

EMG

Series Servo Motor

Features

- Used to drive the feed shaft of various machines
- Various Options (1.0kW~5.0kW power rating, optional brake, etc.)
- Equipped with a 2,500 P/R incremental encoder or a 17-bit incremental/absolute encoder
- IP65 Protection Level

Applications

- Machine tools
- Handling machine
- Food processing machine
- Textile machine



Model Specification Description

EMG-10 A D A 1 1

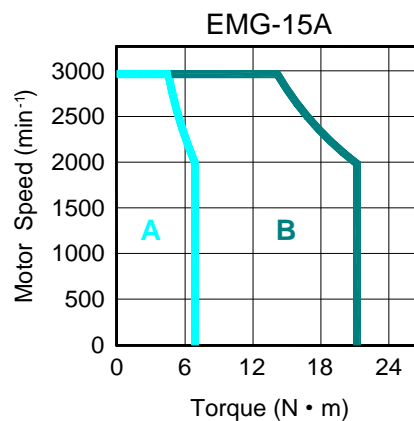
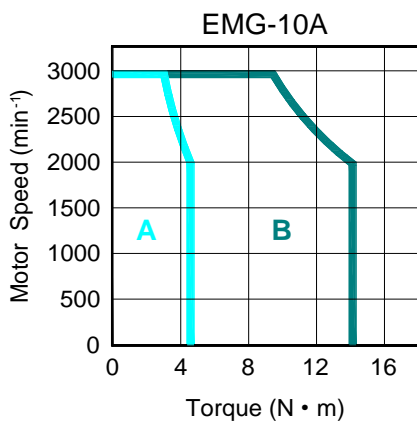
EMG Model Servo Motor	Rated Power		Power Voltage		Encoder		Design Sequence		Shaft End		Optional Parts	
	Sign	Spec.	Sign	Spec.	Sign	Spec.	Sign	Spec.	Sign	Spec.	Sign	Spec.
	10	1.0KW	A	200VAC	D	Incremental Encoder: 131072P/R	A	Design Sequence	1	Flat, without keys	1	None
	15	1.5KW	D	400VAC							2	With Oil Seal
	20	2.0KW			S	Absolute Encoder: 131072P/R			2	Flat, with keys, with screw thread	3	With brake (DC24V)
	30	3.0KW									4	With oil seal, with brake (DC24V)
	50	5.0KW			P	Incremental Encoder: 2500P/R						

Rated Value and Specification

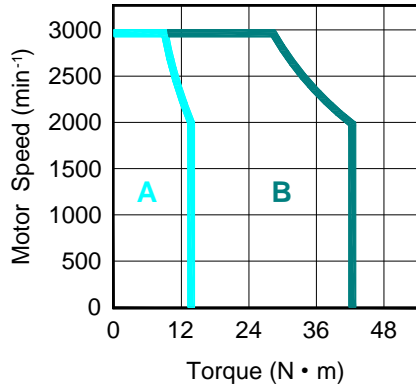
Voltage		200VAC/400VAC									
Motor type	EMG-	10A	10D	15A	15D	20A	20D	30A	30D	50A	50D
Rated output power	kW	1.0	1.0	1.5	1.5	2.0	2.0	3.0	3.0	5.0	5.0
Rated torque	N.m	4.78	4.78	7.16	7.16	9.55	9.55	14.3	14.3	23.9	23.9
Instantaneous peak torque	N.m	14.3	14.3	21.5	21.5	28.7	28.7	43.0	43.0	71.6	71.6
Rated current	Arms	6.0	3.2	9.0	5.0	12.0	6.4	18.0	8.8	28.0	15.0
Instantaneous peak current	Arms	18.0	9.6	27.0	15.0	36.0	19.2	54.0	26.4	84	45.0
Rated speed	min ⁻¹	2000									
Max. speed	min ⁻¹	3000									
Rotator rotated inertia	x10 ⁻⁴ kg/m ²	10(10.6)		14.5(15.1)		19.0(19.6)		41.3(44.5)		65.7(68.9)	
Brake rated voltage		DC24V ± 10%									
Brake rated power	W	19					35				
Brake holding torque	N.M	10					40				
Feedback unit	Standard	2500P/R incremental encoder									
	Optional	17 bit Incremental/Absolute Encoder: 131072P/R;									
Heat-endurance level		F									
Environment humidity 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		24.5m/s ²									

