

# EMG-50 Servo Motor



## FEATURES

- **Rated Torque of 3,385 oz-in**
- **Medium Inertia to Maximize Torque**
- **Peak Torque up to 300% of Rated Torque**
- **Peak Current up to 300% of Rated Current**
- **Speed of up to 3,000 RPM**
- **2,500 PPR Incremental Encoder Attached**
- **Enclosed and Self-Cooled**
- **Power Rating up to 5.0 kWatts**
- **Oil Seal and Optional Brake**
- **Long Life and Highly Reliable**
- **Neodymium-Iron-Boron Magnets (NdFeB)**
- **CE Certified**



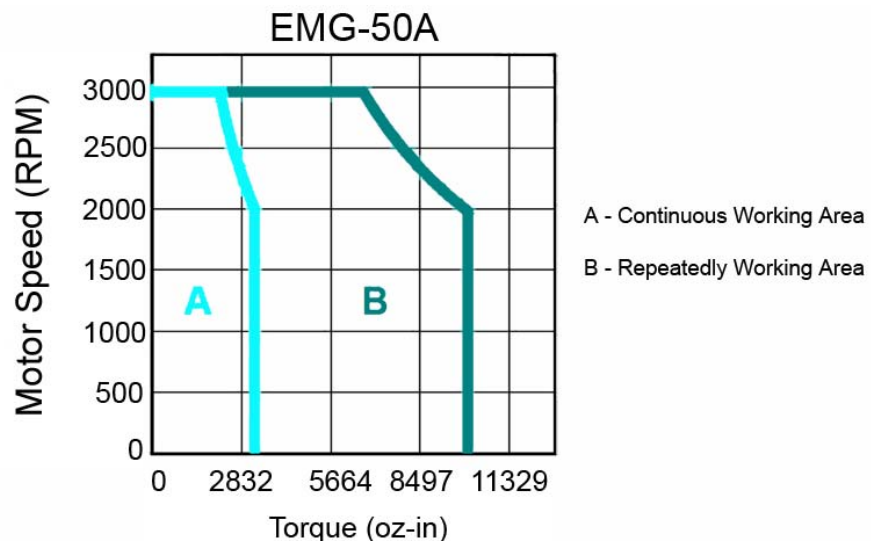
## DESCRIPTION

Anaheim Automation's Digital AC Servo Motors offer a simple solution to servo applications involving speed and positioning control. The AC EMG-50 Servo Motor comes standard with a 2,500 Pulses Per Revolution (PPR) Incremental Encoder, runs at a maximum speed of 3,000 RPM, provides peak values up to 300% of the rated torque and current values, and has a rated torque of 3,385 oz-in with a 5.0 kWatt power rating. These enclosed and self-cooled motors also provide longer motor life and higher reliability. The EMG-50 AC Servo Motors enable industrial motion control applications with medium inertia to attain a great combination of speed and positioning functionality.

