

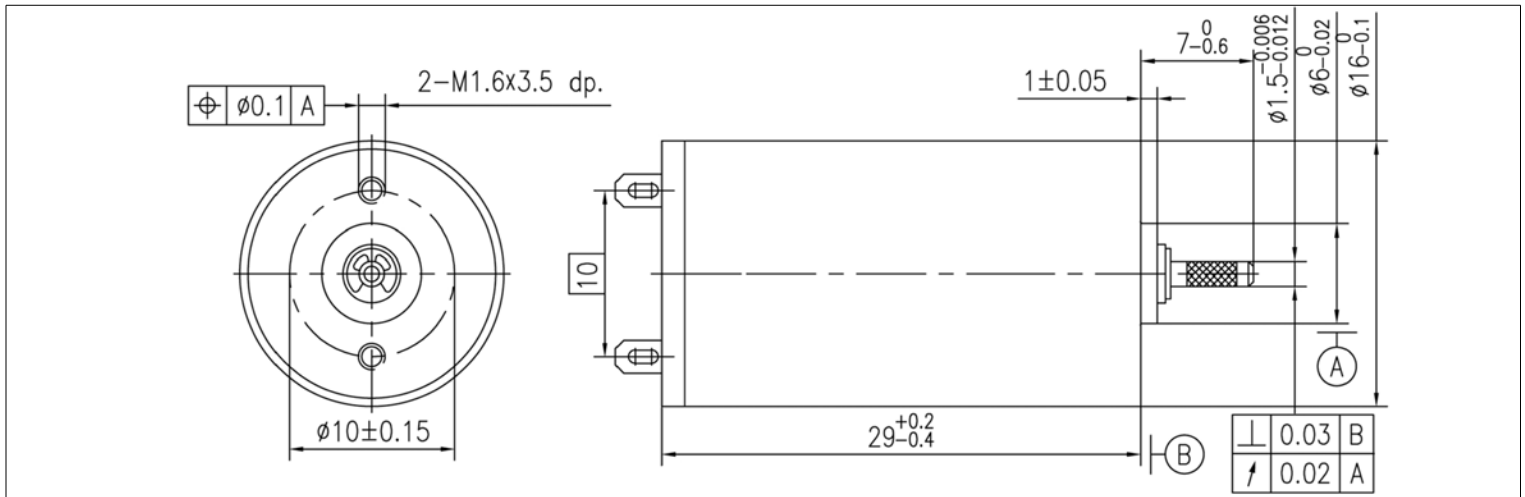
Coreless DC Motor - 16 mm Ø

C16P03SE000

2.4 Watts Peak Power



Global Motion Products



Not to Scale - Dimensions in millimeters (mm)

Nominal Voltage	3.0 Volts	3.0 Volts	3.0 Volts
No-Load Speed	10,200 rpm	10,200 rpm	10,200 rpm
Stall Torque	8.9 mNm	91.1 gcm	1.3 oz-in
No-Load Current	0.045 Amps	0.045 Amps	0.045 Amps
Peak Output Power	2.4 Watts	2.4 Watts	2.4 Watts
Torque Constant	2.77 mNm/A	28.24 gcm/A	0.39 oz-in/A
Terminal Resistance	0.93 Ohms	0.93 Ohms	0.93 Ohms
Back-EMF Constant	0.29 V/krpm	0.29 V/krpm	0.29 V/krpm
Mechanical Time Constant	16.1 msec	16.1 msec	16.1 msec
Rotor Inertia	1.33 kgm ² x10 ⁻⁷	1.33 gm cm ²	0.19 x10 ⁻⁴ oz-in-sec ²
Mechanical Time Constant	16.1 msec	16.1 msec	16.1 msec
Slope of Speed/Torque Curve	1,141.7 rpm/mNm	112.0 rpm/gcm	8,062.5 rpm/oz-in
Speed Constant	3,448 rpm/Volt	78 %	78 %
Motor Constant	2.87 mNm/√Watt	29.28 gcm/√Watt	0.41 oz-in/√Watt
Commutation Type	Precious Metal	Precious Metal	Precious Metal
Rated Power @ 8,362 rpm	1.4 Watts	1.4 Watts	1.4 Watts
Rated Torque @ 8,362 rpm	1.6 mNm	16.4 gcm	0.2 oz-in
Rated Current @ 8,362 rpm	0.580 Amps	0.580 Amps	0.580 Amps

Part Number: How to Order C16P03SE000

Ratings are at 25°C Ambient Temperature.

