



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.

22BL



BRUSHLESS DC MOTOR

General Specifications

Winding Type	Star
Hall effect angle	120° Electrical angle
Insulation Class	B
Ambient Temperature	-20°C~+50°C
Insulation Resistance	100MΩ Min.500VC DC
Dielectric Strength	600VAC 1 minute
Max Radial Force	10N(10mm from front flange)
Max Axial Force	2N

Technical Specifications

Model	No. of Poles	No. of Phase	Rated Voltage (VDC)	Rated Torque (N.m)	Rated Speed (RPM)	Rated Current (Amps)	Output Power (Watts)	Peak Torque (N.m)	Peak Current (Amps)	Torque Constant (N.m/Amps)	Back EMF Constant (V/kRPM)	Motor Height L (mm)	Motor Weight (kg)
22BL201-001	8	3	24	0.02	3800	0.6	8.0	0.06	1.8	0.033	3.5	68	0.11

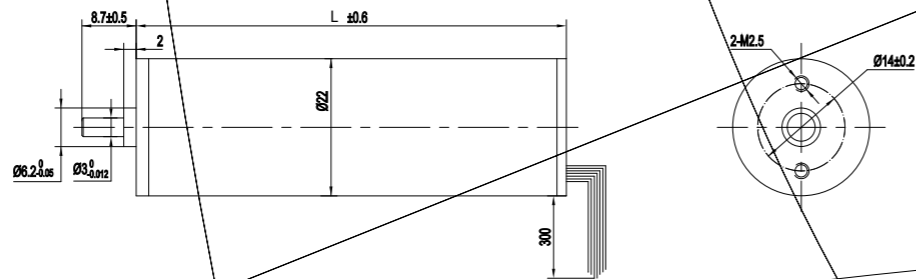
* Products can be customized by special request.

Model	No. of Poles	No. of Phase	Rated Voltage (VDC)	Rated Torque (N.m)	Rated Speed (RPM)	Rated Current (Amps)	Output Power (Watts)	Peak Torque (N.m)	Peak Current (Amps)	Torque Constant (N.m/Amps)	Back EMF Constant (V/kRPM)	Motor Height L (mm)	Motor Weight (kg)
28BL01F	4	3	12	0.015	3000	0.60	4.7	0.045	1.80	0.025	2.6	40.5	0.20
28BL02A-001	4	3	24	0.02	3000	0.36	6.3	0.06	1.07	0.056	5.7	53	0.15
28BL03E-001	4	3	24	0.05	3000	0.96	15.7	0.15	2.88	0.052	5.3	78	0.25

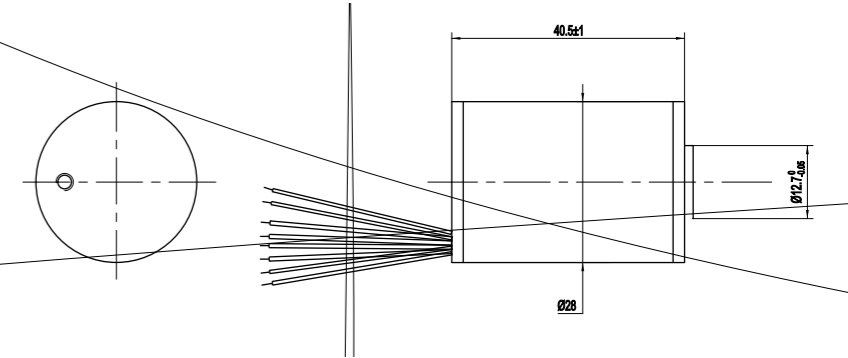
Wiring Diagram

FUNCTION/功能	COLOR/颜色		
TP	ORANGE	橙	UL1107 26AWG
GND	BLACK	黑	
PHASE A	BROWN	棕	
PHASE B	WHITE	白	
PHASE C	PURPLE	紫	UL1332 28AWG
+5V	RED	红	
HALL A	YELLOW	黄	
HALL B	GREEN	绿	
HALL C	BLUE	蓝	

