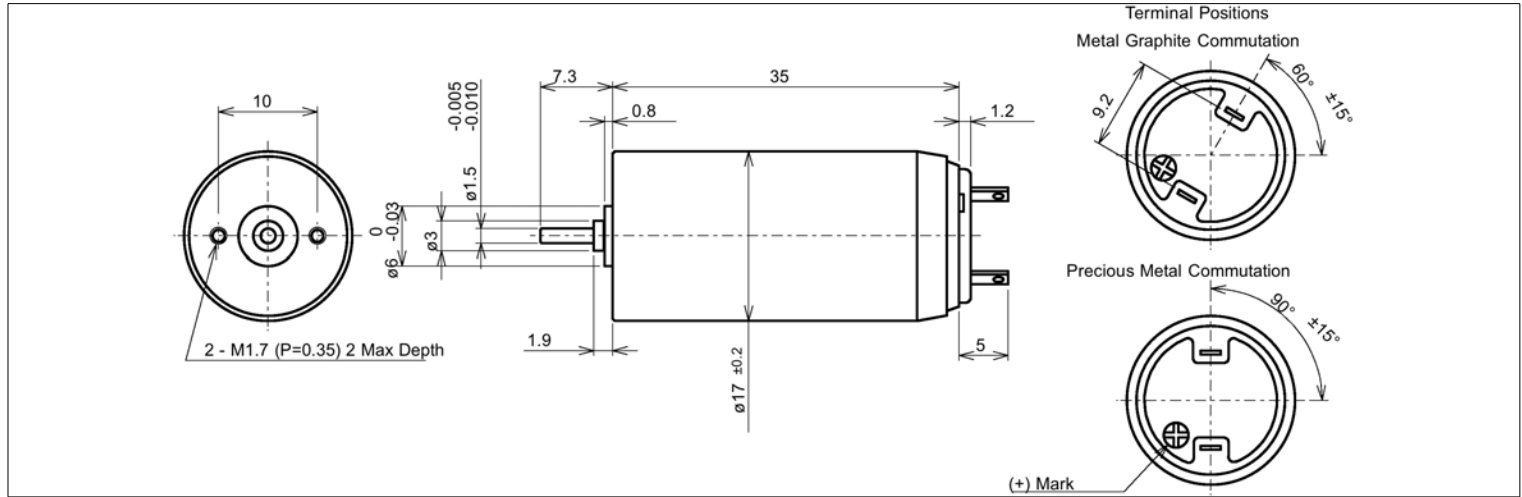


17 mm Ø Coreless DC Motor

C17G06SX000 1.75 Watts Peak

GMP

Global Motion Products



Not to Scale - Dimensions in millimeters (mm)

Nominal Voltage	6.0 Volts	6.0 Volts	6.0 Volts
No-Load Speed	4,200 rpm	4,200 rpm	4,200 rpm
Stall Torque	16.1 mNm	165.0 gcm	2.29 oz-in
No-Load Current	0.017 Amps	0.017 Amps	0.017 Amps
Peak Output Power	1.75 Watts	1.75 Watts	1.75 Watts
Torque Constant	13.45 mNm/A	137.18 gcm/A	1.91 oz-in/A
Terminal Resistance	5.00 Ohms	5.00 Ohms	5.00 Ohms
Back-EMF Constant	1.41 V/krpm	1.41 V/krpm	1.41 V/krpm
Inductance	0.230 mH	0.230 mH	0.230 mH
Rotor Inertia	0.909 kg-m ² x10 ⁻⁷	0.909 gm cm ²	0.129 x10 ⁻⁴ oz in sec ²
Mechanical Time Constant	2.5 msec	2.5 msec	2.5 msec
Slope of Speed/Torque Curve	260.2 rpm/mNm	25.5 rpm/gcm	1,837.3 rpm/oz-in
Speed Constant	710 rpm/Volt	710 rpm/Volt	710 rpm/Volt
Motor Constant	6.02 mNm/√Watt	61.35 gcm/√Watt	0.85 oz-in/√Watt

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

Rated Power @ 3,500 rpm	0.72 Watts	0.72 Watts	0.72 Watts
Rated Torque @ 3,500 rpm	2.3 mNm	23.8 gcm	0.33 oz-in
Rated Current @ 3,500 rpm	0.190 Amps	0.190 Amps	0.190 Amps

