



YUHAI MOTOR

Energy Saving,  
Stability,More power  
[wlyuhai.en.alibaba.com](http://wlyuhai.en.alibaba.com)  
[www.zjyuhai.cn](http://www.zjyuhai.cn)





YUHAI MOTOR

Energy Saving,  
Stability,More power  
wlyuhai.en.alibaba.com  
www.zjyuhai.cn





YUHAI MOTOR

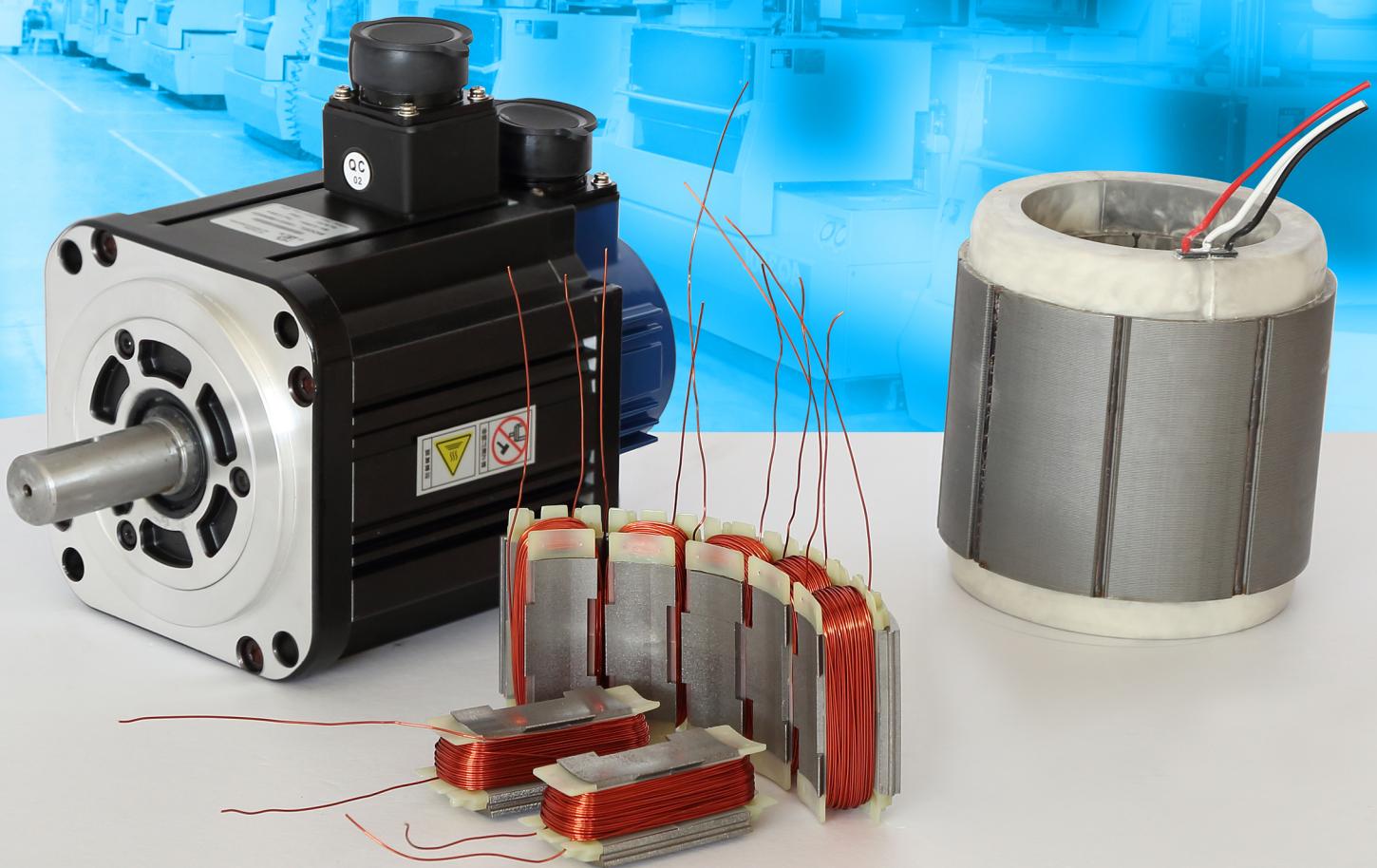
Energy Saving,  
Stability,More power  
wlyuhai.en.alibaba.com  
www.zjyuhai.cn





YUHAI MOTOR

Energy Saving,  
Stability,More power  
[wlyuhai.en.alibaba.com](http://wlyuhai.en.alibaba.com)  
[www.zjyuhai.cn](http://www.zjyuhai.cn)





YUHAI MOTOR

Energy Saving,  
Stability,More power  
wlyuhai.en.alibaba.com  
www.zjyuhai.cn



Energy Saving,  
Stability, More power  
[wlyuhai.en.alibaba.com](http://wlyuhai.en.alibaba.com)  
[www.zjyuhai.cn](http://www.zjyuhai.cn)



**YUHAI MOTOR**

- Servo Motor
- Stepper Motor
- Motor Driver
- Coupling



ZHEJIANG WENLING YUHAI ELECTROMECHANICAL CO.,LTD

Servo motor professional manufacturer

**YUHAI**  
quality



## Company Introduction

Weiling yuhai electromechanical CO.,TLD,founded in 1995,focuses on the development of servo motor,stepper motor,motor driver and coupling design,production and sales.

The company has a full set of production and testing equipment, higher quality research and development staff.The products are produced according to ISO and CE standard.widely used in automation equipment, such as CNC lathe. milling machine .packing machine.prinding machine.sewing machine. engraving machine.medical apparatus.ATM machine,ect.Successfully export to South Asia,Europe,South America,ect.Our tenet is"customer first,honest, innovation".

In the coming days.The company will continue to technology innovation and management innovation.Take more social responsibilities and keep the production of environmental protection.The ultimate goal is to become a world-class permanent magnet motor supplier.



pioneer territory  
开疆拓土  
world-renowned  
名扬四海





Energy Saving,  
Stability, More power  
www.yuhai.en.alibaba.com  
www.zjyuhai.cn

*Extraordinary quality comes from profession*

*Achieve international science and technology brand*

**DIRECTORY**

1

buyer guidelines  
and  
brief description

2

60SY AC  
Servo Motor

3

80SY AC  
Servo Motor

4

90SY AC  
Servo Motor

5

110SY AC  
Servo Motor

6

130SY AC  
Servo Motor

7

180SY AC  
Servo Motor

8-9

204ZJY  
Ac Asynchronous  
Spindle Servo Motor

10

SG Series  
Servo Motor Drive

11

86 BYG  
Two Phase  
Stepper Motor

12

86BYG  
Three Phase  
Stepper Motor

13

110BYG  
Three Phase  
Stepper Motor

14

110BYG  
Two Phase  
Stepper Motor

15

130BYG  
Three Phase  
Stepper Motor

16

130BYG  
Two Phase  
Stepper Motor

17

YH-3722  
Three-Phase  
Stepper Driver

18

2MA860H

19

2M982

20

YH 7

21

YH 8

22

YH 9

23

YH 10

24

YH 11

25

YH 12

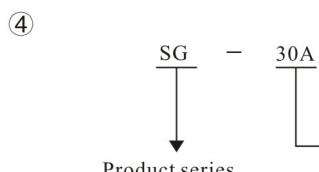
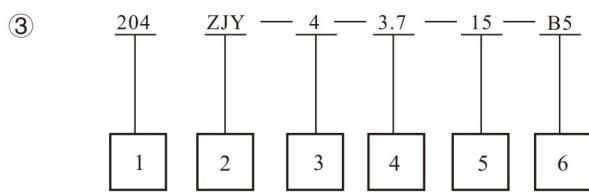
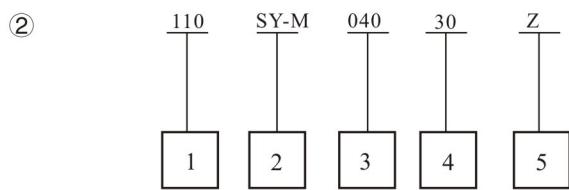
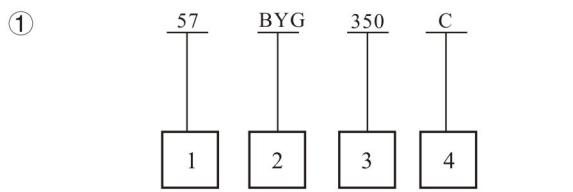
26

Electromagnetic  
Pump BCD-A

27-28

YH-990 CNC  
Lathe System

### Product brief description



#### Hybrid stepper motor

- 1.Shape side 57mm
- 2.hybrid
- 3.3 represents three phase.50 represent 50 teeth
- 4.represent torque type

#### Permanent magnet AC servo motor

- 1.Shape side 110mm
- 2.Permanent magnet AC servo motor
- 3.4N.m -- 040 represent the torque of 4 N.m
- 4.Speed/minutes 30 represent 3000 rpm
- 5.with brake

#### Spindle servo motor

- 1.Shape side 204mm
- 2.Ac asynchronous spindle servo motor
- 3.Pole pair number is 4
- 4.Rated power 3.7KW
- 5.Rated speed 1500 rpm
- 6.Installation method is the flange installation  
(B3:Horizontal installation B5:Flange  
installation B35:Horizontal/Flange installation)

#### Servo motor specifications

Model	output power(Kw)
15A	0.2-1.0
20A	0.4-1.5
30A	0.8-2.4

#### Notice for installation :

- 1.The place of installation should be no dust,corrosive gas or liquid,avoid metal dust,oil,water getting into the inner motor .if have special requirements,pls add the protection device.
- 2.Installation spigot must be concentric with the axle load.use the flexible coupling to prevent the shaft being broken.
- 3.Ensure the radiation,high speed running of the motor will produce high temperature.
- 4.It is the inherent characteristics that the motor will produce high voltage when switched on.
- 5.When Motor or driver don't work,pls contact us or the distributors.



**YUHAI MOTOR**

Energy Saving,  
Stability,More power  
[www.zjyuhai.com](http://www.zjyuhai.com)



## 60SYAC Servo Motor

Temperature: 0°C–55°C  
Number of pole pairs: 4  
Incremental encoder line: 2500/5000PPR  
Absolute encoder: 17bit  
Insulation class: B  
Safety Class: IP54  
Insulation and voltage resistance: AC1500V, 1Minute  
Insulation resistance: DC500V, 10 MΩ above  
Structure: Self-cooling  
Vibration: Under 2.5G  
Altitude: Under 1000m  
Work system: Continuous  
Installation Method: Flange installation



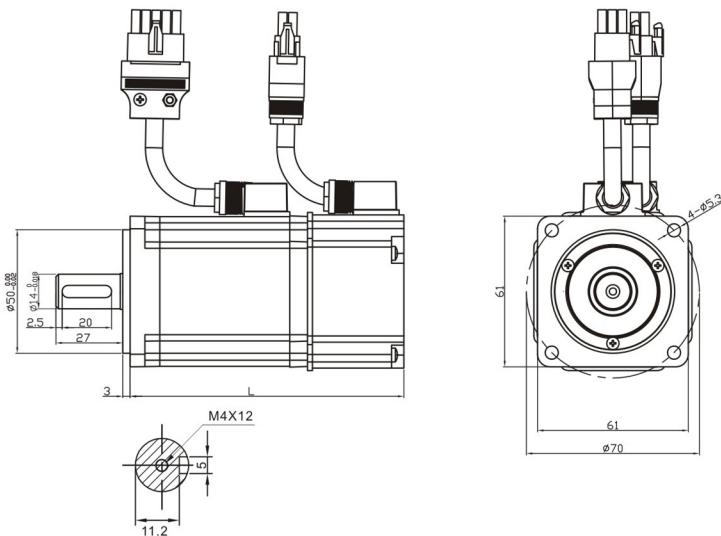
**YUHAI MOTOR**

Energy Saving,  
Stability,More power  
wiyuhai.en.alibaba.com  
www.zjyuhai.cn

### Specifications

Motor Model	60SY-M00630	60SY-M01330	60SY-M01930
Rated Power(Kw)	0.2	0.4	0.6
Rated Current (A)	1.3	2.5	3.7
Rated Torque(N.m)	0.637	1.27	1.91
Max Torque(N.m)	1.91	3.81	5.4
Rated Speed(rpm)	3000	3000	3000
Max Speed(rpm)	3600	3600	3600
Rotor Inertia(KG.m <sup>2</sup> )	$0.264 \times 10^{-4}$	$0.407 \times 10^{-4}$	$0.526 \times 10^{-4}$
Input Voltage(V)		(AC 220)	
Motor Weight(Kg)	1.18	1.70	2.10

### Installation Dimension:unit=mm



Model	L(mm)	L(mm) with brake
60SY-M00630	110	148
60SY-M01330	133	181
60SY-M01930	154	192

- All above is the standard installation dimension, can be changed according to the customers' requirements
- Not hit the shaft, or the encoder in the other end would be damaged.