Mechanical Dimension



FUNCTION/功能	COLOR/颜色		
+5V	RED	红	UL1007 26AWG
HALL A	GREEN	绿	
HALL B	BLUE	蓝	
HALL C	WHITE	白	
GND	BLACK	黑	
PHASE A	ORANGE	橙	
PHASE B	YELLOW	黄	
PHASE C	BROWN	棕	



33BL



BRUSHLESS DC MOTOR

General Specifications

Winding Type	Star
Hall effect angle	120° Electrical angle
Insulation Class	B
Ambient Temperature	-20°C~+50°C
Insulation Resistance	100MΩ Min.500VC DC
Dielectric Strength	600VAC 1 minute
Max Radial Force	10N (10mm from front flange)
Max Axial Force	10N

Technical Specifications

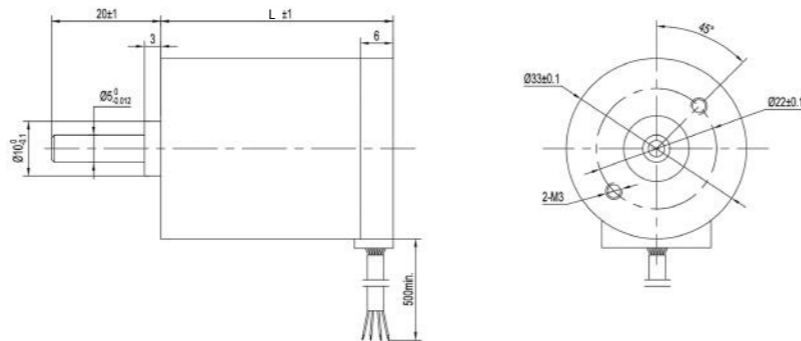
Model	No. of Poles	No. of Phase	Rated Voltage (VDC)	Rated Torque (N.m)	Rated Speed (RPM)	Rated Current (Amps)	Output Power (Watts)	Peak Torque (N.m)	Peak Current (Amps)	Torque Constant (N.m/Amps)	Back EMF Constant (V/kRPM)	Motor Height L (mm)	Motor Weight (kg)
33BL01C	4	3	24	0.02	4000	0.43	8.3	0.06	1.3	0.045	4.8	42.5	0.16

* Products can be customized by special request.

Wiring Diagram

ELECTRICAL CONNECTION TABLE/接线表			
FUNCTION/功能	COLOR/颜色		UL1007 26AWG
+5V	RED	红	
HALL A	GREEN	绿	
HALL B	BLUE	蓝	
HALL C	WHITE	白	
GND	BLACK	黑	
PHASE A	YELLOW	黄	
PHASE B	ORANGE	橙	
PHASE C	BROWN	棕	

Mechanical Dimension



36BL



BRUSHLESS DC MOTOR

General Specifications

Winding Type	Star
Hall effect angle	120° Electrical angle
Insulation Class	B
Ambient Temperature	-20°C~+50°C
Insulation Resistance	100MΩ Min.500VC DC
Dielectric Strength	600VAC 1 minute
Max Radial Force	15N (10mm from front flange)
Max Axial Force	10N

Technical Specifications

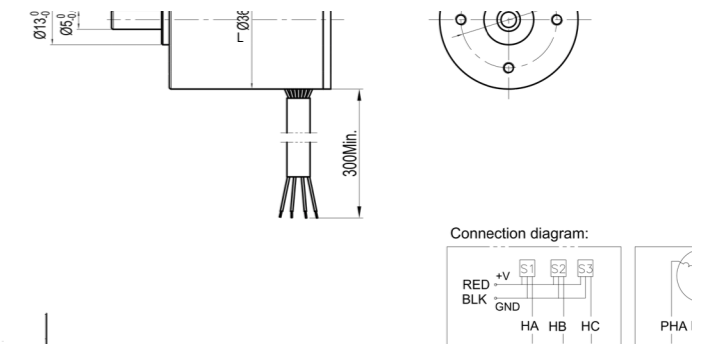
Model	No. of Poles	No. of Phase	Rated Voltage (VDC)	Rated Torque (N.m)	Rated Speed (RPM)	Rated Current (Amps)	Output Power (Watts)	Peak Torque (N.m)	Peak Current (Amps)	Torque Constant (N.m/Amps)	Back EMF Constant (V/kRPM)	Motor Height L (mm)	Motor Weight (kg)
36BLY01	4	3	24	0.03	3000	2.0	9.4	0.09	6	0.015	1.6	42	0.16

* Products can be customized by special request.