Part Number: How to Order C17G06SX000 Characteristics - Specifications at 22 °C

Radial Load Rating	Radial Play	Max Temperature	65 °C
Radial Load Distance	Thrust Play ≤ 0.300 mm	Min Temperature	-10 °C
Axial Load	Magnet Type NdFeB	Max Winding Temp	100 °C
Press Fit Force - Max	Bearing Type Sleeve Bearings	Mass	41.4 grams
Gearbox Options	Planetary & Spur. Low Backlash & Sintered Planetary. Ball Bearing versions. Special lubrication.		
Encoder Options	Integral 3 Channel Magnetoresistive w/ Complementary Outputs & Line Drivers or 2 Track Optical		
Options - Other	Precious Metal Commutation. Ball Bearings. Wire Leads and connectors. Extended life versions.		

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Commutation Type: Manufactured under a Certified ISO
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RoHS Compliant

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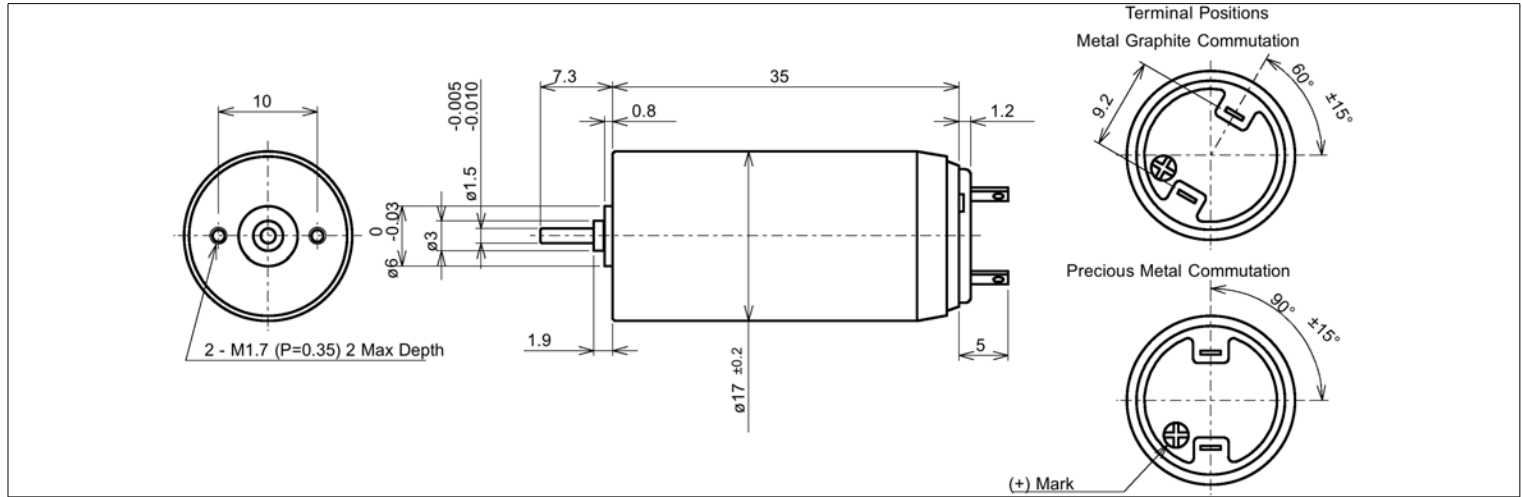
Specifications Subject to change without notice

17 mm Ø Coreless DC Motor

C17G12SX000 8.21 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	9,700 rpm	9,700 rpm	9,700 rpm
Stall Torque	32.7 mNm	333.0 gcm	4.62 oz-in
No-Load Current	0.027 Amps	0.027 Amps	0.027 Amps
Peak Output Power	8.21 Watts	8.21 Watts	8.21 Watts

Torque Constant	11.70 mNm/A	119.31 gcm/A	1.66 oz-in/A
Terminal Resistance	4.30 Ohms	4.30 Ohms	4.30 Ohms
Back-EMF Constant	1.23 V/krpm	1.23 V/krpm	1.23 V/krpm
Inductance	0.168 mH	0.168 mH	0.168 mH
Rotor Inertia	1.037 kg-m ² x10 ⁻⁷	1.037 gm cm ²	0.147 x10 ⁻⁴ oz in sec ²

