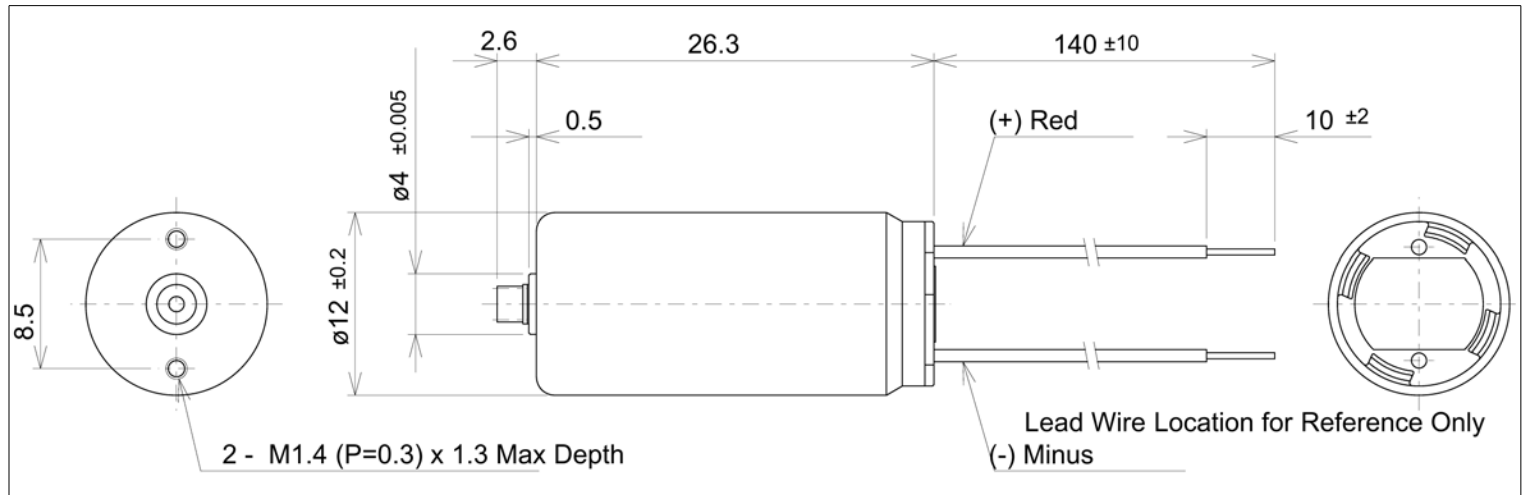


# Coreless DC Motor - 12 mm Ø x 26



C12P06SZ000 0.29 Watts Peak

Global Motion Products



Not to Scale - Dimensions in millimeters (mm)

Nominal Voltage	6.0 Volts	6.0 Volts	6.0 Volts
No-Load Speed	5,400 rpm	5,400 rpm	5,400 rpm
Stall Torque	2.1 mNm	22.0 gcm	0.30 oz-in
No-Load Current	0.007 Amps	0.007 Amps	0.007 Amps
Peak Output Power	0.29 Watts	0.29 Watts	0.29 Watts
Torque Constant	10.27 mNm/A	104.71 gcm/A	1.45 oz-in/A
Terminal Resistance	29.00 Ohms	29.00 Ohms	29.00 Ohms
Back-EMF Constant	1.08 V/krpm	1.08 V/krpm	1.08 V/krpm
Inductance	0.314 mH	0.314 mH	0.314 mH
Rotor Inertia	0.136 kg-m <sup>2</sup> x10 <sup>-7</sup>	0.136 gm cm <sup>2</sup>	0.019 x10 <sup>-4</sup> oz in sec <sup>2</sup>
Mechanical Time Constant	3.7 msec	3.7 msec	3.7 msec
Slope of Speed/Torque Curve	2,541.8 rpm/mNm	245.5 rpm/gcm	17,948.8 rpm/oz-in
Speed Constant	930 rpm/Volt	930 rpm/Volt	930 rpm/Volt
Motor Constant	1.91 mNm/√Watt	19.44 gcm/√Watt	0.27 oz-in/√Watt

Ratings below are at 60°C. At room temperature the ratings would be considerably higher.

