

MC2250 Series

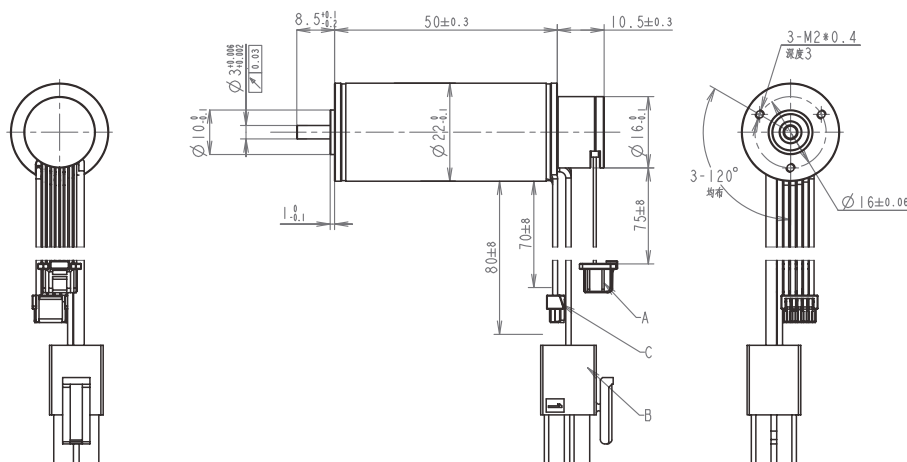
Φ22mm Brushless Coreless Motor

Key Features

- Four magnetic poles
- 15600rpm
- 41mNm
- 13.7mNm/A



Dimensional Drawing



Motor Data (Rated)

Rated voltage (V)	24	28
No-Load Speed (rpm)	16700	14500
No-Load Current (A)	0.38	0.25
Rated speed (rpm)	15600	11000
Rated torque (mNm)	41	80
Rated current (A)	3.7	4
Stall torque (mNm)	627	456
Stall current (A)	47	25.4
Max. efficiency (%)	86%	80.1

Motor Constant (Rated)

Phase-to-Phase Resistance (Ω)	0.52	0.9
Phase-to-Phase inductance (mH)	0.05	0.085
Torque constant (mNm/A)	13.7	18.1
Speed constant (rpm/V)	699	526
Speed/torque gradient (rpm/mNm)	26.6	32
Mechanical time constant (ms)	1.3	1.49
Rotor inertia (gcm ²)	4.66	5.43

Thermal Data

Thermal resistance housing-ambient (K/W)	11.6	11.6
Thermal resistance winding-housing (K/W)	0.75	0.75
Thermal time constant winding (s)	4.72	4.72
Thermal time constant motor (s)	940	940
Ambient temperature (°C)	-20~+100	-20~+100
Max. winding temperature (°C)	125	125

Mechanical Data (Ball Bearing)

Max. allowable speed (rpm)	25 000
Max. axial play (mm)	< 3 N 0 12 N > 3 N 0.1 (max)
Radial play	preloaded
Max. axial load dynamic(N)	3.2
Max. force for press fits (static) (N)	29
Max. radial load (2 mm from flange) (N)	15

Note: Specifications can be customized per customer requirements.

Terminal Type

CJT A1257HRE-5P CJT C6201HFB-2*2P CJT C6201HFB-2X5P

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Terminal Definition

Connector A

CJT C6201HFB-2X5P



pin 1	None
pin 2	UL10064 #28 Red Vcc (3.3~5.0 VDC)
pin 3	UL10064 #28 Black Grounding
pin 4	None
pin 5	UL10064 #28 Blue A-
pin 6	UL10064 #28 Blue A+
pin 7	UL10064 #28 Yellow B-
pin 8	UL10064 #28 Yellow B+
pin 9	UL10064 #28 White Z-
pin 10	UL10064 #28 White Z+

Connector B

CJT C6201HFB-2*2P



pin 1	UL1571 #22 Red Motor Winding 1
pin 2	UL1571 #22 Black Motor Winding 2
pin 3	None
pin 4	UL1571 #22 White Motor Winding 3

Connector C

CJT A1257HRE-5P



pin 1	UL1571 #26 Green Vcc (3.3~24 VDC)
pin 2	UL1571 #26 Red Hall sensor 1
pin 3	UL1571 #26 Blue Grounding
pin 4	UL1571 #26 Black Hall sensor 2
pin 5	UL1571 #26 White Hall sensor 3