



to be the Best Motion Control Provider

Servo System Brochure

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深圳简控自动化技术有限公司

Shenzhen ECON Technology Co.,Ltd

Shenzhen ECON Technology Co.,Ltd(short as "ECON") establish in 2013,and devote to be the leading solution provider in automation industry.At the beginning,EC is mainly sell CNC and CNC around products,such as servo product/stepper product、 CNC control system、 plasma/flame cutting system、 engraving system、 motion card ect.After such long cooperation,we have been agent of several domestic leading CNC products manufacturer.In 2014,to meet the change of market,based on existed technology,and with some rich experience engineers,we developed own branded stepper driver and closed loop stepper.To reduce cost,and improve stepper product,hybrid servo should be the right choice.As one of the few hybrid servo manufactures in China,currently we already have three models high performance hybrid servo driver:HS506,HS806 and HS806AC,which can match with closed loop stepper motor in Nema17 to Nema34,mainly applied in engraving,cutting,medical device and electronic device,etc.

ECON is continuous taken "market-oriented,engaged in developing functional economic CNC product" and "customer-centered,provide real-time and strong technical support"as principles,and develop more and better products for users.



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Servo Motor

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Universal Servo

G2 Series Servo Drive



Technical Indexes

Power Range: 50W~2.0KW

Input Voltage: Single Phase or Three Phase 220VAC (-15~+10%),50~60HZ

Control Mode: Position Control,Speed Control,Torque Control

Type of Encoder: 2500 line incremental type photoelectric encoder(economical/non-economical)

Communication Method: RS485,RS232,CAN,standard MODBUS communication protocol

Input and Output Points: IO can be programmed to support positive and negative logic settings, 8 channel input support 16 functions with each channel having function of relocation , 4 channel output support for 10 functions with 1 channel having function of relocation

Monitoring functions:Provide more than 30 states like location,speed,current,voltage, input and output

Product Advantage

- 1.Small in volume and compact in size,which greatly saves the installation space
- 2.Combining the intelligent PID control algorithm and PDF controller,which increase the rapidity and accuracy of position and speed control
- 3.Support the setting of encoder signal at any frequency dividing ratio,more precise
- 4.Support load disturbance observer,able to make torque feed-forward compensation,which improve the dynamic response of the system
- 5.Functions of inertia identification and automatic gain simplify the commissioning process of the system
- 6.Support debugging software,able to make analysis of mechanical properties,set parameters and conduct surveillance,simple and intuitive to operate

Universal Servo

G Series Servo Drive



Technical Indexes

Power Range: 0.4KW~2.0KW

Input Voltage: Single Phase or Three Phase 220VAC (-15~+10%),50~60HZ

Control Mode: Position Control,Speed Control,Torque Control

Type of Encoder: 2500 line incremental type photoelectric encoder(economical/non-economical),1024 line rotary encoder

Communication Method: RS485,RS232,CAN,standard MODBUS communication protocol

Input and Output Points: IO can be programmed to support positive and negative logic settings, 8 channel input support 16 functions with each channel having function of relocation , 4 channel output support for 10 functions with 1 channel having function of relocation

Monitoring functions:Provide more than 30 states like location,speed,current,voltage, input and output

Product Advantage

- 1.Combining the intelligent PID control algorithm and PDF controller,which increase the rapidity and accuracy of position and speed control
- 2.The adoption of notch filter can improve tracking performance,reduce noise and mechanical loss
- 3.Support the setting of encoder signal at any frequency dividing ratio,more precise
- 4.Support load disturbance observer,able to make torque feed-forward compensation,which improve the dynamic response of the system
- 5.Functions of inertia identification and automatic gain simplify the commissioning process of the system
- 6.Fan switch temperature is adjustable,open air cooling system according to field needs, provide applications in environmental protection and with higher price/performance ratio
- 7.Support debugging software,able to make analysis of mechanical properties,set parameters and conduct surveillance,simple and intuitive to operate
- 8.Configure hand held operational panel,and parameter setting and system debugging are more convenient and efficient

Servo Drive

Model Description

ECON - GA 3204B * *

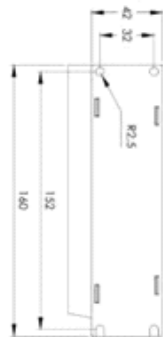
ECON is Company Code, means Jiankong servo drive
 GA means G series servo drive, G2A means G2 series servo drive
 3204 means three phase, 220V and 0.4kw
 B means the version of this product
 The first * means communication function. A means the servo drive with CAN and 485, blank means without CAN and 485
 Another * means encoder. R represents the drive is with 1024-line rotary encoder, blank is 2500-line incremental encoder

External Dimension

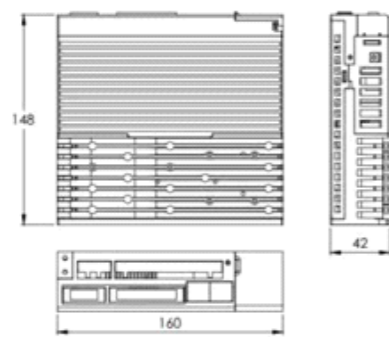
Code	11	12	31	32	33
Power voltage	Single phase	Single phase 220V	Three phase 165V	Three phase 220V	Three phase 380V