Mechanical Time Constant	3.3 msec	3.3 msec	3.3 msec
Slope of Speed/Torque Curve	297.1 rpm/mNm	29.1 rpm/gcm	2,097.7 rpm/oz-in
Speed Constant	816 rpm/Volt	816 rpm/Volt	816 rpm/Volt
Motor Constant	5.64 mNm/√Watt	57.54 gcm/√Watt	0.80 oz-in/√Watt

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

Rated Power @ 8,500 rpm	2.71 Watts	2.71 Watts	2.71 Watts
Rated Torque @ 8,500 rpm	3.7 mNm	37.4 gcm	0.52 oz-in
Rated Current @ 8,500 rpm	0.340 Amps	0.340 Amps	0.340 Amps

Part Number: How to Order C17G12SX000 Characteristics - Specifications at 22 °C

Radial Load Rating	Radial Play	Max Temperature	65 °C
Radial Load Distance	Thrust Play ≤ 0.300 mm	Min Temperature	-10 °C
Axial Load	Magnet Type NdFeB	Max Winding Temp	100 °C
Press Fit Force - Max	Bearing Type Sleeve Bearings	Mass	41.4 grams
Gearbox Options	Planetary & Spur. Low Backlash & Sintered Planetary. Ball Bearing versions. Special lubrication.		
Encoder Options	Integral 3 Channel Magnetoresistive w/ Complementary Outputs & Line Drivers or 2 Track Optical		
Options - Other	Precious Metal Commutation. Ball Bearings. Wire Leads and connectors. Extended life versions.		

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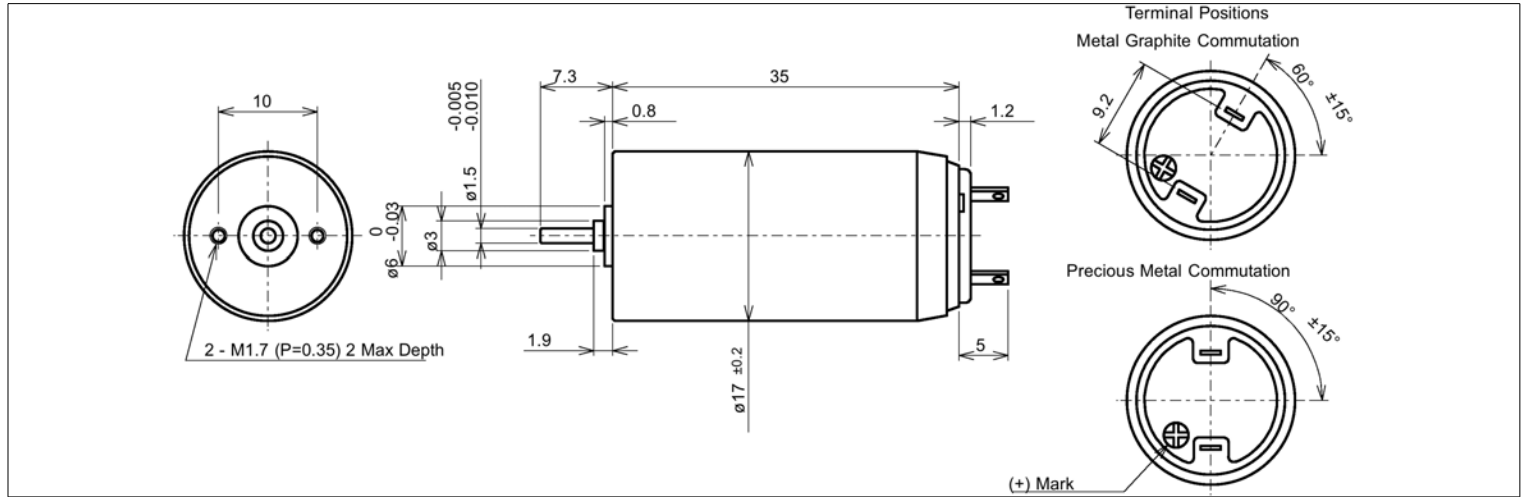
RoHS Compliant

