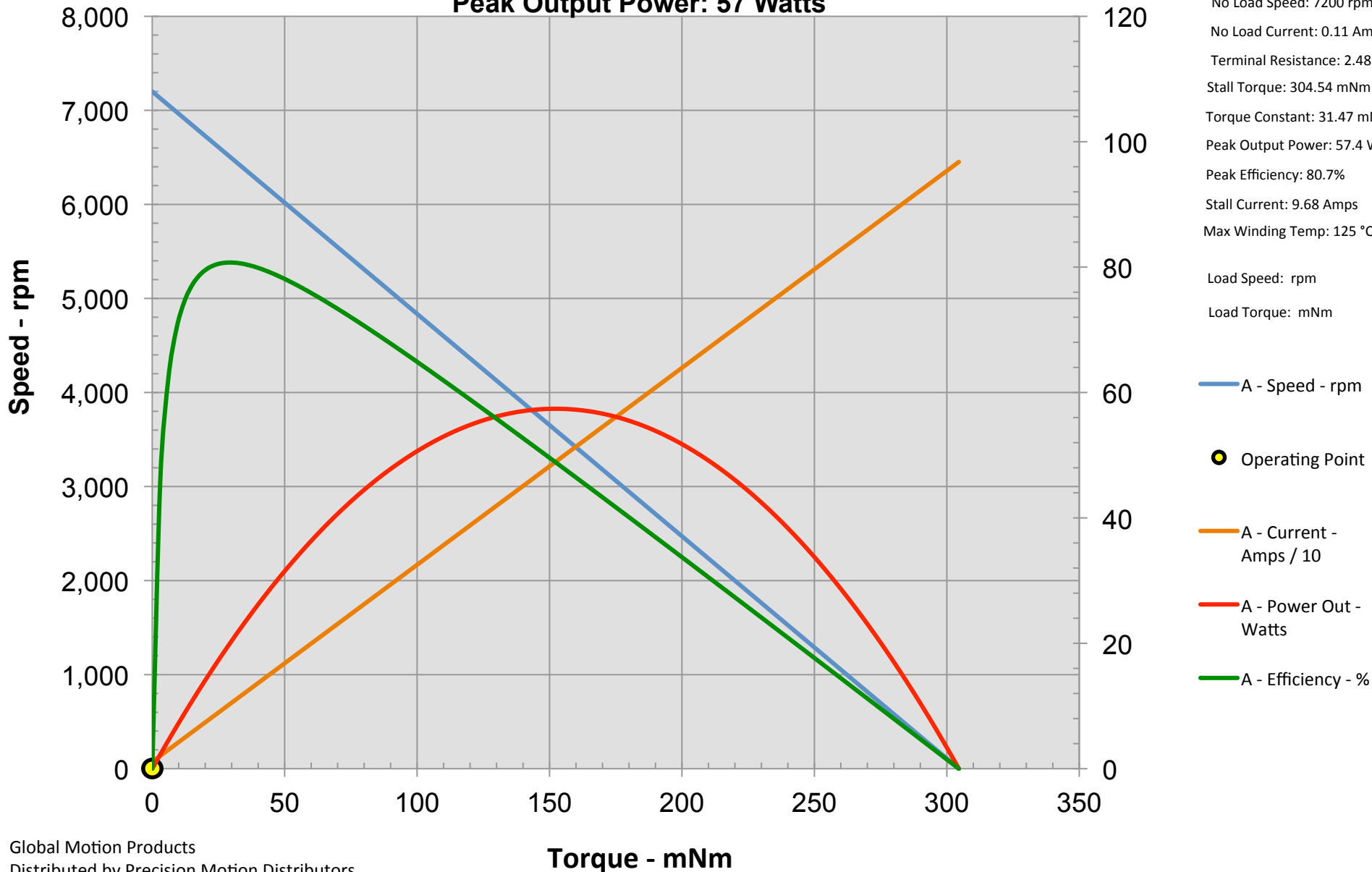
A - August 2012

Specifications Subject to change without notice

BLDC Slotless Motor - 35 mm - x 64
B30E24BZ050 - - - 24 Volts
Peak Output Power: 57 Watts

B30E24BZ050

Voltage: 24 Volts
 No Load Speed: 7200 rpm
 No Load Current: 0.11 Amps
 Terminal Resistance: 2.48 Ohm
 Stall Torque: 304.54 mNm
 Torque Constant: 31.47 mNm/A
 Peak Output Power: 57.4 Watts
 Peak Efficiency: 80.7%
 Stall Current: 9.68 Amps
 Max Winding Temp: 125 °C



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IT IS NOT TEST DATA. Stall Torque ignores motor coulomb and viscous torque losses. Voltage divided by Resistance multiplied by Torque Constant equals Stall Torque for motor only simulations. **CAUTION:** Peak Output Power is NOT a RATING. This is merely a calculated value and does not address Thermal Issues.

November 29, 2012

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