Radial Load Rating	1.4 N	Radial Play	0.020 mm	Max Temperature	65 °C
Radial Load Distance	4 mm	Thrust Play	0.150 mm	Min Temperature	-20 °C
Axial Load	0.80 N	Magnet Type	NdFeB	Max Winding Temp	85 °C
Press Fit Force - Max	15.00 N	Bearing Type	Sleeve Bearings	Mass	22 grams
Gearbox Options	P16 Planetary Gearbox				
Encoder Options	N/A				
Options - Other	Ball Bearings. Shaft length. Lubricants. Leads. Solder Tabs. Connectors.				

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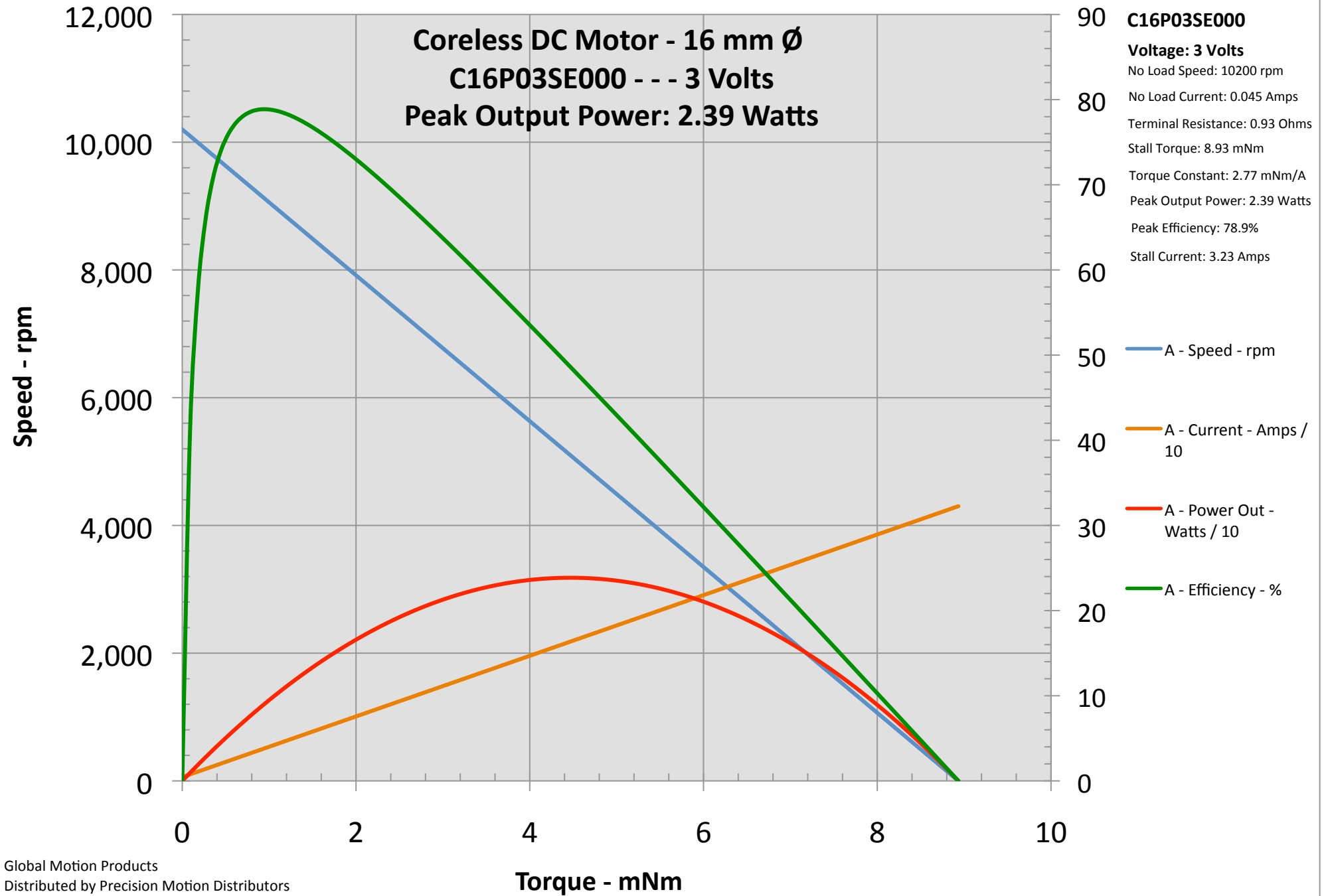
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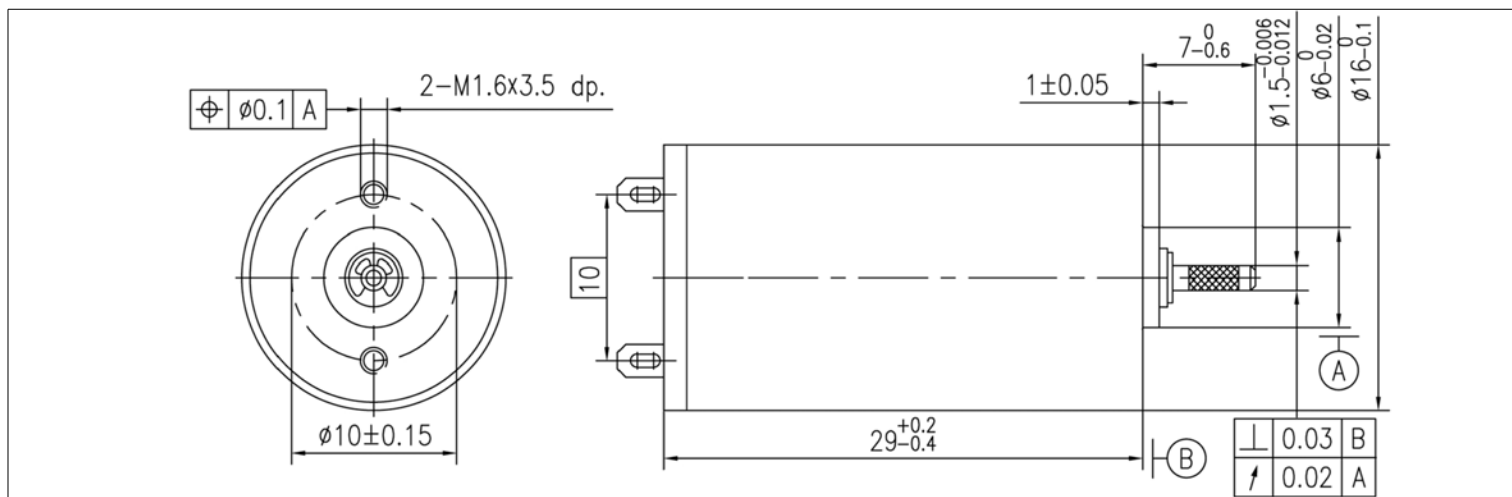
Coreless DC Motor - 16 mm Ø