Code	4	7	10	15	20	30
Output Power	0.4KW	0.7KW	1KW	1.5KW	2KW	3KW

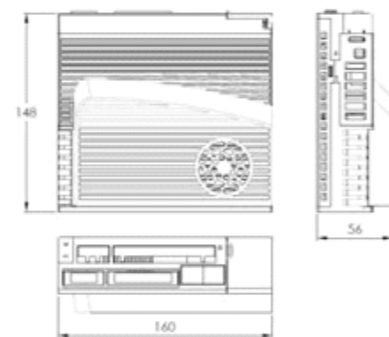
G2 Installation Dimension



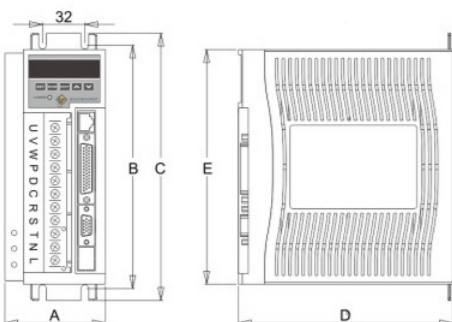
External Dimension of G2-400W



External Dimension of G2-750W



External Dimension of G serial



G系列型号	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)
GA3207□□	77	183	202	162	178
GA3210□□	80	183	202	191	178
GA3215□□	80	183	202	191	178
GA3230□□	93	183	202	191	178

Technical Indexes

Model		G2 Series			G Series				
Rated Output Power		0.4	0.75	1.5	0.75	1	1.5	2	3
Rated Output Current		2.8	5.5	10	3.5	4.5	6	10	14
Input Power		Three phase AC220V(-15~+10%),50-60HZ Single-phase AC 220V(-15~+10%),50-60HZ							
Encoder Specification		2500-line incremental encoder , 17/20/23 bit absolute encoder							
Control Mode		1.Position Control 2.Speed Control 3.CAN Control 4.485 Control 5.232 Control							
Regenerative Brake		Internal or External							
Control Feature	Speed Frequency Response	=200HZ							
	Rated Volatility	< ±3%(Load 0~100%),<±2% (Power-15~+10%)(at Rated speed)							
	Speed Control Ratio	1:5000							
	Input Pulse Frequency	=500KHZ							
Position Control Mode	Input Pulse Type	Pulse+Sign,CCW+Pulse/CW+Pulse,A/B Quadrature Pulse							
	Electronic Gear	Setting Range:1~9999/1~9999							
	Feedback Pulse	Adjustable according to the encoder							
Feedback Type		Encoder							
Parameter Setting Type		Button on drive or through PC							
Application Load inertia		Less than 3 times of the rotor inertia							
Regenerative Brake Type		Resistance consumption Brake							
Installation Type		Wall Mounting Installation							
Grouding Type		Shell grouding,grouding resistance= 0.1?							
Monitoring		Speed,current location,Commanding pulse count,Position error,motor current,commanding pulse frequency,working status,I/O status,etc							
Protection		Over-speed,over-voltage,under-voltage,over-current,overload,abnormal brake,encoder error,position deviation,etc							
Display and Operation		5-digit Led display panel,5 keys							
Environment	Temperature	Operation temperature:0~55? ,storing temperature:20~80?							
	Humidity	<90%(Non-Condensing)							
	Vibration	<0.5G(4.9m/S²),10~60HZ(Noncontinuous operation)							

Slection Guide

Motor Type	Torque(N.M)	Speed (R/MIN)	Current(A)	Power(KW)	G2 Series			G Series				
					0.4KW	0.75KW	1.5KW	0.75KW	1.0KW	1.5KW	2.0KW	3.0KW
					2.8A	5.5A	10A	3.5A	4.5A	6A	10A	14A
EC-40M005D-B	0.16	3000	1.1	0.05	•	0	0	0	0	0	0	0
EC-40M005D	0.16	3000	0.4	0.05	•	0	0	0	0	0	0	0
EC-40M010D-B	0.32	3000	2.5	0.1	•	0	0	0	0	0	0	0
EC-40M010D	0.32	3000	0.6	0.1	•	0	0	0	0	0	0	0
EC-60M020D	0.637	3000	1.2	0.2	•	0	0	0	0	0	0	0
EC-60M040D	1.27	3000	2.8	0.4	•	0	0	0	0	0	0	0
EC-60M060D	1.91	3000	3.5	0.6		•	0	•	0	0	0	0
EC-80M040D	1.27	3000	2	0.4	•	0	0	0	0	0	0	0
EC-80M075D	2.39	3000	3	0.75		•	0	•	0	0	0	0
EC-80M073C	3.5	2000	3	0.73		•	0	•	0	0	0	0
EC-80M100CC	4	2500	4.4	1		0	0		0	0	0	0
EC-90M075D	2.4	3000	3	0.75		•	0	•	0	0	0	0
EC-90M073C	3.5	2000	3	0.73		•	0	•	0	0	0	0
EC-90M100CC	4	2500	4	1		0	0		0	0	0	0
EC-100M100D	3.2	3000	5	1		0	0		0	0	0	0
EC-100M200D	6.4	3000	9.9	2			0				•	0
EC-100M060D	2	3000	2.5	0.6		•	0	•	0	0	0	0
EC-100M080C	4	2000	3.5	0.8		0	0	0	•	0	0	0
EC-100M120D	4	3000	5	1.2			0			0	0	0
EC-100M150D	5	3000	6	1.5			•			•	0	0
EC-100M120C	6	2000	4.5	1.2			•			•	0	0
EC-100M180D	6	3000	6	1.8			•			0	•	0
EC-130M100CC	4	2500	4	1		0	0		0	0	0	0
EC-130M130CC	5	2500	5	1.3			•			•	0	0
EC-130M150CC	6	2500	6	1.5			•			•	0	0
EC-130M200CC	7.7	2500	7.5	2			•				•	0
EC-130M100A	10	1000	4.5	1			•			•	0	0
EC-130M150B	10	1500	6	1.5			•			•	0	0
EC-130M260CC	10	2500	10	2.6								•
EC-130M230B	15	1500	9.5	2.3								•
EC-130M380CC	15	2500	13.5	3.8								•
EC-150M380CC	15	2500	17	3.8								•
EC-150M300C	15	2000	14	3								•
EC-150M360C	18	2000	17	3.6								•

