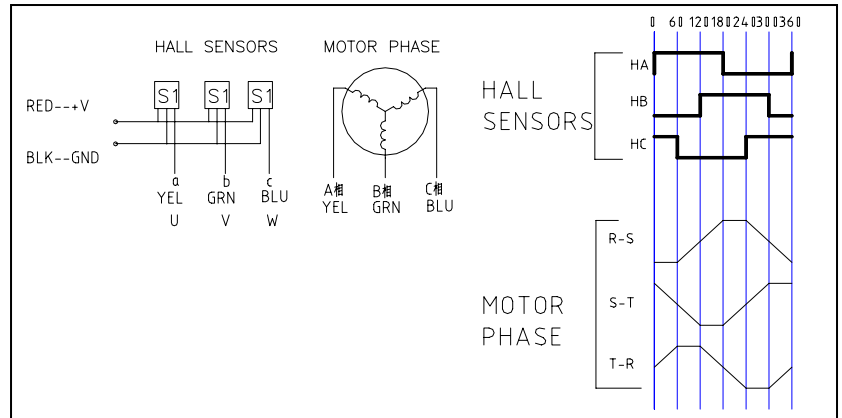
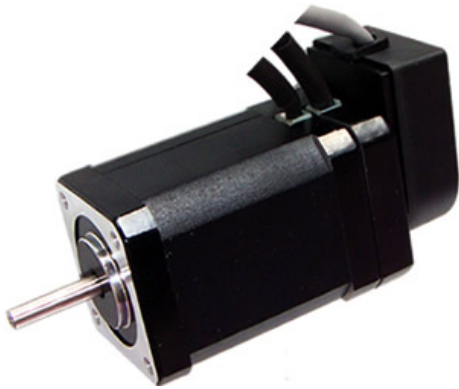


# 3 Phase Hi-Torque Brushless Servo Motor

42 series, 42x42mm Frame Size

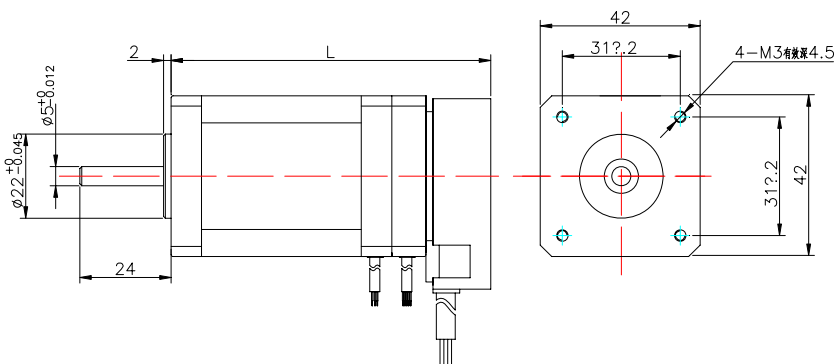


## Electrical Specifications:

Model	Rated power	Rated voltage	Current	Number of poles	Rated speed	Torque @ rated speed	Peak torque	Moment constant	Length L	Weight	Encoder
	W	V DC	A		rpm	N.m	N.m	N.m/A	mm	Kg	P/R
42BLS65A-240-1000Z	28	24	1.56	8	3000	0.1	0.3	0.06	65	0.45	1000
42BLS85A-240-1000Z	63	24	3.44	8	3000	0.2	0.6	0.06	85	0.55	1000

\*Note: We can also manufacture products according to customer's requirements.

## Dimensions: unit=mm

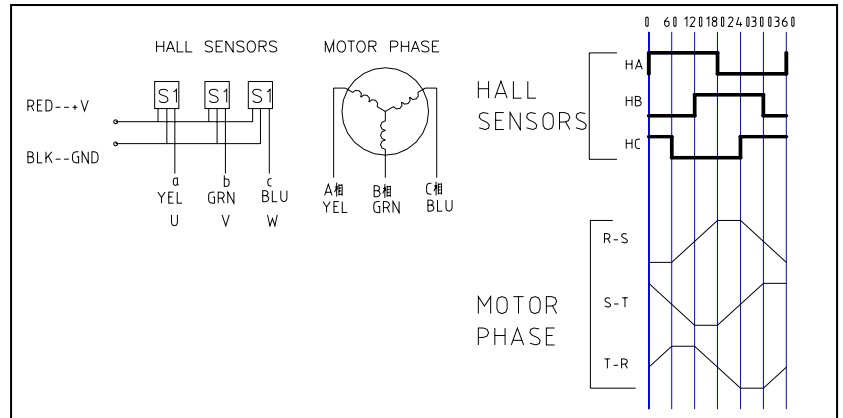


Model	Shaft Diameter D	Shaft Shape
42BLS60A-240	$\phi 5$	Slick
42BLS80A-240	$\phi 5$	Slick

MotionKing (China) Motor Industry Co., Ltd.