C16P06SE000

2.0 Watts Peak Power



Global Motion Products



Not to Scale - Dimensions in millimeters (mm)

Nominal Voltage	6.0 Volts	6.0 Volts	6.0 Volts
No-Load Speed	10,300 rpm	10,300 rpm	10,300 rpm
Stall Torque	7.4 mNm	75.5 gcm	1.0 oz-in
No-Load Current	0.020 Amps	0.020 Amps	0.020 Amps
Peak Output Power	2.0 Watts	2.0 Watts	2.0 Watts
Torque Constant	5.48 mNm/A	55.88 gcm/A	0.78 oz-in/A
Terminal Resistance	4.44 Ohms	4.44 Ohms	4.44 Ohms
Back-EMF Constant	0.57 V/krpm	0.57 V/krpm	0.57 V/krpm
Mechanical Time Constant	11.4 msec	11.4 msec	11.4 msec
Rotor Inertia	0.77 kgm ² x10 ⁻⁷	0.77 gm cm ²	0.11 x10 ⁻⁴ oz-in-sec ²
Mechanical Time Constant	11.4 msec	11.4 msec	11.4 msec
Slope of Speed/Torque Curve	1,391.0 rpm/mNm	136.4 rpm/gcm	9,822.5 rpm/oz-in
Speed Constant	1,743 rpm/Volt	77 %	77 %
Motor Constant	2.60 mNm/√Watt	26.52 gcm/√Watt	0.37 oz-in/√Watt
Commutation Type	Precious Metal	Precious Metal	Precious Metal
Rated Power @ 7,937 rpm	1.4 Watts	1.4 Watts	1.4 Watts
Rated Torque @ 7,937 rpm	1.7 mNm	17.3 gcm	0.2 oz-in
Rated Current @ 7,937 rpm	0.310 Amps	0.310 Amps	0.310 Amps

Part Number: How to Order C16P06SE000

Ratings are at 25°C Ambient Temperature.

