

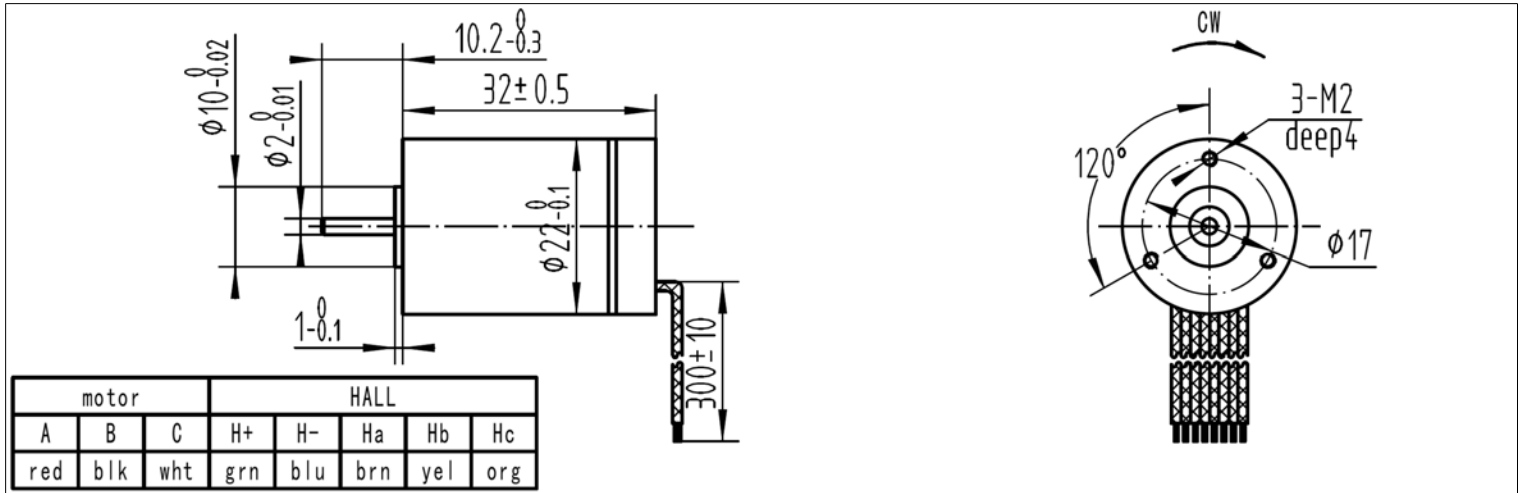
BLDC Slotless Motor - 22 mm Ø x 32



B22E18BZ000

5.1 Watts Peak Power

Global Motion Products



Not to Scale - Dimensions in millimeters (mm)

Nominal Voltage	18.0 Volts	18.0 Volts	18.0 Volts
No-Load Speed	16,000 rpm	16,000 rpm	16,000 rpm
Stall Torque	13.2 mNm	135.0 gcm	1.88 oz-in
No-Load Current	0.100 Amps	0.100 Amps	0.100 Amps
Peak Output Power	5.1 Watts	5.1 Watts	5.1 Watts
Torque Constant	9.94 mNm/A	101.33 gcm/A	1.41 oz-in/A
Terminal Resistance	13.50 Ohms	13.50 Ohms	13.50 Ohms
Back-EMF Constant	1.04 V/krpm	1.04 V/krpm	1.04 V/krpm
Inductance	0.480 mH	0.480 mH	0.480 mH
Rotor Inertia	2.250 kg-m ² x10 ⁻⁷	2.250 gm cm ²	0.319 x10 ⁻⁴ oz in sec ²
Mechanical Time Constant	30.8 msec	30.8 msec	30.8 msec
Slope of Speed/Torque Curve	1,207.6 rpm/mNm	118.5 rpm/gcm	8,527.4 rpm/oz-in
Speed Constant	961 rpm/Volt	961 rpm/Volt	961 rpm/Volt
Motor Constant	2.70 mNm/√Watt	27.58 gcm/√Watt	0.38 oz-in/√Watt

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

Part Number: How to Order	B22E18BZ000	Characteristics - Specifications at	22 °C
Radial Load Rating	Radial Play	Max Temperature	125 °C
Radial Load Distance	Thrust Play	Min Temperature	-30 °C
Axial Load	Magnet Type	Max Winding Temp	125 °C
Press Fit Force - Max	Bearing Type	Mass	77.0 grams
Gearbox Options	Spur and Planetary Gearboxes.		
Encoder Options	Modular 2 channel Optical Encoder with zero index.		
Options - Other	Windings, special shafts, sensorless version, lubrication, connectors.		