17 mm Ø Coreless DC Motor

C17G12SX010 2.49 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	5,900 rpm	5,900 rpm	5,900 rpm
Stall Torque	16.4 mNm	167.0 gcm	2.32 oz-in
No-Load Current	0.013 Amps	0.013 Amps	0.013 Amps
Peak Output Power	2.49 Watts	2.49 Watts	2.49 Watts
Torque Constant	19.12 mNm/A	194.97 gcm/A	2.71 oz-in/A
Terminal Resistance	14.00 Ohms	14.00 Ohms	14.00 Ohms
Back-EMF Constant	2.00 V/krpm	2.00 V/krpm	2.00 V/krpm
Inductance	0.484 mH	0.484 mH	0.484 mH
Rotor Inertia	0.841 kg-m ² x10 ⁻⁷	0.841 gm cm ²	0.119 x10 ⁻⁴ oz in sec ²
Mechanical Time Constant	3.2 msec	3.2 msec	3.2 msec
Slope of Speed/Torque Curve	360.0 rpm/mNm	35.3 rpm/gcm	2,542.2 rpm/oz-in
Speed Constant	499 rpm/Volt	499 rpm/Volt	499 rpm/Volt
Motor Constant	5.11 mNm/√Watt	52.11 gcm/√Watt	0.72 oz-in/√Watt

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

Rated Power @ 4,700 rpm	1.45 Watts	1.45 Watts	1.45 Watts
Rated Torque @ 4,700 rpm	3.6 mNm	36.4 gcm	0.51 oz-in
Rated Current @ 4,700 rpm	0.200 Amps	0.200 Amps	0.200 Amps

Part Number: How to Order C17G12SX010 Characteristics - Specifications at 22 °C

Radial Load Rating	Radial Play	Max Temperature	65 °C
Radial Load Distance	Thrust Play ≤ 0.300 mm	Min Temperature	-10 °C
Axial Load	Magnet Type NdFeB	Max Winding Temp	100 °C
Press Fit Force - Max	Bearing Type Sleeve Bearings	Mass	41.4 grams
Gearbox Options	Planetary & Spur. Low Backlash & Sintered Planetary. Ball Bearing versions. Special lubrication.		
Encoder Options	Integral 3 Channel Magnetoresistive w/ Complementary Outputs & Line Drivers or 2 Track Optical		
Options - Other	Precious Metal Commutation. Ball Bearings. Wire Leads and connectors. Extended life versions.		

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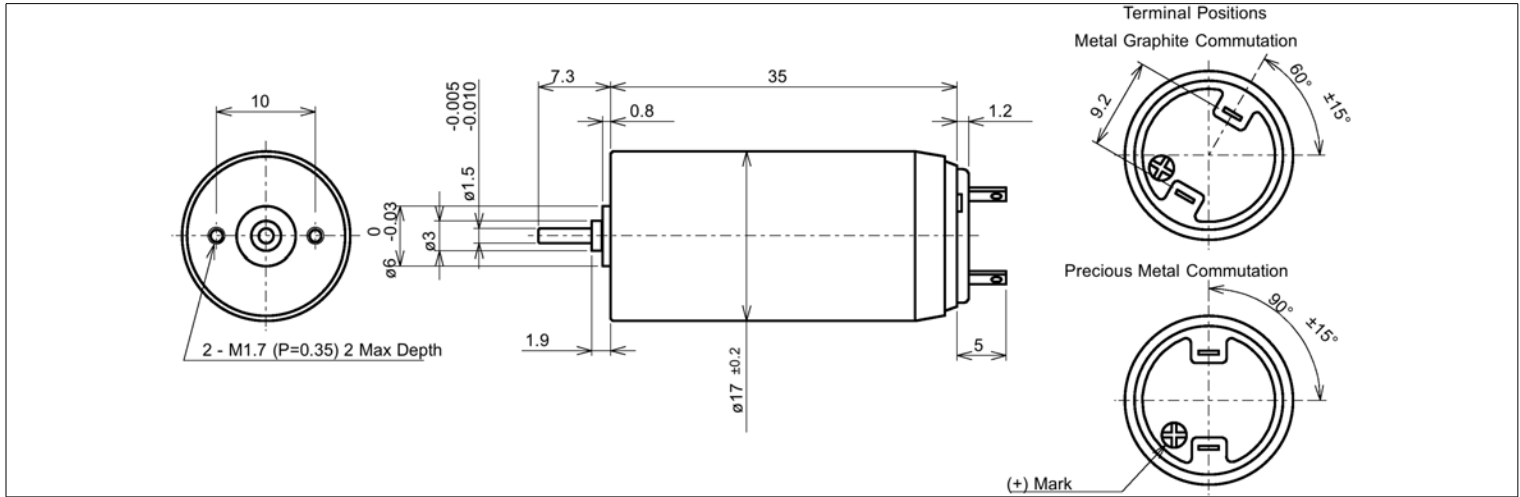
Specifications Subject to change without notice