### Winding connection table

Winding wire	U	V	W	PE
Socket Number	1	2	3	4

Note: Brake voltage is DC 24V (Non polar requirement)

### The encoder connection table

Signal Definitions	5V	OV	A+	B+	Z+	A-	B-	Z-	U+	V+	W+	U-	V-	W-	PE
Socket Number	2	3	9	4	7	13	14	5	6	10	11	8	12	15	1



## 80SY AC Servo Motor

Temperature: 0°C~55°C  
Number of pole pairs: 4  
Incremental encoder line: 2500/5000PPR  
Absolute encoder: 17bit  
Insulation class: B  
Safety Class: IP54  
Insulation and voltage resistance: AC1500V,1Minute  
Insulation resistance: DC500V, 10 MΩ above  
Structure: Self-cooling  
Vibration: Under 2.5G  
Altitude: Under 1000m  
Work system: Continuous  
Installation Method: Flange installation



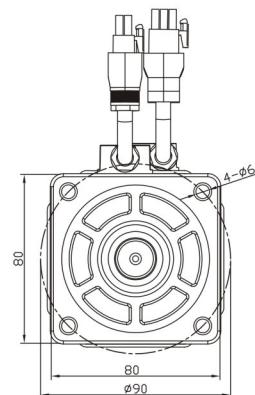
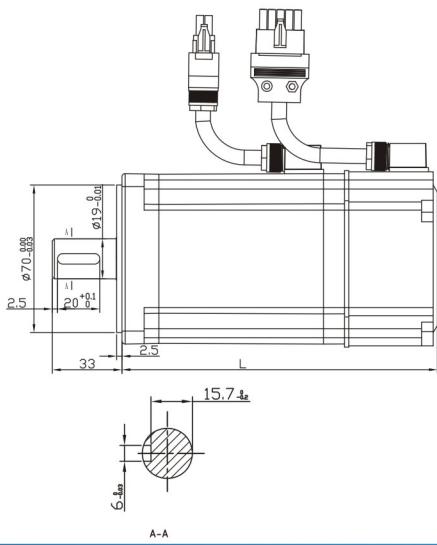
**YUHAI MOTOR**

Energy Saving,  
Stability,More power  
www.yuhai.en.alibaba.com  
www.zjyuhai.cn

## Specifications

Motor Model	80SY-M01330	80SY-M02430	80SY-M04025
Rated Power(Kw)	0.4	0.75	1.0
Rated Current (A)	2.2	3.5	4.2
Rated Torque(N.m)	1.3	2.4	4
Max Torque(N.m)	4.8	7.2	10
Rated Speed(rpm)	3000	3000	2500
Max Speed(rpm)	3300	3300	2700
Rotor Inertia(KG.m <sup>2</sup> )	$1.22 \times 10^{-4}$	$2.4 \times 10^{-4}$	$3.45 \times 10^{-4}$
Input Voltage(V)		(AC 220)	
Motor Weight(Kg)	1.9	2.2	3.5

## Installation Dimension:unit=mm



Model	L(mm)	L(mm) with brake
80SY-M01330	123	163
80SY-M02430	158	198
80SY-M04025	180	220

1. All above is the standard installation dimension, can be changed according to the customers' requirements  
2. Not hit the shaft, or the encoder in the other end would be damaged.

## Winding connection table

Winding wire	U	V	W	PE
Socket Number	2	3	4	1

Braking lead	PE	Brake	Brake
Socket Number	3	1	2

Note: Brake voltage is DC 24V (Non polar requirement)

## The encoder connection table

Signal Definitions	5V	OV	A+	B+	Z+	A-	B-	Z-	U+	V+	W+	U-	V-	W-	PE
Socket Number	2	3	4	5	6	7	8	9	10	11	12	13	14	15	1



## 90SY AC Servo Motor

Temperature: 0°C–55°C  
Number of pole pairs: 4  
Incremental encoder line: 2500/5000PPR  
Absolute encoder: 17bit  
Insulation class: B  
Safety Class: IP54  
Insulation and voltage resistance: AC1500V, 1Minute  
Insulation resistance: DC500V, 10 MΩ above  
Structure: Self-cooling  
Vibration: Under 2.5G  
Altitude: Under 1000m  
Work system: Continuous  
Installation Method: Flange installation



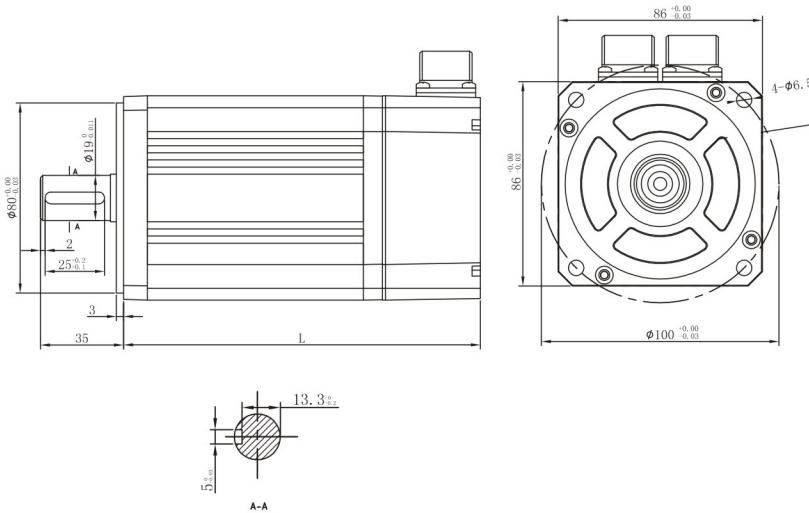
**YUHAI MOTOR**

Energy Saving,  
Stability,More power  
www.zjyuhai.cn

### Specifications

Motor Model	90SY-M02430	90SY-M03520	90SY-M04025
Rated 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
Max speed(rpm)	3300	2300	2700
Rated Torque(N.m)	2.4	3.5	4
Max Torque(N.m)	7.1	10.5	12
Max Current	9	9	12
Rotor Inertia(KG.m <sup>2</sup> )	2.45X10 <sup>-4</sup>	3.4X10 <sup>-4</sup>	3.7X10 <sup>-4</sup>
Motor Weight(Kg)	3.4	3.8	4.13

### Installation Dimension:unit=mm



Model	L(mm)	L(mm) with brake
90SY-M02430	149	190
90SY-M03520	171	212
90SY-M04025	181	222

- All above is the standard installation dimension, can be changed according to the customers' requirements
- Not hit the shaft, or the encoder in the other end would be damaged.

### Winding connection table

Winding wire	U	V	W	PE	Braking lead	PE	Brake	Brake
Socket Number	2	3	4	1	3	1	2	

Note: Brake voltage is DC 24V (Non polar requirement)

### The encoder connection table

Signal Definitions	5V	OV	A+	B+	Z+	A-	B-	Z-	U+	V+	W+	U-	V-	W-	PE
Socket Number	2	3	4	5	6	7	8	9	10	11	12	13	14	15	1



## 110SY AC Servo Motor

Temperature: -10°C~55°C

Number of pole pairs: 4

Incremental encoder line: 2500/5000PPR

Absolute encoder: 17bit

Insulation class: B

Safety Class: IP54

Insulation and voltage resistance: AC1500V, 1Minute

Insulation resistance: DC500V, 10 MΩ above

Structure: Self-cooling

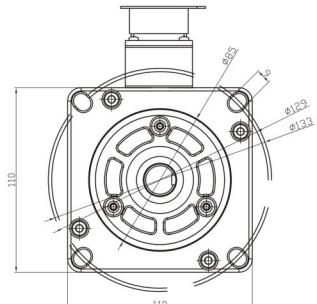
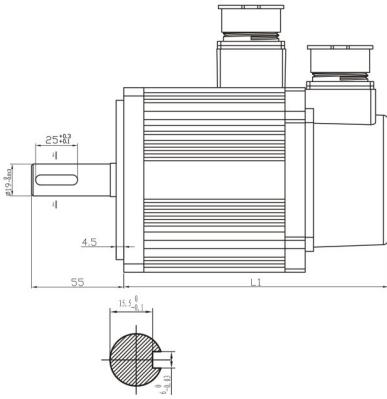
Vibration: Under 2.5G

Altitude: Under 1000m

Work system: Continuous

Installation Method: Flange installation

### Installation Dimension:unit=mm



1. All above is the standard installation dimension, can be changed according to the customers' requirements  
 2. Not hit the shaft, or the encoder in the other end would be damaged.

Model	L(mm)	L(mm) with brake
110SY-M02030	157	217
110SY-M04020	187	247
110SY-M04030	187	247
110SY-M05020	202	262
110SY-M05030	202	262
110SY-M06020	217	277
110SY-M06030	217	277

### Specifications

Motor Model	110SY-M02030	110SY-M04020	110SY-M04030	110SY-M05020	110SY-M05030	110SY-M06020	110SY-M06030
Rated Power(KW)	0.6	0.8	1.2	1.0	1.5	1.2	1.8
Rated Current (A)	4	3.2	5	4	5	4.5	6.0
Rated Torque(N.m)	2	4	4	5	5	6	6
Max Torque(N.m)	6	12	12	15	15	18	18
Rated Speed(rpm)	3000	2000	3000	2000	3000	2000	3000
Max Speed(rpm)	3300	2300	3300	2300	3300	2300	3300
Rotor Inertia(KG.m <sup>2</sup> )	$0.33 \times 10^{-3}$	$0.65 \times 10^{-3}$	$0.65 \times 10^{-3}$	$0.85 \times 10^{-3}$	$0.85 \times 10^{-3}$	$1.0 \times 10^{-3}$	$1.0 \times 10^{-3}$
Motor Weight(Kg)	4.6	5.6	5.6	6.2	6.2	6.8	6.8

### The power line

110SY-M series motor's winding leads to corresponding relationship by the 4-core connector as winding connection.

### Winding connection table

Winding wire	U	V	W	PE	Braking lead	PE	Brake	Brake
Socket Number	2	3	4	1	Socket Number	3	1	2

Note:Brake voltage is DC 24V (Non polar requirement)

### The encoder connection table

Signal Definitions	5V	OV	A+	B+	Z+	A-	B-	Z-	U+	V+	W+	U-	V-	W-	PE
Socket Number	2	3	4	5	6	7	8	9	10	11	12	13	14	15	1



## 130SY AC Servo Motor

Temperature: -10°C~55°C

Number of pole pairs: 4

Incremental encoder line: 2500/5000PPR

Absolute encoder: 17bit

Insulation class: B

Safety Class: IP65

Insulation and voltage resistance: AC1500V,1Minute

Insulation resistance: DC500V, 10 MΩ above

Structure: Self-cooling

Vibration: Under 2.5G

Altitude: Under 1000m

Work system: Continuous

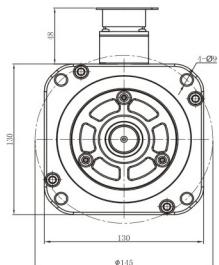
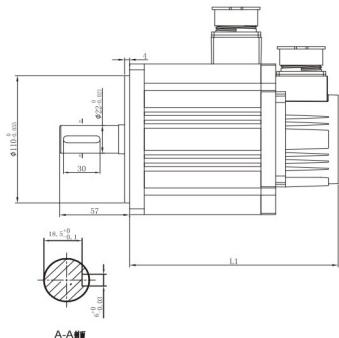
Installation Method: Flange installation



**YUHAI MOTOR**

Energy Saving,  
Stability,More power  
www.yuhai.en.alibaba.com  
www.zjyuhai.cn

### Installation Dimension:unit=mm



1. All above is the standard installation dimension, can be changed according to the customers' requirements  
2. Not hit the shaft ,or the encoder in the other end would be damaged.

Model	L(mm)	L(mm) with brake
130SY-M-04025	164	210
130SY-M-05025	173	219
130SY-M-06025	102	148
130SY-M-07720	190	236
130SY-M-07725	190	236
130SY-M-10010	210	256
130SY-M-10015	210	256
130SY-M-10025	210	256
130SY-M-15015	230	276
130SY-M-15025	230	276
130SY-M-20015	200	246

### Specifications

Motor Model	130SY-M 04025	130SY-M 05025	130SY-M 06025	130SY-M 07720	130SY-M 07725	130SY-M 10010	130SY-M 10015	130SY-M 10025	130SY-M 15015	130SY-M 15025	130SY-M 20015
Rated Power(KW)	1.0	1.3	1.5	1.6	2.0	1.0	1.5	2.6	2.3	3.8	3
Rated Current (A)	4.0	5.0	6.0	5.5	7.5	4.5	6	10	9.5	17	13
Rated Torque(N.m)	4	5	6	7.7	7.7	10	10	10	15	15	20
Max Torque(N.m)	12	15	18	22	22	25	25	25	30	30	35
Rated Speed(rpm)	2500	2500	2500	2000	2500	1000	1500	2500	1500	2500	1500
Max Speed(rpm)	2800	2800	2800	2300	2800	1300	1800	2800	1800	2800	1800
Rotor Inertia(KG.m <sup>2</sup> )	$0.82 \times 10^{-3}$	$1.20 \times 10^{-3}$	$1.26 \times 10^{-3}$	$1.53 \times 10^{-3}$	$1.53 \times 10^{-3}$	$1.94 \times 10^{-3}$	$1.94 \times 10^{-3}$	$1.94 \times 10^{-3}$	$2.77 \times 10^{-3}$	$2.77 \times 10^{-3}$	$3.67 \times 10^{-3}$
Motor Weight(Kg)	7.8	8.4	8.9	10.2	10.2	11.5	11.5	11.5	14.5	14.5	17

### The power line

130SY-M series motor's winding leads to corresponding relationship by the 4-core connector as winding connection.

