



## COMPANY PROFILE



» ChangZhou Hetai (Stock code:834300) is a leading manufacturer with advanced technology and innovative management mode. Hetai specializes in producing servo motors, DC Motors, hybrid stepping motors, drivers and so on.

Hetai dedicates to professional electrical integration and automation strategies for customers. The products are almost applied in robots, packing machinery, textile machinery, medical instruments, printing machinery, intelligent logistics equipment... Hetai also sends its products to USA, Europe, Southeast Asia and all-around China.

Hetai is located in ChangZhou, JiangSu province and its workshop area is over 35,000. Since Hetai reformed in 1998, the specialization, scale of production has ensured to manufacture 3,000,000 motors every year.

» In the year 2003, Hetai was qualified by ISO9001/TS 16949 Certificate, and passed supervision successfully. The company also attained import and export right of external trade of self-management.

» In 2005, Hetai has qualified by EU Type Examination Certificate and get four Invention Patent, seven Utility Patent, and one Appearance Design Patent.

» Hetai was quoted on the stock market in 2015.

Hetai was authenticated by safety standardization management system in next year.

The company was qualified as high-tech enterprise in 2018.

CHANGZHOU HETAI ELECTRIC MOTORS&APPLIANCE CO., LTD.

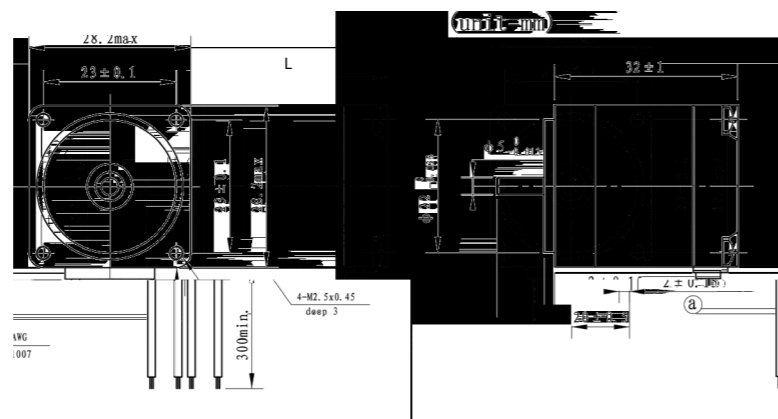
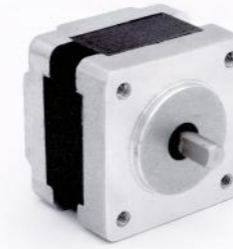
**28BYGH****HYBRID STEPPING MOTOR****General Specifications**

Step Accuracy	± 5%
Temperature Rise	80 °C Max
Insulation Resistance	100MΩ Min.500VC DC
Ambient Temperature	-20°C~+50°C
Dielectric Strength	500VAC 1 minute
Max Radial Force	28N (20mm from front flange)
Max Axial Force	10N

**Technical Specifications**

Model	Step Angle (°/Step)	Lead Wire (NO.)	Voltage (V)	Current (A/Phase)	Resistance (Ω/Phase)	Inductance (mH/Phase)	Holding Torque (g.cm)	Motor Height L (mm)	Motor Weight (Kg)
28BYGH102-01	1.8	4	3.90	0.67	6.3	3.2	600	32	0.11
28BYGH105-01		6	2.70	0.95	2.8	1.0	430	32	0.11
28BYGH301		4	4.56	0.67	6.8	4.9	950	45	0.17
28BYGH303		6	3.40	0.95	3.4	1.0	750	45	0.14
28BYGH501		4	8.04	0.67	12.0	7.2	1200	51	0.19
28BYGH502		6	3.80	0.95	4.0	1.3	900	51	0.20

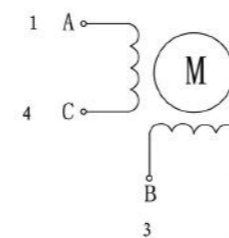
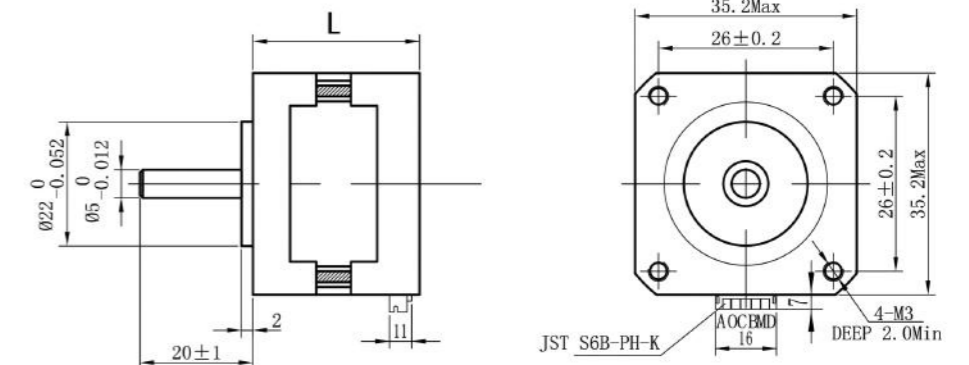
\* Products can be customized by special request.