# 3 Phase Hi-Torque Brushless Servo Motor

## 60 series, 61x61mm Frame Size

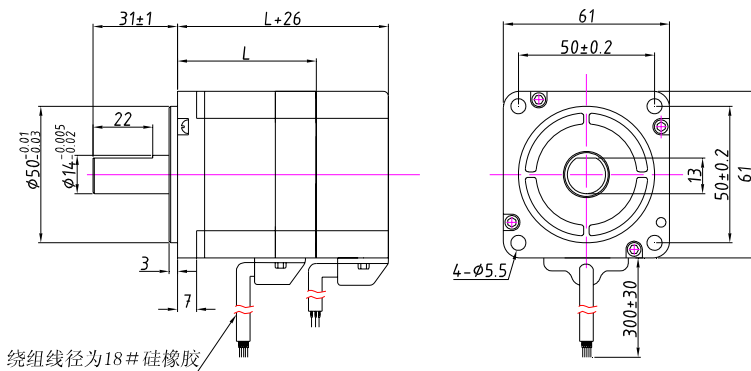


### Electrical Specifications:

Model	Rated power	Rated voltage	Current	Number of poles	Rated speed	Torque @ rated speed	Peak torque	Moment constant	Length L	Weight	Encoder
	W	V DC	A		rpm	N.m	N.m	N.m/A	mm	Kg	P/R
60BLS50A-340-1000Z	78	36	2.89	8	3000	0.25	0.75	0.09	52	0.9	1000
60BLS70A-440-1000Z	156	48	4.33	8	3000	0.5	1.5	0.12	73	1.25	1000
60BLS90A-640-1000Z	235	310	1.16	8	3000	0.75	2.25	0.64	94	1.6	1000

\*Note: We can also manufacture products according to customer's requirements.

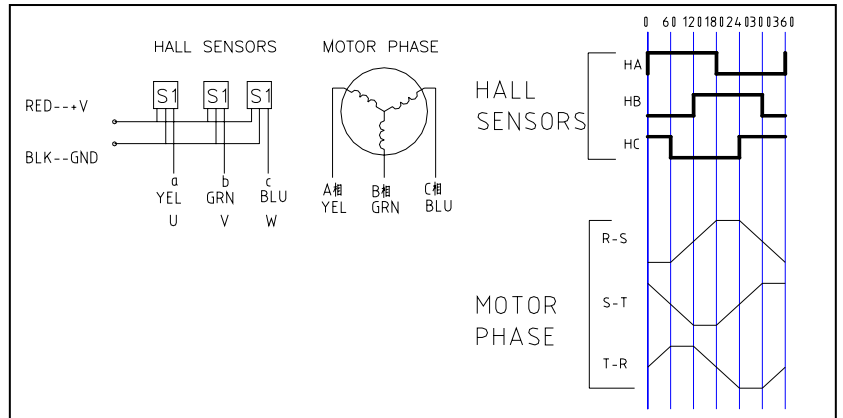
### Dimensions: unit=mm



Model	Shaft Diameter D	Shaft Shape
60BLS50A-350	φ 14	Flat 1x25
60BLS70A-450	φ 14	Flat 1x25
60BLS90A-650	φ 14	Flat 1x25

