

SERVO MOTOR



Specification Description

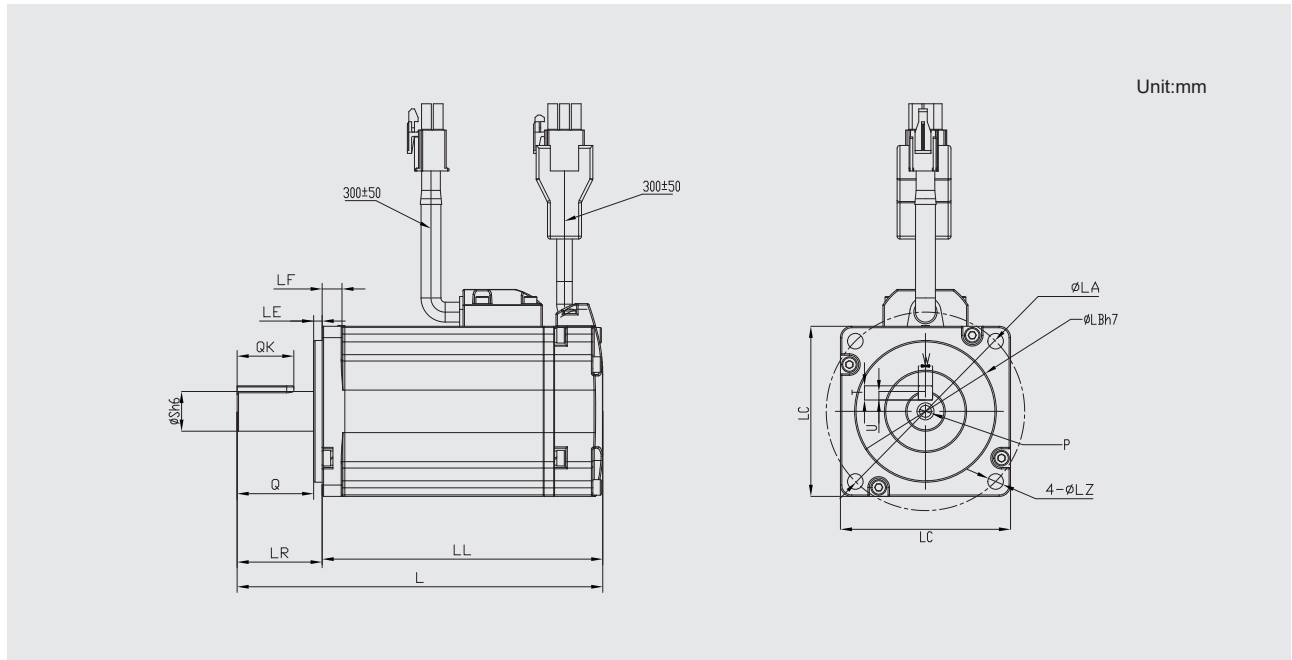
EM3A - 02	A	F	A	2	4	1	
EM3A for Low Inertia Model Servo Motor	Rated Output Power	Voltage	Encoder	Design Sequence	Shaft End	Option Parts	Connector Types
Sign. Spec.	Sign. Spec.	Sign. Spec.	Sign. Spec.	Sign. Spec.	Sign. Spec.	Sign. Spec.	Sign. Spec.
02: 0.2kW 04: 0.4kW 08: 0.75kW 10: 1kW	A: 200VAC	F: 20-bit Incremental Encoder L: 23-bit Absolute Encoder	A: Design Sequence	1: without key 2: with key	1: None 2: With Oil Seal 3: With Brake (DC24V) 4: With Oil Seal, With Brake (DC24V)	1: Lead Wire	

