

# EMJ

## Series Servo Motor

### Features

- Medium inertia
- Peak torque up to 300% of rated torque
- Various models (200w~1000w, with brake, etc.,)
- Maximum speed of up to 4,500 r/min
- Equipped with a 2,500 P/R incremental encoder or a 17-bit incremental/absolute encoder

### Applications

- SMM(surface mounting machine)
- PCB puncher machine
- Robot arm
- Handing machine
- Food processing machine
- Textile machine



### Model Specification Description

**EMJ-08**

**A**

**D**

**A**

**1**

**1**

EMJ Model Servo Motor

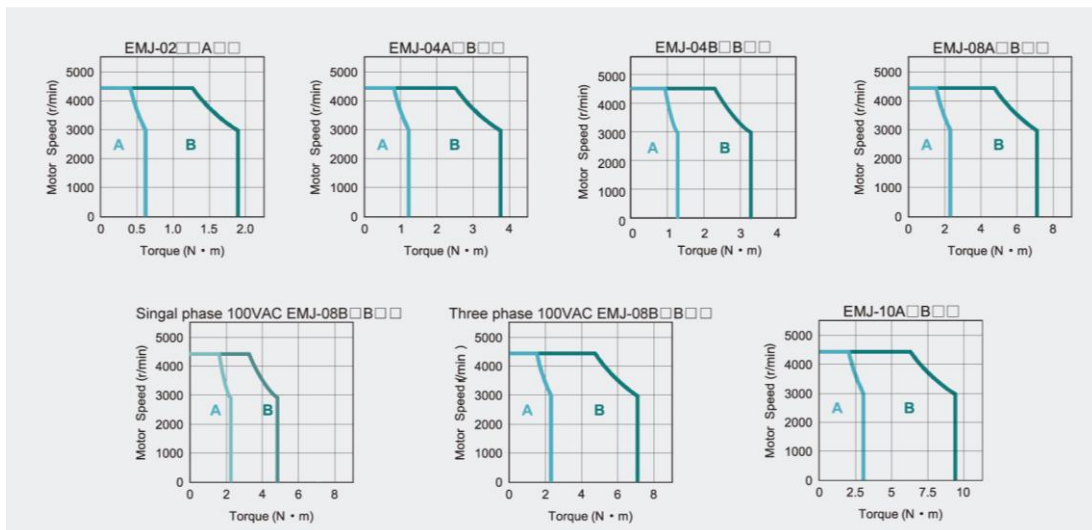
Rated Power		Power Voltage		Encoder		Design Sequence		Shaft End		Optional Parts	
Sign	Spec.	Sign	Spec.	Sign	Spec.	Sign	Spec.	Sign	Spec.	Sign	Spec.
<b>02</b>	200W	<b>A</b>	200VAC			<b>A</b>	Design Sequence	<b>1</b>	Flat, without keys	<b>1</b>	None
<b>04</b>	400W	<b>B</b>	100VAC	<b>D</b>	Incremental Encoder: 131072P/R	<b>B</b>		<b>2</b>	Flat, with keys, with screw thread	<b>2</b>	With Oil Seal
<b>08</b>	750W									<b>3</b>	With brake (DC24V)
<b>10</b>	1000W			<b>S</b>	Absolute Encoder: 13072P/R					<b>4</b>	With oil seal, with brake (DC24V)
				<b>P</b>	Incremental Encoder: 2500P/R						

## Rated Value and Specifications

Voltage		200VAC/100VAC							
Servo motor type	EMJ-	02A	02B	04A	04B	08A	08B	10A	
Rated output power	W	200		400		750		1000	
Rated torque	N.m	0.64		1.27		2.39		3.18	
Instantaneous peak torque	N.m	1.91		3.82	3.26	7.16		9.55	
Rated current	Arms	1.4	2.7	2.8	5.8	4.0	8.2	5.3	
Instantaneous peak current	Arms	4.2	8.1	8.4	15.1	12.0	24.6	15.9	
Rated speed	min <sup>-1</sup>	3000							
Max. speed	min <sup>-1</sup>	4500							
Rotator rotated inertia	x10 <sup>-4</sup> kg/m <sup>2</sup>	0.19(0.23)		0.31(0.35)		1.35(1.47)		1.74(1.87)	
Brake rated voltage		DC24V ± 10%							
Brake rated power	W	7.2				11.5			
Brake holding torque	N.M	1.3				3.2			
Encoder	Standard	2500P/R incremental encoder							
	Optional	17 bit Incremental/Absolute Encoder: 131072P/R							
Heat endurance level		F							
Environment temperature		0 to +40°C (Non-iced)							
Environment humidity		20 to 80% RH (No dew)							
Protection method		Fully enclosed, Self-Cooled, IP65 Protection Rating (Except output shaft and connector)							
Anti-vibration performance		49m/s <sup>2</sup>							

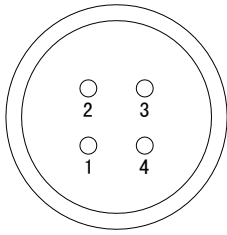
(Note): The values in parentheses are for servo motors with holding brakes.

## Torque-Speed Features





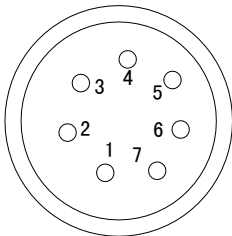
## Connector Specifications for S series



### ➤ Motor Connector Specifications

➤ Plug: CGRSB-4BFMA-SL8001

Pin No.	Signal	Color
1	U	Red
2	V	Blue
3	W	White
4	FG	Green/yellow

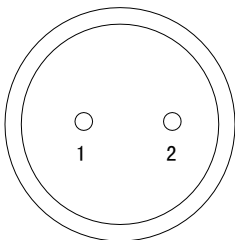


### ➤ Encoder Connector specifications

➤ Plug: CGRSD-7BFMA-SL8001

Pin No.	Signal	Color
1	S+	Blue
2	S-	Blue/Black
*3	BAT+	Brown
*4	BAT-	Brown/Black
5	PG5V	Red
6	PG0V	Black
7	FG	Shield

\*Note: There are no BAT+ and BAT- signal outputs when using an incremental encoder r



### ➤ Brake Connector Specifications

➤ Plug: CGRSB-2BFMA-SL8001

Pin No.	Signal	Color
1	B1	Blue
2	B2	White

## Connector Specifications for E series



- **Motor Connector Specifications**
- Plug: 172167-1 (AMP)
- Pin: 170360-1 (AMP)

Pin No.	Signal	Color
1	U phase	Red
2	V phase	Blue
3	W phase	White
4	FG	Green/yellow



- **Encoder Connector Specifications**
- Plug: 172169-1 (AMP)
- Pin: 170359-3 (AMP)

Pin No.	Signal	Color
1	A+	Blue
2	B+	Green
3	C+	Yellow
4	A-	Blue/Black
5	B-	Green/Black
6	C-	Yellow/Black
7	PG5V	Red
8	PG0V	Black
9	FG	Shield



- **Brake Connector Specifications**
- Plug: 172165-1(AMP)
- Pin: 170360-1(AMP)

Pin No.	Signal	Color
1	B1	Blue
2	B2	White