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

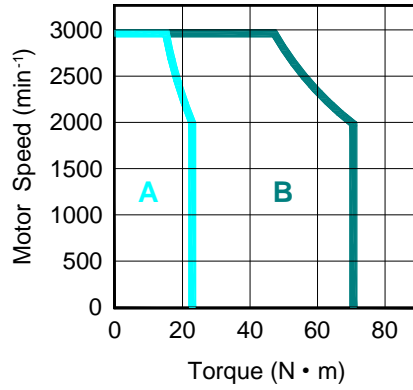
Torque-Speed Features



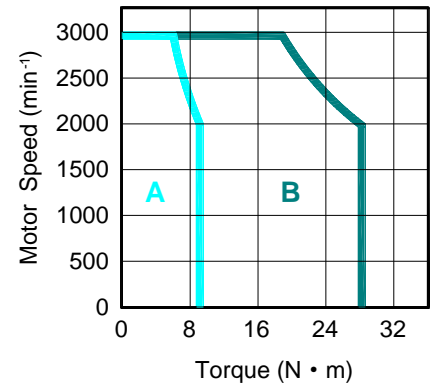
EMG-30A



EMG-50A

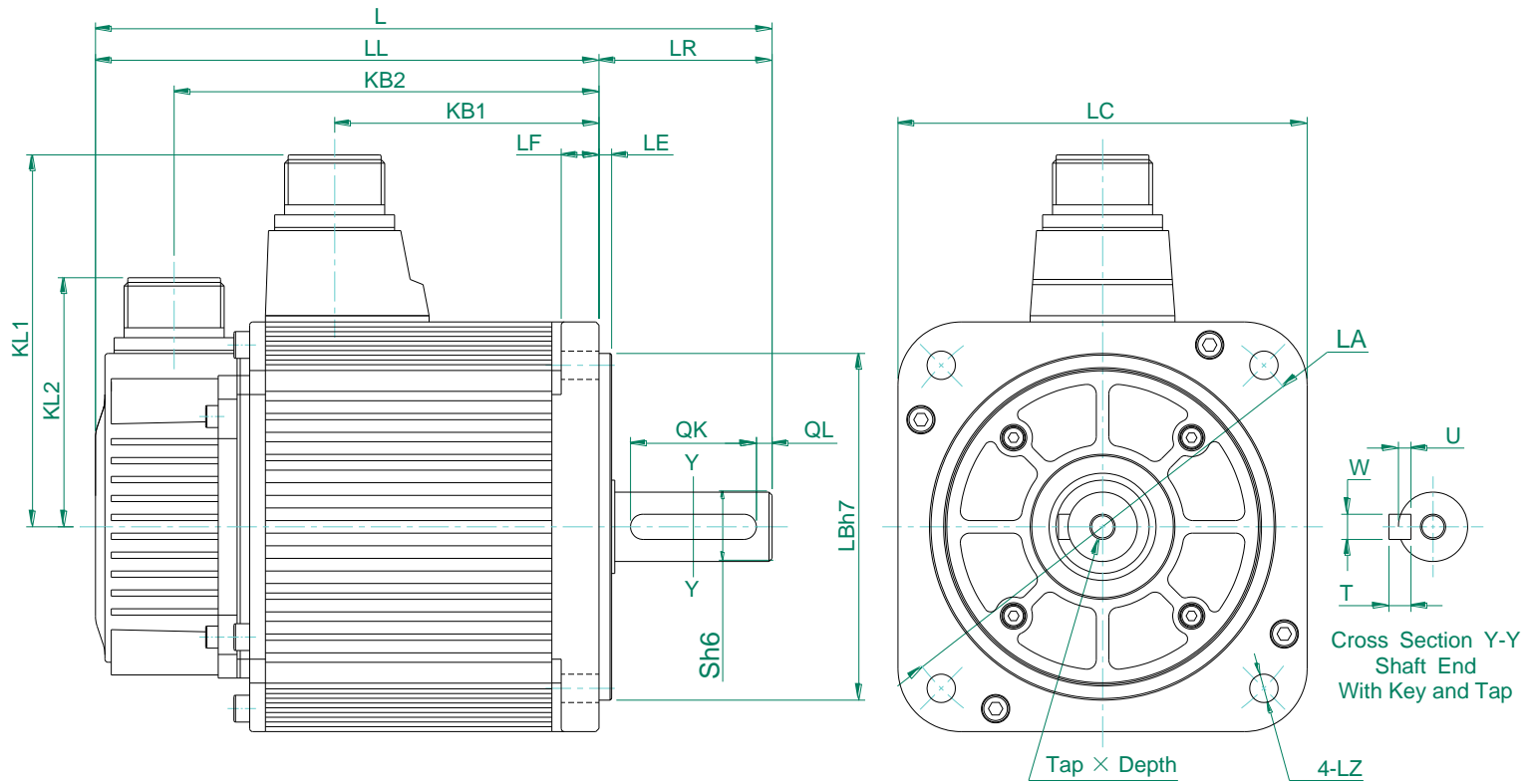


EMG-20A



A: Continuous Working Area B: Repeatable Working Area

Dimensions



Model EMG-	L	LL	KB1	KB2	KL1	KL2	Flange face						S	Tap×Depth	Key					
							LR	LE	LF	LC	LA	LB			LZ	QK	QL	W	T	U
10	215	160	84	135	118	79	55	4	12	130	145	110	9	22	M6x20L	40	5	8	7	4
15	240	185	109	160	118	79	55	4	12	130	145	110	9	22	M6x20L	40	5	8	7	4
20	265	210	134	185	118	79	55	4	12	130	145	110	9	22	M6x20L	40	5	8	7	4
30	307	228	143	203	140	79	79	3.2	18	180	200	114.3	13.5	35	M8x16L	55	6	10	8	5
50	357	278	183	253	140	79	79	3.2	18	180	200	114.3	13.5	35	M8x16L	55	6	10	8	5

Connector Specifications for S series



➤ Motor Connector Specifications

- Plug: MS3108B20-4S(LC=130), MS3108B22-22S(LC=180)
- Receptacle: MS3102A20-4P(LC=130),MS3102A22-22P(LC=180)
- Cable Clamp: MS3057-12A

Pin No.	Signal
A	U
B	V
C	W
D	FG



➤ Encoder Connector Specifications

- Plug: MS3108B20-29S