Wiring Diagram

ELECTRICAL CONNECTION TABLE/接线表			
FUNCTION/功能	COLOR/颜色		UL1007 26AWG
+5V	RED	红	
HALL A	GREEN	绿	
HALL B	BLUE	蓝	
HALL C	WHITE	白	
GND	BLACK	黑	
PHASE A	BROWN	棕	
PHASE B	YELLOW	黄	
PHASE C	ORANGE	橙	

Mechanical Dimension



42BLF

BRUSHLESS DC MOTOR

General Specifications

Winding Type	Star
Hall effect angle	120° Electrical angle
Insulation Class	B
Ambient Temperature	-20°C~+50°C
Insulation Resistance	100MΩ Min.500VC DC
Dielectric Strength	600VAC 1 minute
Max Radial Force	28N (10mm from front flange)
Max Axial Force	10N

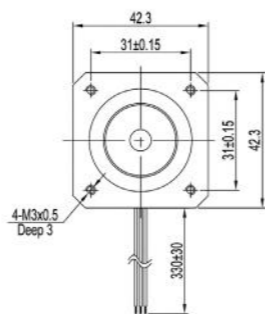
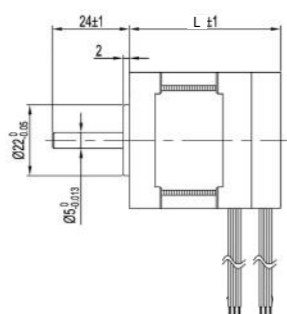
Technical Specifications

Model	No. of Poles	No. of Phase	Rated Voltage (VDC)	Rated Torque (N.m)	Rated Speed (RPM)	Rated Current (Amps)	Output Power (Watts)	Peak Torque (N.m)	Peak Current (Amps)	Torque Constant (N.m/Amps)	Back EMF Constant (V/kRPM)	Motor Height L (mm)	Motor Weight (kg)
42BLF01	8	3	24	0.063	4000	1.50	26	0.189	4.5	0.042	4.4	47	0.30
42BLF02			24	0.130	4000	3.10	54	0.390	9.3	0.042	4.4	63	0.45
42BLF03			24	0.188	4000	4.17	78	0.560	12.5	0.045	4.8	79	0.60

* Products can be customized by special request.

Wiring Diagram

ELECTRICAL CONNECTION TABLE/接线表			
FUNCTION/功能	COLOR/颜色		
+5V	RED	红	
HALL A	YELLOW	黄	
HALL B	GREEN	绿	
HALL C	BLUE	蓝	
GND	BLACK	黑	
PHASE A	YELLOW	黄	
PHASE B	GREEN	绿	
PHASE C	BLUE	蓝	



42BLFX

BRUSHLESS DC MOTOR

General Specifications

Winding Type	Star
Hall effect angle	120° Electrical angle
Insulation Class	B
Ambient Temperature	-20°C~+50°C
Insulation Resistance	100MΩ Min.500VC DC
Dielectric Strength	600VAC 1 minute
Max Radial Force	28N (10mm from front flange)
Max Axial Force	10N

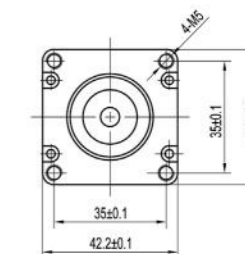
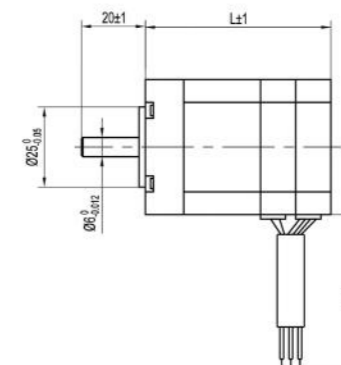
Technical Specifications

