



EM3J-10 is a high speed and medium inertia 1000 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.

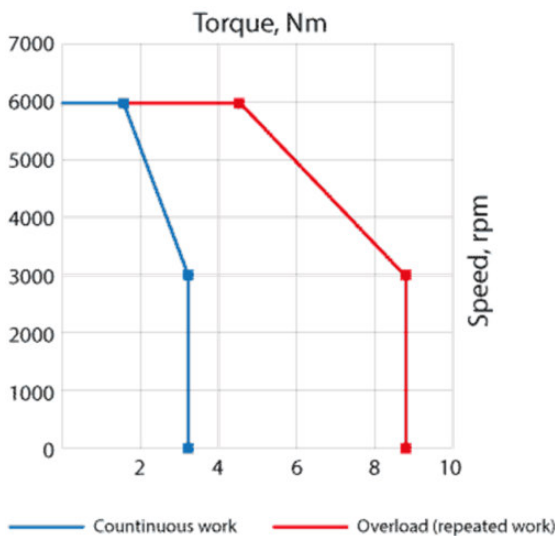
## Technical data

Output power	1000 W
Rated speed	3000 rpm
Maximum speed	6000 rpm
Rated torque	3.18 Nm
Maximum torque	9.54 Nm
Rated current	7.1 A
Maximum current	22 A
Motor inertia (motor without brake)	2.26 kg*cm <sup>2</sup>

## Technical data

Motor inertia (motor with brake)	2.41 kg*cm <sup>2</sup>
Allowable radial shaft load	392 N
Allowable axial shaft load	147 N
Optional brake holding torque	≥3.2 Nm
Optional brake voltage	24 VDC
Weight (motor without brake)	3.1 kg
Weight (motor with brake)	3.8 kg
Flange	80 mm

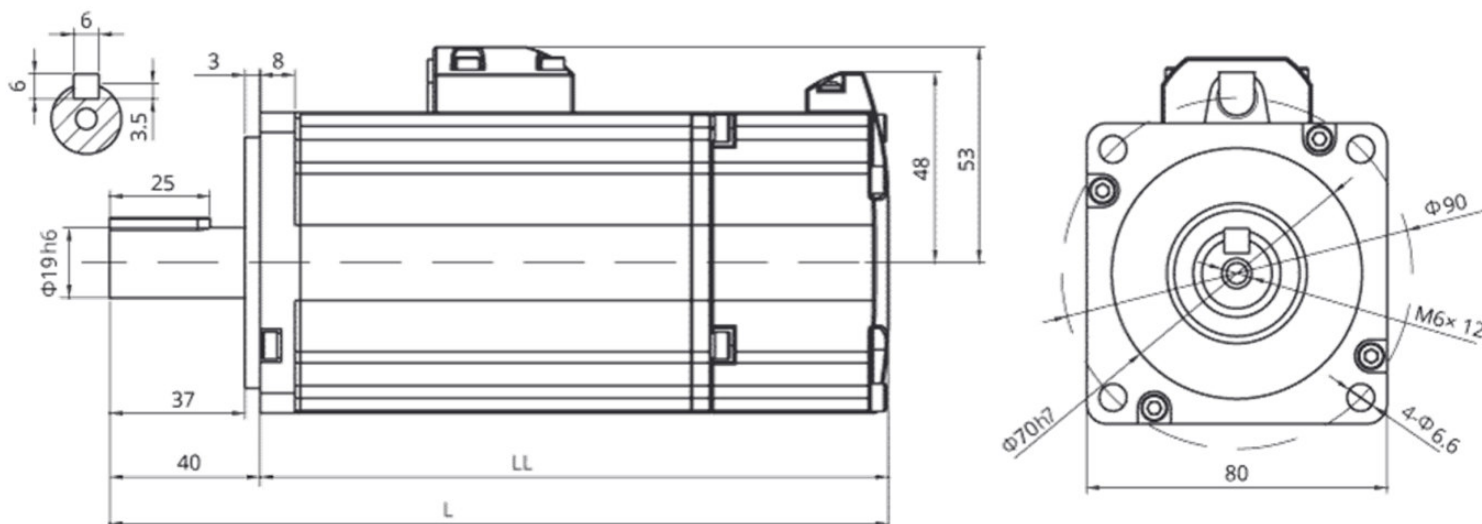
## Speed-torque curves



## Available motor models

Motor model	Encoder	Brake	Waterproof connector	Servo drive	Input drive supply voltage
EM3J-10ALA221	absolute optic encoder, resolution 23-bit (8 388 608 ppr)	-	-	ED3L-10AMA ED3L-10AEA ED3L-10APA	Single phase AC 200V...240V
EM3J-10ALA241		✓	-		
EM3J-10ALA222		-	✓		
EM3J-10ALA242		✓	✓		
EM3J-10ATA221	absolute magnetic encoder, resolution 17-bit (131 072 ppr)	-	-		
EM3J-10ATA241		✓	-		
EM3J-10ATA222		-	✓		
EM3J-10ATA242		✓	✓		

## Dimensions of AC servo motor EM3J-10



Motor model	L, mm	LL, mm
EM3J-10ALA22x	157	117
EM3J-10ALA24x	190	150
EM3J-10ATA22x	174	134
EM3J-10ATA24x	207	177