**Wiring Diagram****Mechanical Dimension****35BYGX****HYBRID STEPPING MOTOR****General Specifications**

Step Accuracy	± 5%
Temperature Rise	80 °C Max
Insulation Resistance	100MΩ Min.500VC DC
Ambient Temperature	-20°C~+50°C
Dielectric Strength	500VAC 1 minute
Max Radial Force	28N (20mm from front flange)
Max Axial Force	10N

**Technical Specifications**

Model	Step Angle (°/Step)	Lead Wire (NO.)	Voltage (V)	Current (A/Phase)	Resistance (Ω/Phase)	Inductance (mH/Phase)	Holding Torque (g.cm)	Motor Height L (mm)	Motor Weight (Kg)
35BYGX001A	1.8	4	10.4	0.4	26	17	500	23	0.12
35BYGX200A			4.20	1	4.2	5.5	1250	29	0.12
35BYGX201A			1.45	0.5	2.9	2.6	500	29	0.13
35BYGX401A			3.20	1	3.2	3.8	1400	34	0.16

**Wiring Diagram****Mechanical Dimension**

## 39BYGX

## HYBRID STEPPING MOTOR



## General Specifications

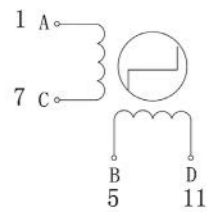
Step Accuracy	± 5%
Temperature Rise	80 °C Max
Insulation Resistance	100MΩ Min.500VC DC
Ambient Temperature	-20°C~+50°C
Dielectric Strength	500VAC 1 minute
Max Radial Force	28N (20mm from front flange)
Max Axial Force	10N

## Technical Specifications

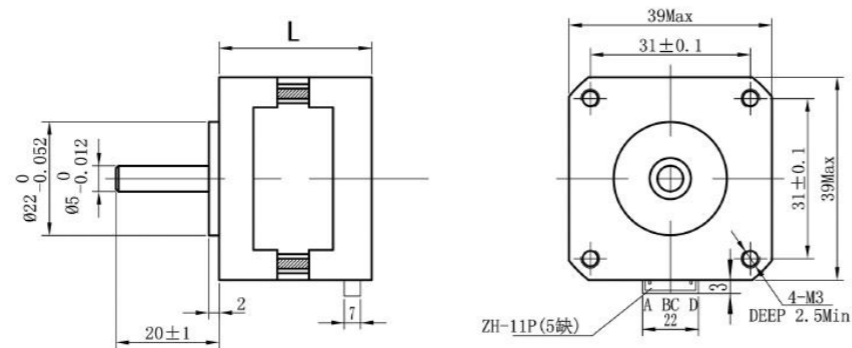
Model	Step Angle (°/Step)	Lead Wire (NO.)	Voltage (V)	Current (A/Phase)	Resistance (Ω/Phase)	Inductance (mH/Phase)	Holding Torque (g.cm)	Motor Height L (mm)	Motor Weight (Kg)
39BYGX001A	1.8	4	13.44	0.48	28	21	1000	20	0.10
39BYGX002A			8.4	0.7	12	11	1200	20	0.10
39BYGX100A			12	0.4	30	20	1300	22	0.12
39BYGX200A			14.4	0.4	36	33	1700	25	0.14

\* Products can be customized by special request.

## Wiring Diagram



## Mechanical Dimension



## 42BYGH

## HYBRID STEPPING MOTOR



## General Specifications

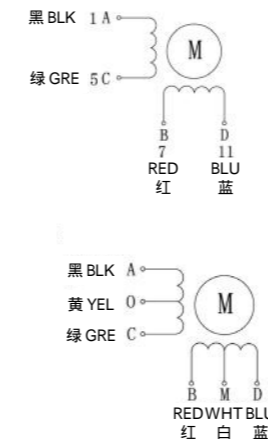
Step Accuracy	± 5%
Temperature Rise	80 °C Max
Insulation Resistance	100MΩ Min.500VC DC
Ambient Temperature	-20°C~+50°C
Dielectric Strength	500VAC 1 minute
Max Radial Force	28N (20mm from front flange)
Max Axial Force	10N

## Technical Specifications

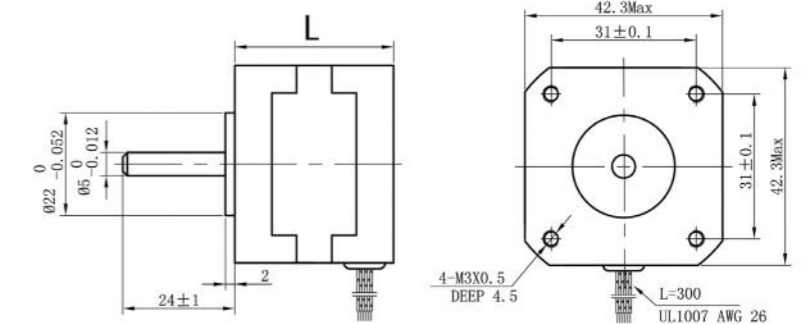
Model	Step Angle (°/Step)	Lead Wire (NO.)	Voltage (V)	Current (A/Phase)	Resistance (Ω/Phase)	Inductance (mH/Phase)	Holding Torque (g.cm)	Motor Height L (mm)	Motor Weight (Kg)
42BYGH208-52A	1.8	4	12	0.4	30	42	2500	34	0.20
42BYGH243-03		4	2.6	1	2.6	3.2	1800	34	0.20
42BYGH622-28A		4	4.8	1	4.8	6.0	2900	40	0.24
42BYGH613-68A		4	2.5	1.7	1.5	2.5	3500	40	0.24
42BYGH705-07		4	12	0.3	40	80	4000	44	0.30
42BYGH721A		6	10	0.25	40	36	2000	44	0.30
42BYGH801-36		6	12	0.4	30	22	3800	48	0.34
42BYGH872A		4	2.8	1.7	1.65	2.8	4500	48	0.34
42BYGH910-02		4	4.8	1.5	3.2	8.0	8500	60	0.49
42BYGH905-13		4	3.15	1.5	2.1	5.0	6800	60	0.49

\* Products can be customized by special request.