Note:• means recommendations,0 means option,the blank means can not match

Frame 40mm servo motor

SHENZHEN ECON TECHNOLOGY CO.,LTD

Technical datasheet

Model	EC-40M005D		EC-40M010D		
	Power(W)	50	50	100	100
Rated voltage(v)	48	220	48	220	
Rated current(A)	1.1	0.4	2.5	0.6	
Rated speed (rpm)	3000	3000	3000	3000	
Rated torque(N.m)	0.16	0.16	0.32	0.32	
Peak torque(N.m)	0.48	0.32	0.95	0.64	
Volt constant(V/1000r/min)	9.2	36.8	8.2	32.8	
Torque coefficient(N.m/A)	0.145	0.4	0.128	0.53	
Rotor inertia(Kg.m ²)	0.025 × 10 ⁻⁴	0.025 × 10 ⁻⁴	0.051 × 10 ⁻⁴	0.051 × 10 ⁻⁴	
Phase Resistance(Ω)	6.75	108	2.2	34	
Phase Inductance(mH)	7.5	108	3	40	
Machanical time-constant(Ms)	1.11	1.0	1.36	1.18	
Weight(Kg)	0.32	0.32	0.47	0.47	
Encoder (PPR)	2500				
Insulation class	Class B				
Safety class	IP65				
Environmental Conditions	Temperature: -20°C ~ +40°C		Humidity: Below 90%RH No dewing		
Motor winding plug	incremental encoder motor		U(Brown)	V(Black) W(Blue) PE(Gre/Yel)	
	absolute encoder motor		PE(Gre/Yel)	(Brown) V(Black) W(Blue)	
			1	2 3 4	
Incremental encoder plug	Definition	5V 0V B+ Z- U+ Z+ U- A+ V+ W+ V- A- B- W- PE			
	Pin NO.	2	3	4	5 6 7 8 9 10 11 12 13 14 15 1
Absolute encoder plug	Definition	E- E+ SD- 0V SD+ +5V PE			
	Pin NO.	2	3	4	5 6 7 1

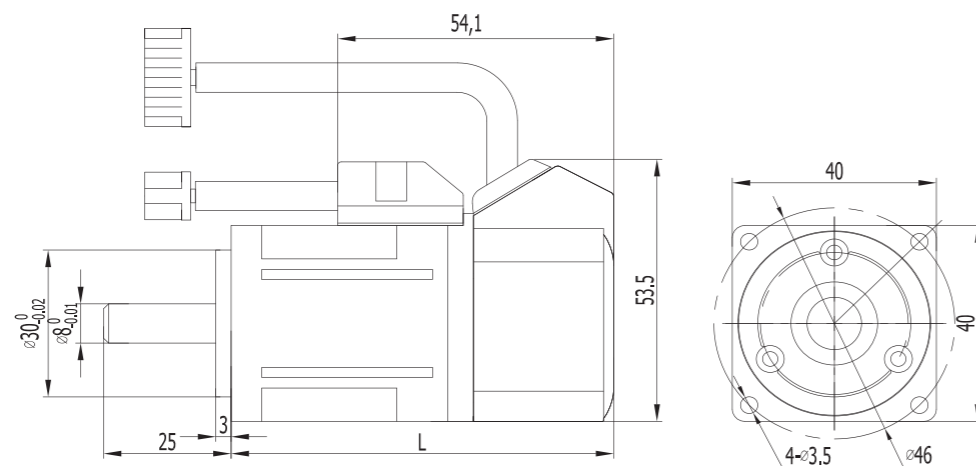
Note!

- For avoiding encoder damaged, please do not beat the shaft when install or remove motor
- For protecting shaft, avoid motor vibration



Mounting Dimension

Model	EC-40M005D	4EC-40M010D
L without brake	75	90
L with brake	109	124



Frame 60mm servo motor

SHENZHEN ECON TECHNOLOGY CO.,LTD

Technical datasheet

Model	EC-60M020D		EC-60M040D		EC-60M060D	
	Power(W)	200	400	600		
Rated voltage(v)	220	220	220			
Rated current(A)	1.2	2.8	3.5			
Rated speed (rpm)	3000	3000	3000			
Rated torque(N.m)	0.637	1.27	1.91			
Peak torque(N.m)	1.91	3.9	5.73			
Volt constant(V/1000r/min)	30.9	29.6	34			
Torque coefficient(N.m/A)	0.53	0.45	0.55			
Rotor inertia(Kg.m ²)	0.175x10 ⁻⁴	0.29x10 ⁻⁴	0.39x10 ⁻⁴			
Phase Resistance(Ω)	6.18	2.35	1.93			
Phase Inductance(mH)	29.3	14.5	10.7			
Machanical time-constant(Ms)	4.74	6.17	5.5			
Weight(Kg)	1.16	1.6	2.07			
Encoder (PPR)	2500					
Insulation class	Class F					
Safety class	IP65					
Environmental Conditions	temperature: -20°C ~ +40°C		Humidity: Below 90%RH No dewing			
Motor winding plug	incremental encoder motor		U(Brown)	V(Black)	W(Blue)	PE(Gre/Yel)
	absolute encoder motor		PE(Gre/Yel)	(Brown)	V(Black)	W(Blue)
			1	2	3	4
Incremental encoder plug	Definition	5V 0V B+ Z- U+ Z+ U- A+ V+ W+ V- A- B- W- PE				
	Pin NO.	2	3	4	5 6 7 8 9 10 11 12 13 14 15 1	
Absolute encoder plug	Definition	E- E+ SD- 0V SD+ +5V PE				
	Pin NO.	2	3	4	5 6 7 1	