# 3 Phase Hi-Torque Brushless Servo Motor

70 series, 70x70mm Frame Size

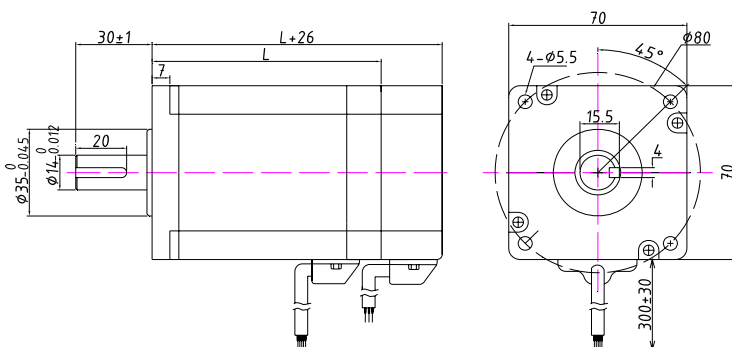


## Electrical Specifications:

Model	Rated power	Rated voltage	Current	Number of poles	Rated speed	Torque @ rated speed	Peak torque	Moment constant	Length L	Weight	Encoder
	W	V DC	A		rpm	N.m	N.m	N.m/A	mm	Kg	P/R
70BLS60A-340-1000Z	156	36	5.78	8	3000	0.5	1.5	0.09	60	1.3	1000
70BLS90A-640-1000Z	313	310	1.44	8	3000	1.0	3.0	0.69	90	2.08	1000

\*Note: We can also manufacture products according to customer's requirements.

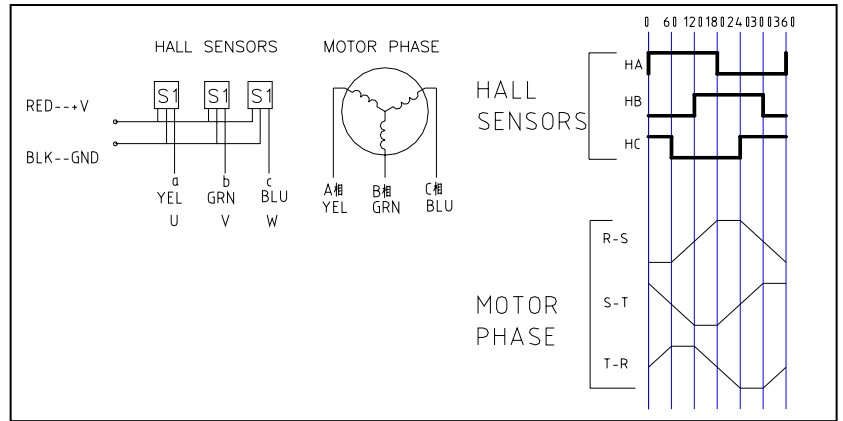
## Dimensions: unit=mm



Model	Shaft Diameter D	Shaft Shape
70BLS60A-340	φ 12	Flat 1x25
70BLS90A-640	φ 14	Key 4x20

# 3 Phase Hi-Torque Brushless Servo Motor

90 series, 86x86mm Frame Size

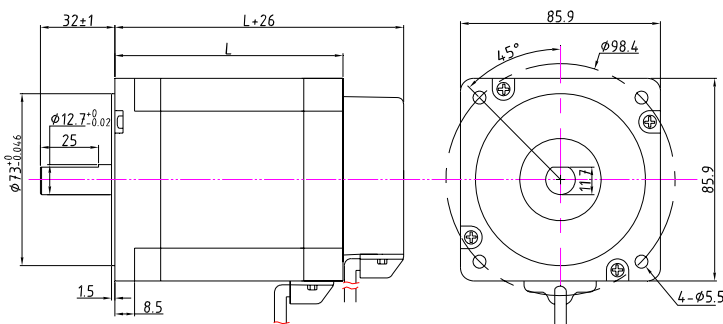


## Electrical Specifications:

Model	Rated power	Rated voltage	Current	Number of poles	Rated speed	Torque @ rated speed	Peak torque	Moment constant	Length L	Weight	Encoder
	W	V DC	A		rpm	N.m	N.m	N.m/A	mm	Kg	P/R
90BLS70A-640-1000Z	220	310	0.94	8	3000	0.7	2.1	0.74	71	1.85	1000
90BLS100A-640-1000Z	440	310	1.89	8	3000	1.4	4.2	0.74	100	2.6	1000
90BLS125A-640-1000Z	660	310	2.83	8	3000	2.1	6.3	0.74	125	4	1000

\*Note: We can also manufacture products according to customer's requirements.