Radial Load Rating	1.4 N	Radial Play	0.020 mm	Max Temperature	65 °C
Radial Load Distance	4 mm	Thrust Play	0.150 mm	Min Temperature	-20 °C
Axial Load	0.80 N	Magnet Type	NdFeB	Max Winding Temp	85 °C
Press Fit Force - Max	15.00 N	Bearing Type	Sleeve Bearings	Mass	22 grams
Gearbox Options	P16 Planetary Gearbox				
Encoder Options	N/A				
Options - Other	Ball Bearings. Shaft length. Lubricants. Leads. Solder Tabs. Connectors.				

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Commutation Type:

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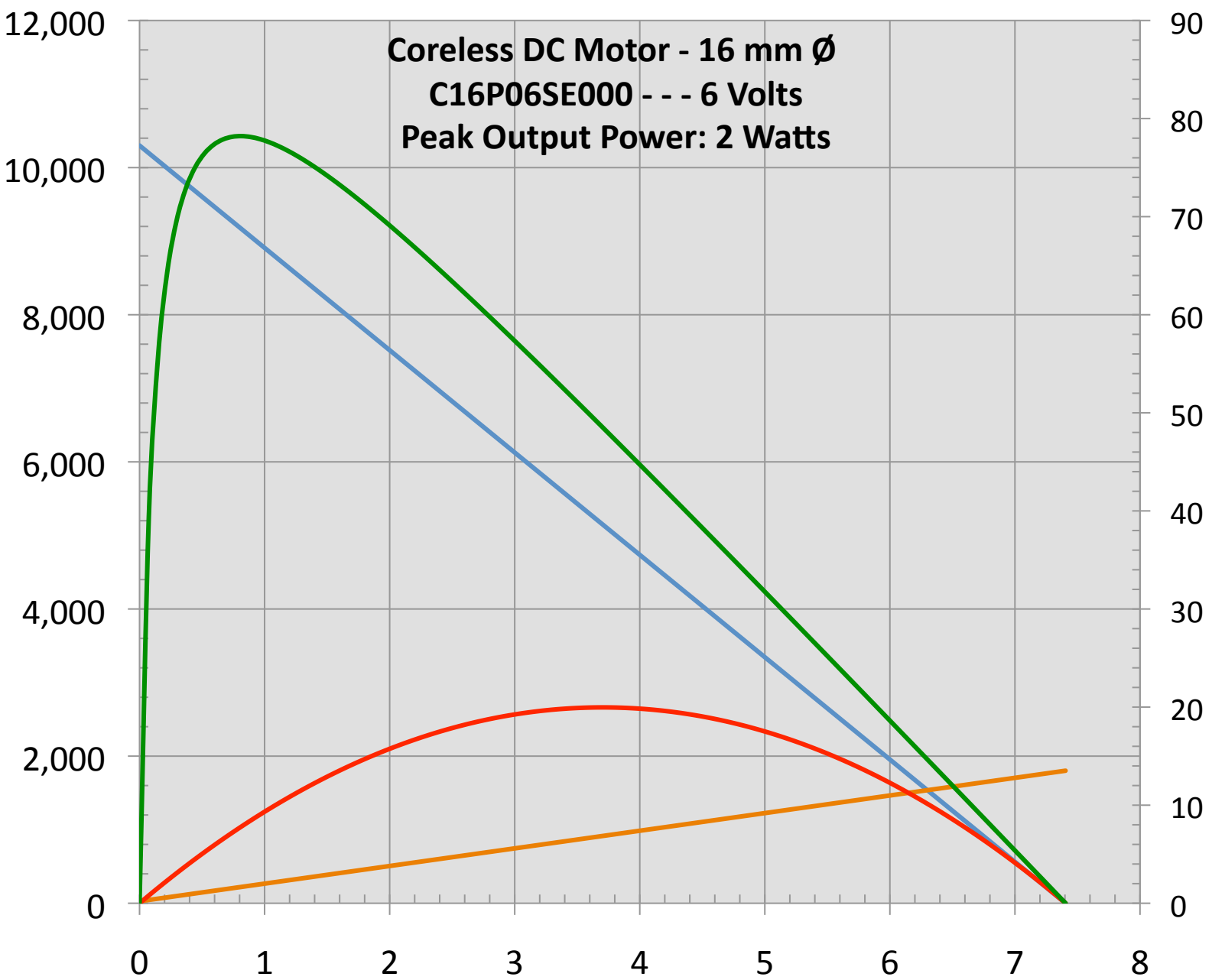
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Coreless DC Motor - 16 mm Ø
C16P06SE000 - - - 6 Volts
Peak Output Power: 2 Watts

C16P06SE000
Voltage: 6 Volts
 No Load Speed: 10300 rpm
 No Load Current: 0.0202 Amps
 Terminal Resistance: 4.44 Ohms
 Stall Torque: 7.4 mNm
 Torque Constant: 5.48 mNm/A
 Peak Output Power: 2 Watts
 Peak Efficiency: 78.2%
 Stall Current: 1.35 Amps