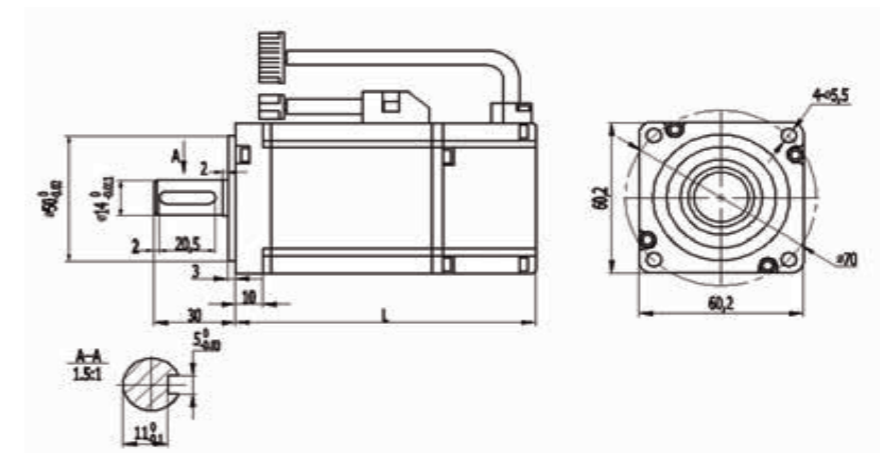
Note!

- For avoiding encoder damaged, please do not beat the shaft when install or remove motor
- For protecting shaft, avoid motor vibration



Mounting Dimension

Model	EC-60M020D	EC-60M040D	EC-60M060D
L without brake	116	141	169
L with brake	164	189	217



Frame 80mm servo motor

SHENZHEN ECON TECHNOLOGY CO.,LTD

Technical datasheet

Model	EC-80M040D	EC-80M075D	EC-80M073C	EC-80M100CC	
Power(KW)	0.4	0.75	0.73	1.0	
Rated voltage(v)	220	220	220	220	
Rated current(A)	2	3	3	4.4	
Rated speed (rpm)	3000	3000	2000	2500	
Rated torque(N.m)	1.27	2.39	3.5	4	
Peak torque(N.m)	3.8	7.1	10.5	12	
Peak current(A)	6	9	9	13.2	
Volt constant(V/1000r/min)	40	48	71	56	
Torque coefficient(N.m/A)	0.64	0.8	1.17	0.9	
Rotor inertia(Kg.m ²)	1.05 × 10 ⁻⁴	1.82 × 10 ⁻⁴	2.63 × 10 ⁻⁴	2.97 × 10 ⁻⁴	
Phase Resistance(Ω)	4.44	2.88	3.65	1.83	
Phase Inductance(mH)	7.93	6.4	8.8	4.72	
Machanical time-constant(Ms)	1.66	2.22	2.4	2.58	
Weight(Kg)	1.78	2.9	3.9	4.1	
Encoder (PPR)	2500				
Insulation class	Class F				
Safety class	IP65				
Environmental Conditions	Temperature: -20°C ~ +40°C Humidity: Below 90%RH No dewing				
Motor winding plug	Motor winding	U(Brown) 1	V(Black) 2	W(Blue) 3	PE(Gre/Yel) 4
Incremental encoder plug	Definition	5V 0V B+ Z- U+ Z+ U- A+ V+ W+ V- A- B- W- PE			
	Pin NO.	2 3 4 5 6 7 8 9 10 11 12 13 14 15 1			
Absolute encodeer plug	Definition	E- E+ SD- 0V SD+ +5V PE			
	Pin NO.	2 3 4 5 6 7 1			

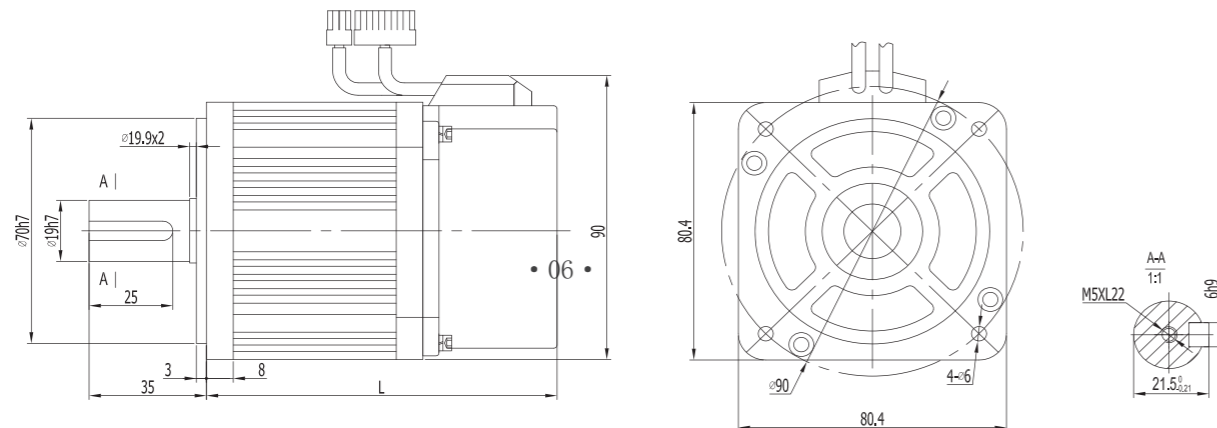


Note!