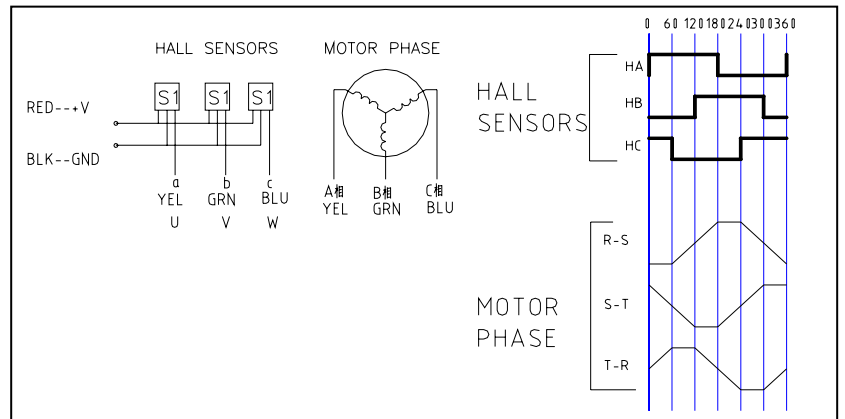
## Dimensions: unit=mm



Model	Shaft Diameter D	Shaft Shape
90BLS70A-640	φ 12.7	Flat 1x25
90BLS100A-640	φ 12.7	Flat 1x25
90BLS125A-640	φ 14	Flat 1x25

# 3 Phase Hi-Torque Brushless Servo Motor

## 110 series, 110x110mm Frame Size

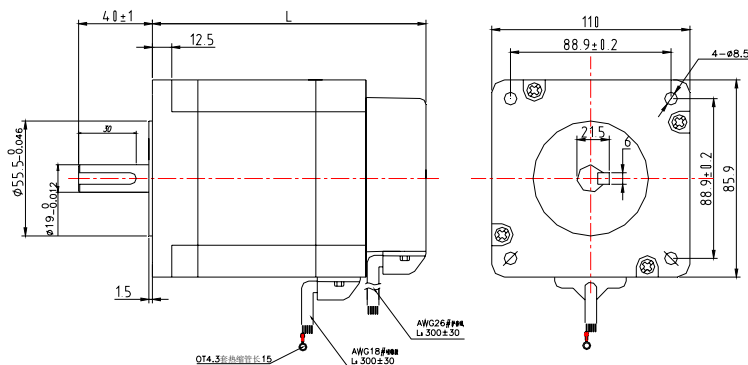


### Electrical Specifications:

Model	Rated power	Rated voltage	Current	Number of poles	Rated speed	Torque @ rated speed	Peak torque	Ke (RMS)	Length L	Weight	Encoder
	W	V DC	A		rpm	N.m	N.m	V/Krpm	mm	Kg	P/R
110BLS110A-7040-1000Z	940	70	18	8	3000	3.0	9.0	12.5	138	3.2	1000
110BLS110A-640-1000Z	940	310	7.3	8	3000	3.0	9.0	31.7	138	3.2	1000
110BLS170A-630-1000Z	1250	310	2.83	8	2000	6.0	18.0	53.0	198	7.5	1000

\*Note: We can also manufacture products according to customer's requirements.

### Dimensions: unit=mm



Model	Shaft Diameter D	Shaft Shape
110BLS110A	φ 19.0	Key 6x30
110BLS170A	φ 19.0	Key 6x30

# Wiring Sheet

## 60~110 BLDC SERVO MOTORS

**Encoder Specs**
*Encoder Specs.*

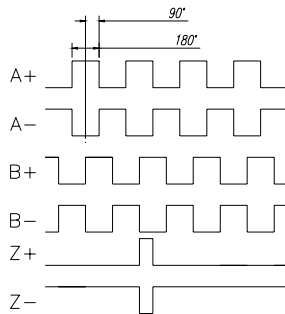
Voltage: +5VDC±5%

Current: 50mA

Frequency: 0~125khz

Temperature: -20~100°C

Pulse: 1000CPR

*Wave*


NOTE: View from shaft side at CW

**Encoder Wires**

ENCODER/HALL CONNECTIONS

	COLOR	SIGNAL
1	BRN	A+
2	BRN/BLK	A-
3	GRY	B+
4	GRY/BLK	B-
5	ORG	Z+
6	GRN/BLK	Z-
7	YEL	U+
8	YEL/BLK	U-
9	GRN	V+
10	GRN/BLK	V-
11	WHT	W+
12	WHT/BLK	W-
13	RED	+5V
14	BLK	GND
15		SHIELD

**Motor Wires**

MOTOR CONNECTIONS

	COLOR	SIGNAL
1	YEL	U
2	GRN	V
3	BLU	W
4	YEL/GRN	GND(OT4.3)