## Wiring Diagram



## Mechanical Dimension



## 42BYGHM

## HYBRID STEPPING MOTOR

## General Specifications

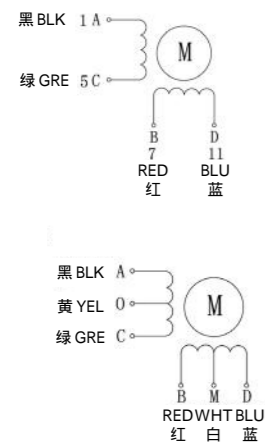
Step Accuracy	± 5%
Temperature Rise	80 °C Max
Insulation Resistance	100MΩ Min.500VC DC
Ambient Temperature	-20°C~+50°C
Dielectric Strength	500VAC 1 minute
Max Radial Force	28N (20mm from front flange)
Max Axial Force	10N

## Technical Specifications

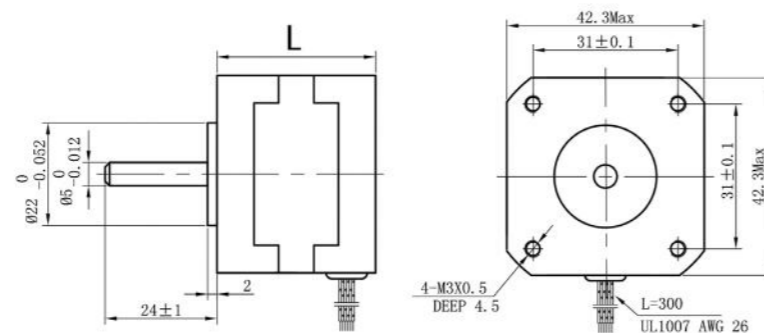
Model	Step Angle (°/Step)	Lead Wire (NO.)	Voltage (V)	Current (A/Phase)	Resistance (Ω/Phase)	Inductance (mH/Phase)	Holding Torque (g.cm)	Motor Height L (mm)	Motor Weight (Kg)
42BYGHM203	0.9	4	10	0.5	20	40	2100	34	0.20
42BYGHM213-07A			8	1	8.0	13	2200	34	0.20
42BYGHM607-16			2.6	1.7	1.5	3.2	3200	40	0.24
42BYGHM619-08			11.2	0.4	28	60	2800	40	0.24
42BYGHM805			3.5	1	3.5	7.6	3700	48	0.34
42BYGHM810			2.4	2.4	1.0	1.8	4800	48	0.34

\* Products can be customized by special request.

## Wiring Diagram



## Mechanical Dimension

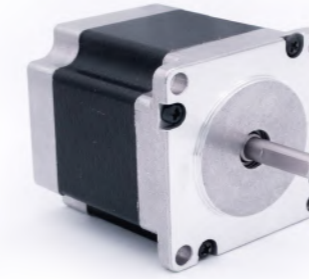


## 57BYGH

## HYBRID STEPPING MOTOR

## General Specifications

Step Accuracy	± 5%
Temperature Rise	80 °C Max
Insulation Resistance	100MΩ Min.500VC DC
Ambient Temperature	-20°C~+50°C
Dielectric Strength	500VAC 1 minute
Max Radial Force	75N (20mm from front flange)
Max Axial Force	15N