- For avoiding encoder damaged, please do not beat the shaft when install or remove motor
- For protecting shaft, avoid motor vibration

Mounting Dimension

Model	L without brake	L with brake
EC-80M040D	124	164
EC-80M075D	151	191
EC-80M073C	179	219
EC-80M100CC	191	231



Frame 90mm servo motor

SHENZHEN ECON TECHNOLOGY CO.,LTD

Technical datasheet

Model	EC-90M100CC	EC-90M073C	EC-90M075D		
Power(KW)	0.75	0.73	1.0		
Rated voltage(v)	220	220	220		
Rated current(A)	3	3	4		
Rated speed (rpm)	3000	2000	2500		
Rated torque(N.m)	2.4	3.5	4		
Peak torque(N.m)	7.1	10.5	12		
Peak current(A)	9	9	12		
Volt constant(V/1000r/min)	51	67	60		
Torque coefficient(N.m/A)	0.8	1.2	1.0		
Rotor inertia(Kg.m ²)	2.45 × 10 ⁻⁴	3.4 × 10 ⁻⁴	3.7 × 10 ⁻⁴		
Phase Resistance(Ω)	3.2	4.06	2.69		
Phase Inductance(mH)	7.0	9.7	6.21		
Machanical time-constant(Ms)	2.2	2.39	2.3		
Weight(Kg)	3.1	3.9	4.2		
Encoder (PPR)	2500				
Insulation class	Class F				
Safety class	IP65				
Environmental Conditions	Temperature: -20°C ~ +40°C Humidity: Below 90%RH No dewing				
Motor winding plug	Motor winding	U(Brown) 1	V(Black) 2	W(Blue) 3	PE(Gre/Yel) 4
Incremental encoder plug	Definition	5V 0V B+ Z- U+ Z+ U- A+ V+ W+ V- A- B- W- PE			
	Pin NO.	2 3 4 5 6 7 8 9 10 11 12 13 14 15 1			
Absolute encodeer plug	Definition	E- E+ SD- 0V SD+ +5V PE			
	Pin NO.	2 3 4 5 6 7 1			

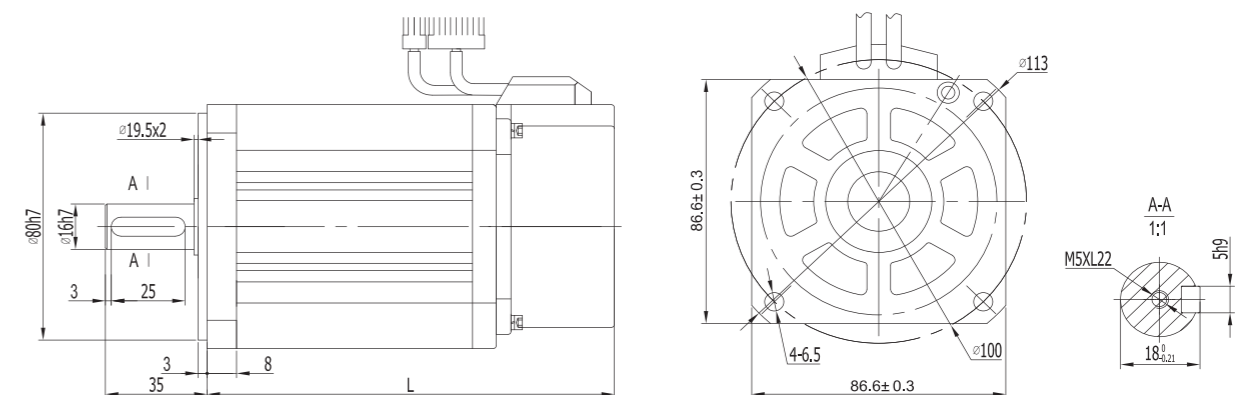


Note!

- For avoiding encoder damaged, please do not beat the shaft when install or remove motor
- For protecting shaft, avoid motor vibration

Mounting Dimension

Model	L without brake	L with brake
EC-90M100CC	150	198
EC-90M073C	172	220
EC-90M075D	182	230



Frame 100mm servo motor

SHENZHEN ECON TECHNOLOGY CO.,LTD

Technical datasheet

Model	EC-100M100D	EC-100M200D
Power(KW)	1.0	2.0
Rated voltage(v)	220	220
Rated current(A)	5	9.9
Rated speed (rpm)	3000	3000
Rated torque(N.m)	3.2	6.4
Peak torque(N.m)	9.6	19.2
Volt constant(V/1000r/min)	39.5	39.0
Torque coefficient(N.m/A)	0.64	0.65
Rotor inertia(Kg.m ²)	2.458 × 10 ⁻⁴	4.422 × 10 ⁻⁴
Phase Resistance(Ω)	0.98	0.41
Phase Inductance(mH)	8.91	3.92
Mechanical time-constant(Ms)	9.09	9.56
Weight(Kg)	4.04	7.12
Encoder (PPR)	2500	
Insulation class	Class F	
Safety class	IP65	
Environmental Conditions	Temperature: -20°C ~ +40°C Humidity: Below 90%RH No dewing	
Motor winding plug	Motor winding	U(Brown) V(Black) W(Blue) PE(Gre/Yel)
	Pin NO.	2 3 4 5 6 7 8 9 10 11 12 13 14 15 1
Incremental encoder plug	Definition	5V 0V B+ Z- U+ Z+ U- A+ V+ W+ V- A- B- W- PE
	Pin NO.	2 3 4 5 6 7 8 9 10 11 12 13 14 15 1
Absolute encodere plug	Definition	E- E+ SD- 0V SD+ +5V PE
	Pin NO.	2 3 4 5 6 7 1