### Winding connection table

Winding wire	U	V	W	PE	Braking lead	PE	Brake	Brake
Socket Number	2	3	4	1	Socket Number	3	1	2

Note:Brake voltage is DC 24V (Non polar requirement)

### The encoder connection table

Signal Definitions	5V	OV	A+	B+	Z+	A-	B-	Z-	U+	V+	W+	U-	V-	W-	PE
Socket Number	2	3	4	5	6	7	8	9	10	11	12	13	14	15	1



## 180SY AC Servo Motor

Temperature: 0°C–55°C  
Number of pole pairs: 4  
Incremental encoder line: 2500/5000PPR  
Absolute encoder: 17bit  
Insulation class: B  
Safety Class: IP54  
Insulation and voltage resistance: AC1500V,1Minute  
Insulation resistance: DC500V, 10 MΩ above  
Structure: Self-cooling  
Vibration: Under 2.5G  
Altitude: Under 1000m  
Work system: Continuous  
Installation Method: Flange installation



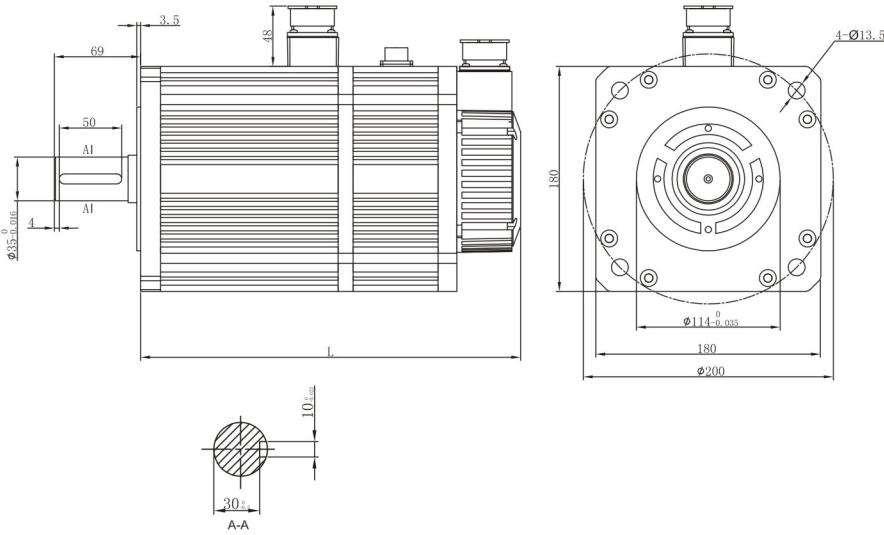
**YUHAI MOTOR**

Energy Saving,  
Stability,More power  
Wuyihai.en.alibaba.com  
www.zjyuhai.cn

## Specifications

Motor Model	180SY-M17015	180SY-M27015	180SY-M35015
Rated Power(KW)	2.7	4.3	5.5
Rated Current (A)	10.5	16	19
Rated Torque(N.m)	17	27	35
Max Torque(N.m)	34	67	70
Rated Speed(rpm)	1500	1500	1500
Max Speed(rpm)	1800	1800	1800
Rotor Inertia(KG.m <sup>2</sup> )	$3.4 \times 10^{-3}$	$6.1 \times 10^{-3}$	$8.6 \times 10^{-3}$
Input Voltage(V)		(Ac220)	
Motor Weight(Kg)	19.5	25.5	30.5

## Installation Dimension:unit=mm



Model	L(mm)	L(mm) with brake
180SY-M17015	226	306
180SY-M27015	262	342
180SY-M35015	292	372

- All above is the standard installation dimension, can be changed according to the customers' requirements.
- Not hit the shaft, or the encoder in the other end would be damaged.

## Winding connection table

Winding wire	U	V	W	PE
Socket Number	2	3	4	1

Braking lead	PE	Brake	Brake
Socket Number	3	1	2

Note: Brake voltage is DC 24V (Non polar requirement)

## The encoder connection table

Signal Definitions	5V	OV	A+	B+	Z+	A-	B-	Z-	U+	V+	W+	U-	V-	W-	PE
Socket Number	2	3	4	5	6	7	8	9	10	11	12	13	14	15	1



## 204ZJY Ac Asynchronous Spindle Servo Motor

Temperature: -15°C-45°C

Number of pole pairs: 4

Incremental encoder line: 1024PPR

Absolute encoder: 17bit

Insulation class: B

Safety Class: IP55

Insulation and voltage resistance: AC1500V,1Minute

Insulation resistance: DC500V, 10 MΩ above

Structure: Self-cooling

Vibration: Under 2.5G

Altitude: Under 1000m

Work system: Continuous

Installation Method: Flange installation

### Specifications

Motor model	204ZJY-4-3.7-15-X	204ZJY-4-5.5-15-X
Rated power(KW)	3.7	5.5
Rated voltage(V)	380	380
Rated current (A)	8	11.5
Rated torque(N.m)	24	35
Rated frequency (Hz)	50	50
Rated speed(rpm)	1500	1500
Max speed(rpm)	6000	6000
Rotor inertia(G. D2)	0.014	0.015
Fan power (W)	75	75
Fan voltage (V)	380	380

### Performance introduction:

204ZJY series AC asynchronous spindle servo motor is a new AC induction servo motor, it is independent research and development, design, and produced by Wenling yuhai electromechanical CO.,LTD. The product has the advantages of compact structure, beautiful appearance. It adopts optimum electromagnetic design, high speed photoelectric encoder, high precision bearings and F level insulation. It is in stable operation, high control precision, low electromagnetic noise, high efficiency, long service life and high performance price ratio. It is particularly suitable for the spindle control of CNC machine tool and the speed control of high performance automation.

### Notice

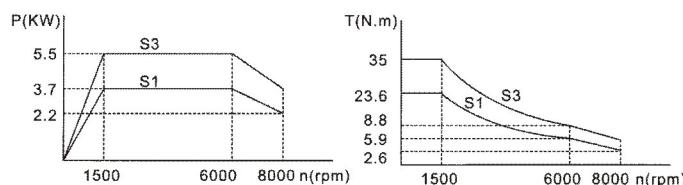
1. Motor U, V, W wiring must keep corresponding relation with the drive U, V, W terminals.
2. Prohibit to hit the end of axis or let the motor axial force, To avoid damaging the encoder and motor bearing.
3. Ensure the terminal in the motor's junction box grounded effectively.
4. Ensure that the cooling fan is in the normal work when the motor adjust speed.
5. The motor's surface temperature is higher during operation, avoid touching by hand to prevent burns.
6. Fan wind direction must be consistent with the signage when wiring.

### terminal instruction

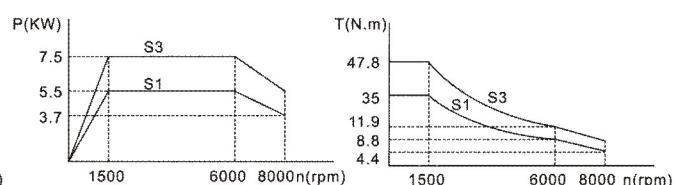
No.	1	2	3	4	5	6	7	8	9	10
Signal	shielding	Z+	B+	A+	0V	T	Z-	B-	A-	+5V

note:T is the thermal protection switch

characteristic curve 204ZJY4-3.7-15-X



characteristic curve 204ZJY4-5.5-15-X



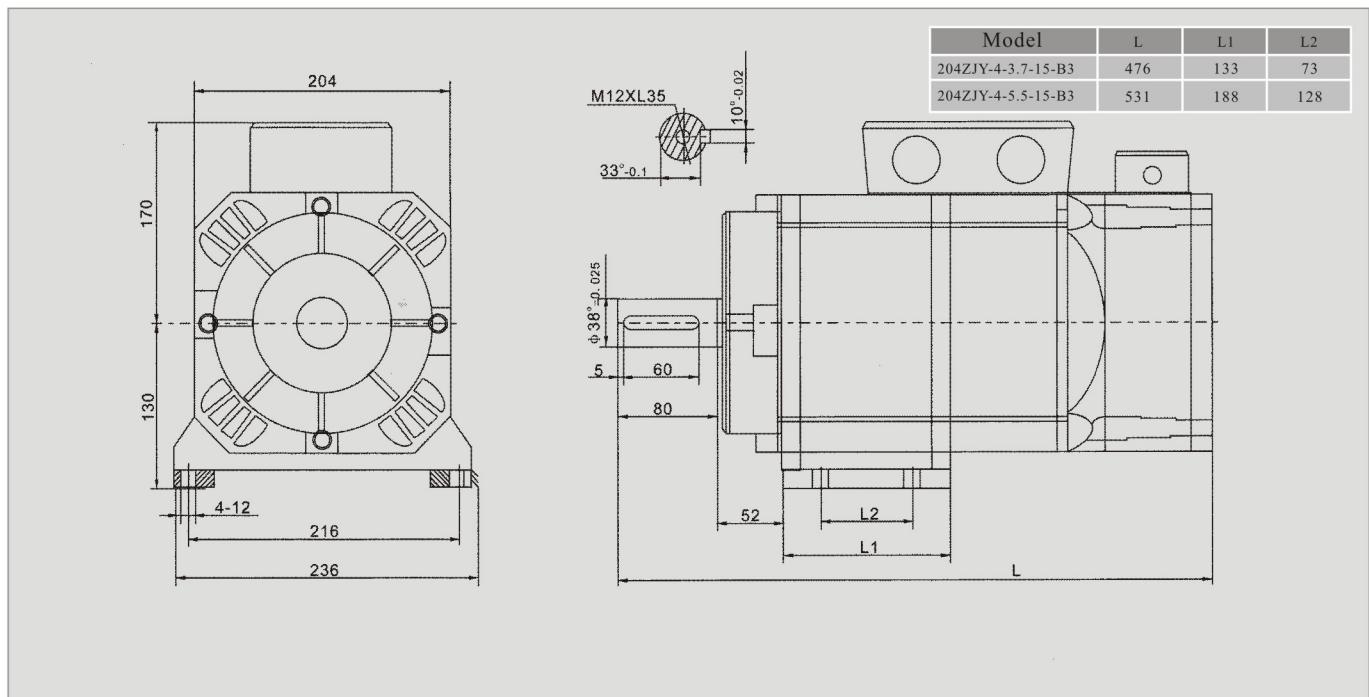


**YUHAI MOTOR**

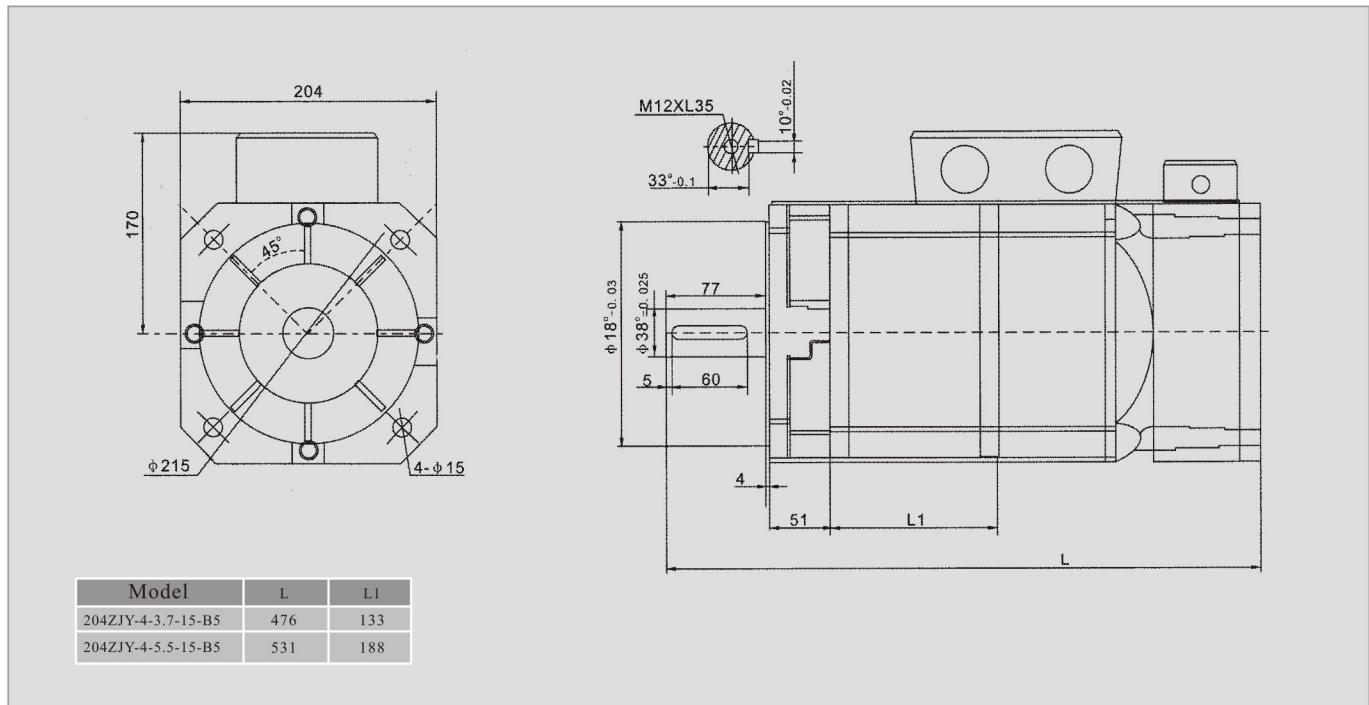
Energy Saving,  
Stability,More power  
[www.yuhai.en.alibaba.com](http://yuhai.en.alibaba.com)  
[www.zjyuhai.cn](http://www.zjyuhai.cn)