Rated Power @ 4,300 rpm	0.18 Watts	0.18 Watts	0.18 Watts
Rated Torque @ 4,300 rpm	0.5 mNm	5.1 gcm	0.07 oz-in
Rated Current @ 4,300 rpm	0.055 Amps	0.055 Amps	0.055 Amps

Part Number: How to Order C12P06SZ000 Characteristics - Specifications at 22 °C

Radial Load Rating	Radial Play	Max Temperature	65 °C
Radial Load Distance	Thrust Play	Min Temperature	-10 °C
Axial Load	Magnet Type NdFeB	Max Winding Temp	100 °C
Press Fit Force - Max	Bearing Type Sleeve Bearings	Mass	15.4 grams

Gearbox Options Consult GMP for Up to Date Options

Encoder Options Must select 10 mm Ø or 13 mm Ø Coreless DC Motor series for encoder option.

Options - Other Wire Lead Type/Length, Connectors, Lubrication. Windings. Shaft.

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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 and ISO  
Precious Metal 14001:2004 Environmental  
Management System.

RoHS Compliant

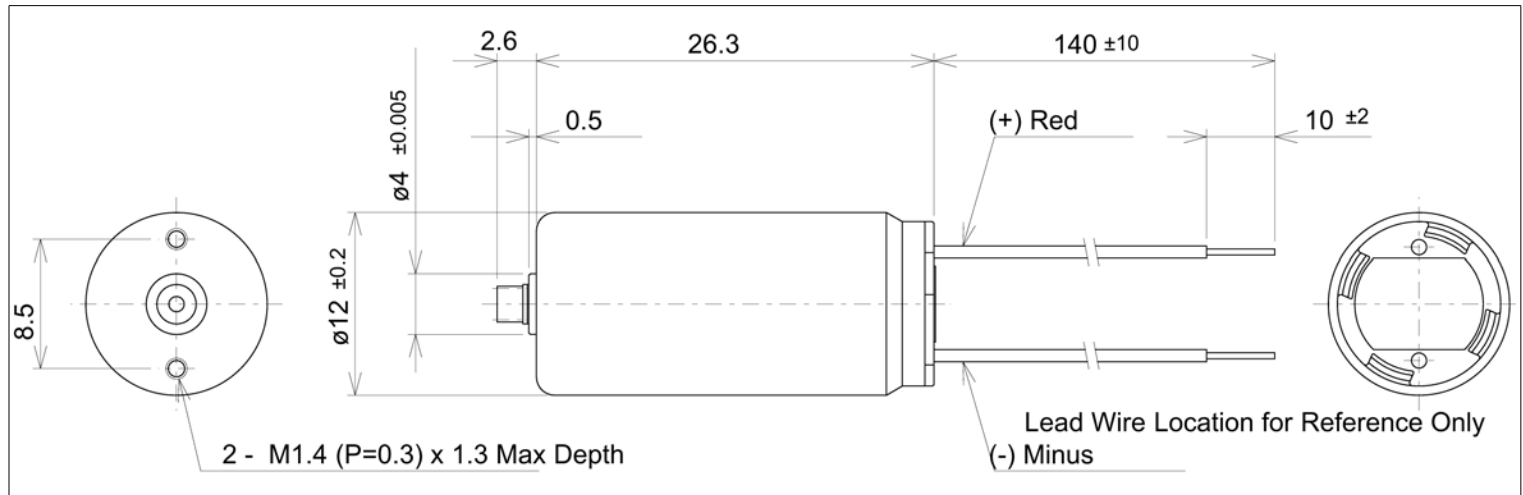
Specifications Subject to change without notice

# Coreless DC Motor - 12 mm Ø x 26



C12P06SZ010 0.56 Watts Peak

Global Motion Products



Not to Scale - Dimensions in millimeters (mm)