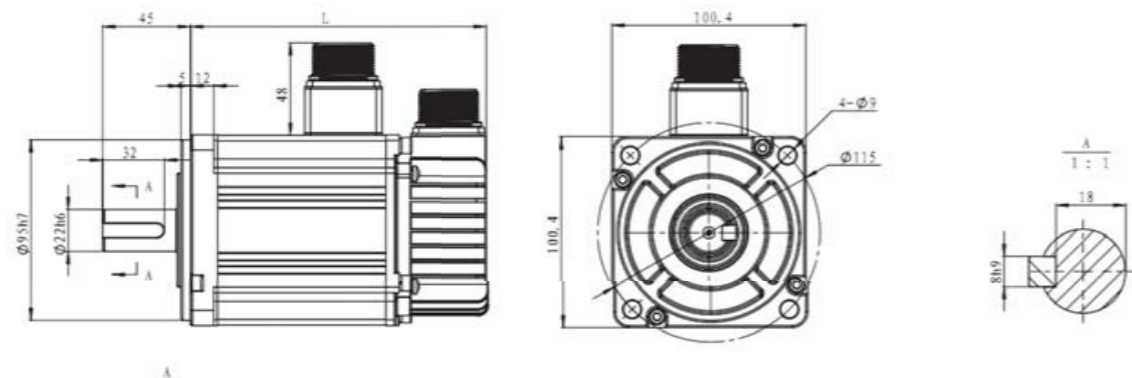


Note!

- For avoiding encoder damaged, please do not beat the shaft when install or remove motor
- For protecting shaft, avoid motor vibration

Mounting Dimension

Model	EC-100M100D	EC-100M200D
L without brake	153	198
L with brake	194	239



Frame 110mm servo motor

SHENZHEN ECON TECHNOLOGY CO.,LTD

Technical datasheet

Model	EC-110M060D	EC-110M080C	EC-110M120D	EC-110M150D	EC-110M120C	EC-110M180D										
Power(KW)	0.6	0.8	1.2	1.5	1.2	1.8										
Rated voltage(v)	220	220	220	220	220	220										
Rated current(A)	2.5	3.5	5.0	6.0	4.5	6.0										
Rated speed (rpm)	3000	2000	3000	3000	2000	3000										
Rated torque(N.m)	2	4	4	5	6	6										
Peak torque(N.m)	6	12	12	15	12	18										
Volt constant(V/1000r/min)	56	79	54	62	83	60										
Torque coefficient(N.m/A)	0.8	1.14	0.8	0.83	1.3	1.0										
Rotor inertia(Kg.m ²)	0.31 × 10 ⁻³	0.54 × 10 ⁻³	0.54 × 10 ⁻³	0.63 × 10 ⁻³	0.76 × 10 ⁻³	0.76 × 10 ⁻³										
Phase Resistance(Ω)	3.6	2.41	1.09	1.03	1.46	0.81										
Phase Inductance(mH)	8.32	7.3	3.3	3.43	4.7	2.59										
Mechanical time-constant(Ms)	2.3	3	3	3.33	3.2	3.2										
Weight(Kg)	4.5	6	6	6.8	7.9	7.9										
Encoder (PPR)	2500															
Insulation class	Class F															
Safety class	IP65															
Environmental Conditions	Temperature: -20°C ~ +40°C Humidity: Below 90%RH No dewing															
Motor winding plug	Motor winding	U(Brown)	V(Black)	W(Blue)	PE(Gre/Yel)											
	Pin NO.	2	3	4	1											
Incremental encoder plug	Definition	5V	0V	A+	B+	Z+	A-	B-	Z-	U+	V+	W+	U-	V-	W-	PE
	Pin NO.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	1
Absolute encodere plug	Definition	E-	E+	SD-	OV	SD+	+5V	PE								
	Pin NO.	2	3	4	5	6	7	1								

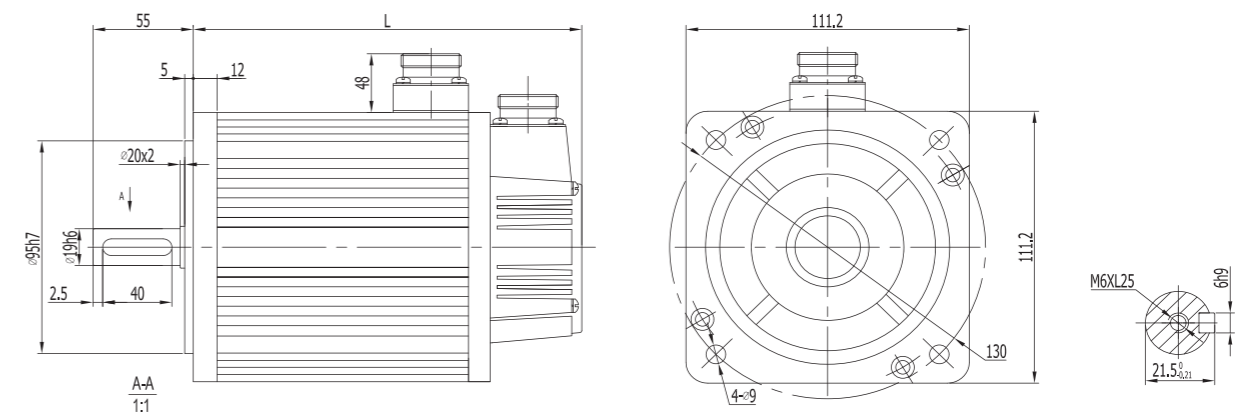


Note!