EMJ/EM3A Servo Motor Rated Value and Specification

Voltage		200VAC					
Servo Motor model		EMJ-		EM3A-			
		A5ASA□□	01ASA□□	02AFA□□1 02ALA□□1	04AFA□□1 04ALA□□1	08AFA□□1 08ALA□□1	10AFA□□1 10ALA□□1
Rated Output Power	kW	0.05	0.1	0.2	0.4	0.75	1
Rated Torque	N·m	0.16	0.32	0.637	1.27	2.39	3.18
Instantaneous Peak Torque	N·m	0.48	0.96	1.91	3.82	7.16	8.8
Rated Current	Arms	0.6	1.1	1.5	2.9	5.1	6.9
Instantaneous Max current	Arms	1.7	3.0	4.7	9.2	16.1	19.5
Rated Speed	r/min	3000					
Max. Speed	r/min	5000		6000			
Rotor Moment of Inertia	$\times 10^{-4} \text{kg} \cdot \text{m}^2$	0.019 (0.05)	0.035 (0.052)	0.147 (0.179)	0.244 (0.276)	0.909 (1.07)	1.14 (1.30)
Weight	kg	0.374 (0.566)	0.508 (0.7)	0.9 (1.3)	1.3 (1.7)	2.6 (3.2)	3.1 (3.8)
Brake Rated Voltage		DC24V \pm 10%					
Brake Rated Power	W	4		7.4		9.6	
Brake Rated Torque	N·m	0.318		1.5		3.2	
Encoder		17-bit Absolute encoder		20-bit Incremental Encoder; 23-bit Absolute Encoder			
Insulation Class		F					
Ambient Temperature		0 ~ +40°C (No freezing)					
Ambient Humidity		20%~80% RH (Non-condensing)					
Vibration		Vibration: Dynamic $\leq 49 \text{m/s}^2$ (5G); Static $\leq 24.5 \text{m/s}^2$; Shock: $\leq 98 \text{m/s}^2$ (10G)					
Enclosure		Totally Enclosed, Self-cooled, IP65 (Except for shaft opening, when not equipped with oil seal; Except for connector, when not equipped with waterproof plug)					

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

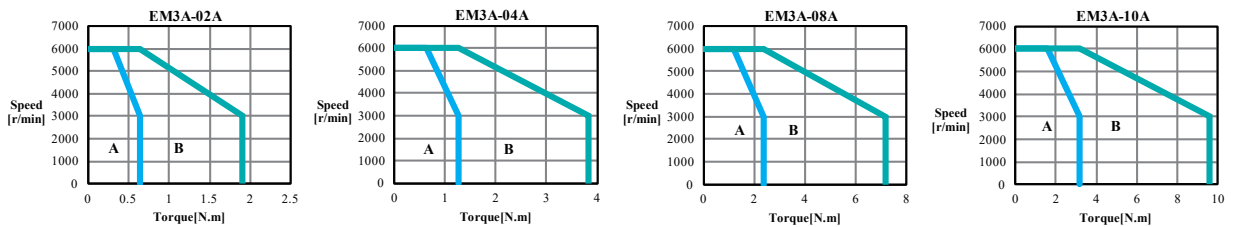
EM3A Dimension



EM3A-	L	LL	Flange Side							S	Tap×Depth	Key				
			LR	LE	LF	LC	LA	LB	LZ			QK	W	T	U	Q
02ALA	116(141.5)	86(111.5)	30	3	7	60	70	50	5.5	14	M5X12	20	5	5	3	27
04ALA	137(162.5)	107(132.5)	30	3	7	60	70	50	5.5	14	M5X12	20	5	5	3	27
08ALA	145.5(188.5)	115.5(148.5)	40	3	8	80	90	70	6.6	19	M6X12	25	6	6	3.5	37
10ALA	155(198)	125(158)	40	3	8	80	90	70	6.6	19	M6X12	25	6	6	3.5	37
02AFA	126.5(155.5)	96.5(125.5)	30	3	7	60	70	50	5.5	14	M5X12	20	5	5	3	27
04AFA	147.5(176.5)	117.5(146.5)	30	3	7	60	70	50	5.5	14	M5X12	20	5	5	3	27
08AFA	159.5(202.5)	129.5(162.5)	40	3	8	80	90	70	6.6	19	M6X12	25	6	6	3.5	37
10AFA	173.5(216.5)	143.5(176.5)	40	3	8	80	90	70	6.6	19	M6X12	25	6	6	3.5	37

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

EM3A Torque-Speed Feature



A: Continuous Working Area B: Repeatedly Working Area