## 204ZJY Ac Asynchronous Spindle Servo Motor

Horizontal mounting dimensions:unit=mm



Flange mounting dimensions:unit=mm





## SG Series Servo Motor Drive

Operating temperature:-10~55 °C

Humidity:<90%(no condensation)

Vibration:<0.5g(4.8m/s<sup>2</sup>)

Working system:continuous work



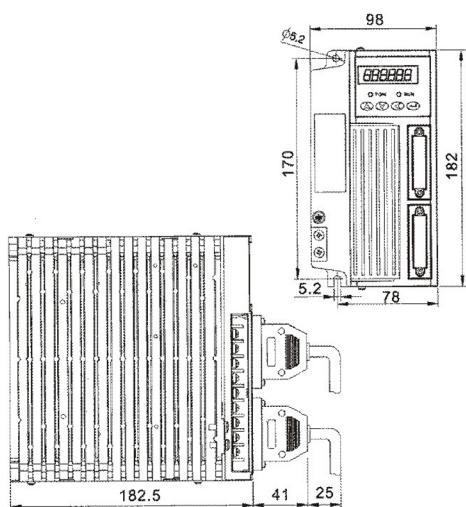
**YUHAI MOTOR**

Energy Saving,  
Stability,More power  
[www.yuhai.en.alibaba.com](http://www.yuhai.en.alibaba.com)  
[www.zjyuhai.cn](http://www.zjyuhai.cn)

## Product brief

Ac servo technology has developed from the early 80s, application technology become more mature and the property improved every year. It is widely used in the cnc turning machine, packaging machine, printer, textile machine, and other automated equipment. SG series ac servo drive , a new generation product, use the latest 32-bit DSP unit As the center core work unit, which we research and develop independently. Adopt the complex programmable device EPLD and Mitsubishi intelligent power module. This ac servo drive has the advantages of high integration, small volume, fast response speed, perfect protection, high reliability etc.

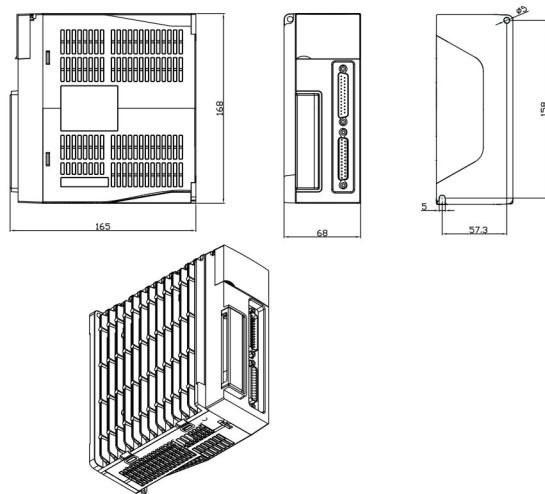
## Installation Dimensions unit=mm



## Specifications

Model	SG20A	SG15A	SG30A		
Output power(kw)	0.4-1.5	0.2-1.0	0.8-2.4		
Motor rated torque(N.m)	2.4-6.0	0.6-4.0	4.0-15.0		
Input power supply	3-phase AC 220V -15%~+10% 50/60Hz				
Control way	SG series	Position control	Speed control		
	Speed frequency response	≥250 Hz			
	Rate volatility	+-0.03(load 0~100%), +-0.02(power-15% ~+10%) value corresponding to the rated speed.			
	Speed ratio	1:5000			
Input control	Pulse frequency	≤500k Hz			
	1.servo enable 2.alarm clearance 3.ccw drive prohibition 4.cw drive prohibition 5.deviation counter reset/ speed selection1/ 6.command pulse prohibition/speed selection2				
Output control	1.servo ready to output 2.servo alarm output 3.positioning to complete the output/ Speed reach to the output 4. mechanical brake output				
	input way:1.pulse+ symbols 2.ccw pulse/cw pulse 3.2 phase A/B orthogonal pulse The electronic gear:1~32767/1~32767 Feedback pulse :2500 ppr				
Position control	rotate speed,current position,command pulse accumulation,position deviation ,motor torque, motor current,Linear speed,The absolute rotor position,command pulse frequency,Running state,input/output terminal signal ,etc.				
Monitoring functions	parameters set 1~10000ms/1000r/min				
Acceleration/deceleration function	overspeed,The main power over-voltage and under-voltage,over current,overload,abnormal braking, the encoder abnormal, control power abnormal position error,etc..				
Protection function					

## Installation Dimensions unit=mm





## 86 BYG Two Phase Stepper Motor

Temperature Rise; 80°C Max { Rated current }

Step Angle Accuracy; 5%

Ambient temperature; -20°C~+50°C

Insulation Resistance; 100MΩ 500V DC

Dielectric Strength; 500V AC 1min

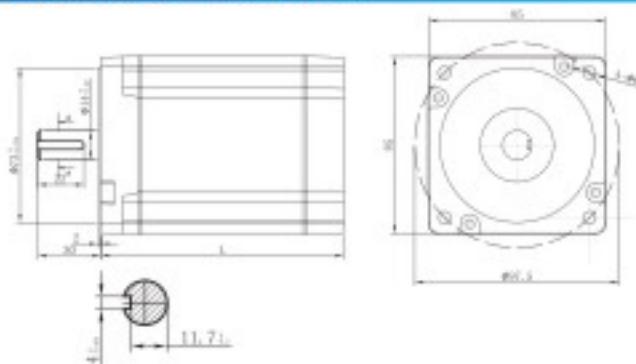
Insulation class; B



YUHAI MOTOR

Energy Saving,  
Stability, More power  
www.yuhai.com  
www.yuhai.cn

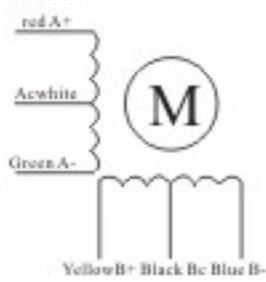
## Installation Dimension: unit=mm



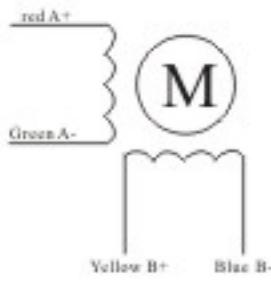
## Specifications

Motor Model	Step Angle (°)	Holding torque (N.m)	(Drive) Operating Voltage(V)	Rated Current (A)	Phase Inductance (mH)	Phase Resistance (Ω)	Rotor inertia (kg.cm²)	Weight (kg)	Motor Length (mm)
86BYG250A	1.8	2.4	60	4.3	3.1	0.5	1.92	2.2	78
86BYG250B	1.8	4	60	4.5	7.0	1.0	2.55	2.95	99
86BYG250C	1.8	6	60	5	7.1	0.8	3.57	3.7	115
86BYG250D	1.8	8	60	6	7.3	0.95	3.96	4.3	145
86BYG250E	1.8	12	60	7.5	7.8	1.0	4.57	5.2	155

## Wiring Diagram



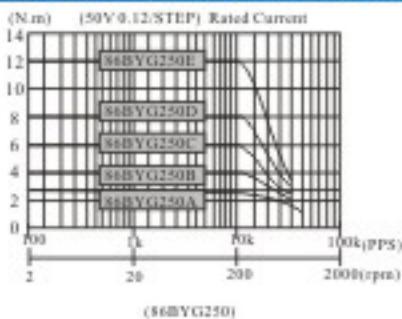
Two-phase six wire



Two-phase four wire

The motor wiring method can be changed according to the customers' requirements

## The torque-speed characteristic curve



## attention:

- Characteristic data of the motor is measured with the specific driver. When change the drive or the voltage, the current and the torque frequency characteristic are also changed, we can change the data to design another torque frequency characteristic according to the customers' requirements.
- Motor shaft must be concentric with the load in order to avoid unnecessary of breaking axis
- When the motor is selected, pls adjust according to the rated parameter and wiring well in order to avoid the motor burned out.



Energy Saving,  
Stability,More power  
www.yuhai.en.alibaba.com  
www.zjyuhai.cn



## 86BYG Three Phase Stepper Motor

Temperature Rise; 80°C Max { Rated current }

Step Angle Accuracy; 5%

Ambient temperature; -20°C~+50°C

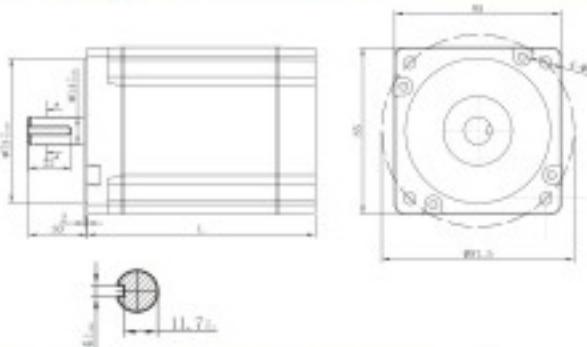
Insulation Resistance; 100MΩ 500V DC

Dielectric Strength; 500V AC 1min

High voltage 1500AC 1min

Insulation class; B

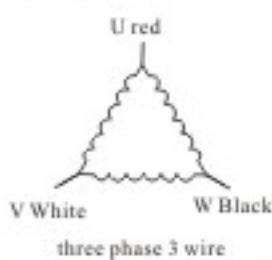
### Installation Dimension: unit=mm



### Specifications

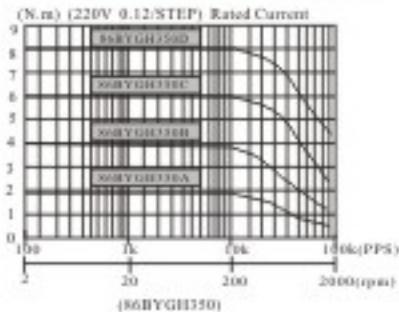
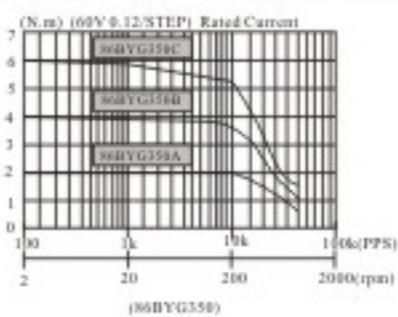
Motor Model	Step Angle (°)	Holding torque (N.m)	(Drive) Operating Voltage(V)	Rated Current (A)	Phase Inductance (mH)	Phase Resistance (Ω)	Rotor inertia (kg.cm²)	Weight (kg)	Motor Length (mm)
86BYG350A	1.2	2	60	5.2	2.4	0.5	1.49	1.84	78
86BYG350B	1.2	4	60	5.6	4.5	0.71	2.55	2.95	99
86BYG350B-5	1.2	5	60	5.6	5.5	0.83	3.21	3.52	110
86BYG350C	1.2	6	60	5.8	6.5	0.95	3.99	3.9	125
86BYGH350A	1.2	2	220	1.75	4.0	1.11	1.49	1.98	78
86BYGH350B	1.2	4	220	2.1	7.4	1.4	2.55	3.0	99
86BYGH350C	1.2	6	220	3.2	12.8	1.87	3.96	4.4	135
86BYGH350D	1.2	8	220	4.0	16.2	2.01	4.95	5.9	145

### Wiring Diagram



The motor wiring method can be changed according to the customers' requirements

### The torque-speed characteristic curve



### attention:

1. Characteristic data of the motor is measured with the specific driver. When change the drive or the voltage, the current and the torque frequency characteristic are also changed, we can change the data to design another torque frequency characteristic according to the customers' requirements.

2. Motor shaft must be concentric with the load in order to avoid unnecessary of breaking axis

3. When the motor is selected, pls adjust according to the rated parameter and wiring well in order to avoid the motor burned out.