Nominal Voltage	6.0 Volts	6.0 Volts	6.0 Volts
No-Load Speed	7,700 rpm	7,700 rpm	7,700 rpm
Stall Torque	2.8 mNm	29.0 gcm	0.40 oz-in
No-Load Current	0.007 Amps	0.007 Amps	0.007 Amps
Peak Output Power	0.56 Watts	0.56 Watts	0.56 Watts
Torque Constant	7.31 mNm/A	74.58 gcm/A	1.04 oz-in/A
Terminal Resistance	15.40 Ohms	15.40 Ohms	15.40 Ohms
Back-EMF Constant	0.77 V/krpm	0.77 V/krpm	0.77 V/krpm
Inductance	0.128 mH	0.128 mH	0.128 mH
Rotor Inertia	0.136 kg-m <sup>2</sup> x10 <sup>-7</sup>	0.136 gm cm <sup>2</sup>	0.019 x10 <sup>-4</sup> oz in sec <sup>2</sup>
Mechanical Time Constant	3.9 msec	3.9 msec	3.9 msec
Slope of Speed/Torque Curve	2,702.2 rpm/mNm	265.5 rpm/gcm	19,082.0 rpm/oz-in
Speed Constant	1,306 rpm/Volt	1,306 rpm/Volt	1,306 rpm/Volt
Motor Constant	1.86 mNm/√Watt	19.00 gcm/√Watt	0.26 oz-in/√Watt

Ratings below are at 60°C. At room temperature the ratings would be considerably higher.

Rated Power @ 6,700 rpm	0.21 Watts	0.21 Watts	0.21 Watts
Rated Torque @ 6,700 rpm	0.4 mNm	4.0 gcm	0.06 oz-in
Rated Current @ 6,700 rpm	0.060 Amps	0.060 Amps	0.060 Amps

Part Number: How to Order C12P06SZ010 Characteristics - Specifications at 22 °C

Radial Load Rating	Radial Play	Max Temperature	65 °C
Radial Load Distance	Thrust Play	Min Temperature	-10 °C
Axial Load	Magnet Type NdFeB	Max Winding Temp	100 °C
Press Fit Force - Max	Bearing Type Sleeve Bearings	Mass	15.4 grams

Gearbox Options Consult GMP for Up to Date Options

Encoder Options Must select 10 mm Ø or 13 mm Ø Coreless DC Motor series for encoder option.

Options - Other Wire Lead Type/Length, Connectors, Lubrication. Windings. Shaft.

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Commutation Type: Manufactured under a Certified ISO  
9001:2008 Quality System and ISO  
14001:2004 Environmental  
Precious Metal Management System.

RoHS Compliant

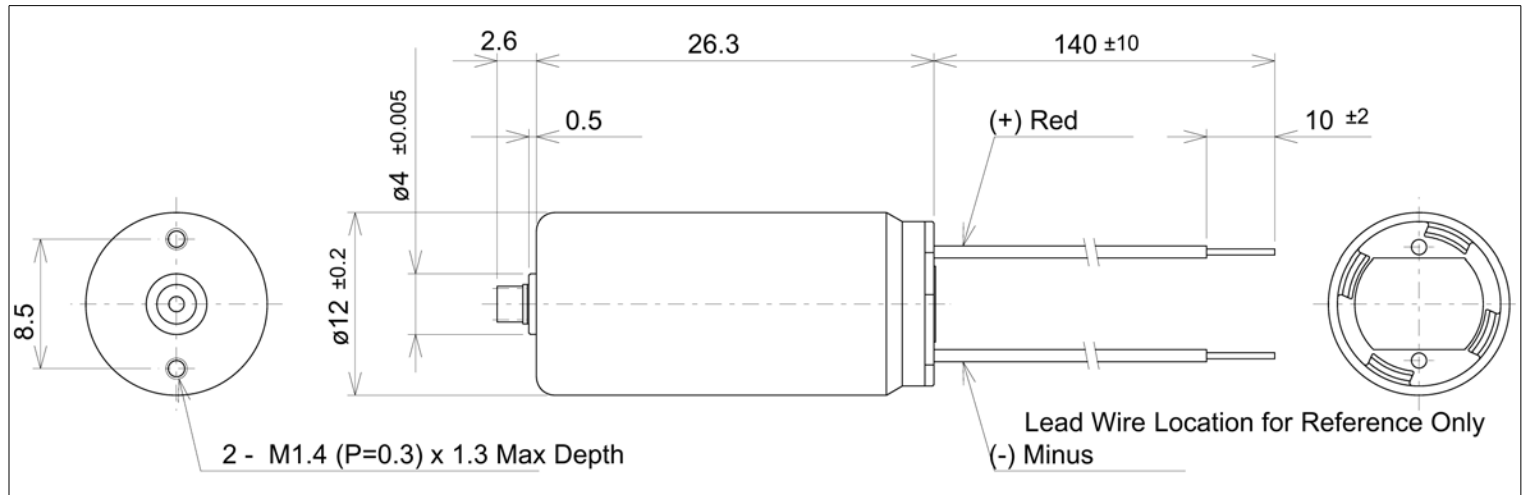
Specifications Subject to change without notice

