



COMPANY PROFILE



CHANGZHOU HETAI ELECTRIC MOTORS&APPLIANCE CO., LTD.

» 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.

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	Rated Torque	Rated Speed	Rated Current	Output Power	Peak Torque	Peak Current	Torque Constant	Back EMF Constant	Motor Height L	Motor Weight
			(VDC)	(N.m)	(RPM)	(Amps)	(Watts)	(N.m)	(Amps)	(N.m/Amps)	(V/kRPM)	(mm)	(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.

28BL

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

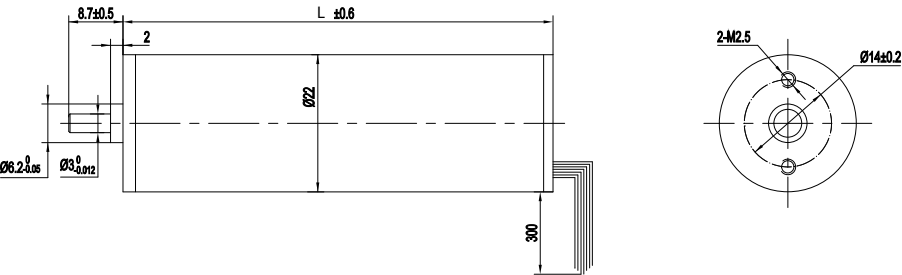
Model	No. of Poles	No. of Phase	Rated Voltage	Rated Torque	Rated Speed	Rated Current	Output Power	Peak Torque	Peak Current	Torque Constant	Back EMF Constant	Motor Height L	Motor Weight
			(VDC)	(N.m)	(RPM)	(Amps)	(Watts)	(N.m)	(Amps)	(N.m/Amps)	(V/kRPM)	(mm)	(kg)
28BL01F	4	3	12	0.015	3000	0.60	4.7	0.045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

* Products can be customized by special request.

Wiring Diagram

Mechanical Dimension

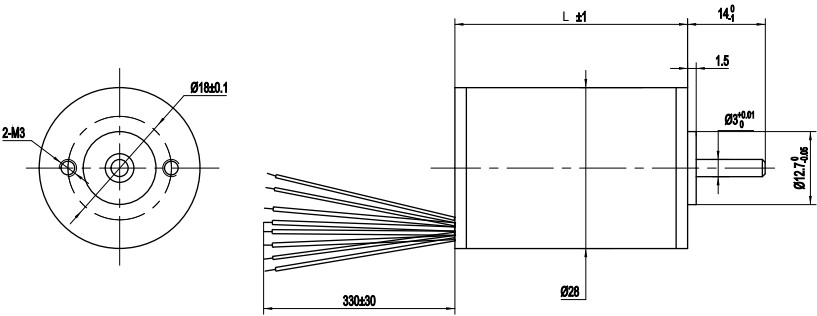
ELECTRICAL CONNECTION TABLE/接线表			
FUNCTION/功能	COLOR/颜色		
TP	ORANGE	橙	UL1061 26AWG
GND	BLACK	黑	UL1332 28AWG
PHASE A	BROWN	棕	
PHASE B	WHITE	白	
PHASE C	PURPLE	紫	
+5V	RED	红	
HALL A	YELLOW	黄	
HALL B	GRENN	绿	
HALL C	BLUE	蓝	



Wiring Diagram

Mechanical Dimension

ELECTRICAL CONNECTION TABLE/接线表			
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	Rated Torque	Rated Speed	Rated Current	Output Power	Peak Torque	Peak Current	Torque Constant	Back EMF Constant	Motor Height L	Motor Weight
			(VDC)	(N.m)	(RPM)	(Amps)	(Watts)	(N.m)	(Amps)	(N.m/Amps)	(V/kRPM)	(mm)	(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.

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

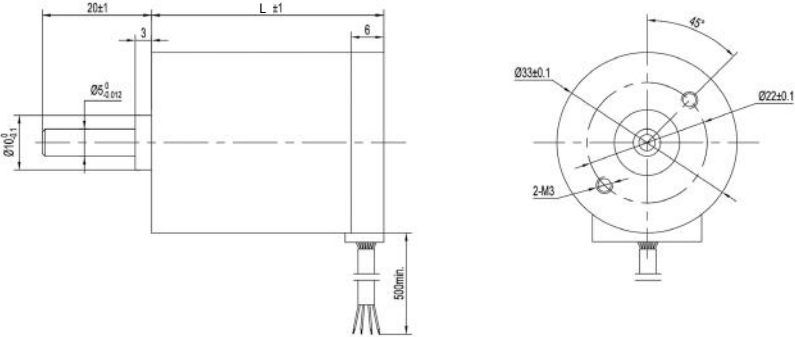
Model	No. of Poles	No. of Phase	Rated Voltage	Rated Torque	Rated Speed	Rated Current	Output Power	Peak Torque	Peak Current	Torque Constant	Back EMF Constant	Motor Height L	Motor Weight
			(VDC)	(N.m)	(RPM)	(Amps)	(Watts)	(N.m)	(Amps)	(N.m/Amps)	(V/kRPM)	(mm)	(kg)
36BLY01	4	3	24	0.03	3000	2.0	9.4	0.09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

* Products can be customized by special request.