Model	No. of Poles	No. of Phase	Rated Voltage (VDC)	Rated Torque (N.m)	Rated Speed (RPM)	Rated Current (Amps)	Output Power (Watts)	Peak Torque (N.m)	Peak Current (Amps)	Torque Constant (N.m/Amps)	Back EMF Constant (V/kRPM)	Motor Height L (mm)	Motor Weight (kg)
42BLFX01	8	3	48	0.13	4400	2.0	60	0.39	6.0	0.064	6.7	59.2	0.39
42BLFX02			48	0.22	4600	3.5	106	0.66	10.5	0.063	7.1	84.2	0.59

* Products can be customized by special request.

Wiring Diagram

ELECTRICAL CONNECTION TABLE/接线表			
FUNCTION/功能	COLOR/颜色		
+5V	RED	红	
HALL A	YELLOW	黄	
HALL B	GREEN	绿	
HALL C	BLUE	蓝	
GND	BLACK	黑	
PHASE A	YELLOW	黄	
PHASE B	GREEN	绿	
PHASE C	BLUE	蓝	



42BLY

BRUSHLESS DC MOTOR

General Specifications

Winding Type	Star
Hall effect angle	120° Electrical angle
Insulation Class	B
Ambient Temperature	-20°C~+50°C
Insulation Resistance	100MΩ Min.500VC DC
Dielectric Strength	600VAC 1 minute
Max Radial Force	15N (10mm from front flange)
Max Axial Force	10N

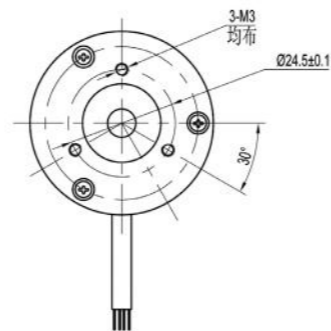
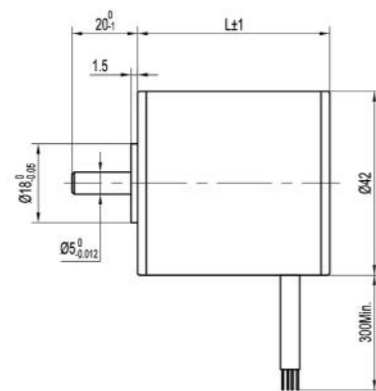
Technical Specifications

Model	No. of Poles	No. of Phase	Rated Voltage (VDC)	Rated Torque (N.m)	Rated Speed (RPM)	Rated Current (Amps)	Output Power (Watts)	Peak Torque (N.m)	Peak Current (Amps)	Torque Constant (N.m/Amps)	Back EMF Constant (V/kRPM)	Motor Height L (mm)	Motor Weight (kg)
42BLY01C	4	3	24	0.035	3000	0.63	11	0.105	1.9	0.054	5.7	42	0.25
42BLY02			24	0.08	3000	1.77	25	0.24	5.3	0.045	4.7	60	0.38
42BLY302-001			24	0.13	3000	2.53	41	0.39	7.6	0.051	5.3	78	0.56

* Products can be customized by special request.

Wiring Diagram

ELECTRICAL CONNECTION TABLE/接线表		
FUNCTION/功能	COLOR/颜色	
+5V	RED	红
HALL A	YELLOW	黄
HALL B	GREEN	绿
HALL C	BLUE	蓝
GND	BLACK	黑
PHASE A	YELLOW	黄
PHASE B	GREEN	绿
PHASE C	BLUE	蓝



Mechanical Dimension

57BL

BRUSHLESS DC MOTOR

General Specifications

Winding Type	Star
Hall effect angle	120° Electrical angle
Insulation Class	B
Ambient Temperature	-20°C~+50°C
Insulation Resistance	100MΩ Min.500VC DC
Dielectric Strength	600VAC 1 minute
Max Radial Force	75N (10mm from front flange)
Max Axial Force	15N