# Coreless DC Motor - 12 mm Ø x 26



C12P12SZ000 0.80 Watts Peak

Global Motion Products



Not to Scale - Dimensions in millimeters (mm)

Nominal Voltage	12.0 Volts	12.0 Volts	12.0 Volts
No-Load Speed	11,200 rpm	11,200 rpm	11,200 rpm
Stall Torque	2.8 mNm	29.0 gcm	0.40 oz-in
No-Load Current	0.007 Amps	0.007 Amps	0.007 Amps
Peak Output Power	0.80 Watts	0.80 Watts	0.80 Watts
Torque Constant	9.99 mNm/A	101.85 gcm/A	1.41 oz-in/A
Terminal Resistance	42.80 Ohms	42.80 Ohms	42.80 Ohms
Back-EMF Constant	1.05 V/krpm	1.05 V/krpm	1.05 V/krpm
Inductance	0.444 mH	0.444 mH	0.444 mH
Rotor Inertia	0.136 kg-m <sup>2</sup> x10 <sup>-7</sup>	0.136 gm cm <sup>2</sup>	0.019 x10 <sup>-4</sup> oz in sec <sup>2</sup>
Mechanical Time Constant	5.8 msec	5.8 msec	5.8 msec
Slope of Speed/Torque Curve	3,999.4 rpm/mNm	386.2 rpm/gcm	28,242.1 rpm/oz-in
Speed Constant	956 rpm/Volt	956 rpm/Volt	956 rpm/Volt
Motor Constant	1.53 mNm/√Watt	15.57 gcm/√Watt	0.22 oz-in/√Watt

Ratings below are at 60°C. At room temperature the ratings would be considerably higher.

Rated Power @ 10,500 rpm	0.17 Watts	0.17 Watts	0.17 Watts
Rated Torque @ 10,500 rpm	0.2 mNm	1.9 gcm	0.03 oz-in
Rated Current @ 10,500 rpm	0.025 Amps	0.025 Amps	0.025 Amps

Part Number: How to Order C12P12SZ000 Characteristics - Specifications at 22 °C

Radial Load Rating	Radial Play	Max Temperature	65 °C
Radial Load Distance	Thrust Play	Min Temperature	-10 °C
Axial Load	Magnet Type NdFeB	Max Winding Temp	100 °C
Press Fit Force - Max	Bearing Type Sleeve Bearings	Mass	15.4 grams

Gearbox Options Consult GMP for Up to Date Options

Encoder Options Must select 10 mm Ø or 13 mm Ø Coreless DC Motor series for encoder option.

Options - Other Wire Lead Type/Length, Connectors, Lubrication. Windings. Shaft.

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Commutation Type: Manufactured under a Certified ISO  
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RoHS Compliant