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

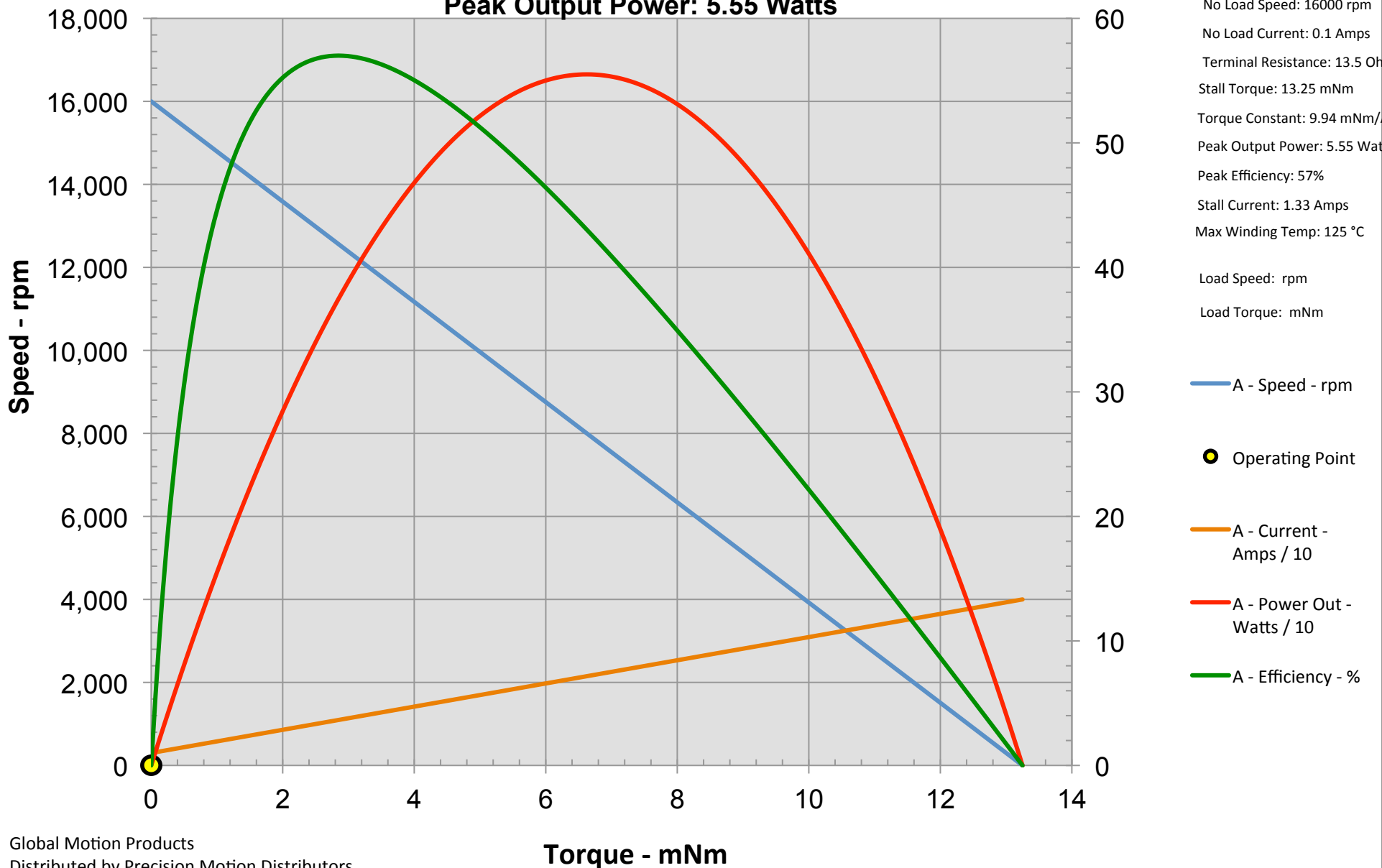
Preliminary

Specifications Subject to change without notice

BLDC Slotless Motor - 22 mm Ø x 32
B22E18BZ000 - - - 18 Volts
Peak Output Power: 5.55 Watts

B22E18BZ000

Voltage: 18 Volts
 No Load Speed: 16000 rpm
 No Load Current: 0.1 Amps
 Terminal Resistance: 13.5 Ohm
 Stall Torque: 13.25 mNm
 Torque Constant: 9.94 mNm/A
 Peak Output Power: 5.55 Watts
 Peak Efficiency: 57%
 Stall Current: 1.33 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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