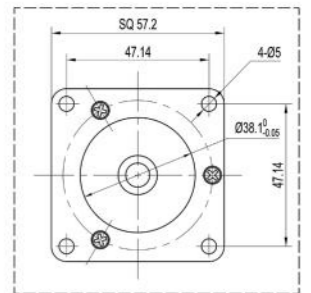
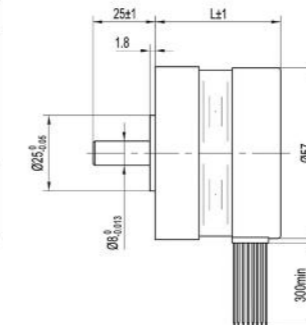
Technical Specifications

Model	No. of Poles	No. of Phase	Rated Voltage (VDC)	Rated Torque (N.m)	Rated Speed (RPM)	Rated Current (Amps)	Output Power (Watts)	Peak Torque (N.m)	Peak Current (Amps)	Torque Constant (N.m/Amps)	Back EMF Constant (V/kRPM)	Motor Height L (mm)	Motor Weight (kg)
57BL01G	4	3	24	0.057	2500	0.77	15	0.17	2.3	0.074	7.75	41.5	0.35
57BL02A			24	0.11	3000	1.87	34.5	0.33	5.6	0.059	6.2	46.5	0.44
57BL03B			24	0.18	3000	3.17	56	0.54	9.5	0.057	5.9	56.5	0.56
57BL04A			24	0.22	3000	3.67	69	0.66	11	0.060	6.3	66.5	0.67
57BL05A			24	0.33	3000	5.33	104	0.99	16	0.062	6.5	86.5	0.95
57BL06			24	0.44	3000	7.00	138	1.32	21	0.063	6.6	106.5	1.18

* Products can be customized by special request.

Wiring Diagram

ELECTRICAL CONNECTION TABLE/接线表		
FUNCTION/功能	COLOR/颜色	
+5V	RED	红
HALL A	YELLOW	黄
HALL B	GREEN	绿
HALL C	BLUE	蓝
GND	BLACK	黑
PHASE A	YELLOW	黄
PHASE B	GREEN	绿
PHASE C	BLUE	蓝



Mechanical Dimension

57BLF



BRUSHLESS DC MOTOR

General Specifications

Winding Type	Star
Hall effect angle	120° Electrical angle
Insulation Class	B
Ambient Temperature	-20°C~+50°C
Insulation Resistance	100MΩ Min.500VC DC
Dielectric Strength	600VAC 1 minute
Max Radial Force	115N (10mm from front flange)
Max Axial Force	45N

Technical Specifications

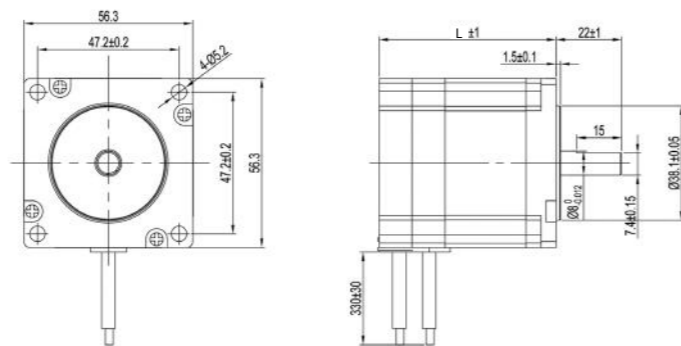
Model	No. of Poles	No. of Phase	Rated Voltage (VDC)	Rated Torque (N.m)	Rated Speed (RPM)	Rated Current (Amps)	Output Power (Watts)	Peak Torque (N.m)	Peak Current (Amps)	Torque Constant (N.m/Amps)	Back EMF Constant (V/kRPM)	Motor Height L (mm)	Motor Weight (kg)
57BLF01	8	3	24	0.2	3800	3.33	80	0.6	10.0	0.06	6.3	59	0.61
57BLF02			24	0.4	3000	6.67	125	1.2	20.0	0.06	6.3	80	0.94
57BLF03			24	0.6	3000	10.0	188	1.8	30.0	0.06	6.3	101	1.25
57BLF04A-001			36	0.8	3000	8.87	251	2.4	26.6	0.09	9.47	122	1.59

* Products can be customized by special request.