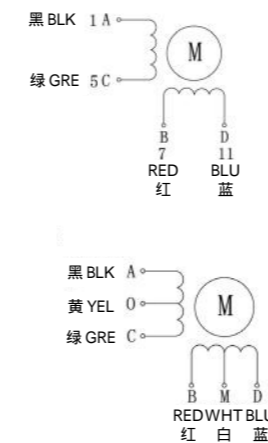


## Technical Specifications

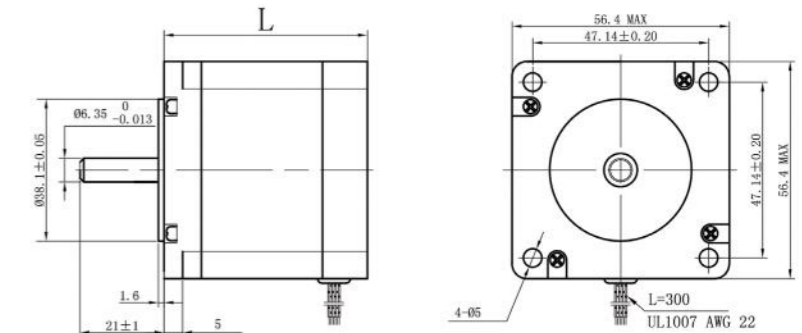
Model	Step Angle (°/Step)	Lead Wire (NO.)	Voltage (V)	Current (A/Phase)	Resistance (Ω/Phase)	Inductance (mH/Phase)	Holding Torque (Kg.cm)	Motor Height L (mm)	Motor Weight (Kg)
57BYGH001A	1.8	4	6.0	0.5	12	20	3.5	41	0.45
57BYGH048-11		4	4.4	2.0	2.2	5.0	6.0	41	0.45
57BYGH201-22A		4	6.6	0.6	11	25	7.0	51	0.65
57BYGH218-45		4	2.6	2.0	1.3	4	8.0	51	0.65
57BYGH420-77		6	3.8	2.0	1.9	3.5	9.0	56	0.70
57BYGH432-63A		6	2.4	3.0	0.8	1.2	9.0	56	0.70
57BYGH633-131		6	3.0	3.0	1.0	1.8	13.5	78	1.00
57BYGH639-10E		4	2.1	4.2	0.5	1.6	18	78	1.00
57BYGH801-01		6	3.3	3.0	1.1	2.5	16	84	1.13
57BYGH815		4	7.36	1.6	4.6	16	20	84	1.13

\* Products can be customized by special request.

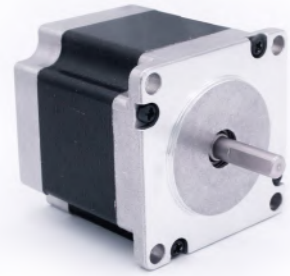
## Wiring Diagram



## Mechanical Dimension



## 57BYGHM



## HYBRID STEPPING MOTOR

## General Specifications

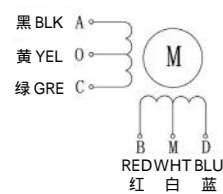
Step Accuracy	± 5%
Temperature Rise	80 °C Max
Insulation Resistance	100MΩ Min.500VC DC
Ambient Temperature	-20°C~+50°C
Dielectric Strength	500VAC 1 minute
Max Radial Force	75N (20mm from front flange)
Max Axial Force	15N

## Technical Specifications

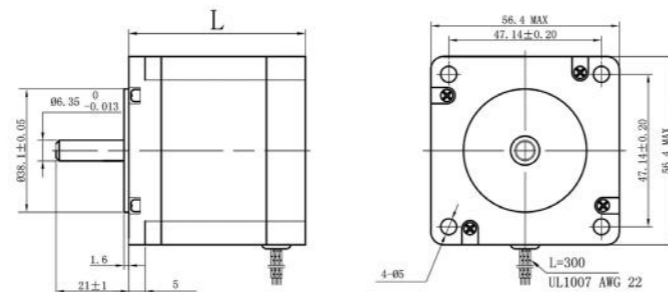
Model	Step Angle (°/Step)	Lead Wire (NO.)	Voltage (V)	Current (A/Phase)	Resistance (Ω/Phase)	Inductance (mH/Phase)	Holding Torque (Kg.cm)	Motor Height L (mm)	Motor Weight (Kg)
57BYGHM002-01	0.9	6	2.8	2.0	1.4	2.0	3.5	41	0.45
57BYGHM200-03A		4	3.4	1.0	3.4	12	7.0	51	0.56
57BYGHM203-04		6	12	0.38	32.0	38	5.5	51	0.56
57BYGHM401-09		6	7.4	1.0	7.4	17	9.0	56	0.70
57BYGHM414		4	1.7	4.2	0.4	1.0	11	56	0.70
57BYGHM604-17		4	3.2	2.8	1.13	6.4	15	78	1.00
57BYGHM601-05		6	8.6	1.0	8.6	20	13	78	1.00

\* Products can be customized by special request.

## Wiring Diagram



## Mechanical Dimension



## 57BYGH350



## HYBRID STEPPING MOTOR

## General Specifications

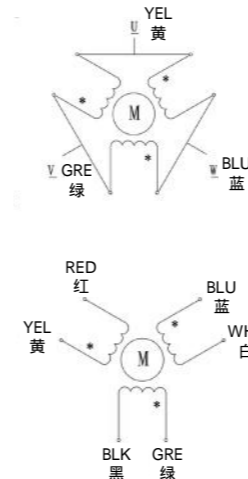
Step Accuracy	± 5%
Temperature Rise	80 °C Max
Insulation Resistance	100MΩ Min.500VC DC
Ambient Temperature	-20°C~+50°C
Dielectric Strength	500VAC 1 minute
Max Radial Force	75N (20mm from front flange)
Max Axial Force	15N