Speed - rpm



— A - Speed - rpm
 — A - Current - Amps / 10
 — A - Power Out - Watts / 10
 — A - Efficiency - %

Torque - mNm

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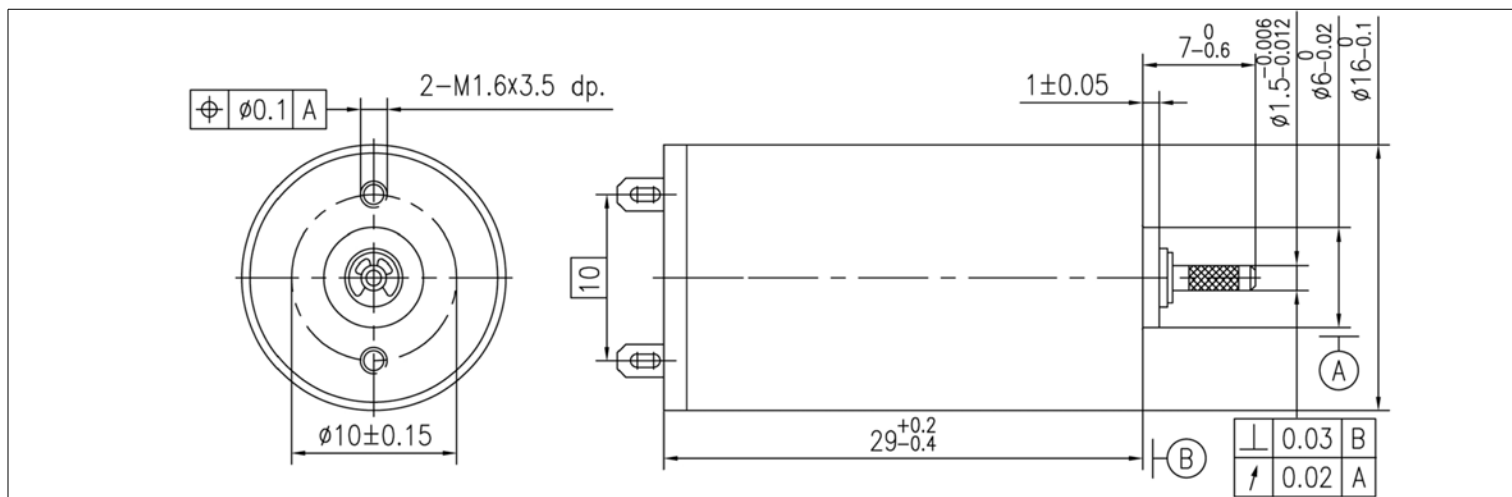
Coreless DC Motor - 16 mm Ø

C16P09SE000

2.3 Watts Peak Power



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Not to Scale - Dimensions in millimeters (mm)

Nominal Voltage	9.0 Volts	9.0 Volts	9.0 Volts
No-Load Speed	10,600 rpm	10,600 rpm	10,600 rpm
Stall Torque	8.2 mNm	84.0 gcm	1.2 oz-in
No-Load Current	0.015 Amps	0.015 Amps	0.015 Amps
Peak Output Power	2.3 Watts	2.3 Watts	2.3 Watts
Torque Constant	7.99 mNm/A	81.46 gcm/A	1.13 oz-in/A
Terminal Resistance	8.73 Ohms	8.73 Ohms	8.73 Ohms
Back-EMF Constant	0.84 V/krpm	0.84 V/krpm	0.84 V/krpm
Mechanical Time Constant	18.2 msec	18.2 msec	18.2 msec
Rotor Inertia	1.33 kgm ² x10 ⁻⁷	1.33 gm cm ²	0.19 x10 ⁻⁴ oz-in-sec ²
Mechanical Time Constant	18.2 msec	18.2 msec	18.2 msec
Slope of Speed/Torque Curve	1,287.1 rpm/mNm	126.2 rpm/gcm	9,089.1 rpm/oz-in
Speed Constant	1,195 rpm/Volt	77 %	77 %
Motor Constant	2.70 mNm/√Watt	27.57 gcm/√Watt	0.38 oz-in/√Watt
Commutation Type	Precious Metal	Precious Metal	Precious Metal
Rated Power @ 7,958 rpm	1.7 Watts	1.7 Watts	1.7 Watts
Rated Torque @ 7,958 rpm	2.0 mNm	20.9 gcm	0.3 oz-in
Rated Current @ 7,958 rpm	0.257 Amps	0.257 Amps	0.257 Amps

Part Number: How to Order C16P09SE000

Ratings are at 25°C Ambient Temperature.