Wiring Diagram

Mechanical Dimension

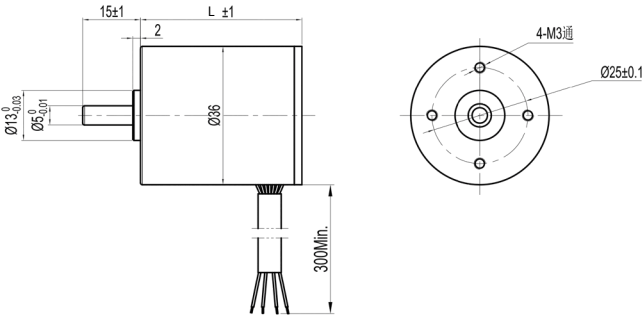
ELECTRICAL CONNECTION TABLE/接线表			
FUNCTION/功能	COLOR/颜色		UL1007 26AWG
+5V	RED	红	
HALL A	GREEN	绿	
HALL B	BLUE	蓝	
HALL C	WHITE	白	
GND	BLACK	黑	
PHASE A	YELLOW	黄	
PHASE B	ORANGE	橙	
PHASE C	BROWN	棕	



Wiring Diagram

Mechanical Dimension

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	



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.

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

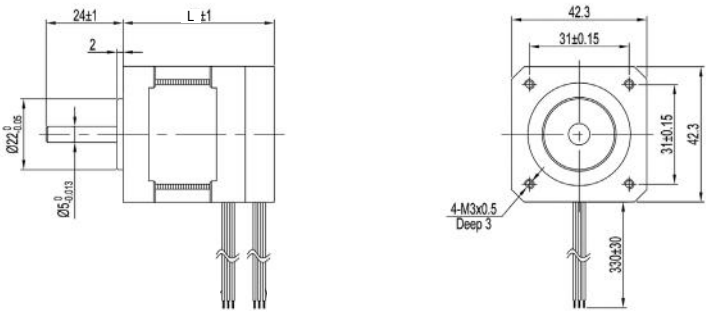
Model	No. of Poles	No. of Phase	Rated Voltage (VDC)	Rated Torque (N.m)	Rated Speed (RPM)	Rated Current (Amps)	Output Power (Watts)	Peak Torque (N.m)	Peak Current (Amps)	Torque Constant (N.m/Amps)	Back EMF Constant (V/kRPM)	Motor Height L (mm)	Motor Weight (kg)
42BLFX01	8	3	48	0.13	4400	2.0	60	0.39	6.0	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

Mechanical Dimension

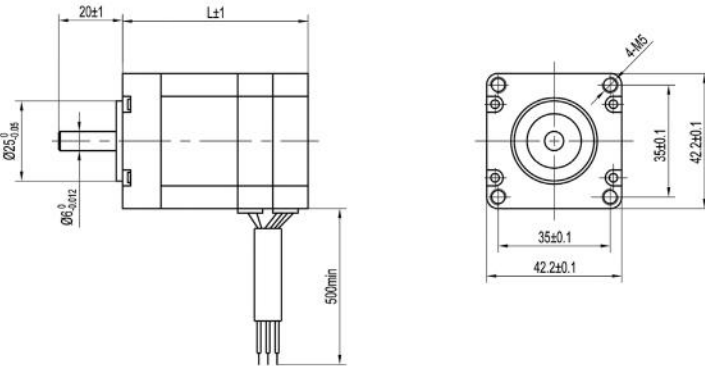
ELECTRICAL CONNECTION TABLE/接线表			
FUNCTION/功能	COLOR/颜色		
+5V	RED	红	UL1007 26AWG
HALL A	YELLOW	黄	
HALL B	GREEN	绿	
HALL C	BLUE	蓝	
GND	BLACK	黑	UL3265 22AWG
PHASE A	YELLOW	黄	
PHASE B	GREEN	绿	
PHASE C	BLUE	蓝	



Wiring Diagram

Mechanical Dimension

ELECTRICAL CONNECTION TABLE/接线表			
FUNCTION/功能	COLOR/颜色		
+5V	RED	红	UL1007 26AWG
HALL A	YELLOW	黄	
HALL B	GREEN	绿	
HALL C	BLUE	蓝	
GND	BLACK	黑	UL3265 22AWG
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

