



EM3A-A5 series are high speed and low inertia synchronous AC servo motors by Estun manufacturer. These small-sized servo motors with a power of 50 W are used in small automatic machines, instruments and machine tools. Motors are available with optical 23-bit or magnetic 17-bit absolute encoder. The motors are suitable for applications with a maximum speed of 6000 rpm. Products can be provided with a 24VDC holding brake option.

The EM3A series boasts a low inertia design for extremely-fast response times. These motors are highlighted with the perfect combination of compact size and high torque performance, ensuring unparalleled dynamic response and precision positioning when used together with servo drivers ED3L series. Versatile and powerful, the these servo drive systems has a wide range of applications, thanks to its top-tier performance, varied power range, and compact form factor. Elevate your technical operations with the EM3A series servo motors and ED3L servo drive system.

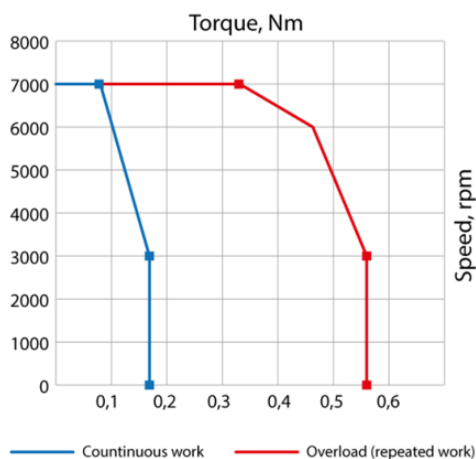
Technical data

Output power	50 W
Rated speed	3000 rpm
Maximum speed	6000 rpm
Rated torque	0.16 Nm
Maximum torque	0.55 Nm
Rated current	0.9 A
Maximum current	3.3 A
Motor inertia (motor without brake)	0.023 kg*cm ²

Technical data

Motor inertia (motor with brake)	0.027 kg*cm ²
Allowable radial shaft load	78 N
Allowable axial shaft load	54 N
Optional brake holding torque	≥0.32 Nm
Optional brake voltage	24 VDC
Weight (motor without brake)	0.4 kg
Weight (motor with brake)	0.6 kg
Flange	40 mm

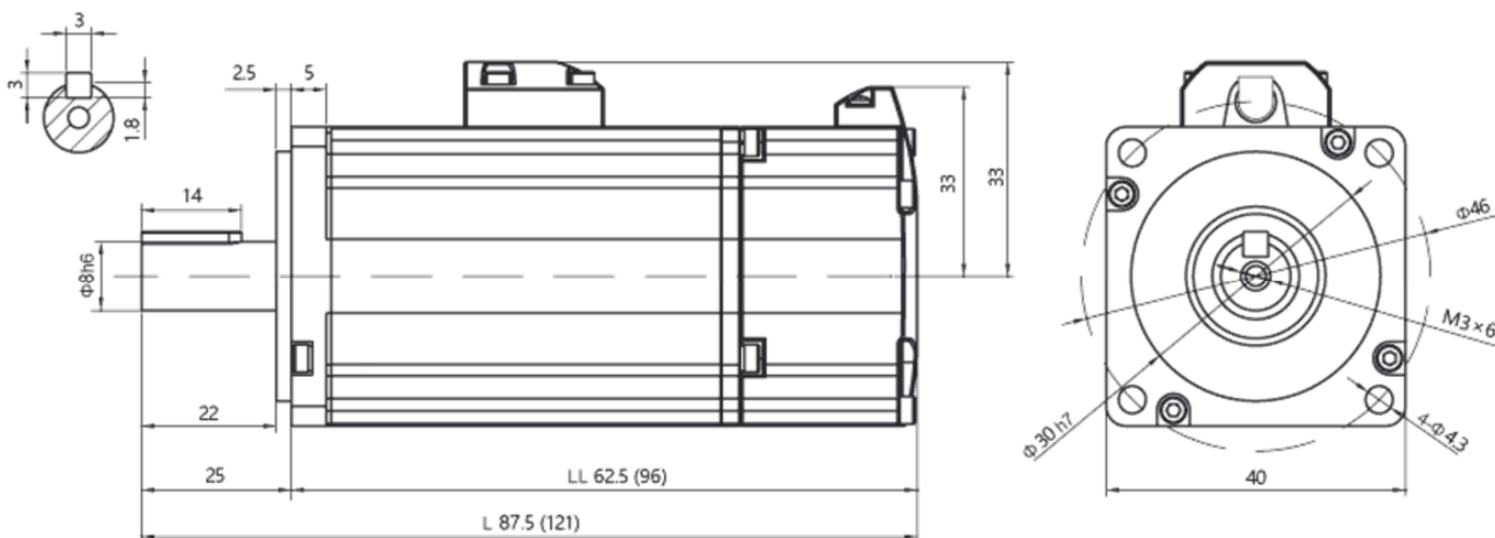
Speed-torque curves



Available motor models

Motor model	Encoder	Brake	Waterproof connector	Servo drive	Input drive supply voltage
EM3A-A5ALA221	absolute optic encoder, resolution 23-bit (8 388 608 ppr)	-	-	ED3L-A5AMA ED3L-A5AEA ED3L-A5APA	Single phase AC 200V...240V
EM3A-A5ALA241		✓	-		
EM3A-A5ALA222		-	✓		
EM3A-A5ALA242		✓	✓		
EM3A-A5ATA221	absolute magnetic encoder, resolution 17-bit (131 072 ppr)	-	-		
EM3A-A5ATA241		✓	-		
EM3A-A5ATA222		-	✓		
EM3A-A5ATA242		✓	✓		

Dimensions of AC servo motor EM3A-A5



Note: The values in parentheses represent the values of motors with brakes

