

MC0408 Series

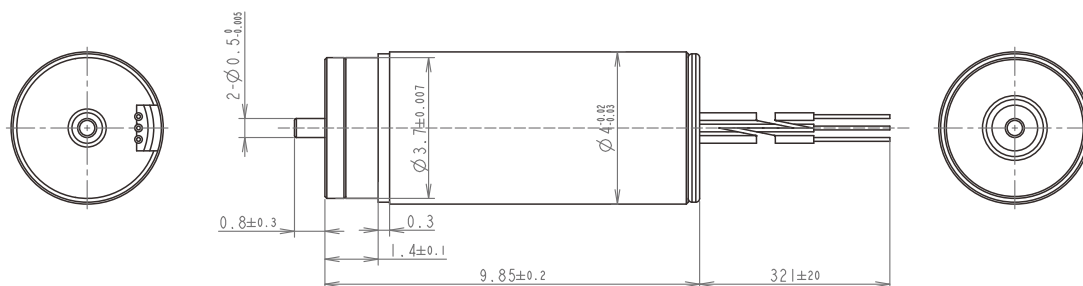
Φ4mm Brushless Coreless Motor

Key Features

- Two magnetic pole
- 41900rpm
- 0.02mNm
- 0.6mNm/A



Dimensional Drawing



Motor Data (Rated)

Rated voltage (V)	5
No-Load Speed (rpm)	58000
No-Load Current (A)	0.045
Rated speed (rpm)	41900
Rated torque (mNm)	0.02
Rated current (A)	0.095
Stall torque (mNm)	0.07
Stall current (A)	0.19
Max. efficiency (%)	20

Motor Constant (Rated)

Phase-to-Phase Resistance (Ω)	26.4
Phase-to-Phase inductance (mH)	0.07
Torque constant (mNm/A)	0.6
Speed constant (rpm/V)	16667
Speed/torque gradient (rpm/mNm)	789337
Mechanical time constant (ms)	4.2
Rotor inertia (gcm ²)	0.0006

Thermal Data

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

Mechanical Data (Ball Bearing)

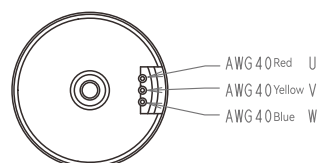
Max. allowable speed (rpm)	100 000
Max. axial play (mm)	< 0.15 N 0 > 0.15 N 0.3 (max)
Radial play	preloaded
Max. axial load dynamic(N)	0.1
Max. force for press fits (static) (N)	10
Max. radial load (2 mm from flange) (N)	2

Note: Specifications can be customized per customer requirements.

Terminal Type

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Terminal Definition



Line1 Motor Winding 1 Red
Line2 Motor Winding 2 Yellow
Line3 Motor Winding 3 Blue