## Technical Specifications

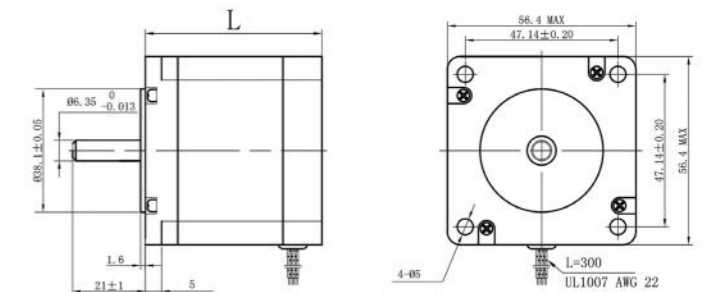
Model	Step Angle (°/Step)	Lead Wire (NO.)	Voltage (V)	Current (A/Phase)	Resistance (Ω/Phase)	Inductance (mH/Phase)	Holding Torque (Kg.cm)	Motor Height L (mm)	Motor Weight (Kg)
57BYGH350A-001	1.2	6	3.12	2.4	3.4	4.0	4.0	41	0.45
57BYGH350A-002		3	5.0	0.5	10	16	2.0	41	0.45
57BYGH350B-001		3	2.52	5.6	0.45	1.1	9.0	56	0.69
57BYGH350B-002		6	5.28	2.4	4.9	8.4	8.0	56	0.75
57BYGH350C-001-09		3	2.6	5.2	0.5	1.4	12	76	1.05
57BYGH350C-005-01		3	9.0	1.0	9.0	21	9	76	1.10

\* Products can be customized by special request.

## Wiring Diagram



## Mechanical Dimension



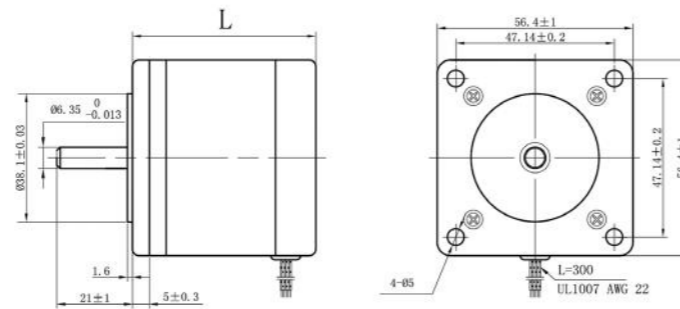
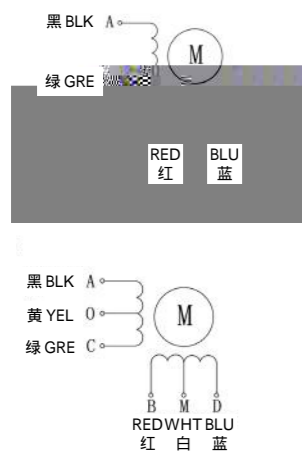
## 57BYGN



	(°/Step)	(NO.)	(V)	(A/Phase)	(Ω/Phase)	(mH/Phase)	(Kg.cm)	L (mm)	(Kg)
57BYGN001	1.8	6	12	0.38	32	25	3.0	41	0.45
57BYGN027		4	2.8	1.4	2.1	3.5	3.9	41	0.45
57BYGN200-19A		6	5	1.0	5.0	11.5	5.8	51	0.65
57BYGN204		6	11.2	0.4	28	30	3.8	51	0.65
57BYGN400-11A		4	5.5	1.1	5.0	12	7.8	56	0.70
57BYGN412		4	4.4	2.0	2.2	6.3	9.0	56	0.70

## 57HN

	(°/Step)	(NO.)	(V)	(A/Phase)	(Ω/Phase)	(mH/Phase)	(Kg.cm)	L (mm)	(Kg)
57HN41-001-01	1.8	4	2.1	4.2	0.5	1.4	9.5	41	0.43
57HN41-003-04			7.0	1.0	7.0	14.7	9.0	41	0.43
57HN46-005A			2.3	4.2	0.55	1.5	10.6	46	0.54
57HN46-003A			8.2	1.0	8.2	18	10.5	46	0.54
57HN51-003A			1.5	3.0	0.5	1.4	9.5	51	0.63
57HN51-005			4.0	2.0	2.0	6.5	12	51	0.63
57HN56-002			9.0	2.5	3.6	11	15	56	0.68
57HN56-005-02			6.8	1.0	6.8	24	12	56	0.68
57HN67-001-15			5.76	1.6	3.6	12	19	67	0.70
57HN67-004-07			1.5	3.0	0.5	1.8	14	67	0.70



## 60BYGH

## HYBRID STEPPING MOTOR



## General Specifications

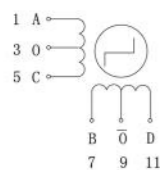
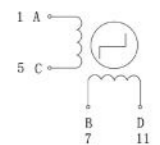
Step Accuracy	± 5%
Temperature Rise	80 °C Max
Insulation Resistance	100MΩ Min.500VC DC
Ambient Temperature	-20°C~+50°C
Dielectric Strength	500VAC 1 minute
Max Radial Force	75N (20mm from front flange)
Max Axial Force	15N

## Technical Specifications

Model	Step Angle (°/Step)	Lead Wire (NO.)	Voltage (V)	Current (A/Phase)	Resistance (Ω/Phase)	Inductance (mH/Phase)	Holding Torque (Kg.cm)	Motor Height L (mm)	Motor Weight (Kg)
60BYGH402-13A	1.8	6	2.4	3.0	0.8	1.6	10	56	0.77
60BYGH410-05A		4	6.0	1.0	6.0	16	12.5	56	0.77
60BYGH502-03A		4	5.32	1.4	3.8	10	12.5	64	1.00
60BYGH500		6	3.6	1.5	8.4	8.0	12.5	64	1.00
60BYGH805-56		4	2.8	4.0	0.8	3.5	23.5	87	1.34
60BYGH808A		4	4.5	3.0	1.5	5.0	26	87	1.34

\* Products can be customized by special request.