## 110BYG Two Phase Stepper Motor

Temperature Rise: 80°C Max ( Rated current )

Step Angle Accuracy: 5%

Ambient temperature: -20°C~+50°C

Insulation Resistance: 100MΩ 500V DC

Dielectric Strength: 1500V AC 1min

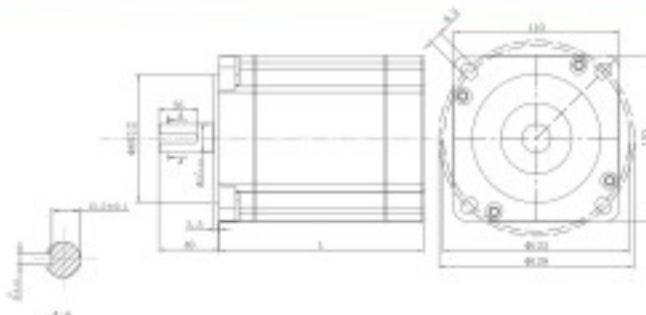
Insulation class: B



YUHAI MOTOR

Energy Saving,  
Stability, More power  
www.yuhai.com

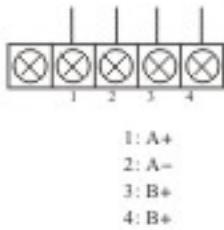
## Installation Dimension: unit=mm



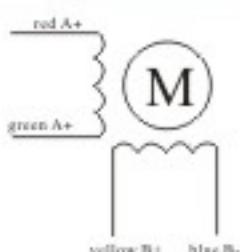
## Specifications

Motor Model	Step Angle (°)	Holding torque (N.m)	(Drive) Operating Voltage(V)	Rated Current (A)	Phase Inductance (mH)	Phase Resistance (Ω)	Rotor inertia (kg.cm²)	Weight (kg)	Motor Length (mm)
110BYG 250A	1.8	8	110~220	5	17.3	1.3	7.3	4.8	110
110BYG 250B	1.8	12	110~220	6	12.7	0.78	10	6.4	134
110BYG 250C	1.8	18	110~220	6.5	15.5	0.87	12.35	8.1	159
110BYG 250D	1.8	20	110~220	6.8	17.5	0.97	13.8	9.2	193

## Wiring Diagram

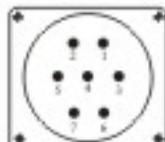


wiring row



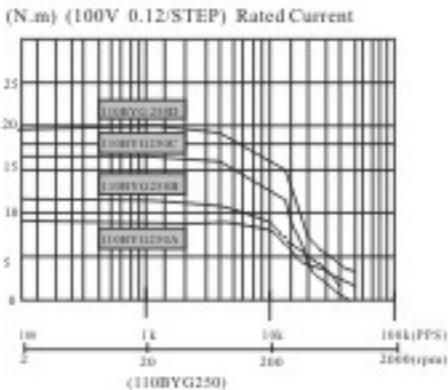
three phase 4 wire

Number	Over-current	over-voltage
1	A+	A+
2	A-	A-
3	B+	B+
4	B-	B-
5	Grounding	
6		Grounding
7		Grounding



seven-core socket

## The torque-speed characteristic curve



## attention:

- Characteristic data of the motor is measured with the specific driver. When change the drive or the voltage, the current and the torque frequency characteristic are also changed, we can change the data to design another torque frequency characteristic according to the customers' requirements.
- Motor shaft must be concentric with the load in order to avoid unnecessary of breaking axis
- When the motor is selected, pls adjust according to the rated parameter and wiring well in order to avoid the motor burned out.



Energy Saving,  
Stability,More power  
www.yuhai.en.alibaba.com  
www.zjyuhai.cn



## 110BYG Three Phase Stepper Motor

Temperature Rise; 80°C Max { Rated current )

Step Angle Accuracy; 5%

Ambient temperature; -20°C~+50°C

Insulation Resistance; 100MΩ 500V DC

Dielectric Strength; 1500V AC 1min

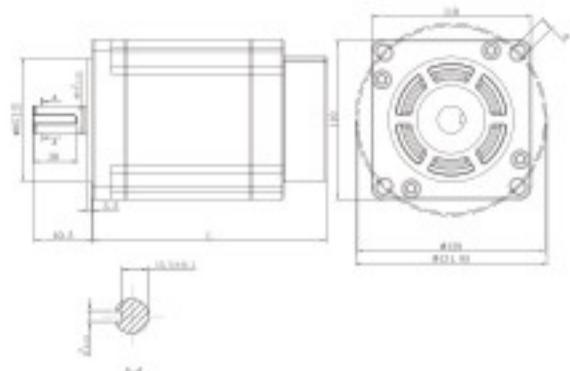
Insulation class; B



**YUHAI MOTOR**

Energy Saving,  
Stability,More power  
www.yuhai.com  
www.yuhai.cn

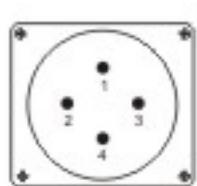
#### Installation Dimension: unit=mm



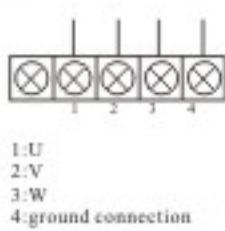
#### Specifications

Motor Model	Step Angle (°)	Holding Torque (N.m)	(Drive) Operating Voltage(V)	Rated Current (A)	Phase Inductance (mH)	Phase Resistance (Ω)	Rotor inertia (kg.cm²)	Weight (kg)	Motor Length (mm)
110BYG 350A	1.2	8	220	3.7	11.9	1.00	8.6	5.5	139
110BYG 350B	1.2	12	220	4.5	11.5	0.76	11.9	7.1	162
110BYG 350C	1.2	16	220	6.0	19	1.28	14.8	8.8	187
110BYG 350D	1.2	20	220	6.8	22	1.24	19.8	11	221

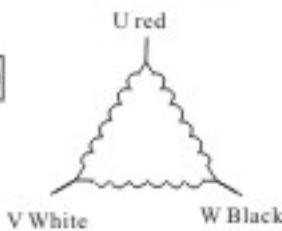
#### Wiring Diagram



four-core socket



wiring row

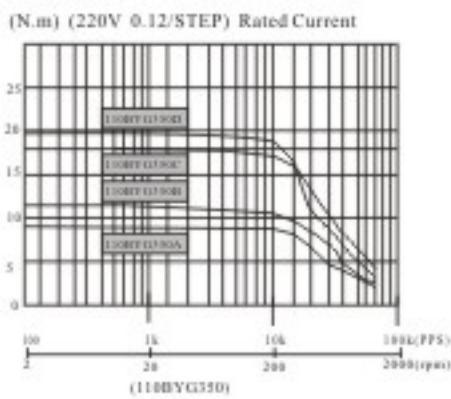


three phase 3 wire

Note: use clevis flange motor shaft. Drive can be selected  
according to customer's needs.

Number	4-wire	5-wire	7-wire
1	U	U	U
2	V	V	
3	W	W	V
4	Gounding		
5		Gounding	W
6			
7			Gounding

#### The torque-speed characteristic curve



#### attention:

- Characteristic data of the motor is measured with the specific driver. When change the drive or the voltage, the current and the torque frequency characteristic are also changed, we can change the data to design another torque frequency characteristic according to the customers' requirements.
- Motor shaft must be concentric with the load in order to avoid unnecessary of breaking axis
- When the motor is selected, pls adjust according to the rated parameter and wiring well in order to avoid the motor burned out.



**YUHAI MOTOR**

Energy Saving,  
Stability,More power  
www.yuhai.en.alibaba.com  
www.rjyuhai.cn



## 130BYG Three Phase Stepper Motor

Temperature Rise: 80°C Max ( Rated current )

Step Angle Accuracy: 5%

Ambient temperature: -20°C~+50°C

Insulation Resistance: 100MΩ 500V DC

Dielectric Strength: 1500V AC 1min

Insulation class: B

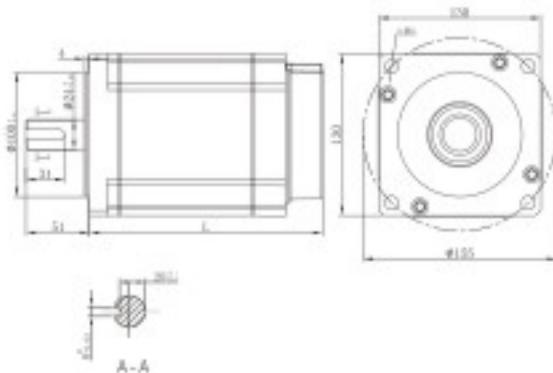




**YUHAI MOTOR**

Energy Saving,  
Stability, More power  
www.yuhaimotor.com  
www.yuhaimotor.com

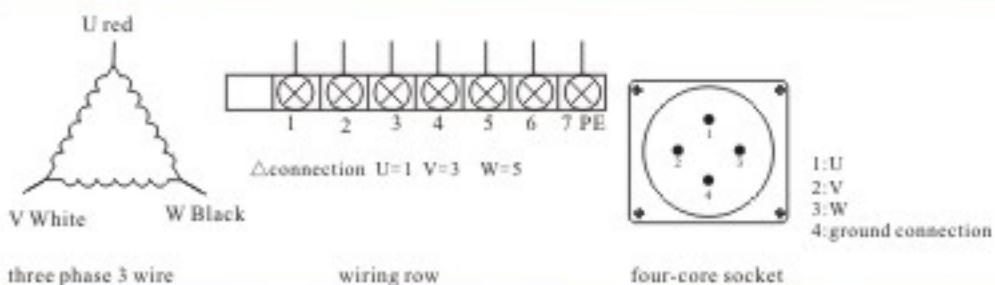
### Installation Dimension: unit=mm



### Specifications

Motor Model	Step Angle (°)	Holding torque (N.m)	(Drive) Operating Voltage(V)	Rated Current (A)	Phase Inductance (mH)	Phase Resistance (Ω)	Rotor inertia (kg.cm²)	Weight (kg)	Motor Length (mm)
130BYG350A	1.2	24	220	6.8	16.2	0.96	26.87	14	188
130BYG350B	1.2	28	220	6.8	19	1.17	33.97	17	220
130BYG350C	1.2	35	220	6.8	24	1.39	41.4	19	252
130BYG350D	1.2	50	220	6.8	18.3	1.02	47.3	20.5	280
130BYG350A-X	1.2	22	220	6.8	9.9	0.89	26.8	14.58	189
130BYG350B-X	1.2	28	220	6.8	11.3	0.80	34.9	17.14	236
130BYG350C-X	1.2	37	220	6.8	13.8	0.92	39.2	19.7	256
130BYG350D-X	1.2	50	220	6.8	18.3	0.99	42.5	20.5	271

### Wiring Diagram



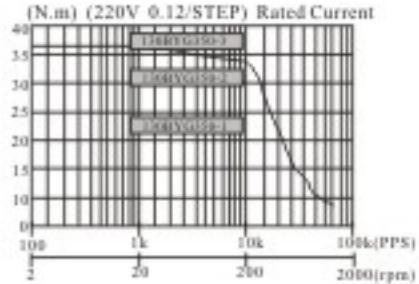
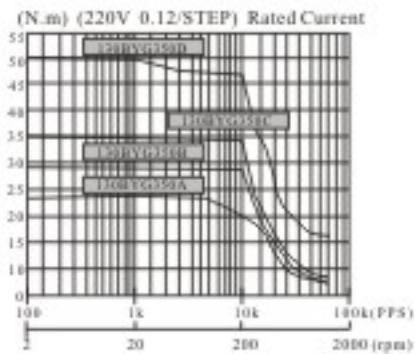
Number	4-wire	5-wire	7-wire
1	U	U	U
2	V	V	\
3	W	W	V
4	Grounding	\	\
5	\	Grounding	W
6	\	\	\
7	\	\	Grounding

three phase 3 wire

wiring row

four-core socket

### The torque-speed characteristic curve



### attention:

- Characteristic data of the motor is measured with the specific driver. When change the drive or the voltage, the current and the torque frequency characteristic are also changed, we can change the data to design another torque frequency characteristic according to the customers' requirements.
- Motor shaft must be concentric with the lead in order to avoid unnecessary of breaking axis.
- When the motor is selected, pls adjust according to the rated parameter and wiring well in order to avoid the motor burned out.



**YUHAI MOTOR**

Energy Saving,  
Stability,More power  
www.yuhai.cn



## 130BYG Two Phase Stepper Motor

Temperature Rise; 80°C Max { Rated current }

Step Angle Accuracy; 5%

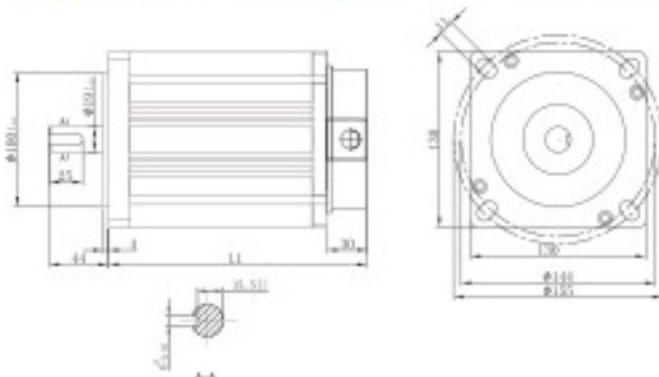
Ambient temperature; -20°C~+50°C

Insulation Resistance; 100MΩ 500V DC

Dielectric Strength; 1500V AC 1min

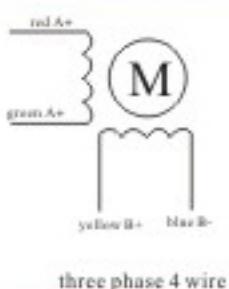
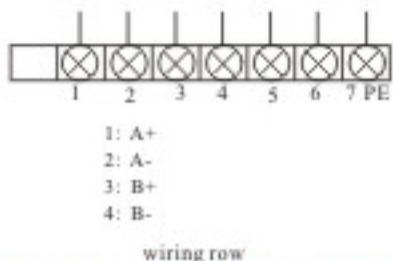
Insulation class; B



**Installation Dimension: unit=mm**

**Specifications**

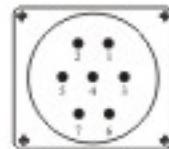
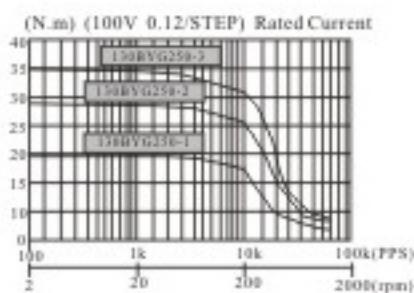
Motor Model	Step Angle (°)	Holding torque (N.m)	(Drive) Operating Voltage(V)	Rated Current (A)	Phase Inductance (mH)	Phase Resistance (Ω)	Rotor inertia (kg.cm²)	Weight (kg)	Motor Length (mm)
130BYG2501	1.8	20	110~220	6.8	8.2	0.8	26	12.5	155
130BYG2502	1.8	28	110~220	7.5	12	1.1	33.5	15.1	187
130BYG2503	1.8	35	110~220	8	15	1.3	40	17.2	219
130BYG250A-X	1.8	20	110~220	6.8	8.2	0.89	26.8	12.5	189
130BYG250B-X	1.8	28	110~220	7.5	12	1.1	33.5	15.1	187
130BYG250C-X	1.8	35	110~220	8	15	1.3	40	17.2	219

Note: X represents the Aluminum shell

**Wiring Diagram**


Note: can choose five-core socket, seven-core socket.