Radial Load Rating	1.4 N	Radial Play	0.020 mm	Max Temperature	65 °C
Radial Load Distance	4 mm	Thrust Play	0.150 mm	Min Temperature	-20 °C
Axial Load	0.80 N	Magnet Type	NdFeB	Max Winding Temp	85 °C
Press Fit Force - Max	15.00 N	Bearing Type	Sleeve Bearings	Mass	22 grams
Gearbox Options	P16 Planetary Gearbox				
Encoder Options	N/A				
Options - Other	Ball Bearings. Shaft length. Lubricants. Leads. Solder Tabs. Connectors.				

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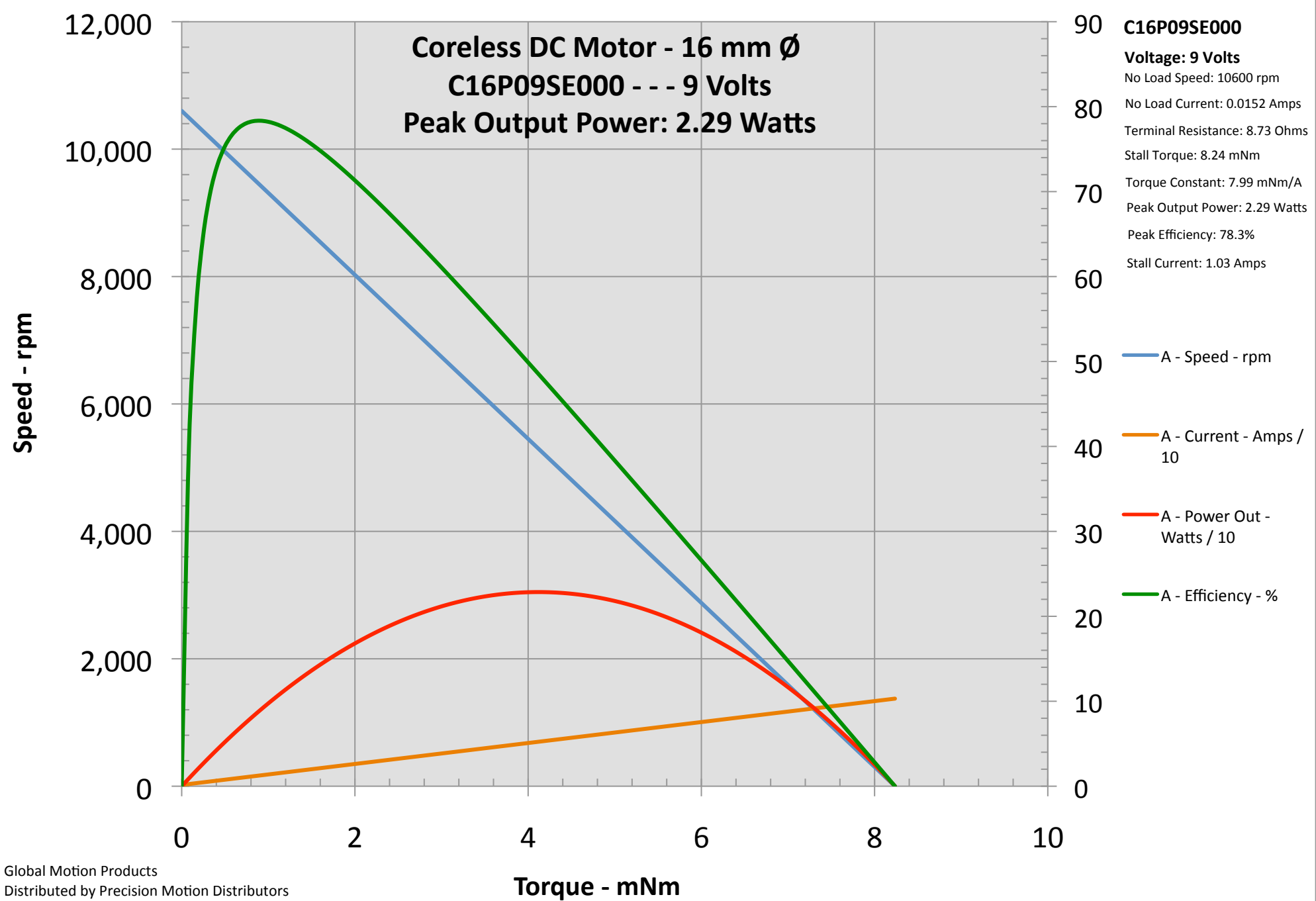
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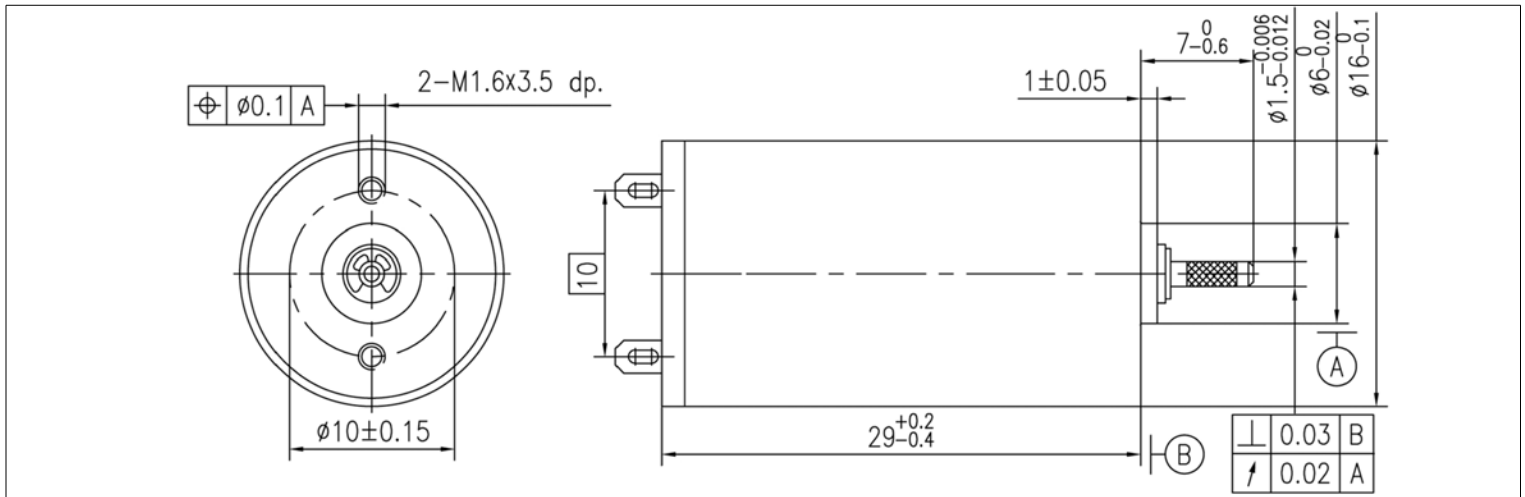
Coreless DC Motor - 16 mm Ø

