



EM3J-04 is a high speed and medium inertia 400 W synchronous AC brushless servo motor. The motors can be equipped with 17-bit magnetic or 23-bit optical absolute encoder.

Independent electromagnetic design improve rotor rotation inertia. Inherit all the advantages of EM3A series, but with higher inertia. This high speed series offers a range of output power and different encoder types. Optional 24VDC brake is available.

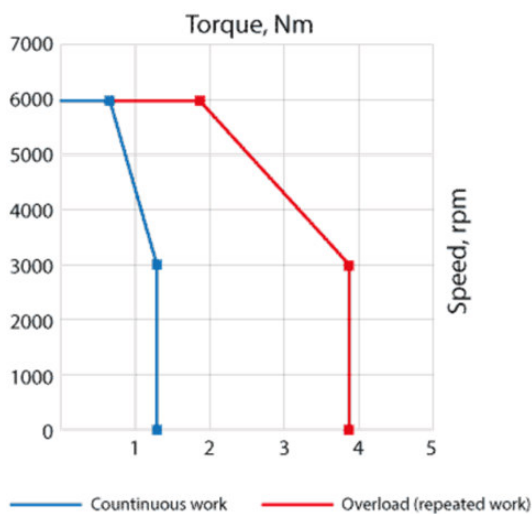
Technical data

Output power	400 W
Rated speed	3000 rpm
Maximum speed	6000 rpm
Rated torque	1.27 Nm
Maximum torque (for motor model EM3J-04ATA)	3.81 Nm
Maximum torque (for motor model EM3J-04ALA)	4.46 Nm
Rated current	2.8 A
Maximum current (for motor model EM3J-02ATA)	8.8 A
Maximum current (for motor model EM3J-02ALA)	11.2 A

Technical data

Motor inertia (motor without brake)	0.64 kg*cm ²
Motor inertia (motor with brake)	0.68 kg*cm ²
Allowable radial shaft load	245 N
Allowable axial shaft load	74 N
Optional brake holding torque	≥1.5 Nm
Optional brake voltage	24 VDC
Weight (motor without brake)	1.3 kg
Weight (motor with brake)	1.7 kg
Flange	60 mm

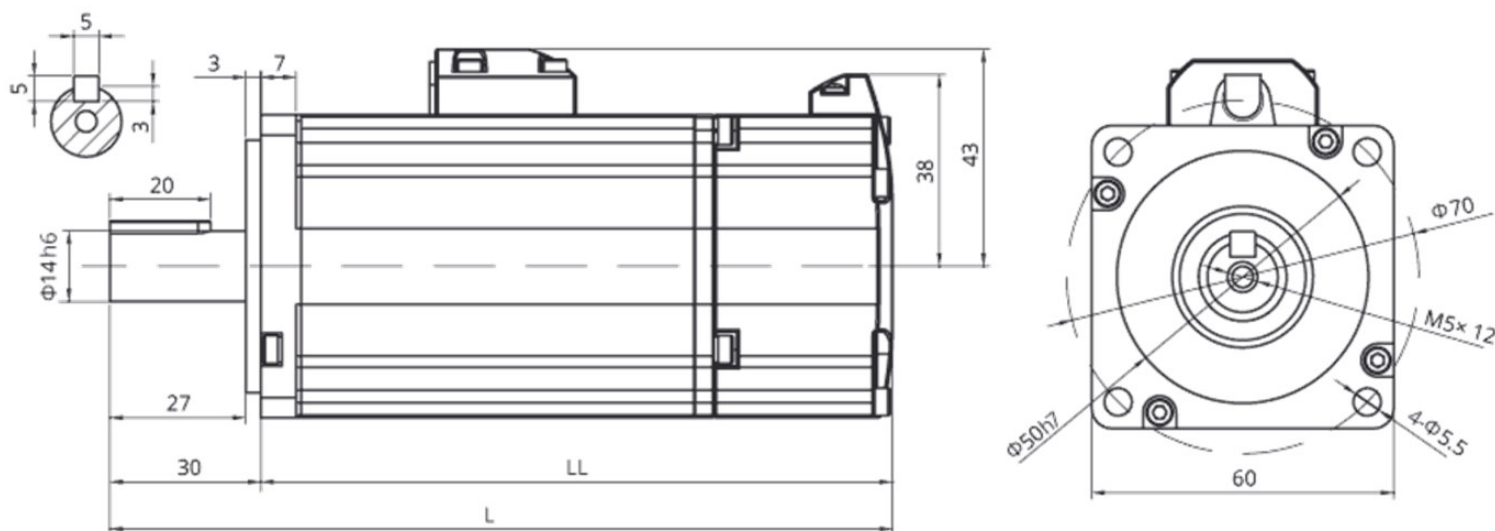
Speed-torque curves



Available motor models

Motor model	Encoder	Brake	Waterproof connector	Servo drive	Input drive supply voltage
EM3J-04ALA221	absolute optic encoder, resolution 23-bit (8 388 608 ppr)	-	-	ED3L-04AMA ED3L-04AEA ED3L-04APA	Single phase AC 200V...240V
EM3J-04ALA241		✓	-		
EM3J-04ALA222		-	✓		
EM3J-04ALA242		✓	✓		
EM3J-04ATA221	absolute magnetic encoder, resolution 17-bit (131 072 ppr)	-	-		
EM3J-04ATA241		✓	-		
EM3J-04ATA222		-	✓		
EM3J-04ATA242		✓	✓		

Dimensions of AC servo motor EM3J-04



Motor model	L, mm	LL, mm
EM3J-04ALA22x	129	99
EM3J-04ALA24x	158	128
EM3J-04ATA22x	148	118
EM3J-04ATA24x	177	147