17 mm Ø Coreless DC Motor

C17G24SX010 3.77 Watts Peak



Global Motion Products



Not to Scale - Dimensions in millimeters (mm)

Nominal Voltage	24.0 Volts	24.0 Volts	24.0 Volts
No-Load Speed	8,500 rpm	8,500 rpm	8,500 rpm
Stall Torque	17.2 mNm	176.0 gcm	2.44 oz-in
No-Load Current	0.010 Amps	0.010 Amps	0.010 Amps
Peak Output Power	3.77 Watts	3.77 Watts	3.77 Watts

Torque Constant	26.55 mNm/A	270.70 gcm/A	3.76 oz-in/A
Terminal Resistance	37.00 Ohms	37.00 Ohms	37.00 Ohms
Back-EMF Constant	2.78 V/krpm	2.78 V/krpm	2.78 V/krpm
Inductance	0.676 mH	0.676 mH	0.676 mH
Rotor Inertia	0.777 kg-m ² x10 ⁻⁷	0.777 gm cm ²	0.110 x10 ⁻⁴ oz in sec ²

Mechanical Time Constant	4.1 msec	4.1 msec	4.1 msec
Slope of Speed/Torque Curve	493.6 rpm/mNm	48.3 rpm/gcm	3,485.7 rpm/oz-in
Speed Constant	360 rpm/Volt	360 rpm/Volt	360 rpm/Volt
Motor Constant	4.36 mNm/√Watt	44.50 gcm/√Watt	0.62 oz-in/√Watt

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

Rated Power @ 7,000 rpm	2.16 Watts	2.16 Watts	2.16 Watts
Rated Torque @ 7,000 rpm	3.8 mNm	39.3 gcm	0.55 oz-in
Rated Current @ 7,000 rpm	0.155 Amps	0.155 Amps	0.155 Amps

Part Number: How to Order C17G24SX010 Characteristics - Specifications at 22 °C

Radial Load Rating	Radial Play	Max Temperature	65 °C
Radial Load Distance	Thrust Play ≤ 0.300 mm	Min Temperature	-10 °C
Axial Load	Magnet Type NdFeB	Max Winding Temp	100 °C
Press Fit Force - Max	Bearing Type Sleeve Bearings	Mass	41.4 grams
Gearbox Options	Planetary & Spur. Low Backlash & Sintered Planetary. Ball Bearing versions. Special lubrication.		
Encoder Options	Integral 3 Channel Magnetoresistive w/ Complementary Outputs & Line Drivers or 2 Track Optical		
Options - Other	Precious Metal Commutation. Ball Bearings. Wire Leads and connectors. Extended life versions.		