- For avoiding encoder damaged, please do not beat the shaft when install or remove motor
- For protecting shaft, avoid motor vibration

Mounting Dimension

Torque(N.M)	2	4	5	6
L without brake	159	189	204	219
L with brake	215	245	260	275



Frame 130mm servo motor

SHENZHEN ECON TECHNOLOGY CO.,LTD

Technical datasheet

Model	EC-130M100CC	EC-130M130CC	EC-130M150CC	EC-130M200CC	EC-130M100A	EC-130M150B	EC-130M260CC	EC-130M230B	EC-130M380CC							
Power(KW)	1.0	1.3	1.5	2.0	1.0	1.5	2.6	2.3	3.8							
Rated voltage(v)	220	220	220	220	220	220	220	220	220							
Rated current(A)	4.0	5.0	6.0	7.5	4.5	6.0	10	9.5	13.5							
Rated speed (rpm)	2500	2500	2500	2500	1000	1500	2500	1500	2500							
Rated torque(N.m)	4	5.0	6	7.7	10	10	10	15	15							
Peak torque(N.m)	12	15	18	22	20	25	25	30	30							
V-constant	72	68	65	68	140	103	70	114	67							
T coefficient(N.m/A)	1.0	1.0	1.0	1.03	2.2	1.6	1.0	1.58	1.11							
R-inertia(Kg.m ²)	0.85 × 10 ⁻³	1.06 × 10 ⁻³	1.26 × 10 ⁻³	1.53 × 10 ⁻³	1.94 × 10 ⁻³	1.94 × 10 ⁻³	1.94 × 10 ⁻³	2.77 × 10 ⁻³	2.77 × 10 ⁻³							
P Resistance(Ω)	2.76	1.84	1.21	1.01	2.7	1.5	0.73	1.1	0.49							
P inductance(mH)	6.42	4.9	3.87	2.94	8.8	4.37	2.45	4.45	1.68							
Mach T-constant(Ms)	2.32	2.66	3.26	2.91	3.26	2.91	3.36	4.05	3.43							
Weight(Kg)	6.2	6.6	7.4	8.3	10.2	10.2	9.8	12.6	11.7							
Encoder (PPR)	2500															
Insulation class	ClassF															
Safety class	IP65															
Environmental Conditions	Temperature: -20°C ~ +40°C Humidity: Below 90%RH No dewing															
Motor winding plug	U(Brown)		V(Black)		W(Blue)		PE(Gre/Yel)									
Incremental encoder plug	Definition	5V	0V	A+	B+	Z+	A-	B-	Z-	U+	V+	W+	U-	V-	W-	PE
Absolute encoder plug	Definition	E-	E+	SD-	OV	SD+	+5V PE									

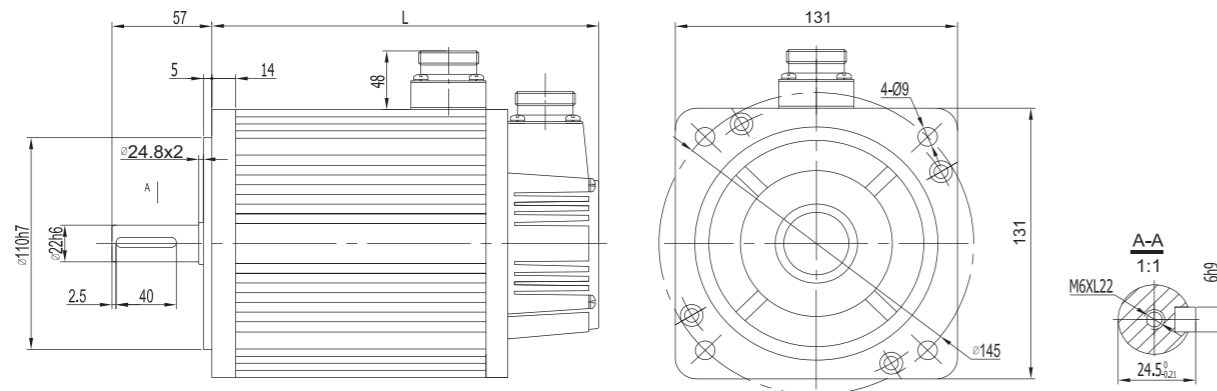


Note!

- For avoiding encoder damaged, please do not beat the shaft when install or remove motor
- For protecting shaft, avoid motor vibration

Mounting Dimension

Model	130 series motor								
	10				15				
Rated torque	4	5	6	7.7	1000rpm	1500rpm	2500rpm	1500rpm	2500rpm
L without brake	166	171	179	192	213		209	241	231
L with brake	223	228	236	249	294		290	322	312



Frame 150mm servo motor

SHENZHEN ECON TECHNOLOGY CO.,LTD

Technical datasheet

Model	EC-150M380CC	EC-150M300C	EC-150M360C	EC-150M470C	EC-150M550C											
Power(KW)	3.8	3.0	3.6	4.7	5.5											
Rated voltage(v)	220	220	220	220	220											
Rated current(A)	17	14	17	21	27											
Rated speed (rpm)	2500	2000	2000	2000	2000											
Rated torque(N.m)	15	15	18	23	27											
Peak torque(N.m)	30	30	36	46	54											
V-constant	59	70	71	72	64											
T coefficient(N.m/A)	0.88	1.07	1.05	1.09	1.1											
R-inertia(Kg.m ²)	3.88 × 10 ⁻³	3.88 × 10 ⁻³	4.6 × 10 ⁻³	5.8 × 10 ⁻³	6.8 × 10 ⁻³											
P Resistance(Ω)	0.23	0.34	0.255	0.2	0.125											
P inductance(mH)	1.08	1.55	1.3	1.06	0.7											
Mach T-constant(Ms)	4.7	4.56	5.1	5.3	5.6											
Weight(Kg)	15	15	17	20.4	22.7											
Encoder (PPR)	2500															
Insulation class	ClassF															
Safety class	IP65															
Environmental Conditions	Temperature: -20°C ~ +40°C Humidity: Below 90%RH No dewing															
Motor winding plug	U(Brown)		V(Black)		W(Blue)	PE(Gre/Yel)										
Incremental encoder plug	Definition	5V	0V	A+	B+	Z+	A-	B-	Z-	U+	V+	W+	U-	V-	W-	PE
Absolute encoder plug	Definition	E-	E+	SD-	OV	SD+	+5V PE									