Number	Pin core	seven-core
1	A+	A+
2	A-	A-
3	B+	B+
4	B-	B-
5	Grounding	
6		Diagonal line
7		Grounding


**The torque-speed characteristic curve**

**attention:**

- Characteristic data of the motor is measured with the specific driver. When change the drive or the voltage, the current and the torque frequency characteristic are also changed, we can change the data to design another torque frequency characteristic according to the customers' requirements.
- Motor shaft must be concentric with the load in order to avoid unnecessary of breaking axis
- When the motor is selected, pls adjust according to the rated parameter and wiring well in order to avoid the motor burned out.

# YH-3722 Three-Phase Stepper Driver

## Specifications

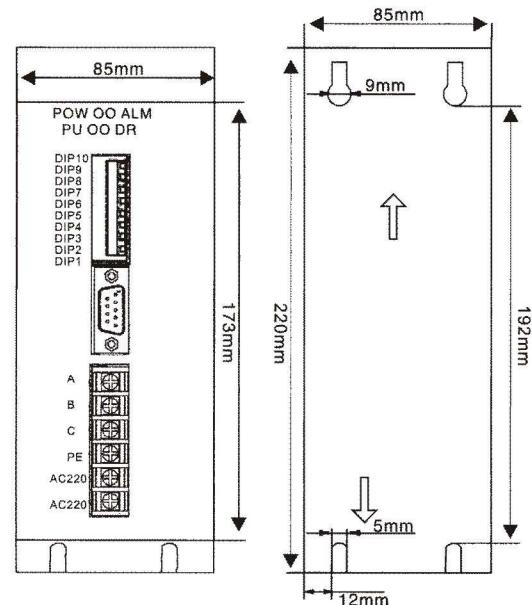
Input power	Single-phase AC220V -15~+10% 50/60Hz
Output phase current	1.5A-6.8A(Up to 8A for customization)
Adaptation of motor	Three phase hybrid stepping motor
Operate environment	0°C~55°C 15~85%RH No frost,non corrosive, flammability, explosive, conductive gas, liquid and dust
Storage environment	-25°C~70°C 15~85%RH No frost
Driving mode	pwm
Step angle	400/480/500/600/800/1000/2000/3000/4000/4800/5000/6000/8000/10000/12000
Step angle setting	DIP switch setting
Input signal	CP+/CP-;CW+/CW-;FREE+/FREE-;
Input level	5V,5~10MA;Connet 510Ω~1K resistance when input 12v voltage;Connet 1.2K~2K resistance when input 12v voltage
Out signal	ALM+/ALM-
Position pulse input mode	Single pulse mode:CP(pulse)+CW(direction), pulse width≥1us,pulse frequency≤300khz (10000P/r);Double pulse mode:CW(positive pulse)+CCW(reverse pulse)
Status indication	Green LED power indication;driving power, normal state indication Green LED pulse indication,pulse status indication Green LED fault indication;drive fault indication
Size and shape	170.4×94.2×127mm
Weight	1.3KG



## Properties

- 1.Added full digital loop control in the mode by AC servo control principle,three-phase sine wave current driver' output can make three-phase hybrid motor low speed、no creep、no vibration area and minimal noise.
- 2.When voltage amplifier stage reaches DC325V, stepper motor of high speed still can output a high torque.
- 3.With perfect protection function of short circuit voltage and undervoltage overheating,high reliabilty.
- 4.With subdivision and semi flow function,variety of subdivision choices' minimum step angle can be set to 0.036°

## Installation Dimension:unit=mm





**YUHAI MOTOR**

Energy Saving,  
Stability,More power  
www.yuhai.en.alibaba.com  
www.zjyuhai.cn



## 2MA860H

(stepper driver)

### Main character

- 1.AC 50-80 (DC70-110V)power supply , adapt to the worst grip enviroment
- 2.H bridge 2pole the constant phase flow subdivided driving
- 3.Original creation speed self-adaption circuit,Automatic optimization
- 4.Subdivision current setting is convenient
- 5.1-64 subdivision 16 kinds of operating mode
- 6.Over current,over voltage ,under voltage,over temperature,short circuit protection
- 7.Off-line ena protection function

### Performance indicators

2MA860H is an equal angle ,Constant Torque subdivision drive,drive votage is AC 50-80 (DC70-110v), suit for the 2 phase HB stepper motor of current below 6A,diameter 57mm,86mm series .this drive adopt the advanced technology of the United States,the ciruit can make motor running with high torque at high speed ,make motor has good acceleration and small heating ,stepper pulse stop for over 100m/s,Drive current automatically in half. Positioning accuracy is up to more than 12800step/loop. Widely used in crystal machine and engraving machine.

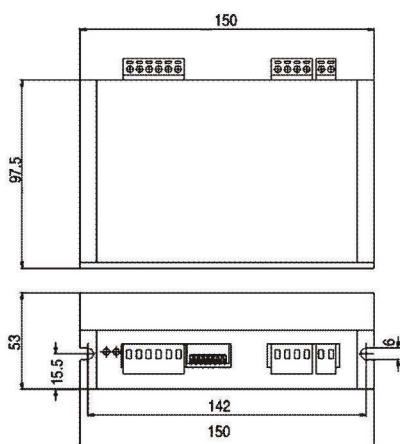
### Electrical Indicators

Instructions	Min values	Typical values	Max values
Supply voltage	1.5	-	6.0
Normal work output current		10	
Logic input current		10	
Step pulse correspond frequency	-	-	200
Pulse low level time	2.5	-	-

### environment indicators

Cooling mode	Natural cooling or forced cooling	
Occasion	Avoid oil mist,dust,corrosive gas	
Using environment	Storage temperature	-10~80 °C
	Max environment temperature	65°C
	environment humidity	≤80%RH Non – Condensing, no frost
Vibration		5.9m/s <sup>2</sup> max
Weight		0.6kg

### Shape Dimension:unit=mm



### ⚠ notice

Ensure well ventilated when install the drive.  
regularly check the cooling fan in normal operation.  
Ensure that the distance between is not less than 5cm;when multiple drivers are parallel used in the cabinet.  
ground terminals must be connected well between driver and equipment,in order to ensure the safety of usage.

# 2M982

(stepper driver)

## Main character

- 1.20-80V Dc power supply,adapt to the worst grip enviroment
- 2.H bridge 2pole the constant phase flow subdivided driving
- 3.Original creation speed self-adaption circuit,Automatic optimization
- 4.Subdivision current setting is convenient
- 5.1-64 subdivision 16 kinds of operating mode
- 6.Over current,over voltage ,under voltage,over temperature,short circuit protection
- 7.Off-line ena protection function



## Performance indicators

2M982 is an equal angle ,Constant Torque subdivision drive,drive votage is DC24-80v,suit for the 2 phase HB stepper motor of current below 6A,diameter 57mm,86mm series .this drive adopt the circuit similar to the servo control theory,which can make motor running stable at low speed ,with little Vibration and no noise. running smoothly and small heating value ,when stepper pulse stop for over 100m/s,drive current automatically in half. Positioning accuracy is up to more than 12800 step/loop.(when match 86mm stepper motor of high torque,the high speed characteristics would be influenced)

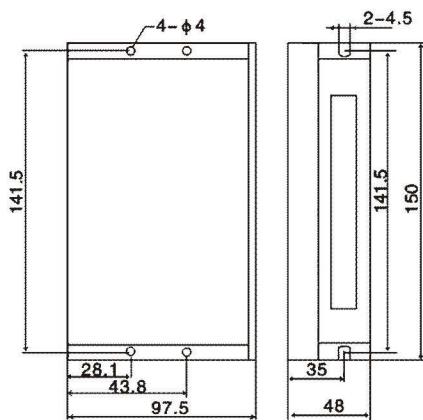
## Electrical indicators

Instructions	Min values	Typical values	Max values
Supply voltage	24	48V	80V
Normal work output current	1.3	-	7.8
Logic input current		10	
Step pulse correspond frequency	-	-	200
Pulse low level time	2.5	-	-

## Environment indicators

Using environment	Cooling mode	Natural cooling or forced cooling
	Occasion	Avoid oil mist,dust,Corrosive gas
	Storage temperature	-10~80 °C
	Max environment temperature	65°C
	environment humidity	≤80%RH Non – Condensing, no frost
	Vibration	5.9m/s <sup>2</sup> max
	Weight	0.6kg

## Shape Dimension:unit=mm



## ⚠ notice

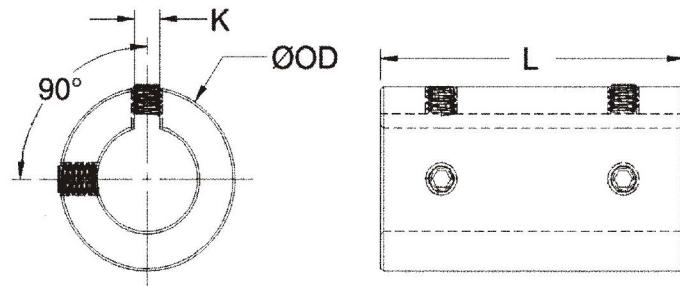
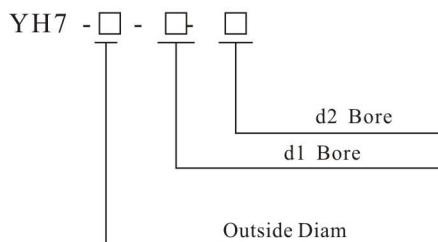
Ensure well ventilated when install the drive.  
regularly check the cooling fan in normal operation.  
Ensure that the distance between is not less than 5cm;when multiple drivers are parallel used in the cabinet.  
ground terminals must be connected well between driver and equipment,in order to ensure the safety of usage.



## YH 7

# Series Location Rigid Coupling

Rigid coupling ,used to torsional rigidity,is fixed by screw and is made of Aluminum alloy with light weight.Even if bearing load, it has no backlash.If the relative displacement can be controlled successful, the rigid coupling, especially small specifications , can play well in the servo system.. In practical application, the rigid coupling is of free maintenance, strong oil resistance and good corrosion resistance., low inertia and high sensitivity of superior performance,ect.



For example: YH7-25-5-6

YH 7:series No, Aluminum material

Outside diam:  $\phi D=25\text{mm}$

$d_1$  bore:  $\phi d_1=5\text{mm}$

$d_2$  bore:  $\phi d_2=6\text{mm}$

### Size of coupling

Model	$\phi d_1 \phi d_2$ Bore	$\phi D$	L	L1	M	Tighten Torque (N.m)
YH7-25 □□□	3 4 5 6	16	24	6	M3	0.7
YH7-30 □□□	5 6 8 10	20	30	7	M4	0.7
YH7-35 □□□	8 10 11 12	25	36	9	M4	1.7
YH7-42 □□□	12 14 15 16	32	32	10	M4	1.7

### Parameters of coupling

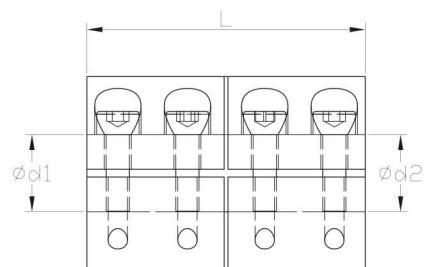
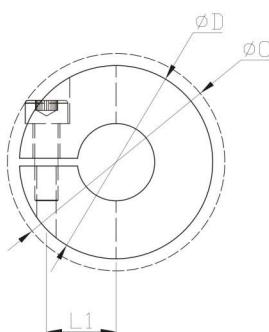
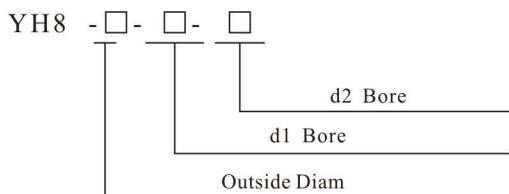
Model	Rated torque (N. m)	Maximum torque (N. m)	Max.Rotational Frequency (rpm)	Errors of Angularity (°C)	Mass (g)
YH8-16 □□□	0.3	0.6	23000	$3.1 \times 10^{-7}$	11
YH8-20 □□□	0.5	1	18000	$8.5 \times 10^{-7}$	20
YH8-25 □□□	1	2	14000	$2.6 \times 10^{-6}$	39
YH8-32 □□□	2	4	10000	$9.1 \times 10^{-6}$	71

# YH 8

## Series Clamping Rigid Coupling



Rigid coupling ,used to torsional rigidity,is fixed by screw and is made of Aluminum alloy with light weight.Even if bearing load, it has no backlash.If the relative displacement can be controlled successful, the rigid coupling, especially small specifications , can play well in the servo system.. In practical application, the rigid coupling is of free maintenance, strong oil resistance and good corrosion resistance., low inertia and high sensitivity of superior performance,ect.