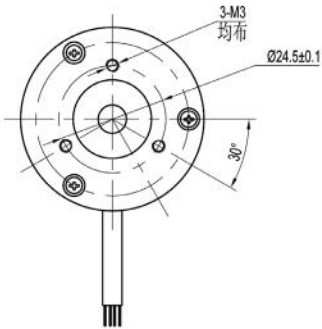
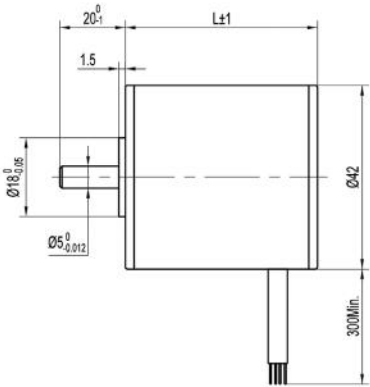
Model	No. of Poles	No. of Phase	Rated Voltage	Rated Torque	Rated Speed	Rated Current	Output Power	Peak Torque	Peak Current	Torque Constant	Back EMF Constant	Motor Height L	Motor Weight
			(VDC)	(N.m)	(RPM)	(Amps)	(Watts)	(N.m)	(Amps)	(N.m/Amps)	(V/kRPM)	(mm)	(kg)
42BLY01C	4	3	24	0.035	3000	0.63	11	0.105	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

Mechanical Dimension

ELECTRICAL CONNECTION TABLE/接线表			
FUNCTION/功能	COLOR/颜色		
+5V	RED	红	UL1007 26AWG
HALL A	YELLOW	黄	
HALL B	GREEN	绿	
HALL C	BLUE	蓝	
GND	BLACK	黑	UL3265 22AWG
PHASE A	YELLOW	黄	
PHASE B	GREEN	绿	
PHASE C	BLUE	蓝	



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

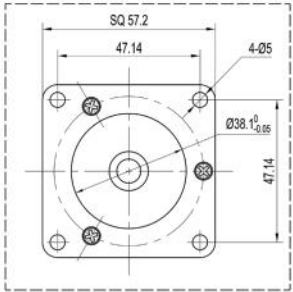
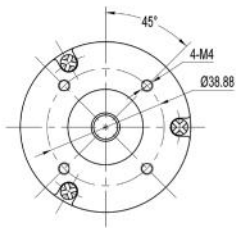
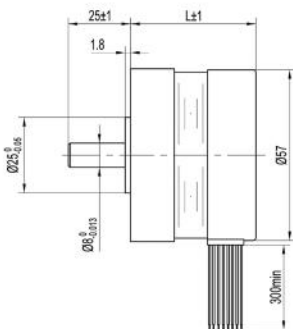
Model	No. of Poles	No. of Phase	Rated Voltage	Rated Torque	Rated Speed	Rated Current	Output Power	Peak Torque	Peak Current	Torque Constant	Back EMF Constant	Motor Height L	Motor Weight
			(VDC)	(N.m)	(RPM)	(Amps)	(Watts)	(N.m)	(Amps)	(N.m/Amps)	(V/kRPM)	(mm)	(kg)
57BL01G	4	3	24	0.057	2500	0.77	15	0.17	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

Mechanical Dimension

ELECTRICAL CONNECTION TABLE/接线表			
FUNCTION/功能	COLOR/颜色		
+5V	RED	红	UL1007 26AWG
HALL A	YELLOW	黄	
HALL B	GREEN	绿	
HALL C	BLUE	蓝	
GND	BLACK	黑	UL1015 20AWG
PHASE A	YELLOW	黄	
PHASE B	GREEN	绿	
PHASE C	BLUE	蓝	



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

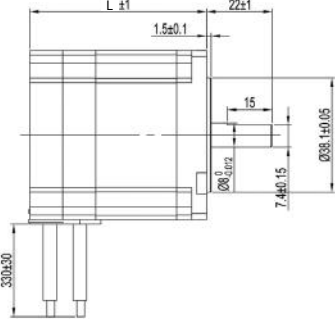
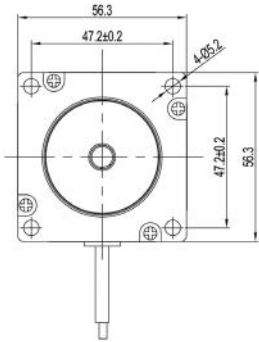
Model	No. of Poles	No. of Phase	Rated Voltage (VDC)	Rated Torque (N.m)	Rated Speed (RPM)	Rated Current (Amps)	Output Power (Watts)	Peak Torque (N.m)	Peak Current (Amps)	Torque Constant (N.m/Amps)	Back EMF Constant (V/kRPM)	Motor Height L (mm)	Motor Weight (kg)
57BLF01	8	3	24	0.2	3800	3.33	80	0.6	10.0	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