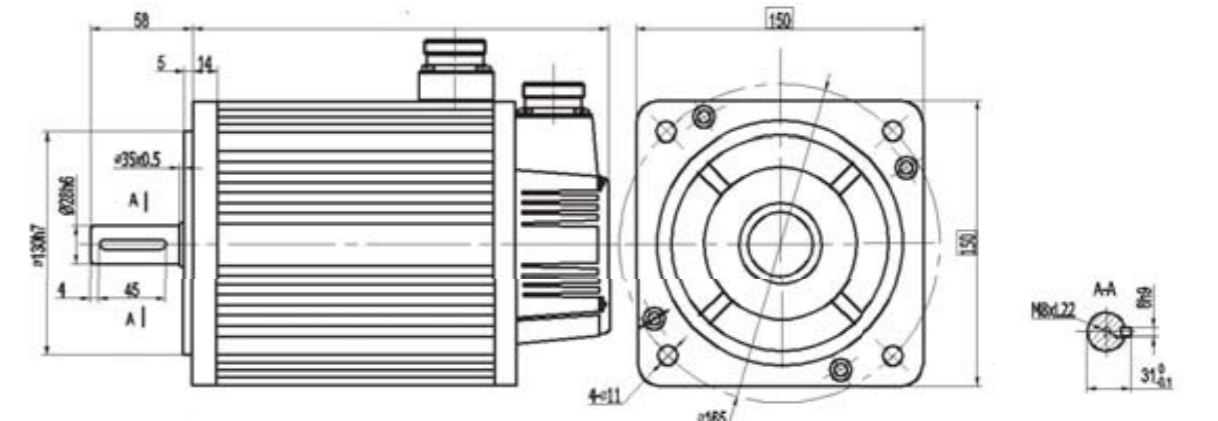


Note!

- For avoiding encoder damaged, please do not beat the shaft when install or remove motor
- For protecting shaft, avoid motor vibration

Mounting Dimension

Model	150 series motor					
	15		18	23	27	
Rated torque	2500rpm		2000rpm	18	23	27
L without brake	230	230	248	278	302	
L with brake	303	303	321	351	375	



Frame 180mm servo motor

SHENZHEN ECON TECHNOLOGY CO.,LTD

Technical datasheet

Model	EC-180M270B/EC-180M270B				EC-180M300C		EC-180M300C		EC-180M450B		EC-180M450B		EC-180M290B			
Power(KW)	2.7				3.0		3.0		4.5		4.5		2.9			
Rated voltage(v)	220	380	220	380	220	380	220	380	220	380	220	380	220	380	220	380
Rated current(A)	10.5	6.5	12	7.5	16	9.5	12	7.5	16	10	16	10	24	12	32	20
Rated speed (rpm)	1500		1500		2000		1000		1500		1000		1500		1500	
Rated torque(N.m)	17.2	19	21.5	27	21.5	27	27	27	27	35	35	35	35	48	48	48
Peak torque(N.m)	43	47	53	67	53	67	67	67	67	70	70	70	70	96	96	96
V-constant(V/1000r/min)	112	167	97	170	84	140	138	224	103	172	134	223	90	181	94	156
T coefficient(N.m/A)	1.64	2.65	1.58	2.5	1.34	2.26	2.25	3.6	1.69	2.7	2.2	3.5	1.45	2.9	1.5	2.4
R-inertia(Kg.m ²)	3.4 × 10 ⁻³				3.8 × 10 ⁻³				4.7 × 10 ⁻³				6.1 × 10 ⁻³			
P Resistance(Ω)	0.7	1.47	0.4	1.23	0.24	0.71	0.48	1.37	0.28	0.796	0.31	0.93	0.14	0.62	0.104	0.273
P inductance(mH)	3.5	7.8	2.42	7.3	1.45	4	3.26	8.6	1.74	4.83	3.28	9.1	1.0	4	0.77	2.14
Mach T-constant(Ms)	5	5.3	6	5.93	6	5.6	6.79	6.27	6.2	6	10.58	9.78	7.14	6.45	7.4	7.8
Weight(Kg)	19.5				20.5				22.2				25.5			
Insulation class	2500															
Safety class	ClassF															
Environmental	IP65															
Environmental	Temperature: -20℃ ~ +40℃ Humidity: Below 90%RH No dewing															
Motor winding	Motor winding U(Brown) V(Black) W(Blue) PE(Gre/Yel)															
Incremental encoder plug Absolute	Definition 2 3 4 5 6 7 8 9 10 11 12 13 14 15 1															
encoder plug	Definition E- E+ SD- OV SD+ +5V PE															
encoder plug	Pin NO. 2 3 4 5 6 7 1															



Note!

- For avoiding encoder damaged, please do not beat the shaft when install or remove motor
- For protecting shaft, avoid motor vibration

Mounting Dimension

Model	180 Series					
Rated torque(N.M)	17.2N.M	19N.M	21.5N.M	27N.M	35N.M	48N.M
L without brake	226	232	243	262	292	346
L with brake	298	304	315	334	364	418