**For example:YH8-25-8-10**

YH 8:series no,Aluminum material

Outside diam:  $\phi D=25\text{mm}$

d1 bore:  $\phi d1=8\text{mm}$

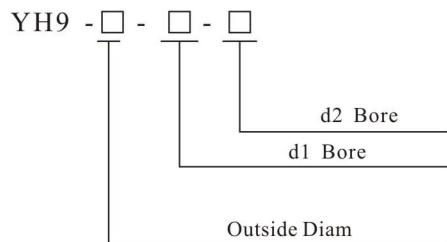
d2 bore:  $\phi d2=10\text{mm}$

### Size of coupling

### Parameters of coupling

Model	$\phi d1 \phi d2$ Bore	$\phi D$	L	L1	M	Rated torque (N. m)	Maximum torque (N. m)
YH8-16□□□	3 4 5 6	16	24	6	M2.5	0.3	0.6
YH8-20□□□	5 6 8 10	20	30	7	M2.5	0.5	1
YH8-25□□□	8 10 11 12	25	36	9	M4	1	2
YH8-32□□□	12 14 15 16	32	41	10	M4	2	4

Model	Tigten Torque (N.m)	Max.Rotational Frequency (rpm)	Errors of Angularity ( $^{\circ}$ )	Mass (g)
YH8-16□□□	1	9300	$2.9 \times 10^{-7}$	8.2
YH8-20□□□	1	7400	$8.6 \times 10^{-7}$	14.5
YH8-25□□□	1.5	6000	$2.6 \times 10^{-6}$	28
YH8-32□□□	2.5	4600	$7.0 \times 10^{-6}$	50



For example: YH9-32-12-14

YH 9:series No, Aluminum material

Outside diam  $\phi$  D=32mm

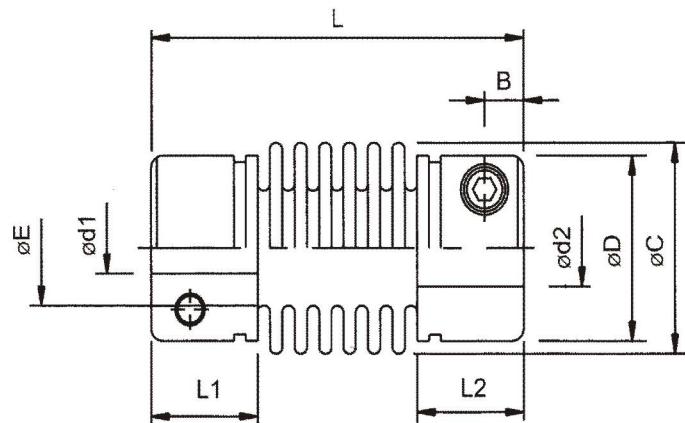
d1 bore  $\phi$  d1=12mm

d2 bore  $\phi$  d2=14mm

## YH 9

# Series Clamping Bellows Coupling

YH9 series clamping bellows coupling is made of aluminum alloy, surface anodic treatment, stable performance. The characteristics are quite same when it runs in clockwise or anticlockwise rotation. Corrugated tube structure can compensate for radial, angle and axial deviation. Zero backlash, reliable connection, high sensitivity. It is suitable for the transmission connection of the equipment, such as encoder, screw drive measurement control, information system, platform machine tool, etc.



### Size of coupling

Model	$\phi$ d1 $\phi$ d2 Bore	$\phi$ D	L	L1	M	Tighten torque (N. m)
YH9-16 □□□	3 4 5 6	16	30	10.5	M3	0.7
YH9-20 □□□	3 4 5 6 8 10 12	20	33	10.5	M3	0.7
YH9-25 □□□	5 6 6.35 8 10 12	25	38	12.5	M4	1.7
YH9-32 □□□	8 9.525 10 12 14	32	43	14	M4	1.7
YH9-32L □□□	8 10 12 14	32	54	14	M4	1.7
YH9-40 □□□	10 11 12 14 16	40	62	21.5	M5	4
YH9-55 □□□	12 14 15 18 19	55	72	23	M6	8
YH9-65 □□□	19 20 22 24 25 38	65	81	25.5	M8	15
YH9-82 □□□	22 24 25 28 30 42	82	103	34.5	M10	28

### Parameters of coupling

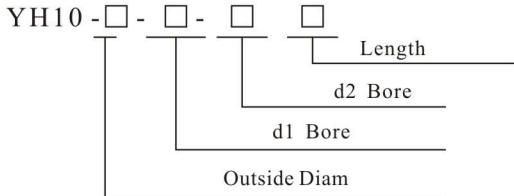
Model	Rated torque (N.m)	Max torque (N.m)	Max speed (rpm)	Inertia torque (kg.m <sup>2</sup> )	Static torquerigidity (n.m/rad)	Radial deviation (mm)	Angular deviation (°)	Axial deviation (mm)	Weight (g)
YH9-16 □□□	0.8	1.6	18000	3.4X10 <sup>-7</sup>	100	0.1	1.5	±0.5	8
YH9-20 □□□	1.5	3	13000	8.9X10 <sup>-7</sup>	160	0.1	1.5	±0.5	14
YH9-25 □□□	2	4	11000	2.8X10 <sup>-6</sup>	220	0.15	2	±0.5	32
YH9-32 □□□	2.5	5	10000	8.8X10 <sup>-6</sup>	310	0.2	2	±0.5	52
YH9-32L □□□	2.5	5	10000	8.9X10 <sup>-6</sup>	310	0.2	2	±0.5	58
YH9-40 □□□	10	20	8000	1.5X10 <sup>-5</sup>	520	0.2	2	±0.5	98
YH9-55 □□□	25	50	6000	2.3X10 <sup>-5</sup>	850	0.2	2	±0.5	200
YH9-65 □□□	60	120	4500	2.8X10 <sup>-5</sup>	960	0.2	2	±0.5	350
YH9-82 □□□	80	160	4500	6.0X10 <sup>-5</sup>	1290	0.2	2	±0.5	710

# YH 10

## Series Plum Flexible Spring Coupling



YH 10 series plum flexible spring coupling ,which adopt the expansion sleeve connection, is of zero backlash and high sensity. It can transfer big torque. furthermore, the characteristics are quite same when it run in a clock-wise or enti clock-wise rotation. so it can absorb the vibration ,compensate for radial, angle and axial deviation, it usually used in the connection of servo motor ,stepper motor,etc.



**For example: YH10-55-19-24-78 (mm)**

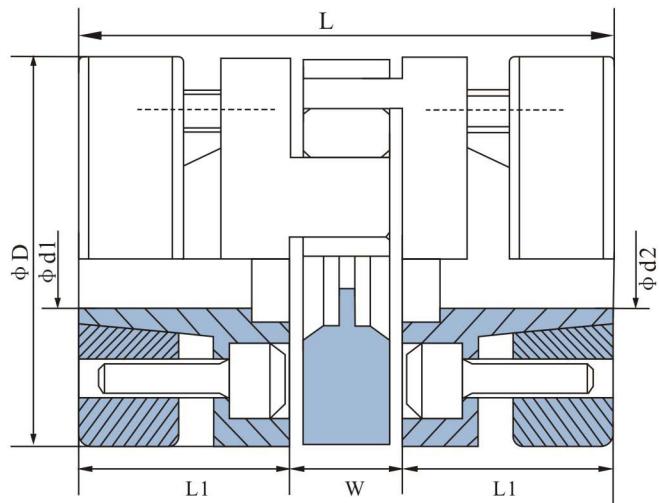
YH 10 series no, Aluminum material

Outside diam:  $\phi D$ -55mm

d1 bore:  $\phi d1$ =19mm

d2 bore:  $\phi d2$ =24mm

Length L=78mm



### Size of coupling

Model	$\phi d1 \phi d2$ Bore	$\phi D$	L	L1	W	M	Tighten torque (N. m)
YH10-20□□□	4 5 6 8 9 10	20	30	10	10	M3	1.1
YH10-30□□□	8 9 10 12 14	30	50	18.5	13	M4	1.3
YH10-40□□□	11 12 14 16 19 20	40	66	25	16	M5	2.7
YH10-46□□□	16 18 20 22 24 25	46	70	28	17	M6	4.5
YH10-55□□□	14 16 19 24 25 28	55	78	30	18	M8	6.0
YH10-65□□□	19 20 24 28 30 35 38	65	90	35	20	M8	6.0
YH10-80□□□	24 28 30 35 38 40 45	80	114	45	24	M8	10.0
YH10-95□□□	30 35 38 40 45 50	95	126	50	26	M8	35
YH10-105□□□	35 40 45 50 55 60	105	140	56	28	M8	35

### Parameters of coupling

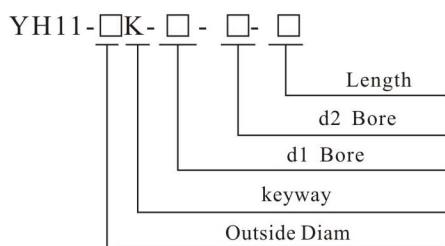
Model	Rated torque (N.m)	Max torque (N.m)	Max speed (rpm)	Inertia torque (kg.m <sup>2</sup> )	Static torque/gearidity (N.m/rad)	Radial deviation (mm)	Angular deviation (°)	Axial deviation (mm)	Weight (g)
YH10-20□□□	7.4	14.8	20000	$8.7 \times 10^{-4}$	510	0.02	1	$\pm 0.06$	50
YH10-30□□□	7.4	14.8	20000	$8.7 \times 10^{-4}$	510	0.02	1	$\pm 0.06$	50
YH10-40□□□	9.5	19.0	15000	$1.12 \times 10^{-3}$	550	0.02	1	$\pm 0.08$	120
YH10-46□□□	20	40	14000	$3.2 \times 10^{-3}$	1510	0.02	1	$\pm 0.08$	280
YH10-55□□□	34	68	13000	$4.5 \times 10^{-3}$	1510	0.02	1	$\pm 0.08$	280
YH10-65□□□	95	190	10500	$9.1 \times 10^{-3}$	2800	0.02	1	$\pm 0.08$	450
YH10-80□□□	135	270	8600	$1.9 \times 10^{-3}$	3600	0.02	1	$\pm 0.08$	960
YH10-95□□□	230	460	7500	$2.2 \times 10^{-3}$	4700	0.02	1	$\pm 1.00$	2310
YH10-95□□□	380	760	6000	$3.3 \times 10^{-3}$	5800	0.02	1	$\pm 1.00$	3090

note: The calculation of Inertia torque and weight is based on the max bore.



**YUHAI MOTOR**

Energy Saving,  
Stability,More power  
www.zjyuhai.en.alibaba.com  
www.zjyuhai.en.alibaba.com



**For example: YH11-56K-14-10-45 (mm)**

YH 11: series No, Aluminum material

Outside diam:  $\phi D=56\text{mm}$

K :keyway

d1 bore:  $\phi d1=14\text{mm}$

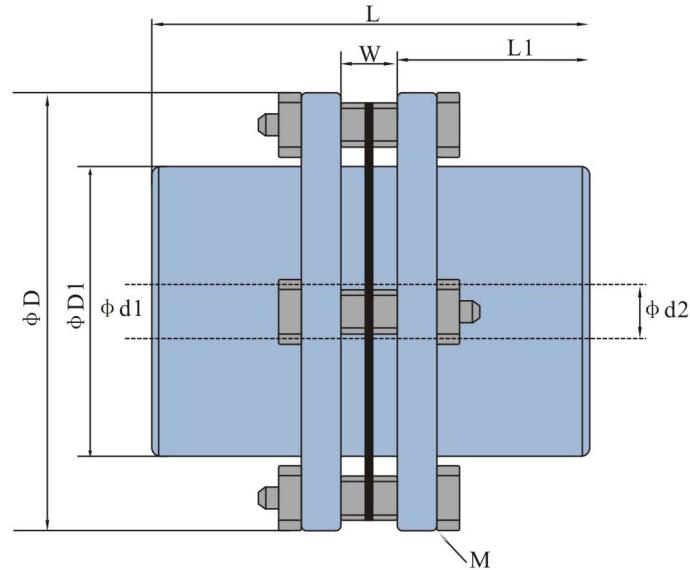
d2 bore:  $\phi d2=10\text{mm}$

Length: L=45mm

## YH 11

### Series Keyway Connect Diaphragm Coupling

Diaphragm coupling, which adopt the expansion sleeve connection, is of zero backlash and high sensitivity. It can transfer big torque. furthermore, the characteristics are quite same when it run in a clock-wise and anti-clock-wise rotation. so it can absorb the vibration, compensate for radial, angle and axial deviation, it usually used in the connection of servo motor, stepper motor, etc.