C16P12SE000

1.9 Watts Peak Power



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Not to Scale - Dimensions in millimeters (mm)

Nominal Voltage	12.0 Volts	12.0 Volts	12.0 Volts
No-Load Speed	10,200 rpm	10,200 rpm	10,200 rpm
Stall Torque	7.2 mNm	73.8 gcm	1.0 oz-in
No-Load Current	0.008 Amps	0.008 Amps	0.008 Amps
Peak Output Power	1.9 Watts	1.9 Watts	1.9 Watts
Torque Constant	11.09 mNm/A	113.14 gcm/A	1.57 oz-in/A
Terminal Resistance	18.40 Ohms	18.40 Ohms	18.40 Ohms
Back-EMF Constant	1.16 V/krpm	1.16 V/krpm	1.16 V/krpm
Mechanical Time Constant	16.4 msec	16.4 msec	16.4 msec
Rotor Inertia	1.10 kgm ² x10 ⁻⁷	1.10 gm cm ²	0.16 x10 ⁻⁴ oz-in-sec ²
Mechanical Time Constant	16.4 msec	16.4 msec	16.4 msec
Slope of Speed/Torque Curve	1,409.7 rpm/mNm	138.2 rpm/gcm	9,954.3 rpm/oz-in
Speed Constant	861 rpm/Volt	79 %	79 %
Motor Constant	2.59 mNm/√Watt	26.38 gcm/√Watt	0.37 oz-in/√Watt
Commutation Type	Precious Metal	Precious Metal	Precious Metal
Rated Power @ 7,651 rpm	1.4 Watts	1.4 Watts	1.4 Watts
Rated Torque @ 7,651 rpm	1.8 mNm	18.5 gcm	0.3 oz-in
Rated Current @ 7,651 rpm	0.163 Amps	0.163 Amps	0.163 Amps

Part Number: How to Order C16P12SE000

Ratings are at 25°C Ambient Temperature.