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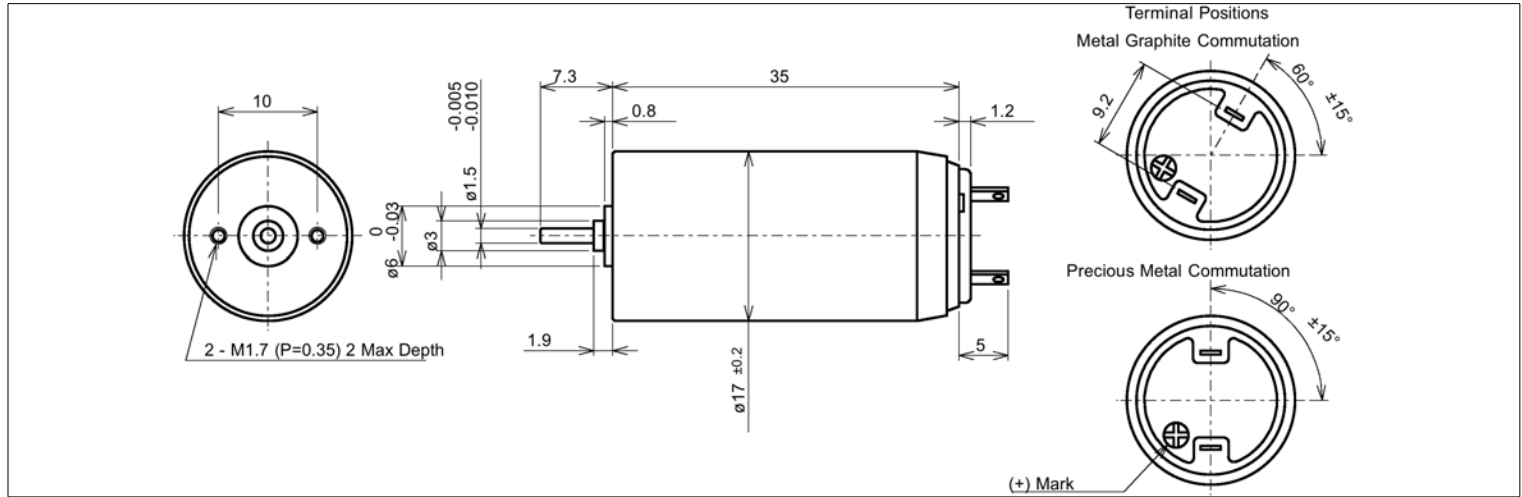
Specifications Subject to change without notice

17 mm Ø Coreless DC Motor

C17G24SX000 10.09 Watts Peak

GMP

Global Motion Products



Not to Scale - Dimensions in millimeters (mm)

Nominal Voltage	24.0 Volts	24.0 Volts	24.0 Volts
No-Load Speed	11,800 rpm	11,800 rpm	11,800 rpm
Stall Torque	33.0 mNm	336.0 gcm	4.67 oz-in
No-Load Current	0.017 Amps	0.017 Amps	0.017 Amps
Peak Output Power	10.09 Watts	10.09 Watts	10.09 Watts
Torque Constant	19.23 mNm/A	196.13 gcm/A	2.72 oz-in/A
Terminal Resistance	14.00 Ohms	14.00 Ohms	14.00 Ohms
Back-EMF Constant	2.01 V/krpm	2.01 V/krpm	2.01 V/krpm
Inductance	0.464 mH	0.464 mH	0.464 mH
Rotor Inertia	0.841 kg-m ² x10 ⁻⁷	0.841 gm cm ²	0.119 x10 ⁻⁴ oz in sec ²
Mechanical Time Constant	3.2 msec	3.2 msec	3.2 msec
Slope of Speed/Torque Curve	357.9 rpm/mNm	35.1 rpm/gcm	2,527.2 rpm/oz-in
Speed Constant	496 rpm/Volt	496 rpm/Volt	496 rpm/Volt
Motor Constant	5.14 mNm/√Watt	52.42 gcm/√Watt	0.73 oz-in/√Watt

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

Rated Power @ 10,300 rpm	4.23 Watts	4.23 Watts	4.23 Watts
Rated Torque @ 10,300 rpm	4.7 mNm	47.7 gcm	0.66 oz-in
Rated Current @ 10,300 rpm	0.260 Amps	0.260 Amps	0.260 Amps

Part Number: How to Order C17G24SX000 Characteristics - Specifications at 22 °C

Radial Load Rating	Radial Play	Max Temperature	65 °C
Radial Load Distance	Thrust Play ≤ 0.300 mm	Min Temperature	-10 °C
Axial Load	Magnet Type NdFeB	Max Winding Temp	100 °C
Press Fit Force - Max	Bearing Type Sleeve Bearings	Mass	41.4 grams
Gearbox Options	Planetary & Spur. Low Backlash & Sintered Planetary. Ball Bearing versions. Special lubrication.		
Encoder Options	Integral 3 Channel Magnetoresistive w/ Complementary Outputs & Line Drivers or 2 Track Optical		
Options - Other	Precious Metal Commutation. Ball Bearings. Wire Leads and connectors. Extended life versions.		

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