Mechanical Dimension

ELECTRICAL CONNECTION TABLE/接线表			
FUNCTION/功能	COLOR/颜色		
+5V	RED	红	UL1007 26AWG
HALL A	YELLOW	黄	
HALL B	GREEN	绿	
HALL C	BLUE	蓝	
GND	BLACK	黑	UL1015 20AWG
PHASE A	YELLOW	黄	
PHASE B	GREEN	绿	
PHASE C	BLUE	蓝	

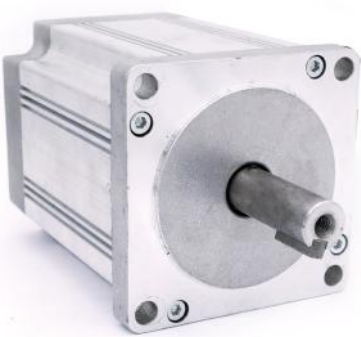


80BL

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

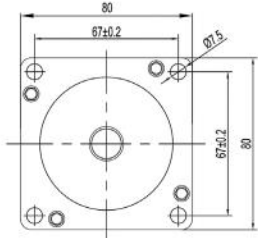
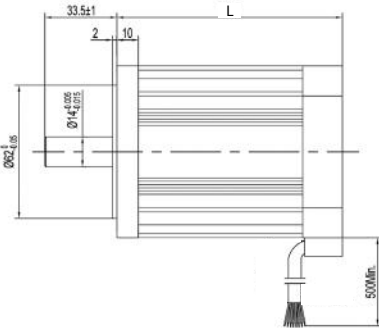
Model	No. of Poles	No. of Phase	Rated Voltage (VDC)	Rated Torque (N.m)	Rated Speed (RPM)	Rated Current (Amps)	Output Power (Watts)	Peak Torque (N.m)	Peak Current (Amps)	Torque Constant (N.m/Amps)	Back EMF Constant (V/kRPM)	Motor Height L (mm)	Motor Weight (kg)
80BL01A	4	3	48	0.7	3000	6.36	220	2.1	19.0	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

Mechanical Dimension

ELECTRICAL CONNECTION TABLE/接线表			
FUNCTION/功能	COLOR/颜色		
+5V	RED	红	UL1007 26AWG
HALL A	YELLOW	黄	
HALL B	GREEN	绿	
HALL C	BLUE	蓝	
GND	BLACK	黑	AF0.75
PHASE A	YELLOW	黄	
PHASE B	GREEN	绿	
PHASE C	BLUE	蓝	



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

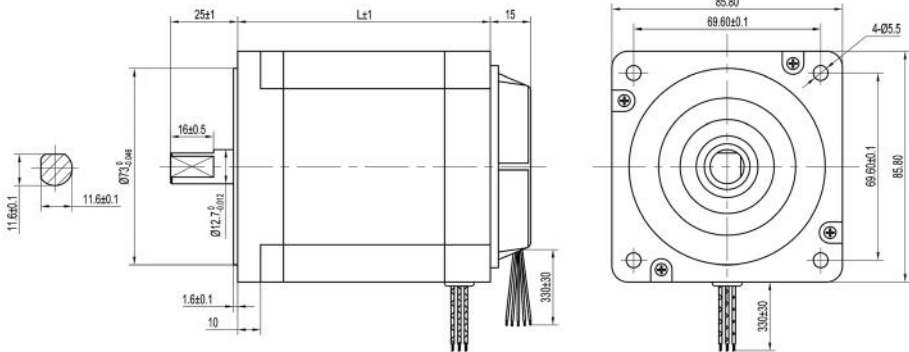
Technical Specifications

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	UL1007 26AWG
HALL A	RED	红	
HALL B	YELLOW	黄	
HALL C	BLUE	蓝	
GND	BLACK	黑	UL1015 18AWG
PHASE A	RED	红	
PHASE B	YELLOW	黄	
PHASE C	BLUE	蓝	



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

ELECTRICAL CONNECTION TABLE/接线表			
FUNCTION/功能	COLOR/颜色		
+5V	RED	红	UL1007 26AWG
HALL A	YELLOW	黄	
HALL B	GREEN	绿	
HALL C	BLUE	蓝	
GND	BLACK	黑	UL1330 16AWG
PHASE A	YELLOW	黄	
PHASE B	GREEN	绿	
PHASE C	BLUE	蓝	