Radial Load Rating	1.4 N	Radial Play	0.020 mm	Max Temperature	65 °C
Radial Load Distance	4 mm	Thrust Play	0.150 mm	Min Temperature	-20 °C
Axial Load	0.80 N	Magnet Type	NdFeB	Max Winding Temp	85 °C
Press Fit Force - Max	15.00 N	Bearing Type	Sleeve Bearings	Mass	22 grams
Gearbox Options	P16 Planetary Gearbox				
Encoder Options	N/A				
Options - Other	Ball Bearings. Shaft length. Lubricants. Leads. Solder Tabs. Connectors.				

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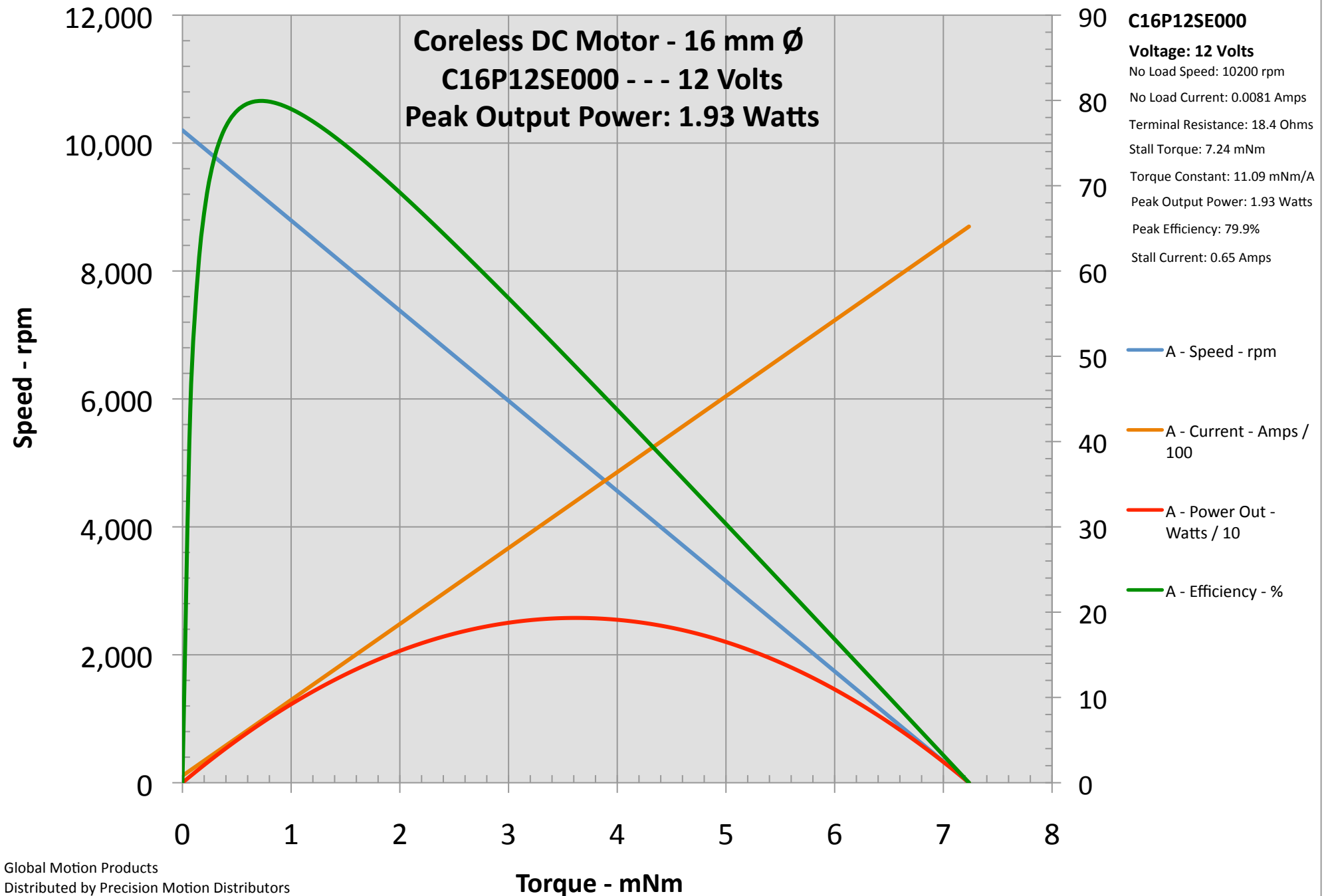
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