



EM3J-02 is a high speed and medium inertia 200 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.

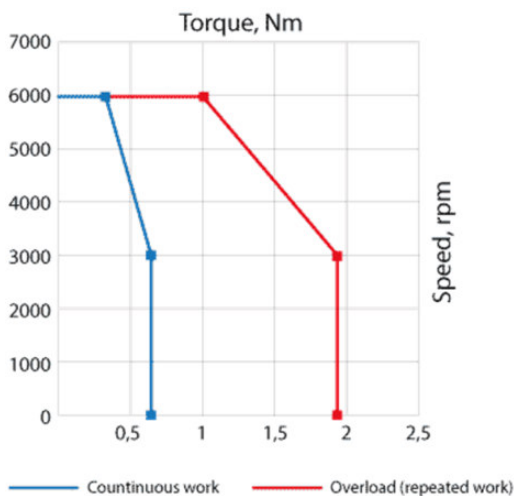
## Technical data

Output power	200 W
Rated speed	3000 rpm
Maximum speed	6000 rpm
Rated torque	0.64 Nm
Maximum torque (for motor model EM3J-02ATA)	1.91 Nm
Maximum torque (for motor model EM3J-02ALA)	2.23 Nm
Rated current	1.5 A
Maximum current (for motor model EM3J-02ATA)	4.7 A
Maximum current (for motor model EM3J-02ALA)	5.8 A

## Technical data

Motor inertia (motor without brake)	0.33 kg*cm <sup>2</sup>
Motor inertia (motor with brake)	0.36 kg*cm <sup>2</sup>
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)	0.9 kg
Weight (motor with brake)	1.3 kg
Flange	60 mm

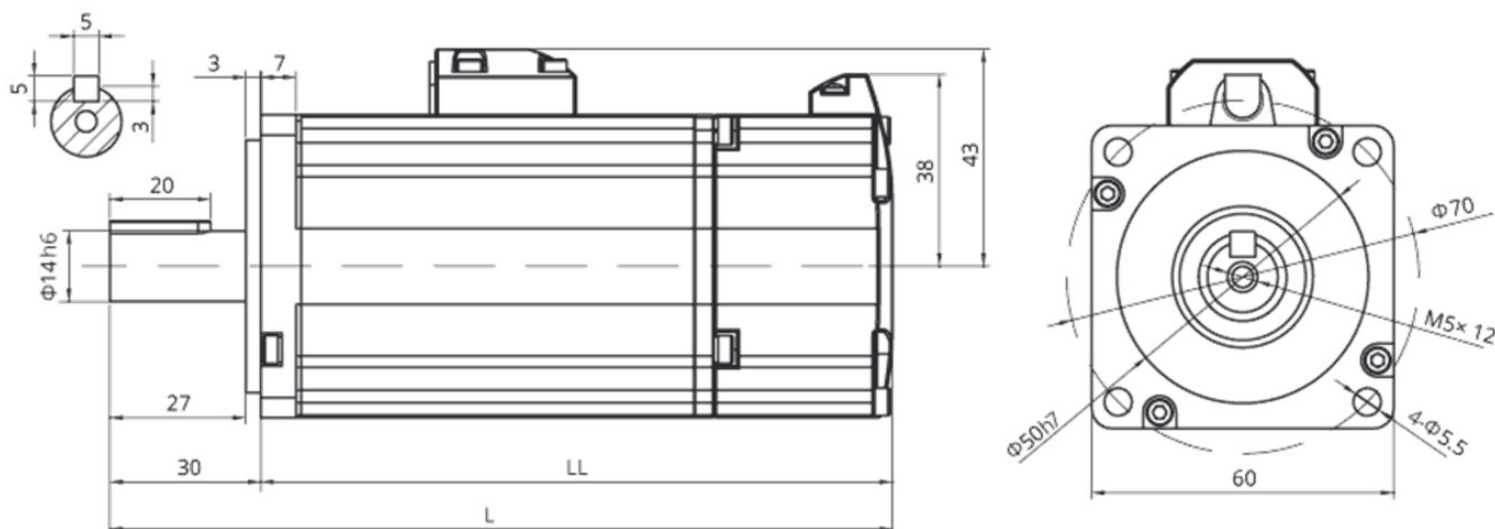
## Speed-torque curves



## Available motor models

Motor model	Encoder	Brake	Waterproof connector	Servo drive	Input drive supply voltage
EM3J-02ALA221	absolute optic encoder, resolution 23-bit (8 388 608 ppr)	-	-	ED3L-02AMA ED3L-02AEA ED3L-02APA	Single phase AC 200V...240V
EM3J-02ALA241		✓	-		
EM3J-02ALA222		-	✓		
EM3J-02ALA242		✓	✓		
EM3J-02ATA221	absolute magnetic encoder, resolution 17-bit (131 072 ppr)	-	-		
EM3J-02ATA241		✓	-		
EM3J-02ATA222		-	✓		
EM3J-02ATA242		✓	✓		

## Dimensions of AC servo motor EM3J-02



Motor model	L, mm	LL, mm
EM3J-02ALA22x	108	78
EM3J-02ALA24x	137	107
EM3J-02ATA22x	127	97
EM3J-02ATA24x	156	126