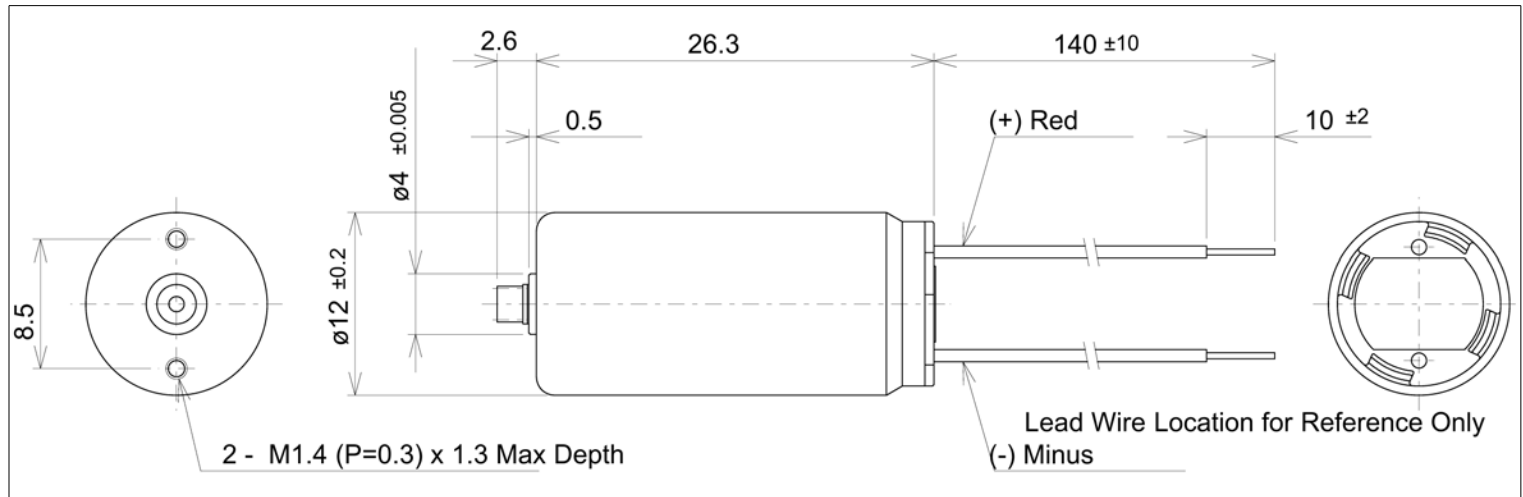
Specifications Subject to change without notice

# Coreless DC Motor - 12 mm Ø x 26



C12P12SZ010 2.06 Watts Peak

Global Motion Products



Not to Scale - Dimensions in millimeters (mm)

Nominal Voltage	12.0 Volts	12.0 Volts	12.0 Volts
No-Load Speed	13,800 rpm	13,800 rpm	13,800 rpm
Stall Torque	5.8 mNm	59.0 gcm	0.82 oz-in
No-Load Current	0.010 Amps	0.010 Amps	0.010 Amps
Peak Output Power	2.06 Watts	2.06 Watts	2.06 Watts
Torque Constant	8.19 mNm/A	83.48 gcm/A	1.16 oz-in/A
Terminal Resistance	17.00 Ohms	17.00 Ohms	17.00 Ohms
Back-EMF Constant	0.86 V/krpm	0.86 V/krpm	0.86 V/krpm
Inductance	0.170 mH	0.170 mH	0.170 mH
Rotor Inertia	0.136 kg-m <sup>2</sup> x10 <sup>-7</sup>	0.136 gm cm <sup>2</sup>	0.019 x10 <sup>-4</sup> oz in sec <sup>2</sup>
Mechanical Time Constant	3.5 msec	3.5 msec	3.5 msec
Slope of Speed/Torque Curve	2,388.2 rpm/mNm	233.9 rpm/gcm	16,864.3 rpm/oz-in
Speed Constant	1,167 rpm/Volt	1,167 rpm/Volt	1,167 rpm/Volt
Motor Constant	1.99 mNm/√Watt	20.25 gcm/√Watt	0.28 oz-in/√Watt

Ratings below are at 60°C. At room temperature the ratings would be considerably higher.

Rated Power @ 11,700 rpm	0.96 Watts	0.96 Watts	0.96 Watts
Rated Torque @ 11,700 rpm	0.9 mNm	9.2 gcm	0.13 oz-in
Rated Current @ 11,700 rpm	0.120 Amps	0.120 Amps	0.120 Amps

Part Number: How to Order C12P12SZ010 Characteristics - Specifications at 22 °C

Radial Load Rating	Radial Play	Max Temperature	65 °C
Radial Load Distance	Thrust Play	Min Temperature	-10 °C
Axial Load	Magnet Type NdFeB	Max Winding Temp	100 °C
Press Fit Force - Max	Bearing Type Sleeve Bearings	Mass	15.4 grams

Gearbox Options Consult GMP for Up to Date Options

Encoder Options Must select 10 mm Ø or 13 mm Ø Coreless DC Motor series for encoder option.

Options - Other Wire Lead Type/Length, Connectors, Lubrication. Windings. Shaft.

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