## Wiring Diagram

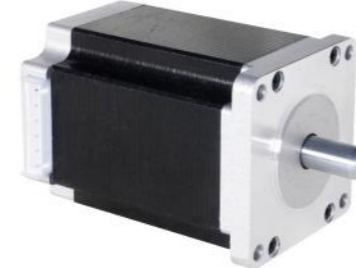


## Mechanical Dimension



## 60HS

## HYBRID STEPPING MOTOR



## General Specifications

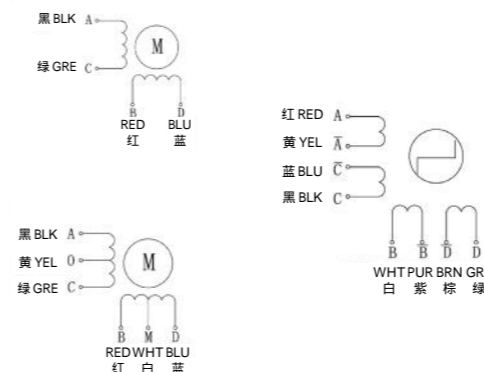
Step Accuracy	± 5%
Temperature Rise	80 °C Max
Insulation Resistance	100MΩ Min.500VC DC
Ambient Temperature	-20°C~+50°C
Dielectric Strength	500VAC 1 minute
Max Radial Force	75N (20mm from front flange)
Max Axial Force	15N

## Technical Specifications

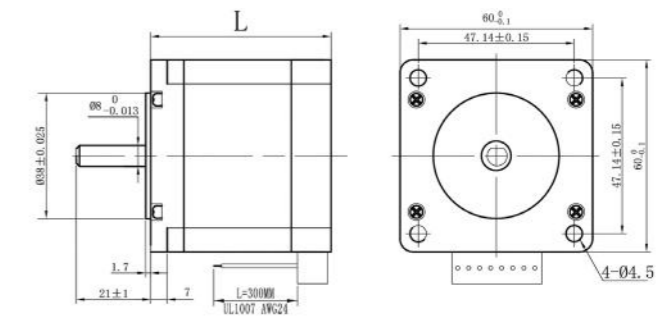
Model	Step Angle (°/Step)	Lead Wire (NO.)	Voltage (V)	Current (A/Phase)	Resistance (Ω/Phase)	Inductance (mH/Phase)	Holding Torque (Kg.cm)	Motor Height L (mm)	Motor Weight (Kg)
60HS63-1506-01	1.8	6	14.7	1.5	9.8	10.6	14	63	1.0
60HS67-1804-003A		4	4.68	1.8	2.6	7.8	16	67	1.1
60HS67-2204-001		4	3.96	2.2	1.8	5.0	16	67	1.1
60HS87-3504-001		4	4.0	3.5	1.15	4.5	27	87	1.4
60HS87-3008-003		8	3.9	3.0	1.3	3.2	21	87	1.4
60HS101-3008-001		8	6.0	3.0	2.0	4.0	25	101	1.6
60HS101-4204-002		4	4.2	4.2	1.0	4.0	33	101	1.6

\* Products can be customized by special request.

## Wiring Diagram



## Mechanical Dimension



## 85BYGH350

## HYBRID STEPPING MOTOR

## General Specifications

Step Accuracy	± 5%
Temperature Rise	80 °C Max
Insulation Resistance	100MΩ Min.500VC DC
Ambient Temperature	-20°C~+50°C
Dielectric Strength	500VAC 1 minute
Max Radial Force	220N (20mm from front flange)
Max Axial Force	60N

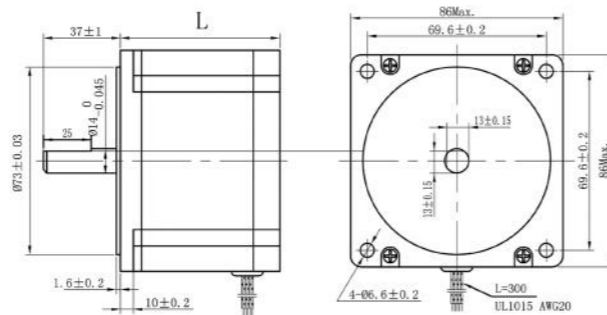
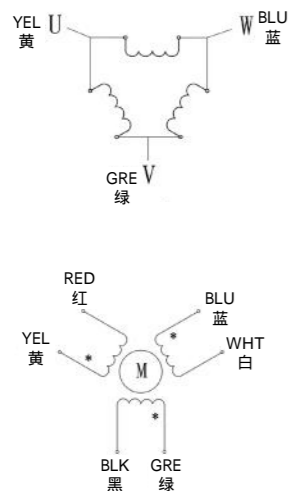
## Technical Specifications

Model	Step Angle (°/Step)	Lead Wire (NO.)	Voltage (V)	Current (A/Phase)	Resistance (Ω/Phase)	Inductance (mH/Phase)	Holding Torque (N.m)	Motor Height L (mm)	Motor Weight (Kg)
85BYGH350A-001	1.2	3	3.1	3.1	0.7	3.1	1.6	68	1.7
85BYGH350A-002			7.4	1.75	4.25	12.3	2.3	68	1.7
85BYGH350B-001-17			3.1	5.8	0.5	2.5	3.2	97	2.9
85BYGH350B-002-02			10.8	2.0	5.4	23.0	4.5	97	2.9
85BYGH350C-001-02			3.7	7.0	0.53	2.5	5.6	127	4.0
85BYGH350C-003			21.0	3.5	6.0	25.0	6.8	127	4.0

\* Products can be customized by special request.