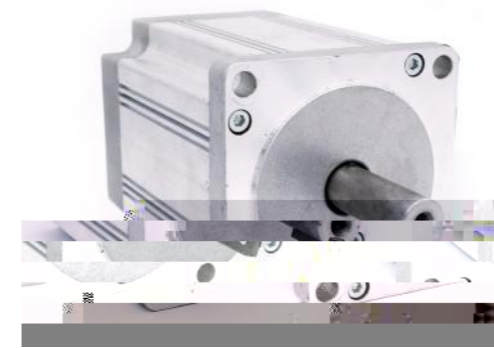
Wiring Diagram

ELECTRICAL CONNECTION TABLE/接线表		
FUNCTION/功能	COLOR/颜色	
+5V	RED	红
HALL A	YELLOW	黄
HALL B	GREEN	绿
HALL C	BLUE	蓝
GND	BLACK	黑
PHASE A	YELLOW	黄
PHASE B	GREEN	绿
PHASE C	BLUE	蓝

Mechanical Dimension



80BL



BRUSHLESS DC MOTOR

General Specifications

Winding Type	Star
Hall effect angle	120° Electrical angle
Insulation Class	B
Ambient Temperature	-20°C~+50°C
Insulation Resistance	100MΩ Min.500VC DC
Dielectric Strength	600VAC 1 minute
Max Radial Force	220N (10mm from front flange)
Max Axial Force	60N

Technical Specifications

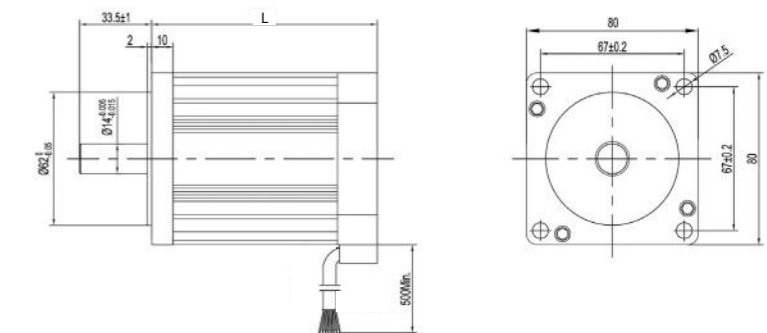
Model	No. of Poles	No. of Phase	Rated Voltage (VDC)	Rated Torque (N.m)	Rated Speed (RPM)	Rated Current (Amps)	Output Power (Watts)	Peak Torque (N.m)	Peak Current (Amps)	Torque Constant (N.m/Amps)	Back EMF Constant (V/kRPM)	Motor Height L (mm)	Motor Weight (kg)
80BL01A	4	3	48	0.7	3000	6.36	220	2.1	19.0	0.11	12	105.0	2.19
80BL02A			48	1.2	3000	11.0	376	3.6	33.0	0.11	12	132.5	2.80
80BL03A			310	1.8	3000	2.43	565	5.4	7.3	0.74	77.5	160.0	3.50

* Products can be customized by special request.

Wiring Diagram

ELECTRICAL CONNECTION TABLE/接线表		
FUNCTION/功能	COLOR/颜色	
+5V	RED	红
HALL A	YELLOW	黄
HALL B	GREEN	绿
HALL C	BLUE	蓝
GND	BLACK	黑
PHASE A	YELLOW	黄
PHASE B	GREEN	绿
PHASE C	BLUE	蓝

Mechanical Dimension



86BLF



BRUSHLESS DC MOTOR

General Specifications

Winding Type	Star
Hall effect angle	120° Electrical angle
Insulation Class	B
Ambient Temperature	-20°C~+50°C
Insulation Resistance	100MΩ Min.500VC DC
Dielectric Strength	600VAC 1 minute
Max Radial Force	220N (10mm from front flange)
Max Axial Force	60N