#### Size of coupling

Model	$\phi d1 \phi d2$ Bore	$\phi D$	$\phi D_1$	L	L1	W	M
YH11-46K-□□□	10 11 12 14 16 19 20	46	32	45	20	5	M5
YH11-56K-□□□	8 10 11 12 14 16 18 19 20	56	32	45	20	5	M5
YH11-68K-□□□	11 14 16 18 19 20 22 24 25	68	40	56	25	6	M6
YH11-82K-□□□	14 16 18 19 20 24 25 28 30 35	82	54	66	30	6	M6
YH11-94K-□□□	19 20 24 28 30 35 38	94	58	68	30	8	M8
YH11-104K-□□□	24 28 30 35 38 40 45	104	68	80	35	10	M8
YH11-126K-□□□	30 35 38 40 45 50	126	78	91	40	11	M10
YH11-144K-□□□	35 40 45 50 55 60	144	88	102	45	12	M12

#### Parameters of coupling

Model	Rated torque (N.m)	Max torque (N.m)	Max speed (rpm)	Inertia torque (kg.m <sup>2</sup> )	Static torque rigidity (n.m/rad)	Radial deviation (mm)	Angular deviation (°)	Axial deviation (mm)	Weight (g)
YH11-46K-□□□	25	50	20000	$0.1X10^{-3}$	$15X10^{-3}$	0.02	1	$\pm 0.5$	300
YH11-56K-□□□	25	50	20000	$0.1X10^{-3}$	$15X10^{-3}$	0.02	1	$\pm 0.5$	300
YH11-68K-□□□	55	110	15000	$0.28X10^{-3}$	$28X10^{-3}$	0.02	1	$\pm 0.8$	500
YH11-82K-□□□	80	160	14000	$0.85X10^{-3}$	$81X10^{-3}$	0.02	1	$\pm 1.0$	1000
YH11-94K-□□□	170	340	11000	$1.5X10^{-3}$	$165X10^{-3}$	0.02	1	$\pm 1.0$	1400
YH11-104K-□□□	240	480	9800	$2.4X10^{-3}$	$240X10^{-3}$	0.02	1	$\pm 1.0$	2100
YH11-126K-□□□	420	840	8000	$6.3X10^{-3}$	$410X10^{-3}$	0.02	1	$\pm 1.0$	3410
YH11-144K-□□□	700	1400	6800	$9.2X10^{-3}$	$760X10^{-3}$	0.02	1	$\pm 1.0$	4900

Note: The calculation of Inertia torque and weight is based on the max bore.

# YH 12

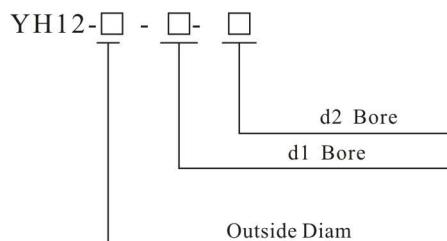
## Series Clamping Screw coupling



The unibody metal flexible coupling is

apply to shaft coupling with smaller torque.

Fixed by clamping screws, aluminum material  
zero backlash, elastic effect can compensate  
for radial, angular and axial deviation. the  
characteristics are quite same when it run  
in clockwise or anticlockwise rotation



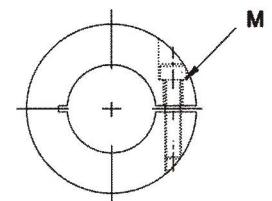
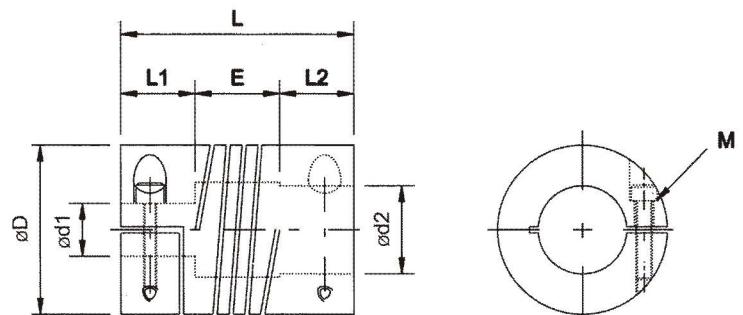
**For example: YH12-32-12-14 (mm)**

YH 12: series No, Aluminum material

Outside diam  $\phi D=32\text{mm}$

d1 bore  $\phi d1=12\text{mm}$

d2 bore  $\phi d2=14\text{mm}$



### Size of coupling

### Parameters of coupling

Model	$\phi d1 \phi d2$ Bore	$\phi D$	L	L1/L2	M	Tighten torque (N. m)
YH12-19 □□□	3 4 5 6 6.35	19. 1	22. 9	6. 5	M2, 5	1
YH12-25 □□□	5 6 6.35 8 10	25. 4	31. 8	7. 5	M3	1. 5
YH12-28 □□□	6 6.35 8 10 12.7	28. 6	38. 1	9. 5	M4	2
YH12-38 □□□	10 12 12.7 14 15	38. 1	41. 3	11. 5	M5	4
YH12-50 □□□	14 15 16 18 19 20	50. 8	51	13	M6	7. 5
YH12-12 □□□	3 3.15 4.5	12	18. 5	6	M2, 5	0. 5
YH12-16 □□□	4 5 6 6.35	16	23	6. 5	M2, 5	1
YH12-18 □□□	4 5 6 6.35 8	18	25	7. 5	M3	1
YH12-20 □□□	5 6 6.35 8 9. 525	20	26	7. 5	M3	1
YH12-25 □□□	8 9. 525 10 12	25	31	7. 5	M3	1. 5
YH12-32 □□□	10 11 12 14 15	32	41	11	M4	2. 5
YH12-40 □□□	11 12 14 15 16 18	40	50	13	M5	4
YH12-50 □□□	12 14 16 18 19 20	50	51	15	M6	8
YH12-63 □□□	14 15 19 16 20 24	63	70	20	M8	16

Model	Rated torque (N.m)	Max torque (N.m)	Max speed (rpm)	Inertia torque (kg.m <sup>2</sup> )	Static torquerigidity (n.m/rad)	Radial deviation (mm)	Angular deviation (°)	Axial deviation (mm)	Weight (g)
YH12-19 □□□	0. 5	1	8000	$9.0\times10^{-7}$	110	0.1	2	$\pm 0. 15$	14
YH12-25 □□□	1. 4	2. 8	6000	$2.6\times10^{-6}$	170	0.1	2	$\pm 0. 15$	34
YH12-28 □□□	1. 6	3. 2	5000	$8.9\times10^{-6}$	260	0.1	2	$\pm 0. 15$	48
YH12-38 □□□	4. 2	8. 4	4500	$3.2\times10^{-5}$	330	0.1	2	$\pm 0. 15$	96
YH12-50 □□□	9	18	4500	$9.8\times10^{-5}$	560	0.1	2	$\pm 0. 15$	140
YH12-12 □□□	0. 5	1	10000	$7.6\times10^{-8}$	34	0.1	1.5	$\pm 0. 3$	4
YH12-16 □□□	0. 8	1. 6	9300	$3.2\times10^{-7}$	46	0.1	1.5	$\pm 0. 3$	8
YH12-18 □□□	0. 9	1. 8	8000	$5.6\times10^{-7}$	85	0.1	1.5	$\pm 0. 3$	18
YH12-20 □□□	1. 1	2. 2	7500	$8.8\times10^{-6}$	118	0.15	1.5	$\pm 0. 3$	26
YH12-25 □□□	1. 4	2. 8	6000	$2.5\times10^{-6}$	167	0.15	1.5	$\pm 0. 35$	32
YH12-32 □□□	2. 8	5. 6	4600	$9.6\times10^{-6}$	228	0.2	1.5	$\pm 0. 35$	66
YH12-40 □□□	6. 3	12. 6	3600	$3.2\times10^{-5}$	346	0.2	1.5	$\pm 0. 35$	116
YH12-50 □□□	11	22	3000	$9.0\times10^{-5}$	580	0.2	1.5	$\pm 0. 35$	250
YH12-63 □□□	22	44	2200	$3.1\times10^{-4}$	843	0.2	1.5	$\pm 0. 35$	460



Energy Saving,  
Stability,More power  
www.zjyuhai.com  
www.zjyuhai.cn

## Electromagnetic Pump BCD-A

Performance characteristics:

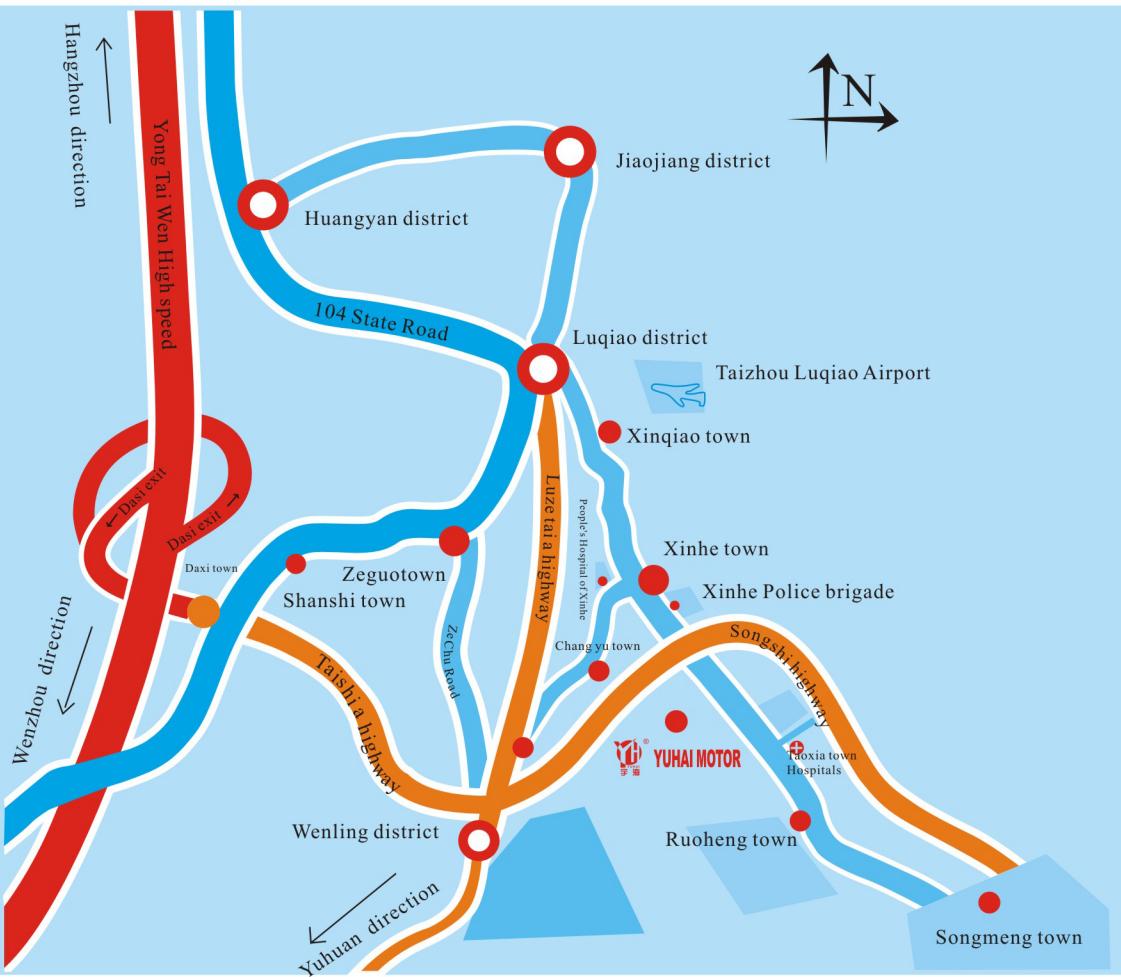
- 1.The controller control lubrication pump's working period, lubrication time and interval time in countdown mode.
- 2.The longest run duration of lubrication pump is 999 seconds, the shortest interval time is 1 minute.
- 3.Lubrication pump doesn't has overheating protection device to protect the safety work of motor.
- 4.Equipped with one-way valve to prevent the discharge of oil flowing.
- 5.The set keys "▲" "▼" can set lubrication time and interval time.
- 6.With the alarm of low oil level, the buzzer sounds and the display flashers when the oil level is lower than the lowest limit.
- 7.Without forced button, the pump is forced to feed oil, convenient to debug.
- 8.The panel indicator light can display the running status of the lubrication pump

### Notes

1. It can only use the new oil, prohibit to lubrication by used oil.
2. There is a thermal protector in the motor of oil pump, If intermittent supply frequent is too high, it may cause the pump stop working, it can continue to work when the temperature drops, it is not failure.
3. Particles dust in fuel tank and oil filter of oil pump should be removed every 2 to 5 months., in order to ensure the normal lubrication.
4. Refer to the wiring diagram when wiring, pay attention to voltage.
5. The cleaning liquid can not be corrosive when cleaning, in order to protect the sealing of the machine.

### Specifications

Model	Theoretical Flow Rate	Spit out diameter	Max pressure	volume	Motor	
					Voltage (v)	Power (w)
BCD-A	≈80ml/min	φ 4/φ 6	1.0MPa	2L	AC220	35



## WENLING YUHAI ELECTROMECHANICAL CO.,LTD

Add: Tangxia industrial park Wenling City Zhejiang China

Tex:0086-576-86580288/86518522/86518511

Fax:0086-576-86562022

<http://wlyuhai.en.alibaba.com>

<http://www.zjyuhai.cn>

E-mail:[zjyuhai@zjyuhai.cn](mailto:zjyuhai@zjyuhai.cn)