## Wiring Diagram

## Mechanical Dimension



## 85HS

## HYBRID STEPPING MOTOR

## General Specifications

Step Accuracy	± 5%
Temperature Rise	80 °C Max
Insulation Resistance	100MΩ Min.500VC DC
Ambient Temperature	-20°C~+50°C
Dielectric Strength	500VAC 1 minute
Max Radial Force	220N (20mm from front flange)
Max Axial Force	60N



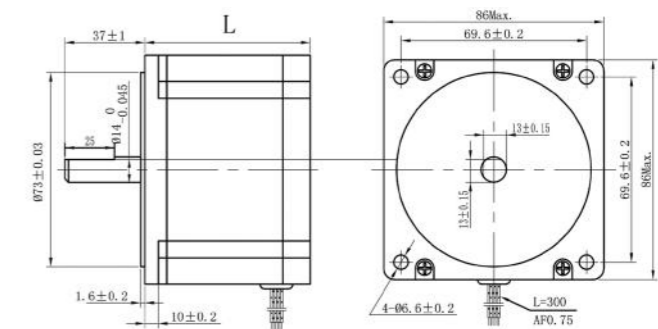
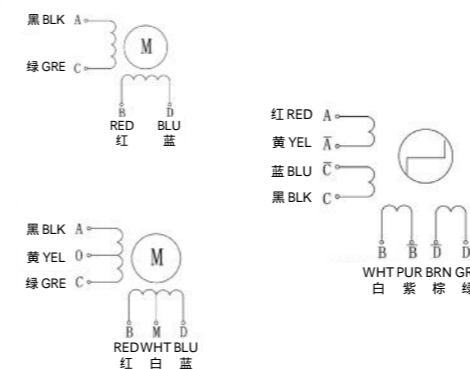
## Technical Specifications

Model	Step Angle (°/Step)	Lead Wire (NO.)	Voltage (V)	Current (A/Phase)	Resistance (Ω/Phase)	Inductance (mH/Phase)	Holding Torque (N.m)	Motor Height L (mm)	Motor Weight (Kg)
85HS68-1404-001	1.8	4	5.6	1.4	4.0	24.0	2.8	68	1.8
85HS68-4004-001		4	2.4	4.0	0.6	2.8	2.8	68	1.8
85HS80-4208-001-02		8	4.6	2.97	1.55	6.76	3.2	80	2.3
85HS80-5504-001-06		4	1.6	4.0	0.4	3.5	3.0	80	2.3
85HS97-3008-001		8	1.8	3.0	1.6	8.0	5.0	97	2.8
85HS97-4006-001		6	3.4	4.0	1.0	5.0	4.4	97	2.8
85HS116-4208-001		8	5.0	4.2	1.2	6.5	6.0	116	3.6
85HS116-5004-001		4	5.0	5.0	0.9	11.0	8.5	116	3.6
85HS126-4008-001		8	6.0	4.0	1.5	8.0	6.8	126	3.8
85HS126-6408-001		8	1.53	6.4	0.536	2.86	6.2	126	3.8
85HS131-3004-001		4	5.1	3.0	1.7	18.0	9.0	131	4.2
85HS131-7004-001		4	2.8	7.0	0.4	4.0	9.0	131	4.2
85HS155-5004-001		4	4.0	5.0	0.8	10.0	11.0	155	5.0
85HS155-6504-001		4	3.9	6.5	0.6	7.0	10.0	155	5.0

\* Products can be customized by special request.

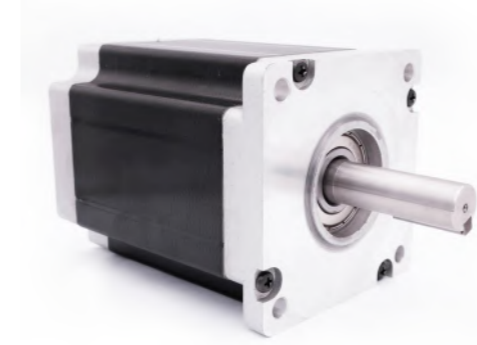
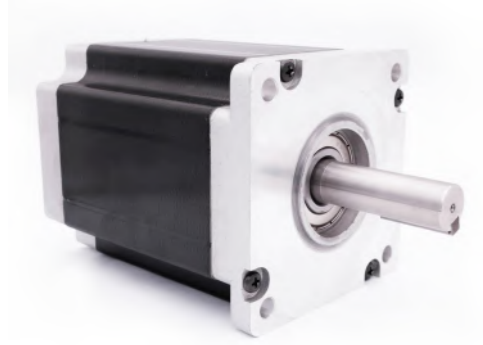
## Wiring Diagram

## Mechanical Dimension





# 110BYGH



	(°/Step)	(NO.)	(V)	(A/Phase)	(Ω/Phase)	(mH/Phase)	(N.m)	L (mm)	(Kg)
110BYGH80-001AG	1.8	4	9.0	6.0	1.5	14.0	8.5	80	5.0
110BYGH99-001-10			4.95	5.5	0.9	12.0	11.2	99	5.0
110BYGH150-001			5.44	6.8	0.8	12.0	21	150	8.4
110BYGH165-001-03			4.80	6.0	0.8	14.0	24	165	9.5
110BYGH201-001			5.36	8.0	0.76	16.0	30	201	12.0