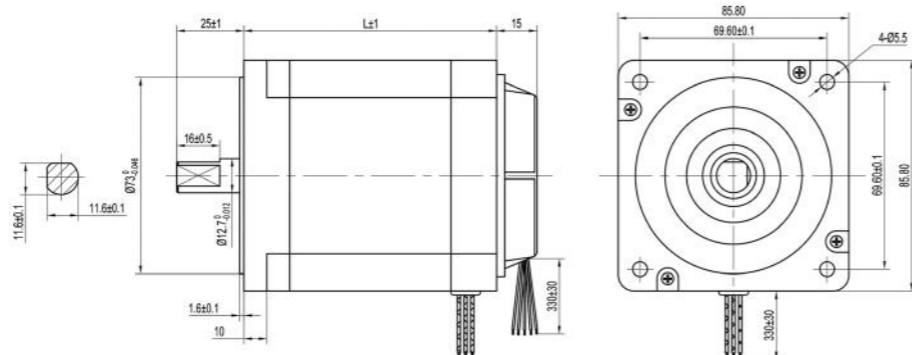
Technical Specifications

Model	No. of Poles	No. of Phase	Rated Voltage (VDC)	Rated Torque (N.m)	Rated Speed (RPM)	Rated Current (Amps)	Output Power (Watts)	Peak Torque (N.m)	Peak Current (Amps)	Torque Constant (N.m/Amps)	Back EMF Constant (V/kRPM)	Motor Height L (mm)	Motor Weight (kg)
86BLF01	8	3	48	1.40	3000	12.17	439	4.20	36.5	0.115	12.0	94.0	2.99
86BLF02A			48	1.05	3000	8.67	329	3.15	26.0	0.121	12.6	80.5	2.44
86BLF03			48	0.70	3000	5.33	220	2.10	16.0	0.130	13.7	67.0	1.78
86BLF06C			48	1.80	3000	16.33	565	5.40	49.0	0.110	12.0	107.5	3.39
86BLF07			48	2.10	3000	19.67	660	6.30	59.0	0.106	11.2	124.0	4.07

* Products can be customized by special request.

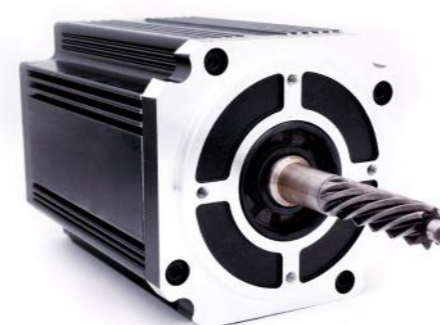
Wiring Diagram

ELECTRICAL CONNECTION TABLE/接线表		
FUNCTION/功能	COLOR/颜色	
+5V	WHITE	白
HALL A	RED	红
HALL B	YELLOW	黄
HALL C	BLUE	蓝
GND	BLACK	黑
PHASE A	RED	红
PHASE B	YELLOW	黄
PHASE C	BLUE	蓝



Mechanical Dimension

110BLF



BRUSHLESS DC MOTOR

General Specifications

Winding Type	Star
Hall effect angle	120° Electrical angle
Insulation Class	B
Ambient Temperature	-20°C~+50°C
Insulation Resistance	100MΩ Min.500VC DC
Dielectric Strength	1500VAC 1 minute
Max Radial Force	330N (10mm from front flange)
Max Axial Force	100N

Technical Specifications

Model	No. of Poles	No. of Phase	Rated Voltage (VDC)	Rated Torque (N.m)	Rated Speed (RPM)	Rated Current (Amps)	Output Power (Watts)	Peak Torque (N.m)	Peak Current (Amps)	Torque Constant (N.m/Amps)	Back EMF Constant (V/kRPM)	Motor Height L (mm)	Motor Weight (kg)
110BLF01C	8	3	310	3.5	3000	4.72	1100	10.5	14.0	0.74	77.5	156.0	5.08
110BLF02C			310	4.5	3000	6.10	1413	13.5	18.3	0.74	77.5	177.0	6.06
110BLF03C			310	6.5	3000	8.77	2040	19.5	26.3	0.74	77.5	216.0	7.88

Wiring Diagram



Mechanical Dimension