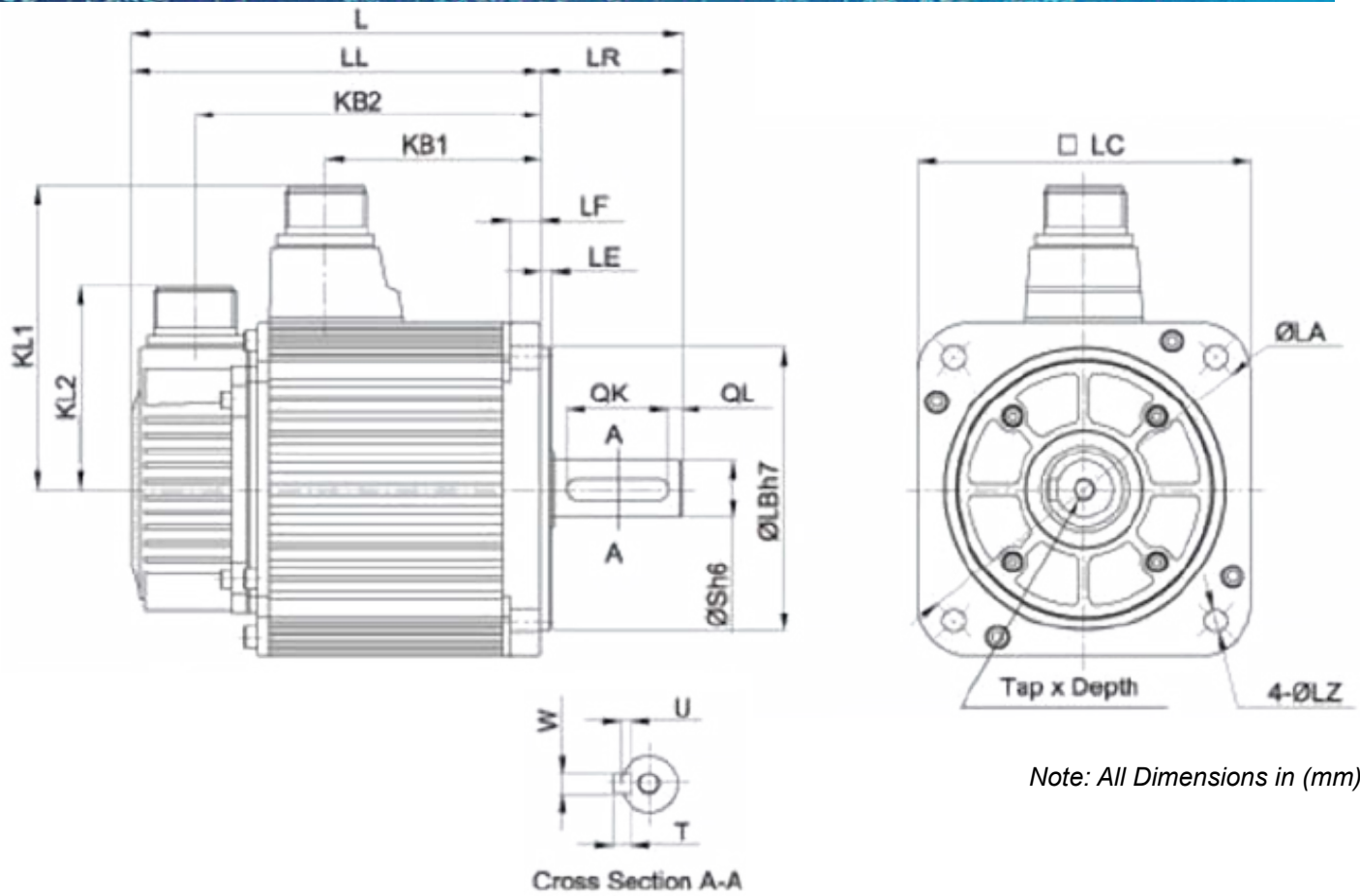
## SPECS

Model #	Rated Torque (oz-in)	Rated Power (Watts)	Rated Speed (rpm)	Max Speed (rpm)	Rated Current (A rms)	Brake (24VDC)	Inertia (oz-in-sec <sup>2</sup> )	Electric Time Constant T <sub>E</sub> (ms)	Back EMF Voltage K <sub>E</sub> (V/krpm)	Torque Constant K <sub>T</sub> (oz-in/A)	Resistance (ohms)	Weight (lbs)
EMG-50APA22	3385	5000	2000	3000	28.0	No	0.9304	16.0	56.2	120.7	0.1	61.73
EMG-50APA24	3385	5000	2000	3000	28.0	Yes	0.9757	16.0	56.2	120.7	0.1	61.73

## TORQUE CURVE



L010986

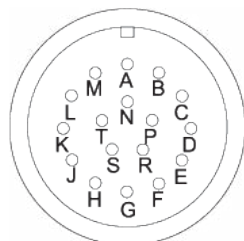


Note: All Dimensions in (mm)

MODEL #	L	LL	KB1	KB2	KL1	KL2	FLANGE SLIDE						S	TapxDepth	KEY					
							LR	LE	LF	LC	LA	LB			LZ	QK	QL	W	T	U
EMG-50APA22	347	268	183	243	140	79	79	3.2	18	180	200	114.3	13.5	35	M8x16L	55	6	10	8	5
EMG-50APA24	418	339	183	314	140	79	79	3.2	18	180	200	114.3	13.5	35	M8x16L	55	6	10	8	5

**Encoder Connector Specification:**

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

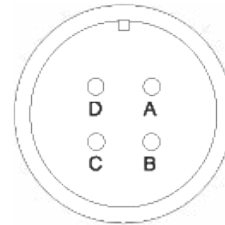


Pin No.	Signal	Color
A	A+	BLUE
B	A-	BLUE/BLACK
C	B+	GREEN/BLACK
D	B-	GREEN
E	C+	YELLOW
F	C-	YELLOW/BLACK
G	PG 0V	BLACK
H	PG 5V	RED
J	FG	SHIELD

**Motor Connector Specification:**

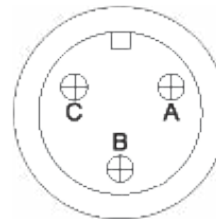
Receptacle	Plug	Cable Clamp
MS3102A22-22P	MS3108B22-22S	MS3057-12A

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


**Brake Connector Specification:**

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

Pin No.	Signal
A	B1
B	B2
C	--



Power Requirement: 220VAC	Vibration: 49 m/s <sup>2</sup>	Running Air Pressure: 86 to 106 kPa
Insulation Class: F	Ambient Temperature: 20% to 80% RH	Insulation Voltage Endurance: AC 1800C, 50Hz, 1 min
Ambient Temperature: 0°C to 40°C	Running Humidity: Not More Than 90%, Under 25°C	Insulation Impedance: Not Less Than 50M Under Normal Conditions
Running Temperature: -25°C to 40°C		

**Compatible Drivers**

Part Number	Description
PRONET-E-50A	Driver


**Compatible Cables**

Part Number	Description
PDM-GD12-05	Power Cable
BMP-GA24-05	Encoder Cable
PRONET-PSC-CC24-02	Comm. Cable