## 42BYGHL

## HYBRID STEPPING MOTOR



## General Specifications

Step Accuracy	± 5%
Temperature Rise	80 °C Max
Insulation Resistance	100MΩ Min.500VC DC
Ambient Temperature	-20°C~+50°C
Dielectric Strength	500VAC 1 minute
Max Radial Force	28N (20mm from front flange)
Max Axial Force	10N

## Technical Specifications

Model	Step Angle (°/Step)	Lead Wire (NO.)	Voltage (V)	Current (A/Phase)	Resistance (Ω/Phase)	Inductance (mH/Phase)	Holding Torque (Kg.cm)	Motor Height L (mm)	Motor Weight (Kg)
42BYGHL208-12A	1.8	4	12.0	0.4	30.0	42.0	2.6	34	0.20
42BYGHL613-03A			2.3	1.7	1.35	3.0	3.5	40	0.26
42BYGHL810-09			3.8	1.2	3.2	6.0	4.5	48	0.36

\* Products can be customized by special request.

## 57BYGHL

## HYBRID STEPPING MOTOR



## General Specifications

Step Accuracy	± 5%
Temperature Rise	80 °C Max
Insulation Resistance	100MΩ Min.500VC DC
Ambient Temperature	-20°C~+50°C
Dielectric Strength	500VAC 1 minute
Max Radial Force	75N (20mm from front flange)
Max Axial Force	15N

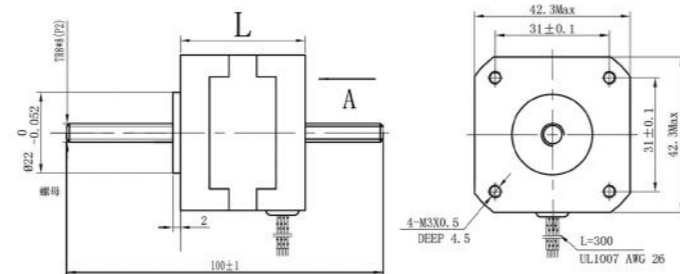
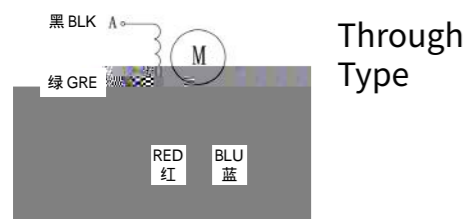
## Technical Specifications

Model	Step Angle (°/Step)	Lead Wire (NO.)	Voltage (V)	Current (A/Phase)	Resistance (Ω/Phase)	Inductance (mH/Phase)	Holding Torque (Kg.cm)	Motor Height L (mm)	Motor Weight (Kg)
57BYGHL013-15	1.8	4	2.7	1.5	1.8	4.0	4.0	41	0.45
57BYGHL216-10			3.3	1.7	1.95	6.0	10.0	51	0.65
57BYGHL401-03			6.0	0.6	10.0	32.0	9.0	56	0.70
57BYGHL602-07			10.4	0.8	13.0	42.0	19.8	78	1.00
57BYGHL815-001			7.36	1.6	4.6	16.0	20.0	84	1.13

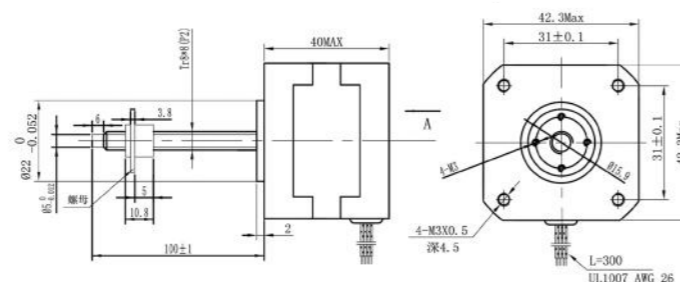
\* Products can be customized by special request.

## Wiring Diagram

## Mechanical Dimension

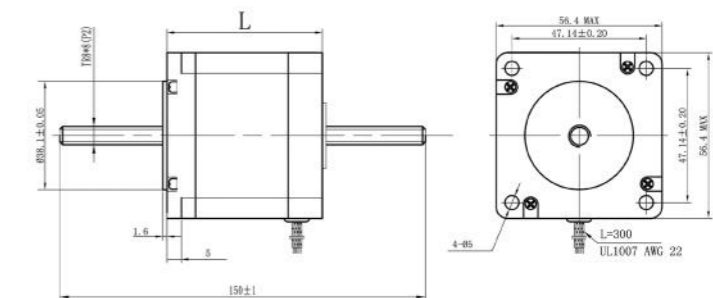
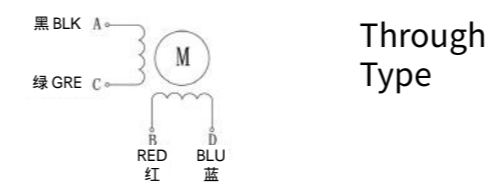


External Driver Type



## Wiring Diagram

## Mechanical Dimension



External Driver Type