- Receptacle: MS3102A20-29P
- Cable Clamp: MS3057-12A

Incremental/Absolute encoder

Pin No.	Signal	Color
K	S+	Blue
L	S -	Blue/Black
*T	BAT+	Brown
*S	B AT-	Brown/Black
H	PG5V	Red
G	PG0V	Black
J	FG	Shield

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



➤ Brake Connector Specifications

- Plug: MS3106A10SL-3S
- Receptacle: MS3102A10SL-3P
- Cable Clamp: MS3057-4A

Pin No.	Signal
A	B1
B	B2
C	-

Connector Specifications for E series



➤ Motor Connector Specifications

- Plug: MS3108B20-4S(LC=130), MS3108B22-22S(LC=180)
- Receptacle: MS3102A20-4P(LC=130),MS3102A22-22P(LC=180)
- Cable Clamp: MS3057-12A

Pin No.	Signal
A	U phase
B	V phase
C	W phase
D	FG



➤ Encoder Connector Specifications

- Plug: MS3108B20-29S
- Receptacle: MS3102A20-29P
- Cable Clamp: MS3057-12A

Pin No.	Signal	Color
A	A+	Blue
B	A -	Blue/Black
C	B+	Green/Black
D	B -	Green
E	C+	Yellow
F	C -	Yellow/Black
G	PG0V	Black
H	PG5V	Red
J	FG	Shield



➤ Brake Connector Specifications

- Plug: MS3106A10SL-3S
- Receptacle: MS3102A10SL-3P
- Cable Clamp: MS3057-4A

Pin No.	Signal
A	B1
B	B2
C	-